

Figure S1

ATGGATGTTCTTGTTGGAAGATAGTTCTCTTGCTCGTCCGGAGTCATAAGATTTACAGAA
M D V P C W K I V L L L V G V I R F T E
CCGACCGACGTTCTACC AAATGAACTGGCTTTAGTCGAATAGAAAA GCAACGATACGAT
P T D V L P N E T G F S R I E K Q R Y D
GGCTGGTACAACAATTTGGCTCATCCAGATTGGGGATCTGTTGACAGT CACCTGGTCCGA
G V Y N N L A H P D V G S V D S H L V R
AAGGCACCCCTGCATA TTCCGATGGGGTTTATGCCTTAGCAGGTAT CAACCGACCATCA
K A P P A Y S D G V Y A L A G I N R P S
CCGCGACGATTGATGCG TCTTTTTATGCGGGTCAAGATGGCTTAGG CTCCAAAACAAAT
P R R L S R L F M R G Q D G L G S K T N
AGGACCGCCCTACTTGC ATTCTTCGGGCAGGTGGTAGCCAACGAAAT CGTTATGGCTTCC
R T A L L A F F Q G V V A N E I V N A S
GAATCTGGTTGTCCCAT AGAAATGCACTGAATTGACATTGAAAAATG CGATGATATGTAC
E S G C P I E M H R I D I E K C D D M Y
GACAAAGAATGTCGAGG AAATCGTTATATTCCATTCTTGAGAGCGGC ATATGATCGAGAT
D K E C R G N R Y I P F L R A A Y D R D
ACTGGACAGAGCCCAAA TGCTCCAAGAGAACAGGTGAACCAAATGACT GCTTGGATTGAT
T G Q S P N A P R E C E N Q M T A V I D
GGCAGTTTCATCTATAG TACGTCCGAGGCATGGCTGAATGCTATGCG ATCATTCCAGAAT
G S F I Y S T S E A V L N A M R S F Q N
GGTTCGTTGCTGACCGA GAAGGAAGGTGCGCATGCCAATCAGGAACAC AATGCGAGTTCCA

G S L L T E K E G R N P I R N T M R V P
CTTTTCAATCATCCACT ACCGCATGTGATGAGGACCTTAAGTCCGGA GCGATTATTCTTA
L F N H P L P H V M R T L S P E R L F L
CTCGGTGACCCGCGAAC TAATCAAATCCTGCTCTTCTCTCATTCCGG GATCCTGTTCCCTC
L G D P R T N C N P A L L S F G I L F L
CGATGGCATAAACAATTT GCCGAAACGTATTAACGCCAACATCCCGA CTGGAGTGACGAA
R V H N T L A K R I K R Q H P D W S D E
GACATATTCAGCGAAT CCGTCCGATTGTTATAGCTAGTCTTCAAAA TATAATTTTTTAT
D I F C R T R R I V I A S L Q N I I F N
GAATATTTGCCGGAATT TTTGGGCTCTAAAATGCCTGAATATACGGGGTACAACCAAGAT
E Y L P E F L G S K M P E Y T G Y N Q D
GTCCATCCTGGCGTTGG TCATCTTTTCCAAGCGGCAGCTTTCCGATT TGGTCATACCATG
V H P G V G H L F Q A A A F R F G H T N
ATACCACCAGGAATTTA CAGACGTGACGCTAAGTGCAACTTTAGGAA AACGTCCATGGGG
I P P G I Y R R D A K C N F R K T S N G
TATCCGGCTATGCGTCT GTGTTCCGACTTGGTGGGATTGCAATGACTT TCTGGCCAAAGTCA
Y P A N R L C S T W V D S N D F L A K S
TCAGTCGAAGAGATCCT TATGGGTCTTTCATCGCAAATTTCCGAGCGA GAGGCATCCGGTA
S V E E I L M G L S S Q I S E R E D P V
CTATGCTCCGATGTGCG CGATAAGCTGTTCCGGTCCGATGGAGTTACAC AAGAAGAGATTTG
L C S D V R D K L F G P M E F T R R D L
GGAGCTTTGAACATTAT GCGAGGAAGAGATAATGGACTCCCTGATTA T AACACAGCACGT

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

CATAAAGGATCTGTGGATAAGAT GATAGCGCGGGAATGGTTGCATGCTAATCACAAGCGA
H K G S V D K M I A R E V L H A N H K R
TTGGTTACTGTGAAATTTGGTCC TGAAGCTGCAATATACACAGTCGACCGTAAAGGCGAG
L V T V K F G P E A A I Y T V D R K G E
AAATTAAGGACATTTTGTGAA AAATGTGATTTGGTCACCGTGAAGAATCTCAAATA
K L R T F C L K N V D L V T V E E S Q I
ACAAATTTAAGGAAGAAACCATA TCTCCTGATAAGAATTCATAACGATCATGATTTGGTG
T N L R K K P Y L L I R I H N D H D L V
CTTGAATTAGATTCAGTGAATTC TCGAAGGAAGTTTATCAAGAAATTAGAAGATTTCCCTG
L E L D S V N S R R K F I K K L E D F L
CTGCTACATAAAGAGAGTTGAC TGTAATTGAGGTTCCCTAAAGACATCATGCTGACTCGT
L L H K R E L T V I E V P K D I M L T R
GCGGAAACTCGAGAAAGAAGACA AAAGCGTCTGGAATACTTCTTCAGAGAAGCATATGCC
A E T R E R R Q K R L E Y F F R E A Y A
CTTACCTTCGGCCCTAAAACCTGG CGAGCGCAGACGCCGTTTCCAGACACCTCAGCCGATGGC
L T F G L K P G E R R R R S D T S A D G
GAAGTCATGACCGTCATGCCAAC TAGCCTTTCCACTGCCGAATTCGCCGCGAGCGCTCGGG
E V N T V N R T S L S T A E F A A A L G
ATGAAATCAAACGACATGTTTGT TCGAAAAATGTTCAATATTGTTGACAAGGATCAAGAC
M K S N D N F V R K N F N I V D K D Q D
GGACGAATATCCTTCCAAGAGTT CCTGGAGACTGTAGTACTATTTTCACGAGCGAAGACC
G R I S F Q E F L E T V V L F S R C K T
GAGGATAAGTTCCGAATCATTTT TGATATGTGTGATAATGATCGGAATGGAGTAATAGAC

E D K L R I I F D N C D N D R N G V I D
AAGGAAGAAGCTGAGCGAAATGAT GCGATCCTTGGTAGAGATTGCAAGAACCCTAGTCTT
K E E L S E M M R S L V E I A R T T S L
AGGGATGACCAGGTTACCGAGCT CATTGACGGAATGTTCCAGGATGTAGGCTTGGAGCAT
R D D Q V T E L I D G N F Q D V G L E H
AAGAACCATTTGACTTACCAAGA CTTTAAGCTTATGATGAAGGAGTATAAGGGAGACTTT
K N H L T Y Q D F K L M N K E Y K G D F
GTCGCGATCGGGCTGGATTGCAA AGGAGCGAAACAAAATTTCTTGGATACATCAACGAAT
V A I G L D C K G A K Q N F L D T S T N
ATCGCACGAATGACGTCGTTTCA TATTGAACCTGTGCAGGATATTCATCGACATTGGCTG
I A R N T S F H I E P V Q D I H R H V L
CAGAAGCAATGGGATAGTTACAC AACTTTCTTGGAAAGAGAATAGACAAAATATCTTTTAT
Q K C V D S Y T T F L E E N R Q N I F Y
TTATTTTTATTTTATGTGATCAC GATCGTACTATTTGTTGAGAGGTTTCATACATTACTCC
L F L F Y V I T I V L F V E R F I H Y S
TTTATGGCTGAGCATACTGATCT GAGGCATATTATGGGAGTGGGCATTGCGATAACTCGT
F M A E H T D L R H I M G V G I A I T R
GGATCGGCTGCATCACTATCATT TTGCTACTCTCTGTTACTGCTAACAATGTCGAGAAAT
G S A A S L S F C Y S L L L L T N S R N
CTAATAACAAAAGCTGAAAGAGTT CCCGATCCAACAATACATCCCCTTGGACTCTCATATC
L I T K L K E F P I Q Q Y I P L D S H I
CAGTTCATAAAAATCGCCGCTGT TACAGCCCTGTTTTCTCGCTCCTCCATACAGTCGGT
Q F H K I A A C T A F L F S L L H T V G
CACATAGTGAATTTCTATCATGT TTCGACCCAATCCGTTGAAAATCTTCACTGCCTCACA
H I V N F Y H V S T Q S V E N L H C L T
AGAGAAGTTCACTTCGCGTCCGA CTATAAGCCTGATCTGACCTTCTGGTTGTTCCAAACA

R E V H F A S D Y K P D L T F W L F Q T
GTTACTGGTCTAACCGGTGTCCT TCTCTTCATCATAATGGCAGCGATCTTCGTTTTCGCC
V T G L T G V L L F I I N A A I F V F A
CATCCGACCATCAGGAAGAAGGC ATACAAATCTTCTGGAACGTTTCATGCTCTATATATC
H P T I R K K A Y K F F V N V H A L Y I
CTGCTTTATATTTTGTGTTTGT TCATGGGCTGGCGAGACTTACAGGACCACCGAGATTC
L L Y I L C L I H G L A R L T G P P R F
TGGATGTTCTTCATTGGACCGGG AATTATTTACACCTTGGATAAGATCGTCTCACTACGT
W M F F I G P G I I Y T L D K I V S L R
ACAAAATACATGGCTCTAGACGT CATGGAAACCGATCTTCTCCCATCCGACGTGATCAAA
T K Y N A L D V N E T D L L P S D V I K
AT CAAGTTCTACCGTCCGCCCAATCTAAAATACCTCTCCGGACAATGGGTTCCGTCTATCC
I K F Y R P P N L K Y L S G Q W V R L S
TG CACGGCCTTGGACCAACCGAAATGCATAGCTTTACTCTTACATCTGCTCCACATGAA
C T A L R P T E N H S F T L T S A P H E
AA CTTCCTAAGCTGCCATATCAAGGCGCAAGGACCATGGACATGGAA GCTTCGGAAGCTAT
N F L S C H I K A C G P W T W K L R N Y
TT CGATCCGTGCAACTACAACCCGGAGGATCAACCGAAAATCCGTAT CGAAGGTCCCTTT
F D P C N Y N P E D Q F K I R I E G P F
GG TCTCACTCCATATGCATCGATTCTCAACGATTTGGTATTTGGAAGTAGCACGAATCGG
G V T P Y A S I L N D L V F G T S T N R
TA CTCAGGAGTGGCTTGAAGAAGGTCTACTTCTTGTGGATTTGTCCGTCCGATAAGCAT
Y S G V A C K K V Y F L W I C P S H K H
TT CGAATGGTTCATCGATGTTTTGCGCCATGTTGAGAAGAAGGATGT TACCAATGTATTA
F E W F I D V L R D V E K K D V T N V L
GA AATTCATATTTTCATAACACAATTTTCCATAAATTCGATTTAAGGACTACAATGCTG

E I H I F I T Q F F H K F D L R T T N L
TA TATTTGTGAAAACCACTTCCAGAGGTTGGCTAAAACCTTCAATATTTACGGGACTTAAG
Y I C E N H F Q R L A K T S I F T G L K
GC TGTTAACCATTTTGGACGCCCTGATATGTCGAGCTTCTCAAGTTTCTTCCAGAAGAAA
A V N H F G R P D N S S F L K F V Q K K
CA TTCATATGTCTCAAAAATTTGGTGTATTCTCCTGTGGACCGCGCCC CTTAACCAAGAGT
H S Y V S K I G V F S C G P R P L T K S
GT AATGTCCGCATGTGATGAAGTGAACAAAGGACCGCAAGTTACCATATTTCAATCACCAT
V M S A C D E V N K G R K R P Y F I H H
TT CGAGAAGCTTTGGTTAG
F E N F G

