

Sequence #1 — Gene Saci 0001

M A I R E ^{0.042} T L K G G K G E V I K N P K V F I D P L ^{0.104} V F K D I P F R E D I L R E V A I A V R ^{0.001} Y F V K N N M K F ^{0.001} S ^{0.025} T L F L G L ^{0.031} T G ^{0.018} T G K ^{0.06} T F V A M ^{0.026} Y M F N E I Q E

V K K E D G E ^{0.222} Y G V V ^{0.005} S Q A ^{0.044} Y V N C R E V G G ^{0.029} T P Q A V L ^{0.004} S A I ^{0.019} T Q R I ^{0.058} T G E E V P K H G I N L G E ^{0.011} Y I E R I K E N L V D K K A L I ^{0.008} Y L D E V D ^{0.069} T L I K R R G G

D I V L ^{0.005} Y Q L L R A N A D I ^{0.004} S V I M V ^{0.003} S N D I N I R D ^{0.085} Y M E P R V L ^{0.019} S ^{0.004} S L G P ^{0.028} T I F F K P ^{0.019} Y D A E Q L K H I L ^{0.008} S I ^{0.006} Y ^{0.008} S E ^{0.013} Y G L I K G ^{0.007} S ^{0.004} Y ^{0.045} T D E I L ^{0.008} S ^{0.015} Y I A A I ^{0.008} S

A K E H G D A R K A V N L L F R A A Q L A ^{0.005} S G E G M I R K E H V D R A I I E ^{0.02} Y E Q E R L I E A I K A L P F H ^{0.005} Y K L A L I A ^{0.004} S M Q A ^{0.005} S D V I ^{0.081} T A H K I ^{0.029} Y ^{0.002} S D L C N

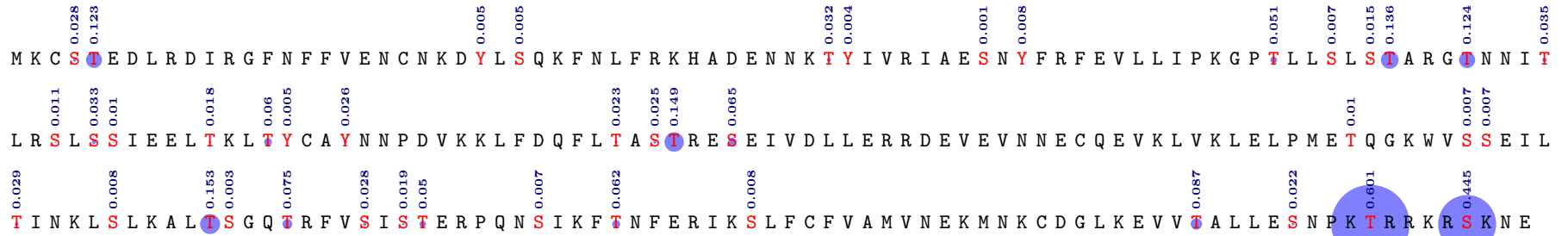
E ^{0.006} Y K Q K P L ^{0.03} S ^{0.008} Y R R F ^{0.073} S D V I ^{0.01} S E L D M F G I K V K I I N K G R A G G I K K ^{0.098} T I E V A D K E K I ^{0.27} T K A L E E A M Q L E ^{0.084} Y E D ^{0.1} T V

Sequence #2 — Gene Saci 0002

MLWEIVKVLERR **S** ^{0.059} KLD **T** ^{0.102} EIAELQKVLDT **T** ^{0.034} LPNGHLEEKVVKGKK **Y** ^{0.01} **Y** ^{0.008} **Y** ^{0.011} LRYWENGRRLR **S** ^{0.024} **K** ^{0.006} **Y** LGKD **V** ^{0.43} **T** ^{0.43} EIKEKFKIA **T** ^{0.208} **T** ^{0.075} ETKI

KLNRLEERNRIVRIDKI **S** ^{0.011} KILVENDQLN **T** ^{0.019}

Sequence #3 — Gene Saci 0005



Sequence #4 — Gene Saci 0006

M **S** I V K L E E L M **S** L P G W D **T** R R K I L E **S** L **S** E K P K **T** A **Y** E L **S** K E L D L N **Y** **S** **S** T V R **Y** H L E L L E K F G F V K A R K **T** K K **Y** V **Y** E V **S** F K N L E F **Y** **S**

N Q V

Sequence #5 — Gene Saci 0012

M A N G V ^{0.008} Y ^{0.005} M ^{0.002} Y ^{0.007} V I Q A K F N N E W W ^{0.002} S ^{0.007} T ^{0.002} S L Q ^{0.155} T R R N I L N R I E E L E A R ^{0.019} S K N D L V A L K R F I ^{0.025} S L R ^{0.002} Y D G H L L ^{0.01} Y W V ^{0.006} S D F D ^{0.035} T ^{0.003} S K L N N L R ^{0.01} Y ^{0.024} S L I ^{0.018} S
^{0.024} S G E G F L E E K L ^{0.04} T L F ^{0.007} S ^{0.016} Y F K P ^{0.02} S P ^{0.037} Y I G G ^{0.019} S A D K L A ^{0.012} S ^{0.049} Y L R L E P L R ^{0.031} Y F I A ^{0.002} Y P M K K ^{0.023} S P E W ^{0.056} Y L L P F E E R K E I M D E H I E I A K ^{0.073} T H P D N Q G I
^{0.007} R ^{0.019} S ^{0.075} Y ^{0.083} T ^{0.015} T ^{0.003} Y S F G I A D ^{0.067} Y E F V V I ^{0.022} Y E A P D L ^{0.002} S K W I N V V E R L R E A K A R K W V V ^{0.015} S E E P I L V G E I G ^{0.012} S L D I F L K

Sequence #6 — Gene Saci 0013

M R I ^{0.002}Y ^{0.034}S ^{0.01}S K K F D V L I E N F N L P N G K Q V E K A F V R H R G ^{0.015}S V V I A P F L G P E R I I L I K Q ^{0.015}Y R P I L G K W L ^{0.014}Y E F P A G ^{0.206}T I E E G E ^{0.063}S E D L ^{0.731}T A R R

E L E E E I G ^{0.052}Y V P L K L F K V L K F ^{0.013}Y V ^{0.004}S P G I A ^{0.013}T E L M H L ^{0.017}Y I A ^{0.004}T N L ^{0.003}T K ^{0.028}T ^{0.048}T Q K L E E ^{0.025}Y E V I E P F E L ^{0.085}T I D E A I K M I D E G K I E D G K ^{0.068}T I L ^{0.012}S L L

F I ^{0.016}S R K ^{0.001}Y Q E I R ^{0.026}S L L Q G

Sequence #7 — Gene Saci 0021

M I E F **S** N I L C D V **S** L V R E N F L I **S** P P G **S** P P **T** **S** I K G I F G F **T** L E P A L **T** **T** N F V A F **T** **S** F **S** E A L L I I A G V G I P V G V **T** **G** **T** E F I E I H F **S** L

I K N **S** **S** A A G V K C V N **S** G V A P A **T** V I P G I R L **T** **S** V V A I **T** R I N A K L P L R L I F P L I **S**

Sequence #8 — Gene Saci 0024

M T F V E D F R E L V P I T K R M T Y L N H A A I S P T P L P V Y F E A N R Y L I D V M R Y G S L A D N D E E S D E L Y H I R K N I G S L I N A E A D E I S L I
P N T S F G V N V I S F G L D I K E G E N I V T D N L E F P T V V Y P F L K L E K K G V K I K L V K T K P D T I E E D L L S A I D T R T R L V A V S H V S F N T
G V M V D V K K I V K E V K S V G G F T L L D I I Q S A G A I K V D V K D L G V D F A V A G G Y K W L M S P Q G S G F I Y V R K G L I S D P P F Y G W K S T K N
V L E F N P E K F E I E P G P R R F E I G T I D I A A N L G L A K S C E I I R K H E E E T V S S V Q N L S D Y V I K L A E E N R L D V I T P K K R K A G I S I I
R V N N A K Q V V Q K L L E K H I V V S A R G E G I R I S T H F Y N T K R E V E I L I E E M K K I L Q Q A S

Sequence #9 — Gene Saci 0026

M S V N I V F D T A G F L A G L E N L Y E K V Y T T Q E V I R E V K D F K S A S L L E L A I S S N K V I I F E P T R Q S L L T V T K T L N K I N D I S L S R T D
I S V A A L A L D L K P S L V V T D D L S L Q N L L L H M N I K Y Y S V K L N I K I S K K K N Y I Y K C E G C G K T Y M K N I K I C E I C G H K V I K V S Q

Sequence #10 — Gene Saci 0033

MKVKNVKPYKRRSLELEIEMAIDMTKNREYQLAREYTKLAI TYSRKFRFKIPIEYKRSICRKCYPPLVIGL T ERRRIKNKV
VIR T CLLCGWVRRYELKRD SKEGKGIPPRHKNRQER T Q

The image displays a protein sequence in two lines. The first line is MKVKNVKPYKRRSLELEIEMAIDMTKNREYQLAREYTKLAI TYSRKFRFKIPIEYKRSICRKCYPPLVIGL T ERRRIKNKV. The second line is VIR T CLLCGWVRRYELKRD SKEGKGIPPRHKNRQER T Q. Above the first line, p-values are listed for specific residues: 0.007 for Y, 0.088 for S, 0.272 for T, 0.028 for Y, 0.03 for Y, 0.088 for T, 0.06 for T, 0.003 for Y, 0.011 for S, 0.002 for Y, 0.029 for S, 0.002 for Y, and 0.146 for T. The residues T at position 14, S at position 15, T at position 20, T at position 21, and T at position 30 are highlighted with blue circles. The residues T at position 1, S at position 15, and T at position 21 in the second line are highlighted with purple circles. The residues T at position 1 and T at position 21 in the second line are also highlighted with blue circles.

Sequence #11 — Gene Saci 0034

M R L N L I L L D **S** A L E L V P R E I V **S** H P A V V K N A V R R G K K A E N **T** L L D I **S** L H **Y** K A M K N L E N A N K R G R P D I V H F A L L L F L **T** L E E E I R
G D L F I H **T** I D G K I I F V D R Q M R P P K N **Y** N R F V G L M E Q L L L E G K I P P K G D R **T** L M E I **T** N L K L K D L **S** R K **Y** **S** **S** L I V L **S** **S** G R K V N P A
D L C K L M H E N V L F G V G A F A H G D F **S** **S** E V K E **S** A **S** D F L **S** I **S** K N V L E **T** H Q V I C R V **S** I A C **S** G F L **S**

Sequence #12 — Gene Saci 0037

M Q Q F L T F N P R L W E F I S I N P F D F G F N N Y V P A T L V R R E F E N L I S V L K E N G D V I D L C N I V D N D K L L D I I Y D T I S V D V E N S S C K
N N L K K N L V N N D K E E L C K I F I L N P S I I L N E E G K V S K N R I L V H N M R A E L L W L H K Y I M Y A K N K L T I S Y P S T F S D K V T A K F L R N
A L E K F S K E I I L V N Y P P A L L N L D D V T I L G D Q M L L A Q I S S S T N A D G F L T L F S L N F P Q I V E V F S D F S G D E K P L S S I L R L V S Q D
Y V L T N L N I S E K I K L N I Y E M E R E K Y I L K G K T S L R E F L R K V N L K I I D V S V Q D I N K G L L S F L E V N D K R L L V K D L K D D G S H E I F
K N L G Y E I V K I Q M D N L A P D H R G P N N L I V K I T E

Sequence #13 — Gene Saci 0042

M N I ^{0.008}S I V V ^{0.011}S ^{0.091}T R D P V G E ^{0.216}T I K K L G ^{0.019}Y K F E E I D E D E V D F R F E R G D A I V I F ^{0.007}S K H Q ^{0.011}S ^{0.01}S ^{0.006}S K ^{0.339}T P A L ^{0.12}T V H ^{0.03}Y P G N P ^{0.008}S ^{0.015}S Q V L G G E P E K L G V A

F P R L L ^{0.067}T A I F R E I N K L D I P V Q K ^{0.073}T L E A ^{0.016}T H H G P ^{0.064}T ^{0.051}Y Q K V P I V F V E V G ^{0.004}S D P ^{0.038}T ^{0.089}Y W G N E K I V K ^{0.005}S L V E ^{0.005}S ^{0.018}T L ^{0.005}S A I D K V ^{0.005}S ^{0.002}S ^{0.005}L Y C E E I I V G

F G G P H ^{0.008}Y A P ^{0.003}Y ^{0.002}F S K L G E K V C I G H I I ^{0.002}S K ^{0.002}Y ^{0.001}Y L A ^{0.002}S I K D ^{0.013}T ^{0.058}T I I I Q ^{0.014}T V E K C M E N V D ^{0.043}T V V F D ^{0.006}S V P L ^{0.011}S V R D K V M H V L K D R N L K F K F H

Sequence #14 — Gene Saci 0044

M Q T Q F N F I L N K T V H V I R E D D S V R F A A E E M K K H N I G S L I V I D N R G K V S G I I T E R D L V R A I A E G N I N S T V S N Y M T R N V I G V T
E N F D P N Q A L Q V M L D H G F R H L P I I G K D G R V K G I L S I R D L A R T L I D P H Y L T Y G K E P E E V R G T G I A C P V C G V E I D E Y G Y C G C G
S G S G

0.007
0.016
0.025
0.008
0.005
0.092
0.002
0.01
0.004
0.006
0.031
0.089
0.022
0.117
0.028
0.16
0.047
0.099
0.021
0.057
0.028
0.016

Sequence #15 — Gene Saci 0050

MIDKA ^{0.016}Y EELIKMKKEKIMRD ^{0.062}S ^{0.049}Y ^{0.173}T IHKEL ^{0.033}S ^{0.023}E ^{0.019}S VE ^{0.011}S ^{0.008}ILNELWIN ^{0.001}Y ^{0.005}S ^{0.01}PE ^{0.005}S ^{0.005}VEH ^{0.005}S KKL LAIDGGMWWKE ^{0.078}T RQGVIFIVNAKAI VF
 EGINEIN ^{0.005}S EGVLVHIF ^{0.003}S PGN ^{0.011}Y AKERIELLMQLLELQLALKLVENV ^{0.04}Y ^{0.019}VLLDG ^{0.015}S ^{0.015}S KKLGRHK ^{0.13}S ^{0.003}ELKVDLDDIV ^{0.058}S IDKI
 L ^{0.046}S LEEKDEDNMLRFLIAENQLVL ^{0.011}S ELV ^{0.024}S ^{0.001}RY KDKLLFI ^{0.018}S KN ^{0.02}S ^{0.029}K ^{0.015}S ^{0.024}DLFKQA ^{0.01}Y ^{0.019}SDI ^{0.021}T ILELFT ^{0.003}QNC ^{0.004}GY ^{0.004}SKILEKKIDEN ^{0.004}Y IL
^{0.021}S ^{0.025}RKA ^{0.006}S ^{0.01}KL ^{0.005}SLN ^{0.055}Y ^{0.03}Y ^{0.03}FNLRLEP ^{0.085}S ^{0.016}ERLFRLLDFFNADKIFE ^{0.01}Y ^{0.015}LKVLKPV ^{0.01}S ^{0.015}LKG ^{0.015}Y ^{0.015}Y ^{0.015}PLIKVHKDVRV ^{0.059}G ^{0.078}KEDRERI ^{0.059}Y ^{0.078}S ILEMK
 RKDI ^{0.007}S ^{0.008}W ^{0.015}WP ^{0.015}S ^{0.015}QFY

Sequence #16 — Gene Saci 0051

M I I R E I R L Q N F L S H E D T T V K F E G S I N V I I G N N G A G K S S I I D G I L F G L F K R T N R D I G K N E E L I K K G K K S G Q V S I K F E I N G D
 T Y L I D R N V G E T S R D T I S L L K E G K I I T L A R Q S T I V N N K I K E I L G F D H K I L M S T T I I G Q G S V E S V F S D F P E V M K E L L K I N K L
 E M L R E S N G P I H S L I K V L T D R I R S L Q S I K D I L K R E E A E I D R L K K E I E E I K V K L E N I E R E A K E K E D E L N Q Y N T E F N R I K E I K
 V Q Y D I L S G E L S V V N K K I E E I A L R L K D F E E K E K R Y N K I E T E V K E L D E N R E K I N T I S S F K S I L V Q I D S L K S Q I N V V E N D L K R
 K K E K L K R K K E L E E K E K Q Y E E I E K R K K E L E E K E K Q Y E E I E K R L T Y V L K N I E R Q K N E I E K L N Y V D T Q D L E N K I K D V S D R I N Q
 I D N E L K G L L D R R G D L N G R K E Q T L K I Y N N L N S I E D D R C P I C G R P L D S E H K A K I R E E I K V Q L L E L N K Q I T A L Q A R I N S L I K E
 R E E L E A T R N K L Q L E L Q K R S K E K G I Y E A K L K E L Q R L E E E K N K L Q N E I L S L L S Y H Q E F E N I A E K E K E L I D Y H E E Y L K N S D I L
 E E D I Q E Q E Q R L N E L N S K L S E L E K S Y N D Y K A K Y Q F L P A D L K S L V S L E E R I R R R I S E L E K L K I E Y E R L K E E I T R M K G L K E E Y
 E K L K E E E D A L L N R I S E L G Y S E K R Y K Q L E E I I D K L S K I L S G I E A D K G K I K G S L E E K I K N I E E K E R N I E E L R N K M N E E S K L N
 L G I S K L Q K L R E V L D N K H L Q S H I M N I V R N Q I E N N V N E V I A K F D L S F S A V E I D F V G K S E L Y V Y T A S G Q K I H I N A L S G G E R I S
 I A L A L R L A I A K A L M N Q F S T L I L D E P T V N L D E Y R R K E L I D V I R S A I E I V P Q I I L V T H D Q E L I Q A G D Y I I R V E K K G D T S K V E
 V S S Y D R

Sequence #17 — Gene Saci 0054

M L I ^{0.021} Y L P ^{0.015} S D ^{0.007} Y S ^{0.022} L R I P M I ^{0.028} S ^{0.022} S K V E K I L E E F ^{0.047} S I K E G E E H I ^{0.009} S ^{0.119} T ^{0.089} Y N K I A M ^{0.051} T A K A E G ^{0.045} Y A D I E A M L C A F A E E E A K I A E ^{0.189} T V G K V A ^{0.064} T E L K

V K K L L ^{0.016} S D F A ^{0.107} T K E G E E H I ^{0.007} S ^{0.129} T ^{0.052} Y N K I A M ^{0.05} T A K A E G ^{0.043} Y A D I E A M L C A F A E E E A K I A E ^{0.095} T V G K V A A

Sequence #18 — Gene Saci 0057

MI^{0.249}**T**^{0.084}**S**KRMKALEIN^{0.011}**S**EALGV^{0.006}**P**^{0.04}**T**LLLMENAGR^{0.023}**S**VKDEIMKRLNLD^{0.014}**Y**^{0.004}**S**KKVVVFAG^{0.08}**T**GGKGGDGLVVARHLA^{0.006}**S**EG^{0.011}**S**EVHVLLL

GENKHPDAIINLNAI^{0.006}**Y**EMD^{0.004}**Y**^{0.018}**S**IREVKLIKD^{0.068}**T**DELQPVKADVLIDAMLG^{0.029}**T**GF^{0.004}**S**SGKVREPF^{0.071}**R**AIRVFNQ^{0.004}**S**^{0.008}**S**SGFKV^{0.014}**S**IDIP^{0.022}**S**

GINADDEEQQGEHVIPDLIV^{0.026}**T**FHDLKPLKKE^{0.016}**S**KVVVKKIGIPKEAEI^{0.041}**Y**VGPGDVI^{0.01}**V**NVKKRE^{0.044}**Y**NT^{0.01}KKGDNGRVLIIIG

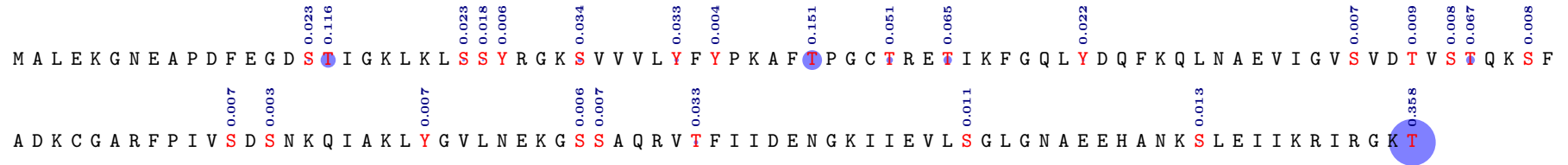
NF^{0.028}**T**F^{0.003}**S**SGAP^{0.13}**T**L^{0.005}**S**ALGALR^{0.255}**T**GADLV^{0.125}**Y**VAS^{0.02}PEE^{0.03}**T**AKVI^{0.011}**S**^{0.022}**S**S^{0.018}**S**SPDLI^{0.011}**S**IKLKGNIS^{0.008}**T**DNLDELKPWIDKADV^{0.043}VVVGPMGQER

E^{0.138}**T**VDA^{0.017}**S**IEIVR^{0.025}**Y**LKAKNKP^{0.024}**S**VIDADALK^{0.008}**S**VAGMELFPNAVI^{0.104}**T**PHAGEFKI^{0.133}**Y**SG^{0.008}VQPD^{0.008}**S**NMRKRIEQVKEC^{0.003}**S**LKCN^{0.003}CVLL

KGY^{0.007}VDIIEEKEEFKLNK^{0.036}**T**GNPGMAVGG^{0.156}**T**GD^{0.062}**T**LT^{0.025}GIAS^{0.002}FMAQKL^{0.004}**S**PF^{0.132}**T**SA^{0.004}**Y**LGAFVNGLAG^{0.012}**S**IA^{0.004}**Y**EKLG^{0.004}AHLVA^{0.012}**T**DIEN

IPKVINEPLEVF^{0.001}FKKKV^{0.036}**Y**KRILD^{0.06}**T**

Sequence #19 — Gene Saci 0058



Sequence #20 — Gene Saci 0059

M V F N L F F A ^{0.018} Y A L Q M R K I P R ^{0.049} T M ^{0.022} S ^{0.044} T Q H P D N A K V P E W N Q G E A I ^{0.007} S G E N E I I E A ^{0.011} Y L A F ^{0.005} S R ^{0.007} Y G V E E V M W D A E G K D V D ^{0.114} T H V V R K L L ^{0.003} S Q
^{0.003} Y P E F F R H R I L G K D I F L ^{0.345} T ^{0.011} Y R V P N P K I E G A E R K V F A E ^{0.083} T L N ^{0.024} T I P I ^{0.061} T ^{0.011} Y D L A E K F ^{0.017} Y G E N P N P P V F E V I L P F ^{0.011} T ^{0.086} T ^{0.004} S ^{0.005} Y E E L I A V I K F ^{0.003} Y
 E K V I V N ^{0.002} S D N ^{0.03} T K L V D D ^{0.084} T ^{0.021} Y V K D I I G E ^{0.088} T I N P K K I E V I P L I E D R D ^{0.053} S M L R I D ^{0.196} T I V G K ^{0.013} Y I E I E R P P ^{0.028} Y L R V F L A R ^{0.012} S D P A M N ^{0.008} Y G L L ^{0.004} S A V
^{0.009} L ^{0.014} S V K ^{0.014} Y A L ^{0.016} S R L ^{0.008} S K M E K I ^{0.004} Y G V K I F P L L G V G ^{0.004} S L P F R G H F ^{0.003} S P ^{0.015} Y N V E N ^{0.076} T L N E ^{0.035} Y R G I ^{0.009} Y ^{0.051} T F ^{0.008} T V Q ^{0.002} S A F K ^{0.026} Y D ^{0.015} Y E D D L V I ^{0.005} S A I K K V N G ^{0.027} T N
^{0.018} V ^{0.044} T E K I E L ^{0.004} S E E D E E I I ^{0.004} S N V ^{0.166} T R K ^{0.004} Y ^{0.133} T Q Q ^{0.003} Y Q N K I E A L A D V I N K V A L L L P R R R A R K L H I G L F G ^{0.013} Y ^{0.009} S R ^{0.012} S ^{0.297} T G K V ^{0.062} T L P R A I ^{0.009} S F V G ^{0.004} S L ^{0.005} Y ^{0.017} T
 I G I P P E I I G L ^{0.009} S ^{0.008} S L ^{0.005} S K M ^{0.021} T D Q E L N A I F N N ^{0.001} Y ^{0.002} K Y L K N D L Q F A A R F V N F E A L Q L L K D I W N I D A E V V K A I K E D I D ^{0.071} Y A E N ^{0.005} S L G I R I G
^{0.009} E ^{0.082} S ^{0.008} D Y M S K K H V L L ^{0.008} S ^{0.024} T L A L L ^{0.008} S I K E G K L D E A K ^{0.051} T ^{0.083} Y I K E M A I V R R A I G

Sequence #21 — Gene Saci 0060

M K I L V ^{0.006} S G L I P V D ^{0.009} S G K ^{0.017} T ^{0.029} T F ^{0.011} S L ^{0.005} S I L ^{0.006} S F F K ^{0.005} S V G I D V F P H K P V A G H N A W ^{0.02} Y ^{0.005} S ^{0.017} Y ^{0.003} S ^{0.009} T L L R ^{0.009} S E E L K A L V G N D A L K ^{0.012} Y ^{0.016} Y D E ^{0.046} T R L D I N M I N

P F A V L L A P P D L E K L G ^{0.005} Y N V R L ^{0.006} Y K E I I ^{0.006} T N G L P V M I R L ^{0.01} Y D G N A V ^{0.004} S H L V L E K F ^{0.013} S E L V ^{0.049} T D ^{0.016} S L V E K I E ^{0.017} S L ^{0.009} S K V L K A I R V P K E K L N E

I I N ^{0.006} Y ^{0.013} S P D I ^{0.017} S D I ^{0.016} S ^{0.049} T Q K I L ^{0.021} S R E ^{0.043} S N V L I E ^{0.008} S ^{0.014} Y N D A L A P N ^{0.005} Y ^{0.003} S ^{0.003} S L N V D C L F I V ^{0.003} S P G K V F L I D E F K K F I ^{0.051} T L F A ^{0.007} T Q P W L I Q G ^{0.001} S ^{0.002} S F I R ^{0.012} Y

A K V ^{0.004} S K V W K ^{0.11} T E L G ^{0.041} T ^{0.016} Y K L E N G L E D F L L G L A E K E

Sequence #22 — Gene Saci 0061

M S L L D E A L K G N Q L A I G R L L T K I E Y L P E G L D A L E Q L M K N S G K A H V I G I T G S P G S G K S T L I S K L V S E Y L N R G H R V G V I L I D
 P S S P F S L G S F M G N R I R L S E D E F G E K V F I R S I G S R G Y L G G I S S E A L M L V E A L D G L G F D R I L V E T V G A G Q T D T E V I D T V H T I
 S V L T T P G T G D D I Q A L K A G I M E I G D I Y V I N K S D K P E T E L A Y N T I R F A I E T A E G E Y K D G W K P R I V K T I A I K G V G I S E L I D A F
 D E H L R F L I G N R K F E F K V E N R R V K I L E L L L K R S I N T I I E R F I I Q N K N E I D V E L N K N H R I K L L I E K Y T K I I G S I L E N Q Q K A

Sequence #23 — Gene Saci 0067

MFH I I D L A L K W D E R R V K I V D E L K ^{0.008} S K G I N P ^{0.004} Y P H K ^{0.018} Y D I ^{0.01} T H ^{0.071} T I I D I K K M E R ^{0.071} S D K P ^{0.221} T D A F A F D I ^{0.006} S T ^{0.164} A G R V A N I R R H G K I ^{0.008} S F V D I
 F D E G E R L Q L Q L R V N E L G D R ^{0.025} Y D K F F E I V D R G D I L G V K G D L L ^{0.005} Y T ^{0.013} I K G E L ^{0.024} T L R I K D ^{0.01} Y V L L ^{0.005} S K ^{0.019} S L I E P P D W ^{0.012} S K L ^{0.872} S P E F R ^{0.016} Y A H R ^{0.011} Y
 V D F L ^{0.041} Y N D L A R R N M E I R ^{0.012} Y S ^{0.026} T ^{0.249} I R R I R E F L ^{0.032} Y S ^{0.002} K G F M E V E ^{0.193} T P I L Q P V ^{0.087} Y G G A L A K P F M ^{0.002} S H V N ^{0.019} Y L N E N W ^{0.005} Y L R I ^{0.005} S L E L ^{0.002} Y L K R ^{0.001} Y I V G G
 F N K V F E I G K V F R N E D I D V ^{0.073} T H N P E F ^{0.02} T L L E L ^{0.006} Y W A ^{0.012} Y A D ^{0.023} Y N D I M R L ^{0.011} T E E M L Q D V V K N I N N D ^{0.004} S K I K ^{0.007} Y S ^{0.014} I G G K E ^{0.013} Y T ^{0.028} I E F ^{0.008} S Q F R K I ^{0.163} T
 M I D ^{0.017} S L ^{0.121} T E V L G K D V D K M ^{0.133} S D E E L K ^{0.038} S L M D K N G L K P R G N M ^{0.015} Y I R G L M I E K L F D K L V ^{0.069} T P ^{0.055} T L I Q P ^{0.058} T F V L D ^{0.008} Y P V E ^{0.062} T ^{0.204} T P L C K P H R ^{0.013} S K Q G
 L V E R F E L ^{0.028} Y V A G M E L A N A ^{0.025} Y T ^{0.056} E L N D P I I Q D M L F K Q E Q E M F K R G D E E A H P ^{0.125} Y D V D F V R A L ^{0.019} S ^{0.075} Y G M P P ^{0.125} T G G L G I G I D R L I M L L ^{0.006} T N N
 M ^{0.003} S I K E I I P ^{0.029} Y P M L ^{0.006} S A K V I Q E D

Sequence #24 — Gene Saci 0069

MEVA Y T NEHWKVLIEKRRKIAMEILN Y L T KLGMEGFV Y G S VARGDVKNE S D I D I V I F N P N I L G L D L I S C D H K F I V Q A T P F S
T P K A Y I S L D H E E K K V I S F P L S K L T K K E T E F Y Y F G G L L S R D E I I K D I R A P G V N K K L S I I I P T K E G H I E L P L K G N E D Y A V K V
I K N V S K D T I M E R E R L L T K R E E K G H T G I F I K Y E L T R E E S L Q E A F R D L Y K S N K Y F R R V I D A K R

0.026 0.027 0.005 0.041 0.089 0.016 0.005 0.001 0.144 0.003
0.185 0.027 0.012 0.023 0.008 0.388 0.163 0.026 0.023 0.015 0.008 0.051 0.082
0.007 0.065 0.337 0.292 0.007 0.16 0.074 0.087 0.024 0.009

Sequence #25 — Gene Saci 0072

M K I L E F N D K R G ^{0.017} S L K L H V E N E D D L W L L H I I I K K G D R I V A K ^{0.115} ^{0.105} T T R D I ^{0.07} S M G K D ^{0.061} S R R I P M ^{0.064} T I E L Q V E ^{0.043} ^{0.044} Y T E F Q N F ^{0.009} ^{0.026} T T R L R I H G L I L

D A P E R F G I K G A H H ^{0.02} T V N L D I G D E V I I I K E Q W ^{0.01} ^{0.006} S N Y E L E K I R E Q E E K K G K L L I A L V D V D E ^{0.023} Y I I A L L M K Q G V K I L A E K ^{0.009} S L Q ^{0.039} T P G

K D N D V V N E N I E E M A N E I I ^{0.003} S F V K L ^{0.013} T G V N V I I I A G P G P F K D M V N Q K I K Q I D N K L I V ^{0.016} Y V D ^{0.011} S V ^{0.009} ^{0.023} S S A ^{0.016} S R A G L N E L L R R D I I D Q V ^{0.016} Y

R E F E I A Q Q L K I L E ^{0.006} S I M E N L A K N ^{0.03} T G L V V ^{0.019} Y G I E D I K K A N E L G A V D K L L I ^{0.041} T E D ^{0.004} Y L ^{0.116} T ^{0.079} T G R E I I D E L L R D I E K K K G K I M I V P K D

^{0.012} S ^{0.024} P ^{0.004} I ^{0.007} Y Y Q V K N L ^{0.004} T G I V S L L R F R I N

Sequence #26 — Gene Saci 0073

M I I I S D A R E E D L P E I Y D V E L E S F D N P Y P F S L L R A Y Y Y I S G D L F I V A K S G D K V I G Y I L G I I Q F G Y R G H I V S I A V K K D K R G S
G I G T K L I S E L E N R F K L A Y H C I H S Y L E V Y Y K N I S A I N F Y I K N G Y K A V R I Q K D Y Y G R E K H A I I M I K S L Y D H Q N G F E

Sequence #27 — Gene Saci 0074

M L E D F F V L D F ^{0.004} S ^{0.014} Y D V V D N I P V I F I W ^{0.003} S I D R R G N R V ^{0.073} T L V E K N F R P ^{0.007} Y F ^{0.054} Y A V V D D R E D V ^{0.038} S R V I ^{0.13} S E I K K L ^{0.033} S K P ^{0.055} S ^{0.057} S P I ^{0.093} T N I E I E ^{0.245} T D R
^{0.025} R ^{0.007} Y F G N P L K ^{0.036} S L K I E T V V P A ^{0.018} Y V R I ^{0.013} Y R D E V ^{0.005} S K I K G V K N V L E A D I R F ^{0.017} Y M R ^{0.001} Y S I D K G I K P F ^{0.003} Y W I K A D V E E I Q P K E I F K V K ^{0.008} S E K L ^{0.01} Y
 L I K D I L E I ^{0.015} Y E A E E P R L K ^{0.038} T M A F ^{0.005} S I E V ^{0.038} Y N K ^{0.041} Y G F P N ^{0.255} T R R D P I I V I G V ^{0.016} Y T ^{0.065} E N G ^{0.006} Y K Q F I ^{0.004} S S D ^{0.006} Y D D I N V I R E F I K F V N D F E P D I I F
^{0.004} G ^{0.003} Y N ^{0.002} S N S F D W R ^{0.006} Y L V E R A E L R G I K V A I G R K V N ^{0.005} S E P ^{0.009} S Q G V ^{0.101} Y G H ^{0.055} Y ^{0.004} S V ^{0.031} T G R L N V D L A G V F C ^{0.007} S S R ^{0.009} S K ^{0.012} S L I D L A D N L G V M P K N K R E I
^{0.013} L E W ^{0.003} Y E V P R ^{0.021} Y W D D K S K R E I L L K H N L ^{0.005} S N I K ^{0.004} S I ^{0.004} Y D I G Q S N L H ^{0.001} Y L I Q L V K V ^{0.01} T G L P L D Q L ^{0.023} S M A ^{0.007} S S G H R I E W L L V R E ^{0.004} S K K ^{0.012} Y N E F I P
 N R E E R R ^{0.305} T E A ^{0.025} S D E G I I V P P V ^{0.005} S G L H N N V ^{0.041} Y M L D F ^{0.003} S T I ^{0.042} Y P ^{0.003} S I I L K ^{0.004} Y N I ^{0.003} S P D ^{0.063} T L V R G D C ^{0.003} S D C W ^{0.026} T S L N G N ^{0.002} Y K F R K D I K G L ^{0.009} Y Q N V L L
 N L ^{0.011} S A E I E R R E E I I K ^{0.365} T L D P E K R R R L E E E L R A L R ^{0.015} S I L N ^{0.003} S F ^{0.01} Y D ^{0.007} Y I R W ^{0.082} T N A R W ^{0.002} Y V K E C A E G L F E W G R E L I L Q I L K I V K E ^{0.002} S G F Q V
^{0.044} I ^{0.022} Y A D T D L M F F K G E N D P K K L E E D I A N R L ^{0.013} S L N L K F N K F ^{0.001} Y T ^{0.012} K L I L L E G K K Q ^{0.009} Y A A L ^{0.105} T K D N K V D M V G I E D ^{0.014} Y R N N W C D L A K E V L Q N
 V V D Q V L R ^{0.005} S D K I N E A V R ^{0.007} Y V K ^{0.011} S V I ^{0.003} Y S L R R G E F K I E D L V ^{0.012} T W N I I D K D I E E ^{0.014} Y K F D L P H I V A A R K A M K ^{0.009} S G H L V ^{0.024} T R G ^{0.023} S K I G ^{0.046} Y V I V K
^{0.011} G ^{0.011} S G K L S N R A E P ^{0.075} Y F M V K E K ^{0.013} S K V D I E ^{0.028} Y ^{0.024} Y I D K Q I I P ^{0.003} S A L K V L G L F G V K E N ^{0.026} T F K F G G ^{0.026} T D V L N F F K K

Sequence #28 — Gene Saci 0075

M K Y N I V F K F N V E G I V D K P D V I G A I F G Q T E N L F G D D F D L R E L Q D K G R L G R I S V D L S S K G R S E G T I I I P S N L D K V E T A L V A
A M I E N V D K V G P Y N A E F K L I D I V D I R E E K I K K I I G R A K E I L G S W S R E K T L D I R E V I N E I T S S V K T G E L T E Y G P E R L P A G P D
V D K D P E L I I V E G R A D V I N L L R Y G Y K N V I A V E G A T G K I P Q T L V D L T K Q K K A V I A F L D G D H G G D L I L K E L L S S N I K L D Y V A R
A P T G K E V E E L T G K E I A K S L S N M V T I A Q Y I K K Q Q E A Q Q A I K Q A L A T E T T T T A V T T T S S T Q I Q V E V K P E E K K E I Q I T V P A Q I I
E E I K K L P G T L E G I L L D E N W N I I E K I Q V R D I V Q K L E N I S A D S I R Y I V F D G V I T Q R L V D L A S A K N I K M L I G A R I G G I N R R P K
E L E L L S F N D I I S

Sequence #29 — Gene Saci 0078

M K I V **T** H E F N V R **T** K **S** R F E **S** I D I **T** E H I R E N I K G I K D G V V **Y** V F V K H **T** T C A L I V N E A E **S** G L M K D **Y** L E W G K K L V P P D G **T** F E H N N I

D N N G H A H I I **S** **S** I I G N **S** R V L P I **T** N G E L D L G **T** W Q R V I L L E F D G P R **T** R **S** I L V K G I G E

Sequence #30 — Gene Saci 0080

M S Q Q Q F K Y I V R L F G Q D V D G T M K L P Y A L A M I K G I G Y N T A M I I R K L N L D K D K R L G E I S D E D I K K I E N L L N N K I I P E S P N W I
Y N R Q K D Y E S G A D M H L V T S D L I F Y V R N D I E R E R R S R S W R G V R H S L G L K V R G Q R T R T T G R T G A T I G V R R A K A G Q P Q Q A K P A
G P A E G G E A K K

Sequence #31 — Gene Saci 0081

M G D P R K **S** K K K W M G P **S** H P W I K I N L G K E Q I L I G K **Y** G L R N K K E I W I A Q **T** M I R N F R H Q A R **S** L L A L P P A E R N I R E K Q L I Q K L **Y** R M
G I L E K D N **S** **S** **T** L D D I L **S** **L** **T** E E N **Y** L E R R L Q **T** I V **Y** K K G L A R **T** I **Y** Q A R Q L I **T** H G H I A I **S** G R K V **T** **S** P G **Y** V V L R G E E D L I D **Y** **Y** P **T** **S** P
F K Q N P P **S** Q G E V N V E Q A

0.113 0.023 0.002 0.023 0.009 0.003 0.003
0.014 0.08 0.022 0.037 0.007 0.061 0.006 0.018 0.003 0.023 0.004 0.229 0.006 0.025 0.21 0.138 0.203 0.013
0.012

Sequence #32 — Gene Saci 0083

M P I ^{0.012} S L I E R N G L R L R L V L E N ^{0.003} Y P L E F V N ^{0.01} S I R R A ^{0.022} S I L ^{0.009} Y V P V M A V D E V ^{0.038} Y F I E N N ^{0.003} S P L ^{0.046} Y D E I L A H R L A L V P F V ^{0.012} S D E A L E H ^{0.053} Y R P P E

E C A E C K E N C D G C ^{0.025} Y N R V ^{0.094} Y L D V E A K D Q P L M I ^{0.004} Y ^{0.028} S R D L K ^{0.008} S E D Q M I ^{0.018} T P V ^{0.01} S G A I P I V L L G ^{0.006} S K Q K I ^{0.006} S L E A R L R L G ^{0.025} Y G K E H I K ^{0.03} Y ^{0.007} S P V ^{0.011} S

V ^{0.009} S I V R ^{0.004} Y ^{0.005} Y P K V ^{0.081} T V L G N C E K A V E V C P E G V F A M E N N K L V V K N E L ^{0.003} S C I L C E E C L K ^{0.001} Y C A G ^{0.009} S V ^{0.013} S I E ^{0.017} S V E N K F I L E I E ^{0.081} S V G ^{0.07} S L K P E R

I L I E A ^{0.072} S K ^{0.165} S L L R K L ^{0.364} S E L K ^{0.189} S K L E A G K

Sequence #33 — Gene Saci 0085

M ^{0.015}S ^{0.015}S Q E E I V I V D A ^{0.01}T N Q I L G R M ^{0.013}S ^{0.021}T H I A K L L K ^{0.01}S G K K V ^{0.021}Y V V N A E K A I I ^{0.022}S G P R ^{0.04}S R V L E G ^{0.026}Y ^{0.005}S L L F ^{0.03}T V K ^{0.016}T M Q N P ^{0.019}Y R Q G I R R P R N P I N

I V K R ^{0.21}T V R G M L P K N K L G K Q I ^{0.025}Y R N L K A ^{0.02}Y I G I P K E L E G K ^{0.049}S M I R F D D A D V ^{0.024}S R L K G K ^{0.024}Y I ^{0.148}T V A E L ^{0.016}S R L L G G L K Q

Sequence #34 — Gene Saci 0092

M S^{0.004} Y^{0.001} F D N Y^{0.002} F N E I V N S^{0.002} V N D I I K S^{0.004} Y^{0.01} I S^{0.008} G D V P K L Y^{0.016} E A S^{0.008} Y^{0.016} H L F T^{0.081} S^{0.003} G G K R L R P L I L T^{0.029} I S^{0.009} S^{0.006} D L F G G Q R E R A Y^{0.015} Y^{0.017} A G A A I E V L H T^{0.013} F T^{0.007} L V
 H D D I M D Q D N I R R G L P T^{0.047} V H V K Y^{0.007} G L P L A I L A G D L L H A K A F Q L L T^{0.004} Q A L R G L P S^{0.003} E T^{0.028} I I K A F D I F T^{0.017} R S^{0.01} I I I I S^{0.007} E G Q A V D M E F E D R
 I D I K E Q E Y^{0.145} L D M I S^{0.025} R K T^{0.286} A A L F S^{0.008} A S^{0.016} S^{0.014} S^{0.023} I G A L I A G A N D N D V R L M S^{0.009} D F G T^{0.014} N L G I A F Q I V D D I L G L T^{0.041} A D E K E L G K P V F S^{0.087} D I R E G K
 K T^{0.119} I L V I K T^{0.057} L E L C K E D E K K I V L K A L G N K S^{0.029} A S^{0.028} K E E L M S^{0.022} S^{0.057} A D I I K K Y^{0.003} S^{0.02} L D Y A Y^{0.017} N L A E K Y^{0.005} Y^{0.009} K N A I D S^{0.009} L N Q V S^{0.011} S^{0.007} K S^{0.029} D I P G K A L K Y^{0.007}
 L A E F T^{0.083} I R R R K

Sequence #35 — Gene Saci 0094

M I K ^{0.005} Y N F P V F K V K G V I F D L D G ^{0.009} T L A N ^{0.003} T A L I H K E A W E K A L D R L G I K ^{0.021} S D V K I D N L L G R K ^{0.038} S ^{0.038} S D I A K L L A P N N W ^{0.002} S E L I N I K N Q I ^{0.015} Y V
E L V K E K A ^{0.015} S ^{0.09} P ^{0.017} T P C A L D L L ^{0.005} S ^{0.057} Y L R K K E I K ^{0.027} T A I V ^{0.015} T ^{0.014} S S N K L ^{0.018} S ^{0.018} S G ^{0.037} S V L K K L G I ^{0.03} T ^{0.013} S E V V L ^{0.101} T G D D V I N ^{0.005} S K P N P E G I N K A L ^{0.006} S L L ^{0.018} Y L D G R
D V I G V G D ^{0.035} T E V D V E A ^{0.006} Y ^{0.029} Y K A G L G G I ^{0.006} Y L V K ^{0.003} S G V P F R E E V V K M ^{0.014} Y G G I V I ^{0.002} S ^{0.004} S L C E L L E L I ^{0.012} S

Sequence #36 — Gene Saci 0111

M I ^{0.085}T ^{0.017}S Q D ^{0.021}S K K ^{0.065}V ^{0.056}Y A V ^{0.027}S K L D ^{0.019}S L D L E K N V Q ^{0.013}S ^{0.029}G Y H E H V ^{0.009}S ^{0.014}S A I D E I ^{0.007}S K N V K D I L R ^{0.013}S Q G ^{0.008}Y ^{0.007}S G K F E I F V E V ^{0.011}Y A K E N G K ^{0.007}S R L I Q ^{0.005}T V K L K

I N V N

Sequence #37 — Gene Saci 0113

M E ^{0.04} T D I V K ^{0.024} T I L ^{0.013} S ^{0.007} Y ^{0.012} S D ^{0.01} S ^{0.026} Y L A L S ^{0.019} R K V E V N G N K I R I N G V D ^{0.016} Y E F Q N P L L I ^{0.008} S I G K ^{0.012} S ^{0.017} S P K M A K F F V E R L K V ^{0.013} S R G L I V ^{0.009} S P ^{0.005} Y Q A K V D ^{0.011} S L
 E V I V ^{0.008} S ^{0.013} S H P K I ^{0.109} T E K ^{0.012} S ^{0.042} L Y A G ^{0.083} S R I V D M L R R E D ^{0.01} Y D I V I F L L ^{0.004} S G G A ^{0.006} S A L V E ^{0.065} Y ^{0.015} S D V P L E V L K E I N D K L V ^{0.022} T ^{0.008} S G L ^{0.005} S I D E I N ^{0.181} T V R K H L ^{0.005} S
 K I K G G W L A K ^{0.005} Y ^{0.009} S K A P I V ^{0.014} S L I I ^{0.02} S D V P ^{0.018} S ^{0.017} S D I ^{0.014} S F V G ^{0.01} S G P ^{0.081} T I L D K ^{0.026} T ^{0.011} S V I D A E R I L A K I G L ^{0.006} S ^{0.004} S Y ^{0.005} N K ^{0.009} Y L V E ^{0.041} T P K D I K N ^{0.02} T V N V K I L D V
 E E V L V K L K N H L K N ^{0.008} S L L L ^{0.008} S ^{0.011} S E V K G D A ^{0.031} Y ^{0.004} S F G V N L A G I A N ^{0.008} T F A R I N R Q E N V I L A G G E P D V K I ^{0.234} T ^{0.01} S K A G K G G R N G E V C L G F L K ^{0.003} Y I
 R A N A K L ^{0.013} Y A V A ^{0.015} T D G I D G N ^{0.002} S E ^{0.021} Y A G C ^{0.015} Y V D H N V K I E N I D ^{0.022} Y ^{0.086} Y V E ^{0.007} S H ^{0.007} S ^{0.004} S Y E I L E K ^{0.029} T G N V I Q ^{0.002} T G F ^{0.009} T G D N V N N I ^{0.002} Y V L H I N N

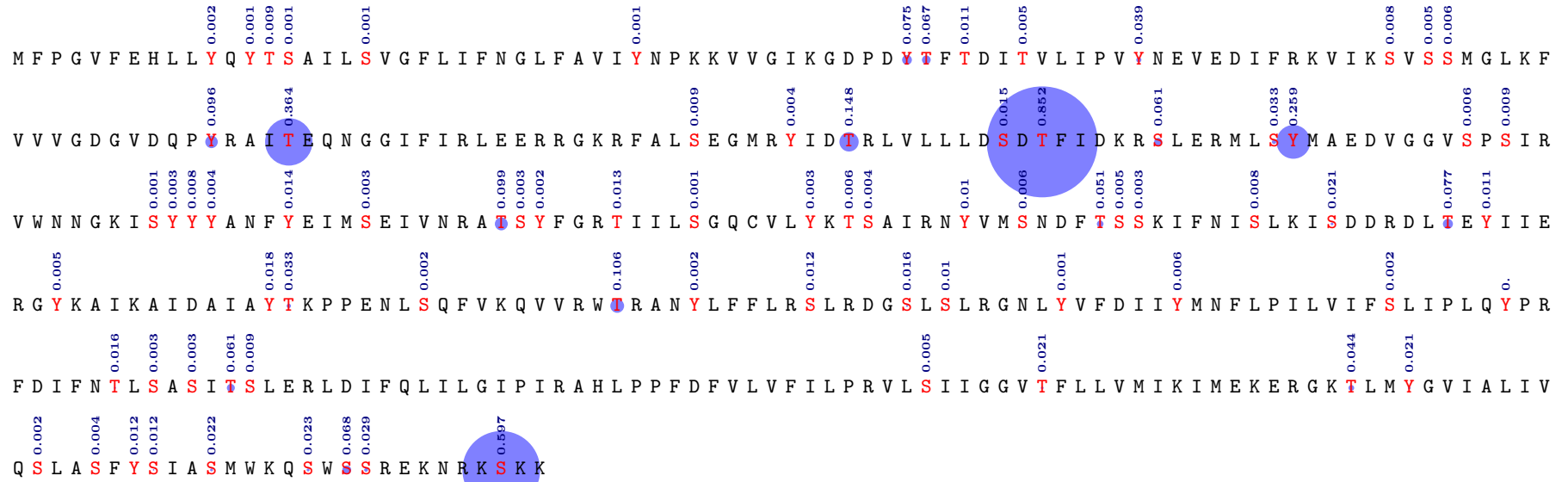
Sequence #38 — Gene Saci 0121

M R F M E T C L G V V K R G D F F L F I R K L R G I G T G Y I N S A G G K L R D T E T P R E C V E R E L Y E E L G I R V L S S E R V G K I E F L Y G Q E K Y L M
H V Y L V T E F E G I P R A S E E G I P M W L K E P P Y E E M W Q D D K I W L P K V L A G E K V D C K F Y F S S D W K E F F G G E C K S L T E F T

Sequence #39 — Gene Saci 0122

M K Y ^{0.05} T ^{0.094} D ^{0.162} A P K L F M N ^{0.056} T ^{0.178} G ^{0.001} R F P R R I I W A M G L I K Y A C A R V N M N L G L L D R E I G R A I I Q A A E Q V M K G D H D D K I I L D V F Q ^{0.062} T ^{0.003} G ^{0.003} S ^{0.083} G ^{0.083} T ^{0.083} G L
 N M N I N E V I A E ^{0.027} T ^{0.003} A ^{0.002} S ^{0.004} K I A N K H V H P N D H V N L G Q ^{0.049} S ^{0.223} S ^{0.101} N D ^{0.041} T ^{0.101} V P ^{0.071} T ^{0.106} G I R V A A A E V E E N L I P A L T ^{0.062} K L I N ^{0.071} T ^{0.106} L D R K A E E ^{0.071} V ^{0.106} K D I V K A G R ^{0.106} T ^{0.106} H
 L R D A L P V ^{0.018} T ^{0.004} L ^{0.096} G ^{0.006} Q E L ^{0.062} S ^{0.065} A ^{0.085} Y ^{0.088} S ^{0.003} D A F K H D L E N I R Q ^{0.062} T ^{0.085} V E ^{0.088} Y ^{0.003} V K E L P I G G ^{0.085} T ^{0.088} A V G ^{0.088} T ^{0.088} G A N ^{0.003} S ^{0.003} H P D F Q I K V I D E I N N E ^{0.012} T ^{0.012} G L G F K P A N K F R A M R
 L L ^{0.111} T ^{0.066} D L L ^{0.004} T ^{0.049} L ^{0.01} S ^{0.007} G A L R ^{0.049} T ^{0.007} S ^{0.005} A V N L ^{0.185} Y ^{0.019} R L G Q D I R L M F ^{0.005} S ^{0.019} G P M ^{0.185} T ^{0.019} G F N E I D L P ^{0.019} S ^{0.019} Q E E I A G ^{0.019} S ^{0.023} S ^{0.091} I M P G K ^{0.091} T ^{0.155} N P V ^{0.155} T ^{0.155} V E A ^{0.004} S ^{0.004} L L I ^{0.002} S ^{0.002} A Q V V G L D H A N
 Q F A ^{0.003} S ^{0.003} M L G E F E L ^{0.003} S ^{0.01} M G I P L I G ^{0.01} Y ^{0.03} N V V ^{0.012} T ^{0.012} Q ^{0.012} T ^{0.012} R L L A E A L N K F A D L V I D K M V P N L E R M R R L A E ^{0.013} S ^{0.029} S ^{0.017} P ^{0.017} S ^{0.076} L I ^{0.076} T ^{0.076} I V ^{0.02} S ^{0.02} P V I G ^{0.016} Y ^{0.016} D K A ^{0.026} S ^{0.026} E I G K K
 L A K G L ^{0.057} S ^{0.057} I R E A L K E L G ^{0.05} Y ^{0.05} N D E Q I D K I L D L K K L ^{0.117} T ^{0.117} K P G F ^{0.083} S ^{0.083} A K

Sequence #40 — Gene Saci 0124



Sequence #41 — Gene Saci 0125

MGK ^{0.004} S P F I M F L V I A I I L ^{0.001} S P I V L M I Q N N F V ^{0.022} Y ^{0.002} S ^{0.005} D S P F L ^{0.042} T P Q ^{0.012} Y ^{0.009} S ^{0.004} S V R V D Q I L V K D F N ^{0.012} Y ^{0.002} S ^{0.002} S N D N I ^{0.008} Y I I A ^{0.003} S G N ^{0.007} Y ^{0.002} S Q I L D K L N N ^{0.01} S L H
^{0.014} Y ^{0.007} L ^{0.005} S P D ^{0.159} S ^{0.013} K L I ^{0.028} T ^{0.015} P ^{0.003} Y ^{0.001} E Y L K M F N E ^{0.006} T L Q N ^{0.003} Y ^{0.001} S K P L I E E I ^{0.001} Y ^{0.003} N K I L P L H ^{0.03} Y ^{0.001} L Y G N L ^{0.002} T ^{0.005} F E K L I I L ^{0.001} S ^{0.002} N F ^{0.002} T ^{0.002} Y ^{0.004} F M Y Q L N V ^{0.002} S ^{0.011} Y ^{0.003} G I P Q G K F N ^{0.005} S ^{0.002} S ^{0.002} S
^{0.003} T ^{0.012} Q A V L F K Q I F F A Q P G ^{0.006} S L L E K A R N A ^{0.007} S ^{0.001} L Y V F R D P F I L L F ^{0.002} S ^{0.002} F M N ^{0.059} Y ^{0.002} S ^{0.005} N ^{0.038} T ^{0.001} S L A Y R ^{0.002} T ^{0.001} I M N F ^{0.001} S ^{0.002} N ^{0.002} Y ^{0.005} S ^{0.008} Y L I ^{0.016} Y L L ^{0.008} T ^{0.007} G K ^{0.007} S I P E V A L E N P ^{0.014} Y V
^{0.011} Y ^{0.003} S E K L V ^{0.038} Y ^{0.006} S K V N ^{0.028} T ^{0.004} S G L ^{0.003} S I ^{0.002} S N F H K G D Q W L F I V Q V P ^{0.002} S ^{0.002} N E ^{0.002} S L Q N I E N F I ^{0.002} S ^{0.002} S I N ^{0.005} Y ^{0.014} T ^{0.01} V ^{0.025} T ^{0.007} G H L P V ^{0.008} Y ^{0.008} A ^{0.018} D ^{0.031} S ^{0.004} A ^{0.004} S ^{0.004} T ^{0.004} T ^{0.004} E ^{0.004} S D L R V I D I V ^{0.004} T I L L
 V A I L L ^{0.} S V L I R A L V P I I L L I I ^{0.001} S A V I G L E I A ^{0.001} Y ^{0.006} T ^{0.001} A L ^{0.001} Y ^{0.002} I ^{0.001} S ^{0.001} T ^{0.001} F L G ^{0.001} Y ^{0.001} S ^{0.002} I ^{0.001} Y ^{0.001} Y ^{0.001} I ^{0.001} S ^{0.015} G L V I P P I V F G I ^{0.005} T ^{0.002} I ^{0.002} D ^{0.003} Y ^{0.004} S ^{0.004} V L F L ^{0.003} Y ^{0.004} R ^{0.007} Y ^{0.003} F E E V ^{0.007} S ^{0.01} K ^{0.185} G ^{0.01} S ^{0.01} T ^{0.01} F
 P L D K A ^{0.014} Y ^{0.004} R N A R R A I L F ^{0.011} S ^{0.012} G L ^{0.007} S ^{0.006} I G L G F L ^{0.001} S ^{0.001} F L I ^{0.001} S ^{0.005} P ^{0.007} S ^{0.007} P L L K N I G I A L V I A ^{0.005} S ^{0.009} L ^{0.011} S ^{0.011} A L I P ^{0.011} S ^{0.011} I L F M K ^{0.011} S ^{0.018} S ^{0.023} L ^{0.023} S ^{0.023} V V ^{0.011} S ^{0.011} I ^{0.011} K ^{0.019} Y ^{0.013} L K F P R K Q L P ^{0.013} S ^{0.013} S ^{0.013} I
 D I R Q Q ^{0.005} Y ^{0.006} L ^{0.013} S ^{0.012} K V ^{0.004} S ^{0.001} R K ^{0.001} S I N ^{0.002} Y ^{0.001} R ^{0.001} Y I V L A ^{0.001} S ^{0.001} M I L I A I F ^{0.001} S ^{0.001} Y ^{0.001} F V F I H G ^{0.003} S ^{0.006} T ^{0.006} N G D I ^{0.006} S ^{0.01} E I V ^{0.006} S ^{0.006} P N ^{0.006} S ^{0.006} K V L V G E K E L N N F F N ^{0.002} Y ^{0.001} S ^{0.001} V D ^{0.008} Y ^{0.001} V I I R G N P N
^{0.004} Q ^{0.01} S ^{0.004} Y ^{0.007} S ^{0.005} Q I ^{0.003} Y ^{0.002} S ^{0.002} L ^{0.001} S ^{0.001} K ^{0.001} Y ^{0.001} V I D K G G F V I G P A G I G R ^{0.027} T ^{0.019} L ^{0.02} L N ^{0.004} T ^{0.049} T ^{0.004} T ^{0.004} E L ^{0.004} T ^{0.004} N F F F A G N ^{0.004} Y ^{0.011} T ^{0.003} L ^{0.003} V E I ^{0.003} Y ^{0.003} I ^{0.003} S ^{0.003} S ^{0.001} P V F ^{0.001} S ^{0.007} N Q A I N F ^{0.001} T ^{0.001} E N L I K M G ^{0.001} Y ^{0.001} L V G G A N
 A E R V D I I D N ^{0.005} T ^{0.002} V ^{0.001} S ^{0.001} I ^{0.001} Y ^{0.001} Y ^{0.001} S ^{0.001} F V L P V ^{0.001} T ^{0.001} I L I I ^{0.001} T ^{0.001} L ^{0.} Y ^{0.001} L G L V L G ^{0.002} S ^{0.006} I I V P I R L ^{0.006} S ^{0.001} L ^{0.001} T ^{0.001} L L L ^{0.001} S ^{0.001} S ^{0.001} L F G V A L L H I I F G ^{0.001} S ^{0.001} V ^{0.001} Y ^{0.001} W L ^{0.001} S ^{0.001} P L I V F A I M ^{0.001} Y ^{0.001} S ^{0.002} L
 G I D ^{0.001} Y ^{0.008} D M F I I V R I L E E E G N E E E R I V K ^{0.012} S ^{0.03} V E ^{0.013} S ^{0.003} T ^{0.003} G L A V ^{0.003} T ^{0.003} A A G L I L A G A F M ^{0.003} S ^{0.003} L V V ^{0.003} S ^{0.003} N M R F L Q E I G L A V G L ^{0.012} T ^{0.007} I I L F D ^{0.007} T ^{0.007} F I V R P I L V P
^{0.003} A ^{0.} V M ^{0.103} S ^{0.174} I L K K ^{0.013} Y ^{0.013} N W W P K ^{0.013} T ^{0.013} K ^{0.013} T ^{0.013} K ^{0.013} S

Sequence #42 — Gene Saci 0127

M I N ^{0.013} T I N F N E E F R K A ^{0.011} S N ^{0.002} Y N ^{0.004} Y R L L ^{0.008} S I H L G N W E K ^{0.006} S ^{0.076} T F D L L R V ^{0.012} Y K E F R E P E K A L ^{0.028} Y A F H P W I E G A K D R F F K F K K ^{0.003} Y I P N L L D L D ^{0.024} Y ^{0.003} S
^{0.015} N Y G K I L G G ^{0.016} T ^{0.005} Y D V V I L D L M D D F R P N ^{0.006} Y I ^{0.002} S A L V D L V R G G G L I I M ^{0.007} Y ^{0.004} S D D L Q R N K L ^{0.004} Y K N ^{0.007} S I Q R N G I V D N ^{0.009} Y F E E R F L R M A K ^{0.005} S ^{0.005} Y P G V
 F L F V N D N L E ^{0.002} S F N ^{0.007} T F K ^{0.014} T E Q L ^{0.011} S I I N ^{0.004} S K L N P R K ^{0.042} S I I N ^{0.008} S K L ^{0.006} Y ^{0.004} S L C L ^{0.049} T D D Q A K V L D E ^{0.008} S L F I L E D G R R V L ^{0.097} T ^{0.035} I T A P R G R G K ^{0.044} S ^{0.015} S ^{0.018} S I G L
 F L ^{0.007} S H L ^{0.009} S ^{0.011} T L N I ^{0.004} S L D I I I ^{0.022} T ^{0.017} S P ^{0.017} S ^{0.002} Y ^{0.005} Y ^{0.02} S ^{0.026} S I E I I ^{0.009} S F L I K G L D Q L G K R ^{0.006} Y ^{0.116} S ^{0.2} I ^{0.035} T R ^{0.006} S R D G K V M G I M ^{0.006} S G A L R V K W L A P D V A K D ^{0.011} Y Q G D I I V
 D E A A ^{0.005} S I G ^{0.025} T E ^{0.031} T L D ^{0.014} Y I V R ^{0.003} S W E K V I L V ^{0.008} T ^{0.015} T I H G ^{0.012} Y E G ^{0.064} T G K A F L K ^{0.013} Y L N G L R E D K ^{0.013} S I K F K H V ^{0.179} T L E K P I R ^{0.039} Y A K G D P I E R F I ^{0.095} Y D V M L L D
 A E P K K E N E N L E F ^{0.055} T E I D R K E L F E K D H L L R Q V ^{0.015} Y G I L V ^{0.001} S A H ^{0.022} Y R N ^{0.01} S P D D L M I L G D H H F Q R I F ^{0.005} S L G K I A V A Q V I E E G A L E K G E I D
 R I L N G ^{0.01} S G L E G H L I P ^{0.006} Y K L ^{0.056} T L ^{0.01} Y E R L Q E F G K ^{0.008} Y K G W R I M R I A V Q P D V Q N K G F G ^{0.005} S K L L R ^{0.019} S V V E R G K R E G I D W I G A ^{0.002} S F V A D ^{0.009} Y R V V N
 F W L N N G F ^{0.03} T P V H L ^{0.002} S N R K N E G L N G ^{0.015} Y ^{0.004} S I V V L K A L N E A I E P I I N R L ^{0.003} S V L L R F K I L H ^{0.005} T A H Q L ^{0.005} Y F N V N P L L L ^{0.001} S K I L R G ^{0.034} T N I D ^{0.007} S K ^{0.012} S ^{0.017} S
^{0.006} N Y P V ^{0.018} S F P K E ^{0.003} Y C ^{0.017} Y K I E ^{0.006} S ^{0.01} Y L K G I L E ^{0.054} Y ^{0.002} N S V A D G I H A V ^{0.043} T ^{0.008} Q ^{0.012} Y ^{0.005} Y F L Y P D H F L E E R E E A V L I A R ^{0.009} T L Q G K ^{0.003} S W H H I ^{0.004} S L ^{0.003} S ^{0.094} T G I D R R V V E E
^{0.024} Y M R ^{0.019} S ^{0.046} S I D K I ^{0.011} Y M K ^{0.} Y C D R V L

Sequence #43 — Gene Saci 0132

M H F P G I L V E E K E L M K S K D V E Q I K R E L E K Q G Y V I V K E K K E K N L L K V F D D N V V F T C N K D E T I F S L S F L S N V I A R I V I T D K L T

T V I T F T K R K N T S Y T F K I G R I P S L K G I R E T Y N V S S Y E L F L E R Y L E Y L S N N N D E E V L N W L R R L M R E K K T T E S T H

0.011 0.036 0.094 0.11 0.003 0.001 0.021 0.029 0.028 0.208 0.006 0.011 0.009 0.007 0.003 0.007 0.006 0.024 0.021 0.004 0.001 0.002 0.452 0.316 0.048 0.301 0.086 0.011

Sequence #44 — Gene Saci 0134

M K I L I T G L G F I S S N V A Y F L S P K H D I K I T Y R S L N P V K E L Y T K I L K E K G V D T T K L D V I N E T Q K L E E L V K S N D L I V N F V G D I Q
G D E K V L Y M A N V E V P S I I A Q A C K K Y N K V M I H A S G S T Y G V T G K V T I E E N H G E G L N P S T A F E K T K L Q G E K E L L N I L G K N A I I L
R P T L V Y G R F N A H V Q F V T I Y K L V K L G I I P K L E I E F Q P V S A R Y I A Y L I D S I A N G K L P S R N Y F Y A T E C S L V N L S E F F Q I Y A S T
I N K K G I Q I P I P N K L A E I A L P K E V K S L L K Y A G T V Y D C T V M K E Y V S N M E F D R E E V I E N A K F L S T L D K N K I L I P T

Sequence #45 — Gene Saci 0135

M N L C D K K I ^{0.008}S ^{0.006}S I G L G ^{0.024}T W K M G G D ^{0.021}Y ^{0.171}W ^{0.021}T P G H G N D N V ^{0.005}Y ^{0.025}I E A I K ^{0.005}Y ^{0.025}T I N K G I N L I D ^{0.013}T A E M ^{0.011}Y G G G H ^{0.026}T E E I V G K A V A D F D R E ^{0.008}S L F I ^{0.021}T ^{0.011}T K
V W P N H L K ^{0.015}Y D D ^{0.059}T I K ^{0.004}S A L A ^{0.006}S L K R L N ^{0.064}T ^{0.012}K Y I D L ^{0.029}Y L I H W P N P D V K V E E ^{0.039}T I ^{0.006}S A M E K L I D M G V V R C I G V ^{0.001}S N F D V K L L D Q A I H ^{0.002}S ^{0.02}T K K Y ^{0.019}Y
E I V A N Q I Q ^{0.004}Y ^{0.003}S I ^{0.012}Y R L ^{0.217}T P E R D V I P F A E K N K V ^{0.041}T I I A ^{0.017}Y ^{0.01}S P L G Q G ^{0.04}S I ^{0.016}S ^{0.049}S E ^{0.085}S R L K D I A L K ^{0.016}Y G K ^{0.071}T Q A Q V A L A ^{0.015}Y L K R R ^{0.072}S I P I P K A V Q K
^{0.085}T H I D E I A D V M K F D L R D E D ^{0.05}Y N E I R K R F ^{0.156}S

Sequence #46 — Gene Saci 0138

M L K G ^{0.008} S I I ^{0.005} T V L A ^{0.009} S ^{0.041} T E A D A L N I A E R L G K R V E ^{0.058} S ^{0.015} S I ^{0.006} Y ^{0.011} Y K K F G E H I R ^{0.01} S I L V P Q K L L D Q A E A L ^{0.012} S V ^{0.007} S ^{0.007} S A F ^{0.039} Y L K M ^{0.007} S Q I ^{0.045} T ^{0.014} S V E G E L A L L
 A E A ^{0.029} S G L K G V V L P P E D ^{0.081} S ^{0.031} S A F E K I F K D L ^{0.029} S I V ^{0.016} S M V ^{0.012} S N E F K E ^{0.225} T D G D V N D K G ^{0.08} V ^{0.033} Y V V D R A F N V K G V G ^{0.016} T V V L G F ^{0.006} S L ^{0.05} T E V R P H D K L I A
 L P M K K E V E V K ^{0.082} S I Q V L D E D Q E G V L P G V R I G F A L K N V K I E D I E G V ^{0.01} T A L V K P N I K L V N ^{0.003} S I Q G F ^{0.019} T K F K W ^{0.017} T ^{0.004} S D A D ^{0.003} S V H V V A G G I K
^{0.012} T I G K I D G N I I ^{0.05} T L K D E I P I ^{0.012} T V G R V I L L N L N A K P K ^{0.009} S ^{0.014} S R V ^{0.059} V ^{0.042} Y A E V K

Sequence #47 — Gene Saci 0144

M S I N T T N V K L F I G Q A F I V A G S T L L S L L Y P L V L Y D Q T H S T A L L G I S M M L N E L A V G L G S Y V W G R I I D R V R E R Y I F F I I L P V S
 G I G I T L L I F D T S L G L V G Y A L L G F F T A L D S P I Y S I L L L E R F S M D K A V V A N S M L S Q L S L A G N I I G S I M G T F K L K F F T I I I F F
 T I A A V L N A I L I P R Y K G D I R E D K V E R I R D T R R L L K P L I S Y S I F N L S A E V F Y V V Y I P L L N L L T L P S W T Y F V S Y T I L Y M I D E Y
 I Y Y I S P N L V R D N E L Y Y I F I S I A L R G F L V A L V G Y L L F M K I N F S F L T V L L F I S F G S L Y P L Y N T A L F S L I F K D L K K N R G S I L G
 L F S A G N N L A S A M G S Y L S G L V N P M S I S Q A Y F F S F F G F S L S F F I M Y D Y I S E K R Q R V E N K K K V I V S N S T

Sequence #48 — Gene Saci 0145

M R I S E K V S S L K I I H Y E H I N Y L G R L H G G V M L N F L V D T G M M S A I R V A K G L A V I A S L D D V I F K K P I S L G D N I A V E A E A E Y V G
N S S V E V S M R A L R D E E T L V E A T G T Y V K I D D L F K P I I I E N K L I A D T E E E K R R M E K A I Q R R N E R Q R D I K D R V E K K F D I T D P T E
G L R Y R L S S K I F I T P D M T Y D G K I I S A G K L L K A M D D L G G V L C G R Y I K Q S E P G T V V T V A V N R M S F Y T P I R L G D I V E I R A G I I Y
V G N T S I E T L I N V I R I D P K T M M K E H I T T G Y F T Y V R V D S T G K P I R V P S Y T P E T E V E K K Y Y E E V L R R K K L I T T R

Detailed description: The image shows a protein sequence alignment for Gene Saci 0145. The sequence is presented in four lines. Above each residue, a p-value is indicated. Residues with p-values less than 0.05 are highlighted with blue circles. The p-values are: Line 1: 0.089, 0.088, 0.008, 0.003, 0.024, 0.006, 0.006, 0.004, 0.004, 0.011, 0.079. Line 2: 0.03, 0.022, 0.042, 0.126, 0.052, 0.076, 0.126, 0.172, 0.098, 0.174. Line 3: 0.011, 0.085, 0.272, 0.213, 0.135, 0.004, 0.007, 0.006, 0.001, 0.053, 0.02, 0.003, 0.006, 0.079, 0.003. Line 4: 0.023, 0.002, 0.013, 0.06, 0.051, 0.043, 0.015, 0.129, 0.11, 0.025, 0.433, 0.103, 0.097, 0.574, 0.262, 0.086, 0.118, 0.116, 0.041.

Sequence #49 — Gene Saci 0148

M S N T N E L A V I L N E V I Q R Y I R E Y F N I Y V P R G D F K E S D A S L I T N D I V K E V I P T R L N M E V Y A I D G S S R S I F S A G G T I S I S T V A
 V S S S N K P V Y G V Y P G L F G L K G L E I Q K P F I A L A P S S N S K G T I N P Y L Y S S K Y I M T F S L D G T P F Q S T I E P E R I E T E L R A I L E T E
 A L K V L K N K G L V L V D G P L F P S Y V Y L P E R V K T K I I N E R L S I L D Q N F I G V V K R I D K S D L L I R T L S S N K E L T A K Y K V D P R G F L S
 D E A Y L Y Q F V R F N Y N P P Y P T L C I G P L V K D V N E R V K V F V N Y M I Y P I H K Y V P K F S I L R I E S I G K N A V D R L S S L K F T T E G I P L A
 L A V A D K T A K E L S S G I L R F I M F S L D R I G V Q E S F R N K F E V L D V V

Sequence #50 — Gene Saci 0149

MEKLVVVGGAAGM **S**A **S**^{0.032} **S**^{0.042} **S**^{0.037} KVRRLKPEMDIEVFE **S**^{0.012} **T**^{0.19} K F V **S**^{0.007} H A P C G I P **Y**^{0.007} F I E G L F D D E **S**^{0.012} L F M **T**^{0.091} **Y**^{0.006} **T**^{0.177} P E F F K E K R K I D V K **T**^{0.121} G I R

I **T**^{0.193} E I D F **S**^{0.012} G R **T**^{0.1} I **Y**^{0.025} G E **T**^{0.2} A N K E K I K R E **Y**^{0.029} D **Y**^{0.068} L L L **S**^{0.008} **T**^{0.034} G A K P K K V E **T**^{0.142} E G N E R V F **Y**^{0.047} V H H P A D A L E L R K Q L W **S**^{0.001} L N **T**^{0.015} V A I I G G G I L G L E

M V E A L V E R G K K V V L I H K G D **Y**^{0.015} L L N R **S**^{0.007} L D N E L G K I I **T**^{0.028} **S**^{0.012} I V M K D A E V K L N E R L E V I K R G G R L V V **T**^{0.057} D K G N **Y**^{0.01} E V D G **T**^{0.044} V V A I G V E P

N V D L V K G K L **T**^{0.118} L G D **T**^{0.005} G A I K V D R H M R **T**^{0.009} **T**^{0.127} L K D V **Y**^{0.164} **S**^{0.003} A G D N **T**^{0.07} E V V N L L **T**^{0.052} G R P Q W V P F A P V A N K M G **Y**^{0.011} V A G **S**^{0.003} N I G G K E M **T**^{0.082} F P G **T**^{0.065} V N **T**^{0.044}

Q V **T**^{0.128} K **Y**^{0.01} K D **Y**^{0.027} **Y**^{0.028} I A R V G L N E E E A R K H G F H V I **S**^{0.005} **S**^{0.006} I N **S**^{0.007} **T**^{0.161} R A R **Y**^{0.006} **Y**^{0.007} P G G G D I **Y**^{0.019} V K I I A D E E **S**^{0.018} R K I L G G Q I I G V E E V L G R I N M L A G

M L **Y**^{0.002} K G F **T**^{0.158} I D D V F F **T**^{0.051} E M G **Y**^{0.006} L P A I N R V W D P V I V A I R R L M K D D

Sequence #51 — Gene Saci 0152

M N P L R L Y N T L G R R I E T F E S F D P L T V K M Y V C G P T V Y D Y V H I G H G R A F V G F D G I V R Y L K L R G F N V I R V Q N I T D I D D K I I K R A
 N E T G K D W R E I V D Y Y T K D Y M E S L K A L K V E I D Q H P R V T S H I Q E I I D F V Q K L V D K G H A Y I T S S G S V Y F D V D S F P S Y G L L S G S K
 K E E W N Q G E E I V K E K K N P Y D F A L W K A W K P G E P Y W E S P W G K G R P G W H I E C S T M S T R Y L G E Q F D I H G G G V D L V F P H H E N E R A Q
 S S L L G K I W V K Y W V H V A Y L T I N K E K M S K S L G N I I P L N E A L K K W G P S V L R F W Y L S T K Y R N S I D Y S E Q T L E Q A R S S L Q R L K D
 A M G I I R S V I K E E P K S H S N E E E I S T Q R E I I S L I G K F H E A M S N D F D T A T A L S N I Y E I A N L V F T K I Q Y T R D F M G A M L A F D A F R
 Q F N Y V F G V M D E E F S P S Y E T M Y K V I D S V V E I R N I L R A R K M Y D L S D E I R S V L A N A G I K I L D G K E K S T W R F E

Sequence #52 — Gene Saci 0155

M N ^{0.031}S ^{0.025}S A V E E ^{0.084}T L ^{0.005}S ^{0.006}S N L ^{0.014}Y V Q Q V K K L ^{0.007}Y N V G K I L G L N E D V L D ^{0.015}T L A Q P E R V I Q V K I E I K G K D G Q V R ^{0.009}T F M G W R ^{0.005}S Q H N ^{0.002}S A L G P ^{0.049}Y K G G V

^{0.029}R ^{0.087}Y H P N V ^{0.066}T Q D E V V A L ^{0.002}S M M M ^{0.003}T W K N A L L L L P ^{0.017}Y G G G K G G I R V D P ^{0.008}S K L ^{0.173}T Q D E L E Q L ^{0.035}S R R Y V G A L ^{0.004}Y K Y I G ^{0.083}S D I D I P A P D V N ^{0.087}Y ^{0.008}S D I D I P A P D V N ^{0.136}T N P Q ^{0.027}T

M A W ^{0.087}Y V D E ^{0.042}Y I K I ^{0.117}T G R A D ^{0.019}Y A A F ^{0.048}T G K P I E L G G L P A R I ^{0.016}Y ^{0.009}S ^{0.059}T G L G V A ^{0.04}T ^{0.217}T A R L A A E K V L G G I E G A R V L I Q G F G N V G ^{0.003}S F ^{0.089}T A K F L E E M

G A K I V G I ^{0.004}S D I K G G V I N ^{0.013}Y N G I D V K K A L E V K D N ^{0.061}T G ^{0.006}S V F N ^{0.01}Y P D G K K V ^{0.026}T N E E F L V ^{0.003}S D C D I L I P A A I E N V I H K F N A P K V K A K L I V

E G A N G P L ^{0.1}T A D A D V V M K D R G I M V V P D I L A N A G G V V G ^{0.006}S ^{0.013}Y V E W A N N K M G E I M D E E E A R K L I V ^{0.019}S R M E R A F D ^{0.065}Y V ^{0.066}Y ^{0.113}T K Y N K L G D Q D

M R ^{0.081}T A A M A M A I E R V V N A M K V R G K L

Sequence #53 — Gene Saci 0160

M S I D K D F L L I Q D M I L A K T S I E K A L L H V N S R N E K T V Y S W V Q R E L S G F F R K Y S K N K D L A N D I I K I Q E C I S K E D Y I C L K Q Q L L

S T K K K I E D Q I D L L Y K S M Y R R A S

Position	Amino Acid	p-value
1	M	
2	S	0.021
3	I	
4	D	
5	K	
6	D	
7	F	
8	L	
9	L	
10	I	
11	Q	
12	D	
13	M	
14	I	
15	L	
16	A	
17	K	
18	T	0.017
19	S	0.005
20	I	
21	E	
22	K	
23	A	
24	L	
25	L	
26	H	
27	V	
28	N	
29	S	0.005
30	R	
31	N	
32	E	
33	K	
34	T	0.034
35	V	
36	Y	0.036
37	S	0.004
38	W	
39	V	
40	Q	
41	R	
42	E	
43	L	
44	S	0.006
45	G	
46	F	
47	F	
48	R	
49	K	
50	Y	0.005
51	S	0.016
52	K	
53	N	
54	K	
55	D	
56	L	
57	A	
58	N	
59	D	
60	I	
61	I	
62	K	
63	I	
64	Q	
65	E	
66	C	
67	I	
68	S	0.01
69	K	
70	E	
71	D	
72	Y	0.003
73	I	
74	C	
75	L	
76	K	
77	Q	
78	Q	
79	L	
80	L	
81	S	0.005
82	T	0.015
83	K	
84	K	
85	K	
86	I	
87	E	
88	D	
89	Q	
90	I	
91	D	
92	L	
93	Y	0.004
94	K	
95	S	0.029
96	M	
97	Y	0.004
98	R	
99	R	
100	A	
101	S	0.475

Sequence #54 — Gene Saci 0162

MEGVVPAIVT^{0.291}PFKENEDIDFE^{0.009}SLNLFNLFERNGVKWI FALG^{0.004}^{0.016}STGEFNML^{0.018}^{0.015}SEKQEFIRKLR EIT^{0.056}KLKIVINV^{0.003}SEN^{0.007}SLK
N^{0.014}T^{0.007}SLGKLAFDVGM EGI ALIPPI^{0.014}YHKP^{0.019}SE^{0.021}SGLI^{0.011}^{0.03}SYFEEM^{0.008}SKLDLPL^{0.063}^{0.039}YV^{0.003}YAY^{0.007}PKVPI^{0.022}TYET^{0.008}IT^{0.001}SKLVKQDIIDGIKL^{0.019}^{0.042}TTDN
LPLFKK^{0.002}YLG LKEIKNDLKILIG^{0.004}^{0.016}SD^{0.009}^{0.002}TLFV^{0.002}SLIEGGNGCI^{0.002}SAVANVAPELMMRA^{0.088}YQGVREGKLNES^{0.019}LEIQGMI^{0.011}SKI^{0.027}SDAIM
S^{0.017}GDFP^{0.016}SGVKVALR^{0.083}YRGV^{0.104}SVG^{0.085}VRRPLKE^{0.023}IEVNARI^{0.031}^{0.018}YSVLKELG M

Sequence #55 — Gene Saci 0164

M E L ^{0.016} S L ^{0.011} S L P ^{0.195} T K R V ^{0.027} Y Y Y ^{0.01} V L K ^{0.003} S K N G V ^{0.001} T I R Q I Q E D L G F ^{0.003} S S ^{0.006} T S ^{0.046} A V R ^{0.007} Y H V K K L V A A G L V E E ^{0.009} T L E G K I V P R K V I L D D D ^{0.033} Y M L L F N N I L ^{0.179}

P K ^{0.003} S V F F A ^{0.004} S F F L ^{0.009} T S ^{0.002} F F I I I F L I ^{0.002} S S ^{0.004} S H E L A L E V F ^{0.001} S A I V V L I G G I V F V V D A I K R H M R F ^{0.025} T R I Q L D E E

Sequence #56 — Gene Saci 0165

M I E L P D E F N D L K E F L A L R E ^{0.129} T L K K A K K E N E A K V H V I G N F ^{0.002} Y V V D L V K G N I K L G E ^{0.005} S S L V V R G Y A L ^{0.003} T Y P Y Y K A I A Y L K S K G V N G
N E M A K I L D ^{0.008} Y S C F V L D N ^{0.002} Y F S Y I P L L V R E G L K L ^{0.008} Y T E G K L D E ^{0.002} S I R L ^{0.006} T N R F K R I M ^{0.016} Y V G R E ^{0.142} S G K P L E V L K K H ^{0.037} Y K G N N L K R D W E L L
P E ^{0.011} S Y K K I I F ^{0.005} Y L L D ^{0.01} S S L G L L P G ^{0.025} S S K Y E L G E I D N V A G E E I D N D Q I I ^{0.031} S P L ^{0.024} T F P E F V D L ^{0.01} T N Y G V R ^{0.004} T V ^{0.045} Q G K D L I I L G P V R ^{0.059} S G K S
^{0.039} T L ^{0.017} S T L I M K R L K E I G F G D V K L I D ^{0.046} Y H D L E G N F A F I K K I Q D D I N D G ^{0.013} S N F R K I I V L ^{0.005} T K D I ^{0.02} Y Y T L K P R G Q V I E I L D H F L ^{0.014} S S P N Y N
D L L K D ^{0.002} Y E R N I F N ^{0.003} Y F Y N V I L D A D P N K A I W ^{0.007} Y I P L V K L A E E ^{0.003} Y G T P I P ^{0.011} Y K L G L F ^{0.065} T L T K N G R R V G E E D K D I I V E W F ^{0.005} S N V N E D I K ^{0.04} T
^{0.016} Y F D D D ^{0.155} Y V K E ^{0.014} S Q H K V D L D K I I D G L ^{0.017} S S Y L L T ^{0.007} K V K E D ^{0.011} S E T A I D L L R L ^{0.052} Y F T E V N E N H V L V N ^{0.021} S E L N K L L L ^{0.082} S A G K L Y K P ^{0.003} S K L A I R K
I F N E L V D V V ^{0.012} S S T R N I D C M E L K R D V D P I E N I I ^{0.01} S I L V L L R K ^{0.037} S E N R E C I ^{0.009} S W A Y E E I L K L K D R ^{0.004} T V I S D L L S D V I ^{0.053} S S F N R V G R D K
R L A N L L ^{0.004} S I I I Y N L L K E F ^{0.005} T P T S I E K I L E D L L A V ^{0.025} T P F S Q I P L ^{0.046} S L L Y Y K ^{0.013} T D M I D K I D V K D P L L ^{0.029} S T L I Y S L L I D ^{0.005} Y N V R N K E L N K
V V ^{0.021} T L Y D K F R K N ^{0.797} Y T K P K N ^{0.007} T Q L D L K E F K E V V ^{0.233} S Y L F S H Y Q F D K I E D F M D ^{0.122} Y L K R R A D A I I G ^{0.011} Y T L L L T ^{0.013} H P N D E ^{0.004} S V K G ^{0.005} T I E L A E K L
I L P W G E I I L K R I K ^{0.03} S S T A ^{0.006} T D E D ^{0.118} Y M D L L K L ^{0.155} Y Q L Q I L K ^{0.003} S L A N N E K ^{0.003} Y E A R L A L Q G I ^{0.007} T E L S S I V H K I R D D K A K ^{0.016} S S I A ^{0.017} T A I T L S K M
I I D N K V K I L ^{0.057} T K V E ^{0.047} T I S D L L V F ^{0.003} Y S T L F L M G N K N A L P L I E L L V ^{0.001} Y Q I D K N D L I Q ^{0.002} Y N L F ^{0.007} T D L Y S L L K G E E I D R N ^{0.009} Y Y N ^{0.012} S V M L ^{0.02} T L I
^{0.001} S K Y I N N ^{0.002} T N K V L V L L V ^{0.001} T L I G M W H V L G ^{0.001} Y R G Y ^{0.001}

Sequence #57 — Gene Saci 0166

M A F V N E R T Y Q K Y L E E G R E E E F H K E F D K A V N E L S S G I G K E Y P L I I G K R E I R T N E K I I V T V S F N S D L R L G I F Q K A T E N E L N E
 A I E T A E N A Y K E W Q Y S D W K D R V E I A M R A A E L M A R H K F A L A A T I T F E N G K N R Y E A M A E V D E T I D Y L R Y Y A Y L L E E N R G Y I R E
 M E S R I Y K N E K G Y S V M R P Y G T W F V V S P F N F P L A I T A T M T L G S V L T G N T A I V K P S S D T P L S A Y N L I Q I L R R A G L P D G V V N Y L
 T G K G S E I V T P A L K S K R I A G L A F T G S K D V G H K L A K D F L D V D T R P I V M E L G G K N A V I V T D K A N I D K A V E G V F R G A F G F G G Q K
 C S A S S R I Y V E T N V Y D T F L N K L V N R T K E A I I G D P T K K E T F L G P L I N S D A V S K Y V K F V E E A K K G G G E I L Y G G E V I D V K R R L V
 K P T I V S N L P L S H W L W K T E L F V P I I L V T K I G S L E E G V K L A N D V E Y G L T A G I F S E D Q K E I E Y F F N K I E A G V V Y A N R M V G A T T
 G A M P G V Q P F G G W K H S G W T G K N A G G P Y Y L L S F M R E Q A R T M Y T

Sequence #58 — Gene Saci 0168

M V D E E K V I E E V L R K **Y** K N I A **T** I G F **S** K D P **S** K P A H E V P R F L I **S** K G **Y** N V I P V N P **T** V N E I L G R K **S** **Y** K **S** I L D I P E K I E V V E V F R P **S**
S E V P K I V D E V L E R V K M K G D V K V I W L Q E G I R H D E A A E K A R K A G L V V I Q D R C M **Y** K E **Y** V K K I G **S**

Sequence #59 — Gene Saci 0176

M P L R P G R C **Y** R K F **S** G P A **Y** T R R E **Y** I P G I P M P K I **T** K F V M G N V N G D **Y** D **V** E L R L I **T** T E K G Q I R H N A L E A A R V I A L K **Y** L **S** K K L A **S** E
Q N F A L V V **T** K **Y** P H H V I R E N K M M A F A G A D R L Q D G M R L **S** F G K P I G **T** A A R L E K L G E L V M **V** V R V K K E H L E A A K E A L K I A **S** **S** K L P I
R **T** K I E I **S** A L N K E A A A Q

0.016
0.035
0.078
0.601
0.032
0.101
0.046
0.063
0.03
0.012
0.002
0.005
0.004
0.026
0.002
0.023
0.125
0.057
0.04
0.021

Sequence #60 — Gene Saci 0179

M E R ^{0.004} Y A R Q L L V L G L G V Q E K I ^{0.002} S Q L K I A I V G C G A L G ^{0.011} T T L A E L L A R L G V G K I K L I D A D I V E V ^{0.026} T N L H R ^{0.012} T H L F E E ^{0.005} S D I G K P K A ^{0.039} T V C

A E K I R K I N ^{0.007} S G I K V E V V N D I I D ^{0.006} S N N A E E M L K D ^{0.014} S D ^{0.008} Y I F D A L D N L ^{0.002} Y Y R F L L N D V A V K L R I P L V ^{0.016} Y G G V M G E ^{0.089} Y ^{0.006} S S V M L I V P R E G P

C L R C F M N ^{0.007} Y D E H E N E V N A C E ^{0.004} T I G ^{0.008} T L D ^{0.016} T V I ^{0.003} S I ^{0.004} T A ^{0.001} S L Q V Q L M L N H L R N Q A N L H ^{0.003} S L ^{0.001} Y ^{0.007} Y L D ^{0.041} T R E L R I D N V K I ^{0.005} S K N D K C P ^{0.08} T C ^{0.016} S L E R

F D F L D G R M K Q P ^{0.03} S C G L ^{0.033} S R L D I E ^{0.026} S H E F L V R D E E N G N L V I C ^{0.008} Y P ^{0.006} S G K C F K K ^{0.029} S N R

Sequence #61 — Gene Saci 0182

M N E L E E L R K E I E E I D ^{0.022} S Q I L N L I A K R L Q V ^{0.006} S ^{0.012} S M I G E I K G K M G F N V ^{0.201} T D E K R E E ^{0.049} Y V K E ^{0.049} Y W ^{0.096} T E K G R R L G I P E ^{0.013} S L V ^{0.01} S ^{0.008} S V L ^{0.017} T N L I ^{0.006} S Y

^{0.006} S K M F Q V K D ^{0.014} S K K R R V ^{0.233} T I I G ^{0.028} Y G G M A R ^{0.016} S L ^{0.02} S ^{0.005} S L F H L ^{0.003} S G H N V V I ^{0.164} T G R D K R K A E R L A N E F K F V ^{0.045} Y M E E K ^{0.012} S A L D W ^{0.018} S E ^{0.035} Y V I L ^{0.017} S I ^{0.013} S P ^{0.005} S G L

^{0.101} D Y A E ^{0.011} S V L K ^{0.017} Y A K E K V V M D I F ^{0.005} S ^{0.098} T K ^{0.003} S N ^{0.148} T F R K L Q ^{0.078} T L S E Q F ^{0.011} S F E ^{0.081} Y I ^{0.008} S ^{0.02} T H P L F G P I L ^{0.006} Y P V G E R I A V I P ^{0.005} S Q K ^{0.008} S ^{0.182} T R ^{0.068} T Q E V I E F W R K C G

L V P V L ^{0.068} T ^{0.163} T P E E H D K V M A I V Q V L A H F ^{0.016} Y M L G L L R ^{0.005} S ^{0.007} S N ^{0.075} T L K K E L E V G N K I D E L Q ^{0.015} T ^{0.019} T N F R E I ^{0.014} S K I L D R I N ^{0.015} S L L P V I L E I Q K D N P ^{0.019} Y

A H K V R D L G M R E L Q D V L K ^{0.01} S L G E

Sequence #62 — Gene Saci 0183

M L L I L K Q N A N Y S S L K E K L N N S S A S Y K F L D L Y G K K L V V T W P D T Y V E N I K D E S I E I A V K S K R Q F P L V S N E W K K D P T I V K V K D
V E I G G D R L V V A A G P C A V E D E E Q V L T V A K A A K R A G A K L L R G G A L K P R T S P Y S F Q G L G E R G L E I L R K V G D Q V G L P V V S E I M D
T R Q I D M F K K Y A D M L Q I G A R N G Q N F D L L K E A G K S G M P V L L K R G L G N T V D E W L L A A E Y L L L E G N G N V V L C E R G I R T F E K A T R
F T M D I G G M I A A K L Q T H L P I C A D P S H P A G K R E L V H S L A L A A V A A G A D M L L I E V H P N P E K A L S D S E Q Q L T P D S F E L L M N R I R
A L A N V L G R K V

Sequence #63 — Gene Saci 0190

MLRIKR**S**ELKPGEEKKKV**T**IGNEEVILL**Y**LGGGK**Y****Y**AFQ**S**RCPHLGCDL**Y**KVGVVIREELVCQCHF**T**H**F****S**INDGRAIKGA**T**
KKPLKL**Y**RVQVDGEDII**V****S**

Sequence #64 — Gene Saci 0192

MLKLRDWQEKLKDKVIEGLRNNFLVALNAP **T** ^{0.067} **G** **S** **G** **K** **T** ^{0.005} **L** **F** **S** ^{0.038} **L** **L** **V** **S** ^{0.006} **L** **E** **V** **K** **P** **K** **V** **L** **F** **V** **R** **T** ^{0.047} **H** **N** **E** **F** **Y** ^{0.004} **P** **I** **Y** ^{0.018} **R** **D** **L** **T** ^{0.187} **K** **I** **R** **E** **K** **R** **N** **I** **T** ^{0.062} **F** **S** ^{0.006} **F**

L ^{0.012} **V** ^{0.015} **G** **K** **P** **S** **S** **C** **L** **Y** ^{0.029} **A** **E** **K** **G** **A** **E** **S** ^{0.041} **E** **D** **I** **P** **C** **K** **Y** ^{0.008} **C** **E** **L** **K** **G** **S** ^{0.022} **I** **V** **E** **V** **K** **T** ^{0.051} **D** **D** **S** ^{0.035} **P** **L** **S** ^{0.029} **L** **V** **K** **K** **L** **K** **K** **D** **G** **L** **Q** **D** **K** **F** **C** **P** ^{0.005} **Y** **Y** ^{0.006} **S** ^{0.005} **L** **L** **N** **S** **L** **Y** ^{0.004} **K** **A** **D** **V** **I** **A** **L** **T** ^{0.051} **Y** **P** ^{0.001} **Y** **F** ^{0.007} **F** **F**

I ^{0.002} **D** **R** **Y** **R** **E** **F** **I** **D** **I** **D** **L** **R** **E** **Y** ^{0.014} **M** **I** **V** **I** **D** **E** **A** **H** **N** **L** **D** **K** **V** **N** **E** **L** **E** **E** **R** **S** ^{0.071} **L** **S** ^{0.063} **E** **I** **T** ^{0.661} **I** **Q** **M** **A** **I** **K** **Q** **S** **K** ^{0.063} **S** **E** ^{0.063} **S** ^{0.266} **R** **R** **I** **L** **S** ^{0.043} **K** **L** **L** **N** **Q** **L** **R** **E** **V** **L** **P** **D** **E** **K** **Y** ^{0.072} **I** **K** **V** **E** **N** **V**

P ^{0.018} **K** **L** **S** **K** **E** **E** **L** **E** **I** **L** **A** **D** **D** **Y** ^{0.165} **E** **D** **I** **R** **K** **D** **S** ^{0.045} **L** **K** **Q** **G** **K** **V** **N** **K** **I** **H** **I** **G** **S** ^{0.014} **I** **L** **R** **F** **F** **S** ^{0.017} **L** **L** **S** ^{0.013} **I** **G** **S** ^{0.023} **F** **I** **P** **F** **S** ^{0.005} **Y** **S** ^{0.002} **S** ^{0.008} **K** **R** **L** **V** **I** **K** **N** **P** **E** **I** ^{0.005} **S** **Y** ^{0.006} **Y** **L** **N** **L** **L** **N** **D** **N** **E** **L** **S** ^{0.005} **I** **I** **L**

M ^{0.006} **S** ^{0.016} **G** **T** **L** **P** **P** **R** **E** **Y** ^{0.011} **M** **E** **K** **V** **W** **G** **I** **K** **R** **N** **M** **L** **Y** ^{0.021} **L** **D** **V** **E** **R** **E** **I** **Q** **K** **R** **V** **S** ^{0.019} **G** ^{0.004} **S** ^{0.009} **Y** **E** **C** **Y** ^{0.133} **I** **G** **V** **D** **V** **T** ^{0.082} **S** ^{0.006} **K** **Y** **D** **M** **R** **S** ^{0.011} **D** **N** **M** **W** **K** **R** **Y** ^{0.023} **A** **D** **Y** ^{0.004} **L** **L** **K** **I** **Y** ^{0.005} **F** **Q** **A** **K** **A** **N** **V** **L** **V** **V** **F**

P ^{0.005} **S** ^{0.048} **Y** **E** **I** **M** **D** **R** **V** **M** ^{0.061} **S** **R** **I** **S** ^{0.05} **L** **P** **K** **Y** ^{0.074} **V** **E** ^{0.085} **S** **E** **D** ^{0.058} **S** ^{0.074} **S** **V** **E** **D** **L** ^{0.196} **Y** ^{0.008} **S** **A** **I** **S** ^{0.006} **A** **N** **N** **K** **V** **L** **I** **G** **S** ^{0.017} **V** **G** **K** **G** **K** **L** **A** **E** **G** **I** **E** **L** **R** **N** **N** **D** **R** **S** ^{0.01} **L** **I** **S** ^{0.005} **D** **V** **V** **I** **V** **G** **I** **P** **Y** ^{0.007} **P** **P** **P** **D** **D** **Y** ^{0.124} **L**

K **I** **L** **A** **Q** **R** **V** **S** ^{0.02} **L** **K** **M** **N** **R** **E** **N** **E** **F** **L** **F** **K** **I** **P** **A** **L** **V** **T** ^{0.035} **I** **K** **Q** **A** **I** **G** **R** **A** **I** **R** **D** **V** **N** **D** **K** **C** **N** **V** **W** **L** **L** **D** **K** **R** **F** **E** **S** ^{0.018} **L** **Y** ^{0.001} **W** **K** **K** **N** **L** **K** **C** **L** **N** **A** **N** **K** **M** **K** **L**

Sequence #65 — Gene Saci 0193

M ^{0.009}S K V E I F ^{0.044}T H K ^{0.1}C ^{0.031}T E C G I L M E F L E R N K L L G K V ^{0.07}T I I D ^{0.015}T E L ^{0.003}Y P F L A F E R G V I ^{0.004}S ^{0.012}T P ^{0.003}S I F V D G K L V ^{0.028}Y A G V V D ^{0.015}Y D E L L K I L Q D K K V
I V E V N K D E L V N K L M F G V V N ^{0.001}S F A A ^{0.012}T A W L ^{0.004}Y V N R D F D A L M A Q K D F V L A V ^{0.018}T G L ^{0.009}S L V D D K ^{0.01}S A D E ^{0.054}Y ^{0.083}Y ^{0.148}T ^{0.015}Y L R N I I V K E G E K ^{0.027}Y V D E W K
E K M L R V I A ^{0.01}T N F I R E L ^{0.002}Y L L ^{0.002}Y R K K L ^{0.018}S D E E I M R K ^{0.002}Y P L E V F A H W L M I R G G A V G R V G L R I H P L ^{0.003}S D N Q V L E K I ^{0.006}S E V ^{0.012}Y V ^{0.019}Y ^{0.012}T L ^{0.003}S N A K Q
L W D K V I K E Q E E L A K K ^{0.019}S A L ^{0.029}Y E Q A R F I ^{0.029}S I

Sequence #66 — Gene Saci 0196

M V S A I V L A G G Y A T R L R R P L S L T K P K A L L P V L G K P L M D Y T L Y S L A S S D V D T I Y L S L R V M A D K V L D H V K Q L N L Q K N I V S V I E E
S R L G D A G P L K F I N S K Y N L S D D V I V V Y G D I Y A E I D F N K L L E Y H Q S K G C N A T L T A T Q V E D P S R Y G V L I T D G H R L I Q I I E K P K
T P L S N L V N A G I Y V F K K E L L N K I D G L S I S R D F L P K L L V S D T C V S V Y P Y K G L W M D I G V P R D Y M R I N L E L L T L K Y P K G F I S Q S
A K V S E K A E L F P P F Y I G D N T T V G E G S S I R N S I I G V N N R I G N G S C V E E S I L M N D V M L G D F S L I K E S V I G D E V S L G K W N R V D G
A I I G D G V L I H D Q V F I N R D T I I L P D K E V A E S V Y D K G K I I L

Sequence #67 — Gene Saci 0198

M N R L G N V ^{0.02} S ^{0.01} S A F L K L ^{0.015} S ^{0.028} S E ^{0.052} S P I D W F P W ^{0.038} S D E A F D K A K K E D K P V L V D V G A ^{0.002} S W C H W C H V M D E ^{0.007} T ^{0.075} T ^{0.021} Y E D K E V I D L I N K N F V A I K V D R
 D E M P D L D R R L Q L A V ^{0.006} S ^{0.011} S I ^{0.056} T G E ^{0.005} S G W P L ^{0.048} T V F M ^{0.152} T P D G K V F F G G ^{0.077} T ^{0.054} Y F P P E D ^{0.022} S ^{0.115} Y G R V G F K R L L N E I I R L W K N E R D K I F Q ^{0.01} T A N ^{0.003} S L H ^{0.002} S
 S L Q N L G ^{0.002} Y ^{0.081} Q K V E A Q W D Q V E ^{0.002} S I V ^{0.003} S ^{0.021} Y I A ^{0.002} S N F D F Q N G G L L G ^{0.003} S M K F P H P ^{0.062} T I D Q L L I A ^{0.01} Y ^{0.003} S F ^{0.021} Y ^{0.289} T K ^{0.009} S D ^{0.122} T E A K L ^{0.005} S M F ^{0.02} T L K K M ^{0.005} Y ^{0.004} Y G G I F D
 Q V G G G F H R ^{0.005} Y ^{0.204} T V D N E W ^{0.017} Y V P H F E K L L I D N A E L L I ^{0.002} S ^{0.003} Y ^{0.018} T Q A ^{0.017} Y M Q ^{0.004} S E D I E I L D A M N M ^{0.006} T V N F I L R E L ^{0.021} S ^{0.051} T V D G F ^{0.007} S N ^{0.01} S V D A D ^{0.017} S E G V E G
 F ^{0.025} Y ^{0.011} Y ^{0.005} T W ^{0.084} T L K E F Q E A L G G E D I N F W I R F F N V D ^{0.095} T G K E V E G R K V L R R N ^{0.016} Y D L R E L ^{0.181} S K R F K D P I G K L N D V R E R L R V ^{0.028} Y R E E R R K ^{0.01} Y P F I
 D ^{0.153} T N V ^{0.038} Y ^{0.071} T H ^{0.003} S N C R ^{0.039} T A E A L ^{0.016} T L A ^{0.002} Y P I ^{0.044} T G K G L N E A L K V I D M I N ^{0.006} T K I ^{0.318} T R R L ^{0.355} T G G K D G L P E D ^{0.039} Y A ^{0.015} S A L L A L L ^{0.008} S A ^{0.02} Y E V ^{0.042} T G K M K ^{0.005} Y R D L A L
 R I G R E L K E M D ^{0.018} Y ^{0.017} N Y P I D ^{0.024} S P N E ^{0.011} S N A ^{0.014} S L A N K G L L K L ^{0.085} S L L D E ^{0.012} S F K F ^{0.162} T P N ^{0.013} S ^{0.007} Y ^{0.008} S I D ^{0.01} S P ^{0.046} Y I A G V ^{0.049} T F N ^{0.003} S M A F E K G L A H I V V V D E K D G K
 A K D L H L ^{0.009} S A L K I ^{0.011} Y H P F K V V E L V ^{0.012} S E D ^{0.026} S I D M L P ^{0.008} S F I K ^{0.003} S M V N ^{0.011} Y N K G ^{0.006} S ^{0.006} S R V ^{0.019} Y V C I G N ^{0.02} T C N L P V D ^{0.009} S ^{0.008} S E K I R L L L G G K ^{0.085} T

Sequence #68 — Gene Saci 0200

MFKV LLEPDLQEALIFLNE **S** V N A L L **T** I **Y** **S** E C E I L **Y** **S** G R A K **S** R A **S** L **S** P R L **T** I I K P D G **S** V I I H G P **T** K R E P V N W Q P P G **S** R I E **Y**
S I E **S** G V L **T** V N A E R K R P K E R L **S** I L H H R V **Y** **Y** I **T** **S** **S** E V K P G E F F L V G R E K D E V D F I I N N P D V I E G G F K P I H R E **Y** R **T** P **Y** G **T** V D L
 I G K D K E G N L V V L E F K R A K A **S** L Q A V **S** Q L **Y** R **Y** I M **Y** F K E I G E N A R G I L V A P G I **S** E N A L N L L K R L E L E **Y** V N I **S** D K L G D **S** **T** I **S** R P
 I N **Y** V P N L Q R D

Sequence #69 — Gene Saci 0201

MLIFLI ^{0.002}SS ^{0.003}AI VLLADLLI ^{0.005}TY ^{0.002}QI ^{0.007}YREIKVRRREV ^{0.011}SGNQGGFA ^{0.003}SVIIPVRGLDVNAEENLK ^{0.009}SLLS ^{0.007}QD ^{0.023}YS ^{0.004}AY ^{0.029}EVI ^{0.028}YVVDDENDP
IVPILRK ^{0.001}YNV ^{0.003}KVVVSNKNC ^{0.001}DICS ^{0.002}GKINAQLEGLKHARGDIIVFAD ^{0.002}SD ^{0.044}TWFPK ^{0.002}YWLKELV ^{0.002}SPL ^{0.001}SN ^{0.009}YVA ^{0.016}TT ^{0.016}TVFS ^{0.001}SWAKPVRL ^{0.045}T
IGNIIRAGFW ^{0.009}T ^{0.002}LGFE ^{0.004}SQAVGG ^{0.04}T ^{0.008}FLWGS ^{0.008}MAFKREFFDERVIQELK ^{0.02}T ^{0.068}QWCDDC ^{0.04}TL ^{0.04}TRIAKERGKLGFFVFNAMPLNF ^{0.015}YDE ^{0.088}TQ
LIT ^{0.014}WS ^{0.001}KRQLI ^{0.011}TV ^{0.013}WRY ^{0.013}SRRGVNGFIIVAIFMLAFLFLIPFNVFAI ^{0.005}TP ^{0.002}PFIFWVFKNILR ^{0.002}SY ^{0.005}KIGL ^{0.009}SN ^{0.009}SIIP ^{0.004}SLA ^{0.004}SILAI ^{0.001}FYS ^{0.001}YS
LFLIAL ^{0.017}TLREKNIIWRGKI ^{0.017}YKV

Sequence #70 — Gene Saci 0204

M I I T V I N Q K G G V G K T T T S V N L S Y T L S K N K N T A L L D L D P E G G A T I S F G I K R E K R E Y P L G G K S V N I F N V E V F L A H I G L L K L E
L N G D I E S I V S S L K K L A E N F D F L V I D T P P N L G T L A V S A M I A G D K I V T P I T P Q P L V L E A A K N L D S R L Q G L R K P A I A F T N M S K
K S V K L E L P S V K S I D L S I P Q S K L F S E A T R L G V P A L R Y E E F R V K R P K F S Q L Y E D L A K V V I E G

Sequence #71 — Gene Saci 0209

M I G G A Q G T 0.13 G I D T 0.013 S A N I F G K V V S 0.002 T L G Y Y I Y G N R E Y 0.007 H S N I K G R H S 0.013 Y F T L T I S 0.009 D K K V R S 0.014 I P E K A D I L V S 0.055 F D A E T 0.012 V L Q H F N E I K 0.028

G Y I I Y N E G V K G T 0.021 K V E T 0.014 V Q S M E S 0.066 E A A E R I S 0.088 K Q L E S 0.027 E N L P K T 0.085 V E G A L E S 0.026 A K R R G V K L I P V N Y 0.066 D E I A K K V A E E A K V Q L S 0.005 V V E R

V K N V I G I A V S 0.002 T K L L G I N E E H L A K V A G S 0.007 T F K Q E L Y 0.014 R K L N V M A I K K A Y 0.018 E L T 0.05 E S V 0.131 Y S L P K L E G A P E R Y 0.008 L L D G N T 0.065 A V A I G K L Y 0.015 G

G L R F Q S 0.014 Y Y P I T 0.04 P A S 0.016 D E S 0.111 M Y 0.01 I E A H Q E V L M E D P K T 0.168 G D K K K G A V V V V Q A E D E L A A V N M A V G A A L T 0.075 G I R S 0.021 S S T 0.02 A T 0.223 S G P G F S 0.06 L M V E 0.015

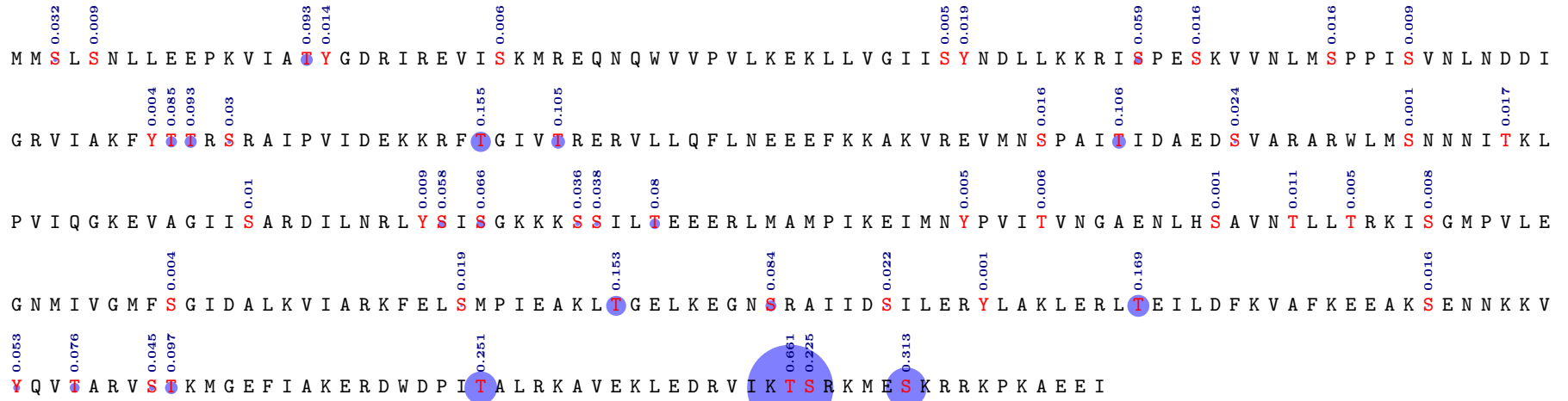
G I G W A G M N E V P V V I T 0.075 Y Y I R G G P S 0.006 T 0.132 G L P T 0.071 R T 0.059 S 0.017 Q A D L L F S 0.002 M F A G H G E F P K I V V A S 0.004 G T 0.098 H D E A F K D A V L T 0.012 L N L A E R Y 0.005 Q T 0.068 P V I H L

V E K T 0.018 L A N S 0.002 Y T 0.047 T 0.028 V P K Q D L G V G Q L Y 0.065 A D R G K L I L S 0.022 P P E D Y 0.093 A R F Q F T 0.136 E D G V S 0.018 P R A P L G K A L M Y 0.117 Y Y T 0.008 G D E H N E Y 0.191 0.225 G F I S 0.007 E D P V N R N I

I Y E K R M K K L E L A D K E I P E E E R V K V Y 0.011 G N V N S 0.002 E N V V I T 0.008 W G A P T 0.024 G V F I D I L E E T 0.034 K L D F A L L Q L R M F S 0.038 P F P S 0.02 R F V S 0.016 K F L Q G R K K

I I A A E G N Y 0.021 L A Q A G K I V K M N T 0.007 G I E A T 0.011 N Y 0.005 I L K W N G R P F L R D E V E E A L R N V I E K D V K K V M L S 0.026 G G S 0.049

Sequence #72 — Gene Saci 0212



Sequence #73 — Gene Saci 0213

M N V A F L W D **Y** D **Y** L K **Y** S F P G N H P F K A L R E **T** M A K K I L E E R G A F H **Y** M D V I K P D L I **S** E E D L L K V H **S** R D **Y** I Q L V K K K **S** E E G **T** G **Y** L D
 D G D **T** P A F K G M **Y** E G A L **S** R **T** S G **T** V **T** **T** I K L L D K **Y** D V V F N I G G G F H H A K **Y** S S A **S** G F C V F N D V A L A I K I A Q E K **Y** N R I A L I D I D G H
 H G D G **T** Q **Y** M L F D D P N **S** L K I **S** L H M **Y** H R G F F P G **T** G N **Y** D E I G R G R G E G L V L N V P L P P G **T** G D K E **Y** L K A F **T** E **T** V I P K V E **S** Y K P D L I
 I I L N G G D **S** H F **T** D P L V E L K L **T** N K G **Y** V D V I **S** L L K D L A Q R F K **S** K I V M **T** G G G G **Y** S Y E A **T** A K I W V L **S** I A **T** L A E L G L **S** D **Y** E D L E D P
S **Y** **T** V **S** **S** D F V V K K V N E V V E K I K G I H G L

Sequence #74 — Gene Saci 0214

ME I G T P L F E G A K K L L W L G G G E L G K E M V I E A Q R M G V E T V V I D R Y D L A P A M H V A H R K Y V V N M H D G G A I E S I I R K E R P D A V I A
E I E A I N T E T L S K I E M D G I K V M P N A R A V K I C M D R I E L R R F A A E K V K V P T T A Y G F A T S P E E V K K M C K D V G Y P C I I K P Q M S S S
G H G H E V I Y D E S Q V E E K F K E A L T H A R G K S K T V I V E E Y V K I D R E L T V L T Y R Y P L S S G G V A T K T I Y P V E H Q R P Q G V Y H Y I E S W
H P A T S Q D V I S K A S E Y A T K V V N E L G G F G I F G V E I M I A G N R V L F N E V A P R P H D T G L V T L V S S D I S E F Q V H V R S A L G L P T P D
V K V V T P A A A H V I L A S G E K W A P K Y I N V D K A L E I P G V Q V R L F G K P V T Y N E R R M G I V L A T G N S V E E A K E K V R K A S A L I L V S

Sequence #75 — Gene Saci 0216

M I I ^{0.008}T ^{0.002}Y ^{0.}S D V V W G L I L V A W V A F V ^{0.002}T ^{0.}L ^{0.}Y ^{0.}L S K L I N K ^{0.002}Y ^{0.016}T ^{0.001}N ^{0.002}T ^{0.027}Y ^{0.002}V ^{0.002}T R K A I H I L G G G V V A V V ^{0.002}S Q F L F ^{0.001}S ^{0.002}S P L V P I I A ^{0.001}S ^{0.004}Y A I M I ^{0.002}Y L I V H R ^{0.091}T
 R Q K M L N W F Q D E G D R G E V ^{0.012}Y ^{0.002}F ^{0.001}S ^{0.008}F ^{0.008}S F G ^{0.003}T ^{0.018}V L L I M W L I E P ^{0.003}T ^{0.004}F ^{0.002}S ^{0.003}S P L K F V P F L P L ^{0.003}Y ^{0.01}Y ^{0.002}M ^{0.002}S F G D G I ^{0.016}T ^{0.001}G I I R N ^{0.001}Y ^{0.001}V ^{0.001}Y R R R F K G F W G ^{0.002}S V G
 M F L F C V P L G ^{0.002}Y ^{0.004}L I ^{0.001}Y G I P G M I ^{0.005}S G V I A ^{0.011}T I V E ^{0.003}T L P ^{0.002}Y I D D N I ^{0.001}S V P F I ^{0.}S F I F L ^{0.}Y I A V K F L ^{0.}Y I

Sequence #76 — Gene Saci 0218

M L ^{0.004} S W I I G ^{0.004} S P A P P W H ^{0.004} Y L R D M F E D ^{0.094} Y N N V G V ^{0.021} Y V D ^{0.002} S K G N I Q L I K V ^{0.003} S E F D E F H I ^{0.009} T T ^{0.004} S V L I ^{0.001} S G ^{0.004} Y H L L ^{0.044} T L K P ^{0.001} Y Y ^{0.002} I K L R K ^{0.002} Y V A F ^{0.017} T T ^{0.012} T T ^{0.009} R

L N V V K E L I K N R N W R ^{0.007} S M E ^{0.009} Y Y ^{0.015} Y G ^{0.024} D E F V ^{0.018} Y A W V I ^{0.003} Y S ^{0.002} C E M C E E K Q R L H L E V N E E K L N D D E L L ^{0.017} S K H L E I ^{0.013} Y N ^{0.021} S

Sequence #77 — Gene Saci 0220

M I T E G Y F V K Y D G V Y W A V K G C F H P Q Q G Y V V G I P R L Y K G E K I K R Y N D A M N I V R R D F P H L L R Y V E E I G A E V P L I P L K G S E V L D P
F D L K K V T D P K V K Y F I S L F R H V G I T G S L L Y F K G K N F N D I D L L S F D I G N Y E I L R E L R K A G I T K S L S S F N Q G E V E I L N S H D F N
L L K R E R V L E G I F H D I P Y T F K I V E C E D F G K V K R V E K F E G K V T I D K T L K P Y S L P V K Y L T D T G H V L T S F R T R F T E L K E G L E L Y
V D G F L L E R D K F S D I D L D I A R K V E I L

Sequence #78 — Gene Saci 0221

M T A H E K H K E H A P K E V R F Y V I T I S T S R Y E K F I K R E T I V D E S G D A I K E S I I S E G Y K V V G Y T L I P D N K I K I L R A F S E A L D N P D
V D V I I S T G G T G Y S T T D V T V E T I R K I F D R E I E G Y G D V F R M V S Y N D P K V R S A S Y L S K S T A G I I G D K V V F L L P G S P D A V K L A M
K E L I L P E I G H L L Y L V R G K

0.065
0.015
0.014
0.016
0.076
0.018
0.007
0.304
0.018
0.014
0.009
0.005
0.005
0.022
0.011
0.005
0.011
0.029
0.013
0.011

0.007
0.012
0.106
0.026
0.008
0.291
0.031
0.032
0.12
0.03
0.021
0.046
0.026
0.049
0.01
0.011
0.011
0.029

Sequence #79 — Gene Saci 0231

M F ^{0.164} S ^{0.182} S D P ^{0.07} S V Q A R K E K L D K E E E V R A L R G A L M A E L D A I N ^{0.01} Y ^{0.023} Y L Q Q G K L F E N E H L K K V H E D I A K E E I A H F G E F L R L L ^{0.009} Y E V ^{0.013} S K E D F

D ^{0.04} Y I V K G W K E A ^{0.015} S E L I G ^{0.018} S G N E I P I P H G Q G N D D K D ^{0.076} S E H K E D K N D ^{0.071} S ^{0.389} Y Q K E P ^{0.042} S V E E I V ^{0.113} Y E A L K Q R K I R ^{0.017} Y A G ^{0.18} T L R ^{0.041} S ^{0.016} Y P D E ^{0.079} S ^{0.041} I S L F D

F E E ^{0.284} T E R E V ^{0.397} T Q K M D ^{0.008} S Q L ^{0.032} Y K I E Y ^{0.029} L S V E F K I R ^{0.008} S D L P V N R ^{0.011} T L N I I H R A G V K ^{0.016} Y ^{0.007} S L M E D E L L L ^{0.009} S K H P L ^{0.041} S I I E R G R K E K A ^{0.049} S D W D I P G

S ^{0.006} I A N D V I R G I Q I L E ^{0.074} T N G ^{0.074} Y ^{0.171} T D P V ^{0.109} T I I ^{0.004} S P E L ^{0.018} Y ^{0.063} T R L F R V ^{0.009} Y D K ^{0.005} S G ^{0.02} T ^{0.008} Y E I K L V K H A ^{0.027} T E I I V ^{0.001} S P L I K G L A V V ^{0.004} S K K G F ^{0.011} Y V M E N ^{0.08} T P A K

V E F L G R E G I N ^{0.002} S ^{0.005} D Y I I W G K I A P ^{0.002} Y L I D ^{0.009} T N A A V V F L R Q

Sequence #80 — Gene Saci 0238

M F K G K N V V I T G G T R G I G R A I A E R F N S L G A K V F V L Y A S S E S Q A K E L E S K G I V T I K C N V S K R D Q V I E A S K K V R E I T N N V D V I
V N N A G V M Y T M P F E E F D E E K Y R R M M D I N L N G T I Y V I H T F L P F M K E R G G V I V N I A S N A G I G T S A V G T T F Y A I T K S A V I M L T R
R L A F E L G K Y N I R V N A V A P G W V E T D L T V S G K S P E E T E K I K Q W F R D R T V L H T T G R P E D I A G I V T F L S S D D A K Y I T G Q V I V A D
G G R I D Y L T H S L

0.02 0.021 0.011 0.026 0.02 0.016 0.029 0.011 0.084 0.009 0.006 0.026
0.032 0.012 0.038 0.018 0.009 0.017 0.002 0.027 0.002 0.052 0.019 0.007 0.022 0.002 0.006
0.017 0.063 0.061 0.008 0.081 0.169 0.385 0.103 0.1 0.014 0.005 0.002 0.686 0.041
0.002 0.029 0.004

Sequence #81 — Gene Saci 0246

MVKVAFIGVGRVGGQTIA^{0.014}YNT^{0.016}IVNG^{0.025}YADEVML^{0.015}YD^{0.016}VVPELPEKFEHEIRHALAALRVK^{0.057}TELL^{0.004}ST^{0.006}NNIDDI^{0.007}SGADIVVI^{0.118}TAGK

PRKPGM^{0.108}SR^{0.042}RDLFIDNAKIMIDLAKKLPKKNKGAM^{0.075}YIMVANPVD^{0.007}MA^{0.014}S^{0.006}VFMKY^{0.003}SGEN^{0.098}TI^{0.003}ST^{0.056}GNQVE^{0.037}TM^{0.027}MR^{0.007}SYIAKKLNIP

A^{0.03}YEVGG^{0.042}YVGGEGHGEAAMVLW^{0.002}ST^{0.023}TV^{0.03}VK^{0.009}GKPF^{0.006}SES^{0.006}LGVNKA^{0.006}EVED^{0.006}YVKKIAAEIIRVLGG^{0.008}TT^{0.047}WGP^{0.006}GADIEEVIR^{0.007}SV^{0.007}ALNEGK

VMS^{0.005}VAFPHK^{0.049}YEDEI^{0.003}IHS^{0.226}EPVVGR^{0.087}T^{0.006}VGPAL^{0.021}TS^{0.012}ALDENDKARL^{0.012}S^{0.006}QAIKEV^{0.012}YNV^{0.006}YK^{0.006}SNLKELEQVI^{0.006}S

Sequence #82 — Gene Saci 0247

MLI L S T EKLPDECKRLLPNARDQFNEDDVPKADILMLWPLQAKVFLPKAK S V KAVQ T F S A G V D D F P F S L L P K G V D V F S N A
G A Y S V S V A E H A F A L I M T L A K G I G K R D R T F R P Y P L T G V N L M V L G G G I G S E V A R I G K M G F N M Y V I G V S R S F K R P E L F D E K H
N I S E L K D I I G K A D I I V D T L P L T K L T D G I L N Y D M L S R V K E N A I I V N V G R G E T V V E E D V Y R L L K E R K D V R F G T D V F W R K N G V
E D F N S K L W E L D N F T G T P H T G G A Y G N D V V K T N A I I E A C K N V Y N Y I T S G K A E N K V R I E D Y L

Sequence #83 — Gene Saci 0248

M T Y W I I P V Q E D F W E A V S S L N V F G H N K E R A T R Y I K K G D L L I F Y V N K Y Y A K R L G G M F V G I Y R V S S D W Y T D T P L F P D E K L Q N
K V I H T Y R I N I E P L L A G K C P V R D I L Y E L S F I E D K F Q F S K F L R N V P G N L R R P V P V S D A K L I E E C I K K S N E V

Sequence #84 — Gene Saci 0253

M P Q ^{0.058}T L ^{0.014}T E K I L ^{0.023}S R A ^{0.085}S G K N V ^{0.012}S P G D V ^{0.057}T E I K V D L V A F H D L ^{0.019}T G ^{0.086}Y H V I E V M E D V G ^{0.061}T L K V F D R E K L V I A F D H L A P P P D V R ^{0.012}S A E I Q G Q
 I R N F V K K ^{0.043}T S ^{0.003}V P N F ^{0.014}Y D I N ^{0.002}S G I L H Q I M I E R ^{0.014}Y A N P G Q V I V A A D ^{0.005}S H ^{0.03}T S ^{0.004}T S ^{0.005}T S ^{0.004}T S G A V G A F A Q G L G A ^{0.005}S D V A A A V I ^{0.02}T G K ^{0.023}T W V M V P Q P F K I
^{0.082}T L E G K P A R W I N G K D I A L K I L G D F K A D ^{0.015}Y F N G M ^{0.006}S L E I F V K E P ^{0.016}S A V P M D F R A ^{0.225}T V ^{0.003}S N M G I E M N A D A L M F V P D Q E ^{0.121}T F N ^{0.079}Y I K ^{0.064}T A R G
^{0.053}Y E P Q M V ^{0.153}T P D ^{0.009}S D A K ^{0.309}Y V D E ^{0.084}Y N I D L ^{0.006}S K L D P L V A A P H ^{0.016}S V D N V K ^{0.006}S V N E V E G ^{0.095}T P V D Q V F I G ^{0.002}S C ^{0.024}T N G R I ^{0.03}S D L E M A A K I L K G K K V K ^{0.056}T R
^{0.026}T I V I P A ^{0.003}S Y ^{0.008}Q L F K K A L E L G ^{0.016}Y V Q ^{0.029}T L A D A G A I I ^{0.019}T Y ^{0.004}G ^{0.021}T C G P C L G G H F G I A G P G E ^{0.121}T I I ^{0.004}S ^{0.11}T S ^{0.013}S S ^{0.015}S R N F K G R M G ^{0.098}S P D A K V ^{0.121}Y L ^{0.019}S G P A V A A
^{0.126}A ^{0.126}T A L E G K I ^{0.326}T D P R R L

Sequence #85 — Gene Saci 0254

M ^{0.09}S ^{0.137}Y Q K A R E D K E Q P L I E H I R E L L R R ^{0.046}T R R V I I ^{0.002}S F L V F L ^{0.012}T I ^{0.}Y ^{0.013}T ^{0.03}T F G I ^{0.014}T ^{0.005}T I K I G ^{0.01}T ^{0.001}Y ^{0.003}S I P I L Y P ^{0.}T ^{0.045}L ^{0.014}Y D ^{0.002}S I ^{0.001}S V Q F ^{0.022}T R V V L M R P I P K
 D L I L I ^{0.009}T ^{0.002}L S P F E A L L ^{0.002}T ^{0.009}T I ^{0.02}T V ^{0.002}S V ^{0.005}Y L ^{0.005}S I F ^{0.004}S ^{0.004}S L P I L L R E F W A F V ^{0.003}S P G L ^{0.021}Y E H E K R ^{0.227}T F R K L V ^{0.086}T P G M L L F V A G ^{0.002}S A F A ^{0.005}Y F M L L P F M L I
 F I ^{0.002}Y R L D V ^{0.002}S L G V E P ^{0.026}T L G F N ^{0.001}S ^{0.001}Y I ^{0.002}S ^{0.011}T I I L L M A G ^{0.006}T G I A F E M P L I M ^{0.001}Y M L ^{0.009}T L V G L I K ^{0.001}S ^{0.001}S ^{0.013}T W F K N W R W G V L I ^{0.}S F I V A ^{0.003}Y I I ^{0.002}S P G ^{0.022}T ^{0.004}T G G
 I I E ^{0.006}T I I G I I L ^{0.003}S M L ^{0.}Y F G G A ^{0.004}Y A ^{0.017}S K I A E K ^{0.071}S R E K K K N L L M ^{0.029}T K

Sequence #86 — Gene Saci 0255

M V ^{0.004}S ^{0.003}S I D G F L I I I V L G I I L L A G D K N ^{0.004}S I ^{0.003}S ^{0.02}T I K N V V K ^{0.121}T ^{0.004}Y N E L R R K Q ^{0.169}T E I V N E L K R E F N E I A Q ^{0.02}S N E E I V R P L ^{0.066}S E V ^{0.033}S R ^{0.118}T M ^{0.11}Y ^{0.023}Y E ^{0.201}T ^{0.127}T

N D ^{0.224}T P V N ^{0.051}Y ^{0.011}S I K D ^{0.025}Y K M D M L E Q R I K E L E K E L N E L K K N R G V D N E L ^{0.124}S E G K G G

Sequence #87 — Gene Saci 0260

M P P F G K V L V A N R G E I A I R V M K A V K E M G M K A V A V ^{0.081} ^{0.008} ^{0.009} ^{0.112} ^{0.049} ^{0.063} ^{0.008} ^{0.005} ^{0.087} ^{0.005} ^{0.007}
Y S E A D K N S L H V K Y A D E A Y Y I G P S P A I Q S Y L N I E S I I S V A E K A H V D A V
H P G ^{0.082} ^{0.015} ^{0.012} ^{0.015} ^{0.027} ^{0.008} ^{0.08} ^{0.037} ^{0.074} ^{0.008} ^{0.005} ^{0.087} ^{0.005} ^{0.007}
Y G F L S E R A D F A E A V E K A G V V F I G P S P H A M N S I K S K L D G K R L A K A S G V P I S P G S D G P V E N L D E A I K I A D R I G Y P I M V K
A A ^{0.015} ^{0.019} ^{0.069} ^{0.004} ^{0.008} ^{0.027} ^{0.003} ^{0.012} ^{0.021} ^{0.008} ^{0.012} ^{0.181}
Y G G G T G I T K V D S Q E Q L I E V W E R N K R L A Y Q A F G K A D L Y I E K A A V N P R H I E F Q L I G D K Y G N Y V V A W E R E C T I Q R R N Q K L
I E E A P ^{0.048} ^{0.006} ^{0.071} ^{0.085} ^{0.086} ^{0.003} ^{0.012} ^{0.021} ^{0.016} ^{0.036}
S P V V K M E E R E R M F E P I M K F G Q L I R Y H T L G T F E T V F S D V S R E F Y F L E L N K R L Q V E H P I T E T I F R I D L V K L Q I R L A A
D E H L P F ^{0.128} ^{0.092} ^{0.097} ^{0.052} ^{0.026} ^{0.054} ^{0.087} ^{0.193} ^{0.47} ^{0.084} ^{0.129} ^{0.057} ^{0.03} ^{0.044} ^{0.006} ^{0.085} ^{0.007} ^{0.004} ^{0.005}
T Q E E L N K R V R G H A I E Y R I N S E D P M S D F S G S S G T I T Y Y E E P S G P G V R V D S G I T L G S Y V P P F Y D S L I A K L I V Y G E D
R I ^{0.018} ^{0.01} ^{0.016} ^{0.07} ^{0.153} ^{0.013} ^{0.048} ^{0.087} ^{0.089} ^{0.022} ^{0.006} ^{0.015} ^{0.039} ^{0.044} ^{0.01} ^{0.081} ^{0.009} ^{0.011} ^{0.015}
S A L Q S G Q R A L S D F K I G G V K T I E L Y K W I T R E E D F V N A K F T T A Y I S Q K S K E F L E Y L K R K E M T K A V I A S V M Y S K G Y V K K S
G N G K K E ^{0.158} ^{0.026} ^{0.044} ^{0.027} ^{0.008} ^{0.013} ^{0.008} ^{0.018}
T V S N N K N K W K T Y G I M S Q S S Y R V L W

Sequence #88 — Gene Saci 0263

MEEI ^{0.147}T VEDLPVD ^{0.02}S KVKDIIK ^{0.051}S RGIKKLNPPQ ^{0.197}T EAVKKGLIEDKRLLI ^{0.016}T ^{0.095}T P ^{0.063}T A ^{0.01}S GK ^{0.086}T LMAELGMI ^{0.005}S HLLNKGKKAIV ^{0.011}Y ^{0.173}T P L
RAL ^{0.31}T ^{0.007}S EK ^{0.029}Y ^{0.008}S ^{0.079}T FKDWEKLGFKVGV ^{0.152}T ^{0.009}S GD ^{0.04}Y ^{0.144}D ^{0.015}T ^{0.078}T ^{0.003}Y EKLD ^{0.005}S LWRH ^{0.011}S AEWLKDID ^{0.065}Y FVLDEFHY ^{0.043}MNDGDRGP
VEGVAVRAKRQG ^{0.029}T ILLAL ^{0.001}S A ^{0.017}T I GNAKDVAKWLNADIVA ^{0.04}T NWRPVPLKEGVM ^{0.089}Y ^{0.007}S EGGKGGHII ^{0.033}Y ^{0.003}S DG ^{0.024}T ^{0.082}T NKLKGGDDPIIAY ^{0.002}Y
^{0.023}T LDIL ^{0.002}S KGGQVIVFR ^{0.011}S ^{0.027}S RK ^{0.019}Y A ^{0.006}E ^{0.111}T ^{0.004}A ^{0.076}M ^{0.004}K ^{0.004}I ^{0.076}S Q ^{0.065}Y MNFVKLDDKKLLE ^{0.027}T AERIKEVEDAG ^{0.071}S NEKEVL ^{0.071}Y NLIVRGVAFHHAGL ^{0.003}S ^{0.003}K
GLRDIIEA ^{0.005}S FRERIIKVI ^{0.051}T A ^{0.056}T P ^{0.029}T LAAGVNLPARAVVIGDI ^{0.024}Y RFNRKIVGF ^{0.053}T EMI ^{0.011}S ^{0.07}T ME ^{0.082}Y RQM ^{0.057}S GRAGRPG ^{0.057}Y DNHGEAII L
VR ^{0.01}S KVEVDKVIDK ^{0.048}Y LH ^{0.014}S DIEPIE ^{0.017}S KLGAEGPFF ^{0.014}S FVL ^{0.014}S LIA ^{0.022}S EGEI ^{0.141}T EDRLKD ^{0.017}Y VED ^{0.089}T ML ^{0.004}S KQLVRK ^{0.005}Y ^{0.004}Y NNAIDWLS ^{0.005}SKNE
FIK ^{0.006}S NDDRLLQL ^{0.041}T KFGRRV ^{0.084}S DL ^{0.089}Y LNPFF ^{0.064}T AV ^{0.053}T IKN ^{0.02}Y LERAES ^{0.015}PCDIA ^{0.019}Y FHLIA ^{0.004}Y ^{0.046}T PDGPLV ^{0.01}S VGRNEEDALLDNLDCELIID
EPDDELEF ^{0.005}S ^{0.007}NY ^{0.004}IS ALKVAFILKDWIEEVDED ^{0.067}T ILS ^{0.005}K ^{0.001}Y GIG ^{0.004}S GDLRAIID ^{0.012}T MEWL ^{0.013}T ^{0.004}Y GAFHV ^{0.001}S ^{0.002}S ILLDLNQH ^{0.026}T ^{0.003}SVLEKCLKHR
IADGVKEELLELV RVP GIGRARARLLFNQGIKRPEDIVMKPERVK ^{0.026}S LLGQNLGKIVKEAARIA

Sequence #89 — Gene Saci 0266

MVLKIRINREQEVFDKLIKIGEDLK T T AEAALRQLINALLVKDDDMKN S S L I K I K S L N E K I S M T R E E L L S V I Y S E A F L P D F
K E A I V M L T Q D L Y R A S A S A K D A G R A L T A R R V D E K C L T T L K E S L L S Y I S I I L E A S D K V V L M L S L L P K D I A S A L K V G K E V Q M L
E R S G D E I K D M I I T R L Y D M E D S L H L I T L L Q T R D A I F F L D D I L D S M E S A V L S I K I L Y A T L K S

0.017 0.067 0.021 0.021 0.025 0.032 0.147 0.014 0.021 0.017
0.029 0.045 0.055 0.022 0.418 0.016 0.029 0.01 0.006 0.007 0.014 0.012 0.016 0.037 0.089 0.089 0.024 0.007 0.007 0.009 0. 0.018 0.007

Sequence #90 — Gene Saci 0267

M G L E G I A D L P L H **T** G K V P **Y** W L A **S** I M R R L **S** K A I I D V M I I E W G P D K V V E R L **S** N P L W F Q G F N N I I G M D W D **S** **S** G **S** **T** **T** V **T** L G I L K E
V I K P E E E G I A V L G G K G K N A L K V P D E L N **S** L R G K F **S** V N L E K I E R A **S** R L V A K V D **S** **T** L I Q D G H **T** L **Y** H H **S** V L V **S** E **S** G K W G I I Q Q G
M N L E **T** R F A R R **Y** H W L **S** **T** E N F L V E P H K G I M G V K Q E I A I N A V D K N V E N **T** R K L M V D L L K E P P E K L I N D V V K A E N M I K G Q **T** **T** L D N
P **S** A F K V D I K K R R I **Y** M K P I E I **S** K I R Q I L H K V **Y** E V N P **S** N L E E A L L H G L G P **S** **S** **T** R A L **Y** L V A D L I **Y** N E P P **S** **Y** N D P V N M P **Y** D P F K
Y A **Y** A I G G K D G I P F P V N R K V A **Y** E V I **Y** **T** L E D I L Q R I K **T** E E K D R E F A L R K L R **S** L A E G L K E

Sequence #91 — Gene Saci 0268

MLIAA ^{0.023}T ^{0.005}S D I H ^{0.009}S P R ^{0.003}Y L ^{0.043}T Q F F A ^{0.001}S F N L I R N L ^{0.007}S I D I F L L A G D L A N E G E ^{0.03}Y I H F K P V ^{0.013}Y D V L K R F R ^{0.127}T I A V F G N E D F R E N R D ^{0.05}S ^{0.038}Y K E ^{0.168}T ^{0.013}Y
P D I K W L E E D I V E F E L G D I L V ^{0.015}S I I G ^{0.009}S D G V L E E P ^{0.061}T K W Q K L N G I D E N ^{0.01}Y ^{0.01}Y R E K A R K I E D L L C K A R G D V K L L L ^{0.016}T ^{0.01}H ^{0.006}Y A C ^{0.024}T F M ^{0.024}T V Q G
E K K ^{0.004}S I F P H L G ^{0.03}Y R I L E E ^{0.019}T ^{0.002}S C L P H L A I H G H A H H ^{0.001}S K V ^{0.01}T Q G L V R G V R V ^{0.011}Y N V A L P A N H K I V L I R L

Sequence #92 — Gene Saci 0269

M E E L I E A K I L N Y G K L K E I H K Q I L F I R E Y S K I V K G G P P P S N I P R E L Y Y Q A T S S S N K I R Y G P L R I I G N T S P Y R I P E V D A L V S
S T R R S P P L Y A I A E F S D D V R V F L A Y E K P K S I V G I D I G V R H L I T V V S I R E D S L W K V R Y W G N D V I T E E M I K V I G D P Q G V S E I R
I K G K I G N I I R D V V S F I Q D L N P K V V A I E D L E Y F E S K I G S A L R T V E K E L E S H L Y R K G V K F R K L P P Y Y T S K I C S N C G F R R G E
V M G P L F V C P S C G Y K A D R D F N A A Y N L A L Q C K Y T C

Sequence #93 — Gene Saci 0270

M C R L L G F ^{0.01} S V K G E V D H K A L K ^{0.009} S L I D A A R N D V F ^{0.003} S R ^{0.018} Y L N H P H G W G I ^{0.003} S A I I ^{0.032} Y R D N K P R V L H F K ^{0.008} S P I P I ^{0.032} Y D D P ^{0.256} T F ^{0.042} Y D I A ^{0.005} S L L K G D R
 V I G M I H V R R A G K G F L L G V R H N H P ^{0.008} Y H V R ^{0.019} T K N L D I ^{0.048} Y F A H N G ^{0.009} S I ^{0.01} S R K A F E D P N ^{0.043} Y P ^{0.005} S ^{0.085} T D ^{0.006} S ^{0.048} Y L F L Q E I I K N I D R N N L D V K R A ^{0.003} Y E E
^{0.027} T I I K L ^{0.005} S E F ^{0.006} S V ^{0.017} T L N ^{0.01} S I L L ^{0.007} S L ^{0.007} S N E D V ^{0.007} S L L V G H ^{0.005} Y ^{0.017} Y N K N K M R D V E D ^{0.033} Y ^{0.069} K M ^{0.017} Y R ^{0.012} Y E N ^{0.013} Y V F ^{0.004} S ^{0.003} S ^{0.128} T V M ^{0.036} Y ^{0.005} Y ^{0.015} Y G V K G E E L R Q G ^{0.021} S V I E I

Sequence #94 — Gene Saci 0271

M K I V F V G T G A G S T K G S K R V K S I Y V K G S E G S L L L D L G S G A S F K L D D L E L V D F S A I F V T H L H I D H I N G I P D H L I Y R R I F G L
P D V E I R S P P G L Y E I L S S Y Q K W N G I N I K L I E E S K P K G K V G D L N I Y S V E A C H A I Y A V S Y V I T D N K R K I V Y T G D S Q P C E P I M
E E I K D A D L V I H E A S C L E E C S K Y G H T S V K Q L L S M F S S P S K L V M T H I P S Q I E D Q V K L I A K N Y I V A Y D G L V L N V

Sequence #95 — Gene Saci 0272

M I V V V G S Y N V D F L I K V R D F P S E G E T V F S D G V Y I D H G G K G S N Q A V S A S R L G G N V R L I S A V G N D E F G K R A I K F W E D E R L D V A
Y V K I K N A L T G S A Y I V F D R R G R N F I V V N R G A N A L L S E D D L D G C L N G D I L L T Q L E V N E N V V K K A L K E F P G V K V L N P A P A V L N
D N S L L E Y V D I L T P N E I E F K E L T G T Q D L N Y G I D L L K K V K R A V I V T L G E R G A Y I G T R E R R I L I P T L A V D A I D T T G A G D V F N
A S L A V Y L E K G Y S L E R A V R I S N I I S A Y S T T R I G A L G P R L S E V S E L I E K E

0.002 0.004 0.014 0.052 0.006 0.23 0.009 0.008 0.014 0.015
0.021 0.025 0.003 0.007 0.007 0.005
0.005 0.056 0.094 0.057 0.022 0.008 0.05 0.005 0.121 0.012 0.022 0.089
0.002 0.005 0.013 0.016 0.595 0.024 0.019 0.019 0.16 0.095 0.074 0.056

Sequence #96 — Gene Saci 0281

M ^{0.087} S T ^{0.013} E L I D R V ^{0.028} S E R L ^{0.012} S Y F N V K I A H I F ^{0.083} T E T ^{0.019} A L E P D L G A K V E D L P L G G N L K Q M L K Q V G I H R L ^{0.005} Y K F Q E E A ^{0.06} Y N K I ^{0.002} S H G N N V M I V ^{0.003} S G
 T ^{0.079} G T ^{0.038} G K ^{0.078} T E A F L I P L L D L A L K G E R ^{0.02} S V L V ^{0.005} Y P ^{0.056} T K A L A R D Q L E R V R R L A ^{0.024} S P L G V E M G V F D G ^{0.153} D T ^{0.084} P E K E R K R L ^{0.051} Y E N P P H I L I ^{0.104} T N P D M
 I H I G L P L ^{0.006} S Y R F R R L I R ^{0.082} T A D H F V F D E V H ^{0.005} S Y D G V L G ^{0.007} S H I R M I ^{0.009} S D R L R E L ^{0.176} T D ^{0.076} Y H V I G ^{0.006} S S A ^{0.005} T I D A ^{0.006} S P ^{0.081} Y L F E E L F G V K G E I I ^{0.017} Y G ^{0.015} S
 P R R K G V A I H A L L N I G ^{0.004} S A ^{0.004} S R W ^{0.081} T L S A ^{0.002} Y L ^{0.01} T A F L V K E G ^{0.01} Y K V L ^{0.045} T F V D ^{0.002} S Q Q M A E L I A K I ^{0.094} T A R F G E E N I H V H R A G I N K E D R L K V E E ^{0.035} S
 I K ^{0.019} S G K I K G V I A ^{0.083} T P ^{0.072} T L E L G I D I G D L D V V I M A E N P P N ^{0.027} Y ^{0.25} T K ^{0.012} Y L Q R A G R A G R R ^{0.028} S K I G ^{0.022} Y I F ^{0.021} T L L G E D P I D ^{0.083} T ^{0.088} Y Y ^{0.01} L R K P ^{0.187} T E F F N R K V
 L P L ^{0.057} T F D V ^{0.004} S N K E V V K I H A A A ^{0.019} Y L A E K G ^{0.807} S L R L G R V I P K A W V K A ^{0.011} Y E E L V K D G K V K I E N N V V ^{0.003} S A L P P L ^{0.024} Y ^{0.016} S Y ^{0.018} V R ^{0.011} S ^{0.316} T Y ^{0.014} L R ^{0.01} S ^{0.043} T G P I V G
 L ^{0.002} Y D R D G N R L G E R E L P V A L ^{0.01} Y D I ^{0.004} Y P Q A I ^{0.004} Y F I ^{0.002} S K R N ^{0.024} Y I V E D V K L D ^{0.015} S L R A ^{0.191} T L R R A K D D L ^{0.018} S ^{0.05} Y ^{0.046} T ^{0.21} K P V ^{0.052} Y ^{0.01} S ^{0.029} T H L L ^{0.008} S F E E I E E R K V F G
 L P V K ^{0.008} Y G I ^{0.011} S E I M I ^{0.005} S V D G F A ^{0.055} T ^{0.067} Y E I ^{0.006} S G N K N K P K Q E F F ^{0.012} Y K E P I I F ^{0.014} T ^{0.003} Y ^{0.016} T ^{0.095} T K G V L I K H P I L E E F N E F D ^{0.006} S I E A ^{0.085} Y H A ^{0.024} T E H V L I ^{0.004} S ^{0.007} S A R V
 V A G A ^{0.01} S M ^{0.042} T D L A G I ^{0.004} S ^{0.006} Y P ^{0.021} T G H V V I ^{0.031} Y D ^{0.008} S V V G G ^{0.009} S G V ^{0.006} S K L L ^{0.027} Y D R L E E A ^{0.017} Y ^{0.01} D I ^{0.038} S I D I ^{0.003} T G K C D C E D G C P K C I ^{0.005} Y ^{0.004} S P ^{0.004} Y C G N N K M L ^{0.033} S R R K ^{0.239} S
 H R L M ^{0.195} T K I K L G E F D N ^{0.007} S V E Q N I N G K P I V

Sequence #97 — Gene Saci 0290

M N V V A L F K I V P D D T L I K I T G S T L D L N V P A K I S T Y D K S A I E E A I R I K E K H G G K A I G I T A G N T D R K A I R E A L A M G L D E V I A I
D M K E Q D I Y S T A N M I A D Q L K Q L N P D L V I G S E A T D S S G G I F P A Y L A G L L G L P L I S Y V K S I T I E G K K I R A E R N L I S S T E I V E
A E L P L V I S V V G E I N T P R I P T V K Q I L E S S K K P V K S V N A N V K P L V K L A S V S P Y V I Q R K K I I I D G S K M E E A V D K L L S Y L R Q E G
V I S

0.041
0.002
0.005
0.026
0.014
0.152
0.015
0.437
0.125
0.255
0.055
0.004
0.028
0.015
0.042
0.139
0.008
0.009
0.007
0.005
0.002
0.009
0.038
0.01
0.016
0.027
0.005
0.088
0.145
0.008
0.02
0.019
0.014
0.016
0.019
0.019
0.017

Sequence #98 — Gene Saci 0294

M I I ^{0.007}S ^{0.027}I ^{0.041}T P E I A ^{0.016}T D E V P I ^{0.005}Y A G G L G I L E G D K ^{0.052}Y L E A ^{0.003}S ^{0.006}K ^{0.013}Y N E K ^{0.024}Y V V L ^{0.006}T L F ^{0.005}Y P N G H ^{0.007}S ^{0.015}R ^{0.039}Y ^{0.014}Y V N N E I R E E V V D ^{0.066}Y ^{0.027}S ^{0.003}V L E E N M V N E G D I E
 I Q A R P G N V K L K V L ^{0.007}S I A R G N A K V V ^{0.039}Y F K ^{0.003}T I ^{0.195}S ^{0.022}P D W A V R A ^{0.011}T ^{0.006}S R L ^{0.006}Y V E D ^{0.032}S ^{0.013}K F D ^{0.011}Y E ^{0.005}Y ^{0.008}K ^{0.001}Y I I L A K A ^{0.016}S E E ^{0.004}Y V K K L D N V K A V ^{0.022}Y A H E ^{0.014}S ^{0.019}L A
 G L A L I G L ^{0.011}Y G K ^{0.025}Y E ^{0.096}T H L V ^{0.031}T ^{0.098}H P G P W G H P ^{0.026}Y F ^{0.004}S ^{0.004}S R ^{0.061}T L R E E F G I H V D V E D V M L ^{0.002}T K L L L N ^{0.008}Y ^{0.001}S ^{0.01}N ^{0.016}Y F H ^{0.004}T V ^{0.022}S V K H N D L ^{0.014}T K I M F P E ^{0.019}S ^{0.013}S P S
 P L ^{0.282}T ^{0.011}N G V ^{0.031}S F D R W M H E E V K K I ^{0.089}Y N ^{0.014}T G K G ^{0.019}S F G E A R V K A R N D L L ^{0.024}S L L R K ^{0.262}Y K E I D Q D K L I V V W A R R M ^{0.005}T ^{0.015}R ^{0.015}Y K R P ^{0.015}Y F V ^{0.015}S R L I R E M G K D
 L N V V F V I A G K A H P R D A E G I V ^{0.059}Y M N E F N W L ^{0.001}S K E L K N V I ^{0.002}Y I H D ^{0.007}Y ^{0.001}S L ^{0.007}T N A K ^{0.002}Y I L ^{0.005}S G G D L L L F ^{0.043}T P F ^{0.003}S G W E A C G ^{0.126}T ^{0.001}S ^{0.022}Y M K A G I N G V P
^{0.048}T ^{0.01}L ^{0.004}S S K D G G ^{0.042}T L E I I K D G ^{0.01}Y N G ^{0.012}Y F F G E D I R E F V D I ^{0.038}Y N ^{0.011}S P K A K E I D ^{0.049}S R D ^{0.025}Y V D F V N K F L ^{0.005}Y I I N K A E ^{0.027}S D R D W F K N L ^{0.01}S E N ^{0.028}T F ^{0.006}S ^{0.007}S F I K
 F C D I K R V M D K V I ^{0.068}T

Sequence #99 — Gene Saci 0295

M I K P N V K W M Y L V I P F N A S T G P L S T L I T L Q I L N L G G N A I E V A Y T V S L G N L V L I I A S M F W G Y V A D R F D R R K Q I L I S T G G T S L
 P L F L M M M S R S I P L I S L N Y A F A V F M S T A S T T P F N L L V M E T D K K H W G S L F S R Y S L F S S I G V L V G L L I S T F L I T Y L E I S L I E
 G I L A I I S L S T F I L C F R F I P K P Q V S F E R T S L I H N K E S F F S R I R Q I P L I F L H L P S I H S F K I F S L K R L K T P H V N Y V P L L Y I G L
 I I F Y I S S G I F N T V Y P A G L Y K R G L T E N E V L L V T L V G M L I Q I V G F Q F S S R L L E N R K E E K L A H L S L L L R G G N Y I I I G L I M Q F F
 V G I P V L L A G L T S Y P L A A G I A Y A I F Y S S S T T L I F K I L G G R H Q G A G L G I Y S T V V G V A L F A G S L I S G Y I T H Y F S Y G I D F M I A G
 V L L I I C S R I F A Y L S S Q

Sequence #100 — Gene Saci 0299

MIQGI E ^{0.084}Y E E R V E R E D F V G F K I R P K M I V ^{0.012}Y P R ^{0.131}T E E D V V K I V N ^{0.031}Y A R E ^{0.158}T ^{0.149}K T P I V ^{0.015}T W G A G ^{0.014}T ^{0.001}S L ^{0.001}S G H L I C D G C I L L D M K ^{0.003}Y M D N I I E
 I N E I D W ^{0.019}Y A R V Q A G V N L E R L D K E L E K R G F F L P P D P A ^{0.009}S F F L C ^{0.003}S V G G A ^{0.063}T A N ^{0.01}S ^{0.004}S G G M R G V K ^{0.005}Y G ^{0.063}T F K D W V L A L K V V L P N G K V V K I
 G E P F ^{0.104}T K N R G G ^{0.016}Y D L V H L F V G ^{0.002}S E G ^{0.002}T L G I I ^{0.024}T E I W F K I I P L P R R K K ^{0.002}Y ^{0.063}T I L A ^{0.069}V ^{0.034}T D ^{0.011}S L E D ^{0.005}T A E V I V ^{0.011}S L R K N K I M P E L A E F V D ^{0.05}Y Q V I
 N A L N K H L N A G L E E V R D G G A L I I ^{0.012}S V E E D ^{0.068}V L E E L K K I L G N K K ^{0.012}Y V V A E G E E A E R I ^{0.012}Y ^{0.071}S L R A Q A A I A L K A E G K ^{0.02}T ^{0.009}M Y I E D I V V P V ^{0.011}S
 R L V E A I R R L R E I E R A ^{0.015}Y N V K M P ^{0.014}T I A H I G D G N L H P N V I ^{0.099}Y D D P K V G K K V F E E V A K V A I E L G G ^{0.011}S V ^{0.014}S G E H G I G I Q K A K L L G D Q I I
^{0.003}S H N G K E V L E L M K R I K D L F D P ^{0.287}Y D I M N P N K ^{0.028}Y V E L A ^{0.042}Y K L ^{0.022}S E N R

Sequence #101 — Gene Saci 0300

M R A L F P G R F Q P F H L G H L Q V V K W L L D R Y E E L I I M I G S G Q E S H S P Y N P F T A G E R L V M V K E S L A E T G I D L R K V V I F P V M E S F T
S K N W I R I V E M Y S P H F D V I I S G N P L V Y T V A K E A G Y M V E R V P M F N R D I Y N A T R I R K L I M E N D L K W M E C V P K S V S Q F I R D I K G
D E R I R D V T K N D Y T E D

0.002 0.005 0.003 0.001 0.08 0.068 0.07 0.012 0.008 0.016 0.047 0.15 0.014 0.108 0.009 0.009 0.002 0.016
0.319 0.144 0.302

Sequence #102 — Gene Saci 0302

M K R L N F V L A F D V F G **T** I L D L **S S** I I Q E F R R K Q L E **Y T** W L L **T** I L G K F A **T** F E E I **T** K L A L Q **S T** L **L** **S** R G E M E K F N E E L N K W N N L R **S** H
S D A K **Y** L Q D M **S** E I V D I **Y** A L **S** N G **S** M K E V **S** M H L E H N G L L K F F K G V V **S** A E E V K V **Y** K P **S** P L V **Y** K H F M K **S** V **T** P N A **Y** L V **S S** N P F D V I
 G A K N A G M G A I **Y** V N R F N Q P I D P L G **Y** Q P D L V V K D F H E L H D W L K R K L V **S**

Sequence #103 — Gene Saci 0305

M G L P Q V F A P F K R D P **T** **F** **Y** **P** **S** P K M A I N **S** P P E D L A **Y** V A C L **Y** V G **T** K I N R P D **Y** I A V V D V N P K **S** E **T** **Y** **T** K V V A K V E L P **Y** **T** G D E L H H F
 G W N A C **S** **S** **S** L C P N G R P N V E R R F L V V P G L R **S** **S** R I **Y** I I D **T** K L D P R K P N I V K V I Q P E E I K K V **T** G **Y** **S** R L H **T** V H C G P D A I **Y** I **S** A L G
 N E V G E E P G G I L M L D H **Y** **S** F E P L G K W E I **Y** R E D Q K L **S** **Y** D F W W N L P N E I M V **T** **S** E W A **T** P **T** I E N G L N P E H L K E K **Y** G N R I H F W D L R
 K R K K I **S** **S** I **T** L G E E N R M A L E L R P L H D P **T** K L M G F I N L V V **S** L K D L **S** **S** **S** I W L W F F E D G K W Q A Q K V I D I P A E P A E G N L P D I L K P F
 K A V P P L V **T** D I D L **S** L D D K F L **Y** V **S** L W G **T** G E L R Q **Y** D V **S** N P F K P V L **T** G K V K L G G I L **Y** R A D H P **S** G N K L **T** G A P Q M V E I **S** R D G R R I **Y**
 V **T** N **S** L **Y** **S** **S** W D N Q F **Y** P E G V K G W L V K L N A N P E G G L D I D K E F F V D F G E A R A H Q **T** R L R G G D A **S** **S** D **S** **Y** C **Y** P

Sequence #104 — Gene Saci 0306

M ^{0.012}S ^{0.005}V ^{0.011}S W A L P F E Q K I I P K K G A ^{0.005}S K L V D I N ^{0.032}T ^{0.058}Y K E I H ^{0.004}S Q ^{0.027}T V K E ^{0.009}Y R N F W A ^{0.003}S V A ^{0.006}S E L E W F K P W E K V L D D ^{0.005}S N P P F ^{0.006}Y K W F V G G E I N A ^{0.003}S ^{0.033}Y
 L A V D R H A K ^{0.014}S W R K N K V A I L W E G E P V D E R G N P K E V R K L ^{0.251}T ^{0.054}Y H D L ^{0.145}Y K E V N R V A ^{0.006}Y L L K E K ^{0.002}Y K L K K G D ^{0.018}T I A I ^{0.019}Y L P M I P E L P I F M L A
 A A R L G V V F ^{0.014}T V V F ^{0.002}S G F ^{0.003}S A D A L A N R I N D A E A K L V V ^{0.044}T A D G G W R R G K I V E L K Q I V D K A L E K ^{0.084}T ^{0.177}P T V K D V I V V R R ^{0.212}T G H K V N M M E G R
 D K ^{0.103}Y F D E V I K D I P Q N V ^{0.168}Y V E P E R L K ^{0.026}S E D P L ^{0.286}Y I L ^{0.029}Y ^{0.066}T ^{0.004}S G ^{0.01}T ^{0.027}T G K P K G I V H D I G G ^{0.022}Y E ^{0.019}T L L H A ^{0.002}T M R W V F D I R D D D I ^{0.022}Y W C ^{0.004}T A D I G W V ^{0.021}T
 G H ^{0.001}S ^{0.013}Y I V F G P L ^{0.169}T E G A ^{0.036}T ^{0.025}T V M ^{0.085}Y E G A L D ^{0.038}Y P Q P D R W V ^{0.011}S I I E R H ^{0.006}S V ^{0.114}T I L ^{0.014}Y ^{0.008}T ^{0.005}S P ^{0.315}T A I R ^{0.069}T F M K F G E E W V K K H D ^{0.208}T ^{0.007}S ^{0.074}T V R L I H ^{0.003}S V G E P I N
 P E A Q D W M W K L V G R E E I P F G ^{0.002}S ^{0.032}T W W M ^{0.021}T E ^{0.023}T G G I M I ^{0.003}S H L P G L ^{0.013}Y L I P M K P G ^{0.085}T N G M P I M G V E A D V V N D D G K P ^{0.011}S N L E D R G ^{0.308}Y L V I K N P
 W P G M P L ^{0.161}T I ^{0.048}Y K D P E R ^{0.042}Y V K V ^{0.005}Y W ^{0.003}S K F P G M F ^{0.008}Y A G D ^{0.041}Y A V K D R D G ^{0.047}Y F W I L G R A D E V I K V ^{0.008}S G H R L G ^{0.088}T ^{0.048}Y E L E ^{0.005}S A L I E H P A V A E A A V V G
 V P D P V K G E V P ^{0.227}Y A F V V L R ^{0.004}S G Q ^{0.079}T P ^{0.004}S Q Q L ^{0.029}T Q E I L K ^{0.1}T V R E K V G P I A V V D K V F F V ^{0.005}S K L P K ^{0.182}T R ^{0.044}S G K I M R R V V K A V V ^{0.109}T K A E V G D I ^{0.037}T ^{0.121}T
 L E D E A ^{0.068}S V D E V K K A ^{0.042}Y E E F K A E V G K ^{0.182}S ^{0.213}S

Sequence #105 — Gene Saci 0307

M K L R V L I S E Y P N D P Y L N V A I D E A L F A Y N S I V L R L W R N S T S V V L G V L S R V K D E V N I E V T N Q L G I P V I R R I T G G G T V Y H D M G
N F N Y T V I L E N K D V K V K G I D F L Y G F L L K G T I N A L E R I I G D R V E T Y N Q T D I A Y K H Y K I S G N A G Y I S N N K Y L L H G T L L I N S D L
D L L H K T L I I P P K S L R N K G I N M I K Y R V N N L S Y L L G R D I Q L D L I I S S F T K A F E E I L S V D S Y V D E I T K N E L E L A S M L V R D R Y A
N P N Y I F K I

Sequence #106 — Gene Saci 0310

MLR I I I D G P R D P H Y N M A I D E A I M G L R P Y V K Y D T L R I Y M W S P S G V S I G R S Q D A L R A V K I E E I K R L G F K L V R R P T G G G A L L H
P E N D E I T Y S V V L S L D N Q L A K I P V D E S A S S I A K G I I D A L Q I I G S S A K V K D F G D K E K H D L C Y L R R G S S D V I L G G K K I S G S A Q
V R N D K A L L Q H G T L L L R F E P E V W L R V I N A P G Y D H E M L R S R I A G L Y E F M D V K I E K I I D S L V K G F S K E L G D E T F I G S L T P E E V
Q L S L E L Y Q K K Y S N D L W N L K G S L E Q F

Sequence #107 — Gene Saci 0316

M E F D V I V I G A G P A G S A A A A L T A A K G G A K V L L L E K G P E P G S K N V S G A M I R T E E I A K V F D T S S M P F E R K V K N V D L I F M D S T G K
V R I S V D I S S G L I N V G R L K L D K W M A Q Q A E K A G A V L V T K T T A L G V E K D G E K Y K V V T D R G S I S G S K V V L A E G V N A L I S M G M K I
R P D L E P E H S V Q A V K E V Y N L N K D E I N K R L G F K S D E E G S S W R I F G T N P V P Y A G F L Y T Y K D A I A I G V G I P M S I L I K K K I S P Y T
V L D E L K E R L G I N E L V K G G S L R E Y S A K V I P E Q G F P S Y R A C S G K I Y L A G D S I G L I N A L T F N G I G P A V I S G S I A G K A A L E G Y E
C F K Y E E E L M K D K E I K G V V K A R P L I Q E L T K E E N L N Y Y V N F L G D A L H S W A Y G S L S L N L D M P R L I K H L M L G M G V L K A

Sequence #108 — Gene Saci 0321

M Y L I E I R P V L E K H R L K Q F L R K F R F H L H N T H K I P H I T L I Y S F K P K P L V K I S E I S Q I I S D V A G K Y E D L R F L F D G I S I K R G S K
G L V L A F N I S P S M E L V A L Q R E L Y Q R L K P L I K I E R G K E K F S E S L W F H A A I S F G T T E K E L K E I E K T D K F E R L K Q F L Y P G V A L R
I C L L G N S K I V A E Y D T A T K S L L V R K Q A L S K R Y L S K T F K A Y R E K F L K V N I D N M S M R E N I W F V A D T H F G H K N I I K Y C S R P F I E
V K E M D D F I I R R W N E V V S P N D T V Y I L G D F S I N H K K L K E Y T S L L R G N K V F I Q G N H D V P G V G P E S M Y F N F A G Y D F L L T H K P S P
Q G N V W N I H G H V H N N R L R E F P F V N G E L K T I N V G V D V T K F Y P V N L S W I I D H I E R K E T K L W L S

Sequence #109 — Gene Saci 0325

M S N P Y G K I A F Y P G C A L D G L G K T Y E V S L K L V A Q D L G I P L D R I E D Y N C C G A L E V K N V N T M A G L L L P A R N L S L A R E M G A D A V V
S A C P G C H Y S L S R A Q Y Y M S K Y P K V R E K A N N Y L E K M G T V K Y D L K L M L I H A V E Y V Y N T V G I E G V K A K V K R P L T G L K V A P Y Y G C
L Y S R P K Q Y L L T G M A P L K D D P E R P F F M D E I L K A I G A E V V P F E A K T M C C G G P H V Y S D V E V A M H L E A R I L K E A R R N G A E V L V T
D C P L G H V A I E T N M R K I A E K Y G K D L E M P L A Y F S Q L L A F A F G H S P E E T L L V A N I T N P M S V L K R Y M

Sequence #110 — Gene Saci 0328

MNK^S^{0.01}SVLVVVGAGPAGL^S^{0.019}AAKEL^S^{0.03}RMGVLDLILVERE^S^{0.045}^Y^{0.064}LG^T^{0.371}PKKLY^S^{0.022}^S^{0.025}LLFPELRPA^S^{0.101}EVLDPLVK^S^{0.023}VEENG^N^V^R^V^L^T^{0.063}ES^I^{0.013}

IENMKNV^S^{0.01}DGFVGIKDKKGNL^K^T^{0.082}EKVNAIIAA^S^{0.007}SGFEHFD^S^{0.023}RRKY^E^{0.012}^Y^{0.01}^Y^{0.042}GLIPNI^Y^{0.014}QI^S^{0.003}DI EGM L HENKLV^T^{0.153}^T^{0.017}KG^T^{0.144}PPKR

VAILLCVG^S^{0.003}RDAT^V^{0.15}GN^T^{0.045}^Y^{0.004}^S^{0.001}RVCCAI^S^{0.003}IKQAMEIKQRIPDAIVHI^Y^{0.}^Y^{0.024}MDIR^T^{0.085}^Y^{0.024}GLMEDKLY^W^{0.082}KAQLDY^R^{0.026}RVGFIRGRI^S^{0.008}SEF

MRGPND^T^{0.018}VIIKGED^T^{0.027}MNLRALVVP^Y^{0.012}DMVILANGMELGLG^S^{0.005}KQVAKVLGLELEEHGFVKPLDPDRLPVQ^S^{0.012}^T^{0.069}RKGVFLAGA

I^T^{0.107}GPKGI^S^{0.008}SD^S^{0.01}IT^E^{0.235}EGYAAALKAY^Q^{0.023}^Y^{0.013}V^T^{0.031}^S^{0.003}SGVWEES^N^{0.003}FGKMQQVIHH

Sequence #111 — Gene Saci 0331

MAKRIIVAGGNIGG **T** I I A N R L A Q K L D H E L H K G E V E I V V L N K N D D H I **Y Y** P G Q L L L A **Y** G L E **T** P P E L M K K E **S** E L L D H R I K F I H
 G E K G **T** I **T** K F D P A N H **S** V V **T** A D G V **S** H **S Y** D **V** L V I **T T** G V E **Y S** W D E I P G **Y** R A G **S** V N F **V** E **V** E D A L K M R E A L N N F Q G G **T** I V V N **T** A R L
 P H R C P V A P L E N **T** L V L D D **Y** L R K R G I R D K **T** K I I **Y T Y** P V Q G V F G R P I **T** N K F M L K L F E E R G I E V H **S** P F **T** V **T** N V N P **T** E K I I E **S** Q E
 G G K L K **Y** D L L I A I P P N M G A K V V G D **S** G L G D R R R W L P **T** D K F **T** L R M K D H **S** N V **Y** V M G D A **T** D L P V **S** K A G **S** T A D F E **S Y** V V **S** H N I A N D
 I K G N L G M K H **Y** G G D V L C **Y** I A **T** G **T** D Q A **T** Y I R F **S Y** **T** M N E **S** P P P P **S Y** I H W W G K I M **Y** N K L **Y** W **T** V **T** A K A V V

Sequence #112 — Gene Saci 0333

M Q D L N L D K I F **S** K L D Q K R I D A L **S** E L V E L **T** P **T** L **T** E L L K K L D E L K E **S** G **T** L D A L I N Y A Y I G K **T** M K D M L N D D A L Q N L **S** N **T** V **S** **S** L L
 E L **T** K V L **S** R P D **T** F H N **T** M R L M N N I D A L A D V **T** **S** K L R **T** M K E D G **T** L D V L M N **T** A Y **T** I R **T** F R D M L N D E A L A N I **S** R Y **T** **S** N L L E I L R E M
 D D N **S** V R **S** L K **S** I L R R A K **T** I D G L M V R L E E L E N **S** G A L D V L L N L A Y A G K **T** M K D M L N D D A L A E I G K Y L **S** Q F L E A Y P R V M G L L N **S** V
T D G N G L V **S** R M M N A M K **S** E D V R K A L E **S** P P K V **S** I **S** G L I K Q L **S** D P E V Q V G L G V L F **S** V I K A I G K E F **S** **S** H N K

Sequence #113 — Gene Saci 0338

MEYD V V V V G G G T A G Y I A G S I L A R K G K K V L V T E R E R F G G V C V N Y G C V P S I F F Y D V T Y F L N R G K E I G N Y L G I E I E T K E S K R F
F L R R D E L V S Y L S D A G K R L I E N A G G D T E I G E T R I L T N N R V K V N G K E I D F K R I I I A S G T K P L K P E I Q G I E N A I S E D E A V R L N
Y I P S S V V I I G G G F A G I E L A Q Y F S R L N S N V T L I T R G K I L R T F P E D A V N F L R Q S L E F D G V K L I E N T R V T N I S K R I V E T N K G N
F E G E V V V Y A T G R E P D L P K G I E N I K V I T G K N G V I T N E R L R A G E N V Y A V G D V V D K A N K T A H S A M L D A I I C S M D I L G I A H A N V
K G I K I P R V L Y T D P Q I G V I G D I N D A V K F G Y F P F N A S T R A I I S G N R E G Y V K I G I N E K N E I V F G E V I G E K A E E L I N I L T L A V N
S K M T V E Q L S L I P F V H P S L S E A I L N S A K S F F D L D V D R Y K E N N D F K

Sequence #114 — Gene Saci 0339

M T L N D Y I R K R G L S L V T D G N T K K I L L D D Y E I R I E E R R V I L P I P L P T G K E T L D D L L S M G I K Y A R A S R I S Q L L G S P L E Y S I E G
N T V F V I K K F E S E K S L E D S L I K A L D G I E G L R Y F L

The image displays a sequence alignment visualization. The top sequence is M T L N D Y I R K R G L S L V T D G N T K K I L L D D Y E I R I E E R R V I L P I P L P T G K E T L D D L L S M G I K Y A R A S R I S Q L L G S P L E Y S I E G. The bottom sequence is N T V F V I K K F E S E K S L E D S L I K A L D G I E G L R Y F L. Vertical p-values are shown above and below the sequences, corresponding to each position. Two residues in the top sequence, 'T' at position 18 and 'E' at position 19, are highlighted with blue circles. The p-values for these residues are 0.288 and 0.323, respectively.

Position	Top Residue	Bottom Residue	P-value (Top)	P-value (Bottom)
1	M	N		0.024
2	T	T	0.034	
3	L	V		
4	N	F		
5	D	I		
6	Y	K	0.004	
7	I	K		
8	R	K		
9	K	R		
10	R	G		
11	G	L	0.034	0.026
12	L	S		0.05
13	S	L		
14	L	E		
15	V	D	0.113	0.045
16	T	S		
17	D	L		
18	G	I		
19	N	K	0.043	
20	T	A		
21	K	L		
22	K	I		
23	I	L		
24	L	L		
25	L	D		
26	D	D		
27	Y	S	0.012	
28	E	E		0.003
29	I	I		
30	R	E		
31	E	E		
32	E	R		
33	R	V		
34	V	I		
35	I	L		
36	L	P		
37	P	I		
38	P	P		
39	T	P	0.288	
40	G	L		
41	K	E		
42	E	T	0.323	
43	T	L		
44	L	D		
45	D	D		
46	L	L		
47	S	S	0.009	
48	M	M		
49	G	G		
50	I	I		
51	K	K		
52	Y	Y	0.01	
53	A	A		
54	R	R	0.064	
55	A	A		
56	S	S		
57	R	R		
58	I	I	0.043	
59	S	S		
60	Q	Q		
61	L	L		
62	L	L		
63	G	G	0.021	
64	S	S		
65	P	P		
66	L	L		
67	E	E		
68	Y	Y	0.047	
69	S	S	0.012	
70	I	I		
71	E	E		
72	G	G		

Sequence #115 — Gene Saci 0340

M S Y D N I I R E Y T R A I K S N I T I Y Y C D G E E L I N Y L K D V V V T K Q L E E C Q K P L I K V Q K D N R T Y F T Y Y G I P T A N E L W P F L N A L A R I
S N D I V Q L D Q K E I E L A K G I R G N I K L F V T P D C T K C P I T A E F L Y Q L V Q I N P D V T L E I F D V T E Y E Y E K E K Y R V L S V P K I V F N E R
T E I P G G F P S T I I L K M M I K A L E K T

0.006 0.007 0.002 0.025 0.001 0.003 0.002 0.007 0.084 0.005 0.037 0.012 0.015 0.072
0.006 0.152 0.07 0.01 0.019 0.027 0.118 0.026 0.029 0.008 0.026
0.1 0.01 0.088 0.188

Sequence #116 — Gene Saci 0345

M R E F R F I V E R N ^{0.014}S Q D ^{0.026}Y I L A G E E A L L L ^{0.012}S V A ^{0.015}S G ^{0.018}S S ^{0.006}S P V L R F V I F D P P A V L I G ^{0.017}Y H Q ^{0.03}T V E Q E V N L E E V R R K N W D V G R R P ^{0.692}T G G ^{0.052}T I I

M G P W Q L G W E I ^{0.022}Y A D K ^{0.005}S L L G E ^{0.09}T P D N A M R L G A E G V I R ^{0.066}T L G K L G I ^{0.003}S A N F R P K N D V E I K G R K I ^{0.082}S G I G A F ^{0.012}S E G R ^{0.063}Y M G V ^{0.035}T G ^{0.033}T I L L D F

D V D A M V ^{0.014}S V L K L ^{0.052}T S ^{0.023}E K L K D K L ^{0.056}S K D F K D R L ^{0.071}T W I N K E L ^{0.018}T S S ^{0.008}I D M V D L I K I A K E G F ^{0.027}S E A L G V E L K E S ^{0.02}T ^{0.107}Y H K E E ^{0.06}T E ^{0.249}T I N R L A R K ^{0.023}Y

^{0.045}S ^{0.021}S P E W I F G M R K P L E G D N I R ^{0.01}Y L E R K L P G G L V K V Q I K L A G E N L I Q ^{0.002}S V L I ^{0.041}T G D F F V E P R ^{0.062}T A I ^{0.009}Y D L E A R L K W ^{0.013}S R V E D I D N E I K E

^{0.004}W ^{0.027}Y K N V K I L G I T Q E D L I N L M K E A L K

Sequence #117 — Gene Saci 0351

MGDWR **V** **V** **S** L P P Q D G **Y** H M I **T** **S** F V A V A D **Y** V N K N G K N **T** L M **T** **F** **Y** A R **T** P F I N V G V H Q E V W L E V D L E C A K Q N N I **T** V V R R D I G G **T** V
V I **T** P G E H D **Y** F I V V R A E E V P R N P **S** Q L **Y** E K F L **T** P V V N V L K **S** **Y** G L N A N L R D Q D I V V N G K K I **S** G N G A **S** **T** F G N A V V I **T** G N I L F Q L
D V D **T** **M** **T** R C I K V P **S** E K F R D K M A K D I R D W L **T** **S** L E R E L G **Y** V P P R E E I E K K L K D E F E R **S** L G I K F E D **S** R I **T** R E E I E L W E **S** L A K E K
A N E E W I **Y** **Y** K D N R H P D L H **S** E R C V K I **S** **S** **S** V A I C H I D **Y** K A R K L L R I **T** M R I V E K K V D E I **S** I **S** G D F F V M N P K N F L E K L E E **S** L R G V
E V N N I N **S** V V R R I F E **T** E K P V I F G F **S** E N D L I N A I Q E I L N K P E V Q E V I

Sequence #118 — Gene Saci 0353

M T I I I T F T A E G E F S G D K V T I T I M D D Q I L E V G T L G S N Y V K P E E L C L A S A L S C L I L T V N Y I A K E K G V D V K G I E G Y I E G K L D P D
G F Q G K N S V P P G L L E V N Y H I S V K S N D T K I N E V I E E A E R R C P M K D T L T R G I K V N I R W K I E E T N

Sequence #119 — Gene Saci 0355

M D I V D K R I L **S** F F L K D G R I **S** Q R R I A **S** L L N L **T** P A **S** L N **Y** R F R K L I D **S** N I L K G F K L **Y** I N P N F **Y** G Q **Y** Q L **Y** I A F K N **Y** K E I D A D W I **S**
 F K L R C L E W L N V **Y** G I **Y** G **S** **S** Q **T** E L K D R I E **Y** M R K E L G D P V L **T** **Y** L P V Q **Y** K L K P **S** **S** L D K K I V E M L K E D P R L A **S** **S** E I **S** K K L G I N **T** R
 V I E K H I R H M R F R G M I L I V P E I N L G R A D I V I F **S** M F **S** K R I E D I **S** P V L Q E C K L W Q F **T** D G **Y** A G I **T** V C **Y** A D N V E G A K K **Y** I N G A R E
 V D K D **S** D V M I I **Y** D **Y** E F K **T** M K Q **S** P E **S** **T** **S** **S** P F

Sequence #120 — Gene Saci 0363

M V I A C ^{0.08} T R D C ^{0.002} Y D ^{0.082} T C I F D D N ^{0.083} Y K P L K ^{0.006} S F P F L G F ^{0.081} T C ^{0.005} S R G N A D L R R N K I N R V L ^{0.054} S P L V E G K E ^{0.157} T ^{0.04} S L E D ^{0.029} S V K Y I ^{0.011} S K I I K E ^{0.133} T P K D K I I H
V E ^{0.021} Y D G N Q G L L ^{0.023} T W ^{0.002} Y Y P A R L W N L L G ^{0.002} T L ^{0.003} S I D ^{0.008} Y ^{0.003} S I C A ^{0.003} S E G H E A I K A H ^{0.009} Y G ^{0.01} S S F G A L P E E F E K ^{0.066} Y ^{0.007} D S V V F W G ^{0.008} S E ^{0.004} S A V ^{0.004} S F I H G W K L L Q
S ^{0.002} K ^{0.008} Y K I ^{0.06} T V D V R I ^{0.04} S E ^{0.281} T A R R ^{0.059} S D K ^{0.082} Y ^{0.09} L V R P G ^{0.02} S D G F L A V G V M K R I F A R G V ^{0.016} S A D I L D D E A ^{0.154} T L R E ^{0.018} Y V N ^{0.004} S Y ^{0.004} T W D E I E ^{0.004} S V ^{0.042} T G L N R K ^{0.005} Y I E
E L G D L ^{0.02} Y ^{0.012} Y D R R P L ^{0.041} T I I G F A L G R ^{0.059} T ^{0.005} Y Y G G D A V ^{0.004} S L I ^{0.003} S L I P A L L G L R R G F F ^{0.004} Y ^{0.003} S N ^{0.004} S Q G W G I D F ^{0.004} S ^{0.029} Y L R G L H L ^{0.004} S K P A R I A P M G K V G E E
V E K G N I K V I F A W N ^{0.003} S N P I H ^{0.006} S L P N ^{0.016} S D R I V E A I K E G R L ^{0.029} T L I M H D P F I N E ^{0.002} S V K L ^{0.006} S N V V I P ^{0.003} S P ^{0.039} T F L E K R D V V ^{0.043} Y ^{0.004} S Y W H D ^{0.006} Y L V ^{0.027} Y N E P
I C E P K G V D E I R L M R L I A K Q L G I ^{0.005} S H P L I E E D E W K A V D ^{0.032} Y A I R R ^{0.057} T G V ^{0.014} S L E E L V K N K V V K V K R ^{0.016} Y ^{0.034} Y D G F Q K V K V N P L P R L K E P P V
G E ^{0.07} Y L V F ^{0.005} S S H P N H ^{0.041} T N ^{0.003} S Q F N E I ^{0.053} Y D R P K P I V ^{0.004} Y N C C ^{0.01} Y E G E G ^{0.033} Y L E ^{0.006} S D F G K I R V I F K I ^{0.009} S E R V P K G V ^{0.007} Y ^{0.011} Y M ^{0.007} Y K ^{0.007} S G L F D L D D K P V N ^{0.005} S I V
N N A I N E ^{0.024} Y G G ^{0.019} T P Q I N F ^{0.02} T K V R A I L K

Sequence #121 — Gene Saci 0369

M I V A V D V G G T F T D A I A I D E N G N I K Y Y K G L S T P R N P E V G L R K A I E E L N V K V D R V I H A T T V A T N A F L G Q L N L E L P K T A L I T T
K G F K D I I E I G R Q N R P E L Y D M Y F H K P K P L V P R E L R F E V N E R T L F D G K V L V K L N P L E I D E I A V R L K D V E S V A V S F L H S Y A N P
E N E D V A K E V L S K H F N Y V C I S H E V C P E Q R E Y E R T S T T V I N A M L M P I V S R Y L E S I S K D I P S L Y I M S S G G L V D V D E V K K R P V
Q I I E S G P A A G V V G A Q V F S Q L L G I S N V I S F D M G G T T A K A G S I V N N E I E I T S E Y E V G G K A H H G R L V K G S G Y P V R F P F I D L A E
V S A G G G T I I W R D E G G A L R V G P I S A G A D P G P I A Y M K G G D K P T L D A N L V L G R I N E Y L L S G N M R L D V E G A R S G L E K L G D P I E
V S Y Q A V K L A S I E M A R A I R L V T V E R G L D P T E F T L F A F G G A G P Q W A V D V A E E L G I K R I I V P P H P G L F S A L S L L A V D E K I E A R
S P F P R D V D S E F R K L E E S L R R R M G T V D Y F I R Y V D A R Y K G Q G W E L T V L V K N D Y R R D F E E R H R A V Y G Y T L P Y P I E V V N A R V F A
V R K T V K P V L P D P V G G N I N K K I R K V Y I D D W V S A D I Y L R E K L P K G F R A K G P V I V E E Y S S T L V K D G W E L E V G K M G F M E V R K Q

Sequence #122 — Gene Saci 0372

M Q I ^{0.011} S K Y ^{0.021} E V ^{0.048} Y L D F D F K N L ^{0.007} S Y R G K E K I ^{0.018} Y C ^{0.007} S L D D E L V L D A I G F ^{0.004} S I H ^{0.005} S V R I N G K E I D ^{0.015} Y N ^{0.03} Y D G E K L R I K ^{0.112} T G K F D G ^{0.124} T I E V D F ^{0.181} T G K V
R E R E L V G I ^{0.027} Y K A P ^{0.035} Y D G G K N ^{0.042} Y I V ^{0.003} S T ^{0.034} Q F E ^{0.002} S N H A R K F I P C V D H P ^{0.007} S Y ^{0.03} K A V F K I Q V R V D K D L D V I ^{0.009} S N M P I Q K V ^{0.164} T E E G D K K L V E F ^{0.028} Y E
^{0.164} T P K M ^{0.006} S T ^{0.068} Y L L ^{0.017} Y L G V G K F E E I K D E L D G I Q V I V A ^{0.005} S V P G K I ^{0.01} S K G R F ^{0.026} S L E V G K K V I N F ^{0.013} Y N E ^{0.019} Y F G I K ^{0.003} Y Q L P K E H L I A I P E F A F G A M
E N W G A I ^{0.112} T F R E ^{0.058} T A L L A D E K ^{0.008} S S ^{0.005} V I Q R M R V A E V V A H E L A H Q W F G D L V ^{0.008} T M K W W D D L W L N E ^{0.002} S F A ^{0.019} T F M ^{0.002} S Y ^{0.013} K A I D H L F P N W D M F G D F
I H ^{0.004} S E ^{0.069} T S ^{0.008} G A M L R D ^{0.03} S L ^{0.009} S T ^{0.042} T ^{0.114} H P I E A H V K ^{0.034} S P E E I E Q I F D D I ^{0.016} S Y ^{0.024} G K G A ^{0.016} S I L R M I E G ^{0.019} Y M G K E A F Q K G I Q N ^{0.003} Y L Q K ^{0.005} Y K F ^{0.005} S N A E G Q D F W
N ^{0.003} S L Q E A ^{0.003} S G L P I A D V V K D W I ^{0.116} T K R G ^{0.009} Y P A V K V E V E G ^{0.087} T K I R L ^{0.019} Y Q E R F ^{0.012} S L ^{0.035} T P L N E N ^{0.022} T T ^{0.013} Y L I P L ^{0.025} T L E V N G K R I ^{0.039} T Q L M K E Q ^{0.042} S M ^{0.009} T I D V
G ^{0.016} S E V K ^{0.007} S L K V N L D R V G F ^{0.004} Y R V E ^{0.04} Y D N L D L F L N A N P N H ^{0.003} Y E R W G L L D D ^{0.016} Y Y ^{0.021} N L L L A G R I ^{0.007} S Y ^{0.003} E V ^{0.016} Y E N A V K E L M N D D N ^{0.166} Y L V V D E I R G Q
L F F L W ^{0.013} T V N P ^{0.001} S K ^{0.009} Y T ^{0.017} L I ^{0.032} T D F L E L Q L P K W ^{0.014} S K R ^{0.107} T D D L ^{0.017} S Q R V ^{0.02} Y G N L L R ^{0.006} S F A ^{0.004} Y V D D R F A Q G L ^{0.005} S I ^{0.005} S F D N ^{0.081} Y D ^{0.003} S L N P N L K E A V A I A ^{0.016} Y A I
^{0.041} T Q G E N G ^{0.046} Y D E L L R K ^{0.008} Y R E E K F D E E K Q R I L N A M L ^{0.008} S F R E P ^{0.018} Y L V V N ^{0.017} T L ^{0.003} S L A L N G E I K R Q D ^{0.095} T A R I I P L A ^{0.003} S A N P ^{0.005} Y S ^{0.004} R F A V W R W ^{0.046} T K ^{0.032} T Y ^{0.013}
M E F L R ^{0.003} S I ^{0.009} Y A G ^{0.052} T G I L G R ^{0.011} S F R G A I P ^{0.02} Y L G L N I P E V E E ^{0.045} Y F ^{0.12} T S ^{0.007} N K F P E M E V E I K ^{0.041} S A L E I L K A L K R L ^{0.224} S

Sequence #123 — Gene Saci 0373

MDFLNEIASKWQKVDSEERVY EADVDR T KEKKFI T VAFP Y T NSPLHIGHR T Y I T ADI Y AR Y LRMKG Y NVLFPFAFQF T G
0.006 0.01 0.073 0.159 0.026 0.01 0.038 0.002 0.013 0.01 0.026 0.025 0.004 0.008
0.024 0.006 0.003 0.019 0.021 0.011 0.003 0.007 0.01 0.108 0.007 0.019 0.011 0.025 0.014 0.308 0.148
T P I L S I A D A V K R G D E E I I S T F T N V Y Q I P I G V I S K F S D P S Y L S A Y F K E D M R N T A L T L G L S I D R R R E F T T I D P A F E R F V Q W Q
0.009 0.016 0.04 0.095 0.027 0.032 0.019 0.007 0.163 0.004 0.004 0.004 0.004
Y K R L Q E I G Y I K K E K A P V A Y C P V D E F P V G M H D T R G D I E P E I I D L D V I Y F Q G E K L L F L T A T S R P E T I F G A V A I L I N P D S D Y S
0.01 0.017 0.016 0.037 0.047 0.033 0.12 0.024 0.006 0.029 0.005 0.052 0.058
I V V D N K N G K R L V M S T E A F K K L S F Q M S L T E E E R K K G G E L I G L N V T N P V T L K K L T V L P S K Y V E S K Q G T G V V M A V P A H E P L H Y
0.01 0.012 0.021 0.104 0.11 0.054 0.074 0.006 0.052 0.053 0.024 0.016 0.072 0.033
L A L S E L K E S F E I V P V I K S E D Y G D F P A M E V L E T A Q T T S A Q E L K D Y I D T L Y R I E F H K G S I R D E V V D L V P D Y M K Q F V G E R I A G
0.035 0.023 0.048 0.009 0.001 0.013 0.002 0.007 0.019 0.011 0.018 0.012 0.033
K S V R E A R S S V V E L L R N L G V H G N I Y E I I N G P V Y C R C G A E V V V K V F D D Q W F I D Y S N S T W K S S V L K S L D K I E I L P Q D A K R E I S
0.619 0.034 0.005 0.007 0.004 0.008 0.007 0.032 0.015 0.003 0.001 0.022 0.004 0.025 0.03 0.008 0.028
K I I F N M K P R P F T R S R G L G V R L P W D D R Q I I D S L S D S T I Y T V F Y I V A N K V K S Y P T S I L N E R F W D Y V V L G R G D S S Q L S R E L G I
0.105 0.007 0.007 0.019 0.011 0.019 0.03 0.011 0.007 0.002 0.004 0.007 0.007 0.01 0.017
P K E Q L E E L R M E V E Y W Y P V D S R H S G R D L V Q N H I P Y Y L Y H H V G V L G E D K V P K R I V L N G F I R V G G K K M S K S F G N V Y P L N K A I R
0.011 0.082 0.022 0.015 0.017 0.019 0.021 0.028 0.016 0.01 0.002 0.006 0.005 0.002 0.004 0.002
E Y G V D T V R L A L T S T S S L S D D I E F S P N I A K S I G E Q L K H I H D F I E N L I K L Q S V N E I R K V D L W I S S L I S E Y I D L I D N C L S N L D
0.156 0.002 0.066 0.004 0.005 0.009 0.003 0.001 0.001 0.081 0.002 0.006 0.005 0.002 0.004 0.029 0.022
L R T A Y K T I Y Y D I Y E D L K D Y L E L G N G K I N S D I I K N V I S V W I R L M A P F T P H L A E E L W H K L D N S L V V R Q R F P S K G E L Q Y D K R A
0.009 0.004 0.094 0.015 0.009 0.025 0.071 0.045 0.257 0.346 0.266 0.023
L L E I E Y L R Y T I D L I N S M K S K M S K E P E T V I I Y V N E D N T Q R D L I R K A I E S L K E R K S L P D F E K E V G D R E M A R L A Y E I A G D L P D
0.008 0.013 0.003 0.022 0.038 0.008 0.023 0.162 0.039 0.001 0.033
K I K N L A E I G I N E S E I L T S N A Q F L L N K L D V K E I Y I Y N S K D P S T P D I K G K K S I A L P Y K P G I I L T

Sequence #124 — Gene Saci 0374

M V L ^{0.005} T ^{0.019} T G K C N L ^{0.1} C D ^{0.015} Y C G G ^{0.005} S F P K E A V P W E V K ^{0.042} Y D V ^{0.006} S K L K N V I E R D ^{0.025} S E A V V I F ^{0.028} Y G G E P L L N P K F I M ^{0.002} S V M D N V K A V R W G I Q ^{0.002} S N G I

G A K L L P D K ^{0.006} Y W K R M N I A L F ^{0.002} S I D G R E E I ^{0.196} T D K H R G R G V ^{0.083} Y K V V ^{0.044} T R N A K ^{0.016} Y V K E F G V E ^{0.072} T I A R M A V ^{0.077} T E D ^{0.005} S D I ^{0.071} Y E E V M H L L ^{0.002} S L G I F D K

V H W Q L N V I W ^{0.001} S E R W D F E ^{0.026} T W A ^{0.014} Y K ^{0.004} S ^{0.004} Y L P G L R R L ^{0.003} Y E ^{0.01} Y F M ^{0.006} S E L R R G R I V K I V P F L G V I ^{0.003} S ^{0.003} S H F F K K ^{0.01} Y R G V A C G A G ^{0.054} Y E ^{0.012} S I ^{0.006} S V ^{0.006} S ^{0.041} T D G R

I L ^{0.016} S C P I A V R E K W A E L G ^{0.034} T L E ^{0.024} S F R L L D E P L P E E C K ^{0.019} S C E F K ^{0.013} S ^{0.01} Y C G G R C L ^{0.006} Y A V K E K ^{0.012} Y W G E E G F K V V D E V ^{0.232} T K E ^{0.008} Y L R L ^{0.027} T L ^{0.012} S G I E E I

K E L I R D N V I ^{0.009} S L ^{0.013} S D L K ^{0.032} Y D P V M D ^{0.019} S ^{0.131} T E V I P

Sequence #125 — Gene Saci 0375

MDYIKDLFEFLKID ^{0.011} **T** ^{0.039} **T** ^{0.214} **S** ^{0.009} AKGRGEEGAKFLVD ^{0.009} YLKDNGIEAKIIRHKAKNP ^{0.011} **Y** ^{0.056} **V** ^{0.002} **S** ^{0.006} **K** ^{0.055} **T** ^{0.028} **L** ^{0.006} **L** ^{0.055} **I** ^{0.028} **Y** ^{0.006} **N** ^{0.006} **H** ^{0.006} **Y** ^{0.006} **D** ^{0.006} **V** ^{0.006} **Q** ^{0.006} **P** ^{0.006} **V** ^{0.006} **E** ^{0.006} **P** ^{0.006} **L** ^{0.006} **E** ^{0.006} **K**

WNSDPFNPVIKDGKIFARGVGDDKG ^{0.007} **S** ^{0.053} **T** ^{0.008} **L** ^{0.008} **M** ^{0.008} **A** ^{0.008} **R** ^{0.008} **L** ^{0.008} **Q** ^{0.008} **A** ^{0.008} **I** ^{0.008} **E** ^{0.008} **L** ^{0.008} **L** ^{0.008} **R** ^{0.008} **E** ^{0.008} **N** ^{0.008} **K** ^{0.008} **L** ^{0.008} **K** ^{0.008} **V** ^{0.008} **N** ^{0.008} **V** ^{0.008} **K** ^{0.008} **L** ^{0.008} **F** ^{0.008} **Y** ^{0.008} **E** ^{0.008} **G** ^{0.008} **E** ^{0.008} **E** ^{0.008} **E** ^{0.008} **I** ^{0.008} **G** ^{0.008} **S** ^{0.008} **P** ^{0.008} **N** ^{0.008} **M** ^{0.008} **E** ^{0.008} **D** ^{0.008} **F** ^{0.008} **L** ^{0.008} **K** ^{0.008} **D** ^{0.008} **Y** ^{0.008} **S** ^{0.008} **K** ^{0.008} **M** ^{0.008} **L** ^{0.008} **S** ^{0.008} **A** ^{0.008} **D** ^{0.008} **Y** ^{0.008} **V** ^{0.008} **L** ^{0.008} **W**

EGAGK ^{0.013} **S** ^{0.013} **P** ^{0.013} **E** ^{0.013} **G** ^{0.013} **R** ^{0.013} **P** ^{0.013} **E** ^{0.013} **I** ^{0.013} **V** ^{0.013} **L** ^{0.013} **G** ^{0.013} **V** ^{0.013} **K** ^{0.013} **G** ^{0.013} **L** ^{0.013} **L** ^{0.013} **Y** ^{0.013} **V** ^{0.013} **E** ^{0.013} **L** ^{0.013} **R** ^{0.013} **K** ^{0.013} **T** ^{0.275} **P** ^{0.008} **K** ^{0.008} **D** ^{0.008} **L** ^{0.008} **H** ^{0.008} **S** ^{0.008} **M** ^{0.008} **Y** ^{0.008} **G** ^{0.008} **P** ^{0.008} **I** ^{0.008} **A** ^{0.008} **R** ^{0.008} **N** ^{0.008} **P** ^{0.008} **A** ^{0.008} **W** ^{0.008} **D** ^{0.008} **L** ^{0.008} **V** ^{0.008} **Y** ^{0.008} **L** ^{0.008} **L** ^{0.008} **N** ^{0.008} **K** ^{0.008} **L** ^{0.008} **R** ^{0.008} **D** ^{0.008} **E** ^{0.008} **K** ^{0.008} **G** ^{0.008} **K** ^{0.008} **V** ^{0.008} **L** ^{0.008} **I** ^{0.008} **P** ^{0.008} **N** ^{0.008} **F** ^{0.008} **Y** ^{0.008} **D** ^{0.008} **K** ^{0.008} **V** ^{0.008} **V** ^{0.008} **W** ^{0.008} **L** ^{0.008} **S** ^{0.008} **E** ^{0.008} **E** ^{0.008} **E** ^{0.008} **K** ^{0.008} **K**

^{0.051} **Y** ^{0.363} **L** ^{0.062} **R** ^{0.013} **T** ^{0.013} **P** ^{0.013} **D** ^{0.013} **E** ^{0.013} **V** ^{0.013} **L** ^{0.013} **A** ^{0.013} **K** ^{0.013} **A** ^{0.013} **I** ^{0.013} **E** ^{0.013} **Q** ^{0.013} **N** ^{0.013} **V** ^{0.013} **P** ^{0.013} **G** ^{0.013} **N** ^{0.013} **S** ^{0.013} **M** ^{0.013} **I** ^{0.013} **K** ^{0.013} **L** ^{0.013} **V** ^{0.013} **E** ^{0.013} **E** ^{0.013} **P** ^{0.013} **T** ^{0.024} **C** ^{0.013} **N** ^{0.013} **I** ^{0.013} **D** ^{0.013} **G** ^{0.013} **I** ^{0.013} **Y** ^{0.013} **S** ^{0.013} **G** ^{0.013} **Y** ^{0.013} **T** ^{0.013} **G** ^{0.013} **E** ^{0.013} **G** ^{0.013} **S** ^{0.013} **K** ^{0.013} **T** ^{0.013} **V** ^{0.013} **I** ^{0.013} **P** ^{0.013} **S** ^{0.013} **L** ^{0.013} **A** ^{0.013} **F** ^{0.013} **V** ^{0.013} **K** ^{0.013} **L** ^{0.013} **D** ^{0.013} **F** ^{0.013} **R** ^{0.013} **L** ^{0.013} **V** ^{0.013} **P** ^{0.013} **N** ^{0.013} **Q** ^{0.013} **D** ^{0.013} **P** ^{0.013} **Q** ^{0.013} **E** ^{0.013} **I** ^{0.013} **L** ^{0.013} **S** ^{0.013} **S** ^{0.013} **L** ^{0.013} **K** ^{0.013} **R** ^{0.013} **Y** ^{0.013} **I** ^{0.013} **S** ^{0.013} **D**

^{0.016} **P** ^{0.016} **E** ^{0.016} **I** ^{0.016} **I** ^{0.016} **V** ^{0.016} **H** ^{0.016} **G** ^{0.016} **S** ^{0.016} **V** ^{0.016} **K** ^{0.016} **P** ^{0.016} **Y** ^{0.016} **R** ^{0.016} **T** ^{0.016} **S** ^{0.016} **L** ^{0.016} **N** ^{0.016} **S** ^{0.016} **E** ^{0.016} **I** ^{0.016} **A** ^{0.016} **R** ^{0.016} **A** ^{0.016} **L** ^{0.016} **I** ^{0.016} **R** ^{0.016} **S** ^{0.016} **A** ^{0.016} **K** ^{0.016} **E** ^{0.016} **V** ^{0.016} **Y** ^{0.016} **N** ^{0.016} **E** ^{0.016} **D** ^{0.016} **P** ^{0.016} **V** ^{0.016} **V** ^{0.016} **L** ^{0.016} **P** ^{0.016} **S** ^{0.016} **P** ^{0.016} **G** ^{0.016} **T** ^{0.016} **G** ^{0.016} **P** ^{0.016} **M** ^{0.016} **E** ^{0.016} **M** ^{0.016} **I** ^{0.016} **A** ^{0.016} **R** ^{0.016} **Y** ^{0.016} **L** ^{0.016} **N** ^{0.016} **V** ^{0.016} **N** ^{0.016} **Q** ^{0.016} **I** ^{0.016} **A** ^{0.016} **D** ^{0.016} **G** ^{0.016} **V** ^{0.016} **G** ^{0.016} **V** ^{0.016} **D** ^{0.016} **N** ^{0.016} **Y** ^{0.016} **S** ^{0.016} **S** ^{0.016} **N** ^{0.016} **I** ^{0.016} **H** ^{0.016} **S** ^{0.016} **F** ^{0.016} **N** ^{0.016} **E**

^{0.002} **N** ^{0.002} **I** ^{0.002} **L** ^{0.002} **V** ^{0.002} **N** ^{0.002} **D** ^{0.002} **Y** ^{0.002} **Y** ^{0.002} **K** ^{0.002} **G** ^{0.002} **I** ^{0.002} **E** ^{0.002} **W** ^{0.002} **T** ^{0.002} **K** ^{0.002} **S** ^{0.002} **L** ^{0.002} **L** ^{0.002} **R** ^{0.002} **H** ^{0.002} **L** ^{0.002} **G** ^{0.002} **E**

Sequence #126 — Gene Saci 0376

MLK ^{0.01}Y ^{0.007}Y ^{0.011}E ^{0.088}Y ^{0.025}T R H ^{0.007}T L C E P L L ^{0.019}T I N I ^{0.016}Y K K V E D G K V I A L ^{0.005}T R I ^{0.014}S V ^{0.089}Y K N ^{0.004}T S I V ^{0.009}T ^{0.013}Y ^{0.045}E T D K L D G A E I L E L I P ^{0.047}T A I D ^{0.006}S L I K ^{0.084}T I K K ^{0.003}Y ^{0.002}Y D ^{0.016}S K F

DDI ^{0.046}T V F G E R Q L V D ^{0.018}S F L D K F ^{0.028}Y E E E E

Sequence #127 — Gene Saci 0378

M K C G K C D D E A V I K I P **Y** A N I **S** L C A R H F **T** E W L E N R F E R V V E K **Y** K M F D G **S** D R I G V A V **S** G G K D **S** **T** **T** L L H L M N K L A Q K R G F E I V G
I H I H L G I D M G K G **Y** **S** D K **S** L E F A L K N F Q M L G V K **Y** K L I N V K E K **Y** G F **T** I D E A K F K I R R P I C **S** **T** C G L V K R **Y** **S** M E E I A E E E G L D **T** V
V **T** G H N L N D M A Q F V L **S** G **Y** F **S** G D V N N L **S** R L K P V L P P **T** R G **Y** K V K K V K P L F L I **Y** E K E I L **T** **Y** A I L N N I P F I **Y** D **S** C P H **T** F R V G G A **T**
Q D K I R R K L E E M E D E I P G F M L L V Q N F **T** D K I Q E P L E V I **V** **S** K V E E V **S** K C K I C G R P **T** **T** K D R E I C **S** F C A **T** K M K L **T** **S** V **S** R

Sequence #128 — Gene Saci 0381

M L P ^{0.007} Y ^{0.008} S V N ^{0.007} S ^{0.008} S F L N ^{0.02} Y ^{0.003} S G L M ^{0.025} Y L V E E A K K V A E M I L ^{0.003} S ^{0.002} S V N A I A F ^{0.026} T G A G I ^{0.005} S ^{0.04} T A ^{0.007} S G I P D F R G P Q G L W K K ^{0.011} Y ^{0.01} S P E L A ^{0.01} S I E ^{0.021} Y F Q K ^{0.014} Y P D A F

W Q F ^{0.009} Y ^{0.009} S ^{0.06} T R M K ^{0.02} S L F E A K P N R A H ^{0.021} Y A L A Q L E K M G L I K A V I ^{0.026} T Q N V D G L H ^{0.004} S ^{0.004} V A G ^{0.004} S R N V I E L H G N M R K ^{0.013} S ^{0.006} Y C ^{0.061} T ^{0.007} S C L R ^{0.009} S ^{0.012} Y D ^{0.014} S L E V L A R V

E K G E V I P R C E C G G I L K P D V V L F G E P V H G I ^{0.083} Y E A M R I A N E ^{0.004} S D L V L A I G ^{0.005} S ^{0.004} S L T ^{0.081} V ^{0.002} Y P A N Q I P L I V K R N G G L I I L N G E E ^{0.292} T ^{0.028} Y D E

^{0.07} Y A D L V I R E R I E I F L P E V I ^{0.007} S H I Q ^{0.023} S L H R ^{0.055} S ^{0.195} S

Sequence #129 — Gene Saci 0386

M R I A V T Y D K E Y N L K P L D E A E I I G I I D E E K K E V E Q Y E N A G M G S K E A T M D I I L N A I N P P P E A I I V G K Q F L C P G S Y M M S H G R I
K Y V P T E L K T L N D V L N N L E T V K K N M T E E L E E D M Y A E E H F H H H H H H G Y G F

0.015 0.012 0.207 0.063 0.008 0.161 0.11 0.31 0.052 0.01 0.068 0.012 0.005 0.039 0.009

Sequence #130 — Gene Saci 0388

M R N V I P ^{0.025}T ^{0.01}T R A I I K D N L ^{0.003}S ^{0.002}S R V ^{0.03}T L G F V I F F P L I L A L V F ^{0.001}S L L G N A F Q P H A ^{0.019}T ^{0.008}V ^{0.023}Y L T G E N A Q K V G K ^{0.011}Y V N A ^{0.001}S G L F ^{0.031}T ^{0.014}A ^{0.005}Y I G G ^{0.005}S P ^{0.005}S I V

^{0.004}K ^{0.016}Y E P V I F I N L ^{0.}T S K N V ^{0.025}Y ^{0.009}Y N Q L E Q E ^{0.011}Y V P L L Q ^{0.002}S ^{0.005}Y L N ^{0.002}S ^{0.005}Y ^{0.008}Y T N Q ^{0.023}T ^{0.002}S I F ^{0.002}S ^{0.001}S Q L I L ^{0.004}T R N ^{0.082}T P V A ^{0.004}Y E I ^{0.002}S G V I G V I A L ^{0.001}S N G I F G V ^{0.021}T G V G ^{0.005}S

^{0.003}G ^{0.009}Y Y R D R L V D R L A ^{0.011}S ^{0.011}S P L R D ^{0.007}Y E W V L ^{0.002}S L M I ^{0.}Y E V L I ^{0.004}T I L ^{0.001}S ^{0.001}S I V V L G L G L I L G F ^{0.013}T P V ^{0.004}S I L E F L G V L I L ^{0.002}S ^{0.006}T L M F ^{0.001}S G L G A I I L G L ^{0.031}T P

K D K I F L A N V V P ^{0.006}T F I V F P L M F I ^{0.002}S N A F ^{0.001}Y ^{0.006}S ^{0.003}S ^{0.007}S I F P ^{0.004}S I L G L I A E ^{0.015}Y Q P V ^{0.002}S I V N D V V R Q A I V F N V L P N P I ^{0.}Y L I ^{0.002}T I I I L ^{0.005}T L V F L G V G

A R L L K L R E M

Sequence #131 — Gene Saci 0393



Sequence #132 — Gene Saci 0394

M K K G K V V F I G A G P G D P E L I **T** V R A K N V I E D A D V V L **Y** A G **S** L V N P Q V L K W A R K D A E I V N **T** A **S** L **T** L E E I **T** D I M I K K A N E G K L I A
R L K **S** G D F **S** I **Y** G A L I E E I W A L Q D A G I P **Y** E L V P G I **T** A A I A **T** A **S** V L G I E L **T** L P K I **S** Q **T** V I I **T** R A **S** G A V P M E G **S** I K D **V** A P F L M K
G A **S** M A I **Y** **T** G V Q L I D K V V R E L K E G G V P D D M P V I V V **Y** K A **T** W P E Q K I L K G **T** V G D I A Q K V K A E K L **T** K D **S** M I I V G K V A D P N R **Y** K D
Q I R **S** **S** V **Y** D P **S** H A H **S** F R P K K K V V D E A

Sequence #133 — Gene Saci 0396

MRVPGIPDEEFIREEKIPM **T** ^{0.162} KEEIRVLAL **S** ^{0.015} KARLF **Y** ^{0.005} GAKFLDVG **S** ^{0.02} **S** ^{0.04} **T** ^{0.021} **S** ^{0.014} V **S** VEAGLIVGEKGV **V** ^{0.096} AVERDPQAVEL **T** ^{0.083} RKN
VEKF **S** ^{0.022} LRNVEIIEGEAPEVLNKINDELD **S** ^{0.009} AFIGG **T** ^{0.134} ERLEEIIPVV **S** ^{0.012} EKIRRGGMIVLDAILIE **S** ^{0.003} AVKALH **T** ^{0.06} L **S** ^{0.005} ELG **Y** ^{0.027} KAE
VIEVIVAKGMK **T** ^{0.027} **S** ^{0.005} K **Y** ^{0.026} AMI **S** ^{0.008} RNPIFII **Y** ^{0.004} GEKK

Sequence #134 — Gene Saci 0398

M KGKL **Y** I V G V G P G **S** P E M R **T** I R A V Q A I K E **S** N V I V A **Y** **T** **T** **Y** A D L V K D L **T** D G K E V I **T** A R M K E E I **Y** R A R **T** A L E K A M E G N V V **S** L I **S**
0.014 0.046 0.01 0.054 0.002 0.023 0.013 0.089 0.025 0.383 0.111 0.019 0.259 0.01 0.007
S G D P Q V **Y** G M A G I **T** L E M M **Y** K N K I Q V D F E V I P G V **T** A G L A A A **S** R L G **S** P L **S** M D F A **S** I **S** L **S** D L L V P A E D I L F R V R K A A E A D F V I V
0.014 0.07 0.034 0.004 0.14 0.025 0.059 0.016 0.024 0.023 0.013 0.005 0.003 0.008 0.271
L **Y** N P I N K P L L E K A M K I I **S** E **Y** R K P E **T** P V G I V K G A **Y** R E **S** E E V F **T** **T** **T** L **S** N W R E **Y** E D K I N M I **T** **T** V V V G N **S** R **S** **Y** L W G N R I L **T** P R G
0.001 0.024 0.082 0.024 0.015 0.027 0.377 0.045 0.085 0.026 0.015 0.023 0.006 0.007 0.005 0.008 0.005 0.003 0.008
Y E R K **Y** **S** L D V N **T**

Sequence #135 — Gene Saci 0402

M C ^{0.009} S P ^{0.003} S L V I M K ^{0.008} Y K V P I L G I H G G A G N W D K R N H E R A L V E L E K A L E R G ^{0.059} Y D E F K R G ^{0.062} S ^{0.061} S L E A V V E A I A ^{0.031} Y M E D C G V F D A G V G ^{0.011} S V K N ^{0.01} S

K G E V E M D A G I M H G N ^{0.085} T L R V G A V A ^{0.007} S V K V K N P I R E A L K V L K N G R H V L L V G N R G E E ^{0.009} S L V ^{0.023} T I E ^{0.018} T ^{0.019} S I ^{0.075} T ^{0.019} S P L R ^{0.02} S G D ^{0.109} T V G A V A L D K E G

N L V A G ^{0.071} T ^{0.016} S ^{0.022} T G G I ^{0.021} S G K L P G R V G D ^{0.021} S P I P G A G F ^{0.041} Y A ^{0.276} T E R V A V ^{0.007} S ^{0.006} S ^{0.038} T G I G E I I L R ^{0.038} T L P A K E V D I L V ^{0.006} S L G I ^{0.008} S I D D ^{0.011} S I R ^{0.011} S V I N K V ^{0.013} T ^{0.006} S I F

G K D N I G M I G L D ^{0.003} S K G F V ^{0.004} S A ^{0.013} Y ^{0.019} Y N ^{0.03} T I G M A R G V K D ^{0.006} S E V K R I ^{0.024} Y V F E G E L

Sequence #136 — Gene Saci 0407

M E L M V **Y** F F L R I I **T** P L N G **T** L E **Y** V E N A **Y** I N D N **T** N N E V V A A M **S** V P L N N **S** I K **Y** L N I **S** L I Q G A N **Y** L K I P I K L **S** **Y** N P F H I **S** **S** L E **S** R

E I **Y** **T** A G I **T** I L L K **Y** E L P N G D Q I L K E F N L **T** M V I D **Y** Q **T**

0.004 0.027 0.002 0.012 0.005 0.006 0.007 0.019 0.004 0.002 0.005 0.001 0.01 0.004 0.002 0.005 0.005 0.005 0.008

0.004 0.027 0.025 0.001 0.009 0. 0.103

Sequence #137 — Gene Saci 0409

M N A I S R S T W L D R L I G R K G T Y I D L V I G I A K T Y N I P Y Q K T E D G V I V G N D I L I T Q G N I N H D K L E S K E I K K M Y I I K D S H I F L I D
T S K G E H D P Q L F E L K E G V K R I L S D I V E K V G D K I N I M Y K D D Y P

0.005
0.007
0.05
0.124
0.007
0.015
0.002
0.004
0.013
0.015
0.007
0.004
0.006
0.029
0.013
0.057
0.008
0.031

Sequence #139 — Gene Saci 0418

MEKKKVEEKKIRPI^{0.005}YVGLFNFG^{0.076}TRIV^{0.005}SAPI^{0.001}SFVF^{0.013}TYLV^{0.002}AHYLS^{0.001}NLQNGQIIFA^{0.012}TWQ^{0.}SMFVLI^{0.}MGY^{0.001}FTLPADIF^{0.03}SLV^{0.002}TS^{0.013}SRF^{0.003}
^{0.005}SVENRPVGGILLNLI^{0.002}TGAI^{0.001}SSL^{0.001}IYVVL^{0.002}TPY^{0.021}LM^{0.001}STIG^{0.001}YFN^{0.004}TYAF^{0.017}YS^{0.002}SGIIVIL^{0.001}TFY^{0.001}VLRIT^{0.011}TAIT^{0.}RGL^{0.005}SPRMIGI^{0.005}SGVIF^{0.013}Q^{0.009}
^{0.001}ISRLVIVLVLF^{0.}YVFKLNILAV^{0.001}SLAY^{0.001}GIG^{0.002}YLAQ^{0.004}TLV^{0.002}YS^{0.001}NFIK^{0.002}SNLKVDFK^{0.024}TT^{0.008}VEIAKK^{0.003}SL^{0.003}TTII^{0.013}SS^{0.001}FLQLILEA^{0.003}TI^{0.003}VWIT^{0.002}LA^{0.004}
^{0.004}ITND^{0.007}AIT^{0.}VAY^{0.001}FE^{0.001}SAIIIS^{0.005}NIV^{0.005}TW^{0.002}TS^{0.002}SLY^{0.001}DGLIAKL^{0.004}SET^{0.017}K^{0.006}SAEVVENFVKLY^{0.003}FVV^{0.002}SAFFL^{0.001}SLV^{0.001}IEGRGLLY^{0.003}HLRPE^{0.004}YMQA^{0.004}
^{0.003}FIT^{0.002}FIIIS^{0.001}SS^{0.004}FLRGLN^{0.037}TLFY^{0.005}QAVVMIDRALG^{0.011}SEERFDIKK^{0.006}SY^{0.002}TAKLNA^{0.002}SN^{0.008}TI^{0.002}FAIIGVGI^{0.002}SVILV^{0.002}YI^{0.002}YKG^{0.002}SS^{0.007}PALL^{0.007}SS^{0.003}SL^{0.002}
^{0.023}MIT^{0.039}IGV^{0.003}TVN^{0.005}SVWMT^{0.003}ISS^{0.002}ARICK^{0.005}SL^{0.003}YS^{0.002}MKIPVKDIV^{0.005}T^{0.01}ST^{0.002}FI^{0.003}SIF^{0.01}TT^{0.003}LVGIMFF^{0.001}SS^{0.002}NF^{0.001}SY^{0.002}LY^{0.002}MLV^{0.011}SS^{0.005}SALIG^{0.008}SS^{0.006}SIFI^{0.008}SL^{0.014}SY^{0.009}V^{0.003}SS^{0.012}SP^{0.007}
^{0.001}FAR^{0.001}YIIKRGLVEIRKILMQ

Sequence #140 — Gene Saci 0422

M I E K A V I T A A G K G S R M K Y I T V L P K A L L P L F S S E N G D L I T R P V I D L I F D S L S S V G V K K F C I V V G K H G K L L M D Y L F D M G V T
F V F Q P H P K G F G D A V L K A E D F S S N D P F I V H A D D G V L T G G Y K E A V S L F D E V K P D A V L L L R E V K N P K R Y G I V D V K D E G E Y M G H
K M Y R V I E A Q E K P Q N P R S N I G I S A V Y I F S P K I F Q G L N K V K V E E G K E L E L T Y G I Q N I I S E G G E V Y G I L L K D E K W L N V G D P V S
Y I D A L N L T Y S F H V K K Y Q

Sequence #141 — Gene Saci 0424

M I I V G I D A G G **T** **K** **T** K A V A **Y** **T** C D G Q **V** I G E G E **T** G P G N **Y** H N V G L **S** K A I N N I R E A A L K A **T** K G E E P D V I **S** I G A A G L D **S** R **Y** D **Y** E **S** F N
0.006 0.002 0.024 0.068 0.044 0.004 0.085 0.1 0.025 0.052 0.002 0.082 0.018 0.016 0.023 0.049 0.006
S L A **S** **T** V A K K V I V N H D G V I A L F A E **T** L G E K G V V V I **S** G **T** G **S** V V E G **Y** D G K D F H R I G G R G W L L **S** D V G **S** A **Y** W V G R R A L R A V L E V M D
0.006 0.002 0.024 0.01 0.018 0.015 0.011 0.005 0.025 0.013 0.014 0.003 0.007 0.009
G L R Q K **S** N L **Y** **Y** K V L E K I R V K D L D D L V L W **S** **Y** **T** **S** **S** C Q A D I I A **S** V A E A V N **S** **S** A L **T** G D E L A I **S** I L K E G A E K L A N Q A V L M A R R L N V
0.026 0.103 0.007 0.016 0.047 0.016 0.003 0.003 0.002 0.002 0.016 0.003 0.008 0.006 0.082 0.02 0.005
N **T** **V** **V** M K G G M F K **S** P I **Y** L A **T** F K N **Y** L **S** L **Y** G I K G E V G K R N P E L G A M V I A F K E L G C **S** I E K L L N G

Sequence #142 — Gene Saci 0427

M V L D L K **Y** I Q E K M K E L **Y** **Y** V K D **S** E R G V **Y** A **T** F **T** W L V E E V G E L A E A L L **S** K N K D **S** L E E E L A D V L A W **T** V **S** V A N L V G I D L E E A L R K K

Y H I

0.041

0.02

0.014

0.013

0.028

0.01

0.047

0.012

0.029

0.009

0.003

0.001

Sequence #143 — Gene Saci 0428

MEKKEFFEILRN **S**MLD **S**KDR **Y**YRNLVFIQDE **S**DILRHVLEVLQL **Y**LDINPDPLIA **Y**AFHPWAKGAKDRLEELRKIVKN **S**E
 KLIDID **Y****S****S****S**ER **Y**LG **S****T**FDVAAILDLVDNFEPNHIGRLVDLVRGGGLIIL **Y****T**NDLKNNKIFKN **S**ILREGKVLVDV **Y****E****T**RFIR
 KL **T**EHHEGIFVI **S**N **S**E **Y**YAKPFKGEVKEKP **S**PQLPKKP **T**MPVELH **S**LCL **S****S**DQNKVLE **S**FIGMR **Y****G****S**RKVLVI **T**A **S**RGRGK
SAV **T**GLGMAGLIFKHGFRKGRK **Y**KIIV **T**AP **S**IA **S****S****S**Q **T**MEFLKRGLDALGVE **Y**REKR **S**PMGFIN **S**LEGEGERVFFFEIPEA
TLEHEGDLLVDEAAAIGIG **Y**ID **S**ALK **T**WKKVVLV **T**TVHG **Y**EG **S**GKAFRL **Y**LNRLKQRK **T****T**V **Y**WEEMRKPLR **Y**AE GDP I
 EKWL **Y****D****S**LLLLDAEPEDVQQEIDKV **Y**FE **T**LDKEELF **S**DDRKLQRV **Y**GILV **T**AH **Y**RNNPNDLMIMGDGIHH **T**IKGL **S**IEG **T**N
SYIGVVQIANEGGL **S**DELIH **S**ALMGV **T**FDGDLIPDRMIKH **S**RLEIFGKMKGWRIVRIAVMQELQDKGFG **S**QMLEMIEDA
 KRQEIDWVG **S****S**FMGDMRVLNFWIRNGF **Y**PVHV **S**PKKNEKLG **Y**PVIVIKPI **S**EIA **T**KAVRVA **Y**VLKEKLLN **T**LHDV **Y**FS
 MDPEIAQIIL **S**GIKVHKEVKINPI **Y**VDKAVAF LQGV **S**PYE **S****S**ADGIHLLALK **Y**FWDAKREW **S**LEPEQEILLIAKILQGRP
 WRF **T**SA **S**LN **S**NR **T**GVNEMLYQAIAELL **Y**RY **Y****S**LN **S**ETKVGISLDKLDLDDQID

Sequence #144 — Gene Saci 0430

MRKLSHMIIELSLA^{0.006}T^{0.002}FLAGL^{0.006}T^{0.007}IVLGGIVEG^{0.004}Y^{0.014}Y^{0.002}GL^{0.089}SLG^{0.005}T^{0.138}KWP^{0.007}Y^{0.006}^{0.006}TRDMVHLAVRKADPEAMHRI^{0.006}S^{0.014}ATLVGLLS^{0.002}LT^{0.001}ILILD

FNLLS^{0.001}IAGFI^{0.001}S^{0.005}VIF^{0.02}T^{0.003}ALLGMA^{0.001}T^{0.001}LY^{0.006}VLAGKLP^{0.006}S^{0.026}IFQGFHDIAA^{0.007}Y^{0.006}T^{0.008}TMVI^{0.008}Y^{0.004}LLIAMGFDP^{0.042}S^{0.006}RFT^{0.006}SFIIDAI^{0.048}T^{0.009}PPHFLY^{0.009}FVIF

MGGVVT^{0.206}GR^{0.073}KMRFS^{0.084}IGDVRKPKNRLQWIWIVH^{0.001}SIAGVIFFL^{0.}SLILLQLWIPLALALIEGIVGLLVFRGINRNPEKPGIVV

GLHQLFS^{0.}IAIVLS^{0.001}LVIFS^{0.002}I

Sequence #145 — Gene Saci 0432

M Q L ^{0.021} S K G ^{0.01} S L ^{0.055} I R E ^{0.025} S Y G Q A M A V ^{0.089} T A P L G ^{0.005} S V V ^{0.005} S T ^{0.021} T ^{0.052} T ^{0.014} A A I A ^{0.003} Y A G K ^{0.002} S V L F A ^{0.005} T L L A F L A ^{0.001} S L L W M F ^{0.006} T L ^{0.089} T K ^{0.001} Y ^{0.042} T K K I A ^{0.006} S P G G ^{0.005} Y ^{0.011} Y ^{0.058} T F G ^{0.002} S A A
 W R ^{0.003} S K ^{0.052} T V A ^{0.004} Y ^{0.013} Y E A I ^{0.019} T E V I A ^{0.005} Y ^{0.002} S S L N A V N ^{0.002} S F ^{0.001} S V ^{0.006} Y L L L K V ^{0.006} T F Q M L N L E L P D ^{0.007} Y V L P L ^{0.002} S L V I G L I ^{0.001} Y P ^{0.008} T L ^{0.002} S S V I L H I R K V L G ^{0.} Y I V ^{0.001} S I ^{0.001} S
 A ^{0.003} T L E V I F L ^{0.002} Y V L F G ^{0.001} Y A V A ^{0.022} T R G F D I ^{0.009} T ^{0.022} Y L ^{0.002} S P V G ^{0.081} T N F ^{0.001} S S L G ^{0.001} T A M V L ^{0.02} T I V ^{0.037} S I A G A G A A A ^{0.018} Y L G E E ^{0.284} T K K P ^{0.089} T ^{0.006} S T I ^{0.009} T ^{0.007} T G I K I A ^{0.002} Y V V G G G
 A I L A G ^{0.016} T ^{0.016} Y A L V A L W N E P I Q ^{0.041} T L ^{0.003} S N ^{0.003} S P Q P L I Q E L ^{0.001} Y P I ^{0.002} S F I V M L I ^{0.002} S L I L ^{0.003} S I N ^{0.003} S L L A ^{0.002} S N I G ^{0.015} T ^{0.012} T V G A A R I L F N L A R E K A M P K V F ^{0.013} S R
 L N ^{0.026} S E R E P L I A ^{0.014} T V V V G L I ^{0.001} S A I F A I ^{0.002} S S L ^{0.004} T ^{0.025} Y ^{0.005} T ^{0.045} T G ^{0.004} S A D V A F ^{0.021} T E I ^{0.003} S F I ^{0.002} S S L F W L A G R I V D N L G A P V F ^{0.003} Y W R L R E L ^{0.04} T P K I L I V F L G ^{0.} S T ^{0.003}
 T ^{0.008} I N L V G M I G ^{0.002} S L Q A P D M F Q A V ^{0.007} Y L I ^{0.001} S V L A A A ^{0.01} T L W ^{0.001} Y I I K A R K G I A G K ^{0.002} Y L V D E N N Q L I ^{0.01} T M E E ^{0.001} Y F A K V R ^{0.045} S R

Sequence #146 — Gene Saci 0440

M S N L L N E L E W R F R N L N E G L A F L L A I L S I A I A Y I R P Y S L T Y D P L V Y L V F P I V T A T I A I V P H E I A H R Q I A R R Y G S Y S R F A L S
F T G F L I T L L V N L I S A F G I S P F V I F A S G Y T L I L G R F G V P T Q E V E G K I S F G G P A V N L A V S I V S F I I A G F T S N P L V Y I F F A E L
Y S F N A W V A F F N L L P I P P L D G F K V F R W N K T L W I I G L I V S L A L V I L

Sequence #147 — Gene Saci 0444

M^{0.174}S D N P F R M^{0.182} S^{0.152} S P Q Q P^{0.477} T K Q P R D L R K V Q P Q A P Q A V D M K L Q L R M K R V K^{0.007} Y K I A I L^{0.02} S G K G G V G K^{0.013} S F V^{0.011} S^{0.006} S N L A M A I A A^{0.009} S G R K V G I V D

V D F H G P^{0.005} S V P K M L G V R G Q^{0.052} Y L^{0.063} T A D D N G I N P V^{0.026} T G P F N I K V V^{0.002} S I D F L L P K D D^{0.113} T P V V W R G A I K H^{0.009} T A I R Q F L G D V N W G E L D^{0.051} Y L F I D

M P P G^{0.208} T G D E A L^{0.004} S I A Q L I P N L^{0.013} T G M V I V^{0.012} T I P^{0.005} S E V^{0.003} S^{0.021} T L A V K R^{0.004} S I N F A K^{0.007} T V N A K I I G V V E N M^{0.003} S H F V C P D^{0.005} S G K^{0.038} T^{0.036} Y F I F G E G R G K K M

A D E M G V P L L G Q V P L D P I I A K A N D M G E P F F V K^{0.012} Y P E^{0.03} S P^{0.225} T^{0.013} S K E F M^{0.013} S I A Q K I I N N V E V N

Sequence #148 — Gene Saci 0446

M S I E I T E K Y V I L K R F L S V A Y G L S E S E I D T F L R I L E S K E G K D I D A I S A E L K I S K S R T S I I L K K L S D A G L V D K E K G D N M K G G
R P K Y V Y S V N K E E L K N R L I A K S E E L C K E L N Q V I K S F I

0.008 0.026 0.004 0.036 0.008 0.033 0.02 0.132 0.02 0.06 0.057 0.093 0.061 0.159 0.044
0.03 0.041 0.025 0.018 0.004

Sequence #149 — Gene Saci 0447

M F I I L S^{0.011} K A E I R E K I W S^{0.014} L L E D K N I A S^{0.016} F P R P V F G R I P N F K G S^{0.015} K E A A L R L R E I V E Y^{0.067} R K A K V L K V N P D S^{0.015} P Q R W V R E F A L I D G K T^{0.086}
V L V P T^{0.132} P R L K G G F Y^{0.014} L L D P S^{0.009} K I S^{0.013} D Y K K A S^{0.01} T^{0.046} I S^{0.005} G F I Y^{0.029} L G E L V D I Y^{0.016} S^{0.005} I P K V D L V V V G S^{0.006} V A L T^{0.115} S^{0.009} R G D R V G K G E G Y^{0.022} S^{0.021} E L E Y^{0.08} A I L R E
I G K I D E T^{0.005} T^{0.3} P V V T^{0.026} T^{0.062} I H D I Q I V D E I P T^{0.047} E V F D V P V D I I V T^{0.121} T^{0.063} K V V Y^{0.025} T^{0.03} T^{0.193} N K R E K P K G I Y^{0.017} I E Y L T^{0.208} K E K I E D T^{0.067} P F L K E Y^{0.004} L N K R L N N

L V

Sequence #150 — Gene Saci 0449

M K F N N **T** K I G K K F I L K N V D **S S** I M **T** E A **S** V D E L K R L **Y** N Q G K **S** M K **S** I A R E L G I **S Y T** K V R N I L L N A G V N I R K K R I N E Q E V V E L A K
Q G H **S** A R **Y** I **S** K M L K I **S** E **S S** A L R I L K K H N V G R K I K K L **S** D E D I N K I K E M **Y** L K G E **S** I **Y** R I A K **T** L G K **S T** N L V V **Y** H L K R L G V **Y** K R G
Y **T**

Sequence #151 — Gene Saci 0459

M E I **T** E D **S** K R K I N **Y** Q I R L A **T** L **S** D I D Q I I R I N R **S** A L P E N **Y** P **Y** **Y** F F V E H L K E **Y** G Q A F **Y** V A D L E G E V V G **Y** V M P R I E W G F **S** N L K H
I P **S** L V R K G H I V **S** I A V L E P F R K I G V G **T** **S** L L Q N **S** L K A M K D **T** **V** N A E E V **V** L E V R V **T** N **Y** P A I **S** L **Y** K K F N F R E V K L L K H **Y** **Y** A D G E D
A **Y** L M A A P L

Sequence #152 — Gene Saci 0460

M A I M A L I T R L P C E N S L I E K I N S L N V D Y V V G L G D V E C P Q F L R D F Y G I L G E M D N I T M K Y L K N T G K L I E S S F L T F S T N F S N I
T I T H F P P R L E Y G S L I V R N Q I L T N S P K I V F H G H S E V Q K I Y N L G L T K I V S I G S G E K G Y Y V I Y D S N M N E I I L K R S S H

0.013 0.004 0.002 0.019 0.012 0.023 0.119 0.001 0.02 0.005 0.007 0.025 0.002 0.016 0.003
0.056 0.01 0.004 0.003 0.003 0.002 0.002 0.007 0.008 0.004 0.012 0.015 0.02 0.011 0.004 0.014 0.025

Sequence #153 — Gene Saci 0462

MGRD Y F L D K D L V L D R D N N I Y Y V Y S N I N P F G Y I Y A I L K Y V F T G K G L W K G Y E R A L K Y Y G I H N V L K V K Q E F I H E C C Y G V S F P V
 L R K S A I S N H L K P E E K I R E I I K H P S Q S K Q E L T L L E I I Q Y I H T S R L G V S G S L L T N T Y H E L S D L D I V I Y G C K E S L N V I E S F E G
 F N D D E E W I Y E T S K N Y G L E L D L V K K L Y T R K I R G K Y Y N N V K Y S I L F V D D K P Q R Y C E D V C I P T H K R V K I K A E I E P D C K A L F Y P
 S K V S L Y H V E G D E K V D N L V S Y E G I Y S Y L L Y S S R K I E V D G L L V K C E N S S Q V I V G D R N V G G R V R R I L

Sequence #154 — Gene Saci 0463

M I F ^{0.087}T G I D P G ^{0.011}S R ^{0.078}^{0.035}T Y E A I ^{0.015}S V ^{0.043}T E ^{0.044}T G N I ^{0.007}S R K I E I P ^{0.045}T D L V K Q A ^{0.01}^{0.017}^{0.013}S Y S L L R ^{0.006}Y L L D E R P V A V A M P ^{0.011}S G H G L P F K K I ^{0.052}T D L ^{0.017}S E K E I F L L ^{0.069}T L

A D P E K E G H L R N F I R ^{0.007}^{0.008}S S K A ^{0.009}Y I F N G F ^{0.037}T I P G V I E L D ^{0.003}S V P V ^{0.025}Y R K I N V I D M G ^{0.05}T A D K V A ^{0.002}S A F F ^{0.011}Y R ^{0.031}T M ^{0.005}Y D N F V L V E I G ^{0.002}S N F ^{0.002}^{0.002}S S I L V V

Q N G E I ^{0.084}T D G F G G ^{0.03}T I L P G F ^{0.005}^{0.004}S S A G F L D G E I A ^{0.002}Y L L C K ^{0.002}Y A K I ^{0.004}S K E ^{0.056}T I ^{0.015}^{0.003}Y S G G N W E R G V E I I R I I ^{0.019}S E W ^{0.001}^{0.009}^{0.004}Y S S K ^{0.004}Y D L P I I V ^{0.018}S G R R K W D V

D F G K K F ^{0.011}S F P F K E ^{0.01}S A I G ^{0.011}S A ^{0.009}Y I A N ^{0.005}S L ^{0.008}Y G G I ^{0.001}Y R K ^{0.003}Y I D F L K ^{0.002}S A G ^{0.09}T P L ^{0.007}S H V R L K G W E E I I ^{0.01}S L ^{0.03}T R I

Sequence #155 — Gene Saci 0472

M S A K N D S E S R V N K S F D S T Q Q P N I S E Q A G S I A P Q Q T S D S A P Q Q A Q Q S N I P S Q P S N Q A S V Q Q V S Q S Q Q Q T Y Y I G K V I I S K D
 0.076 0.148 0.177 0.086 0.023 0.21 0.026 0.059 0.196 0.061 0.081 0.058 0.063 0.03 0.02 0.019 0.012 0.007 0.024 0.03 0.003
 T P A K H N E F W V W T K S H I D I E V G S S F V I V E D P S A S N R K Y I V G L V V D S M T M S T S E N G I A E Y F S S G V G E P L I N P P I E P R V I T F Y
 0.118 0.009 0.004 0.007 0.011 0.006 0.01 0.02 0.013 0.015 0.012 0.024 0.011 0.097 0.016 0.024 0.237 0.031
 K V R V I S R E P S I T K P A E S R M L V R L A S Q N D I D R L N S I I K P E Y R V L A G F L Y N F T N P L D S N S W I P I Y F D S T Y L A G K Q G A H V M I T
 0.081 0.091 0.071 0.044 0.015 0.011 0.003 0.007 0.022 0.002 0.002 0.004 0.016 0.002 0.014 0.027 0.004 0.004
 G K T G L A T K T S Y A L F L I P N F L Q H A K M N N K R V A A V L F N V K Q C D L F N L H N L L L Y K D W D S L Y S T I K N L F G N R T D L A E Y N I G M W K
 0.086 0.06 0.023 0.002 0.004 0.082 0.04 0.006 0.008 0.01 0.08 0.009 0.001 0.002 0.002 0.003 0.064 0.005 0.027 0.015 0.001 0.031 0.039 0.008
 R I K E L Y N L S K P S D L I P K D S S G R P M L Y Y Y T Y A G D N I C S S Q I S N A A N I L L Q Q T I P T Y S Y G L M D L G I P E L I T A L S N G K Y D T M S
 0.015 0.013 0.022 0.002 0.004 0.082 0.04 0.006 0.008 0.01 0.08 0.009 0.001 0.002 0.002 0.003 0.064 0.005 0.027 0.015 0.001 0.031 0.039 0.008
 E P Q R V A I S L L A R K V I P E L K E E I S F D K L L N D A N K Q R S I F M K L L T N N V D E R T V P V I I R Y L I D F V G T N R N I G L E L Q N A H G N P I
 0.006 0.031 0.009 0.006 0.042 0.001 0.006 0.006
 K D T N I H E G I N I I Q L N G L S D T M Q N I V F S S V L R T L M N I Q Q D Q N N R R F D Y I I V F V D E L N K F A P K R G E S P I K D L I V D I A A R A R
 0.05 0.001 0.006 0.001 0.002 0.006 0.007 0.054
 S L N I G L I G A Q Q F A S R I E T Q V Y G N A S T Y V V G N T D A A E L K E D E Y K A F S D F K D M I Y Q L Q K G Q M V I Y Q P S T F I S P I K I R F P V I P
 0.01 0.004 0.046 0.065 0.002 0.088 0.025 0.067 0.138 0.008 0.019 0.024 0.004 0.028 0.005
 0.009 0.016
 Y D V S

Sequence #156 — Gene Saci 0474

M E R V E E A I E L I I N A S E E L S N L P W E L G F S G G K D S S T V L S L T L K A M E R G A M I K T L Y V V Y A D T L L E H P I L R K E A L D A L E S L K
V Y P N V K P I R L T P I E D F I S M M V E R G Y P A P S H R F R W C M E R L K L R P M K R F M E Q L G K F V Q L S G V R M T E S S E R A K Q T A Y N G K H E K
I I R L G N P I I M P I L D W T T E D V F R Y L R S E R R W D G R E F D Y L L N L Y E V K E D N D G C G C A L T T D V R F G C W V C T V V K N D K M P V S D T L
K E A R K M I M D I S R D L R Y R I I D K N G K P R S L N E E G R K E V A K V F I G V L E K E P E A F G Y D T K E L R E K L E K V I E E

Sequence #157 — Gene Saci 0480

M R E L ^{0.005} S N P V R C V H L ^{0.003} Y L I L K H V Q ^{0.002} S E I ^{0.003} S L N E L ^{0.009} Y ^{0.049} T ^{0.033} K T R I A ^{0.006} S ^{0.002} S A F ^{0.015} Y ^{0.031} Y ^{0.145} T V I P ^{0.038} T M L K L G L I E I ^{0.005} S ^{0.007} Y E N R K K I I R L ^{0.085} T E K G R K L L E V L N D

I E F E K V I A K E A L V V ^{0.04} T P

Sequence #158 — Gene Saci 0486

M S V E F N L T L N Q V K V K G S V F S L N P Y S F E A I K R W Y D K F L K W C E N Y D V M T Y C Q K D M E E E V E Y L A E A F R L L A P K S L E E A E E Y F A

V L E R A Y D S T E G K I K E V F V R A M

0.004 0.007 0.007 0.002 0.021 0.005 0.002 0.013 0.186 0.002 0.061 0.054 0.25

0.044 0.011 0.116

Sequence #159 — Gene Saci 0487

MKR ^{0.02}S NIVRLVV ^{0.017}S KDVGKKLRELA ^{0.015}T ^{0.016}WTAKCVNEVNWLRMQQFKEGKMVDFND ^{0.095}T EKVV ^{0.081}YAK ^{0.01}YKE ^{0.029}YLKVNAQQVCRKNAEAWR
^{0.018}S FF ^{0.01}SLMKDKKDGLP ^{0.083}S WFKPRPPG ^{0.007}YWKDKRG ^{0.023}S ^{0.011}YKLLILIRNDR ^{0.005}Y ^{0.167}T VVDENAR ^{0.042}T ^{0.002}IY ^{0.013}LKDFGL ^{0.013}T LHFKGKLLKWKGKQGRLEIF
HNGLHWCA ^{0.001}S IPVEVEVNAKPKGNAGVLDLGI VNLAT ^{0.023}VVFD ^{0.004}S ^{0.004}SWVLFKGG ^{0.009}S ^{0.015}VL ^{0.03}SEYEN ^{0.007}Y ^{0.016}SRKIAIT ^{0.033}QKKL ^{0.033}SLHKQER ^{0.161}S K
RLKALFLKRRFLKHVLN ^{0.007}S MARK ^{0.103}T ^{0.07}VE ^{0.056}TAYEKGV ^{0.01}S IIKVGY ^{0.002}PKEI ^{0.002}SKHHGNKLT ^{0.02}VNFWN ^{0.007}Y ^{0.006}YVIRRMQEV ^{0.007}SEE ^{0.029}YGIKVE ^{0.03}T V
NEA ^{0.014}Y ^{0.013}T ^{0.002}S IVC ^{0.001}SLCGEAHENGRIHRGLFKCPHIGKVVNADLNGAINILHIPK ^{0.006}S ^{0.009}RGGS ^{0.008}SEGN ^{0.026}ST ^{0.063}KGIGVKWLK ^{0.017}T ^{0.019}QPVV ^{0.003}YHW ^{0.003}TS
GAGWVFK ^{0.003}S ^{0.049}P ^{0.003}TSCEAMGMKVVNHRPVNRP ^{0.095}RG ^{0.105}T ^{0.105}LL

Sequence #160 — Gene Saci 0488

M E R **T** K I G K N L D L L L **S** P P L R L L L L I **Y** **S** L G E A **T** V **S** Q L I K E **S** G G M **S** A **S** **T** I **T** K **Y** V R Q L E G L G L V **S** V E L **T** **S** **S** P P

0.09 0.023 0.008 0.01 0.08 0.009 0.013 0.014 0.01 0.043 0.104 0.021 0.012 0.175 0.024 0.04

Sequence #162 — Gene Saci 0501

M D T V D N Y I L A L L K V A K E E N A E V T A T K L Q K I F F L L E K E G G V N L G L N F E P W L F G P Y S K L L Q D R I N S L I E L G M V D V E E E E V K D
V I S G L T I G I K R K Y V L A N D V K V D N V R N E I I Q F F K E W V S K P R Q E I L T Y V Y R R Y P D Y T R Y S V I R D K V I R G K L I G N A

0.044
0.009
0.063
0.048
0.003
0.003
0.019
0.005
0.004
0.002
0.008
0.13
0.013
0.029
0.002
0.018
0.099
0.012
0.089

Sequence #163 — Gene Saci 0504

M N G ^{0.046} T W K K ^{0.002} Y ^{0.003} Y E K ^{0.012} Y K K V L G V N A Q A V L Q K K N N E A W ^{0.007} S ^{0.007} S F F ^{0.007} S L L K N K D K L P L F M N H V ^{0.007} S P P G ^{0.085} Y W K E D G K R K L I L V V R Q D R ^{0.016} Y K V D E E

R H A L I L K D W K M E I P F ^{0.004} S G R L R W ^{0.008} S G V Q G R L E I H I I N N R F ^{0.014} Y A ^{0.02} Y I P V D V G R V V A K R ^{0.019} S G K L V K D ^{0.013} S L I I H G E R G K I Q I ^{0.007} S ^{0.006} S P K G N K V

A ^{0.006} S V D L G I N M L A ^{0.009} T V I V D D G ^{0.014} T V L F ^{0.004} Y R G ^{0.025} S V V K ^{0.006} S D ^{0.081} Y F ^{0.02} Y F Q K K I A E L D R L K ^{0.117} S E A E K I Q E V E A R E E V L E E R K R L F N K L ^{0.005} Y R R L L H ^{0.003} Y ^{0.002} Y

R ^{0.05} T L A ^{0.002} S H L A K A L W N L G V ^{0.001} S ^{0.028} T V ^{0.014} Y L G ^{0.001} Y P ^{0.008} Y F I ^{0.001} S Q D K G N K F ^{0.021} T V N I W ^{0.002} S ^{0.001} Y R K L I E A I M N K L H E ^{0.004} Y G I K ^{0.019} T F L V V E ^{0.013} Y N ^{0.041} T ^{0.002} S R ^{0.009} Y C A ^{0.112} Y H D V E V V

R K P R G L ^{0.294} T ^{0.018} S ^{0.082} S P P

Sequence #164 — Gene Saci 0507

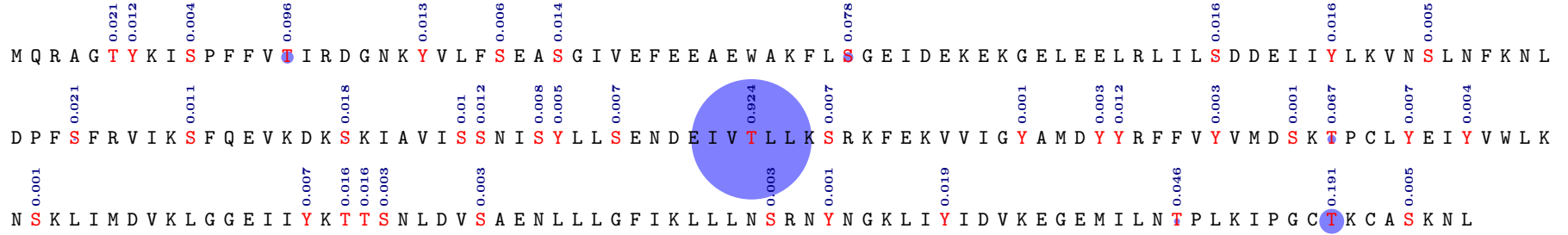
MKEERIGWIYTIISSELEEKSFPLWIKQVSLKQLAVIFPSELLALALIFFSKSILIAMASLIPAIYIITIDEKSMDEFQYVYHF
VKFYLLNLIAPSEKKEKKLKEEKEKIVEGKTTKKSVSLSEIIAKYKQKMLMYKKRVIRAGVSGTTLAVLLILVARDFITI
ASNLMYLVAVSIVIAVAIIIEFLRSIYGKI

0.011 0.023 0.006 0.007 0.005 0.003 0.002 0.002 0.003 0.004 0.002 0.033 0.005 0.004 0.013 0.017
0.004 0.062 0.099 0.175 0.04 0.043 0.033 0.005 0.008 0.002 0.004 0.018 0.006
0. 0.002 0.002 0.002 0. 0.

Sequence #165 — Gene Saci 0510

MGMEREFR **Y** NELVFLNQLQ **T** R **Y** QLF **T** **S** RVMQGL **Y** AVNQEGLAKRGK **T** AKQRFLGKGGDIVVAEKVADWGEVK **S** VIVMN
VRQENVANRP **S** L **T** LNIL **S** P V **Y** KEIGDWRVILKDGREIVIPNVDDP **Y** NKLN **Y** V K **T** R FNLMF

Sequence #166 — Gene Saci 0527



Sequence #168 — Gene Saci 0545

M Y W V K K H V I G G S A I P Y T Q D E I I G W I N E G V K R V L V L P E E F E I D E A W G S L E Y Y I S V L K S F N I E Y L Y S P I P D G R A P S E N Q F L E
I Y K W L R K D K G N L V H C V G G I G R T G T I L A S Y L V L E E N M S A E E A I E E V R R V R P G A V Q T Y E Q E L F V F K V E K M K D K W K I L

Sequence #169 — Gene Saci 0546

M I R L ^{0.009}S ^{0.014}T G I ^{0.008}Y E F D K L I E G G I P Q G F F V A L ^{0.125}T G E P G ^{0.014}T G K ^{0.077}T I F ^{0.003}S L H F V A Q G L K E G N P C V ^{0.047}Y V ^{0.05}T ^{0.042}T E E ^{0.014}S R D ^{0.029}S I V K Q A K Q F G W D F E E H L

D K K L I I I D A L M K E K D D E W ^{0.017}S ^{0.005}L ^{0.046}T E L ^{0.007}T A E E L I N K V I L A K Q K L G H G Y A R L V I D ^{0.005}S ^{0.004}V S A L F L D K P A L A R K I ^{0.011}S ^{0.002}Y ^{0.004}Y L K R V L N K W K F ^{0.018}T I

^{0.008}Y ^{0.018}A ^{0.002}T ^{0.011}S Q Y A I ^{0.018}T ^{0.014}T ^{0.001}S Q A F G F G V E H V A D G I I R F R R ^{0.082}S V K D G M L R R Y I L I E K M R Q ^{0.161}T N H D K ^{0.019}Y I W E I D I R E G K G I V L I G K L D L R R E D ^{0.421}T ^{0.087}S

L P K K V M D K I K E A E ^{0.39}S R K D M E L ^{0.245}S

Sequence #170 — Gene Saci 0547

M I E K L V I N R L L Q L L E E D L Y P E D I T S R V I R G V K V K G I I F S K E N K S I L A G N K F I I P F L E Y L G L K V D Y Y R K D G E L F S K G E N I L
I F Q G D A E A V L G V E R L V L N M L S R L S A I A T E T R K M V N I A R E I N P K V I I A G T R K T T P G L R I F E K Y A I E I G G D P H R Y S L Y D M V
L I K D N H I S I I G N V K D A I K Q A K E I T S F S K K I E V E V S N I N D A I E A Y K A G A D I I M L D N F S P Q E V K E V V K M L K G K V L L E A S G R I
T P E N V K E Y A E T G V D I I S S G Y L T H S V R S L D L S M D V E K L T

0.005 0.071 0.008 0.004 0.01 0.004 0.003 0.004 0.006
0.005 0.018 0.083 0.046 0.17 0.08 0.415 0.013 0.008 0.016 0.032
0.003 0.03 0.015 0.011 0.008 0.022 0.004 0.019
0.341 0.039 0.069 0.008 0.005 0.013 0.072 0.015 0.019 0.022 0.08

Sequence #171 — Gene Saci 0549

M I ^{0.002} Y I L G ^{0.005} S G I A G L ^{0.009} S S A I ^{0.008} S L K L A G H K V ^{0.007} T I I ^{0.012} T K K I D G G ^{0.015} S ^{0.056} T P I A K G G I A V P L G V D D ^{0.007} S A E K H I Q D ^{0.046} T L R V G K N L C D ^{0.026} Y K I V E ^{0.012} Y V V R E

G L K V V E I L Q K L G F N F D K D L R L E G G H ^{0.068} S ^{0.076} S R R V L H K G D E ^{0.121} T G R E I W N F L ^{0.005} Y K K A L D L H I P I V I D E L ^{0.009} T L I L ^{0.001} S K N N K V ^{0.005} Y G F A ^{0.07} T R N R G

R I E N I D K L V L A ^{0.084} T G G Y G ^{0.006} Y L F A ^{0.004} Y ^{0.006} T ^{0.105} S ^{0.003} N K E ^{0.047} T N L G E G I A L G F K A G A L V ^{0.004} S D M E F I Q F H P ^{0.068} T V ^{0.124} T ^{0.007} S L D G E A F L L ^{0.005} S E ^{0.047} T L R G E G G I I V N E K

G E R F L ^{0.009} Y K ^{0.013} Y D E R G E L A P R D I I A R A I ^{0.015} Y F E M I N G H K I ^{0.083} Y M D L ^{0.008} S K I E D F E K N F P ^{0.013} T L ^{0.003} S N ^{0.009} Y L R R H G ^{0.085} Y D H Q ^{0.004} S ^{0.004} S L I P I F P G A H ^{0.013} Y ^{0.115} T I G G L

R V N L K G E ^{0.02} T N V E N L ^{0.086} Y A I G E V ^{0.01} S D ^{0.007} S G L H G A N R L A ^{0.011} S ^{0.009} S L L E ^{0.003} S L V F G F N L Q N ^{0.005} Y V D E C W E G V Q A ^{0.002} S G G I ^{0.109} T ^{0.01} Y E L Q V R E ^{0.12} T R D E N ^{0.02} T I N V R

D I Q K I N W E ^{0.006} S L G I V R N E E A I R K A I E V ^{0.011} Y R R H ^{0.04} S ^{0.152} T N E A I I ^{0.005} S H M I G L A ^{0.014} S L I R ^{0.086} S ^{0.073} S R G V H F R ^{0.056} S D ^{0.069} Y P E E K E E W N G K R I ^{0.022} Y F L M ^{0.007} S N K E ^{0.012} Y

G R L

Sequence #173 — Gene Saci 0553

MKPLHL **S** VGRINIDIIAKINKIPDIDEFET **T** **T** D **T** LEILPGGA AVN **Y** AVA INKFGH **S** IKIL **S** KIGKD **S** LV **S** **Y** VLERIAEMGV
GLD **Y** VEE **T** NLPQ **S** MALIFLRDNG **S** I **S** MVRKLG **S** **S** ILLDKEDIKKVFGLFDVIHFAS **S** I **S** PDIVVRDP **Y** AKLI **T** **Y** DPGPN **S** **S**
KIPENFGNADII **Y** LNERE **S** **T** KVKIE **S** LKARLIVIKMG **S** KGAKVI **S** ENEEC **Y** CEP **Y** KVQ **T** VLD **T** **T** GAGDVFDAAFN **Y** A **Y** VQ
G **Y** **S** IED **T** LRF AV **T** A **S** ALKVMRIGGIN **S** P **T** REEVMNALNA **Y** **T** P N **T** KCK

Sequence #174 — Gene Saci 0554

M I V I F V D F D **Y** F F A Q V E E V L N P Q **Y** K G K P L V V C V **Y** S G R **T** K **T** S G A V A **T** A N **Y** E A R K L G V K A G M P I I K A M Q I A P **S** A I **Y** V P M R K P I
Y E A F **S** N R I M N L L N K H A D K I E V A **S** I D E A **Y** L D V **T** N K V E G N F E N G I E L A R K I K Q E I L E K E K I **T** V **T** V G V A P N K I L A K I I A D K **S** K
P N G L G V I R P **T** E V Q D F L N E L D I D E I P G I G **S** V L A R R L N E L G I Q K L R D I L **S** K N **Y** N E L E K I **T** G K A K A L **Y** L L K L A Q N K **Y** S E P V E N
K **S** K I P H G R **Y** L **T** L P **Y** N **T** R D V K V I L P **Y** L K K A I N E A **Y** N K V N G I P M R I **T** V I A I M E D L D I L **S** K G K K F K H G I **S** I D N A **Y** K V A E D L L R
E L L V R D K R R N V R R I G V K L D N I I I N K **T** N L **S** D F F D I



Sequence #175 — Gene Saci 0557

M R A A V L E E **Y** K K P L R I **S** E V D **S** P **S** I N E **S** **S** E V L L Q V **T** A **T** G L C H G D I H I A M G E W D **S** Q I Q V N L P I I L G H E V V G R V L Q **S** N H D K I K K
N D L V L V **Y** N A F G C K N C K **Y** C K F K E **Y** Q F C E K V K V I G V N L N G G F A E **Y** V K I P D G D N L V R V N **T** **S** D P I K L A P L A D A G L **T** A **Y** N **S** V K D L
E E N **S** K V L I I G **T** G A V A L I A L Q L L K L K N V D V **T** V I G E N Q L K L D **S** A E K L G A D E V I **S** I K R E E D **S** **Y** L **S** L L P G K K F D **Y** I L D **Y** V G **S** **T** R
T L A E **S** P W L L N K K G E L R I I G E F G G V L R A E E Q L L V L R G L R I R G I L **Y** G **S** L Q D L K H I L D I **Y** L K G K I D **T** L **T** **T** V **Y** K L E D I N E A I **T** D
V **T** E G K V V G R A V I V P

Sequence #176 — Gene Saci 0559

MIKKLARDLGVWKKVEILGDIALIGIPFNENLEEVKKYAEQIMQNNINYVKSVWGRYRDINGDYRLSTTIHLAGERRESETI
YRENGCKFALDVTKVFFSSSKLSYEHLLRVARLVKPGETIINMFSGFGPFSIISILGKPSVVSIDINPYAYYMMVNVDDL
NKTFNVIPIYGDAFKKIYSLPVADRIISPLPERSYEAYKVAIERLRKDGVLHLDEVS VNENEDPVEIAKRKYPNVEFAR
VVRSVNPKYHVVLDIRK

0.028 0.009 0.004 0.074 0.017 0.045 0.005 0.002 0.009 0.013 0.01 0.007 0.07 0.058 0.028 0.022 0.003 0.007 0.002 0.01 0.005 0.01 0.136 0.012 0.007 0.002 0.005 0.023 0.012 0.3 0.005 0.009 0.006 0.008 0.01 0.012 0.049 0.306

Sequence #177 — Gene Saci 0560

M K T I I R G G I V L G A E K P L K K I Y I G V D R S K I D V V S Q E E P I G Y E D A E L N V G G W D R L V A P G F I T L H T Y I S L Y P F R Y R I F S G R I N
A N S L M S S T M S Q S D V Y Y F A L L G A Y H L M R T G V T T V V F S D R Y N D N V A R A V I N V G L K P I I A V P V G C N N S P E N W E K E F R I L Y N R W S
H E G S N N V I L R L C E P Q D S I E V F E I A R E Y K I P V L V D R H V D L S Q F K D I P N T V I A L G G G R G D F D T V K N N N L K L S F T P S F E T S I
F P L S E L K P S M A L D L V P N F D L R H E M S V A V N R L L L T S E E A F K A V T E W G Y K Q L N I N A G V F L K D S S A D I I V L E F R E P P S F P L D Y
A S P Y D N L V Y G G Y N I E T V F V N G E A V L D G G V P L N V G L K D V E E A I K R V E E I D K K V G E R L R S L E K S

Sequence #178 — Gene Saci 0566

M G G R Q R **T** **T** L F M **T** K E V K K E A K K K A **S** **T** G E Q **T** A Q R

The image shows a protein sequence: M G G R Q R T T L F M T K E V K K E A K K K A S T G E Q T A Q R. The residues T (at position 7), T (at position 8), T (at position 14), S (at position 21), and T (at position 27) are highlighted with blue circles. Above each highlighted residue is a vertical label with a p-value: 0.184 for the first T, 0.281 for the second T, 0.202 for the third T, 0.09 for the S, and 0.383 for the fourth T. The residue A at position 26 is also highlighted with a blue circle, but it does not have a p-value label above it.

Sequence #179 — Gene Saci 0570

M K I I I S G P P G S G K S V A K I L S S K L S I K Y V S A G L I F R D L A K R M N I D I V K L N K L A E D D F E I D K K I D L E M F K L I K S Q D N V I I E
S H I G G W L F H N L S D L S I Y L R A P L D V R A K R I A S R D H I S E D E A I I Q I I K R E R S H R E R F L R Y Y G I D I L D L S V F D L V I N T S Y L L P
E D V A D I I L G V I S R K N L H S A L S H

0.063 0.074 0.074 0.113 0.025 0.023 0.03 0.007 0.011 0.002 0.001 0.002 0.008 0.128 0.023 0.123 0.007 0.003 0.005 0.002 0.002 0.005 0.002 0.002 0.006 0.011

Sequence #180 — Gene Saci 0571

M P **S** P Q Q R **S** G **S** F R K V F V K L P **S** G K **S** **T** I H **V** E R R K D N I A R C G M C K K P L N G V K N N **Y** **T** **Y** K **Y** **S** K **T** E K R P E R V **Y** G G **Y** L C H K C L E **S** L I K

M **T** I R G I **S**

0.109
0.046
0.079
0.017
0.026
0.215
0.065
0.018
0.306
0.057
0.024
0.017
0.227
0.03
0.013
0.003

Sequence #181 — Gene Saci 0574

MGFMDFLAKMGENLPAVSKPKDKP^{0.011}TL^{0.262}TRKLLW^{0.077}TFIGLIVYLLMA^{0.003}SIPLY^{0.212}GV^{0.009}TSS^{0.004}SN^{0.003}FL^{0.001}SNFLAQQIIFA^{0.002}SS^{0.002}QGT^{0.022}LAQLGI
 GPVI^{0.051}T^{0.001}SGLIMQILVGS^{0.002}KLINVDL^{0.033}TT^{0.045}QEGK^{0.003}SKF^{0.046}TQAEKALALIFIIVE^{0.001}SS^{0.002}SLFGY^{0.001}VVF^{0.008}TRA^{0.019}TS^{0.001}NI^{0.001}LLPIIVV^{0.003}QLIIA^{0.003}SY^{0.014}IIL^{0.058}
 LLEMIQKGWGLG^{0.002}SGV^{0.002}SLFIMAGIMKVI^{0.001}FWNMFGIV^{0.001}SVQ^{0.003}SQNL^{0.001}PVGFF^{0.002}PLL^{0.002}LV^{0.05}SY^{0.002}IT^{0.002}SGRNLQEIVLN^{0.009}TSS^{0.003}ST^{0.002}TP^{0.014}Y^{0.058}QPD^{0.002}LIG
 LIA^{0.005}TVGL^{0.001}TILIV^{0.001}YLVN^{0.005}TNI^{0.001}YIPV^{0.016}TT^{0.018}QRLRGIR^{0.01}TV^{0.018}PLN^{0.003}FL^{0.001}YV^{0.001}SS^{0.002}IPVIFV^{0.001}SVLGADIQLFA^{0.005}SLAN^{0.01}SI^{0.003}SN^{0.004}SA^{0.005}SGIL^{0.038}TDIAN
 AFFFPQGVPH^{0.002}SV^{0.036}YALVVD^{0.007}PVGAAI^{0.001}YAAV^{0.001}FIVL^{0.001}SIVFGMLWIDVAGLDPK^{0.083}TQAEQMIR^{0.017}SGIEIPGMR^{0.04}TNPRIIEGIL^{0.002}SKY^{0.001}
 IYALGFF^{0.003}SS^{0.001}SLIVGLIAVVA^{0.024}TFLG^{0.005}TYG^{0.001}TGVGLLLAI^{0.016}TIAMQ^{0.01}Y^{0.001}YNLLA^{0.003}YER^{0.003}TLEM^{0.03}Y^{0.006}PLLKRIVGE

Sequence #182 — Gene Saci 0577

M **S** ^{0.057} E E V P V I K L E D W K P R **T** ^{0.193} K V G Q L I K E G K I N **S** ^{0.02} M K E L F E R N L P I V E P E I V D V L L P K L R **Y** ^{0.014} D I V D I G I V Q K Q **T** ^{0.023} D A G E L **S** ^{0.005} R **Y** ^{0.007} K V L I
V M G N M D G **Y** ^{0.061} I **S** ^{0.004} **Y** ^{0.028} G **T** ^{0.107} G K A K Q L R V A I Q K A I R D A K M R I I P V R R G C G **S** ^{0.005} W E C **T** ^{0.02} C G E **S** ^{0.005} **S** ^{0.007} L P F I V **S** ^{0.005} G K A G **S** ^{0.012} V E V **T** ^{0.034} L L P A P K G **T** ^{0.062} G L V V
G **S** ^{0.004} V L K **T** ^{0.049} F L **S** ^{0.003} L A G L K D V W **S** ^{0.012} R **T** ^{0.07} K G **S** ^{0.002} **T** ^{0.056} **Y** ^{0.029} **T** ^{0.058} H E N F I K A A **Y** ^{0.004} I A L **Y** ^{0.011} N **T** ^{0.047} **Y** ^{0.015} R F V **T** ^{0.082} P V D W G R M K

Sequence #183 — Gene Saci 0578

M T Q G P N Y R I K F R R R R E G K T D Y Y T R Y T Y V I N N A I R F V P R L T N K Y V I V S V S K F D Q K G D I M I A Y A H S I E L V K K Y G W K G D T N N T
P A A Y L T G Y L A G L R A V K S G V K A A V S D I G L F V P V K G G R I F A V I K G A I D A G L K V P V G D L G K L K D R V N G S H I S A Y A Q K L K N E N Q
E L Y N K L F S S Y I Q R G L D P V L L P Q H F E E V L N K I K E N G G K

0.069 0.009 0.305 0.02 0.046 0.165 0.005 0.113 0.01 0.032 0.01 0.003 0.002 0.006 0.004 0.004 0.004 0.046 0.068
0.014 0.086 0.009 0.004 0.005 0.003 0.003 0.008 0.003 0.003 0.008

Sequence #184 — Gene Saci 0585

M V H I **T** R F E A P W F L K V G K K E **Y** K W I I R **S** R A G P H K I Q E **S** V P L A I L L K **Y** **Y** L K A V D **T** **T** R E A K R I I F D G K V L V D G K V R R D **Y** **K** **Y** P V G
L M D V V E I P **S** A D L R V R I I P D N V R **Y** L **T** **T** I N I **S** R E D A K **Y** K F V R I M N K **T** **T** L K **S** G V L Q L N L E D G R N I L L K G E E L **S** Q **Y** N L P **T** L **T** **T** L
K I E L P E Q K I **T** **T** A **Y** **T** I K E G V **Y** A M I I G G R N A G L H G K I **S** K I Q L A K **Y** K R I K **Y** **S** L V **T** L E G K D G **S** **T** F Q **T** N L I N V M A I G E N E A D **S** N L
G V K L

Sequence #185 — Gene Saci 0588

M G K K G Q L V K N V G I E G V S A P S K T C D D E Y C P Y H G S L K V R G I V L E G K L I R A R A N R T G T V E R E Y I F Y D S K Y K R Y E R R R S R I H V H
I P S C L E V K E G D N V I I G E S R P I A K S I S F V I L G V K R

Sequence #186 — Gene Saci 0590

M P L E V D E L R K M D L K Q L K E R L N E L E M Q L L K L R V E **S** R M G **T** L K N **T** A **S** I K N **T** R K D I A R I L **T** V I G E K **S** K K E A K K

0.081 0.115 0.051 0.029 0.246 0.116 0.093

Sequence #187 — Gene Saci 0592

M S K W V Y P I L S I P E D K L A K A V I K N I D A S V R D L Y N V C K A I R G M N L K E A R E F L N N V L E E K E A L P F W R Y S H G T S H R S N I S R K W K
V K S G R Y P K K A I K Y V L K L L D N A E N N A N S K G L D I D N L K I V H I A A H K G L V L K R Y M T R A F G R S T R K Y K Y L S H I E V I L G E V

0.004 0.002 0.012 0.006 0.011 0.006 0.012 0.022 0.189 0.024 0.017 0.02 0.056 0.001 0.004 0.003 0.006 0.105 0.021 0.141 0.006 0.004 0.007

Sequence #188 — Gene Saci 0599

M^{0.208}T^{0.035} KFDPLKFE E E V L K^{0.004} Y WDDNNI^{0.012} Y KKLKEINEKNHKKFLFIDGPPY^{0.006} P^{0.008} S^{0.009} S P I P H I G^{0.055} T VWNK^{0.027} T I KDCILR^{0.01} Y ERLMG^{0.004} Y^{0.007} S V K D Q
P G^{0.128} Y^{0.095} D^{0.104} T HGLPIEVE^{0.015} T E K R L G I K^{0.003} S K A E I I E K V G V D N F I^{0.002} S^{0.002} K^{0.033} S L T Q N F R N L G I F M D W E N P^{0.002} Y^{0.033} F^{0.008} T F N N D^{0.001} Y^{0.002} I^{0.008} S^{0.001} N^{0.002} S W A
V I K K A^{0.002} Y E R G L L^{0.01} Y K G V H V L H W C^{0.002} S R C E^{0.046} T^{0.009} T L A D^{0.078} Y E V^{0.017} S E^{0.047} Y R D L E D P^{0.017} S I^{0.066} Y V K F R V K G E P N R^{0.034} Y L V I W^{0.007} T^{0.016} T^{0.003} P W^{0.03} T L P A N V F V M I N K D F
E^{0.132} Y A D V R V G D E I L V I A K D R V K E L M K E A R I K E^{0.022} Y K I L R V^{0.007} Y K G E E L L G L E^{0.044} Y E H P L A D I V^{0.003} S A Q^{0.001} S K I N N H H K V L D G G E A V^{0.023} T L Q E G^{0.035} T
G L V H^{0.005} S A P G H G D V D F E I G K K^{0.028} Y D M P V V M L V N D K G E F^{0.149} T Q D^{0.01} S G K^{0.012} Y A G K^{0.018} Y V R^{0.04} S A^{0.131} S E E I I^{0.018} S D L K Q R^{0.009} S A L L H A^{0.002} S K I V H R^{0.} Y P V C W R C K
T^{0.028} P L I L R A I E Q W F I A V^{0.001} S K L K D H L M G E I D R V R W I P D W G K^{0.083} T R I G N M V K E V R D W V I^{0.004} S R Q R F W G^{0.013} T P L P I W V C^{0.} S N C Q N I I V G G V D
E L^{0.002} S K I^{0.003} S I N Q V P Q D L H R P W I D^{0.002} S V V V R C E K C G G E A R R I^{0.052} S D V A D V W F D^{0.006} S G V A F F A^{0.003} S L G Q D W R K R W^{0.012} S E L G P V D L V L E G H D Q L R G
W F F^{0.002} S L L R^{0.03} T G V I L M D K A P^{0.044} Y E A V L V H G F M L D E Q G R E M H K^{0.014} S S G N^{0.01} Y^{0.162} V E P^{0.008} S Q V V^{0.004} S K^{0.003} Y G R D^{0.13} T L R L W L L R N^{0.039} T^{0.104} W E D A K F^{0.005} S W K^{0.007} S L D M^{0.17} T
R R D L N I I W N V^{0.002} Y V F A N^{0.011} T Y M^{0.023} S L D E F K^{0.004} Y S K^{0.005} Y S Y N D I K D^{0.029} Y L K L E D I W L L^{0.004} S R^{0.002} Y^{0.004} R M L K E V I E A M K E^{0.024} Y K V H E L A N K V^{0.02} T A F I I D D I^{0.012} S
R F^{0.004} Y L R V^{0.158} T R K R A W N E A N D P D K I A M^{0.012} Y^{0.002} V L^{0.004} Y H V L K G^{0.003} S L I L L^{0.001} S T^{0.006} V I P F^{0.08} T A E K I^{0.024} Y L D F V Q E R L E^{0.051} S I^{0.064} S M E K I P E I K E E F I N^{0.039} S E I E E
A F E V A K E I I D A G L N A R A K A G I K L R W P L K E V^{0.016} Y V F L V^{0.01} S D K D R R^{0.14} S I E K I^{0.02} T D V L^{0.022} S S L L N^{0.012} S K^{0.006} S I I I E G I D G^{0.029} Y K R F^{0.029} S K I R A^{0.115} T P N^{0.066} T G
S I G P^{0.009} T^{0.13} F K R L^{0.013} S V K V A E^{0.053} Y I Q N N^{0.002} S D K V A Q D I V^{0.005} S K G^{0.015} Y H E F N V D^{0.003} S E N L R L D I^{0.007} S H V N L V E E V E K G^{0.043} Y V^{0.021} S A R F^{0.023} S K G V V L L K Q E M^{0.073} S K E E
E E E G I I R D L I R R I Q F M R K Q L^{0.004} S L N V N E^{0.02} Y I L L^{0.007} S I R A P D D K V D L I K K W E Q^{0.011} Y I K N E^{0.073} T R A K E L R I G D V^{0.01} S G D L I Q D W D V E E E^{0.029} T^{0.078} Y^{0.038} T I
G V^{0.011} S K A D V^{0.023} S V^{0.033} S

Sequence #189 — Gene Saci 0603

MKDV^{0.118}TRVRNIGIIAHVDHGK^{0.014}T^{0.061}T^{0.011}S^{0.005}D^{0.012}LLAA^{0.005}SGIISQKVAGEALALD^{0.042}YLS^{0.004}VEQQRGI^{0.08}TVKAAANI^{0.002}SL^{0.046}YHEIDGKG^{0.016}YVINLIID
^{0.026}TPGHVDF^{0.007}SGRV^{0.063}TR^{0.007}SLRVL^{0.01}DG^{0.0122}SIVVIDAVEGIM^{0.022}TQ^{0.121}TE^{0.024}TVLRQ^{0.024}SLEERV^{0.007}RPILFINKVDRLIKELKL^{0.017}SS^{0.026}QEIQKRLIDLIIIE
 VNNLIE^{0.017}TY^{0.016}GPEPKDQWKIKPELGNVVF^{0.007}SSAKDKWGF^{0.012}SVPMAGKRGVKF^{0.007}SDVVNA^{0.028}Y^{0.176}T^{0.008}SGDKAKIEELA^{0.008}SKVPIHEALLDA
 VIKFV^{0.024}PNPRD^{0.02}SKYRIPKIWKGDLD^{0.007}SEIAKAMINADPN^{0.023}GPIVMMINDMKVDPHAGLVA^{0.072}TGRV^{0.003}FSGLRAGEEVWLVNAKR
 QQRILQV^{0.004}SL^{0.007}YMGAI^{0.023}RELAEEIPVGNIAAALGMDAAR^{0.098}SGE^{0.006}TGVDIRFKD^{0.015}SVLGS^{0.043}F^{0.009}EKLHY^{0.021}ISEP^{0.005}VVT^{0.083}ISVEPRNPKDLTKM
 IDALRKL^{0.047}SI^{0.013}IED^{0.041}SNLVVKINEE^{0.026}TGE^{0.006}YLL^{0.003}SGMGFLHLEV^{0.016}SLQLLKEN^{0.027}YGLD^{0.038}VVT^{0.016}TPPIV^{0.056}YRE^{0.016}SI^{0.016}RNK^{0.012}SQVFEGKSPNKHNK
^{0.042}LYIS^{0.005}VEPLNNQ^{0.108}TIDLIANG^{0.062}TIKEDMDNKEMAKILRDQAEWD^{0.032}YDEAKKIVAIDENINVFIDA^{0.017}TS^{0.002}SGVQHLREIMD^{0.005}TLLQGFR
 LAMKEGPLAFEPVRGVKVV^{0.019}LHDAVVHEDPAHRGPAQL^{0.104}YPAVRNAIFAGIL^{0.002}SKP^{0.054}TLLEPLQKLDIRIPME^{0.003}YLG^{0.02}NVT^{0.061}AVIT
 RKR^{0.025}GKVIN^{0.055}VVQTGNVARV^{0.018}YAEIPVGE^{0.045}SFELAS^{0.048}ELRAS^{0.093}AGRAFWG^{0.085}TEFS^{0.009}RWAPVPD^{0.007}SILVDLIMKIRERK^{0.003}GKPKQLPKVE
 DFI^{0.063}S

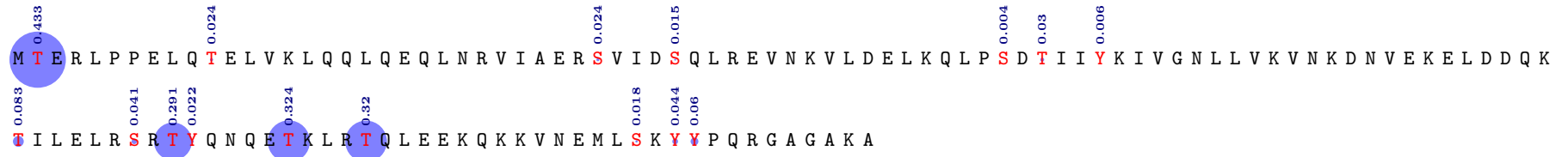
Sequence #190 — Gene Saci 0604

M L R I ^{0.05}Y A D ^{0.01}Y R E K A ^{0.006}S N V P D F L R E L G A V V I F E N L ^{0.01}T V A D ^{0.007}Y V I ^{0.006}S E ^{0.009}T I G I E R K ^{0.068}S V E D L V ^{0.017}S ^{0.027}S V F D K R F F D Q L ^{0.084}S R L ^{0.071}S E ^{0.024}S ^{0.021}Y K E P ^{0.025}Y I L I E

G D L ^{0.006}S Q I R F I ^{0.019}T ^{0.019}T K W K A V N ^{0.003}S A L V ^{0.002}S A I I D ^{0.008}Y D L R V L F ^{0.003}S L N K K D ^{0.012}S A E V L ^{0.015}Y K L A E K I ^{0.016}S A K ^{0.012}S N F R ^{0.023}S I N L H D K P K F E N L K D I Q L ^{0.026}Y V V E

^{0.006}S L P N V G E K L A K K L L E K F N ^{0.085}T I E N I C K A ^{0.012}S I ^{0.027}S D L E K A L G ^{0.113}S R K R A E E I ^{0.089}Y K V L H ^{0.051}T A ^{0.014}Y ^{0.005}S ^{0.004}S D N G ^{0.198}T K K N V ^{0.014}S L A D F L A E D R N N N D

Sequence #191 — Gene Saci 0605



Sequence #192 — Gene Saci 0613

M A L G P A A M G Y D R A I T I F S P D G S L Y Q V D Y A F E A V K R G W T T L G V K T K S G V V L L A E K R K A T Q L L D V D G I E K I F M L D D H V G C T F
A G L A S D G R I L I D Y A R S Q A L Q H R L I Y D E P I S I E Y L T K V I S D V K Q A Y T Q H G G V R P F G V A L I V G G I D K G K Q P K L L M T E P S G Q F
M P Y Y A V A I G Q G G Y T A T E Y L E K N Y K E D L D I Q S T I L L A L R A L M A T L K P G E K L N Y S S V E I G Y A D V D S G T F K K L T T E E R S D L L Q

K I

Sequence #194 — Gene Saci 0620

M ^{0.227}S ^{0.118}S K ^{0.096}S ^{0.065}S ^{0.189}S ^{0.273}T I R D K W K L K K W ^{0.015}Y V I ^{0.046}T A P K V F G E A L L G ^{0.005}S ^{0.11}T P A ^{0.042}Y D I N K A L ^{0.005}S R K I E V ^{0.029}T L ^{0.011}Y D L ^{0.026}T G D ^{0.009}Y N L V ^{0.003}Y I H L ^{0.004}Y F K I L G N I ^{0.003}S G D K L ^{0.003}S

^{0.08}T I F ^{0.011}Y G H E L ^{0.021}S R D ^{0.01}Y I R ^{0.041}S L V R R K ^{0.073}S ^{0.016}S K I N A V V D V ^{0.051}T ^{0.133}T K D G ^{0.028}Y M L R V K G L V L ^{0.006}T ^{0.016}T Y R A H I ^{0.005}S Q K ^{0.002}T A I R K V I ^{0.103}S D I ^{0.013}T R K K A E E ^{0.029}S D F D Q F V Q

D V I F G K L ^{0.006}S N D I F Q E A K K I ^{0.002}Y P L R K V E I E K ^{0.167}T K L L K A P K V

Sequence #195 — Gene Saci 0624

M Q R R K Q V K E K L E N ^{0.046} Y G ^{0.022} Y I L D ^{0.028} Y L R Q G N P L D K H Q ^{0.032} Y H R N K P V V Q L I G E D ^{0.058} Y F M L M E A ^{0.027} S P L D ^{0.01} S K F E F Q L E Q R V E L G ^{0.008} S ^{0.047} T P L K I D N L V
I ^{0.023} Y E D L ^{0.007} T ^{0.067} T V A R E E L V K V L R N I I L Q K E E I F V K F F N ^{0.068} T A E P L ^{0.047} T L K L H A L E L L P N I G K K ^{0.079} T L R I I L E E R R K Q L F ^{0.113} T ^{0.019} S ^{0.044} Y K D I E ^{0.021} S R I G V
K D V V N I L E E R I I K E L Q G G E K ^{0.004} Y ^{0.031} Y L F V ^{0.007} Y P V E E I K K V V E K P I ^{0.02} Y V G ^{0.006} Y L E R L R

Sequence #196 — Gene Saci 0632

MLK ^{0.011}S NN ^{0.086}T LLKDLKV ^{0.013}Y HHL ^{0.022}S LE ^{0.008}Y VKKN ^{0.021}Y KEEEVRELLM ^{0.014}S GLAKVEKL ^{0.009}S AHIDGP ^{0.087}Y RD ^{0.014}Y LV ^{0.083}Y RAIDEIDVN ^{0.026}T IKKFLGLV ^{0.002}S E
DFGNDV ^{0.008}Y WAFRIKL ^{0.005}Y V ^{0.002}Y IWGE ^{0.003}S ENL ^{0.008}Y VKK ^{0.003}S KFDDIVE ^{0.022}Y ILEH ^{0.005}Y LAEV ^{0.009}Y F ^{0.002}S FCPHFEPNHRAES ^{0.006}V VECQWLF ^{0.002}Y DIDNVNE ^{0.026}T
VLRNL ^{0.01}S RL ^{0.028}S PRPVVIL ^{0.007}Y S ^{0.004}GHGAHL ^{0.025}Y ^{0.017}Y KL ^{0.008}S RKVR ^{0.309}T EE ^{0.043}Y KKIWQRFAKRYL ^{0.003}T ^{0.074}Q ^{0.006}Y LNKIDK ^{0.081}T ^{0.008}KS GP ^{0.022}Y VLARLP ^{0.045}T LNCKDPEN
PVR ^{0.025}T I A I F Q E G D L I E V R I

Sequence #198 — Gene Saci 0634

M K A L G **Y** A R V **S** V E D E R I E N Q I A E I **S** A **Y** A K N N G I E L M K I F **T** D V G V **S** G **S** K P A L E R E G F K **S** L M Q A **S** E L L D V K **T** I V I **Y** D L **T** R L G R

D L F D L V **T** **T** **Y** **K** **T** L L E K G **Y** N V L F V K H P E L N V **T** Q **S** **S** P I G E A L R K A L L V L L G A V A E L E R A F I R E R **T** **S** G L A R A K A Q G V K L G R K P

A D I P V E L V K R **Y** L K M G A **T** K K F I **Y** A K L V E D G F L R **Y** K E K G V E R V M **S** **Y** D W F L K R M K K E G L

Sequence #199 — Gene Saci 0635

MEWVKHL **S**^{0.008} PDEREFVVFVLR **S**^{0.009} KLPV **T**^{0.029} EIAE **S**^{0.011} LGI **S**^{0.022} RI **S**^{0.037} L **Y**^{0.01} KM **S**^{0.015} KGEIHA **S**^{0.013} DD **T**^{0.041} IIGLF **S**^{0.01} LL **S**^{0.022} DKDKLELLKLRGVFE

RVLREIDEEIARVNLKVN **T**^{0.057} QKRE

Sequence #200 — Gene Saci 0636

M M E L K H K K E E **Y** A K E L I N L L **S** R F M **S** G K I **S** **Y** P V L **S** L R L **T** G I E A K V H E **S** G F E D L V R L I H E L L K A I R E A E R K G **S** N E I N K L V R P **Y**

V E K L E **S** I A K G

0.044
0.008
0.027
0.018
0.003
0.014
0.074
0.012
0.093
0.011

Sequence #201 — Gene Saci 0637

M E L **S** K E Q R R E L L K R A V E L L G **Y** P K L **T** E I **T** N R **S** K K Q L **Y** L **Y** V R G **Y** D E R G K E I E P P D E I V N E V M K A L P V D E V V K I V H G I D **Y** **S** D V
0.056 0.118 0.014 0.121 0.071 0.006 0.03 0.052 0.049
T P **S** D I L R V M V K A **S** K D P **S** F R N I F L F F L H K **Y** F G D L I K E **T** A K E **Y** I V **T** Q E D I Q L F E K L L K E **T** K **S** **T** K **T** A K D R L N **Y** L K R A L A D L G N
0.004 0.005 0.012 0.001 0.098 0.019 0.034 0.06 0.032 0.125 0.282 0.004
T L **T** P E G L K E **Y** I L D L M A E **S** N G K A E H **T** V K A L K L F I K E V V K L R D P A L A R L L **Y** D **S** F K **T** P R G K **T** K **Y** R P M N L **S** I D I L K R I F N N I Q D
0.04 0.213 0.009 0.006 0.056 0.02 0.023 0.303 0.51 0.01 0.008
I G A K A F F L V L A E **T** G L R **T** G E V L **S** L **T** V E Q V D L E H R V I K L M K E N E **T** K R A **Y** I **T** F L H E N **T** A K W L K E V **Y** L P **Y** R E D F V **S** R **Y** L E N V K K
0.054 0.046 0.009 0.014 0.144 0.007 0.078 0.041 0.018 0.006 0.008 0.01
L A E A N P E Q G I D V **T** L W F N K F F P F R D D **S** L R F D I K N A M K R V L G R E F R L **Y** D L R **S** F F A **S** Y M I K Q G V **S** P M V V N I L Q G R V P P Q Q F R I
0.014 0.061 0.012 0.01 0.004 0.023 0.005
L Q E H **Y** F V I **S** E E E L R **Y** A **Y** E K H A P R I L
0.028 0.011 0.028 0.009

Sequence #202 — Gene Saci 0640

M L Y K T V E I K E H I I N L P K H I Y T G Y G I L D N F R N Y L Q T L N L P Q P F L V I T G P V I H Q E I F S K R I E E H I K D F K Y E V V I V N K S D L S E
A E K V E D I A R Q K G I K T I L G V G G G T V I D I A K F T A Y K I D R E F I S I P T S P S H D G I T S P F A A I K G L G K P I S I K A K E P L A I I S D V E
I L A S A P R R L I N A G I G D T L G K I T A V R D W R L A H K L R G E Y Y G D Y T A S L A L M S A R H A L S C T K I I N K D I R A G V R V L T E A L I S S G V
A M G M A G S T R P A S G S E H L F A H A I E L L Y P N L G L H G E L V A L G T I M M A Y I H G I N W R R I R R A M K K I G L P V T S K Q I G I P D E G I I K A
L T I A H S I R P E R Y T I L G D R G L T W E S A E K I A R E T G V I S

Sequence #203 — Gene Saci 0642

M K G T P S F G K M N K T P T H V R C R R C G R N S F N A R K G Y C A A C G F G R S K K I R R Y S W Q N K K V N G V R L V

Residue	P-value
T	0.385
P	0.081
T	0.328
P	0.385
S	0.01
Y	0.008
S	0.008
Y	0.005
S	0.062

Sequence #204 — Gene Saci 0643

MFEW T W H L E W Q T P Q E F H A H A I K R I L I E E R S E F Q R V I L A E L F R F G K A L I I D G K I Q S T L A D E F I Y H E S L V H P L L I S L E D P E N
I L I L G G G E G A T L R E A L R Y K S V R K V T M V D I D P V V I K F A K Q N L Q E W H M G S F D D S R T N L I I G D G Y K F V K E T N E K Y N A I I L D L T
D P I Q D S P S Q L L Y T S E F Y R D L K S I I T P N G G L V T Q A T S P S F S L D T F A I I Y S T L K T V F K N V S A G I T Y V P S F D G L W G F I Y A S D V
T N P A H L N R N Q I N D R I K E R V T G S L R F V D G E T H E M L F R V P K Y I R E K I E N E K R V S T R E N P V A T P A

0.016 0.052 0.008 0.004 0.009 0.015 0.007 0.005
0.189 0.024 0.041 0.063 0.01 0.003 0.028 0.024 0.07 0.008 0.024
0.011 0.009 0.013 0.019 0.006 0.034 0.003 0.06 0.021 0.048 0.004 0.004 0.003 0.009 0.005 0.002 0.003 0.05 0.002 0.119 0.006 0.002 0.006 0.001
0.014 0.156 0.013 0.072 0.152 0.018 0.103 0.443 0.319

Sequence #205 — Gene Saci 0646

M D ^{0.029} Y R V K D L ^{0.02} S L A E Q G R K Q I E W A E L H M P A L M E I R K R F N A E K P L D G I R I G A V L H V ^{0.019} T K E ^{0.075} T A V L V E ^{0.012} T L K A G G A E I A L A G ^{0.007} S N P L ^{0.006} S ^{0.076} T

Q D D V A A G L A K N G I H V ^{0.023} Y A W R G E ^{0.148} T E K D ^{0.046} Y ^{0.244} Y D N I R E I L K ^{0.017} Y E P H V I M D D G G D L H A ^{0.037} Y V H E N N L ^{0.004} T ^{0.001} S K I V G G ^{0.088} T E E ^{0.065} T ^{0.102} T ^{0.06} T G V I R L K A M E E

E K V L K ^{0.004} Y P V I A V N N A F ^{0.023} T ^{0.001} K Y L F D N R I G ^{0.084} T ^{0.002} G Q ^{0.011} S T I D G I L R A ^{0.007} T N I L I A G K V A V V I G ^{0.002} Y G W V G R G I A ^{0.005} S R F K G M G A R V I V V E ^{0.004} S ^{0.013} S P F R A

L E A L M D G F D V M ^{0.04} T M N R A ^{0.008} S E I G D I F V ^{0.027} T ^{0.014} T G N L N V V ^{0.004} S R D H I L R M K D G A V L A N ^{0.002} S G H F N V E I D V K G L K E I ^{0.011} S V E ^{0.088} T R E V R Q N L E E ^{0.01} Y K

L R N G K R I ^{0.011} Y L L A D G R L V N L V A A E G H P ^{0.008} S E V M D L ^{0.004} S F C N Q A L ^{0.003} S V E H L I K N K G K L E N K V ^{0.024} Y N V P I E I D E Q V A R L K L K A L G I E I E E L

^{0.075} T I E Q K E ^{0.006} Y I K Q W K ^{0.001} Y G ^{0.117} T

Sequence #206 — Gene Saci 0650

MAKLIPLVHNVTSAQKLIDFAKLVFSLNINYLVA TKVGGVASN VGVPEVNKLAFKLGKTFIFSLPDLKDAIELLS PDLVIL
LTSQAQKILETQVFNDKNKIMLVFSGIENGFSKIDLSLGENYKLRNIDVEISPIASIAVIHSCILHEEFKNG

Sequence #207 — Gene Saci 0655

M Q N Q N V K **Y** C E L C G **S** P I K G K G F **T** V **S** Y E G **S** I I **T** V C **T** N C F N K I K N **Y** A K I V N L K K E E D K K R I K **T** **S** P N K K **Y** **T** E V E L D I V E E **Y** **Y** K I
I K E A R E R L K M **S** Q Q L A Q A L K V **S** E N I I K R F E **S** G K L K P **T** I Q Q A K Q L E R I L G I K L L V P I E G E E E **S** N P Q K D L G L **T** L G D I V N I R E
G K K

Sequence #208 — Gene Saci 0658

M D I K I T L K G V N E S E L Q N A K F I T G F R T I G E V G Y I A T R Y I A L K M K M K R I G F I T T K Y L R D V T F L D E Y G I A T P F E L F Y D N D N K I
L V L L N H L L P L P R E A N M F S E K I I K W L K R I N I S N A F Y I G G L D K R Y R T N N E K L R W I K T S N S T I N L N F P L M E K Q L L M I G P L A L F
T I Y S E I E D L P A T V L L P Y A D R D R I D P G A A A T V V E E L A K I I G V N I D V T E L Y E D A K K I E E E L Q K Q L E L I Q K E I N R G A S D R V Y M

Sequence #209 — Gene Saci 0660

M **S** 0.073 **S** 0.082 **S** 0.065 G D L G **S** 0.012 L L D K **T** 0.017 I I V K L N N N K V **Y** 0.014 **S** 0.004 **S** 0.008 **S** 0.006 F E V **S** 0.01 P F M V **S** 0.003 L L N A K D N D N N M **Y** 0.004 **Y** 0.002 K V I I N G N M I **T** 0.004 E I L V K **S** 0.006 A P L F D P R

E F A D V I **T** 0.049 K E L N L R **T** 0.026 **T** 0.046 D I K V **Y** 0.023 E E A G V V **T** 0.012 I L D R V K V **T** 0.05 E N G V E G **S** 0.007 G P L A Q K V **Y** 0.047 D I F N **S** 0.008 **Y** 0.012 I D K K K K G **S** 0.249

Sequence #210 — Gene Saci 0662

M E E L P A T A I G I K T K D G V V L A A E R R L S Y G D F V L S K S A R K V F K L G R F G I A G A G I V G D I Q T L T R I M N V E I K Y Y E M Y N S R K I S A
R A A A K L L S V I L Y Q N K V L P Y I S E L L F G G V D E D G P K L F I L D P I G S L I E D S Y A A V G S G A R V A I G V L E A E Y N E S L T S E A A K E L A
I K S M K S A V E R D V M S G D G I D I L I I N K N N I Y E D F I K I

Sequence #211 — Gene Saci 0664

M T E S T N I D K F I V I S D L K S R G K K P V E L N N Y I L I K D N E Y V V M V L N E N N K I N A K E L E R F L S F S S S K I N K N S V I A V V D K Y G D V T Y
Y F L S E V R L N K K

0.014
0.004
0.038
0.012
0.022
0.015
0.03
0.018
0.006
0.009
0.005
0.023
0.029
0.029
0.006
0.006

Sequence #212 — Gene Saci 0665

M E C P E C K **S** R E I V W D **Y** K C G N L V C **S** N C G L V L D K I **Y** D D H N **Y** I D N E I M I K I Q **S** **T** **F** **T** N V **T** I L **T** **Y** K D K I E K I D K I I K F N **S** K L **S** K K Q

L P K **S** R K L L N **Y** N N A I I R **S** **S** **S** A **T** I I K **Y** L D F N E K L L L V **Y** D I I D **T** I P I L N N I **S** I K **Y** K V A L A M **Y** **F** **Y** D K K **T** F N K I M N N L E I **S** N K **Y** F

N K I L R R L N **S** K E K M I I M E K V I N L L E Q R V P **S** Q **T** L K **T** M

Sequence #213 — Gene Saci 0667

MKNRLPAVILLFAGIFVLLN **S**LNII **T**FSRLFLVLI **S**AFLLILFILVLF **S**KYKLF **T**KTKNIIILNFEIKN **S**INKININGK **T**
 IA **Y**IGFKLVGKKNVNDQQLD **Y****S**EEELKQLVE **T**ISRHKDRRLKIVIL **T****S**FDPLPG **S**GIAF **Y****T**EV **S****S****Y**KDEDFIKEVN **T**LKN
 MLE **S**VAPHI **S**LEI **S**QVNLNMFVPLMKV **T**GALI **Y**NG **Y**VFEKR **Y****T**IPD **S**EILLQNHDIELGEVINN **Y**GIQ **T**GFN **S**KDVL RHI
SIFG **S****T**G **S**GK **T**NSAALI **S**KE LLKKGFDVVILDWHGE **Y**KHILPEFKV **Y****S**RRNIL **T**LNPIPLDEQD **T**EDIIDIFKD **T**LEL **T**E
 PQ **S**FIL **Y**LVIEQLKR **Y**RKLD **T**DTLKIILE **S**IQ **T**D **S**YMIRDIKFALGRKLYLL **T**TP LARKLFSLD **T**GY **T**YYDIGEKL **S**GGN
 IIDL **S**FI **Y**NLKLRRLY **S**LFMMKFLF **T**FYER **S**NN **S**DRKILLVIEEAHN **Y**FNNKNEMLKRALQEIRK **Y**NV **S**LCII **T**Q **S**SP **S**SI
 DEEVIKN **T**NIKIIH **T**IK **S**NIDKRII **S**DSL **S**LDKDQLQLLDKLDVGEAILV **S**PNIR **S**HS **S**IIKVKKV **T**

Sequence #214 — Gene Saci 0668

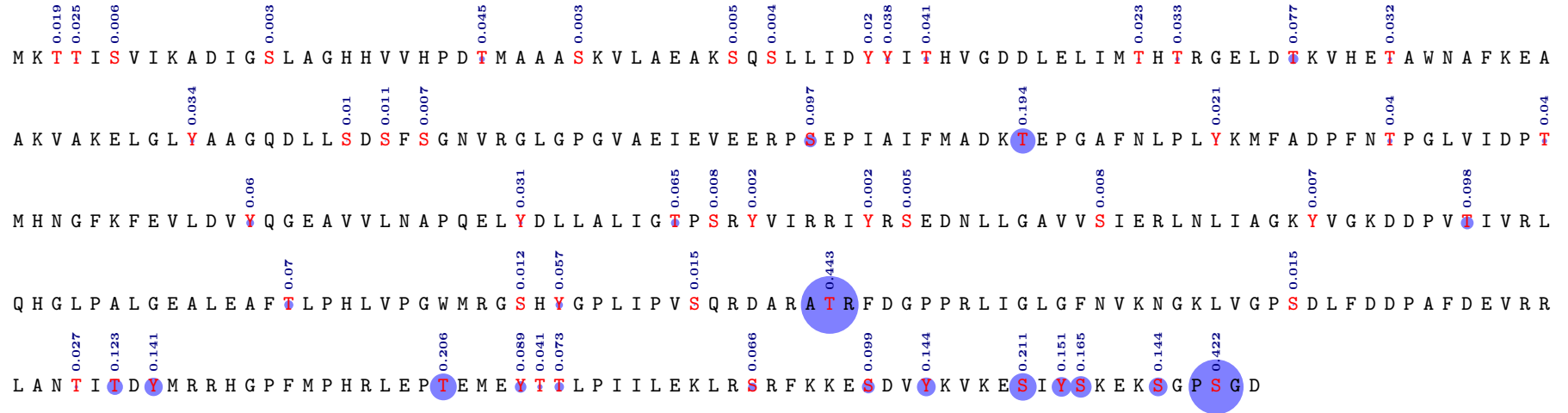
M V A K T Y K I I S I D M K D Q S D L K K F I Y V D E R C V S Q V L R E L P D E A F I S H A C E L Y K Y L I Q Y K N I R I K S R T V L F L L L L L G T D N I S K
A L N I M K E K P S G T M Y Q I I C C N T E K G H V N K S F N L N K K L R E L L S E N A I H S L E W L S

Sequence #215 — Gene Saci 0669

M ^{0.014} S V K I R L K G P L A ^{0.045} T R L G R D E F V I ^{0.007} S L K A D N L L D I L K E L D K E E K L L I N G N K I R ^{0.007} S G ^{0.} Y I L L I N G I D ^{100.0} Y R L L N G K L K D G D V V D I L P I

N H G G

Sequence #216 — Gene Saci 0671



Sequence #217 — Gene Saci 0672

MRVAVIN^{0.012}Y^{0.015}DCPKDKRLECI AFCPINK^{0.006}SG^{0.007}SKAIEL^{0.009}SEIVK GKPII^{0.003}YEE^{0.018}TCIGCGICIKKCPFDAIDIVNLPDEY^{0.022}GKDE^{0.136}T
 HR^{0.014}YK VNGFKLFGMI^{0.023}TPKKG^{0.009}SIIGILGKN^{0.015}SG^{0.137}TGK^{0.007}ST^{0.07}ILRIL^{0.027}SGELIPNFGNPQEV^{0.405}LT^{0.008}KDQVLD RFKGKEI^{0.014}YN^{0.002}YFQ^{0.005}SL^{0.002}YNNKL
 KVVHKIQ^{0.01}YVE^{0.014}YAS^{0.007}SK^{0.006}YLKG^{0.011}SVKDLL^{0.109}T^{0.001}KVDQRGKIDEVK^{0.01}SMLNL^{0.006}TPFWEKDV^{0.006}SVL^{0.011}SGGELQKLLV^{0.008}SA^{0.022}SLLRDADV^{0.03}YLFDEP^{0.01}S
 S^{0.015}Y^{0.059}LDIRERINLAIAIREL^{0.087}T^{0.003}KGR^{0.036}Y^{0.001}TIVVEHDLIVLD^{0.001}YLADVIHII^{0.003}YGK^{0.006}SS^{0.006}V^{0.014}YGRV^{0.036}SK^{0.007}SY^{0.006}SS^{0.013}SRVGINNFLHG^{0.005}YLP AENIQIR
 S^{0.005}DAIKFNLREL^{0.089}T^{0.019}EELDNPHAV^{0.019}T^{0.004}KVIW^{0.008}TAMEKQLNGF^{0.008}SL^{0.015}SEEGNAREGEIIGIVGPNIGK^{0.012}TT^{0.044}FMRILV^{0.002}SEI^{0.451}TPDHGNVL
 T^{0.072}EGL^{0.083}TL^{0.008}SY^{0.014}KPQRLAPN^{0.016}YEG^{0.026}TVQE^{0.034}YLENVRKDIL^{0.012}SS^{0.005}SS^{0.012}SWFFEEVIKRLNLHRILE^{0.009}SNVRDL^{0.019}SGGELQKL^{0.015}YVAGALAKEADI
 V^{0.068}VIDEP^{0.015}SS^{0.013}Y^{0.069}LDVEERY^{0.034}IVAKAIKRV^{0.109}S^{0.021}RERK^{0.03}SV^{0.009}TFVVDHDLAIHD^{0.009}YIADRIMVF^{0.006}SGVPG^{0.012}SKGIAR^{0.012}SPQ^{0.008}SLA^{0.08}TGMNQFLKEL
 GI^{0.148}T^{0.197}FRRD^{0.058}SD^{0.021}SGRPRVNKFG^{0.083}S^{0.477}YLDRLQKE^{0.322}T^{0.095}GE^{0.049}Y^{0.203}YS^{0.153}MKI^{0.165}S^{0.165}REEEST

Sequence #218 — Gene Saci 0678

M V ^{0.014} T G I ^{0.002} Y Q K L I I ^{0.013} Y ^{0.003} S V E L ^{0.039} T ^{0.047} T E Q K R Q L L K R A V E L L G ^{0.007} Y P K L ^{0.072} T Q I ^{0.836} T N R ^{0.004} S K K Q L ^{0.027} Y L ^{0.054} Y V R G ^{0.025} Y D K R G K E I E P H D E V V ^{0.027} T E V M K A L P V D E

V V K I V H G I N ^{0.001} Y ^{0.005} T D V P L Q I F

Sequence #219 — Gene Saci 0685

M S Q K P H L N L I V I G H V D H G K S T L I G R L L M D R G F I D E K T V K E A E E A A K K L G K D S E K Y A F L M D R L K E E R E R G V T I N L S F M R F E
T R K Y F F T V I D A P G H R D F V K N M I T G A S Q A D A A I L V V S A K K G E Y E A G M S A E G Q T R E H I I L S K T M G I N Q V I V A I N K M D L A D T P
Y D E K R F K E I V D T V S K F M K S F G F D M N K V K F V P V V A P D G D N V T H K S T K M P W Y N G P T L E E L L D Q L E I P P K P V D K P L R I P I Q E V
Y S I S G V G V V P V G R I E S G V L K V G D K I V F M P V G K I G E V R S I E T H H T K I D K A E P G D N I G F N V R G V E K K D V K R G D V A G S V Q N P P
T V A D E F T A Q V I V I W H P T A V G V G Y T P V L H V H T A S I A C R V S E I T S R I D P K T G K E A E K N P Q F I K A G D S A I V K F K P I K E L V A E K
F R E F P A L G R F A M R D M G K T V G V G V I I D V K P R K V E V K

Sequence #220 — Gene Saci 0693

M L D ^{0.132} T E S ^{0.017} R W A I A E ^{0.004} S F F K ^{0.094} T R G L V R Q H L D ^{0.004} S F N D F L R N K L Q Q V I ^{0.044} Y E Q G E I V ^{0.024} T E V P G L K I K L G K I R ^{0.022} Y E K P ^{0.172} S I R E ^{0.05} T D K G P M R E I ^{0.525} T P
 M E A R L R N L ^{0.225} T Y S S ^{0.025} P I F L ^{0.011} S M I P V E N N I E G E P I E I ^{0.013} Y I G D L P I M L K ^{0.01} S V A D P ^{0.008} T S N L P I D K L I E I G E D P K D P G G ^{0.137} Y F I V N G ^{0.014} S E K V I I
 A Q E D L A ^{0.029} T N R V L V D ^{0.028} Y G K ^{0.005} S G S ^{0.003} N I T H V A K V ^{0.019} T S S ^{0.029} A A G Y ^{0.005} R V Q V M I E R L K D ^{0.004} S T I Q I S F A ^{0.016} T V P G R I P F A I I M R A L G F V ^{0.002} T D R D I V ^{0.019} Y A V
 S L D P Q I Q N E L L P ^{0.005} S L E Q A ^{0.017} S S I ^{0.031} T S ^{0.023} A E E A L D F I G N R V A I G Q K R E N R I Q K A E Q V I D K ^{0.128} Y F L P H L G ^{0.031} T S P E D R K K K G ^{0.109} Y Y L A ^{0.087} S A V N K I
 L E L ^{0.009} Y L G R R E P D D K D H ^{0.084} Y A N K R V R L A G D L F ^{0.021} T S L F R V A F K A F V K D L V ^{0.008} Y Q L E K ^{0.062} S K V R G R R L S L ^{0.025} T A L V R A D I I ^{0.069} T E R I R H A L A ^{0.022} T G N
 W V G G R ^{0.026} T G V S ^{0.002} Q L L D R ^{0.003} T N W L ^{0.003} S M L S ^{0.006} H L R R V V ^{0.015} S S L A R G Q P N F E A R D L H G ^{0.011} T Q W G R M C P F E ^{0.105} T P E G P N ^{0.337} S G L V K N L A L L A Q V ^{0.006} S V G I N E
 S V V E R V A ^{0.004} Y E L G V V ^{0.02} S V E D V I R R I ^{0.018} S E Q N E D V E K ^{0.091} Y M S W S K V Y L N G R L L G ^{0.029} Y Y E D G K E L A K K I R E ^{0.014} S R R Q G K L ^{0.005} S D E V N V A ^{0.029} Y I A ^{0.007} T D Y
 L N E V H I N C D A G R V R R P L I I V N N G ^{0.041} T P L V D ^{0.039} T E D I K K L K N G E I ^{0.058} T F D D L V K Q G K I E F I D A E E E E N A ^{0.012} Y V A L N P Q D L ^{0.415} T P D H ^{0.023} T H L E I
 W P ^{0.002} S A I L G I I A ^{0.005} S I I P Y P E H N Q ^{0.009} S P R N ^{0.267} T Y Q ^{0.045} S A M A K Q ^{0.005} S L G L Y A S N Y Q I R ^{0.006} T D T R A H L L H Y P Q M P L V Q ^{0.047} T R M L G V I G ^{0.004} Y N D R P A G A N A
 I L A I M ^{0.003} S Y T G Y N M E D ^{0.005} S I I M N K ^{0.023} S S I E R G M Y R ^{0.035} S T F F R L ^{0.028} Y S T E E V K Y P G G Q E D K I V ^{0.009} T P E A G V K G ^{0.033} Y K G K D ^{0.019} Y Y R L L E D N G V V ^{0.048} S P E V
 E V K G G D V L I G K V ^{0.053} S P P R F L Q E F K E L ^{0.04} S P E Q A K R D ^{0.608} T S I V ^{0.033} T R H G E N G I V D L V L I ^{0.019} T E T L E G N K L V K V R V R D L R I P E I G D K F A ^{0.398} T R H
 G Q K G V V G I L I D Q V D M P ^{0.005} Y T A K G I V P D I I L N P H A L P ^{0.03} S R M ^{0.004} T I G Q I M E A I G G K Y A A L ^{0.099} S G K P V D A ^{0.46} T P F L E ^{0.012} T P K L Q E M Q K E I L K L G
 H L P D ^{0.008} S T E V V ^{0.145} Y D G R ^{0.159} T G Q K L K ^{0.079} S R I L F G I V ^{0.005} Y Y Q K L H H M V A D K M H A R A R G P V Q I L ^{0.012} T R Q P ^{0.268} T E G R A R E G G L R F G E M E R D C L I G F G ^{0.404} T
 A M L I K D R L L D N ^{0.005} S D K A V V ^{0.004} Y I C D Q C G ^{0.005} Y V G W ^{0.012} Y D R ^{0.047} S K N R Y ^{0.007} V C P V H G D K ^{0.002} S V L H P V ^{0.009} T V S Y A F K L L I Q E L M ^{0.046} S M V I ^{0.001} S P R L I L G E K V N L
 225

Sequence #221 — Gene Saci 0695

M T^{0.017} T^{0.045} Q V P K R L R Q P I V V V L G H V D H G K T^{0.02} T^{0.041} L L D K I R G T^{0.145} A V V K K E P G E M T^{0.113} Q E V G A S^{0.013} F V P T^{0.083} S^{0.021} V I E K I S^{0.028} E P L K K S^{0.024} F P I K L E I P G L L F

I D T^{0.161} P G H E L F S^{0.004} N L R K R G G S^{0.016} V A D I A I L V V D I V E G I Q K Q T^{0.02} L E S^{0.011} I E I L K S^{0.005} R K V P F I V A A N K I D R I N G W K A Q D T^{0.103} Y S^{0.021} F L E S^{0.007} I N K Q E

Q R V R D N L D K Q V Y^{0.018} N L V I Q L A E Q G F N A E R F D R I R D F T^{0.092} K T^{0.089} V A I I P V S^{0.003} A K T^{0.1} G E G I A E V L A I L A G L T^{0.052} Q N Y M K N K L K F A E G P A K G V

I L E V K E L Q G L G Y^{0.004} T^{0.026} A D V V I Y^{0.008} E G I L R K N D I I V L A G I D G P I V T^{0.063} K V R A I L V P R P L Q D I K L A K S^{0.006} D L A Q I D E V Y^{0.075} A A S^{0.007} G V K V Y^{0.014} A Q N L

E T^{0.032} A L A G S^{0.011} P I Y^{0.033} V A E N N E E V E K Y^{0.007} K K I I Q E E V S^{0.012} A V R Y^{0.005} N S^{0.004} S^{0.006} V Y^{0.004} G I I V K A D S^{0.889} L G S^{0.021} L E A I V S^{0.019} S^{0.013} L E R R N I P I R L A D I G P I S^{0.02} K R D I T^{0.234}

E A E I V A E K A K E Y^{0.028} G I I A A F R V K P L S^{0.014} G I E I P E K I K L I S^{0.009} D D I I Y^{0.024} Q L M D N I E K Y^{0.004} I E D I K E S^{0.047} E K R K T^{0.081} L E T^{0.04} I V L P G K I K I I P G Y^{0.005} V F

R R S^{0.024} D P V I V G V E V L G G I I R P K Y^{0.007} G L I K K D G R R V G E V L Q I Q D N K K S^{0.033} V D R A S^{0.069} K G M E V A V S^{0.012} I K G N I M V G R Q V E E G E V L Y^{0.221} T^{0.134} D V P K E

D L Q I L M E K Y^{0.028} K D I V T^{0.098} D D M I E V I K E I I R I K R T^{0.206} Q D A T^{0.063} Y^{0.012} G L G L Q F Q

Sequence #222 — Gene Saci 0702

M I I R L Q N N V Y A I K G V Y Y I Y L L A I D N K N L L I I D S S N G E D T G I V L D G I L E I K S K T N Y N P S F L V L T S C K K E V A G G A A K I S S F L
N I P I L A S H I D A S S I R K G M C L D E E Y E P A D V S I E I K D I K V L I N G L N N L T F L R A K T P S K G S L V I K Y N N T L F S G A T K I S G I A E K
I G Y V C N A F E F S K V E E D W F L R R R K E N E K A L E Y K

Sequence #223 — Gene Saci 0706

M D D D I C V L E W R Y G S K E M R Q L F S R K N I V K T M A E V E I A L L Y A L S K L G L I K E T D V K K V E D I I D K I D L N R V D E L E R K L G H D V M A
 L T V H M A E L S G E A G D F I H F G A T S N D I I D T T N A I I V K K A L E I V K K K L R D V I T I L I E Y S R K Y K D T I M V G R T H G Q H A L P I T L G F
 K F A N Y V Y E Y S R S L E R I Y E L E K R V V R I K M A G A V G T M A A W K G H G T T I E K Y V S E R L G I P S H I I T Q V T P R D G F A E L I S D L A I L
 G S Q L D R F A L E L R E L M R P E I R E L A E G D A S K R V G S S T M P Q K E N P V N A E K I S G L A K V L R G L V I S E M E N I P L W H E R D L T N S S S E
 R I I I S H S F L I I D E M L D S M L K I L K N L V V N Q D Q M Q K N L S L S K G L T M A E S L M I N L T L N G M P R H K A H E L T M E L S R I A S N T G K S L
 L E V A K E N E T V M K I I G D E N K I K E V L N P S K Y L G E Y E K L I E R A I S Y A E E I L N T Y V

Sequence #224 — Gene Saci 0707

M D T V L T I G S H S S L Q I L H G A K K E G F K T V Q I T P K N R V N F Y S Q F S F I D E I L G Y N N E D E A V E F V N K Y S N R G A L I P H G S L V E Y V G
 S E R V S K I T K I F G N R N L F A W E S N Q K K K M S L L R R S G I Q V P E E F E N V E D V D R L V I V K L P G A K G G K G Y F I A K T K S E V K E G L N R
 L I S S K L I K D V N D V I I Q E Y V I G V P M Y F Q F F Y S P I L N R L E I T G I D I R Y E T N V D G L R R L P E N L A D P T F V V V G N I P A V A R E S L L
 P K V Y D Y G M S F V N T V K E V V P P G M I G P F C L E S V V K D D G S I V V F E F S G R I V A G T N L Y I A G S P Y S W L Y W D E P M S V G R R I S R E I R
 L A L N S N K L E V I F T

Sequence #225 — Gene Saci 0710

M L ^{0.013} Y D V V I I G A G P A G L L A A ^{0.006} Y E F ^{0.033} T T F ^{0.015} S T ^{0.003} K E R L K V L L V D K G L R A L R R ^{0.16} T C P L L ^{0.224} T P K E K C ^{0.118} T F C E P C N I ^{0.013} T Y ^{0.006} G I G G A G A ^{0.005} Y ^{0.006} S ^{0.007} S G I I N L

R P D V G G E L H E I M R ^{0.006} S W D K A Q E L I N ^{0.011} Y V D D I L V K F G A P K D R L F E P N M E R ^{0.085} T R E I Q K R A A K V G A E F V P I R Q R H I G ^{0.024} T D K ^{0.104} T P M V I E N

I Q K ^{0.015} Y I E N N G I N V A E L ^{0.023} T E V F E I Q K K A D H F V L K ^{0.104} T N R K E E I E A K ^{0.087} T I L A A P G R A G A K W F L D Q A K K L G V D M A P G P L D I G V R V E V E

A F V M E E L ^{0.034} T ^{0.004} S A V W D P K V I L ^{0.006} Y ^{0.005} S K K ^{0.019} Y D D K V R ^{0.144} T F C V N P R G F I M K E V ^{0.083} Y D D R ^{0.146} T I G V N G Q ^{0.039} T F A D K K ^{0.004} S N N ^{0.043} T N F A F L ^{0.028} T ^{0.064} T I K L ^{0.008} S D P L E D ^{0.144} T

V E ^{0.019} Y G K ^{0.026} S I A R L M ^{0.092} T R L G G E K P I I Q R L I D F E K G R R ^{0.185} S ^{0.582} T W E R I ^{0.13} S ^{0.025} S ^{0.565} T V K P ^{0.196} T L R E V ^{0.438} T P G D I ^{0.006} S M G L P ^{0.046} Y R V V ^{0.017} S N L I E G L E R L D N I A P G

M ^{0.043} Y ^{0.005} S ^{0.005} S N ^{0.118} T L L ^{0.019} Y A P E I K ^{0.023} Y ^{0.011} Y ^{0.007} S M K A V V D ^{0.003} S N M E ^{0.009} T V V D N L F V A G D G V G L ^{0.004} S R G I N I A A A ^{0.033} T G I L A A R G I G R K L G L L

Sequence #226 — Gene Saci 0712

M K K I ^{0.032}Y ^{0.012}S H P H A I Q E A K E K L E E L G L H N I I P V E ^{0.008}S ^{0.025}T ^{0.015}S I A A K ^{0.02}Y A ^{0.027}S E D K D A A A I C ^{0.004}S R ^{0.}Y A A Q I N N L N I L L E N V E N G V N L ^{0.005}T R F V I I ^{0.003}S N
R F K I ^{0.003}S G E K ^{0.02}T M I F F ^{0.039}T I P H K P G ^{0.005}S L ^{0.007}Y K V L E R F ^{0.007}Y V N N I N L ^{0.01}T M I ^{0.005}Y ^{0.005}S R P L K V E P W K ^{0.006}Y ^{0.014}Y F ^{0.01}Y V E F E G G L N E D K V D ^{0.014}S A I K E I ^{0.008}S Q I ^{0.022}T L ^{0.009}S V
K I K G ^{0.02}S M ^{0.021}S K L Q ^{0.023}Y P V

Sequence #227 — Gene Saci 0717

MKE ^{0.006}Y I ^{0.052}KK ^{0.011}Y D ^{0.011}KL ^{0.016}F ^{0.045}SL ^{0.015}SP ^{0.022}SY ^{0.054}QAVRL ^{0.012}SN ^{0.017}KY ^{0.022}GF ^{0.012}LD ^{0.017}YM ^{0.022}VER ^{0.016}Y I ^{0.076}H ^{0.013}MF ^{0.108}DS ^{0.006}LE ^{0.007}DA ^{0.117}ES ^{0.013}FM ^{0.013}RC ^{0.013}ND ^{0.013}LV ^{0.013}TC ^{0.013}CS ^{0.013}ME ^{0.013}Y ^{0.013}RL ^{0.013}EE

KNFELEK ^{0.04}V ^{0.04}Q ^{0.04}W ^{0.04}LP ^{0.04}H ^{0.04}GY ^{0.04}RV ^{0.04}IK ^{0.04}KK ^{0.04}PN ^{0.04}K ^{0.04}PS ^{0.04}LG ^{0.04}AT ^{0.04}VE ^{0.04}YL ^{0.04}NG ^{0.04}YY ^{0.04}YI ^{0.04}QGLA ^{0.04}SM ^{0.04}VPA ^{0.04}Y ^{0.04}VL ^{0.04}NP ^{0.04}HEED ^{0.04}TV ^{0.04}LD ^{0.04}MA ^{0.04}AA ^{0.04}PG ^{0.04}GK ^{0.04}TS ^{0.04}QL ^{0.04}AQL ^{0.04}MKNK

GLIIA ^{0.063}T ^{0.903}E ^{0.085}K ^{0.008}SR ^{0.008}RR ^{0.008}AR ^{0.008}SL ^{0.008}IN ^{0.008}RM ^{0.008}H ^{0.008}ARN ^{0.008}I ^{0.008}L ^{0.008}IR ^{0.008}SD ^{0.008}AT ^{0.008}LS ^{0.008}TK ^{0.008}TR ^{0.008}IK ^{0.008}FS ^{0.008}KILL ^{0.008}DAPC ^{0.008}SG ^{0.008}E ^{0.008}GI ^{0.008}IF ^{0.008}KD ^{0.008}TER ^{0.008}R ^{0.008}KK ^{0.008}TS ^{0.008}SL ^{0.008}SDL ^{0.008}KN ^{0.008}FS ^{0.008}L

^{0.041}T ^{0.05}QM ^{0.005}G ^{0.01}LL ^{0.003}T ^{0.029}IG ^{0.004}Y ^{0.004}DL ^{0.004}LD ^{0.004}K ^{0.004}NG ^{0.004}IL ^{0.004}V ^{0.004}YS ^{0.004}TC ^{0.004}SI ^{0.004}AP ^{0.004}EE ^{0.004}DEL ^{0.004}V ^{0.004}V ^{0.004}NY ^{0.004}G ^{0.004}IE ^{0.004}EL ^{0.004}GF ^{0.004}RA ^{0.004}IK ^{0.004}IS ^{0.004}GY ^{0.004}P ^{0.004}AD ^{0.004}K ^{0.004}G ^{0.004}IS ^{0.004}E ^{0.004}FR ^{0.004}GV ^{0.004}K ^{0.004}FS ^{0.004}HD ^{0.004}V ^{0.004}NN ^{0.004}C ^{0.004}IR ^{0.004}F ^{0.004}YP ^{0.004}HE

^{0.078}H ^{0.078}TE ^{0.078}GF ^{0.078}FC ^{0.078}AL ^{0.078}Q ^{0.078}K ^{0.078}D

Sequence #228 — Gene Saci 0719

MLKRR **T** I A I L **T** D **Y** G V **S** D N **Y** N G **T** L E G V I R K I N P D I D I **T** **Y** I **T** P N A K N F N I F **T** G A **Y** L L N **T** **S** **Y** R **Y** F K K N **T** I F L V I V D P G V G **T** Q R
N A I L V K **T** N N **Y** **Y** F V A P D N G V L **Y** P **T** I V E D N I D K I I R I **S** N K K F **Y** L **S** E **S** I **S** N **T** F H G R D I F A P V A **S** **Y** I **S** V G V D L N V F G E E I **S** K **S** E
I V K L D F **S** **Y** **T** L E R I N E N K V K A C G K I V **Y** I D H F G N I A **T** **T** I R N V K L R **T** G E K A L V **S** L R D K Q L E L R V V R **T** F A E G K E N E L V L **Y** **S** N G **Y**
G F I E I G I N M **S** **S** A **S** N I L G V K E G E D V C I E A **Y** I Q E D **S** N H **S** **T**

Sequence #229 — Gene Saci 0720

M H R G L Y P G R F Q P F H I G H L E V V K W S M K H V D E L I I V I G S A Q E S H T L S N P F T A G E R I E M I R R T L D K E N L D L S K V Y I I P I P D I M
M N S V W V S H I K T F A P N F D V I I S R N P L V N R L F K E A N V E V L Q P P P F D R H K Y N S T L I R R Y I I E G N E E W K K L V P K S V L D Y L L E I H
G D E R L R S I A G L

0.003
0.002
0.003
0.005
0.041
0.006
0.202
0.18
0.005
0.009
0.002
0.002
0.046
0.003
0.011
0.004
0.133
0.007
0.008
0.017
0.002
0.038

Sequence #230 — Gene Saci 0722

M ^{0.062} S D I I D ^{0.033} S I L ^{0.027} S ^{0.1} L K K G R I F R ^{0.041} S R D L L L P D ^{0.025} Y I P E A L P H R E D Q I R K L V E I L A P I ^{0.094} R ^{0.011} S E K P ^{0.005} S N V F I ^{0.008} Y G L ^{0.038} T G ^{0.015} T G K ^{0.022} T A V ^{0.047} T R F V L ^{0.001} S N L
 Q R K F P ^{0.002} S K F ^{0.03} T F I ^{0.014} Y I N ^{0.039} T R Q N D ^{0.086} T P ^{0.012} Y R I L A D V L E A L G I R V P F ^{0.129} T G L ^{0.005} S T ^{0.023} A E L F K R F V K R L N ^{0.014} T F Q ^{0.007} T I V L I ^{0.02} T L D E I D A L V K K H G D D I L
 Y R L ^{0.007} T R I N Y ^{0.005} D L ^{0.005} S T ^{0.003} S K V ^{0.007} S V I G I ^{0.082} T N D V K M V E N L D P R V K ^{0.048} S ^{0.024} S L G E E E I I F P P ^{0.008} Y N A E Q L E D I L K Q R ^{0.011} S K I A L N E G V I ^{0.01} S E E V I K L C A A
 L A A R D H G D A R R A L D L L R V ^{0.07} S G E I A E R E G R D L I ^{0.155} T A D D V N R A R I E L E R D R V ^{0.062} Y E V I ^{0.005} S T ^{0.005} L P F H ^{0.002} S K L V L I ^{0.002} S I V L G L N ^{0.002} S N ^{0.002} S T ^{0.007} L T ^{0.008} T T G E
 V ^{0.009} Y D I ^{0.01} Y I K L A G K L G V E ^{0.004} S I ^{0.096} T Q R R V ^{0.021} S D I I N E L D M V G I I ^{0.118} T A R V V N R G R ^{0.005} Y G K ^{0.043} T K E I ^{0.015} S L A V ^{0.017} S K D I V I K ^{0.091} S I K E ^{0.067} S D E R I G ^{0.231} S L W ^{0.098} S R

Sequence #231 — Gene Saci 0728

M K F R G K V A R Y I S E I L E E G K T L H F S L F D P D K I F D L D S L H D I A S K L I E A G T D V F L I G G T L G I S Q D K L D N I L S I L E E F S I P L I
I F P S N V N L I S N K A D A I L F L S L L N S D D L Y Y I V G A Q I V A A P I I K R I G L E V L P T A Y L I I G H G G T A G H I G R A R V I P Y D N I E L I V
S Y S L A A N Y M G M K Y I Y L E A G S G A S E T V K P E A I K V V K N T V K D G V V I V G G G V T S E E R A R N L V L A G A D I I V T G N V I E R D H Q K A L
K I I K E I K S I R R T S N A I K

Sequence #232 — Gene Saci 0729

M P **S**^{0.224} **S**^{0.189} K K K K E D V P I A **S**^{0.042} M A G L V R **Y**^{0.085} **Y**^{0.04} **E**^{0.04} **S** E K E K V K I **S**^{0.019} P K V V V V A **S**^{0.006} I V L I A G V I I A **S**^{0.003} F I I P P P L

Sequence #233 — Gene Saci 0731

M A ^{0.005}S A I V L I N ^{0.027}T D A G G E E E V F E K L K ^{0.005}S L N E V ^{0.019}T E V H I V ^{0.019}Y G V ^{0.026}Y D I V A K I E A D ^{0.061}T L D K L K D F V ^{0.041}T N ^{0.135}T V R K L P R V R ^{0.026}S ^{0.082}T L ^{0.025}T M I V V E G K ^{0.013}S L

V K K

Sequence #234 — Gene Saci 0743

MLRRLVVGQED^{0.037}YFEIP^{0.004}^{0.087}STLID^{0.011}YLRNKV^{0.017}YFEVVFD^{0.029}TL^{0.054}YDGY^{0.014}PEIE^{0.017}YNGKRIKVD^{0.026}^{0.083}^{0.028}SSDIEALVKRLVAD^{0.067}TKD^{0.309}TVND^{0.17}TDK^{0.02}SSF

PK^{0.018}^{0.003}SYKWDRI^{0.054}^{0.007}LSGALV

Sequence #235 — Gene Saci 0745

M K K K K N I I M V G N F **T** I D V F N N D N E K I G G **S** P I **Y** **S** G F A V **Y** M L G G I P H V V **S** **S** I **S** N A **Y** E N I L P P F L **S** **K** **Y** K I F N **S** N N M **T** **T** F K L I **Y** **K**
 E N G K R D L L L V **S** **M** **S** E R K L **S** I E N H K **S** D G L I I N P V C N E I D V N I L **S** N I **S** F P **S** A V D I Q G F V R I C E E N **K** **Y** V I L G N Q F K L P **Y** N R N **Y** **L**
 V V H A N **Y** D E L **S** **K** **S** **M** **Y** **T** V **S** D L I **T** **T** G F K E V L V **S** **Y** D E D G F I **T** **F** **T** R N **S** **S** **Y** K F K P E N I G P **Y** **K** **T** **G** **T** G D V L L A **S** **Y** F M **Y** R L N G I D P E **K** **S**
T **Y** L A G K F **T** E W F **S** N **S** G **Y** R L L **S** D I G

Sequence #236 — Gene Saci 0746

M ^{0.024}S ^{0.043}S ^{0.113}T ^{0.081}T R W ^{0.085}T P K W K ^{0.018}T V K I K L N D K D I D I C F D E I ^{0.062}T K L ^{0.}Y A C P I C A P E C K K G N ^{0.152}T P N ^{0.02}Y G A ^{0.015}Y F F ^{0.004}S L D D L K E H V L ^{0.008}S H N F ^{0.007}S ^{0.018}Y W L R K R K ^{0.605}T E

E E E E E E E K V K A E E E E E

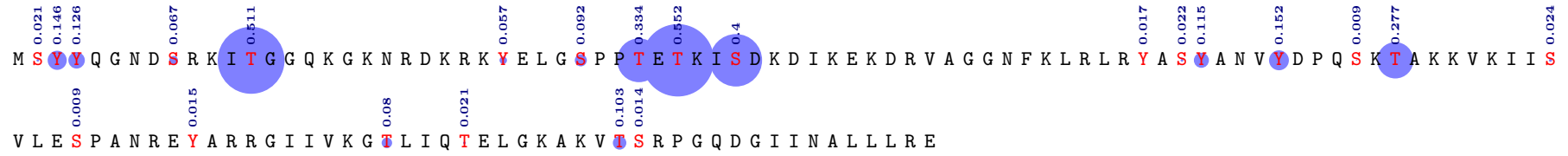
Sequence #237 — Gene Saci 0747

M ^{0.028}S ^{0.013}Y K W R F K L ^{0.024}S ^{0.083}S ^{0.041}S P ^{0.079}T N ^{0.099}T ^{0.013}S L F E ^{0.014}S L I ^{0.007}S I K ^{0.116}T M ^{0.012}Y D I A E F I M R A V R M L K P E Q V ^{0.003}S K M I E V L V N H ^{0.008}Y N Q N K N G K I L V M G A G R ^{0.01}S G L V G K A

F G M R L L H L G ^{0.009}Y N V ^{0.025}Y V L G D ^{0.012}T I V P A I G E R D I A I A I ^{0.005}S ^{0.007}G S G R ^{0.018}T R L I L ^{0.044}T A A E A A K A A K ^{0.018}S ^{0.063}T L I ^{0.009}S I ^{0.083}T ^{0.019}S ^{0.048}Y A D ^{0.011}S P L A K I ^{0.009}S D V V V E I P G R ^{0.197}T

K ^{0.019}S ^{0.004}Y ^{0.119}T N E D ^{0.019}Y F A R Q I L G I ^{0.084}T E P L A P L G ^{0.021}T L F E D ^{0.089}T ^{0.08}T Q I F L D G L V A E L M K K L N K ^{0.088}T E E D L R M I H A N I E L

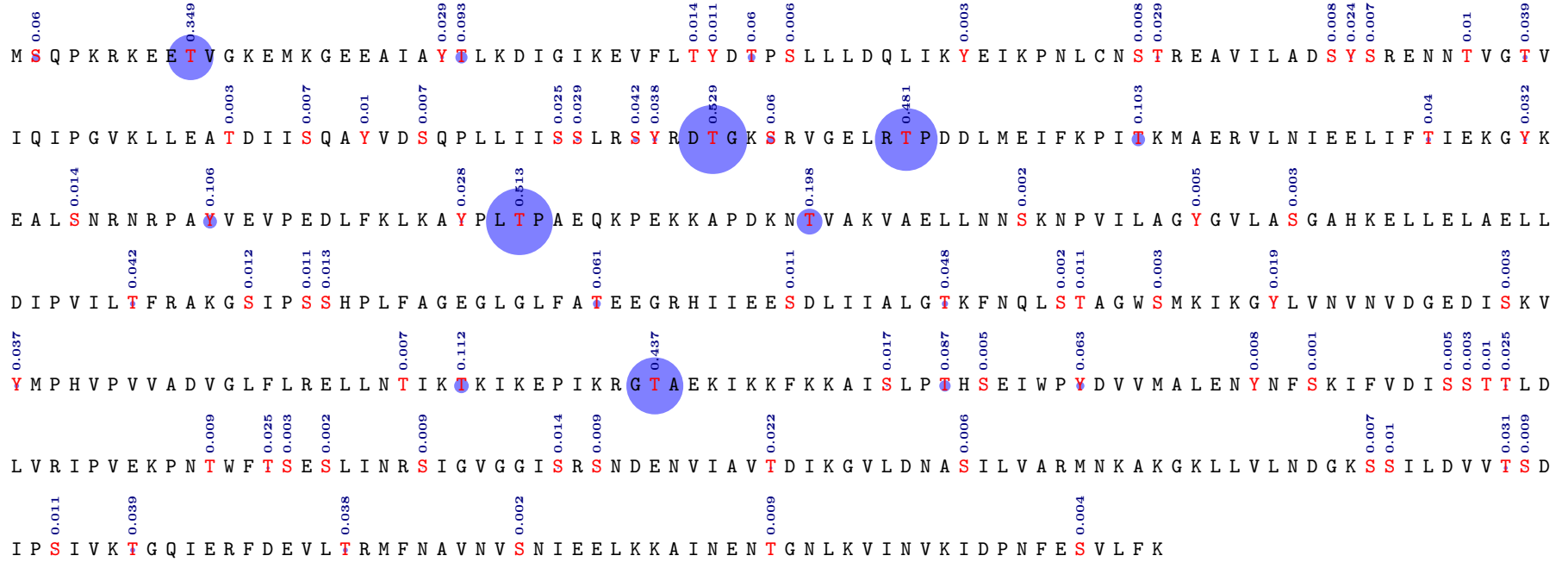
Sequence #238 — Gene Saci 0758



Sequence #239 — Gene Saci 0761

M Y V I T G G A G Y I G G H L V D T L V N Q N K E I I V I D N F T N G K Y I N N K A L Y L N L D L R G N N I L G L K V P K E S I L Y H L A A N P D V R D S M T N
T I D H F E M D V K A T L N I L E V A R K N D V C L F I F A S S S T V Y G E P S K I P T P E E E Q T N P I S N Y G I F K L L G E Q L V N Y Y S R V Y G I K S I I
V R L A N V I G G R V T H G V I K D F I N K L R S D P N R L Q I L G N G K Q R K S Y I Y I T D V I D G F Q V I E K S S I D Q V S V Y N L G N E D W I S V D E I A
R I V E E E L K L T P A H E Y V D A G G R G W P G D A R Y M L L D I T K L K K L G W K P K Y S S R E A V R L A V R D Y I E N G M A K N

Sequence #240 — Gene Saci 0763



Sequence #241 — Gene Saci 0769

M N ^{0.052}Y ^{0.018}S D L D ^{0.009}S F L G L E K ^{0.02}Y ^{0.01}Y I Q E E W E P L Q I ^{0.008}S I N R P E G F K V I E E I ^{0.044}S ^{0.133}E ^{0.007}T P V D E W K G E ^{0.007}S N G ^{0.06}T ^{0.042}Y ^{0.005}S A ^{0.025}Y L L ^{0.02}T K K G I D H F ^{0.005}S V I ^{0.009}S I L K K L M K

R K I H ^{0.006}Y L G I K D A N A I ^{0.008}T Q Q I I ^{0.004}Y V N G I P P I ^{0.087}T ^{0.009}S ^{0.013}Y ^{0.006}K S E K F E I E F V G H F ^{0.005}S R Q L N H ^{0.011}T G N R F E I E L N ^{0.017}T ^{0.013}T N E N E L Q K R L H K I L ^{0.019}T ^{0.081}T K F L F

A ^{0.003}Y I G ^{0.002}Y Q R F G ^{0.226}T R R P V ^{0.167}T H I V G K ^{0.003}Y L L L K D W C Q A V D W I V G H P F ^{0.001}S ^{0.057}T E N E N L I ^{0.027}Y A R R A ^{0.005}Y E Q K D F E ^{0.055}T ^{0.012}S ^{0.023}S Q L F P R K F K D E I N I L K ^{0.003}S L M

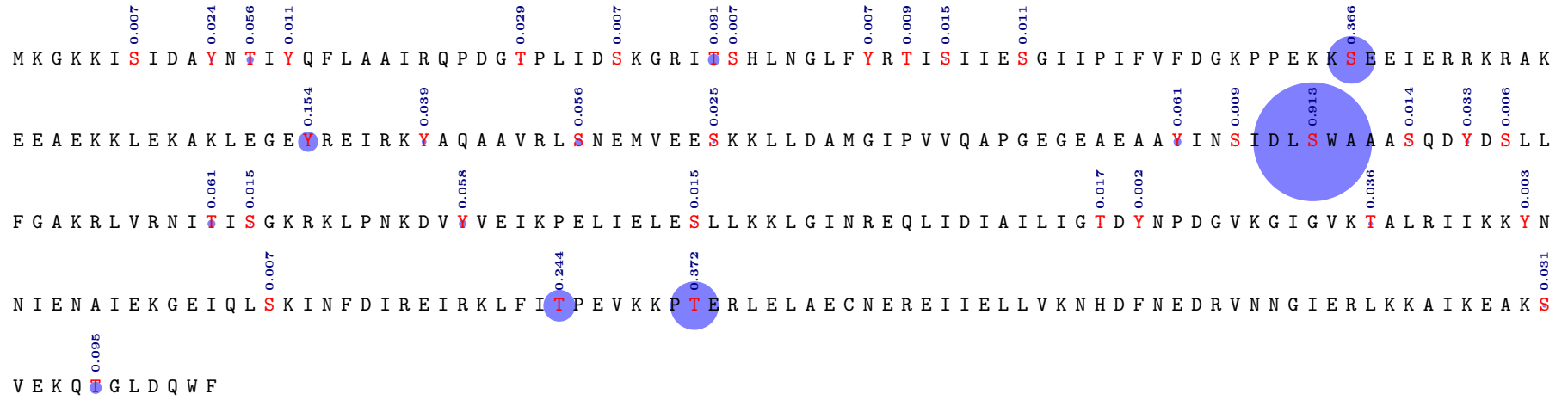
N G D D C L ^{0.059}T A I K K I V ^{0.085}T P H ^{0.015}T F F I E A ^{0.011}Y Q ^{0.004}S F L ^{0.006}Y N K ^{0.002}Y L ^{0.011}S K I A D R L R G K E ^{0.04}S E D L M I R I P ^{0.111}S D L ^{0.05}S N V ^{0.038}S D D N L K E I I R E E N I E N R ^{0.017}S F N I K

E L R V R L R D F ^{0.238}S ^{0.071}R S P F M K L R N I K I K Q N K I ^{0.007}S F ^{0.011}S L D R G M ^{0.01}Y A ^{0.083}T I V L R E I ^{0.045}S R ^{0.086}Y D P K ^{0.045}S ^{0.063}Y ^{0.481}T

Sequence #242 — Gene Saci 0771

M ^{0.081}Y A M G V ^{0.018}S F R L ^{0.011}S L K E E I E P I V C ^{0.006}S ^{0.012}S C G K I L H P R E K G D E F ^{0.023}Y C P N C G Q V L I R R C ^{0.}Y ^{0.}Y C R K Q V V V ^{0.004}Y V C P K C G F E G P

Sequence #243 — Gene Saci 0775



Sequence #244 — Gene Saci 0777

MVDNIID^{0.038}T^{0.012}DN^{0.019}Y^{0.001}YA^{0.024}IV^{0.001}Y^{0.001}TY^{0.027}KT^{0.002}IGL^{0.005}SKL^{0.007}Y^{0.003}EH^{0.041}Y^{0.002}IPEKDLINIRF^{0.003}SD^{0.047}T^{0.006}QV^{0.002}SLLQ^{0.027}T^{0.004}CNRVEL^{0.004}YL^{0.002}Y^{0.082}T^{0.008}KDRNKINDIL^{0.008}SKLNE^{0.011}THGK

DI^{0.006}SS^{0.007}NAIVLRGKDAINHL^{0.004}Y^{0.004}QVA^{0.004}SGLD^{0.003}SLAIGE^{0.017}YEILGQIKEAL^{0.047}T^{0.006}SCCKH^{0.006}SLCNEEIELELFNAAIKVGRKVR^{0.014}SL^{0.019}T^{0.004}NI^{0.004}SKGK

VGI^{0.006}YS^{0.007}IAIQK^{0.004}SLEVMGDL^{0.128}TDIKIAIVGAGEIG^{0.004}SKLAFMLKNNGARNL^{0.057}T^{0.005}IFNRNLDRALEL^{0.005}SNKFG^{0.004}YNAELLD^{0.014}FQKVNEY^{0.014}D

LVFIAINN^{0.002}SNP^{0.006}SQRLRLDKPKLVIDL^{0.008}SVPPVV^{0.008}YK^{0.043}T^{0.004}SNVI^{0.013}YLDDLRVI^{0.014}SDNIILNKREDIKKAEAIINEEIQKFE^{0.008}SL^{0.008}LNN^{0.003}YN

MNRLV^{0.019}SR^{0.062}FMSEIEWVREKEVDRAFNEILKN^{0.003}YADKDNIKEIIDKM^{0.042}T^{0.003}YS^{0.014}LIKKVF^{0.02}SPILEDLRKDPNNKKQIVE^{0.037}YLIEVFQN

GQF^{0.006}SD^{0.203}T^{0.205}KT^{0.205}QKIEKQ

Sequence #245 — Gene Saci 0779

M S E K Y W N I A S H Y F A G G V N S P V R A A V K P Y P F Y V E R A E G A Y L Y T A D N K Q L I D Y V L G Y G P L I L G H A N Q Y V T K K I I E Q V N K G W L
Y G T P S P I E I E L A R K I S H H L P S A Q K I R F V N S G T E A T M L A L R L A R A Y T G R E K I I K F H G N Y H G A H D Y L L L D A G S A F T E F N V N V
Y N G I P K S I V N T I R I C E Y N D A E C V E K L S K S E D I A G V I V E P V M G N M G V I L P D K D F L E R L R E I L T Y N S V L I F D E V I T G F R L G
L G G A Q G T F N V T P D L T T L G K I I G G L P I G A V A G K K E I I D M L T P A G K V F N A G T F N A N P L T M T A G L A T I E V L E R E N V H E V A N R
A V N V I L E E L V N A L D K K I P N N F V I N H I G S M F Q V F F G V K K V S N A T E A K L A N K E M Y Q K F H N L L L Q R G V F I P P S Q F E T I F T S Y A
H K D V V V N T T L E I L R K V V Q E L

Sequence #246 — Gene Saci 0780

M R I R I A A R G S L L S R I Q V K M V E D K L R N L G I E T E L I V V K T K A D L F Q D K P L N S L G K G V F E K E V N E A V I N G E A D I A V H S M K D M L
S D M D E K L V L Y G V L P R D S P Y D S L V A E K D L F N I E S G K V I G T S S I R R R S M I S F Y R R D L V V K D L R G N I D T R L K K Y Q S K E Y D G I V
I A E A A I K R L N S V V R Y Y K I D P K I I T P E A N Q G I I A I V G R V N E K L K T L F R E L N D E R T L K E A L V E R T V V K L L G G G C H S P I G I L A
S M I S E N E F N V I S T Y V I S D K K K I T I E G I Y R G D P T T V G E K V V K D M V K V L K H E N S S V T T

0.018 0.015 0.008 0.046 0.017 0.026 0.046 0.077 0.121 0.021 0.013 0.028 0.025 0.097 0.213 0.081 0.003 0.067 0.003 0.012 0.088 0.017 0.017 0.011 0.007 0.06 0.066 0.254 0.076 0.005 0.003 0.005 0.003 0.007 0.006 0.014 0.019 0.007 0.095 0.007 0.092 0.153 0.01 0.005 0.048 0.065

Sequence #247 — Gene Saci 0782

MKVLLVVIDGL^{0.012}S^{0.005}F^{0.012}VFERIKDKLPVMKDLIEKGF^{0.081}Y^{0.016}S^{0.008}KLE^{0.008}SVFPP^{0.01}S^{0.206}L^{0.011}T^{0.009}PVALA^{0.009}S^{0.023}L^{0.007}ATGFNPKNNGVN^{0.007}S^{0.005}SKI^{0.021}Y^{0.015}LKN^{0.017}SSL^{0.006}LDKPL
^{0.011}S^{0.007}AYNS^{0.005}KALKVNP^{0.006}I^{0.014}WV^{0.001}Y^{0.001}LAK^{0.001}EGY^{0.001}NV^{0.001}LVAS^{0.001}FPQALPDRWNMEGLVLLDP^{0.011}Y^{0.074}R^{0.008}IR^{0.008}KCS^{0.039}DGK^{0.025}VIR^{0.002}SGENKVLGKIWLVE^{0.006}SRHN
 NG^{0.027}Y^{0.026}Y^{0.023}V^{0.044}S^{0.019}Y^{0.083}SS^{0.051}PS^{0.054}GEK^{0.014}SEIEI^{0.046}SKGDW^{0.007}Y^{0.009}GPIE^{0.004}I^{0.004}Y^{0.009}GKCGKNE^{0.009}LT^{0.004}GIS^{0.004}FLHARE^{0.021}DS^{0.055}I^{0.003}Y^{0.004}LPV^{0.007}S^{0.007}F^{0.002}YNKEWCNKP^{0.002}S^{0.002}IMENVWN^{0.01}Y^{0.002}V^{0.002}SLK
^{0.024}Y^{0.011}GMMLDGD^{0.007}Y^{0.005}PS^{0.039}LS^{0.012}KGII^{0.017}T^{0.029}FEE^{0.001}Y^{0.034}MK^{0.}T^{0.}IDL^{0.001}TFDF^{0.001}FKN^{0.001}Y^{0.001}TK^{0.001}Y^{0.001}LLDN^{0.001}IKWDLAI^{0.002}T^{0.004}YL^{0.004}PIVDNLQHLL^{0.004}Y^{0.018}GIDDDKA^{0.004}YE^{0.004}Y^{0.004}I^{0.003}LKG^{0.003}YL
 MADEFIKLQLD^{0.004}Y^{0.004}APLIFIV^{0.004}SDHGIEKIKKRV^{0.004}Y^{0.084}VNKLLEKMNILKLR^{0.084}SEDEIDW^{0.008}SK^{0.062}T^{0.016}KAY^{0.008}Y^{0.008}VGGGQIRINLRGREN^{0.019}RGIV^{0.019}S
 IKEFPKLVKRIVKNLENLKDENEQIF^{0.028}T^{0.009}SI^{0.083}Y^{0.083}ANEVPS^{0.033}SD^{0.032}DREGDI^{0.063}T^{0.009}IMGVRR^{0.009}Y^{0.009}Y^{0.004}GI^{0.005}SS^{0.005}MVKANQEVLENV^{0.016}KPY^{0.089}V^{0.101}TA^{0.021}T^{0.021}GEHG^{0.021}Y
 FREN^{0.009}DL^{0.}Y^{0.001}GIVII^{0.013}YS^{0.006}KNNNFKNILRIN^{0.006}SL^{0.003}RIIDIAP^{0.006}T^{0.003}IL^{0.003}SLFRINNVKFDGVPIS^{0.003}KLIEI^{0.007}YE^{0.007}YS^{0.016}SRNNIEKG

Sequence #248 — Gene Saci 0783

M S I P A T I S K K A R K L I G I S Y E E Q G M P Y V E Q V D S E G N R V N V V E Q K I Y I K K S F M T I P S S L R L I H T N K L L R T P S L L P I I S N L Q D
L P Y K Y K P I N N G K N K E I R D V T V E R L I I G G G T S G L A S M R E N S L L I T R E E L G D I L F D E Y T L E R S F I I E E L K K L Y K Y Y Q N H I I S
G R F L G K F D E G L V F D T V D Q I W I V K A N E I V L A G G G R C L K P I F P G N N T P G I V S R E F N L K R L K N K F Q K I L V

Sequence #250 — Gene Saci 0793

MQGQKFIADAMLGKLSRWLRILGYD^{0.013}T^{0.068}LYS^{0.011}KDFEDWQIIKIAKND^{0.008}SRIIL^{0.041}TMDRGLCY^{0.}RAKKNDLECFY^{0.009}VNT^{0.008}ELNIEEILA
MLAIKY^{0.001}KIDL^{0.069}TADPN^{0.009}YS^{0.004}RC^{0.152}TKCNGILKKVDENRWKC^{0.083}TRCKKEY^{0.005}WKG^{0.007}MHWK^{0.021}SIQNI^{0.013}IIKAK^{0.001}SEK^{0.001}YEFRT^{0.062}T^{0.089}S^{0.084}NNQ

Sequence #251 — Gene Saci 0795

MNKKNSM^{0.016}SY^{0.007}IDL^{0.015}LAWIT^{0.02}ENK^{0.004}SIIEG^{0.013}SRIDNV^{0.008}YKI^{0.003}SGIQAY^{0.004}LFKLH^{0.001}SKN^{0.071}FDKFLVVEPGKRIHF^{0.442}TKY^{0.05}DREK^{0.225}SE^{0.064}EGEVRLIR
 ELVKEKIIK^{0.017}SINILGNERIAKIDLIDRKI^{0.003}YIELLPRGLLVI^{0.013}T^{0.004}DGNNKVLFS^{0.063}TEY^{0.009}KEFRDRIIRLGI^{0.056}EVLP^{0.262}PPQPAPL^{0.02}TS^{0.004}D
 EIEKLIN^{0.02}KGNT^{0.012}RILGVPQEILEALNIKIN^{0.012}SLEELDGVKNRINDLLN^{0.011}TIRGGKFFNCLIRNV^{0.032}TVLP^{0.082}PIKT^{0.013}DECVEY^{0.004}NS^{0.089}YND
 ALDDY^{0.036}FT^{0.041}QLEKDIVK^{0.144}TEVDKNLEKEKGNLEK^{0.039}TIEELK^{0.064}QIEEY^{0.028}AKKE^{0.047}SEMRQIAET^{0.008}II^{0.016}T^{0.007}NYELIENAIKN^{0.005}SN^{0.006}KKNS^{0.01}VT^{0.037}LK
 INNI^{0.004}SIDIDPKL^{0.201}TV^{0.015}YKNA^{0.009}SK^{0.027}YY^{0.029}DLAKEY^{0.025}SEKAKKAGEVLEELRKKL^{0.042}SELQFKIDERKEEIRI^{0.191}SLR^{0.01}KK^{0.007}EW^{0.007}Y^{0.037}E^{0.037}Y^{0.037}HWGI^{0.037}TRN
 GHIVIAGRD^{0.016}SDQNE^{0.014}SIVRKL^{0.049}LDEKDI^{0.005}FLHADI^{0.005}QGAA^{0.015}T^{0.002}VLKAN^{0.002}SGQV^{0.002}SEDDILDAAY^{0.009}IAAC^{0.001}YS^{0.108}KA^{0.108}WK^{0.108}TGLG^{0.108}SV^{0.108}VDVFWV^{0.108}YG
 NQV^{0.003}SK^{0.007}SP^{0.019}SGE^{0.016}YLAKG^{0.006}SFMI^{0.001}YGRKNFIKNVKLELAIGIMNQND^{0.082}EVGLLY^{0.007}GS^{0.03}V^{0.003}YS^{0.077}VE^{0.212}TR^{0.053}T^{0.053}KN^{0.053}Y^{0.053}VVV^{0.053}VG^{0.053}PG^{0.053}DE^{0.053}DE^{0.053}LEE^{0.053}E^{0.053}ISE^{0.053}KIL
 RYL^{0.014}SQ^{0.06}SG^{0.085}SG^{0.048}GVKGLRILKEEIRQLPGK^{0.069}SR^{0.198}LI^{0.198}SR^{0.399}KT^{0.399}

Sequence #252 — Gene Saci 0798

M A K N I N V Q Q S H W A N P D K L E V E L A E R K G V G H P D Y I A D S A S E E A S R K L S L Y Y L K A F G T I L H H N L D K T L V V G G Q A T P K Y K G G D
 V V Q P I Y V I V S G R A T T E V K T P S G V E N I P I G T I I I E S V K D W I K E N F R Y L D V E K H V V V D Y K I G K G S T D L V G L F E A N K Q V P L S N
 D T S F G V G F A P Y S T L E N L V L S T E R L L N S K E I R S K I P E I G E D I K V M G L R K G K E I E L T V A M A T I S Q L I D D L N H Y L Q V K E E A K Q
 K I L D L A S K L A P E Y S V K V N I N T G D K I D K G I V Y L T V T G T S A E H G D D G M T G R G N R A T G L I T P M R P M S L E A T A G K N P V N H V G K L
 Y N V L A N L I A Q K V H K D V K G I N G V Q V E I L G Q I G R P I N D P L I A N V Q L A A E N I T T E I K R E V E G I T D E L L S S V T K L S E L I L E S K T

M L F

Sequence #253 — Gene Saci 0801

M T K Y I I V T G G V L S S V G K G T I V A S I G F L L K S S G Y N V T A I K V D P Y L N V D A G T M N P Y M H G E V F V T D D G A E T D L D L G H Y E R F I G
 I N T T R Y N N I T A G R V Y F E V I R K E R E G K Y L G Q T V Q I I P H V T D E I K G L V K K A V D D T N A E I A I E I G G T V G D I E G L P F L E A V R Q
 M K L E E E E N L M F I H V A L V E Y L R V T G E L K T K P L Q H S V Q E L R R I G I Q P D M I I A R S I L P L D E E T K K K I A L F T N V K P D Y I L S N Y D
 V E L T Y E V P L I L E K Q N I T K K I F N K L G L E P K E P K V A E W L E F V E N M K N P S K E V K I A L V G K Y T K L K D S Y L S I K E A I Y H A A A K L R
 V K P T L V W V E S S D L E K S E D E I N K L K D V N G I I V L P G F G A R G V E G K I Q A I K F A R E N N I P F L G I C F G M Q L A I V E Y A R N V L G L K E
 A N T T E V N P N T K Y P I I T L L D N Q K K I V Q V G G T M R L G A Q K I I L K E G T L A Y S I Y N S P H I Y E R H R H R Y E V N P E Y V D L L Q K Y G M I I
 S G V S E N G L V E I I E L K N H K F F L G T Q A H P E Y K S R P L S P S P V F L N F L S V A S A


Sequence #254 — Gene Saci 0802

M Y E A I M M R L I S N L K N A K L I Q V A L D F I N I Q D A E K V A I Q A I K A G A G I I E A G T P L V K A E G I R G L K R L R E L N P N G I I L A D T K T A
D A G D V E V E I A K A G D A N I M T V L G I M D D A T I E S A V K R A H E L G L L V Q A D L I N V R D V I G R A Q E L K K L Q V D I I G L H V G L D V Q K K R
G I S I V D L K N E I M E I S N L N V I I S V A G G L N K D R I K E L V N L P I N I F V V G G A I T R A H D P F K A T E E I V K I I N A

Sequence #255 — Gene Saci 0804

M Q K N L L A **T** L K E L E K K **Y** Q N **S** **S** **S** D R L D L I L A **T** R V A F Q H I L R **T** I K A F D Q W L Q D P Q I I K H M P K E M L E D V M K **T** **T** W E L L E N L L E L D

I R H **T** **S** E F K D L V V K L **S** K E G K L D P L I W **S** R P V E E G Q Q P Q Q **T** R R G F M P M



Sequence #256 — Gene Saci 0806

M G K L F G T D G V R G L I N K D L S P E L V L K L S R A I G S F F G K G S K L L V G R D V R A G G D M Y V K L V E A G L L S T G V D V F Y G G L A P T P T L Q
0.012 0.061 0.02 0.097 0.002 0.096 0.021 0.011 0.009 0.047 0.002 0.03 0.079 0.038 0.076
Y A V K T L G Y D A G V I V T A S H N P P E Y N G I K V I D K D G V E I R R E K E N E I E E I L F S E R F N S I E W K A L T N D V K K E D R V I P T Y V K G I L
0.015 0.004 0.017 0.027 0.003 0.005 0.069 0.006 0.026 0.046 0.023 0.032 0.075 0.014 0.011
Q H V D T E K I S K K G Y T V L I D S A N S V G G L T S P L V A K E L G C K V Y T L N G N L D P L F P A R M P E P T F E S L K E T A K I A L T L K A D L S I A H
0.008 0.012 0.03 0.004 0.019 0.009 0.018 0.059 0.013 0.01 0.009 0.017 0.083 0.02 0.01 0.267 0.021 0.036 0.037 0.024
D G D A D R A I F L D S E G R V Q W G D R S G T L L S Y W S H V K N P K G S R V I V T A V S S S S L T E E Y L A K Y G L E V L W T K V G S V D I A H K L Q D E K
0.007 0.005 0.005 0.01 0.006 0.004 0.018 0.003 0.014 0.01 0.016 0.007 0.002 0.008
G L A G F E E N G G F I Y P P H Q Y V R D G A M S F A L M L E F M A S E N L S S A Q L F D R L P K Y Y L V K T K V N L K P Q Y D I Q G L Y G D L I K S Y G N R G
0.054 0.007 0.024 0.027 0.073
K V I T I D G V K I I G E D F W F L V R K S G T E P I I R I I V E A K D E S K A M L L A E E L K K F V E S K

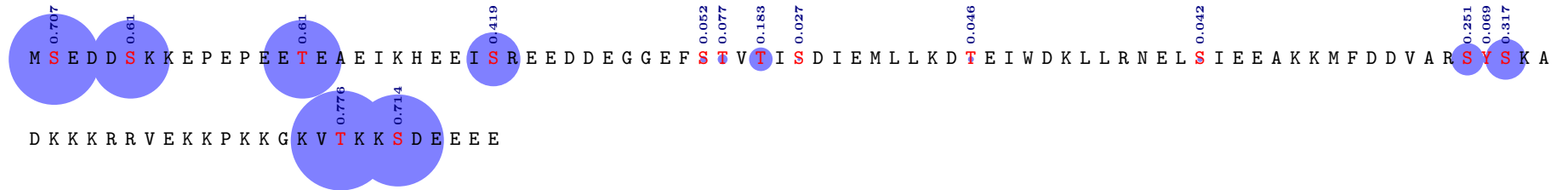
Sequence #257 — Gene Saci 0811

M I Y E F I N K I D S F C S Y E N R W K I L R E E D T E E K F G Y Y A D K R P I E S L I K N S I I N L D K P P G P T S H E V A Y W V K K L F N I T K A G H G G T
L E P V M N Y I S K S G K E Y I C L L Q M H C N V D Q K E L K E I I S Q F V G E I Y Q K P P V R S S V K R R I R K R R I Y A I D I L D M Q D K L I L L R V Q S D
A G T Y M R K L C H D V G V I A G C G S H M R E L R R I R S G I F T E K T N M V T L Q E V S E S L Y L Y R N C K D E S E L R R I L L P M E Y G V C G I P K V I V
S D T A V N A I T Y G A K L N L P G I L A Y Q N F R K N Q D V A V L T L K G E L V A I G E S I V E S K Q L E S G K K G E V I R P K R I F M E R D I Y P K S W K

Sequence #258 — Gene Saci 0814

M I S V S Q T F I N K L N E L G Y K S L T P I Q K I G I P I I L K G K N T I V I A P T G F G K T E T A I F P V F Y K I L S S N A E K I S A I Y I T P L R A L N R
D L E D R L S R I G S A L G I K I A I R H G D S T E R Q R K R I L E D P P D L L L T T P E T L L Y L L V N Q K M R E L L G N I R W I I I D E L Q E M L D E K R G
Y E L L L A I Q R L K R L S K Y E I Q L I G L S A T I G D I E L A K R F I G R N V E V A E Y N T R K D V K I E L V I P T V S K D L A E L S Y K T G L H P D T L A
R I R E L E K L I K E N K P V L V F T N V R E S T E F L A S E L S K L S Q L K V R T H H G S L S R E I R L E A E K E F K T G N L D A L I A T S S L E L G I D V G
T I N A V I Q Y T S P K Q V I R L V Q R I G R S G H S I N K V S S G F L L P S H D I F D I L E C K S I I D N L K E G Y L E K P I V E P K P Y D V M A H E I A G L
V L E G I T D K K E I F N L I K S S F Q Y N D L T E E E F E E T L S I L E S A R I I R K N K D K I S P A G R L W R Y Y Y S T N M I P D S I K D Y I V I D H I S N
T K I G T L D Y E F V A T L D E N T V F I L G G K I W R V V S I E E N R I Y V E N A Q L K S G V L P S W F G E S I P V E R E I S I K V Y D Y I E R I E R G D Q I
D L P K E I L E K I S S L L E E Q K R R G Y P V P T K S K I L V E I N N D L I V L H A G L G S R G N N T L G A L L S L L L T Q V K G V R T Y R S D P Y H I A I
A S L V P V S K E E F T K A I K I L N S L S S S E F E D L L K R A I K E S P Q Y K W K L L I E A E R F G L I D K Q K T D I T F S Q T L L K A Y T D T L V G E E A
V K E L M Y K N Y D V T L R E F L T R L T W E C I E V P G F S P L A K E F L N K L F V A A H S D E K G V M I E I F R R K L L N N K V K I I C M V C G W N N I Y Y
A A E V P D R C T K C G S I F L T V T D E D D K E S V E I I K K V I K G S K I S K N E K K K F E I L Q N I S S M F S T Y K K Y V A I G L S A R G V G I N N I G K
V L N K L S D G E D R F F E S L L E E E R K F L R T R K Y W Q

Sequence #259 — Gene Saci 0816



Sequence #260 — Gene Saci 0819

M K T I I L D L V G Y K E W T E S L G C D R E W R I Q A F Q H Y F A S I L Y S K L A D V N A F P I P I R Y D S Y I I L V D G V K E K E V L H V I R E V S E K Y S
P T K M Q I C K G Y G E T I Y E S I F N C V D T L E D K P D D K I V V A H Y D I N G I T R L D K R T A M Q E I E E L K A N V F S L S E K V G G I A Y Y F G G D N
V G L F A S K K D L D S M L T I A N L N D N V K T G I G I A E N P R K A L M K A T T A L E Y V R K N R E I K W K I L E

Sequence #261 — Gene Saci 0820

MEMQDQ **S** K I N L G I V V **S** E F N **Y** D I **T** **S** L M L Q R A L **S** H A E F L G V **T** V K V V K V P G **S** **Y** D M A V I V K E L L K R D E I D G V V **T** L G A V I K G E **T**
KHDEIVA **T** **Q** **T** A R K L M D L **S** V E **Y** G K P V **T** L G I I G H G V **T** H E Q A V E R I E E **Y** **S** M R A V E **S** A V K L I K R L K K L R E I D L **T** K E **T** N V **S** I E

Sequence #262 — Gene Saci 0822

M L D K I **T** L R R H L E Q G L P I L I **Y** D F D G R E E E **T** D M V F **Y** G E K V **T** W K V I N **T** L R **T** Q A G G L I C **Y** V **T** S K D I G Q Q I G I **T** F I **S** E I I K **S** N **Y** P
K L **Y** K R P K **Y** G D E P A F **S** L W V N H I D **T** K **T** G I **S** D E D R A K **T** I R E L H A V V E L V E N N N I D E A I Q K F **Y** N E F **Y** S P G H V P I L L **S** R G L **S** **T** R K
G H **T** E L **T** M A L F **S** **Y** L G L K K **S** A I I A E M L D N N I **S** L **S** K D K **S** L I **Y** S R N N G F P L I D G K E I I K E V V G L

Sequence #263 — Gene Saci 0824

M ^{0.004} S N Q N Q P ^{0.003} Y N P ^{0.001} Y N W K M I L L ^{0.} S Q ^{0.004} T ^{0.002} S I V I I ^{0.001} S F V L ^{0.001} S L ^{0.} Y ^{0.001} S Q ^{0.001} Y F L P V ^{0.001} Y I A ^{0.001} Y L I I ^{0.002} Y F I I M ^{0.003} T ^{0.011} T I M A R ^{0.007} S N P M L ^{0.017} S E R K ^{0.013} Y L ^{0.008} S E I V N A R ^{0.076} T I L E
 E K K A G E L I Q N D E E ^{0.013} Y I K K F Q A I ^{0.013} T ^{0.002} S A N L K ^{0.001} S F G I M F V ^{0.001} Y L I V I L I F ^{0.} Y N F V V L R ^{0.} Y V ^{0.002} S S V ^{0.001} T Q I Q K L I V F L V ^{0.003} Y ^{0.002} S E A L F L F G M F V N R R
 I M R V Q M M E V M A P F ^{0.154} T ^{0.019} Y K I ^{0.091} T E K G I V ^{0.014} S ^{0.026} T D R ^{0.008} S A V F L H ^{0.004} S R H L V N A ^{0.006} S I V E N R D K K ^{0.102} Y V E I ^{0.013} S P ^{0.086} T ^{0.086} L K L P ^{0.003} Y K L R L ^{0.003} Y ^{0.022} S N D I D R I L D A I N R
 V K R L E L K R Q Q ^{0.288} S ^{0.115} S ^{0.192} S ^{0.251} S

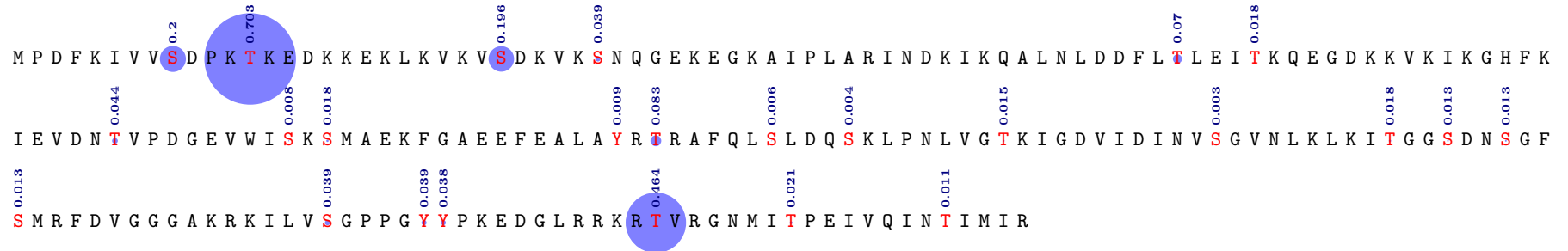
Sequence #264 — Gene Saci 0825

M R F P R I I I ^{0.039}S ^{0.04}S D R ^{0.026}S N ^{0.027}S G K ^{0.02}T L V ^{0.037}T A G L I K V L ^{0.012}S K R ^{0.008}Y K V R G ^{0.023}Y K V G P D F I D P M ^{0.061}V H K I A ^{0.002}S G H P V I N L D L W L M G E ^{0.007}S G V ^{0.037}Y ^{0.004}S ^{0.004}S L A K ^{0.007}Y G K H
 F D L G I I E G V M G L ^{0.015}Y D G L ^{0.028}Y E D ^{0.017}Y ^{0.007}S ^{0.02}T ^{0.015}Y K L ^{0.004}S E L ^{0.016}T ^{0.004}H T P L I L V I N C ^{0.}S N L ^{0.001}S ^{0.001}S T V G A I V K G L R E ^{0.006}Y R N A N V R G V I F N ^{0.005}Y I A ^{0.006}S E K H L D ^{0.004}Y C K K
^{0.01}S I P E N V E V L G ^{0.048}Y L P I D K ^{0.011}S L ^{0.008}S V P ^{0.014}S R H L G L ^{0.034}Y ^{0.045}T ^{0.051}T E D F K N A K D V I N A ^{0.006}T A N L I E M N V D V D K I V E I A E E A N E L Q E ^{0.011}S N E I E E R N V V G K
^{0.014}A ^{0.017}Y V A ^{0.008}Y D ^{0.007}S A F ^{0.017}S F ^{0.011}Y Y D E N I D I L K K R ^{0.006}Y D V E F F ^{0.008}S P L N N D A P A D Q P ^{0.008}S F I ^{0.021}Y I G G G ^{0.003}Y P E L H L E E L E N ^{0.018}S ^{0.033}T ^{0.047}T K D W I K R N V E K G V K L L A
 E C G G F M F L ^{0.002}S N E I I N E K ^{0.006}S ^{0.01}Y R M I G L ^{0.01}Y D I Q I K A K D K L ^{0.125}T I G ^{0.011}Y ^{0.075}T E L E ^{0.413}T E K D N L L ^{0.018}S ^{0.023}S K G E ^{0.039}S I R G H E F H V ^{0.005}S K A V ^{0.009}S V G D V N F A F K N K H
 G K G I W N G K D G V ^{0.077}Y V E N ^{0.008}S L G ^{0.007}S ^{0.018}Y ^{0.009}S H F H F ^{0.018}S R ^{0.074}T R R L L ^{0.046}S F

Sequence #265 — Gene Saci 0826

MIKKNKVM S^{0.01}DKLLIMRIV Y^{0.022}DDVRLDKNIVE T^{0.021}L T^{0.017}KFIDEGLFEIGQDGIRLVAVDKAHV S^{0.005}SLINIEL Y^{0.015}KELFKEYEVEDEFKF
GFN S^{0.005}Q Y^{0.004}LAKIL S^{0.012}IAKRKEEI S^{0.136}IE S^{0.074}D S^{0.064}PERVKI T^{0.016}LG GALNRVFIINNIQV S^{0.011}SPPEVPEVNLEFEVKA S^{0.01}LS S^{0.019}SKAFK T^{0.025}TI NEI S^{0.005}
AV T^{0.027}D T^{0.056}VDI IAVEDKVI LK GEGKEG S^{0.043}QIENEF S^{0.017}KD T^{0.076}GAI S^{0.042}DMEFKNEAK S^{0.024}P Y^{0.031}DVNYL S^{0.011}SDIL S^{0.008}LTNL S^{0.009}SD Y^{0.008}T^{0.199}RLAF S^{0.138}TEKPLE
LEFNMEGGGKV T^{0.155}Y^{0.037}LLAPKL S^{0.022}

Sequence #266 — Gene Saci 0831



Sequence #267 — Gene Saci 0833

M E I N R M G N N K L K I L V D ^{0.005}T N I L M N V ^{0.05}Y D G I D P F E L V I ^{0.005}S ^{0.006}Y L E ^{0.02}Y K P E F ^{0.007}Y V ^{0.005}S K A ^{0.072}T I M E L D K F L N E E K ^{0.014}S V I K Q K R A R V A M L ^{0.005}Y L E ^{0.037}T N K

^{0.002}S ^{0.004}S ^{0.025}T L I D E A D N I L V D N L L E L C K Q ^{0.001}Y N F I I F ^{0.046}T ^{0.003}S D R I L K N R A L K E G I K V I ^{0.002}Y L V P K G K N I ^{0.002}S L N F I I

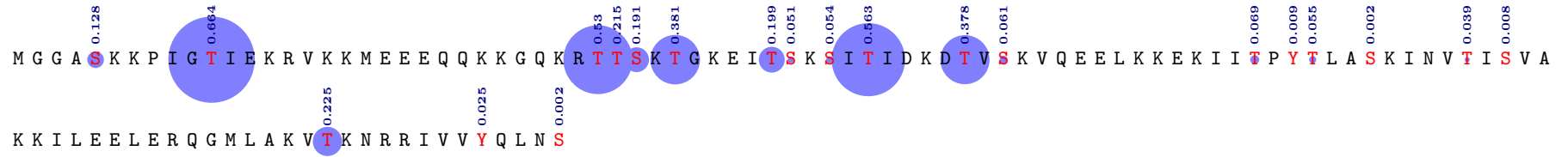
Sequence #268 — Gene Saci 0834

M F K L V R A K G I V R I P P E Y F G Q S V D E I A I K I L R Q E Y Q E K L I K D I G V V L G I V N A K A S E E G F I I F G D G A T Y H E V E F D M L V Y T P I
I H E V I E G E V S Q V D N Y G V Y V N M G P V D G L V H I S Q I T D D N L K F D S N R G I L I G E K S K K S I Q K G D R V R A M I I S A S M S S G R L P R I A
L T M K Q P Y L G K I E W I N Q E I A K A S K

Sequence #269 — Gene Saci 0839

MIDNIDQI ^{0.003}SS ^{0.005}ST ^{0.028}SY QFLFVDDVD ^{0.171}TALK ^{0.011}SS ^{0.012}SK ^{0.014}SAQAAILKLLGF ^{0.133}TP ^{0.013}SDQDKIKE ^{0.058}SLKK ^{0.017}YRENT ^{0.674}QKNEQNEY ^{0.035}IFEEDKIRKDR L
^{0.026}ASK ^{0.063}TVIF ^{0.004}SS ^{0.007}SA ^{0.052}TLNR ^{0.005}SNPI ^{0.011}IL ^{0.004}TS ^{0.011}SLVGFKPG ^{0.004}SS ^{0.01}SVI ^{0.009}YIRK ^{0.014}VY ^{0.049}DM ^{0.019}YVKQPDKEQE ^{0.019}TF ^{0.004}NLIK ^{0.004}SL ^{0.004}LHRLGDGGLIFVPVDKKQE ^{0.016}YIK
^{0.017}RLQ ^{0.007}SEL ^{0.034}SNEFNVA ^{0.008}AI ^{0.029}TS ^{0.008}TS ^{0.11}SA ^{0.001}TK ^{0.015}IDDFANGEIDVLI ^{0.011}GS ^{0.011}A ^{0.011}TH ^{0.002}Y ^{0.002}GILVRGLDLPWRVK ^{0.002}YS ^{0.002}IFVGI ^{0.027}PKFKFRLG ^{0.005}EKVNLL ^{0.005}TL ^{0.005}SR
^{0.013}LL ^{0.05}SLIALI ^{0.014}TKDQEV ^{0.041}I ^{0.115}IS ^{0.069}RRV ^{0.011}KDKIRRL ^{0.011}SPAAL ^{0.018}FML ^{0.004}SVQAK ^{0.002}EGKLED ^{0.003}S ^{0.003}ILLKA ^{0.002}Y ^{0.003}DLLNK ^{0.003}YL ^{0.017}SNQNV ^{0.004}LKRI ^{0.004}SEIGDFVL ^{0.004}SP
^{0.024}DNDILIPD ^{0.035}YL ^{0.013}TY ^{0.005}VQA ^{0.017}SGR ^{0.025}TS ^{0.003}RI ^{0.015}YAGDV ^{0.019}TT ^{0.003}GL ^{0.003}S ^{0.003}ILLVDDFNLFRLLNKKLQ ^{0.003}Y ^{0.051}ILDDIQWRELDVEKW ^{0.006}T ^{0.006}AGDVEIKNLI ^{0.006}SKI
^{0.007}NEERNEI ^{0.035}SKL ^{0.009}KNEGNVAPALQKV ^{0.066}KT ^{0.011}VLLVVE ^{0.016}SP ^{0.016}NKAK ^{0.046}TI ^{0.016}ISS ^{0.016}FF ^{0.016}SRP ^{0.016}SI ^{0.078}RQ ^{0.059}IGNMRV ^{0.004}Y ^{0.002}ET ^{0.002}V ^{0.047}VLGDKVLMV ^{0.067}TA ^{0.022}SGGHV ^{0.022}YDL ^{0.022}TT
^{0.005}QDMGI ^{0.002}YGVDIMKQN ^{0.001}SSL ^{0.02}LVFIPI ^{0.005}YN ^{0.025}SI ^{0.002}KK ^{0.002}CENNHQF ^{0.014}T ^{0.014}DFFE ^{0.005}SN ^{0.005}KCPRCM ^{0.018}TK ^{0.014}V ^{0.005}RY ^{0.005}DSL ^{0.119}KS ^{0.119}INVLRNLAVEADEVLI ^{0.119}GT ^{0.119}DPD
^{0.209}TEGEKIAWDL ^{0.032}Y ^{0.004}LALRP ^{0.005}YN ^{0.064}SN ^{0.003}IRRAEFHEV ^{0.003}TR ^{0.003}KAILQAINQPREFNVNLVK ^{0.003}S ^{0.003}QLVRR ^{0.003}IEDRWIGFKL ^{0.003}SS ^{0.004}S ^{0.036}ILQ ^{0.003}TR ^{0.003}FWPE ^{0.003}YCK
^{0.004}SSL ^{0.005}SNKQLNCNENKNL ^{0.002}SA ^{0.149}GRVQ ^{0.002}TP ^{0.011}VL ^{0.1}SW ^{0.024}IVDR ^{0.017}Y ^{0.004}TE ^{0.004}Y ^{0.004}QRNK ^{0.006}SR ^{0.006}V ^{0.006}Y ^{0.006}YGKIDQLQDIVI ^{0.009}Y ^{0.009}VPKQDGVRKN ^{0.009}SKI ^{0.009}VVVFNEINQL
^{0.007}EEFGLPP ^{0.118}YT ^{0.118}TD ^{0.135}TL ^{0.005}LS ^{0.005}DS ^{0.005}NNFFGL ^{0.005}S ^{0.183}APET ^{0.002}MR ^{0.011}IAQDLFELGLI ^{0.063}TY ^{0.002}HR ^{0.06}TD ^{0.011}SN ^{0.008}RI ^{0.03}SN ^{0.005}TGI ^{0.005}SV ^{0.008}VAEN ^{0.008}YL ^{0.069}KDVLGDK ^{0.037}YT ^{0.037}NI ^{0.037}FKPR
^{0.015}SWG ^{0.048}DGGAHEGIRP ^{0.092}TK ^{0.009}PIDVEQLRLLIEEGELELAKRL ^{0.009}T ^{0.009}NNHF ^{0.009}FKV ^{0.009}Y ^{0.009}DIIFRRFI ^{0.008}SS ^{0.006}Q ^{0.006}I ^{0.006}I ^{0.006}PLKVRKEIVKIEL ^{0.009}Y ^{0.009}GENKKEKI
^{0.003}NS ^{0.015}NQNIIEVI ^{0.017}TGI ^{0.023}TL ^{0.003}PGID ^{0.029}TEI ^{0.078}SK ^{0.15}FAY ^{0.041}VPVRNV ^{0.036}SR ^{0.025}SV ^{0.004}VAERL ^{0.007}KKELGR ^{0.003}SI ^{0.034}P ^{0.017}TD ^{0.045}FS ^{0.017}IEI ^{0.045}SN ^{0.017}S ^{0.045}S ^{0.045}FIK ^{0.045}ST ^{0.045}VNL ^{0.045}YT ^{0.045}QADLVMEMKNK
^{0.015}KIGRP ^{0.057}ST ^{0.021}Y ^{0.148}AI ^{0.086}IG ^{0.005}ILRRG ^{0.008}Y ^{0.073}VLE ^{0.032}SL ^{0.048}KT ^{0.019}KKLIP ^{0.043}TR ^{0.315}LG ^{0.315}VEVNK ^{0.315}Y ^{0.315}LNEN ^{0.315}Y ^{0.315}GRFV ^{0.315}SEDR ^{0.315}TR ^{0.315}KKLLQLMDMVEAGQEK ^{0.053}Y ^{0.053}EEVLKQV
^{0.027}YEEINEIR

Sequence #270 — Gene Saci 0841



Sequence #271 — Gene Saci 0845

M ^{0.024}S ^{0.02}S K I K V ^{0.05}Y A D A V V K ^{0.01}Y E ^{0.093}T N L K E I E K K I A E D G K K L I L L ^{0.015}S ^{0.015}E ^{0.117}L ^{0.021}T Q K L K ^{0.029}S V A E E ^{0.094}Y V ^{0.096}T ^{0.088}S I ^{0.045}S A E L E R K ^{0.009}Y A E E A N K L R L K ^{0.086}Y G E E R ^{0.003}S K

E I N K I K Q L A E A N L D K A V D F V I ^{0.006}S K L L E A ^{0.003}Y K

Sequence #272 — Gene Saci 0846

M S T N V Y V T A L A R V Y K A N T L T K S T V L E L L D T K N W K D A V T I L K D K G L I P E I P S K L E D A E N L L R D K A V K T V A T L K Q Y T L N S K V
A A Q I L D L Y E F I L T L E D I E A V I S A S V L G K K D G V N V R Y L K E L V D V R P Q S L E D V V S T V K G T Y K E A L R F S L D K A G N K T P S R I N S
Y L E Y Y F V D R L Y Q I I S N I T G D A R M K A Q E I I C G Y V D Y V A V S L A F T L K E Q E R S I C K I S S D I I R D I I N M A R P D E L S N I L S R T S Y
A K L L T L G N P Y D L L A S F K R A A R V L A R N A S I N A F M N S P S V V S V L A I A E L T K L D Y E D L V T I L N G I A L K I N D K I K N Q L S F D I V

Sequence #273 — Gene Saci 0847

MLVKVPQRVFE **T** I I **S** ELK **S** KV **Y** D **Y** ND **S** I K D F G V **Y** L K P **Y** H L V **Y** K N D K K **Y** I **Y** I G K **Y** W **Y** K L E K N K G K L R W I **Y** L G R E K P **Y** P N M P

DPPEIPD **Y** **T** I V R N K D G E **Y** I I D **S** K I L D **Y** I K

0.283 0.195 0.02 0.005 0.006 0.047 0.011 0.01 0.023 0.005 0.005 0.015 0.002 0.002 0.005 0.016 0.075

Sequence #274 — Gene Saci 0848

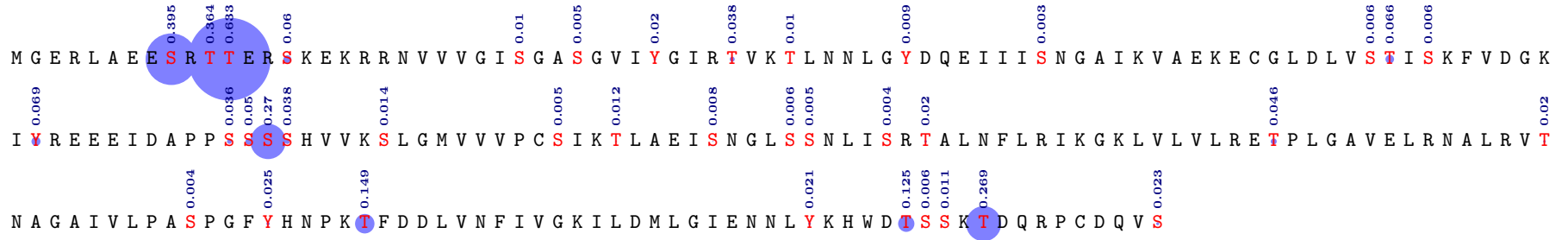
M R ^{0.051}T R ^{0.133}I ^{0.008}S N ^{0.06}T G I E I ^{0.004}S E L G I G L W ^{0.002}S L V ^{0.06}T K E W G A D V N K A E D I L R R A F E L G I N F ^{0.009}Y D ^{0.087}T A D V ^{0.019}Y G E G L G E ^{0.014}S I L G K V F ^{0.01}S ^{0.012}S K R D K V V I L ^{0.007}T
K I G L D F ^{0.034}Y H N ^{0.003}S V N G K ^{0.002}Y P R N ^{0.003}Y ^{0.028}S L D ^{0.015}Y L ^{0.01}S F A F E K ^{0.008}S L E R L N ^{0.062}T ^{0.057}Y V D I L M I H N P K I N D I K N K K L ^{0.014}Y D F L D ^{0.015}S L R K D G K V R V I G V A L G P
^{0.023}T L G W G E E G L E A I K M G ^{0.001}Y G ^{0.009}S L E ^{0.009}Y I ^{0.017}Y N L I E L R P G I E F L N ^{0.052}Y D I A H F V R V P H A ^{0.004}S D A L N E ^{0.003}S K W P I ^{0.034}Y N D P K F H R R ^{0.007}Y K D I N W I N K A I E
R ^{0.024}S R D L I ^{0.014}S F A R ^{0.006}S K H M ^{0.061}T L A Q L A L K F I L ^{0.003}Y N K R V ^{0.068}T ^{0.015}S V I P N V A ^{0.012}S I ^{0.016}S E L E E F A K V E N L E Q L ^{0.031}T E ^{0.078}T E ^{0.027}Y D ^{0.028}Y L ^{0.013}Y S ^{0.008}Y S ^{0.033}S I R N ^{0.019}Y R D L N D E ^{0.023}S I E
^{0.317}E ^{0.101}T K Q Y K

Sequence #275 — Gene Saci 0853

M S^{0.017} Q Q I K I K V S^{0.026} D K V E G I V E R D I Q N N V A N R R E L Y^{0.01} I K L F H I G S^{0.012} G T^{0.147} S^{0.02} R K E L V K A I A S^{0.007} T^{0.008} F S^{0.004} T^{0.11} A E D L V V K K V F T^{0.027} N Y G S^{0.003} G I S^{0.008} Y^{0.044} A R

V N V Y^{0.059} K D K D S^{0.014} L Q K L E P Q Y^{0.072} L I G R D T^{0.294} G Q K I K K G G K S^{0.062} A Q K Q Q

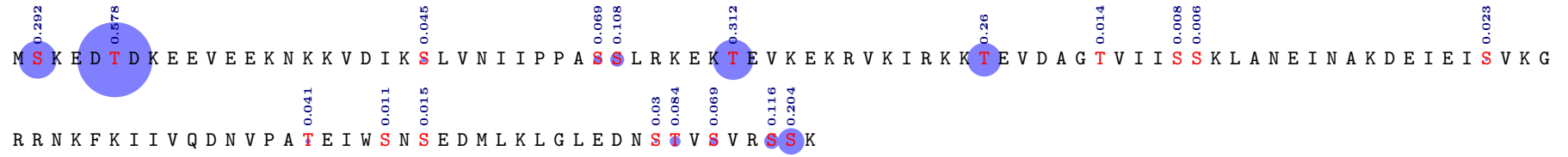
Sequence #276 — Gene Saci 0856



Sequence #277 — Gene Saci 0859

M S^{0.024} L P E V S^{0.022} I E E Q L Q Y^{0.019} I A N Q I L D Q L R I L Y^{0.001} Q Q F T^{0.019} E N N A N H T^{0.037} Q V Y^{0.066} S^{0.002} K I D G I K S^{0.015} S^{0.012} V E D L K Y^{0.014} K L G E Y^{0.005} I F R V A E G I N N K E L Y^{0.015} L D I L S^{0.008}
D F E K I S^{0.005} Q N I S^{0.002} A A S^{0.003} Y^{0.002} R F G V L N N V I K V Y^{0.011} D N V L Q N L S^{0.001} I^{0.004} T^{0.015} I T E K L I A A L M N T^{0.004} I E A I R L L S^{0.035} V S^{0.036} S^{0.026} K K A S^{0.037} E K A R N V I K I E E E V D D L Y^{0.06}
R N F E V K L F E R E Q S^{0.024} G I A Y^{0.01} I L L T^{0.083} K D V A D R L E D C A D L L R N V A N S^{0.003} I L Y^{0.004} I S^{0.006} F L R E

Sequence #278 — Gene Saci 0861



Sequence #279 — Gene Saci 0863

MVD ^{0.03}S RLL ^{0.029}Y LNE ^{0.014}S ^{0.01}S RQFAGFNK ^{0.03}T ^{0.033}T ^{0.005}S PPFVIVGIPLDI ^{0.083}T ^{0.014}S ^{0.018}S FRPG ^{0.079}S RFAF ^{0.015}S VIREVAQ ^{0.029}Y IEF ^{0.018}Y ^{0.01}S MR ^{0.035}T GIDMGEIGF ^{0.006}S DVGDI V
 MHP ^{0.009}S NVEENIKRIKDVV ^{0.01}S ^{0.009}Y F ^{0.011}S EKGKIVV ^{0.013}S IGGEH ^{0.008}S I ^{0.055}T VVG ^{0.021}T ^{0.016}T EGT ^{0.026}T NADCVL ^{0.005}S IDAHLDLRDE ^{0.107}Y MG ^{0.004}Y K ^{0.031}Y DHACVMRRI ^{0.075}S ERG
 VKI IELG ^{0.086}T RAV ^{0.039}S KEELE ^{0.21}Y ANQKGI ^{0.081}Y LNPRQVNL LGIRG ^{0.197}T AEKVKRGLAECKRI ^{0.03}Y L ^{0.067}T ^{0.013}Y DMDGIDPAY ^{0.135}Y APGVA ^{0.37}T PEPEGLD
 P ^{0.019}T ^{0.06}T VLEIVNMV ^{0.039}T DKRIVGFVDVVEI ^{0.016}S PPHDP ^{0.009}S NI ^{0.021}T ^{0.01}S VLA ^{0.005}S RFILE ^{0.009}T ^{0.014}S IIFK ^{0.014}S L ^{0.02}S L ^{0.073}S

Sequence #280 — Gene Saci 0864

MAK **Y** RCGKCKWKE LDDQLK **T** L P G V R C P **Y** C G **Y** R I I **Y** M V R K P **T** V K I V K A I

The image shows a protein sequence with p-values indicated above certain residues. The residues are highlighted with colored circles: a blue circle around 'T' at position 14, a red circle around 'Y' at position 15, a blue circle around 'T' at position 24, a red circle around 'Y' at position 25, a blue circle around 'Y' at position 26, a red circle around 'Y' at position 27, and a large blue circle around 'T' at position 34. The p-values are: 0.01 for 'Y' at position 2, 0.155 for 'T' at position 14, 0.003 for 'Y' at position 15, 0.014 for 'Y' at position 25, 0.009 for 'Y' at position 27, and 0.348 for 'T' at position 34.

Position	Residue	p-value
2	Y	0.01
14	T	0.155
15	Y	0.003
25	Y	0.014
27	Y	0.009
34	T	0.348

Sequence #281 — Gene Saci 0870

M V E I I I P V G P G D R L E W V R E **S** V **S** **S** A L R Q K V D R V V V **Y** D N **S** E R P D L G D **Y** L **S** **S** L A V E **Y** I K G P R M R K I N M A K L R N I M L **S** L **S** K D D V
I I M L D **S** D V V I P **Y** D W **S** Q R L V E K I R **S** G V H F **T** W M H **Y** A **Y** **S** **S** **T** N D I M K P L A P G E N N P N L G C **S** A L **S** **S** K V K D I G F D E R **Y** E R D E D I W L **Y**
A K L R K L G F K A E P **T** E G R C L H L N **S** **T** H A R L D F R **S** **S** L K E A K R N L W R **S** K **Y** D M R L I R D G L V D F **T** F L **T** G **Y** **S** **Y** **Y** G **S** **Y** F L V G V L G V I **Y** A
P L W L L **Y** L P I I A **Y** G I E **Y** **Y** G G V K **S** F L L N L I P G L A L V **T** **S** L P **Y** G L V **S** A L K D

Sequence #282 — Gene Saci 0871

M N V G R K L K T L M F L S G T L T I I A E G I I T Y L I V S I I G I P T I F T A I F L V I L W L I Q W L I A P Y L V G R N T E E V G P G D P L Y E I V R K I A
M E S K V P T P R V F I S Y E E Y P N A F A F G N Y I T G K R V A V T K P L L D I L N Q D E L E A V L A H E V G H I K H L D V E I G M A L G L I P T I I G Y V G
N F L L F T G W T L L F F A G D E V E L I L G L A M L A I G G V L F V L T F L L Q I F V L W F N R L R E S F A D F H S A T L Y K D K A P Y L A T A L A K I Q I Y
A Q N I R T D P F T G I I I T A P P I K L K E N E R D A E E L V M K W L H E H I S P F A D I L M T H P H P A K R V K M L Y S I L Q G T

Sequence #283 — Gene Saci 0874

M S A F K I Q S I L F I M A V K L T P L E Y K V L N I L K E D S R R S A S S I A K E L Q V S R A T I A K T I K S L R S K N I K F S V E Y W E E G E L A V F A I S
 K E C L K G S K E C Y K L I D G R S V S I I R G S F D H I Q Q I L E Q N K I K N Y L L A V D K V D S T K V I K E G L Y C D Y C G G E I K G T P I T L K V R R R I
 Y Y T C C N T C K E H L R K K L S T S Q V

Sequence #284 — Gene Saci 0877

M V V ^{0.001}S N N ^{0.003}T N ^{0.001}T ^{0.089}T A I P ^{0.015}T L L ^{0.003}S D ^{0.003}Y S S ^{0.003}Y I I L A I Q V L L F I I P I L F F V ^{0.001}Y Y ^{0.001}M R R M G I G V G N R K K E L E A K M R N I P ^{0.006}S V ^{0.005}S W E Q I ^{0.043}Y D M K E L K Q
K L L D I ^{0.008}S N ^{0.039}Y V M ^{0.017}S R K R A ^{0.027}Y G V I L F G P P G ^{0.06}T G K ^{0.094}T ^{0.008}S I A K A L A N N L K W N ^{0.002}Y F E L R ^{0.012}S S ^{0.026}S D I L ^{0.01}S K W ^{0.004}Y G E S ^{0.008}S E F L L E N F F N ^{0.04}T V E L N V P A I I V I
D E I D G F ^{0.021}T L R R E G D I H E V ^{0.046}T H R L V N I L L N R L Q D I H D K R L P V I I I G ^{0.011}T ^{0.012}T N L P Q E I D E A L L R P G R F D E I I ^{0.048}Y V P L P D E K A R E E I W L
G ^{0.006}Y ^{0.017}T K G L ^{0.004}S V D C K L L A N K ^{0.018}S N R L ^{0.068}S P A D I K E I V E ^{0.085}S V ^{0.044}S I E C ^{0.008}S K E G R E P ^{0.097}T ^{0.205}T Q D F I R ^{0.015}Y L D N F K P ^{0.007}S V ^{0.007}S I Q ^{0.023}T L I K F E N L ^{0.01}S K K ^{0.004}Y ^{0.028}S R H K L G
E K P ^{0.054}Y G I A N I K W D D L G D L D E I K K V I R E ^{0.071}S V E L P M K N K D I A N K L G I K P V K G I L L ^{0.017}Y G P P G ^{0.106}T G K ^{0.079}T ^{0.01}S I A K A L A N E L Q A ^{0.007}S F I V V ^{0.017}S G D
E I ^{0.02}S ^{0.016}S V G P F K A G E L I A E K F H I A K D N ^{0.01}S P ^{0.014}S I I F I D E I D M I A R ^{0.183}T R G E N E W R G A L ^{0.05}T E L L ^{0.019}S E M D G I R E N E D V I I I G A ^{0.056}T N R P W D L D P
A L L R A G R F D R I I ^{0.031}Y V P P P D ^{0.083}Y E G R V K V L K V L ^{0.029}T K G L ^{0.015}S V D E E I L N K V ^{0.004}S R M ^{0.137}T N N ^{0.026}Y ^{0.141}T P A D L K L V D E I R R N L L K E A ^{0.032}T ^{0.011}S ^{0.02}T G N I R ^{0.021}T ^{0.007}S L
N F D D F V R V L A ^{0.01}Y I K P ^{0.003}S V N V E L L K M ^{0.008}Y E Q F R V E R

Sequence #285 — Gene Saci 0880

M L ^{0.004}S I N D ^{0.014}T L V I D D N D I V G L V G K N G ^{0.004}S G K ^{0.012}T ^{0.037}T L I K N A L C L G Q N R F K I I L D G D D F C E H R E ^{0.025}Y ^{0.01}S K L ^{0.045}T G V F Q E P A ^{0.021}T Q I L A L ^{0.02}T C E E E L K
L R ^{0.005}S L F H ^{0.044}T I D F N I A K K I M E N ^{0.005}Y I N R D F ^{0.022}Y ^{0.067}T L ^{0.005}S D G ^{0.006}Y K K R F V I A ^{0.005}S A L ^{0.009}S ^{0.006}S N P K H I L L D E P F A N L D K ^{0.005}Y ^{0.007}S ^{0.198}T K L V K E I I P K G ^{0.029}S L I A E H R
I K E I R D L V ^{0.005}S K V ^{0.004}Y L I K E I N R I V E I E K E K L ^{0.006}Y D E K F L R E E G L R G F K L P E I N I K P K D K V I F E ^{0.016}Y ^{0.008}S W I K L R E G E I L C L V G R N G V G K
^{0.01}T ^{0.024}T ^{0.076}T L K K L V N K V ^{0.007}Y I I F Q N P D L Q F F K P R V I D E V K D E E A L R L F K I K D L A E K ^{0.024}S P F ^{0.054}T L ^{0.005}S ^{0.008}Y G Q K M R V L I A ^{0.025}T A F A ^{0.008}S ^{0.007}S K V I G F D E P ^{0.023}S
V G M D G E A L L ^{0.003}S ^{0.023}F Y Q M V K I L K E E G K A M I I A ^{0.052}T H D E D I L ^{0.006}S L C D K V V N L E E M R I V ^{0.003}Y ^{0.06}T

Sequence #286 — Gene Saci 0882

MMAEV **T** **T** GRKKR **T** R Y E I I H D I L A Q C E N G A K K **T** W L M **Y** K A N L **S** **Y** E L **T** N N **Y** I N K L V E K Q L I **S** Q K D G L **Y** **Y** L **T** D K G K K L L E L L K E
Y K D K K **T** A L D R V **T** **S** Q I K D I **Y** G E D

Residue	P-value (above)	P-value (below)
M		
M		
A		
E		
V		
T	0.049	0.009
T	0.341	
G		
R		
K		
K		
R		
T	0.217	0.155
R		
Y	0.011	
E		
I		
I		
H		
D		
I		
L		
A		
Q		
C		
E		
N		
G		
A		
K		
K		
T	0.039	
W		
L		
M		
Y	0.004	
K		
A		
N		
L		
S	0.003	
Y	0.006	
E		
L		
T	0.016	
N		
N		
Y	0.006	
I		
N		
K		
L		
V		
E		
K		
Q		
L		
I		
S	0.005	
Q		
K		
D		
G		
L		
Y	0.03	
Y	0.006	
L		
T	0.085	
D		
K		
G		
K		
K		
L		
L		
E		
L		
L		
K		
E		
Y		
K		
D		
K		
K		
T		
A		
L		
D		
R		
V		
T	0.155	
S	0.03	
Q		
I		
K		
D		
I		
Y	0.067	
G		
E		
D		

Sequence #287 — Gene Saci 0886

M S N N P F K G I D N T K L N W N H I K I W Y T A G M G F F T D A Y D L L I I S Y I L A V M I D A Y K Y Y G F N M A G F T E Y L I G N Q A T F W T G L L A S S A
I W T A I I G Q L V F G Y I G D R L G R K K V Y G V E A S L L T A G A L L S A L S P N L P L L I L F R S I M G L G I G G D Y P I S A T I M S E Y S N V K D R G K
L V A L V F S N Q A L G S I A A L I V G V V A A L T L P P D I A W R V M A G F G A I P A A T V I Y L R R K V P E T P R Y S L I A K G D V E E A K K A A Q F V G A
N L Q V K D S L K A P N S S T K L N I M T F L R N Y S L L L I G T A G T W F I L D I A F Y G T G V Y S S S V I T P I F G S P F S S T I T S I T E F Q S E L A K Q
L F I G G I P Y L V G F P G Y F T A V A L I D K L G R K L I Q V Q G F I V M G I L Y G I V S L V L F Q A G K S I S F T I P A T V A F I L Y S L T F F F I D F G A
N T T T F V I P S E V Y P T K F R S T G H G I S A A S G K L G A A I T T Y L F P S L V A S I G F R N I F V L L T A V S I I G A I L T I V L I P E P K M K S L E D
V A K E E I Q T E T E S E

Sequence #288 — Gene Saci 0892

M **S** 0.051 **T** 0.087 **T** 0.122 **S** 0.026 V K K A A E L L R Q G A **T** 0.025 M L D I P C P V C N M P L F R L K **S** 0.005 G E V I C P **T** 0.135 H G K V **Y** 0.022 I V K D E A E Q K R I Q **T** 0.035 N F L M D **S** 0.005 L E **S** 0.005 I L V N N V E K V

A E K I K Q D P M D **T** 0.077 **E** 0.017 **S** 0.018 I **T** 0.006 Q I I R **Y** L E A I E R I M R I R N G L E K N K Q

Sequence #289 — Gene Saci 0898

M V I ^{0.017}Y ^{0.008}Y M P K K K G D E V R K ^{0.044}T ^{0.011}Y ^{0.002}S V V N N V ^{0.004}Y V I I I L V L V M G I ^{0.001}T I L G A I A F P ^{0.001}Y ^{0.001}Y I ^{0.002}S P I ^{0.062}T ^{0.008}Y ^{0.002}S N G G ^{0.012}T A Q A G G I A V L A A L I I L G L I L G V ^{0.001}Y

F V E N K N ^{0.002}Y D I G ^{0.005}T P I L I L M L V I I V I ^{0.}Y V W L A ^{0.}Y G ^{0.001}S A A I K F I F N M ^{0.001}S G

Sequence #290 — Gene Saci 0900

M E T P S Q L D Y G E L F L E F I S T F H D D K G R L V Y Q N L I N E L I A Y R K K S I Y I D F S D L Y S F N Q K F A T K L I D S P K E I I P L I E K K L Y D Y
 V T E R D P S Y Q D E I R E L H V R I L N V P R V V E L R K L R S N Y A G R L I S V E G I L V K A T P P K E R L R K A I F Q H M N P D C M H E F V W P P E G D M
 G E V I E A P S V C P A C N K P G Q F K F I E D K S E F I D W Q K A V I Q E R P E E I P P G Q L P R Q V E I V F E D D L V D I S R P G D R V K V V G I L E I K K
 D T Y I R R G S K A I F D I Y L K V N S I E I S Q K V L D E V N I S E E D E K K I R E L S K D S F I R E K I I S S I A P S I Y G H W E I K E A I A L S L F G G S
 P K L L P D G T R V R G D I H I L I I G D P G T A K S Q M L Q F A A R V A P R A V Y T T G K G S T A A G L T A T V T R D K N S G D Y Y L E A G A L V L A D G G I
 A V I D E I D K M R E E D R V A I H E A M E Q Q T V S I A K A G I V A K L N A R A T V I A A G N P K L G R Y I A E R T L I E N I N L P P T I L S R F D L I F I L
 V D K P G K E D E L L A S H I L N V H A S K N I V Q Q N T I D T E L L K K Y I A Y S R K N V S P K L G D E A K K L L L D F F V E M R K K S E S P D S P I I T
 P R Q L E A L I R I S E A Y A R M A L K E E V S R E D A E R A I N I M R I F L E R V G I D V E S G K I D I D T I M T G K P K S A R E K M S K I L E I I D T I S
 S E G C V K I K D L A K E A E N A G I E K S S F D K L I S D M R K Q G L I Y E S R P D C Y R K V

Sequence #291 — Gene Saci 0902

M E R P **T** L L L **T** A K K N K D N I C L M E I L N R I L I K D I N A **T** A V E I V K N V I I L **Y S** N L N P M E A **Y** G L L I **S** G P P **S** C V A K I F P I H G V I D **S I S**
E A E V I R K **S** I D L C K N M L K N **T F Y** V Q C **Y S** R G V R V N C R E I E I G I G I G L R G I A K V D F K **S** P E L I V F V N V V R D K **S Y I S** F L K K G R E K V
S V K **S** L G Q N I

Sequence #292 — Gene Saci 0903

MDDIKNLI EDLLGGD **T** VFNNT KILNPEY I P **S** NLP HRENQIKEM **T** V **S** FRDLILNPG **S** **S** **S** IRLVIIGR **T** **G** **T** **G** **K** **S** **V** **T** **T** KKFGL
0.081 0.023 0.01 0.009 0.023 0.012 0.009 0.017 0.017 0.083 0.276 0.014 0.141 0.108
0.016 0.022 0.004 0.002 0.015 0.004 0.058 0.003 0.002 0.008 0.012 0.003 0.088
KLREIAHERNLRLEY VHVNCHRQR **T** **L** **Y** LILQEI **S** QGLRLQLPNRGL **S** **S** QE **T** FRIIYDY LEKRNIHLVI **T** LDEFDY FV **S** **T** A
0.083 0.008 0.009 0.019 0.004 0.072 0.004 0.005 0.01 0.005 0.011 0.083 0.086 0.023 0.018 0.017 0.018 0.017 0.018 0.017
PLEDIY FLVRVY DELNV **T** **T** KRLHY IFIVREI **T** **S** **L** **S** GLDK **S** IKDHI IKNIIDFPPY **K** **S** **T** EL **Y** DILADRVY NEKAFKEN **S** **V** **S**
0.009 0.089 0.048 0.008 0.013 0.046 0.005 0.018 0.017 0.023 0.018 0.017 0.017 0.018 0.017 0.017 0.018 0.017 0.017 0.017
EDVLRFIAEVHGFDKGG **S** GNARI **S** IE **T** LELAGKIAD **S** EN **S** PIV **T** LEHAKKAN **S** KINPEL **S** ALID **S** IKELDLHQLIFLKAL
0.011 0.008 0.448 0.062 0.145 0.096 0.25 0.625 0.014 0.015
VLLHDQEGIDFFPIGKIEQR **Y** VEL **S** KNFGEEP RR **H** **T** **Q** IFE **Y** VRRMKLMGLIN **T** R **S** GRGMRGR **T** **T** **L** **V** **S** LPIPI **S** MEFKDL
0.087 0.069 0.31 0.448 0.625 0.014 0.015
IN **T** EIRKRLEQ **S** R **I** **S**

Sequence #293 — Gene Saci 0905

M I D I S G K D I V L R E A I A E G F I K L K K D T I E K I T K R E I E K G D V I A T A K V A G I L A A K K T H E L L P M C H P I P L E Y I N V E I E I E N D G
L K V V S T V R A H Y R T G V E M E A L T A T S I A L L T I W D M V K K Y E K D E E G Q Y P L T E I S K I R V V S K I K S Y G

0.024
0.007 0.096
0.013 0.054
0.027 0.02 0.002
0.094
0.191
0.045
0.056
0.034
0.008
0.032 0.042 0.018
0.086
0.029 0.011

Sequence #295 — Gene Saci 0907

M E E E I L W A E K ^{0.004} Y R P K ^{0.074} S L D E I V N Q K E I V E R L K K F V K E K N M P H L L F A G P P G ^{0.249} T G K ^{0.044} T ^{0.109} A A L A L V R D L ^{0.029} Y G N N ^{0.005} Y R Q ^{0.006} Y F L E L N A ^{0.009} S D E R

G I D V I R N K V K E F A R ^{0.032} T V A ^{0.003} S N N V P F K V I L L D E A D N M ^{0.092} T A D A Q Q A L R R ^{0.128} T M E L ^{0.008} Y T E ^{0.016} T T R F I L A C N ^{0.019} Y L ^{0.027} S K I I E P I Q ^{0.001} S R ^{0.002} T A L F R F ^{0.008} Y P ^{0.044} S

L K K E D V V N R L I Q I A K N E K V E F D P K G I E ^{0.063} T I F D I ^{0.051} T Q G D M R K A I N V I Q A A ^{0.002} S A ^{0.015} Y G K I ^{0.019} T V E ^{0.066} T V ^{0.04} Y K V L G L A Q P K E I R E M L H L A L ^{0.006} S G

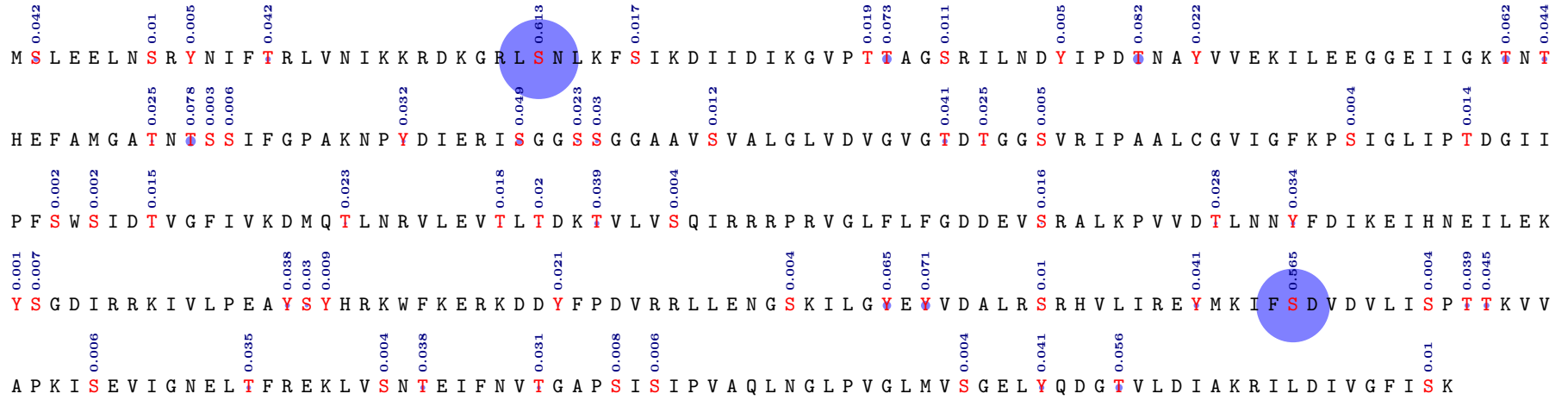
K F L Q A R D K L R E L L I N ^{0.004} Y G L ^{0.006} S G E D I I K V H K E L ^{0.036} T G N E I ^{0.006} S I P D D L K V I L V D ^{0.021} Y A G E V E F R I M E G A D D E I Q L ^{0.004} S A F L A K L A L H A E K

^{0.016} Y ^{0.03} S G G K

Sequence #296 — Gene Saci 0909

M N L Q N K I L K G **T** **T** **T** V G I K V K D G V V L A A D R R A **S** A G **Y** **Y** V A H K **Y** V R K V L **Y** V **T** D N I G I **T** **T** A G **S** V A D L Q F I **Y** E A L K **Y** I **Y** H R N **S** I **T** G
 E G P I **T** V K G I A **T** W L A N V L **S** **S** **S** **S** K **Y** F P **Y** L V Q I L I G G V D D Q P R L **Y** N L D **Y** L G D I **T** E E E **Y** **T** A **T** G **S** **S** P E A L G V L E D N **Y** K P E M **S** L D E
 A A E L A K R A I F **S** **S** I K R D **S** **F** **T** G **T** G V I V **T** K I **T** K N G H E E K E **Y** **Y** I **T** K R

Sequence #297 — Gene Saci 0910



Sequence #298 — Gene Saci 0915

M Q N D P V C G M E V N E D **T** **K** **Y** K L **S** **Y** K G K **T** **Y** Y F C **S** P L C M A E F K K R P E K **Y** I Q H

0.204 0.065 0.014 0.014 0.278 0.017 0.011 0.005 0.011

Sequence #299 — Gene Saci 0916

M Y P P K I G Y V I P E N I D E T F D F L E D H E D A R P L A G G H S L I P A L K L R I I R P S Y L V E I R R F K E L N Y V K F E G G K Y R I G A L T T H Y D I
S K A G V P L L S Q A A T K I A D P Q V R N M G T I G G S I S H L D P A A D Y P A S L I A A D A E V K I K S K K G E R T V S F K D F A K D M F T P D L N P G E L
V V E V Q L P D L R N Y K Y S Y E K L E R R A G D F A I V G V A V L L K L S G D V V D D V R I G L T A V N N V A V R A K E A E E E L I G K R L S Q E L I E K A S
S R A V E R A N P S S D I R G S A E Y K K K M V K V M T K R A I I N A I G G K I

Sequence #300 — Gene Saci 0920

M K Y P K E S E T G K I E Y K L L I L N D D E T R L Q S L A T Q M K Y R L E E G G G E A F Y I I G V G D N G E I I G I E R D Q L D K S I A T I E K I A S T I N A
K I V H K R I V E V K S R K F I A E L L I R I F K E R M P V Q V N I A V M G H V N A G K S T L T G A L I L G K L D D G N G T L R A L I A R H M H E I L S G R T S
S V T L R L L G L D S N G N I I N W T L R D P L D E A E I T L K S S K I I R L I D L G G H E R Y L R T T L K G L L G Y E V D Y V M L V V G A D D G L S A M G K E
H L A V A S I L K F P I F I V V T K V D K Y S K E K T N G I V N D I R N I L K I P G I N R L V I E V E N E E D L L N S I L A M K T K R V V P I F K V S N V T G E
G L D L L M K F L N M L P P K K I D K R D E N E E P L V Y I D E I Y N V S G V G T V V L G S V V R G M I T T N R N Y Y I G P T R L G D F K E V K V K S I Q V N K
I F V D K V S S G T I A T F A I Q G L D K D I L R K G M V L T N H N S K V R S S R K F K A K V M V L H H P T T I K E G Y V A T L H L Y T I R Q A I R F E N I S T
K Y L R S G D A A E V T L S F L Y R P E Y I E K D Q I F V F R E G R T R G L G I V I D L L D

Sequence #301 — Gene Saci 0921

M T S D L K L L Y E G K H I C P V C S N N S M W I R Q Y S Y E A P K A G V L L L M V F E C E S C G Y R I R D V K P F E E G K P I K I I L K V E N E E D L R S I L
Y R S P Y A N V I I P E L G V E A L S K E A Y Q G V I T T V E G L L E I L L D N M G E L C E N N G C Q D I E K A K K G E L P F T L I I E D Q S G L S Y V E S K K
A S V T Q L

0.033 0.011 0.005 0.001 0.001 0.02 0.006 0.02 0.003 0.009 0.008 0.022 0.036 0.005 0.018 0.014 0.017 0.009 0.013 0.018 0.023 0.025 0.019 0.019 0.079

Sequence #302 — Gene Saci 0924

M T M D T D D K I L E K S K E W E E K V L K P W I S K R P E R K N N F L T P S G I L V K R L Y T P L D Q K G D Y L S K L G F P G E Y P Y T R G I Y P N M Y R G R
 L W T I R Q Y A G Y G S A E D T N Y R F R K L L E A G Q T G L S M A F D L P T Q L G L D P D H K L A F T E V G V V G V S L F H W K E M D L V M S D I P I Q K V T
 T S M T I N A T A I E L L S M Y I A T A E S R G I S T S E L D G T V Q N D I L K E Y I A R K N Y I Y P P E F G I R Y A V D L I E Y S S K N I P N W H P I S I S G
 Y H I R E A G A D A I L E V A F T L A D G I E Y V R K T I E R G I S V D D F A P K L S F F F A A Y T N I F E E I A K F R A A R R M W A K I M K E M F N A K K P E
 S M M L R F H T Q T G G A E L T A Q Q P E I N I R T T L Q A L A A I L G G T Q S L H V N S Y D E A L G L P T E K A A K I A I R V Q Q V I A H E S G A T T I D
 P I A G S Y Y V E W L T D E I E E H A W K I L Y D I E R M G G M M K A I E V G Y P Q A Q I A E S S Y R I Q K R L E Q N D L V R V G V N M Y Y E P D W I G T T E V
 F K V N P L V R D R I L Q R L A K Y K K E R D N S K V E G S L S R L R N A A D K E N V N I F P Y I L D A I K S G A T V G E V S S V L R E L W G E Y K E P S L F

Sequence #303 — Gene Saci 0925

M P ^{0.006}S W N E I E E G V L ^{0.037}T I A E K M L D D N F V P D M I V ^{0.003}S I L ^{0.027}T G G V I P A K L I ^{0.002}S D A L G I K N L K ^{0.017}Y V D I R F ^{0.025}Y K G V K D R E N K P I V R A I ^{0.008}Y V N D V E
A K K V L V I D D V ^{0.008}S D ^{0.037}T G E ^{0.027}T L D F A G N I I A M F N P L V V R ^{0.048}T A ^{0.088}T L F V K P W ^{0.01}S R K ^{0.001}Y P D ^{0.003}Y ^{0.021}Y ^{0.082}Y K I I D K W I I F P W D K W E I V R E N N E V E V E K K E
R F L E I L K K L K V Q K Q D

Sequence #304 — Gene Saci 0926

M E F V Y P D Y Y S N S V Y N L A C A I A D F L G V N R E C K G K K L E I S G R R I A L T L L D G L G Y T M L S D A G F T V D R T I T T V F P S T T A T T L T T
 L F T A Q L P A E H G I L G Y T T Y S K R L G G I I N T L K Y T Y P L V D T R D I I S E E G I E Y E K A F P D V K N Y L K E V R D K K T A E V T P K G L E N T Q
 F T K L T H G R T N I T K T Y I N Y W D A F T E A S N I L Q M K E Y D F V Y I Y I P D V D S L A H K H G P N H P V V K E C I R D L Y N G L M K L A E R F K D Y T
 F V I T A D H G H V Q V N E H I A L N H D S E L L K L L D V V P Y G D S R A V F L H S R Y D L K T Y L K T K Y P N L E V F G R N E F E K L I G N T S Y A D Y I
 A V P T D S N A Y V Y L F K E E G N E Y N K L K G H H G G L S L N E M K V P L V I W N G

Sequence #305 — Gene Saci 0929

M T I D E V P I I I S L L G V I I F I V V I L S L L F K K Q T Q K F I V S D K A T Q I Q Q K N Q R K N D I L D R I N W E M I G G Y E D V K K E I K E Y I E F P L
 K Y K E L S R K Y G I K P P K G I L L F G P P G C G K T L M M R A L A N E A K I N F I Y V N V S D I M S K W Y G E S E A R L R E L F A N A R K N S P C I L F F D
 E I D T I G V R R E S H T G D S V T P R L L S L M L S E I D G L Q G N D G I I L V G S T N I P H L L D K A L L R A G R F D K L I Y I G L P D K R S R R E I L E I
 H C K A K P L E S D V D F D K L A E M T E R F T G A D L A N L C Q E V A R R A A I E A L E R N V E R K I S M Q D F N D V I K R Y K P S V T L Q M L E E Y E K F R
 L D Y E R K F R G P E I T S S D N E K I T L D D I G G Y N S I K K E L Y E L L E I Q L R Y S K L M E Q M K I P P I R G I L L H G P P G V G K T M M A K A L S K T
 L G V K F I M I S G A E I L Y K G Y E G A V S T I K E V F N R A R E N K P A I V L L D E I D A I A P R R E N Q K T D S S K V V N Q L L T E M D G I R S L K E V V
 V I A T T N R M E D V D P A L K R P G R F D R I V Y M P L P N S E E R E D I L Q K Y I G L E E C K M V K C D Q I A K V T E G Y S G A D L A A I A R E A K L K V L
 R E I I R G N V D R K L S Y E D L I E A A S K I K P S V K Q E R K I L E D F R Q D L

Sequence #306 — Gene Saci 0930

M K R E D V E K V A ^{0.082} S E A ^{0.04} S K ^{0.052} Y I ^{0.105} E E R E N K D V D R V I N V H G N D V ^{0.025} T R I I D K R ^{0.024} S E D F I V D R L K ^{0.01} S L G ^{0.003} Y N I L I V ^{0.026} T E E ^{0.008} S G V I D ^{0.004} S ^{0.026} Y G K N ^{0.02} Y ^{0.022} D ^{0.004} Y ^{0.004} I

A I V D P L D G ^{0.003} S ^{0.026} T N F V ^{0.005} S G I P W ^{0.004} S ^{0.005} S V ^{0.006} S I A I ^{0.013} Y N R D E E D I L ^{0.008} S ^{0.005} S N V G A V ^{0.004} S ^{0.007} S I F ^{0.051} T P ^{0.007} Y ^{0.029} T F ^{0.007} S ^{0.016} Y D E G ^{0.006} S A ^{0.053} Y V N G V K I A E I K K P E K I L L L A ^{0.004} Y ^{0.004} F ^{0.02} S

R ^{0.012} S K L P N L K L F F E K I G Q G ^{0.002} Y K I R ^{0.014} S L G ^{0.004} S A ^{0.007} S L D M I L V C ^{0.146} T G R A ^{0.023} T M F F D I R G K L R N V D I A A ^{0.003} S ^{0.003} N F C ^{0.004} S R L G V I P ^{0.007} Y D I G L R K I K ^{0.008} S ^{0.016} S L ^{0.011} T

E V ^{0.016} S V V K D L V I ^{0.02} S L D E ^{0.043} S L L R ^{0.019} S F ^{0.082} S L A L Q ^{0.018} T V

Sequence #307 — Gene Saci 0931

M S L L P K V F N V K E G E K Y D T I I I I G L G P A A Y S A A L Y A A R F M L K T L V I G E T P G G Q L T E A G E V D D Y L G L I G I N A Q D M I K V F N K H I
E K Y E V P V L L D I V E G F K R E G D E F V V K T K R K G E Y K A D T L I L A I G V K R R K L N V P G E N E F A G R G V S Y C S I C D A P L F K N R T T V I V
G G G D S A L E G A E I L S R Y S N K V Y L V H R R D Q F K A Q P I Y V E L V K K K P N V E I I L N S V V K E I K G E K L V K S V V I Q N I N T G E T R E I Q T
N G I F V E I G F E P P T D F A R A H G I E V D N N G Y I K V D E W M R T N V E G V F A A G D C T G M W L G F R Q I I T A T A Q G A V A A H A A F N Y L N Q R K
K K K

Sequence #308 — Gene Saci 0932

MRVLLI ^{0.008} T AKLA ^{0.011} Y NNVKAV ^{0.003} S ^{0.007} S ^{0.003} S LGVD ^{0.026} T D I L M L N ^{0.002} Y P I A ^{0.001} S L M ^{0.01} T V D ^{0.026} Y I V E N L K ^{0.002} S L K L G K ^{0.003} Y D ^{0.023} Y I I I P G L V N G D A K K I E E V ^{0.143} T G I K ^{0.125} T
^{0.017} Y K G ^{0.05} T E D I N D L P L M I Q A L K N G L ^{0.005} S ^{0.006} F ^{0.034} S ^{0.149} T I P A D K L I ^{0.07} S I E R E K E V ^{0.053} S L E L R R L E E N G D ^{0.201} Y A F E V N G L K I P R R P P P F R I F L E I D G ^{0.092} T K
^{0.029} S L E L L E N E I E R V D K L V D V I V I G F P ^{0.009} S G H E D I ^{0.02} S E V K N K V ^{0.017} S K L ^{0.027} S ^{0.024} S M K L ^{0.255} T A I D ^{0.031} S G ^{0.033} S P K E L I E G V K A G A ^{0.009} S F V F N L N E E N I ^{0.004} S D L L D
 I K R D A V F I V A P F ^{0.003} S V E N K A ^{0.016} T ^{0.022} T ^{0.032} T L K I R D K A K Q L G F D K L I L D P I L ^{0.014} S P P I ^{0.076} T G L V E ^{0.01} S L C E ^{0.055} Y K ^{0.109} T V R E N ^{0.03} S N E P M L M G L L N V ^{0.003} T E L I D A
^{0.004} D S V G I N G I L ^{0.017} T ^{0.004} S I A G E L G V A N L L ^{0.095} T M E R G K ^{0.274} T R G ^{0.061} S ^{0.041} S ^{0.04} Y E I N ^{0.042} T A ^{0.029} T K M I ^{0.012} S I A L N K R K N P K D L G L D L L I L K D K K K I ^{0.032} S ^{0.048} T ^{0.022} S L N E N ^{0.019} S G E I
^{0.034} I R V ^{0.08} Y E Y L E P K N M D K G ^{0.1} Y V K I D K N D E E I V L ^{0.028} T ^{0.004} Y ^{0.01} Y G K E K F ^{0.008} S V V G ^{0.067} T ^{0.007} S G L ^{0.013} S I G R K F I E K A N V N ^{0.057} T E H A L ^{0.007} Y I G ^{0.004} Y E L A K A E I A L N L G K N
^{0.005} Y I Q D K P L F K H A ^{0.013} Y I N A ^{0.016} Y ^{0.006} S N K K K H

Sequence #309 — Gene Saci 0935

M N N I I S D Y L N A Q P K E K L K I V E I D I P C G T E C I K N S K Y S N L L N I E S F K E Q I E I L D S L K S L I E E K I D T L E R E I H D K V N S F N V N
I E E L T Y S I Y N S I E N G K D Y I I G H D S L K F E D K V L A T G K F Q E I I S L S Q V I D S I K K D K N I I S L C D E I R Y L S E S L W E H F N K N I R R
V L N E S S N R S

0.037 0.004 0.086 0.021 0.005 0.005 0.006 0.015 0.016 0.085 0.121 0.004
0.012 0.007 0.01 0.007 0.017 0.006 0.028 0.006 0.009 0.016 0.013 0.003 0.029 0.013
0.051 0.06 0.193

Sequence #310 — Gene Saci 0940

M G C L F S V N S K K V R I F D T L R D G E Q A P G I D L V D Q K I R V A K R L A E L G V D V I E A G F P A S S D G E F E A T K K I L S E I G D Q V E V T G
L S R S V K Q D I D R T I D T G L S S I H I F I A T S D I H L K Y K L K M T R E E V L N R I Y E S V R Y A K D H G L I V E Y S P E D A T R S D E E F L L K A V K
T A I D A G A D R I N I P D T V G V M H P F K F Y D L I S K I V K V T G D K I V S V H C H N D F G L A T A N S I A G V M A G A R Q V H V T V N G I G E R A G N A
S L E E V V M S L K K L L G Y D V G V R T Y L L Y E V S R Y V A E L T G V P V P Y F K A I V G E N A F G H E A G I H V H G V I E N P M T Y E P I S P E E V G N F
R R I A L G K H S G I H G L K R L L E E Q G I F L D D T Q L R E V L K E I K S L A E A G N K V T S A D A K A I A I K V I N K K I T A

Sequence #311 — Gene Saci 0945

M I R V F L R K E L M E I R R D K R L L V S I I I L P F I L L P I I G L I L F A T L G A Q Q P V I E I I N Q N P K N I P Y V N F V E K N I E S S G A T V V M N S
 S S G T T P N A I I V F P K D F Y D N V T N I S R Q A Y V V L Y V V I S S N Q Q A V N I V N N A L Y N L L V N I S S Q R I A Q L E K L A N T S V S V D D I R N P
 I Y L V L G Y K T S S G S T T T S S A N Q L A Q L S R L V A L I L F P S V T P V V F Y L L E G I T G E R E R R T L E A L L S T P L T V R S F I V S K L L T A S L
 L G F L S S I G D V L G T I I F V S V S G I G L A I N L T E M I Q L L A L I V I T Y L I S I L L T G S L S L A L L Y I F G G S I R N I Q I I N F L I L S F G M A
 S S F I S L F I N T A Q L S F P L S L I Y I I P Y V Q L S L G F L S Y V F G S I Q E S I F S L L V T T I I S V V L I I L V I R S F D S E R L L L K

Sequence #312 — Gene Saci 0946

M T D E I A V S V T N L V K K Y K N V E V L N G I S L Q V Y K G E V F G L I G P N G A G K T T L R A I S G I L K K Y E G D I S I F G Y T P E E A K K L G Y I S
 Y M P E D A F P Y E K L S G I E N L E V F A Q I Y A R G D K E L E K E F L E L G V K I A D L G N K I Y E Q T S I Y S R G M K R R L M I A R A L M V K P R L A I L
 D E P T T G L D V E S T V R V R R I I R E L P R S I N T T I L F S S H N M L E V D F M C D R I A L I N K G K I V E I G M P K Q I A E K Y N S K N L E E A F L K A
 I G N D K S I S

Sequence #313 — Gene Saci 0947

M V T G S V R D R T I E F L L K F A D K G R L V I S N A I E I T E E N E N L E L G D F S Y K A L V E R L Q S K G F Y F D P K M I L R S L E K E Y G I I E T S Y K
S T N Q H W R F I D K D Q V L E V V K D Q E E V E D P K I R L I F L K F Y S L D P K E I E K K L E F I N R K V K L S D V D K K M F R T L I F D Q I S Q L T E L
Y E D A L Q Y E E T Q E V A K R I Q K I L T L A Y T I G R K I Y V S R E G I N K G L S E K E G E R E N N V A Y S L R L P N G K N N V N D E S

Sequence #314 — Gene Saci 0949

M I P E N H P R R E **S** L I I R E K V V K A L E D G **V** L A P Q G L I A H G R G E C F D **Y** L I G E K **F** Q E F A M K A M K A A I A M L L L A K N P V I **S** V N G N M A A
L V P D D I V R L A E E I N A K I E V N L F **Y** R **T** L D R E K K I E E V L K R A G A K E V L G V G D D A **S** A V I P E L F **S** E R R R V **S** K K G I **Y** I A D V V L V G L
E D G D R **T** E A L V K M G K K V I A I D I N P L **S** R **T** **S** Q M A **S** L **T** I V D N I I R V F P K M I **S** L A K E M K K **S** D K D E L Q K I I N Q **Y** N N K E I L K E **S** L R F
I **S** E R M N Q L **S** L **S** L

Sequence #315 — Gene Saci 0951

M D D D F L S Y L L A G E N K V A R R Y A T N D D L I L K R L D E I E R L I R G L N T S K T P Q K Q S L C E Q I L E K G Y I V T D Q H I R S N T H P Q L F V L P
V G D N S S L I T F R D T M D L L L V H F R L Y K N E V D N K L S K R L L N I Y S F L K K N G L I Y L D H E D M M Y K L I

0.011 0.018 0.012 0.256 0.026 0.006 0.351 0.007 0.084 0.037 0.002 0.068
0.003 0.003 0.144 0.143 0.006 0.004 0.003 0.005 0.014 0.002

Sequence #316 — Gene Saci 0953

MRKPVVALS^{0.012}IAGID^{0.067}TGNGAGAES^{0.007}DLKVY^{0.016}EILGVHGVIAV^{0.002}TAL^{0.045}TAQ^{0.003}^{0.032}^{0.092}ST^{0.079}TGIRAVLP^{0.186}TPPEFLK^{0.118}TQLD^{0.037}LFDDFEIKDVKIGM
^{0.001}I^{0.005}Y^{0.185}NNNDQFAVVKDYLRDKRVV^{0.04}TD^{0.007}PVLF^{0.079}AKDGT^{0.011}QLIKDLEEY^{0.034}KRNILRN^{0.007}^{0.045}^{0.021}^{0.027}TT^{0.008}VL^{0.014}TPN^{0.02}IEP^{0.013}EAS^{0.02}Y^{0.013}LS^{0.02}GLKI^{0.041}SS^{0.001}IEEVKLACK^{0.041}TI^{0.001}SS
 KDFNIPY^{0.038}VVVKGGHAEDD^{0.079}^{0.011}YS^{0.034}IDVLY^{0.007}DS^{0.087}NRDLY^{0.014}YGIG^{0.023}Y^{0.009}MRLNQRHT^{0.045}HG^{0.002}T^{0.01}GS^{0.004}VFAT^{0.003}AV^{0.003}SAEL^{0.089}SKGNDIL^{0.007}T^{0.008}ALRHAR^{0.007}SL^{0.008}LQDS
^{0.093}I^{0.007}^{0.006}Y^{0.062}GLEIGHGIGPIDPVV^{0.033}PFMKK^{0.02}SMKFDV^{0.138}IQEM^{0.005}TR^{0.008}FS^{0.003}QEVES^{0.003}V^{0.01}DGF^{0.098}Y^{0.009}KLIPEVQ^{0.005}SNLAH^{0.008}SI^{0.003}IP^{0.01}SS^{0.009}QY^{0.009}V^{0.009}RGLEDIA^{0.009}FRDRIV
 KNWDNRVKVGLPAVFGKPT^{0.054}H^{0.13}ARLLLS^{0.004}ILPY^{0.006}ET^{0.121}KA^{0.005}SVLMNIRFEDKIVNLLKEVGY^{0.016}NT^{0.032}LEINRELEPMS^{0.017}NVEGK^{0.005}SMQWIA
^{0.003}S^{0.035}YIHEN^{0.015}YGRIPNVIFDRGVK^{0.034}GKEAMIRFW^{0.004}T^{0.007}SS^{0.085}SIDEMID^{0.085}TLKY^{0.}LAKNL

Sequence #317 — Gene Saci 0955

M K L ^{0.012} S P G K N A P D V V N V L V E I P Q G ^{0.008} S N I K ^{0.015} Y E ^{0.081} V D D E E G V I K V D R V L ^{0.019} Y ^{0.082} T ^{0.002} S M N ^{0.002} Y P F N ^{0.024} Y G F I P G ^{0.184} T L E E D G D P L D V L V I ^{0.025} T N ^{0.022} Y Q L ^{0.009} Y P G ^{0.006} S

V I E V R P I G I L ^{0.007} Y M K D E E G E D A K I V A V P K D K ^{0.173} T D P ^{0.025} S ^{0.014} F S N I K D I N D L P Q A ^{0.049} T K N K I V H F F E H ^{0.088} Y K E L E P G K ^{0.048} Y V K I ^{0.006} S G W G ^{0.01} S A ^{0.081} T E A K N

R I Q L A I K R V ^{0.02} S G G Q

Sequence #318 — Gene Saci 0957

M V T^{0.014} N L P A E A K A K W I K Y^{0.089} M D A K T^{0.388} P E E K I R A L Q E F L S^{0.009} A I P K H K G T^{0.224} E N L V Y^{0.022} W A K R R L A E L K D E A E L E R R K S^{0.046} S^{0.105} S^{0.118} V K R G L Q F F I E K
E G A G Q V V L L G D H E L K N R L M R E L T^{0.124} N V K I D P R D L P V P G M M K Y^{0.02} L D V Q I Q L V N T^{0.011} P P L I F E A K S^{0.003} L I G R V L G L T^{0.03} K N S^{0.006} D G I L I V V K D
K E E Y^{0.025} K^{0.027} S I R D N L E N N G I F L R K P K G K V I I D R T^{0.1} R Y^{0.003} G R L G I R I V N M G K L V N T^{0.051} N E D D V R R Y^{0.004} L E G F G I R N A L V K I I G E V T^{0.139} L D D I E R
E V F G T^{0.048} S^{0.004} L Y^{0.005} K P A I I V S^{0.011} N E E F T^{0.007} T^{0.085} E E G I L V I R I N D T^{0.059} D R L R E A I F K I L D V I R V Y^{0.073} T^{0.442} K E P K D K P S^{0.039} M E P L I V K R G T^{0.127} T^{0.296} V V E V A R K L H N
E L A E G F G Y^{0.076} A R V W G K S^{0.005} V K F P G Q K V G A D H V L E D G D I V E I H S^{0.008} A

Sequence #319 — Gene Saci 0958

M I L V G I D E A G R G S L I G P M V V A G V A I D S N F L K F L S E I G V K D S K K L T R K K R E Y L F G V I L E Y S Y A I S L V K A Y P E E I D S E N L N E
I T Y R A M I Q I I H S M S V Y N P S I V T V D K V G N A S A V E R E I I N I N S S P R V E N N A D V K Y V E V S A A S I I A K V V R D N I I N E L K K T Y G D
F G S G Y P G D K K T V E W I K D L Y S R Q P T Y A L P I I R R S W K I L Q D I A P N Y Y I R K R D G N

0.03 0.007 0.002 0.003 0.01 0.005 0.175 0.002 0.003 0.013 0.029 0.271 0.012 0.014 0.006 0.027 0.006 0.002 0.004
0.019 0.005 0.148 0.086 0.005 0.152 0.017 0.012 0.012 0.013 0.025 0.003 0.009 0.185 0.024
0.004 0.004

Sequence #320 — Gene Saci 0959

M S C G K E N V E L I D R L C I D C Y M K I K E L I T V P T E I Q G K Y C K V C G S E W V S G K W I K S A D Q D P L T S I V Y R E I D R N I K T D P N V T D V E
Y T I V K Q W L D Y N D H P F I D V D I R G K I G N R D F R L T R T I S L K V E R V L C P S C L R R K S R Y Y E A I I Q L R T K T G E F T Q S K R T V F E S F F
N E E V I N N L S D V I E G R E G I D Y Y F I N K G V A K R L V S S L M S T I K D I K I T E S F Q D E R M K N G K K S A K L V I S V R I

Sequence #321 — Gene Saci 0961

M **T** 0.072 V K V D K N **Y** 0.06 E Q L L D R L **Y** 0.086 D R L P D K A Q K **S** 0.007 G Q Q N L P N L I V L Q V G N **T** 0.004 **T** 0.02 I I R N F **S** 0.006 **E** 0.004 **Y** C D R I R R E D K L C M R **Y** 0.001 L L K E L A A P G **S** 0.008 L G E N

G Q L V I Q G K F **S** 0.003 **S** 0.003 Q V V **T** 0.011 M L M E R F L K M **Y** 0.005 V V Q C **S** 0.003 **T** 0.055 C R **S** 0.007 F D **T** 0.051 I L K R D K K V W I I **S** 0.002 C L A C G A Q **T** 0.075 P V K Q F

Sequence #322 — Gene Saci 0962

MRV Y I E T Y G C A L N K G D S Y I M M T L L R D K G H E I V D N I Q D A E I L V I N T C A V R L E T E E R M K Q R I K E L K K Y N D K R L V V A G C L A S A
E P A V V V S L A P E A S V I G P Q S V Q K I V D V V E N S K Q R Q V Y L N E D K P L I T P K V F D G K I A I L P I A D G C A G D C N F C I T K L A R R K L R S
Y P P H L I V E S V R D A V R K G A V E I E L S G Q D T A A Y G L D L G Q I K L S D L V R K V T E V E G D F M I R I G M M T P E Q A M R D I D G I I E V L R E T
K V Y K F I H L P V Q S G D D N V L K L M N R K Y T V D E Y K D L V K E I R K K V P I V N I T T D I I I G H P G E D E N A F R N T L E L M R D I K F E R I H L A
M Y S I R P N T R S A S M K Q V P D P V K K E R I Q I A N K L Y E E L A Y E I H S D Y L N S I A S V I T T E Y G R K G S V I G R T L N Y I P V V I R Q N V E L G
K R I N V R I N E A S F Y D L R G E P I S

Sequence #323 — Gene Saci 0963

M D N V **Y** I V **S** A V R **T** P L G K F G G **S** L K D I **S** P **S** E L G **S** V V I R E A V N R A K V D P K L I D I V I M G N V L R A G H G Q D L A R Q A **S** I K A G I P A K **T** D
0.015 0.072 0.006 0.004 0.002 0.004 0.001 0.004 0.009 0.026 0.023 0.011 0.043 0.032 0.041 0.019 0.038 0.007 0.011 0.022 0.071 0.028
A **Y** C V D M V C **S** **S** G M I **S** **T** I N A V Q M I K **S** E D A D I V V A G G M E **S** **S** R A **S** F A I G **S** E I R W G **T** K M L M N K **S** L D I I D **T** M I I D G L **T** D P F N F K V
0.004 0.002 0.004 0.001 0.004 0.009 0.026 0.023 0.011 0.043 0.032 0.041 0.019 0.038 0.007 0.011 0.022 0.071 0.028
M G Q E A D M V A R E H E I **T** R R E L D E V A **Y** E **S** H R R A **T** I A **T** E K G **Y** F K D E I V P L N V D G R V V D K D E G I R A D **T** **T** L E K L L Q L K P A F G **S** D G L
0.406 0.06 0.065 0.087 0.152 0.022 0.024 0.112 0.01 0.0164 0.012 0.007 0.008 0.014 0.012 0.011 0.005 0.003 0.011 0.006 0.004 0.008 0.01
H **T** A G N **S** **S** Q I **S** D G A A A L V F V **S** E **S** A V R K F K L E P I A R V L G **Y** **S** W I G I E **S** W K F P E A P I **Y** **S** V K K L L D K I N I P L **S** K F D **Y** F E N N E A F A
0.164 0.012 0.007 0.008 0.014 0.012 0.011 0.005 0.003 0.011 0.006 0.004 0.008 0.01
V N N V L F N R **Y** L G V **S** **Y** D R L N V **Y** G G A I A L G H P I G A **S** G **S** R I L V **T** L L N V L R K M N G K **Y** G I A **S** I C H G I G G **S** **T** A I A V E L L
0.002 0.003 0.004 0.012 0.004 0.004 0.017 0.002 0.003 0.003 0.028

Sequence #324 — Gene Saci 0964

MAKKKSNTEQPTRREVVKPIEGEVICVVKKLFGGEHVQVICTDGKERLGRI PGKLKKKVWIREGDVVLAA P WDFQP NKCDI
VYRYTESEVRRLVEDKVI SQDVIEQLRG

Residue	P-value
M	
A	
K	
K	
K	
S	0.024
N	0.411
T	
E	
Q	
P	0.152
T	
R	
E	
V	
V	
K	
L	
F	
G	
G	
E	
H	
V	
Q	
V	
I	
C	
T	0.05
D	
G	
K	
E	
R	
L	
G	
R	
I	
P	
G	
K	
L	
K	
K	
V	
W	
I	
R	
E	
G	
D	
V	
V	
L	
A	
A	
P	
W	
D	
F	
Q	
P	
N	
K	
C	
D	
I	
V	
Y	0.04
R	
Y	0.008
T	0.087
E	0.015
S	
E	
V	
R	
R	
L	
V	
E	
D	
K	
V	
I	
S	0.016
Q	
D	
V	
I	
E	
Q	
L	
R	
G	

Sequence #325 — Gene Saci 0965

M S R N K R R K E E K R I K D A D L F K V V D S T L D T R T Y S D L Y Y I S R K L N I K T I Y G A V S A G K E A K I Y P A L T E S E E W Y A V K I Y Y V S T A S
S K R A I E R Y T F G D P R F E G V R A S N T L K L I E V W A K K E F K N L S K M Y D S G V S V P K P I Y V H K N I L I M E F I G D N G I R A P L L K E L R S E
D V N E D L Y K T I I D Q V V I M A N K A E L V H G D L S E Y N I M V F D G K P Y I I D V S Q A I D L T H P N A R E F L V R D I R N I N S F F M N N G I N V M S
E T E I L T R F I K I

Sequence #326 — Gene Saci 0967

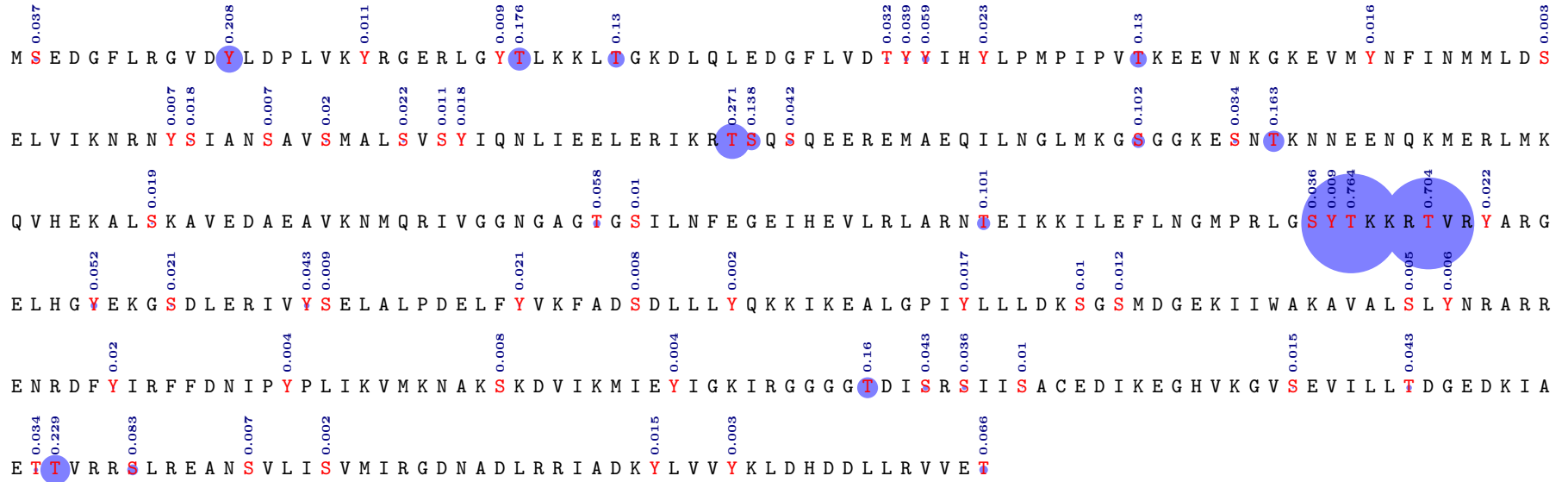
M Y H V R I L E E L R Q E Y D L T D D E I E Y A I D K A R G I I L G F A M E M K A M K V L Q D M N F M N V K Y V D L P T H D I E A E K D G S K Y V E V K A T K
K S P T R E Y S A H K I A M I A R L D G T H L T L V M T P S P H L F N T E E V L S E P K R L L F N V F R Y I Y S N N V E K L K E I T S D D K Y K T I L S S Y E K
V I K I Y T T R Y N K D A L S L L E T F L

0.002 0.053 0.109 0.017 0.048 0.082 0.014 0.026 0.185 0.132
0.043 0.279 0.052 0.031 0.009 0.017 0.085 0.005 0.071 0.008 0.005 0.004 0.003 0.151 0.026 0.083 0.081 0.019 0.007 0.002
0.003 0.084 0.079 0.001 0.006 0.082

Sequence #327 — Gene Saci 0973

M R A I L K D ^{0.016} S E L L ^{0.003} Y P Q D A L A K F L N E F G V K Q L E V E R I N L E D ^{0.015} S L N R I V A E D I I ^{0.024} S D I P L P P F ^{0.019} S R ^{0.017} S ^{0.13} T V D G F A I K H D L C P G E F ^{0.047} T V I D
K I R I G E F K E I R I G N G E A V E V D ^{0.127} T G ^{0.023} S P I P E G A ^{0.046} T A V V K V E N ^{0.021} T V I E G N K V K V ^{0.006} S K K L ^{0.007} S F G E N I G W I G ^{0.015} T D I P K G ^{0.067} T L V V R R G E R L N P
^{0.005} Y K I A L L A ^{0.001} S I G I R Q V L V ^{0.003} Y K R P R I ^{0.009} Y I I I ^{0.043} T G D E L V E P G K D L D P G K I ^{0.082} Y E ^{0.01} S N ^{0.008} S ^{0.029} Y ^{0.037} Y L Q A ^{0.013} Y ^{0.005} Y L ^{0.005} S K G ^{0.031} Y D V I K R ^{0.099} T H V N D D K E L I R R E I L
E G I E K A D I V I V ^{0.057} T G G ^{0.012} S ^{0.01} S A G E K D ^{0.087} Y V H Q V I K E E G K I I V H G L K I K P G K P A I L A E I K G K P V F G L P G N I ^{0.089} T ^{0.001} S ^{0.003} T M V I N E E V V D K ^{0.024} Y I D I
^{0.006} M ^{0.004} Y ^{0.005} N I ^{0.001} S ^{0.001} S ^{0.116} Y ^{0.06} R ^{0.022} Y ^{0.008} T I ^{0.006} K A ^{0.006} T I ^{0.006} T N E V K A D ^{0.008} Y N R ^{0.006} T ^{0.088} Y ^{0.008} I P V ^{0.009} Y L I K K D G K ^{0.044} Y ^{0.023} Y A I G M P F D ^{0.004} S ^{0.047} Y M I G V F ^{0.003} S ^{0.08} T A D G ^{0.054} Y I I I N P G E N I E E G ^{0.026} S E V ^{0.02} S V ^{0.031} Y L
^{0.029} R ^{0.029} S L D E R P V ^{0.245} Y I G E E E P ^{0.043} T L ^{0.011} Y P R G F R V L P F G ^{0.007} S ^{0.009} Y I G L K A I K ^{0.004} Y G I G D V I V I ^{0.005} S N L ^{0.007} Y D ^{0.007} S N F K G D L ^{0.02} S K E R N V I E ^{0.135} T G E G ^{0.013} S E ^{0.046} Y V G ^{0.024} Y L E W V
G L ^{0.003} S K L V K D P V V K L R ^{0.005} Y P ^{0.019} S V A L Q L M D K A K I I I P D ^{0.187} T F H K D G K V I G K E K L E I I V R N P D I K K ^{0.002} Y F R G

Sequence #329 — Gene Saci 0977



Sequence #330 — Gene Saci 0982

MEK L ^{0.004} S ^{0.014} Y D A V I I G A G L A G L M A A H E I ^{0.004} S K A G ^{0.087} Y ^{0.01} S A A V I ^{0.004} S K V F P ^{0.249} T R ^{0.017} S H ^{0.025} S A A A E G G I A A ^{0.079} V V N G N ^{0.011} S D P N D ^{0.016} S P D ^{0.184} Y M A ^{0.083} Y D ^{0.144} T I K G G D ^{0.021} Y L V
 D Q D A A E L L A ^{0.018} Y K ^{0.008} S G E I V E L L E K W G A L F N R Q P D G R I A L R ^{0.005} Y F G G Q ^{0.195} T Y ^{0.004} P R ^{0.347} T R F V G D K ^{0.063} T G M A L L H ^{0.088} T L Y E R ^{0.108} T S ^{0.023} G S ^{0.008} G K V D F ^{0.018} Y F E W F A
 W E L I R D E ^{0.038} S R V R G V V A F D M R N M V P F F F K A K A V V I A A G G M G M L ^{0.003} Y R H ^{0.169} T ^{0.118} T N ^{0.003} S Y I G ^{0.084} T G D G ^{0.068} Y A M A L R A R V A L K D P E F V Q F H P ^{0.062} T A L ^{0.003} Y
 P ^{0.007} S D I L I ^{0.004} S E A A R G E G A V L K N A K G E R F M ^{0.212} T R ^{0.011} Y A P K K L D L A P R D I V ^{0.028} S R A I I ^{0.083} T E I K E G R G F P G G Y V G L D I ^{0.02} S H L G E E ^{0.01} Y I K E R L A L A
^{0.025} Y E A A K ^{0.119} T F ^{0.004} S G V D A ^{0.047} T K E L I P I R P A H H ^{0.01} Y Y ^{0.015} M G G I D V D I ^{0.189} T G K N P D V I G L F A A G E A A C V ^{0.003} S V H G A N R L G ^{0.01} S N ^{0.01} S L L E ^{0.015} T L V F G R E ^{0.165} T G N E V
 V K F L Q ^{0.017} S F ^{0.122} T E P ^{0.049} S ^{0.099} S D I D K E A E K A E Q ^{0.084} S A ^{0.104} Y D I V K K E ^{0.016} S G V H F G D I L E K L R D ^{0.023} Y M W E F V G I ^{0.022} Y R D E N G L K N A V ^{0.009} S E I L K L R E Q M K N M ^{0.005} Y V
 L D K ^{0.005} S K V ^{0.021} Y N ^{0.085} T E F ^{0.018} Y N A L E L K N M I D L G L V I A ^{0.004} S ^{0.051} T A L N R K E ^{0.087} S R G A H Y ^{0.019} R ^{0.28} T D ^{0.085} Y P K R D D Q N W L K H ^{0.009} T I A ^{0.019} Y L ^{0.001} S G N ^{0.04} T V E I ^{0.27} T Y ^{0.057} K P V K M ^{0.117} T K W K
 P E E R V ^{0.076} Y

Sequence #331 — Gene Saci 0985

M N S E T T A R K Y Y S K L K R L P S F R I V F S I F A I E F A L L L V R S L E F G I L Y I I P F L I Y L L C V L L I V R E I K L S I F L G L L T E F V Y L I F
S L F T S Q T V F A F G I L A P F F G Y L M L G K L S E L K S T L S V F V T S F L P S L I S G L N Y Y V L L Y S L I I A V V F H F Y I H I V N V K G E R I T G F
K S L T L L R P F L M S V M R N D N K L V E K F L D G V G T K I V T N V G M F K I G N H H F I I P K I H Y G L N G E I G S S K F I Y Q L E S I I P N V I V F H G
P G D H E L D L V T S S E S R R V A D F I G N E I K D G K W L S Q K F Y G I H V W Y N C G F R G V T L V F S D S T L T F L E R P G L G I D D L P V K L W E N S V
K Y N D Y I I D C H N E Y L Q E E L P L N S R E C I M Q G I N Y A K N V L R E R R V E R A L K I A I E E R T I S N P E G L C S N K I K V A A L S D G N T T V G I
V Y L Y A N N A D P S L T K S L R E S L G K Y V N I P L L I T P D D H S C T G S E L G N L Y T P A Q F S P E L P S L A E K T L N D A L N K L Q D C E V G F N R L
D L K G V K V I G K I I S S F V V A L E E I G G Y V M K T F W I P L V L P L F L A I I F I V L T

Sequence #332 — Gene Saci 0999

M^{0.026}Y I P P G R P I P D I L N L L R Q E A^{0.005}S I A Q N I K L K R^{0.074}T R D A V^{0.019}T^{0.046}T A I Q A A I D R L^{0.044}T Q I P K V D G N G L V I F C G E N F N N E D F K C F M F^{0.011}S P P E K
V P L F F^{0.003}Y R^{0.141}T D K F F H V E F L E D M V E E N E V F G L V I V E R D^{0.065}Y^{0.032}A T I G V L K G^{0.164}T K V E V L D E F E G F V P G K H M M G G Q^{0.039}S Q R R I E R I E E M^{0.026}Y H
N F L K E V G E K V N Q^{0.018}Y F L P^{0.037}Y I E M K K M K G I L I G G P G F A K K D L^{0.029}Y^{0.028}E S D L L D^{0.01}Y R V K K L V L Q P L F D I P D Q G E P G L K E L I M K A Q D I L K N
Q K^{0.02}Y I E V E N L M E E I K^{0.027}Y H L A K D D G M V V^{0.054}Y G L E E I R K A L Q L G A I D A L I V^{0.029}Y E E P G^{0.054}S E L E K L^{0.02}S Q E A E N^{0.027}Y^{0.066}G^{0.074}T K V^{0.074}Y V I G D E L P D G E W V
K K^{0.087}T F G G A I G K L R F K I^{0.003}Y

Sequence #333 — Gene Saci 1004

M N H L I V V **T** L **T** E G E I E N N K E K L **S** N I L K K L R V N D E L I L L **S** K L D V **S** **Y** M F K G **Y** K I V E K N K D D E E G I W I L R V K K N

0.04
0.081
0.01
0.006
0.009
0.01
0.021

Sequence #334 — Gene Saci 1006

M L ^{0.038} T ^{0.021} T V L K P ^{0.006} S E G ^{0.043} T G I V N G ^{0.042} Y D I V K Q P ^{0.005} S L V R R ^{0.081} S I G V V P Q E F ^{0.111} T A D E D L ^{0.081} T G W E N I M M M A G L ^{0.023} Y G I P K D V A N E R G K E L L E L V E L ^{0.083} T N A
A N R K V E ^{0.145} T ^{0.024} Y ^{0.012} S G G M R R R L E I A M ^{0.011} S L I ^{0.018} S R P K I L F L D E P ^{0.097} T I G L D A Q ^{0.029} T R V ^{0.007} S I W K ^{0.014} Y I L E L K K E Q G M ^{0.041} T I F V ^{0.048} T ^{0.016} T H ^{0.028} Y L E E A D N ^{0.049} Y A D R I A I
I D H G K I V A I G ^{0.022} S P K E L K D K I G G D I I ^{0.007} S L ^{0.005} S ^{0.014} T ^{0.005} S N N E L A Q Q ^{0.044} Y I K V V E G V K E L K V M D G M I R V K V E R G E E I A P K I M E E L I K K G I K V G
K L ^{0.048} Y I ^{0.023} T E P ^{0.3} T L D E V ^{0.303} Y M E ^{0.089} Y ^{0.293} T G R K M R D Q E A G E G E M F A L R R ^{0.372} T L R R A R G

Sequence #335 — Gene Saci 1013

MAILLREVDVEKLVNFKDIYD^{0.029}SLERAFKY^{0.01}LS^{0.009}NKNA^{0.002}NT^{0.023}KRIR^{0.068}TFHGS^{0.001}VMT^{0.027}Y^{0.002}QAGAFDNY^{0.019}LGFKV^{0.026}FVK^{0.006}GT^{0.026}Y^{0.006}LGVL^{0.002}YS^{0.001}LDG

DIVLVVEADLL^{0.005}SR^{0.084}IR^{0.005}TGIL^{0.003}SVLV^{0.003}SD^{0.003}YLA^{0.012}AKKN^{0.021}YT^{0.005}SVGI^{0.004}I^{0.004}GLGK^{0.004}QGEF^{0.004}QVK^{0.004}SF^{0.004}NELK^{0.004}KGVT^{0.166}IRAI^{0.048}SK^{0.048}KEK^{0.178}TD^{0.178}KNIK^{0.018}R^{0.018}L^{0.018}QS^{0.018}QGL

NVIPAKDY^{0.029}KELC^{0.005}ST^{0.023}SE^{0.007}EVIV^{0.026}TI^{0.063}T^{0.012}SS^{0.006}KDPFL^{0.017}KL^{0.017}EFL^{0.017}NHG^{0.017}THINAL^{0.006}GS^{0.006}NLPERA^{0.017}E^{0.017}LFPE^{0.022}VIK^{0.017}ASS^{0.022}SLIA^{0.017}VEDLE^{0.017}QAKEE^{0.017}AGDLI

LAEKMKMLDWNKVVLI^{0.003}SD^{0.003}VINGK^{0.054}VGRK^{0.054}DD^{0.071}EIT^{0.071}IFK^{0.006}ST^{0.04}GIGLED^{0.065}VAT^{0.065}MKLL^{0.01}YE^{0.01}KAKK^{0.016}Y^{0.016}GLGVEIDLR^{0.015}GKW^{0.015}SELERK

Sequence #336 — Gene Saci 1014

M V ^{0.045} S R I G K E I E L ^{0.05} S P V E M G ^{0.02} S Q I A K K V E I N L A ^{0.01} S G ^{0.325} T P D P R L M P I K E I R Q A ^{0.091} Y D E V L E E F G ^{0.01} S K V L F ^{0.003} Y P G A G G Q E E L K K E I E N N F L P
^{0.022} Y I D ^{0.002} S G I K G N V V V ^{0.005} T ^{0.001} S G A Q H A V E L L A K ^{0.01} Y F L E D D ^{0.043} T I A V E N P ^{0.077} T F I E T ^{0.031} F T ^{0.067} P L K L R ^{0.007} S N V V L P V ^{0.018} S L D E G G I K I D E L E L L L K V G K I R L
L ^{0.004} Y V I P N C H N P A G V ^{0.048} T M C E E R R K I L V E L A D K ^{0.026} Y D F C I L E D D P ^{0.265} Y K P I A G V ^{0.029} T P M ^{0.07} T I K ^{0.007} S L D R N G R V I ^{0.005} Y I ^{0.004} S ^{0.008} S F ^{0.004} S K I I A P G L R V G F I V
^{0.03} S ^{0.033} S ^{0.021} S E E V ^{0.019} S N K I ^{0.027} S L I E Q M D F ^{0.004} S ^{0.011} T ^{0.003} S ^{0.026} T I N Q F V I A R L L K K G I V R E R M K N L H ^{0.011} S ^{0.018} Y ^{0.005} Y K E K M K ^{0.037} T L I D ^{0.014} S L H D K G F K D F N E P Q C G F F L L L D L
K K D ^{0.009} S W K V F N E A V K L G L ^{0.008} S F V P A K P F ^{0.008} Y L R G G E ^{0.148} T M A R L ^{0.03} S I ^{0.012} S V A ^{0.057} T E E Q I K E G V K R L R D A W I R V

Sequence #337 — Gene Saci 1015

M R ^{0.097} S K L E R V K E E L R A R N I D ^{0.04} Y L I L A P G ^{0.006} S N M L ^{0.01} Y L ^{0.071} T G F D E E Q M E R P L F ^{0.016} Y I V ^{0.018} T Q N E E F F V V P K L ^{0.005} Y E E Q L ^{0.002} S N H N L I V ^{0.044} Y ^{0.091} T D G E N P F K

K I P I Q K G R V V A I D D ^{0.01} T M W ^{0.003} S ^{0.004} S ^{0.028} F T I D I L N ^{0.009} Y F ^{0.007} S P ^{0.006} S Q L V K ^{0.017} S ^{0.015} S E V L K E I R M I K ^{0.042} S Q E E I E I L R E G V K I A E E A F L E ^{0.038} T I N L I R E G M K E V

E I ^{0.012} S N L L I Q K F ^{0.021} S E R G V K P ^{0.021} S F E P I I ^{0.104} T ^{0.013} S G P N ^{0.167} T ^{0.012} S M P H L R A ^{0.189} T N R K V A R N E V I I F D F G I R ^{0.004} Y K ^{0.524} G ^{0.064} Y A ^{0.048} T ^{0.123} D ^{0.011} T R V V S I G K P N E D V L K I H E

I V R E A Q E R A E E ^{0.085} V ^{0.052} S E K V E ^{0.091} T ^{0.083} S E V D K I A R Q ^{0.22} T ^{0.002} I S ^{0.013} K Y G F G A ^{0.015} Y F I H R ^{0.052} T G H G I G I D V H E D P ^{0.158} Y I ^{0.01} S ^{0.006} S ^{0.009} D Y K R P I K N N M ^{0.017} T ^{0.023} F T I E P G I ^{0.007} Y L P

G K F G I R I E D M V F V N D K G I ^{0.005} S M N K L D K N I F ^{0.02} T L

Sequence #338 — Gene Saci 1017

M N G ^{0.007} S P V G ^{0.015} Y I K ^{0.007} S V N E G ^{0.029} Y ^{0.012} S A R V F D E N ^{0.102} Y ^{0.092} L ^{0.015} Y ^{0.012} F L S S D K P E D L ^{0.24} T ^{0.026} A S K L K V K G W E K G V ^{0.425} S E E K R E G G R ^{0.041} Y E V ^{0.034} T Q K I N L L D I P V Q D K M K E
 L ^{0.026} S E L A K ^{0.05} S I ^{0.007} Y ^{0.018} S L D L R ^{0.022} S K I V ^{0.013} S ^{0.017} S ^{0.026} T I ^{0.027} Y ^{0.023} Y M E G I E D K E I V F E D G ^{0.054} T E I N ^{0.004} S K I P R V R L F ^{0.01} Y ^{0.492} S I ^{0.013} T L ^{0.103} T ^{0.007} Y E N R ^{0.007} S A ^{0.09} T V F ^{0.013} S E A V G G ^{0.019} S G G ^{0.05} Y E L I K
 E K D P ^{0.092} Y G H L E N K L K ^{0.008} S V D N V L V K G K ^{0.011} S ^{0.259} T P G R K D V V F ^{0.005} S N E L ^{0.006} S G I M A H E ^{0.014} S V G H P F E A D R I L G R E ^{0.831} S A Q A G L ^{0.015} S ^{0.021} Y L V G R K I G E R I G ^{0.028} S
 E A V N V M D N P L V D G G L G ^{0.074} Y ^{0.016} Y R I D D E G V K A R P K H L I K N G I N E L L Q D R F ^{0.014} S A H K F G V E ^{0.015} S N G ^{0.034} S A R A ^{0.016} S A F N R E P L V R M ^{0.02} S N ^{0.106} T ^{0.089} Y F K P G
 D ^{0.044} Y ^{0.02} S F E E L I E D I K D G I ^{0.022} Y ^{0.005} F K ^{0.006} S Y M E W N I D D L R I G Q R ^{0.002} Y V G L E ^{0.059} T ^{0.012} Y E I R N G E I G E P V L F P V F E G R ^{0.087} T F D V L M ^{0.011} S I D A V D K ^{0.006} S L E F F G G ^{0.125} T
 C G K G D P D Q G I P V W L G G P N M R I R N A V I K V R G ^{0.058} S E

Sequence #339 — Gene Saci 1018

M N E N L I S V L N K L R G F D E V E V G E N K V T R L L I K F V N S E V A T I Q K L I D V N Y G I M V R K G N R Y F M Y S G T N L D V E E A K N G F E V S S G
 A Q L Y P I L S R N D R E F V I D Q N N E N L R E I V E K E R I D G I I S E I G K A E L P I S G V I S I Y E T T T N L V T S Y G F N G S E R R Y K I D G Y V R A
 F N K E Y S G Q W A F F S E S P N D I K D T I K K A V E F A S I T N R V K L D D G K Y N V V M S P L V V A N L M G F F A D F A S A F S V I T G S S F L A K F K V
 G D R I A S D L L T I S D I P I K A G I R S F D D E A E F T R D K K I I D S G I F Q S L L F N N E L G Q L M G Q K S T G N A G I I S P N A F A I D L Q E G N M G
 V E S M T S G N V I L L N N V W Y T R F Q N Y Y E G S F S T V G R D A V V V Y K D G K P I G V A D R I R I S D T L P N I L R N V Q A L S K E K Y G I R W W D A T
 L P T Y S P F I L V E N V N I S S S K

Sequence #340 — Gene Saci 1022

M I D E I L N E I K E K V R N K **T** G K E L **S** A V K A **S** F R I N N K N K V V E **T** K G H **T** I **Y** I N P I F I E G F Q G D P **Y** K I R D C V **S** **S** V L L V E **Y** L R L L G F D

D N E I L D **Y** V K N N E **T** E I I **S** **Y** V Q K L C K P K W **S** V M **Y** **Y** I

Sequence #341 — Gene Saci 1024

MDF ^{0.028} S A V V D D V ^{0.013} S K ^{0.005} S V V ^{0.004} T I L ^{0.036} T K Q I ^{0.035} T L D D F L Q P ^{0.004} S V A Q G L G ^{0.004} S G F ^{0.004} S I G K G L I V ^{0.023} T ^{0.005} S ^{0.006} Y H V I G Q A ^{0.006} S ^{0.006} S ^{0.007} S M I V ^{0.069} T R D G F R G E A E I I A V N P F

N D L A L I K ^{0.07} T D L D L K P L K L ^{0.05} T D D V K V G Q G V L A V G ^{0.012} S P L G L D ^{0.003} S ^{0.004} T ^{0.03} T F G I V ^{0.004} S ^{0.008} S V D R ^{0.068} T I Q ^{0.005} S P I G ^{0.01} S ^{0.005} S L ^{0.029} Y V I Q ^{0.039} T D A A V N P G N ^{0.009} S G G P L V N ^{0.04} T

K G E V V G V I ^{0.007} T A M I P ^{0.007} Y A Q G I G F A I P ^{0.004} S R L V M ^{0.003} S F I E N I K K N G R ^{0.002} Y V R P ^{0.006} Y I G V R I I K L N R A M A V ^{0.017} Y F N L P V D E G V I V I D V D P R ^{0.017} S P A ^{0.01} Y

Q A G I R R G D V I ^{0.056} Y E I N ^{0.01} S K K V K ^{0.017} S Q L D I I A G I E E K G L D Q V E L G V ^{0.015} Y R G K N K L K M ^{0.028} S I E P M E L ^{0.069} S

Sequence #342 — Gene Saci 1027

M T I K V I N I S K K Y G K I T A L Q D V S F E V R D G E I V G Y V G L N G A G K T T T I E I I S G V R S P D Q G D V E I D G H S I V K E K R V A S K N L G W V
P E L P I F E Q D A K A L D Y F I Y L A G F Y G I S T E D A R K K A Q E L F S M V G L E G R E K D K L K N Y S Q G M K K R F A L A V S M L S D P K N F L F D E V
L N G L D P Q G I A F F R D L A I R F K K E G K G V L F S S H I L T E I E N I A D R V I F I H K G R I M K E M R I D E I R N Y A G S S T V R V V L Q K P N E T V
I K V V E K Y G I P R M E G N T L Y I S D F K G D M Q N L F S D L A P Y G V N E I G K V S N N L E E I F F K I I G L Y N Q G T

Sequence #343 — Gene Saci 1032

M N G E E E G **Y** I V **Y** R D N **Y** **Y** **T** A F L D K **Y** P I A P G H **T** L L V **T** N A H F E N I L D **T** S E **T** H L N D L G K **T** I K M L A N **S** I K R A V K A D G I R V V **S** N A G R

S A M Q I V F H F H V H I I P **T** W E N G **Y** P E D F A D F K P R **T** L L P R E **Y** **Y** E K A R **T** L I **Y** N E V N R **S** N H N **S** **Y** L I E

0.026 0.018 0.04 0.042 0.057 0.007 0.011 0.089 0.012 0.002 0.084 0.022 0.014 0.002 0.012 0.015 0.141 0.004 0.02 0.052 0.081 0.005 0.006 0.015

Sequence #344 — Gene Saci 1034

M I I A G Y D I T K H F V S G G M F E R N K A V V K A V Q D V Y I K I K E E E V I A L V G E S G S G K T L G R M L V G L E S P T G G K I L F N V E D K V L E E
Y E T D N Q S R K A E I E S I H D I F K G K I A K E F R R H V N M V F Q D P Y A S L D P R M K V I D I I K E P M I S T G Y L R G E E A N K R V R E L L E A V G
L P K S F A D R Y P H E L S G G Q R Q R V A V A R A I S T D P K F V V L D E P T S A L D V S T Q A Q I L N L L R K L K R E L K I S M L L I T H N I A V A S Y L S
D R I Y V M Y A G H I V E T G T K E Q I M K T P K H P Y T V S L L S A V P K V G S K M N R I V L R G E P P N L V D L P K G C N F H P R C P Y A F G D C G W T A E
E V A I D L K Y L I E S K Y Y D L T E G E I V I D V L S D K E M K V R G I S D E K L K M I T S K E N E I K S F S I K S I S A D G S G D V H V V L R D Y E E P K
L Y N M S D G R L V K C L L F K G K N

Sequence #345 — Gene Saci 1035

M T N V L T I R E L Y L S F V T R I G V Y N A L N G V D L D V K E G E V L G V A G E S G S G K S L L A L T I A G V L P P N A W I K K G E V R F K D I D L V R E L
 R E V G D K G F N K K K N Q R A F K E L N N R L Q A F R G S K I A I V F Q D P M T S L N P V L Q I G Y Q I G E T I Y Y H N P A L L A K R I L A R S K V T K D E L
 R E I I R L L E Q N K E T Y V E K L N E F V K S K G L E G L E D Q I L F I W E R N D I H K A K K Q K L I L S L E G E K L S G F V R N F L E N V A E T N R V R N I
 S R I P I I S R R L K S T L I K E G Y R K A V E I L T M L N V P N P E K V V M Y P H E L S G G M R Q R V A I A I A I V N N P E L I I M D E P T S A L D V T V Q
 A Q V L E L V R S L K K K Y N S T F I F I S H D L S V L Y E I S D R I A V M Y A G R V V E V G N V E D V V T N P L H P Y T Q S L L R A V P T I D S Q E V S P I P
 G E V P D M R T P P S G C M F H P R C P F V M D K C K N S V P L M Y Q V R N G H K V A C F L Y G G D N K

Sequence #346 — Gene Saci 1036

MEKR ^{0.037} **S** ^{0.088} **S** Q L K L ^{0.006} **S** L K I F F ^{0.001} **S** N P ^{0.007} **T** A V I G L I I F L A ^{0.} **Y** V I D A I I V E V ^{0.002} **S** P G L L G I Q N P N Q L Q M N F I N P V P Q P P ^{0.012} **S** P H H P L G ^{0.072} **T** ^{0.035} **T** ^{0.028} **Y** P G I D L

L K G I L A A I R I D L ^{0.005} **Y** ^{0.001} **Y** ^{0.001} **S** V V I V I G G A I I G ^{0.003} **S** V I G I I A G ^{0.} **Y** R G G I I D D I L M R I ^{0.017} **T** D I F F A I P ^{0.001} **Y** L V L A L A I G F V L G R ^{0.016} **T** ^{0.03} **T** ^{0.001} **S** M ^{0.001} **S** I A L I I

V W W P L ^{0.002} **Y** A R ^{0.001} **Y** A R A Q ^{0.042} **T** L ^{0.006} **S** I K R M P F I D A A K V ^{0.003} **S** N V G ^{0.002} **S** L K I M F K H V L P N V L P P I F V Q I ^{0.001} **S** L D L G ^{0.003} **S** I M V I F ^{0.001} **S** V L ^{0.002} **S** F I G L I ^{0.013} **T** N P N L P E

L G ^{0.006} **Y** L ^{0.027} **T** ^{0.002} **S** L G L Q ^{0.005} **Y** I Q ^{0.028} **T** A P W ^{0.007} **T** V I F P G L A I ^{0.013} **T** I F A L A V N L M G D G L R D L L D P R R ^{0.157} **S** ^{0.396} **S** I

Sequence #347 — Gene Saci 1042

M S^{0.024} E V K L F S^{0.009} T^{0.073} A I K L I E R K T^{0.302} S^{0.043} P E K A F D I A V K S^{0.006} L N H K V N R R K L F N K F L R V L W N Y^{0.001} Y^{0.002} Y^{0.003} A T^{0.019} F L Y^{0.001} P E R D I E D I I N V S^{0.003} L N S^{0.005} D F P F K P
P K W A E E R L Q S^{0.017} I M G D L N V K T^{0.038} R Q Q W I R V N T^{0.061} L K A D V E D V R R K L E R K G V V L Q R D S^{0.033} F E F L F R V I K A K S^{0.044} R I S^{0.125} D L E E F K N G E I V I Q D
K A S^{0.006} V Y^{0.057} S^{0.006} V V F L D P K P N E K I L E I G C A P G M K T^{0.006} S^{0.004} L I Q Q I T^{0.018} N N K S^{0.003} L V I G I D I S^{0.011} S^{0.013} K R I K I Q Q D L M N K L G V E N V E L V V S^{0.006} D G S^{0.009} N V P I T^{0.138}
K A D K V L I D A P C T^{0.099} N S^{0.003} G T^{0.071} F V A D P S^{0.005} I F L R I T^{0.133} K K D L M R L S^{0.076} R L Q R S^{0.088} I L R S^{0.051} I R K F K V P T^{0.211} V F S^{0.011} T^{0.162} C S^{0.007} L F P E E G E K I A E K Y^{0.01} E A F L T^{0.08} P I S^{0.006}
I D T^{0.093} T^{0.081} N Y^{0.01} G Y^{0.009} K R S^{0.009} K V W K R V R F Y^{0.003} P N I H G T^{0.046} E G F F I A K F N F S^{0.002} K N I T^{0.018} L D D Q N

Sequence #348 — Gene Saci 1050

M V Y R V S I L G V K G G V G K S T I A L S L G K A L A L K G K K V L L I E R D M V G Y A S F A F G I K R K G I L A K L A D G E E H F E E S F K K L S F G D G E
 L S L L K F Y G D G E R V D D L K K V M S D I S L R E K L S I L A S K F L Y G Y E Y Y I T D N P P L I S Y N D L T L K V E L D L F Y S N V P N P K V L R I Y V
 S S A S R N I I N S T I D Y L K S F E S D V N Y R G T P L A F I V N M V P S L D E V E R I R Q E L R E V I T K L G V S Y G I A I P L Y R E I M E K S Q E N I L D
 L P V V D E I N Y L A D N I I K E R F E E K A V Y I S T Q G G E A L S G V T L I T Q E P G G N G I L A I M N S I N K A V V E G S H V V V V Y T K E K I T E I L R
 S N G I K F V G I S I L P K Y K E E R F K M K T I A D V L K L A H R L A N D I V Y K I Q D L D N P V I I V H R T N D I S P A V D N T A Y L D E F W N S F I N S M
 R N K R S V K I V L I C D K I K D E C D V I K S Y A D K I I E V

Sequence #349 — Gene Saci 1058

M S E D K Y V I A F D V G T T S T K C G I I S L K D F E V R K L V S T K S I V N Y P K K G W A E Q D A N K L W E T I V D L G R T A L E D F K F T I S G L V F D A
H M A G V I P V D A S G E P L R N A I I W L D E R A S G L P E D L W K G V I K L Q G Y S I L K L L K F L R I T G G A P S K T G K D V I S K I I W I A Q N E R D I
F S K T Y K L L D I K G F L I S K A S G V F V T S H D E A S L S W L A D T R T A R A I W S D E I L R D Y K I D R N L L P E I K K S T D I A G Y V K G E V A K L F
G E I P V F V G A G D L T A S A V G S G A V K E G E P H I Y I G T S D W V A S H I S K R K V D V F H Y V G S I L S A I P G K Y L Y V A E Q E V A G G A I E W V M
R L L G M E R N Y E E V E K L V K S I D K T S L L F L P W L Y G E R S P I D D P T V R G G I L N I S L E S S K A E I L R A V M E G V A L N I K W V F P L V A K D
V K E V N I V G G A L F D S W C Q I V A D S I G L P V K R V K R P E L T G L R G L G A I A S V G L G V Y N S F E E A C S K F E I D K V F M P D S N N S L R L N
K K F R E F I N V Y K R L K K T Y R S L N S R P

Sequence #350 — Gene Saci 1060

M K ^{0.085} S N ^{0.021} S S ^{0.007} A L G R I K I G ^{0.012} S L F L E L ^{0.003} S S ^{0.004} I L F I V ^{0.002} S I I V V L ^{0.021} Y T A F N ^{0.03} T V A K Y I N ^{0.002} T S N G V ^{0.003} S G L N Q ^{0.003} S Q L Q Q E L L K Q L N ^{0.01} T P L I H A I P I I V ^{0.007} T V

I A I I G ^{0.001} S I L I L ^{0.003} T G Y ^{0.001} L N E K I K ^{0.005} T N ^{0.002} Y S ^{0.001} D L G K V G ^{0.009} T I I M I I G A V V ^{0.003} Y A L P V N L F G D I I F V I G Q I I L G I ^{0.002} S F ^{0.002} Y R ^{0.03} T G E ^{0.041} T F N E G ^{0.001} S L K N A G I

L V A L P F L I ^{0.004} T Q V I G ^{0.003} Y A L ^{0.001} S Y ^{0.007} I G V N K V I R E L N ^{0.003} S A K K ^{0.059} T V K V ^{0.011} S S ^{0.008} L G ^{0.012} S G I I R G N G I L ^{0.01} T I ^{0.003} S L ^{0.015} Y S ^{0.003} D S ^{0.006} D V ^{0.012} Y I ^{0.007} T Q A Q I V G ^{0.004} T N ^{0.003} Y I ^{0.002} S T ^{0.009} S I ^{0.002} T P ^{0.029}

N ^{0.001} Y L K H G F N N I ^{0.008} T I D F N N L ^{0.001} S L N L I P N ^{0.002} S L ^{0.001} Y ^{0.027} T V R L L L A N G D ^{0.002} S I D I Q V ^{0.022} T A Q P

Sequence #351 — Gene Saci 1063

M T K L V A T L G T S P G G I L E T F L Y L A K N G V D I N E I R V I T T R D P E V E K A W K I V K L M F V C C L K E R F S K V E I I Q F P V S I N D I N T E Q
D L K D F K A F V N N H I S S E D Y V D I T G G R K G M S V A A A L A A K S K G A K I V T S I I P Q D E Y R R I N D L I K Q L K D I P E I K D T R D C R Q D L K
N T Y C S L I S S N A R T I I F E I

0.008 0.013 0.032 0.006 0.025 0.005 0.095 0.128 0.01 0.003 0.045
0.004 0.005 0.214 0.106 0.013 0.014 0.023 0.02 0.075 0.256
0.018 0.002 0.003 0.004 0.009 0.043

Sequence #352 — Gene Saci 1064

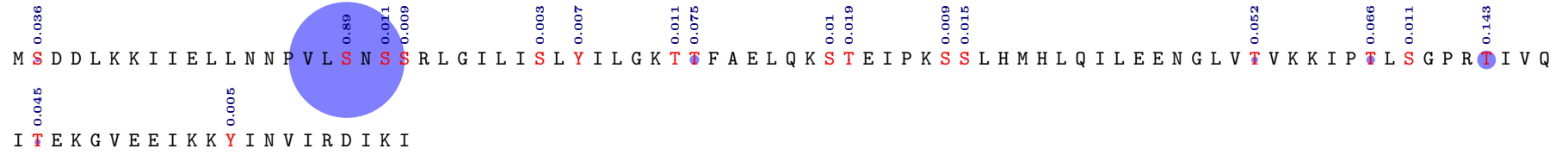
MDFV ^{0.008}S VGG RKLHF ^{0.029}T ^{0.005}QSGKGRNLVLLHGIPGFC ^{0.006}YDFRHNVDVL ^{0.004}SKKFKV ^{0.156}TRLD FKGFGH ^{0.016}SEKGD ^{0.088}YD VDDFRVEVQAKEIM

EALNKLDIHDFVLLGHDI ^{0.003}GS ^{0.001}IVS ^{0.014}QLIAQET ^{0.008}NCDLVLINPA ^{0.005}YKGMGRWRDIANE ^{0.011}YW ^{0.005}YIFFHQIPIAEKMI ^{0.005}TS ^{0.003}NLRD ^{0.006}YIN ^{0.002}Y

FLDHL ^{0.28}TVRKFKEEEEKEE ^{0.037}YFKV ^{0.048}YEEP ^{0.011}YS ^{0.007}VKALVNW ^{0.004}YRA ^{0.004}YV ^{0.001}SHFRWNNIRKIK ^{0.002}SK ^{0.049}TLVLWAENDPLFP ^{0.044}TS ^{0.003}SWVDRLWEEFED ^{0.111}Y

KLVKIHDAGHWPHAENPEEVNNAIL ^{0.017}TFFD

Sequence #353 — Gene Saci 1068



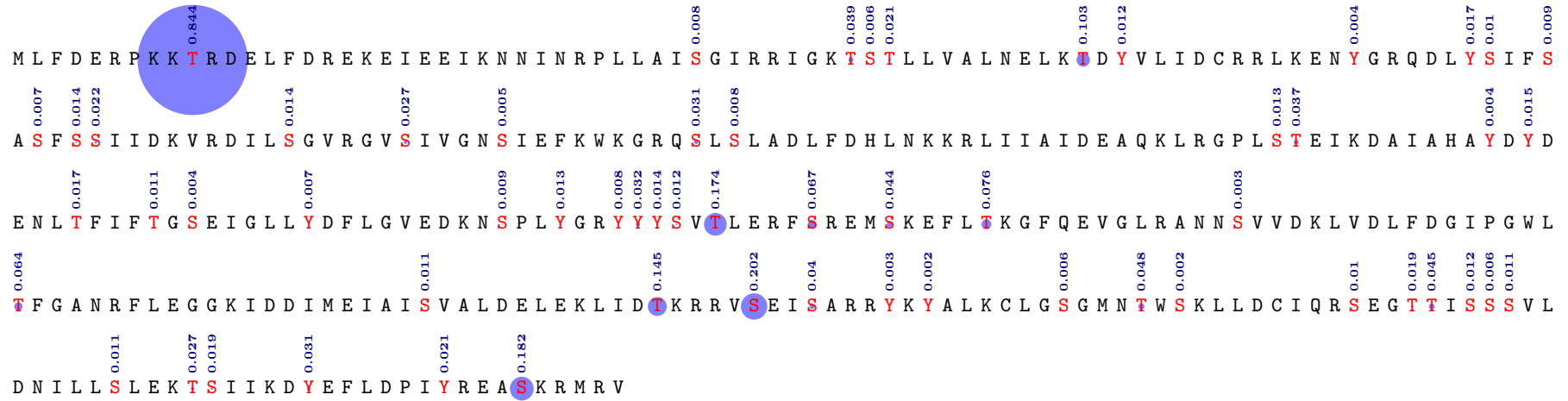
Sequence #354 — Gene Saci 1078

MEIRKFTVVVGAGSMGHGIAELALIAGYDVLNDVAENILKNAKERIGWSS LKRLSEKGS IKEDPEKILSRLHLTVSQEEAM
KDTDFLIEAVIEDINVKKKVFEKADSLAS KDAILA SNTSSSLPI T E I A TAVKRPERVVGMHFFNPPVLMQLVEI I KGEK T S
EETMKRAYEMGKKLGRDPI LVKKDVPGF LVNRILFRVNDI SCLLVEK GKADVLEVDASAIYELGFPMGVFL LQDYAGVDV
A YLVGKAMGERGFKA YECKAFEQLYKAKNLGVKFGKGFYSSYP EPNKFVKP S IPKEKANKIPGIMLIAPAINEGA YLVREG
IVTKEDTDKGCKLGLNWPKGVFEYADEYGLDNVVK T LEDLRKETGLDYFTPDPLLTKMVKEGR LGKKVVGKGFYEYK

Sequence #355 — Gene Saci 1079

M R A I I I R P P N A G A E I K E I K D A Q N Y G K V K I K S L Y S G V C G T D R E L V N G K L S L G K A H K D R D Y L V L G H E A I G V V E E S V G E F S K G
D L V M P V N R R G C G K C L N C L L G R P D F C E T G G F V E A G I Y G M D G F M R E E W Y D D P K Y L V K I P K A L E D I G I L A Q P L A D I E K S L Q E I
D D I Q K R L P A W T C E D G T I N C R K M L V I G T G P I G L L F I L L A R T L G Y E V W A S N R R D P N E T E S V I I E E G K I N Y Y N S S A G F E K L K D
S V G G F D V I V D A T G A N A Q L L D K V I P L L N R N G I L G I F G F P S D G I F S I S Y K D L Q T L V H G N K L I L G L V N G Q K P H F Q Q A I V H L A S
W K T M Y P K T S K L L V T R T I S I N D E N E V M K A L K E K Q A E E I K V R I I W D

Sequence #356 — Gene Saci 1080



Sequence #357 — Gene Saci 1085

M **S** E Q G P F F E D F K V G Q R F R **S** K V G R **S** L **T** D V D N I W F **T** L L **T** N N **S** N Q I H F N R D **Y** **T** E K **Y** F **S** G E P F K G R L V V N G F L **T** L A I V A G L L V E

L **T** **S** Q N G F M L G I E N V K F M N P V F A G D **T** **I** **Y** G E A E V I E A R E **S** **S** R P G F G I V K I R **T** W G **Y** N Q R G E K I V E F D R V F M V R K R N **S** V V W **S** G E

K **S** **T** D K P Q

Sequence #358 — Gene Saci 1086

M S I I P M R V V E L S N N I S A P L V G Q I L S E L G A D V I K V E P P K G D D R R G V K P E I D G V G V Y F A S V N K G K R S V S I D L K K P E G Y E I F K
K I V A T A D I I I T N Y R P S A L K K L R I D Y E S V K N Q T N P K I I Y C S I T G F G N F T E E A D K P A Y D T T I L A L S G L M D M T G E E N P V K F A T
S I S D I T T A L F S T I L I L W Y Y N Q G G P V F I D V P M I Y T Q F Y L M L E D A Y M Y L N T G I L P K R M G S A H R Y L V P Y Q A F R T K N G Y I Y V A T
F N N E Q Y T N L C K A L G R E D L L I Y D T Q E S R V R N R E Y I A R E L Q K I F E T N T R E F W I K K L N E A D V P V A P I L N L A E A F Q I Y G N K L V Y
E R R S L R Y V R F P A N V K D K R E P G T G L P A P R L G E H T I E V L K E I G Y R E K D I E E F I S K G I V I S N N K G

Sequence #359 — Gene Saci 1087

M Y K V E Y P S T Q V I Y G K D A L D W L V N L K S S K V G I V T T R S L L Q G K T L S L V T K L V N A D I I E G P R Q H V P E D D V N A L K E K V G N Y E T I
I G L G G G S I I D G L K L V L E E K T K Y I V I P T T L S G A E H T K S G G Y T T Q G L K R S K L G K E P D I V I L D P R A T L E T P K W L L V S S A V R S I
D H A V E A L Y S R D S T P F V D S L A K E G F H K I V N C L R D I D S L D S R L E C Q I G V W L S S L T M R Y A R M G M S H M F G Y V F G P R F N I P H G Y T
S C I S L P A A V K F N Y G A S K E K L K S I E K N E P L Y E F L D N F L R E I G V R K K L S E Y T S L E E A L K Y A E V F S Q L S N N S G N P T K L S I D D A
R K F I Q E V Y

Sequence #360 — Gene Saci 1092

M Y S K D F T G S V M Q R D T I T F F K W I I P L S L A W G I A Y P L T K V V T F S V S P I L V S V A R V I V G T L F F Y F L G R G F S I G I K Q F V N A L F N
V I I L L A L V N V G I Y L S P S P G L V A T M I Y T Q P I F V L V I E L I L G S K I S L R G M S G V V I G V L G V L I S A T L S F N I G L L F G I M G S L S W
A I G T V Y Y Y R N L S K D N V I K L N A F M S L I S I P F L S S L T P L D Y Y F D F N V T S V V L L I I L A L I A Q V A G F Y F W F N A V R D L G S V S A S T
G S L L V P V I A Y L T S I L I L K V V P N V P E I I G L I L I L V G V Y L S L N S R K G K

Sequence #361 — Gene Saci 1095

M E **S** L D L **T** **T** D V E K G **T** C E **S** G **S** **T** **Y** M **S** L L R F W L E V G G N K E V K V I A W K G R Q E G Q V D N W V **S** Q M A D K G V K I V D K K I N **S** E K V **T** **Y** I I **Y** L

S 0.004

S 0.037

T 0.07
T 0.24

T 0.122

S 0.01

S 0.01
T 0.021
Y 0.063

S 0.007

S 0.003

S 0.005

T 0.037
Y 0.001

Y 0.004

Sequence #362 — Gene Saci 1099

M I E V K ^{0.029} S I I N G E E R R ^{0.205} S D E Y I Y R E C P Y N I D ^{0.01} T S V ^{0.065} T K I N V A K E ^{0.017} S D V E E A I D V A R E F F D K D K N G W V ^{0.008} S N ^{0.012} Y K A R D K V L F R I A E K I R G
 E I Q ^{0.113} T L ^{0.009} S R L L V E E I G M P I R Q A R V Q V N A A D V F E ^{0.015} Y Y A G F G ^{0.028} S K I Y D ^{0.142} T S ^{0.004} K F L P ^{0.006} S K D M V Q I I K E P V G V V G L I ^{0.041} T P W N F P L ^{0.019} T Q ^{0.002} S A R K
 L A P A I ^{0.049} T V G C ^{0.014} T I V W K P A ^{0.025} T Y A A G I ^{0.003} S Y Q L A K I I L ^{0.002} S S ^{0.006} G V P K G A L N V I F D P G E K V G A Q I V K ^{0.005} S K K I D K I ^{0.01} S F ^{0.065} T G E ^{0.025} T N ^{0.051} T G K W I M ^{0.023} S E A ^{0.011} S
 K D L K R V ^{0.079} S L E L G G K D P I I L F ^{0.008} S D ^{0.008} S D L K N A I K G A I F G A L R N A G Q A C G A ^{0.152} T S ^{0.012} R L L V E E ^{0.03} S I A E K V E M A V ^{0.029} S N E I K K L K L G N P L Q E D ^{0.194} T
 D I G P V V ^{0.016} S K P Q E D K V I D ^{0.047} Y I E ^{0.044} T G I K E G ^{0.008} Y K L L V G R K V ^{0.299} T D G E F Q R G ^{0.081} Y F I E P ^{0.083} T V F ^{0.007} S D V D N K ^{0.005} S K I A Q E E I F G P V L V I I ^{0.001} Y F K D E E E
 A I ^{0.003} S L A N D V I ^{0.029} Y G L ^{0.009} T A ^{0.002} S V W ^{0.038} T N D ^{0.005} Y K K A I R V ^{0.008} S R E L R V G ^{0.019} T V W I N D V ^{0.038} Y T ^{0.039} Q P ^{0.004} S E G L W G G ^{0.017} Y K Q ^{0.003} S G I G R E L G I Q G I E D F L E ^{0.027} T K M L ^{0.007} Y T ^{0.013} N L
^{0.003} S ^{0.006} G ^{0.025} S Y P H F K Q V V K D

Sequence #363 — Gene Saci 1100

MKVDL ^{0.01}S ^{0.01}PLNGII ^{0.01}SDKAFQKLS ^{0.006}INNPS ^{0.006}LVHFLS ^{0.004}K ^{0.095}TIEL ^{0.257}TT ^{0.378}PPDRV ^{0.089}Y ^{0.019}VS ^{0.056}FGEEKDRE ^{0.056}YVKKRALE ^{0.373}TKEEIKLKMEGH ^{0.05}TIHFD
 HPLDQARARE ^{0.405}DT ^{0.149}FIL ^{0.214}TDEKIPFVN ^{0.044}TKPRDEGLREML ^{0.015}SLLKGS ^{0.086}SMKGREM ^{0.044}YVGF ^{0.022}YS ^{0.009}SLGPRN ^{0.007}SKFS ^{0.003}ILAVQI ^{0.047}TDS ^{0.005}SP ^{0.034}YVIH ^{0.002}SEN
 IL ^{0.018}YRNAFEDF ^{0.084}Y ^{0.007}GDKPFLKFIH ^{0.007}SKGQLDIKKRRIMIDVKEN ^{0.095}T ^{0.036}V ^{0.002}YS ^{0.023}VN ^{0.023}TTY ^{0.003}AGNS ^{0.072}SVGLKKLALRL ^{0.014}TV ^{0.003}TKAVNEGWL ^{0.003}SEHMAI
 VGFEGNRG ^{0.23}TH ^{0.019}Y ^{0.049}FT ^{0.008}ASFP ^{0.017}SG ^{0.028}SGK ^{0.101}T ^{0.082}SS ^{0.089}TS ^{0.025}MLG ^{0.015}S ^{0.005}LI ^{0.005}SDDLAFIKEIDGVCRAVNPEIGIFGIIQGINERDDPVIWDVLHKPGEV
 IF ^{0.001}SNVLM ^{0.092}T ^{0.149}DDGGV ^{0.027}Y ^{0.027}WEG ^{0.122}SE ^{0.091}VEKPEKGS ^{0.086}YN ^{0.021}YEGAW ^{0.016}T ^{0.22}KE ^{0.026}SGKPA ^{0.075}S ^{0.009}HPNARF ^{0.009}TS ^{0.102}SPL ^{0.009}TS ^{0.009}SNLDKD ^{0.014}Y ^{0.014}DNPQGVVIDGIIFGVRD ^{0.014}Y
^{0.009}S ^{0.13}TLVPV ^{0.008}TEAF ^{0.002}SE ^{0.049}WHEGVI ^{0.007}TIGAS ^{0.02}ME ^{0.02}SS ^{0.158}RT ^{0.027}SAVIGKADVLEFNPMAILDFMPL ^{0.004}SLGKY ^{0.006}LN ^{0.003}NYL ^{0.041}TFGRNLKY ^{0.004}VPKIF ^{0.003}SFN ^{0.003}YFL
 KDENNKFLN ^{0.005}SKEDKRVVVKWAVKRVE ^{0.013}SE ^{0.049}TDAI ^{0.096}Y ^{0.15}TPVGFIP ^{0.002}Y ^{0.085}YEDLS ^{0.004}SKLFN ^{0.006}ST ^{0.094}LGKQ ^{0.01}Y ^{0.062}TFKEA ^{0.014}YELQF ^{0.086}TLKL ^{0.006}SKY ^{0.002}LEK ^{0.071}TERI
 MKI ^{0.012}Y ^{0.01}SEIAD ^{0.124}TPIEVINELKAQKDRLLD ^{0.04}Y ^{0.013}INRY ^{0.008}GDKV ^{0.012}SPFQLVK ^{0.012}S

Sequence #364 — Gene Saci 1101

M T Y K V S I E D L R L Y T I I G V N P Q E K E T R Q E V S I D V Y Y W A D L R K G A K S D Q L P E T V D Y K V L K K E I I S Y V E N S S F N L L E S L A Y R L
S K V V L Q D N R I K K V V I K V G K P G A L S R A K N V S V E V R A K R R D N L A K V Y I S I G S N I N P E D N V R R A I E L L D K M I K I K K I S T V Y L T
K P I P P D Q P D Y F N C V V E S R I N I S P K D L K Y N I L R R I E S E L G R E R T K N K F L P R T I D L D L V L Y G N Q V I N E E G V T V P D P E I E K R E
F L A I P L M E L N E D L V I P G I N K S I K E I V K K F E G V D M K P L T D F T S E L R S L I S G S R K K D P E Q

Sequence #365 — Gene Saci 1102

M Y L K G R T A L I T G S A K R I G R G I A L G L A K E G V N I V L H Y N T S E E S A L R L K D E I E E I G V K C W L V K G E L S K D Y A K I L D N A F K L T E
G N L D F L I N N A S I F P A S K V T M E N L N S I V T V N S W V P L L L S L D F S R K L S K G K I V N I L D S I I S G Y N F E R Y P Y F L S K K L L E I I T V
S L A L K L S P S F Q V N G V A P G L I L P P E G K D N S Y L E N L K S F V P M K R Y G N V E E V V N A V I F L L K S D F I T G Q I I Y V D G G E H L T P R V V

L

Sequence #366 — Gene Saci 1103

M R T K G D F L K S L R D G R K V F Y R G K P V E D I T A H P I L S I A A I H A S K L F E Y S D R M Y E D P S L G K V S K F F K K P T S T Q D L L E R H K L I Y
D T T M Y C N G I F N I S Q A I G S D A I F A L T I T A R Q L D R K Y G T D Y T K R I Q K Y H E Y V T K N D L T I A T A Q T D V K G D R S K R P S E Q A D P D M
Y V R I V D V K S D G I V V R G A K A H T T Q S A V S D E I I V I P T R A M K D S D K D Y A V A F A V P A N A P G L K L Y V R P I D E I E G N T S A V L S K K D
Y E L E T I T V F D N V F V P W D R V F L F K E Y D Y A G N I A M L F A T Y H R F T A L S Y R S A L I N L F L G S A R V M A K A N G I E N E K H V R D D V V D L
I L Y K E I L R S T A I T S A I S P V M L E G V A V P N P L Y V N V G K L Y S N M H F H D V I K D L V D V A G G I A T L P S Q E D F D S E E G K T I I K Y L R
G A V D G E E R V K I L K L V K E L A A S P V A G Y L L T A M V H A E G S I E A S K I E L F R S Y D Y R E A E S L I K K I I G

Sequence #367 — Gene Saci 1107

M M **Y** R A P K **T** E K G K E **S** L N K I L D A **S** V E L I A D K G F L **S** **T** **S** I N D I **T** **S** K A G V A **Y** G L F **Y** **F** **Y** **F** **K** **S** K H D I L D E I I R Q F N R N M R **Y** **Y** L K **T** **Y** **T**
Q N L D **S** R I D V E K V G M K K F L E W M N E N K K **Y** **Y** K I F I E **T** Q V H R P D I **Y** K W H F M K L A E R **Y** **T** **T** **G** L **S** E A M R R G E I I N V D P E L L **S** **Y** V L I G
I A H M L G K R **Y** V L W **S** N **S** G L **T** L K Q Q R D L D L I I E N M L **T** P R

Sequence #368 — Gene Saci 1109

MKVEDIKKILVIGAG^TMGHGI AELAAIAG^YQV^YLS^DVS^QDILN^SAMDKVKW^SL^TKKLKERG^TIKEDVE^TVLQRI R P V V G L D
^T0.075 ^S0.013 ^S0.019 ^T0.021 ^T0.148 ^T0.057 ^T0.055 ^S0.005 ^S0.008 ^S0.014 ^T0.273 ^Y0.077 ^Y0.005
 K^TV^SSDADF^SIEAI^TEKIDVKRQ^TFAKLDEL L P P H A I L A ^TN^TS^SLPV^SKIAEA^TKRPDKVVG^MH^YFNPPALMPLVEVMKGD
^T0.646 ^S0.011 ^T0.157 ^T0.148 ^Y0.046 ^Y0.008 ^S0.001 ^Y0.005 ^Y0.083 ^T0.04
 K^TS^DE^TA^KV^TY^ELAKKLGKQPIMINKDIPG^YVVNRILGGINIA^SCIVVEKKLADIKEVDAVAR^YKLGFPMGVFELLD^YT^G
^I0.021 ^S0.005 ^S0.007 ^S0.013 ^S0.005 ^S0.017 ^Y0.056 ^T0.211 ^S0.028 ^Y0.026
 IDVA^YY^IS^KSREELGVKDDIPIC^SLIVEKFKNNELGVK^SGKGF^YT^YPGPGK^YVKPELPKELAEKLNPAIIAPAVNEAAR
^S0.007 ^T0.016 ^S0.008 ^S0.008 ^T0.077 ^S0.029 ^S0.035 ^T0.069 ^S0.023 ^S0.022 ^S0.015 ^Y0.066
 LVRENIA^SKEDVDLG^TVLGLGFQKGI L K L A D E V G I D N I V N ^SL^SELKKL^TGI^SS^FDPDPLL^TEMV^SQ GK V G M K ^SG^SG^FF^E
^T0.016 ^T0.017 ^S0.01 ^S0.018 ^S0.008 ^T0.051 ^S0.003 ^T0.015 ^T0.048
 GKIQQK^TLK^TLILRVEPPLAWIVLNRPERLNAL^SQELMGELDKVLDELEFNNDVRRVVIITGNGRAFSAGADV^TS^FT^TLRP
^Y0.004 ^Y0.002 ^Y0.008 ^Y0.005 ^T0.011 ^S0.007 ^T0.218
 IDVVR^YY^YMKNVI^YKIQLY^TKPVIAAINGFALGGGLELAMACDIRIA^SNLAQLGQPEINIGIIPGAGG^TQRLPRLIGKGR
^Y0.008 ^T0.04 ^Y0.1 ^S0.026 ^S0.018 ^Y0.009 ^T0.035 ^S0.004
 AKLLI^YT^GDMIPAEEA^YKMGLVDQVVPANKFEEVRRVALKIAEK^SPL^SLLAAKLAVELG^YEANIW^TGQELESALFGLLF
^T0.038 ^T0.075
 T^TEDVKEGVRAFLERRKPKFKGE

Sequence #369 — Gene Saci 1111

M I K G I P ^{0.003} S ^{0.02} T V N D E W Q L N L H K V I E ^{0.01} Y A ^{0.005} S K V H G E R E I I ^{0.015} S D R R F Q G G V L H N L N ^{0.006} Y R K I F H R I ^{0.024} S ^{0.005} S F ^{0.006} T N ^{0.006} S L E K E L N ^{0.077} T K A G D I I G I L G W
 N D H R ^{0.008} Y F E ^{0.002} S F F ^{0.012} T V P ^{0.002} S L G A V L L E L N I R L H P A D L L ^{0.007} Y I L K H ^{0.03} T R A K G L L V D D ^{0.01} S L L P L A E A L ^{0.007} S ^{0.009} K E Y N F D ^{0.083} Y ^{0.054} T I I M ^{0.01} S D K P F E E I K ^{0.09} T N I
 R N A F G ^{0.046} Y E E L V K ^{0.044} S ^{0.053} S P N R K F E E V D E K ^{0.018} S ^{0.204} T A F A A F ^{0.045} T ^{0.074} T G ^{0.022} T ^{0.149} T G L P K G V F ^{0.005} Y ^{0.004} S H R ^{0.004} S V V L H A L N I ^{0.003} S R D L K P ^{0.003} S D V I L Q A V P F F H V H G W G
^{0.024} T Q F A G A I ^{0.065} T G C K Q I F P G R P ^{0.179} T V D ^{0.003} S M V E H I L N H K V ^{0.061} T ^{0.054} R T A A V P ^{0.085} T V V L E L L R R I E ^{0.243} T M D P K P N L A G L R L G I G G A E P P ^{0.022} S A L V ^{0.01} S A L A K
 H G I E ^{0.122} T G Q G ^{0.087} Y G A ^{0.088} T E ^{0.285} T G P V V V A A V A K P E F E Q L P V E E K F K R L K Q G L I L F G V E V K V V D P V ^{0.087} S G E E L P W D G K ^{0.011} S V G E I W F R G P W I A R
^{0.011} S ^{0.01} Y ^{0.022} N D P R ^{0.021} S A E ^{0.01} S F ^{0.087} T ^{0.009} S D G W W K ^{0.009} S K D L G V I D E L G ^{0.024} Y V K L V D R L K D V V K ^{0.008} S G G E W I ^{0.007} S ^{0.005} S I D L E N F L M A H P ^{0.065} Y V R E A ^{0.026} S V V G V P H P K W G E R
 P L A V V ^{0.024} S L K P E ^{0.088} Y Q ^{0.03} S K D K E E V K K ^{0.058} S L L D H L ^{0.016} S K R F A K W Q L P D D I V F V D E I P K ^{0.157} T ^{0.02} S V G K F R K E E L R N K ^{0.021} Y K D ^{0.043} Y ^{0.074} Y M K Q

Sequence #370 — Gene Saci 1113

M V N P M L L D P **T** F E M **S** D D V K L I L G **S** I K E L L D **S** K W D **T** K K F R **S** V L E G N K E L **T** E Q L W K D I I K L E I L P **Y** I **S** N **S** P L R D A V I I N E L I G
S K L L P G I I A **S** **S** V V A **S** R G I K **S** K D I L D K L F **S** G E V K I A V **S** D **S** N **Y** V P G A D Q A D L I L I D N **T** I V K R K D A E L K **S** F N **S** L D N **S** M K I N E V
K H N A G E N V Q V N N A E I **S** I L F A **S** Q M L G H G Q E V L N M A V K **Y** **S** K E R I A F G K P I G **S** **Y** Q A I K H R V V N D A V D V E L V R **S** I I L E A **S** D N I K
Y V W L A K E L A N K K I P K V I L **S** G I Q V H G G I G F **T** D D M D I H L H L K R **S** L **T** L **S** K I **Y** N G K V D I **S** E F L Q **S** L

Sequence #371 — Gene Saci 1116

M P L D P **T** I K K L L E **S** G F V I P I G K V P V D E V R K V F R Q I **S S** A A P K M D V G N I E D I K I P G **T E T** M I P A R V **Y Y** P K **T** K G P **Y** G I L V **Y** L H G G
G F V I G D I E **S Y** D P V C R A I **T** N A C N C V V A **S** I D **Y** R L A P E N K F P **S** A V V D **S** V D A **T** K W I **Y** E N A E **S** L E G K Q G V A V G G D **S** A G G N L **S** A V V
S I L **T** K G K I N L K H Q V L I **Y** P A **T** G A D **Y T S** R **S** M V E **Y Y** D G **Y** F L **T** R E Q I E W F G **S** Q **Y** L R **S Y** M D L L D I K F **S** P I L N Q D L **T** G L P P A L I I **T**
A E **Y** D P L R D Q G E A **Y** A N K L L M A G I P V **T S** V R F N N V I H G F V **S** F F P L I P Q G M D A I G L I G A **T** L R R V F **Y N S** F

Sequence #372 — Gene Saci 1122

M S N E Y Y E Y E L T L D K I L D T G I R T F P D K E I V Y R D I R R Y T F S S F S N S V K R L V T G L K K L G V K K G E R I G V L D W D T D V Y F H T Y Y G V
P L S G A V L H T I N L R Y P L D L I V K T I L H A E D K Y L V V R D E F V P L I E K A K N I I P P G M K V I T Y S D N K E K V K S P I S N A D F W E L I E S N
E P T E E F D V K E N D M S T I F Y T S G T G E P K G V W F T H R K L F M H A M S V A L T G T R S P F N L S P E D V Y M I L V P M F H V H Q W G F P F V T F L
A G T K Y V L P G R Y D Y G F I L K L M E K E G V T Y S A M V P T I L H L L L T H P D A P K Y T H V F K K W K I T I G G S A L P E G L A R K A R E L G I T V T T
G Y G L S E T C P V L S M G Y Y N N V A Q K L D A E K K F S L Q I S T G V P I P L V Q I R V V D P D T G K D K K P G E I G E I V V R S P W L T K E Y K N P E K
T A Q L W R G G W L H T G D L A Y I D E Y G Y L H I V D R D K D A I K S G G E F I P S L L L E D A I S L H P K V A Q V A V V G V K D Q K W G E R P V A F I V A K
E K V T E D E L R Q F M L G L T D Q G R I Q K W W I P D K F I F V D T L P L T S T N K I D K K V L R E M A E K N K

Sequence #373 — Gene Saci 1123

M V L P F K **T** M E A F N V E I **S** E K H E L F R R A V R E F M E R D V A P **Y** V E K G E K E G Q I P K E V L E K A K E L G L **Y** G V **S** V P E E **Y** G G Q G G D **S** L M **T** V
I A Q E E M A R V W A A L **S** **T** R V A V G G L F M **T** P I L L F G **S** E E Q R K K **Y** V **T** P V A K G D K V A A F A N **T** E P Q A G **S** D V A G M Q **S** **T** A K K V N G K **Y** I L N
A R K I F I **T** N G G I A D **Y** **Y** V V **T** A R **T** **S** P P E P N A R W K G I **S** M F V V E R E W K G V K V L N R I E **T** M G L K A **S** N **T** A E L A F E D V E V P A E N L V G E E
G M G F K **Y** A M **S** **T** F D A **S** R V G V A G Q A L G V A Q A A L E K M **T** N **Y** **S** V Q R **S** A F G **S** P L L G F Q M V Q E K I A E **T** L **T** E V N A A R L V **T** **Y** W A A **T** L **Y** N K
G M **T** N E A I I A **S** **S** M A K **Y** F A **T** E V A E R A A I R A I **T** V H G G **Y** G V A **T** **S** **T** G V E R L L R D V E I M K I **Y** E G A N D I Q K L V I L K E **T** A R R L F G I K M

Sequence #374 — Gene Saci 1124

M A T R R E M E T C L I A I F M Y C E L D Y V K V N I S T Y V Y I K V K V K L S I D S E V L K K A K E L A V E R K V T L S E I F E K A V S E L G N L S T V N K I
M R E L D L S P R L I S F E E V T K S R I T L N A S D L V G E M R D E L F R Y

0.315
0.006
0.008
0.011
0.002
0.002
0.013
0.014
0.022
0.019
0.226
0.023
0.011
0.008
0.052
0.043
0.049
0.091
0.021
0.061
0.012
0.005

Sequence #375 — Gene Saci 1126

M I K G I P ^{0.004}S ^{0.013}T V N D D W Q L N I H K I I Q ^{0.006}Y A G K V H G E R E I I ^{0.041}S D R R ^{0.048}S L G G K I H N L ^{0.06}T ^{0.019}Y G K I L E R V ^{0.042}S ^{0.019}S F ^{0.006}T N ^{0.012}S I E ^{0.007}S E L K I N P G D I I G I L G W
 N D H R ^{0.007}Y F E ^{0.002}S F F ^{0.012}T V P ^{0.002}S L G A V L L E L N I R L H P A D L L ^{0.006}Y I L K L ^{0.033}T K P K G L L V D D ^{0.011}S L L P L A E A L ^{0.008}S ^{0.009}K E Y N F D ^{0.081}Y ^{0.054}T I I M ^{0.01}S D K P F E E I K ^{0.089}T N I
 R N A F G ^{0.046}Y E E L V K ^{0.038}S ^{0.05}S P N R K F D E V D E K ^{0.026}S ^{0.019}S A L A A F ^{0.034}T ^{0.073}T G ^{0.021}T ^{0.068}T G L P K G V F ^{0.004}Y ^{0.004}S S H R ^{0.005}S I V L H A L N A ^{0.006}S R R L K I ^{0.002}S D V L L P V V P F F H V H G W G
^{0.023}T Q F A G A I ^{0.065}T G C K Q I F P G R P ^{0.18}T V D ^{0.003}S M V E H I L N H K V ^{0.067}T ^{0.061}R T G G V P ^{0.025}T V F F E L L R R I E N M N P K P D L K G L V V G I G G A A P P A L V ^{0.007}S A L A K
^{0.031}Y G I E V A G N G ^{0.049}Y G A ^{0.06}T E ^{0.383}T G P G V A G G I K P E L E Q L P P E E R R I K A G Q G ^{0.045}Y P ^{0.098}T F G V E V E L V D P V ^{0.036}S G E E L P W D G K ^{0.01}S V G E I W I R G P W I A K
^{0.007}S ^{0.009}Y ^{0.027}Y N D P R ^{0.019}S A E ^{0.009}S F ^{0.076}T ^{0.009}S D G W W K ^{0.01}S K D L A V I D E L ^{0.011}S H I K I V D R L K D V I K ^{0.009}S G G E W I ^{0.007}S ^{0.005}S I D L E N F L M A H P ^{0.057}Y V R E A ^{0.023}S V V G V P H P K W G E R
 P L A I V V L K ^{0.009}S ^{0.116}D ^{0.116}Y E N L P K D E V K R E L R E H L L K R F A K W Q L P D D I V F V D E I P K ^{0.168}T ^{0.021}S V G K F R K E E L R N K ^{0.02}Y R D ^{0.045}Y ^{0.073}Y M K Q

Sequence #376 — Gene Saci 1128

M D ^{0.095} S L R ^{0.057} S L I ^{0.045} S K A D E K A V N L ^{0.008} S ^{0.012} S D G K I I G R V ^{0.15} T R F ^{0.018} S H V K I A E E P A I A I D I P F E N ^{0.006} Y L E K P I E R G E F I G I V ^{0.007} S I I P G ^{0.003} S V V L G A V D Q I
 A R A D A L A ^{0.003} S L G I R ^{0.144} T V R ^{0.009} Y ^{0.038} S E D P ^{0.012} S ^{0.078} T M I ^{0.091} T P ^{0.012} T ^{0.061} T I I F ^{0.005} S P L G E I K ^{0.007} S N G Q I ^{0.016} S P N V ^{0.014} S A I D P Q ^{0.018} S P V F L P K P D L I E K V I N I P ^{0.009} S E G L E V G E V
^{0.084} T ^{0.14} T F ^{0.01} S R Q ^{0.14} T D V R L R L E E N I L R ^{0.004} S H V L L I G ^{0.004} T ^{0.032} T ^{0.008} T G S G K ^{0.023} T ^{0.132} T F L K ^{0.056} T I F F ^{0.004} S N ^{0.003} Y K N K K ^{0.01} S ^{0.068} T I V L D R Q G D F V R F L I K Q F K E G ^{0.07} T V I V P L ^{0.101} T V K A
 M E E ^{0.073} Y G ^{0.005} S F E N L V Q D R ^{0.023} Y C G E N ^{0.057} T W Q G D D N ^{0.003} S I V C E P E Q G R L I ^{0.017} S F ^{0.003} Y P F ^{0.012} S L R F K D I F R Q L P D ^{0.02} S F P ^{0.015} Y L ^{0.013} S D ^{0.052} Y A R A ^{0.044} S W ^{0.008} S ^{0.027} S V V R A C E K L ^{0.079} T
 E V ^{0.019} S ^{0.028} S ^{0.092} T ^{0.015} S P ^{0.017} S F ^{0.029} Y K M L E ^{0.005} S C L G R A N I N ^{0.019} T Q ^{0.017} T ^{0.006} S G N I Q R ^{0.006} S L ^{0.015} S A L I E ^{0.011} Y G I L D I P N ^{0.017} T I ^{0.032} T ^{0.004} G S E L I D L L K ^{0.002} S ^{0.004} S Q N V V I D L ^{0.005} S I V L E ^{0.005} T L F L V E P
 I ^{0.002} S V I ^{0.002} S ^{0.002} Y N I L D I I ^{0.002} Y N ^{0.004} Y K D K M ^{0.005} Y K M R K K G V N D ^{0.015} S N D I P Q ^{0.009} T L L L I D E A H E M F P Q I ^{0.009} S Q E V ^{0.005} S K A ^{0.067} T V E K L I N K I L R F G R Q R N L G V I L A
^{0.026} T ^{0.004} H S P K D L N ^{0.003} S L V I Q Q ^{0.011} T N ^{0.019} T K F I F R N D R ^{0.095} T V L R D L G L ^{0.008} T E F ^{0.03} T D L L E ^{0.004} S A P A G ^{0.012} Y C L V K ^{0.01} S ^{0.014} S F F N ^{0.008} S ^{0.004} S ^{0.006} S F F A K V ^{0.014} Y V L E V K

Sequence #377 — Gene Saci 1129

M R L N E V Q K E L R K L G E K ^{0.209}T R Q ^{0.11}S V R N L ^{0.188}T I P ^{0.021}S P Q K ^{0.198}T Q V P G E E R F I I N ^{0.017}T L P E F K I D K I N I ^{0.007}S ^{0.004}S F Q ^{0.012}S V N F ^{0.007}S ^{0.029}S I A ^{0.027}S L D ^{0.055}T ^{0.018}S ^{0.013}S K L L R ^{0.005}S ^{0.019}T F
L H I G I ^{0.043}T G G A I K ^{0.004}S E R N G V L ^{0.011}Y H P L N I Q D K F I F P I ^{0.055}T ^{0.01}Y L D V ^{0.003}S R N L V E E N L Q M V E L K N V M G F E ^{0.01}Y A I D E V L ^{0.089}Y E D G N V N ^{0.03}T L ^{0.063}Y D V E D M
L D E A R L ^{0.028}Y ^{0.169}T E N Q L M K ^{0.018}T I Q D D L L I V D G P I ^{0.016}Y ^{0.221}T P V E L M P ^{0.021}T F F ^{0.005}S ^{0.007}S F P K Q K D E I K H W G K A ^{0.129}T H R W ^{0.03}S M A K L I K D R I ^{0.038}S V L E N R K A V G V
V K R L E N ^{0.016}S R K L N K I F P D M G R L ^{0.145}T D I E V L D L L ^{0.009}S E R Q C ^{0.005}S N V I ^{0.008}Y P E I C V I G P F K L ^{0.011}T ^{0.074}T K V S V ^{0.014}T ^{0.21}R E D ^{0.021}S G N V I L ^{0.007}S E N E L K D R Y ^{0.007}A ^{0.005}Y ^{0.005}Y V I
L K L ^{0.001}Y G F ^{0.018}T R ^{0.007}S F F R I E ^{0.01}S F D L N V L N D ^{0.003}S I P V V F G N V ^{0.005}S ^{0.008}Y ^{0.003}S S L P V W I D E V D R R A K E V V R A L F ^{0.006}Y L ^{0.006}S F E E L N D I L ^{0.006}S F L H D ^{0.016}T K L E A I E I
G K ^{0.071}T L ^{0.005}S ^{0.07}T N V P E

Sequence #378 — Gene Saci 1132

MRFLLVSDVHKSFRIYRNYNESVAVEWLLNVIDRVKPEVLI SAGDWDDGMT PNDFLNIMSKVKKLLTVYGNHENFPLIEG
0.041 0.01 0.01 0.009 0.005 0.003 0.004 0.085 0.982 0.085 0.025
YVMHDGKVYEVGGLKIAGINGLIGEGSKKGIPTSPTRFRNALYRIKKAVDRLDILVMHQPPYLPEVYPEMSEDEGSALV
0.025 0.014 0.03 0.034 0.247 0.013 0.069 0.08 0.03 0.015
YQGI EELK PRLFFNGHMTQGCYTFHNFQFQT KYLRVDS S QLHKCYGVLESNSRELTVYQEEKEVFKMEF
0.271 0.014 0.006 0.013 0.023 0.022 0.009 0.003 0.026 0.01 0.017 0.201 0.11

Sequence #379 — Gene Saci 1133

M L F D L H P K I E L R E L F G R G **T** E V E **Y** I I Q Q V I **S** R N W V I I **S** G Q R G I G K **T** **S** V M K V **S** I N E L R R R N **S** **T** D G I **Y** L N L R G V K **T** L R E L L **S** L
 L I **S** E I N R N K L F N I F N V N V N L N F G P L G V E L K R G R L **T** V Q R G L L E L L L **S** I N R D M V I G L D E V Q E L **S** P V **S** K P L L D V L G N V F M **S** N P
 K V R F I F **S** G **S** **Y** V G L V K A L L **S** P K E G **S** P L L G R P P V E V R L R P F D K I **T** **S** I N F L K Q G M M E L G V D F E N N E A E E V N K L D G I V G W L **T** L
 F G N N **Y** A I R K L N **Y** E **Y** S L Q **S** **T** I E E G K R I M L E E L N H F L E G R N R E L **Y** L A I L **S** **S** L K V **T** K R W K D I K F A **T** **S** V K L K R **S** I D D K E F **S** **S** A L
 E **S** L I K **Y** N F I D K I K E G E **Y** Q I **T** D P I L R E I D F D H V G R **T** V

Sequence #380 — Gene Saci 1134

MKVDDIKKILVVGAG^{0.021}TMGHGIAEVFAIAG^{0.006}YHVY^{0.003}LS^{0.004}DV^{0.005}SE^{0.004}DI^{0.004}LNK^{0.004}SLNNIRW^{0.041}SL^{0.045}KLKEKDRIKE^{0.175}TV^{0.047}DEVLS^{0.047}RIRPVVGLN
 ES^{0.016}V^{0.02}SDAD^{0.025}DFVVEA^{0.025}SP^{0.003}E^{0.041}IIDLK^{0.004}RQIF^{0.004}ST^{0.107}LDKLL^{0.109}SPN^{0.043}TI^{0.009}IL^{0.102}AT^{0.069}UN^{0.027}TS^{0.154}ILPV^{0.008}TS^{0.008}IAEA^{0.008}TS^{0.008}KPERVVAMHFFNPPVLMELVEVMKGE
 K^{0.22}T^{0.064}NDEVAL^{0.074}TY^{0.027}ELAKKIGKKPILIKKDVPG^{0.009}YV^{0.002}VNNILGAV^{0.01}SG^{0.002}TACLLVEKGLADIKEVD^{0.04}AV^{0.008}TM^{0.024}Y^{0.006}KLGFPMGVFILAD^{0.024}YS^{0.006}YG
 LDIG^{0.505}YNALR^{0.029}SREK^{0.191}LGLK^{0.021}NRPPC^{0.021}SMVEEKVKRGELGVK^{0.023}SG^{0.104}KG^{0.145}Y^{0.071}Q^{0.047}YPAPGKY^{0.047}QKPEIPKELAEKLN^{0.003}PALILCGAVNVA^{0.003}SR
 MY^{0.004}REGIV^{0.046}T^{0.001}KEEIDLAVKLG^{0.022}LN^{0.022}YPKGI^{0.078}FE^{0.027}YADEIGIDEIL^{0.045}SAMR^{0.083}FL^{0.078}KDI^{0.027}SS^{0.045}DF^{0.033}Y^{0.078}DDPDLLEMQKRNELGK^{0.385}KT^{0.009}GKGF^{0.035}Y^{0.009}Y^{0.035}
 KKAEEKKLD^{0.029}T^{0.016}IIVRIEPIA^{0.016}T^{0.034}IILNRPERLNAINGRM^{0.063}SE^{0.027}E^{0.007}INT^{0.023}LS^{0.007}T^{0.023}LAEDQ^{0.021}RVRV^{0.007}VIIT^{0.006}GS^{0.006}GKAF^{0.075}SAGADV^{0.011}T^{0.011}GFQQ^{0.011}SG^{0.011}SS
 PA^{0.037}SRAIFRKDLF^{0.007}ST^{0.08}VAKFPKPVIAAINGFALGGGLELAMACDIRIA^{0.018}SS^{0.005}NAELGQPEINLALIPGGGG^{0.38}T^{0.125}QRL^{0.125}TRLVGRGWA
 KY^{0.002}IVFLGERI^{0.025}SA^{0.015}SLAREIGLIEFVVPPEKLEEEAKRIALKIAEK^{0.071}SPLALAAKLAID^{0.026}ST^{0.282}EEREI^{0.102}ST^{0.126}GL^{0.049}SS^{0.049}LE^{0.025}ST^{0.161}LFGLLL^{0.102}T
 S^{0.032}ED^{0.063}KEGVRAFMEKRKPQFKGV

Sequence #381 — Gene Saci 1141

M I I R E V E V K S A L S K S G L K E I D Y S L N P Y N N C R F S C I Y C Y A Q R Y V S D K W G E V I T I K R N I V D V L K R E V Y K Y R R G V V G V S T I V D
 P Y Q P V E G L Y K L T R K S L E V L L S H G F R V S I Q T K S P M V V R D L D L L S R Y S D K V D V G L T I T T L D K V V S R Y I E P L A P P P K A R A E S I
 K K L S R S V R T W I F L G P I I K G V N D S G F E E I V K L A S E T S S F I V Y D K Y N N Y R G L P N F D C N Q S W W E E K E N E I K D L C E R Y G V H C H S
 E R E D W I Y E R Q R R Y K T L F

Sequence #382 — Gene Saci 1142

MDPRLCVICR ^{0.003}SS ^{0.003}SK ^{0.002}YLCGLA ^{0.003}YCP ^{0.004}IVVK ^{0.041}SI ^{0.021}TKK ^{0.016}IVVPKDMVG ^{0.019}SS ^{0.088}IFVGR ^{0.088}YGY ^{0.014}PKV ^{0.086}SV ^{0.022}YPS ^{0.24}APPVDD ^{0.016}TS ^{0.145}IY ^{0.05}EDPK ^{0.05}TWLN

MDLN ^{0.013}TF ^{0.007}SL ^{0.041}RL ^{0.017}SL ^{0.259}VRV ^{0.061}TD ^{0.022}ANNPQRFLHDVQ ^{0.019}TL ^{0.024}SI ^{0.077}SS ^{0.077}GP ^{0.077}SEIEMEF ^{0.122}AKEPRKVVLD ^{0.016}ET ^{0.016}LPPIGP ^{0.016}SA ^{0.016}PIREFKLG ^{0.036}T

L ^{0.006}SA ^{0.059}PQRIVERV ^{0.013}YEDKDLK ^{0.02}SK ^{0.011}DAVI ^{0.004}TL ^{0.006}YS ^{0.015}NKVEVNV ^{0.097}IS ^{0.066}RLL ^{0.27}SV ^{0.066}GVLGVKRKLVP ^{0.027}TR ^{0.027}RI ^{0.015}TA ^{0.026}VDKLV ^{0.015}SD ^{0.026}SL ^{0.012}IEELKHFE ^{0.012}SI ^{0.012}ID

KIEV ^{0.012}YVRRHMKNL ^{0.002}FIGILIPGNWAF ^{0.088}EWGEAWFPG ^{0.088}ST ^{0.083}WNQFGHG ^{0.014}VEVALELD ^{0.521}Y ^{0.004}EG ^{0.004}YRGR ^{0.004}TY ^{0.008}PKIGGC ^{0.014}YY ^{0.009}AS ^{0.008}RLGVAE ^{0.008}SLRL

RKRQAMVILWREI ^{0.002}Y ^{0.194}PGFNLPVGVWFVRENIREMFKQKPEVFD ^{0.194}TL ^{0.005}DQALRRVKGELKVN ^{0.003}LQEWLKI ^{0.003}SY ^{0.032}VVKLFR ^{0.032}SLRF

Sequence #383 — Gene Saci 1151

M N D L E D I L K K L A L S Y K F I S V P N A R T V K D A S M S L G V S E D R I A K T I L V I A D N K P Y A V F L R G N R R V D L D K L K L Y L N V R E I R V A
K A S E V K K I T G Y E V G G L P P L I N G V E T I M D E E L A D D D K E V F C G G N E T T L L S I I P K E L A E K S M L R I F S V G I

The image displays a protein sequence with p-values for each residue. The sequence is arranged in two lines. The first line contains residues M through A, and the second line contains residues K through I. A large blue circle highlights the residue 'R' at position 14 in the first line, which has a p-value of 0.379. Other residues are highlighted with smaller blue circles: 'T' at position 18 (p=0.092), 'T' at position 25 (p=0.02), 'T' at position 26 (p=0.149), and 'S' at position 27 (p=0.01). Residues 'S', 'Y', 'K', 'F', 'I', 'S', 'M', 'S', 'L', 'G', 'V', 'S', 'E', 'D', 'R', 'I', 'A', 'K', 'T', 'I', 'L', 'V', 'I', 'A', 'D', 'N', 'K', 'P', 'Y', 'A', 'V', 'F', 'L', 'R', 'G', 'N', 'R', 'R', 'V', 'D', 'L', 'D', 'K', 'L', 'K', 'L', 'Y', 'L', 'N', 'V', 'R', 'E', 'I', 'R', 'V', 'A', 'S', 'E', 'V', 'K', 'K', 'I', 'T', 'G', 'Y', 'E', 'V', 'G', 'G', 'L', 'P', 'P', 'L', 'I', 'N', 'G', 'V', 'E', 'T', 'I', 'M', 'D', 'E', 'E', 'L', 'A', 'D', 'D', 'D', 'K', 'E', 'V', 'F', 'C', 'G', 'G', 'N', 'E', 'T', 'T', 'L', 'L', 'S', 'I', 'I', 'P', 'K', 'E', 'L', 'A', 'E', 'K', 'S', 'M', 'L', 'R', 'I', 'F', 'S', 'V', 'G', 'I' are shown in red. P-values are shown in blue text above or below the residues.

Residue	p-value
M	
N	
D	
L	
E	
D	
I	
L	
K	
K	
L	
A	
L	
S	0.012
Y	0.013
K	
F	
I	
S	0.008
V	
P	
N	
A	
R	0.379
T	0.092
V	
K	
D	
A	
S	0.014
M	
S	0.015
L	
G	
V	
S	0.018
E	
D	
R	
I	
A	
K	
T	0.032
I	
L	
V	
I	
A	
D	
N	
K	
P	
Y	0.005
A	
V	
F	
L	
R	
G	
N	
R	
R	
V	
D	
L	
D	
K	
L	
K	
L	
Y	0.039
L	
N	
V	
R	
E	
I	
R	
V	
A	
K	
A	
S	0.013
E	
V	
K	
K	
I	
T	0.139
G	
Y	0.029
E	
V	
G	
G	
L	
P	
P	
L	
I	
N	
G	
V	
E	
T	0.092
I	
M	
D	
E	
E	
L	
A	
D	
D	
D	
K	
E	
V	
F	
C	
G	
G	
N	
E	
T	0.02
T	0.149
L	
L	
S	0.01
I	
I	
P	
K	
E	
L	
A	
E	
K	
S	0.027
M	
L	
R	
I	
F	
S	0.019
V	
G	
I	

Sequence #384 — Gene Saci 1153

MKVLVVGAS^{0.007}GVLG RNVIPLLVREGY^{0.015}EV^{0.029}TGI^{0.04}TR^{0.005}VEKVGILR^{0.006}SLG^{0.003}SHPVVVCNV^{0.03}YDMPRL^{0.04}YNVVRE^{0.008}SNPDV^{0.005}ISFL^{0.055}TDLPDD

MKLINEFAPLNNKIRREG^{0.096}TANLIRV^{0.013}SKDIGV^{0.012}SRI^{0.03}YME^{0.006}SVAWKLN^{0.012}GD^{0.019}SGRAVD^{0.005}EMESI^{0.022}VKEANGV^{0.142}VLRY^{0.111}GRL^{0.132}YGE^{0.142}GT^{0.111}Y^{0.132}Y^{0.132}VN

EIPPPRVRIDKAALM^{0.076}TVEAL

Sequence #386 — Gene Saci 1156

M V M **Y** **T** D K E R E K A **T** E Q R R E E E A **Y** **Y** E E I E K **S** **T** **V** **T** **S** P E V K **S** **T** E D V K **S** N **T** L **S** A **S** E N V K **S** **T** **S** V K K Q K F D Q M R K V K I I P L **T** F P **S** **T**
 P K V **S** **T** **S** **S** L D **T** A N **V** L **S** L V Q K R R E **T** N I V P I **Y** F P P P P **S** V I L **S** E L N M E D **V** L **S** A **S** V K R D **S** V M R **T** Q I I **S** L Q F P I P P Q V V V **S** **S** I D **S**
 E I **V** L K V R V Q Q **S** L M P **T** S P E K E R V E Q P **S** L **Y** E **S** P Q V V R **T** **S** L **T** Q P K K K I D I N I L N D I K E F L G A F **S** **S** G L **S** **T** K H G V I V I V **Y** D E N K R
 G I E D **S** L E R I A E E I A I I **S** G L L V K P D P I **T** I N L G N I **T** Q M G N P G I F K I D K **S** L C **S** V R E D K D E D K V K E V L E **S** R L M G **Y** Q F **S** I L I M P **S**
 C L **Y** **Y** R F R E **T** I G G Q P **S** K I F I D A D V I R G A G L P **S** P I K V **Y** K V N K D L I Q K I A **Y** V A **S** G F N V N D V **S** V L **Y** R W D **S** M K D V N **T** **S** F E E I L **S** E
S R K W L K N **S** **Y** P W W D V E **S** V G E K E **S** E **V** H K E M K A V A I R **Y** L I Q Q R G V K P E N I H V E **T** R I E G V V P D I **Y** V **S** D **S** N I V I D A K **T** **S** I E K E P G
 D E I I D A **Y** N K **Y** K R I K **Y** E N I **T** N E V **T** E V W V V L R P L P L L L D I D K V V G L **Y** N L F E K L K I M I P A K C G K D **Y** K L L P L E E F L D K M I N L Q Q

C

Sequence #387 — Gene Saci 1157

M C G E L V H I D Y E T W D Q Y I Q E D V M K V Y E T T S K V V N L Y Q Q V E R I V K L T Y D K L D D N L K R I L L G G V T R N E D G S F D Y T K N S S A K F Y
 A D F I G L T M D Y S T Y L Q S L Q L G T S I V A R L I S K K P M E M R L S K S I K D Y I R E I N D L S K R I I I S S G F R P R E V E R V S L S D L N G V F N T
 F K E L L E S L A R F S S V Y N P R T F F I T S L T G D I L K A F L E A Y D K L N D K S I R N S V F R K F G V V P L R M F L N D E R Y T I Y G Y T D N S L G R Y
 I T D L D K Q A Y D F L R N F R S E F I R L D G N I E K D F E S L L S Y Y I T S S N L S E V L D F A F W T N P V R C H I P L S N P S K I T C D N S Y S E A Y K A
 K Y R S R T Y T L I E M L E E F S I P L L L Y Y D L K F T T A Q D A I I M E L D P K R E I H E V

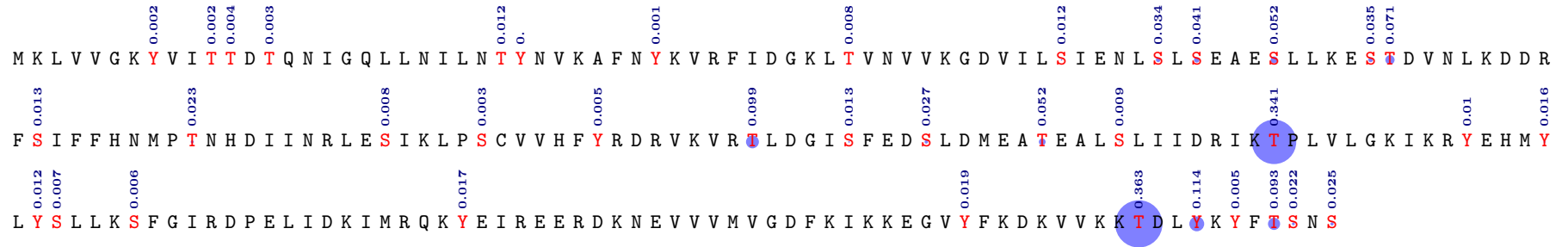
Sequence #388 — Gene Saci 1158

MDLLRIK ^{0.13} T ^{0.111} D ^{0.041} Y I K E ^{0.056} Y ^{0.017} S D I E K ^{0.02} Y I E Q ^{0.009} S L G G K F P ^{0.013} Y A L ^{0.003} S K ^{0.051} T K R I I L ^{0.024} Y A I I K E ^{0.054} T ^{0.056} T P K I A I E ^{0.046} T G V G P G V ^{0.013} S ^{0.016} S ^{0.067} T I I L ^{0.012} S A L P E D ^{0.015} S V L ^{0.008} Y ^{0.006} S

I D V R N R L E D G N E V G ^{0.048} Y I I P Q K L R K K W K F F L G E ^{0.087} S R R F L P K I L Q E V N E V N F F L H D ^{0.005} S D H ^{0.005} S ^{0.076} Y E N V M F E L ^{0.002} S ^{0.02} T I W ^{0.002} Y K L ^{0.003} S E G G V I L V D

^{0.008} N ^{0.006} Y R F ^{0.04} S N A ^{0.008} T I D F V ^{0.006} S S K K A I ^{0.016} Y ^{0.018} S E L ^{0.026} S D E A G G L L L I L K P

Sequence #389 — Gene Saci 1159



Sequence #390 — Gene Saci 1160

MEI KA ER K G K V V R V L I N N P N P V I K F N F K A D Q ^{0.012} S E M I P ^{0.084} S D I E V ^{0.155} T K D ^{0.069} T ^{0.03} T ^{0.007} S H S ^{0.006} I N V L L P L N ^{0.05} T K ^{0.053} T H V L G L G E K A F E L D R R R ^{0.167} T R V ^{0.156} T
 M W N ^{0.059} T D ^{0.003} S Y G ^{0.037} Y T ^{0.006} W Y S ^{0.061} D P L ^{0.012} Y ^{0.056} V S ^{0.004} I P F F I L V D ^{0.005} S S ^{0.007} I K G Y F F N ^{0.009} S P ^{0.01} S K L V F D M G L E R Y ^{0.005} D K I I V K I P E E ^{0.019} S V E F F V F E G D ^{0.009} S V Q E V I E H ^{0.062} Y V
 E L ^{0.037} T G K P F E L P E W A L G ^{0.053} Y Q I ^{0.007} S R Y S Y Y P Q E ^{0.019} T V E E V V R R H L E E D I P L ^{0.018} S A I ^{0.031} Y L D I D ^{0.01} Y M E K Y R L F ^{0.026} T W D K A K F P ^{0.008} S P K E L I E K L H ^{0.009} S L G
 V K V V ^{0.013} T I V D P C V R L D Q N ^{0.011} Y H V F K D G L G N ^{0.008} Y V E N E D G ^{0.012} T I Y A D I L W P G L ^{0.033} S V F P D F L N ^{0.003} S K ^{0.001} T R E W W R N L V E K W V K E N N I D G I W L D M N
 E P ^{0.009} S P L N K K P F N P R A I H R L D D N ^{0.006} S Q V ^{0.061} Y H E S ^{0.004} V H N L Y S L F Q A M A ^{0.027} T K P ^{0.001} S V D F V L ^{0.008} S R A G ^{0.004} Y S G I Q R Y A A I W ^{0.004} T G D N ^{0.013} T T ^{0.002} S W S ^{0.074} D L ^{0.021} T L Q L A ^{0.028}
 L ^{0.002} T L G L ^{0.003} S I S G V P ^{0.002} Y V G C D L G G F I G R ^{0.007} T ^{0.022} D Y L L L Y R Y F Q I A L F F P I F R N H K D K G G ^{0.132} S D Q E I ^{0.002} Y S I P D ^{0.003} Y W K E K I K R V I K M R Y Q F L P Y ^{0.001}
 L N A L A R E ^{0.021} S S K ^{0.013} G H P I I R P L A ^{0.089} Y H Y F R D E N A F K I N D Q ^{0.013} Y M V G E Y L L Y A P Q I N K E G K R L I ^{0.003} Y L P E G K W L N W W ^{0.001} T D E E Y E G K N W I E S ^{0.05}
 D H D F P L F L R ^{0.012} Y N ^{0.01} S V V P ^{0.013} Y G N G L I ^{0.005} T L N V ^{0.004} Y G N ^{0.009} S G K I E L G D G ^{0.003} T Q I L H E N G N V K I ^{0.008} S P G V N K ^{0.01} S K F E V M R R P N K G ^{0.01}

Sequence #391 — Gene Saci 1161

M F E V N D E F I D A L T V L G I S K K E A L V F A Y L T Y K G G A T A K E M I S D L Y I H Q P Q L Y N I L L S L E R K G L I Y V Q N S K P K F Y I P A R L N I
 V L E K I D Q E Q T K R K H V I L E Q I K K L E T N H R K S Q G M M W M T K S T E N V L N N C I S V I T S A K N E L Y V E I P N N Y L Q K L I S Y I I K V A E S
 G V K T Y L N I Y P N V D E F L V N K L L E S K V M E V K V H S L G H F F L V S A D A E E S V F M P R V M S L S T N P N I Y S Y V F R D S T M S L F F I H Y Y F
 E G W R T S R T V Y R K A V T Q S D F P M I F S A H R F A T W E I M K A K E Q G L R L K V K V D G V I T R T G E N V E L F G Y P N N V N I S S E V I N F E L V E
 E R S G R S Y L I G G D N A L V E D V S A E K I E V Y T Q

Sequence #392 — Gene Saci 1169

M D T N K V Y D T I I I G G G I A G L S A A L Y S A R Q K L S T L V L S K D L G G Q L T L T D L I E N Y P G I E S I G G R G L S Q K I Y T Q A K R F N A E F V L
G E E V K E I S Q E G E I F I V N G I H N V Y Q S K T I V L A F G K T P R E L N V P G E Q E F K G K G V S Y C A I C D A A F F K G K P A M V V G E G E P G L E A
I E I L S K H A N P A Y Y V T S S G Q L S G D E E L I K K I M S T S N I K I Y T S S K V L Q I N G N G K V E E V V I N K G G E T L R L K V E G V I I E M G Y V L
K T D F L R G F L K L N D K G E V I V D E F G R T S R E G V F A A G D V T Q T P Y K Q A V I A A A E G V K A A L S A Y N Y L R S K R G L G P I T V D W K A E K K
K I S L K L S

Sequence #393 — Gene Saci 1171

M ^{0.084}S ^{0.024}S M N K R V F D I L R E L D ^{0.013}S L V D F ^{0.01}S R A K L Q W D I L I I L A ^{0.048}T K G P ^{0.011}S ^{0.019}S ^{0.014}T ^{0.088}T E I ^{0.02}S Q ^{0.02}T I N ^{0.108}T ^{0.012}S R K ^{0.089}S I I D A I R K L V D K E L V ^{0.097}T K V K G D I ^{0.043}Y G L ^{0.025}S
E K G E K L L E ^{0.021}S F D ^{0.022}S I M ^{0.031}S I N V ^{0.107}T D K P D ^{0.066}S ^{0.072}S I E ^{0.041}S N S I ^{0.016}S L ^{0.009}S T N I A E ^{0.02}Y F ^{0.007}Y M L E I L K M A L L N K Q I ^{0.074}T I D K A ^{0.004}S H E L G I ^{0.003}S K Q ^{0.014}T L K ^{0.006}Y ^{0.009}Y I E ^{0.014}T F ^{0.057}T E
N K L L K V V N Q E ^{0.011}S V L G K ^{0.008}S K K I ^{0.04}Y V L ^{0.14}T D E ^{0.07}S R K L V ^{0.04}S R L P E L ^{0.161}T R L K R N L P L K I L L K L ^{0.043}T G ^{0.008}S ^{0.003}Y R ^{0.003}Y E I A L ^{0.018}T K V M L F N V I ^{0.001}S I P V L M ^{0.001}Y L K D
Q L G I L E A I W L ^{0.}Y V I I L L P L L ^{0.001}S I F A E I F N R I

Sequence #394 — Gene Saci 1172

M S V I F D R N K K E E M D S K Y I F M L A F M M A L F S A G L P P E T V L L K V S N K D S F H P Y L K V F R R I K N L V S G F R Y K F S Q G I N Y A I R N S K
V K F L S E F L V R L S Q A V T F G D D M V Q F L E R E I D F S L A E Y S S H S A R V I E S M N N F L T V Y A T L N S S L A F L V A D M T V L S V L Y S G G S S
I L L Q I F F L S T V I L V N L T V I M Y Y I Y K P E S Y M R Y S S R D R L L L T A L I L L G I A L N L T Y T S F I T M I I T G V L Y L G V G M R Y R I F E N K
I N N L E R Y F L L F T R Y F T R N Y S V V N N L K E S L M A V L R G D L G S A K P M I R R A L N R L N L G V N K S K I F S L M G R E S K S V L V T M L S E I L
Y E T I S N G G N M L I T G E I L S K I G D V V L N I R A R K E Q N G R A F E A S I Y A L Q V S S A G V S A A L I S I T S M L N N L F S I G E L A S V I A F N P
I D I G F V S K I F L I M L F V M S F A N G M A I S L A Y G K S I Y A S L Y F I G L L M I M S A I S Y Y V I L T L T A Q L F Q A F S S G G I I S G I Q N T T

Sequence #395 — Gene Saci 1184

MAEKPIDELQQLLEEKADY^{0.005}NLRIY^{0.011}KNIY^{0.005}KQS^{0.022}IEEPS^{0.007}KFWDRIAES^{0.005}SLIDWFEPWKK^{0.049}TFVQEEGLL^{0.048}TKWVFVEGKLNA^{0.003}SY^{0.016}NAID
 RHAF^{0.005}SNRKFKA^{0.007}AIWE^{0.008}SGKHERRVL^{0.146}TY^{0.017}QDL^{0.098}Y^{0.021}EVNRWANALREIGVRKGD^{0.106}RV^{0.061}TY^{0.076}MPL^{0.002}TE^{0.003}PEGVI^{0.002}SMLAV^{0.003}TRLGAIHNVVF
 AGFGVQALADRI^{0.015}SDAG^{0.008}SKVVI^{0.37}TADA^{0.023}YY^{0.025}RRGKLV^{0.029}ELKKA^{0.021}VDES^{0.016}IRLLGKN^{0.11}SPVEK^{0.086}VI^{0.071}IY^{0.013}KRT^{0.008}SG^{0.013}EIPFDDKRDV^{0.013}Y^{0.008}FEEIAK
 Y^{0.177}KPIDPEPVE^{0.011}ST^{0.128}HPLY^{0.049}IIL^{0.089}YT^{0.057}SS^{0.004}GT^{0.013}TT^{0.026}GKPKGIVH^{0.002}ST^{0.048}AG^{0.029}YLVG^{0.023}TS^{0.002}IMLLW^{0.001}SY^{0.006}GM^{0.004}SEENDILFN^{0.002}TS^{0.001}SDIGWVVG^{0.001}H^{0.014}SY^{0.008}IT^{0.013}YAPLVM
 GR^{0.005}SIVIV^{0.094}EDAPDY^{0.015}YADKWA^{0.019}EIERNRV^{0.148}TV^{0.009}FG^{0.004}TS^{0.104}ALR^{0.003}SFMKY^{0.016}GDEVVKKHDL^{0.007}SS^{0.006}LRVIV^{0.087}TAGEPLN^{0.011}YAPW^{0.015}KWGLEVVG
 NGRV^{0.044}YM^{0.001}SHQW^{0.018}QT^{0.074}ET^{0.002}SG^{0.068}PNLGY^{0.05}MPLI^{0.01}YLP^{0.148}MK^{0.01}SG^{0.012}PT^{0.089}CGFPLPGNKIEILDE^{0.196}SGN^{0.143}TK^{0.015}PRNRG^{0.018}YL^{0.018}VMLPP^{0.018}YPP^{0.018}SM^{0.018}IGMWN
 DPGNERLKK^{0.011}SY^{0.014}FS^{0.008}KFPGI^{0.018}YYS^{0.014}GD^{0.012}Y^{0.17}AMIDEEG^{0.068}Y^{0.068}IWVMGRADE^{0.157}TI^{0.013}KVA^{0.483}AHRIGAGEVE^{0.034}SI^{0.008}TT^{0.008}SHPAVAEAAAIGLPDPVKGE
 NIHIFVVLK^{0.044}T^{0.002}GHVP^{0.015}SQELATE^{0.103}IQAY^{0.113}MRGHMGAIV^{0.057}TP^{0.082}EIH^{0.057}FVEKLPK^{0.082}TR^{0.021}SG^{0.122}KVMRRVIKAVMLGQ^{0.021}ST^{0.058}GDI^{0.206}ST^{0.058}IEDE^{0.258}TS^{0.162}SMEE
 IKRAIEEFKQ^{0.042}SLK^{0.251}T

Sequence #396 — Gene Saci 1191

M K ^{0.01}S L ^{0.051}T R N ^{0.012}Y L K I G I L G G Q L G W M M I L E G R K ^{0.003}Y P F ^{0.086}T F ^{0.028}Y V L D D P N ^{0.145}T P G C R I A D K C F P P E K ^{0.026}Y K E M I D E V D V V ^{0.186}T F E F E H V L D K A L E

^{0.127}V A Q E K E K L F P G I N ^{0.024}S V E L K R E R ^{0.006}Y K E K L ^{0.125}Y ^{0.048}Y K E H N L P ^{0.266}T P R F L V A E D G E E A L K I L K E E F N G I G V L K E ^{0.014}S L G G ^{0.005}Y D G K G Q ^{0.008}Y F I K G D V

N K ^{0.014}Y E N L K ^{0.009}S K K V K F V V E E F V N F N ^{0.006}Y E A ^{0.006}S I I A M R D K N G N F K A ^{0.002}Y P P ^{0.063}T F N ^{0.006}Y N E K G I L V ^{0.021}Y N ^{0.008}Y G P L H D N R F E E I A K R L A D ^{0.004}S L N ^{0.013}Y V G ^{0.011}T

M G I E F F V R D G E I L I N E F A P R V H N ^{0.067}T G H ^{0.007}Y ^{0.054}T L D ^{0.001}S A ^{0.022}Y I ^{0.002}S Q F E Q H I R A I ^{0.051}T G I E L G ^{0.005}S ^{0.025}T E L L ^{0.036}T F G G M V N I L G ^{0.139}T D D V P P E V L R ^{0.045}Y G K V ^{0.056}Y

^{0.039}W ^{0.039}Y G K P D V K R R R K M G H V N V I G K D L E E V K Q K I D I I M K L I ^{0.003}Y K Q G L D L

Sequence #397 — Gene Saci 1193

MDLAFVKGDVY^{0.01}Y^{0.009}LY^{0.081}MNGS^{0.007}LIR^{0.024}TS^{0.006}EFKVKDENVIGY^{0.006}VLKEY^{0.04}REGKPKLS^{0.049}SSIPVHES^{0.02}SKVKEIVEAKLVDEIKNLNAY^{0.002}VFDK
 DFLIIHFGS^{0.008}IDEVKKDN^{0.083}T^{0.083}YV^{0.042}V^{0.013}V^{0.015}NGKPV^{0.023}LKT^{0.011}NLPQLFDLMKGN^{0.002}YELVK^{0.018}YLLKEFPKY^{0.024}GEV^{0.004}VRR^{0.004}SI^{0.004}ISLVGMNKCDEAI^{0.182}T^{0.044}LY^{0.044}
 N^{0.014}SLEKKY^{0.007}PEES^{0.046}LAVAECY^{0.018}EKREEY^{0.03}LEALKI^{0.013}YS^{0.015}FF^{0.023}SEQKY^{0.022}RELEKRLRD^{0.042}KVNLLIDEFERT^{0.044}YN^{0.007}VK^{0.005}SLFEALS^{0.006}SILP^{0.32}T^{0.011}YDAPA
 IKLGWHFIRKKNHKEAVKY^{0.025}FEEAVRRRRDF^{0.051}T^{0.002}NIL^{0.008}SLANAY^{0.008}IQNQQFKEALDT^{0.042}IQEAEKIRRN^{0.05}SS^{0.026}T^{0.077}AY^{0.016}LKGIALEY^{0.026}LNAPM
 EAQKEFFACREGLVDACGKIKVY^{0.089}ELY^{0.086}TP^{0.03}QNEFDPN^{0.002}SWIGY^{0.012}VLY^{0.008}GY^{0.012}KVEKVI^{0.007}SGGMGY^{0.008}VLLVEKGM^{0.085}RKFAMKIVKKEFR
 Y^{0.085}DEMLY^{0.004}EIAKLQEI^{0.004}SKGS^{0.008}KY^{0.002}IVRIFA^{0.003}SFVDENFT^{0.153}D^{0.053}Y^{0.109}Y^{0.008}SS^{0.012}PPAIVMEY^{0.015}MEGGDLRQII^{0.015}T^{0.066}NNE^{0.008}Y^{0.131}SL^{0.019}LRH^{0.017}SS^{0.017}RWPEIV^{0.003}SIMFS^{0.001}
 KIAADAIHVNKNGY^{0.005}VHCDIKP^{0.001}SNILLNGKLPKY^{0.008}GEQAVQALLEEKIT^{0.038}PKIS^{0.012}DLG^{0.007}SS^{0.006}VKVG^{0.07}TP^{0.012}VIHY^{0.012}TP^{0.091}Y^{0.024}Y^{0.048}AHPLQRFGR
 AEYNFDVY^{0.007}SL^{0.036}T^{0.002}IS^{0.014}LY^{0.002}VAL^{0.02}T^{0.042}NNFPFPEWLEREIEEAVIDP^{0.02}SKRENVIKDF^{0.042}YNMDPRLDY^{0.025}VPS^{0.008}EFHDLILRGLRGEIT^{0.074}IEGI
 S^{0.015}RELKQIT^{0.051}TE^{0.112}YGY^{0.01}NIPLN^{0.016}YSEI^{0.002}SEI^{0.007}

Sequence #398 — Gene Saci 1197

M H T P E E C E R K E W L L T F G T G G Y S S S S T I C G I N S R T Y H G Y L V V P L N P P H K R Y L I L S K F E D F L V L N K E D F P L S T N H Y S N A Y Y P D
 G Y K Y L K H F H W G R N Y V K W I Y D V N G I I V E K L L I A N Q G T N G V T I K Y K A T E G S I K V Y P L M T F R S H H L V S Q P D N L I F T Q K V K D N L
 V S L Y R Y D G S L A L N F V V E N K F K L T N T G Y S Y Y D F F Y V I D Y E L G N N S K E N L Y N P F F L T S E K N E L T I H A Y H N S F D K S E I K E T P S
 D I I K L L G E S S L N F L V K G H Q G Y S I V A G Y H W F D E W G R D T F I S L E G I L L L Q G L Y D Q A K E I I N R Y L Q Y N N R G L L P N H I T P S G E P
 I Y L G V D V S L W A I N S I Y K L Y T Y S R D T Q F I G K I Y P I L Q D I V E S Y M K G N G I V Y T M G E I L F H R G A P R T W M D A S Y N G R I V T P R E G
 A A V E V N A L W Y N A L M I L D Y F S K I L G D S S S L Y R E V A E K V K R S F M E R F V T N W G L Y D Y L T P S F T P D N T I R P N Q I F A I S L P F N I L
 P V E K G K S V I L T I E K E L L R S Y G L S T L S S K D P K Y K P V Y R G E R A K R D E A Y H N G L V W P W L I G A Y V D A K L R Y E T D I V R S K L L L D T
 F K P L L E Y A K L H N G F I P E L F E D V P P Y S N G G A I A Q A W S V A E V Y R A M N K L I S L

Sequence #399 — Gene Saci 1198

M R ^{0.005} Y ^{0.009} V S I G N E R ^{0.036} T L I N L D Q L G R I I D I ^{0.011} Y ^{0.004} Y P H A G M E N H ^{0.016} T N G K P V R Q ^{0.009} Y I F ^{0.031} T Q G K L I P D E E W R V ^{0.005} S L N ^{0.009} Y F H N ^{0.007} T N I A E I D A ^{0.002} S I N ^{0.007} S D I R
 L L A ^{0.006} Y D F ^{0.006} S D I ^{0.01} Y A P L ^{0.005} Y ^{0.002} Y R I L K V ^{0.001} Y N ^{0.027} T ^{0.002} S N ^{0.004} S P L K I K L I F N F D L D L ^{0.01} Y ^{0.005} S ^{0.109} T P F G D ^{0.014} T A F I E P E ^{0.026} T N ^{0.008} S I V H ^{0.012} Y ^{0.015} K S R R ^{0.004} Y I G I K L F ^{0.004} S I L K D M Q E
 Y ^{0.05} S ^{0.022} V G K E E I A D E I R R G ^{0.01} Y ^{0.011} L S N R P I E N G D V Q ^{0.009} S A L A L E L E I N P ^{0.015} S ^{0.016} N S E K A ^{0.023} Y L A L A F G R ^{0.081} S ^{0.036} L S E I K ^{0.148} T L L R R A N ^{0.036} S ^{0.048} T E I E ^{0.013} S ^{0.008} S F V ^{0.028} T N H ^{0.005} S F
 W ^{0.005} S N W L F K ^{0.015} S E R K F ^{0.017} S L Q K M N D L ^{0.018} Y K I ^{0.005} S L L ^{0.024} T I R D H M N E N G ^{0.009} S I I A ^{0.006} S ^{0.007} S D ^{0.036} Y S F M G I ^{0.005} Y G D A ^{0.02} Y ^{0.015} T ^{0.07} Y C W P R D ^{0.008} S A I ^{0.003} S A Y A L D I A G ^{0.003} Y G E L A L K
 H ^{0.005} Y K F I ^{0.003} S K L I ^{0.006} S E E G ^{0.081} Y ^{0.035} L Y H K ^{0.005} Y N P D ^{0.003} S ^{0.033} T L A ^{0.003} S S W H P W I ^{0.003} Y K G K R I L P I Q E D E ^{0.026} T A L E V W A I A N H ^{0.003} Y R I ^{0.02} Y K D I D E L V E I ^{0.001} Y R ^{0.005} S F I K P A I K
 F L M K F I E D G L P K P ^{0.009} S F D L W E E R ^{0.008} Y G I H I ^{0.022} Y ^{0.015} T V ^{0.002} S ^{0.046} T V Y G A L ^{0.148} T E A ^{0.005} S K L V ^{0.196} Y D M G D E V M A ^{0.014} S D M V ^{0.02} S V A E Y ^{0.124} M K ^{0.009} S M M L R K M ^{0.369} T ^{0.004} Y N G R F I R R L
 D E N G N I D ^{0.047} T ^{0.065} T I D A ^{0.004} S M ^{0.008} Y S P F F F G V I D P K D P I M V ^{0.004} S ^{0.008} T I N A I E ^{0.003} S A L K V N G G I I R ^{0.004} Y E G D ^{0.408} T ^{0.059} Y R R ^{0.048} S K ^{0.035} S R P N P W L I ^{0.008} T ^{0.009} T L W V A E ^{0.007} Y ^{0.009} Y L R V G
 N V Q K A N E ^{0.026} Y ^{0.002} I S W V L D R A V P ^{0.02} T G L L P E Q V D P D N L Q ^{0.003} S ^{0.02} T ^{0.003} S V L P L V W ^{0.004} S ^{0.007} S E L V I A ^{0.005} S H Q M K E A I

Sequence #400 — Gene Saci 1209

M T V S V S L K S S T N L A F T G K P T Q V S L I V R V S P T S F A S L S G I H Y V V M I D N S P S M K K E N K I N L A L S S A S R L V Q D I I P G N F I S I Y
 L F S N D I E T L Y E G E S G K Q I E L K S I K M G Y T T N L H K A I T K V L E K F K S S E I P V K I I L L S D G K P T D K R Y S R D Y E S L Q V P K N V Q L I
 T I G L G E D Y N E A I M K I L A D K G S G V F Y H I N D P S Q L P T T L V E Q K S D K V A A Y N L T L N F S E G L E V I N Y E M P V N I P V V D K D V N V Y A
 V G N I P P G E T D Y T L K V T G N Y V D S V S N K N I E I D E S L V I K R A P D D E V R S N F D R T V I N E V S Y Y M L L R Y Y G N L I S E G K S E E A T R V
 V Q E L L T A A E R T K R V E L I E R T K K L V N D P K V D L S E V T K T M R T

Sequence #402 — Gene Saci 1213

MRVRI RGI **Y** **A** **T** A L **T** **Y** L F L K N G F E I V Q Q **T** P Q I A E R F F M D I I R **S** P A D V **T** V K D G I D K G E I V **S** V G E D I **Y** N F M R **S** I F K **Y** **S** P I W R **S**
P I K L **Y** **S** V V **S** **T** E D C K F M N F I V E P C L **S** E G L V I K P P V E G K I I L **S** **S** P R A V G K F A M V W K G D G R **T** F F **S** E H I D E R D **S** Q R L L **S** V **S** I P F
N K K G **Y** N V K W R **S** N A A M A **T** **T** A E L K E E L E N L **T** M R **Y** **S** **Y** N D F R E Q G E D F L K V **T** L **S** L E D K L F L D D I R **S** L V I N **T** M K F H H M L K M **T** **Y** **S** N
E V D I E E G K V N P **S** P E K L L **T** **S** L I G D N M I E A I E H V K P N G K R V L L K G G **T** I V Q K E I G R D **Y** **Y** W L K I R R E F K **S** G G I **Y** D G L N L K I E D G
D **Y** D L V E L D **S** R N W **Y** Q I H R **Y** H D R N N N L K G L **Y** V N I **S** **T** P P E L L K N R I R **Y** L D L E V D V V K V N N **T** V N I I D L E E L E A N K P I L G E F L **Y** K

K A L E I A Q N I K D K L N E D K I

Sequence #403 — Gene Saci 1214

M S^{0.021} Q I L E S^{0.014} N I R Y^{0.089} Y^{0.001} P I K Q L K D R G Y^{0.019} D V D S^{0.013} L P Y^{0.003} S^{0.007} L K I L V E N T^{0.164} F R N L D N V K I T^{0.106} E E D L D A I A S^{0.008} W K T^{0.055} G K E F S^{0.005} F L P T^{0.096} R V V L Q D Y^{0.076} T^{0.047} G I P
 L L V D L A A M R D E M S^{0.038} K R G E D P L K I N P I V Q S^{0.003} D L I I D H S^{0.002} V Q V D Y^{0.014} Y^{0.017} G T^{0.077} A S^{0.006} S^{0.008} L L L N K K K E F E R N V E R Y^{0.002} K F L K W A Q R S^{0.01} F K N L R V F P P
 G K G I I H Q I N L E Y^{0.006} L S^{0.002} K V V D V K E F R G Q L T^{0.041} A Y^{0.009} P E I V I G T^{0.063} D S^{0.003} H T^{0.018} P M T^{0.012} N G L G V L S^{0.006} W G V G G L E A E A V M L G E P Y^{0.052} T^{0.072} M A V P E V V G V R L V
 G E I K E G V T^{0.094} P T^{0.031} D I V L Y^{0.023} I T^{0.027} E K L R K K G V V G K F V E F F G P S^{0.003} L G N L T^{0.114} V P D R A T^{0.236} I A N M A P E Y^{0.055} G A T^{0.056} A S^{0.004} Y^{0.049} F P I D Y^{0.017} Q T^{0.081} L N Y^{0.018} L A A T^{0.049} A R E Y^{0.032} K
 L V E K Y^{0.021} A K A Q G I F Y^{0.034} E S^{0.004} Q P K Y^{0.062} S^{0.012} E V V T^{0.078} I D L S^{0.016} E V E P A I A G P K N P D E R V P L K D L K K L F Q E K K D K K K G S^{0.053} L V K D L D V V L T^{0.012} A I T^{0.005} S^{0.003} C T^{0.027} N
 T^{0.2} S^{0.002} N P T^{0.018} V M I G A G I L A K K A I Q H G I R S^{0.012} K S^{0.059} Y^{0.026} V K T^{0.085} S^{0.013} M A P G S^{0.027} P V V V E Y^{0.029} L K E S^{0.008} G L L P Y^{0.014} L E A L G F H V V G F G C T^{0.011} T^{0.009} C I G N A G P L P K K I E E
 D V K S^{0.005} N K L E V Y^{0.03} G V I S^{0.006} G N R N Y^{0.003} E G R I N P Y^{0.023} L S^{0.003} G V F L A S^{0.003} P V L V V A F S^{0.002} L A G R I D I D F F N E P I D Y^{0.013} D P N G N P V Y^{0.003} L R D I W P T^{0.012} T^{0.064} K E I S^{0.004} E Y^{0.038}
 I K L G M N P E F Y^{0.013} K A V Y^{0.081} S^{0.003} H I L E G D E N W N N L Q V K E S^{0.008} E L Y^{0.011} S^{0.014} W D E K S^{0.008} T^{0.086} Y^{0.068} I R M P P W I S^{0.006} L D L K L D D V K N A R I L L L L G D K I T^{0.079} T^{0.039} D H I S^{0.005} P A
 G P I D K D S^{0.021} V A G K Y^{0.034} L S^{0.012} E L G E Q D L N T^{0.065} Y^{0.026} G A R R G D H E V M L R G G F A N S^{0.002} K L K N L L V D V Q G G F T^{0.047} K H F P D G K V M S^{0.01} V Y^{0.072} E A S^{0.005} Q Q Y^{0.037} K K E G V P
 L V I V A G K Q Y^{0.046} G S^{0.008} S^{0.016} S^{0.018} R D W A A K V T^{0.041} A L L G V K A V L A E S^{0.011} F E R I H R S^{0.002} N L V A M G V V P I E I P D W K S^{0.005} L G I K G D E I V N V Y^{0.003} L K D L K P K S^{0.023} K V
 K V E F I K Q D G S^{0.013} K V E V Q G L A R V D T^{0.111} N V E L E Y^{0.027} I K Q G G I L K Y^{0.002} V F N K L I H E S^{0.004} Q N

Sequence #404 — Gene Saci 1215

M K I L L I S I W T N L N N R E N K Y E I I N E R G E E T E R E V V E S K P S L A E V K F L R E S E E Q V D M L V L L P S F L S A Y L K T Q D L P D S Y V E L K
0.005 0.004 0.022 0.34 0.053 0.101 0.079 0.008 0.009 0.015
K R I Q E E V L K R F Q G I D V E V I P S S G T I D A D G F M H I H D N S L G N F N F S V Y Y S V Y N A L T R Y N P D T V L L D L S E T T S Y L T Y Y T S D A A
0.008 0.006 0.015 0.001 0.001 0.006 0.006 0.002 0.006 0.018 0.001 0.054 0.004 0.01 0.085 0.004 0.01 0.037 0.016 0.002 0.069 0.006
K L A I Q D Y Y I T K R K A D I P L I E F S T D F A N K I I T L K K S T I R N V D I S D Y L T S Q E I K L A K G M P T L S K S E L F A I G R A L Q L G F P L A L
0.021 0.002 0.098 0.002 0.048 0.021 0.009 0.065 0.008 0.042 0.048 0.005 0.044 0.012 0.007
L Y L L N G I E E L T K P E D F M Q K I E E S I T V S K K E Q E K E Y L V S S G V R A Y N T A P Y Y F M G Y H F I E A Y K V K S E T G E Y T L D D L L K L I D V
0.006 0.07 0.036 0.228 0.015 0.149 0.006 0.018 0.023 0.252 0.021 0.028 0.01 0.012 0.006 0.081 0.026 0.142
Y N E P A R S L I K R E L E I L K R L A G L K D D G E Y I L D Y L I R L G N S R V L D W L E N V P I G E S K I D C E I S E Y E M I S H A G M G R Y F T I V N R D
0.089 0.013 0.009 0.008 0.004 0.006 0.015 0.045 0.008 0.024 0.073
K D G K I K I S Y A Q E C L K D I T N W I K S L G K E G E
0.006 0.005 0.042 0.006

Sequence #405 — Gene Saci 1221

M K I ^{0.015} T K ^{0.006} S ^{0.044} T Y ^{0.003} L K I L L L L I L P V ^{0.005} T ^{0.003} S L L L ^{0.003} S L M ^{0.014} Y G D V ^{0.03} Y I P P Q E I L H P ^{0.002} S Q I ^{0.006} Y R L I L ^{0.001} Y E I R L P ^{0.022} T I I ^{0.004} T A A L I G I I L ^{0.003} S V ^{0.002} S G ^{0.003} S I M Q H L L R N
 P L I D P ^{0.022} Y I A G ^{0.084} T ^{0.007} S ^{0.005} S G G A F G A I L ^{0.004} S ^{0.001} Y F L L G F ^{0.003} S L P L ^{0.002} S V M I ^{0.001} Y A Q P L I A F F F ^{0.} S F L A ^{0.002} T I I ^{0.003} T V L I G R G R G I ^{0.001} Y G L V I A G V I V ^{0.001} S ^{0.001} Y I F ^{0.002} S ^{0.001} S A ^{0.002} Y
^{0.002} S I L L V L L Q E R ^{0.001} Y P Q I P P I I F W L M G Q I ^{0.006} T V V G W ^{0.001} S L I P A L ^{0.002} T ^{0.008} T ^{0.005} L V L L I L A ^{0.003} Y K M ^{0.004} S R A L D L V ^{0.007} S I ^{0.005} S D E I ^{0.005} S ^{0.009} Y ^{0.024} T H G I R P N R F R I F W L G
 L I ^{0.001} S F V V ^{0.001} S ^{0.002} T I ^{0.002} S I A G V I G F I G I L V P H L I R L ^{0.004} S I G G N M R ^{0.003} T L L V ^{0.002} Y ^{0.002} S ^{0.003} S G I G I ^{0.003} T V M L L ^{0.001} S N I I A D G M L G ^{0.011} T I I P I ^{0.072} T P I L A V I A ^{0.001} S P F L I
 L F L V R R N D ^{0.018} S E G A

Sequence #406 — Gene Saci 1227

MDCAVIFRRDLRLFDN^{0.004}TALVNAV^{0.002}YHCNKI^{0.}YPIFIVDPRQMINNP^{0.005}YK^{0.003}SEFAA^{0.004}TFLIN^{0.003}SLVELDKELNGNLNV^{0.007}YY^{0.005}GY^{0.001}PENIV
^{0.002}S^{0.009}KLDMVNAIFINED^{0.081}Y^{0.045}PF^{0.039}AIQRDEKMKENALNKGIKFF^{0.01}SY^{0.017}PDVLL^{0.016}S^{0.063}AEEKKIKIGR^{0.05}S^{0.427}FT^{0.056}PF^{0.251}Y^{0.022}TKARELEVPKPQ^{0.034}SV^{0.02}DK^{0.003}SI
NVERI^{0.027}S^{0.015}NS^{0.017}SL^{0.045}IDFL^{0.039}TF^{0.061}FKKVE^{0.063}S^{0.063}PLLKGGRPEGLMLLDREID^{0.116}Y^{0.008}SR^{0.008}KD^{0.008}Y^{0.022}PAEKN^{0.02}Y^{0.011}SM^{0.003}LS^{0.003}PHLKFG^{0.024}TV^{0.003}SPREV^{0.003}Y^{0.056}HKKI^{0.024}SD^{0.003}QAF
^{0.037}T^{0.001}RQL^{0.03}Y^{0.083}WRDF^{0.028}Y^{0.012}TLLA^{0.002}Y^{0.083}QNP^{0.048}Y^{0.013}VFGH^{0.018}S^{0.018}FK^{0.089}TE^{0.016}Y^{0.089}DKIKWENS^{0.016}ERY^{0.016}FNAWKDGM^{0.089}T^{0.016}GY^{0.016}PIIDAGMRALN^{0.046}TT^{0.046}GFINGRVRMLVAFFL^{0.056}T
KVLFDVWRLGER^{0.004}Y^{0.013}FAT^{0.015}KLVD^{0.015}Y^{0.001}DPAVNNGNWQWVA^{0.001}ST^{0.03}GT^{0.024}D^{0.016}Y^{0.046}IFRVFDPWKQ^{0.046}QEK^{0.046}Y^{0.046}DPEAKFIKD^{0.096}Y^{0.096}VREL^{0.013}RD^{0.013}Y^{0.006}PP^{0.006}SV^{0.006}IHKV^{0.012}Y
LHKI^{0.028}T^{0.012}GY^{0.004}SP^{0.028}IVNWRER^{0.002}VE^{0.034}MVKQ^{0.028}V^{0.002}Y^{0.034}FT^{0.034}KA

Sequence #407 — Gene Saci 1228

M I C N I P K V ^{0.005} T V ^{0.005} T T W ^{0.04} S A K N V I L A G P ^{0.042} T Y ^{0.011} K Q Y L ^{0.002} S K S L E V I K N K D I A ^{0.014} S I I G Q P G M G K ^{0.039} T ^{0.09} I L K K V E E I I ^{0.021} S K E K F ^{0.077} L F L D L ^{0.031} S ^{0.026} K G E I
 E ^{0.024} S E F W D K I D R F M V K N L V V G K M D R K K Y ^{0.005} K Y ^{0.005} G F L K K L T ^{0.039} G V ^{0.004} S F E N H L Y ^{0.01} S M C G K L D D F L L R L Y ^{0.} C L D Y ^{0.001} S R D F D G I L K F V N D L K N V M
 D I ^{0.008} T I L V D E I R E G H L ^{0.002} S K I H R L I N ^{0.001} S G L N V P I L M A I P ^{0.068} T D A Y ^{0.033} N K V ^{0.041} T D L A I R R R L D E ^{0.067} S R I ^{0.089} S L D ^{0.03} S A L ^{0.084} T ^{0.015} S D D I K E I V E A Y ^{0.003} C K P I ^{0.003} S D V
 L F P I I L A M W N G R E L ^{0.015} T ^{0.078} V ^{0.005} S S I L Q F I K ^{0.005} S E V E R I E ^{0.118} T D C E G N V E C I K D ^{0.013} S I Q ^{0.01} S S Y ^{0.012} T L K N V E E N ^{0.083} S T ^{0.024} L E K M L R E ^{0.137} T I ^{0.138} S S L ^{0.016} S ^{0.085} K E F R V ^{0.009} S
 Y ^{0.022} V H Q R G K R V E V K G K N I ^{0.009} T V G I F F ^{0.068} T K D D Y ^{0.031} G Y ^{0.008} L G I V K L S ^{0.004} N G N E I ^{0.01} S G D E I ^{0.007} S L L P Y ^{0.022} V E Q V E N D K K I Y ^{0.003} K I R K K F I I ^{0.006} T N ^{0.012} T K I N V Q G V
 D V V E I P ^{0.032} T L E V I R I I R G D ^{0.026} S L I L E E R ^{0.03} T R ^{0.106} S I L K E L V ^{0.009} S D D Q ^{0.023} T ^{0.023} T N V Q N N F N A V A ^{0.037} T ^{0.034} T

Sequence #408 — Gene Saci 1232

M S Y Q S L K N K V V I V T G A G S G I G R A I A K K F A L N D S I V V A V E L L E D R L N Q I V Q E L R G M G K E V L G V K A D V S K K K D V E E F V R R T F
E T Y S R I D V L C N N A G I M D G V T P V A E V S D E L W E R V L A V N L Y S A F Y S S R A V I P I M L K Q G K G V I V N T A S I A G I R G G F A G A P Y T V
A K H G L I G L T R S I A A H Y G D Q G I R A V A V L P G T V K T N I G L G S S K P S E L G M R T L T K L M S L S S R L A E P E D I A N V I V F L A S D E A S F
V N G D A V V V D G G L T V L

Sequence #410 — Gene Saci 1239

M E E V V R A Y Q E G N L N Y A L R K I N E I I K S N P S P D I Y N L L G K I L L E L G K D E E A L E A F R Q A N N R L E V A R I Y I Q K G L Y Q D A L N E I K
D E T N D E S K I L R A L I Y I K M E N F D K A K E E I A N I N S N S P L F H K V K G I V E Y H T A N Y Y G A L R S I T I A L R E Y P M D A E L Y Y Y R A L V K
A E L G L E Y E D D I D M A I N L N P Y Y A E L Y F S K G V I L E Q R G K L N E A V N Y Y S K A I K Y K P E L V K A Y Y R R A K V Y M K L G M D Q E A E K D I E
K V K E L T D N K S

Residue	P-value
M	
E	
E	
V	
V	
R	
A	0.008
Y	
Q	
E	
G	
N	
L	
N	0.005
Y	
A	
L	
R	
K	
I	
N	
E	
I	
I	
K	0.005
S	0.012
N	
P	
S	
P	
D	
I	0.019
Y	
N	
L	
L	
G	
K	
I	
L	
L	
E	
L	
G	
K	
D	
E	
E	
A	
L	
E	
A	
F	
R	
Q	
A	
N	
N	
R	
L	
E	
V	
A	
R	
I	0.003
Y	
I	
Q	
K	
G	
L	0.026
Y	
Q	
D	
A	
L	
N	
E	
I	
K	
D	
E	
T	0.139
N	
D	
E	0.004
S	
K	
I	
L	
R	
A	
L	
I	0.005
Y	
I	
K	
M	
E	
N	
F	
D	
K	
A	
K	
E	
E	
I	
A	
N	
I	
N	
S	0.004
N	0.003
S	
P	
L	
F	
H	
K	
V	
K	
G	
I	
V	
E	
Y	0.027
H	0.027
T	
A	
N	0.011
Y	0.006
Y	
G	
A	
L	
R	
S	0.003
I	0.075
T	
I	
A	
L	
R	
E	
Y	0.002
P	
M	
D	
A	
E	
L	
Y	0.006
Y	0.016
Y	0.008
R	
A	
L	
V	
K	
A	
E	
L	
G	
L	
E	0.009
Y	
E	
D	
D	
I	
D	
M	
A	
I	
N	
L	
N	
P	
Y	0.006
Y	0.012
A	
E	
L	
Y	0.003
F	0.002
S	
K	
G	
V	
I	
L	
E	
Q	
R	
G	
K	
L	
N	
E	
A	
V	
N	
Y	0.029
Y	0.013
S	0.005
K	
A	
I	
K	0.011
Y	
K	
P	
E	
L	
V	
K	
A	
Y	0.006
Y	0.011
R	
R	
A	
K	
V	0.066
Y	
M	
K	
L	
G	
M	
D	
Q	
E	
A	
E	
K	
D	
I	
E	
K	
V	
K	
E	
L	
T	0.342
D	
N	
K	
S	0.056

Sequence #411 — Gene Saci 1240

M ^{0.011}**S** ^{0.013}**T** K R I V I V G G H N G L I L ^{0.002}**S** A L L A E Q G A K V ^{0.051}**T** L L E A N ^{0.005}**S** K L G G M ^{0.008}**T** ^{0.03}**D** ^{0.03}**T** I E I Q G V K L ^{0.004}**S** R A ^{0.01}**S** ^{0.006}**Y** V L G L M P G F L I N K F K I P L L ^{0.005}**Y** N D I F
 Q V F ^{0.003}**Y** V N D K V I P F ^{0.034}**Y** R D ^{0.134}**S** R K R R E E M I K A G E ^{0.312}**T** ^{0.017}**R** ^{0.017}**Y** P E F E D K L L K F K K L L ^{0.042}**Y** D K F ^{0.26}**T** F V E K P P ^{0.397}**T** ^{0.052}**K** ^{0.059}**D** ^{0.052}**S** I L E E A K K ^{0.059}**Y** G L E E F I Q E P A K K
 V L ^{0.017}**S** ^{0.082}**E** ^{0.014}**Y** I ^{0.032}**S** E D ^{0.032}**Y** H E F F I ^{0.016}**Y** P G M E R ^{0.155}**T** ^{0.014}**S** A ^{0.032}**Y** V I A ^{0.024}**Y** F F ^{0.004}**S** P E W ^{0.006}**S** L V E G G M G ^{0.021}**T** ^{0.004}**V** ^{0.004}**S** Q K I A E ^{0.03}**Y** A I D K G V E V R V N ^{0.027}**S** K V E E L I V R D D K V V G V R
 M G N ^{0.047}**T** V V D G D V F V I A ^{0.018}**T** ^{0.002}**S** P L Q F P E L V P N V P K R G ^{0.012}**Y** ^{0.003}**Y** P G W K K ^{0.028}**Y** N V I L ^{0.004}**S** ^{0.005}**D** ^{0.005}**Y** P R F P E K L K G L E N ^{0.021}**S** L L D ^{0.041}**T** E F G E L L F P ^{0.015}**S** I L D K ^{0.014}**S** R N G
 V V M E ^{0.045}**T** M A D L E D L ^{0.147}**Y** Q M F P D L K ^{0.005}**S** K V K ^{0.043}**Y** V D E L N A F N A E K I ^{0.026}**Y** N L P ^{0.026}**Y** G D L N H L P M R E E F I L E K R L G ^{0.007}**Y** ^{0.008}**E** ^{0.084}**T** ^{0.084}**K** ^{0.084}**Y** D N V ^{0.057}**Y** L C ^{0.001}**S** A G ^{0.046}**T** ^{0.009}**Y** P G G
 Q V ^{0.068}**T** G I P A V N V A N L I L K K ^{0.}**Y** F ^{0.029}**T** ^{0.003}**R** ^{0.053}**S** ^{0.005}**T** F V V ^{0.005}**S**

Sequence #412 — Gene Saci 1242

M S Q E K M G I N K E V I R C C Y K I S D T D V D C L L K L I E L R K P I T S E E L S D M M K V S K T T I E N S L K K L M D I G L I T R E K K T D K R I G R P K

Y Y Y T L I I N F E D K M R N D L L N C S K L I D Q V I S E D M A R I

0.038
0.001
0.015
0.046
0.197
0.095
0.041
0.024
0.123
0.082
0.016
0.393
0.399

0.005
0.004
0.01
0.011
0.002
0.007

Sequence #413 — Gene Saci 1243

M E F E Q K R D R L V L T T I A Q A G P S G L D S R T L F S N L S L F V T A E S I Q R S I E N L F I K G D V V I V N T G G E V R Y I A S K T V R D S L L T L E I
Q K V R L V E Y L K E L S K K K D E I L K I E D K S K Q A E E L R K L I G R G F V L I A T G L L S L Y E K R P E T T I P E Y I E A L Q P L V D V L E K L A K M V
E I P Y S K E E L D N I L K L I E K Y R G E K D Y Q I M K D L I E R E T A K N Q

Sequence #414 — Gene Saci 1245

M K L E G E A I A P ^{0.006}S N I A I V K ^{0.007}Y W G K R D D K L N L P L N ^{0.019}S ^{0.021}S L ^{0.025}S I ^{0.021}S L E K L E V R ^{0.069}T K V ^{0.065}T V ^{0.009}S A D L Q K D E I ^{0.082}V I N Q K L R E E E F E E ^{0.025}Y G G R V I N I
 F R E L ^{0.004}Y G K K F ^{0.013}S V K V E ^{0.007}S ^{0.08}Y M N F P K ^{0.009}S V G L A ^{0.007}S ^{0.006}S A A G I A A L V ^{0.019}Y A L N D A L G L G L ^{0.017}S Q R E L ^{0.017}S K I A R I G ^{0.059}S ^{0.015}G S A C R ^{0.012}S ^{0.195}T I G G F V I W E K G ^{0.018}S Q E
 D G E D ^{0.014}S ^{0.083}Y C ^{0.017}Y Q I F P E D H W E D L I D I I P L I Q L K E K K V ^{0.052}S ^{0.073}S R K G M K N ^{0.067}T A L ^{0.023}S ^{0.018}S ^{0.028}S L M E C R L K F I E D ^{0.081}T L P L V I D ^{0.024}S I K K K D E K E F ^{0.009}Y ^{0.087}Y ^{0.016}W T M
 R H ^{0.007}S ^{0.003}N S M H A V I L D ^{0.002}S W P ^{0.002}S F F ^{0.002}Y L N D ^{0.012}T ^{0.003}S F K I M E W I Q E F G N A A ^{0.003}Y ^{0.026}T F D A G P N P H I F ^{0.019}T ^{0.087}T K K H L D E I ^{0.014}T Q ^{0.022}Y L N ^{0.002}S I G I K D ^{0.021}Y I I ^{0.007}T K V G R G P
 R V I R ^{0.05}S

Sequence #415 — Gene Saci 1246

M K L I R D P I H G **Y** I E I D D E I L K I V **S S** R V F Q R L R L I **S** Q N A M A H L V **Y** P G M R H **S** R F E H **S** L G V M Q L A G E F A R F V K P P F F **T** P G **Y** E R L
V K I A G L L H D I G H L A F **S** H **T** F E **S** A L Q V A N E I **Y** G V K D V F **Y** E G K K **T** H V K I G V K I I Q E N L **S S** I L E A I K D **S T** I **S** D P I K F L **T** N V L E E
N V R **S** E E E R F A L Q I I **S** N F I D A D R G D **Y** L L R D **S Y Y** A G V G **Y** G **S Y** D I E R L K R V L V **Y** V D G R I A V L R K A I P I V E Q F L L A R M **Y** M F E N V
Y F H **S** V V G M **Y** N **S** I L **S** H A I A K M I Q **T** G L L D L **S** R L L E I **T** D I N V L **S** K L D K L D E R **Y** K R A L L **Y** R E G **Y** R R I K K E V I N E C L N R V D R D E L
I N L **S** R E **T** D G K I I **Y** H E F F D V P **Y** K E E K E A V **Y** I F D G **S** K L Q E L **S** K V **S** N L I **T** A V K D L K K A V I V **Y** H V **S** E E D R I K K **Y** K E I L **S** N C E

Sequence #416 — Gene Saci 1255

M ^{0.01}S H I K I L G I P G ^{0.025}S I R K N ^{0.015}^{0.003}S Y N K L L L K A ^{0.021}T L N L L P Q G V E M E I F E D I ^{0.022}S Q I P P F N Q D E E N P P Q V V K D L K R K I R E ^{0.071}S D A I L F A ^{0.083}T P E ^{0.034}Y
N R ^{0.01}S I P G V L K N A I D W A ^{0.01}S R P ^{0.037}Y M D N ^{0.003}S F N G K V A A I M ^{0.007}S A ^{0.006}S I G M L G G A L A H ^{0.002}Y H L K Q I L ^{0.001}S F L N V N V V ^{0.044}T G P E V F V ^{0.003}S F A Q Q K F D E N G N L
V D E N ^{0.006}S K K F I ^{0.004}S Q L L ^{0.011}T N L V D ^{0.017}Y V K M V K ^{0.015}S K Q V V ^{0.014}S L

Sequence #417 — Gene Saci 1259

M K A V I L A G G Y G K R L R P L T D E K P K P L V E I G G K P I L E W Q I L L L K R Y K I S S V Y I L A G Y K K E V L L D W V S K N Q E R L E V K L A I L S E
T E P L G T G G A I K R L E D F I K E P F Y V L N G D I I T N L D L D K L K I S E D S D D L A S I A L V P L K S P Y G I I R M K D G G K I I E F V E K P I I K D
Y W I N A G I Y Y M K P Q I F E F L P V K G D V E K T T F P L L A E K G I L S G K T Y D S V Y W R S I D T L K D Y E E A G Q E V S E V F K N L

0.013
0.344
0.001
0.005
0.009
0.005
0.003
0.003
0.043
0.062
0.009
0.049
0.043
0.022
0.023
0.01
0.012
0.005
0.005
0.012
0.041
0.083
0.011
0.165
0.05
0.008
0.02
0.018
0.145
0.124
0.01

Sequence #418 — Gene Saci 1260

M I V ^{0.001}Y G V ^{0.007}Y N ^{0.002}S P L G ^{0.033}T I ^{0.034}T V A K N E R G I I M L D F C D C A E R N L V D N ^{0.003}S ^{0.04}T ^{0.007}F T D L F H K F D N ^{0.021}Y F Q G K P V E F N E ^{0.055}T V D L F V N N F R R R V F N E V R

R I G W G K V K ^{0.147}T ^{0.027}Y K E I A E ^{0.022}T L K ^{0.139}T ^{0.014}S P R A V G M A L ^{0.003}S K N P V L L I I P C H R I I A E ^{0.006}S G L G G F ^{0.021}S R G I E L K K K L L E L E G V N I E A L V R G

Sequence #419 — Gene Saci 1261

MPNME ^{0.011}S ^{0.087}Y KEVWLKAGLI ^{0.008}Y ALNLL ^{0.002}S ^{0.003}SGNLKPVEI GLGER ^{0.02}Y ^{0.082}F Y VDID ^{0.01}S PDIL ^{0.03}T LDEAKDFAK ^{0.008}Y NQ ^{0.023}Y D ^{0.064}Y Q LVEDNRRG ^{0.006}S I ^{0.004}T V V Y ^{0.011}Y

NGHQIKLNGGKPNQNVHPK ^{0.037}Y FQIL ^{0.005}S I ^{0.004}S VHHPS ^{0.006}S PEKQ ^{0.077}Y V R V L G V G F E K E E Q L K D ^{0.028}Y L N W L E K V ^{0.011}S E ^{0.015}Y D H R I I G D R L D L F ^{0.008}S F P E

EAPPGVVL FHPNGQIIRKEMMRFMEEIND ^{0.005}S M G ^{0.024}Y KEV ^{0.069}Y ^{0.191}T ^{0.006}S H V ^{0.019}Y R ^{0.006}S L L W K I ^{0.004}S G H ^{0.013}Y D ^{0.006}Y ^{0.022}Y K D K M L L F E I D N D E E L G I K P M N C P A

H I L I ^{0.008}Y K ^{0.007}S K V R ^{0.016}S ^{0.017}Y K D L P I R F ^{0.014}S E F G H V ^{0.027}Y R W E K K G E L ^{0.034}Y G L L R V R G F ^{0.329}T Q D D G H I F L R E D Q I K D E I K L L M K K ^{0.083}T L D V L A I F G F K G D

D V R V N L ^{0.011}S ^{0.104}T R P D E ^{0.013}S I G ^{0.052}T D E Q W N K A ^{0.008}T D A L I ^{0.003}S A L N E L N I K ^{0.003}Y E V K E K E G A F ^{0.003}Y G P K I D F D I R D ^{0.031}S L ^{0.009}S R W W Q L ^{0.005}S ^{0.027}T I Q V D F N L P E R F K

L E ^{0.077}Y V D K D G ^{0.085}S K K R P V M V H R A I ^{0.044}Y G ^{0.009}S I D R F M A I L L E H F R G K L P ^{0.019}T W L ^{0.003}S P I Q V R V L P I ^{0.015}T D E I E D ^{0.165}Y G N ^{0.011}S L M A K L R E N K I R V D M D ^{0.07}S G

E E ^{0.131}T L ^{0.04}S K R I K K A ^{0.087}Y D D G V P ^{0.084}Y L I I V G R K E K D E G K V ^{0.12}T V R A R G N I E I R G I N V E K F V Q A L V E E I R N K D L N Q ^{0.01}S A V ^{0.018}S K L K

Sequence #420 — Gene Saci 1264

M R R A L T E R V K R S L R T E E I F L I L E K N K D L L S N V G W I V S D P S S P R W W D G L E T I D D I L V S S I L V Q L T R W E T V R E V L K K L K E R G
I R R I E D L A S L E E S E I E E L I K K V N F R R A K A K R L K N L A M L V K E I G I H R L V V S P E L L S N I E G I G D E T K E A I L L F A G N I P L F P R
S E Y S K R V L S R L A G I R L S K N D A R L L G E Y I C G H D L Y K I K L F H A G I V S V G K S F C S N Q N P K C N S C I F K E I C K Y N S V K R L E T V

0.491
0.068
0.026
0.005
0.013
0.013
0.019
0.088
0.002
0.006
0.028
0.103
0.087
0.127
0.021
0.011
0.018
0.091
0.017
0.007
0.004
0.004
0.003
0.002
0.002
0.003
0.007
0.184

Sequence #421 — Gene Saci 1266

MLK Y G T K I V A G V T P G K G G T K V N N V P V Y D T V A D A V K E H E I D A S I I F V P A K F A T D A V Y E A I D N G I K L I V V I T E H I P V L D M L R
I S K Y A K L K G T R I I G P N C P G L I V P D E A L L G I L P P R P F R K G K I G I V S R S G T L T Y E I S E T I K H I G Q S T V I G I G G D P I I G T T M D
E V V Q M F D Q D P E T E E I I V I G E I G G T M E E R V A K L K K E G K I K K K M I A Y I A G M T A P R E K R M G H A G A V V Y M G M G T F D S K I N A F K N
A G I P V A K T P Y E I L E L L

Sequence #422 — Gene Saci 1275

M I Y N R N K F P S D G E V L V A T V K Q I F D Y G S Y V Y L D E Y S N L Q A F L P W S E I S S R W V V K N I R D V L K E D R K I V V K V I R I D R K K G T V D V
S L K K V T E D E K K K K M M L W K K T Q R V D K I L E I V S Q K L G K K E D E A W R D I A F K L E E K Y G N A F D S L L K A Y K E G D K I L K D A G V P D I W
I K P L M E E I G K H I E E K K V K A S D V I S L R T I D P G G V E K I K K V I D T A V E K I D D L D V E V K I Y T I G A P R Y R I D V I G T D Q K L V S N A L
Q E L I N L I K E I S Q H E N V T F S V V K K

Detailed description: The image shows a protein sequence visualization for Gene Saci 1275. The sequence is presented in four lines. Each amino acid is accompanied by a p-value above it. A large blue circle highlights the amino acid 'T' at the 10th position of the second line, which has a p-value of 0.791. Other amino acids with p-values are: Line 1: Y (0.004), S (0.004), T (0.025), Y (0.02), S (0.006), Y (0.025), Y (0.008), Y (0.055), S (0.003), S (0.008), S (0.011), S (0.006), T (0.214). Line 2: S (0.068), T (0.791), T (0.209), S (0.083), S (0.022), S (0.012), Y (0.008). Line 3: S (0.028), S (0.028), T (0.189), T (0.097), Y (0.016), T (0.015), Y (0.001), T (0.042), S (0.001). Line 4: S (0.004), T (0.008), F (0.004).

Sequence #423 — Gene Saci 1277

M K V P K V I K ^{0.041}T ^{0.007}Y C P K C K ^{0.082}T ^{0.145}H ^{0.014}T E H ^{0.014}S ^{0.022}V ^{0.078}S L ^{0.35}W K G G K R R ^{0.013}S L A E G Q R R ^{0.056}Y E R K N V G ^{0.101}Y G ^{0.172}S K R K P E Q K R F A K ^{0.457}T T K K Q ^{0.163}T L V L K C Q K C ^{0.002}S ^{0.019}Y ^{0.048}T I V K

E G M R L K K L E L V E V V K

Sequence #424 — Gene Saci 1279

M Q I ^{0.011}S I ^{0.006}S L Q G Q ^{0.003}S K I I ^{0.002}Y Q I F R ^{0.005}S ^{0.005}Y ^{0.005}Y E N A V L D L P Q D I E L R E F A ^{0.023}Y Q P F N ^{0.005}S D ^{0.097}T ^{0.03}Y V R H L ^{0.079}T F ^{0.006}S ^{0.014}S V D E L R ^{0.006}S F I L ^{0.003}S N V P L H L ^{0.011}Y F ^{0.004}S A A R ^{0.02}Y Q

I P ^{0.006}S A K E M E Q K G W L G ^{0.015}S D L L F D L D A D D I C E I N V R R F C ^{0.013}S G M E I L ^{0.01}S E ^{0.072}T C D G E V R E I ^{0.039}S E I ^{0.027}T V D C I N R V F E N A L V L K D I L I Q D F G L

K P R I F F ^{0.004}S G N R G F H I R V D C ^{0.008}Y N E W A N L D ^{0.006}S E D R R E I A E ^{0.118}Y I M ^{0.079}S P ^{0.121}S P P ^{0.105}Y E ^{0.082}S N ^{0.074}S E ^{0.048}S G P G W L G R F A R G I N G V K I D E Q V ^{0.071}T V D P K R L V R

I P G ^{0.007}S L N G K A G L K V I E I V N D K F E ^{0.017}Y D E ^{0.067}V L ^{0.01}S P F E G I V A F Q ^{0.002}S N L ^{0.002}S G K F N V L G H E I Q L R R G E I ^{0.027}T K L ^{0.004}S A K ^{0.113}T G V ^{0.021}Y L A L K G ^{0.007}Y G V I K A H

V R

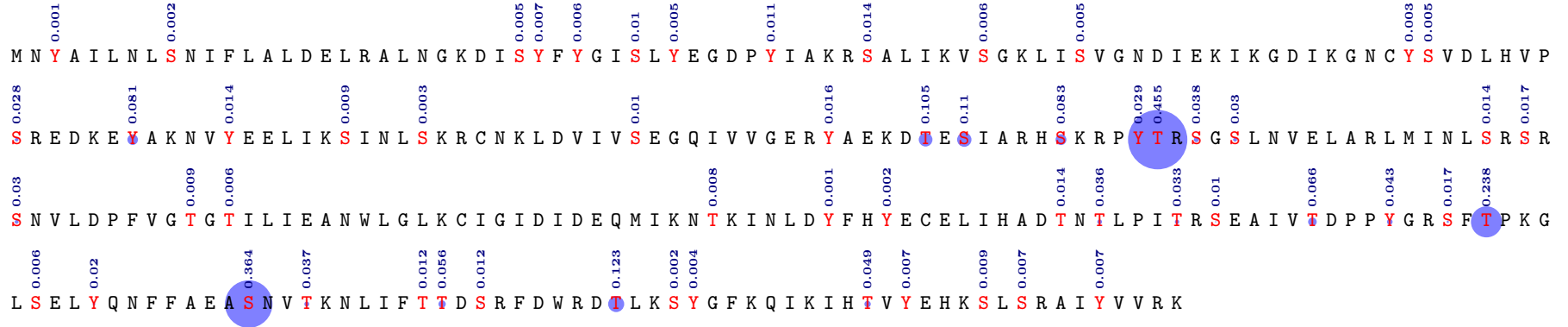
Sequence #425 — Gene Saci 1280

M K V K V V D A L G F S Y I F K T L S Q Y V S E A T L L F G N D G F K V K G M D P S K V V Y I D I F V P K D Y F E E Y N L E N E M K I G V S L K D V N E V I K N
V S K E D I L Y L E L E K D K I M F T L D G E Y L R T F S L P V L S P D E V E T P S I N L E F P F R A N I L T S T F G D L L D E F D Q I G G D S I R F K A Q N G
K L Y L S V M G D M G E S I V E L S L E N G G L L E S T G T D A E S L Y G L E H V S N T T K M R R P S D T L E I A F G S Q L P L K L R Y N L P K G G Y A D F Y I
A P R S E

Sequence #426 — Gene Saci 1281

M Y F I F V L G T A G S G K T L V K A L Q D Y L L N N E L D T A I I N L D P A V E V L P Y K P D I D A R E Y V D V Y D V M N K Y E L G P N S S L V I S V D L L
L T K A K E L K E D L N Q L Q A N Y V L V D T P G Q I E L F A Y R D T G K I L S S F I S E G S K S V S V F L F D S Y L S K D P K S F L S L F L L S S S I K F R I
D M P Q I S V L S K V D L L S S E L E R M R S W I E D G S I I D E L G S I D E Y S F E L V K T I V E N L E S F P I P V S S T N F S G L D Q L Y A E V Q K V L A
G G E D F E T E E P N P R L

Sequence #427 — Gene Saci 1283



Sequence #428 — Gene Saci 1288

M^{0.162}SVVEEKVLELIRPDDKDRERLEKVAEEVL^{0.029}SR^{0.016}RLKGFDAQIQG^{0.013}S^{0.003}FRKGT^{0.105}W^{0.003}LKGD^{0.001}DDIDIFVF^{0.003}Y^{0.003}PKEVGKE^{0.01}YLREK^{0.034}SLKELIQ
LFQDLN^{0.014}Y^{0.008}EIAFAEHP^{0.008}YLILKINNVEVDVVPALKID^{0.01}SGEDVI^{0.029}TAADR^{0.501}TPFH^{0.123}TKFV^{0.029}THLDEK^{0.083}GKDEVRL^{0.01}LKQFMK^{0.01}GIV^{0.01}Y^{0.01}G
AEIKVKGF^{0.003}SG^{0.014}YVAELL^{0.054}TI^{0.01}YY^{0.006}GNFRK^{0.005}VLES^{0.005}AK^{0.085}TK^{0.007}WKPPIKLNLVEPK^{0.001}RDFDEPLQIPDPVDPKRN^{0.082}TA^{0.006}SAV^{0.012}SLRNIAV^{0.004}FS^{0.006}LAS^{0.006}
KIFIERP^{0.044}SE^{0.063}IEFFFP^{0.007}TEIKAEIIGDILLIKVEFKEK^{0.007}SVEDIIWGQVWKNVEKLNKNAIK^{0.01}TAGF^{0.002}SLIDIGAWGN^{0.001}SQ^{0.002}TVKIAV
QIEDKNI^{0.002}SR^{0.002}YY^{0.004}LNQGP^{0.019}Y^{0.01}F^{0.012}V^{0.006}Y^{0.028}VNGVDNFM^{0.006}RKNK^{0.006}Y^{0.156}VWVGEDGRL^{0.005}YS^{0.005}LKKRRE^{0.008}T^{0.013}NLEKIVLNNL^{0.008}S^{0.008}FKENF^{0.013}SVEM^{0.008}T^{0.008}WLS^{0.008}EINQDD
KELHKFLRKRPT^{0.054}W^{0.044}MQT

Sequence #429 — Gene Saci 1293

M A K A L K G E G ^{0.11}Y ^{0.084}T V V ^{0.041}S L ^{0.054}S R ^{0.098}S R ^{0.067}S E I G D L I ^{0.052}Y E V D V ^{0.084}T N R E E D F R I I N E V L ^{0.003}S K F G K I D V L V N N A G F G I ^{0.005}Y G ^{0.01}S F L E ^{0.063}T ^{0.011}S L D E E E ^{0.045}Y M V K ^{0.024}T

L F L A P I ^{0.004}Y ^{0.043}F T K A V L P H M V K R R ^{0.017}S G ^{0.013}S I V N I V ^{0.003}S E A A ^{0.024}Y V ^{0.027}T ^{0.055}T P K L L I ^{0.005}Y ^{0.006}S A A K ^{0.006}S A L A ^{0.002}S F ^{0.025}T N G L W A E M R K ^{0.016}Y N V K V ^{0.006}S G I ^{0.013}Y P G P V K ^{0.023}T N F ^{0.021}T

^{0.006}S H P ^{0.008}S F ^{0.006}S K N ^{0.057}T A ^{0.01}S I F D K ^{0.047}Y A V E P Q E V A N A V I K G I K ^{0.106}T G K R E I ^{0.026}Y V P ^{0.009}S K L K I D P ^{0.036}Y I L K L ^{0.006}S M A ^{0.004}S Q ^{0.004}S F ^{0.023}T ^{0.002}Y G I V ^{0.008}S K ^{0.002}Y F G

Sequence #430 — Gene Saci 1297

M Y E G P K E I I I I K N N I S F K N L H P F L A F L K R N L L I L E L G G R A Y T A F G V P T F L T K R I E I W K I L P V T I V I A L T L A I F S K Y H I I P
D L F L T R I F L V L S A L S I A S L F T S S I F I M E P I W L Y A T I F S P L R L A R Y L L F S K A L T V I I L L L P F T F L F P D P R T I L M V L L N I P S
F I I F S M A I N A R F Y P Q R Q Q Q I P T L S L G S F L A S I L I L I P I A L L M T I Y I I P S S L I T F T I A S V I Y S A I L A L P I M L S Q A Y W K K T I
E K N I I Y S S

Sequence #431 — Gene Saci 1304

M L P K K K L H M K V G I L D ^{0.013} S ^{0.129} T L R E G E Q ^{0.391} T P G V V F ^{0.08} T ^{0.094} D Q R V E I A K A L S ^{0.007} S D I G V Q M I E A G H P A V S ^{0.01} P D I ^{0.09} Y E G I R R I I K L K R E G V I K ^{0.021} S E I
 V A H ^{0.021} S R A V K R D I E V G A E I E A D R I A I F ^{0.006} Y G I S ^{0.004} D ^{0.073} T H L K A K H H ^{0.17} T ^{0.066} T R D E A L R S ^{0.022} I A E ^{0.085} T V S ^{0.013} Y ^{0.161} A K S ^{0.013} H G V K V R F ^{0.364} T A E D A ^{0.141} T R A D ^{0.082} Y Q ^{0.067} Y L L E V
 I K ^{0.068} T V R D A G A D R V S ^{0.024} I A D ^{0.123} T V G V L Y ^{0.005} P S ^{0.022} R ^{0.12} T R E L F K D L ^{0.082} T S ^{0.012} R F P D I E F D I H A H N D L G M A V A N V L A A A E G G A ^{0.133} T I I H ^{0.014} T ^{0.007} T L N G L G E R V G
 I A P L Q V V A A A L K ^{0.004} Y H F G I E V V D L K K L S ^{0.008} E V A S ^{0.015} L V E K Y ^{0.02} S G I A L P P N F P I ^{0.075} T G D ^{0.043} Y A F V H K A G V H V A G V L N D P K ^{0.322} T Y E F L P P E ^{0.074} T F G R
^{0.022} S R D ^{0.089} Y V I D K Y ^{0.02} T G K H A V K D R F D R L G V K L ^{0.122} T D S ^{0.018} E I D Q V L A K I K S ^{0.006} N P N V R F Y ^{0.089} R D V D L L E L A E S ^{0.009} V T ^{0.024} G R I L K P R P P E N I M A L I ^{0.002} S V K C
^{0.005} D S N V ^{0.011} Y T ^{0.021} T S ^{0.013} V ^{0.004} T ^{0.094} R R I V L I E G V R E V M E I S ^{0.012} G D ^{0.027} Y D I L V K V E A K D S ^{0.01} T ^{0.015} E L N Q I I E S ^{0.016} I R A V K G V K S ^{0.013} T ^{0.081} L ^{0.084} T ^{0.006} S L I L K K M

Sequence #432 — Gene Saci 1306

M K L **T** L K V **S** G K F F D E E N **S** E N L **S** L L R D V I I D L V N N G H R V A V V **T** G G G G **T** A R R **Y** I **S** M G R K L N L N E **S** H L D I L G I L V **S** R L N A Q L L L

F **S** L D N I A **Y** P K V P E **S** I E D F N E R W A **S** G K V V I **T** G G F Q P G Q **S** **T** A G V A A L V **S** E I I N A D **Y** L V L A **T** N V N G V **Y** **T** K D P Q K F V D A K L L P K

L **T** V **S** E L K **T** I L E G **S** Q **S** V N A G K **Y** E L L D P L A I K I V E R **S** K I K V L V I N F K D L N K L P N I L K G N E I L G **S** V V V P E

Sequence #433 — Gene Saci 1308

M N L ^{0.013} S V ^{0.013} S G K R V L I ^{0.017} T A ^{0.008} S T ^{0.017} E G I G L G I A R ^{0.158} T L ^{0.031} S R E G C K I V I ^{0.075} T S ^{0.012} R N E ^{0.011} S K V K N A V N Q L ^{0.007} S R ^{0.008} Y N P E V ^{0.057} Y G L P ^{0.007} S D L ^{0.088} T N L D E L D K L I ^{0.004} S F A L D
 K L G G I D A L I F N ^{0.081} T G N P P N E P ^{0.011} S T ^{0.243} F E V ^{0.021} T N M ^{0.006} S D W D ^{0.024} Y S ^{0.003} V K L ^{0.003} Y L L ^{0.002} S A V K L ^{0.024} T K L V L P E M I K N K W G R I I ^{0.003} Y L ^{0.003} S S ^{0.002} W T ^{0.014} I K E P Q ^{0.009} S I F V L A D V
^{0.017} S R ^{0.013} S S ^{0.028} L V Q L ^{0.007} S K I I ^{0.007} S K D ^{0.013} Y A R ^{0.009} Y N V ^{0.019} T S ^{0.003} N V I L M G ^{0.009} S F E ^{0.218} T E G A K K ^{0.066} S L R K L A E ^{0.138} T K R I P F E E L W ^{0.132} Y R E V L Q R ^{0.009} S P L G R ^{0.047} T G D I D K E L G P L I V
^{0.007} Y L I ^{0.003} S E ^{0.006} Y S ^{0.005} S Y ^{0.006} S Y I ^{0.032} T G ^{0.004} S V I Q I D G G ^{0.018} T ^{0.018} T N A I

Sequence #434 — Gene Saci 1309

M Q N ^{0.007} Y L A E V I N K A F E L L ^{0.003} S ^{0.001} K Y P L C D ^{0.004} S C L G R C F A R L ^{0.011} S ^{0.01} Y A H ^{0.092} T N E E R G K A I K L ^{0.036} T L L L ^{0.012} S L D ^{0.007} Y ^{0.012} S L K E H K I Q D ^{0.003} S N Q V K E I M F N M G Q I ^{0.004} S
^{0.001} Y G I F ^{0.003} S L ^{0.002} Y F G D D F Q N R ^{0.002} S ^{0.001} C Y I C N N R I Q E I K R K F ^{0.002} Y Q K A L ^{0.015} S L L R E K G ^{0.029} Y ^{0.112} K T F V L G V ^{0.011} S L P R H M R D I E Q N F I V E N G L I ^{0.007} Y ^{0.006} Y ^{0.006} E S L K N E I
 K R E V G K L L ^{0.203} T G E E ^{0.041} S K P D I D N P E V E I I ^{0.084} Y D I E ^{0.111} Y ^{0.053} D T I L E R K R ^{0.21} T K H Y L F F ^{0.003} Y ^{0.009} N R L V R G I P L ^{0.003} S ^{0.004} S W Y A K G G L ^{0.008} S L E K L L N ^{0.016} T Q I N ^{0.008} S ^{0.021} P ^{0.011} Y S E
^{0.027} P S D V R I V D D ^{0.014} Y P L I ^{0.025} T E V D L N L N Q I N G F ^{0.002} Y L K K ^{0.008} S G R V ^{0.031} S ^{0.02} G T E L D V I ^{0.02} Y N V K P ^{0.004} S I R V ^{0.016} Y R V ^{0.026} T V N A K E E L R D C V K V F D ^{0.026} T I C D I F I E A K
 D F N E L K Q K L A E L R G E I L G I D L I ^{0.005} S ^{0.011} T ^{0.015} T G K ^{0.003} S N L L A N N Y ^{0.005} I R P

Sequence #435 — Gene Saci 1310

MLDGLRDAVRKFLG ^{0.016}SS ^{0.016}SD ^{0.033}YEKAVNEFIKELQIILIKADVNVRLVKDL ^{0.118}TDRIKKRI ^{0.562}TEEKPP ^{0.095}SAIEKREWFI ^{0.017}SIV ^{0.041}YDEL ^{0.023}SRRL

FGGDKEPEVMPKKLP ^{0.055}YIIMLVGVQG ^{0.007}SGK ^{0.029}T ^{0.078}T ^{0.096}T ^{0.013}SGKLAALFYKKKG ^{0.008}YKVGLVAADI ^{0.023}YRPAA ^{0.007}YEQLIQIGQQINIPV ^{0.037}YGE ^{0.008}PGNK

NPIEIA ^{0.029}TNGLEKFLKEKMNIVIID ^{0.07}TAGRHG ^{0.022}YGEEA ^{0.029}SLLEEMK ^{0.019}SM ^{0.098}YDKIHPDEVILVIDA ^{0.005}SIGQKA ^{0.017}YDLA ^{0.014}SRFHQA ^{0.008}SPIG ^{0.014}S

LIV ^{0.006}SKMDG ^{0.052}TAKGGGALS ^{0.008}AVIA ^{0.063}TGAQIKFIG ^{0.089}TGEKLDELEVFNPRRFV ^{0.045}SRLLGLGDIE ^{0.04}SIIEKIK ^{0.083}SVED ^{0.049}YENLEKRMEDVI

^{0.011}SGK ^{0.048}TKL ^{0.055}TLRDI ^{0.013}YKQLIALRKMGPLGKIFQMLPGAGIL ^{0.015}SQVP EEQLKLGEEKIR ^{0.14}TFMAIMN ^{0.01}SM ^{0.236}TY ^{0.011}KELDNP ^{0.037}SIIIDKARMRR

I AKGAGV ^{0.165}TVEEVKELLKQ ^{0.015}YQM ^{0.015}TNNLLKMVKRRKGLAKLFGG ^{0.013}SNQ

Sequence #436 — Gene Saci 1315

M P Q E E K ^{0.187} Y ^{0.082} S ^{0.183} S ^{0.083} I S P A E F F K R N P E L A G F S ^{0.006} N P A R A L Y ^{0.026} Q ^{0.065} T V R E L I E N A L D A ^{0.055} T D V H N L L P S ^{0.002} L K I S ^{0.007} I E L V D Q Q K Q I Y ^{0.007} K V N V E D N G I G
 I P P H V V P N A F G K V L Y ^{0.003} S ^{0.003} S ^{0.011} K Y V L R Q ^{0.069} T R G M Y ^{0.014} G L G V K A A V L Y ^{0.065} S ^{0.003} Q M Y ^{0.039} Q D K P L E I Y ^{0.035} T ^{0.064} S ^{0.005} P L N S ^{0.004} K R I Y ^{0.006} F F R L K I D V ^{0.125} T K N E P V I M E R Y ^{0.01} S ^{0.019}
 I S ^{0.003} N D K G W H G T ^{0.02} S ^{0.003} V S ^{0.002} I Y ^{0.031} L L A D W Q R S ^{0.005} K A K V Y ^{0.03} E Y ^{0.038} V K R T ^{0.04} Y ^{0.007} I I A P Y ^{0.034} S ^{0.006} E I V F R D P E G N V L Y ^{0.101} F Q R L ^{0.094} T ^{0.273} T K L P K P P E E V K P H P Y ^{0.022} G V D I E L
 I K F M I A K I D K P L D I R D F L V K E F Q S ^{0.014} V G D V ^{0.095} T A D K I L E L S ^{0.008} K I S ^{0.012} K N K K I T ^{0.039} N L T ^{0.032} D E E I S ^{0.03} R L V E V M K ^{0.121} T F D D F R P P S ^{0.07} A E A L S ^{0.038} V I G S ^{0.02} D
 L I E L S ^{0.007} L Q K V F N P E F V S ^{0.002} A I T ^{0.061} R R P K A Y ^{0.027} Q G H P F I V E A G V A Y ^{0.032} G G I P A A T ^{0.069} E P L V L R Y ^{0.004} A N K I P L I Y ^{0.006} D E K S ^{0.009} D V I W K V I S ^{0.005} E E I D W K R
 Y ^{0.007} G V E T ^{0.063} D Q ^{0.145} Y Q L V V M V H L C S ^{0.001} T ^{0.019} K V P Y ^{0.017} K S ^{0.009} A G K E S ^{0.045} I A D V E E I E K E I K L A I M D V A R N L K K Y ^{0.012} L ^{0.423} T E K R K E Q E A K K K L I ^{0.166} T ^{0.011} Y L K Y ^{0.023} I P E V S ^{0.04}
 R S ^{0.036} L ^{0.068} S M F V A G S ^{0.028} K E K I P D ^{0.171} T D K V L R S ^{0.062} R L L D L I I R R L E I E D K N L E E E I K K Y ^{0.006} K V E E V

Sequence #437 — Gene Saci 1316

M K R E D L L T N V V D D L S L E D L R D L K N L E I I F D K V Y G F S A E N V V K A V E I L R D L I K E A D L R F L S F T A N L V S T G L R G L L A D L I R R
E Y F N V V I T T G G T I D H D I A R S F G G K Y Y K G S F E F D D T M L K E L E I H R L G N I F I P F E N Y G K V I E E V V R K Y I P E I V S V R K D W S V Y
E L L W E F G K R I N D Q H S I L K A C Y E K K V P L I V P G V V D G S F G T N L F I V S Q F N G L K I D L F Q D M R L I K D L I F S S E K S G A L I I G G I
S K H H T I W W N Q F K D G L D Y A I Y I T T A Q E Y D G S L S G A R P R E A I S W N K V R P S A R S V T I Y A D A T I I L P I L S A S L L R

Sequence #438 — Gene Saci 1317

M Q T Q I K R I G N Y E W R I E K G A Q E C M K V P V T V F A D D V L I D K M K Q D L T L R Q A T N V S C L Q G V Q E S V Y V L P D G H Q G Y G F P I G G I A A
S A I D E E G V V S P G G I G Y D I N C G V R L L R T N L D Y K D V K D K L K D L V E E I Y R N V P S G V G S E G R V K L S Y Q Q L D N V L S E G V K W A V D N
G Y G W N R D M E H I E Q S G S W N L A D P S K V S P I A K Q R G H T Q L G T L G A G N H F L E I Q V V D K I Y D E K V A K A I G I T H E G Q I T V M V H T G S
R G L G H Q V A S D Y L Q V M E R A M K K Y N I K V P D R E L A A I P F N T R E A Q D Y I H A M S S A A N F A W T N R Q M I T H W A R E S F G R V Y R I D P E K
L D L N I V Y D V A H N I A K I E E Y D I D G K R K K V L V H R K G A T R A F P P G S T E I P A D H R N V G Q I V L I P G S M G T A S Y I M A G I P E G R R T W
F T A P H G A G R W M S R E A A V R S Y P V N S V V Q N L E E K G I I V R A A T K R V V A E E A P G A Y K D V D R V A K V A H E V K I A K L V A R L K P I G V T
K G

Sequence #439 — Gene Saci 1320

MDKNDL ^{0.031}SYKLL ^{0.017}SLIREKGWDDL ^{0.034}TSIQKK ^{0.038}TLSP ^{0.006}ILLGKNVLI ^{0.03}AP ^{0.007}TGYGK ^{0.045}TEAALLPIFN ^{0.002}SMLND ^{0.009}SSL ^{0.002}SPVALL ^{0.004}YIT ^{0.035}PLKA
 LINDL ^{0.012}THRIDWA ^{0.003}SKLGFIV ^{0.009}SRKHGEVPQKEK ^{0.04}SIRLKRVP ^{0.033}PHILV ^{0.098}TEPEGLEVDLDWA ^{0.032}TKFREN ^{0.014}YKNIKVVVIDEVHEL ^{0.001}VH
^{0.004}SKRGAQL ^{0.012}SVLLERLKE ^{0.021}YSG ^{0.01}GNDFQRIGL ^{0.004}SA ^{0.031}TI ^{0.007}SNEKKVAQL ^{0.013}FG ^{0.01}SSQRDFNI ^{0.004}IKV ^{0.006}SSNKNFELK ^{0.001}IKV ^{0.011}EHQGE ^{0.047}TWT ^{0.057}IAKT
 VINKIEKP ^{0.112}PLLF ^{0.108}TNR ^{0.019}S ^{0.059}SRF ^{0.169}STERLFEEL ^{0.05}EK ^{0.009}YNIP ^{0.012}SVFVHH ^{0.058}SSI ^{0.039}SRDDKNKVEENLREGRANLVIC ^{0.016}TR ^{0.023}TRLELG ^{0.001}IHVGDVKKVI
^{0.021}MYRPPP ^{0.019}SV ^{0.01}SS ^{0.006}FLQRLGR ^{0.011}SGHLIDHV ^{0.004}SCGEILCL ^{0.003}YDHEVIE ^{0.006}SLAL ^{0.01}SELAMQGKLE ^{0.007}SGKVPFLDVVAREAI ^{0.025}GIALQYGEVD
 VNRL ^{0.017}YS ^{0.307}ISI ^{0.006}SS ^{0.01}ST ^{0.005}TY ^{0.025}FRAL ^{0.043}SFEEFLK ^{0.003}LI ^{0.009}EYLANNNLLKVEGNRVKVGK ^{0.003}TF ^{0.001}FFKI ^{0.003}WSFNKNNKLAWMKDF ^{0.01}SEFF ^{0.012}SV ^{0.028}SS ^{0.017}DE ^{0.11}TFL
 LRFENK ^{0.05}TVGEIDA ^{0.005}IYV ^{0.011}YKHLR ^{0.018}ND ^{0.004}TIRI ^{0.008}SGKLWRIV ^{0.035}SIDL ^{0.015}NKMT ^{0.009}ITVVPANDGEGE ^{0.003}PIWKGENV ^{0.012}SR ^{0.012}SNLLPKKI ^{0.006}SKVIR
^{0.002}NYKR ^{0.001}YLDLNIINNAAKNDLKNFVNF ^{0.002}YLVHGLPLPNRK ^{0.043}TI ^{0.004}YVEKD ^{0.003}KNEIIYA ^{0.004}TLINEKVS ^{0.002}NTLAHLL ^{0.003}YLA ^{0.046}TKDL ^{0.005}SLNV ^{0.008}SV
^{0.017}RS ^{0.029}SI ^{0.003}YGF ^{0.022}SIRGVENDLM ^{0.012}SEIVNMNEDEL ^{0.024}RKLI ^{0.011}IK ^{0.012}SIMR ^{0.029}SPLFY ^{0.006}TVLKEIK ^{0.004}YSFGKIGNV ^{0.007}SLHDDKLLI ^{0.04}KEAIKQ ^{0.003}TV ^{0.003}YKYF
^{0.003}SIKN ^{0.039}TLKY ^{0.003}IKMIK ^{0.002}KDIDI ^{0.023}IHI ^{0.005}EGIS ^{0.005}PLGRAVLNH ^{0.053}TPLRPWI ^{0.028}TDLS ^{0.201}IRI ^{0.015}YQAMKGGAY ^{0.03}TVSEL ^{0.06}SEM ^{0.056}LGI ^{0.127}SEK ^{0.003}SE ^{0.003}LERLKK
 MRKY ^{0.008}DS ^{0.04}KYR ^{0.013}TCNFIDID ^{0.119}TKDMRWV ^{0.105}LLED ^{0.072}FEEIVE ^{0.069}TDG ^{0.007}YVNS ^{0.024}FEP ^{0.022}IKLDE ^{0.001}TY ^{0.}VAVIRPINNEG ^{0.006}NI ^{0.001}EIVFRVKELVENPEN ^{0.006}V
^{0.073}RRIP ^{0.077}DEVFELK ^{0.024}LKDP ^{0.007}SD ^{0.014}PLVM ^{0.004}SI ^{0.008}SPR ^{0.001}Y ^{0.006}YFVNKNVIKFLILNAV ^{0.001}SYIQNT ^{0.006}TRFG

Sequence #440 — Gene Saci 1324

MRWLKKREII I Y F L L Y K K F E T E K F N I G E A I Q V L S P Y F S K K V S I N V I R Y L T K V G L V I K L N E T E Y R L L S M E E Y L L E I S V S Y I
RRRA T L H H K T Q

0.002 0.002 0.105 0.003 0.002 0.003 0.005 0. 0.161 0.022 0.013 0.033 0.022 0.015 0.009 0.003
0.158 0.022

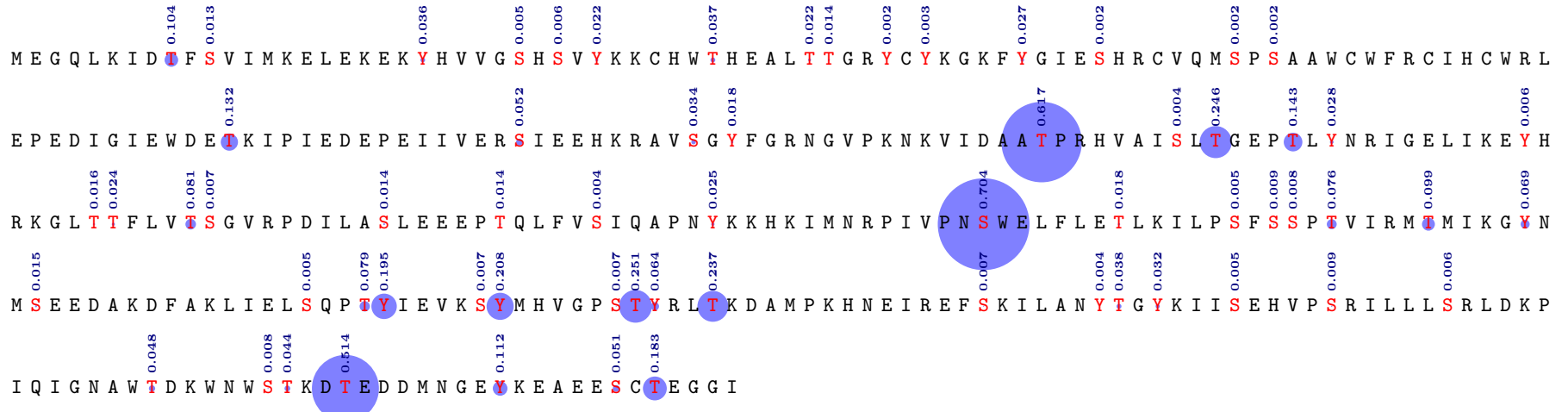
Sequence #441 — Gene Saci 1325

M P **Y** V D V G A K I C R P **T** E **Y** Q K V E K G D I I L V **Y** P A **T** L K I N K Q L I Q F P P L **S** V V **S** E N C E N F I E **S** P N W V D G **Y** I V K G N E R I E F L E G R D L
I K G E I K V H E N L L **T** A F **T** L K K L L P K Q L E I K I L K I K V K A Q P I I **S** V Q D V P L V **Y** L A G N L V I I P **S** M D **Y** K K **Y** L E L F A **Y** S L **Y** Y I **S** **S** **S**
S A D D R N I **S** I

Sequence #442 — Gene Saci 1326

M P ^{0.017}S ^{0.109}Y D V E F E L N ^{0.004}S E G L I I K P H V ^{0.021}Y L M E L I K D ^{0.02}Y ^{0.003}Y E Q K I I K ^{0.005}Y D K ^{0.071}T R K I F I ^{0.04}T F P ^{0.007}Y ^{0.004}Y ^{0.002}Y V F L K ^{0.004}S R F E E N G L I V K P L D L Q F D V L D I E F
 K G E L R E ^{0.01}Y Q K E A L ^{0.009}S K W L E K G ^{0.008}S G V I A L P ^{0.061}T G A G K ^{0.028}T L I G I ^{0.002}S A A C A V K Q ^{0.001}S ^{0.028}T L I V ^{0.016}T ^{0.017}Y ^{0.026}T K E Q M L Q W R D A F I R F ^{0.055}T N I E K R K I G L ^{0.028}Y ^{0.004}Y ^{0.02}S E
 K K E I K P I ^{0.042}T V ^{0.002}S ^{0.022}T ^{0.013}Y Q ^{0.101}T A ^{0.018}Y R H I Q E L ^{0.002}S ^{0.01}Y K F D V L V I D E A H H L P A E K F K R I A L N ^{0.007}S I A ^{0.082}T K R L G L ^{0.013}S A ^{0.074}T P ^{0.089}Y R D D G K H E E L F K F M G G L I ^{0.013}Y
 F K ^{0.01}S P Q E L I E K G ^{0.044}Y L A P ^{0.045}Y E V V Q E K V Q L ^{0.011}S I D E R M M ^{0.022}Y N E L L N K F K K ^{0.009}Y ^{0.127}S ^{0.142}S R K V ^{0.127}S E L L M L A K K G D ^{0.085}S D A I E A L K I ^{0.034}Y N D M R K L V N L A
 K Q K I D A V K R I V E K E K G N K I L I F ^{0.014}T Q ^{0.01}Y V D Q A E E I A R ^{0.034}T I N G L L I ^{0.008}T G K I ^{0.009}S K ^{0.032}S E R E R I L N I F K ^{0.006}S M K ^{0.005}S G V L V L ^{0.019}T ^{0.058}T V G D E G L D I P D A
 N V G I I V ^{0.011}T G ^{0.159}T ^{0.015}S R R Q F I Q R L G R L L R P G V D K K A R L ^{0.065}Y E I M V R G ^{0.251}T A E E ^{0.085}Y Q A L K R K E ^{0.308}T Q M D M F L ^{0.056}S ^{0.049}S A E D D D I

Sequence #443 — Gene Saci 1331



Sequence #444 — Gene Saci 1333

M V D E I A D R V R K **Y** I Q G M E D R L **S** K I **S** P E I I Q K **Y** E K I **Y** N L A K L **Y** V E D A K **Y** **Y** L **S** V N D K V **T** A L V D V V **Y** A E G L L D A I I E M E N L D I E
R Q V **S** K R V F V A G **T** F D I L H P G H I A F L R E A **S** K **Y** G R V **Y** V A V A R D K N **S** E K I K G R K P I N D E N Q R L E V I K **S** V K **Y** V **Y** D A F L G D E K D F L
K **S** V E R V K P N I I V L G P D Q K V D E Q K L I D D L K N R G V I V E K I V R I P **S** R I N N W A H **S** **S** **T** **S** **S** I I N E V L K R **Y** C N **S** **T**

Sequence #445 — Gene Saci 1335

M I S I F N D I Y I A E D L P I L Y I K P L N A V I L S D V H I G F E Q E M A N K G I Y I P K V Q K K R F L T I Y R K A L N Y F K T N K L I I N G D F K H T F N
K I T K Q E R D E L T E I L T E L N E N K I E V K I V K G N H D N Y I S A V T E K F S N V E L V E D I N V N D I S I F H G H K R I N M Q E N E N K V Y I I G H E
H P R L S I K D R L G F A R K L Q C F L K V P L R N N S T V I V L P A T G T Y Q S G N D V T L S H S T Y M S P I M R E H S I L E K A R P Y V I V E G Q G I M E F
P E L G L L K D I I H S M V

Sequence #446 — Gene Saci 1338

MDKLI^{0.024}VI^{0.011}YVDIDDDL^{0.007}GS^{0.033}IGI^{0.007}ST^{0.089}PVIGQEEVAKAIRIAEEKIP^{0.006}T^{0.023}DSL^{0.006}DLN^{0.006}TLLVA^{0.013}YNI^{0.012}Y^{0.028}NKIR^{0.014}SEG^{0.019}SDVEIALI^{0.021}SG^{0.014}SQKGS^{0.021}L
 ES^{0.01}QLAF^{0.016}TEKLD^{0.043}MVIKAVNP^{0.005}T^{0.001}KAIIV^{0.002}Y^{0.019}DS^{0.014}PEDAKAIP^{0.01}IE^{0.024}SRLQVAGIERV^{0.005}LVEQ^{0.004}Y^{0.006}RS^{0.016}VVEE^{0.062}T^{0.027}YVLLGR^{0.002}YIKKAL^{0.024}SEPRFS^{0.006}K
 IF^{0.006}LGVPGVILLIIGLL^{0.001}SI^{0.005}LN^{0.001}TS^{0.002}YA^{0.019}TPVVLIIIGAAFIIRGLRLDE^{0.024}TVEELWK^{0.005}SS^{0.004}IMVVV^{0.006}SI^{0.002}IIFIF^{0.001}SVILGIV^{0.001}Y^{0.001}YS^{0.001}VS^{0.001}VF
 TT^{0.006}LK^{0.011}SY^{0.001}NLLGVLQVLF^{0.001}SIMPFLIFGIVVLF^{0.024}GRAV^{0.004}T^{0.012}KLDRNIRV^{0.003}WHDI^{0.002}Y^{0.002}R^{0.013}IIT^{0.001}VVI^{0.002}Y^{0.002}MMV^{0.013}TI^{0.001}Y^{0.002}K^{0.002}SIG^{0.002}SS^{0.002}SLQVLQLQI
 I^{0.003}Y^{0.023}SL^{0.065}SI^{0.014}TT^{0.003}IVLIGI^{0.003}Y^{0.023}ILLILLEK^{0.065}Y^{0.014}KFN^{0.003}NP^{0.023}ST^{0.065}TS^{0.014}

Sequence #447 — Gene Saci 1339

M S K A T S S S E D E I Q E R Y S K A V E E L R K F K S E K L Q L I D E V K K L K Q K R R E K V E K L K S I R Q Q L Q Q I R E E I K S K I N E I T Q L K S Q R Q
N L I Q I I G E I K K E F E E L K N V T K V K D K L D P A A I S R R I E Q L E W R L Q T S T L T L E E E K K I I I K I A E L E R K L E V A K K V A Q I K E K N T
E N R A E L L A K R V E L S T I R Q K M L E L S Q Q I K S K K E L L Q K L K S E R D V I Q K E L E D L N T K I Q D L N K R I D E L T A K V N E K G N E I G R I K
E E L K K R R E E V R N M N V T D L Y E Q Q L R S T I N S E A L E N K R K Q V E E K L K N N K R L S F D E L L I L Y Y N K D N S D G Q T N S D I R

Sequence #448 — Gene Saci 1343

M ^{0.009} S L V E I I E G K A R I L I P N ^{0.025} Y K D ^{0.089} Y M K D G K F D P ^{0.008} S W A P V F ^{0.007} Y N P K M I L N R D L ^{0.008} S V L A A N V V K P K ^{0.01} S L I D G L ^{0.006} S A ^{0.052} T G V R G I R ^{0.002} Y G L E I N G V
 E E I I L N D I D ^{0.011} S D A V E L I K K N V K I N D L E ^{0.013} S R A K I ^{0.002} Y N N N I N ^{0.002} S L L H E I K V D ^{0.127} Y V D I D P F G ^{0.02} S P A P F L L ^{0.01} S S ^{0.011} F S ^{0.01} A A K ^{0.005} S K Q ^{0.042} Y V A I ^{0.056} T A ^{0.083} T D L
 A A L M C ^{0.009} S ^{0.008} S ^{0.184} K ^{0.027} T S A R R K ^{0.006} Y G L I C N K M ^{0.011} S ^{0.012} F S R E L G L R G L I ^{0.003} S K A I ^{0.084} T E A A V V E K A V ^{0.096} T P V F ^{0.002} S F ^{0.01} Y N D ^{0.012} Y ^{0.016} Y ^{0.049} Y R V I F K V E R G A K K V D R Q L ^{0.014} S K L
 V ^{0.034} Y ^{0.017} Y ^{0.007} E C P K C G ^{0.004} Y R I E ^{0.008} S E ^{0.025} Y L Q Q M K C ^{0.008} T N C N L V M Q ^{0.011} T ^{0.012} Y G P A ^{0.016} Y K E ^{0.005} S L V D ^{0.021} Y E F L N N M I ^{0.006} S E L D K F ^{0.008} S ^{0.007} Y F Q ^{0.066} T F ^{0.005} S K L K ^{0.01} S I L L ^{0.09} T I K D E ^{0.01} S K ^{0.016} Y ^{0.015} S
 E N ^{0.022} Y ^{0.006} Y R I D F L A ^{0.004} S L A R V N V P R R D N V I N C L V D A ^{0.007} S R ^{0.057} T H L D P L G V K ^{0.057} T ^{0.004} S K N L D E I K E C I K K L ^{0.085} S ^{0.044} S R N ^{0.278} T ^{0.17} S

Sequence #449 — Gene Saci 1344

M V T I S D V A N L L S R N T I N Y S I I D Y P E K K K S I D I I T E E Q N D K R R I L V L K I N N S T S D R R N F R I L F D L K K I S E V T E S L P L I I D D
N I E D D V V S E K D G V F S M N L Y T L E R S L R G E K I F L L K T R G G I F V R V D S K K L R E K R E E K N M S L G E L S Q R L G V S R I S V D Y E K E D
S Y S I E V A E K L I E I F G D E V I G D I I K D Y D S N T K K K K E L Q S D Y N E E V K I L E K L D R V L S D A N Y K T V K F N F T A I D M A A I K G S E K
L I F C T E V N T L A N S L K K F N E A N K I A S K I N A K L L V I A K S S K T S K V Y E K E N F N V Y I Y N D I D K V V D E S S

Sequence #450 — Gene Saci 1346

M S E I E K V T K T Q F D N V Y E C I F N D G T T R L C T K N L S P G H N V Y G E R L I K Y G G V E Y R E W N A F R S K L A G A I V K G L K Y N P I V K G S K I
L Y L G A A S G T T P S H I S D I V E L Q G K V Y S V E F S P R V I R E L L V A Q Y R P N M F P I L A D A R F P Q Y Y K S L V E N V D I V Y V D I A Q P N E T
E I A M Y N A R F F L K K N G Y M M I A I K S R S I D V T K D P R E I Y N A E A K K L E D A G F D I R E V L E L D P Y D K D H A M I V V K Y K

Sequence #451 — Gene Saci 1347

M K I ^{0.011} Y L V E H A I G ^{0.007} S F G Y D E ^{0.027} S G K L I D F V P N ^{0.004} S K D I G K V ^{0.079} T E A L I E N E K G ^{0.178} T P L P ^{0.015} S A I E L I N K L K P D Q V V E N D A E V P A L Q K L G I K A

^{0.007} S ^{0.012} S E I R N M G ^{0.008} T E I F R E N L V N V A I Q ^{0.019} T K I V N ^{0.007} S E D E L Y N F L Y E L ^{0.009} S M E Y ^{0.161} T R R K L R G A A ^{0.025} S K R D L L A I Q A I R A I D D I D K ^{0.064} T I N L F ^{0.003} S E R L

R E W ^{0.003} Y ^{0.008} S I H F P E L D K L I E D H W L Y ^{0.012} A ^{0.005} S I I ^{0.003} S K F G H R D N L ^{0.008} S D ^{0.012} T G L E E I G L N K E K I E K I M N A A K N ^{0.007} S I G A D I ^{0.068} T D V D I K ^{0.015} S V K ^{0.076} T L ^{0.017} S D I I L

K L ^{0.004} Y E E R L E L ^{0.012} T D ^{0.078} Y ^{0.073} T E ^{0.015} S V M R E V A P N V ^{0.09} T ^{0.007} S L V G P ^{0.076} T L G A R L L ^{0.154} S L A G ^{0.038} S L E D L A K M P A ^{0.013} S ^{0.056} T I Q V L G A E K A L F R A L R K G G R P P K H G V I F

Q ^{0.03} Y P A I H N ^{0.006} S P R W Q R G K I A R A L A A K L A I A A R V D ^{0.014} Y ^{0.006} S G K F I G N K L N E E L K K R I D E I R E K ^{0.145} Y A Q P P P R K Q E Q K V E Q K G K K E R K N K

K D K R R G K K E G R R

Sequence #452 — Gene Saci 1348



Sequence #453 — Gene Saci 1349

M P E ^{0.116} **T** ^{0.009} Y W G K A R E F L ^{0.002} **S** K H N L D V G D I I E L E K N G I Q V K G I I M P ^{0.012} **T** ^{0.009} Y ^{0.002} S N N D D I I V L K L D N G ^{0.004} Y N I G I ^{0.004} **S** V ^{0.003} **S** N I Q N V K L I E K R K E E K R
 R E G A V ^{0.029} **S** ^{0.024} **T** ^{0.109} **T** ^{0.017} N S E V M I I ^{0.015} **S** ^{0.047} **T** G G ^{0.119} **T** I V ^{0.005} **S** K I E ^{0.046} Y E ^{0.089} **T** G A V R P A L ^{0.242} **T** P D E I I E F M P E I K E I A R I D A E I L F ^{0.007} **S** I L ^{0.007} **S** E N M K P E ^{0.005} Y W I K I A E E A K
 K A L D K G N K G V V I A H G ^{0.089} **T** D ^{0.106} **T** M A ^{0.008} Y ^{0.022} **T** S ^{0.008} A A L ^{0.003} **S** F ^{0.007} **S** F R K M ^{0.047} **T** G P I V L V G ^{0.082} **S** Q R ^{0.198} **S** ^{0.281} **S** D R P ^{0.278} **S** ^{0.21} **S** D ^{0.047} **S** ^{0.047} **S** M N L L ^{0.089} **T** ^{0.009} **S** I L V A K N A P F G E V V V N M H G E ^{0.005} **S**
^{0.006} **S** ^{0.027} **T** ^{0.279} **T** ^{0.065} L V H R G V K V R K M H ^{0.045} **T** ^{0.053} **S** R R D A F Q ^{0.007} **S** I N D L P L A K V H ^{0.009} Y I D K K I E I L ^{0.011} **S** D N ^{0.02} Y R ^{0.025} **S** K E ^{0.017} **S** E N ^{0.089} **T** L D A K F D N R V F L L K ^{0.007} Y ^{0.004} Y P G L ^{0.013} **S** P D M V
 E H L I ^{0.005} **S** ^{0.008} **S** G I R G I I I E G ^{0.064} **T** G L G H ^{0.045} **T** ^{0.006} **S** ^{0.011} **S** D F ^{0.056} Y E V F K K A ^{0.008} **S** K D G V F I G M ^{0.016} **T** ^{0.002} **S** Q C L F G R V N M N V ^{0.02} Y ^{0.026} **T** ^{0.102} **T** G R L L Q E A G V V P L E D M L P E ^{0.054} **T** A L V K
 L M W ^{0.007} **T** L A H E N D L D R I K E I M L ^{0.003} **T** N L A G E I N ^{0.02} Y I H H ^{0.007} Y E M F P R W ^{0.003} Y H D R I R L Q

Sequence #454 — Gene Saci 1353

M Q R L T I V T S V A K I K V L K R N G G Y E Q F K A E K V F S K L G S L P E V V M D G I L Q D V L Q N S K E N A I D T R A L A D I V E R N L I E H S L E Y P N
 L M D L A K R Y V L A R I Y N H V Y G K G K W K E F D S R D L L I S Y N A L K V L E A R Y L L K D P N T L R Y I E T P Q M M F R R V A R H I A N V E K L Y G K D
 E K Q V K E I E D K L Y E M M S N L K F I P N T P A L M N S G T R L G I L S A C F V I P V R D A M S T P N G D G I Y D A L R A M A L V H Q Q G G T G F D F S E
 L R P K G D I V A S T A G V A S G P V S F M R I F D V S T D V V K Q G G K R R G A N M G V M H A W H A D V Q D F I R A K T G E L R D T H L Q N F N I S V G V Y D
 Y F M N A V E R G E A V P L I N P R K T R I P G K D W D Y Y M T N A R G Y M H D E S V Q E Y I L K E L E E K G G S V Y L D E S R I I T V D E A L V I A E K E N A
 I V Q W V N A R Q L F D E I V K G A W D S G D P G L L F I D E I N R R H P V W Y I G K I N A T N P C G E E P L L P W E S C N L G S I S L E K F V V E K D G K M S
 I D W D G L V E A I K Y G V R F L D N V I D A N R Y P L K Q I E E A T K K T R K V G L G V M G L A R M L I K L G I P Y D S V D A L Y I S Y Q L A K F I Y Y H A L
 K T S I D L A K E K G S F P A Y D P Y Y Y H D I W E S A R D F G S L L E V S N I K D K P S D Y V K K L T E V V D R L D F S L L K E E R I K F G L R N S T V V S V
 A P T G T I S I I A G T S S S I E P L F A L A F V R N V A V G K F I E I D P L F L E Y L R K Y E L D D P E V V Q K I A E T G T V A E N P F I P R T M K K L F R T
 A H E V P P E Y H V L H Q A M W Q Q W N D S G T S K T I N L K S E E P P E T V E K V Y M L A W K L G I K G V T V Y R D R S K S Q Q V I Y F G I K K E R E E A E Q
 Q K Q Q K K I Q M V P T S S L R M E K K F V E V N E T Y A G G C K T C E L

Sequence #455 — Gene Saci 1355

M I K V S D L V I P T I N D L E L Q N K K V L L R I D V N S P V D K N T G K L L D D S R I K A H S I T I K E L L K K G N S I V L I S H Q G R P G D D D F I S L K
E H S L L L S K Y V G T E I E F V E D I I G P Y A V E K I K K L D N K G V I M L E N I R L M S E E L I E A P P Q Q H A K S F L I K K L S P L F D A Y V N D S F S
A A H R S Q P S L V G F P L V L P S A A G I V M E K E V S A L S K I F N Y E D S P K I F V L G G G K V N D T L K I I E N L I K N R V A D R I L T G G L V A E L F
A V A K G I N L G K K N M Q V L E N K G L L S L V P R A R K M L L S G A P I E I P V D F V T E Q E N S Q T L E E P T S N L K G T I K D I G N T T I E M Y S S F I
K E S K V V V L R G P M G V I E D E R F R R G S K A L L T S A V E G P G Y V I I G G G H M I S M I D K N I Q I N E N K V H V S T G G G A L L L F L A G E K L P V
L E S L H L S W V V R S G K S

Sequence #456 — Gene Saci 1356

MVKVKVAING^{0.085}Y^{0.043}GTIGKRVADAIRLQPDME^{0.144}IGVAK^{0.005}TS^{0.028}PNY^{0.108}EAF^{0.005}TAMRKG^{0.006}Y^{0.066}KL^{0.047}Y^{0.001}TKENIQKFQN^{0.003}SGIN^{0.013}VAG^{0.016}SI^{0.005}EDMIKD^{0.003}S

DI^{0.07}I^{0.018}IDAT^{0.005}PGGVGAN^{0.004}Y^{0.016}KKI^{0.006}Y^{0.001}Q^{0.004}E^{0.006}Y^{0.001}GKKAIFQGG^{0.016}EK^{0.006}SD^{0.006}VADV^{0.001}S^{0.001}FSALCN^{0.004}Y^{0.001}NDAINKN^{0.001}Y^{0.002}IRVV^{0.002}SCN^{0.003}TT^{0.003}GILRVLC^{0.005}TI^{0.003}NNFDKIE

KVRG^{0.198}TI^{0.022}IVRRAADPKEVKKGPIN^{0.02}SI^{0.037}VADPARIP^{0.027}SHHAKDVL^{0.001}T^{0.001}V^{0.007}LKGIDII^{0.089}TS^{0.001}ALVAP^{0.007}TT^{0.089}LMHLH^{0.015}T^{0.257}LFI^{0.008}TT^{0.003}RNKV^{0.003}SKEDLLN

IL^{0.003}S^{0.036}N^{0.048}TPRILLN^{0.029}TEKADAE^{0.059}S^{0.003}TA^{0.027}EIMEIARDLGR^{0.003}Y^{0.003}RNDVPE^{0.003}T^{0.098}VIFED^{0.086}SI^{0.001}Y^{0.001}T^{0.001}NGNEIFLM^{0.01}Y^{0.004}GVHQE^{0.004}SI^{0.014}VVPENIDAIRA^{0.014}SLN

IM^{0.023}S^{0.048}RD^{0.029}ES^{0.021}IRLT^{0.021}NE^{0.021}TLKIGKGYLI

Sequence #457 — Gene Saci 1358

MDK I P E E L E K I L Q I ^{0.018}T ^{0.054}R E Q N R W R R L E ^{0.094}T I N L I P ^{0.015}S E N V M ^{0.015}S P L A E ^{0.021}S ^{0.127}V ^{0.013}Y M ^{0.145}S D F M ^{0.061}Y R ^{0.014}Y A E G K P F K R ^{0.022}Y Y Q G ^{0.141}T K ^{0.054}Y A D E I E E L A M K L V ^{0.017}S
 E I ^{0.018}S ^{0.03}S ^{0.008}S K ^{0.08}Y A D L R A V ^{0.013}S ^{0.081}G T I A N A G V F R V L A D ^{0.004}S G D K A V I A P V Q A G A H V ^{0.004}S ^{0.218}H T R F G ^{0.083}T L G A L G I E Q I E M P ^{0.024}Y D Q E ^{0.005}S M N V D V D K A I K L I
 E E V K P K F V ^{0.088}T L G G ^{0.005}S L ^{0.063}Y L F P H P V K E L A P H V H A V G A K L V ^{0.083}Y D ^{0.001}S A H V ^{0.09}Y G L I V G K A W H N P L E E G A D V V ^{0.016}T A ^{0.003}S ^{0.043}T H K ^{0.068}T F P G P Q G G L I V ^{0.058}T
 N D D ^{0.003}S L ^{0.106}Y K K V ^{0.003}S D ^{0.04}T I F P W F V ^{0.001}S N H H L H R L P ^{0.004}S ^{0.006}T A I ^{0.015}T A L E M K ^{0.003}Y F G K E ^{0.011}Y A Q Q I V K N A K A L A E A L A A E G F K V I G E H L G F ^{0.025}T K ^{0.001}S H Q V A I
 D V R N L G G G A K V A K L F E E A N I I A N K N L L P ^{0.073}Y D P P ^{0.04}S A V K D P ^{0.028}S G V R L G V Q E M ^{0.091}T R F G M K E E M R I I A R L M R E V A I E N K D V K E V K K
 K V ^{0.224}T E F R K E F L E V K ^{0.015}Y ^{0.03}T F ^{0.063}T N V D L A K ^{0.003}Y ^{0.009}S ^{0.005}S K V I ^{0.008}S L L I

Sequence #458 — Gene Saci 1359

M Q E ^{0.02}T I D N I V D K V V K G Q I Q F H E I D N L L E A N A A M V A R R L A I E K L ^{0.063}T G A K L P ^{0.007}S I G ^{0.008}S ^{0.094}T I I D ^{0.056}Y A E I R N K N A E N V I G A V Q V P L G I I G
P L K I D G E ^{0.054}Y A K G D F ^{0.041}Y V P L A ^{0.012}T T E G A L I A ^{0.004}S V N R G A K A V ^{0.045}T L ^{0.002}S G G ^{0.049}T R V K I F ^{0.014}Y D G M ^{0.064}T R A P I F K L D ^{0.016}S I R D V A E F L E W V D K N K E K L E Q
V A N ^{0.005}S ^{0.037}T ^{0.086}T ^{0.007}S H G K L ^{0.005}S K I E P L I L G N N V W L R F V F ^{0.001}S ^{0.055}T G D A M G M N M A ^{0.02}T I A ^{0.007}S E K L C E F I E K E F G K A ^{0.015}T C L A V ^{0.004}S G N V C ^{0.004}S D K K Q ^{0.005}S M I N A L H
G R G K ^{0.083}T V V A E A L I P D ^{0.009}S I V K ^{0.009}S A L K ^{0.004}S D K H L I H E V N L R K N W L G G A R A G N I F Q ^{0.002}Y N A H F A N I I A A I F L A ^{0.021}T G Q D I A Q V V E ^{0.002}S ^{0.003}S M G ^{0.006}Y ^{0.022}T W
^{0.088}T E V R E N G L ^{0.624}Y I S ^{0.003}I T L N ^{0.003}S L E V G ^{0.085}T V G G G ^{0.283}T R L P ^{0.228}T Q R E A L ^{0.011}S I M G V L G ^{0.012}S G N P P G ^{0.015}S N A R K F A E I V A ^{0.006}S A V L A G E L N L L ^{0.005}S A L A N K E L G K
A H A K L G R G M K V

Sequence #459 — Gene Saci 1361

M V ^{0.008} S I V G C G L ^{0.048} T K L D R ^{0.02} Y Y E L ^{0.015} S E K D L V ^{0.01} S E A ^{0.008} Y K Q L I ^{0.033} T K I K E ^{0.058} Y D Q P D I V I V ^{0.005} S S G ^{0.005} Y I D V L G K N I L ^{0.009} S S ^{0.007} Y K I ^{0.003} S S ^{0.008} G L G L Q N ^{0.012} T K V M R I E N
 G D N G G A ^{0.007} S I L ^{0.035} T A ^{0.006} Y S ^{0.005} F I K ^{0.004} S G V A K K V L L I G I D K F ^{0.008} S D ^{0.002} Y P ^{0.006} S K ^{0.006} Y V N E ^{0.013} Y L ^{0.003} S Y N L D N D ^{0.11} Y ^{0.018} T Y ^{0.027} H V G I ^{0.03} T P H A ^{0.017} Y S ^{0.001} A L L M K R ^{0.005} Y M K K ^{0.007} Y N V D ^{0.021} Y E ^{0.03} Y
 F ^{0.032} T K W P I K M H Q N A ^{0.003} S E N P L A ^{0.018} Y L K F K V D K N ^{0.039} T V V N ^{0.003} S Q I V ^{0.001} S D P L R I F D V G A R A D G A ^{0.007} S V V L V ^{0.115} T A D E V A K R ^{0.016} Y F D ^{0.007} S P V K I D G I V G N I G
 A M N L ^{0.013} S D P ^{0.02} S L P ^{0.022} S V A K A R N E L G D L P K R D V V ^{0.11} Y E I H D ^{0.009} S Y ^{0.041} S I M A A L E I E E L K L A E R G K G L D V V D ^{0.013} S L D I N L ^{0.003} S G G L K A R G ^{0.005} Y I G G G ^{0.043} T A
 I ^{0.006} Y Q L G E V F L H L ^{0.008} T N Q F K G K ^{0.004} S A N A E K G I I L ^{0.004} S N D D L G N ^{0.018} T ^{0.005} S ^{0.001} Y L A V L ^{0.015} S R

Sequence #460 — Gene Saci 1367

M L R ^{0.087} S L V L N E K L R A R V L E R A E E F L L N N K A D E E V W F R E L V L C I L ^{0.013} T ^{0.002} S N ^{0.005} S ^{0.002} S F I ^{0.004} S A ^{0.007} Y K ^{0.006} S M N ^{0.001} Y I L D K I L ^{0.008} Y M D E K E I ^{0.011} S I L L Q E ^{0.013} S ^{0.006} G Y R

^{0.001} F ^{0.002} Y N L K A K ^{0.002} Y L ^{0.017} Y R A K N L ^{0.128} Y G K V K K T I K E I A D K D Q M Q A R E F I A ^{0.047} T H I ^{0.015} Y G I G ^{0.004} Y K E A ^{0.001} S H F L R N V G ^{0.007} Y L D L A I I D R H I L R F I N N L G I P I

K L K ^{0.008} S K R E ^{0.005} Y L L A E ^{0.02} S L L R ^{0.005} S I A N N L N V Q V G L L D L F I F F K Q ^{0.021} T ^{0.04} N T I V K

Sequence #461 — Gene Saci 1368

M Q V K I L I T D P I S E I L I N K L T K Y N I K I D Y R P D I S K E E L Q K I I Y D Y D V I V V R S R T R V D K E L I E K G K K L K V I A R A G I G V D N I D
T E E A E K R N I R V V Y A P G T S T D S A A E L T I G L M I A A A R N L Y N A I N L A K T G V F K K I E G V E L A G K T I G I I G F G R I G S K V A T V A N A
L G M K V L A Y D I L D I K E R A L K M G A E P C T L D D M L P R A D I I T L H V T V G K E T K Y I L D R E Q F E K M K N N V I I V N T S R A A V V N G K I L L
E F I R K G K I F A Y A T D V F W N E P P K E E W E Y E L L R H E R V I V T P H I G A Q T K E A Q D R V A E V T A Q N L I N V M K E M R L I

Sequence #462 — Gene Saci 1369

MLLIPGPVEVPK^{0.006}SVLAA^{0.007}^{0.004}TSLVIDHRGNKFKDIVNRLEKLMIKHF^{0.012}^{0.008}SSKRVALLL^{0.113}TG^{0.007}SG^{0.052}TLAVEAMV^{0.012}^{0.004}YS^{0.113}FKRGEKVLAL^{0.025}^{0.022}SYG

EFGRRLAE^{0.036}SIKRRGA^{0.389}TLRL^{0.063}YDKPMGH^{0.01}^{0.018}SFSELEEVKQIIENKDV^{0.013}^{0.025}TTVALVHNE^{0.019}^{0.004}^{0.022}TSTGTGIALRNLEEI^{0.009}SRFIKNKGLKLI^{0.004}VD^{0.004}S

V^{0.004}SGFAAY^{0.081}QLMVNEWKIDAVA^{0.04}^{0.008}TGSQKALA^{0.005}^{0.006}SV PGLGFVAV^{0.006}SRDGLNEMVNEDLP^{0.037}^{0.058}^{0.007}TYLDVSLHLKFQDK^{0.052}^{0.068}YETPF^{0.095}TPA^{0.286}TGVFNA

^{0.041}TLRAAELELEGVERRWKRHEAC^{0.087}^{0.002}TKYVRDAL^{0.005}^{0.008}SYFGFSLLGNENNFS^{0.001}^{0.032}NTVVAAIPIKD^{0.006}YRAKLKEFNVEIAGGMGELRDK

VVRIGLLGIVDDRAVMKLI^{0.025}GI^{0.007}TARMFHS^{0.007}^{0.09}QY^{0.22}EKEPPLECKLPEELREEIEW

Sequence #463 — Gene Saci 1370

M **T** I D K I N E I F K E N W K N K L **T** **K** **Y** E I A R I I **S** A R A L Q L **S** M G A L P L I D **T** **S** N L K **S** D D V I **S** I A E E E L K R G V L P I **T** I R R I **Y** P N G Q V E L
I **S** V R K I E N R

Sequence #464 — Gene Saci 1371

M S C K T P K N Y T L V I A E K S K A A R K I A E A L S N N Y S Y C K K F Y V N F W I V N Y S S K Y Y I I S P A A G H L F N L Y G N S S F P V Y E T E W K P L W
 Q I D P S A R Y T K K Y Y D L I K S L S K D A Q E F I N A C D Y D I E G S L I G Y L I I N F L G D I K R A K R A K F S A L T K E D I L N S F R N L K P L D Y D M
 I H A G I A R H K V D W L W G I N V S R A L M K S V Y T L T R K R V I L S A G R V Q S P T L I H V I N N T V K R E L F V P L P Y Y S I N L T I N L K N K E F K I
 T I P K T F E N K N E A K Q Y L E E I K K V G E V T V T N I E L K D A V I Y R P P P F N L T D L Q L E A G R L F G Y S P Y L V E R L A E N L Y L N G L I S Y P R
 T N S Q K I P P S V N I Y Q I I D S L S K S K R Y G S L I N T L S Q I T K G K Y I V R Q G E K D D P A H P A I Y P T G E L P Y N L D T K E L K L Y E L I L R R F
 L A S M S T D A R V R K Q E I T L R I P K V D I E L K L N I Q S L I Y K G W I I L Y P Y T K F S D E E L L D V K K G D K G R I V R A N S T M K V T K P D T Q R V
 S K I Q L L K W M E S N N L G T E A T R G R I E E T L F K R K Y L M S K G K Y A Y P T P I G I V V T D V L S S Y F K D L T D V R L T S E M E K K L N G I I S G K
 F S E N E V V E E T K K L I E K Y I N E F E N S K N D I G T K I G K I L G L L E Y K K C K Y C E L E V Y K D D L C K Y H L N A I K L L K D N L K I W K E R T D L
 T E E S I I K K L K K L N T A G K F I R D V L N T Y Y N

Sequence #465 — Gene Saci 1372

M S A Q V M L E E M A R K Y A I N A V K A D K E G N A E E A I T N Y K K A I E V L A Q L V S L Y R D G S T A A I Y E Q M I N E Y K R R I E V L K E L I P A D G A
G N G N G K H S Q V S V D D L V M K E K P K V N F N D I V G L E D V K E A L K E A I V Y P T R R P D L F P L G W P R G I L V Y G P P G C G K T M I A A A V A N E
I D S Y F I Q V D A A S V M S K W L G E A E K N V A K I F N S A R E L S K K D G K P V I I F I D E I D A L L G T Y N S E N G G E V R V R N Q F L K E M D G L Q D
K S E N F K V Y V I G A T N K P W R L D E P F L R R F Q K R I Y I R L P D I E Q R K S L L L H Y T S K I K M D N V N I D E L A K M T E G Y T A S D I K D I V Q A
A H I R V V K E M F D K K L E Q P R A V N M E D F K E I L K I R K P S V N S E V I K V Y E A W H E K Y K A L

Sequence #466 — Gene Saci 1382

MEMHPWLPNLK **Y**T ^{0.025}^{0.024}EEMLKEIGVNDIMNLF **S** ^{0.003}SDVPQDLILKRKLNIP **Y**DKPL **S** ^{0.044}^{0.022}EY **E**I **S** ^{0.028}QRLNELKKKNLELKY ^{0.003}PPFIGGGLC

PH ^{0.019}**Y** ^{0.004}IP ^{0.028}EAVK ^{0.01}FIM **S** ^{0.008}R ^{0.04}**S** ^{0.086}E ^{0.089}F ^{0.142}**Y** ^{0.011}T ^{0.005}A ^{0.009}**Y** ^{0.019}TP ^{0.007}**Y** ^{0.009}QPEI **S** ^{0.009}QGLLQAI **Y** ^{0.019}E ^{0.007}Y ^{0.006}Q **S** ^{0.018}LMAE ^{0.004}ELLEMEFVNA **S** ^{0.006}MY ^{0.003}DWA **S** ^{0.005}AI ^{0.041}AEAVLMAHRINRRK **S** ^{0.004}V ^{0.004}LV

LP **S** ^{0.004}NMNP **Y** ^{0.028}HREV ^{0.026}V ^{0.028}K ^{0.0134}T ^{0.086}W ^{0.014}V ^{0.044}**Y** ^{0.01}G ^{0.007}KGIRI **T** ^{0.086}ELP **T** ^{0.014}D ^{0.044}**S** ^{0.01}**T** ^{0.007}SGQIDIEKLEQIN **T** ^{0.071}DDV **S** ^{0.003}AI ^{0.007}Y ^{0.003}I ^{0.005}IQPNFY ^{0.003}GI ^{0.005}FEENIE ^{0.005}Y ^{0.065}IVDFAKKKNI ^{0.062}IT

^{0.015}**T** ^{0.009}IMGV ^{0.011}**S** ^{0.007}PL ^{0.007}**S** ^{0.019}LGLIKPPGE ^{0.019}**Y** ^{0.005}G ^{0.005}IDIAVGDGQEIGLPLN ^{0.034}**Y** ^{0.024}GGPLMGIFAVRWD ^{0.007}**S** ^{0.056}QLV ^{0.014}RQMPGRIVGL ^{0.02}**T** ^{0.329}K ^{0.014}DEKGNRAF ^{0.065}**T** ^{0.062}LILQ ^{0.009}**T**

REQF ^{0.277}**T** ^{0.099}REKA ^{0.005}**T** ^{0.058}**S** ^{0.025}NI ^{0.011}**T** ^{0.006}TNE ^{0.01}**T** ^{0.005}LMAIG ^{0.006}SAV ^{0.01}YL ^{0.005}**S** ^{0.034}LLGKHGLRDLAEEI ^{0.024}**Y** ^{0.007}V ^{0.056}RS ^{0.014}HY ^{0.02}AKKKFEELGFK ^{0.014}**S** ^{0.02}PS ^{0.014}Y ^{0.02}SGEFFE ^{0.065}FVIQFPKN ^{0.009}**Y**

NLIH ^{0.002}**S** ^{0.002}**S** ^{0.002}LLNKRIHGGLQLND ^{0.002}**Y** ^{0.009}CALFCF ^{0.004}**T** ^{0.003}EVH ^{0.003}TRVMIDELVK ^{0.003}**S** ^{0.003}IAEVL

Sequence #467 — Gene Saci 1387

M S E G A G R F S K D V E T R K V Q R L G S S S L F I T L P K K W I N K W G V K P G D K I I I E I S E D G G L R L V A E K V K N T Y T K K S I K I D V D N Y K Q
S I V N A I P S L Y I L G Y D E M L F T T K K N L D P K E V E N V I T L S K N L V G I E V A E N N N N L I R L D C L L D T E K L G S E T L L R R I L N I I S K K
V D E I I E Y L R G Q Q S T E V Q Q T L E D L R R V Y L M L L R R S I G N K Y M A E R D K V R N F I A I N S T I M M R V Y R I I S K L Y D E I K H N Q I S L P
Q E Q A K T L I D M F R E T N D L F D E I I M S I L F P S I K R I S N G Y T L I N Q L K Q K Y E R L D I K D N L I R N Y F E D L I F N L E E A L N N S S C S I F
L E D A P W I E R N F N S

Sequence #468 — Gene Saci 1388

M V M L K I E D I H V E V E G K K I L K G I D M E I K **S** G E I H V L M G P N G **S** G K **T** **S** L **S** L A L M G H P K **Y** K I **T** Q G K I L L D N E D I **T** **S** L E **T** F E K A R K
G I F L A F Q N P I E I **S** G V K L **S** **T** L L I A E **Y** **S** R M H **S** **S** **T** A Q P Q M I I K Q I K E V **S** K **S** V G V N D **S** L L N R G I F D G F **S** G G E K K R **T** E I L Q M L L I
K P K I A I L D E P D **S** G V D V D G L K A I **S** D A I L K L K **S** E **S** N **T** G F L I I **T** H **Y** R R I L E H L N A D K V H I L **Y** N G K I V R **S** G G M E L A K L V D E K G **Y**

E G A L K Q F L

Sequence #469 — Gene Saci 1390

M G L I D F ^{0.013}S ^{0.009}S A Q N ^{0.009}Y I ^{0.018}S K L E N R ^{0.078}S E R E R L L ^{0.022}S Q F L ^{0.057}T M P ^{0.014}Y Q R I N D ^{0.003}S P ^{0.009}S L K H ^{0.021}Y ^{0.059}T D W N R L E A L N L E I K D I N A K E P ^{0.015}S K P I L D Q E ^{0.063}Y K I L ^{0.044}T
I P Q P ^{0.147}T K L D G F I K I E D K P E N A L I K A D E H K L V ^{0.007}S L V L A L ^{0.003}S K K ^{0.053}T I I D L ^{0.005}S A I ^{0.045}T P R K L L I ^{0.011}Y H N ^{0.005}S ^{0.005}S ^{0.006}S N ^{0.008}S L I P A N I E L K I P E G E N V D V
V ^{0.131}Y ^{0.008}F ^{0.065}S E ^{0.007}T D D Q N ^{0.007}S M ^{0.009}T ^{0.008}S ^{0.009}S L I ^{0.004}S F V V P Q N ^{0.006}S ^{0.009}T L N L ^{0.004}S I I ^{0.004}S L ^{0.003}S A H ^{0.003}S F I ^{0.003}Y ^{0.008}T K G L V K G ^{0.015}T I N A N I F ^{0.001}S ^{0.002}S K ^{0.016}T K L ^{0.047}T H I D ^{0.007}Y ^{0.113}Y V D L D E K A Q ^{0.009}S ^{0.045}T F ^{0.01}S ^{0.011}S
R A I G I E D N N V D I R V A V N H L G V Q ^{0.012}S R ^{0.013}S E G ^{0.086}T L R G I ^{0.027}S ^{0.02}T D ^{0.01}S ^{0.014}S L V I V R G N A I I ^{0.022}S E ^{0.03}S G I D ^{0.021}S ^{0.023}T ^{0.043}S I I G K A ^{0.012}Y ^{0.115}T I G K D ^{0.006}S K A I V A P M L E V K
^{0.027}T G K V Q M A K H ^{0.014}S A ^{0.023}S I ^{0.016}S K V P E D L I F ^{0.02}Y L E ^{0.046}S R G F ^{0.147}S R K E A E ^{0.047}S L I I K G F M I D E N D P K F L V D L I N E I L ^{0.045}T E R K I L V ^{0.008}S V

Sequence #470 — Gene Saci 1391

M R V I **T** F K V D E D L L Q E L D L **Y** A I N **S** K **S** **S** R **S** E I I R E A L I R **Y** L K D R K

0.045 0.065 0.016 0.088 0.08 0.062 0.004

Sequence #471 — Gene Saci 1393

M K A L F F E K **S** G L N N L K F G D I K E P E I G A H D V L I R V K M A G V N P I D **Y** F V V E G I P V K P L P H I P G A E I **Y** G E I V K V G E H V K **S** V K P G D
K V V V **Y** N R V F D G E C D F C L A G M E M L C R N G G I I **S** V I **T** N G G F **S** E **Y** F A V P E K N V F K V N L P D E V A A **S** L P V A A L **T** **S** **Y** H A L K E A N V K P
T D V V V V F G A **S** G N **T** G Q F A L Q L A R K M G A **T** **T** I A V **S** R K Q W V K D F A D **Y** V V D **Y** E N A E N K I K D L **T** G G K L A D V V I N **S** V G **T** **S** I W D L **S** L K
V L G V N G R L V F F G G L **T** **S** D G K I N I **S** A L **Y** G K H Q K L I G **T** **T** G G **S** R K E M V E L I **S** L C K D C K V K V **S** K V **Y** N L E D G K E A L A **S** I M K D R D G
R P M I K I **S**



Sequence #472 — Gene Saci 1396

M N P I R ^{0.013} S V K E E F C E I V A N G L G I ^{0.003} S K D V I F K ^{0.116} L E Y P P R E E L G D I ^{0.025} S L P L P ^{0.007} S L K L N V R ^{0.026} T E V ^{0.044} T F ^{0.003} S H G K L I K E V R K ^{0.108} L G I ^{0.016} Y V N A F V D E

K E L F K L L F ^{0.024} T E M Q D D ^{0.2} Y G V E K ^{0.106} T E N P K R I V V E H ^{0.049} T S ^{0.003} A N P I H P L H I G H L R N ^{0.005} S I L G D ^{0.035} T I ^{0.006} S R M L K I R G H D V N R R F ^{0.003} Y V N D A G R Q V A I L

^{0.009} T L G ^{0.02} Y I L L G E P E P ^{0.01} S P K V D H W F G L I ^{0.007} Y ^{0.001} S I ^{0.026} T N V I I E I R E L K E E L K K D L D P D ^{0.384} T ^{0.016} Y K D K I N R L D E L V A ^{0.028} T A Q ^{0.019} S L R E R N P E F F D K L A D A

I N ^{0.027} S I P D V E ^{0.026} S E I Q K I I K ^{0.039} S ^{0.008} Y E K G D D P K I K Q I V R K I V N L N L D G F R E ^{0.027} S L D K L E I ^{0.026} S F D V ^{0.071} Y D ^{0.021} Y E ^{0.011} S E L L W ^{0.006} S G M V D E I L ^{0.003} S K A F Q I A K D

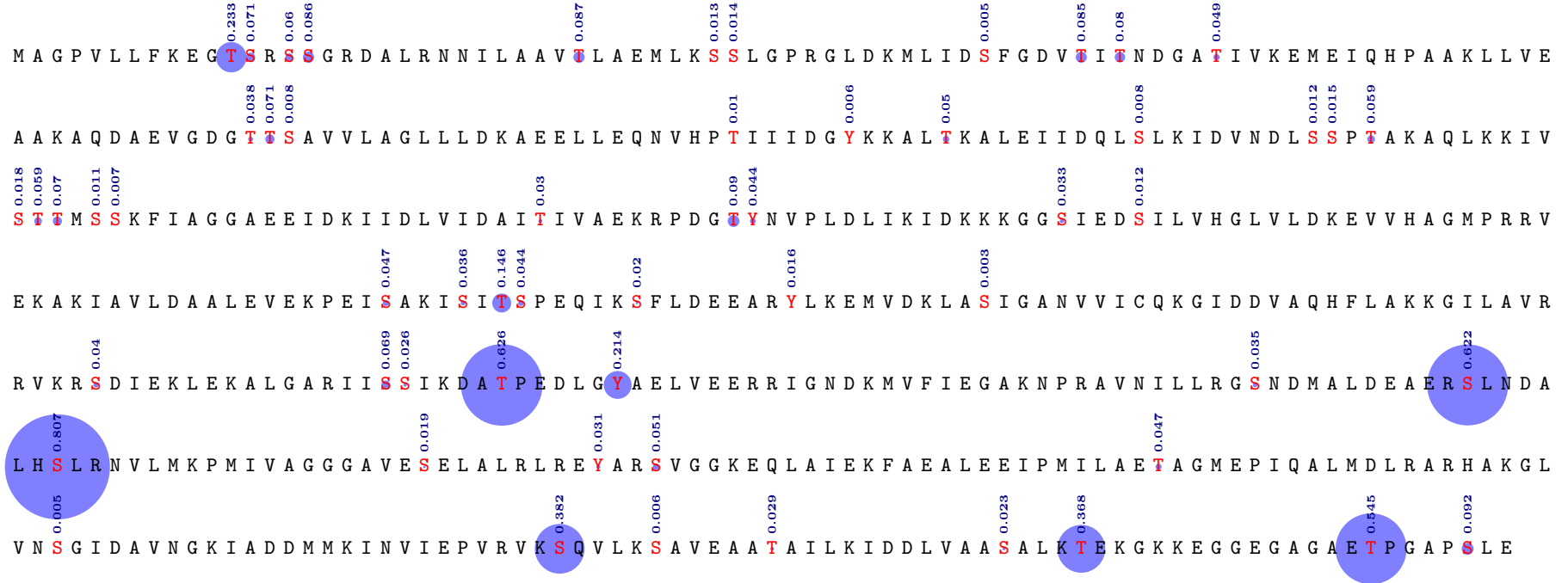
^{0.01} Y K G ^{0.048} T K A L E L E D I N E K I K E I L N I P K G L K L P P L V L ^{0.118} T ^{0.017} S D G ^{0.202} T ^{0.009} S L ^{0.033} Y ^{0.079} T ^{0.165} T R D I A ^{0.011} Y ^{0.08} T V K K F ^{0.006} S D F K A D ^{0.024} T V I N V I A E Q Q ^{0.003} S I P Q M Q L R A ^{0.014} S

L ^{0.008} Y L L G ^{0.006} Y E R L A Q N L V H ^{0.016} Y ^{0.002} S ^{0.027} Y G M V N L Q G M R M ^{0.046} S G R L G R F I ^{0.027} S L D D V I E K V ^{0.049} S E V A K K K I E E K ^{0.026} S G D I ^{0.055} T N L R D I V N ^{0.004} S A I R ^{0.002} Y A I L ^{0.003} S V A ^{0.002} S

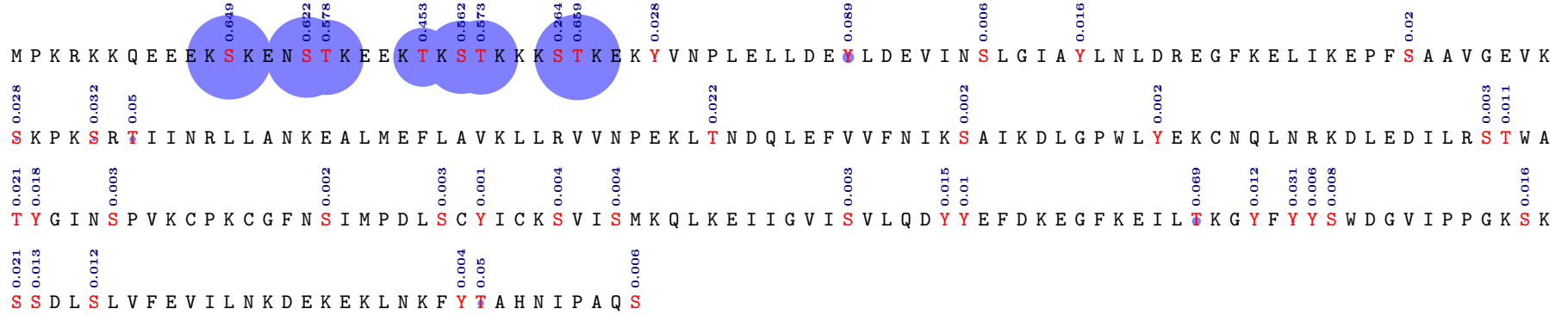
N K P V ^{0.01} T F N I N N I V D F E Q N ^{0.002} S G P ^{0.003} Y L Q ^{0.003} Y ^{0.079} T ^{0.003} Y A R A ^{0.005} Y N I L A K N Q D E I K L ^{0.083} T D A D L ^{0.02} S D L I G D K R R L L L I A R F P E ^{0.329} T F N K A I D E L R P E D L

I D F L R R ^{0.341} T A D V F N R W ^{0.01} Y N F E R V L Q E P D ^{0.008} Y R K R I ^{0.101} T R L F I V K G I E R V L ^{0.006} Y N G L N A L G I K P L ^{0.006} S K M

Sequence #473 — Gene Saci 1401



Sequence #474 — Gene Saci 1403



Sequence #475 — Gene Saci 1409

MPKIPAE LCIKCKGHK^{0.002}YLCGL^{0.004}SICPI LERFKNV^{0.01}TSTV^{0.003}SKIVINNKIEG^{0.019}STPP^{0.089}SILIGEKN^{0.028}YPKV^{0.006}SLV^{0.047}YNIPPGVIGEEAK

D^{0.14}YENPEGWGRK^{0.014}SLNDII^{0.013}SIR^{0.019}SSL^{0.018}LS^{0.005}STILGGLNVRDP^{0.02}YKLYEKEI^{0.012}SLAGI^{0.016}SEKPVV^{0.053}SET^{0.176}DS^{0.04}SGKIVPKLKFDGILIPRGP

^{0.027}SL^{0.036}T^{0.022}VQ^{0.01}SIKV^{0.388}SENPKVPR^{0.018}TI^{0.011}QKLI^{0.003}FDDLKAAE^{0.012}SVIKLY^{0.003}LDNEN^{0.012}YYRI^{0.007}ISAF^{0.003}SLGFLGLKRN^{0.008}RKLVP^{0.006}TRW^{0.012}SI^{0.001}TAVDQIVGN^{0.001}Y

LLDNIR^{0.006}TLD^{0.027}TIDNVE^{0.007}YY^{0.002}YG^{0.005}SYLGNHFIIL^{0.002}YP^{0.002}SSH^{0.001}SS^{0.002}STWIEIWHPL^{0.002}SLW^{0.005}TT^{0.002}ELII^{0.003}SEL^{0.004}SEN^{0.004}YWGE^{0.022}YD^{0.007}SLDGG^{0.013}YIAARF^{0.029}SI

IEKLY^{0.001}KRRRQAGIIIREI^{0.215}TKDY^{0.006}FAPVGNWHIRE^{0.063}VKRALENKPK^{0.086}TFN^{0.055}TIEES^{0.009}SLKY^{0.015}VN^{0.015}TNLEANDKINLLGLK^{0.018}SIKKIIG

QRRIDEFLFK

Sequence #476 — Gene Saci 1412

M I K V I K I G G S I Q K D E K D Y E L I A D K I S K Y S D E N R L I V T S A I K G V T D Q L T S V I N E T D K A V D K V T E I Y D K H I K L L S K L V D G I
E F E K A F R D I S R L V D E L Y R I A W S I R V L D E A T P R V K D Y I L S F G E R L A V I L L S S F L R T R K F S V N N L I E P P I V T D E N Y S E A N V L
L E D S K E L L S K K L E E S Q Q K I V V L P G F I G K S K N N R Y T I G R G G S D Y T A T L I G K L V D A K E V R L V T E V P G I M T A D P R K I S N S V T
I Q R L S L E E A I E L S Q L G A K K L H P R T F D P L F D A N M K V I I E G L Y E E G C T I I E G L C T S K D G L K G I T T K E G L S L I T I E S T R I V G K
I G S A S T I T S E A K N A N V N I I A L S Q P A S E T T I Q F V V D Q K D Q K K F V E R L S Q L S G L I K N I E L S E V G A V S I V G C G L R N K E I S S K V
L S K A S S Y N P I F V S R G L K G V S I T F I V D K K E L D S I S K E L H E V V V N W S I N

Sequence #477 — Gene Saci 1414

M G F K D L R E **Y** I E F L R R N K N I L E I **S** D E V **S** **T** E L E I A **Y** L **T** R E A **T** **Y** **S** K M P A L L F **T** N V K N F P E W K V I **T** N I F N **S** L N V F **Y** N I F G **S** N K L
 E E I **S** G K F L D E F L G Q L P **T** **T** F F E K I R **S** F A E M **S** K L G K V F P K **S** K K P V F E L H E E **Y** **S** L D K F P A L R **T** W P K D A G R **Y** **T** **F** **S** I **T** I **T** K D P D
T E V H N L **S** V **Y** R I Q L V N Q K E A I V H W Q A F K R G **S** I **T** A N K **Y** L K K G I **T** K V P V A I I N G V D P I **T** **T** F V A A **S** P V P P G L D K **Y** L F A G I L R Q E
 G V E V **T** R L D N G I L V P A N A E **S** V I E G **Y** V D L N D V R L E G P F G D H L G **Y** **Y** **T** P A D F **Y** P **T** L K V E R I **Y** V R D Q P I F H A **T** **S** V G K P P L E D A W I
 G R A V E R L F L P F L K M I V P E L V D M N L P E **Y** G L F **T** G I G I F **S** I R K **T** **Y** P G Q G K R A M M A L W G V G Q L **S** L L K M I I V D E D V N V H D I N Q I
 L **Y** A I **S** **S** **S** **T** V D P K R D V L I V D N V L **T** **D** **S** L D H **T** **T** P H P P L G **S** K I G I D A **T** R K F R E E V G R E W P E E V **S** D D P E V V K R M E K I L K K I K D Q **Y** P
 L **S** K

Sequence #478 — Gene Saci 1420

M G G L K R M **Y** V I V **Y** G I V Q G V G **Y** R R F I Q I H A A R L G I K G **Y** A K N L P D G **S** V E I L A E G **Y** E E A L **Y** K L L D Q I K R G P P L **S** K V E K V D V K F D

D **Y** **T** G E F A **S** F D **T** **Y**

0.095 0.103 0.005 0.011 0.002 0.018 0.017 0.023 0.089 0.083
0.027 0.182 0.055

Sequence #479 — Gene Saci 1421

MVN ^{0.003}S FDIIPK ^{0.007}Y ^{0.038}WYNIIPDLPKPLPPPRDPQDAEF ^{0.043}S RIDLLRKILPKEVLRQEF ^{0.126}T IERFVKIPDEVDR ^{0.056}Y INIGRP ^{0.16}T PLIR
 ARRLEE ^{0.043}Y LK ^{0.346}T PARI ^{0.022}Y FKY ^{0.013}EGAT ^{0.044}P ^{0.226}T ^{0.005}SGHKIN ^{0.053}T AIPQA ^{0.014}YFAANEGV ^{0.002}SHV ^{0.005}T ^{0.05}T ^{0.022}T GAGQWG ^{0.124}T AVA ^{0.004}LAAS ^{0.065}YDLE ^{0.003}ST ^{0.014}IFMVRV ^{0.013}SY
 EHKPMRR ^{0.158}T IMEL ^{0.032}Y GAKVHA ^{0.015}SP ^{0.069}T ^{0.058}DELTEFGRKILKED ^{0.061}S RHPG ^{0.023}SLGIAM ^{0.01}SEAIE ^{0.033}YALENN ^{0.01}RY ^{0.004}YLVG ^{0.003}SVLDVVILHQ ^{0.003}SIIGMES ^{0.005}S
 INQLEALGEEP ^{0.032}DTIIGCVGGG ^{0.006}SNFGGF ^{0.065}T ^{0.01}Y PFIG ^{0.251}T KRGGK ^{0.032}YIavg ^{0.053}SS ^{0.028}SEVPKF ^{0.013}SKGK ^{0.031}YE ^{0.135}YDFPD ^{0.012}SAGLLPLVKMI ^{0.022}T LGKDFI
 PPI ^{0.021}YS ^{0.003}GGRL ^{0.043}Y HGVAP ^{0.035}TL ^{0.004}SLLVKEKVVVEWRE ^{0.055}Y ^{0.122}T EEEI ^{0.121}YN ^{0.004}SAKIFMK ^{0.01}T QGIIPAPE ^{0.017}SAHAIKAAIDEALEAKK ^{0.075}T NDKKVIL
 VNV ^{0.004}SGHGLLDL ^{0.008}SN ^{0.027}YE ^{0.011}SMKNRVMKK

Sequence #480 — Gene Saci 1422

M S K K Y L V A Y M T L G Y P N V N D F Y K F I D N I E D F G V D I L E I G I P P K Y A K Y D G P V I R K T Y K I V S N N I K N Y Y E I L Y E V K Q R I K I P V
V I L T Y L E E Y V D K L G D F L L K L K E S R V D G V L F P D L L I D Y V D E Y E K Y V N L I K N E G I K T V L F T A P L M P D D L I I K A S K L T D L F L Y
Y G V R P T G V V I P I S I D S L I N R I R T M V Q S K L V V G F G L N S I E D I K K A M S V G A D G I A V G T S L I E E V D K N G V N G A L E L I K K L R G
V L D E Y

Sequence #481 — Gene Saci 1425

MEV ^{0.009}Y P I ^{0.019}T A F ^{0.031}T Q P N E V F ^{0.003}S C I K K D E D V A V L L E ^{0.014}S ^{0.019}G S G P Q ^{0.034}Y K ^{0.018}S R ^{0.017}Y ^{0.059}S M I G W G R K G ^{0.01}Y I ^{0.014}S L ^{0.009}Y K N K ^{0.014}S ^{0.015}S S G D I V K E F ^{0.037}Y D P I E V L ^{0.01}S E F L N K
 A P ^{0.007}S L N V P G K F K G G I F G ^{0.033}Y M G ^{0.012}Y D G V R ^{0.015}Y W E ^{0.135}T I K D L K P E P E K W P ^{0.015}Y A E F F I P Q N I I V ^{0.034}Y D H A E G K V ^{0.094}Y L D G D L P ^{0.045}T K ^{0.022}Y N C I ^{0.01}S ^{0.017}S D E ^{0.154}T K F
^{0.05}S ^{0.026}Y ^{0.023}Y E E ^{0.047}S L K K E E F E G I V K E A L D ^{0.012}Y I R R G ^{0.002}Y I F Q V V L ^{0.004}S R F ^{0.003}Y K ^{0.002}Y I ^{0.004}Y K G D L M R F ^{0.023}Y N N L R K V N P ^{0.01}S P ^{0.036}Y M F ^{0.008}Y M K F M D R E I I G ^{0.011}S ^{0.021}S P E ^{0.081}T L F
^{0.005}S V Q G G V V E ^{0.17}T ^{0.008}Y P I A G ^{0.116}S R P R G R ^{0.498}T L E E D L E L E R D L L ^{0.087}S ^{0.052}S E K E R A E H L M L V D L A R N D I G K V C ^{0.054}Y M G ^{0.006}S V K V P E F M ^{0.022}Y V E K ^{0.024}Y A ^{0.021}Y V Q H I V
^{0.002}S K V V G ^{0.018}T L R K N L ^{0.031}T ^{0.003}S F D V L K ^{0.004}S ^{0.034}T F P A G ^{0.087}T V ^{0.012}S G A P K P M A M N L I E L F E H ^{0.018}Y K R G P ^{0.022}Y A G G V G F F ^{0.004}S ^{0.004}S N G D A E F A I ^{0.037}T I R ^{0.005}S A F V N K D ^{0.038}T I R I
 Q A G A G I V ^{0.102}Y D ^{0.009}S V P E M E ^{0.067}Y F E ^{0.094}T E H K M R A L K V A M G V

Sequence #482 — Gene Saci 1431

MLKIAILGGGV ^{0.008}SG ^{0.004}SLLA ^{0.001}YL ^{0.003}LIK ^{0.081}Y ^{0.008}TNN ^{0.007}YV ^{0.008}KIFDIKDR ^{0.007}YIKPCGDIVPNVFEP ^{0.013}PN ^{0.005}SWPRK ^{0.018}YDIKRFAF ^{0.018}YLDGERV ^{0.083}YDIQ ^{0.005}YRS ^{0.004}S

^{0.01}T ^{0.005}KW ^{0.044}IV ^{0.044}IDKWKWINDMRKEVDF ^{0.128}SY ^{0.012}VGNFNGKEFDM ^{0.02}TI ^{0.018}IDS ^{0.074}KGP ^{0.112}YDLDRKVV ^{0.083}Y ^{0.007}TR ^{0.027}VLLK ^{0.006}TDKFDDEAVIEFN ^{0.083}TK ^{0.007}YT ^{0.027}GF ^{0.006}YWI ^{0.006}YWF

^{0.004}P ^{0.028}SE ^{0.016}DGV ^{0.227}Y ^{0.011}NI ^{0.116}GAGFIEDKN ^{0.014}SR ^{0.011}DL ^{0.014}TL ^{0.014}K ^{0.012}Y ^{0.014}IK ^{0.012}E ^{0.014}K ^{0.012}FG ^{0.014}DR ^{0.014}E ^{0.014}Y ^{0.014}K ^{0.014}IV ^{0.014}DIRGAPI ^{0.014}SI ^{0.014}IS ^{0.014}PI ^{0.014}HE ^{0.014}T ^{0.014}N ^{0.014}Y ^{0.014}K ^{0.014}IG ^{0.014}EARGLLP ^{0.014}LS ^{0.014}G ^{0.014}EG ^{0.014}IR ^{0.014}P ^{0.014}SA ^{0.014}IS ^{0.014}AI ^{0.014}SA

VKA ^{0.007}FE ^{0.014}AI ^{0.005}KNGKDFNK ^{0.003}YL ^{0.007}SE ^{0.007}EELK ^{0.005}KI ^{0.007}HE ^{0.005}AI ^{0.017}IS ^{0.003}V ^{0.007}Q ^{0.005}H ^{0.017}MF ^{0.003}L ^{0.007}KL ^{0.005}YL ^{0.017}LN ^{0.003}SS ^{0.007}SL ^{0.005}SL ^{0.017}LR ^{0.003}K ^{0.007}Q ^{0.005}FL ^{0.017}RL ^{0.003}FF ^{0.007}K ^{0.005}NE ^{0.017}IL ^{0.003}IDA ^{0.007}Y ^{0.005}LED ^{0.017}K ^{0.003}IF ^{0.007}FE ^{0.005}G ^{0.017}IA ^{0.003}ES ^{0.007}VR ^{0.005}SI ^{0.017}SI

KGG ^{0.052}SL ^{0.052}LL ^{0.052}R ^{0.052}KL

Sequence #483 — Gene Saci 1442

M K L F K V A L K D L N Y S K L E Q T Q V F G N V F E F V F L E R E K E V D F F V R T S A Q E E I L R K Y L M I K E D N L S F N Q G F V G V L S L K K E S D F Y
E N I E Y S N L L N I I T Y W Q K D E Q I R F W V V L E P R L N D L F L R K A E V L K K E A Q R A M F G K R K K E V Q A S L L G S L A K K N I Y L L H I M F Y T
K D K Q R L K L L F E Y A K

Sequence #484 — Gene Saci 1443

M E ^{0.074} S R R R F F L ^{0.009} S M I ^{0.007} S Y L V G L L L L ^{0.002} Y L ^{0.001} S L F L ^{0.001} S T Q I P ^{0.002} Y H G N L V L E L P I I I P M V F ^{0.001} S I I A I G V ^{0.001} S V H L F L G ^{0.002} S S Y P ^{0.002} Y F F R ^{0.001} T G V M ^{0.002} S L V A G I

^{0.018} T L F V F G F I ^{0.001} S Y S ^{0.001} F N A G ^{0.002} S I V W A G ^{0.002} S L V L G V I F I A G A I F R L L V Q G G L ^{0.009} S A Y ^{0.002} R R F R R G E ^{0.214} T ^{0.028} S ^{0.262} T V E E ^{0.079} T ^{0.081} S I P ^{0.012} S ^{0.179} T R L R N R K I F L I ^{0.004} T F G A I

L L I F ^{0.002} S I Q G V I ^{0.003} S N I ^{0.021} T G ^{0.006} S R P L A ^{0.004} S F G D I I ^{0.003} S F A F I A G G I ^{0.004} Y F V V E ^{0.003} Y V R I R D Q ^{0.034} S

Sequence #485 — Gene Saci 1454

MIQLGQQLLMA^{0.015}YED^{0.016}YKY^{0.027}LLNRGY^{0.003}NRKPA^{0.026}LDLI^{0.039}SS^{0.002}RY^{0.026}NLDKK^{0.006}SR^{0.009}LLLY^{0.006}RCIHS^{0.006}DEEIQH^{0.019}IR^{0.006}SK^{0.011}SV^{0.012}KSV^{0.006}TY^{0.011}V^{0.012}VIL^{0.003}DGY^{0.003}NLAL^{0.006}T^{0.006}

LL^{0.002}S^{0.003}LI^{0.006}YGDEIFLCDDGF^{0.008}YRDLGLGKRKNN^{0.006}SEE^{0.011}IFDMLVLL^{0.006}SE^{0.006}YLDQNKIKFEIILD^{0.006}S^{0.036}QI^{0.024}SR^{0.006}SGELAGKLR^{0.003}Y^{0.006}RGI^{0.006}YAK^{0.095}T^{0.006}VR

K^{0.081}T^{0.001}DLELIL^{0.007}S^{0.001}NNVIC^{0.001}T^{0.001}NDFLVLRARQI^{0.006}YNLLAKFIKD^{0.162}SGLD^{0.02}T^{0.005}TF^{0.003}SFYKENL

Sequence #486 — Gene Saci 1458

M K K G D L K L R E I V P L P K Q P **S** ^{0.016} K A K R V L V V P **S** ^{0.016} F E Q L E **V** ^{0.061} A K K A **S** ^{0.013} P N V V I **T** ^{0.071} R E E L Q K L Q G Q K R P V K K L A R Q N E W F L I N Q E **S** ^{0.003} M A L A

G R I L G P A L G P R G K F P **T** ^{0.148} P L P N **T** ^{0.067} A D I **S** ^{0.008} E **V** ^{0.104} I N R F K R **S** ^{0.007} V L V K **T** ^{0.027} K D Q P Q V Q V F I G **T** ^{0.084} E D M K P E D L A E N A I A V L N A I E N K A K V E **T** ^{0.017} N L

R N I **Y** ^{0.008} V K **T** ^{0.024} **T** ^{0.105} M G K A V K V K R A

Sequence #487 — Gene Saci 1460

M E D F K **Y** R N **Y** **Y** V L R V **T** G G Q E I N V A L I L E E R I K **T** N N I N E I F **S** V V V P P N I K G **Y** V I L E A **T** G P H V V K L I **S** **S** G I R H V K G V A H G L I Q

K E D V **T** K F V **S** K **S** V A L P A V K E G D L V E V I **S** G P F R G M Q A Q V V R V E **S** **T** K N E V V L N I L E **S** **S** **Y** P V Q V **T** V P L E Q V K P V K R

0.014
0.004 0.002
0.048
0.015
0.003
0.012
0.011
0.001 0.005
0.064
0.005 0.01
0.006
0.015 0.045
0.003 0.008 0.015
0.089

Sequence #488 — Gene Saci 1461

M K V F **S** I M K I **S** D I I K R L R E D W K R I I **S** V A K K P D K D **S** F N **Y** **S** I R L **T** L L V M A V V G L I A **Y** I V Q L **T** **T** **S** L I I R

0.051 0.028 0.051 0.012 0.006 0.006 0.025 0.004 0.005 0.001

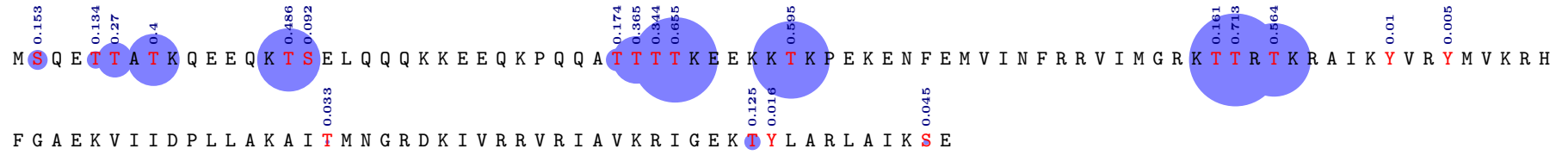
Sequence #489 — Gene Saci 1462

M I E K I R **S** **S** G K K P F V I I F F G V N G V G K **T** **T** **T** I A K V V N M L K K N N L **S** **T** I I A A **S** **D** **T** F R A A A Q E Q L A **Y** H A **S** K L E V Q L I R G K **Y** G A D P A
S V A F D A I **S** F A K **S** R N I D V V L I D **T** A G R M H I D **S** D L V E E L K R V L R I A K P D F R I L I L D **S** L A G **S** D A L E Q A R H F E N N V G **Y** D A V I L **T** K
V D A D A K G G I A L **S** L A **Y** E L K K P V V **Y** M G V G Q N **Y** D D L I P F **S** P D W F V E R I F **S** **S**

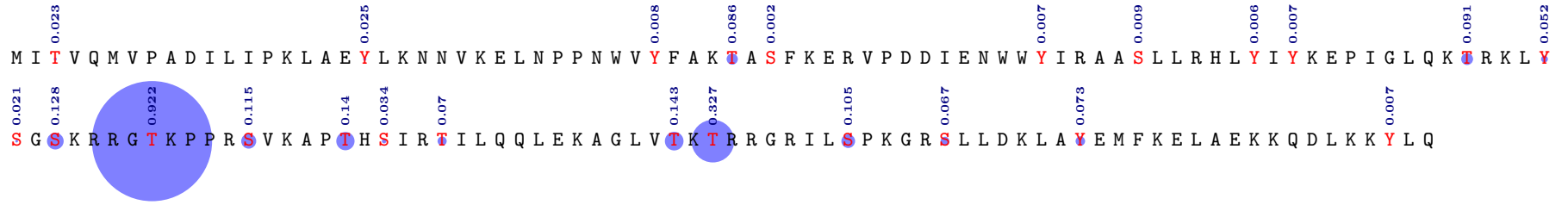
Sequence #490 — Gene Saci 1465

M I L D K L **S** I F G **T** D N I G I **Y** I F **T** N D K **Y** **T** I I P K I D D K E V I E K I Q G I L K **T** E I I Q **T** **T** I **S** K **S** V L V G I L V **T** G N N D V I L L P R **T** A L A D E I
K V I K E Q A K D V R V E V V D I R P **T** A L G N I I L **S** **T** H G A L I **Y** Q D L **S** E A E I N K V K K A L Q I D **T** A I K G **T** I A N I I **T** V G **S** V A V I **T** D K A G L V
H I D A **T** E E E L K K L **S** E L F K V K L D **S** G **T** V N F G **S** V F I R **S** G L V A N R N G V L V G **S** **S** **T** **T** G A E I L R I Q R A F **S** D

Sequence #491 — Gene Saci 1466



Sequence #492 — Gene Saci 1469



Sequence #493 — Gene Saci 1470

M R F ^{0.005} Y I A N E R D I L D G K M ^{0.169} T D I ^{0.023} Y F D R ^{0.096} T I R ^{0.117} T L E H L G I K D L K V R M E V H ^{0.007} S ^{0.083} Y G L P E G ^{0.013} Y ^{0.008} S W A I F ^{0.006} S G L E E V L K L L E G K E V ^{0.11} T ^{0.068} V Y A M P E G ^{0.114} T

V F K E V E P V M I I E G N ^{0.023} Y L D F G V F E ^{0.004} T A F L G I L R H ^{0.003} Y ^{0.013} S ^{0.009} S I ^{0.01} S ^{0.078} T K A A R I K K L A L D K ^{0.02} T V L F F G L R A L H P A I A P M V D R A A ^{0.013} Y I G G C D G V ^{0.003} S

G A F N Q E ^{0.095} T I G A E P ^{0.04} T G ^{0.198} T M P H A L M L ^{0.003} S V G D N V K A W K A F D E A M P ^{0.004} S N V P R I I L A D ^{0.077} T F E D E R ^{0.172} T E V L K A A E L L K D K L ^{0.052} Y G V R L D ^{0.493} T ^{0.05} P ^{0.027} S S R

R G N F R K I V Q E I R W ^{0.002} T L N I H G ^{0.014} Y G H I K I F V ^{0.002} S G G I D E D D V V K L R D V V D G F G V G ^{0.045} T ^{0.007} S I ^{0.007} S F P Q ^{0.004} S V D F ^{0.004} S A D I V E K ^{0.013} Y V N G Q W I P F ^{0.174} T K R G

K W P G A K Q V ^{0.016} Y R C G D ^{0.004} S P D G D I I ^{0.041} T L L D D ^{0.022} Y P P A N L N C K P L L V K ^{0.005} Y I E N G K I I R D I P ^{0.089} T A K E I R E ^{0.014} Y V I ^{0.006} S Q L K K L P N L

Sequence #494 — Gene Saci 1472

M K I R A L ^{0.054} T I F A ^{0.008} S N I D K D K I E N ^{0.026} Y A N Q L ^{0.005} ^{0.006} S S I N D ^{0.006} S L I W ^{0.016} S K R I A F P P K ^{0.013} S L N E K I I G K I P E N K D I I ^{0.008} ^{0.007} Y S I I H L ^{0.008} S Q K D N L ^{0.004} S L I K D I L ^{0.005} S

V N E N F ^{0.013} ^{0.002} Y G S I L L N N P ^{0.002} ^{0.008} S Y V D N V ^{0.002} S K F I ^{0.027} Y D L E P Q L A ^{0.032} T R V A V L I ^{0.016} Y D D F L ^{0.042} ^{0.047} T T P Y F P V G ^{0.007} S A N ^{0.002} T L I D ^{0.041} S M A I ^{0.003} S L I ^{0.006} Y P R E F L D G N A Q K A L

^{0.008} S V A D E Y ^{0.016} A K K I A ^{0.05} T Q L K L K ^{0.021} Y L G I D V ^{0.008} S L ^{0.019} S P W K E E ^{0.02} S V A E I I E K R ^{0.037} S G K L F ^{0.006} S F G N M ^{0.005} ^{0.011} S T V A E I N K E I F E I A W K L K I ^{0.02} T P I G F ^{0.003} S E V M L P

V A E D N V L I E R V N E G ^{0.009} T L ^{0.005} T L Q G L F L L ^{0.017} ^{0.001} T S V C V A G I D M V V V K K D ^{0.014} Y D L I R K I L K D ^{0.008} S M A L Q I V K R R P ^{0.009} Y G V R L I P ^{0.008} ^{0.141} S T D ^{0.007} S G ^{0.097} Y V ^{0.035} Y L K D Y ^{0.003}

G R I P E I K ^{0.039} T L

Sequence #495 — Gene Saci 1475

M S^{0.013} Q K E F H I F E N T^{0.13} I D L M E G M W P T^{0.081} P L L R L N I G E N V W G K L E F Y N P F S^{0.008} R S^{0.011} I K D R T^{0.097} A L F L F K Q A L R E K T^{0.043} E N I V E A T^{0.043} S^{0.006} G N M G I A M A
A L S^{0.003} S^{0.002} I F N I K F T^{0.029} V F V P T^{0.028} T^{0.069} S^{0.01} P E V F K V M I K L L G S^{0.004} E V I T^{0.042} A G T^{0.014} S^{0.004} T^{0.017} T^{0.082} E I L P L V K K M S^{0.006} Q L G S^{0.006} Y^{0.037} K H L D Q F H N E V N V I A H Y^{0.019} E^{0.013} T^{0.007} T A K E L D
L Q A N A A G I K I R R I I A S^{0.003} M G T^{0.016} A G H I V G I S^{0.004} K Y F K E K Y^{0.072} G D E V E I V G V E P S^{0.029} E G E R I P G I K R V T^{0.22} E D N N F V K I A K I D S^{0.011} V I D V G F K D A
L E G V K E V A R K S^{0.045} G I L V G L S^{0.009} S^{0.01} G A T^{0.062} V A A Y^{0.019} K K L G D T^{0.103} K G A T^{0.082} I L I F P D D A F K Y^{0.007} V E E L K D G L

Sequence #496 — Gene Saci 1479

MKD V Y G R E L E D L R I T L T H A C N F T C F F C H M E G E N D G D S L L S A D Q I S L V A Q I G M E F G I R T V K L T G G E P T L R R D L P E I I S K L K
E V G I K E V S M T T N G Y L L K E L A G K L K D A G L D R V N I S L H S I D P V I F K E V T G V N V L S K V V E G I E E A K K V G L R P L K L N Y V V T R K N
A K G I F E F I N F A S S S N I D E I H L I E L H P V G L G K E A F V T H V D M S D I E G R L N E D C T L V E I R N K H K R P R Y K C G N L V V E V V K P Y A N
P I F C S G C N R I R L T V D G K L K T C L Y R D D K I I D I S D I I K S S Y S T E E K E E L L R E A Y R L A I L I R E P N F R F R Y E T S K T G

Sequence #497 — Gene Saci 1487

MVKRLE^{0.03}YDEFVLDEL^{0.088}RKV^{0.063}SG^{0.011}T^{0.008}KFN^{0.008}SLLD^{0.015}SL^{0.019}LLVPNS^{0.107}R^{0.086}LY^{0.025}IRVNT^{0.201}LK^{0.027}TS^{0.016}PT^{0.021}RI^{0.012}RE^{0.016}RLPFLHEDED^{0.027}FS^{0.021}EAL^{0.023}Y^{0.02}IEIRGP^{0.154}S^{0.012}KL^{0.016}LEE^{0.151}

RE^{0.186}S^{0.282}KVIVDKR^{0.014}TA^{0.023}ES^{0.006}VMMGANV^{0.004}Y^{0.004}RPGVKRVIGN^{0.004}SR^{0.083}FVNVV^{0.011}SENGIIIAE^{0.021}GELVNQGNLAVKI^{0.023}T^{0.02}K^{0.012}SM^{0.016}YS^{0.031}SS^{0.014}Y^{0.014}PL^{0.014}SD^{0.009}LD^{0.027}DELK^{0.009}T^{0.027}YG

EILLQGKA^{0.005}SM^{0.018}Y^{0.011}VAY^{0.056}LIDPKPGEKIIDM^{0.099}TA^{0.086}H^{0.175}PGGKLT^{0.175}HI^{0.175}Y^{0.175}QLEPKARILGFDH^{0.175}T^{0.175}K^{0.175}R^{0.175}K^{0.175}V^{0.175}Q^{0.175}DL^{0.175}R^{0.175}QL^{0.175}T^{0.175}Q^{0.175}RL^{0.175}GM^{0.175}HI^{0.175}E^{0.175}T^{0.175}Y^{0.175}L^{0.175}AD^{0.175}SR^{0.175}Y^{0.175}

L^{0.036}Y^{0.024}EDFRI^{0.006}SD^{0.006}DVDKVLIDPPC^{0.006}S^{0.006}ALGLR^{0.006}PKI^{0.006}Y^{0.006}DKKNKEDLINL^{0.003}SS^{0.003}SY^{0.005}QKQFINAA^{0.001}Y^{0.001}KLLK^{0.001}KDGI^{0.001}L^{0.001}I^{0.001}YS^{0.006}TC^{0.003}TM^{0.066}TEIENERIVEDE

RFELEEII^{0.003}RF^{0.003}Y^{0.003}PMVHDI^{0.062}T^{0.062}GFFIAKLRKRK

Sequence #498 — Gene Saci 1489

M N R D I K A F R W F I R ^{0.027}T Q V L K D P F N P A ^{0.018}Y A ^{0.076}T F K V ^{0.04}T ^{0.002}S R C N L H C ^{0.002}S F C N P ^{0.004}S ^{0.021}Y ^{0.025}Y N G E L G E ^{0.025}S ^{0.02}S ^{0.11}T E K V K K M I D N M R D ^{0.041}S ^{0.071}S I V V L ^{0.007}S F E G G E P

^{0.117}T I R Q D I L E L L E ^{0.014}Y A H D G ^{0.003}S ^{0.011}F Y V M L ^{0.004}T ^{0.01}T N G ^{0.016}Y R L N D E ^{0.004}S F L ^{0.006}S K L A D R I D F L H ^{0.003}Y ^{0.006}S I D E ^{0.033}Y H W N A K A I D N L Q R F R D ^{0.003}Y G L K V N V Q ^{0.012}T V V ^{0.023}T R

^{0.004}Y N L H K L E E K V R K V H E C Q ^{0.013}Y K I V I L P A I D ^{0.022}Y P G ^{0.012}S K V K L E P D P N E L ^{0.046}Y K V L ^{0.024}S E L K R K ^{0.003}Y G P ^{0.076}T I N N ^{0.008}T W G F I N A L V G K ^{0.001}S A P ^{0.05}T R V V ^{0.011}S ^{0.015}Y A

^{0.042}I ^{0.022}T V ^{0.002}Y P N G E I P Y P D D I N G K I V G N L V E E K L Q D I L K K Q I V K E L Q K D M L N N Q A K F E ^{0.011}Y L H L Q ^{0.038}T ^{0.007}Y ^{0.003}S F N ^{0.003}S I K D L A ^{0.004}S ^{0.015}Y V N E M L K W R F L

G R A

Sequence #499 — Gene Saci 1490

M R L Q L E G D A N S D D P Y N K F I L T L N L A G A S E N T I R L Y S I A I K D F L D F V K K D P R Q V T N S D V N A W L L K I L K S S S T R S K R V R E E N E
K R R M K L T T A K I Y L T A V L R F L K W L G K D V K P T V P K A R K N E I R A L T Y E E L E K L K A S A K K L R D A V I L N L L I D T G I R A K E L L S I K
V Q D I D L E R R R I I I R N T K N G E S R I V F F T S H T G A L L K K Y I Q K N K K E P E D K L I N M T Y Q A L Y R K L R R L G K K I G I D L R P H I L R H T
F A T E A I R K G I P L P V V Q K I L G H K D I R V T Q V Y T H L V I E D V E K A Y K N T F G

Sequence #500 — Gene Saci 1493

M I V ^{0.011}S I E ^{0.007}S K E D L I F P D ^{0.002}S C I V W I ^{0.003}T K I N D K L L V N ^{0.004}S D A I L ^{0.004}S P Q I E I ^{0.009}Y P D I R L N G K W V V ^{0.012}Y D G ^{0.017}Y K V ^{0.055}T E I D E N G N K K I L K N ^{0.01}S I E D K V
V R ^{0.004}Y V ^{0.003}Y A E D G L I P I ^{0.008}Y K ^{0.005}S F L G F ^{0.007}T F G N E K F D E ^{0.015}Y K ^{0.009}S K ^{0.008}Y G F I M L L N G K R A R V I L P ^{0.041}Y G Q F V D V E H P K F ^{0.005}Y K I F R D H V D L I ^{0.042}Y D N E ^{0.029}T L I
I ^{0.005}Y R D G R R E R ^{0.001}Y K G E K ^{0.016}Y L I A L ^{0.028}T ^{0.008}S V G R V F L ^{0.002}S P N G R I L L D ^{0.006}S ^{0.009}S A ^{0.064}Y D L M G I C ^{0.01}T E D M E F I G E ^{0.029}T R N G I I I ^{0.002}S C G N K L K ^{0.005}S F ^{0.001}Y R G G W ^{0.009}S ^{0.001}Y I G
S ^{0.005}F ^{0.002}S ^{0.008}Y L P V I D A D ^{0.028}Y N H I ^{0.001}S I N D G N V V N V ^{0.005}Y E L D ^{0.009}S D K ^{0.01}S ^{0.008}S K L F N V R A L K F K D G K I I L I ^{0.006}S K ^{0.015}S G ^{0.092}T V F K L ^{0.015}S F ^{0.013}S K D ^{0.107}T D F L K I I N D K N ^{0.006}S A E
L P ^{0.003}Y I I R I D K K I A ^{0.017}S D F ^{0.014}S L ^{0.008}S K N L I D V E K V A D G D G F V L K L E P F K L ^{0.013}S N E ^{0.076}T E G ^{0.022}S I ^{0.2}T F K E E I F E ^{0.024}Y Q F P L K V F ^{0.008}S D L P D I E V E ^{0.011}S G H I I
M A K N G H L K ^{0.113}T D P ^{0.016}S ^{0.018}S N A I L K L K M R F K I P ^{0.043}S L L R K ^{0.083}S I L I D V G N K K ^{0.11}T K V D L D R ^{0.064}S V G E L D L ^{0.03}S I P F F K L ^{0.017}S L D E E V V K I ^{0.081}S V L R D N R V E
L K K E F I V K ^{0.083}T N L K M M ^{0.011}S K N ^{0.023}S K K ^{0.175}T ^{0.032}S ^{0.076}Y A V I Q D M ^{0.011}S K R ^{0.268}T ^{0.019}Y K V ^{0.025}Y N D D L F ^{0.008}S W E E F ^{0.014}S E E P N I ^{0.029}Y E N I ^{0.01}Y ^{0.028}Y A K V G D K L Q I E D K I I E V K D G L N
Q V K V E R P N ^{0.017}Y ^{0.004}S R ^{0.015}T ^{0.015}Y F I ^{0.026}Y G V ^{0.003}S N P L R D L K V ^{0.014}T L K E ^{0.02}S D V I F D L V K D E D ^{0.006}S V V ^{0.017}T V I ^{0.012}Y G ^{0.043}T N ^{0.004}Y V ^{0.023}T ^{0.029}T K N N K I K F ^{0.003}S I D P A ^{0.008}Y N ^{0.025}T I I I R ^{0.009}S ^{0.001}Y K E
G I R F E ^{0.049}T ^{0.001}S ^{0.051}Y M L V D F F R N C M L K A V V N A K ^{0.003}Y L A Q Q L F L E

Sequence #501 — Gene Saci 1494

MDQVLA EY FVGPVKVRL **TR** ^{0.031} **S** ^{0.382} **SKGICN** **Y** ^{0.009} **EIEEP** **S** ^{0.075} **F** ^{0.071} **S** **DFEE** **S** ^{0.07} **LKEKVL** **S** ^{0.052} **EI** **Y** ^{0.012} **Y** ^{0.046} **S** ^{0.022} **SK** **S** ^{0.025} **TD** ^{0.346} **DFEDKVLRLRLKELGVNDENVEKIL** **Y** ^{0.002} **S** ^{0.008}

IKKQIL **Y** ^{0.013} **NEI** **T** ^{0.089} **PLLLDPDIEEIECLG** **Y** ^{0.017} **GNPI** **T** ^{0.089} **VVHRKFPE** **C** ^{0.009} **IRF** **Y** ^{0.121} **NIKLNDEE** **T** ^{0.048} **VVRIIEKLA** **S** ^{0.005} **KANK** **S** ^{0.007} **VNIARPY** ^{0.015} **VEF**

^{0.01} **S** **L** **P** **E** **G** **H** **R** **V** **A** **A** **T** ^{0.096} **I** ^{0.011} **S** **K** **E** **I** **S** ^{0.015} **L** **P** **G** **S** ^{0.017} **T** ^{0.033} **F** **D** **I** **R** **K** **F** **P** **L** **K** **P** **L** **N** **I** **L** **E** **V** **I** **N** **S** ^{0.002} **S** ^{0.001} **M** **L** **N** **E** **L** **I** **T** ^{0.014} **A** **Y** ^{0.002} **L** **W** **L** **L** **L** **E** **Y** **R** **P** **F** **I** **I** **L** **G** **P** **T** ^{0.016} **G** ^{0.004} **S** **G** **K** **T** ^{0.005} **T** ^{0.021} **L** **L** **N** **A** **L**

N **L** **V** **N** **P** **H** **Y** ^{0.004} **K** **I** **L** **T** ^{0.048} **I** **E** **D** **T** ^{0.014} **S** ^{0.002} **E** **I** **S** ^{0.002} **L** **L** **N** **K** **N** **W** **V** **R** **F** **I** **A** **R** **S** ^{0.005} **T** ^{0.031} **L** **L** **S** ^{0.01} **E** **F** **E** **I** **S** ^{0.022} **I** ^{0.009} **S** **D** **L** **A** **K** **L** **A** **L** **R** **Y** ^{0.001} **R** **P** **D** **Y** ^{0.064} **M** **I** **G** **E** **V** **R** **G** **K** **E** **I** **E** **A** **L** **V** **H** **A** **A** **S** ^{0.004} **G** **H** **G** **S** ^{0.007}

^{0.045} **I** ^{0.062} **T** **F** **H** **G** **S** ^{0.004} **R** **P** **I** **D** **A** **V** **T** ^{0.023} **R** **I** ^{0.029} **T** **D** **L** **L** **S** ^{0.003} **G** **D** **L** **A** **K** **L** **F** **L** **Q** **T** ^{0.008} **I** **W** **N** **F** **I** **I** **V** **G** **N** **R** **K** **E** **G** **N** **K** **T** ^{0.05} **V** **R** **S** ^{0.008} **V** **L** **D** **I** **Y** ^{0.021} **E** **I** **I** **N** **K** **G** **S** ^{0.007} **K** **K** **I** **T** ^{0.058} **F** **K** **K** **I** **F** **E** **W** **S** ^{0.003} **Y** ^{0.008} **Q** **N** **N** **N** **F**

I **P** **Q** **N** **V** **S** ^{0.006} **E** **I** **I** **K** **R** **S** ^{0.028} **Y** ^{0.001} **R** **L** **K** **R** **I** **K** **E** **I** **Y** ^{0.008} **N** **V** **D** **V** **E** **S** ^{0.013} **E** **L** ^{0.284} **T** **R** **R** **L** **D** **F** **I** **K** **R** **L** **K** **E** **N** **G** **I** **R** **D** **S** ^{0.068} **E** ^{0.019} **S** **I** **Q** **G** **S** ^{0.01} **L** ^{0.013} **Y** ^{0.013} **Q** **F** **Y** **F** **G** **D** **Q** **V** **E** **N** **I** **S** ^{0.005} **M**

Sequence #502 — Gene Saci 1497

M D I A N Q L Y M K L R E E Y K I D Q K E F I S S Y I C G K T R N V F A T I L A T I L S Q N S T D K S A L I A F S K L N E T V G E I T P D R I K H A D I N T I I
D A I R V A G L G N S K A R Y I K N V A E V I N D L D L N I E I D C Q K L R D F L T A I E G I G D K T A D V V L L T C F R C R E F P I D T H I R R V I S R L G F
L G S S P K Y K D I S E Y F K T R F S S E D L L N L H H L L I A H G R K T C K S R K P I C D K C V I R D Y C K Y Y L D N I K N

0.025
0.003
0.004
0.002
0.005
0.052
0.01
0.012
0.003
0.006
0.044
0.008
0.002
0.017
0.088
0.029
0.016
0.024
0.081
0.037
0.016
0.081
0.026
0.035
0.073
0.029
0.024
0.233
0.016
0.002
0.001
0.002

Sequence #503 — Gene Saci 1498

M ^{0.005}S ^{0.081}N ^{0.008}Y Q L E W V ^{0.004}S P K Q L R P H E D V I L ^{0.007}S I V N E N I E I L R K D N ^{0.014}S ^{0.014}M A P I I V D K N ^{0.004}S ^{0.004}M V I L D G H H R ^{0.014}Y ^{0.014}Y A ^{0.002}S ^{0.004}L ^{0.004}S L G L P K I P A I M I D ^{0.024}Y ^{0.005}N ^{0.005}S E Q V

E V R E W N R I I A P D ^{0.016}S ^{0.036}S I R D F L R V F R ^{0.01}S ^{0.03}S V D G K ^{0.013}Y C V ^{0.013}S ^{0.003}Y K ^{0.009}S D V V F C D D N I ^{0.016}Y ^{0.002}S ^{0.003}L Y W K E E A I E Q L L ^{0.002}S ^{0.006}R M G ^{0.006}Y N V V K ^{0.166}T A D Q E A ^{0.017}T ^{0.005}I ^{0.005}S I P P

V P K N V V I D F ^{0.005}S ^{0.081}Y K G L R F P P K ^{0.011}S ^{0.069}T R H I ^{0.007}Y ^{0.01}H F Y I P K Q R I I L Q W D

Sequence #504 — Gene Saci 1500

MDIN^{0.074}TLLN^{0.27}TPDEDVLSL^{0.004}FT^{0.105}PQVARWFKEKY^{0.015}KVF^{0.298}TP^{0.008}PPQKGAIPLIKKGKNVLV^{0.007}SS^{0.011}PT^{0.027}GS^{0.015}GK^{0.037}T^{0.031}LAAFLGILD^{0.004}T^{0.001}LIDLY^{0.008}KNE
 LNKQI^{0.001}Y^{0.002}AI^{0.005}Y^{0.004}ISPLRALNNDMRRNLI^{0.174}EPL^{0.008}T^{0.024}ELRNLY^{0.094}PD^{0.045}LPEI^{0.292}SS^{0.039}IGV^{0.043}RT^{0.108}SD^{0.007}TS^{0.011}SEKQKMLKKPPHILI^{0.083}T^{0.104}U^{0.014}PE^{0.014}SS^{0.01}FGI^{0.008}SLV^{0.008}SSP
 KFREKL^{0.011}SDVKWVIVDEIHELANS^{0.004}SKRGAY^{0.004}LAGLLELY^{0.002}KS^{0.002}FIAKNNFVRIGLSA^{0.002}TI^{0.025}S^{0.008}PLEEVAKFLVGGNGD^{0.129}YEI^{0.008}IDARFVK
 P^{0.045}TDI^{0.004}QVV^{0.029}SPVKDLVHAT^{0.019}EEEVNIGI^{0.003}YS^{0.008}YLVDEIKKHK^{0.009}TT^{0.083}LIF^{0.023}T^{0.041}NRHAAERVA^{0.022}Y^{0.008}KLRKMFEDQNI^{0.008}FD^{0.008}SSDLVAAHHS^{0.019}SS^{0.045}LS^{0.025}SR
 DVRLEVEEK^{0.017}LK^{0.016}RGEL^{0.085}KVVV^{0.012}SS^{0.023}LELGIDIG^{0.023}Y^{0.026}IDLV^{0.013}TLL^{0.015}SS^{0.027}PK^{0.022}SS^{0.027}VRLLQ^{0.022}RVGRAGHHIREV^{0.03}SKGRVVV^{0.008}DRDDL^{0.005}VECT^{0.019}V
 LAKLAIDRKIDNIHVPENPLDVL^{0.009}T^{0.002}QLIVAA^{0.046}SLI^{0.014}TP^{0.003}IEKDKLY^{0.003}E^{0.004}EIKNV^{0.012}YNFR^{0.008}SL^{0.1}SY^{0.008}DE^{0.008}Y^{0.008}NNVAE^{0.008}Y^{0.005}LAGN^{0.003}Y^{0.003}GLD^{0.061}SS^{0.015}NKV^{0.008}Y^{0.008}AK
 IRIKDGMI^{0.027}SPKRG^{0.079}RMIFFLN^{0.003}SG^{0.254}TI^{0.085}PDEAMIPVKMENG^{0.035}Y^{0.016}VGNLEEEFVEILAPGDIFVLAGK^{0.023}TY^{0.016}EFIR^{0.01}SEG^{0.01}NS^{0.005}VI^{0.008}VKK^{0.014}SS^{0.005}
 EGQRP^{0.123}VP^{0.014}SW^{0.007}SEMPLAFD^{0.014}SAIEIGKFRGKIAEAIMNEVPKDEVI^{0.016}SS^{0.023}IM^{0.016}SE^{0.01}YNL^{0.01}SRFAAL^{0.005}SI^{0.008}Y^{0.014}NY^{0.005}VKEELLF^{0.005}TGGIVP^{0.005}TT^{0.059}
 DKLLIEV^{0.027}YDDDDQNRNFI^{0.006}FHGL^{0.326}YGR^{0.007}TV^{0.005}DAL^{0.002}SRAIA^{0.005}Y^{0.002}II^{0.035}SKDLNMDVRIA^{0.031}IT^{0.031}DNGFAIT^{0.053}VP^{0.007}GKQE^{0.007}YEI^{0.007}SKVFDKLEPK
 M^{0.105}YEIL^{0.02}SDVIL^{0.051}RT^{0.055}EMIKRRFRHCAER^{0.014}SS^{0.292}FML^{0.078}LKR^{0.078}Y^{0.005}KGRE^{0.005}TS^{0.005}IDRRQINS^{0.005}EVLLGVVRQIEHFV^{0.109}LKE^{0.046}TVREILED^{0.046}YMDIKRA
 IEIVEKIRNGDIKVA^{0.071}T^{0.002}IGPNQVP^{0.002}SPFAHNILVKQ^{0.03}Y^{0.041}TDV^{0.041}VLAEDKRELLKELHNKVIEFLRNKGIDIDLE^{0.005}Y^{0.039}TEAGIK

Sequence #505 — Gene Saci 1502

M Q N L S S S Q R E I L L A L I D I Y N K N K R M V K S K E I A D M I G K D E G T V R N V I L S L K V L G L I E S K P G P S G G Y V P T L K A Y E A I K N P V I
T P L L S Q L T L Y K D G M E T D I R I N N I E I L D I T N P N G N K V L L K V S G D L R K I K V G D T V K I G P I P Y T R L V I E G V I I H T D D E R K E L V
I D V T R M V S I P K V Q V K N I M G K R L V A L K P E N T L R D A S Q I L Y K E G I R G A P V L D N E G K N L G I L T T A D I I K A F F E Q R Y D A K V S D Y
M K T N V I S I S E D D D V L T A I K K M L I Y N V G R L L V L N K D Q R V I G I V T R T D I L K T I A G L E E I I T L

Sequence #506 — Gene Saci 1503

MVKEIYRERVRVLTELWGS LVEKYTHL TREVLVDLLKESYE TNDIKPIRGFKAEDLYEKELISLYVVGKEGLGLFNDYKE
VFEKLLMPEIVIDRAS EIL IENKPIEAFELLQKDKGSLAKVLRRLIFIQGIF SFKPEENLYIAMRNLDFTNIDEMKH TAVS
FARFY TAFKVAEGIAEK TIKDKMNAEAFKRALAISIGIKYPLPKPEYISLIGKEVFNIDQKLLKKVLG

Sequence #507 — Gene Saci 1504

M S^{0.038} A V T^{0.16} E D G L K P T^{0.27} I V L V S^{0.012} A S^{0.04} E L E E E V K K L S^{0.043} D K V N N L V T^{0.149} S^{0.018} R A Q N E E L K T^{0.038} E I N N I K S^{0.006} L I S^{0.005} W L S^{0.015} I A R S^{0.007} Q G I W K A K T^{0.117} C K H S^{0.003} V N E
K C N A W N I S^{0.005} D P E K L G I P Q E Y^{0.035} V S^{0.021} E G E N G S^{0.009} K K V L V G K F S^{0.004} E I C I T^{0.047} C P L Y^{0.004} D P K G R

Sequence #508 — Gene Saci 1505

M R I I H N L **S** K D A R A K I I E I L L E N R **S** K K E L A E E L E I **S** P A A V **T** K F V N G I **T** H P **S** D D **T** I E K A I E I A D D E E K R E I L N I I D D I M I **S**
V E E L V N E **Y** K L V D K K V E K I K K I L N **T** I **T** **Y** P

The image shows a sequence alignment visualization. The top line contains the amino acid sequence: M R I I H N L S K D A R A K I I E I L L E N R S K K E L A E E L E I S P A A V T K F V N G I T H P S D D T I E K A I E I A D D E E K R E I L N I I D D I M I S. The bottom line contains: V E E L V N E Y K L V D K K V E K I K K I L N T I T Y P. Vertical p-values are placed above and below the sequences. Above the top sequence, p-values are: 0.007 (above S), 0.072 (above S), 0.025 (above S), 0.025 (above T), 0.085 (above T), 0.014 (above S), 0.361 (above T), and 0.011 (above S). Below the top sequence, p-values are: 0.013 (below S), 0.04 (below S), 0.052 (below T), and 0.001 (below Y). A blue circle highlights the 'T' at position 14 of the top sequence.

Sequence #509 — Gene Saci 1510

M P T I V S Y K W T L I N N L K I S D N Q L E E L L F K L K S E V K P I D A D H V E I E V N N D R P D L F F P Y G I I R A A K G I L G K E L G E P K Y D I K Q S
V S F E V K E V K S R P Y A V A G I V K D I K L D D E S L R E L I Q F Q E K L H I T V G R K R K K V A I G I H D L D K I T S T K I Y Y K P L P L D Y K F I P L
N Q S K L M T I K E V I E Q T P Q G R E Y G N I S I Y D G L S P A I V E E N G D V L S I P P I I N S D K T R I D E K T R N I F I D V T G T S F E A V S S T L D I
L V T D L A E M G G K I E L L N F I S P S K F E F S P L L R R Y T V S V S A N Y I S K N L G I N L S L N E I E K Y L R M A R F D T K V L N D V V E V T V P P Y R
V D I L S Q I D L V E E I A M T I G Y D K L S P K D Y T I K A T G K L S A E T E L I R T L R D L S I G A G F S E I F T F I L S N D K R L R N E Y V S I V N P V T
V E Y N A V R N S L I P T L L N F L K Y N Q H A I M P V Y V F E I G D V V I K D K R T D T G Y K N S L R A V Y G I M N S K V N Y E D L Q S R V H Q I L M S L D I
E P T Y K T Y L D D M F I P G R G A K I I D T S K S V E I G V I G E I N P V L L E E L E I E F P V V I S E I Y L D S L V K R

Sequence #510 — Gene Saci 1511

M L ^{0.026} S E N E I K I L ^{0.025} S ^{0.009} Y L K L K K K A N A E E I ^{0.023} S K E L G L P L ^{0.027} S ^{0.038} S I F ^{0.024} S L A K L L E E K G ^{0.028} Y V K I G E R K I I R F E L ^{0.218} T E E G K K R L K E G F P E E I L L K E
 L N G Q P ^{0.023} S L I E D L K N K M G K D L E I A I ^{0.017} S W A R K K N L V K I D Q N R V I P N ^{0.142} T ^{0.007} S ^{0.084} N ^{0.058} Y ^{0.016} T ^{0.094} F ^{0.016} S ^{0.071} T E K E A L L K P E ^{0.076} S A D E K V L Q E L L ^{0.076} S R K L I ^{0.25} T R K E E
^{0.08} S K L E I ^{0.021} T L L K E E F E E Q N ^{0.029} Y ^{0.011} I ^{0.075} T ^{0.006} Q L ^{0.018} S E L L R ^{0.025} S K D W K K ^{0.005} Y K I R E ^{0.065} Y N V E A L P P ^{0.018} Y F P L A K K H F F R D F I E K L K D V M K E L G F ^{0.02} T E V N A G ^{0.02} Y I
 E M E L ^{0.005} Y N F D L L F Q A Q D H P A R E I H D ^{0.018} S F R V D G L G K I D D E R L L K E I K E M H E K G W K ^{0.007} Y ^{0.01} S W D P Q I A K R L V L R ^{0.007} S Q ^{0.113} T ^{0.025} T A V ^{0.069} T A R I L ^{0.061} S ^{0.014} S R P
^{0.042} S V P F K G F ^{0.012} S L G K V F R P D ^{0.034} S I D A ^{0.011} T H L I E F H Q L D G V I I Q K E F ^{0.003} S ^{0.008} F T D L L G I L R E I F ^{0.002} Y K I G I K E I K F K P G ^{0.006} Y F P F ^{0.134} T E P ^{0.014} S V E V ^{0.091} Y G K I E
 G L G W V E M ^{0.006} S G A G L L R P E I L K A M D I D A N A G A W G I G I D R L A M L L F G L K D I R L L ^{0.001} Y A N D I D F L R K M K V R L

Sequence #511 — Gene Saci 1514

M Y A I V L A Q Q S S S T S E F G S A Y Y F I T Y I L F F A V I I L T A L P G V Q I R L Q M Y W A S M D I E R G L T R V K R V L D S T V S K T K Q I L E K N G A
S N S D E I T R K F S D M F T I D P V N V E P T D I I S R M R L L L R S T E D K I K Q V I N V S I P T I D P M N R S K I Q V S A E I V N T V N I I Y K V I R H Y
L L L G R K L Q N Y Y L L L Q L Q M I V P M L V R M A E T Y E K A L D V F L Q G V P V G D S L G P L V A S R F L M N V S E K W S P S R E M I A G T T V Y E G R R
L V I L K A E G P M A T V G T P G E A V E N V I G K L N G S V S R I I T V D A A K L E G E E T G E I A E G T G V A M G D P G P E K I A I E R V A V K Y N I P I
D A V I V K M S M E E A I T A M P Q K V Y E A A D K V V E M I K R M I M E R T K P G D T I I L V G V G N T V G V A Q

Sequence #512 — Gene Saci 1523

MKLVKRNGKWLVIKN **T** 0.07 EKNSD **T** 0.064 **T** 0.026 **T** 0.149 PNPARNARI **S** 0.026 **S** 0.007 **T** 0.047 **T** 0.072 YPGKR **S** 0.024 **S** 0.009 **T** 0.313 **S** 0.004
 AEVIN **Y** 0.007 EKRVEND **S** 0.016 **S** 0.01 IEY **P** 0.01 NPK **Y** 0.002 LK **Y** 0.001 KDK **T** 0.13 LECIKDCEGALDEI **S** 0.017 **T** 0.126 **Y** 0.02 RHP **S** 0.04 **S** 0.02 SEIINAMDEL **T** 0.268 **S** 0.025 **T** 0.109 **S** 0.004 **T** 0.217
T 0.283 DDKARGI **Y** 0.014 EVLKRDP **I** 0.101 **T** 0.086 IILRL **T** 0.002 EEEVKGIKGNKVKLA **T** 0.014 **S** 0.008 **S** 0.015 **T** 0.108 **T** 0.005 **S** 0.002 **S** 0.007 **Y** 0.007 **S** 0.02 **S** 0.019 **S** 0.016 **S** 0.021
 GLFFDHKE **Y** 0.01 NK **S** 0.004 SKFLLFGR **I** 0.087 **T** 0.002 EKALGYFKDIND **Y** 0.019 DGALI **Y** 0.004 VEQIDNI **S** 0.005 **S** 0.013 **S** 0.012 **S** 0.012 **S** 0.011 **S** 0.089 **T** 0.089 **T** 0.113 **T** 0.047
S 0.011 **S** 0.008 **T** 0.06 **S** 0.015 **S** 0.017 **S** 0.027 **S** 0.018 **S** 0.03 **S** 0.053 **S** 0.041 **S** 0.031 **S** 0.022 **S** 0.018 **S** 0.003
 KRVD **T** 0.047 LERIGGNNVLR **T** 0.059 **S** 0.007 **S** 0.003 **S** 0.008 **T** 0.08 **T** 0.028 **Y** 0.001 **S** 0.002 **S** 0.042 **T** 0.004 **S** 0.022 **S** 0.018 **S** 0.008 **T** 0.069 **S** 0.014
T 0.151 **T** 0.03 **T** 0.021 **T** 0.009 **S** 0.013 **S** 0.006 **T** 0.064 **T** 0.09 **T** 0.356
 FREPD **S** 0.097 **T** 0.81 **S** 0.095 **S** 0.039 **S** 0.029 **S** 0.013 **S** 0.01 **S** 0.015 **T** 0.148 **T** 0.108
S 0.176 **S** 0.096 **S** 0.123 **S** 0.07 **S** 0.009 **S** 0.029

Sequence #513 — Gene Saci 1524

M V K I G L **S** K R D K K G N **S** E K K R V K **Y** V **Y** A **T** K G A I F I V **T** G E L K E **S** K **Y** **S** **Y** A V E I R P L **Y** G K F **Y** D A K E K K **T** **Y** N A E E L R E **Y** K V **Y** L N V R K

E M E E L V D A L K R G K P V L W G **Y** D D D E F I Q I P K D V L G G E K E

0.094
0.03
0.014
0.013
0.046
0.043
0.008
0.041
0.012
0.023
0.011
0.018
0.189
0.055
0.087
0.043

Sequence #514 — Gene Saci 1525

M E W I E H L **T** P K E R E V V **T** D F V F **S** N V K L **S** M K E M A Q A L G V **T** A M A V **S** K L R R H Q I R P **S** D E **T** L K R M **V** **S** I L D D K K K V E L L L N V R R M **Y** E


D I L K E I D Q E L G K L G **Y** A R G D L **S** G Q D R **S** I

Sequence #515 — Gene Saci 1528

M E R E F E V **Y** L N N **Y** D I V K K L C W K V I R E **S** E K G **Y** L **T** **Y** N E L L R R V V E L D D **T** G L V R A K **S** L A W L K K K V G Q L L R D G H L V R F M V R G N W K

Y V **Y** **Y** **T** **T** P K R W R E G I **S** **S** I E G V I R V D **Y** G E N K R G K M K W A I K E **S** L K V Q A K K

0.019 0.023 0.015 0.02 0.051 0.016 0.085 0.02 0.005 0.011 0.046 0.015 0.005 0.021 0.03 0.046 0.302 0.005



Sequence #516 — Gene Saci 1536

M L D C I E V D G L I K F ^{0.002}Y ^{0.005}G ^{0.004}S F K A L D G L A F ^{0.004}Y I K C G E K V A L L G P N G A G K ^{0.028}T ^{0.046}T ^{0.079}T L R I L A G L L R P N E G I V K I K G F D I ^{0.004}S K N P R E A K ^{0.01}S N I G
F L P E D A V P F L N L ^{0.014}T V R E N L E ^{0.012}Y V G I L R N I N N L K E R I N H L L D V L E L W E ^{0.003}Y E R K ^{0.152}T V ^{0.006}S ^{0.022}S L ^{0.009}S R G N R Q K V A L A M A I I H E P A I L L D E P
L N ^{0.039}Y L D I P ^{0.064}T Q E R V I N L L N ^{0.002}S M N ^{0.004}S ^{0.026}T M L V ^{0.003}S ^{0.016}T H I M ^{0.005}S I A E R L ^{0.017}T N K I I L I ^{0.032}T K G K V I W Q G G M ^{0.023}T E L K K L A G E N E R I E Q V V A R L I G D ^{0.01}S L

Sequence #517 — Gene Saci 1537

M S K Q A T L F D F S I K K N E S K E Q T N Q E S V E V P K Q T A N R T K I E W I K E A E D G K V Y F L L Q V D Y D G K K S R A V C K L Y D K E G K K I Y I M Q
 D E S G H K P Y F L T D I D P D K V N K I T K V V R D P S F D H L E L I N K V D P Y T G K K I R L T K I V V K D P L A V R R M R S S L P K A Y E A H I K Y Y N N
 Y V Y D N G L I P G L I Y K V N K G K L T Q L N P E L K G E E I N E I K K A F A D A D E M T K E T V N D W I P I L E T E V P D I K R V S L D I E V Y T P N R G R
 I P D P E R A E F P I I S V A L A G N D G S K I V L A L K R E D V N S D F S K K D G V Q V E I F D S E K K L L A R L F E I I R E Y P M L L T F N G D D F D I P Y
 I Y F R A L R L N F S P E E V P L D V V S G E G K F L A G I H I D L Y K F F F N R A V R I Y A F E G K Y S E Y S L D A V A T A L L G I S K V K L D T F I S F L D
 I D K L I E Y N L R D A E I T L K L T T F N N N L V L K L M V L L A R I S K L G L E E L T R T E V S T W I K N L Y Y W E H R K R N W L I P L K E E I L V R S N Q
 V K T A A V I K G K K Y K G A V V I D P P A G V Y F N V V L D F A S L Y P S I I K N W N I S Y E T I D I D E C T K K V W V E D E T G E K L H Y V C M D K P G I
 T A V I T G L I R D F R V K V Y K K K A K Y S N I S E E Q R S L Y D V V Q R A M K V F I N A T Y G V F G A E N F P L Y A P A V A E S V T A I G R Y I I T T Y K
 Q A E K L N L K V I Y G D T D S L F L Y N P T K D K L E E L I K F V K Q N F N L D L E V D K S Y K Y V A F S G L K K N Y F G V Y P D G K T E I K G M L A K K R N
 T P E F I K K E F A E I K N M L A S L N S P N D I P E V K N K L E I K I K D I Y N K L R N K G Y N L D D L A F R I M L S K P L D S Y T K N T P Q H V K A G L Q L
 R A F G V N V L P R D V I M F V K V K S K D G V K P I Q L A K I S E I D I E K Y V E T L R T T F E Q I L K A F G I S W D E I V S T I S I D S F F G S K K

Sequence #518 — Gene Saci 1541

M L **T** R I R K Q **S** K K I L L P I A R A L I K I K I N A N **T** I **T** F V G L I L **S** L I **Y** L I V L V F F K N P I L G L V L L L L **S** G F M D A I D G E V A R L **S** **G** **S** A G **S**
K G **S** F L D **S** **S** L D R I E D M N **Y** I L G L L G L G F P **S** L L V G L L I G I **S** I **T** I **S** **Y** L R A K A E **S** L G L K K I E G R G L I E R G E R I I I L F V I L L V **S** I F
S V L I **S** L **Y** I A **Y** I F L I L **S** I V **T** V I Q R F I **Y** I **Y** F N L **S**

Sequence #519 — Gene Saci 1545

M V R A E I I T K D N V N E V V S K L L K L G T F E P D D P K V P I S Q N R L E D A R R I L G E I N D K I A R L I L L M E A S E I A V E P K G N L K Q D K Q D
 W I E I A R I Y T S E A S K I E E K Y R E L L E E I Q K L K S E R D S L K L K L D E L E P F K D V D I D L K K I Y A N T Y F D V A L A I L N R Q Q I E E L K K R
 G F E V I S Y Q S N N F Y P S L I I G L K G T G L N E T L K E L G I K R L E T Q D L V S P S Q Q Y K T I M D R I N Y I D G V L G A K R K E L R E K A N E D K E W
 I Q S T Y G K L L T L R D S M L V L S K A K I S D Y F I Q I E G Y V L E K S T K Q L T N S L K D S A V V V Y E Y P K R F G E Q E E P P T Y V N L P K S I R P L E
 S I I E L Y G T P S Y W E I S P T L F L I I T F P L I F G L M F P D L G N A I I L L I F A V W F H N Y G K K R N S E S I R Y L S L V L I Y S S I I A A I T G I L
 A R E F F G P L A V G G L R E L L N N P S Y P V G P L Y N I W P I S E S V Y E K I A P I L P T S G E T G I V N T I I I S L L L G S I L L F V S S I L G V I N T I
 K K K D Y E Y L V L D R L P L L L I Y T P P L I V F S Y G F T N I S N Y T L Q I Q E L L G G I E Y F I F H S G S P A P G T T Q I L A T S L V I W V E L A L I Y N
 W I G K I I I L R K H E K V S I G N A I V T G F I E G A F E A G I L L S N V I S F I R I L I F A I A H Y Y I L F A F S F M G Y L A A G S P N S L L A V F I N P
 A S I A I I I V G N L L A I A L E G L V V F I Q D M R L H F Y E M F S K F Y E G R G R K F N P V K T Y V E L P

Sequence #520 — Gene Saci 1546

M G K V I V I G D K **Y** **T** V N L F K L I G **T** E G I I L E D P L E L E N **T** L L K I R K R E D V D L V L V **T** N D **T** **V** **T** P V K E K V D N L I L E Q K K P L I **T** V I P **S** P

F **S** E A K P V D V K G L I L K **S** L G F G

0.003 0.012 0.01 0.013 0.083 0.024 0.067 0.149 0.089 0.008

Sequence #521 — Gene Saci 1549

M I K G P L M A I E G V T D A A Y N E L I E V E M P D G S K R R G I V V D S Q S G V A I V Q V F E G T T G V S P T Q S K V R F L G R G L E V K I S E E M L G R I
F T P L G E P L D N G P Q V L S G E K R D I N G S P L N P S V R E Y P E E F I Q T G V S A I D G L T S L L R G Q K L P I F S G S G L P A N Q L A A Q I A K Q A T
V R G E E S N F A V V F A A I G I R Y D E A L F F R R F F E E T G A I N R V A M F V T L A N D P P S L K I L T P K T A L T L A E Y L A Y E K D M H I L A I L I D
M T N Y C E A L R E L S A S K E E V P G R G G Y P G Y M Y T D L A V T Y E R A G K V R G K K G S I T Q M P I L T M P N D D I T H P I P D L T G Y I T E G Q I V L
D R S L F N K G I Y P P I N V L A S L S R L M R D G I G E G K T R D D H K D L S N Q L F A A Y A R A Q D I R G L A A I I G E D S L S D V D R K Y L L F A E Q F E
R K F I N Q G I N E N R D I E T T L D I G W E V I S M L P E S E I S L I R T E Y I K K Y H P N Y R V K K

Sequence #522 — Gene Saci 1553

MKL ^{0.091} **T** REK WENN **F** ^{0.002} **S** EWF D W V I R E A E I ^{0.028} **Y** D ^{0.039} **Y** G R ^{0.002} **Y** P V K G M G V W L P ^{0.003} **Y** G F K I R Q A A V D L I R K L L D A K G H E E V L F P L L V P E D L L R R E
 G E H I K G F E ^{0.018} **S** E V F W V ^{0.075} **T** K G G E E N L D I R L A L R P ^{0.061} **T** ^{0.021} **S** E ^{0.025} **T** A I ^{0.107} **T** ^{0.042} **Y** M E ^{0.015} **T** ^{0.04} **Y** W V Q ^{0.003} **S** ^{0.014} **Y** K Q L P K K ^{0.019} **Y** ^{0.032} **Y** Q I V ^{0.005} **S** V F R ^{0.005} **Y** E ^{0.237} **T** K A ^{0.052} **T** R P M I R L R E V ^{0.025} **S** ^{0.104} **T** F
 K E A H ^{0.145} **T** L H E ^{0.041} **T** ^{0.07} **Y** E D A E R Q V K E A I E I ^{0.028} **Y** K N F F E E L G I P ^{0.005} **Y** I M ^{0.011} **S** Q R P E W D K F A G A I ^{0.037} **Y** ^{0.036} **T** I A F D ^{0.052} **T** I M P D ^{0.002} **S** R V L Q I G ^{0.023} **T** V H H L G Q H F ^{0.021} **T** K A
 F D L K V Q R K D G ^{0.138} **T** L D ^{0.019} **Y** P H Q ^{0.059} **T** ^{0.005} **S** ^{0.042} **Y** G I ^{0.004} **S** D R V I A V A V ^{0.003} **S** I N G D D H G ^{0.03} **T** I L ^{0.003} **S** P V L A P I K A V I I P I P A K D E K E ^{0.042} **T** E K I I E ^{0.015} **Y** ^{0.007} **S** E D V A K I L V ^{0.003} **S**
 N G I N ^{0.073} **T** V I D K D ^{0.141} **T** E K ^{0.184} **T** P G E K ^{0.014} **Y** ^{0.019} **Y** I W E I K G V P L R I E I G P R E L ^{0.027} **S** ^{0.01} **S** N ^{0.013} **S** V F I K R R D ^{0.214} **T** L Q G I ^{0.01} **S** V K K E N L V ^{0.011} **S** E V V K L L E ^{0.073} **T** L R K D L K E R A
 W N F L R ^{0.014} **S** K I R ^{0.01} **Y** ^{0.282} **T** D N L E E A K K M L D ^{0.006} **S** K A G I V E V P W C E ^{0.006} **S** N E C G L K I E E ^{0.05} **T** ^{0.141} **T** G A R V L G K P ^{0.111} **Y** D ^{0.084} **S** P R D V ^{0.045} **S** K ^{0.02} **S** ^{0.283} **T** C V V C K K P A K ^{0.105} **T** ^{0.249} **T** L R L A
 K ^{0.117} **T** ^{0.007} **Y**

Sequence #523 — Gene Saci 1555

M R L ^{0.004} Y D L ^{0.016} S F ^{0.014} Y E I E K F F ^{0.003} Y K L A E L K D I I ^{0.018} S D ^{0.025} T G L L ^{0.016} S I ^{0.015} S P ^{0.015} S I P Q ^{0.146} T L P A Q G ^{0.088} T V M A K H A F P I F Q K G G V I M D V ^{0.006} T N V ^{0.027} T Q A E I A E N A G A V

A V M V L D K L P ^{0.029} Y D V R K ^{0.045} S G G V A R M A D P K I I E E V M N ^{0.007} S I ^{0.058} T I P V M A K V R I G H ^{0.019} Y Y ^{0.007} E A R V L E A L G V D M I D E ^{0.016} S E V L ^{0.45} T P A D E E H H I N K W E

F K V P F V N G A R N L G E A L R R I ^{0.014} Y E G A ^{0.026} S M I R ^{0.252} T K G E A G ^{0.041} T G N V ^{0.006} S E A V K H M K I M N ^{0.022} Y E I ^{0.008} S ^{0.054} T L I ^{0.022} S L P E E D R L K K A R E ^{0.053} Y Q V P ^{0.089} Y Q L V E L V V

K L K R L P I V N F A A G G I A ^{0.171} T P A D A A L M M W L G ^{0.003} S D G I F V G ^{0.006} S G I F K ^{0.006} S Q D P D Q R A K A V V L A A A N W E D P E I V L E A Q K M I ^{0.01} S E N K ^{0.012} S M M G I

D I K ^{0.097} T L K P E E L L Q V R G V

Sequence #524 — Gene Saci 1556

M K V G V I A Y Q G S F E E H A I Q L K R A M S K L N L T G E V I A V K K P K D V D L I D G V V I P G G E S T T I G I I A E K L G V L D E I K A K I N A G L P V
L G T C A G A I M L A K D V S D A K V G K K S Q P L I G T M D I Q V V R N Y Y G R Q R E S F E T D L D F R V I G G K A R V V F I R A P I I K R T W N D A T A L
I S F E N G I V M A E Q K N M L A T T F H P E L S E S T I V H E Y F L S K I K K

0.025 0.006 0.007 0.025 0.007 0.055 0.025
0.052 0.013 0.007 0.008 0.005 0.01 0.014 0.162 0.081 0.007
0.001 0.009 0.027 0.007 0.007 0.108 0.021 0.018

Sequence #526 — Gene Saci 1558

M S N K T K G S T L E R Y L V S R L R D K G F A V I R A P A S G S N R K D H V P D V I A M K S G V I I L I E M K S R K N G N K I Y I Q K E Q A E G I K E F A K K
S G G E L F L G A K I A K D L K F L R F D E L R R T E A G N Y V A D L E T I K S G M D F D E L V R Y V E G K I S K T L D S F M

0.062 0.299 0.028 0.276 0.02 0.088 0.01 0.022 0.006 0.012 0.045 0.121 0.081 0.073 0.011 0.016 0.018 0.044 0.013 0.005

Sequence #527 — Gene Saci 1559

MAKIY^{0.009}^{0.123}TDKDV^{0.009}SLDVIKEKRVAVLGY^{0.014}YS^{0.01}QGRAWALNLRD^{0.025}SGIKV^{0.012}SVGLEREGNS^{0.013}WKQAENDGFKPLR^{0.275}T^{0.012}E^{0.012}EA^{0.012}VRN^{0.012}SD^{0.012}IIIFL

LPDMIQR^{0.1}T^{0.011}VYLERVKP^{0.005}YLKEGMDLVFAHG^{0.025}FNIHY^{0.005}RLIEPP^{0.175}SNVDV^{0.002}Y^{0.002}MIAPKAPGPIVRE^{0.008}Y^{0.008}FAKGGGVPALVA^{0.052}T^{0.049}Y^{0.003}QDHS^{0.003}GK

ALQKALAVAKAIGA^{0.142}T^{0.025}TRAGVIE^{0.113}T^{0.144}FKEE^{0.081}T^{0.025}DLFGEQVDLVGGVMQLMR^{0.002}Y^{0.023}AFQT^{0.083}LVEAG^{0.014}Y^{0.017}QPEVA^{0.017}Y^{0.017}FET^{0.037}INEMKLI^{0.037}VDLV^{0.037}Y

EKGF^{0.003}SGML^{0.077}T^{0.007}AVSD^{0.118}T^{0.054}AKYGGM^{0.116}T^{0.025}VGKMVIDE^{0.021}SVKERMKKALDNIR^{0.021}SG^{0.021}GKFAEKWVEE^{0.081}Y^{0.081}GKGAN^{0.112}T^{0.112}I^{0.112}KEGMKEVDN^{0.06}S^{0.224}T^{0.224}E^{0.224}E^{0.224}KVGR^{0.126}S^{0.126}

LRDIILRGKPK^{0.173}S^{0.173}

Sequence #528 — Gene Saci 1562

M I K L V V F D A D K T L W T H S N I S I F R P P I R L I D E N S V E D S I G N K L R L F E N V R E T L S E I R Q M G L F T A M A T W N I P E K T E L V L S T L
K L K D Y F D V I V S N E H P Y K F L Y I I E I I N K L S R L K N V K I K P D E I I F V D D R R S H F G N I W L Y V G K V N C L E M W V D V T S Y T Q L L E K I
K T I Y K L K E E S K K I Y N N A

Sequence #529 — Gene Saci 1563

MIKQILA^{0.003}YIRK^{0.015}SDLVVEVLDA^{0.462}RPDL^{0.001}TR^{0.03}SKRLEN^{0.029}YVMENQKKLLIVLNKGD^{0.017}LIPVEVLEKWK^{0.005}KFIEENEGIP^{0.017}TI^{0.005}YI^{0.004}SA^{0.043}TR

HLG^{0.056}TKVLREKIKELIEGEGKII^{0.118}FIG^{0.014}YPK^{0.014}TGK^{0.042}SS^{0.059}IINALKGRH^{0.217}SA^{0.015}TT^{0.017}SKHPMS^{0.012}YG^{0.049}YT^{0.007}RSIQ^{0.103}LFRIDNRI^{0.017}FAWD^{0.005}TPGI^{0.004}IPPD

GNELERIIRGANVDKLEDPVRGAKLLIERIEGIDK^{0.01}SVLRN^{0.089}TY^{0.001}KID^{0.014}YS^{0.006}NY^{0.014}LDFLEKLLALKRGWILK^{0.03}TS^{0.003}HEPNIDEAAKAFI

RD^{0.019}YHEGKII^{0.008}YY^{0.009}LLPENVNK

Sequence #530 — Gene Saci 1567

M N P I V F D R K P F V G K K C T^{0.04} G I I S^{0.02} R K T^{0.34} F E K L D I S^{0.085} R E F I D R E F K S^{0.017} I I L H Y^{0.001} E N K K I Q I R A D L I R L N R Y^{0.002} K L E Q S^{0.015} L A Q D L D V K L K T^{0.089} D
A I V K N E K E V I T^{0.014} N N N E K I T^{0.034} A D K V I I A S^{0.009} G W K G R S^{0.005} K W V K A I E Y L T^{0.036} E P V E M E D I H V F F N R N N V G G F S^{0.001} W I V P L P Y^{0.011} G T^{0.047} L V G A L G Y^{0.112} D
D P K K F I P K L D A R V L D I H G G G I P R A H P T^{0.09} F I R N G I G D V L G L V K I S^{0.004} T^{0.06} G G G I F S^{0.013} I S^{0.009} E M L E G L K K I V Y^{0.007} E D D E R L Y^{0.004} K E K F N Q L K K E
I N R Q L T^{0.082} L F N L V E K M W G T^{0.008} T^{0.024} L R S^{0.002} L F Y^{0.003} I L N E R T^{0.017} I N I D T^{0.025} E F D L H S^{0.006} L I P R R I F R P L P D

Sequence #531 — Gene Saci 1572

M T G D I Y A R Y M R M R G Y N V L F P M A F H Y T G T P I I A M A D D V A K G D K E L I D I F K S I Y E I P D D V I S K L V D P L F M A N Y F K E E I K Q A M
K E I G L S I D W R R E F T T I D P E F S S F I I W Q F R K L Q E K G F I V R D T H P V G W C P V H H I P V G M H D T K G D M E P E I G E F V L I Y F D S D M G
I L P V A T L R P E T V F G A I A V W V N P H E S Y S I V E I D G K K Y V M S E K A S S K L S F Q I D N L K V I T V V K G S E L V K H S A V N P I T G K E V P I
I G A N F V D P L T G T G V V M S V P A H A P F D Y F Y L K K T K S E L S I I S V I R V E G M G E T L A K D L V E K S N P Q N D N D L K K L T E Q V Y R I E Y N
K G V M I D I T K L V K P E Y V E E L K P L V N L P V P A A R Q K I T E F I T Q K G L G R K I Y E I M N R P V Y C R C G N E V V K I L K D Q W F L D Y G N Q E
W K D L A R K S I E S I R F I P P E I K K D F E F V V D W L Q K R A C A R T R G L G T P L P W D K K W I I E S L S D S T I Y M A F Y T I A H R L K E H K L K P S
Q L T Y E F W E Y I M L G N G N P D E I S K I S G I P V E V I K A M R D E F L Y W Y P L D V R H S G K D L V P N H L S F F I F N H A A I F P H Q L W P K G I A V
N G F V L Y D G K K M S K S L R N I V P L R K A I R M Y S P D V I R I A L T T N A D I G S D V N F S D S Y A K S I I D T L K N Y Y D L L E K L K E F K G E D E G
F P E K W L K S K F Y Q M V I N V T Q Y M D S L D L R S S S N E I L Y N F S S Y I N E Y F E L V R S E G R E P N G K L L S Q I L Q I W I K L L S P F A P H F A E
E L W H K I G K N T L V S L E S W P I I D Q S N V D L F I D L T H T Y H R K L L N D I Q A I L S V Y K D T P K S I K I F V A N K E F L N V L R D A I N I V Q K G
G Q L R Q L M E I H K P K G K Q D A R L Y Q K I Y E E A R E I D D D M K K L V T N F D F D E K D L L D K G L K Y L S Y K L G I K E I R I L D A S E M D R T K Y N
K D A L P L R P A I I I E

Sequence #532 — Gene Saci 1575

M K L A I P N K G R L Q Q P V L Q F L N Y V G I R P L S S D E R A L I I P T N W E G I Q L V M L R T E D I P S L V E A G A A D I G I T G Y D Y V L E S G A N V D
E L I R L D F G K A K I V L A V P L S W D Y N S P D Q I K Q E I R I A T K Y Y N L A K K Y I T E K G I P A K V V K I S G A A E V I P S L G A A D A I I D V M S T
G T L K L H G L K P L D T V L E T Q A V V I G N R Y W M K S D E A D K I N L M L T M M K G A L Y A R N K K M I F M N V P D S K L N N V I Q S L P A M L S P T L
S K L A K G D A W E V I T V I D G D K L P E I I A K V V A N G A R D I V V D I E K V I K

Sequence #533 — Gene Saci 1578

M T S K R I I P C L D V K D G R V V K G V N F L N L V D K G D P V E L A A R Y E E E G A D E I V F L D I T A T I E G R K T M M N V V K D T A S V I S I P L T V G
G G I R S L D D V S K I L G N G A D K V S I N T A A V E N K D L V S I S S A E F G S Q A I V V A I D V K R I G N D Y Y V F T R S G K Y N T G I N A I S W A K E V
E K L G A G E I L L T S I D R D G T R E G Y D I E I T E L I S K S V N I P I I A S G G A G K I D D F L G I L K V A D A A L A A G V F H D G V I R I M D L K K Y L
G K N G V E V R M

Sequence #534 — Gene Saci 1584

M S W S I L E L I R N N P E V L K E N L K R R F I D T S T V D K A V E L D K K W R Q T L Q E V E R L R H E H N L I S S Q I P K A P K E Q K S E L I N K A K E L L
K T L E D K E K E L Q K I E E E R E N L L L S L P N L V H D S V P I G P D E S Y S V P I R F W G K F K V Y K D D V N E F L K Q T N G H K V D Y E V I N W K P V G
H A D M L E N V L R L G D T K K A G E V A A S R F Y Y L F N D I V W L D L A L L L Y A I D T I T S R G Y T L V L P P Y M L R G E V I K S V I D L D T F K D A I Y
K I E G E D L Y L I A T A E H S I A A L Y Y K E E I P K E E L P L K L V G V S P A F R K E A G A A N K D L K G I F R V H Q F H K V E Q F I F S S P E D S W K Y H
E E M I E N A E E I F R G L G L P Y R V I N I A S G D L G A P A A K K Y D L E V W M P A Q A K F R E M V S C S N C L D W Q A Y R M R I R Y V E K N N K K G Y L H
T L N S T A I A S T R A I T A I L E N F Q K E D G V V E V P K V L R K Y L E T F S G A P K E Y I Y P K K K P N T T S

Sequence #535 — Gene Saci 1588

M S^{0.181} D R K K I E I D A I D K K L L I E L L K D S^{0.111} R I S^{0.15} L R R L A E E M N V S^{0.011} P A T^{0.073} L H N R L M R L V Q E G V V K G F T^{0.047} A L I D Y^{0.011} S^{0.001} K L G Y^{0.004} P V T^{0.014} S^{0.004} I L M I K V D
G K H I L E F E K E V S^{0.003} N L D N V V A V Y^{0.028} D V V G E Y^{0.03} D V M L I A K F R S^{0.016} I E D L D T^{0.119} F I K S^{0.007} L L K N P K I E R T^{0.062} Y^{0.01} T^{0.083} S^{0.005} I V L N V V K E D P R I K I I

Sequence #536 — Gene Saci 1590

M K L R I N K I P K **S** E E D L D **T** I R R E I E D E H H H D E H G E H I D Q H M L D E I L **S** A L Q Q L Q I K I N E **T** K D D **T** E R C K G E I **S** R I **Y** **S** I L **S** K L V V

A **T** **F** **T** E D K D Q R I K I L R E L L **S** Q L E

0.019 0.181 0.187 0.319 0.006 0.256 0.311 0.045 0.004 0.03 0.008

Sequence #537 — Gene Saci 1593

MWIKGKA^{0.004}Y^{0.002}YEGEIKEICINFDR^{0.024}SIKEIRANCKPDM^{0.034}T^{0.034}FTNEELILPA^{0.003}SVDLHVHVVRGAQL^{0.004}S^{0.04}YKE^{0.019}TVA^{0.051}TATA^{0.046}TS^{0.004}EAV^{0.205}YGGVGV I
 V D M P N^{0.08}T^{0.058}V P^{0.234}Y I N T P E R I K E R L R E F Q L^{0.037}Y^{0.009}S^{0.113}R^{0.057}T^{0.078}D^{0.01}Y G I^{0.016}Y^{0.016}S G V S K E V E E I D K L P I A G^{0.081}Y^{0.007}K I Y P E D L E K E E^{0.085}T^{0.055}R^{0.03}Y V L E K S K K L K I L H P E
 M P F V^{0.015}S^{0.07}K I E R S L R R^{0.086}S^{0.008}Y W M E^{0.005}T A A I N L V K G N M H I^{0.002}T^{0.013}H I T N F E^{0.01}T L Q L A K S M G F^{0.002}T^{0.021}T D I^{0.01}T A H H L V D G E R D C I^{0.003}S K V N P P I R D^{0.014}Y^{0.132}V T R L
 K L F L K G L F E V D C I A^{0.016}S D H A P H^{0.021}S K E E K R M N F D L C P P G I A G V^{0.004}S F^{0.004}S^{0.055}T P Y I^{0.009}Y S L M F K G L I^{0.011}S^{0.004}I D R A V^{0.012}S L L S G N P^{0.018}S R I L N I P^{0.007}T^{0.008}G K I K
 E G^{0.003}Y R A N F^{0.087}T V I K R E N W R^{0.005}Y^{0.053}T^{0.078}T K F S K V^{0.003}T^{0.107}E^{0.165}T P M D G F^{0.004}S L D A K V^{0.01}T N V I V E G K L A F D G E N V^{0.013}Y P I R G V N I F D^{0.031}S^{0.024}S^{0.072}S R^{0.256}TS

Sequence #538 — Gene Saci 1596

MKHII ^{0.008}SA^{0.006}YNF^{0.011}SRDELEDIFAL^{0.055}T^{0.012}DK^{0.008}YS^{0.008}KNLND^{0.021}TRKIL^{0.009}SGK^{0.018}TI^{0.007}SIAFFEP^{0.013}S^{0.084}TR^{0.015}TYL^{0.002}SFQKAIINLGGDVIGF^{0.018}SGEE^{0.025}ST^{0.045}SVAK^{0.017}
 GENLAD^{0.071}T^{0.017}IRMLN^{0.004}YS^{0.014}DGIVMRHK^{0.012}YDGA^{0.017}SRFA^{0.011}SEISDIPVINAGDGKHEHP^{0.031}TQAVIDI^{0.026}YT^{0.035}INKHFN^{0.041}TIDGLVFALLGDLK^{0.005}Y
 AR^{0.034}T^{0.004}VNS^{0.049}LLRIL^{0.007}TRFRPKLV^{0.011}YLIS^{0.007}PQLLRARKEILD^{0.007}ELNY^{0.025}PVKEVENPF^{0.022}EVINEVDVL^{0.032}YV^{0.011}TRIQKERFVDEME^{0.015}Y^{0.011}EKIKG^{0.015}SY
 IV^{0.012}SLDLANKMKKD^{0.016}SIIILHPLPRVNEIDRKVDK^{0.115}^{0.106}T^{0.041}T^{0.007}KAK^{0.068}YFEQA^{0.007}SY^{0.012}GVPVRMS^{0.025}IL^{0.012}T^{0.012}KIYGE

Sequence #539 — Gene Saci 1597

MDFVKAALLDKKLLLIIGNFMLTSGKVSPLYLDLRKLPNHPDIFSFVVS SAVDIVKGINFDMILGVVTGGVPPFASFIAACKLN
KPMGYIRAEKKKGHGTERLLEADV DGGKVIIVDDVATTTGGSILKAVEEVRKAGGKVEHALVIVDREEGAFEKLESVGI RLL
SVYKVS EILNSLIKSNLVAENEKKLISDYMVKNIGKS

0.015 0.003 0.01 0.004 0.041 0.004 0.002 0.003 0.023 0.003
0.008 0.161 0.042 0.021 0.009 0.025 0.007 0.014 0.005 0.007 0.009 0.012 0.011

Sequence #540 — Gene Saci 1598

MEKARIILALDKILPINLLKDF **T** **T** HINKIKI **S** **Y** **V** **T** LLEGGGLG **Y** LKDIRKLDWDEIIFDLKLADID **S** **T** MI **S** IVKNLEQFAD
S **Y** I **S** **H** **S** F I G **Y** E G A L D K L K N **Y** L D **S** R N K G L **Y** L V L **S** M **S** H K G W N D D **Y** **Y** **K** **Y** L K **S** I V N V **T** K P K G I V V G A **T** K P L M L K L A R **S** D F P N **T** I
I I **S** P G V G V Q G A K I G E A I C N G A D **Y** E I I G R **S** I **Y** D **S** G E P L K **T** L I E F I D N Q K V **T** I N E C K V R Q **T**

Sequence #541 — Gene Saci 1601

MKKR **T** I A E L L **T** D I R M A K **Y** K I D M W I **S** K A E N R N K A L E R L **S** L **S** N I G R F P L L **S** K E **Y** I K E **T** E L **T** R K **Y** I V **T** L V Q L K I L L E I L E I R L
E **T** L I I L G N V V **T** **Y** L **S** P L V E A L N E L K G Q L G A **S** I E F **S** P I I D E I I E **T** I R **T** V **Y** I A P N **T** V Q Q **S** P Q I N V K E E A R Q L L K E A E D V A K K E
L K E N **Y** K I E I

Sequence #542 — Gene Saci 1603

M T S W E E Y K A K A W E R I N R D K E I G V L D P D I V D I L K A F F S R Q K S Y T Q S S C S G R I S I I D A K L P W E R R D S T V V F K D H L K F S V E D L
Y D V L D K G I V R R L W L I V Q G P I I H V Y T K D M E E A L N V L K L A R D V G F K H S G I L S F N D K G I L V E L R T G V K M V H L L K P N L P E E E A K
H L V E V S L E I L N K G K E K L N N L R N I V E L S V A N D S M K L G E D S K L D T K F H Y R I S

Sequence #543 — Gene Saci 1607

MEPKRVAEGK **T** K I V **Y** E F D P E H **Y** L L R F K D **S** I **T** A G D G A R K D E L P G K G **T** L N A Q **T** **S** A L F F R L L E K N D I R **T** H **Y** V G M **Y** D E K **T** M I V **T**
K L K M I P V E V V L R N I A **T** G **S** I V K R L P I K E G E V F D P P I V E F F L K D D L R H D P L L N **Y** **S** H L Q **Y** F N L L **T** R K E A E I V E E V I V K V N A V M
K N F L K E R G L V L **Y** D L K L E F G K D K D N N L I V G D E I **T** L D **S** M R V R D E K **T** N K I L D K D L **Y** R K G E **S** L E V V K K A **Y** E D F F N L I **S** R

Sequence #544 — Gene Saci 1610

M R L ^{0.089} S L ^{0.104} S ^{0.115} Q E M E L V R K F L G R E P K E E E W L V V D A L W ^{0.006} S E H C ^{0.008} S ^{0.02} Y K ^{0.016} S ^{0.024} S K I F L R ^{0.008} S F P ^{0.012} S E G E R V V M G I E D W Q D A G A L D V G D G W A V V L K
 L E ^{0.002} S H N H P ^{0.003} S A I D P F N G A A ^{0.019} T G I G G I I R D I I ^{0.002} S K G A R P I A L L D M I R V G N L N N ^{0.003} S R N R W L L K N I I A G I G F ^{0.002} Y G N ^{0.003} S I G V P V V A G E L A F
 D E ^{0.062} T ^{0.089} Y N D N P L V D V A G L G V V K K D K I V P ^{0.011} S V V K E A G L K I V L V G L ^{0.047} T G L D G L G G A ^{0.013} S F A ^{0.034} S R K L ^{0.047} S G E D E I G A V Q I A D P F A G K I V L D V ^{0.004} T
 L Q I A D K V E A I K D L G G G L V V G I ^{0.05} T E M A N G L G V E V E L D K I P L R V K D L ^{0.251} T P G E I L V ^{0.011} S E ^{0.145} T Q E R M V F A V K P E R V K E V C E A F E ^{0.02} Y ^{0.015} Y ^{0.006} Y
 P C A V I G E F ^{0.013} T N D ^{0.048} T ^{0.006} S I R F L ^{0.004} Y K G K E V V N L P ^{0.003} S ^{0.008} S L L L N P P R ^{0.008} Y K W G V K K ^{0.048} T K ^{0.011} Y ^{0.011} S V ^{0.018} Y ^{0.015} Y E K P N I N L E V A V K E I L ^{0.007} S ^{0.011} Y P D L V ^{0.003} S K F W A ^{0.025} Y ^{0.003} S Q F
 D ^{0.079} Y E V G ^{0.051} T ^{0.007} S ^{0.124} T V L K P G E A D ^{0.019} S G L I ^{0.007} S L P N G K L L A I K G D A N P D L C A E D ^{0.005} S ^{0.034} Y E C G R ^{0.006} Y I V A E A ^{0.014} Y R N L A ^{0.015} T V G A K G I G V V D H L Q F G D P K K P
 E V ^{0.053} Y ^{0.098} Q F V E A V R G I A E A ^{0.003} S K ^{0.046} Y F G ^{0.108} T P I V G G K V ^{0.004} S F ^{0.074} Y N E N K E G K P I K P ^{0.128} T P L V M A G L V Q D K F L R P K I ^{0.06} T E G A ^{0.015} S I I M I G F ^{0.081} T R E E M G G
 S ^{0.011} L L A K I F G N ^{0.033} Y G D V P K ^{0.053} T R L N E E L L ^{0.008} S ^{0.012} S E L V I K A I N D G K I I F A K D I ^{0.004} S K G G L V G A L L P I L V R G F G V ^{0.004} S I D ^{0.005} T N L I P ^{0.009} S D ^{0.037} T D D V I ^{0.007} S K L
 F ^{0.006} S E N G G R F I V L ^{0.029} S E R E D D I N W L E ^{0.016} S Q ^{0.016} S R G I ^{0.008} Y V ^{0.007} S K I G E V ^{0.199} T R E Q ^{0.014} Y V M W L R E G K K I D L ^{0.367} T K E V N N ^{0.016} Y H R ^{0.013} Y L E E V ^{0.092} T ^{0.018} S D

Sequence #546 — Gene Saci 1613

MKKVL L I G E G A R E N V L A E A L G ^{0.135}T ^{0.023}S E E G ^{0.065}Y R V F A L ^{0.009}S ^{0.003}S ^{0.017}Y K N P G I N E I V M K ^{0.003}T N G E ^{0.018}Y L I G N I N ^{0.005}S V E E V R R A I K Q V N P D F G V I G P E E
 P L F H G I A D E F R K E G I P V V G P N A D G A M I E K ^{0.006}S K V W M R E L M W K ^{0.013}Y E I P G R L R F R ^{0.006}Y F N N M Q E A A K F I L E ^{0.061}Y G G ^{0.005}S V A V K P A E Q V G G R
 G V K V V A D L Q A ^{0.05}Y ^{0.025}L ^{0.027}S E E K R ^{0.013}S A L ^{0.009}S K G V E N V A ^{0.008}S L V K G D V K I L I E E K V D G P E ^{0.05}Y ^{0.034}T L H V L ^{0.105}T D G K ^{0.007}S ^{0.029}Y L P L P L A Q D ^{0.082}Y K N A ^{0.062}Y E D G I G P E ^{0.108}T
 G G M G ^{0.038}S ^{0.023}I ^{0.101}S G P D ^{0.012}Y L L P F I N R E E F D K ^{0.193}T A D A I A K E V K Q A ^{0.015}Y V G I L ^{0.002}S G Q M M L ^{0.005}T A I W G P ^{0.111}T I I E ^{0.018}Y ^{0.007}Y ^{0.012}S R L G D P E ^{0.044}T ^{0.008}S A I I P R I
^{0.176}T ^{0.01}S D F G R ^{0.017}T L E L L A ^{0.02}T ^{0.004}S H L N K A K I E I N E K P ^{0.013}S I V K A V A P L G ^{0.003}Y P L D K N M A ^{0.003}T G H ^{0.035}T I W L D L P R M R E I G C N V ^{0.011}Y F G ^{0.005}S I ^{0.006}S Q E G G K L I ^{0.107}T K G
^{0.013}S R A L E I ^{0.044}T V V D D ^{0.058}Y D K A V E K L D R C F ^{0.081}S L I ^{0.007}S ^{0.013}S D ^{0.023}T K L I F R H D I G R ^{0.066}T I ^{0.03}S Q Q E E K A E I V R F ^{0.028}S ^{0.008}Y K ^{0.041}S R E ^{0.035}S K G I L G V ^{0.012}S A D W ^{0.016}S P N G G L W

Sequence #547 — Gene Saci 1615

M K Q M D I K **S** L V N **Y** V A L K I L G G **S** D **Y** I L E A L E K **Y** L V K G E G P A **T** V A **Y** E **Y** Q I **S** K H Q L R G **Y** A Q R I I E K **S** G **S** E G R A K K I L P I I K G I **S**
K D V K P I V K R **T** D G D L **Y** **Y** C **T** L C N **T** **S** I P K E D **T** E E H V R K **Y** H K E I L **T** **S** **T** I K **T** M L E R L E E **Y** K K E K Q A V I L **T** **S** V **S**

Sequence #548 — Gene Saci 1617

M K I V L A Y S G G L D T T V A I R W L R E T F N A D V T T V T V D V G Q K D D F Y Q I E K R A Y I A G A I K H Y T I D A K K D F A E R Y I S Y A I K M N G L Y
E D I Y P L S T A L A R P L I V E K V V E I A K K I G A E A I A H G S T S K G N D Q V R F D L A V K A L Y P E A K I I A P A R I W N M T R D K E I E Y A K S K G
I P I K T E S S K Y S I D E N L W G R S I E G D I I S D P S K E V P E D A F E W T K K T K D D K L K I S L T F D K G L P V E V N G E K M D L L K V I Q V L N E L
V G S R G F G R V E H L E N R V V G F K S R E V Y E V P A A L V L I N S H K D L E K S T Y T P L E F R F K R S L D G Q W S D L V Y Q G L W F E P L R E T I Q I A
G D N L N K W I S G E V F I E V E N G N M K I L G R K G K F S P F S E E I A S Y N K G W Y P S D E M A R G F I E I F G M H S L V A R K S R G I

Sequence #549 — Gene Saci 1620

M R E N V K R V L V I G S G P I K I A E A A E F D Y S G S Q A L K A L K E E G I E T I L V N S N V A T V Q T S R K F A D K L Y M I P V T W W T V E R V I E K E R
P D A I M I G F G G Q T A L N V G V D L Y K K E I L K K Y G V K V L G T P I E G I E R A L S R E K F R E T M I N V N L P V P P S L S A R S E E E A L E K A R Q I
G Y P V M V R V S F N L G G R G S T V A W S E E D L K R D I G R A L S Q S Y I H E V L I E K Y L H H W I E L E Y E V M R D K H G N S A V I A C I E N L D P M G V
H T G E S F V I A P C Q T L D N K E F Q D M R S M S I D V A K S I D L V G E C N V Q F A L N P L A Y E Y Y I I E T N P R M S R S S A L A S K A T G Y P L A Y V S
A K L A L G Y E L Y E V L N K V S G S T C A C F E P S L D Y V V I K I P R W D L D K F E N V E H S L A T E M K S V G E V M S I G R S F E E A L Q K A V R M L D L
G E P G I I G G K V Y N S K M T K I D S L R M L K E R R P Y W F L Y A S K A F K E G A T I D E V Y E V T G I N K F F L N K I K N L V D F Y E S I K N N K G L D Q
K T L S I A K R L G F S D Y Q I A S A V G L S E K D I R E L R Q K Y G I E P K V K Q I D T L A G E W P A V T N Y L Y V T Y N G T E D D I E F S N G I R K L L I V
G A G G F R I G V S V E F D W G V V S L L D S A S K Y F D E V T I I N Y N P E T V S T D W D I A R K L Y F D E I S V E R I L D L V R K E K F N Y V A T F A G G Q
I G N T I S K K L E E N G V K L L G T S G H S V D I A E D R E K F S R L L D K L G I K Q P D W I S A R S I E E V R K F V E M V G Y P V L V R P S Y V L S G S A M
R I V Y N D T E L V S Y I K K A T E I S S E H P V V V S K Y I D N A I E A E I D G A S D G R G V Y G V V L E H V E E A G V H S G D A T I S I P F K K L S P E T V
H K M K E S I H S I S R E L N I K G P F N V Q F V V K N G T P Y I I E M N L R A S R S M P F S S K V V G K N I I D L A L T G V I K G F D F D E F V E L K A K S W
G V K S A Q F S W A Q L K G A Y P F L G P E M R S T G E A A S L G V D F Y D A L L K S W L S S S P N R L P D Q K G I A L V Y G R S N V E Y L Q A S A R N L S E Y
G M T V Y T L S D A P I Y G Y E V T S S G K S V E L I K D R K V E I V V T D G Y L K S L D Y E V R R I A V D Y N V P I I L N G R L G E E L T K A F L L R K S N M
T 0.054
J 0.007
F Y E I G E Y G A G I 0.021

Sequence #550 — Gene Saci 1625

M D C **Y** V **Y** **Y** E N R K C V E I C G K V V C D K A **T** V E D **Y** G **S** I C E K C A N G D K K **S** C I E L **Y** N R F G C W **S** I **T** G W W L

0.005 0.003 0.003 0.051 0.016 0.008 0.003 0.002 0.001 0.008

Sequence #551 — Gene Saci 1632

MVKEA ^{0.017}S ^{0.027}L ^{0.009}Y ^{0.009}K ^{0.009}F ^{0.009}ESGRIRCLACARKCLIGENQVGF CGIR ^{0.004}S ^{0.004}V ^{0.046}K ^{0.046}G ^{0.046}G ^{0.046}K ^{0.046}L ^{0.046}Y ^{0.046}LDV ^{0.044}Y ^{0.044}G ^{0.044}K ^{0.044}V ^{0.044}AAAHIDPIEKKPLVHF ^{0.003}Y ^{0.003}PG ^{0.003}S ^{0.003}K ^{0.003}V ^{0.003}F ^{0.002}S ^{0.002}F ^{0.001}S ^{0.001}T ^{0.025}F

GCNWMCM ^{0.006}Y ^{0.006}C ^{0.014}Q ^{0.014}N ^{0.014}Y ^{0.014}DI ^{0.01}S ^{0.01}Q ^{0.01}RRRAEG ^{0.118}T ^{0.118}E ^{0.088}IS ^{0.088}PEEIVEMALAY ^{0.032}E ^{0.032}SE ^{0.011}SEGI ^{0.141}T ^{0.024}Y ^{0.079}T ^{0.022}Y ^{0.022}NEPAIFAFAHD ^{0.015}T ^{0.015}G ^{0.015}VIARKHGLFN ^{0.003}T ^{0.003}M ^{0.003}V ^{0.003}T ^{0.003}NG ^{0.015}Y ^{0.015}WS ^{0.002}SI

ELVD ^{0.009}Y ^{0.009}V ^{0.009}K ^{0.009}DFLNAV ^{0.04}T ^{0.04}V ^{0.04}DFKNGE ^{0.016}E ^{0.016}E ^{0.155}K ^{0.155}FMKR ^{0.016}Y ^{0.016}T ^{0.269}G ^{0.269}AT ^{0.269}G ^{0.269}PEPILE ^{0.108}T ^{0.108}IREL ^{0.081}S ^{0.081}K ^{0.081}R ^{0.081}GIHVEI ^{0.027}T ^{0.027}D ^{0.027}L ^{0.027}I ^{0.027}PEIGDNLE ^{0.003}S ^{0.003}AKILLKKI ^{0.008}Y ^{0.008}D ^{0.008}IL

GPDIPIHFLRFHPD ^{0.007}Y ^{0.007}K ^{0.03}LD ^{0.03}Y ^{0.03}LPW ^{0.068}T ^{0.068}VPVK ^{0.017}T ^{0.017}LEAH ^{0.046}Y ^{0.046}K ^{0.046}VAK ^{0.046}EF ^{0.025}GFNFAY ^{0.025}LG ^{0.025}N ^{0.025}VP ^{0.018}PGHP ^{0.018}Y ^{0.018}EN ^{0.078}T ^{0.017}Y ^{0.017}CP ^{0.017}NC ^{0.017}G ^{0.017}K ^{0.017}M ^{0.017}VI ^{0.017}RR ^{0.002}Y ^{0.002}GF ^{0.002}RI ^{0.002}LE ^{0.002}WHLKE

DMRCK ^{0.004}Y ^{0.004}CG ^{0.008}Y ^{0.008}K ^{0.008}LP ^{0.018}IEGKL ^{0.018}S ^{0.018}K ^{0.018}HAF ^{0.065}DERFE ^{0.065}S ^{0.065}VFL

Sequence #552 — Gene Saci 1633

ME^{0.037}T I I V K N E P P F L R I^{0.041} T L N R P D R L N A I N K K M I E E I R^{0.075} T V L E E^{0.055} T V K D E K V R V I I F^{0.016} T G N G R A F^{0.019} S A G A D I^{0.008} S Q F K E L E G L^{0.043} T A W Q F A
M K G R E L M D^{0.021} Y I E N^{0.007} Y P K P^{0.06} T I A M I N G^{0.023} Y A L G G G L E L A L A C D I R I A^{0.026} S D E A Q L G L P E I^{0.02} T L G I^{0.002} Y P G F G G^{0.124} T Q R L L K L V G K^{0.015} S R^{0.073} T L E M I M
L G E R I^{0.048} S A K D A E R I G L V N R V V P^{0.006} S N D L E K E^{0.082} T L N L A^{0.008} S K L A E R P P L A I Q L^{0.003} S K L I V N Q G M N^{0.005} S P I^{0.109} T V G L N M E^{0.004} S L G W G V I F^{0.059} T^{0.089} T K D^{0.006} S K

E G V N A F L E K R K P N F K G E

Sequence #553 — Gene Saci 1637

MLLIEDRAKALGIFVA^{0.029}Y^{0.092}TEVEDIKFGR^{0.038}SAGELE^{0.089}TEIKMVEEK^{0.074}YKKNENPEKLENT^{0.041}TIIRAY^{0.01}RDF^{0.027}YWKIGIDP^{0.197}T^{0.319}K^{0.126}TRPSGEA
LRRRI^{0.144}S^{0.04}RNG^{0.04}SIPRINNIVDIGNLV^{0.001}SAD^{0.023}TLVPIGI^{0.019}YDKARFQ^{0.002}YPI^{0.013}YLKL^{0.009}SS^{0.008}SGGELF^{0.038}YAIR^{0.025}SEPEKIDPNIPILVD^{0.003}SKGVV
MHI^{0.005}Y^{0.004}PHRD^{0.031}ST^{0.011}LT^{0.068}NVIE^{0.035}TKDVLIV^{0.004}SAGVKGVNEDLVILA^{0.002}SKR^{0.115}TAELLVK^{0.015}YANGKWN^{0.015}GDVKLA

Sequence #554 — Gene Saci 1638

MDV L A R A E ^{0.021} S ^{0.022} Y G A ^{0.069} T F A D L R ^{0.019} Y F K ^{0.007} S K G L ^{0.015} S L V V ^{0.446} T E D R E Q V ^{0.013} S ^{0.016} S ^{0.039} Y G ^{0.169} T E R G ^{0.028} Y ^{0.041} S L R V L ^{0.015} Y R N N W G ^{0.009} Y F ^{0.007} S ^{0.01} S ^{0.005} S K E I E E E N V K Q A I N ^{0.004} S A V G N E
 N V N I I L L P ^{0.006} S K H D E I M L K P R ^{0.017} Y E V ^{0.028} S K ^{0.057} S V H E K M E D L K R L R Q K L F D L D ^{0.065} S R I K ^{0.059} S V ^{0.337} T I R ^{0.036} Y A E E E I R K E ^{0.006} Y ^{0.015} Y ^{0.023} S ^{0.035} T E G R E I K Q ^{0.009} S ^{0.009} Y ^{0.01} Y L ^{0.01} S G I
 S I N V I A R E G D ^{0.006} T I ^{0.02} S ^{0.008} S ^{0.004} A Y H R H F ^{0.01} S ^{0.005} Y ^{0.014} Q G ^{0.006} Y P F E V F N E E E I L D ^{0.046} T V K M R I N N Q F I G L ^{0.028} T P K A G L ^{0.015} Y ^{0.015} T V I L ^{0.004} S P D V ^{0.002} S G V F A H E A I G H L A E A
 D L ^{0.003} S ^{0.002} T N G I L F P L R G K K I A P D ^{0.013} S V ^{0.123} T I M D ^{0.007} S P L V Q ^{0.007} Y P E G I G V ^{0.036} T ^{0.076} Y D D E G V E G R D V K I I D K G V V K E ^{0.011} S L ^{0.082} T D R F ^{0.067} Y ^{0.015} S L ^{0.042} Y L G Q K P ^{0.287} T G N A R
 S E D F K ^{0.013} S ^{0.012} P V L I R M R N ^{0.097} T ^{0.031} Y F A P G D I ^{0.007} S ^{0.053} Y Q E I L R E ^{0.032} T K N G I L L V ^{0.011} S ^{0.012} S G G Q ^{0.19} T ^{0.016} S P D G ^{0.188} T F Q F G I Q E ^{0.005} S ^{0.026} Y L I E N G E I ^{0.006} S K P L K ^{0.033} T V G I ^{0.006} S ^{0.02} G ^{0.008} Y T L
 E ^{0.033} T L K ^{0.009} S V V ^{0.014} S V ^{0.005} S K E F N V F P G F C G K D G Q ^{0.014} S V P V G ^{0.076} T G G P ^{0.069} Y V K V E K V K V G G I V G

Sequence #555 — Gene Saci 1639

M V K D E ^{0.055} Y ^{0.013} S L I ^{0.025} S R A K D M G V ^{0.016} T A E I ^{0.053} Y ^{0.019} S V E V ^{0.007} S ^{0.01} S I Q ^{0.009} Y K K D R Q A H F F N L R D ^{0.123} T ^{0.015} G Y G L R V I K D G K V G F A H ^{0.008} S N L L D D ^{0.01} S L L E M A I E ^{0.057} T M K L ^{0.013} S
 K E D K F N V L P ^{0.017} Y ^{0.012} S K P V N K I N L K F F D I E E V R E K L L E F ^{0.01} S K Q ^{0.105} T E E A K D ^{0.141} Y A N V V N E ^{0.015} Y ^{0.027} Y E A V N ^{0.005} S K I K I I ^{0.014} S ^{0.019} T E G M D V E E E R ^{0.026} S L V G M ^{0.009} S I
 V ^{0.009} Y N F K I G D ^{0.089} Y ^{0.019} S P E I ^{0.038} Y E G I ^{0.022} S ^{0.025} S R D I G K L D V Q R G I M D K I V ^{0.277} T K R N L ^{0.021} Y K N M N K E R L K F N ^{0.004} S V I L ^{0.085} T P K A V ^{0.007} S ^{0.009} S L F I P L L M H ^{0.014} S ^{0.014} L S L E N K
 F R G K ^{0.112} S I L K D E E I L N E ^{0.028} S ^{0.056} T L I D N P ^{0.022} S ^{0.036} S H A P G ^{0.065} S ^{0.099} S F D G E G L P ^{0.009} S K I V Q L I E R G K V R N F L ^{0.003} S N ^{0.013} T ^{0.011} Y W ^{0.006} S L K A N R E N ^{0.247} T H ^{0.018} S A G R ^{0.077} S ^{0.046} Y ^{0.068} S ^{0.025} T L
 P ^{0.036} S ^{0.087} I ^{0.033} S P ^{0.017} S ^{0.016} V I D I Q V ^{0.026} S ^{0.018} S A D E E T I V V D E V Q G V H ^{0.025} T ^{0.004} S N F D ^{0.073} T G D F ^{0.005} S L V A ^{0.007} S ^{0.01} V S ^{0.007} W Y K D ^{0.009} S A L R E L ^{0.023} T ^{0.006} I S G N I K D L A K N I V G A L G E K E M V W
 N V H ^{0.013} T ^{0.001} K S L F F N G V N L V

Sequence #556 — Gene Saci 1640

M F K K I V V A ^{0.019}Y D G ^{0.004}S D N A N R A L D V A I D L A K K ^{0.003}Y D A K L D V V Q V V D ^{0.014}T S ^{0.003}A L L G M G L A P V P N D L I Q Q V ^{0.027}Y S ^{0.005}K A K ^{0.018}S D V E N A K ^{0.011}S K A ^{0.089}T N Q G I

K E V D G I V L E G D P A ^{0.042}S ^{0.052}S I V E ^{0.082}Y ^{0.019}S ^{0.015}S K ^{0.013}S G A N L I V ^{0.043}T ^{0.089}S R G L ^{0.014}S ^{0.15}T F K R L L L G ^{0.01}S V ^{0.007}S ^{0.017}T K I A Q E ^{0.015}S R I P V L I V K

Sequence #557 — Gene Saci 1641

M L I F K F P S V T S T Q D L A E A I Y Y M I N A E E F V V T A E E Q T N A R G R Y R R E W Y S P K G G L W I T Y V V K N Y D V D K V P F L T L K V S L G I R N
A L A K Y V N A G I R W P N D I V V G N K K I A G V L I E G I A E G S S G T V F I G A G I D T N V T R F P E D I I A T S I L L E T G K E V D N D E L L N E I I N
S I K N I M N L D D R T T I D K I N E V L Q I K D K K I R I M G Q D W E K I C K T L F V D Y Y G R L V T D C G I F E V E E V M R V E S L D N

Sequence #558 — Gene Saci 1642

M T L V L K V D P L N P E I Q K I R E A S E V I K R G G L V S F P T E T V Y G L G A N A Y D G N A C L K I F Q A K N R P P D N P L I V H I A E L D Q L F D V A V
D I N E K V L E I V Q V I W P G P L T L I L K K S S K I P K E V S A G L D T V A V R M P A H P I A L Q L I R E S G V P I A A P S A N L A T R P S P T R A E D V L
N D L N G R V D I I I D G G H T F F G V E S T I V N V T S N P P T L L R P G P F T V E E L R S F F P D I Q V P E F A R G L G E A D I A L A P G M K Y R H Y A P S
K K I I L I E N R S L M R K V V D L L S A K Y K V T V L I T K E L V N E F K D K D M I V L G S D E N L Y E V A R N L F E S F R L L E N R D T E L G V M V G F P E
R G V G L A I M N R A R K A S G F N I V Q K L E D V Y K Y V N I

Sequence #559 — Gene Saci 1644

M T^{0.065} E E L L L T^{0.022} G N L E E V S^{0.005} K K V V N W L L N R K P I K S^{0.015} L K D W G T^{0.022} S^{0.005} F S^{0.003} L W P P H L T^{0.069} T^{0.09} S^{0.002} C C G T^{0.04} E F G A F A A A R F D A E R Y^{0.013} G V L P F S^{0.006} S^{0.005} A R Q T^{0.052} N L

L V I E G T^{0.061} L T^{0.067} R K M G R A A K I V Y^{0.074} D Q M P E P K F V I A M G A C A L E G G I F W N S^{0.001} Y^{0.029} N T^{0.01} V L P S^{0.002} D L G I P V D I Y^{0.089} A P G C P T^{0.192} R P E A L A R A V L L L Q K

R I R S^{0.04} S^{0.02} N G T^{0.052} L N K

Sequence #560 — Gene Saci 1645

M D D L L K L V ^{0.006} S G L V K I P ^{0.008} S V N P P H G E G L R D C A N F I R E ^{0.017} Y F ^{0.002} S N H G ^{0.086} Y S ^{0.006} A E V V E F D K G W P N I I V N N G K K ^{0.006} S D K ^{0.006} S I M L N G H ^{0.1} Y D V V P ^{0.032} T G D
L K ^{0.006} S W ^{0.009} S H D P F ^{0.003} S A L I L E D K I ^{0.073} Y G R G ^{0.042} S ^{0.036} S D M K ^{0.005} S G L A V Q M K V F V E L A D K L D ^{0.065} Y N L V F ^{0.01} T A V P D E E ^{0.005} S G G F H G A K H L A E K ^{0.022} Y K P N L V L V ^{0.008} S E
P ^{0.023} S ^{0.014} S E W I N I G E K G L L Q V K L K ^{0.012} S K G K V A H G ^{0.016} S L P ^{0.01} S L G D N A I M K I V R D L V N L E K I R D V K I P I P ^{0.041} S E L K E A I ^{0.111} S A R A ^{0.104} S ^{0.178} S E V E K D ^{0.151} Y V ^{0.029} S
I ^{0.008} S F N P G V I K G G V K V N V V P D ^{0.112} Y A E A E V D M R I P P G I K N ^{0.015} S E A L ^{0.034} S L V K K L V ^{0.068} S E ^{0.093} S E V E P I D L ^{0.025} S E P N ^{0.257} Y ^{0.18} T N P E N H ^{0.017} Y V K K L E E ^{0.024} T I ^{0.005} S K ^{0.014} T L
G I R P K N ^{0.007} Y I I ^{0.007} T G A ^{0.127} T D G R ^{0.008} Y F R N K G I P A I V ^{0.021} Y G P G E L G V A H ^{0.032} T ^{0.022} Y N E F V ^{0.002} S F K E V I N A ^{0.003} Y K V I R E ^{0.002} Y L L ^{0.003} S I

Sequence #561 — Gene Saci 1647

MKIGT I I F V L M L G T L M A A V D T T I V L L A L P T I T T D L H T D L Y T S I W V L L A Y L L V L A I L S T Q A G R I G D I V G R S R I Y N M G F L L F
 T L A S G L C G I S P N I E F L I G F R I L Q A A G G A M L A S N S G A I V A D I L P P N R R G G A Y G L T S L G W N V G A L L G I I L G G V L T T F L G W R Y
 I F Y I N V P I G I I A V I L G F R E I K D V N K T K N K L D I A G S L V L G L L L F L I S F G A V L I A G E G A S I S S I L M I I V G V L L I P A F I L V E R
 K V S A P I V N M R V F R E K K L S Y S V F A N F L Q G L G A L A V S F L L I M Y L Q G V R G Y S P F Y S S I I L S P G Y I V A S I L A P I M G R V A D R G K P
 G I I A G I G L I F T F L S L I A Y Y L F L T P T T P I E I I L M I T F I T G V G S G M F W P S N Q T A I M F N A P R E Y Y G A V S G V S R T L G N I G T I L S
 Y V L T I T V S T L S I P R N V A F E I F L G T N V L N G G V S S V F V D G L H L A F L I S S V I V V V A A I L S I L G E G K S R R V V E

Sequence #562 — Gene Saci 1648

M Y R R K T K I I A T M G P N S E K I I D E L A K A V D I I R I N L A H G D E E Q H R R Y F D M V R D K V P I L A D L P G P K L R I G D L K N P I D L K P G D K
V T F G Q D I P V D N E I F F K L I K K D S N V L I A D G R I K L K I E E V G E G K A V A T V I E G G T I T S R K G I N L P D A D T P V G L T K R D Y E L L K L
A I D L G A T F I G L S F V I N A D D V K K V R E I V G N R V W L I S K I E K K K A L S N L K E I C K A S D G V M V A R G D L G V E V G L P S L P Q I Q R R I V
K I A R N Y G K P V I L A T Q V L E S M V E S P L P T R A E V T D V A N S I S Q G V D A I M L S D E T A I G L Y P L D V V K T L D S L I I S V E K T F K P K R I
H I Y K N V D E A I A Y S A V V S S I L S N S P A I F V Y T R S G S T A L R I S R L R P T C P I I T L T F D K S V A K R L S M C Y G I Y P V L T D K L E T L D D
I T R K A K E T A L N L G L N G N I V V V G A A R P D Q K G T R F V R I E E I N

The image displays a protein sequence with p-values for each residue. Residues are highlighted with blue circles of varying sizes, indicating their statistical significance. The largest circle is centered on the residue 'T' at position 100 (T C P I I T L T F D K S V A K R L S M C Y G I Y P V L T D K L E T L D D). Other highlighted residues include 'T' at positions 1, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54, 58, 62, 66, 70, 74, 78, 82, 86, 90, 94, 98, 102, 106, 110, 114, 118, 122, 126, 130, 134, 138, 142, 146, 150, 154, 158, 162, 166, 170, 174, 178, 182, 186, 190, 194, 198, 202, 206, 210, 214, 218, 222, 226, 230, 234, 238, 242, 246, 250, 254, 258, 262, 266, 270, 274, 278, 282, 286, 290, 294, 298, 302, 306, 310, 314, 318, 322, 326, 330, 334, 338, 342, 346, 350, 354, 358, 362, 366, 370, 374, 378, 382, 386, 390, 394, 398, 402, 406, 410, 414, 418, 422, 426, 430, 434, 438, 442, 446, 450, 454, 458, 462, 466, 470, 474, 478, 482, 486, 490, 494, 498, 502, 506, 510, 514, 518, 522, 526, 530, 534, 538, 542, 546, 550, 554, 558, 562.

Sequence #563 — Gene Saci 1653

M E ^{0.046} Y K E I N E I I R H K D E I L ^{0.119} S D L K ^{0.067} S K D R E K R K I A W D K I K ^{0.017} S L V D ^{0.086} T G N V K V L E G K K N ^{0.003} Y L R ^{0.005} S L L W N R I Q G V R E D A W ^{0.006} S H L D I ^{0.025} Y K E L ^{0.014} S
V E G I E R G L R A N ^{0.023} S D R I K W ^{0.005} T A W ^{0.003} S H I F E L M D M G I I ^{0.081} T R K K V I E D K ^{0.017} Y ^{0.021} S F W R L L R ^{0.018} S R W ^{0.065} S ^{0.226} T I R K K A W R L F V D L V K A R I F D R R D V G R ^{0.007} Y
V E F L R H N K P ^{0.002} S V R I ^{0.007} Y A W E V A L Q L L N L G F I D A N ^{0.049} T L K ^{0.002} S N Q I ^{0.006} Y L E D L ^{0.093} T K I E ^{0.044} S R I K K R A L R I L L R L K ^{0.151} S

Sequence #564 — Gene Saci 1654

MKVAIIIGGGIVG ^{0.004}S FIA ^{0.006}^{0.005}Y Y L ^{0.007}S REGVDV ^{0.08}T ^{0.081}I Y EK ^{0.014}^{0.012}S S L G ^{0.012}^{0.013}S G S VHAAGLIEP ^{0.011}Y RFDKIN ^{0.003}^{0.01}T T GMIKKML ^{0.006}^{0.003}S Y V G K K V ^{0.07}T I V K Q L N P E W
 I K ^{0.007}S L L ^{0.006}S I L N K E P P Q E A W D I I R R M A ^{0.139}T ^{0.021}S L K E ^{0.082}Y K R M A E E V N D F D ^{0.089}Y E E N G L L E I ^{0.016}Y Q D R L N L E H G V E E E K R N P F N P K F E V I D V K
 G F ^{0.007}S G A I ^{0.086}Y F P E L ^{0.008}S K L N ^{0.198}^{0.029}T Y K F M E R M K R E L K G V K I E I R E I V N L D E I ^{0.004}S K G ^{0.026}Y D ^{0.083}T V V L ^{0.004}S A G V W L ^{0.002}S K L G M P I ^{0.081}^{0.003}T S F K G ^{0.015}Y G ^{0.023}Y R V ^{0.019}S G E M L
 V K ^{0.005}Y P ^{0.006}S V I ^{0.007}S E L G V A V V K N ^{0.003}S D H I K I ^{0.05}T G G F D A D F ^{0.01}S A D V E R A K I F L D A G G C L A K I D K V ^{0.065}Y D L ^{0.007}S M G ^{0.008}Y R P C ^{0.016}S P D G F P I I G R V G Q F V I
^{0.001}^{0.056}S ^{0.005}T G A C R L G W ^{0.004}S F G P ^{0.054}S M G K F ^{0.027}^{0.006}T A D L V L D R V K ^{0.008}^{0.015}S Y G ^{0.008}Y L ^{0.015}S R L L N G R N L ^{0.024}S V P K L

Sequence #565 — Gene Saci 1655

M ^{0.04}T ^{0.072}F I K A D ^{0.196}T L K K L M D A K K L L ^{0.02}S D G I I E E G D K I I K E L A K ^{0.022}S ^{0.028}S P R D E ^{0.004}Y N W F I C N I V D ^{0.014}T I ^{0.002}S C D ^{0.009}T L F V V L E D I G ^{0.003}S N F D L ^{0.001}S K C Q N L R ^{0.01}T

I I N C G I K L N I N ^{0.001}S ^{0.002}K Y F D M A L D ^{0.018}Y ^{0.044}L T A Q G K K E Q L E D I ^{0.008}S K N L F K L N E Q P K P E I V I K I A N A L K K I G ^{0.029}S ^{0.061}T R E A N D L M N E A C K R G I K D

A C A ^{0.004}S V V V G ^{0.061}T ^{0.063}T K W ^{0.047}T

Sequence #566 — Gene Saci 1656

M L P W E L A R F K I Q G **S** R I I P L F I D N **S** E I A Q E V L D L F Q K G E R L G N V I E Q A K **Y** L E K I **Y** D **Y** K L V R G L I R L I I R V **T** **S** L E E D **S** P I D P
0.057 0.009 0.005 0.003 0.005 0.013 0.07 0.06 0.074
S I L R R E L F **S** R G P V F D K K V K E D V I E E I K K K **Y** N I E P I R **Y** M F **S** D L D E E K R I I E K P N I **S** A D E L I K W **Y** N L **S** L L Q **T** L L F K G **Y** R L **S** I
0.006 0.01 0.007 0.001 0.014 0.008 0.025 0.02 0.008 0.002 0.002 0.003 0.001 0.081
R V **S** **S** N W K E I I W R A K L L G L M **Y** **Y** A **Y** K E P L E L E F I G P A **T** L V K M N E K **Y** G R N F A V L L P **Y** V V **S** **S** P D W **S** I R A E I V L G K L K K R I **Y** K L E
0.028 0.078 0.071 0.04 0.11 0.018 0.072 0.012 0.086 0.006 0.007 0.015 0.004
A **S** N L K N L R E I K I D E K K F D **S** **S** I E E K F **Y** N D F **T** **S** I L K D W K I **T** R E P E P L V V K D K I F L P D F V A E K G K L K V **Y** I E I V G F W **T** K K **Y** L Q N
0.017 0.012 0.001 0.005 0.006 0.002 0.046 0.089 0.011 0.008 0.003
K L E K V **S** D V E N P L L L L V N E E L **S** I D G K I D L P N I I L **Y** K K K I D V M K V **Y** K W L R D **Y** E R Q F L Q **S** L P N N I D **Y** **T** I E G D V V **S** **S** E I A N R L
0.021 0.005 0.002 0.008 0.005 0.01 0.063 0.009 0.012 0.007 0.004 0.157
S L P L E H L R K N L K N F P G **Y** I L L K N **Y** **Y** V K E D L I N K I K **S** **Y** Q L E G R K L **S** D L K K E **Y** G D **Y** I V D V I D **Y** L G **Y** K L M W R G L **T** D A V V V K K

Sequence #567 — Gene Saci 1658

MMD ^{0.051} S I D K K I L I ^{0.009} Y L F R D G R I ^{0.048} S Q R K I A E E V K L ^{0.008} S A ^{0.025} T ^{0.005} S L N ^{0.006} Y R F N K L I E D G I I K ^{0.003} S F K V Q V N P N L ^{0.003} Y G K ^{0.002} Y ^{0.007} Y G F V ^{0.004} S F K N ^{0.008} Y K D L D F Q F I

D L K V N C L E D L N V ^{0.022} Y R L V G D ^{0.01} S ^{0.037} T E D I E D K I ^{0.025} S V M ^{0.016} S K D L G E P Q M ^{0.033} S ^{0.019} Y I P P Q N P I I P ^{0.013} S G I D I K I V K ^{0.024} S V I K N P R I E I ^{0.018} S E I A K D L N L P ^{0.009} S

K ^{0.008} S V N R R I N V L ^{0.013} T N K N M I R I ^{0.004} Y P I V D L ^{0.003} S K A D L I M F A I F ^{0.009} S ^{0.009} S H I D ^{0.008} S L D F L K ^{0.077} T C ^{0.004} S F ^{0.044} T ^{0.005} S F K D N G R G I V I C I ^{0.009} T E N I R ^{0.03} T A E N ^{0.004} Y F K N V R D

I D R E A E I M V ^{0.015} T ^{0.082} S ^{0.005} S ^{0.023} Y D I R N E G A L R E L E R I E ^{0.074} S Q ^{0.183} T ^{0.052} Y ^{0.017} S K A F

Sequence #568 — Gene Saci 1661

MKRFENLKELLAEYKKLW^{0.01}SLQYAESLMGWDIE^{0.197}^{0.185}TYMPEDDAM^{0.146}TRGEVIST^{0.009}^{0.122}FSSEIKREIYQKLGKIIERY^{0.015}YEGKEGLNDEERG^{0.004}
 ILRVLGRDYKYYSKIIPLEIIQQIERVRS^{0.03}EAT^{0.048}VVWRQAKAKSD^{0.01}YS^{0.039}MFKPYLEKIKDLQIKIAEY^{0.024}WGY^{0.028}EDHPY^{0.057}NALLDLNEE
 GFS^{0.026}IRDGDRIFS^{0.048}RLLPELS^{0.041}DIMKKVSEKGY^{0.042}FPK^{0.026}SELEEV^{0.018}Y^{0.225}DIGRMKVVN^{0.135}EEVIKILEMPKGGKFR^{0.01}LDIS^{0.006}AHPFT^{0.063}VRI^{0.018}SA
 DDVRI^{0.109}^{0.201}TR^{0.005}YEGKDFRS^{0.01}^{0.103}TLF^{0.002}SVVHECGHAIY^{0.015}ELGIDRELEGT^{0.135}PIGGGV^{0.003}SMGIHEAQ^{0.004}SRFWENIIGRS^{0.011}REFV^{0.005}SLI^{0.001}YPK^{0.006}LKQN
 LDFLS^{0.006}KY^{0.005}NEDDI^{0.061}RY^{0.009}FNIVRPS^{0.014}FIRVDADEV^{0.032}TY^{0.012}NFHIAVRY^{0.003}EIEKRLIGGEIKVDEIP^{0.015}SLW^{0.004}SELMEKY^{0.049}LGI^{0.066}TPK^{0.066}NDAEGA
 LQDIHW^{0.009}TGGFGY^{0.008}FPA^{0.007}Y^{0.067}TLGNVVS^{0.001}GI^{0.021}YS^{0.001}K^{0.086}TPNL^{0.007}YNLLREGKIG^{0.038}EIK^{0.029}TEKI^{0.015}YKY^{0.016}GAT^{0.059}YS^{0.012}PKDLLRK^{0.019}^{0.285}TFGEEY^{0.045}NPEGLI
^{0.016}LYLRHK^{0.004}Y^{0.015}LKS

Sequence #569 — Gene Saci 1663

M D D N I F **T** D P V G **Y** K N W **Y** V K H N D L **Y** E **S** E R K L V Q **S** F K L K N C I D L G **S** G P G **T** F H E V I N G R K I **S** I D I **S** L L M L N E V D K **S** E D R I L A D V
S D I P L R D N A **T** D C V F I **S** L **T** I C F V D D V R K F I D E A M R V **T** K E R L V A C F I P R D **S** E L G K **Y** **V** E E L G K R G H R **Y** **Y** **S** K A R F I **S** K K E L **Y** A L
L **S** N **Y** N I V **S** V K **S** **T** L L **S** E K E K **T** **Y** E I R **Y** D D **S** G **S** **V** V C V E V **S** K Q **S** **S**

Sequence #570 — Gene Saci 1664

MFR T L S V I I K L L P R V I K I R N Y R N A I L N N E Q V D E K E M E K E A E K F V D T L I S L G P I F I K F G Q L L S V H S D I L P Q P Y L K A L S R L Q
D D V D P P S W E E I K K I L E E D L G N K L N E Y E I D P T P I S S A S I G V V Y I A K R K K D G K L V V I K V N R P N I K E M A D Q D I S V L K S L A P L T
K Y V F D E S F Y E S F K V L V D N F G K K I Y E E M E F T I E E F H M K K I R E E M S D Y P W I R I P E P Y L A T K R V L I M E Y V K G Y K V T S E E A K R I
M R A P D L S Y M V F R T F M V M L L T K E Y F H A D P H P G N I A L D E K G N L I L Y D F G I V G R M D R D T R L R L L R A Y G A L L R F D S I G L V K V L E
E L G A I Q P E A D R E I L A K G I G L F L E Q F Q G I T P E T L E V E Q F L E A T N E V F Y R F P L K I P D K L A I Y I R M T S I L G G T C T R I D P E F N F
F L N L Q K L V E E E G L L F E A M I N D M R S T I S S A I Q K F R L S L L E K P I P L N K K S T S E K I S R Y L S F S F I V I A L L T Y L Y D R N S I L P L L
I A I I A L V I I M N K

Sequence #571 — Gene Saci 1667

M S E W E I A V N R A I N N N V P K V F Q I L N K Y P Y I L E L A K K L R E A K L Q V L S N P E K Y I E E T I N S V K R I G G N A Y F V R D A N E A R E V I S K
I V G S G K K V V M G K S M V A Y E I G L R K H L Q S I G N E V W E T D L G E F L I Q L A D E P P S H I L A P A V H M T K E R I A K L I R E K L H V D V D V N S
S H E E L V A K V R E F L R E K F V K A D V G I T G A N A V A A D T G S V I L V E N E G N I R M S S V L P T V H I A V A G V E K I V P T F Y D A L T E A T V Q A
A F A G L Y P P T Y I N V S S G P S S T G D I E M K R V S P A H G P K E F H L V I V D N G R I Q I S K D E I L K E T L L C I R C G R C H M H C P V Y R V E G V D
W G D P P Y T G P M G A M W S Y A V Y R D T K P A M Y C M H S G N C K E V C P M K I N I P R V L E R I K A I G N G S V R D G D G Y R R K K

Sequence #572 — Gene Saci 1678

M L N V K E V D L T K V D G D K R F A I L S A F L T V R P I I Q L K A D D D D S I V R I F E L C Q L L S Y P F K E S V G E D G V T T F E I R R K K D L P K D L P
S S M T D V T V P F K P E K I A S K L G T P T I L T S F I P E L V S V R R V A P K S Y M F K I K T Y G E I P F V I Y K V K T P T P R Y I I R Y F G Y D T K L F G
Q F L L R I E F V I S K A K G G S R V V M T E T Y K R A F G A E G A I R K H L S L F R D K M S S V L F

Sequence #573 — Gene Saci 1686

MAKAI S^{0.002}API T^{0.003}FAIILVIGILLLLIPFL T^{0.002}Y V^{0.001}T Y L S^{0.003}Q S^{0.001}N Q I S^{0.001}Q A Q F N N Y^{0.008}I Y^{0.005}L K N L E Q Q R A V S^{0.021}G R P G V Y^{0.011}Y^{0.011}N G S^{0.002}S^{0.002}L F I L Y^{0.004}S^{0.001}N G T^{0.007}F
 V P N A S^{0.001}I V V V G I L Y^{0.002}L N N L G V W Q N I T^{0.006}S L K Y^{0.001}P I I L N R T^{0.004}G S^{0.009}V N L P S^{0.002}N V A G K P I I L V T^{0.011}S^{0.002}L G N I F F L Q P G S^{0.01}S^{0.016}I G P Y^{0.009}S^{0.007}N S^{0.684}I G K G G V T^{0.021}
 I I S^{0.014}Q I Y^{0.001}T S S^{0.021}Q I Y^{0.006}S T S^{0.012}Q I Y^{0.001}S T S^{0.005}I N I T^{0.002}T N I N G K F S^{0.004}N Y^{0.001}T T P I T^{0.081}F P N Q T^{0.026}G T F Q V K A R E Y^{0.003}I Y^{0.005}Y I N S^{0.009}K T G K V I T^{0.001}G V F S^{0.03}N W Q I L G S^{0.017}A T V N S^{0.001}T T^{0.007}
 T^{0.027}Q G I T^{0.017}V T L Q G K P V I L I A N Y^{0.003}S Q L V Q S^{0.001}V N L S^{0.002}I K T N A N F S^{0.001}I V V N I N G V N Y^{0.002}T V N N H A L S^{0.005}A T V P A G Y^{0.012}V V N F T^{0.004}V Y T L Q G N D T^{0.019}S S^{0.003}M S^{0.004}S^{0.006}S^{0.004}
 G I I K H Y^{0.004}K F N T^{0.029}I N Y^{0.004}T G N T^{0.008}Y V T N S^{0.014}Q L L F L P P N S^{0.006}L P Y^{0.005}V Q I N Y^{0.001}V N D Y^{0.002}N Y^{0.004}Y K V F L Y^{0.021}D Y^{0.029}Y^{0.049}D S^{0.008}P P P P G G L V V I L N G T^{0.006}E Y^{0.008}N Y^{0.007}N N T^{0.011}Y^{0.001}G
 Y W I I G G N Y^{0.005}S F V P T^{0.011}G I F N G S^{0.002}M S^{0.003}Y E A K E V T^{0.048}I A G N N G I L N Y^{0.004}Y F P D I P S^{0.002}Y I I I N Q P M T^{0.007}I T^{0.008}V Y^{0.014}Y^{0.004}D Y^{0.001}V I K W V P I^{0.002}

Sequence #574 — Gene Saci 1689

M D L K K R A V I I T L L L L V S L L A Y A L A K S T G Y S V L I L S T T S A L S F W S A I L L L I P K R F Y N S T F F S L R K G K A Y W I T L S S Y L I F H S
I L Y G T F L T V L L G Y V G F Y P Y F S W G V G F A V P P S P E Y F I Y W V A S S P A F W M F I G P Y E S D I L P F T L V I G V I L G L L L S A N V Q S I V E
L S R N V S V S R S R I S S S I V A I P T L G V I S G T A C C I S L P T I I L L Y V S L S I G A V T S I L P I L S S P V Y F N F V Y F G L P I L S S V I L Y Y N

L L E L R R I N R K V C E L K

Sequence #575 — Gene Saci 1691

M K I V D L H Q D L A ^{0.098}Y ^{0.007}S N Q M G R D V I E E E Q K Q ^{0.024}S ^{0.028}S I K M L R N F D ^{0.007}S L I F G ^{0.006}S I F P H I D ^{0.038}T L N D K ^{0.008}S H K L ^{0.008}S N L ^{0.012}Y G R P ^{0.141}T R G ^{0.153}T ^{0.021}S F ^{0.006}S F ^{0.003}S L F L D Q V

^{0.004}K ^{0.001}F ^{0.007}Y Y Y L D R R G ^{0.005}Y ^{0.159}T L V R R K E D L E K P G I K V L L ^{0.01}S L E G A D V L R D ^{0.032}Y E D I ^{0.015}Y L L K E L H V ^{0.005}Y N L G L ^{0.005}T W N ^{0.005}Y D N K F A ^{0.003}S ^{0.003}S C M ^{0.006}S N K D ^{0.085}Y G L ^{0.079}T D E

G E E L V K ^{0.023}T A N ^{0.004}S L G I I I D L A H A G K R ^{0.06}T L L D V A ^{0.006}S I ^{0.011}S K R P I I V ^{0.017}S H G N A R K L K D H R R N L D D E E I E A I V K ^{0.028}T N G V I G V ^{0.01}T A I V E ^{0.063}T L R E P

^{0.044}T I N G L V E N I K ^{0.007}Y I G E ^{0.002}S F G W E ^{0.015}Y V A I G ^{0.034}T D F L G I Q K V P E G F E N V M K L R E L ^{0.042}S D M L D G H ^{0.017}S E E V L W K N A M R V I L K H F E ^{0.046}T

Sequence #576 — Gene Saci 1692

M D E F N K K E I N N E L R V M R F Q V F D V E C G N C V **Y** K I K R A L A **T** L P D V V D I N I **T** P D F D N **S** K A V V I L R **Y** K G N L D K R E I E E I L K E I **S** E

E **S** P **V** H E **Y** K A V W E **S**

0.062 0.09 0.025 0.019 0.003 0.032 0.084 0.003 0.007 0.056

Sequence #577 — Gene Saci 1694

ME ^{0.18}S ^{0.15}S ^{0.15}S ^{0.066}S K M ^{0.096}S I I G A P R ^{0.067}S ^{0.091}S R K V L ^{0.04}T L ^{0.055}T V K G L P P D V L ^{0.102}T K V V V N G L P ^{0.011}Y ^{0.013}Y L ^{0.002}S N E ^{0.014}T V ^{0.009}T F I E P I I W K A ^{0.005}S K V I K K N K V ^{0.087}Y E P I Q ^{0.027}S E G ^{0.046}S A
^{0.029}S P P D N A E I V ^{0.082}Y R E ^{0.044}T ^{0.025}S ^{0.032}T I P E ^{0.069}Y W L E K K I G G K ^{0.006}Y K I ^{0.014}S K I L G ^{0.009}S G G A G ^{0.032}Y V M L A E D K Q A N K L A V K I ^{0.015}Y R L E ^{0.022}S E N Q G E ^{0.038}T A L F R D ^{0.019}S M I E L A
 N N I N K I ^{0.003}S K L D H P K L I K F ^{0.005}Y D V N V N L E V I K ^{0.002}S ^{0.003}Y F K G I ^{0.041}T ^{0.007}Y L ^{0.002}Y L K D P P ^{0.07}Y V A M E ^{0.025}Y M G N G ^{0.06}T V K D L L R D E ^{0.023}Y F ^{0.003}Y ^{0.005}S V R W K K L V ^{0.005}Y R I I F Q
 V A R G L L ^{0.005}Y L H ^{0.002}S E G ^{0.024}Y V H L D V K P ^{0.004}S N I F I E ^{0.005}S V K G D D I R V K L G D L D ^{0.033}S M K R V G Q ^{0.012}S I L E I ^{0.199}T P E ^{0.102}Y A P P E Q L Q A H ^{0.074}Y ^{0.186}T K E G A R P ^{0.133}T M D I F ^{0.003}S
 L G I ^{0.098}T ^{0.015}F Y E L L ^{0.151}T R K K R Q P N ^{0.017}Y L V ^{0.007}S A L E A L ^{0.007}S K G N H D E A K K L I N D D I I ^{0.009}Y L ^{0.007}S ^{0.008}T W N I D ^{0.013}S I D D D K I K D L I Q R M V ^{0.161}S P D P K ^{0.059}S R P ^{0.685}T A K E I V
^{0.112}Y E L D D L L Q R A E K K

Sequence #578 — Gene Saci 1700

MEKGVYIGKLVKPVVDREWYEVARNPADYREIVSKFPRLRHKDVVD A I K I A K E S Y E K W R E Y T A Y E R A K I L F K T A D I L E S R M Q
 E I A K T L T M E E G K T L G E S A Y E V E R V T S L L R Y Y G G L T L N S H G K T L Q S S M K N S M H L T V R E P I G V V G I I T P W N F P F L I P G W K I A
 P A L A T G N T V V F K P A S N T P T V A F E L V N A L Y E A G L P E G V V N L V T G S G R E V G D E I V T N K E I K A V S F T G S L E V G R E V N S K I G N R
 F T R L Q L E L G G K N A T V L T K N G D F N L A I E H V T W S V M V N T G Q V C L A T S R F L V P K E L H D K A V N A M T E S F K S L V V G N A L K Q P V H M
 G P L S S R D Q Y E K V L G Y V E I G K D E G A K L V Y G G E P I K G E D Y D Y G Y F V K P T I F D N V T K D M R I A K E E I F G P V L A I M T Y E S L D E A I
 E I V N S T D Y G L T A E I V T N N L N E A M K F S E G V E A G V V K V N R P T V E L D Q W V P Y G G F K G S G N D V Y K E L G E E A L D F Y T K I K A V H L Q
 Y 0.013

Sequence #579 — Gene Saci 1704

M V T G G A G F I G S S F S R E V K K P V I F D L L T Y A G R L E N L I G V D H I F V K G D I R N Y S Q L E D T V K K Y D I K I I V N F S A E T H V D R S I N N
A H I F L D T N V Y G V V N L L E I C R R Y D T R L V Q I S T D E V Y G E Q E N A T E D F P L R P S S P Y S A S K A S A D M F I L A Y V R T Y G V D A I I I R P
S N N Y G P R Q H I E K L I P K T I V R T L L G L E I P I Y G K G D Q E R D W I Y V E D T A K V I A Q L V E T G K K G E I Y N V P G G Q R T T N I K L V E M I G
E L M G R E P K I K F V K D R P G H D K K Y S M V S T K L S Y K V T P L K E G L S K T I K W Y L E N E W W R P L L N D E Y F L R E T S W

Sequence #580 — Gene Saci 1705

M V T L I I G G S G Q L G Q E L G K L I K D S I L T F S S R P I E G G I Y L D T R D Y I R V E D L I M K T K P E V I I N T S A I T D V D K C E V D R I N A H S V
0.018 0.006 0.016 0.044 0.015 0.017 0.041 0.156 0.032 0.015 0.015 0.003 0.045 0.002
N S L A V K H M V R A A S I T K S Y F V Q I S T D Y V F D G N R G N Y N E D D L P N P L N Y Y G L T K L L G E T Y S L S Y D Y S L V I R T S G I Y G S N K E N F
0.003 0.015 0.014 0.001 0.005 0.003 0.02 0.002 0.007 0.007 0.006 0.024 0.03 0.009 0.007 0.011 0.011 0.01 0.005 0.008 0.014 0.021 0.004
P L Y V L K S L E K G S K V R A V W D M Y Y S P I N V K Q L A E A I V Q L L P L R K T G I L N I A G D R I S R Y D L A L K I A K M S S L N E N L I E A A S Y E E
0.008 0.011 0.012 0.03 0.021 0.003 0.052 0.026 0.007 0.011 0.017 0.067 0.119
M S W R A K R P K D S S L D S S T V K K Y V S V N L S L E E G L R R L I N D V Q N K
0.107 0.129 0.138 0.061 0.057 0.225 0.018 0.025 0.016

Sequence #581 — Gene Saci 1706

MFRINEKDIPDVLVIE^{0.161}TDK^{0.076}YEDERGLLMELFKR^{0.004}SNFIFID^{0.003}SIVQVN^{0.007}Y^{0.003}S^{0.003}Y^{0.004}SKKGVIRGLH^{0.008}YQLKPKKEQGKLV^{0.023}TVIDGKI^{0.044}YD
VAVDIRRG^{0.047}S^{0.014}SPWY^{0.002}GK^{0.002}FVSEILVPGKMLWIPPGFAHGFQALEN^{0.002}SHVV^{0.098}Y^{0.009}FI^{0.007}SGNDF^{0.007}SP^{0.02}SEAGIR^{0.088}YDDPDIGVNWPIQNP^{0.005}IVS
QKDLRWP^{0.028}SLKECKNNFE^{0.037}YVPHNKK

Sequence #582 — Gene Saci 1708

M Y D L A I I G Y G A A G F S A L I R A N E L G I K P V I I G Y G E I G G T C V N V G C V P S K R L L S I G E T Y K Y A S I A L N Q K T P N F E K S F E D K S
E I V S S L R K E K Y E D V L N S Y D A K V I K G R A H F I S P N A I K V N G E I V E A K K F I I A T G S S P S I P D I K G L R E A G Y W T N V E A L S P T R R
I S S L A I I G G R A L A L E F S Q M Y K R L G V D T V I L Q R S N R I L P N W E P E I S L S V K S Y L E N M E E I P V F T Q V K V K E V E T K N D Q K V I I T
D M G E V E V D E I L V A T G R R P N V D L N L N V A G V S L N E K G G V K V D E E L R T T N P N I F A A G D V I G E Q M L E S V A G K E G F I A V D N A I L N
S H K K I D K L S I P Q V V F I D P N V S R V G L T Q V E A E S S G Y T Y R V V N M E S V P K A R I L R E S H G L I K M V V N R E D M R I L G A E I F G K N
S A E I I N E A A L A I K F R A T I Y D I I D T I H V F P T M S E S L K I A A I A F E R D V K R M S C C V D

Sequence #583 — Gene Saci 1715

M P E ^{0.022} S K L N ^{0.02} S P L R ^{0.058} Y H G I ^{0.022} Y N A P H R A F L R ^{0.003} S V G L ^{0.057} T D G E I N K P L V A V A ^{0.034} T A W ^{0.003} S E A G P C N F H ^{0.056} T L ^{0.002} S L A H V A K E G A K E G G L ^{0.085} T P L A F P ^{0.115} T I V
 V N D N I G M G ^{0.006} T E G M R ^{0.003} Y S L V ^{0.016} S R D L I A D M V E A Q F N A H A F D A L I G I G G C D K ^{0.035} T ^{0.077} P G I L M A M A R L N V P ^{0.004} S I ^{0.022} Y I ^{0.031} Y G G ^{0.006} S A E P G F ^{0.011} Y L G R R L
^{0.175} T I E D V H E A I G A F I A G K I D E H E L ^{0.077} Y E I E K R A H P ^{0.028} T V G ^{0.016} T C ^{0.002} S G M F ^{0.012} T A N ^{0.192} T M G ^{0.027} S M ^{0.025} S E A L G M A L P G ^{0.078} S A ^{0.055} S P ^{0.426} T A ^{0.244} T S ^{0.113} S R R I M ^{0.074} Y V R E ^{0.084} T ^{0.263} G K A V
^{0.018} S R L L E N G V K ^{0.022} S R D I L ^{0.035} T F E A F E N A I A V L M A M G G ^{0.002} S ^{0.019} T N A V L H L L A I A ^{0.006} Y E A G V K L ^{0.027} T L D D F N R I ^{0.015} S K R ^{0.252} T P ^{0.018} Y I G ^{0.009} S L K P G G D ^{0.076} Y V M A D L D
 E V G G V P L V M K K L L D A G L L N G D V L ^{0.079} T V ^{0.019} T G K ^{0.07} M K Q N L Q E ^{0.027} Y R I P N V P H N H I V K D V K N P I K P R G G I V I L K G ^{0.01} S L A P E G A V I K V A A ^{0.006} T
 N V ^{0.034} T K F E G K A K V ^{0.016} Y N ^{0.021} S E E Q A F K G I Q ^{0.012} S N E V K D G E V V V I R ^{0.031} Y E G P K G G P G M P E M L R V ^{0.022} T A A I V G A G L ^{0.004} S N V A M V ^{0.109} T D G R F ^{0.005} S G A ^{0.176} T R G P M
 V G H V A P E A M V G G P I A I V E D G D V I V I D V E N E R L D I K L ^{0.026} S D A E I K R R L N N W ^{0.033} S P P E P R ^{0.032} Y K ^{0.054} S G L L A K ^{0.04} Y A ^{0.018} S L V A Q ^{0.008} S S ^{0.011} M G A V ^{0.101} T R P V I

K

Sequence #584 — Gene Saci 1717

MLRELLS^{0.057} RINELRGNET^{0.074} DRFLKFLAILNT^{0.011} LIEQKELGR I I I VGGFA^{0.011} SEI^{0.007} Y^{0.015} SGR^{0.082} SYR^{0.025} T^{0.111} GDVDILVEGRAEGIVRDLLRS^{0.024} IS^{0.031}
DLGLRIY^{0.001} LPKIREIS^{0.043} EKGIDIVGN^{0.244} TY^{0.009} DRKKPPMKI^{0.067} V^{0.007} VDS^{0.027} YHV^{0.075} IILPPEEVIL^{0.031} TY^{0.021} LEAWKY^{0.008} W^{0.005} SS^{0.002} T^{0.119} EDRNKAVLVY^{0.012} CS^{0.004} QRDI
LDEGY^{0.043} LRS^{0.063} EAKDRRVEDY^{0.031} LDKIRDFC

Sequence #585 — Gene Saci 1724

M K F I V K P R N R Y I E V I A Q G K E G V V I F P T Y V P G S Y V I R E L E R N V V E I E G F R I T K N K F Y V K E N F K Y L V Y A S S R D Q R E A I S T N D
0.005 0.181 0.007 0.003 0.008 0.153 0.007 0.006 0.024 0.017 0.008 0.004 0.083
V L F I N P P A V F P F Q N I Y E K Y C V K I E T N W K V A T T L Q E E N G Y Y C A D N Y H E F A D S P I E A S P E L K V L Q V D E G H Y V S T I D D V D L A M
0.182 0.006 0.026 0.004 0.018 0.089 0.007 0.041 0.011 0.01 0.054 0.004 0.097 0.018 0.026
L G K I V S E A D K V I Q P K D K Y I F H F R R S D R N F G G I E H K K S T G I V V S W D K K D L S I L F A H E Y F H R L N V K K L V P K D L N H N Y E T E V Y
0.01 0.024 0.051 0.01 0.078 0.006 0.004 0.018 0.006 0.018 0.014 0.004 0.004 0.018 0.076 0.026
T D L L W F A E G F T D Y M A H L I C L R A G L N T P E E I F R R I L Q S L H N L T F P G A K R V S L S E A S K T A W I K Y Y K Q D E N F L N A S I S Y Y D G G
0.012 0.022 0.004 0.08 0.002 0.044 0.022 0.005 0.006 0.02 0.014 0.004 0.004 0.004 0.02 0.004 0.004 0.02 0.008 0.008
L A L G F Y V D L R L A E R G N R I D E L F K T L P E R Y T F R D V E K T L E R L G F H E L E L A N K P A Y Q I V E A I G R I I D L Q F V D K G K K Y Y G L S L
0.004 0.091 0.004 0.449 0.181 0.021 0.004 0.009 0.008 0.004 0.009 0.008 0.015
D N Q R V K F V E E N S P A D L A G L M P E D Q I V G V D G I S K P L E V K D Y V K L H V I R E G R L K Q I E L R A G E N P G H S L K G K I E G E H A R K I L S
0.026 0.007 0.089 0.021 0.021 0.015
R D V V E A V Y N S V I I
0.025 0.003

Sequence #586 — Gene Saci 1725

MDE^{0.007}Y^{0.001}L^{0.004}A^{0.001}R^{0.017}I^{0.001}D^{0.001}R^{0.004}L^{0.001}P^{0.001}T^{0.001}W^{0.001}G^{0.001}L^{0.001}S^{0.001}Y^{0.001}V^{0.001}I^{0.001}L^{0.001}Y^{0.001}A^{0.001}I^{0.001}G^{0.001}F^{0.001}S^{0.001}Y^{0.001}F^{0.001}I^{0.024}T^{0.004}L^{0.004}Y^{0.003}D^{0.003}A^{0.003}V^{0.003}G^{0.003}N^{0.003}I^{0.003}G^{0.003}A^{0.003}A^{0.003}L^{0.003}P^{0.003}Y^{0.003}I^{0.003}P^{0.003}F^{0.003}L^{0.003}N^{0.003}A^{0.001}S^{0.014}T^{0.001}A^{0.002}S^{0.002}L^{0.005}I^{0.005}A^{0.005}S^{0.005}I^{0.005}G^{0.005}L^{0.005}F^{0.005}G^{0.005}Y^{0.001}I^{0.001}P^{0.001}G^{0.005}S^{0.005}L^{0.005}G^{0.005}L^{0.005}G^{0.005}Y^{0.003}L^{0.003}A^{0.003}D^{0.003}R^{0.003}I^{0.003}G^{0.003}

R^{0.007}K^{0.007}P^{0.007}V^{0.007}L^{0.007}I^{0.007}L^{0.007}T^{0.044}V^{0.003}T^{0.024}L^{0.002}T^{0.002}A^{0.002}I^{0.002}G^{0.002}S^{0.001}L^{0.001}G^{0.001}M^{0.001}A^{0.001}L^{0.001}S^{0.001}V^{0.001}N^{0.001}F^{0.001}P^{0.001}M^{0.001}L^{0.001}A^{0.001}V^{0.001}F^{0.001}R^{0.001}F^{0.001}I^{0.001}E^{0.001}G^{0.001}A^{0.001}G^{0.001}I^{0.001}G^{0.001}G^{0.001}D^{0.001}L^{0.001}N^{0.001}L^{0.001}A^{0.001}M^{0.001}V^{0.007}Y^{0.042}V^{0.007}T^{0.007}E^{0.007}F^{0.007}A^{0.007}P^{0.007}S^{0.003}A^{0.003}K^{0.003}R^{0.003}G^{0.003}K^{0.006}Y^{0.011}A^{0.011}N^{0.011}Y^{0.011}I^{0.012}Y^{0.012}L^{0.001}S^{0.001}G^{0.001}W^{0.001}I^{0.001}A^{0.001}V^{0.001}G^{0.001}V^{0.001}G^{0.001}A^{0.007}T^{0.007}I^{0.007}

A^{0.002}S^{0.002}V^{0.002}L^{0.002}V^{0.002}T^{0.002}S^{0.002}L^{0.002}P^{0.002}G^{0.002}I^{0.002}G^{0.002}W^{0.002}R^{0.002}L^{0.002}A^{0.002}F^{0.002}G^{0.002}I^{0.002}A^{0.002}A^{0.002}I^{0.002}M^{0.002}A^{0.002}F^{0.002}A^{0.002}A^{0.002}L^{0.002}V^{0.002}L^{0.002}R^{0.002}V^{0.002}A^{0.002}A^{0.002}P^{0.002}E^{0.002}T^{0.245}V^{0.002}R^{0.002}F^{0.002}L^{0.002}V^{0.002}K^{0.002}K^{0.002}G^{0.002}K^{0.002}I^{0.002}D^{0.002}E^{0.002}A^{0.002}E^{0.002}K^{0.002}L^{0.002}V^{0.002}R^{0.102}S^{0.003}M^{0.003}E^{0.003}E^{0.003}T^{0.164}A^{0.003}M^{0.003}A^{0.003}R^{0.003}A^{0.003}K^{0.003}V^{0.023}S^{0.016}S^{0.016}L^{0.016}P^{0.016}E^{0.016}P^{0.016}K^{0.016}I^{0.016}I^{0.016}Q^{0.016}Y^{0.016}N^{0.083}T^{0.083}I^{0.083}

P^{0.02}T^{0.03}K^{0.002}T^{0.002}W^{0.002}S^{0.002}V^{0.002}L^{0.002}G^{0.002}N^{0.002}R^{0.002}T^{0.087}F^{0.087}L^{0.087}K^{0.087}R^{0.087}L^{0.087}V^{0.087}G^{0.087}L^{0.087}V^{0.087}I^{0.087}F^{0.087}W^{0.087}F^{0.087}F^{0.087}I^{0.087}Y^{0.087}F^{0.087}V^{0.087}Q^{0.087}Y^{0.087}T^{0.087}F^{0.087}S^{0.087}T^{0.087}L^{0.087}W^{0.087}D^{0.087}Y^{0.087}Y^{0.087}G^{0.087}L^{0.087}A^{0.087}L^{0.087}G^{0.087}I^{0.087}T^{0.087}G^{0.087}S^{0.087}T^{0.087}F^{0.087}N^{0.087}Q^{0.087}Y^{0.087}V^{0.087}L^{0.087}Y^{0.087}T^{0.087}G^{0.087}F^{0.087}A^{0.087}A^{0.087}L^{0.087}G^{0.087}D^{0.087}T^{0.087}A^{0.087}M^{0.087}A^{0.087}F^{0.087}L^{0.087}L^{0.087}L^{0.087}A^{0.087}F^{0.087}I^{0.087}E^{0.087}K^{0.087}T^{0.029}

D^{0.032}R^{0.032}R^{0.032}L^{0.032}I^{0.032}T^{0.032}Q^{0.032}I^{0.032}G^{0.032}S^{0.032}F^{0.032}G^{0.032}W^{0.032}L^{0.032}I^{0.032}G^{0.032}T^{0.032}I^{0.032}V^{0.032}A^{0.032}A^{0.032}Y^{0.032}F^{0.032}V^{0.032}T^{0.032}R^{0.032}F^{0.032}D^{0.032}L^{0.032}L^{0.032}G^{0.032}M^{0.032}A^{0.032}L^{0.032}T^{0.032}L^{0.032}G^{0.032}F^{0.032}I^{0.032}L^{0.032}N^{0.032}A^{0.032}I^{0.032}G^{0.032}G^{0.032}M^{0.032}S^{0.032}Y^{0.032}L^{0.032}A^{0.032}G^{0.032}Y^{0.032}L^{0.032}M^{0.032}S^{0.032}S^{0.032}E^{0.032}S^{0.032}F^{0.032}P^{0.032}T^{0.032}S^{0.032}A^{0.032}R^{0.032}S^{0.032}T^{0.032}G^{0.032}F^{0.032}A^{0.032}I^{0.032}S^{0.032}D^{0.032}G^{0.032}L^{0.032}G^{0.032}H^{0.032}I^{0.032}G^{0.032}G^{0.032}

A^{0.002}I^{0.002}G^{0.002}P^{0.002}L^{0.002}L^{0.002}L^{0.002}F^{0.002}P^{0.002}L^{0.002}V^{0.002}A^{0.002}S^{0.002}F^{0.002}G^{0.002}P^{0.002}I^{0.002}T^{0.002}A^{0.002}W^{0.002}G^{0.002}L^{0.002}E^{0.002}A^{0.002}F^{0.002}P^{0.002}V^{0.002}V^{0.002}I^{0.002}A^{0.002}A^{0.002}V^{0.002}I^{0.002}L^{0.002}W^{0.002}F^{0.002}T^{0.002}V^{0.002}P^{0.002}K^{0.002}T^{0.002}V^{0.002}G^{0.002}V^{0.002}R^{0.002}L^{0.002}E^{0.002}E^{0.002}I^{0.002}N^{0.002}E^{0.002}N^{0.002}L^{0.002}L^{0.002}S^{0.002}P^{0.002}P^{0.002}Q^{0.002}M^{0.002}A^{0.002}K^{0.002}S^{0.002}K^{0.002}S^{0.002}T^{0.002}E^{0.002}S^{0.002}K^{0.002}E^{0.002}R^{0.002}G^{0.002}T^{0.002}S^{0.002}

Sequence #587 — Gene Saci 1731

M ^{0.062} S I ^{0.082} S ^{0.081} K S ELR K V ^{0.087} T L A A ^{0.006} S I G ^{0.022} T F L E ^{0.016} Y ^{0.004} Y D L L L S ^{0.001} A ^{0.006} T A A G I V W P ^{0.002} S L ^{0.017} Y F N P A ^{0.101} T K N P ^{0.034} T V G L A L ^{0.002} S L ^{0.002} S ^{0.004} T V G I A F I V R P L G G L I F G Q I G D K
 L G R K ^{0.008} S ^{0.08} T L I I ^{0.002} T L L L M F I G ^{0.005} T F G L G V L P ^{0.01} T ^{0.004} Y A Q I G V I ^{0.001} S A F M I I I L R I I Q G I G F G G E W G G A V ^{0.003} S W M V E F A K K A N ^{0.004} S ^{0.005} S P ^{0.004} T ^{0.014} Y W ^{0.024} T ^{0.002} S F L Q G
 A V L F G I ^{0.002} S A ^{0.002} S ^{0.017} T F G F A I V ^{0.004} S A L L D R A ^{0.006} S F L ^{0.001} S W G W R L L F I V G A I I V V L G A L M R ^{0.008} Y ^{0.092} Y ^{0.006} T S E ^{0.004} S P L F L E L K V K G E L ^{0.013} S ^{0.014} S P A L E ^{0.047} T L K K ^{0.001} Y W V
 S ^{0.001} I I L L A I A W W ^{0.001} Y M ^{0.001} T V ^{0.004} T ^{0.004} T V L I A ^{0.01} T P ^{0.001} Y ^{0.001} S I Q F A ^{0.001} S A I G V N ^{0.002} T I L G L ^{0.001} S ^{0.002} S Q ^{0.001} S F M N L V I G I G ^{0.001} Y V V G G L A ^{0.002} S I V L G V M ^{0.005} T ^{0.003} K S I R M ^{0.012} T R L N V I V A
 V V C ^{0.002} S V L V ^{0.001} Y L ^{0.002} Y F ^{0.002} Y M I ^{0.002} S L K E A ^{0.002} Y F V I L ^{0.001} S ^{0.001} S A I F ^{0.005} Y G A V F ^{0.001} Y P F G G L A ^{0.002} S W F A E ^{0.002} S F P ^{0.172} T K ^{0.003} Y R ^{0.005} Y ^{0.098} T G ^{0.012} T G L A ^{0.011} Y Q I G G L L ^{0.001} S G I V ^{0.001} S ^{0.009} T F V P P I I L
 L ^{0.001} Y ^{0.007} T K L P V ^{0.001} S Q L W I ^{0.001} Y ^{0.001} Y A L ^{0.003} T ^{0.002} Y ^{0.005} T I I C V V ^{0.0032} S A L A ^{0.007} T ^{0.002} I A ^{0.014} Y S R V ^{0.014} Y G K V E M P K

Sequence #588 — Gene Saci 1738

M S E T I E V V S P S N L K V I G K V K R M S R D D V R A Q I E E A D K G F E D I S S L P L Y K R T A I L K R A S D I I E R E K E R L A R L L A L E A G K P I K
D A R V E V T R A S R L F R Q A G E E A V F V L E G K N Y R V D G Y E Y P P G N E N R I V V S Q R E P L G V V S A I L P F N F P V N S F A H K V A P A I A V G N
S V V V K P S I N T P L S A L E M A K I L V E A G L T E K A I R V V T G Y S K E I G D E L Y T H P S I S L V T L T G S T Q T G L M I A S K A V S L G K R I I M E
L G G S D P I I V L E D A D I E R S S I S V R A R Y E Y A G Q N C N A G K R I I V R E E I Y E R F V S S F E K K V K E L R V G D P L D E N T D V G P V I N R E
S V E N L N S V I D D A K S K G G K V E I L N K G P D N G H F F P L T A V L K P S L D M L V T K T E V F G P V A P I I P V K S D E E A I Q V A N S T D Y G L Q S
A V F T K D V N R A L R I S K A L K F G A V I I N D S T R L R W D S L P F G G F K K T G I G R E G V R D T M L E M T E N K L V S I T L L

Sequence #589 — Gene Saci 1740

M I T Y I I F P V I K Y T R G L E E E K L L R E I I Q V L G L E Y I N A E R V R V V Y S V N S K S R A I A R I W S V P K V I L T S F Q L E P L Y V I E L I T E R
Y S R L S E E E K I K V L I H E I L H I P K G F S G G L R A H G K H V N K R E V E K L Y R E Y Y S K K R G N W K S R

Sequence #591 — Gene Saci 1743

M P ^{0.031}T I A Q Q I ^{0.009}Y D L L ^{0.001}S K ^{0.004}Y ^{0.018}T N ^{0.004}S I ^{0.025}Y G N P G ^{0.033}T ^{0.05}T E L H F L K ^{0.006}Y L P N N M K ^{0.002}Y ^{0.011}Y L A L H D G V A V G L ^{0.003}S E G ^{0.003}Y ^{0.019}Y L K ^{0.003}S R N L G V V N L H A G P G L ^{0.003}S N ^{0.004}S F G ^{0.018}Y
 I ^{0.028}Y ^{0.008}S A ^{0.001}Y R N K ^{0.011}S P L L I I A G Q Q P ^{0.018}S ^{0.068}V ^{0.037}S ^{0.039}S P E E P M L ^{0.038}Y ^{0.081}Y N F ^{0.009}S ^{0.007}S L P ^{0.015}S V K E ^{0.115}Y V E I K N ^{0.005}S K E ^{0.063}T I K F M N R A I R ^{0.089}T C L ^{0.054}T ^{0.006}Y P ^{0.014}Y G P V V V ^{0.004}S L P ^{0.032}Y D I I E
 D I ^{0.011}S D E D V N ^{0.125}Y G K V V E G N M C ^{0.003}S E ^{0.006}S V I I D ^{0.032}T V E K I K ^{0.008}S ^{0.009}S ^{0.009}S Q I A I V A G ^{0.005}Y E I E ^{0.027}T F D A ^{0.005}S Q E V M H L ^{0.003}S N K L N C P I ^{0.033}Y A E P ^{0.015}Y L ^{0.014}S R ^{0.011}S ^{0.029}S G I R V N D
 T ^{0.034}L P ^{0.051}T R A ^{0.01}S E L N K I I R N ^{0.004}Y D L V L V L G G E L H R V L ^{0.041}Y M D E D I H W K N V I Q V ^{0.022}T S ^{0.001}D V N E A R K R P W N ^{0.031}T I V C N L K ^{0.006}Y ^{0.017}F T G K L N E L I ^{0.202}T P R ^{0.019}S ^{0.179}S P
 S ^{0.052}R I I Q R Q K R R N E K I ^{0.013}S N M L K L L L ^{0.012}S ^{0.017}Y ^{0.189}T D G ^{0.049}Y ^{0.145}T V F G E A ^{0.02}S ^{0.031}S Q G E E I R E L F ^{0.018}S ^{0.024}S ^{0.059}T R F ^{0.013}Y ^{0.028}S N R ^{0.009}S G L L G W A L P A G V G ^{0.024}Y A ^{0.011}S A G G K ^{0.007}S L V I M G
 D G ^{0.003}S F N ^{0.019}Y A P Q A I W ^{0.007}T A ^{0.004}S R ^{0.002}Y D L R V K I L I I N N ^{0.002}S G ^{0.016}Y E A L R ^{0.026}S R A G ^{0.007}Y K R D F F ^{0.014}S P E ^{0.106}T H P W R I A E A ^{0.027}Y D F R A K E F E D ^{0.069}Y Q L A V K W L M E G E E
 R K L A E I R V E E

Sequence #592 — Gene Saci 1752

M R ^{0.001}Y ^{0.015}S I G L ^{0.005}S L L N D D E K N A I N V I M ^{0.004}T ^{0.006}T H D F V V N W H A K I E D K ^{0.02}Y I F P L F G E K A K P ^{0.008}Y ^{0.004}S N D H L L I E R ^{0.014}Y G N ^{0.002}S A I Q Q R N V E W I K R ^{0.005}Y V K I

V L D H N L N E E R N I F I D K V Q A K D I M N A I L K E M R N ^{0.009}Y ^{0.014}P ^{0.009}S ^{0.009}Y E E I ^{0.054}T G L K I D F E

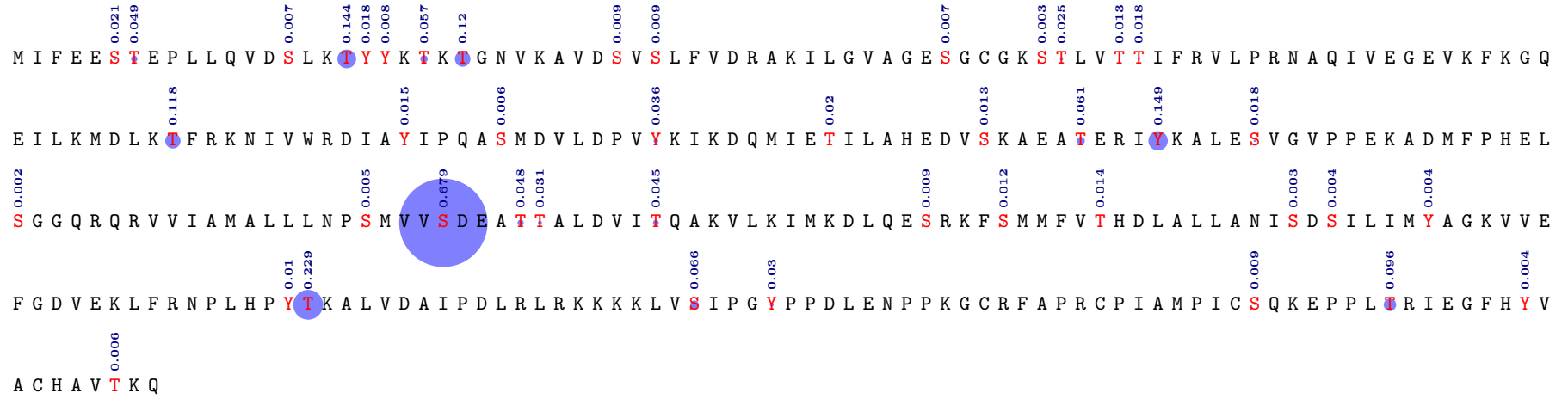
Sequence #593 — Gene Saci 1756

M I V G L A P A G N G G N R **T** G R V F **T** G D E **S** **S** N N L **T** K A L **Y** D **T** G L A N Q P **Y** **S** V **S** R D D G L K L N D V **Y** I **T** A V V K C V P P E N K P **T** **T** G E I R N C M **S**
0.011 0.183 0.056 0.151 0.061 0.244 0.008 0.004 0.036 0.034 0.03 0.032 0.014 0.013 0.163 0.024 0.005 0.018 0.015 0.047 0.008 0.027 0.022 0.111 0.141 0.241 0.185
Y L E E E **T** R M L **T** E A K V **V** V A L G K V A W D **S** L I N L F K **S** K G **Y** E L N G D R K F **S** H G K I V K L V K D G N I V **Y** L I G **S** **Y** H P **S** P R N V R **T** R R L **T** I E M
L E E I F E **T** A K **S** L L
0.14 0.016

Sequence #594 — Gene Saci 1762

M ^{0.075}S ^{0.081}S ^{0.088}S ^{0.308}T A V D N K E A R R G F R I ^{0.221}T G L K R ^{0.}Y I L K R V F E R L V L L F G I L V F N F F I F Q I L P ^{0.032}T L ^{0.002}Y H I N P A E L ^{0.017}Y V P L ^{0.05}T ^{0.014}Y K G L P R ^{0.005}S E L V Q A L D
R Q F G L N L P L Q E R F F V ^{0.009}Y I E ^{0.002}S L L ^{0.006}T F H L G I ^{0.003}S M H ^{0.001}Y D R ^{0.002}S V L ^{0.011}T L I V E R F P V ^{0.012}T A L L V V P ^{0.002}S L I L ^{0.001}S T I L A V V L G L ^{0.001}Y ^{0.48}S I ^{0.003}S R Q G K I G D ^{0.003}S V I
^{0.001}S ^{0.015}F T A I M ^{0.011}T ^{0.001}Y F I P A F W L G E I L L ^{0.001}Y I L G F ^{0.001}Y L N I F P ^{0.004}T N I A Q A I ^{0.005}T ^{0.009}T S N G M A L Q G F ^{0.012}T ^{0.001}Y W V ^{0.001}S L M K F L ^{0.005}T L P I L F I ^{0.003}T I I ^{0.}S ^{0.001}Y G V R N I L F R N
N G V E L M G ^{0.002}S N F V N ^{0.005}Y L R A R G I ^{0.017}S D R K I L ^{0.006}Y K H V ^{0.013}T R N A I I P V V ^{0.012}T R V G I D L A F L F A G V V F I E D I F N I P G L G R L L V N A A A N L D V P L L
E G D F ^{0.002}Y I I ^{0.001}S L F A I I I L L A L D L L ^{0.002}Y P L I D P R V K ^{0.002}Y E

Sequence #595 — Gene Saci 1764



Sequence #596 — Gene Saci 1771

M V ^{0.066} T K W E ^{0.017} Y K K P K R V I N W G D F ^{0.072} T G I R K F E ^{0.007} S V ^{0.064} Y E L P Q E A V E V L L K L L ^{0.003} S V Q G D ^{0.006} T E F A ^{0.004} S I E Q H L ^{0.01} Y W L F H A P ^{0.001} S L ^{0.19} T E R V ^{0.061} T I A R I M A D E

M R H G W Q I I Q V L K E F G E P G K R I A E E L L A ^{0.017} T R M G K H R L D A F N M P F N L W E D ^{0.065} T I A F ^{0.008} T F L I D R V G L ^{0.01} Y Q L M A F E D ^{0.007} S S ^{0.009} F G P L ^{0.024} S R I I P ^{0.002} T

M L M E E E F H I N F G ^{0.01} Y ^{0.041} T G I K R L V E ^{0.012} S G K R D I A Q K L I N K W ^{0.002} Y P R G L D M F G H ^{0.016} S R ^{0.018} S R ^{0.51} T I E L A ^{0.077} Y ^{0.014} K Y G L K K W ^{0.025} S N E E M R K M ^{0.084} Y M K D V E E L V ^{0.027} S

P L G L E L P D P ^{0.127} Y K N R R V L

Sequence #597 — Gene Saci 1774

M ^{0.014}S ^{0.008}S ^{0.073}K ^{0.006}Y G D I L N V T D A I F S K R S N E L G R P A I ^{0.004}Y ^{0.006}Y K D E I W ^{0.048}T ^{0.003}Y R R L I D E I N R V G N A L K K F L E R E Q R L L M I ^{0.006}S ^{0.015}Y D ^{0.005}S P ^{0.023}Y F I ^{0.003}S V F ^{0.012}Y G A M K
 I G A F P I P V N ^{0.037}T ^{0.129}F ^{0.007}T I P D D H I F ^{0.005}Y L E D S K A K V L V V E P E I W D R L A ^{0.01}S K L N G R ^{0.064}T E E L K ^{0.142}Y V M I L P G G H R E Q L H I ^{0.008}S P H P A K V M L ^{0.076}Y E D I V
 P H E ^{0.013}S ^{0.197}T D L N P A K ^{0.352}T ^{0.031}S P D E P A F G L ^{0.082}Y ^{0.174}T ^{0.006}S S ^{0.004}G ^{0.04}T G H P K C A V H L H K D I I V V L N ^{0.013}T ^{0.002}Y V K N V L K I N E N D K L F ^{0.003}S A ^{0.003}S K L F F A ^{0.003}Y G L G N ^{0.007}S ^{0.005}S Y F A F
 G N G A ^{0.004}S V V L M P E R V E P K R V L H ^{0.008}Y I Q ^{0.082}T ^{0.02}Y K P ^{0.012}T I F F A V P ^{0.02}T I ^{0.007}Y N ^{0.001}S L L N V E E W K K ^{0.01}Y D L ^{0.006}S ^{0.013}S I R L C V ^{0.005}S A G E P L P G K I ^{0.016}Y E E W K K R ^{0.002}Y V V E I
 L D G I G ^{0.003}S ^{0.021}T E A L H I ^{0.04}Y I ^{0.002}S N F P G E ^{0.003}S R P N C ^{0.082}T G K V V P G ^{0.007}Y E V K I V D E N G N Q V K A G E I G D L ^{0.055}Y V K G D ^{0.006}S V A M ^{0.035}Y ^{0.006}Y L H K ^{0.028}Y E D ^{0.043}T R K N M Q G ^{0.011}Y W F
 R ^{0.01}S G D K F ^{0.005}Y F D D N G ^{0.012}Y L ^{0.01}Y ^{0.008}Y I G R ^{0.009}S D D M I K A G G M W I ^{0.007}S P I E V E ^{0.003}S V I L ^{0.013}T H E A V L E A A V V G I K D E V G L ^{0.023}T K V V A F V V P K Q G ^{0.01}Y E A N E K L E
 E G I K E ^{0.04}Y L K G K L P ^{0.016}S ^{0.028}Y K I P K Q I R F V N E L P K ^{0.064}T A ^{0.158}T G K I Q R ^{0.026}Y K F R ^{0.217}T G E V K ^{0.041}S

Sequence #598 — Gene Saci 1785

M K A L L V R P ^{0.011} T N P ^{0.125} **T** G ^{0.013} S G ^{0.068} Y N K ^{0.005} S F G F M P ^{0.089} T P L G L L Q L A G D L R A V G N W D I K V V D M E A D ^{0.02} S L ^{0.027} S V ^{0.02} S D V I ^{0.013} S L A K ^{0.008} S Y ^{0.015} D P E I V G I ^{0.021} T L H A ^{0.009} T A ^{0.002} S
 H N I ^{0.002} S ^{0.016} T Q L A K G I K Q E L N D ^{0.002} S L I I A G G H H A ^{0.046} T F V P ^{0.001} S Q M L A E G F D I V V L G E G D L ^{0.034} T M M E I G K N I Q E G ^{0.012} Y R D L ^{0.021} S K V N G I M H K K D G K ^{0.459} T V
 R N P P A P L I D D L D K L P L P A F D L V R K E L ^{0.002} Y R I D I F N E D Q ^{0.054} Y V A C M E ^{0.042} T A R G C P ^{0.003} Y A C D F C ^{0.002} S V ^{0.019} T P ^{0.021} T W G N K W R N K ^{0.024} S N ^{0.007} S R I L K E I E E I K
 K L G ^{0.002} Y N W I F F V D D I F I V W P N R ^{0.015} S Q R E K L F R E M I D R K L ^{0.065} T I N F I ^{0.031} T Q I R A D V ^{0.067} T A R N P Q L I K L A ^{0.006} S D A G L R V A F L G I E ^{0.011} S G ^{0.011} S Q E ^{0.101} T L L K K
 M H K G L A I P D ^{0.007} S V K A V K V L H E N G V I V F L G M M L G A P ^{0.021} Y E ^{0.005} S L K D M I A ^{0.023} T I K F ^{0.005} S R K L A D V G A D G V Q F ^{0.002} S I ^{0.008} Y ^{0.02} T P L P G ^{0.021} T R I F V N ^{0.001} S L E H N ^{0.002} S
 I F ^{0.011} T L N W D F ^{0.007} Y D L L ^{0.028} T P V A R ^{0.068} T K V N P A I I K L L ^{0.001} S V ^{0.009} Y A N H ^{0.018} T F ^{0.001} Y L ^{0.003} Y K ^{0.001} Y F K ^{0.017} S K L R I ^{0.066} S K L K I P D R K L E L L R R A E K ^{0.002} Y I W R K L P F ^{0.008} Y L R G ^{0.106} T F
 I D L P K ^{0.01} S M I G V L R L ^{0.029} S M R K ^{0.05} T N Q V ^{0.006} S K D I L D L M I ^{0.018} S E ^{0.023} S ^{0.014} S K I I ^{0.089} Y L E Q G D K N R ^{0.003} Y F K I K ^{0.117} T E

Sequence #599 — Gene Saci 1791

MPVITVRI DDELKEKMDQLSYINWSEVIRRSIIISVIEEENKKRKENFKKKDNDRIKRA SVKAEEFYAYLGGEKSEEKIRE

WRDKNWQL

Sequence #600 — Gene Saci 1793

M **S** E M P K H R **S** K I E I M **Y** **T** I L K V L R E **S** E **T** E V K K **T** H L M **Y** L V G L N **Y** D V F **S** K **Y** I **S** R I E K L G L V R V N K E G **Y** **S** L **T** D **S** G K R E L E M I E N **Y**
L **T** I E R K L K G

Sequence #601 — Gene Saci 1797

M E E I E K R E **S** E A M I K R **T** L D F L I **S** L **S** K L M **S** N **S** E V N D L L E E I L **T** Y I **T** S L K G R Q W K E I Y E **T** **T** I K R L D P I K R E L D D I R Q K V N N I K
E V E N A **S** R R A K L C Y **T** A L N Y **S** M I **T** L I L **T** F **T** I **S** I L F Y **T** I F M D Y I Y **S** F L F L E I V E **T** I I I F L E I L Y L Y K **T** Y K K I D I N M F I E

Sequence #602 — Gene Saci 1802

M D F L P I F V I I A S V M T A V S V Y L I Y L V K K G I N G I G F L L V L Y L S G S M L T M F I S L S I A L S N T A L T T E I L A L T V N T A Y M I V G L V S
I L L L G A S R R K I E S R K W Y T V L L F S L L M T I S E A V M G E S F Y S I L T K S I G N P L I G T E N Y W F Y A V M L A E M T F T L V Y S F N S L T R Q I
R N Y L L V T L P I M V V S P V I L P T F S I W L S S L L M I V A T I I I Y D T L Y R D R L K K T Q E T F T S L E L M L I F T L M M A G I F T Y Y V T S S W Y L
Y D I S M I L G M T W F I Y R A I Q G P S S I K G N Y L R D S R W T F A F V L M T F V M E W F M G A V L D F A S S Y F S P G V E G F I S S L P L G F V N P F S Y
F G A G A L F D F L S I F G S V T G S V W F L V M M G L E M G T L A I F R I K E V R L R E N R I R L A L M V S A F A I Y A V Y I P S F S P L A S K I P Y I P Y M
W S M G L G T L G P V S T D Y L L S G I V G T Y V L S A V L S F L F G S R Q I C S V T C T A P T M Y Q G T F Y N S L K V Y N R T S S F A R K T L S S K L R P W Y
K L I A I A V W S S L L A F A V I S Y F D Q K G I L N I T I F G N D P T M F L Y S F Y F N F L W Y V V F I S I P F S G N Y A C V T Q G W C S W G T F N Q F F G G
L G L F R L K V K D P E L C V K C E T K A C S K A C P V G N T D L P G N F I K K G E F K S S R C I G V G D C A E A C P Y D N I M F Y D V R S W L K E K I K G D K

M

Sequence #603 — Gene Saci 1805

M N P A K T L I R A I I I L L V V G F V V Y I L H V V I S G F V A Q N Q T L A P Y A R D I E L G V D A A L V G I G G Y I I I R I I K Y V I E G Y I L S R T D N T
G L R S I S L I V D L I L Y T L L I L A I L S A L G V N L T G A A I G G A V G G V A I G L A A Q T V A S N V L S G I L V T S S R T V R P G D S V I L Q S W I W S
P P I I G E V E R V S I L F T E V R T N T G N L V K V P N S A F L G N T V F T K L E D G G V L T Y P Y Q L T V N A D V S A N Q L L D R V K G I L E D E F K K E N
S L V P D V T F Y S K N G A T N I F L V R I K V T E I S K L N G Y I D I V N K A F D K A Y W E L K S P P T Q A K

Sequence #604 — Gene Saci 1807

M Y F R V V Y L T Y V M N V F E I P L S F V K V F L I E T K E G L I L V D S G T P G N G K K I V T E I T R L G K S L D D V K Y V V F T H S H G D H I G S A H E L
K D I L P D A K F G I E S S G V S Y L Q E G K I R N P V L H S S L Q K F L F G L A R P F I V R G F K G T K V D L E L K D G K L V E G V E I M K T P G H T S D S I
S I Y L P E I G S V I V G D M L Q G T K R G L K Y P N I Y E D F E E L K R S V E R I K K L K P K M V Y V S H G V S S S E F L V

0.001 0.001 0.017 0.005 0.002 0.041 0.006 0.086 0.024 0.021 0.004 0.025 0.047 0.004 0.009
0.013 0.013 0.01 0.088 0.003 0.006 0.19 0.155 0.068 0.016 0.016
0.012 0.083 0.013 0.182 0.016 0.124 0.113 0.017 0.03 0.026 0.018 0.014

Sequence #605 — Gene Saci 1808

M K L A V L G S D K L V T T A N A V L S E I F T G V I P D E I I I L S E D Q P S K S V E G I K E L V S Y F G V T P T V R N E I V G E G I E K W R Q K V S E I E V
 D I A D V T P G R K Y M A T S V Y A Y S K A K H I R Y V Y V K N E S S G Y K V F G Y L P F N E I K V F D M R S G D I I K W D P P R V T R S N E K S V Y L T N D S
 L N A L I N I Y S L L G K V K I S L N R D S Y T I E E L V K Y I H D S N D E E I S I C G F R S G F L R Y K E E K D L K D N V E K G Y F T V A D T N V Y I R L G F
 R L G Y L T Y S K T Y G R R L L P S K A T Y N E L N N K V T S T Q K D R N I F K F N L A M A T F N K L H P P P I S V G N Q G S G D V P L V K E T A T L K S Y L P
 E S V V L V T A D S G V N R L A S S N I K T V Y L N T V E K A R S G D I G E F L H C L S F Y V D H N F E I K E I G I E V N D K L A M K I K K Q D A N K V L N E
 G L T E V Q V V S E D L N Y A S L L Q T E E K L I R S

Sequence #606 — Gene Saci 1809

M V N W A P P V P S V A D Q V I S W L V F F F G L I G P I V I I L G L I G I R G F M E I T R F E K G E S V L Y K I S P L T K L I L V I S T T I A V S L T I W W F
 G A I L A L I Y L L L F S T L N N P G K K I L Y A G F L T F S T S L G V V S S F S F Y T P Y Y I L T Q A I G T D T L H V I W Y W P S Y F V Y M G Y Q P G L T L E
 A L Y Y G F Q V A F R F I A P M L S G L L L I I T T P S D V L R Y L E K V K F P L V F I F A L T V A M R S I P R I F D T L D T I V K L Q M M R G L G Y G K P K
 A L R P F Y L L L G G L Y G I V P T L I F L M R Q A K Y T A I A A D T R G F N A M P K R Y M K P I V F T Q L D Y I A I G L T V L L Y I I T A I L L I I G L G R
 G I P Y I G F

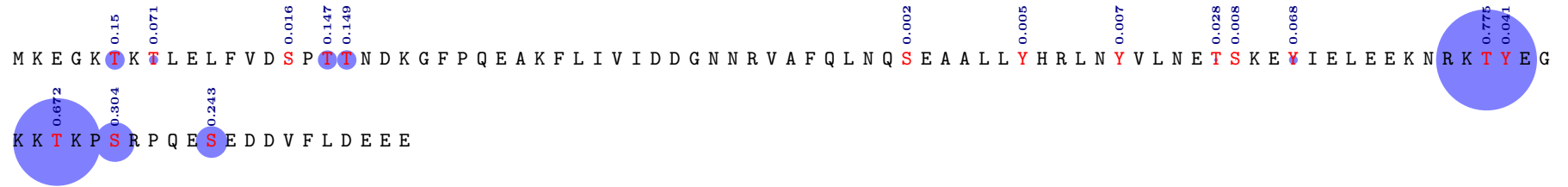
Sequence #607 — Gene Saci 1810

M Y A V E I K G L Q F F Y L G Y P T P A I T V D E L F I E K G E S V L I T G R S G S G K S T L V S C I N G I I P H M T S G D L K G E V Y V L G K S I K D T P L S
K L S T V V G T V L Q D P E S Q V V N Y T V E E E V A F G P E N L N F P P E Q I V E R V K E S M E I A G I S H L W G R E T T T L S G G E L Q R T V L A S V L T M
R P E V L I L D E P T S N I D P E G T N Q I F S T L K D L R G Q K T L I I V E H K V E R V L P F V D R V I L V D K G K V S L D L E K D E I L E G A E T L H S A G
V E V P E Y F I Y A K K F G V K S P D L D T V K K L I V Q N N V K L E H P K R R T P E N K I L T A N L R I N V K E K Q I V D F S L D L W E G E L V A I M G K N G
A G K T T A L K A L A G I L D T S E Y S I T G S I K Y Q G E E L I N K P V W Y R G K Y M I Y M P Q S F D L M L V T N Q V R K E I E Y S L K K R K V K N Y R E I S
E K Y M R E F G L F E Y R D R D P T L L S M G E R R R V A M A S V L A S G V K I M L M D E P T S G Q D Y S N K M S L G K E L R Q L T D K G Y T V V V V T H D S K
F V Y D F A D R L I V I S D G K K V L E G R P E E V F I S S S R Y G I N P P S D F L L R W

Sequence #608 — Gene Saci 1813

M T E Y L F D A S S I V N L I K R G I V S P L T N G E T L N L A L Y E C I S A I W K E Y R K L K V I S R D L A G K Y I R A I I K V M S I I P V N S I S G S E E E
V F D L A L K E D L T I Y D A S Y L L V A I N K N L M L V T D D K V L R D R A S K Y V T A T S T K E L L T R Y G F V D Q

Sequence #609 — Gene Saci 1815



Sequence #610 — Gene Saci 1816

M L G M K P L G F I G N G L ^{0.018} T ^{0.001} S A L V D N G ^{0.005} S I V W L ^{0.044} T F P R F D ^{0.024} S P ^{0.011} S V F G K L L D D N A G E F ^{0.025} S I R P V E D K F K V ^{0.008} S Q ^{0.007} S ^{0.043} Y L V P N V L ^{0.007} S ^{0.027} T ^{0.037} T F K ^{0.003} S ^{0.004} S N G K
 A E I V D L M P I G E K A I I R K V R ^{0.11} T E I P L ^{0.005} S F K I I P M F N ^{0.006} Y G L ^{0.003} Y R P I I R R K D D G I Q F L N P V ^{0.01} S R E C L ^{0.008} S L L ^{0.02} S D V P ^{0.186} T D E I K P P G ^{0.048} T ^{0.045} T L ^{0.025} Y L V
^{0.016} Y ^{0.005} S ^{0.006} S D C A ^{0.081} Y G P L D K G K Q L E N D L E N ^{0.002} S F N L ^{0.044} T I D ^{0.003} Y W K D K I R ^{0.005} S N D E V W R ^{0.021} T ^{0.011} S V G V L L G L I ^{0.008} Y ^{0.015} S P ^{0.018} S G ^{0.023} S ^{0.029} S I A A A ^{0.04} T ^{0.032} T ^{0.017} S L P E A V G D ^{0.007} S R N W D ^{0.021} Y
 R F V W V R D ^{0.017} S ^{0.013} S M I ^{0.004} S E A L L ^{0.012} Y ^{0.004} S G ^{0.005} Y V V E A R R I L N F M L A L V N F ^{0.061} T A K P L L H P L ^{0.089} Y A V D G ^{0.012} S D P P P E I E I P W L ^{0.008} S G ^{0.103} Y M N ^{0.006} S R P V R V G N A A A ^{0.004} S
 Q I Q L D I E G F L V D A I ^{0.009} Y ^{0.005} K ^{0.002} Y ^{0.002} Y ^{0.129} Y ^{0.009} T S D R V F V E E N W D K I K ^{0.002} Y I G D W V ^{0.002} S K N W M L K D A G M W E D R G D P K H ^{0.049} Y ^{0.149} T H ^{0.002} S K V M M W V A L D R I E K I M
 N V K I H E K D E I K E W V M R N C V K D G ^{0.025} S F V R ^{0.022} S ^{0.083} S D ^{0.016} S N D V D A N L L ^{0.012} T L P L ^{0.03} Y D F I D V K D P I F L K ^{0.037} T L K R I E D E L ^{0.113} Y V D G F V K R ^{0.003} Y ^{0.01} S Q D F M G E
 A K H P F A L A ^{0.026} T I W L A R V ^{0.006} Y I R L G R K E R A M E L L D K V L K P ^{0.005} S G ^{0.046} T L ^{0.044} Y L I G E H I D V E N M E ^{0.033} Y ^{0.014} T G N ^{0.008} Y P Q A F V H A Q L L L A L K E V K G L ^{0.011} S ^{0.058} T

Sequence #611 — Gene Saci 1824

M G I G L I L S I F L M I I I V L I I I S Y S R R I N K I Q E E S K R Q A Q E M F S Q W T Q Q H S N E L R F Q I E Q S V E M K Y K A M L E Q W T I Q K E S E I R
K D A V T K S I N T L L G K I S E E F A P I F I A Q K Y S I S P K D F R H L G S P V D F V A F K G L S D E S E P E I I F F E I K T G K S S A L T E R E R K I R D
A I V A K R V K Y E V I N L N S L V E D A K R K I S E E I D K V T K E

The image displays a sequence alignment visualization for Gene Saci 1824. It consists of three lines of amino acid sequences. Above each sequence, p-values are indicated by small vertical text. Residues are highlighted with blue circles: T (0.148) in the first line, T (0.13) in the second line, and T (0.423) in the third line. A larger blue circle highlights the T (0.375) residue in the second line. The p-values are: 0.001, 0.005, 0.009, 0.017, 0.021, 0.009, 0.148, 0.004, 0.071, 0.014, 0.018, 0.065, 0.016, 0.079, 0.009, 0.02, 0.013, 0.007, 0.012, 0.024, 0.016, 0.084, 0.057, 0.13, 0.042, 0.04, 0.375, 0.014, 0.012, 0.15, 0.423.

Sequence #612 — Gene Saci 1827

M I E K ^{0.004} Y E K F I G E H E L D ^{0.011} S L F K I A E R I K D L ^{0.007} S I L H V N ^{0.004} S T ^{0.022} K A G G G V A E I L N R M V P L M K E L G L N V D W R V I K G D N E F F N V ^{0.017} T K ^{0.002} S F H N ^{0.001} S
 L Q N G I G N I ^{0.066} T E E H F R I ^{0.006} Y D K W Q E L N L ^{0.002} S E I P L D ^{0.082} Y D V M F I H D P Q P A G L I K F K K G N N R W I W R C H I D I ^{0.002} S N P ^{0.003} Y P P V W D F L K K ^{0.008} Y V ^{0.003} S E ^{0.011} Y
 N A ^{0.009} S I I ^{0.006} S V P ^{0.015} S F G R D D I D I P Q F I I P P ^{0.028} S I D P L ^{0.02} S E K N K H I ^{0.016} S E ^{0.057} T ^{0.11} K L R I M ^{0.044} S K F G I ^{0.013} S E D K P L V ^{0.068} T Q I ^{0.013} S R F D ^{0.034} Y A K D P L G V I K A ^{0.019} Y K L A K
 R H V D L Q L A ^{0.185} Y V G ^{0.012} S P A ^{0.36} T D D P E G E K V ^{0.165} Y N E V I R E ^{0.104} S R D D K D I H I L M L P P ^{0.089} Y ^{0.01} S D L E I N A F Q ^{0.004} S A ^{0.005} S ^{0.024} T V V M Q K ^{0.012} S I K E G F G L ^{0.087} T ^{0.003} S E A M W K N
 K P V I G G N ^{0.02} T G G I P L Q V I N G V ^{0.019} T G F L V N ^{0.001} S P Q G A A H ^{0.027} Y ^{0.086} T I ^{0.018} Y L ^{0.071} T R N A K V R H ^{0.017} T M G ^{0.013} T N A R E H V R R N F L I ^{0.028} T R E L R D ^{0.008} Y L M ^{0.004} T I M ^{0.} Y V N E R N ^{0.011} S

V

Sequence #613 — Gene Saci 1828

M R A K K E I S D D S K Q K L T F V D L F F I S F G G Q A P F I S L L T F G T V M I A L V G T A G V F A M I I A T L V V L F N G L V V Y Y L S K R F K R G G G Y
0.004 0.129 0.006 0.007 0.001 0.011 0.013 0.005 0.004 0.849 0.002 0.019 0.001 0.002 0.001 0.003 0.001 0.007 0.005 0.004 0.008 0.007 0.003 0.006
Y T Y A V Y S L T T R L G L E T G W S Y I L Y A I S Y G G T L V T G G A Y V L Y Y I T G W N Q T I L A L I V S V V A S A I V L S G V R V S A K Y A M I M S L I E
0.004 0.001 0.001 0.002 0.001 0.002 0.007 0.002 0.002 0.078 0.016 0.011 0.001 0.052 0.02 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001
M G A I V I L S I Y F L Y S S G W H F Y N P V N F P S K L A S A V L F G L G I P T G Y G S I A P L G E E A D T R K S I G K A A I L V L I F G G L A S L F F Y S
0.005 0.001 0.002 0.004 0.001 0.002 0.005 0.005 0.005 0.046 0.006 0.005 0.007 0.001 0.001 0.001
L G A I N F T G N L V D Y L L A S F S I I G T V F L S F L A L N D G I L G G V S Y I L A N S R T V K A M S E D L I F P K F L S K S V K N R P L I S E I F I A I V
0.004 0.002 0.001 0.001 0.003 0.007 0.016 0.001 0.004 0.029 0.002 0.001 0.001 0.001 0.001 0.001 0.002
F I T I L T L A V H Y I G L Y D T F V T L G A L A G L G N I F I H T S A N I S L I R L A S R R P R K H I D E L M V G I I A T I I S L W V L V S S L F S V N P Y V
0.013 0.004
T N I F L G W L I F G F L Y A E A L D I V R G N V E E K E E R R

Sequence #614 — Gene Saci 1830

M S K D Q I D D K F I E I N G S K I H Y I Q S G S G D P V I L F H G S R F N A Y T W K E T N T L D S V A K A G F R A I S V D F P G Y G K S E R G K F T S L S D F
I Y D F I F S L S L N K P F L L G A S M G G E A V L S Y S V Y H P K D I K G L I L V G A V G V K K Y E K L L T N L E G V P I L L I W G K K D R I S S E E N Y K L
I M N S V K T T H F V Q I G N N H A C Y L D D P T F N D I V T K F I K G S P W M I S

Sequence #615 — Gene Saci 1831

M D D L L K E V L K D K R L L E V L R H L K R A N V D Y G K S I M L N T K I P L T E V L D V L D K L E S L G L I E R V T G A T L K N T E A K F K L S Q E V H K H
H T Y Y R L T R D G D H L L R R L D E K D I I D A Y A E I V K D D E V G L K L L Y Y A E E L H S D H A L T Y S K L L R K P L E E I T P K I E E L E R M G L M E E
K N S K V I K F R E R R A K P K K E T R T H H K Y Y G L T R L G E L L V R E L K R R G V L E K

Sequence #616 — Gene Saci 1834

MAKILFVVMNDPTNLADSIKAAHVVLHYAVELKEKGNADVYVYFDGLGTKIPITESPYPKGLKPAYEKAMKEGLILGACGYCA
SPPHLNIRDKLPNTIKLIGDEDHHVALTDLVDKGYQIVVS

0.018 0.003 0.02 0.127 0.04 0.064 0.233 0.013 0.052 0.017 0.005
0.003 0.028 0.087 0.02 0.023 0.003

Sequence #617 — Gene Saci 1836

MDILIKGGELFNGKDFVGGKANVYIKY GKVVEVS KEVKEAKEEIDARDMFVLPGLIDAH IHL SGIKGS L L K MFERPEYR
VLRAS KWLERLLLAGFTVRDCGEYVSLALKRAVQEGIIIRGNIIAAGRPI TQT FGHGEINHDIPLEFS HKVGFSEFCDG
TESCIHAARKVLRDGSDFIKVFA TGGVLSQRDKPENPQLSYEEIKAIVNEAHKVG T YVAAHAHGDAGAKIAVEAGVK TIE
HGTLLKDD T LKLMVNRGVSL T P L T I Q E V I Y R Y G K Q I G V D E W G L Q K I F E V R E R V A D V V K K A K E Y G V L M I S G T D L G F E T G L
GDIDMGKNWYELVLLVERGGL TPKEALI T A T Y N S S L A L G I N A G F I D I G R D G D L V V I N G N P L E N I Y D V T K V T H V L K A G R V E
VRNGKLES K T

Sequence #618 — Gene Saci 1837

M Y P E F C L E R W Q S L R D W R A K Y V L S E S G V E P L D L K D F D L V D I K L E Y G H T K G K I R L R E L I S N M Y S T A S S D N V I V T N G G A E A N Y
I T I L S L I K P G D H V L V E M P N Y M Q I P G L L K G L N T K I D Y F W L K D E N G F R I D L E E I N E K V T K D T K A I V I T N P N N P T G M A L S D S D
I K A I V E I A E D N K T W I I A D E V Y R G S E H D G N V R P S F V D V Y D K A I S T N S M S K V Y G L P G I R I G W V V G S R E I V D K M W S V K D Y T S I
S P S V I S Q E I A L Q V L M N R E K L Q A R S R D I A N K N M R L F E E L M R N V D M K W V R P N A T V L A F P K T P V K D T Y K F S E E L F E K Y S V L V N
P G E C F E M P G Y L R I G L G S K N A E Y L R E A L T L L I K Y L E E Y V K K G T

Sequence #619 — Gene Saci 1838

M I K E H F P I I ^{0.118} T G K ^{0.009} S ^{0.179} T ^{0.006} Y I D D I ^{0.004} S P K N V V ^{0.015} Y L H V V R ^{0.004} S ^{0.022} S I A R G V I K ^{0.017} S ^{0.007} V S K P ^{0.006} S N V L L A L ^{0.015} T W D D I K ^{0.005} S F M ^{0.009} S A R L F P G L A G A Q V A R M P V L
 A N G K V N F V G Q P V L A F V V D D R ^{0.154} Y K A E D V A E E V ^{0.043} S I D ^{0.222} Y E E M K P I V D P E E A L N ^{0.025} S E P I H D D L K N N I ^{0.004} S I D Q V L Q G G N L ^{0.005} S L K ^{0.009} S ^{0.018} S A D V V
^{0.014} V ^{0.007} S R K I K Q H R I V ^{0.009} S N P M E P K G F I C W W D N D V L N V ^{0.02} Y V ^{0.001} S ^{0.083} T Q A P F G V R N D L R E A L G I P P E K I K V ^{0.064} Y ^{0.009} S P P N V G G G F G N K ^{0.009} S G G ^{0.004} Y P E ^{0.048} Y V L
^{0.007} A ^{0.007} S I A ^{0.017} S L K L G R P V K W I E ^{0.017} T R ^{0.006} S E I L V N ^{0.011} T Q ^{0.007} S L G R G E V ^{0.007} S D M K L ^{0.019} Y A ^{0.068} T N K G E I L G I E G ^{0.007} T V I A N I G A ^{0.005} Y N H G I N F F ^{0.049} T P L F V A ^{0.003} S L ^{0.005} S N G P ^{0.004} Y
 K L K F ^{0.02} T S I R A I ^{0.008} S V F ^{0.068} T N ^{0.123} P P M G F ^{0.01} Y R G A G R P E A A L I H E ^{0.092} T L V E D L A E E L G I D P I E L R R K N L V D N ^{0.059} T G ^{0.066} Y I ^{0.156} T P L G A K L D P A G ^{0.106} Y Q D V L
^{0.018} S R A E V ^{0.019} Y ^{0.044} Y R K A K E V H K D K G V ^{0.004} S L V I F ^{0.083} T E I V R ^{0.059} T S ^{0.028} P G E G A R V E V K D G K V H F ^{0.083} Y L G L G P H G Q A ^{0.025} Y S ^{0.005} T ^{0.226} T F K K L A ^{0.009} S E ^{0.02} T L G I ^{0.013} S E E N I E I I
^{0.026} T G N ^{0.086} T D ^{0.072} V K E G I G ^{0.008} S F G ^{0.019} S R A G ^{0.417} T I G G ^{0.01} S A V I A A G K E L L K K L N V ^{0.025} S ^{0.088} S L K ^{0.016} S M D L ^{0.008} S K F E G I G V E V F ^{0.018} Y R A D D I F A P G A H V A V V D V D K E ^{0.051} T
 G F A K V I D ^{0.047} Y ^{0.026} Y A V D D V G R V L N K E E I E G Q I V G G M L Q G V ^{0.004} S Q V L M E A M R ^{0.008} Y D E R G I P L C ^{0.004} S ^{0.01} S I A D C G V P ^{0.132} T A M E ^{0.026} S P L R I H E D ^{0.042} Y V E H P ^{0.014} S
^{0.025} T L L ^{0.018} S ^{0.026} S R G V G E A G ^{0.164} T ^{0.115} T G A L P A V F I A F E K A ^{0.285} T K R K ^{0.012} Y N ^{0.117} T ^{0.018} T P I D P W L V V E

Sequence #620 — Gene Saci 1841

M N S L E I T L L D L G I M L I L S K I A E Q V F S R L G L I P F V G S I F V G I V L G E G V T N L I Q V N T I I S F I S S L G I V F L L F L A G A E E I N T E
 0.003 0.01 0.002 0.002 0.002 0.001 0.004 0.001 0.002 0.001 0.053
 Y K I S N K L L F T T I I Q I I L P F I L I F L I L H E V L D I P D Y L A L I V P L I M T S A G P L T R L L I D L G I S R N E V G A N L F Y Q A T L V E I I S V
 0.001 0.001 0.002 0.001 0.001 0.009 0.002 0.027 0.003 0.002 0.002 0.003 0.002 0.002
 I L F S I F S Q F N K N L L L I T L E I V L I F L L I L I L G P F I T K V L E K I E G Y I K V R E V E F A S I I S L V L I I G F L A E F F N F N S A I A A L F L
 0.001 0.001 0.001 0.002 0.006 0.003 0.002 0.001 0.004 0.002 0.002 0.002 0.06
 G F L L R G Y F K D R P D L L E K L H G F T Y G F F E P L F F V S I G L F F V K I N L Q I L V I G F I L F L S V L I S K F I A G F I S G K I T R N D P I T N G L
 0.032 0.005 0.088 0.005 0.002 0.007 0.391 0.004 0.003 0.003 0.006 0.012 0.003 0.005 0.088 0.006 0.012 0.006 0.005 0.016 0.004 0.044 0.002 0.02
 G T S T K G G V D V S L L I S A L T A G I I T P I E Y S Y T T L A I S L A S L A I P L L F K L R T G Y R V S H G E R V K L N T K L S S L V N V T S T V F V S C D
 0.042 0.016 0.038 0.007 0.045 0.01 0.086 0.021 0.078 0.128
 N T L R E A I L K I N E K G V R A L V V V D E E M R V I G L I T V K T L L E I S P D D Y D R L R V C Q V Y L D D A E I I D E D Y K V S D A L R K F R E S E T P V
 0.063 0.051 0.148 0.183
 I A V I D K R R R L K G T L Y E R E L L R F L M G G E P G S L S E K K

Sequence #621 — Gene Saci 1846

MRKPLI T FVLLF I L F S LFAH P H V N I P V G S T T P G T V K E I L P N S E I P A T P N V S L S W K Y I P D Y I S V Y S L H Y S E P A P M G I T D Y
 0.014 0.003 0.002 0.012 0.005 0.003 0.006 0.005 0.001 0.004 0.003 0.007 0.001 0.001 0.002 0.002 0.012 0.002 0.004 0.004 0.004 0.003 0.107 0.005 0.059 0.007 0.056 0.006
 GL S P N G S Y I L T T T Q W M G V I N L Y G L S T N T T S V S F Q L N L N L H Y Y L N G Y T Y D L W V Q D V A F F D T Q D N N I Q I L D N I W N F S S P H A Y
 0.033 0.001 0.01 0.002 0.007 0.002 0.021 0.022 0.02 0.051 0.021 0.013 0.012 0.012 0.141 0.072 0.013 0.025 0.001 0.006 0.001 0.001 0.009 0.001 0.001 0.012 0.006 0.006 0.004 0.004
 I T S V Q G N G N I Y S Y S K L N T T Y Y A Y E A S G Y P G S P A T L L P A T V Y L L V N V S T N S L G E P V I Y F Y Y N D G Y G W I L Y D T V T V T N A Q G
 0.001 0.001 0.049 0.006 0.011 0.034 0.034 0.003 0.003 0.07 0.192 0.082 0.019 0.028 0.003 0.003 0.022 0.012 0.001 0.006 0.012 0.017 0.005 0.012 0.071 0.006 0.006 0.004 0.004 0.004 0.008
 S S Q V Y F L V D G F Q Y N G Y G T F W D S E M V F A G P G G S T Y V Y S S E V Y L E L L Y W N G H N F Q E V E N A Y N F G S D T G E S A E N V I D S Y Y Y
 0.01 0.005 0.101 0.024 0.004 0.003 0.012 0.001 0.012 0.025 0.001 0.011 0.021 0.009 0.004 0.005 0.004 0.005 0.011 0.032 0.005 0.011 0.005 0.005 0.007 0.004 0.006 0.061 0.002 0.002 0.032
 Y R Y G L P V A G L T A G S G S L G Q L W N Y D S V T I L E I N T P V Q S G Y A T V Y N F S I P F S D S S N I Q D F Y F T G G E F I L T L F P M P Y S I L V Y
 0.017 0.019 0.005 0.119 0.039 0.001 0.001 0.01 0.022 0.004 0.012 0.009 0.004 0.005 0.009 0.004 0.005 0.005 0.005 0.005 0.005 0.007 0.004 0.006 0.013 0.029 0.002 0.002 0.002
 Q N G Q L A Y E G Y S P G D T G L N V V N T E R F A L N L S S G F I K L Y T N Q S Y D E V I N I I G E G P A Y I Y V N S S N G L S Y S L S Q E Y L N L N G D G S
 0.002 0.001 0.008 0.106 0.007 0.008 0.002 0.001 0.032 0.001 0.004 0.001 0.001 0.001 0.014 0.005 0.027 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001
 V N L R I Y P Q S P G F Y T V T V N L L N G Y Y L R A T F S V Y V Q A I S S V K F N I N V V G S Q L P T S P V L T L Q F P N G T I S T L T V S P G E T L Y L
 0.018 0.021 0.01 0.001 0.01 0.006 0.001 0.011 0.006 0.007 0.003 0.003 0.002 0.003 0.002 0.006 0.014 0.019 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002
 P V G T T Y N L Q Q I I G S G N I R W A S P S P I N G I V N G S I T I Y V T Y Y Q Q Y L V N F N F M V Q G G S G Y P A P Q L I Y T S F G Q S Y E S T V P I T V W
 0.001 0.002 0.019 0.006 0.003 0.017 0.002 0.002 0.002 0.015 0.007 0.009 0.009 0.007 0.07 0.016 0.011 0.006 0.014 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001
 V D S N S Q Y Y F Q N I L Q G D N E R W V D F S P T G V I S S P G N V I A F Y Y N E Y Y V T V K T P V T V Y A Y I N G T K N T L S S G W Y I Q G T N I S I I N E
 0.008 0.002 0.001 0.002 0.001 0.004 0.001 0.01 0.018 0.009 0.007 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001
 T Y P V S N G V R I I L S G I S P A L N F V I N S P L V V T V T T V T Q V Y L T V N S I L P V E A L V N G T N V T L T T G W Y N N G T K I Q I E N I T R Y T S T
 0.005 0.061 0.008 0.001 0.003 0.004 0.045 0.027 0.002 0.012 0.007 0.003 0.001 0.006 0.026 0.001 0.005 0.011 0.004 0.022 0.002 0.007 0.111 0.003 0.002 0.007 0.007 0.016 0.016 0.016
 G E R Y I L T S I Y P S A S F T L T S P V N I T V T Y Q Q Q F R I I V N S Q L P I Y A I V N G E N T S L T T G W Y N N G T K I Q I E N I T R Y S N D Q R Y V M
 0.001 0.002 0.002 0.006 0.005 0.002 0.005 0.002 0.001 0.004 0.015 0.002 0.003 0.002 0.002 0.002 0.012 0.003 0.004 0.007 0.001 0.003 0.004 0.007 0.001 0.008 0.004 0.004 0.004 0.004
 I Y I S F E S L T V D Q P F N I S A N F I K Q Y Y I N V I S P I P V K A L V N G T L T S L N S S W V N S G T K I Q V I N Y T Y Y V S N N E R L V P T L I P S N L
 0.021 0.009 0.002 0.018 0.025 0.009 0.002 0.002 0.001 0.001 0.001 0.001 0.001 0.007 0.012 0.007 0.007 0.028 0.011 0.002 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.002
 T V T S P I T V E I K T V T Q Y L V T I N G N S S W H N N G S T I V L N A N I P F Y M T G K Y I G T Y N V S P G A E L V V N R P L V E N L T E T I N L P V T I G
 0.008 0.008
 I G A L I I I V I L G V V V T R V L L H K K R P

Sequence #622 — Gene Saci 1847

M C R M F A Y Y G S S W S K V E E L F N C L S R S A E V D P Y F N N S S H K D G W G F V I V T R D K I I H Y R S G R P I F E D T L P I K L N D Q E M I A V F H A
R Q A S A G N P I G S Q F S H P Y L E V N Q N G S I F L A H N G S V D K E R L L K E V S M N S E Y V V D S E L A L K F I S R F K D L Y E G V E V L K G Y T K S A
L N L F L V N I S R L G E A E L Y Y L N Y V S P S H W D R V K S G R T N A S P N Y Y D L Y I N S E D G D A V F S S T L S Y Y C S E L G E R K A E Y S R L T K L G
E R M K L V Q

Sequence #623 — Gene Saci 1856

M ^{0.032}S I E I ^{0.02}S G M E K L R E G ^{0.014}S L F ^{0.002}Y A I L L I L I L I L L P I V F V G ^{0.01}T ^{0.015}T F A G A ^{0.004}T V L G L F Q Q P F ^{0.002}S ^{0.003}S G Q L I ^{0.013}T ^{0.003}S ^{0.003}S A ^{0.008}S I V V G V A L L P L G A I I ^{0.002}S G L I
 I L F ^{0.001}S V F L M F ^{0.}Y R N ^{0.018}S I R G F ^{0.003}Y A I I ^{0.007}S ^{0.005}S S G K ^{0.007}S D V K G G V ^{0.004}Y ^{0.002}S L ^{0.003}T M I L I G G I I I V I G I A L L L ^{0.001}S ^{0.001}S V F ^{0.001}S P N L I Q V L I D L G A I I G G ^{0.006}T ^{0.001}G F I I ^{0.01}T
 S ^{0.002}I G F I I L G L D ^{0.001}Y ^{0.002}S N L G R V ^{0.003}Y ^{0.006}S N G G I N V ^{0.002}S G R M I ^{0.007}S I A H V L F L A ^{0.001}S F G V I L V ^{0.008}T ^{0.001}S P ^{0.002}T ^{0.002}F ^{0.005}T ^{0.003}T I I N G I N N L ^{0.003}T ^{0.004}T N L L G I F I G V L M ^{0.002}S ^{0.003}S I G ^{0.}Y A
 L D I I G F L K L ^{0.008}Y ^{0.006}S N L R V ^{0.026}S ^{0.026}S V ^{0.024}S V P V ^{0.027}S Q V ^{0.018}S ^{0.009}S M P Q Q N V V V Q Q ^{0.015}T N I P Q V K Q Q D N I ^{0.011}S Q P N Q Q ^{0.1}V ^{0.083}T E Q P P Q N ^{0.008}S ^{0.063}G T L N R D G ^{0.112}T A N L I V ^{0.007}Y ^{0.003}S
 Q ^{0.001}Y P L Q I L ^{0.003}S A ^{0.005}S ^{0.004}S L ^{0.028}S G V G V I ^{0.03}T N D V N P N Q L K V G V N ^{0.023}Y ^{0.024}V ^{0.004}T V N F R ^{0.008}T P L ^{0.046}S ^{0.057}L ^{0.01}S Q E E K ^{0.004}Y ^{0.004}T I S L A L ^{0.004}S N G Q I M ^{0.004}S V E V ^{0.185}T ^{0.035}Y ^{0.01}K S

Sequence #624 — Gene Saci 1857

M V V R Y K L F I N G E F S E P H S G E Y K V K T S P I D N S P L A E I A V G D R E D A K R A I D S A Y E A F K G W S S L T A M K R S E Y L L K L E E T I R A N
E G D L I N T L I V E G G G T Y K K A W G E V V F T E R L V R N A A E M A R H F K G E T I P S D S E G I I S M T F R K P K G V V G A I T P W N Y P L S I S M K K
V A H S L A I G N T V V L K L S S E T P I I G V K I A E L V Q R A G L P K G V V N V V T G P G S A V G D E I V T N K R V S H V T F T G E T N T G R E I A S K A G
H S L K T V T L E L G G S D P L I V L D D A D V N L A V K I A V F G A F F H Q G Q I C T S S K R I I V S E K V Y E A F V K K F V E R V S Q L K V G D P R D R T I
E Q G P L I S K R Q V E S M I E F Y E D S V K R G G K I M T G G K W D G N Y F Y P T V V T D V D R N F R I M K E E V F G P I R P V L R V K D D E E A I E V A N D
T E Y G L S A A V V T R N V T R A F K F V E Q I E S G M V H I N D V T M L E E S H I P F G G I K A S G I G R E G G E Y S F R E T T Y E R W T T I T Q R E R K Y P

I

Sequence #625 — Gene Saci 1861

MEP ^{0.048}S F M G V ^{0.013}S D W F K E R L G L D D D L P F F R ^{0.164}T P D ^{0.034}Y M ^{0.015}Y N V N ^{0.004}Y W L G ^{0.001}S L V A A A F I ^{0.003}Y T ^{0.009}V V ^{0.001}S G L I L L L ^{0.002}Y Y ^{0.003}N A E A G ^{0.014}Y S ^{0.002}S S ^{0.001}T E F I I Q K V P ^{0.003}Y G ^{0.002}S V

I L ^{0.003}Y S ^{0.001}H L ^{0.004}Y G A ^{0.002}Y A M I I L A ^{0.003}Y I H M F R N ^{0.003}Y F A G A ^{0.003}Y K K P R E L L W I I G V I M L V L ^{0.}T L G ^{0.01}T A F L G ^{0.004}Y S ^{0.002}L I G D A L A ^{0.041}T S ^{0.004}A V D V G E G I I ^{0.005}S S ^{0.004}V P G L

S I F I P I L F G N ^{0.002}Y D A G ^{0.002}Y Y G R V L A W H I I F V A L I G L L F I F H F F M A E H ^{0.018}Y G I M P ^{0.008}S R K V K D R A P A V ^{0.051}Y A R E E W Q K F N P W W P R N F V ^{0.011}Y M M

S L V F L ^{0.001}T W G F I L L I P N A L A ^{0.004}Y L N G L P Q Q L N P F L N P Q P A P P P N ^{0.013}S P A A A H I ^{0.029}T ^{0.081}T Y ^{0.002}P P W F F L F L ^{0.001}Y K I A D F ^{0.042}T N D V L I F L F I G V I I P L

L ^{0.}Y L I L V P F I D R ^{0.006}S P H L D L K K R R L F ^{0.036}T A F G I L M V ^{0.002}T Y ^{0.002}L I Q ^{0.002}T T I F G D L ^{0.013}T P G V E I ^{0.027}S I I Q Q I I V ^{0.001}Y L P P A V I ^{0.003}T L ^{0.424}V G V F A L P ^{0.024}T G ^{0.002}S N K K A

I A N P L G I L A V L A ^{0.014}T S ^{0.002}I L F A G A L I ^{0.013}T F V V ^{0.001}S P ^{0.002}S L L ^{0.011}T I ^{0.002}T A F ^{0.013}T V F A L I F V L ^{0.004}S I R N L ^{0.017}S P I V L K ^{0.017}S E G E H R D A K A V L E K P E N R E L K K K I

A E I L I ^{0.002}S I L F I L ^{0.002}S V V L A ^{0.001}S Q L W V I P ^{0.002}S T G ^{0.014}Y L ^{0.002}S N I F G I D L G ^{0.001}S I F I M L G E A I ^{0.002}S L ^{0.001}Y H ^{0.003}Y V V ^{0.004}Y K R

Sequence #626 — Gene Saci 1864

M T L I V S A E I D V I P K H D V I L P L L T S K V A K F I L S K N Q Q I G E L I G S K K K Y K E L S I S P L S S N G R F L Y A E N D G K L L R A M R G E K L H
F T F S V A T S E V N E K T F D L D G D V S T S Y G E F Y V L L K T I Y I N Q L K D I R H E I K E R N V N L R F E S P T L L S N K Y M V P P V F K K K K V R S M
N R L I P Q P S L I F S F L A N L W N S I A D E R E R I V K G D L E W T P Y Y I G R I A D V A F A E I G Y S L R P V T V I I G K D N N Q R I R Q A R G F V G W V
K Y E V I N V N P R Y L E T F E R L L G L A K I F G I G R S R G I G L G R V K V E

Sequence #627 — Gene Saci 1866

M G E G K E E K V I **Y** A M E I K K N K F P G **Y** R **Y** K L I A **T** **T** E R V I K R D L K R N **Y** E E N I G **Y** N E I G **Y** L K I H K R R **S** L P **Y** I I V G **S** I L L **S** I G L V **Y** F
0.066 0.005 0.014 0.02 0.081 0.003 0.026 0.018 0.016 0.003 0.002 0.001 0.001
G V **Y** I A L L L A M N N V P P F N N V N I L **S** L A N **S** G P F **T** **Y** **T** **T** N **S** R I G P V D N A I A Q H **Y** I **T** P **Y** L **T** F G N L F I L M **T** V L W F I A G L F I **Y** Q G I **S** G
0.001 0.002 0.001 0.085 0.009 0.007 0.056 0.003 0.004 0.04 0.002 0.01 0.004 0.001 0.004
L R **Y** G L K K R **T** R L E I G G R R N I N **S** **S** F V **Y** W R F E V V E G **S** K V L E N F A E I V K K K V D E F K N Q V N P G **T**
0.001 0.059 0.003 0.003 0.012 0.005 0.174

Sequence #628 — Gene Saci 1867

M A ^{0.173}S ^{0.1}E ^{0.019}S D D M V K K L L E D P K F I ^{0.11}S ^{0.015}T L A ^{0.081}S K I ^{0.009}Y D R L K D E V V I K R L E E N T E A I R N L Q Q G I M G L E E A V R Q Q G G ^{0.013}S I K ^{0.014}S L Q E ^{0.131}T V K Q H ^{0.013}S E A
I R G L Q E A V K Q Q G E I L R E H ^{0.101}S E A I K ^{0.02}S L Q E ^{0.081}T V K Q H ^{0.015}S E A I K G L Q E A V K Q L ^{0.009}S N D I K E V ^{0.014}S K L ^{0.038}T I K L ^{0.012}S ^{0.065}T E I G ^{0.008}S F ^{0.054}T N R A G K G L E K ^{0.046}T I M
M V ^{0.007}Y K E A L E L H G I D P N K V K H G N I V D ^{0.01}T L G I I D K G R I F E V D F ^{0.022}Y E ^{0.044}T N D ^{0.089}Y V ^{0.019}Y V F E I K N F A D E G A L E Q M L V R K K L V P Q L F N K P V K L
F L V A N ^{0.01}Y V D K K V K E E L E K E G V ^{0.083}T I I ^{0.012}S ^{0.011}S M V V E

Sequence #629 — Gene Saci 1868

M L C ^{0.011} Y K A V P P V L L F ^{0.017} Y Y S ^{0.003} N P P ^{0.004} S P V Q G F A F ^{0.041} T F D V N N V N I ^{0.11} T ^{0.025} Y R L R P P K K G K ^{0.403} T ^{0.046} S P P K D Q L D V V ^{0.068} T R I L E D N F V R G F G I G ^{0.006} S K L K V A R

I E R V ^{0.02} Y Q P I C E M ^{0.007} S ^{0.005} Y V I F R E ^{0.018} S Q R G K N ^{0.007} S ^{0.047} Y G V P ^{0.005} S L I ^{0.086} T G D F N V V ^{0.002} S N M I ^{0.029} T K ^{0.003} S V V N E V ^{0.012} Y ^{0.025} S R R A K ^{0.019} S ^{0.006} D S N ^{0.111} Y L M H Q V Q V N I I K ^{0.004} S K E E L ^{0.016} S A

L L G

Sequence #630 — Gene Saci 1869

MGDGN^{0.005}^{0.004}SSDPLVGLCLIIIAFT^{0.005}FLFT^{0.007}SSWN^{0.001}YF^{0.}SAIIP^{0.002}SVL^{0.005}SS^{0.004}SVQ^{0.006}GKDFV^{0.014}SS^{0.014}SVL^{0.023}YS^{0.011}MEVK^{0.02}SS^{0.009}SI^{0.012}YQLKGEPS^{0.007}DQLVQAEV^{0.019}TFMGG
 IFFNPV^{0.001}SMQNL^{0.026}LEYLALRVQGV^{0.009}PDGDAFNWFPVWIV^{0.009}TGIDFLAGVVLAKRAY^{0.003}DLRS^{0.01}RGLALV^{0.006}STS^{0.021}SMIT^{0.018}SS^{0.005}SS^{0.005}TVL^{0.122}YFARPQEP
 FLKFFLLPE^{0.005}SLLFVVGQIV^{0.008}SGLELRRE^{0.039}SKLGALFVALPIFPVINLFGFGWL^{0.014}TVLEG^{0.004}SRV^{0.029}Y^{0.077}QPMNIT^{0.008}SS^{0.005}SS^{0.006}ST^{0.048}QYS^{0.016}SKDELLEQE
 FVN^{0.003}SLLNRE^{0.019}YDNARAVLAEL^{0.142}ENQGVGV^{0.168}VEEAFNEFVRA^{0.001}TR^{0.001}TY^{0.001}KRCNEVIWLMDNFLID^{0.002}YCKCRECRG^{0.065}TS^{0.006}SECVK^{0.031}T^{0.056}TGDIPY
^{0.208}TVDRLLECLRWNQ^{0.001}SEAVDLAKVVLQKV^{0.129}TKQDHRRAKAEEVLR^{0.068}AI^{0.083}SR^{0.231}TS^{0.02}RT^{0.091}TT^{0.681}VT^{0.077}NT^{0.174}SNLPPEKWDPNLWVGREI^{0.012}YGY
 KVE^{0.009}SVLGE^{0.056}GG^{0.014}TS^{0.046}SY^{0.01}VLS^{0.037}AT^{0.017}SGERFAIKVPKL^{0.054}SQP^{0.044}SS^{0.042}SA^{0.054}TK^{0.195}KL^{0.021}SKV^{0.111}T^{0.049}FEEL^{0.024}YKE^{0.018}SNLQRL^{0.018}SEGVENVVKI^{0.004}YGI^{0.004}FLDINLLRR
 IERGEVK^{0.019}Y^{0.02}YL^{0.034}TNPPAIVME^{0.011}YMEGG^{0.055}T^{0.002}LADLMRNDIVVN^{0.001}SSH^{0.001}WGDIVKVVARKVAKALD^{0.063}YIH^{0.004}SS^{0.003}SG^{0.036}YVHLDVKPQNIFF^{0.002}SAPV
 GK^{0.126}TGGGEVFD^{0.009}SLVKGRNEVKLGDLG^{0.021}SAKRVGERV^{0.015}SY^{0.083}TPN^{0.153}Y^{0.13}CPVDQVEALIVGKGAET^{0.026}TM^{0.118}MDV^{0.062}YAFGAT^{0.04}IYT^{0.021}ATAL^{0.021}T^{0.053}GKAF^{0.005}SP
 EVVGLVEEA^{0.043}VED^{0.183}Y^{0.065}TRGG^{0.063}SP^{0.046}L^{0.167}GK^{0.006}L^{0.086}KLARDR^{0.162}Y^{0.01}EE^{0.006}Y^{0.036}Y^{0.01}FNVLP^{0.006}ST^{0.036}LT^{0.162}TS^{0.01}APREI^{0.042}SEVVIKAT^{0.203}THPDP^{0.033}SKRAKV^{0.032}SEL^{0.032}LKVLEK

Sequence #631 — Gene Saci 1872

M V V K E V Y L E E G K V T V N G I R L R K F Q E E L L Y S L D K Y R R I L L R A P T G S G K T F T L I V S L L K N L G R G M P V T G L Y P S K S L V Y D Q Y E
0.004 0.022 0.048 0.017 0.019 0.029 0.137 0.008 0.016 0.044 0.005 0.102 0.006 0.006 0.012 0.049 0.051
S L K N T L I R M G F S N N G D Y F M G K I K V E G V D Q S E G I P E E E E V K L R V V K L T S D T K R E V F E S L E H F I P N P K E L L L V L T V P E Y P Y M
0.004 0.037 0.003 0.02 0.031 0.139 0.013 0.12 0.035 0.003 0.005 0.012 0.05 0.012 0.073 0.088
F L S T L G K S P H S S Q L I E M A M K G I R S V N M S K A T L V N L F N D F S R F F N G Y F F V D E F H L Y N G I E R S S L N V L V D M V E F Y W K Y L G T P
0.006 0.065 0.009 0.01 0.016 0.007 0.002 0.017 0.003 0.003 0.009 0.003 0.005 0.004 0.007 0.088
H S I V F S S A T P T S M T F D K V I T A Q S G Q G N S V I R K R T K V V F H L V L G E R Q A T T Q S N S N I D V S N R G S N P Q E A L V N Y I I S M A E P P T
0.003 0.003 0.004 0.052 0.086 0.005 0.118 0.043 0.005 0.004 0.092 0.029 0.016 0.005 0.006 0.016 0.025 0.024 0.008 0.145
K K T G I I L D R V Y Y I A E L C D K I T W N D V A L I W G L D V S Y G R C V K R D V G R E S K V I V G N N A L S F G V D I P D L D L G Y I T S N D A E T L I Q
0.046 0.011 0.001 0.022 0.003 0.006 0.014 0.002 0.028 0.035 0.004 0.026
R F G R F G R M N K N I S S N S P S E S T A E V H I F V E A N K R A A D S L N K V N G K E L T Y E E F I Q L I N N I Y Q G R V Y D K L D Q L E F S R L R E K I I
0.016 0.026 0.086 0.025 0.037 0.086 0.006 0.025 0.008 0.001 0.008 0.012
F D T F L L A Y Y I A N G D M A L P V M R E N W R D V D A T I N V R P S S E D Y F K I F A F R P E G I E G K I C G D S G T E N F F T L L R N F R Y N S E G D C F
0.023 0.002 0.006 0.072 0.021 0.027 0.074 0.008 0.041 0.049 0.003 0.017
Q L K D P L K E Y P Y L L V D K L K G I E E C K I T T F L D F M D K A Y H P N L V L S R N G I I K T K P K N I D S L K N T Y L I P I T P K C I Q W D N F S N M A
0.017 0.058 0.024 0.005 0.047 0.005 0.013 0.002 0.025 0.001
N L V S S Y A S A L V V C E G D L K E Y C R Y P K A L L L F L
0.002 0.003 0.007 0.003 0.002 0.003

Sequence #632 — Gene Saci 1875

MEKD ^{0.044}T ^{0.081}I ME ^{0.085}V ND L V K ^{0.098}T AL ^{0.008}S ^{0.007}S I ^{0.023}T F K E G V R E A K V R ^{0.016}S P Q ^{0.003}S F A F H ^{0.052}T I I ^{0.003}S V G ^{0.049}T I A ^{0.005}Y E I C R ^{0.055}T I ^{0.008}Y E M ^{0.004}S D ^{0.023}T G K ^{0.206}T ^{0.068}T L D ^{0.145}T L ^{0.004}S K ^{0.004}T ^{0.005}Y ^{0.005}S I P W E Q

L C F F G G F I H D W N K L P G E D E ^{0.021}S V Q N K E D R M A K K E E E A R A I I ^{0.044}T R I A E L ^{0.144}T K N P N I K P D L F I R R I A L ^{0.069}T A E G P L P D ^{0.028}T L H L P L W I A V

K L G D M L M I ^{0.004}S D I R ^{0.006}S V N D V ^{0.051}Y ^{0.086}Y F M N ^{0.003}S P ^{0.003}S ^{0.005}Y L Q A I N A L K ^{0.004}S V ^{0.014}Y G I E L R ^{0.061}T L ^{0.013}S ^{0.013}S ^{0.018}S P R L F ^{0.045}T L I A ^{0.013}S K R L V E Q L K ^{0.815}S E A V P L I ^{0.004}S ^{0.013}Y ^{0.022}T D G L V ^{0.04}Y L

^{0.007}S R V N ^{0.008}S Q P I F L ^{0.002}S K V ^{0.03}Y N V M E E I M ^{0.025}Y G ^{0.011}S ^{0.016}S G E D N L N N V K E N L N K C L Q K N I D I F K E L E L K P E V I D D E E R V K Q I P N ^{0.02}S I F P ^{0.005}S K I C K P F

E D L V G L L K P E ^{0.015}S V ^{0.012}S K L I D D L V A E ^{0.047}Y K D V A P W A L I L ^{0.008}Y F A E K ^{0.011}S N K K D Q I K K E L G L G K A K E ^{0.016}Y V K ^{0.071}T F K ^{0.032}S E E L L E K L I P V L K K L ^{0.005}Y G Q

K R E ^{0.164}T I D Q N L L ^{0.007}S F V K K ^{0.014}S F G G D I E D D L ^{0.008}S K V V K E P M ^{0.007}S ^{0.007}Y C I V C G M P I ^{0.026}Y E E ^{0.005}S A R F ^{0.171}T Q ^{0.008}Y G F ^{0.003}S I G A R G G ^{0.107}T V E I F I P R A K A M D D I D R L

R D D W K I C P I C N F E A G ^{0.015}Y L ^{0.005}S K V ^{0.009}S K P P F A L V ^{0.004}S F ^{0.004}Y P G I P I R L L E ^{0.003}S I N V G N D ^{0.009}Y E G D V F Q M I E E N ^{0.009}S ^{0.012}Y ^{0.052}Y ^{0.017}Y D V F E ^{0.015}S ^{0.025}S G G D I K ^{0.013}S G ^{0.015}S D Q N

L I V ^{0.007}S ^{0.013}Y L ^{0.009}S ^{0.004}S K I L V P ^{0.003}Y R H F ^{0.225}T D K D I R I ^{0.035}S ^{0.088}T R L ^{0.02}S K ^{0.05}T D V N D L M R ^{0.002}Y V P L L ^{0.004}S I V ^{0.012}Y L A ^{0.004}S P V F I ^{0.003}S ^{0.004}S ^{0.02}T I M N I P M E E G K I K V D ^{0.005}S V F N ^{0.022}Y ^{0.003}S W M ^{0.043}T

^{0.004}Y ^{0.009}S K E R K D V N ^{0.014}Y R ^{0.02}T L L I L L A ^{0.001}Y K ^{0.005}S K ^{0.003}Y E A L V ^{0.006}S I C R G ^{0.016}S D I E N C V N ^{0.008}S M V E E ^{0.006}S D L ^{0.138}Y ^{0.032}Y A V D P ^{0.003}S L F V I A F G L G I G ^{0.005}S V M D E N K Q F ^{0.011}Y D ^{0.007}S I L

^{0.006}R ^{0.019}Y L N F L D F V M G E V ^{0.085}S E M G E ^{0.04}T ^{0.021}S ^{0.026}S I N L L ^{0.01}S ^{0.011}S S E L V N V I K K R ^{0.081}S ^{0.063}S K ^{0.018}Y D V V G F F R D G V D V F F R ^{0.097}T ^{0.02}S ^{0.028}S L ^{0.037}T L K K E D R I N L A V ^{0.043}S D A I ^{0.083}S ^{0.04}S L

^{0.028}E ^{0.024}S ^{0.234}K Y T L R D E ^{0.081}S K ^{0.017}S K L F F A L R D I F E K L ^{0.017}Y D I E N N ^{0.008}S D R ^{0.007}S L A I R I A N ^{0.002}S L ^{0.007}T ^{0.007}T W I ^{0.001}Y L Q F L ^{0.003}Y F E R ^{0.018}S G E K K

Sequence #633 — Gene Saci 1877

M T G E V D K M Y K L V K I K V N I P T P F I T N D Y T G K F V K T V L I N A N P D L Q E V F E G K K K V Q P K P M R V T S L L D E N N E A V Y P K H I V N R F
E M D H K P N L P P K P I T I K G K F S F Y L G Y D M S L E P E V S K V M T S L F S G L Q M K Y G E F N V E L K A I E Y N Q V E F D N F P S E F S Q I K V K L I
T P S M F K D P F E K L A D L D R V K Y R R Y L P F P A F I F S T N V F E I F R E T Y K R N I I R L S Y G L L E S H N N L N T V R K V W Y Y Y D G K W L P G V V
G Y L K F F V R K G L R K E V M N I F R E I F I H A N I M G V G T G R A A G F G F A E I T A K

0.026 0.085 0.044 0.084 0.004 0.086 0.019 0.073 0.026 0.022
0.319 0.01 0.049 0.085 0.02 0.013 0.082 0.011 0.003 0.002 0.058 0.006 0.005
0.185 0.011 0.005 0.005 0.002 0.029 0.143 0.005 0.002 0.001 0.066 0.002 0.005 0.002
0.004 0.033 0.068

Sequence #634 — Gene Saci 1880

M P A R I F D D I S V C K L R G K Y N L Y K Y S Q E R D L R L S Y E R E T D I N F G E K K T L E I Y F N F G D W A K I I G V P D G L I S N L A I E F T I T R S E
D F P R Y L L M R S V I Y S Y M C M Q D H I I C S T L I V P T T P P I F E D Q P L F G Y L V I P N G R V L D Y I A D Q L Q R I V N G R V E G R R N K F C P S C I
Y K R I C P E W M

Sequence #635 — Gene Saci 1885

MEAE **T** I **T** K **T** FEKEFGDKKFI **T** NDRVLEEE **S** KAP **V** LV **S** PVL **S** KMGKKVIGVVMADDEEDIFNAVRLCD **T** HHIPLLRGAG **T**
 0.006 0.0426 0.123 0.247 0.008 0.011 0.019 0.096 0.029 0.008
S T I G Q V L P I **S** P **S** T I V L D I N R M R E V I E **S** D D **S** W V R I **T** P **S** V K V F K A L Q **Y** L R K R G K E L R V **Y** P **S** S F **Y** I **S** T L G G **Y** I A G G D V G I G **S** F
 0.006 0.003 0.008 0.005 0.003 0.029 0.019 0.023 0.01 0.032 0.007 0.005 0.125 0.046 0.008 0.008 0.008 0.012 0.003 0.013 0.011 0.004 0.004
 Q **Y** G **Y** H F D N G G I N **S** V R V V G P **T** G K **Y** E L R G E D **T** L G V A Q A A G **T** T G I I **S** S A E L A **T** V D **Y** E D W K D Q L V **T** F N **S** V E E V **T** K **Y** L V R V R D **Y** K
 0.008 0.005 0.003 0.029 0.019 0.023 0.01 0.032 0.007 0.005 0.125 0.046 0.008 0.008 0.008 0.012 0.003 0.013 0.011 0.004 0.004
S K I R R I **T** I E D K E **T** L **S** S V A K D R L D K V G E W N V I V A **S** T L **S** L G E E V N M R F L D E L A F A A I **Y** V **T** M **S** R L **T** S F K D **Y** F **Y** E V R L L P L E **S** F
 0.023 0.344 0.089 0.05 0.024 0.002 0.009 0.007 0.015 0.043 0.007 0.051 0.01 0.032 0.008 0.008 0.008
S R V V K Q V K M A L G **S** S V L V H G D V M **T** L R G E **T** I V **Y** T V F M **S** D K G N F P V I D **S** I M **T** R E G I P F E I H **S** I E V N **Y** R V D E E **S** R L N L M K K L K R
 0.008 0.003 0.005 0.022 0.113 0.041 0.016 0.004 0.006 0.153 0.023 0.012 0.056 0.008 0.008
T I D P N N I L N P G K L L L
 0.205

Sequence #636 — Gene Saci 1888

M K L N E L I S V G E G V L C I K Y D K L Y R I G K S V D A L C V T M K V N E E E R K R Y C F E S Q N N E S Y E A I L V E I K E K L N E K H L K E A I D Q I T C
S K S R I D A K I R R A F I L L S D C S K A K T A Q E D K M L L E A M K Q Y K I H I T N V C L D V D E V K D E S T K N L I N T A T E L S

Sequence #637 — Gene Saci 1898

M K L L K A V L R A Y N G Y R A D V L P S T T I A G G L V Y G M V I N K D T R S Y D I M F T N F Y I V K R N G N K V K H Y D R L R I R L D R V V N Y S M P Y L Y
H K L I S K D G P Y V D F Q G Y V I S S D L R S V E D L L K K Y L V L V G N N Y T V F E M V E I S E Y T A R S N E L C V H N L P V K D V E S L G E Y R G Y L R R
I T V Q R F N N T N F L G L D R K V Y Y F D M Q D K K V K E V Q N D R N V L L C T F R Y N E S N E F G S F Y N K F P G S L D S I E H Y T K E Y V K A G T G V I A
P C D G Y

Sequence #638 — Gene Saci 1899

M T S R I K N L F Y S S L I L H V G S L G H D E V L R N Y M L A D Y G Q S P V M C Y I H D L F K G I L P A G R D K N D S T Y Y E I C D H I A S I A E E S E K L I
E A Q S R D Q E L F K N V M N D L P S K I V I S F D L R G F P I L L E E N N G R S I K V E R S L F Q N W F K D L S S E Y V R N F I D F K Y G N G T Y D Q L R N I
A E N G K P F D M K T F S S L I D S I K F F P Q R S W I S G N D I S V L A H L K G A L L A D L L F R K G V V K V F S I S N P F E T D L R T L K D V R G L Y I I T
N I F L Y H L N L C L W D K L N I D F Q K A L E K V L D T E N L G L Y A F L N M S I V D F F N S F V F N V Y I H E S E E I N P S Q I K S F L T V F Y N D E K S L
E E C T K T S L K D T I E T I Y T H A W P K L V S D K P P K R T E R K S D I I L V V S E L G K V E K D S E D K I K L A E K V N E L L K T T D H T D Y F R I K I
E Y D G S I T S D K L C D K C K V R K A V K L E D S I W D E L R S M F I V K E D E R L C D I C L T T R I A S S L I G E V R Q Q T G D E G L Y L K R T E K I L V R
Q S I D E F A K G K D L I Y L V F K L D M K H V L K D R K I S I S D F F E V N K L E V S L N E F L S E I I N V I K G M T E K I K D F Y P V K K D C N F N Q N F Q
G C I E L F L R K Y L E K L S S L S K P D A D T I S E F L V E C L C K S E N G T T L K G M I K S I L M I N G V D K S K K K D N M L I N N I A R K T L T N D P E N
E M R L K F F K R L E F V K M I S A E N N E M I D I S I S L D R T F S L K I H F S I L V E Y L E Y L L I N S N I D Y I T L I P S S S T T E Y S M L A I K K D D
L P K V L D L I G K V F G I F D T P G R A Q E A I L E H S I K I F L I K A K P E T P L Y M V F R L L D R E V T E I N G K D D I R V V D V P V I L N K G G M P I
G D L N S F S Y N E L F T A F K R I S E H G D P Q K L N E F V V S S A P D V T Y P E F R E Y K K V E G F E K Y V K R Y S S D R K P F S V K Y E R D D I I M A Y V
A R L L A

Sequence #639 — Gene Saci 1904

M D F V F F ^{0.111} T D P L ^{0.099} ^{0.006} S V ^{0.051} Y G A V R P A L ^{0.088} ^{0.006} T V S K E L A R R G H D V ^{0.015} T I L ^{0.076} T P ^{0.018} ^{0.004} Y S M L ^{0.007} S D F H K V R I A E I K E K I Q R ^{0.024} S G K ^{0.03} T V L ^{0.714} T K I P L L R E W M K A L I

L P ^{0.028} Y V H E R E K ^{0.043} ^{0.021} S E S L V I N ^{0.044} ^{0.007} T S ^{0.011} ^{0.012} S S L I ^{0.106} T E A D A ^{0.082} ^{0.081} Y Y G Q G Q I ^{0.021} T K A I D D M ^{0.026} ^{0.013} S Q S R D F P L R ^{0.016} Y K V I ^{0.007} Y K F I R G M L V N L E K R L M M Q F R E N ^{0.008} S A L F

I ^{0.009} T ^{0.002} N S N F ^{0.026} T K S L ^{0.006} ^{0.013} Y E S W G I K V D H V I ^{0.019} Y P P L D L E V F R P ^{0.149} ^{0.144} T Q K P ^{0.007} S R D ^{0.045} Y V L A ^{0.083} Y L G I R G K E ^{0.085} T N L K V I K E L A R Q G V K I K A F G K ^{0.024} ^{0.085} S S K E ^{0.022} Y E

K E L ^{0.013} ^{0.01} S S Q N I E I L G ^{0.013} Y V D D N ^{0.086} T L V D L ^{0.008} ^{0.021} Y T N A L F ^{0.013} T L F ^{0.076} T ^{0.053} T H E P F G ^{0.026} Y I P V E ^{0.001} S M A C G ^{0.111} T P V I ^{0.106} ^{0.083} T Y D K Q G P K N ^{0.097} T V ^{0.003} S H N R ^{0.045} T G W L V ^{0.004} S N D E E L V

R E A I R I W K Q G ^{0.021} Y D E ^{0.012} ^{0.008} S S I K N K C L A N A Q E ^{0.009} Y D V K K I A D E W L N C L N Q L R C G V K ^{0.005} S

Sequence #640 — Gene Saci 1909

M L ^{0.003} S V V I P A ^{0.008} Y N E E N R I G N ^{0.025} T L ^{0.002} S C L G I W F D ^{0.002} S A E I I V V H D G K D N ^{0.101} P E V V K K F N G V K L L K ^{0.028} S P N R L G K G L A I K I G I E N ^{0.006} S ^{0.013} S V D R I L L
 I D A D L P ^{0.157} T ^{0.164} R D D L E K V L ^{0.011} S V D A D L V I ^{0.065} T K R R F V N I ^{0.005} S ^{0.008} S E R ^{0.002} Y I L H K G F I F L V R L L F P ^{0.015} S L R K I ^{0.015} S D F Q ^{0.024} S G V K V V K R ^{0.016} S K V I ^{0.011} S V A D E L I
^{0.003} S N D L L F D V N I I ^{0.001} Y A F K R R G ^{0.001} Y ^{0.072} T I K E V E I Q ^{0.015} Y L N D E D G ^{0.014} S K I G K ^{0.009} S L ^{0.008} S K ^{0.054} T I V L M A L ^{0.011} S L L R L R I F ^{0.002} Y ^{0.006} S P F K K L L ^{0.004} Y ^{0.001} Y P L M V R F Q R W V F N
 R L N ^{0.007} S

Sequence #641 — Gene Saci 1911

M W ^{0.003} S I E I P V V H G K ^{0.003} Y L R N V L E ^{0.003} S I R ^{0.021} T Q ^{0.015} T Y ^{0.021} Q D F E V I V V N ^{0.006} S G D E L I ^{0.005} S D L I R E ^{0.01} Y G F K E V R E K V N L L N A R ^{0.009} Y L A H K N ^{0.02} S ^{0.011} S G E K A L V L D E
^{0.072} T R V L R K D ^{0.046} T L E I L ^{0.015} S E I E H D M I I V G E A E V G N ^{0.004} S ^{0.002} S L W I R L A Q L D K D N L I N C N E P D A V K G F L L P R A F N ^{0.009} S E L L ^{0.054} T ^{0.106} K ^{0.008} T F E L L R D K L G D
 K F D K V L ^{0.007} Y P D H E L I ^{0.019} Y F ^{0.051} T ^{0.003} S R M F ^{0.004} S N K L H V I R D ^{0.009} S L I F H ^{0.011} Y G D E ^{0.045} T F L ^{0.01} S I I R K ^{0.001} Y ^{0.001} Y R ^{0.001} Y G R ^{0.024} S L R I L K G ^{0.029} T E F Q I L ^{0.031} T ^{0.238} S ^{0.028} S R K K R K I C K G ^{0.008} S K
 L G L ^{0.004} Y ^{0.014} T ^{0.002} L ^{0.006} Y V V R G I P F I L G Y L L G

Sequence #642 — Gene Saci 1921

M L ^{0.004}S I ^{0.004}T F L I G R L P L ^{0.018}T G G N ^{0.007}Y ^{0.003}S I L E I A N R L L R R G F D V K I V ^{0.013}T ^{0.026}T G A K V W ^{0.007}Y ^{0.007}Y D H N K V P I I ^{0.004}Y P K E P K V L K ^{0.008}Y L L ^{0.009}S P L ^{0.008}S F K ^{0.009}Y K M I K E F A
 G F D ^{0.008}Y ^{0.008}Y ^{0.007}Y A L ^{0.004}S H L L G I D F D F A K R V M E I I P Q ^{0.002}S D L L I V N E F K ^{0.006}T A L W G F L A K W Q G K V K R L A F F P Q L L V P M ^{0.005}S V L ^{0.01}Y ^{0.003}S ^{0.012}S D P R W ^{0.004}Y L ^{0.004}S ^{0.008}Y F
 L P H D ^{0.016}Y ^{0.02}Y F A L ^{0.004}S N I D A K L A K P L L R ^{0.008}S ^{0.027}S ^{0.088}T R V F V ^{0.06}T G V G V D ^{0.004}S K L F R V L K ^{0.006}S ^{0.008}Y D K R E K N V I M ^{0.041}T I L R ^{0.014}S E K I K N ^{0.017}S E L A I R ^{0.047}T L N ^{0.005}S L A E K I N
 F ^{0.002}S A I I V D H G V L N ^{0.024}T L K D K I K F K ^{0.002}Y I ^{0.005}S ^{0.007}Y ^{0.004}S H P ^{0.064}T ^{0.043}Y E E M V K L ^{0.012}Y N E A ^{0.007}S V F L I ^{0.065}T ^{0.011}S R L E ^{0.02}S ^{0.013}Y ^{0.009}S L ^{0.04}T ^{0.07}T V E A M ^{0.003}S C G ^{0.091}T P V V ^{0.086}T ^{0.04}T D N I G M R A ^{0.015}Y V I N
 R E N A L V ^{0.005}S K H H D E K E L L ^{0.016}S L V L E V L ^{0.016}S N P R L A L R L V E N G I K ^{0.035}T A K A N D W D N V I E R W I D V L K Q I E V D I

Sequence #643 — Gene Saci 1922

M ^{0.063} S R K ^{0.078} T N K N I ^{0.083} T ^{0.049} T ^{0.028} Y ^{0.013} S L V R D M L K K V L V V ^{0.101} T D P L ^{0.026} S P G G A ^{0.006} S K H A R E V L K I L P K L G L E V K L ^{0.014} Y I P F I H A I P Q ^{0.015} S P E E K E R K ^{0.067} V L N L K E L E
 R N G V E V F P E V W K ^{0.025} Y L E M E K E K E N I F P ^{0.029} Y L L ^{0.051} T L ^{0.052} T ^{0.007} S G ^{0.011} Y I P K K D M E F ^{0.009} S N D L R E N F ^{0.01} S L V ^{0.054} Y D M ^{0.005} S E N E ^{0.022} Y H F K V ^{0.002} S H M I A K K L H V P L V I L
 L Q ^{0.003} S E ^{0.003} S ^{0.045} Y A N ^{0.005} S F G R G ^{0.007} Y R K V L G I K G L F ^{0.002} Y D L G I ^{0.014} T ^{0.003} Y I F M F N R R R F V N A L R E G V L R G I L ^{0.01} S V ^{0.015} S R A I I K Q ^{0.005} S K L E R L A Q D ^{0.022} Y K V ^{0.074} T ^{0.058} N V L K
 P A N A I D G ^{0.088} T ^{0.012} S I ^{0.012} S H F R ^{0.01} S K K V K E N F A L ^{0.004} Y A G R I ^{0.113} T ^{0.001} Y L K G I I D L I K I A K E ^{0.083} T N V K I M L A G ^{0.006} S F D N H K E M E R L F ^{0.008} S K F P P N L V ^{0.014} Y L G ^{0.004} S F M N
 N E L ^{0.024} Y K I I ^{0.005} S N ^{0.004} S K V ^{0.024} T L L P ^{0.016} S ^{0.005} Y K E ^{0.012} S ^{0.011} S L I ^{0.022} T M E ^{0.006} S L A L D ^{0.088} T P V I A ^{0.004} Y N L P A I N E I ^{0.016} Y G D I K A V I K I P V G N ^{0.009} Y K L M A K ^{0.129} T L E ^{0.015} S L M E K D I R E L
 F D P K V E E L I K F ^{0.02} Y ^{0.012} S ^{0.012} S W E K V A E A ^{0.121} T L H E L E N V K K L A ^{0.012} S ^{0.085} T ^{0.032} P S

Sequence #644 — Gene Saci 1923

M ^{0.021} S K R G I I F I E E F ^{0.014} T R L G G G Q I A F I N I ^{0.006} Y N A I M Q R F D ^{0.006} Y L L L ^{0.007} Y ^{0.04} T D K F H P K L P K L R F D R V F E G K ^{0.046} Y ^{0.169} T ^{0.161} Y ^{0.011} S E N D P L I V F P I R M F R E R R
 L L K K F I E K E K R N V N N ^{0.006} S ^{0.034} R ^{0.002} T L F V F N N H P N V F V ^{0.004} Y ^{0.007} N G ^{0.016} T L N L V H E N F L ^{0.007} T P F ^{0.016} T D E N G N I R N W I G V K L L K L ^{0.006} S ^{0.005} G I ^{0.005} Y K E ^{0.011} Y E K A N L I V ^{0.011} T G
 N ^{0.007} Y A R K M V ^{0.005} S ^{0.006} R S L D I L G V ^{0.024} T P N ^{0.003} S I H V I N L P V K M P E N V E L D N R E E C V L I F G R I N R E K K L D V V I E I A K R ^{0.034} S ^{0.003} R Y R F I V A G A V N K G D E
^{0.015} S ^{0.072} Y F N ^{0.025} S L R A K ^{0.039} S P D N V N I I P N P N E E N K D I L F R K C ^{0.005} S V F L Q ^{0.049} T K R ^{0.006} Y E H ^{0.013} Y G L ^{0.004} S V A E A I ^{0.002} S ^{0.07} Y G L I P V V P K V G G P W E D I ^{0.099} T ^{0.041} E ^{0.025} Y G K ^{0.047} Y G F G Y
 E D I E E A I ^{0.004} S A I G Q V M K V N P V F R K E V F E ^{0.051} S ^{0.016} R Y R F ^{0.062} S F D R F H A K L N E L L D K F L M

Sequence #645 — Gene Saci 1929

MNKADILLNEAEIDLKFKCFNKSVSA SYFAVRKEIEYLAIKLGS TIIPRRDDKLINILKHLGKDKLAEDVLYLYERRKDAD

0.107 0.09 0.005 0.013 0.012 0.014 0.032 0.01 0.064 0.054 0.006

YGD TGMDEGIAINCLNIAKIVI TEVRRL SQSIT

0.03 0.073 0.005 0.088

Sequence #646 — Gene Saci 1932

M R R V A **T** I P V **S** D **T** V K V I L E R E K G N M N W D E F L L M L V N E **Y** K R K K R E E G I **S** D L R K I L **T** E D D I R E I

0.147 0.013 0.073 0.005 0.096 0.178

Sequence #647 — Gene Saci 1934

M I V I L G G G F A G V S A Y N Q N S E A V V V D K K D F F L L T P W V I D Y V C G L K E L E D V T V K Y K R V V L G E L R K I D Y K G K R V I L D K D R E I R
Y D K L I V S L G H H Q N L P R L K G A R E Y A H K I E T L D D A V A L R K R L E E V K N V V I V G G A T G V E L A G N I R G K N I T L I H R K E R L L P T M
T T G S S K R A E K L L T E L G V N L M L K V S A E E I T K E G V V T S N G F V K S E L T I F A G G L K G P Q I I D T I E H R N K D H R L L V D K Y L R S V E F
N D I Y G A G D C A T F E N E D I P M S A N T A V I S G R V A M R N A M G E E V E F R P K R L A T I L R V G E D F F G D F G D N Y V E G N S A R L L R S I A Y T
E S L M L P E K L R R

Sequence #648 — Gene Saci 1938

M K ^{0.013}S ^{0.029}Y Q E L A ^{0.05}Y K W I R G ^{0.022}S G E E ^{0.298}Y L D V N P A D K E H V L A K I K L F ^{0.213}T K D D L K E ^{0.061}S L N K A L ^{0.028}S K F D E W ^{0.068}S R ^{0.265}T P ^{0.131}S P K R G Q I L L K A G E L M E Q E A K

E L A L L M ^{0.026}T L E E G K ^{0.169}T L K D ^{0.019}S M A E V ^{0.214}T R ^{0.007}S ^{0.012}Y N L L K F ^{0.021}Y G A L A F K I G G K ^{0.128}T L P ^{0.021}S ^{0.031}S D P D ^{0.041}S R I ^{0.031}Y ^{0.144}T L K E P L G V V A L I ^{0.047}T P W N F P L ^{0.002}S I P V W K L A

P A L A ^{0.023}T G N ^{0.038}T V V L K P A ^{0.112}T K ^{0.085}T P L L V A K L V E I L ^{0.006}S R A G L P D G V V N L V V G K G G E L G D I I V ^{0.015}S D E N I ^{0.008}S A V ^{0.009}S F ^{0.03}T G ^{0.013}S ^{0.055}T E V G K R I ^{0.017}Y R L V G D K

N R M ^{0.069}T R I Q L E L G G K N A L ^{0.018}Y V D R ^{0.008}S A N L D L A ^{0.008}S E L A V R G A F G L ^{0.036}T G Q ^{0.003}S C ^{0.022}T A ^{0.088}T S ^{0.003}S R L I V H K D V ^{0.026}Y G H F K Q K L I E R V R K W R V G N G ^{0.153}T D D V D

M G P V V D E G Q F K K D L E ^{0.196}Y V E I G K R E G F K L I ^{0.01}Y G G N V I P G K G ^{0.019}Y F L E P ^{0.069}T I F D G V ^{0.116}T P E ^{0.016}S R L F K E E I F G P V L ^{0.043}T V ^{0.043}T E V G ^{0.011}S L D D A I ^{0.005}S L V

N ^{0.004}S ^{0.047}V E ^{0.007}Y G H T A G I V ^{0.003}S ^{0.048}T D I K A I N R F V R E V E A G V I K V N K P ^{0.099}T V G L E L Q A P F G G F K N ^{0.004}S G A ^{0.061}T ^{0.124}T W K E M G E E A L E F ^{0.007}Y L R E K ^{0.159}T V ^{0.043}Y E G W

Sequence #649 — Gene Saci 1941

MDGNHIVR **T** VML **S** LKVN **S** EV **Y** ARLKEVEEE **V** KQILED AID **Y** GLRNNIN **S** F **T** K L K A G I **Y** R Q E R A K H H **S** L P **S** H **Y** I **V** **T** A C E D A
0.024 0.044 0.007 0.053 0.114 0.009 0.02 0.077 0.013 0.003 0.047 0.025 0.004 0.005 0.005 0.006 0.099 0.005 0.046 0.007 0.006 0.003 0.024 0.064 0.093
S A R L K **S** **Y** L K R R K Q G K A **Y** **T** D K P E I R N V **S** V H L D D H L W K F **S** L **S** E V R I V **T** R K G W V **S** L K P F F **T** K L F W R **Y** **Y** N D G W A L A **S** E **S** **S** F K L C
 K G N V V K L **Y** L V F K R P L P K P F E A K G **Y** I P V D L N E D N V **S** V L L D G K P L L V E **T** **S** V K K I **T** L G **Y** A **Y** K R K R I **S** E G R **S** **T** K D R V V R R A L K **S**
 L K E R F K K L D I R R K L A K L I V **T** E A L R E G K G I I L E D L P K N **T** P E K M V Q D I K D K Q L R D R I **Y** K **S** A F A **S** L K N A I V E K A K E F G V P V L L
 V N P A **Y** **T** **S** **S** V C P I H E C K I I **Y** P P D G **S** **S** A P R V G V C E R G R E R W H R D V V A L **Y** N L L K K A G N V **S** P M P L G **S** K E **S** H D P L **T** V R L G E W L R A
 K **S** L H L **T** L N V N K M M G M **T** V
0.009 0.019 0.08 0.001 0.002 0.004 0.015 0.024 0.03 0.013 0.013 0.026 0.162 0.006 0.003 0.003 0.006 0.003 0.003 0.177 0.09 0.687 0.057 0.375 0.064 0.144 0.01 0.008 0.01 0.007 0.01 0.01 0.01

Sequence #650 — Gene Saci 1945

M ^{0.03} S K K F V E V K E P ^{0.009} Y V V ^{0.007} S L I ^{0.012} S I I E I ^{0.021} T ^{0.011} S V I R R K ^{0.003} Y L E L A K K G E K ^{0.057} S R A E G ^{0.012} Y I R F L N L ^{0.003} T L ^{0.003} S H I R N N V V E V ^{0.096} F R D V E R G I E L M F E R D V

N L G E A V N ^{0.027} T M V A K R L N L ^{0.022} T V I ^{0.008} S ^{0.015} S D K D W E ^{0.021} S L R D I I D V E N M

Sequence #651 — Gene Saci 1946

M I G E K F E R K A D E K G R I ^{0.034}Y I P E ^{0.023}Y K G K ^{0.035}T V ^{0.013}Y L V D ^{0.004}S G H G ^{0.065}V F I ^{0.106}T ^{0.004}S D K G L A D A V ^{0.017}S K N A ^{0.008}S ^{0.012}S F V ^{0.092}T E E F L R L V ^{0.102}T E L D L Q L E D V H K E A E N E

L A K R F L K Q L ^{0.023}S

Sequence #652 — Gene Saci 1947

M K V V **Y** **S** I R I D K R L R E E M Q K **Y** N I K W R E E I E N F I A R K **T** E E L K E E E I L R E **T** E E K L K D I K G V K R G E V A R L V R E D R D **S** N

The image shows a protein sequence alignment visualization. The sequence is: MKVVYSIRIDKRLREEMQKYNIKWREEIENFIARKTEELKEEEILRETEEKLKDIKGVKRGEVARLVREDRDSN. Residues Y, S, Y, T, T, and S are highlighted in red. Vertical p-values are shown above the sequence: 0.008 and 0.085 above the first Y and S; 0.014 above the second Y; 0.638 above the first T; 0.323 above the second T; and 0.487 above the final S. Three blue circles are positioned below the sequence, centered under the first T, the second T, and the final S.

Sequence #653 — Gene Saci 1957

M V Q ^{0.004} Y K W I A L ^{0.001} S N ^{0.003} T T ^{0.008} I G V L M A ^{0.001} S I N G ^{0.003} T I ^{0.083} T L I ^{0.001} S L P A I F R G I N I N P L N P ^{0.001} S S ^{0.002} F E Y L L W I L M G ^{0.} Y N V V ^{0.009} T A A L L V ^{0.01} T F G R L ^{0.004} S D I F G R V R L
^{0.001} Y N L G F A I F ^{0.007} T V G ^{0.001} S I L L ^{0.005} Y I ^{0.009} T P N Q G ^{0.002} T T ^{0.017} G A L E L I V F R V V Q G I G A A F L F ^{0.001} S N ^{0.002} S A A I I ^{0.085} T D A F P P N E R G K A L G I N Q I A A L A G ^{0.003} S L I G L V
 M G G I L ^{0.001} S ^{0.003} T L N W R ^{0.001} Y V F L V ^{0.001} S V P V G L L G ^{0.008} T V W ^{0.001} S ^{0.004} Y L K L K E ^{0.013} T G V I ^{0.008} S R G E K I D I P G N V ^{0.017} T F A A G L I ^{0.001} S I L L G I ^{0.005} T ^{0.008} Y G L E P ^{0.011} Y G ^{0.004} S S ^{0.003} A M G W ^{0.011} T N P
^{0.007} Y V I ^{0.011} T A L A I G A G L L I A F P F I E R K V K ^{0.} Y P M F R L E L F K I R G F L M G ^{0.005} S L ^{0.006} S Q I L F ^{0.001} S F A F G G V M I I L I I L L Q G I W L P L H G ^{0.006} Y K ^{0.007} Y E D ^{0.096} T P F
 W A G V ^{0.02} Y ^{0.017} T L P M M L G F V I M G P I ^{0.003} S G A L ^{0.005} S D K ^{0.008} Y G A K ^{0.003} Y I ^{0.002} S ^{0.009} T V G L V I I G ^{0.018} T A F L A L ^{0.002} S ^{0.016} T L P ^{0.01} Y D F N ^{0.005} Y P E F A V ^{0.015} T I F V L G L G ^{0.002} S G M F G A P N I A A
 I M N ^{0.013} S V P R N ^{0.067} S R G A A ^{0.021} S G M R ^{0.007} T ^{0.053} T L Q N ^{0.004} S A Q ^{0.018} T A ^{0.003} S L A L F F ^{0.002} T I I I ^{0.002} S V L I ^{0.001} S N L P ^{0.068} T A L ^{0.003} S N A V ^{0.062} T Q A G A P Q L A P L L ^{0.006} S K I P A ^{0.041} T ^{0.003} S A L F A A F L G ^{0.005} Y
 N P I G ^{0.049} T I L ^{0.005} S L L P ^{0.004} S Q L L A ^{0.021} T I ^{0.004} S P N A I A ^{0.052} T L ^{0.075} T ^{0.002} S ^{0.012} T Y W F P E ^{0.086} T I A P P F M N A L R V ^{0.003} S F ^{0.003} Y I G A A L V L I G A V F ^{0.004} S I M R G E R V V ^{0.106} Y E E I A D Q P R A
 G G G N G ^{0.062} S A

Sequence #654 — Gene Saci 1965

M R ^{0.017}Y A I V ^{0.019}T G G G ^{0.01}S G I G ^{0.01}Y T ^{0.016}T ^{0.126}T ^{0.01}S I K L A ^{0.004}S L G ^{0.063}Y G V I M G D I A P N I E E K A K ^{0.035}S V R E A ^{0.148}T K N E K V I G L H L D V ^{0.026}T D W D ^{0.002}S C N A F ^{0.002}Y N K A L ^{0.003}S ^{0.002}S L G I D

H V D I L I N N A G I L R D A L F V K M ^{0.017}T R E Q W D Q V I K V H L ^{0.009}Y G A F N M ^{0.006}T K Q V V E G M I K ^{0.004}Y Q W G R I I N M ^{0.002}S ^{0.003}S I ^{0.003}S W K G N V G Q A N ^{0.008}Y ^{0.003}S A A K A G L I

G F ^{0.011}T ^{0.042}K T L A K E L G K ^{0.014}Y N I ^{0.015}T V N A I V P G F I D ^{0.066}T P M ^{0.072}T A P L P D K I K K M F L E R I P A G R M G R P E E I ^{0.013}S N I I A F L V ^{0.011}S D E A ^{0.019}S ^{0.044}Y I ^{0.018}S G A E I E V ^{0.087}T G

G F ^{0.009}S Q

Sequence #655 — Gene Saci 1967

M K I ^{0.064} ~~S~~ E V K V ^{0.061} ~~F~~ K L ^{0.085} ~~S~~ ^{0.013} ~~S~~ K E F ^{0.019} Y E R D A L A V K G G A E H F M D V A V V ^{0.004} ~~S~~ V V ^{0.023} ~~T~~ ^{0.003} ~~S~~ N G E I G ^{0.008} Y G E A I A ^{0.014} Y G I L D V V ^{0.002} ~~S~~ ^{0.007} ~~T~~ ^{0.088} ~~T~~ I E K I ^{0.005} Y R P L L L G E E ^{0.006} ~~S~~ ^{0.006} ~~S~~ N I
 L G L W N K M Y ^{0.004} K ^{0.026} ~~T~~ ^{0.046} ~~T~~ F R L G R R G V ^{0.121} ~~T~~ I ^{0.004} ~~S~~ ^{0.006} ~~S~~ L ^{0.005} S G V D I A L W D L L G K E L G ^{0.032} ~~S~~ P V ^{0.021} Y K L L G G E R R R I R G ^{0.014} Y I ^{0.194} ~~T~~ G G ^{0.018} Y Y ^{0.012} R Q D K D M E K L L E E V K G ^{0.014} Y I
 E K G F ^{0.067} ~~T~~ ^{0.01} ~~S~~ V K I K I G G L ^{0.008} S V Q E D M K R L N A I R E N F G N ^{0.002} ~~S~~ L N I A V D A N N V ^{0.018} Y D F N ^{0.027} ~~T~~ A L K V G R E L E K L G V M F F E E P I ^{0.021} ~~S~~ ^{0.196} ~~T~~ D L P D L ^{0.022} ~~S~~ A E L ^{0.253} ~~T~~
 R A L D I P I A G ^{0.018} Y E ^{0.041} ~~T~~ A ^{0.005} ~~S~~ ^{0.056} ~~T~~ L F E ^{0.009} Y R D L I ^{0.104} ~~T~~ K R ^{0.004} ~~S~~ V D I V Q V D A ^{0.001} ~~S~~ W N G G I ^{0.011} ~~T~~ E M V R I G N L A R A F G L P V V P H ^{0.012} Y ^{0.004} ~~S~~ A G G I ^{0.003} ~~S~~ F V A ^{0.003} ~~S~~ L H ^{0.005} ~~S~~ A L V I D
^{0.005} ~~S~~ P I I E ^{0.008} Y H L R ^{0.008} Y N P L R E ^{0.033} ~~S~~ L A G E A I R ^{0.062} ~~T~~ Y E N G E F L P P D K P G L G I ^{0.026} ~~S~~ L D E R V I E K ^{0.015} Y R V E

Sequence #656 — Gene Saci 1968

M I V G F ^{0.01}S ^{0.009}S ^{0.013}S I H K K ^{0.005}Y E G ^{0.01}S ^{0.024}T F Q L L A E ^{0.056}T ^{0.003}V S K A L D M A ^{0.025}T V D L K D I D G L F ^{0.016}Y ^{0.015}T V L P G V F D G K A ^{0.006}S L H F ^{0.007}S ^{0.005}S F Q I P ^{0.004}S F L G I R P K V I E L V E ^{0.07}Y
 G G P ^{0.006}S A L ^{0.043}T M V ^{0.009}Y R A E K L I E A G E I D ^{0.022}T A L C V V G G K A ^{0.004}S F L R E N K V ^{0.119}T V D A V D R F L G ^{0.002}S V Q L ^{0.117}T P ^{0.027}Y D D L F R V ^{0.051}Y Q D L N P V ^{0.005}S D ^{0.067}Y A L V A K R H
^{0.014}S K L F G ^{0.046}T ^{0.003}S D E Q R A L I A V M Q R K N A L G N E R A M ^{0.04}Y R ^{0.078}T P L ^{0.165}T V K D V L E ^{0.021}S R V V ^{0.019}S D P L R L L E I V ^{0.007}Y P V D G F H V F V V ^{0.002}S K H Q R K ^{0.034}S D V R P L K V
 E F ^{0.134}Y G E ^{0.021}S H W ^{0.016}S E M P P E L P D I V ^{0.172}Y ^{0.262}T P A V E ^{0.008}S ^{0.006}S K G V N L E R I D A F Q L ^{0.03}Y D ^{0.003}S F ^{0.037}T I ^{0.023}T V M L Q M E D I G L ^{0.1}T K K G K G G E F V E R ^{0.032}T D I ^{0.037}T ^{0.1}Y Q G E V P V
 N ^{0.071}T G G G ^{0.006}S L N V G Q P A F M ^{0.003}S G G V I L E E A I L Q L N N M A ^{0.002}T N H Q V K D V N R V L I N G I G G W N R G H ^{0.005}S V ^{0.009}T M V L G E G N V

Sequence #657 — Gene Saci 1969

M F E E I K K K **Y** Q E M F R E E K L P **Y** L K C **T** R C G H **S** F **Y** **Y** P R D **Y** C P K C R **S** R E L E V K E **S** R G I G **S** V F **S** V **T** K F R D R D N K E V **Y** **Y** G I V E L E E G

F R L **Y** **T** N F L V P V E I G D K V R V K F L G K E **S** K V P **Y** F E K I

0.057
0.018
0.183
0.008
0.028
0.002
0.007
0.075
0.057
0.021
0.021
0.248
0.097
0.083
0.008
0.051
0.021
0.029

Sequence #658 — Gene Saci 1975

M I K V I F G D **S** R N M **S** E V E D K **S** I G L V L **T** **S** P P **Y** **Y** N A P F D F P D L F P **S** **Y** E E **Y** L N L L R D V G K E L **Y** R V L D D G R V A V F V **T** **S** D V R I E G V L
0.017 0.058 0.02 0.04 0.008 0.088 0.056 0.018 0.011 0.066 0.015
Y P I V A D L I R I M **T** D L G F K **Y** Q E R I I W K K P E G **Y** I R I **S** R R **S** G V L I Q H P **Y** P L **Y** **Y** **Y** P D N V **Y** E D I V V F K K P G K F H **T** **T** N Q E K **S** K I D V N
0.011 0.02 0.005 0.019 0.035 0.024 0.002 0.085 0.006 0.003 0.368 0.048 0.021 0.004
K F Q K E K W **Y** L N V W E I **T** N V L P N N K **Y** **S** K F **T** A P F P E E L A N R I V **T** L **Y** **S** **Y** V G D **T** V L D P F A G **T** G **T** **T** L **Y** V A R I L **S** R N A V G **Y** E I D L E L K
0.024 0.006 0.005 0.002 0.054 0.086 0.017 0.002 0.006 0.047 0.009 0.018 0.024 0.007 0.01
E V I R E R V G H P **T** L F D N H E V V F V E R **S** D A K R L R **T** K L R E K I N E K L E K K **S** Q
0.094 0.028 0.428 0.2

Sequence #659 — Gene Saci 1976

MDDPDMKF^{0.156}Y^{0.015}GKIEGIR^{0.007}YKAS^{0.085}FKMPVLHE^{0.006}Y^{0.008}SLKEGIENQ^{0.015}TAFI^{0.002}YKLG^{0.006}SHKFAV^{0.021}SWWV^{0.313}SPKR^{0.089}TR^{0.01}SY^{0.05}PY^{0.099}ARV^{0.083}YN^{0.001}TLQFS^{0.058}GKK

V^{0.058}T^{0.007}IIPVMKDEGEEDRDFIQWD^{0.002}T^{0.001}ISLM^{0.006}SLLGV^{0.017}Y^{0.007}VILGY^{0.004}VEAS^{0.011}KK^{0.081}S^{0.008}Q^{0.018}GKI^{0.037}TS^{0.027}QRFD^{0.068}Y^{0.052}E^{0.002}YLKAQFEEL^{0.001}S^{0.01}NWQ^{0.008}SD^{0.086}ALHWNIN

QV^{0.014}NI^{0.005}G^{0.047}DL^{0.021}M^{0.001}N^{0.003}MAIEA^{0.018}Y^{0.177}ERIS^{0.027}QRLNVRLKDIQ^{0.068}SA^{0.052}AKNKAEEV^{0.002}Y^{0.001}RDLEKFKNH^{0.01}SR^{0.008}T^{0.009}Q^{0.02}SEKAQ^{0.001}QREVL^{0.001}T^{0.008}TP^{0.113}QPKENI^{0.105}T^{0.022}G^{0.003}E^{0.004}K^{0.001}APID

IEN^{0.014}Y^{0.005}LGGL^{0.047}Y^{0.021}HFT^{0.001}IDEA^{0.003}Y^{0.006}VNLQ^{0.006}SK^{0.006}T^{0.013}ACIVEAKN^{0.004}SK^{0.001}SNCLP^{0.009}SEEDI^{0.02}KDGLLKMII^{0.001}FLNL^{0.008}SEL^{0.001}Y^{0.001}YE^{0.008}Y^{0.086}GDA^{0.022}Y^{0.001}IRIEHINPFLKL

T^{0.022}GVCE^{0.003}S^{0.004}FKPRHKVVLEELLREAKENNLKII^{0.004}LNQKVIDVK^{0.001}SEIL^{0.009}Y^{0.02}Y^{0.001}T^{0.001}DFMC

Sequence #660 — Gene Saci 1977

M S G L R V E R L K R R G L R F L D N A K D D L K N G Y Y D I A I F H V E Q A V Q L Y T K A V I F E L F G K E Y T I H G I R G L L S Y L T K L L E E N G Y K E L
S R R I V E F T K E N R D T L L G I E E A Y I S S R Y E D I D F G R Y E A E S S V Q T A E S L I K L L D E I V D N V K L G K A

0.134
0.048
0.254
0.082
0.015
0.039
0.041
0.017
0.031
0.008
0.012
0.015
0.021
0.075
0.014
0.003
0.057
0.002
0.001
0.053
0.027

Sequence #661 — Gene Saci 1978

M ^{0.016}S ^{0.018}S W V K H R F E H L R R W R E ^{0.042}Y A E I M A K A ^{0.106}T K D L C ^{0.001}S N C K V ^{0.008}Y V F G G V A E G R V ^{0.086}T V L ^{0.005}S D I D I L V V ^{0.004}S E G K L ^{0.033}T D ^{0.018}T E I K E I W I N I M K R A M D

V ^{0.062}Y ^{0.004}S L P F D A P V E L H V V D K E R A V R ^{0.008}Y F ^{0.097}T M A K K L I E I V

Sequence #662 — Gene Saci 1982

M Q ^{0.01} S G D L K H L R R G L ^{0.013} T L M V I F ^{0.001} Y ^{0.023} T V F ^{0.073} T V ^{0.001} S D I A L I I F L E P ^{0.001} Y I ^{0.009} T ^{0.002} S I L N ^{0.008} T L ^{0.014} T K V Q L L E A L P ^{0.047} T ^{0.002} S N L L L V P L M G L G I ^{0.02} T F F L L I P I P F ^{0.002} Y
 F M L R G L R G W W K A G P ^{0.002} S L V I A ^{0.002} S P V V F I I A L W E L M N R ^{0.002} S ^{0.003} S G D F Q I I E I F G V W A L L ^{0.001} Y F L G L L V ^{0.005} T ^{0.004} S F G V ^{0.009} Y ^{0.005} S R G K E F N ^{0.008} Y R G L M ^{0.008} T G G I
 I M V L G ^{0.002} S F ^{0.015} T ^{0.002} S F L P V L M L I G ^{0.008} S G I A L L ^{0.006} S L P Q A V Q P ^{0.009} S K L R ^{0.023} Y G D L L K L D A V N Q I H F A D R E G I K R I A K R G A F F L ^{0.002} S ^{0.053} T V L ^{0.004} S L L M V G F G
 I L G L F ^{0.002} S I A ^{0.003} S ^{0.003} Y F A F P F M N ^{0.003} S M A G I P D I ^{0.002} Y L I L L A L L V F L P L L I ^{0.001} S G I ^{0.002} S M ^{0.006} Y ^{0.001} Y N R G V E ^{0.011} T V L L V P W ^{0.002} S E V K D I V V ^{0.025} T Q V F ^{0.025} T ^{0.011} Y Q R V ^{0.003} S L F P
 A V ^{0.038} T R G V ^{0.021} Y ^{0.002} S Q E V G R V V I I ^{0.056} T R D G R ^{0.053} T I D I G N V I ^{0.002} S P ^{0.019} Y Q K V K ^{0.004} Y L K V K ^{0.005} Y G I G ^{0.014} S H

Sequence #663 — Gene Saci 1986

M K **S** P E K **V** H M **S** K K L V I A **S** W G D P **S** A W K **S** V **T** **Y** I D G E D **S** **S** Q N P R K I A **S** I **S** **S** L R L L A E K F **S** D I Q K F **Y** V L V Q D **S** I V F **T** **T** L K R I N D E
C K E C G Q K I N A **Y** I **T** A E R G E A V W L N E P I **S** **T** **Y** E E L V K K V K D **Y** **T** **S** C I L D R L G I R N H E V F I L P **S** N L R **T** **S** I N V Q P **S** P H F **T** **S** F

Sequence #664 — Gene Saci 1989

M H ^{0.028} S E W L ^{0.044} S ^{0.012} Y R D ^{0.024} S F K F L E E N L D E L K K ^{0.009} Y I E ^{0.088} T K N F ^{0.001} Y P C I F R ^{0.009} S ^{0.018} S K E L N ^{0.004} S N L N G ^{0.008} S I I ^{0.003} Y ^{0.003} S I L G E I G ^{0.004} Y V ^{0.001} Y W G D N K G ^{0.003} S V R I R G E E I ^{0.024} T ^{0.022} G Y
 I F P A L F R R ^{0.001} Y F E ^{0.005} S ^{0.01} Y F K V N G D R V E E ^{0.281} T ^{0.196} P P N K A L I G L L ^{0.002} Y G P E I G ^{0.009} Y I A A G V V ^{0.013} T D I N L D A V R N F K L W K E E G D K ^{0.026} Y W I V R F R M K V I W
 L P D ^{0.006} S L M ^{0.107} T K I E E L K D K I L E W A K L R N E P P D L L K D L K G E N I P N V N P N Q A N N C ^{0.001} Y R D D N ^{0.021} Y V E A I K N F L L E K F N N E V ^{0.002} S K ^{0.048} T I Q F ^{0.016} Y N
 E I ^{0.004} S ^{0.007} S W L V Q K V P E E K L P I V D ^{0.024} S G ^{0.145} T R C R P L ^{0.031} S E A L K I A R E R I V N E V ^{0.011} Y I Q D N ^{0.007} T ^{0.022} T I D ^{0.021} Y M L ^{0.002} S V L K N G N I L L V G P P G V G K ^{0.037} T Q I A K I I A
 E ^{0.003} S L C D D ^{0.011} Y L M A ^{0.004} T A N A L W ^{0.123} T R R D L I G G E ^{0.017} S I R N ^{0.012} S ^{0.013} S V I W K K G I L M E A F L K V P K ^{0.103} T ^{0.127} T E E V L F P V I L D E I N R A D I D K A F G D F F ^{0.039} T ^{0.043} T F ^{0.008} S ^{0.014} S
 A R P E E W V I P ^{0.011} S W L V E E L K ^{0.051} Y ^{0.083} Y ^{0.011} S ^{0.021} S F Q E E L K P L L ^{0.023} S A L H ^{0.01} S D K Q R L ^{0.024} S K I R I I A ^{0.009} T M N L K D L R N L ^{0.007} Y Q L G D A L ^{0.097} T R R F ^{0.024} S V F ^{0.006} Y L E C P K N L D
 D V E F V I Q R M K I N L P P Q V L D D L K ^{0.016} S ^{0.071} T V K L I R D K M K ^{0.086} T E F C F ^{0.004} S ^{0.091} T A ^{0.021} T V ^{0.002} S K V L ^{0.028} T Q L G V L Q Q L R ^{0.015} S ^{0.04} S ^{0.046} T ^{0.057} S E I ^{0.015} T ^{0.116} P E D I V M L I K ^{0.017} T N L G ^{0.121} T V
 D R K V V N N V K E I L E E K R ^{0.367} T K V K K A

Sequence #665 — Gene Saci 1990

MHV ^{0.002}S K F L L N E I G N N G I P R P K L ^{0.068}Y G N E D P ^{0.077}Y ^{0.027}E Y C N K F K L D P Q D M K E L N D ^{0.072}Y ^{0.11}Y ^{0.011}S L F ^{0.017}S P M K E E ^{0.084}T I ^{0.014}S F F K D ^{0.012}S L I L V G R Q E R L K E A L Q

G P C P I G C L A Q ^{0.005}Y K G R G D C I R V V K R W L ^{0.001}Y Q L W V L K L V I E A L K I D K L C K R P ^{0.003}Y E E K P R I E I L Q G ^{0.011}S P ^{0.31}T P A V L G R ^{0.008}S A L G ^{0.043}Y D V ^{0.022}T I W F E

F Q P ^{0.04}T E D I H L V L P L A R R K R ^{0.364}T ^{0.037}S V R P D I V I ^{0.037}T K G L V Q D ^{0.007}Y N ^{0.009}Y ^{0.029}T ^{0.005}S R L L D V I R N R ^{0.022}S I I I E C K E D P ^{0.014}Y N K W G R ^{0.047}S I R N Q L ^{0.016}S D ^{0.019}Y R D L ^{0.012}Y A P K

R I I I A ^{0.005}S L R L ^{0.028}T Q D I Q I A D K ^{0.101}T ^{0.049}F Q T F R H L M G R

Sequence #666 — Gene Saci 1991

MFPEELK KVL ^{0.162} T D Q K Q I L E D K L ^{0.081} S R D ^{0.011} Y V P R D V P N I L D H L K I P N I L ^{0.006} T I L G V R R ^{0.016} S G K ^{0.006} S T L A V M L L K G I K F ^{0.003} S Y V N F D D E ^{0.014} S L ^{0.01} Y G I R ^{0.024}
 A E D L R G L E E A I ^{0.03} Y Q V ^{0.022} Y G N V E ^{0.042} Y M V F D E I H N V K G W E L F A ^{0.015} S R L R E ^{0.083} S G K R L V V ^{0.064} T G ^{0.017} S N ^{0.007} S K M L ^{0.007} S G E L A ^{0.012} T H L ^{0.159} T G R H ^{0.022} S D ^{0.041} Y V L F P F ^{0.008} S F G E
^{0.013} Y L K F K G V R F G E L L ^{0.029} S ^{0.177} T R E R A E I K N E L E ^{0.021} S ^{0.072} Y I D V G G F P E ^{0.006} S L I L G K E Q ^{0.014} T L ^{0.025} T I ^{0.01} Y N D I L F K D I V ^{0.012} S R L K I K Q I G R F K D F A N ^{0.024} T L I ^{0.005} S ^{0.003} Y ^{0.015} Y
^{0.019} S ^{0.022} S E V ^{0.04} S L ^{0.087} S R L A K ^{0.007} S M G I D E K ^{0.046} T V F Q W ^{0.002} S F G M E N A ^{0.026} Y ^{0.004} S V ^{0.081} Y F L P R ^{0.006} Y G E K L R E R L ^{0.168} T ^{0.007} Y N K K V ^{0.021} Y I V D ^{0.03} T G L I ^{0.013} S R V A A R K K D R G R L I E N M V A
 L K L L K E N Q L K G L ^{0.005} Y ^{0.004} Y I K D K D ^{0.025} Y E V D F ^{0.073} Y D E V N ^{0.01} S R L I Q V ^{0.007} S ^{0.013} Y A ^{0.123} T D K V E D R E I K G L I R A N E K L R V R E Q I I V ^{0.024} T ^{0.026} Y D I E G E E R V A E G K P
 I K L V P L ^{0.007} Y K F L L G

Sequence #667 — Gene Saci 1994

M ^{0.033}S V I E M A ^{0.017}S V I R N K ^{0.004}Y L E L L R K G E K A M A K G ^{0.008}Y I E F L N L V L ^{0.002}S Q I R N N V V E V ^{0.029}T ^{0.007}S D I E E G I K I M F E R D V N L ^{0.004}S E A I N A I I A R R L K A

I V I ^{0.006}S N D K D W V R L K D L V K R V E N V

Sequence #668 — Gene Saci 2005

M T F G E S F G K F L T K T D C V K I V N I L R D E Y N V N I S E I A K K I G I T R S A I Y H W I W E I A K Y I D E E N K A K L L D L L Y E K D R V R A I S F V
Q E L L V E Y M G F L E K E K R K I L K T T P E L E T R I I Y T N P N V T I S P Q E G V R R Y A I K V L

0.042 0.007 0.041 0.081 0.008 0.002 0.018 0.004 0.002 0.013 0.007 0.013
0.035 0.066 0.092 0.056 0.041 0.055 0.047 0.005 0.003

Sequence #669 — Gene Saci 2006

M Q L R S C R L T I R F S Y P H V I D L R D M I K V I Q D N A Y I V P R D L P P S P P G S I V I G S F T A S K D S I V F E F N N S S G V M S F S V S S F D E I P
K A V S D F K E I V K E L R L G D I D F I E L V S E I L V K G N L K L D C K L F G K E L S G F E I T E E N S L I R L S N Y P A L R N T Y V L T I I Y K F K E I G
E T D K F L S E T K K V I D S V T S N I S

0.018
0.127
0.005
0.001
0.186
0.037
0.047
0.013
0.055
0.007
0.018
0.014
0.024
0.063
0.086
0.03
0.086
0.027
0.008
0.013
0.085
0.025
0.013
0.002
0.148
0.001
0.017
0.002
0.051
0.013
0.024
0.018
0.05
0.013
0.014

Sequence #670 — Gene Saci 2012

M I K K P F L R Y R D L T G Q P D Y I L A F Y H Y F S P L D I K A G E K V R L D H K M Q V I F Y S Y L M E R K G M L V K E G L I Y Y V K L K R I V R V K Y T N Q
E R R Y I E S V I N K I R G T E S G R R K E R I V Q P A K K C I N C G F L P Y C N P L R Q G S L Y V R E I

0.023
0.214
0.072
0.006
0.018
0.003
0.01
0.003
0.011
0.008
0.006
0.012
0.052
0.007
0.016
0.216
0.05
0.008
0.023
0.01

Sequence #671 — Gene Saci 2016

M I L ^{0.129} T S ^{0.013} D E A ^{0.187} T Y ^{0.103} H S ^{0.009} L P S ^{0.007} L P L R L I P D F F P G S ^{0.012} K Y ^{0.003} P P Y ^{0.017} G L R K I E S ^{0.005} L V N G V V V P P H R I E R Y ^{0.009} L R T ^{0.035} D K V L G I Y ^{0.026} V N D P L N Q T ^{0.025} E V S ^{0.006} A K L S ^{0.006}
 E I F G E P P Y ^{0.041} V F H A F Q E L S ^{0.026} R R V S ^{0.189} R L K D R Y ^{0.037} D F K V I V G G P G S ^{0.005} W E F S ^{0.003} L N T ^{0.212} P E W V D T ^{0.042} V L M G E A E E T ^{0.128} L P K L L R E G S ^{0.065} D N L P K V V Y ^{0.055} G E R
 A K N F V A I R R P S ^{0.177} S ^{0.092} N A E V E V K R K D R K I P L E V V E A E L E V Q S ^{0.011} R Y ^{0.014} H N Y ^{0.008} L N L I S ^{0.007} D D L L S ^{0.011} Y ^{0.014} G T ^{0.142} E D E I L G L L R L A S ^{0.014} S ^{0.008} Y ^{0.022} G N E K K V V F S ^{0.012} Q
 I S ^{0.016} A E S ^{0.032} S ^{0.082} Y ^{0.016} R F Q L S ^{0.016} K I R E V L R L S ^{0.089} E N N W R S ^{0.005} P L L I N R P N S ^{0.007} C V L G E I D T ^{0.022} G V I K E L N K N F I Y ^{0.002} P M V Y ^{0.008} V P E E R V G D F M D H K V L L I P L P
 Q T ^{0.062} E K F Y ^{0.029} D V L Y ^{0.022} K C W V H D K G V L R M R F S ^{0.016} R V I D Y ^{0.007} V L D K N R E T ^{0.096} R G E Y ^{0.01} L K R L N V R G V H V F N L V L L L I R S ^{0.002} Y M W

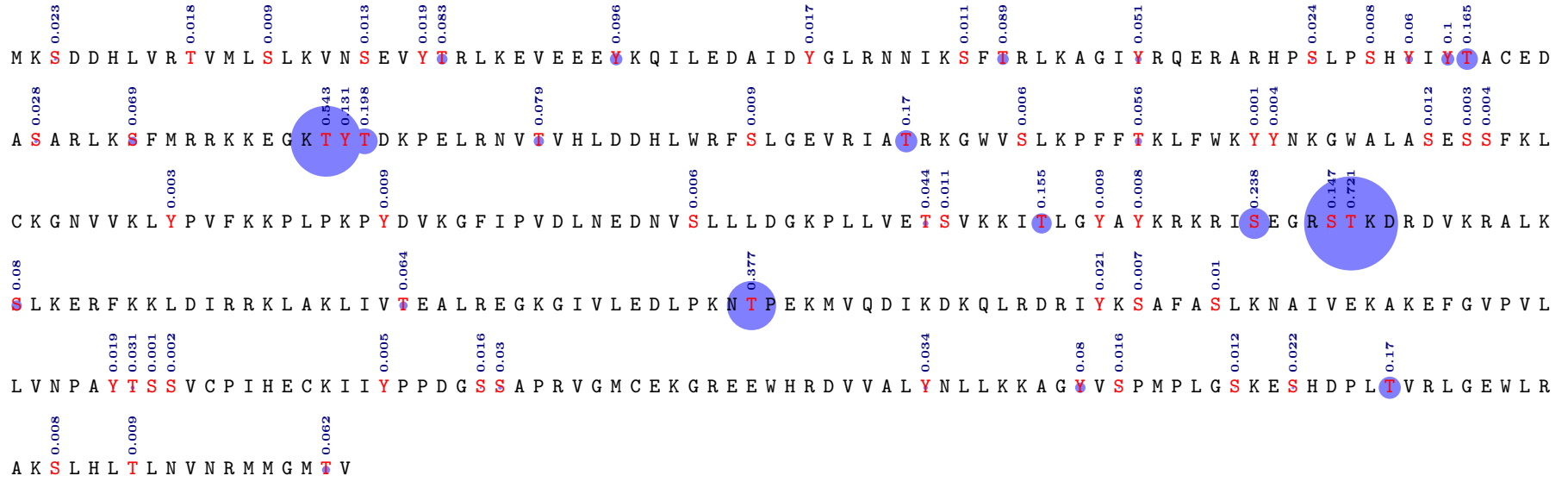
Sequence #672 — Gene Saci 2022

MEKLLRPKEVCQT^{0.009}LGIS^{0.003}Y^{0.007}RTL^{0.02}LLRWIDQGKIKAVK^{0.084}TEGGI^{0.02}YRIP^{0.012}Y^{0.006}SEVERILKNKI^{0.028}TNEVRAVI^{0.025}YARV^{0.06}~~S~~^{0.087}~~S~~^{0.02}SDQK~~S~~^{0.01}D~~S~~LD~~S~~DRQI

E^{0.016}YL^{0.083}T^{0.011}NYCLAKGY^{0.01}KVVD^{0.077}T^{0.012}LS^{0.006}DI^{0.008}SS^{0.384}GLN^{0.008}T^{0.024}KRKNLLKLFQLVKEGKVDVVVI^{0.074}T^{0.005}YKDRL^{0.091}T^{0.01}RFGF^{0.011}EY^{0.01}LE^{0.011}YFFQQFGV^{0.06}RV^{0.087}VEVVLGE

EPKDA^{0.062}V^{0.006}QELVEDLL^{0.01}S^{0.003}IV^{0.008}T^{0.024}S^{0.211}FAGKLY^{0.008}GIR~~S~~HKK~~T~~LLREGVKKLIGEL^{0.071}~~S~~EK

Sequence #673 — Gene Saci 2023



Sequence #674 — Gene Saci 2024

MEGK Y T G T E I I E R A R R T S L I F S L V N L L L G T I L V L T D P L Y M V G Y I N R V F V G I M D I I W V G Y V E Y K Y I K A Y R V L N N V E G L G Y R
S L R Y Y V R L M L R T A Y L I P Y V M F I L V I L I F T L Y T F I H I L G V S K T L S Y I L V I P M I G A G V I G G F K I H R Y I E S L V N T L G G S D

0.008 0.001 0.001 0.011 0.126 0.017 0.008 0.025 0.001 0.003 0.009 0.013 0.001 0.001 0.001 0.008 0.001 0.004 0.008 0.003 0.001 0.004 0.008 0.001 0.001 0.001 0.006 0.001 0.002 0.006 0.002 0.006 0.017 0.001 0.002 0.001 0.003 0.001 0.004 0.005 0.009 0.004

Sequence #675 — Gene Saci 2025

M L F D P **T** P K D N R E D F F N R D E E I N R V R **S** L **S** L **S** P I **T** L V L G L R R **T** G K **S** **S** I I K I A L N E L **S** L P **Y** I **Y** L D L R K F E D R A **Y** I **S** F K D L L L E L
E R E V K K L **T** R K F P **S** L V D F L K G V K G V **S** I A G N E V R F N W G V K N R L N F **S** D L L E **T** L N D W **S** K D R V I I A F D E A Q D L I N L R G V N L L **Y** P L
A **Y** **T** F D N L K K V R I I M **S** G **S** E M R L L **Y** R F L G V E N P K **S** P L F G R A M N E V E L R P F D H E K **S** I E F L R R G F K E V N V E F R E **Y** E R V **Y** E E L G G
I P G W L **T** **Y** F G **Y** **Y** F I Q **T** R N L E E **S** M D R **T** L E R A K G L V M E E F N N F L **S** K R L I A K E R **Y** M V I M K R I A N G C **S** R W **S** E I K **T** A V E I H E G R E I
S D **S** E I **Y** N **Y** L N N L M D **S** **S** W I V K D E E K N E **Y** C P A E K L I G R V F R V

Sequence #676 — Gene Saci 2027

M D V T V G I P L G R D S L Y P L L R K L K T W K D V E I L L V Y K G E V K T K D Y N R A I E Q K D G Y Y E E A I N I I F R E S H S S I L L I T D D D A I P S
D T W I Q D H V S F H E R N E K I G V A S G V V E G K K W I N Y P N F T F Q L F K D T V Y M E E Y D H R F K D Y V G Y L T K T G L S V D R R P H D S K D L E K T
L A I A G V N M S I K K E V Y S N L S V P E Y S I R G S Y N E S L I A I E G I K R G Y H S A I F N R G K V V H T G E E S L S R T D Q E W L T K Y L A V E K H T F
P Y A V N F F L K I D S R L L E D F S R R V Q G E A K T G L D L A L K G I L H N M D P H S F R E E L R S I Y L R L K E E G E K H H N H

Sequence #677 — Gene Saci 2032

MEIK T^{0.018} S^{0.004} VLVIGGGANGLF T^{0.04} ALDLALRGIDV T^{0.071} LVERRDIG S^{0.011} G^{0.073} T^{0.012} SGRFHGLLH S^{0.008} GAR Y^{0.071} AV T^{0.151} DPE S^{0.012} AKECIQENNI I S^{0.004} KIA PH
 AIRD T^{0.074} GGLFLGI T^{0.093} KEDLEFLDKFL S^{0.014} S^{0.011} LKKLGI EHKIVDNNQVLQEEP Y^{0.016} VNKDLKIAIWVPDKVV Y^{0.003} Y^{0.007} DLL S^{0.002} S^{0.004} IAV T^{0.031} G^{0.002} SLN
 KARIM T^{0.116} Y^{0.013} NEV T^{0.013} EFIRDGN S^{0.006} IKGVKVFDKI T^{0.009} NQMNLIK S^{0.003} DIIIN T^{0.028} S^{0.002} GPWAFKII T^{0.032} MAGLEEIPILP T^{0.023} AGIMAVFGKKV NNA
 VLNRLRPP S^{0.081} DGDIIIVP Y^{0.033} QD T^{0.06} S^{0.006} IILG T^{0.012} T^{0.009} A T^{0.047} IIEDPDNF T^{0.198} I S^{0.021} DEDVKMLIKEG S^{0.026} QLVPEL S^{0.027} K T^{0.075} RVIR T^{0.327} Y^{0.126} A S^{0.034} VRPLMR T^{0.198} S^{0.071} EDGR
 KAS R^{0.112} D^{0.152} F^{0.018} T^{0.012} ILDHEREDGV S^{0.018} GLI S^{0.012} IIGGKF T^{0.101} T^{0.123} S^{0.016} RLVGEKVGDLV S^{0.031} EKLGVRAK S^{0.104} K T^{0.096} KE T^{0.145} KLI S^{0.111} S^{0.073} EIDFEK Y^{0.007} LEKIGI S^{0.021} SKIF
 LK S^{0.016} VMERRG S^{0.277} LDEER Y^{0.081} K T^{0.15} VLY LLL S^{0.015} LIARGR S^{0.011}

Sequence #678 — Gene Saci 2033

M A E K ^{0.009} Y V I A I D E G ^{0.064} ^{0.059} ^{0.008} T S A R A I V F D K E L N I L G I G Q N E F ^{0.054} T Q ^{0.036} ^{0.006} Y Y P Q P G ^{0.027} Y V E H ^{0.005} S P E E I W Q A Q L L A I N K A L E K A K I D R N N I L ^{0.003} S I G I ^{0.036} T

N Q R E ^{0.021} ^{0.041} T T V M W D ^{0.086} T R ^{0.134} T G K P I ^{0.014} Y N A I V W Q D R R ^{0.089} T A P I ^{0.196} T D ^{0.044} Y L K A N ^{0.005} Y L R L I K D R ^{0.093} T G L V P D P ^{0.058} Y F ^{0.005} S A ^{0.003} S K I K W I L D N I P N A R E K A E K G E I K

F G ^{0.017} T I D ^{0.003} ^{0.018} T Y L I W K L ^{0.015} T N G K A H V ^{0.094} T D ^{0.027} ^{0.001} Y S N A ^{0.005} S R ^{0.089} T M L F N I R K L E W D R E I L E I L N I P E A I L P D V K P ^{0.013} S S ^{0.016} E I ^{0.044} Y G ^{0.073} Y A E I L N ^{0.01} S S ^{0.01} I P I ^{0.013} S G D A G

D Q Q A A L F G Q I A F N Q G D V K C ^{0.009} ^{0.002} T Y ^{0.005} T G ^{0.002} S F I L L N ^{0.004} T G ^{0.002} S N L V ^{0.001} S S ^{0.002} N D L L ^{0.003} T T I A W G V G K G I ^{0.047} ^{0.002} T Y A L E G ^{0.002} S I F I ^{0.087} T G A A V Q W F R D G L R A I D V

^{0.009} S D E I E P L A G ^{0.011} S V P D N G G V ^{0.053} Y F V P A F ^{0.056} T G L G A P ^{0.016} Y W D P ^{0.012} Y A R G L I I G I ^{0.037} T R G ^{0.051} ^{0.312} T T K A H I A R A I L E ^{0.003} S M A ^{0.026} Y Q ^{0.063} T M D V L G I M Q R D ^{0.026} S G I K I D A

L K V D G G A ^{0.008} S K N D L L M Q F Q A D I L K M K V V R P K I M E ^{0.014} ^{0.04} T T ^{0.008} S M G V A M L A G L ^{0.006} S V G ^{0.089} Y W N ^{0.007} S M D E L K Q K W K I D Q V F E P K M D D E ^{0.12} Y R E K L ^{0.045} Y S ^{0.011} G

W K E A V R R A L G W A K ^{0.072} T I G G

Sequence #679 — Gene Saci 2038

M N V N N L F T Y Y L V V N F L I S I A Y I S L Y M A D V A Y F V K I Y N L T Y G V L I L F L C I W D A I R Y L R N N N I E D R T R A G V Q F S W L I V S F A L
G Y I S I I Y A P I L Y T T I F I V A I E S L M S I I Q A I W G A S L L Y L A Y K K G Y S I I K V

Sequence #680 — Gene Saci 2041

M I R I G I D I G G A F ^{0.025} T D L V ^{0.046} Y Y D Q ^{0.014} S N D E F E W I K V E ^{0.022} T T ^{0.04} Q D P ^{0.087} S I G V I R A V D E ^{0.007} S K V D L K N A N E I I H G Q ^{0.009} T L A I N ^{0.005} T I I E R K G A K V G L I
^{0.029} T ^{0.03} T K G F R D I L E I Q R A N R R D M Y ^{0.012} N F K ^{0.057} Y K K P E ^{0.053} S F V P R Y ^{0.007} L R R E V ^{0.271} S E R I ^{0.138} S ^{0.243} S ^{0.062} S G E I I ^{0.045} S P L K I E E L K I V V N D L V K K G V E ^{0.011} S I A V ^{0.005} S L I N ^{0.005} S
^{0.01} Y V N ^{0.005} S A H E L K V K E L L K E I L G D ^{0.013} S V F I ^{0.007} S L ^{0.007} S S H E I ^{0.084} R E W G E Y ^{0.02} E R ^{0.04} T N ^{0.117} T V V L N A ^{0.014} Y I K P K M N N ^{0.004} Y L R K L K K E I D K R G F K G K ^{0.015} Y ^{0.024} Y A M L ^{0.007} S N G
^{0.129} G M A ^{0.051} T F D F ^{0.043} T M D F P I ^{0.086} T L E ^{0.004} S G P V A G I I G A I A I G E L A H E K N I I G L D G G ^{0.007} S ^{0.042} T ^{0.035} T ^{0.02} T K A ^{0.004} S L V E N L M P N I I ^{0.074} T D ^{0.029} Y ^{0.04} Y I E R N P ^{0.039} Y ^{0.006} S P G ^{0.003} Y P V K V
^{0.07} P ^{0.014} T I D I V E V G N G G ^{0.004} T S I A W I D E I D N L K V G P R A A G ^{0.02} S ^{0.015} Y P G P A A ^{0.044} Y G R G A ^{0.079} T E P ^{0.133} T V ^{0.087} T D A ^{0.976} Y I L ^{0.005} S G L L N P N E L L G G K L K V R R D L A E K A I
^{0.017} K R I A D H ^{0.01} Y K I S V D E A A E G I V R L A N N N A V N V I R L V ^{0.008} S V Q R G ^{0.012} Y D P R D F V L I A ^{0.029} Y G G ^{0.008} S G P M F A P F I A E E L D L K K V I V P F V P P G V F ^{0.001} S
^{0.014} A W G M L V A D I R H D L V K ^{0.01} T E L V R I D K E D A I N K I N ^{0.003} S V F D E L E K K I L Q F F A ^{0.003} S E G F N A N D V M I F R E A E M R ^{0.004} Y ^{0.023} Y G Q ^{0.004} S H ^{0.067} T V K V N V M N G E
^{0.028} L R D K E I G E I I N K F H L Q H E A ^{0.006} T ^{0.009} Y S F K ^{0.005} S A ^{0.008} S P I E I V N F R V ^{0.038} Y G I I R A K K V P L L K R K L N G N ^{0.012} S I K E ^{0.011} S ^{0.192} T R N V F I N G K ^{0.013} Y E E F K V ^{0.056} Y D K ^{0.011} S ^{0.009} T
^{0.005} L ^{0.083} S ^{0.039} T D C K V H G P A I L E D P ^{0.004} T ^{0.006} S T I I I L K G Q R G E I D D ^{0.004} Y G N V I I ^{0.023} T R

Sequence #681 — Gene Saci 2043

M I T L Y K L V F K T P N G L R V G G E D T L K P L K Y D N D Y V I P S T S L K G I F R R V S E M I V N D K D H M E E H P V E D L S R Y Q N E L K Q I E S C L N
S N C F D M R F K K I L K S K G L E D S N D R K E M V R L Y L L W N C P V E R L Y G S E Y F A S A L T I S D S V I R Q A D I V E R T H V V I D R K N K K N L E G
H L F T E E I L N V Y K I D V N V L R D S S Q G N S K Q A G Q S E L W L K T L K F M V N V G T F V G G G K S R G I G L M V L D Q K E S Q F A E I K D I Y D Q P
K F A P L Q D K L T Q V K

Sequence #682 — Gene Saci 2044

M K L Q L I K L V V N K Y I T T Q M R K V K N Y Y F S T T D Y I P A T L R G A I L A E Y Y Y Q K G K I E E D F Y V S P A Y P Q N S A P S H Y F S P A E G R K G
 S E F V E E S R I L S I K N D E I N K G K D M R E V M N L G I D K K P R I G V I I K P N E K Q K S P N E T R Y I K Y T P S S T I L M H V A I D K V S A S S F H R
 M L Y A Y E Y L K F N E M W A L A K P G D V I D T V E Q I R I G R S R S R I D S I V K V Q K V K E V N L E E P D G L T Y C L S P C V P S L L G E K L F E I R K L
 S S G K T L V I G E E S Y Y T G W F T T D T H S G A K P V F K T M K E G S L V V V E H K G D Y S K L M P A G L N F M V K I E D L A S L L S K V S L

Sequence #683 — Gene Saci 2046

M^{0.192} T L R G K L I L P E F E V K F V E E N K V K A L R E K I I N I I T^{0.009} Q I S^{0.002} N L S^{0.003} C E I A G N D E R Q A M N I L A D L L A L I Y^{0.004} K A P M I L S^{0.017} Y A P S^{0.016} L P S^{0.023} S K Y^{0.016}
S^{0.01} A N A F E Y^{0.013} L L Y^{0.018} Y^{0.008} V I L R H K Y^{0.007} G K E L M I T^{0.025} P D L G V K D L M D K L E K L P A E T^{0.143} V R N L K S^{0.004} F F Q S^{0.006} F K D L M D I Y^{0.025} E A L L Y^{0.032} T^{0.239} P A D T^{0.135} R P G F N F T^{0.004} S^{0.002}
L A S^{0.001} H L Q L T^{0.007} S L V V W A M Q Q Q T^{0.025} Y D Q S^{0.011} Q L R V A A L L H D I G K L V N P E H H V R E S^{0.02} V D I L E E V L R K S^{0.033} T^{0.065} G E L C I K G G I E K I R D E V L H H H G
Q I Q T^{0.007} I L N M A D D V A A S^{0.008} H D R I S^{0.021} P I V M E G L D N L N L S^{0.011} V K E C Y^{0.009} S^{0.036} K R G E D S^{0.013} F N C L E S^{0.014} K G A Q E Y^{0.034} E K A S^{0.028} K E L Y K Y L S^{0.026} S V L L D P S^{0.02} V I Q K
D E A K V L K Y^{0.012} L N D V K P A Q T^{0.31} P K S^{0.012} T^{0.119} Q Q A S^{0.007} A N T^{0.11} S^{0.115} R N P I A Y^{0.005} L V Y^{0.044} V D F P G I Q K F I T^{0.061} N F P G L R E M S^{0.012} F A S^{0.004} F L V D F I T^{0.026} S V Y A F A L I D S^{0.003} K^{0.007}
F R D L G K S^{0.008} M L P V E A L L S^{0.008} G Y G G H S^{0.015} Y I V V R A D L D K P D I E G L F K N L K L E E E L D A K L N V T^{0.004} V L D F M Y^{0.015} D N E I L G I N K I S^{0.006} E E I G K Q S^{0.009} Y^{0.002}
N R Y^{0.001} L L D F N E R L Y^{0.011} S^{0.005} Y^{0.005} G L H E T^{0.02} C S^{0.002} Y^{0.034} C G I R P A V D D V P I S^{0.038} P D E K E R L C K R C K L V R E L S^{0.115} S^{0.036} N R G F S^{0.02} A K T^{0.072} D T^{0.058} Y^{0.051} M I D G S^{0.124} F I R P A D L A K
S^{0.035} I F K G K D S^{0.032} S^{0.03} E G E Y^{0.07} L N Y^{0.046} A M E F I A G W K N E N D K K Y^{0.018} I S^{0.008} L V K A D G N Y^{0.02} A G I I F S^{0.002} A T^{0.049} V T^{0.09} F S^{0.006} D Y V D R S^{0.017} F R L D Y^{0.021} G I K K A F Y^{0.008} E L K E L H E
K E T^{0.144} S^{0.015} S^{0.032} A N A Q S^{0.018} S^{0.017} T^{0.064} G N S^{0.009} L V P R V L S^{0.014} G V L Y^{0.058} L G G D D I M L M S^{0.003} P S^{0.002} V I A I Q F A V R L F K K A Q E Y^{0.042} T^{0.014} G F T^{0.02} F K V G V L T^{0.148} V K P D H P V Q F A Y^{0.071} Q A V
N E L M E R A K I G H L N G S^{0.009} P V A M S^{0.012} S^{0.008} I A A M L F S^{0.002} S^{0.002} L A N R N V I D T^{0.025} E I N K Y^{0.011} S^{0.006} G S^{0.009} K H N E I K Y^{0.014} K F L V V S^{0.005} N P L E N V E E F L K S^{0.015} F G L E D F K E
L V N L Y^{0.012} N N E R E G R N K V K E V L R P I Q D V V G Y^{0.02} L S^{0.006} T^{0.053} I N K E N K G S^{0.013} E D I F F K G L A Y^{0.021} M V R Q R A R V K E N Q S^{0.012} N T^{0.06} D S^{0.016} Q R K V L S^{0.004} T^{0.011} L L Q N T^{0.026} K I
S^{0.007} N D G G S^{0.007} A P L Y^{0.009} D Y^{0.008} Y^{0.01} F I L K S^{0.005} I L A G L G E A

Sequence #684 — Gene Saci 2048

M K V E ^{0.018}S E L L H V G G G K ^{0.01}Y ^{0.043}T I ^{0.007}S L N K G I ^{0.011}S K K D V D Q W I D ^{0.011}S V L K G ^{0.013}S V P D L ^{0.007}S G ^{0.07}Y F N P P I H E F N K ^{0.065}Y ^{0.005}S D G R L V I P G A ^{0.065}T I K G M V R ^{0.045}T R L E L ^{0.006}S

I P D ^{0.005}S ^{0.048}C Y V V N R Q ^{0.015}S N ^{0.016}Y ^{0.01}S ^{0.012}S P R ^{0.025}Y I N I F R P A F R R ^{0.001}Y ^{0.003}Y H K F P Q V C V V D D L L G ^{0.007}T A K L A ^{0.003}S R V N F ^{0.022}T D F V G ^{0.004}S N V K V K K V N I N N E D ^{0.031}Y E C A E K

G ^{0.011}S ^{0.02}T F ^{0.159}T G K V L F R ^{0.048}S I R R P E E I G M L L ^{0.008}Y G F G F R L V N G K L Q Q K I Q L L G R F K ^{0.002}Y I D K R F G R V ^{0.066}S ^{0.083}F S I R ^{0.04}S ^{0.046}S ^{0.054}S L ^{0.189}T G G K I D L ^{0.015}S Q A L Q K F V ^{0.026}S

^{0.02}S ^{0.015}Y R P R D F N E A W

Sequence #685 — Gene Saci 2049

M V S A F I Q R N V I Q R I I T I E G Q V V V I S P L R V G A G K S A I S P G E L A R D V V L K D S T G R P V I P G S S W K G V F R S A G E R I L N S K G V K V
C T G I G R D I C L R N Y G K Y E D F Q R F L K S D I R Q A I D T F W K Y T C L N C K L F G T M S V S G M V N F L D S L P I D Y K L N V R T M V A I S R T E G A
S A R S A L V Q V E Y V E P N S K F E F K L M G R N L P N Y V V G Y L L T I M K N I H D G L T Q I G G H K T R G F G F V K F G N L K L T I S G D P K I G E E D K
E V P Q G L N N V Q G E G D D F F N K V K P Y M E V F Q N V K I P Y P V S G

Sequence #686 — Gene Saci 2054

M R R I L I F D I P N I G F A R W A K K R L E L L G ^{0.012} Y R V I E ^{0.387} T P ^{0.002} Y K ^{0.01} Y D I A I A L ^{0.016} Y A E R L G A I V V ^{0.1} T ^{0.012} S D K R F P ^{0.002} Y R K K I V L P Q K F V ^{0.074} T ^{0.004} N ^{0.004} S G V I G K P

^{0.008} K ^{0.005} Y E K L ^{0.037} Y T I L M ^{0.084} T E L ^{0.007} S K V

Sequence #687 — Gene Saci 2055

MFKNSKSKSYIYT MNIRDFIERVRELGLLREVKGASWDLEIGAITDLNAKRRKFLLLFDEIKDY PKGYRVL T GALLDYRRV
 0.009 0.008 0.006 0.005 0.002 0.032 0.008 0.054 0.087 0.005 0.007 0.106 0.013
 0.086 0.015 0.01 0.087 0.151 0.068 0.072 0.086 0.026 0.01 0.044 0.125 0.15
 SLALNLPANSDIELVKKLRERLAYASKKEYANYSPREVSDSPLLENDVDVGEKVDLKFSP PKWHEHDGGRYIG T ADAVV T K
 0.006 0.044 0.004 0.022 0.005 0.005 0.006 0.007 0.057 0.003 0.072
 DPESEWVNVGAYRVMLVDKNRLAIFIDSPHHGRIHMEKYLRQGKCKPIVIVSFS PPLDLFIFSGMEVPPQGVSEY N FSGAV T
 0.075 0.028 0.108 0.386 0.221 0.023 0.023 0.041 0.014 0.046 0.051 0.044 0.016
 GKRVDVLRGED T GLPIPAESEI AIEGYITGEL T DEGPFGFEMGY YAGGRMKNPVI EVKRV Y YRNDPILLG T TPGIPP Y D Y
 0.009 0.02 0.006 0.002 0.006 0.002 0.002 0.002 0.002 0.031 0.001 0.004 0.014
 SYFRCPIRSAMIWDMLEIRIGIRDVKGVWAHEVGF SRALVVVAIKQAFAGHQ TMLGHILAI SPL TSYGGRYVIVVDEIDP
 0.053 0.063 0.032 0.006 0.021 0.128 0.053 0.043 0.018 0.02 0.155 0.008 0.021 0.014
 SDLNQVWVALC TR TDPAN SIEVVKNVP S T PLDPMAERKENVKEYV S SRAIIYA T KPFNK SFPLEIKV S EDLVKKIKENW S
 EIFQ

Sequence #688 — Gene Saci 2060

M V N V A M V D P Q V **Y** I N L C E F L **Y** H E A E I L D N E M **Y** R E W L E M L G D D F E **Y** L I **T** **Y** V Q P E K G A K L K **Y** **T** E D **S** F L M K A N K Q K L **S** E M V K R L
Y H P **S** G W A L Q D **S** L **S** R F R R I V G N V R V K E A L N N **T** V R V R **S** N I A L F R I E M N E G **S** Q **S** V I **T** G E R E D L L **S** L **S** G E I R L R K R V V L D **S** P **S**
L L **T** **Y** N L **Y** F P I

Sequence #689 — Gene Saci 2062

M V E V I R D K K I V V E P N L T N Y D E I Y R N F N W D N A R K L N F V G K G N V S K L V M D L N A D G K D K S G L I W I S E K G D I K S Y T F H D L E V K
A S S F G A V L K D S G V K P G D R V V V M S K R V P S L Y F S L L A I G M I G A V I V P I Y S T F G E E A I R Y R V E N S G S K V A I V H E S L A D K F R N I
S G I K I L K T S E E G I V N E Q N V H N T S Y V E R S I N D P T L I L Y T S G T T G R P K G I W H S Q D I M T F Y Y F S G K Y H F D M H A Q D K F W H T G D P
A W V A G F A G V W T A W L N S I P I V S Y E G K F D A E S W Y S N I E R V K V T L M S T A P T A I R L L K K E G V E L A R K F D L S S I R F I H A G G E Y V D
P D I I R W S M E V F G V P I H D G Y G Q T E T A T Y V I A N Y V S M P I K I G S M G K P L P G V K A L V V D E N G N P L P P N T K G I L A L D P D F P A M A K
G I W N D E E R W K N S F K N G Y Y L T G D M G Y I D E D G Y F W Y L G R A D D I I K V S G Y R I S P V E I E S V I M T H P A V A E S A V I G V E D P I R G F R
I K A Y I V L K K D Y S P S D E L K N E I I N H V R V K L G A H V V P R E V E I V K E L P H T L S G K T M R R V L R A I E S G S Q L G D V S T L E N P E T V K K

E

Sequence #690 — Gene Saci 2063

MIKVELDKENRIGKVLIDRQEKMNAI **T**^{0.047} **V**^{0.026} **S** MRREIGERILELEK **S**^{0.015} PDVRV I I VRGLGGKAF **S**^{0.02} **S**^{0.045} GGDV **S**^{0.025} EFL **S**^{0.024} **L**^{0.041} **T**^{0.089} PE **T** L I D W
GEDL **S**^{0.012} **S**^{0.013} **S**^{0.031} ERI **T**^{0.218} KPVI A **S**^{0.008} IDG **Y**^{0.059} **T**^{0.047} FGAGLELAL **S**^{0.003} CDIRIA **T**^{0.115} PR **S**^{0.015} EFG LPEIRLGMVPA **S**^{0.007} GGI **T**^{0.123} RLVKVLGL **S**^{0.005} RA **T**^{0.105} **Y**^{0.046} M L M L G K
RID **S**^{0.005} QLA **Y**^{0.012} QWGI VHEIVDAEK LDER **T**^{0.09} **Y**^{0.065} EVAKELAGL **S**^{0.023} PLALKALKKVLHEIAD **S**^{0.008} PM **Y**^{0.066} VGYDI ERK **T**^{0.224} FGLLK **Y**^{0.012} **S**^{0.014} GDFKEGV
E A F L N K R K P K F D G K

Sequence #691 — Gene Saci 2064

MFKEGLRFVKGEG ^{0.025}SY ^{0.021}IDDMI ^{0.011}KE ^{0.007}YKNHLHV ^{0.008}SILR ^{0.008}SPY ^{0.008}AHALIKRID ^{0.026}YS ^{0.006}DA ^{0.008}SKAGVKVI ^{0.065}TFRDLMNFL ^{0.006}SPFPPL ^{0.004}SLD ^{0.211}TKVE ^{0.123}Y
^{0.01}YPIARDKAV ^{0.029}Y ^{0.042}YGE ^{0.159}PVALVIAKDQ ^{0.008}YEAEDA ^{0.055}KELIQVD ^{0.095}YEPIKPVV ^{0.009}TI ^{0.011}IED ^{0.003}SLK ^{0.003}SEPIHPQVK ^{0.043}SNI ^{0.094}VLNK ^{0.041}TF ^{0.075}Y ^{0.026}GDFE ^{0.026}Y ^{0.026}ES ^{0.026}EK
^{0.026}SEVVVENRVKFP ^{0.012}RY ^{0.026}SC ^{0.009}SPLE ^{0.076}T ^{0.05}YEVFAR ^{0.011}YDGD ^{0.041}KYEI ^{0.034}YS ^{0.004}NFQGP ^{0.018}YS ^{0.004}IHY ^{0.008}LL ^{0.014}TKALKADVLLK ^{0.006}GP ^{0.006}RDIG ^{0.006}SG ^{0.006}FGIK ^{0.004}SAI ^{0.003}Y ^{0.013}YP ^{0.013}YMA
 LIA ^{0.006}SA ^{0.006}SRV ^{0.088}IWRPL ^{0.118}LLWRE ^{0.01}TR ^{0.009}TEHVIA ^{0.058}SS ^{0.019}AGAERE ^{0.012}SVV ^{0.007}KVY ^{0.007}GNR ^{0.007}SG ^{0.007}KINAIEIKA ^{0.007}IDNLGA ^{0.019}YPRPPEPG ^{0.021}NLLRN ^{0.019}HGNL ^{0.021}TGAY
^{0.002}DIK ^{0.029}SMKVN ^{0.011}YMAVL ^{0.008}TNT ^{0.082}IP ^{0.011}TGLNRG ^{0.023}Y ^{0.114}GAPHL ^{0.025}Y ^{0.007}TAIE ^{0.007}TT ^{0.007}IDIFADEIK ^{0.065}MDP ^{0.121}IDVR ^{0.093}MKNVI ^{0.027}KDE ^{0.019}Y ^{0.014}YE ^{0.031}TA ^{0.01}SS ^{0.01}G ^{0.01}GK ^{0.01}Y ^{0.01}RS ^{0.01}FS ^{0.01}CS ^{0.01}Y ^{0.01}KVL
 RRMKEL ^{0.045}Y ^{0.125}DKLN ^{0.012}TD ^{0.006}VEMERAK ^{0.061}GKRIG ^{0.023}VGV ^{0.045}SL ^{0.056}IIEP ^{0.005}SG ^{0.009}T ^{0.005}NI ^{0.007}GY ^{0.007}LDLARE ^{0.007}SS ^{0.007}DFLPK ^{0.007}SS ^{0.007}AQ ^{0.007}DI ^{0.007}VMV ^{0.007}Y ^{0.007}IDL ^{0.007}Y ^{0.007}GK ^{0.007}V ^{0.007}K ^{0.007}V ^{0.007}F ^{0.007}V ^{0.007}NG ^{0.007}SE ^{0.007}NE
 GQGHE ^{0.095}T ^{0.011}V ^{0.028}VEQV ^{0.07}SRRL ^{0.127}GVK ^{0.349}PKPQDV ^{0.016}DI ^{0.017}Y ^{0.15}RT ^{0.045}DD ^{0.015}TER ^{0.011}PWAV ^{0.015}SS ^{0.011}SG ^{0.015}TY ^{0.011}SS ^{0.011}RF ^{0.015}FAPI ^{0.015}IVMEAL ^{0.015}NRALD ^{0.015}SS ^{0.015}LED ^{0.022}KLL ^{0.014}LA ^{0.014}SEL ^{0.014}LGV ^{0.014}QK ^{0.014}SS ^{0.014}SS ^{0.014}L
^{0.013}KIKEGKV ^{0.092}T ^{0.124}V ^{0.005}EDK ^{0.007}SV ^{0.089}SLRQL ^{0.005}VGIF ^{0.012}HWD ^{0.009}PVKLRN ^{0.014}TE ^{0.03}EQGL ^{0.004}VAV ^{0.004}GHFQ ^{0.004}SP ^{0.004}Y ^{0.004}ADNL ^{0.004}KEGKIN ^{0.004}SS ^{0.004}ISI ^{0.004}SY ^{0.004}GCMG ^{0.004}QV ^{0.004}VE ^{0.004}VE ^{0.004}IGE ^{0.004}TE ^{0.004}EM
^{0.005}PFIRRA ^{0.005}Y ^{0.005}VIHDAG ^{0.005}KILNE ^{0.005}KMAEG ^{0.005}QIVGA ^{0.005}S ^{0.005}FQ ^{0.005}GV ^{0.005}EV ^{0.005}SL ^{0.005}F ^{0.005}SS ^{0.005}LE ^{0.005}Y ^{0.005}NED ^{0.005}G ^{0.005}I ^{0.005}PL ^{0.005}SS ^{0.005}QNF ^{0.005}SD ^{0.005}Y ^{0.005}L ^{0.005}V ^{0.005}LT ^{0.005}AME ^{0.005}SP ^{0.005}NI ^{0.005}EV ^{0.005}QHI ^{0.005}T ^{0.005}SD ^{0.005}PN ^{0.005}HV
 AGLGEGGI ^{0.006}ISM ^{0.009}P ^{0.009}PAI ^{0.009}INAL ^{0.009}RK ^{0.009}V ^{0.009}IKIN ^{0.009}SI ^{0.009}P ^{0.009}AL ^{0.009}KE ^{0.009}II ^{0.009}SS ^{0.009}SS ^{0.009}K

Sequence #692 — Gene Saci 2065

M ^{0.016}S ^{0.02}S H R K V R N H A L ^{0.007}Y V V G I M ^{0.002}S ^{0.001}Y V V ^{0.001}S L I P F ^{0.001}Y N L N F F R ^{0.007}T I I L I P I L A ^{0.002}Y ^{0.012}T L P I L E R L Q P K V M V L K L ^{0.001}S K M D ^{0.003}Y I L I V L A ^{0.002}S I P ^{0.001}Y L F I K

Q ^{0.003}S I L L L L P I ^{0.002}S L I L L ^{0.003}T F A L ^{0.001}Y ^{0.001}Y F K N ^{0.012}T M W G N V L G ^{0.001}T ^{0.007}T F L ^{0.001}S ^{0.001}S L ^{0.001}S I V W N I F V ^{0.001}Y N ^{0.001}S F L L P ^{0.001}S L ^{0.001}Y W I L ^{0.001}Y I L V G A L ^{0.001}Y V E ^{0.001}Y K I P F R R L ^{0.006}S K G

V V Q E A W V I ^{0.002}S V I V F V F L ^{0.002}S L ^{0.001}Y V F K V P L L L L ^{0.008}S L I E P ^{0.019}S L R F L R P G Q K L G ^{0.082}S M K D L A R L G K R G V K R D A L F I A L L ^{0.002}S I V ^{0.003}S I I W A ^{0.003}Y R I ^{0.003}S

L I N I

Sequence #693 — Gene Saci 2068

MAQKVL D VRK **Y** ^{0.037} **S** ^{0.024} **P** ^{0.229} **T** V R H **S** ^{0.027} L I L E E F E R L K P G E G M **Y** ^{0.173} I I N D H E P V H L L H F L **S** ^{0.006} H R D D F D I N A **Y** ^{0.043} H A K E E E E G K W I A F L K K K E V Q G

E A R A I V **T** ^{0.065} N F D **S** ^{0.006} N K K L **S** ^{0.007} E **T** ^{0.012} **S** ^{0.008} F **T** ^{0.085} P I Q I F R **T** ^{0.045} **T** ^{0.045} **Y** ^{0.085} A V I L A **Y** ^{0.011} F K P G Q F I P V H K P **S** ^{0.005} I D V I L L I R K G K G V V V A G D N K **Y** ^{0.014} N V K E G D L V I

V P R G V K R G V L A E **T** ^{0.024} E M E I L H I V **S** ^{0.062} P P P N E R D H E E V E E G L R K G K F E G

Sequence #694 — Gene Saci 2069

M T V N V D E W K K K I M E G L K D V Y D P E I P I D I V N L G L I Y E L R I S E E G D V Y I R V G V T T P Y C P V T E D I A Y T V E Q V I K E T V N A K S I N
V E L D L D T R W T P L M M T D E G K E T F K K R F G Y D I V Q M W K M Q H G E E Q

Sequence #695 — Gene Saci 2074

MVKLIIRDPI Y G Y IRVND E D L R I V D S P P F Q R L R Y I R Q N G M A Y L V F P S A T H S R F E H S L G V Y H V A D L M F N R I K D V N E E T V T R E
 N I R R L A L V H D I G H L P F S H T F E F A L K Y I E Y M D N G I Y S T F R N E F F K E V K V A K L H E L V G I H V I Q K C M N N D D L S R W M K R V Y V E N
 S E D T K T I K A I L N S S L D A D R L D Y L Q R D S Y Y F G V K Y G Q I P L D R I L E T V E I R G S D G K Y V F N I K G R D D L E E Y L M A R Y H M Y S A I Y
 N H P V V G I F N S V M A Y T I A K M M M D Q I I T V D N I K E C D Q F L G F T D N F I I S K L H E I R D R S E T Y S R L Y E T L Y K R V K Y R K K V L E Y D Q
 A N F F S M A M N D R D R E R E L Y N F I K D V K G K V L V Y S A D V S M P T D N I V L S L G N N V F I D L E K H D D A S R Y I N I P S L R R K V I I G Y Y D D
 K S Y Q K F S E Q F L P K Q

Sequence #696 — Gene Saci 2075

MKR ^{0.001}Y PRDVAH ^{0.013}S LAFLVAI ^{0.02}S KRE ^{0.031}S DL ^{0.012}S GFELNNG ^{0.013}Y VK ^{0.011}Y VE ^{0.011}Y VED ^{0.006}S ^{0.03}Y DCKGIDLDVDPGIVK ^{0.004}S ^{0.085}T ^{0.004}S ^{0.037}T KMWNYL ^{0.022}Y ^{0.202}T GNKVEFDDK

EKELLRKLGDNG

Sequence #697 — Gene Saci 2077

M I I D R Q D A V Q L A N S L T Q S G V Y S Q S E L N S L Q N G Y F V I I K A S V T N N E A Q N F T L Y P S S F E L V T N N G S V Y S Y F I L Q H S S S V S Y Y
Y S F N S L L N T N Y Q L A P L F L T A T E N I T L G Y Q V T A N R D L I F L I P L N T T P S T L R V V D N G K I I G Q V S L V N V T T D Y L K V I K V N T F T
N D S E V S L S L N S A S T I Y T I N D T I T L S L N V Q N S E G L M P L T V T K I G V Y P S A F S I I K I S P D I V N S T L T P G Q S V V T G S S F P R S Q
N V I I L V K L P N E S Y N G N V N V F M N V T Y K P S F Q A V V T Q A I N D R A E A L L Q Y S Q G G P G Q L E V S T Y L V A N L S I M Y N G S A S V A F N P G
N I H L V T N K G I Y S N L Y G P T S P F I Y L Y A V T N H I P Y I N T I V N G Q I I Q G Q V A F Q I P L G A K P L Y I I Y V S E N N Q T L F S A P I P S K I Y
N F S I F A I N Y E V N N Q S L A Y V Y G T P Y H F I S Y V Y G I S G G N F T I N L Q A Y K Y S Y Y Q N S I V E V Y N I S L S P S I F E I L S I S P N L I G R Y
L N T S P T Y C N I T I G F P N Q S F Y G Q L T I N V Y V K I V G N V T I S N P A Y I Q K I Q S K S L L N E K V G I K N P N T Y Y M I G S T T S R D I S N L A

Sequence #698 — Gene Saci 2081

M Y D W F S E M R K K D P V Y Y D G N I W Q V F S Y R Y T K E V L N N F S K F S S D L T G Y H E R L E D L R N G K I R F D I P T R Y T M L T S D P P L H D E L R

S M S A D I F S P Q K L Q T L E T F I R E T T R S L L D S I D P R E D D I V K K L A V P L P I I V I S K I L G L P I E D K E K F K E W S D L V A F R L G K P G E

I F E L G K K Y L E L I G Y V K D H L N S G T E V V S R V V N S N L S D I E K L G Y I I L L L I A G N E T T T N L I S N S V I D F T R F N L W Q R I R E E N L Y

L K A I E E A L R Y S P P V M R T V R K T K E R V K L G D Q T I E E G E Y V R V W I A S A N R D E E V F H D G E K F I P D R N P N P H L S F G S G I H L C L G A

P L A R L E A R I A I E E F S K R F R H I E I L D T E K V P N E V L N G Y K R L V V R L K S N E

The image displays a protein sequence with p-values for each residue. Residues are highlighted with blue circles of varying sizes, indicating their significance. The largest circle is centered on the residue 'T' at position 166 (T166). Other significant residues include 'T' at position 101 (T101), 'T' at position 177 (T177), 'T' at position 183 (T183), 'T' at position 134 (T134), 'T' at position 103 (T103), 'T' at position 109 (T109), 'T' at position 105 (T105), 'T' at position 118 (T118), 'T' at position 119 (T119), 'T' at position 120 (T120), 'T' at position 121 (T121), 'T' at position 122 (T122), 'T' at position 123 (T123), 'T' at position 124 (T124), 'T' at position 125 (T125), 'T' at position 126 (T126), 'T' at position 127 (T127), 'T' at position 128 (T128), 'T' at position 129 (T129), 'T' at position 130 (T130), 'T' at position 131 (T131), 'T' at position 132 (T132), 'T' at position 133 (T133), 'T' at position 134 (T134), 'T' at position 135 (T135), 'T' at position 136 (T136), 'T' at position 137 (T137), 'T' at position 138 (T138), 'T' at position 139 (T139), 'T' at position 140 (T140), 'T' at position 141 (T141), 'T' at position 142 (T142), 'T' at position 143 (T143), 'T' at position 144 (T144), 'T' at position 145 (T145), 'T' at position 146 (T146), 'T' at position 147 (T147), 'T' at position 148 (T148), 'T' at position 149 (T149), 'T' at position 150 (T150), 'T' at position 151 (T151), 'T' at position 152 (T152), 'T' at position 153 (T153), 'T' at position 154 (T154), 'T' at position 155 (T155), 'T' at position 156 (T156), 'T' at position 157 (T157), 'T' at position 158 (T158), 'T' at position 159 (T159), 'T' at position 160 (T160), 'T' at position 161 (T161), 'T' at position 162 (T162), 'T' at position 163 (T163), 'T' at position 164 (T164), 'T' at position 165 (T165), 'T' at position 166 (T166), 'T' at position 167 (T167), 'T' at position 168 (T168), 'T' at position 169 (T169), 'T' at position 170 (T170), 'T' at position 171 (T171), 'T' at position 172 (T172), 'T' at position 173 (T173), 'T' at position 174 (T174), 'T' at position 175 (T175), 'T' at position 176 (T176), 'T' at position 177 (T177), 'T' at position 178 (T178), 'T' at position 179 (T179), 'T' at position 180 (T180), 'T' at position 181 (T181), 'T' at position 182 (T182), 'T' at position 183 (T183), 'T' at position 184 (T184), 'T' at position 185 (T185), 'T' at position 186 (T186), 'T' at position 187 (T187), 'T' at position 188 (T188), 'T' at position 189 (T189), 'T' at position 190 (T190), 'T' at position 191 (T191), 'T' at position 192 (T192), 'T' at position 193 (T193), 'T' at position 194 (T194), 'T' at position 195 (T195), 'T' at position 196 (T196), 'T' at position 197 (T197), 'T' at position 198 (T198), 'T' at position 199 (T199), 'T' at position 200 (T200).

Sequence #699 — Gene Saci 2087

M V E E K K S G I I D S I L E R L G I N E A P L F R T P D Y M Y N I S Y W L G A M V A A S F A Y T I I T G L F L L L Y Y Q P A F A Y Q S T Q T I I N S V P Y G S
V L L F S H L Y G S Y I M I L L A Y I H M F R N F Y K G A Y K K P R E L Q W V T G V L L L A L T L G A S F F G Y S L V S D V L G V N A I D I G D Q L L V G T G I
P G A T A I V G W L F G P G G S A A L S S N P L V R S E L F D R L L G W H I I M V F L L G V L F L F H F M L S E R Y G M T P A T R E K P K V P S Y Y T K E E Q E
K F N P W W P R N F V Y M L S I V L I T W G I I L F V P N L L A N I N G L P I V I N P Y P A P Q A G S P Q A V S V Q P Y P P W F F L F L F K L V D F L L P N G I
P I T P I L T I A L L V V G L V I L M L L P F L D P S D S L Y V T R R K F W T W I M T T L A V Y L V E L S V W G Y L E P G V P E P T S A Q I E F L G P P L V I I
G I I V Y L W P T E R K T K T V S T T A T D S R V I K M N I T P M E I L L G A V G T L S F A A T L F N F I Q F P T L I N G I I L V P L G L F A I Y A L R R I S F
Y V L G G K P V A S V G N T S S R I S L R K K I A F F G I I A L F V V S L V L L G L M W T L P S V G P Q A T Y A G M D L G V I L L L W G V A I Q L Y H Y E I F V
K E

Sequence #700 — Gene Saci 2091

M L L G ^{0.011}S ^{0.016}T K L W K ^{0.011}Y ^{0.004}F S G M I G V K ^{0.367}T ^{0.005}S I F D ^{0.062}W ^{0.089}M ^{0.015}Y E K ^{0.016}Y M E ^{0.026}T ^{0.004}T R L M ^{0.004}S K M N ^{0.004}Y I P A I A ^{0.006}S G E I A L L L I L ^{0.001}Y ^{0.002}S G G M G L A I ^{0.004}Y N L P L E G P L L I M H L
^{0.002}Y G A I L V A V L ^{0.001}S L G L L A A V N ^{0.001}Y R D K G A I L I ^{0.001}S F L N V L ^{0.001}S I L F A A F E G ^{0.002}S ^{0.002}F Y F G G I V D V ^{0.002}S ^{0.014}Y L M Q M G M G F V F A V I ^{0.014}T ^{0.001}S G C L I ^{0.003}Y A I K R

G E

Sequence #701 — Gene Saci 2093

M ^{0.004}S ^{0.009}K ^{0.009}F ^{0.009}T ^{0.009}F ^{0.009}M ^{0.009}T I I F D I L N E V H G F F G A L W A G A A F L N F L V K P R E K E Q F V R I G K F F L I ^{0.}S ^{0.002}S V I ^{0.01}T I V ^{0.004}T G I I I F A ^{0.}Y I ^{0.}Y L I P ^{0.}Y N G N L F I V

N A V L H D ^{0.001}S L N I R I R A F L N L V G G A F G L L A F G ^{0.005}S G I V I ^{0.002}S N R I R Q L M N L R E G D V V G L E I R N ^{0.012}S I ^{0.002}S ^{0.011}T L ^{0.003}S K F N I V F L L L ^{0.003}S I ^{0.003}S M M I L A G

^{0.005}S I A Q V I G A

Sequence #702 — Gene Saci 2094

M S I N D V A K L F G S A W I V M M A D V D A A S I L T G V A D G Q T Y G Y R L I I L L L V L T L P L Y I V Q E A A G R V G A V N N G K G L G T L L R E K F S Q
K F A L T A A I P M F L V D L F T Y V V E Y V G I A V G S L M I G V P V Y I S L P L F F V I H L S I V L T R T Y E K M E K T L L G I S F F L V I A F I V Q A F L
R G V S P N Q Q L L Y F S A S K S F L F F L A A N I G A V V M P F M I F Y Q A S A T A Y K Y N N S A L S K D V K V K W S S M E T F I G A L V S E L L M V A I E I
S T T G L S S S I D P L N Y R E M S Y A L S A I S G I Y S P Y V F G I G L I C G G L L A L I V E S L G S A W G T L E A L N K H N H R N T T L L Y V F E S V P A I
I I A S I F S Q N Y D Q I V N T V L S L M S V T P I I V F I P A F F V G L L V G D E K I M G K Y S Y S R R R M V I Y W I T V V I L L I S G I M S L L

Sequence #703 — Gene Saci 2095

M ^{0.073} S K P F K P L D E K N L ^{0.006} S W F H F K ^{0.002} S M I ^{0.008} T ^{0.035} T G M G V F ^{0.057} T D G ^{0.03} Y D L ^{0.003} S ^{0.001} S I G I V L L ^{0.015} T V L Q ^{0.015} T F G I ^{0.024} T R A N P D ^{0.014} Y ^{0.003} S L ^{0.009} Y V ^{0.006} S L I ^{0.019} T G ^{0.005} S A L M G ^{0.005} S A V G A I L F
 G F L ^{0.001} S N K G R K ^{0.085} T F ^{0.001} Y G V D V A I L ^{0.007} T I G A I L Q A L V V D P V Q L I I V R F I L G L G I G A D ^{0.008} Y V L ^{0.003} S P M I M A E H ^{0.01} S N A R D R G K M L A L G F G L F W G F
 G A ^{0.016} T ^{0.019} T ^{0.002} S A L L ^{0.013} Y L G L ^{0.009} S ^{0.008} S M G L ^{0.004} S P Q L L W K V V L A A G A I P A A ^{0.008} S V I ^{0.005} Y L R R K I P E ^{0.216} T A R ^{0.006} Y L G R I K G D L E E L N ^{0.008} S V I K ^{0.005} S V ^{0.041} T G E ^{0.084} T ^{0.011} Y P V N ^{0.182} T D L R
 D K N ^{0.003} S F R F ^{0.002} Y L ^{0.019} T K F W R Q F L A A C V L W F L F D I V A ^{0.002} Y A G N L F G P ^{0.003} S L I A ^{0.003} S ^{0.003} S L G I N ^{0.002} S G V F Q I M I E G L F V I P G G I V A L M L V D R I G R K P M
 Q ^{0.012} T I G F F G M A L A L L G F ^{0.007} S L ^{0.003} Y K ^{0.007} S F A L ^{0.004} S F ^{0.004} S P I V A F L I ^{0.004} Y G L N N F A ^{0.003} S Q A G P G ^{0.007} S V ^{0.007} S A V G I L G V E L A P ^{0.018} T K I R G F V Q ^{0.002} S L ^{0.029} T V A ^{0.005} S G R I G A A
 L ^{0.018} T A F V F P ^{0.003} S L F ^{0.086} T E ^{0.005} Y G E A F A I G F L ^{0.002} S A V A I V ^{0.004} S A I V ^{0.022} T L I ^{0.01} S I P E ^{0.346} T K G K ^{0.052} S L E E ^{0.189} T S ^{0.054} G E V E I L ^{0.047} S A

Sequence #704 — Gene Saci 2098

M V V L L I P F L T V P V T F A T M V F I G F L F Q S V Y Y K R L S L T N Y P Y K L I D I L S V L V V V Y S F E F L S Q A Y N L P M Y Y T V V L G L V V S T Y L
0.015 0.011 0.006 0.002 0.002 0.001 0.004 0.004 0.001 0.014 0.002 0.003 0.002 0.001 0.003 0.006 0.003 0.007 0.001 0.003 0.006 0.003 0.007 0.001 0.017 0.003
0.001 0.008 0.003 0.003 0.002 0.003 0.002 0.012 0.005 0.005 0.007 0.002 0.04 0.002 0.023 0.042
M Y R V K F G I E R K V N Y L S N P R V A F L L L F Q A F S L S W F A S G I L N F E T G M I S S A M G L Y S N F G F F P L T N P L F A L M D F L S V F A T I T A
0.001 0.002 0.001 0.003 0.002 0.002 0.015 0.002 0.001 0.001 0.009 0.007 0.015 0.024 0.002 0.006 0.042
S P W F M I N M G I W L G L L G S F R V L E L N K L E N K I R Y L L M M F A Y A F Y S I W L P T F S P I S N S V Q Y I P Y M W F N G L G T Y G P V E P S Y L I D
0.001 0.018 0.003 0.001 0.001 0.017 0.038 0.031 0.011 0.008 0.03 0.014 0.182 0.056 0.008 0.007 0.002 0.001 0.002 0.006 0.001 0.001
G I I G T F A V T A V L S F L F G G R Q I C S V T C T A P F M L Q G T F Q G S M R K Y N R S S K L G R K T L T S R M A N W Y K W V M I T V W A S L I V F A V L S
0.002 0.003 0.002 0.001 0.023 0.002 0.001 0.002 0.002 0.002 0.081 0.01 0.002 0.002 0.007 0.002 0.001 0.002 0.002 0.002 0.002 0.001 0.001
Y F N Y E G V I S F S V L G N D A T K F Y A S L Y F N V I W Y F Q F M F M P F L G N Y A C V T E G I C A W G T F N Q F F G Y L G L F K L K V K D P Q Q C L N C K
0.089 0.106 0.005 0.004 0.004 0.015 0.032
V D C A L A C P V G L T D M R A N F I K K G E F K S F K C I G V G D C V E A C P H D N I V F H D V R S Y L K R F S V K L L Q K Q S K

Sequence #705 — Gene Saci 2102

M S Q L K L S R R D F L K I S G F A G L G T A V F L S T P S V V D K I F R P I A E T T S Y T L N Y P S D E I V Y T N C F Q C L G R C A I Q V T R T P E G Y P R F
V T G T I G W H I N D G G V C P R G A A D V Y Y F V P S R L R Y P L L R A G P R G S G K W I A I D Y D T A Y D I L V N G A N A N S W S K L G L N P G S L G I G
N F P G L L K I R E T N P H S F V L F T G R D Q L I P G I T A G F F A G N F G T A N S G A H G G F C S M N V Y S A G V Y V T G A P V W E Y A G P D E T R A Q Y F
I L A G L A G D H F P N W M R R I I A R I R E N G G K V L T I A P E R F G F Y S V S D E H L Y V N P A T D G A L F M G W I R V L V D F H F Y V Y K V S N G K T V
L N P I T L Q Q V S P S Y S G T G Q L L F Q T V A P N G Q V V T L P Q F G E I P D T A N F P H I D E E F L R Y Y T N L S W L V I L N P N P Q Y G D P L D P S D P
N A S N N T G L H V R M P V K N S L Y S T S Q K I T A T S S G S T V S F T F P A S K W L E A V L G S D G N V Y S Y V D I P W Q N G V M P I L T L D E L P S S M
I S N I V Q V S Y R L R N G Q M I K V P A I Q V T V P A S P G S S N T I T L T V T T G F E L L R A E L M N Y D P Y T S P D Q T A Q Y G A I N V S N L T G I P E Y
T V V R I A N E L A V V A F Q K S I Q Q P V K W V D Y L G R Y H E S I T G R P V S I Y F M R G L A A H A N G F Q S A A S A Y Y L V L M L G A W D N P G A D G Y K
Y P Y P H Y F P G H G V P P H P L A N T P S I D P D L A S L G V K P P A G G R A G F L K N E L I H N D G T V E I T K V S V V P A G P Y G F P D G P D D L V I Y K
T G R P L L V D R G Y S W E L P L T T Q R S I S A V A Y T A Y L M N K Y F N K A I I P Y N I Q A M M W Y L T A P Y W N N A Y T L S D L L Q K V T E T D S N G N Y
I I P F T T T I D L F M H E N D N V V D L V I P D L S F L E V Y G F H S T F D R P T S L P N G P S D S L N W P S L P S L Y P V L S A G D F L L T L L W L V R G Y
P N Q K S N P N L S I S P T N N P H Y T Q D P V T G L P L V S P V T I H D P V T G Q Q I F S Q G Q P G L I S T G I Y I L K S G T L I A G Y G K N F E Y I L K N
E A E A Q T P N P Q Q L K L Y A S F V P N G S D Q S T V I S Q I T S Q V P S G S T F S T A T T Y T I G A S N R N G G I E D Y F R L P V Q F Q P L L Q N L L Q S I
I N N F A A G K M T L N D I N P G V V K V G K G G A V Y V L P P S I R Y M R N V N M F Y F R G W G A Y M P G G Y G N V G L P Y I H R I Y L E Y L Q R F R L A A A

0.081 0.004 0.004 0.004 0.002 0.005 0.011 0.001 0.005 0.078 0.003 0.043 0.007 0.076 0.003 0.004 0.023 0.016 0.017 0.009 0.072 0.003 0.005 0.039

Sequence #706 — Gene Saci 2111

MIWLLIMQ^{0.001}YKWIAL^{0.}SN^{0.002}TT^{0.008}IGVLMAS^{0.002}ING^{0.003}SI^{0.082}TI^{0.002}ISLP AIFRGINVNPFDS^{0.001}FQFLLWILMG^{0.}YNVV^{0.01}TA^{0.015}TF^{0.001}FLV^{0.003}SFGKLS^{0.003}SDI^{0.002}YGR
 VRL^{0.001}YNLGFLIF^{0.003}TVG^{0.002}SILL^{0.002}SI^{0.006}TPNQGS^{0.002}SLGALELIIFRVIQGVGGAF^{0.001}LS^{0.002}SA^{0.05}AIIT^{0.003}DAFP^{0.}YNERGKALGINQIAFLGG^{0.002}SLI
 GLILGGIL^{0.001}SVINWRLVFLV^{0.001}SV^{0.008}VPV^{0.003}GILG^{0.011}TI^{0.044}IWS^{0.003}Y^{0.01}TKLKEIS^{0.015}KPS^{0.014}RNE^{0.001}SIDWVGNLT^{0.007}LAVGLIS^{0.007}ILVAV^{0.005}TY^{0.002}GLLPY^{0.002}GS^{0.002}QLGW
 GNP^{0.006}YVIAGLVVG^{0.005}FALIGAFI^{0.001}YVERK^{0.003}VQ^{0.007}YPMFRLELEFKIRMFAAGNFA^{0.003}SLLR^{0.004}SIA^{0.002}YGG^{0.007}LTIMLVIFLQGIWLP^{0.007}IHG^{0.007}YS^{0.002}YEE
 P^{0.086}FWAGI^{0.023}YMIPLMVGFV^{0.003}SMGPI^{0.003}SGWL^{0.007}SDR^{0.007}YGAKLLAT^{0.002}LG^{0.001}MVIVGVGFLML^{0.014}TT^{0.007}LP^{0.002}YNF^{0.002}SY^{0.002}PEFAAIIFFMGLGNGMFA^{0.004}SPN
 T^{0.039}AS^{0.01}IMN^{0.014}SV^{0.013}PPKY^{0.015}RGAA^{0.018}SGMRA^{0.007}TI^{0.002}QNI^{0.029}GQT^{0.005}AS^{0.005}IT^{0.006}IFF^{0.007}TIV^{0.005}IAL^{0.005}SS^{0.006}SLP^{0.007}SALANAV^{0.01}SQAGAPQL^{0.013}SG^{0.01}YVQNI^{0.007}PVT^{0.001}GALF^{0.001}S^{0.001}AF
 LG^{0.029}YDPVK^{0.128}IL^{0.006}SSL^{0.003}LP^{0.055}AQI^{0.007}Y^{0.016}SS^{0.064}IPPQAMAIMEQH^{0.055}T^{0.002}WFP^{0.006}TA^{0.002}AIAP^{0.006}SFLL^{0.003}SL^{0.002}REAF^{0.003}YIS^{0.002}AILCFLAAIA^{0.007}SALRGK^{0.067}T^{0.051}IAEIERDG
 GRVDK

Sequence #707 — Gene Saci 2116

M Q I **Y** K V R M R V K H D A C W **T** Q E **T** S G **Y** D V **T** A N V K **Y** L F P L V A K N **S** V F E I V E L **Y** S N **T** K **T** Q L **T** D F I D V L **S** R K **Y** R N N I K I I R V D R N K **S**
S K **T** A L L **Y** **Y** F K N F E N **S** I **T** K A M M N **S** N A I V A N L **T** V **S** D G I E D W Q V **Y** **T** F N K R D Q L E **T** Q I **S** E E L K K I N V E V E N L D F D R V E M D E V K **S**
 E M M I L **S** **S** L **T** P **T** E R Q I L **Y** **T** A **Y** K M G F F D **Y** P K **T** K L E E L A K M **Y** G V **T** K V A L D R H I R N A I R K V L M Q V F V D N **S** N K F

0.011

0.011

0.013

0.002

0.075

0.025

0.009

0.003

0.005

0.002

0.014

0.009

0.014

0.006

0.001

0.023

0.007

0.023

0.002

0.003

0.004

0.038

0.003

0.089

0.003

0.014

0.041

0.105

0.012

0.037

0.015

0.011

0.134

0.182

0.027

0.101

0.036

0.004

0.373

0.024

0.028

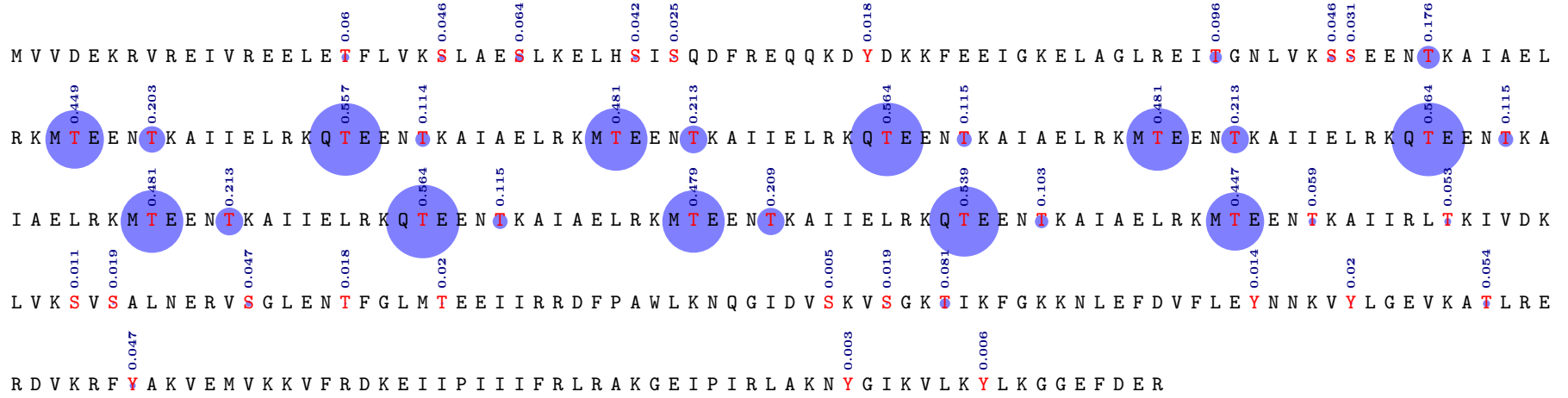
0.003



Sequence #708 — Gene Saci 2117

MPK ^{0.007}Y I G K P L K R I I E D P P L V ^{0.244}T G R A ^{0.136}T F V ^{0.019}Y D L D L R G ^{0.025}T L ^{0.016}Y A ^{0.005}S F V R ^{0.005}S Q ^{0.034}Y A H A K I K ^{0.004}S V K C P E G ^{0.01}S M C F ^{0.129}T ^{0.003}S H D L P K A I ^{0.039}T G I A R N E A V ^{0.057}Y
 Q G Q P I A V V L ^{0.125}T N D E ^{0.1}Y K A R D L A E E V E V E ^{0.122}Y E P L P ^{0.129}S V I D V E E A L ^{0.088}S N K E R A M ^{0.085}S E L E ^{0.01}S N I V L Q D E V N V G D I Q ^{0.005}S D F K R A ^{0.01}Y K I I E G E L
 I N Q R V I P ^{0.008}S A M E P R G A F A Q F D G K R L ^{0.101}T V V ^{0.01}S ^{0.007}S ^{0.088}T Q ^{0.141}T P F D L K K ^{0.02}S L ^{0.01}S E I L ^{0.006}S E ^{0.029}Y G V N D I R V I Q P ^{0.009}Y V G G A F G ^{0.002}S K I I N ^{0.01}Y A E E F V V A ^{0.025}Y L ^{0.004}S
 V V ^{0.079}T K R P I K W F N ^{0.01}S R ^{0.086}T E D M M ^{0.083}T ^{0.043}T N H G R D M R L R F K A A F D ^{0.017}S E G K L L G I E G ^{0.039}T L I H D L G A P F E D I N R D ^{0.006}S F W M ^{0.007}T ^{0.003}T ^{0.019}T A A R L L I G R Y ^{0.003}K V N
 S ^{0.002}L K I R V L G V A ^{0.028}T N K A F I G A ^{0.008}Y R G A G R P E A ^{0.077}T ^{0.019}Y F I E R I L ^{0.044}T L G A R E L G L D Q ^{0.087}Y E V R E R N V M D D V N F ^{0.11}T K L P ^{0.062}T G L ^{0.203}T ^{0.041}Y D ^{0.013}S G K ^{0.04}Y K E L L R I
 A K P ^{0.006}Y ^{0.02}Y N D L I K R R D ^{0.245}S L R ^{0.021}S K G K L A G V G V A I V ^{0.008}S E I A ^{0.007}S F G P ^{0.063}Y ^{0.595}S ^{0.046}T A K V K V L P N G R I Q V I ^{0.007}T G ^{0.023}T ^{0.052}T P H G Q G D A ^{0.018}T A F ^{0.056}T Q I A A E V F D V D P
 S ^{0.004}N V D V L W G D ^{0.009}T D L I ^{0.007}S D G D L ^{0.106}T A G ^{0.015}S R ^{0.071}T I ^{0.177}T V G G ^{0.01}S A V ^{0.037}Y E A A V R L K E K L L K V V ^{0.04}S E K M G V R A E E I E ^{0.103}Y R E G K F I H E D K ^{0.073}T M ^{0.009}S L W E A A R ^{0.126}T
 S ^{0.01}M F M G V L P E Q D ^{0.142}Y ^{0.003}S ^{0.131}Y V M N L ^{0.055}Y ^{0.06}T ^{0.003}S P ^{0.027}Y G V H M V L V E V D R D ^{0.039}T G F ^{0.035}T R V L D ^{0.031}Y K A F D D V G V V N P L L A E G Q ^{0.029}T H G G A L Q G I G Q A L ^{0.018}Y E E A V
 Y ^{0.021}S ^{0.003}Q D G N L L ^{0.025}T ^{0.002}S N F ^{0.003}S ^{0.03}D Y V L P ^{0.051}T A V E ^{0.003}S F N V E W K ^{0.005}S F G L ^{0.296}T K ^{0.008}S ^{0.442}D ^{0.011}T P I G ^{0.011}S K G I G E L P ^{0.231}T I A G ^{0.075}T P A V V ^{0.008}S A I E D A I G K K I ^{0.013}Y ^{0.04}T M P V K P E L V L
 K L L G E

Sequence #709 — Gene Saci 2119



Sequence #710 — Gene Saci 2123

MKREL ^{0.086} **T** ^{0.042} **T** ^{0.131} **T** DFHAMLN ^{0.097} **T** DLGRDLKLEQE ^{0.041} **T** VEI ^{0.044} **T** GNEVRV ^{0.012} **Y** ^{0.002} **S** KHNEIL ^{0.006} **T** LNGVIRLDVE ^{0.004} **S** GI ^{0.022} **T** I ^{0.002} **S** KLVG ^{0.018} **T** ^{0.058} **T** ADGKVELA ^{0.013} **Y**
^{0.233} **T** KRKEEVFKKLA EAFN ^{0.012} **S** GEQIEIKDEVDDK ^{0.02} **S** HKPGVN ^{0.044} **T** LRWLF ^{0.003} **S** I ^{0.004} **S** ^{0.01} **S** ^{0.001} **R** ^{0.08} **Y** RK ^{0.018} **T** MILGA ^{0.018} **T** L ^{0.003} **S** LI ^{0.002} **S** ^{0.009} **T** GLNLVPP ^{0.} **Y** LLLKILID
 NVLI ^{0.001} **S** NNH ^{0.} **S** AQLFQLIVLLL ^{0.002} **T** ^{0.003} **S** ^{0.001} **S** ^{0.007} **Y** ^{0.003} **T** ^{0.003} **S** LALV ^{0.003} **S** ^{0.002} **S** ^{0.029} **L** Q ^{0.005} **T** RILNNLG ^{0.005} **S** RIINDLREML ^{0.001} **Y** NHVIKHD ^{0.014} **Y** ^{0.006} **S** ^{0.043} **S** ^{0.009} **F** IERI ^{0.043} **S** ^{0.009} **P** ^{0.018} **S** ^{0.044} **S** ^{0.044} **R** ^{0.107} **S** ^{0.013} **I** ^{0.039} **S** ^{0.044} **R** ^{0.044} **L** ^{0.091} **S** ^{0.091} **R** ^{0.044} **L** ^{0.091} **T** ^{0.091} **D**
 AGN ^{0.01} **T** NWLLVWGLP ^{0.007} **T** LV ^{0.025} **T** NFF ^{0.003} **T** LLGIGVILF ^{0.008} **T** LNPLLA ^{0.009} **T** FILIPIPLILFMVVR ^{0.} **Y** ^{0.038} **R** ^{0.005} **K** ^{0.005} **S** ^{0.044} **H** ^{0.107} **R** ^{0.013} **L** ^{0.039} **S** ^{0.044} **R** ^{0.044} **I** ^{0.039} **S** ^{0.044} **R** ^{0.044} **I** ^{0.039} **D** ^{0.039} **T** ^{0.039} **I**
 PNFLVVR ^{0.035} **S** ^{0.072} **S** ^{0.018} **K** ^{0.028} **E** ^{0.02} **E** ^{0.006} **Y** ^{0.007} **S** ^{0.025} **K** ^{0.002} **R** ^{0.002} **L** ^{0.002} **R** ^{0.002} **N** ^{0.002} **M** ^{0.002} **L** ^{0.002} **D** ^{0.002} **K** ^{0.002} **L** ^{0.002} **Y** ^{0.002} **E** ^{0.002} **S** ^{0.002} **S** ^{0.002} **V** ^{0.002} **T** ^{0.002} **I** ^{0.002} **N** ^{0.002} **R** ^{0.002} **L** ^{0.002} **N** ^{0.002} **S** ^{0.002} **L** ^{0.002} **Y** ^{0.002} **W** ^{0.002} **P** ^{0.002} **V** ^{0.002} **I** ^{0.002} **G** ^{0.002} **L** ^{0.002} **V** ^{0.002} **V** ^{0.002} **N** ^{0.002} **L** ^{0.002} **S** ^{0.002} **T** ^{0.002} **V** ^{0.002} **I** ^{0.002} **I** ^{0.002} **W** ^{0.002} **W** ^{0.002} **V** ^{0.002} **G** ^{0.002} **G** ^{0.002} **H** ^{0.002} **E** ^{0.002} **V** ^{0.002} **I** ^{0.002} **S** ^{0.002} **G** ^{0.002} **V** ^{0.002} **I** ^{0.002} **E** ^{0.002} **L** ^{0.002} **G** ^{0.002} **V** ^{0.002} **I** ^{0.002} **T** ^{0.002} **A** ^{0.002} **F** ^{0.002} **I** ^{0.002} **A** ^{0.002} **Y** ^{0.002} **L** ^{0.002} **L**
^{0.001} **S** ^{0.006} **Q** ^{0.002} **F** ^{0.001} **Y** ^{0.001} **S** ^{0.001} **P** ^{0.001} **I** ^{0.001} **N** ^{0.001} **N** ^{0.001} **L** ^{0.001} **S** ^{0.001} **N** ^{0.001} **V** ^{0.001} **L** ^{0.001} **P** ^{0.001} **F** ^{0.001} **I** ^{0.001} **Q** ^{0.001} **Q** ^{0.001} **S** ^{0.001} **L** ^{0.001} **T** ^{0.001} **S** ^{0.001} **A** ^{0.001} **E** ^{0.001} **R** ^{0.001} **I** ^{0.001} **R** ^{0.001} **E** ^{0.001} **V** ^{0.001} **L** ^{0.001} **E** ^{0.001} **V** ^{0.001} **K** ^{0.001} **P** ^{0.001} **Q** ^{0.001} **I** ^{0.001} **T** ^{0.001} **N** ^{0.001} **S** ^{0.001} **E** ^{0.001} **T** ^{0.001} **P** ^{0.001} **K** ^{0.001} **R** ^{0.001} **P** ^{0.001} **V** ^{0.001} **M** ^{0.001} **P** ^{0.001} **S** ^{0.001} **E** ^{0.001} **I** ^{0.001} **V** ^{0.001} **F** ^{0.001} **E** ^{0.001} **N** ^{0.001} **V** ^{0.001} **F** ^{0.001} **F** ^{0.001} **G** ^{0.001} **Y** ^{0.001} **D** ^{0.001} **P** ^{0.001} **H** ^{0.001} **F** ^{0.001} **P** ^{0.001} **V** ^{0.001} **V** ^{0.001} **K** ^{0.001} **N** ^{0.001} **L** ^{0.001} **N** ^{0.001} **I** ^{0.001} **N** ^{0.001} **I** ^{0.001} **R** ^{0.001} **P** ^{0.001} **G** ^{0.001} **E** ^{0.001} **K**
 VAIVGK ^{0.016} **S** ^{0.015} **S** ^{0.013} **S** ^{0.061} **S** ^{0.005} **T** ^{0.005} **I** ^{0.005} **A** ^{0.005} **K** ^{0.005} **L** ^{0.005} **L** ^{0.005} **L** ^{0.005} **R** ^{0.005} **F** ^{0.005} **Y** ^{0.005} **D** ^{0.005} **V** ^{0.005} **N** ^{0.005} **K** ^{0.005} **G** ^{0.005} **K** ^{0.005} **I** ^{0.005} **T** ^{0.005} **I** ^{0.005} **G** ^{0.005} **V** ^{0.005} **D** ^{0.005} **L** ^{0.005} **K** ^{0.005} **E** ^{0.005} **I** ^{0.005} **D** ^{0.005} **I** ^{0.005} **D** ^{0.005} **Y** ^{0.005} **L** ^{0.005} **R** ^{0.005} **R** ^{0.005} **K** ^{0.005} **V** ^{0.005} **A** ^{0.005} **Y** ^{0.005} **V** ^{0.005} **P** ^{0.005} **Q** ^{0.005} **D** ^{0.005} **V** ^{0.005} **V** ^{0.005} **L** ^{0.005} **F** ^{0.005} **D** ^{0.005} **T** ^{0.005} **T** ^{0.005} **V** ^{0.005} **G** ^{0.005} **Y** ^{0.005} **N** ^{0.005} **V** ^{0.005} **A** ^{0.005} **Y** ^{0.005} **G** ^{0.005} **S** ^{0.005} **D** ^{0.005} **N** ^{0.005} **V** ^{0.005} **N** ^{0.005} **E** ^{0.005} **V** ^{0.005} **D** ^{0.005} **I** ^{0.005} **V** ^{0.005} **R**
 ACK ^{0.024} **T** ^{0.024} **A** ^{0.024} **K** ^{0.024} **I** ^{0.024} **H** ^{0.024} **D** ^{0.024} **E** ^{0.024} **I** ^{0.024} **V** ^{0.024} **R** ^{0.024} **L** ^{0.024} **P** ^{0.024} **F** ^{0.024} **A** ^{0.024} **Y** ^{0.024} **D** ^{0.024} **T** ^{0.024} **I** ^{0.024} **L** ^{0.024} **G** ^{0.024} **E** ^{0.024} **R** ^{0.024} **G** ^{0.024} **T** ^{0.024} **Y** ^{0.024} **L** ^{0.024} **S** ^{0.024} **G** ^{0.024} **G** ^{0.024} **Q** ^{0.024} **R** ^{0.024} **Q** ^{0.024} **R** ^{0.024} **L** ^{0.024} **S** ^{0.024} **I** ^{0.024} **A** ^{0.024} **R** ^{0.024} **A** ^{0.024} **I** ^{0.024} **I** ^{0.024} **K** ^{0.024} **N** ^{0.024} **P** ^{0.024} **D** ^{0.024} **V** ^{0.024} **L** ^{0.024} **I** ^{0.024} **F** ^{0.024} **D** ^{0.024} **E** ^{0.024} **A** ^{0.024} **T** ^{0.024} **S** ^{0.024} **N** ^{0.024} **L** ^{0.024} **D** ^{0.024} **V** ^{0.024} **V** ^{0.024} **S** ^{0.024} **E** ^{0.024} **R** ^{0.024} **E** ^{0.024} **V** ^{0.024} **Y** ^{0.024} **E** ^{0.024} **A** ^{0.024} **M** ^{0.024} **M** ^{0.024} **E** ^{0.024} **V** ^{0.024} **S** ^{0.024} **R** ^{0.024} **N** ^{0.024} **K** ^{0.024} **T** ^{0.024} **V** ^{0.024} **V**
 ILI ^{0.003} **T** ^{0.003} **H** ^{0.003} **N** ^{0.003} **I** ^{0.003} **H** ^{0.003} **E** ^{0.003} **V** ^{0.003} **M** ^{0.003} **N** ^{0.003} **A** ^{0.003} **D** ^{0.003} **K** ^{0.003} **V** ^{0.003} **I** ^{0.003} **V** ^{0.003} **L** ^{0.003} **D** ^{0.003} **N** ^{0.003} **G** ^{0.003} **E** ^{0.003} **V** ^{0.003} **M** ^{0.003} **E** ^{0.003} **R** ^{0.003} **G** ^{0.003} **K** ^{0.003} **P** ^{0.003} **K** ^{0.003} **E** ^{0.003} **L** ^{0.003} **L** ^{0.003} **R** ^{0.003} **N** ^{0.003} **E** ^{0.003} **T** ^{0.003} **Y** ^{0.003} **F** ^{0.003} **H** ^{0.003} **K** ^{0.003} **I** ^{0.003} **F** ^{0.003} **K** ^{0.003} **D** ^{0.003} **Q** ^{0.003} **I** ^{0.003} **N** ^{0.003} **E** ^{0.003} **E** ^{0.003} **N** ^{0.003} **V** ^{0.003} **F** ^{0.003} **S** ^{0.003} **K** ^{0.003} **D** ^{0.003} **G** ^{0.003} **N** ^{0.003} **G** ^{0.003} **K** ^{0.003} **E** ^{0.003} **I** ^{0.003} **H** ^{0.003} **D** ^{0.003} **I** ^{0.003} **R** ^{0.003} **I** ^{0.003} **L** ^{0.003} **N** ^{0.003} **P** ^{0.003} **R** ^{0.003} **S** ^{0.003} **T** ^{0.003} **K** ^{0.003} **I** ^{0.003} **T** ^{0.003} **P** ^{0.003} **A** ^{0.003} **E** ^{0.003} **E**
 RR ^{0.177} **S** ^{0.171} **R** ^{0.171} **V** ^{0.171} **E** ^{0.171} **A** ^{0.171} **E** ^{0.171} **N** ^{0.171} **E** ^{0.171} **I** ^{0.171} **Y** ^{0.171} **R** ^{0.171} **D** ^{0.171} **L** ^{0.171} **I** ^{0.171} **P** ^{0.171} **K** ^{0.171} **A** ^{0.171} **L** ^{0.171} **F** ^{0.171} **P** ^{0.171} **I** ^{0.171} **T** ^{0.171} **N** ^{0.171} **P** ^{0.171} **K** ^{0.171} **F** ^{0.171} **I** ^{0.171} **G** ^{0.171} **F** ^{0.171} **Y** ^{0.171} **T** ^{0.171} **D** ^{0.171} **D** ^{0.171} **G** ^{0.171} **K** ^{0.171} **E** ^{0.171} **L** ^{0.171} **F** ^{0.171} **L** ^{0.171} **E** ^{0.171} **D** ^{0.171} **Y** ^{0.171} **S** ^{0.171} **K** ^{0.171} **L** ^{0.171} **D** ^{0.171} **S** ^{0.171} **E** ^{0.171} **S** ^{0.171} **L** ^{0.171} **K** ^{0.171} **V** ^{0.171} **L** ^{0.171} **E** ^{0.171} **S** ^{0.171} **A** ^{0.171} **L** ^{0.171} **L** ^{0.171} **Y** ^{0.171} **N** ^{0.171} **N** ^{0.171} **L** ^{0.171} **V** ^{0.171} **F** ^{0.171} **K** ^{0.171} **V** ^{0.171} **V** ^{0.171} **K** ^{0.171} **I** ^{0.171} **N** ^{0.171} **N** ^{0.171} **I** ^{0.171} **N** ^{0.171} **I** ^{0.171} **K**
 GDQLEWDLV ^{0.033} **T** ^{0.033} **D** ^{0.033} **K** ^{0.033} **G** ^{0.033} **V** ^{0.033} **S** ^{0.033} **K** ^{0.033} **T** ^{0.033} **F** ^{0.033} **L** ^{0.033} **G** ^{0.033} **R** ^{0.033} **R** ^{0.033} **N** ^{0.033} **V** ^{0.033} **V** ^{0.033} **V** ^{0.033} **F** ^{0.033} **E** ^{0.033} **K** ^{0.033} **K** ^{0.033} **V** ^{0.033} **V** ^{0.033} **L** ^{0.033} **I** ^{0.033} **D** ^{0.033} **R** ^{0.033} **N** ^{0.033} **D** ^{0.033} **N** ^{0.033} **L** ^{0.033} **Y** ^{0.033} **E** ^{0.033} **I** ^{0.033} **N** ^{0.033} **M** ^{0.033} **E** ^{0.033} **S** ^{0.033} **I** ^{0.033} **D** ^{0.033} **K** ^{0.033} **S** ^{0.033} **L** ^{0.033} **R** ^{0.033} **L** ^{0.033} **L** ^{0.033} **L** ^{0.033} **L** ^{0.033} **E** ^{0.033} **T** ^{0.033} **I**

Sequence #711 — Gene Saci 2124

M I V I E ^{0.014}Y ^{0.014}K ^{0.014}S G R R E E I P V I D ^{0.014}Y H A H I W K A G E ^{0.002}S N W L R P E L A K G W I ^{0.002}S C F ^{0.012}Y ^{0.022}D ^{0.024}Y ^{0.179}Q ^{0.086}T A L ^{0.18}T P D E ^{0.013}Y ^{0.013}K M D F E ^{0.018}T F K ^{0.013}Y ^{0.013}Y G H E K F I E D V M I N G ^{0.065}Y

V D V A I ^{0.019}T ^{0.014}Q P Q ^{0.005}Y ^{0.005}L L ^{0.041}Y ^{0.03}F ^{0.004}Y ^{0.004}K K P F G N ^{0.025}T ^{0.285}E E F G K L A V E N P ^{0.008}Y ^{0.008}R F V I G ^{0.008}T R F D P R D G E E G K R Q L E E D V R K ^{0.011}Y ^{0.042}R V K P W Q M R H V K L ^{0.069}Y ^{0.042}T A E W K E

V D G K L ^{0.022}S ^{0.029}R G W R L D ^{0.038}S ^{0.004}K E A ^{0.004}Y E F L E F ^{0.004}S ^{0.004}K S L G I N I F V A H K G P ^{0.025}T ^{0.008}V W P L D K D ^{0.007}S ^{0.005}F D V K D V D A V A ^{0.007}S ^{0.005}S F P E L K F V V ^{0.04}T H V G L P R L D D F C W I

A ^{0.019}T ^{0.015}Q E K N V ^{0.002}Y ^{0.001}G G L A V A ^{0.007}S ^{0.001}A F I R K R P K ^{0.007}Y ^{0.004}F A ^{0.018}S ^{0.004}I I G E L L F W L G E D R V L W G ^{0.018}S ^{0.015}D ^{0.015}Y A I W N P K W L I E D F M K F E L P E E I K R E ^{0.015}Y ^{0.024}G V E L ^{0.055}T ^{0.024}L D ^{0.055}T

K K K L L ^{0.027}Y ^{0.003}Q N A ^{0.302}S ^{0.302}K L W D I P L E E V M R R E D D I ^{0.302}T ^{0.302}R R R N L L H V K M E G

Sequence #712 — Gene Saci 2125

M ^{0.004}Y K M R F L K G ^{0.023}Y ^{0.018}Y E D D K G N L H L I I ^{0.003}S P P ^{0.064}T F W C P P L F L ^{0.01}Y I M L E E I R N R L P D A I I E V K D H H D ^{0.008}S K K L ^{0.008}S E C I N N G L K F H E C ^{0.024}Y ^{0.013}S N E ^{0.011}S L

N G D E ^{0.164}Y E K V K R ^{0.481}T F E E K R ^{0.045}S N K ^{0.011}Y G K L V Q L ^{0.247}S L N I N G E L C K L I A E A K E R

Sequence #713 — Gene Saci 2128

M ^{0.026}S ^{0.022}K E I ^{0.034}S ^{0.15}V E G I L V G G ^{0.019}Y ^{0.022}T D E R A K ^{0.063}S ^{0.013}G L ^{0.026}T V I V ^{0.042}F E G D N V A G I ^{0.067}S ^{0.002}Q R G G ^{0.019}S ^{0.005}P A ^{0.019}T L N ^{0.019}F D L L R P G H R Q D Q ^{0.019}S ^{0.019}V N A I V L ^{0.019}T G R ^{0.005}S ^{0.005}V F G F R A V Q G
 V V Q E L F N K K V G F K I A N L R I P I V ^{0.004}S ^{0.018}A A A I ^{0.007}Y ^{0.005}D L ^{0.022}Y E N ^{0.006}S ^{0.007}I L P ^{0.007}T E E W G F K A L E ^{0.006}S ^{0.007}L ^{0.084}S ^{0.011}F E I P I G R ^{0.011}Y ^{0.071}W A G K G G ^{0.029}T ^{0.029}V G K V G G L K ^{0.029}Y ^{0.029}A K P G G Q
 G ^{0.026}Y ^{0.014}Y E L R K G N V K V G V I V V L N ^{0.002}S ^{0.015}V G N I ^{0.004}Y ^{0.027}D E ^{0.007}S ^{0.018}G K L I A G N E F ^{0.005}T ^{0.018}S ^{0.005}V D E N ^{0.01}T ^{0.018}L G ^{0.003}T ^{0.002}T L G V V I ^{0.015}T ^{0.015}N A K L ^{0.002}S ^{0.01}S ^{0.01}D A C R L A ^{0.002}S ^{0.01}I V E N G F ^{0.002}S ^{0.01}S ^{0.01}V I R P
 Y ^{0.005}N L ^{0.003}S ^{0.04}L D G D ^{0.024}T ^{0.006}V F A I A ^{0.017}T ^{0.061}N R V E V K F D E L N A M A ^{0.01}Y ^{0.01}E A A R K A V V ^{0.017}S ^{0.061}V ^{0.01}Y ^{0.01}S E G Q

Sequence #714 — Gene Saci 2131

MDLLEDKFEEIKEEALDRLKEI I KIP ^{0.135} T ENPPGLN ^{0.028} Y QKIVDKLDEILRDLG ^{0.026} Y K ^{0.154} T EIFNP ^{0.019} S EEELKRLVRFGE GDRPNLVG ^{0.012} Y
 I GNGG ^{0.029} T K I A F N G H ^{0.071} Y D V V P A G ^{0.006} S G W N V ^{0.003} S P ^{0.071} Y ^{0.004} S A V V K D G K L ^{0.026} Y G R G ^{0.041} S A D M K ^{0.008} S G I I A G I ^{0.02} Y G V E L L K R A K ^{0.014} S F P ^{0.002} S N L Q V I Q ^{0.016} T F V P D E E
^{0.065} T V G N V N A G A H ^{0.019} Y L V E K G V L K R G K V D ^{0.026} Y V I F ^{0.009} T E P ^{0.025} T G ^{0.002} S D N I C ^{0.005} Y G H R G A I W A I V K I ^{0.002} Y G K K ^{0.004} S H G G L P Q L G V D A V K V ^{0.003} S M K I I Q E L ^{0.024} Y N
^{0.006} S V P E I V ^{0.003} S K ^{0.015} Y N I I P E V ^{0.012} S K R P ^{0.014} S V L V G ^{0.017} T V R C G ^{0.004} S W M N ^{0.006} T V A D ^{0.017} Y C E L ^{0.005} S I V R R L I P E E N L D E V R ^{0.009} S K I I N V I E K V ^{0.179} T M D F K A K ^{0.008} Y D ^{0.042} Y D E F
^{0.092} Y ^{0.018} S V E ^{0.102} T I ^{0.058} T ^{0.009} S D V K N E I ^{0.052} Y E V M R R K I R E V R Q R E P G L V L ^{0.016} S P G ^{0.215} T F D M R F ^{0.134} T V K E G I P ^{0.013} S I N ^{0.026} Y G P G R I E Q A H A ^{0.107} T D E ^{0.13} Y V E I K D F F D ^{0.008} S I K V
^{0.01} L ^{0.013} S L ^{0.02} T L L E L ^{0.056} S K ^{0.056} T I K

Sequence #715 — Gene Saci 2132

M S F I D E N R F V E T F H K L S N I G W T E E G A M R V A L N E Y D I Q V R I E L T K I L S S L G A E I K V D D A G N I I A N I A G E K E D K I A I G S H M D
S V P Y G G K Y D G F Y G V M A G L E I L R G L R E H G V R T N H T I S L I D F T N E E G S R F K P S L M G S G L T G V F N R E Y V S I V D K D G I T F E K
A L E R S G F L G N E S N R I I H D K P K F Y L E L H I E Q G P V L E E E G Y Q I G I P L G I V G L T V C E F K F K G Q S S Q A G P T P M D R R R D A L V G A S
K F I T N I R D Y A R R T S D L R A T V G I V N L K P N I Y N A I P G E V T L T L D L R S I E K E D R E R A L R E A K R L A E E I A D Q E K L E V E E K H L W T
A E Q V K F D K E V V S V I E K A C N Q L G L K Y K F L Y S W A G H D A Q Y M T R V S R V G M I F I P S H L G I S S K E E Y S S D R D M V N G L R V L A K T V
E L L D G L T

Sequence #716 — Gene Saci 2133

MRK ^{0.004}S V V I G W L G ^{0.005}T F M Q L L I R L ^{0.002}S W G V I A L P I ^{0.001}S I L L N L N P V E V G F V A ^{0.002}S ^{0.001}S F ^{0.001}Y I G ^{0.001}Y I L F ^{0.001}S I P W G L I I D K I G P N K A M A ^{0.007}T ^{0.003}S ^{0.003}S A I L V P
 L N L I L F L F L R ^{0.001}S ^{0.001}Y V L I V I I ^{0.}Y L M E G I I A ^{0.003}S ^{0.003}S I F P ^{0.003}S A M K I I A I ^{0.017}T ^{0.003}Y A G ^{0.002}S ^{0.002}S H L ^{0.011}T ^{0.01}F ^{0.001}Y V A I L E ^{0.001}S A G P I ^{0.011}T I L L L G A V ^{0.004}S ^{0.003}S F I L D ^{0.002}S W K F L F
 L F F A V G F ^{0.002}S V L C L L ^{0.004}S L K L K V N ^{0.008}S ^{0.019}K ^{0.021}S T E V K R ^{0.01}S ^{0.014}S V L F N K K I I L A ^{0.014}T L I R L G E L W A ^{0.005}T W G ^{0.002}T ^{0.002}T ^{0.003}T W I F ^{0.}S M L V V ^{0.009}Y R D I P V ^{0.015}T ^{0.001}S A ^{0.002}S F L F L
 F G L G Q L I G I L ^{0.002}S V E ^{0.003}S L V A V M G D K N V I L I N L I G F I L V ^{0.}T L L I I I ^{0.004}T F N P ^{0.002}Y L V V A E A F L L G V F ^{0.002}S ^{0.005}S ^{0.007}Y R P P ^{0.151}T ^{0.016}D S I I M K I G G E ^{0.02}S R A G
^{0.091}T ^{0.005}S I G F A N A V ^{0.002}S Q L G ^{0.013}T M I A P ^{0.003}S L V G F V L F L ^{0.02}T ^{0.003}S F A F ^{0.002}S M F A L D L G C V I ^{0.003}S I I ^{0.006}S L F L L ^{0.006}S K L K

Sequence #717 — Gene Saci 2134

MRQIDALKSPRF^{0.016}T^{0.487}QV^{0.004}ST^{0.354}FGRLPMCLPQEEVKAAFLGIPFDDAV^{0.123}T^{0.042}Y^{0.164}RTGARFGPMAVRQGS^{0.027}RLLRP^{0.012}YNQFLD^{0.089}TY^{0.003}PFDKLNA

CDLGDVNIIPGY^{0.001}IED^{0.005}TIK^{0.055}IEKDV^{0.006}Y^{0.004}DI^{0.006}SS^{0.004}KKLV^{0.002}PF^{0.003}IAGGDH^{0.002}SI^{0.003}TL^{0.011}PILRAMHKQ^{0.011}YGKINLIHLD^{0.001}SH^{0.025}YDFWD^{0.011}TY^{0.005}WGKK^{0.005}YT^{0.034}

HGS^{0.004}WLRRALEEGLLKDV^{0.027}I^{0.111}QAGIRA^{0.013}ST^{0.057}FS^{0.01}KEDL^{0.086}SD^{0.01}KVKLG^{0.01}IK^{0.086}S^{0.01}FI^{0.086}RELKLNPKDILKEIE^{0.022}SLKGP^{0.074}T^{0.06}Y^{0.01}V^{0.01}SLDIDVVDPAFA

PG^{0.202}T^{0.18}GTPEVGG^{0.011}LS^{0.006}SFEIIEFIRQWRFDKLVGF^{0.015}VDV^{0.054}VEV^{0.007}SP^{0.021}Y^{0.005}DV^{0.005}SEI^{0.005}TS^{0.005}MLANII^{0.005}YEGL^{0.007}SIL^{0.011}SL^{0.016}SL

Sequence #718 — Gene Saci 2142

M D E K E F M M A S^{0.034} A E S^{0.045} W G E K E I N A D V I E M N K W R P P F Y^{0.006} L M L K K E M K R L L G D D F I K E R N R L I R D D P V S^{0.016} Y^{0.085} M K F L I D D A K I K A F V I D E
G F G S^{0.019} K E M E I P A P Y^{0.005} K R L F R I E S^{0.067} I I N S^{0.01} S^{0.01} L F S^{0.008} L P F D K A I E F F E E T^{0.068} L R N K V R E G Y^{0.005} V G F K S^{0.007} I I A Y R T^{0.056} G L N I T^{0.005} C N E L K A L E D F L S^{0.089} R
D E D W Y^{0.028} G E K K K G F R D Y^{0.012} L L C K T^{0.089} M E I A K E L D V P L Q V H T^{0.041} G A G D R D I K L E L S^{0.01} R P A Y L T^{0.082} N V V R R Y^{0.002} E G K I V F V H S^{0.002} G Y P Y H R E T^{0.008} A W M S^{0.013}
Y^{0.006} I F P S^{0.001} V Y^{0.082} L D L S^{0.001} Q V C P F A P L G A L N A L E E I M E V A P F N K I M Y^{0.005} G S^{0.003} D G F N I P E I A W I S^{0.004} A K I F P R Y^{0.009} L D M V L N K M V S^{0.007} L G I I E E E E E I
R Q M I L S^{0.028} R N A S^{0.046} R L Y^{0.016} K L D

Sequence #719 — Gene Saci 2144

M K E ^{0.016} Y D I I I V G G G P I G L F A ^{0.016} T F ^{0.01} Y S ^{0.006} G L R D M ^{0.015} S A L L I D A Q D E L G G Q L V ^{0.022} T I ^{0.002} Y P E K M V ^{0.007} Y D V G G ^{0.006} Y P G I L A ^{0.02} Y D L A Q N L I E Q A K M F ^{0.002} S P D I

R L K E W V D W I ^{0.01} T R ^{0.033} T Q D N L W V I K ^{0.071} T D K G N E F K A K ^{0.046} T I L L A L G I G R I ^{0.418} T P ^{0.013} S R L G A G G E I E ^{0.035} Y E N R G V ^{0.039} Y Y ^{0.006} T V K R K K D F E E K R I L I V G G G

D ^{0.005} S A V D W A I N L A P V A K ^{0.002} S I ^{0.027} T L I H R R D Q F R A H E ^{0.004} S S ^{0.005} V K Q L ^{0.026} Y N I A ^{0.002} S V H ^{0.007} T W H E L K E V K G D G ^{0.005} S K V ^{0.13} T Q A V I F D N R ^{0.036} T K E E K ^{0.092} T L D V D A V I

I ^{0.005} S I G H K G D L G N V P R W G L N M K G R D I L V N A K M E ^{0.013} T N L P G V ^{0.076} Y A A G D I A ^{0.009} S Q E G V P K M A L I A I G F ^{0.006} S E A A I A ^{0.027} T S ^{0.007} M A K K ^{0.027} Y I D P N V ^{0.009} S I F

G G H ^{0.017} S ^{0.018} S E I M K ^{0.161} S ^{0.197} R S

Sequence #720 — Gene Saci 2147

M R R V ^{0.002}Y K A A I L G ^{0.001}S ^{0.019}T G L V G I E ^{0.048}Y V R M L A N H P ^{0.087}Y I K P ^{0.097}T ^{0.026}Y L A G R G ^{0.013}S V G K P ^{0.034}Y G E V V R W Q ^{0.077}T I G Q I P K E I A N Q E I R P ^{0.243}T D P K Q M D D V D L V

^{0.016}F ^{0.021}S P L P A G S A A Q V E D E F A K L G F K V I ^{0.01}S ^{0.008}S P D H R L E P D I P L I I P E V N P H ^{0.008}S L N L I E E Q K K R R D W E G F I V ^{0.005}T ^{0.122}T P L C ^{0.053}T A Q G V L I P L V

^{0.003}P ^{0.002}I ^{0.009}Y Q N F R V Q ^{0.006}S ^{0.002}V F I ^{0.016}T T M Q A L ^{0.01}S G A G ^{0.01}Y P G V A S L D V I D N I L P L G N E ^{0.024}Y D A K M V K E M ^{0.118}T K V L N ^{0.011}S ^{0.037}T K R N V ^{0.025}S D E ^{0.008}S N I N I ^{0.002}S ^{0.08}T ^{0.007}T ^{0.054}T H R V P ^{0.072}T I

^{0.017}H G H ^{0.027}Y A V V ^{0.037}Y V T F K E N V D L G K I R E ^{0.021}S L V N F ^{0.005}S G E P Q A L K L P ^{0.106}T A P E K V I V L ^{0.043}T E Q D N R P Q V ^{0.058}Y F D R W L G D P P G M ^{0.004}S V I V G R L ^{0.101}T Q V D N N

A I R F V ^{0.004}S L I H N ^{0.003}S V R G A A G G G I L ^{0.014}T A E L L I N R K ^{0.}Y I

Sequence #721 — Gene Saci 2148

MKEDRPWFK ^{0.086}Y WPPKLPK ^{0.265}T LD ^{0.021}Y PKAPL FNILEV ^{0.004}S ANR ^{0.005}Y PDKDAII ^{0.007}Y ^{0.004}Y ^{0.041}Y G T RIK ^{0.001}Y EKLL ^{0.006}S N T LKF ^{0.002}S ^{0.005}S FL ^{0.014}Y NELGIKKGDRVAI
 FMPN ^{0.001}S V QWIIA ^{0.004}Y F GILRANAVVVPINPLIAEDELN ^{0.021}Y I LKD ^{0.005}S ^{0.009}S VAVV ^{0.023}T L ^{0.006}S ^{0.005}S QLPKVMKAIQG ^{0.054}T EVRNVI ^{0.003}S GMFRD ^{0.078}Y L ^{0.012}S ^{0.014}S ^{0.026}S
 PEIKVHPLMLKEPEIQGDVIKWKES ^{0.027}I ^{0.013}S ^{0.01}S NKPLPEV ^{0.083}S V ^{0.083}T ^{0.017}S EDIALIP ^{0.019}Y ^{0.087}T ^{0.004}S ^{0.026}T ^{0.015}T G FPKGC I H ^{0.009}T ^{0.001}S ^{0.014}T IWP ^{0.006}T VIG ^{0.006}S A FWNMV ^{0.006}T P
 S ^{0.001}A IGLA ^{0.001}S LPLFHV ^{0.01}T G FVH ^{0.0186}S LN ^{0.024}T P M ^{0.009}Y VGG ^{0.045}T I VLM ^{0.001}S IWDREAAALDAIEK ^{0.01}Y KV ^{0.006}T H W ^{0.016}T NI ^{0.002}S ^{0.026}T M VVDLL ^{0.005}S ^{0.01}T P GIEKRDL ^{0.089}S ^{0.009}S LVMV
 GGGGAAMPEAVAKKLRREL ^{0.186}T GLD ^{0.106}Y VEG ^{0.054}Y GL ^{0.012}T E ^{0.088}T M ^{0.004}S Q ^{0.062}T H VNPPHRPKLQCLGIPHFGVDALVVDA ^{0.012}S ^{0.231}T G EVLPPNKEGEIVVK
 CP ^{0.016}S LFKG ^{0.004}Y WRKEEE ^{0.107}T RK ^{0.017}S FI ^{0.186}T ING ^{0.078}T E ^{0.016}Y FR ^{0.243}T G DLG ^{0.082}Y MDDEG ^{0.081}Y FFI VDRVKRMINRAGFKVWP ^{0.081}T KVENKL ^{0.062}Y QHPAILEACVV
 S ^{0.007}T ^{0.26}P DPRVGEEVKA ^{0.084}Y VVLRPEFRGKV ^{0.085}T EEDIKW ^{0.011}S KEHM ^{0.011}S A ^{0.124}Y ^{0.057}Y PRVVEFVD ^{0.015}S LPK ^{0.013}S G ^{0.019}S GKILWRVLQDKEKNK ^{0.088}S H

Sequence #722 — Gene Saci 2151

M V A N L D A L F L G I V F L I A ^{0.002} S I P V G G I G ^{0.004} Y G F ^{0.002} S A V ^{0.003} S T P I L L I D ^{0.001} Y S ^{0.006} P K Q I ^{0.003} S P I L N F I E L F Q N ^{0.001} S S ^{0.001} N V I I N ^{0.002} S G K ^{0.001} Y ^{0.048} T L K R E I I L F V V F
^{0.002} A ^{0.002} S P G L A I G ^{0.01} S I L G ^{0.004} S Y ^{0.001} L L K ^{0.013} T L G G ^{0.016} T S ^{0.002} P Q L K I L I ^{0.001} Y V I L I P L I L L Q A ^{0.001} Y G F R R S ^{0.007} F T L K S ^{0.003} W K Y L G ^{0.002} S I I ^{0.001} T L L I G C L ^{0.002} Y G V ^{0.025} T T I ^{0.001} S G P P L A
 L I V N N Q G L ^{0.002} S K E E ^{0.005} Y R F A I ^{0.004} S L L R V V E ^{0.003} S Y ^{0.002} T T F ^{0.005} T S ^{0.016} Y L ^{0.057} T L G I F ^{0.002} S P A V I ^{0.001} Y Y ^{0.001} S I L ^{0.004} T S ^{0.022} P A I I G M A I G ^{0.003} Y F L ^{0.004} S S ^{0.004} R V R V K E D F R R V A M ^{0.004} S F
^{0.041} D A ^{0.063} Y V ^{0.001} T G F G L ^{0.001} S N N L V G I L ^{0.001} S N ^{0.001} S L V V C ^{0.001} Y I P F F V ^{0.004} T V L I D L I L L R R ^{0.001} Y V K V Q R P K ^{0.004} Y K ^{0.163} T Q N ^{0.01} S

Sequence #723 — Gene Saci 2154

MKDPVEL ^{0.021}S ^{0.014}KK ^{0.02}YEGKIEI ^{0.126}Y ^{0.016}PKIPI ^{0.055}Y ^{0.007}DDF ^{0.025}S ^{0.073}LI ^{0.009}Y ^{0.094}TP ^{0.013}GVAEV ^{0.024}S ^{0.005}KAI ^{0.08}Y ^{0.019}KDPEK ^{0.116}S ^{0.055}FEL ^{0.013}T ^{0.007}SRWN ^{0.005}T ^{0.005}IAVV ^{0.005}T ^{0.005}DG ^{0.003}TR ^{0.013}RVLGLGRIGP ^{0.013}T ^{0.055}AA
 AMPVMEGK ^{0.003}S ^{0.018}LLFK ^{0.006}Y ^{0.008}LG ^{0.004}GVDAIPLPINVK ^{0.121}S ^{0.001}ADEFI ^{0.005}S ^{0.005}V ^{0.005}VKALE ^{0.005}T ^{0.005}S ^{0.006}FGGINLEDIE ^{0.006}S ^{0.021}PKCF ^{0.01}Y ^{0.094}ILEKLQ ^{0.008}S ^{0.008}MLEIPVWHDDQQG ^{0.008}T
 AGAILAGLINAMIL ^{0.023}T ^{0.006}NKDPKE ^{0.008}S ^{0.003}KVVL ^{0.009}Y ^{0.095}GAGAS ^{0.002}NIAT ^{0.002}ARILAE ^{0.002}Y ^{0.002}GFKLENMIMID ^{0.006}S ^{0.001}KGPLY ^{0.001}S ^{0.094}T ^{0.008}REDIDLMLHHRWK ^{0.008}Y ^{0.008}ELAA
 V ^{0.042}T ^{0.016}NG ^{0.008}Y ^{0.003}EVKEIKDAF ^{0.009}S ^{0.095}GADVVI ^{0.003}S ^{0.002}AS ^{0.002}PGPNVIKKEWV ^{0.002}S ^{0.002}V ^{0.002}MNKNAIVFALANPIPEILPQDAKEAGAKIVA ^{0.064}T ^{0.005}GR ^{0.005}SDFPNQV
 NN ^{0.002}S ^{0.015}LIFPAVFRGVLD ^{0.05}S ^{0.093}RAK ^{0.02}S ^{0.017}VDK ^{0.026}MVI ^{0.026}SA ^{0.026}SEALAEFARRKGINEN ^{0.026}Y ^{0.04}IIPRMDEWEA ^{0.065}Y ^{0.011}V ^{0.011}EVA ^{0.009}S ^{0.009}SAIA ^{0.009}S ^{0.045}KAVELGLARNNK ^{0.045}S ^{0.045}RR
 EEFREIAKQRILRARKIMGLVV ^{0.033}T ^{0.027}T ^{0.005}WSA

Sequence #724 — Gene Saci 2155

M N Y T E I I K G L E R L V K I P E Y H V L G K L R D N L V F F S T A Q G V T N I S A L I N T R V V R L T K E P I S F P S T P K S H L D F L V F A R D I E R G K
E K H A V Y A C N L K G E E Y E I A S P R V R I M S V A Y D D K N V A F V G S S E D G T V L Y V I E G G K L K K L N D V P P F S F V T D I E A N H I T G V S V V
S P R S Q D F F I A D L S G E L K I L T P K Q G S V N Q P Y R I K G N K V Y L A S D Y E N I G E S Y W I Y T Y D L A S N T Y E R V D F P E R D I Y Q Y K P V E I
F Y D P E D K L I I S K R D G R E N L F L N G K L I N T V P G T L T G A T V I D N Y I Y F S H S S L V S P H K I Y R V D K E G G K V D V V D N E E H V D L G Q
V E Y V K I Q S Y D K V E V P T W I I K S K A G K V P S T A V V Y V H G G P W G E I D D R W N S I I S S L L L F G Y H V V T P N F R G S T G Y G S K F Y L M D I
G D P G G G D L M D V V K V R D Y I V G K K I A E K V G V M G Y S Y G G Y M T L L A L G R E P D K W D F G M A G A S V A D W I E M Y E L S D S T F K G F I E L L
F N G K N L D L M K E R S P I T Y V N N V K A P V C I I H S Q N D S R T F L S P V I R Y V Q E L H K A G K S F E F H V V P D A G H A D Y T V D D L I N F T L P A
I M F L E K L R K K W E E N

Sequence #725 — Gene Saci 2166

MIKIKNVYDKPEINDGIRILVERTWPA SVTRG SIDMWLRDLAPSEELITWYNYEPQKWEFKRRYLEELRYNPKVKPLLM
IVKMTKIVTFLYSGDPTYNNAVVLKEYIESLINKES

0.021
0.028
0.008
0.009
0.019
0.009
0.047
0.045
0.016
0.014
0.011
0.11
0.081
0.008
0.002
0.122
0.045
0.009
0.006
0.017

Sequence #726 — Gene Saci 2168

M Q I A L R E K V C N G E I S S E E L V T R F L E R V N E L N P K V N A I V T L N D K V M A E A K E M D S L A K K G I C K P L H G I P V T I K D N I L T K G I R
T T F G S V L F K D F V P D E D S I I S E R L K E A G A L I L G K T N M P E F G L V G I T D N P L F G V T K N P W D L T R T P G G S S G G S A V S I A L G F S P
I S I G N D G G G S I R I P S S F C G V F G F K P S P H V I P K Y P P P N T F R G I S V D G P I T R Y V S D A I L T M R I L S G P D L R D R R S L T V P K I N F
S E E L D K N E V K R I R I A Y S R N L G Y G V V D S K V E K T V E D A V Y R F R E L G V E T I D E I N P E L P N L Y K A L M T K I T V E F A T F I Y D K L E E
W K K V T Y K P Y L N F L L P Y F E K L T Y H D Y V V K V D N E V D K L W S K L S N V F Q K Y D Y L I T P T V S V V A F K I E E G I G P S E I N G Q K V G F G E W
S P F S F P F N L T G Q P A S S I P V G L V N N L P V G M Q I I G K P Y D D F G V L K L S L Y Y E R N F S W H K M R P Q V

Sequence #727 — Gene Saci 2176

M N N I N ^{0.003} Y A L D W A K N P D N V L G V I P ^{0.003} S V V G V E D G ^{0.072} Y M V L R F R I L W F F R L ^{0.088} T ^{0.016} S R F K I Q ^{0.017} S P K I ^{0.016} S ^{0.024} S D ^{0.082} S V E W ^{0.014} S A V D D K G N ^{0.085} T F G I G F ^{0.029} Y H E ^{0.064} T

E D M L R V ^{0.032} T ^{0.05} T ^{0.018} Y K G E K E W I V G R N L N K V L E E I R K G M L N D L D K ^{0.038} T E I ^{0.017} Y E V D E N G E N A A D ^{0.046} Y ^{0.01} S Q N L ^{0.004} S K L ^{0.014} S ^{0.008} Y L ^{0.014} S K L V M K ^{0.005} S K M V R ^{0.018} T Q N V

A L N V G G V V D ^{0.028} Y L Q E V V ^{0.003} S Q L ^{0.009} S E ^{0.017} Y P V V ^{0.038} Y I ^{0.008} S G ^{0.008} S G P ^{0.006} S A F R V L ^{0.019} Y I N G E V K G V ^{0.024} Y V M K D G K E ^{0.013} Y F G K E D V L N ^{0.052} T L ^{0.002} S G N ^{0.083} Y K ^{0.081} T Q V ^{0.066} Y V M V ^{0.006} S P K

L L E G I R E

Sequence #728 — Gene Saci 2177

M K I H K P **Y** V I H E D R D H K F V W L G L D E **S** D **Y** E R G V L **T** N Q **Y** L I V D G D K G I L L D P G G **Y** F V F E R V F K N L K D F V K P E N I V G L F **Y** **S** H Q D
P D V I G A M N L W L D **T** C P N A K V **Y** I **S** E I W E R F I P H L G M **S** D P **S** **S** **S** E R I V K I P D R G M E F K I E K N Q V R A V P A H F L H **S** E G N F H L **Y** D V K
S K V **Y** F **S** G D I G A A I F P K G K W **S** L **Y** V Q N F D E H V K **Y** M E W F H R R **Y** L P **T** R K A L D V W L K R V K E L D I K I I A P Q H G **S** I F E G D N V K K F I N
W L D K L D K V G I D L M E

Sequence #729 — Gene Saci 2180

M E K R R K D **Y** ^{0.173} **E** ^{0.079} **S** ^{0.068} D L **S** ^{0.07} V V K **T** ^{0.178} I R I P K K M E E F L D K V **S** ^{0.051} L E E D **T** ^{0.118} K F N **S** ^{0.014} I I **T** ^{0.059} R E L E K **Y** ^{0.01} M L F **T** ^{0.066} **Y** ^{0.003} K I R K F D K E K E I **T** ^{0.016} I **S** ^{0.008} **S** ^{0.011} R F F E L V L N C M

T ^{0.074} D D L H L I E E N A **Y** ^{0.034} Q A G K K W G K E **Y** ^{0.015} L F I W **S** ^{0.006} K E L H **S** ^{0.006} K K **Y** ^{0.006} A K **Y** ^{0.005} G K L M **T** ^{0.016} F I G F L D I I **S** ^{0.003} **Y** ^{0.001} **S** ^{0.003} N L F K **Y** ^{0.005} D I V E D K E **S** ^{0.005} I **T** ^{0.006} I I L **S** ^{0.002} H N **Y** ^{0.001} N **Y** ^{0.002} K

Y ^{0.001} **S** ^{0.002} V L I A N **Y** ^{0.003} **Y** ^{0.004} K G L M E N I H E L A D K K C K I E P M E K **S** ^{0.011} I V F **T** ^{0.046} F N R D

Sequence #730 — Gene Saci 2181

M D E T K G K K E E Q T E Q G E G L A K G V A R Y R E V L A Q G I A S A A P A A A T I G T L T G A A A F V Y G G L P L A V L I A L V A I L L D A T R I S I I S R
0.001 0.003 0.324 0.124 0.015 0.008 0.026 0.052 0.035 0.003
Y I Q S A G G I Y T F I E R G L G K K V A F I A S M S Y I V Y I F A V I I F V Y L I M G L M V P T G L Q E L G L S L P D W I W I P F G L A N A A I A V F I S Y M
0.001 0.003 0.003 0.023 0.002 0.001 0.002 0.002 0.013 0.002
G I R P S L K F T L T M S L A E I T V L I A T S L L I F S K V P P D P Q T F T L A Y V P Q P Q I L N L G L G V S F G I L A F T G Y E T V S V L G E E A Q D P K N
0.007 0.01 0.003 0.004 0.005 0.004 0.003 0.003 0.12 0.039 0.02 0.002 0.05 0.016 0.061 0.005
T I T K G V F T A A L I V G I V Y L I G S E A F T V G W G V N N M S S Y F N Y L A P G L I E A Y N F G G P I L A I I L T A L L I N S N I A C A C G F T N A V T R
0.049 0.022 0.005 0.004 0.001 0.01 0.001 0.001 0.005 0.005 0.001 0.001 0.001 0.001 0.028 0.09
V M Y A M S R D G L L P S R I G D I H K R R R T P H I A A L F T F I F T A V Y F V I M S L I F T P A N I F I A T G V T T T F G F L I A I F T V N I S M L I V V K
0.015 0.008 0.014 0.264 0.07 0.014 0.004 0.001 0.037 0.006 0.003 0.006 0.007 0.002
R N N A L T I G N I L L V A I I E T I I G F V F Y S Q I I T S A I N I P V L I G V L T L V L W V V G G A I Y L A I A R Q L K R
0.004 0.002 0.001 0.008 0.002 0.002 0.002

Sequence #731 — Gene Saci 2182

M V E E ^{0.088} S K V N ^{0.082} S R L V K ^{0.048} S P L D P L D E N E I E I A A Q V I R E K I V L E K G E ^{0.016} S I K F I A I M L N E P E K D D ^{0.085} Y L K W K R G E K ^{0.03} S V E R Q A L V K F ^{0.028} Y N P A
E E G K V ^{0.103} Y E A I V ^{0.014} S I E ^{0.084} S R ^{0.03} S I V ^{0.012} S V H E I K N V H A P I ^{0.07} I L D E F G E C E K A V R N D K R V Q E A L Q K R G I L P N D L N L L I V D C W ^{0.003} S P G ^{0.024} Y V N E A E R
N K R L A I G ^{0.023} Y M W I K K D L K D N N ^{0.066} Y A R P V H G L M P W V D L N K M E V V R I D D F G E A P L P E L ^{0.071} S ^{0.042} S D ^{0.099} Y ^{0.674} T P E R R K D I Q V D ^{0.017} S L K P I E I L Q P Q G ^{0.012} S
^{0.007} S V E V N G ^{0.021} Y E I K W ^{0.005} Y R W R L R I G ^{0.003} Y ^{0.254} T P R E G L V I ^{0.019} Y D V R ^{0.004} Y N ^{0.006} Y K G R E R Q I I ^{0.018} Y R A ^{0.011} S V V D L M V P ^{0.117} Y G D P ^{0.006} S P F H ^{0.069} Y R K M V L D A G D ^{0.048} Y G L G N F I V
P L K H G N G E L ^{0.006} Y D C D C L G E G I ^{0.012} Y H F D V V R A ^{0.018} S ^{0.082} S D G K P V K V K K A I C V H E E D F N V I W R H ^{0.047} T D L R ^{0.012} S G D ^{0.011} S E V R R N R R L V V ^{0.002} S F W A ^{0.017} T L A N ^{0.004} Y
D ^{0.007} Y G F F W H F ^{0.006} Y Q D G ^{0.002} S I E L M V K L ^{0.009} T G I I N D D A A P K G Q K R K ^{0.01} Y G ^{0.016} T L V ^{0.034} T P E V ^{0.035} Y G P I H I H W F N I R L D L D I D G Q I N R V ^{0.01} Y E V N L K P E ^{0.014} S I G
P E N P L G N A F ^{0.048} Y A E E ^{0.089} T L L K N E L E A R R H V N P Q ^{0.007} S G R ^{0.017} Y W K I V N L K K ^{0.003} S N ^{0.036} Y L G E P V A ^{0.056} Y R F I P R E N V A C P L P D E ^{0.011} S F V R K R G G ^{0.029} Y I N ^{0.032} Y H L
W V ^{0.125} T ^{0.023} P Y D P N E R ^{0.051} Y A ^{0.369} T G D ^{0.036} Y P ^{0.187} Y E R I G E G L P K ^{0.017} Y V E K N R ^{0.007} S I V D K D I V L W ^{0.004} Y ^{0.003} T L G V E H V V R V E D W P V M P V E M A G F M L R P D G F F D E N P C
I D L P R E L P ^{0.016} S N N E N K ^{0.05} Y R M K H ^{0.129} T H G ^{0.027} S H

Sequence #732 — Gene Saci 2183

M V F A S K R P I E V T L L V D K H P C E V L D I F R K Y E I K A Q I T N V K L R D Q V T D H I A F L K I N D D I L K E L K R R S L K T L R I N E N T I W I R T
N G C G V C K L L Y H S D L I V E K V K V L S K A T V M Y K L L L P N L S A L K Q F L E E L N S I R V E A T V A N V S E I D E S E L T D R Q L E I L R L A Y K S
G Y F D V D R K I S M K E L A N K L G I K A S T L E E I L R R A L K K A V K Y Y L D R K S

0.007 0.015 0.001 0.003 0.008 0.092 0.03 0.007 0.015
0.001 0.002 0.003 0.019 0.006 0.004 0.017 0.054 0.019 0.021 0.202 0.005 0.009
0.046 0.086 0.018 0.09 0.023 0.008 0.296

Sequence #733 — Gene Saci 2186

MNKNEIWNRRRIIPiEIFA **S** ^{0.002} **P** ^{0.003} **Y** ^{0.002} **S** VIRKI **Y** ^{0.} LQLLML **S** ^{0.001} I V V **Y** ^{0.001} I I A L I F V **Y** ^{0.001} **Y** ^{0.} Q H L D W I **S** ^{0.} A I **Y** ^{0.002} A A V N V I **T** ^{0.002} **T** ^{0.014} V G L **Y** ^{0.003} A P N I **Y** ^{0.01} **S** ^{0.001} M P **S** ^{0.002}

Q E K L F L **T** ^{0.002} **L** ^{0.004} **S** I I F **S** ^{0.002} V G L F A **S** ^{0.001} I A Q **T** ^{0.014} L I L **T** ^{0.007} I V N R N **T** ^{0.102} W I D A R A R W R G K H M R G H V I V L G N **S** ^{0.015} R **S** ^{0.01} V L **S** ^{0.007} A V K K L E E L D K D **Y** ^{0.094} V V V **T** ^{0.084} N **S** ^{0.005} Q

E I **Y** ^{0.014} K L L K G D K V I L G D P K N E D N L L **S** ^{0.004} V G I N N A E **S** ^{0.009} A I I A M D D D **S** ^{0.017} E **T** ^{0.047} L L L **T** ^{0.009} L K V Q K M N P P L **T** ^{0.057} I V **T** ^{0.103} V V K D **S** ^{0.005} **S** ^{0.009} M M D I M R **T** ^{0.121} A G A D I I

I P F E E V L G R M M A **S** ^{0.012} A **S** ^{0.01} V **S** ^{0.005} K Q F A G M I **Y** ^{0.003} **T** ^{0.1} N G R E F A I G V F E V K R I I K L K D L P N D V I P I A I L K D G K L D P **Y** ^{0.083} F E K D **T** ^{0.124} E V K E G Q V L F

V L G D P **S** ^{0.015} K F K E V N K L I Q

Sequence #734 — Gene Saci 2187

M K I D **T** H Q H L G I **Y** G V N A K E I R D N F D **Y** V V L N P **S** **Y** **K** **Y** **S** C N C C V D G F **Y** Q Q **Y** L W N K G R D **Y** L Q L G I **Y** N L K C R V P A G V E L G R Q L D K G
I V G I V L N P I N H D F D L D K A D D V **Y** Q F A E D H D L P L F I **Y** **T** G R G K G D P **S** K L **T** E V L K N F R L K V V L I **S** L G **Y** P N **Y** V N E A R E L L K L N N V
Y G D I **S** **S** V P Q N V I K **T** F P R E K L I F G **S** H **Y** P **Y** V P F Q E I M D K E I L **S** N A V K I L **S** I

Sequence #735 — Gene Saci 2189

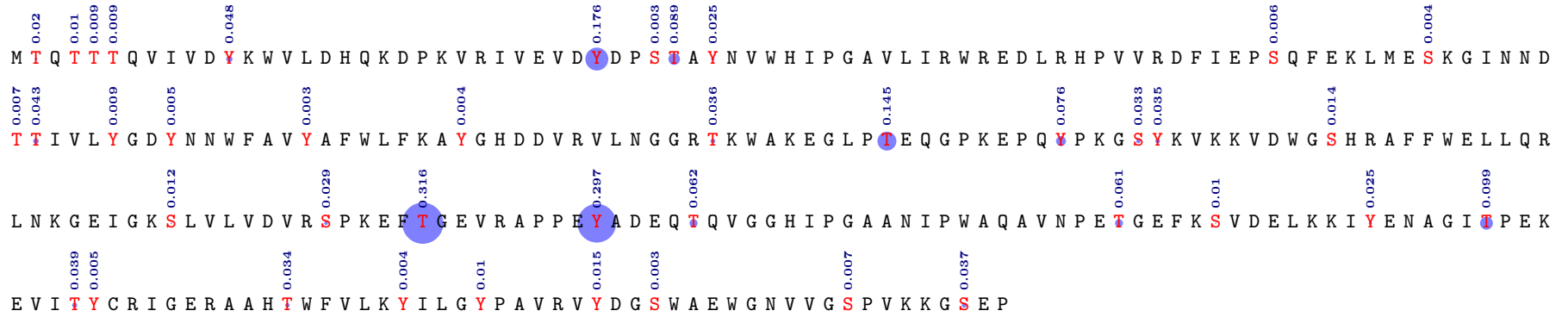
M G E E K ^{0.065} T L N ^{0.187} D K Q L R R E L ^{0.105} T L I D L V ^{0.002} S L A L G G I I G ^{0.005} S A W L F ^{0.003} S A L ^{0.004} S A A ^{0.012} S I A G P ^{0.004} S A V L ^{0.003} S W V I G G I L I I F I G L A ^{0.002} Y A E L G ^{0.032} T A V P R ^{0.005} S G G
 I V R ^{0.004} Y P H ^{0.021} Y S H G ^{0.004} S Y A G Y ^{0.003} M L A V L ^{0.026} Y L I ^{0.034} S A V ^{0.012} T T P ^{0.002} S I E A E A V V E ^{0.002} Y L A ^{0.004} S I ^{0.002} S P L N F L ^{0.006} T T S ^{0.002} V N G V N V L ^{0.001} T V ^{0.009} Y G I L L A I C L M V V F F L V N ^{0.001} Y F
 G I K A L G K ^{0.01} T N ^{0.002} T G I ^{0.004} T I W K L V V P ^{0.003} T V ^{0.013} T F I L L F F A F N ^{0.001} S K N F ^{0.085} T S ^{0.002} Y G F L P ^{0.004} T G N ^{0.043} S N G L I D V F ^{0.015} Y A I P A ^{0.002} S G I V ^{0.002} Y A ^{0.021} Y L G F R Q P V E ^{0.002} Y A G E A K ^{0.044}
 N P Q R D I G R A I V I ^{0.001} S L A I A I I I ^{0.005} Y T L L Q I A F I G A L D W ^{0.009} T S ^{0.002} A G I ^{0.002} S T ^{0.055} P G N W ^{0.02} T A L ^{0.043} T S ^{0.004} S S ^{0.005} W A ^{0.006} S G P F ^{0.005} Y N E L E N ^{0.005} S G K A L G L A L L V ^{0.004} Y W G ^{0.002} Y A ^{0.002}
 L L V D A V I ^{0.002} S P ^{0.002} S G ^{0.024} T G L V ^{0.008} Y I G ^{0.058} T T ^{0.011} T R ^{0.034} T F ^{0.063} Y G I A A D R ^{0.007} Y F P E F F L R L N K ^{0.002} Y K I P I F ^{0.001} S L I A ^{0.001} T L V V G I L F L L P F P ^{0.003} S W ^{0.003} Y L F V N F ^{0.002} S S ^{0.001} L A ^{0.001} T V F ^{0.043}
^{0.025} T ^{0.005} Y V M G G I G L ^{0.05} Q ^{0.09} T L R R ^{0.006} T A P D L R R P V K L A G ^{0.035} S K V I A P I A ^{0.002} T V ^{0.003} S A M L V A ^{0.001} Y W ^{0.004} S G F ^{0.012} T T I F ^{0.003} Y V L ^{0.006} T S ^{0.001} L F I L V P I F W I ^{0.001} Y ^{0.001} Y A V K E L N M N R A L ^{0.001}
 G V ^{0.002} T L G L L Q L L ^{0.001} S N I L L A ^{0.001} Y F A ^{0.001} Y V N I L N ^{0.001} S S ^{0.002} Y N L I G ^{0.001} S F I M ^{0.003} Y F L G F L G M ^{0.002} S I I P ^{0.007} S L I G ^{0.036} Y L A V N E ^{0.001} T G R K ^{0.002} Y I K ^{0.001} S G L W L I G L I L A ^{0.01} T ^{0.001} Y V M
^{0.001} S F I G N F G L L ^{0.001} S S ^{0.002} P I V P F P ^{0.007} Y D ^{0.016} T I L V V I I G L V F H ^{0.002} Y L A V ^{0.005} Y S ^{0.003} G F R ^{0.027} T E E I E N I V R E Q A Q Q D

Sequence #737 — Gene Saci 2195

M L K L R **T** **S** A D V **V** L E E A D E L L **S** R G D V V Q A **S** E K **Y** **Y** K A **S** E E **S** I K I L **S** **S** V L E L E V I N K I **S** N E G W **S** G E L L N K C V F **S** L **S** **S** I F G K W I I

E **S** W G **S** A I A L I **T** V N M D **S** Q Q V N A **Y** R E N I L K L V Q V A D E R L N N K V **T** K R G

Sequence #738 — Gene Saci 2198



Sequence #739 — Gene Saci 2208

M S^{0.004} Q I S^{0.008} R V G V V G A G T^{0.085} M G H G I A E V V A I A G F N V V L T^{0.033} D V N E D I L R N A L E K I R W S^{0.086} L E K L R E K R Q I K E N P N T^{0.041} V L S^{0.011} R I K T^{0.063} T^{0.081} V S^{0.018} F G D F
 S^{0.012} D V D F I I E A A I E R S^{0.083} D V K R K I F S^{0.014} E L D R V V K K D A I F A T^{0.101} N T^{0.019} S^{0.006} T^{0.015} I P I S^{0.004} Y L A E V T^{0.009} G R Q E K F I G L H F M N P P V L M P L V E I I M G N K T^{0.124} A
 E E T^{0.091} L K T^{0.064} T^{0.027} I D L A K K I N K D Y^{0.012} V V V K K D V P G F L I N R I N G R T^{0.054} F P E A V L L Y^{0.017} D E G Y^{0.091} S^{0.02} K E D I D A M S^{0.034} R F R L G M P M G F L E L M D F T^{0.107} G I D V A
 Y^{0.026} N A G L E A I K R G E G E P P H F K V L K K L V E E G R L G I K S^{0.012} G K G F Y^{0.023} T^{0.203} Y^{0.012} T^{0.052} S^{0.007} K T^{0.227} Y^{0.021} E R A R V V P T^{0.045} D N M Y^{0.109} Y^{0.017} V N P L R I I A P A V N E A A W I L R N D
 V S^{0.002} S^{0.003} A Q D I E K G M V K G M N W P Q G P L T^{0.288} F A D K Y^{0.025} G I D N V L K F L E E R Y^{0.034} E V T^{0.287} K N E Y^{0.136} Y^{0.017} K P D P L L T^{0.049} E M V S^{0.015} K G K L G V K S^{0.018} G E G F F K W N Y^{0.012} E K A
 N F G P V K Y^{0.022} E K L H D Y^{0.119} A K I T^{0.072} M S^{0.013} R A D K L N A L N E A M W S^{0.009} G L T^{0.135} E A F K K A K D D S^{0.041} E I R A V V I T^{0.065} G E G R A F C A G D D I E M N Y^{0.006} W G S^{0.005} V A G A M E
 W N E K F S^{0.002} S^{0.002} P L I N L L L N Y^{0.001} P K P V I S^{0.003} A V N G L A F G G M E L N I L F D I I V A S^{0.005} D D A M F A I P E G L I G A L P P L A S^{0.006} S^{0.007} M G V G F I S^{0.008} R K I A R Y^{0.015} A
 L T^{0.058} G D W M S^{0.004} A K Q A K E L G L V D I V V P H D Q L E I A T^{0.009} V E I V E K A K K I A P L S^{0.014} S^{0.018} M A I K R A V N S^{0.017} I R N S^{0.013} Y^{0.008} L Q Q L Q S^{0.008} S^{0.012} Q D L L I L S^{0.018} A T^{0.125} E D F K
 E G M R A F V E R R Q P K Y^{0.014} K G K

Sequence #740 — Gene Saci 2211

MIDGAK ^{0.009}S ^{0.034}T ^{0.044}T NDDWQL ^{0.005}S VHKVLE ^{0.024}Y AGKVHP ^{0.005}T ^{0.148}T ^{0.014}E I I SDRRLQG GELHILN ^{0.042}Y GKVLDRVR ^{0.025}S MANALEKELDVKP ^{0.008}S D V V G I I D W
 NDHRFFE ^{0.003}S ^{0.014}Y ^{0.005}F ^{0.006}S V P S I G G V L L E L N F R L H P S ^{0.002}D L V ^{0.034}Y I V K H ^{0.033}T K A K G L F I D D S L L L L A Q I L S ^{0.004}K E ^{0.003}Y K F D F I V V M ^{0.326}S D K ^{0.03}S L E E I E P L K
 G M S ^{0.027}L A ^{0.009}S K V ^{0.098}Y ^{0.063}G ^{0.045}Y E E L V K S ^{0.02}H S P N R R F E E V N E K S ^{0.017}A A ^{0.078}Y A A F ^{0.079}T ^{0.006}S G ^{0.014}T ^{0.079}T I G L P K G V F ^{0.011}Y S ^{0.005}H R S ^{0.003}S V V L H A M ^{0.023}T V A H D M R P ^{0.089}T ^{0.085}D ^{0.03}T L L Q V V P M F H
 A N G W G ^{0.056}T P F A A A M Q G C R Q I ^{0.006}Y P G R P ^{0.494}T P E S L ^{0.007}T D ^{0.046}Y I L N ^{0.042}Y K V ^{0.049}T R ^{0.08}T A A V P ^{0.026}T I I I E L L K R L E K M D P K P D L K G L K I S ^{0.032}M G G Q E P P S ^{0.023}K L V
^{0.015}S E L A K ^{0.07}Y G V E V ^{0.082}Y Q G ^{0.068}Y G A ^{0.042}T E ^{0.216}T ^{0.02}S P V V S ^{0.014}V G F S ^{0.015}K S E I D N L P A E D K F L K M K Q G L I V F G V E V K V V D P I ^{0.038}T N Q E L P W D G K S ^{0.004}V G E I W I R G
 P W I ^{0.116}T R E ^{0.012}Y ^{0.035}Y N D P R ^{0.157}T S ^{0.014}Q S ^{0.005}F ^{0.207}T P D G W W R S ^{0.014}G D V G V V D P L G ^{0.013}Y I R L V D R L K D V I K S ^{0.009}G G E W I S ^{0.006}S ^{0.005}S I D L E N F L M A H P ^{0.056}Y V R E A S ^{0.022}V V G V P H P
 K W G E R P L A I V V L K S ^{0.007}D ^{0.095}Y E N L P K D E V K K S ^{0.035}L L D H L S ^{0.011}K K F A K W Q L P D D I V F V D E I P K ^{0.137}T S ^{0.018}T ^{0.154}T G K F D K K L L R D K ^{0.001}Y K N L F ^{0.085}T ^{0.023}S ^{0.018}S

Sequence #741 — Gene Saci 2218

M K V V V I G ^{0.006} S G E M G H G I A E V M A I ^{0.03} Y K N E V ^{0.08} T L V D I K D E I L D K A I ^{0.078} S K I R E ^{0.282} S L D R L K K R G ^{0.574} S I E E E P E D I L K R I ^{0.092} T K ^{0.017} S I N L E E A V K D A

D L V I E A V P E I V D L K Q N I F K R L D Q F ^{0.068} T K P D A I L A ^{0.018} T N ^{0.021} T S ^{0.009} N I R I ^{0.021} S E I ^{0.006} S K F V N K K D R V V G M H F F N P P V L M Q L V E I I K G P D ^{0.211} T ^{0.01} S P E V

V Q K L ^{0.085} Y E I ^{0.006} T K Q I G K ^{0.088} T P V I V N K D ^{0.086} T P G F I V N R I N A A E ^{0.001} S L F I C L V L Q K G I N ^{0.025} Y E E V D A ^{0.042} Y F R ^{0.006} S L G L P M G P ^{0.063} Y E L M D ^{0.031} Y V G L D I V A H ^{0.004} S L

E ^{0.014} Y F A K E I ^{0.011} S P E ^{0.014} Y G K C ^{0.04} T K I K E M V N N G L L G R K ^{0.042} S G R G F ^{0.014} Y D W ^{0.069} T K G R P Q I N A K Q N P I I D V N D L L A I D I N E A ^{0.006} S K L L E D N V A ^{0.092} T P N D I E

^{0.067} T A V K L G M N R P F G P I ^{0.244} T V A K ^{0.012} S A D L N D V K ^{0.033} S R L E R I ^{0.057} S ^{0.052} S E ^{0.025} Y G I ^{0.044} T I F Q P ^{0.094} T D ^{0.022} S I K ^{0.201} T G K L K E L L E G E K K E E K K E F E ^{0.071} T L N V ^{0.011} S K E G K V A I

V K L N R P K L N L I N ^{0.006} Y ^{0.042} T L L D E L D R L L ^{0.086} T E L W N D R ^{0.003} S I N V I L I ^{0.025} T G E G Q N F ^{0.004} S G G A E L ^{0.009} S A P I ^{0.052} T D Q V Q F L E L V R K G E R ^{0.17} T F K R L ^{0.083} T E I P K I

V I A F V K G ^{0.009} Y A L G G G F E L ^{0.003} S ^{0.004} S ^{0.013} Y C D L R I A ^{0.018} T E N A V F G F P E ^{0.122} T G L G L V P A W G G ^{0.086} T Q R L P K L I G I ^{0.003} S R A M ^{0.01} Y L I L ^{0.088} T A Q R I ^{0.009} S A K E A L E ^{0.046} Y G L V

N K I V K D E N E A L E F A K D L ^{0.028} S E R I A P I ^{0.018} S A M L A K R L I N R G ^{0.046} S E V P I D V G L E M E ^{0.026} S I A G G L L F ^{0.046} T ^{0.048} T E D L K E G I V A F F ^{0.049} S K R K P E F K G K

Sequence #742 — Gene Saci 2220

M D K P V E I T P D G K V V R K S Y V S S V K K G I D W N S Y P M R L W A K S N E L F W S P L Q F K E L I Q Q D K Q D W E T M S E S E R E I S E Y I A T A F S A G
E E A V S R Y L A E L V I A L D E L G Y T E E V L F L N Q F Q Q E E T R H T D A F R R W M D S I G M D K D T E K W T T E I N P S Y Y E L F Y V A L P S A A Y G V
K A N P S P E S I L R F T A T Y M F S I E G I A A E T G F Y F W R T M W E R G R H L K G I Y E I V K R V A A D E S R H L A F G T Y L T T M L I G E D Q S L Y D K
F L E Y F N Y A G G L A V R L I G T I V E Q Q V N K W E P Y K E K W G R Y F E W V Y K E N G L G S L V D Y A A K M V Q H R L F Y V N R L R N A N R E K L R Y M P
L N E A A P V I E N F D T V E K Y L T P Q Y D P E

Sequence #743 — Gene Saci 2221

M S T E D S P I S E V N P L K L L P P I T E E K Y N D Y D G I G L L S I K R F S L L Y T I S F F V I I A G L L G T L T S I P A F P T P L F F I I P V V S L I F V
I I T A I G F L L G T A S I N V L S I G L T I L G K I K K D Y N S R L V E F S I L T P L V T G I G L L V F L I L G L L G L N P V P V L E L N I V M A I I G I A I
A V F F I G M I A A A I K M W K L G K R Y E S W G L R I G G I F L F L L P P L G G I L T Y I F S S R A A K K V K R T D C F L A

Sequence #744 — Gene Saci 2223

M S L N R I C G R F S V L D L V K T L Q F I G D Q N N F V G C I P N I V S A N E N T F K A K V K A L G L P L T V K G E L Y K Y E I S P E T L I L T V G L R V K T
T G A V I D I I T R S K V K E D G S Q V I W D T Q Y N I A G P L K I L L K P L L E S V T E Q T V V D T I E C I K L R T T S

0.004 0.004 0.002 0.002 0.021 0.047 0.008 0.012 0.006 0.063 0.002 0.021
0.086 0.089 0.005 0.011 0.025 0.025 0.004 0.011 0.094 0.045 0.03 0.01 0.021

Sequence #745 — Gene Saci 2225

M S S G Y Y K Y Q L T I D K F L D S G E T V F P T R E I V Y T D K R R Y T F K K F A E S A K I L A N A L K K I G V K K G D I V G V I D W D T D V Y M H L Y Y A V
P M I G A V L H T V N L R Y P P E L I I K T M L H A E D K W V I I R D D L I G L V E D I K N F N P N I R F I I Y N D D K E K I K V D D K T I D F W D L L Q G E P
K Y D P D E E G L K E D M M A T L M Y T S G T T G N P K G V W F T H R D L V L H A M A M G T I S R A P P V E L T R D V V M S L V P M F H V H S W G F P Y V A L
A S G L K Y V L P G V Y N P A T Q L K L I A N E G V T F S A M V P T I L F M I L A Q P D I D D Y K P Y L K N W K V A I G G E A L P E G L A R K A R E Y G I K L Y
S G Y G L T E T C P V L T V A Y H N S I V E S F D E E K K F E I Q L S A G V P I P G V K L R I V D E E G K D V P R G K I G E I V V R A P W T T R E Y Y K D P E K
T A Q L W R G G W L H T G D L G Y I D E Y G Y L H L V D R E K D A I K S G G E F I P S L L L E T V I S L H P S V A E V A V V G I R H E K W G E R P V A F I V P N
G Q F D E V E M R K F L M K K V E E G K I Q K W I P D R F F V V E D I P K T S T M K A D K K L L R E M A S K E L Q K Q K

Sequence #746 — Gene Saci 2228

M A R V N I L L A G V G G Q G I I T M G K M I A E A G N Y C N V K V L V A E T H G L A Q R G G A V N V H V R I G D V N S P L I P L G G A D Y L V G L E A T E V L
R N L N Y C S K N T V I V L N N Y V L R P V L P K V R L L E I R E V L D R L K G L N V H L I N A Y E I A E K A G N T K A V N A A L L G Y L Y S I G A F K G L L T
E E A F Y K S L K Y E S N V K A F Q S A K S A F A H L L

0.001 0.032 0.023 0.008 0.002 0.021 0.005
0.001 0.017 0.003 0.009 0.002 0.002 0.005 0.035
0.026 0.013 0.01 0.016 0.019 0.009
0.074

Sequence #747 — Gene Saci 2233

M V V F L N R T A I I G V G W Y G F R P T T P E V S F R E M V F E A A S R A Y K D A G D I N P R T D V D S F I S C Q E D F W E G I S I S D E F A P D Q I G G A M
R P T M T V A G D T I Q G L A H G I M H I N A G V A D V V A I E G H S K V S D I L T F P D L V K F A M D P I Y L R T L N P P N F H F L A G I D A V K F M E R K G
V T R E D L A L V V E K N K K A G L K S V R S S Y A S N L S V D E I L R H N E Y V V Y P L T R L D I A S F V D G A I T I V I A S E E V A K R V K G D D Y L I I R
G V G Y A T D S V N A E T S D M G K A T Y M K L A A N M A Y R M G K I D S P R K Y F N A V F V D D R Y S Y K E L Q H L E A L G I S E E P V K D L R E G N L H P Q
G E I P V N P L G G H L S K G V P L E A A G F S L L L D A I D Y I N S G K G D R A L V G S W R G I P T F T G S V V V V E R P

Sequence #748 — Gene Saci 2234

M S E T T I L V N S L R E F L R R E V E K I A E K V D R E D Y Y P R D I V E K L G E L G Y L V P L Q N N L S Y Y D M V I S L E E M A K V S G S V A L I A D A Q G
E L V G E M L R L F A N E S Q K K Q F L D P I S R G K M I G S F A L T E P T G G S D V G S M K T Y A E R R N G E W V I S G R K M W I T Q G I Y A D L F I T V A R
T G S R R R G E L S V F L L P R S N C I E S R K I E V M G N R G T G T S E V V F R E C K A D E S Q V V G E I N R G W D M V N T V L E V G R L A I S G I S I G L A E
S A L Q E A L S W A L N R E A F G S K L Y S F Q G I K W Y I A D S I T K L T S V K S F M K E V S K K F E E N S N T K G V Y A S M L K L L S G E V A N Q V V D L S
L Q I F G G M G Y A K G T K I E R I Y R D V R L M R I G E G T D E V Q R H I I S K Y V E K Y G I P T L D D I

Sequence #749 — Gene Saci 2241

M N G V G Y F I S H G S P M I L V E E N P W K G H L A D L G K E I K N K Y D P E T V I I S S P H F F S W G E G N Y T V I S K D L K C I Q D Y F G F P K E L Y E F
0.011 0.002 0.003 0.021 0.025 0.006 0.005 0.002 0.023 0.053 0.001 0.006 0.003
C Y Q A E N D V E L A S E L I K E S N G M L K V E E K W G L D H G A W I P L Y Y M F P E D K P K V V P I S I S S A S P R R H Y E L G S I I R K V S E K L G R R T
0.019 0.009 0.007 0.064 0.065 0.034 0.025 0.027 0.069 0.022 0.064 0.04 0.082
L F I A T G S P T H R L D L L Y F N L K P R A T K F D V L L I K L I N E G K F E D I L D M D S K Y P K E Y S S A T P E G D L K T L H T L L G F V R P T K A K V L
0.086 0.005 0.158 0.085 0.167 0.083 0.084 0.038 0.246 0.03 0.026 0.227
G Y D I P W A G V S M L S A L F E E
0.03 0.004 0.005

Sequence #750 — Gene Saci 2242

M K I **T** V N G R **T** A G **T** K E **T** G C A L C G G **T** W G D **Y** **V** E E I D G E K L F F C C D I C A L E F V N M L R E V K K R **T** G W D R I D E L V I N G N **Y** **S** **S** G R **T** C V **S**
K R G G R E **Y** K F **Y** V R F N E D A G V E **T** F R E V V

0.013 0.011 0.056 0.12 0.051 0.006 0.069 0.069 0.023 0.029 0.12 0.009 0.011 0.01 0.156 0.025

Sequence #751 — Gene Saci 2249

M N V C P A N A I T K N E M G I V R I I E D N C I G C G F C T W A C P Y E A L K I T P S G I M S K C H L C Y N R I G S G L P Y C V E A C P T G A L T F G W I E K
G D A N V N Y L A P E D I T E P R F V I K K P E K A E T I K V E T L H R K K E E N Y I G L L A F T I A S E L A L G Y S I F K L P Y W N L V G L I L P L V S L L L
S V N H A K R F D R F Y R V I Y N L K T S W L S R E V L F S S I S V L F Y L I S F F N Q L F Y Y P A V I F L G L G V L S S I M I Y I L K A R P S W Y N P D T P V
S F I G S I F T T S L P L L F Y L T H E V F I I P A L I V V L G V E I L T G Y K K S R T R V I L N A V S I A L S L L S I P L P F I I L A D E I V N L V S E V S H
R I Q F Y Q K V V Y Y G L P K V

Sequence #752 — Gene Saci 2250

M L E I R F H G R G G Q G V V **T** A **S** H L L A E A A G **Y** D N L **Y** **S** **S** **S** **S** F P I **Y** G A E R R G A E I E A **Y** C R I **S** D **S** Q I R V **T** **S** P I Q E P D **Y** V V V L D G **S** L L H L
0.002 0.015 0.003 0.004 0.284 0.003 0.005 0.046 0.029 0.073 0.005 0.011 0.008 0.038 0.043 0.016 0.016 0.005 0.032 0.012 0.074 0.083 0.028 0.186 0.005
S N N V **Y** R G L K **S** N **S** V I L A N **Y** G **S** E I K **T** D K K I I **T** V N A **T** K V A **S** E L G L I R **S** G W P M V N V I M L G **S** L I K L **T** G M P **S** I E **S** L E K A I R D E F D D
0.028 0.002 0.016 0.02
K L A E I N M K G V R K M **Y** E L V E G R R **Y** N V L **T** **T**

Sequence #753 — Gene Saci 2252

M I R K I I S G N E A V A T A V K L A R V G L T G I Y P I T P Q T S I I E K L A E M K A Q G E I Q T E I V R V E S E H S A M A A T Y G A A L A G I R A F T A T A
0.003 0.1 0.027 0.005 0.097 0.033 0.01 0.061 0.029 0.01 0.103 0.023 0.074 0.021
S Q G L L Y M H E M V W W V A G S R V P V V M V V G T R A V G A P W N I W N E H T D F T S E R D S G W I M A F A S N P Q E A L D L T I Q A F R I S E D E R V F L
0.001 0.088 0.001 0.041 0.014 0.141 0.007 0.017 0.003 0.015 0.01
P V M V G M D G F I L S H T K T N V L I P D Q E Q I D D Y L P P R R Q P Y V I D P E D P V E I G N M F P P E G Y M K L R E S I H L A L K N S E D I I R Q H G R E
0.002 0.05 0.02 0.148 0.025 0.06 0.065 0.018
Y N K K V S P M I D Y S T L N S S Y R L E D A D Y A V V L M G A W A G D A M E A I D V L R E K G I K I G M L R V R Y L R P W S E K E I R E N L E G K K G V L V L
0.007 0.011 0.052 0.008 0.06 0.011 0.012 0.044 0.178 0.003 0.102
D R S T S F G R G G P L Y I E V K S T I R D T E V K D I V T G L G G V T V G K S D M I Y L F S K F V E G I K E D V T W Y Y P K E V G K L D V R T P R D I E
0.027 0.305 0.06 0.039 0.021 0.238 0.274 0.025 0.053 0.005 0.017 0.002 0.079 0.008 0.007 0.129

Sequence #754 — Gene Saci 2256

M I K L N R D Q K L T Y K F L I I P I A L L I L S F N P Y T E S L E F S L P A V Y M A S H Y A V Y F S G L Y I G Y K Y F K G G Y I S L I L G L I P A V L W H S P
 Y F F S L G A A M L D Y R I L L E I T L L F G G V L L G S S I N S M R L Q I K I T L L A L W M L G D S I L A I L F I T S T P L Y S N L A Y P F S P Y T P S S L P
 L A G I L M F V I M N V F L I Y V I S K F M K S I I G

Sequence #755 — Gene Saci 2258

M D A N N R K R L T L K D Y I W W V V T V V A F F V A F E W V G D F G K L A Y L T S S P I S S Y V E N L Y T A T Y L A A G I V F A I F M G S I V F L A V R F R A
P S T T T E V K R I S T V T Y Y Y I A L V M D L I A G V V I T Y L M M T I S Y E F L I G A L A S A D V F V F G S I I Y L I Y K M Y F T D

0.009 0.03 0.027 0.032 0.089 0.005 0.065 0.03 0.009 0.002 0.002 0.003 0.003 0.001 0.001 0.001 0.008 0.024 0.004 0.004 0.003 0.004 0.011 0.01 0.026 0.008 0.002 0.001 0.001 0.001 0.002 0.002 0.001 0.02

Sequence #756 — Gene Saci 2262

M Y L N F M K A Q S S V L P V V V G I L V V I I A V A V G V Y V Y N Q Y V M L S S P S A S S S T G T S T G P S K I S I P Y S S S S N K T V F L T I V V E S S S N V
 N Q F N F N G T S S G S L V I Y I P A G S T V I V K F I N Q E S L P H N L V L L Q N S T P P Q S P E I S S D G K I I D I V G A T S N Y D V N G I S G G A S A
 E G V W G P I S A G D Y M L V C G I L G H A A S G M W A V L V A S N N V T A P Y A V I D

Sequence #757 — Gene Saci 2263

M N I K R I L K V A L ^{0.004} Y ^{0.007} T ^{0.004} T ^{0.001} N A ^{0.004} S D V G Q M Y ^{0.004} I V L G I V A L I I G ^{0.001} S V N A A L I R D Q L ^{0.001} S F N N L N A V D ^{0.013} Y ^{0.014} Y D A V ^{0.009} T L H G I F M I F F V V M P L ^{0.001} S ^{0.002} T ^{0.001} G F A N
^{0.011} Y L V P R M I G A H D L ^{0.006} Y W P K I N A L ^{0.} S F W M L V P A V I L A A I ^{0.001} S P L L G A V D L G W Y ^{0.007} M ^{0.004} Y A P L ^{0.001} S V E ^{0.009} T ^{0.012} T V N ^{0.012} Y G L G ^{0.002} T N L I Q I A L I L ^{0.002} S G L ^{0.002} S ^{0.001} S ^{0.007} T ^{0.035} L ^{0.001} T
 G V N F V M ^{0.081} T ^{0.088} I T K M K K V P ^{0.011} Y L K M P L F V W G F F ^{0.002} T ^{0.006} T A I L M I I A M P ^{0.002} S ^{0.033} L T A G L V F A ^{0.003} Y L E R L W G ^{0.012} T P F F D ^{0.001} S A L G G ^{0.003} S P V L W Q Q L F W F F G H P E
^{0.009} V Y I L I L P A M G L V ^{0.004} S E L L P K M A R R E I F G ^{0.016} Y ^{0.016} T A I A L ^{0.003} S ^{0.003} S I A I A F L ^{0.001} S A L G V W M H H M F ^{0.01} T A I D N ^{0.004} T L V Q I V ^{0.001} S ^{0.001} S A ^{0.011} T ^{0.014} T M A I A I P ^{0.003} S G V K V L N
^{0.004} W ^{0.008} T ^{0.007} A T L Y G G E I R Y ^{0.002} K ^{0.083} P ^{0.007} T I L L I ^{0.001} S F I V M F L L G G I ^{0.011} T G V F F P L V P I D ^{0.002} Y A L N G ^{0.002} T ^{0.006} Y F V V G H F H ^{0.002} Y M V ^{0.} Y A I L ^{0.002} Y A L L G A L F ^{0.001} Y ^{0.001} Y F P F W ^{0.001} S G K
^{0.003} W ^{0.006} Y N D D L G K ^{0.005} T G A I L L V A G ^{0.013} T ^{0.025} F L T A T G M ^{0.003} S I A G I L G M P R R Y ^{0.017} A V I P ^{0.007} S P I ^{0.024} Y D P F Q F M A ^{0.001} S V G A V L ^{0.026} T G I G L F I L A G V L V H G V F R G R A V
 N G V D P W D N I ^{0.003} S V K L Q D F F I K P V K L P L ^{0.015} S F G K ^{0.009} S L D G A F D E E ^{0.071} Y H G I K F P ^{0.004} Y ^{0.003} Y ^{0.003} S V L G L F L ^{0.002} S F I P L G F M F I L I G L I P I G I V L L L A F M
^{0.006} G ^{0.016} V G L Y W G Y D Q W F K P M Q P P P H F ^{0.068} Y A D G G V P V ^{0.029} T ^{0.005} N S V N N ^{0.005} S I ^{0.006} S P ^{0.009} S L G I A ^{0.021} S M R D A R ^{0.004} S A V L W F I L A E V I L F G ^{0.002} S F I G G ^{0.004} Y A F I M ^{0.002} S P V ^{0.019} T N
^{0.001} P ^{0.006} L S ^{0.008} Y V N N I V P A V E V F P L P A I M ^{0.003} T ^{0.003} A I L L ^{0.005} S S S I P A H I A ^{0.008} Y E ^{0.003} Y F K K G N V K M F R N L G L L ^{0.027} T M A M G L ^{0.022} T F L G G Q I ^{0.007} Y E F ^{0.017} T H ^{0.004} Y I H F I P Q D ^{0.003} S
^{0.004} A ^{0.002} S S F F F A ^{0.007} T V ^{0.002} S L H G F H V I M G L V I W A F M M L R I R K G F I P ^{0.007} Y A G ^{0.001} S V A A ^{0.007} T ^{0.004} Y ^{0.003} Y W H F V D A V W V V V F ^{0.} S ^{0.002} T ^{0.} F Y L H L I V

Sequence #758 — Gene Saci 2266

MENLPP **S** AKLV LKILMERR **S** LRFRELKEE **T** QLP **T** R **T** L **Y** **Y** A L K L L K E K K V I K A M P C L D D **T** R E R V **V** L V V E **S** E E C **Y** K L F N D

Sequence #759 — Gene Saci 2269

M Y P P E F S Y V R A E S L Q E A L K F L E G N D N T R P L A G G Q S L I P M L K L R V L S P D Y I L D I N R L N E L N Y V K T S L N G V S I G A L T R Y H D I
 L S N D I V K S K V P L M H H A T R I G D M Q V R N M G T I G G A I S N A D P A S D M P V V L T A L N A T I I L S S A S G S R S V K A L D F F K G P F T T D T
 N K G E L V T Q I E V P V L D G Y K T V Y K K V V R R A G D Y A L A S V A L A I K L K G N E I E D I K L A Y G G V H D K P F R A M E V E K N V I G K K L N D D L
 V K D I A S K V S S Q I N P P S D H R G S S W Y R R E V V K V L T M K A F K E V A

Sequence #760 — Gene Saci 2271

M T Y T G K S I K R L N D D K F I T G R S N Y I D D I K I P S L Y A G F V R S P Y P H A I I K R I D A T D A L K V N G I V A V F S G K D I N P M L K G G V G V L
 S A Y V N P S L F R F K E R K A F P E D N K V K Y V G E P V A I V I G Q D K Y A V R D A I D R V N V E Y E Q L K P V I K M E D A E K D E V I V H D E L K T N V S
 Y K I P F K A G D I E K A F S Q A D K V V K V E A I N E R L I P N P M E P R G I L S V Y D G N S L S V W Y S T Q V P H F A R S E F A R I F G I P E T K I R V A M
 P D V G G A F G S K V H I M A E E L A V I A S S I L L R R P V R W T A T R S E E M L A S E A R S N V F T G E V A V K K D G T V L G I K G K L L L D L G A Y L T L
 T A G I Q P T I I P V M I P G P Y K V R D L E I E S T A V Y T T T P P I T M Y R G A S R P E A T Y I I E R I M S T V A D E L G L D D V T I R E R N L I D Q L P Y
 T N P F G L R Y D T G D Y I R V F K D G V A K L E Y N E L R K W A Q Q E R S K G H R V G V G L A F Y L E I C S F G P W E Y G E I K V D N K G N V L V I T G T T P
 H G Q G T E T A I A Q I V A D A L Q I P I E K I R V V W G D T D I V E G S F G T Y G S R S L T I G G S A A L K V A E R V L D K M K R A A A S Y F N A D V Q E I R
 Y E N E E F S V K N D P S K K A S W D E I A S L A T T K E P I V E K I Y Y E N D V T F P Y G V H V A V V E V D D L G M A R V V E Y R A Y D D I G K V I N P A L A
 E A Q I H G G V Q G V G Q A L Y E K A I I N E N G Q L S V T Y A D Y V P T A V E A P R F I S Y F A D K S H P S N Y P T G T K G V G E A A L I V G P A A I I R
 A I E D A V G A R F T K T P T P P E E I Y K A I M S K K

Sequence #761 — Gene Saci 2273

M Y T L N P S N P S F F N S E K L Y S E F I R Q A T V C H G C R M C V N Y C D S F P V L F K K I D S K E Q D L N K L L D D L F D V A S K C F H C K L C Y V N C
P Y V P P H E F N M D F P S L M E W A W L Y Y K S K T G L R I K D Y M F E M L D A T N L A R P L V K H L M Q K G K E V L G L H K D A P T L P V S E K G L K E K V
K P K K I E N P K A K V A L F T T C L V D N F F T D I G E D L I E V Y N S L G I E V I I P N F L C C G A P M L D A G D V N R L K K N A E H N M K L I E E L V N K
G Y D I V V P I P T C A L M I K E Y H R V L D K K V P K V Y D S I E Y L Q K L K N E G K I E L N A K F D K T I Y Y H P P C H L K Y L Q V G L P G P R L L R T L G
A K V E I S N K G C S G I D G G W G L R N Y D T A R R V G S K M M E S F K Q S K A D V F M T E C P L A G L Q I E K A S N K R P L H P I Q L L K E A M K N G

Sequence #762 — Gene Saci 2281

ME ^{0.013} S G A K I F L E N L K E L G G V D K I F I V ^{0.005} S G ^{0.053} T D ^{0.018} Y A A F I E E K A K D G A L P E F I V V P H E I ^{0.039} T A ^{0.031} T A A A M G ^{0.004} Y ^{0.005} S L G G K ^{0.112} T G V A A V H ^{0.093} T I P G ^{0.014} T L N
 A L G I I V D A ^{0.005} Y ^{0.037} T ^{0.004} S R I P L I V I A G R ^{0.016} S P ^{0.045} Y ^{0.134} T E E G H E G ^{0.009} S R N L R I H W ^{0.047} T Q E A R D Q G ^{0.11} T V V R Q W I K W D F E I R K V E Q I P E A I A R G I Q L A ^{0.019} Y ^{0.019} S E
 P R G P V ^{0.115} Y ^{0.138} I ^{0.076} T I P R E V ^{0.3} S V E K ^{0.043} T Q ^{0.133} S R I ^{0.115} S R K L ^{0.389} S T F E P G A R L E D I R ^{0.215} T A Q R M I E E ^{0.042} S E R P I I L ^{0.138} T W R A G R R K E W F D E M K K F V D N ^{0.054} T G I P V V
 H ^{0.009} Y I G E V V N ^{0.003} Y E G D F G L ^{0.002} Y E F D I ^{0.022} T N ^{0.002} S D L V I V V E N E V P W I P K K V G K I N A K V I R V D V D P ^{0.01} S ^{0.096} Y ^{0.008} S Y I P F ^{0.01} Y G F P C D L C I Q ^{0.014} S ^{0.004} T ^{0.046} V ^{0.005} S D F F ^{0.015} S R
 L K V N E K K E W K E K V L E I K ^{0.164} S E Q D K K K I E E I E R L ^{0.227} S K G R D K I H P R L L ^{0.028} S ^{0.02} Y M I ^{0.015} T K L ^{0.011} S R E L L G D Q ^{0.053} Y A I F N E ^{0.005} Y P F N P K ^{0.011} Y A K L H F G Q ^{0.008} Y F
 S ^{0.003} D P A F G H L G W ^{0.005} S L G A ^{0.003} S F G F ^{0.002} S L A ^{0.015} T N K K V I A ^{0.044} T V G D G ^{0.004} S F I F G V P D A F ^{0.014} Y ^{0.005} Y A V R ^{0.004} S ^{0.001} Y G G D V ^{0.016} T V I I ^{0.016} Y D N G G W L A ^{0.003} S A E A ^{0.056} T A H V ^{0.034} Y P E G E A
 R K R Q N ^{0.028} Y P G A D F K R ^{0.018} Y N I G E G V R A ^{0.008} Y G G F ^{0.029} Y K V I E E V ^{0.028} S E L E ^{0.023} Y ^{0.015} S L K E A I L N R G L ^{0.007} S V L Q V I V E K ^{0.117} T R

Sequence #763 — Gene Saci 2284

M S E Q I T L R I A R K E D W Q Q I Y Q L Y S S L T D E D L Y L R Y F H L Y K P T E D D A K R I A D C L D H R T I V V E Y Q G K I I A E G S I Y K D G E F A L V
V H P E Y R Q L G L G T K L V L A L I S E A K K M G I S K V R F Y T L P E N T P M I K I G R K L G F N V K L N G D E V Y A E K D I E K E N V V L T L A

Sequence #764 — Gene Saci 2285

M I V E N K D G **Y** A I V K F D R P E K L N A L N L K **T** R N D M I **S** I L R K L N A D P **T** V K **S** V I L **T** G E G R G F C V G A D L **S** E M V E D I **Y** A D L K **Y** **T** F Q P I
I K E I R N P N K L **Y** I **S** A I N G V V A G A C L G I V L **S** **T** D F R I **S** R K D V K F V **T** A F Q R I G L **T** **S** D **T** G V A **Y** F L A K L V G V K **S** **Y** D L L I L G G E F **T** A
E D A E K W G L V K I **S** E D P L **S** D A V K L A Q R I **S** A G P F L **T** **Y** V A G K K M V N K I L F E D M D D F L E **Y** E A L L Q **S** E L G K **T** E D F K E G V Q **S** F I E K R
E P K **Y** K G R

Sequence #765 — Gene Saci 2286

M M **V** ^{0.071} **E** **T** ^{0.049} I K L E **T** ^{0.192} K D K K I G I I K L N R P D R L N A I N F K M V D D L V N A L D E L E K **S** ^{0.013} P V K V V I I **T** ^{0.054} G E G K A F **S** ^{0.008} A G A D V K E M V D **T** ^{0.077} P L K E I V L
K G H M P L W E K M R A F K K P V I A A V N G V A A G G L E L A M A C D I I I A **S** ^{0.008} **E** **S** ^{0.006} A K F G Q P E I N L G I I P G A G G **T** ^{0.209} Q R L **T** ^{0.185} **R** **T** ^{0.066} V G K **Y** ^{0.026} N A M K M V L
T ^{0.062} G E L I **S** ^{0.005} A K E A K D M G L V V K V V P D G **S** ^{0.017} L I D E A I R L A N E I A **S** ^{0.01} K P L F **S** ^{0.004} L I L A K E A V N R A L E **T** ^{0.016} N L Q Q G L D I E R R N F **Y** ^{0.016} V A L A **S** ^{0.037} E E A K
E G M K A F L E K R K P R W E E

Sequence #766 — Gene Saci 2287

M K Y E I I Y Y V I D I L D V S S K L T S K Y V I I G S G I A G Y H A L K E M L N I D P K A N I T L V T S D S S L P Y D R P P L S K E Y M R S E R D R D S L F F
 E K P E F Y Q R D N L K V M L N T T V E R L N V K E K F L T L S T G Q T L N F D K L L I T T G G K P R K L G I H G E N L N G V H Y L R T L S D A D S I K E D L K
 H G K K P V I V G A G F I G V E V A A S L R S L G F E P V V I E V K P F I W S T F V D E K V S E M V R K Y F E N K G V T F L L N E G V K E F E G S Q R V N S V I
 T S G G K K I E S S M V L V A V G I S P N V E I A N E L Q V N N G I L V D E H L K A K E D I Y V A G D V A N I L D P V S G K R R R I E H W N N A Y Y T G Q L A A
 R N M M G Q N E S Y N F L S T V W S D I F D L H I E S G G E T T G Y D D Y V M R G N F D K K S L N V I Y V K G G L V I G Y V A F N R D M S E L E A I N K L I Q D
 K V D I K S K V D K L K D E S F D I R K L S S

Sequence #767 — Gene Saci 2288

MRKVAVIGVGH **S** KFGKRDDV **S** IQELAW **E** **S** IKEAFEDAGV **T** QKDVN **T** VILG **S** **T** A **Y** RGV ELYPGPIVAE **Y** **S** GL **T** GKVP MRVE
AMCA **T** GLAAAL **T** A **Y** SLVA **S** GLAEIAMA VGV DKM **T** EVD **T** **S** **T** **S** LAVGGRG GN **Y** QWE **Y** HF **Y** G **T** **T** FP **T** **Y** **Y** AL **Y** A **T** RHMAVFG **T** **T**
EQMALV **S** VKAHK **Y** GA **S** NPKAHFQKPV **T** VEEVLK **S** RVI **S** WP IKLLDACPI **S** DG **S** A **T** AIFA **S** EEK VRELKID **S** PVWI **S** GVG
FAND **Y** A **Y** VARRGEWLGFK A **T** **T** LAAQDA **Y** KMADI **T** P N **S** IEVA **T** VHDAF **T** IA EIMG **Y** EDLGFVEK GKGGK FIEEGQ **S** EKGGK
VGVNLFGLK **S** KGHPLGA **T** GL **S** MI **Y** EI **T** KQLREEAG **S** LQQPLKR **Y** **T** GLVHNVGG **T** GH **Y** A **Y** VMVLR R

Sequence #768 — Gene Saci 2289

M N L R E **S** N F A K **Y** L H L K L E E I R E G **Y** V K V **S** A E V R E E N L N I H G G V H G **S** F I F A L A D **T** A F E **Y** I **S** N F **S** R N **S** V A L H M D I D F R R Q A **T** L G

E K I I A E G F E E **S** K G R **T** **T** **S** L **Y** R I V V K N E D G K I I A H V **T** A L A **Y** H L D **S** V K R E Q **S** N K G E N K V

Sequence #769 — Gene Saci 2292

M S K E N K Y E S I N F E E S P T Y P E Y N I Y P P I W D F D N E R A W Q L Y R R A K K E Q W D E D N I D W R R V K E W M S G L D R K Q R L A I A Y W Y G L L S
N F D H A T P V F A Y A V V K S F E H H L D T A V R G I L T T I T W D E N R H N L V C G L A I K N A M E G F P L N F K P Q D D L E K K A M L N V Q W V W W N G S
R Y W K A Y L D A Y K K Y A L D V L F T S F M M G E A A A T T V F T S M G K N A K N E E F S K I F K N T A V D E T R H Y A F T H L I M T Q N A P N M N E D R K K
L V T K Q I R A G F V F L S L I T Y K P P K E F W K L P P W F L E V H Q R M E D L A R D A G F Y I P T E K E K E E A W K D A V L R V G A S L K R Y G I K L P D M
P E L G I S G E E V K D I S E D D F I P V F

Sequence #770 — Gene Saci 2297

M K R G V S G L I K G K S T M D G A G V K L Y R V F G G M H T V E Y T D P F L L L D F F G S S N P S D Y L A G F P W H P H R G I E T V T L L Y K G K V E H Q D S
E G N K G V I Y P G Q S Q W M T A G S G I F H Q E M P R P L E G T E I A R Y N Q K P E D M Y G L Q L W V N L P S N M K M S D P V Y R D V K Q L P K E R F D F G E
V Q I L S G K F M G I D G P V R V K S P V D P T Y L D V L L D G E V K I P V K N G Y T V L V Y V V D G K I K T V N T P Y I D S G N L I I F D R E G D E V D L S G
N G R F I L I S G R P L N E P V Y W Y G P I V M N S E E Q I L E A L N D L R N G T F V R K K E P L H E D F

Sequence #771 — Gene Saci 2298

M S W V P G K E W I E K S N V Y Q Y M I S R N I P D L E K F L E F T Y N E A F W D D F V K N V L S L K F E K P Y T K T L D L S K G K Q W A K W F V D G K I N I A
D Q L E E S S K P L V R W M N E R G E S K T L T Y N Q V L Y E S K A V S S W L K R R Y K K G D R I G I Y L P M I P E I I P I F L G I I R A G M I V V P L F S G F
G K E P I R V R L E D S E M K A I F T T D L T T R K D K E I N P T E N L E D F Q V D K I V V E R G G K A K V N Y I S Y D E V K K T A G D G L E K T E S E D P L M
I I Y T S G T T G K P K G C V H V H M G F P I K A A A D I Y F Q F D M K N G E L L T W I T D L G W M M G P W L I F G G I L L R G Q I G L Y E G Y P G F D Q I S H
F T E D F K P G I L G L S A S L V R S F K G R E G K L Q V R L A G N T G E P I D P E S W N Y L Y R L I D H N P I I N Y S G G T E I S G G I L G N Y V I K E I K A
S S F N G P S P G T K A D V F D E S G K R A S P N T E G E L V V L S V W P G M T R G F W R D E K R Y L E T Y W S R W D N V V H G D L A Y Y D S H G Y F Y I V G
R S D D T I K V S G K R V G P A E I E S V I N A H Q K V L E S A C V G I P D P L K G E K I I C F T V T K E E I N E N E L I N F A Q D K L G K A F S P D R I F L V
K E L P K T R N A K I M R R L L R A I I L D K P L G D I S S L E N P S A V E E I R K V V K G

Sequence #772 — Gene Saci 2300

M R L L E P F K I A D V E L K N R V V M S P M I T N F G T P E G Y P T E T H I R Y F V R R S S L G L L I T E Y T Y V N K T D A R G S P N E L G L Y T D E F I P K
 F A R L T E A V H N H D T K I F V Q L V H V G R K T R K A L I W G N S P V A P S N I P L I D P V R E M T K D D I N R V I D D F V K A A E R A E K S G F D G I E L
 H G A H G Y L I A Q F L S P A T N K R E D E Y R D G V K F L E E I I K E V K R V V S I P V G L R I S A T E F D P Q G L N P E T V G K I A K R V E N L L D Y L H L
 S A G R D G P L G G S S S F Y Y K E P S Y L E E A K V I R N Q F G K T L L V A G S I L T V D D A E K V L E F A D A A V L A R Q I L A D P D W L I K V K D G G N I
 R P C I R C N Q L C R L M A T R E V R C D V N P E L G W E P V E L R K G E G E V N I V G G G V T G L E M A R V L A K R G F E V K L Y E K D S K L G G Q L N E Y K
 D P F K K A S F I K L L E Y Y E K E L K R L G V K V Y L N S Y I K S I D G H T I F A V P S Q R Q P I Y Q E Y K G E V I L V D S N L Y A Y Q D Y I F E W A K Q N E
 V Y I T R N L F K G L D R N R G Y L L E E K Y K E I G V R E W D N R T K P T V H I H D V R N S Q Q S I G Q S I S K A F W Y A V E Y D N S R K

Sequence #773 — Gene Saci 2301

M Y P D I R N D F V A F ^{0.018} T T D D D V W L M ^{0.094} S L K D M R P I R V ^{0.073} T D ^{0.227} T G V S I K P K I ^{0.061} S P D G K R I A F ^{0.02} T T L W L R ^{0.028} S G K Q G A D V F I V E D G R ^{0.004} S K R V ^{0.011} T T Y F ^{0.29} ^{0.023}
 N R P ^{0.049} T T W V A G W L ^{0.038} S D K E I M V I ^{0.002} T D ^{0.219} Y H ^{0.044} T P F N A W ^{0.055} T E A ^{0.02} Y K V N V N D E ^{0.012} S Y E P L P ^{0.004} Y G I V ^{0.024} S N I ^{0.02} S I K N E ^{0.002} T I V I A R G ^{0.009} Y Q D L P F W K G ^{0.012} Y R G ^{0.005} T T K ^{0.347}
 G E L W I ^{0.008} S F D A G E ^{0.074} T F K K F L ^{0.004} S L N G I I ^{0.003} S H P M I L N D R V ^{0.03} Y F L ^{0.008} S D H E ^{0.011} S V S N L ^{0.006} Y S V D M Q G E N L L K H ^{0.008} T N F ^{0.014} S D ^{0.002} Y Y C R N A ^{0.009} S S D G K R I V F Q R ^{0.017}
 A G D I ^{0.006} Y L F D P Q ^{0.025} T N N ^{0.022} T I K L E I E V F ^{0.224} T E R K K K R P K F V ^{0.012} S T M E ^{0.056} Y L ^{0.021} T D V D V N Q N ^{0.27} Y I G L I V R G K P F I M R P W E G P V V Q L G E K Q G V K ^{0.031} Y R E ^{0.016}
 L Q F L ^{0.005} S N E D I A V V D ^{0.009} S N E N K L L I L ^{0.02} S K D G K I K Q K V E K D F G R I E K I K A ^{0.049} S P D G K K L L I ^{0.012} S N N R L E L W L ^{0.012} Y D L E ^{0.017} S K K E K L I D K ^{0.015} S S Y G I ^{0.019} ^{0.038}
 I R E F D W H P ^{0.025} T G E W F ^{0.003} S Y A F P E G F R ^{0.025} T Q ^{0.018} S I K I A N V ^{0.007} S G N I I R V ^{0.002} T S ^{0.122} P Y A F D F ^{0.021} S P ^{0.008} S F D P D G K F L ^{0.015} Y F L ^{0.023} S A R ^{0.018} T L D P ^{0.029} S S ^{0.189} D K F I F N M ^{0.014} S F Q R ^{0.014} ^{0.004}
 V I K P ^{0.013} Y L V V L ^{0.005} S K A ^{0.013} Y S P F N Q P L E E V K H D K N V D P E G I Q ^{0.006} Y R V I P F P V E E D N ^{0.052} Y V K I ^{0.12} S G A K ^{0.005} S N K V L L ^{0.008} Y S Q P I R G Q L N P Q E D ^{0.019} T L G K I ^{0.005} ^{0.052}
 E I F D I E I K ^{0.01} S K E V F A E N V R N F V I ^{0.031} T K D G ^{0.005} S K V L L V F K D ^{0.006} S I R L V N A ^{0.012} T T K P D L ^{0.032} S T Q G I K G G V V D ^{0.004} T T R I K V L V D P E K E W R Q M L F E ^{0.02} T ^{0.035}
 W K L M K E N ^{0.02} Y W ^{0.004} S A E K L Q G W D ^{0.017} S V L D K ^{0.034} Y E K L L D R V ^{0.095} S T R ^{0.277} Y E L ^{0.033} S D V L K E M Q G E ^{0.014} T K ^{0.143} T S H ^{0.175} S Y E ^{0.018} T P ^{0.021} Y D F E ^{0.149} T A ^{0.261} E P L V I G G L G A E F N ^{0.215} Y D E Q ^{0.436}
 R E C F K I V K I ^{0.008} Y S G D P ^{0.016} T N E G E R ^{0.21} S P L K D P G V E L N E G D C I ^{0.077} Y S ^{0.029} I D G E K V R K G ^{0.019} S I N ^{0.004} S H F I N K D Q A I L E V L ^{0.029} T S ^{0.004} D G K N R ^{0.033} T V ^{0.008} S V R L M K D ^{0.111}
 E K ^{0.061} Y L M ^{0.021} Y R H W V E K N R E ^{0.029} Y V H K M ^{0.007} S D G K L G ^{0.113} Y V H V P D M M ^{0.015} Y Q G F A E F F R L F I ^{0.002} S E F ^{0.002} Y R Q G L I V D V R F N R G G F I ^{0.004} S G L I L Q R L L L R R E G
 Y D V P R N G E R I P F P ^{0.043} Y L ^{0.015} S S P K V I V A V ^{0.005} T N E N A G ^{0.011} S D G D I F ^{0.042} S Y L F K K ^{0.006} Y K I G I L I G R R ^{0.004} T W G G V I G I ^{0.064} S P R H L L V D K ^{0.004} T V V ^{0.013} T Q P E F A A I ^{0.021}
 F D E V G L G I E N ^{0.023} Y G V D P D I E V D N ^{0.014} Y P Q D ^{0.057} Y R ^{0.324} T G K D R Q L D K A I E I A L K Q M N ^{0.012} T

Sequence #774 — Gene Saci 2302

M L E ^{0.178} T I D L ^{0.035} T K I ^{0.006} Y G D G ^{0.027} T K A L D N L N F K ^{0.003} S N V K V L ^{0.003} S V L G R N G A G K ^{0.012} T ^{0.06} T L V R I L ^{0.012} S ^{0.012} T Q L L P ^{0.011} T ^{0.004} S G ^{0.053} T A R I N G L D I V K E A K K V R K L I ^{0.015} S ^{0.027} S I P
 Q E A R P V G M ^{0.081} S ^{0.036} S P ^{0.086} Y E H L L M Y L ^{0.033} T ^{0.112} A R G M ^{0.09} S ^{0.059} I S E A R E I ^{0.104} S R K ^{0.186} T L K D I G L W E V R D K P ^{0.303} T D E L ^{0.022} S G G M K R K I F V A M A I A ^{0.007} S N A E L I F L D E P ^{0.105} T
 V G L D P ^{0.023} Y ^{0.024} S R ^{0.056} T E V W ^{0.012} S I L K E A D ^{0.006} S K L V L ^{0.012} T ^{0.056} H ^{0.056} Y M E E A E E L ^{0.018} S D E I V L I H K G K L I ^{0.004} S K G ^{0.13} T V E D L L ^{0.013} S K F K D K V R V E G ^{0.053} T G E I K V G K M K I ^{0.012} S
^{0.008} Y V D R K E A E ^{0.054} T ^{0.016} Y I G K ^{0.005} Y I V K P I ^{0.154} T L E D L F I I ^{0.01} Y A G E G L E D

Sequence #775 — Gene Saci 2305

M I V ^{0.006} S E G I ^{0.012} T K K ^{0.003} Y G N R V V L N N F ^{0.001} S L ^{0.009} T I ^{0.009} T R G E I V ^{0.01} T L L G P N G A G K ^{0.029} T ^{0.056} T F V R I V L A L I R P ^{0.018} S G G K I E I F G K D P F K D K ^{0.007} S V F ^{0.02} S R L G ^{0.123} Y V Q E

L P N L P P F L ^{0.046} T G R Q V L L L ^{0.003} S A N I K G A R K D E V D E L L G V I G M V E N A D K Q I ^{0.005} S K ^{0.01} Y ^{0.006} S K G M V Q R I A I A E A L L G N P E I L I M D E P N I G I D P

I F N L N V R ^{0.005} S L L N K L K K ^{0.011} S G ^{0.079} T L I L M ^{0.044} T ^{0.01} S H D L E E V K K I A D R L I L I N K G N K M F E G ^{0.017} S ^{0.089} T E E L I K K F L G I R V I E A D N N A K E I L D K L ^{0.018} S ^{0.025} Y

V E E ^{0.011} Y ^{0.208} T A D G E K ^{0.007} Y ^{0.035} Y V K L R E D K R E D L L K E L V L N G V R V K ^{0.015} S ^{0.032} F Y L D N D I E R A ^{0.008} Y E R A V ^{0.066} S N A

Sequence #776 — Gene Saci 2306

M I G G P Q G L G V D T S A N V F S N A I A R A G Y Y L F G N R E Y Y S N I K G R H S Y F E V V F D E K P V R S I S S Y T N I L A T F D A E T L F Q H F T E V T
 D F V I Y G T D Y A T T N I D M V K S M E P E M A E Q I K Q L L S E N K M G Y T I K D V I T Y L K N K G I K V I E L D Y L D I L K K I A A E L K V Q V S V V E R
 A K N M A A V G A S I G L L G L P F D I L E N T I S S I F R N D L F V K M N V M A A K I G Y N T V N N T Y H L E V I N N V K P R I Q I D G N T I A A M G K I A G
 G L R F Q S Y Y P I T P A S D E S V I E A N Q N V D M I V E G N E L R K G G V V V V Q A E D E L A A I N M A I G A A L T G A R T S T A T S G P G F S L M A E G
 L S W A G M N E V P V V V T Y Y M R G A P S T G L P T R S G Q A D L K F A L N A G H G E F P R I V I A S G D H H E I F W D S I W A L N L A E R Y Q T P V I H I I
 E K A L A N A Y S L I D E D S I K G Q I K I D R G K L V K Q V G D R F N R F Q P S D D G I S P R V F L G Q S S I F Y T G D E H N E E G H I T E N S L N R T K M H
 E K R M K K L E T A D N E I P E E L R V N V V G D A D I V L I T W G S P K G A I L D A M S E L E K D G I K T M M V Q V K M F N P Y P T K L V K K L L E G K S K I
 V A V E N N Y Q A Q G A E V L A E K T G I F A T N Y V L K W S G R P I T R E E I I N S I K V I V E K N E K K V V L T G G A

Sequence #777 — Gene Saci 2311

M R I E K L E N K **Y** I D A V **Y** **S** I R E **S** K **S** F **S** E L L **S** R **S** **S** E L V L L I R L L **Y** K **S** G F R M P R K L G I E I **T** K F L **Y** **T** G E **S** E H L F N A V E M M R **S** **Y** A V

R V K F P R V D F **Y** L Q **T** F V **T** E I D I **T** L K K E R L A P R I E A Q A L

0.036 0.022 0.105 0.089 0.093 0.119 0.146 0.13 0.221 0.044 0.002 0.02 0.063 0.015 0.055 0.006 0.007 0.021

0.016 0.01 0.046 0.079

Sequence #778 — Gene Saci 2313

MIKIDVNMK **S** DEVC PVIK A IRLIG **S** ENKLI VLV **Y Y** LFDEGKGFNELIRL **T** KLN **S** K **T** L **S** K **T** L K D L E E **S** G I V **Y** R K V I G D R P F R
VK **Y** EL **T** D K G V K L K G I F E E L R K W I **S** D

0.017 0.017 0.008 0.003 0.007 0.001 0.043 0.01 0.102 0.013 0.103 0.024 0.037 0.012

Sequence #779 — Gene Saci 2316

M S A L M R L R N Y Y Y Y L F V V V G I I L I V F F I A F R S R P G F F L I A P T M L G A G I G L L A A G V I L T L N S F L K F K K T I Q M E G D S D N S I I A
 F L A D P K N L F E Q A K S R F G S F T L S T R Y F A M I G D V L Y K N R T L I Y L M I I D G R E Y A K L Y I T V K N R R V T F N L D Y K G P K L S E L K D Y L
 S T S I S K L R R R R V P S N V R I P A Y V T D F D D M P K V A P V S E K V K E Y E K L L E E K Y N V Y P L Y L L F V G C M A N Y D E I G V L G F L E Y L Y K Y
 G D N L T D V S P R V K I V D N V C C G F N K Y I S G D L S G A R N D V A Y I E K L L E N N S A E G I Y F L C P E G F Y V Y T R F G G K K G F F G Y D V I K P Y
 V R D K V Y G C T W A K K I G V D V D Y Q I T H K T T Q K E G E A K S V C P F I T Y K L G V L S V Y T R K V I E V N I G N L D K I L V D E V L N S I N T A S L N
 S A K E I A S N L S A L K T G N P D Y F V K L V S P I I R K K F I E N F R Q S L K E Y E T W I K S L D P M F L K T I V S K V Y E M S E K T L D E E K I D N L V K
 L I G K N A S Y E N R E I A G S D E F V K Y L K I A L K S V V E P K L I Q S L F D E L L V N G

Sequence #780 — Gene Saci 2317

M A L S K F T R K S N K D L E E V S Q Y K I P A T L Y P L T G I P E E V L N I S S E Y E V D I L S Q I P K E L V D Q L N N S G I E M K I P N P H V F I Y F D N D
 K G V H K Y V L V E P P L E E K S F V I Y K L L I K Y L E R Q F V G K H F D I G A S I R D F S N I Y R D Y V I E G S R G D Y T V L K P E A R V A L Y H I I R N L
 L G Y N V F T P L L A D Y K V E D I S V N G L N V P I Y V Y H R D Y E Y I P T N I I F Q K R M S V L N E E V D G E E F L N Q I T M R Y I S L S G R S I S I A S P
 I S D G M L P A G D R I A A T Y G R E V S A K G T S F V I R R F S E S P I T V L H L I K Q G V I S A D L V A Y L W Y A I D L K M S F M V I G T T G A G K T T V L
 N A L L N L V K D T M K I V S I E D I P E L K L A R D N W V Q L Y T R P V F G A L G K E I T L M D L L K L S L R Y R P D I I T V G E I R G E E S Y V L F Q A L S
 T G H G G A T T F H A Y D P E S A I K R L M N E P L N I P R D W I P M M N V V L T V R R I P F G L S F K R R V V E V D E V V S Y N K L K K V G S W D P N N D S H
 T F D L S K S E V L K S R I E E I G L N L D I V G D E I K R R A N Y L K M L S D I K Q I L D R P D A Y V F V K K Y I V L Y S I K P D E A I K E V Q R M S V A K V

Sequence #781 — Gene Saci 2322

M Y Y N K I R V I G N S S L A D R I I K L L N E I G Y F I V N E S E N L R V V V G P L S R A I K F A N K P V I L V T E N G E V V I P V N R E E S G V S L I A S L
I S D M I G G N L I L T S K M A E K G V Y S V Q E F S W V N G L Y W T N S E K V K E L N K K I L K S S K L U V Y Y D K K I I L P E G Y S S V E K P C S A D I V V
G D Y D C N S L V L K P Y K V V M G L K Y Y S T I P P E V I L Y S I R L T L K S I Y I L N D R V D V I V S P V K D R N I I N I S T L L G A E L F T I Y G D T C E
S M L L Q Y G G K I L L K G V K R A F G L E T C L G V V K V E K G I Q

Sequence #782 — Gene Saci 2325

M F T K S V E V L D T T L R D G A Q T A N I S F T L N D K I R I A L L L D E L G V D Y I E G G W P S S N P K D E E F F K E I K K Y K L T K A R I A A F G S T R K
K E S T A K E D Q S L N S I I K A D V D V G V L F G K S W S L H V T D V L K I S L E E N L D I I Y D S V N Y L K S H G L R V V Y D A E H F Y Q G Y K E N R E Y A
L K A V K T A E E A G A D V I V L C D T N G G T L P H E V Y N I T K D V V N H V K V K I G L H M H N D S G G A V A N T V M G V V A G A R H V Q G T I N G I G E R
T G N A D L I Q V I P N I M L K L G L N S L K G N E S L K K L K E V S R V V E I I G V H P N P Y Q P Y V G D F A F T H K A G V H A D A V M K V T R A Y E H I D
P T L V G N N R R F V I S E V A G S S N V I Y Y L E K L G I K V D K K D P R V R N A V Q R I K E L E N R G Y S F D L A P A S A V L V A L R D L G M Y R D L I K V
E Y W K V M N E K E L A I A I V K V N G Q L E V A E G V G P V H S V D I A L R K A L Q K V Y P Q I N K V K L T D Y R V I L P G E I K N T E S V V R V T I E F T D
G E K N W R T E G V S T S V I E A S V I A L I D G L D Y Y L Q T E K L I K S E V I N N

Sequence #783 — Gene Saci 2326

M Q W D P G G A T E S R S K L Y I Y L R F L R I E Q V F F S L P M A Y M G A F L A I R E I P P I Q V L I L M F F S L F F L R T A G M T N D N L A D R E I D A M N
P R T K S R P L V T G K I T V R E A K L L I T I S L I G F F I T A Y L I N L Y A L I F A P I V A L I V M S Y P Y M K R Y T A F A N Y H L A S I Q G L A V F S G A
V A S L G L Y A K S F T Q L V T G I P W L F V I S T V F W A V G F D L Y N H I P D A D F D K K M G L H S F A V L L G D R A L M F A G L N Q L I S V L L A L F G D
I Q F N L G I I A Y I A T I L H G L I M G Y A Y Y S A T R G N F G R A F Y Y N I Y S S I V L G I G I I I D I I V

Sequence #784 — Gene Saci 2328

M W I R G V V D I P ^{0.004}Y I F V ^{0.004}Y G ^{0.003}S L R F G F E L N H F L K N ^{0.004}S R F V G L G L V E G ^{0.026}Y K M ^{0.022}Y D L G ^{0.008}S ^{0.012}Y P G V V R G D ^{0.022}S V V H G E V ^{0.081}Y E I N D E L L N V L D E V E D

^{0.049}Y R G ^{0.089}S P D D L ^{0.099}Y I R E K V R V ^{0.005}Y F D D K R K ^{0.001}Y ^{0.004}Y L D N V ^{0.036}Y I ^{0.007}Y V ^{0.002}Y N Q D I ^{0.023}T G R D V I V D G D ^{0.047}Y ^{0.003}S K ^{0.007}Y V G ^{0.015}T ^{0.002}S A I F N ^{0.007}Y F A ^{0.009}Y A E N ^{0.016}T N D E I L K A R G V ^{0.09}T K

I F K K I P V ^{0.003}Y L P D ^{0.012}Y K I V F N V E C K W G ^{0.002}Y C A N L ^{0.069}T K ^{0.003}Y E N G R V C G ^{0.002}Y L L M I L E D E L N L L D ^{0.003}S A E K H L V R ^{0.003}Y I R E V F K V ^{0.027}Y D N N G K E ^{0.015}Y ^{0.01}Y A C A

^{0.017}Y V A P N I ^{0.004}S G E H N P ^{0.107}T D E ^{0.082}Y K R ^{0.012}Y I L E G L K G H C I ^{0.005}S ^{0.004}S G L

Sequence #785 — Gene Saci 2336

M P L I A L **T** P **S** G E I A I K **S** **S** R **S** R R R F E R I L I K N I G K V I R V K **S** **Y** K L D Q G I I I L N **T** D D D **Y** **S** K L **S** K V F G I **S** K **Y** F E V **Y** E F **S** **S** **S** I Q D
 I V N F V K D R F N Q **T** V V K G K K F A V K V K R V G N H **S** F N **S** M D V A R E I G N A L **Y** P **Y** **S** L G V D L E N P D V K I N L I L R Q D **Y** G **Y** V **Y** **T** **T** E N D G P R G
 F P V G **S** **T** G K **T** V V L F **S** G G F D **S** P V A **T** W M L M K R G V R P I L L N F E L G G K V Q R D L V L K E V D V L K Q W **S** **S** N N D I N V **Y** F I N G L D V **T** **S** K L V
 N A E P **S** L R I L L L K R I M **Y** N **T** A R V L A N K L R A **Y** **S** I **T** **T** G E **S** L **S** Q V **S** **S** Q **T** M I N L **Y** V **T** E **Y** D I D L P V F R P L I G F D K E E I I Q M **S** R K I G **T**
 F E **Y** **S** **S** K L P E **Y** C V I **S** N K **S** I V K **S** Q L D K V L E E E R K I E I N **Y** E E L I K K A E L V R I

Sequence #786 — Gene Saci 2344

M T S Q L E P S F G V E I I P V E G E L N V G P Q H P G S G H M R I Y V K L N G D I I E D V D L D V G Y V H R S V E K L S E V R N Y M H L I P L I E R P A I L D
S I H M N L G Y I M A V E K I L N V D V P E R A Q Y L R T L V A E V N R I A S H L Y G M G I L A I F L G H S T G F M W G F G D R E V W V E I L Q A I T G A R V T
N S Y I I P G G V R R D L T P A I K E M I E K A I V Y Q R K K I Q D W Y K I L V N N P N I R A R L E N V G V M S K E N A I K W G A V G P N L R A S G V Y Y D V R
K I E P Y G A Y D K V D F E I P M Y K E G D A Y A R T L V R F E E M E Q S M R I L E Q V I K Q I P D G N I L S D R F F K Q I P P V R L K K W W E G Q R R V V F P
G Y A S F R P P K G E A I S R V E A G R G E L A Y Y I I S D G S P K P Y R L R M I T P S Y R L I Y V F K E L C K G A R Y A D L V A I Y G S L D Y F P P E A D R

Sequence #787 — Gene Saci 2345

M S A P N D N L A K I I Q D L N S K F K V N G K V E G T N R A T I I V D K S Q I L E I A N Y L K Q I G F D H V K A V T G I D Y P E T E E F E V V Y H I S S Y S D
L A L A K V I V A L R E K T S Y K D P V F P S L F K V W E S V W T G E R E T Y E M L G I V F E G H P E L R R M F L D E D F E G V Y P L R K S Y K L K Q E G V F V
D K P A

Sequence #788 — Gene Saci 2349

M I N D A K F ^{0.001} Y D K L I A F F F E ^{0.056} T E N C ^{0.029} T N C E D L ^{0.01} Y N K I L K L T I ^{0.009} S Q K ^{0.003} Y Y F L R A N A N E ^{0.006} Y L F ^{0.008} Y T V R F ^{0.014} S R G V V P ^{0.004} S I G I I N ^{0.054} T S G E L I G I I E ^{0.003} S

E N I D ^{0.005} Y I Q A K L R E I ^{0.006} Y D N R N K I K G F K I D K I ^{0.095} T ^{0.067} T ^{0.079} R E I N ^{0.053} T A D F ^{0.042} Y E V V N ^{0.006} Y A L D G G Q L D F R G A Q F L R F ^{0.018} Y A K I H K E ^{0.032} Y E K V L E R A L P L

D P F A E ^{0.058} Y V L ^{0.028} T G K K P D V E H ^{0.015} Y ^{0.04} Y ^{0.052} T ^{0.004} S ^{0.007} T L A I ^{0.002} S ^{0.013} T I L G L F N D D V I ^{0.004} S K L L E R I N ^{0.027} S D G ^{0.025} S V ^{0.03} Y R ^{0.027} S I R K E V N G L L I D Q A L V G Q A L L R V ^{0.004} Y K K ^{0.051} T W

D Q K ^{0.939} Y L D L A M K V ^{0.021} Y ^{0.082} T ^{0.003} Y I K D N L K G D L G F R D I K P L D E V ^{0.164} T K E E F ^{0.051} Y E P I ^{0.009} S N ^{0.009} S E ^{0.044} T A I F L ^{0.003} S Q L W ^{0.002} S V N N D E ^{0.052} T ^{0.066} Y L L E A K K A M E A ^{0.007} S ^{0.039} Y ^{0.059} T I G G

N D I R V I P R V A I A ^{0.005} Y L K I N E L I K ^{0.04} S R E E I K D D I R V E V M K E I ^{0.016} S C E D K D A V V ^{0.011} Y K G K C V K I D E V Q ^{0.015} S E L

Sequence #789 — Gene Saci 2350

M I D E L R H S L K G K K V V N N C I G V A Y T S V M L S D G S L G I S H T I T E G E N S L C G E V F G N D A V S L V E S L K N S P I E R S V S V A I L N S V G
N I E G Y E N G D P I D V L E G N K L C V F G Y S P G T V T N R F V S V T I Y D F W N P P Q R S F D N V T V K P F S S F T S E T C D S T V I F G S A L V A G N I
E K I L A S I S T D H L I L S G I S S V Y A P I T L K K Y G F D Y I G K V I A V D K I K A L R V V C E G G L A K H L S R F T K K I Y V K L

Sequence #790 — Gene Saci 2352

M S M K K I V S D R V R R G T L R L L V L S S L A E K P M Y L Y E I I K S I E T K A E G F Y R P S T G S I Y P V L R S L A R D G Y I I I Q E R D G K K I Y S L T
D K G V K K V E E I K I E I E S L F T R D P L K R R V I D L L F N I G L T V H I N R K K I D D K V L N Q L I T D L E K C M A L V E E A I K S K G E K T V T Q V

0.094 0.069 0.371 0.016 0.016 0.021 0.089 0.015 0.09 0.086 0.034 0.245 0.02 0.008 0.013 0.08 0.017 0.073 0.006 0.025 0.023 0.178 0.1 0.018 0.029 0.074

Sequence #791 — Gene Saci 2362

M P M D S V K I L G G R E V G R A A I E V S K G D S A I I L D Y G V N F D Q N D N P N L P L Q E T P N R V K G F V V S H S H L D H V G S L P L Y Q I S G S Y P
V F G T M M T K L I T E L M L K D F L K L S G A R L P F E W M E V K R T M D N F R T V N Y Y Q E F E I D T F K V E L G N A G H I P G S S M I K V K T D K H N I V
Y T G D T N V I N T K L V G P A D L N F L S D A D V L V I E S T Y G K Y N H P K R E E V E E E F Y N S V R E V V E G G V V L V P S F S L A R S Q E I L A L L A
D K K F D Y P V Y Y D G M V K E I T E L M I Q N P E F I N N Y D A L K R A H K F Y R Y V N G W N D R N K A I K G E G A I V S S A G M L K G G P A V Y Y F K K I A
E S P R N G V F L V S Y Q A E N T P G R R L L E T G K F D E Y S P M L K A R F Q I F D F S S H A G K S Q L L E M I K S S K K L E K V I L V H G D P S S S A L A
N E I K E K I G V D V E V P E N G K E I N L

Sequence #792 — Gene Saci 2363

M I I L L I H A ^{0.011}S K F ^{0.027}S F ^{0.084}S I K D K A I R E P E E P ^{0.175}T I P ^{0.083}S L E K E N V L V A F ^{0.044}T ^{0.152}T V E K G D D E K I I E R A V K E I G K V F ^{0.011}S D V K A ^{0.007}S ^{0.012}S I I I ^{0.007}Y P ^{0.023}Y A H L ^{0.007}S

D N L E K P D I A I K I L R Q L E E E ^{0.2}T K K V ^{0.131}T M E V ^{0.018}S R A P F G W ^{0.021}Y K Q F ^{0.009}Y I N C ^{0.026}Y G H P L ^{0.015}S E L ^{0.014}S K R I R H E E D ^{0.135}Y E K ^{0.065}S E E I K V C E K F G F P ^{0.013}S ^{0.019}S P H ^{0.006}S

V F M R N A ^{0.016}T I E ^{0.027}Y L K N L V K P N F I ^{0.107}T E G D G I P E E G E F R I I ^{0.032}Y ^{0.009}S ^{0.006}S ^{0.102}T Q G R R L P C V N E E P K I K V R I K N G V D G I E K F E D ^{0.004}S K N ^{0.006}S ^{0.016}Y V I V N R

^{0.055}T K D ^{0.027}Y V E I D V N L L ^{0.019}T ^{0.005}Y ^{0.007}Y F L ^{0.012}Y N A ^{0.002}S ^{0.028}T K A P P M L P L W M N P I Q V R I L P V K ^{0.005}S D ^{0.017}Y L Q D A F K I A ^{0.006}S ^{0.007}Y I K A R V D V D D I N D N L G ^{0.002}S K I A R A G K E

W I P F V V L L G E R E V K ^{0.192}T ^{0.028}G ^{0.055}S L ^{0.053}T I K L R E K N E Q R ^{0.023}S ^{0.337}Y T I D E L N E E I K R G D P L M L P ^{0.037}S ^{0.1}T L P L Q L ^{0.052}S K R ^{0.067}S K K N V ^{0.114}T L Q

Sequence #793 — Gene Saci 2366

M Q A I I L A G G K G E G L L P ^{0.01}Y ^{0.041}T E R V Q K E ^{0.013}T I N I L G K M I L ^{0.01}S ^{0.008}Y ^{0.01}S I ^{0.006}S G L K K A G I N D F V V V ^{0.093}T ^{0.16}T D R G K K L I E D E L E K L N V ^{0.009}S F E V I N Q H R E

G I ^{0.017}S ^{0.026}G A I K D G L E K ^{0.012}S D D D N I V I A F G D I V A P E E F ^{0.002}Y ^{0.002}V N L V N A F ^{0.006}S V ^{0.002}S G ^{0.002}S E I V I P L V P V ^{0.002}S K G I Q ^{0.067}T ^{0.016}Y G L A K I ^{0.042}T ^{0.029}T E G L E V V K E G ^{0.006}S ^{0.024}T L A

L A G A ^{0.003}Y I I K N E ^{0.059}T F E D F I D ^{0.007}Y L N Q R K ^{0.007}S K I K ^{0.001}Y F I W ^{0.004}S G D W F D I G ^{0.001}Y P E D I I G A L E A L L ^{0.006}S K H E ^{0.069}T V I ^{0.016}S ^{0.017}S ^{0.013}S ^{0.017}S E I ^{0.008}S ^{0.009}K T A I I G K K V I I D N N

A V I D D ^{0.042}Y A V V K G P A ^{0.012}Y I G E N A ^{0.027}Y I G N F ^{0.004}S L V R D ^{0.021}Y ^{0.01}S ^{0.013}S V E R G A K V G A ^{0.022}Y C E I V H ^{0.005}S ^{0.005}S I Q P G A E I G ^{0.014}S K ^{0.008}S ^{0.013}Y L ^{0.024}T ^{0.03}Y ^{0.027}S I I G ^{0.015}S ^{0.009}S N ^{0.009}S K I G ^{0.018}S N V I M ^{0.012}S

^{0.009}S ^{0.005}Y P A N V I R G R V E K L G A L V ^{0.022}S P D K E V E H G ^{0.064}S I L R P G ^{0.051}T K I

Sequence #794 — Gene Saci 2371

MED ^{0.001}Y W I K I F E ^{0.005}S D L ^{0.081}Y I N E M L K I W E E G E K W A K W I D E V V K K ^{0.001}Y K I D A R N I L D V P C G I G R V ^{0.006}S ^{0.003}Y ^{0.002}Y L ^{0.021}T K L N ^{0.006}Y N V ^{0.004}S G I D I ^{0.007}S E K M I N ^{0.051}T A
K E R V K K G N F I K G D M R H L ^{0.015}S ^{0.036}T L I R D K F D I I L N I F N ^{0.004}S L G ^{0.004}Y ^{0.015}Y E E E D D L R I L N E F R A V L K Q G G L L I V N L E N R D ^{0.021}Y A I ^{0.023}Y N K P E V V H ^{0.005}S
^{0.013}Y V P P ^{0.069}V V I I D K N D F D P F ^{0.016}S ^{0.025}S R L K V ^{0.16}T R ^{0.049}S ^{0.007}Y L K D G K E I E R I ^{0.082}T ^{0.005}S Q R L ^{0.018}Y ^{0.018}S L H E I V R L L ^{0.031}T K ^{0.007}S G F E I L E V L ^{0.008}S ^{0.007}G ^{0.006}Y S W K R F E V ^{0.066}T D P Q M A I
I A K P I

Sequence #795 — Gene Saci 2373

M F Y E I A S E G L A L G W K A N D I K S I T V N L I I M W Y T G S G D S G K T R L P S G G E V W K D E D L V V A L G D L D E L N S S L G V V I S L Y P D I K E
V L E A V Q F D I F E L S S E I A G F E M N F D E E K V K H V E K L I E E Y S K T L E P I K N F V L P G G H I A S S S L H L S R A I C R R A E R S I V R L L K T
N R A K Q I H E K Y L N R L S T L L F I L A L Y V N K K T N N P N V L W R K S I R H

0.004 0.005 0.002 0.02 0.001 0.086 0.006 0.005 0.178 0.044 0.005 0.006 0.005 0.009
0.013 0.012 0.031 0.016 0.045 0.007 0.008 0.014 0.026 0.047 0.049
0.003 0.005 0.014 0.001 0.083 0.014

Sequence #796 — Gene Saci 2375

M V M L **Y** K E P Q D G E P I K F E K G K W V V P N K P I I L **Y** I E G D G I G P E I **T** N **S** A I R V V N K A V E K A **Y** K **S** **S** R E I K W L E V **Y** A G E K A N K I **T** G D
 R F P K E **T** Q D M L L K **Y** R V V L K G P L E **T** P I G K G W K **S** I N V A I R L M L D L **Y** A N I R P V K **Y** I E G L E **S** P L K H P E K V D M I I F R E N **T** D D L **Y** R G
 I E F P **Y** D **S** E E A K K I R K F L R E E L K V D I E D D **T** G I G L K V M **S** K F K **T** Q R I **T** R L A L N **Y** A L Q N **S** R K K V **T** V M H K G N V M K **Y** **T** E G **S** F R E W A
Y E V A L N E **Y** R D K I V **T** E E E I N R G V N **S** E G K V I L N D R I A D N M L Q Q I I I R P D E **Y** D I I L A P N V N G D **Y** I **S** D A A G A L I G N I G M L G G A N
 I G D **T** G G M F E A I H G **T** A P K **Y** A G K N V A N P **T** G I I K **S** C E L M L **Y** F M G W **S** E A A R L I E K A I N E **S** I K Q K K V **T** Q D I A R **Y** L G I **T** P L G **T** K E **Y**
T D **T** L V Q I M D **S** F