

*FTSH\_THEMEA\_DTM*  $\alpha 1$   $\eta 1$   $\eta 2$   $\eta 3$   $\eta 4$

FTSH\_THEMEA\_DTM 147 ..... A M Y K P S G N K R V T F K R D V G G A E E A I E E L K E V V E F  
 FTSH\_BACSU 114 T T I I P F V I I F I L F F F L L N Q A Q G G S R V M N F G K S K A K L Y T E E K K R V K F R D V A G A D E E K Q E L V E V V E F  
 FTSH\_ECOLI 109 M L L L I G V W I F F M R Q M Q G G G G K . . . A M S F G K S K A R M L T E D Q I K T T F A D V A G C D E A K E E V A L E V E Y  
 O80860\_ARATH 180 A L L I G G L F L L S R R S G G G M G G P G G P G N P L Q F G Q S K A K F Q M E P N T G V T F D V A G V D E A K Q D F M E V V E F  
 RCA1\_YEAST 301 T V L M I A G I I W L T R R S A Q A A G G S R G G I F L S R S K A K F N T E T D V K I K F R D V A G C D E A K E E I M E F V S F

*FTSH\_THEMEA\_DTM*  $\alpha 2$   $\beta 1$   $\alpha 3$   $\beta 2$   $\alpha 4$

FTSH\_THEMEA\_DTM 180 L K D P S K F N R I G A R M P R G I L L V G P P G T G K T L L A R A V A G E A N V P F F H I S G S D F V E L F V G V G A R V R D L  
 FTSH\_BACSU 180 L K D P R K F F A E L G A R I P R G V L L V G P P G T G K T L L A K A G A G E A G V P F F S I S G S D F V E V F V G V G A S R V R D L  
 FTSH\_ECOLI 171 L R E P S R F Q K L G K I P R G V L M V G P P G T G K T L L A K A T A G E A K V P F F T I S G S D F V E M F V G V G A S R V R D M  
 O80860\_ARATH 246 L K K P E R F T A V G A K I P R G V L L I G P P G T G K T L L A K A T A G E A G V P F F S I S G S E F V E M F V G V G A S R V R D L  
 RCA1\_YEAST 367 L K E P S R Y E K M G A K I P R G A I L S G P P G T G K T L L A K A T A G E A G V P F F V F V S G S E F V E M F V G V G A S R V R D L

*FTSH\_THEMEA\_DTM* Walker A Pore  $\beta 3$   $\alpha 5$   $\alpha 6$   $\eta 2$   $\beta 4$  T T

FTSH\_THEMEA\_DTM 246 F A Q A K A H A P C I V F I D E I D A V G R H R G A G L G G G H D E R E Q T L N Q I L V E M D G F D S K E G I I V M A T N R P D  
 FTSH\_BACSU 246 F E N A K K N A P C L I F I D E I D A V G R Q R G A G L G G G H D E R E Q T L N Q I L V E M D G F S A N E G I I I L A A T N R A D  
 FTSH\_ECOLI 237 F E Q A K K A P C I I F I D E I D A V G R Q R G A G L G G G H D E R E Q T L N Q I L V E M D G F E G N E G I I V I A A T N R P D  
 O80860\_ARATH 312 F K K A K E N A P C I V F I D E I D A V G R Q R T G T I G G G N D E R E Q T L N Q I L T E M D G F E P N T G V I V V A A T N R A D  
 RCA1\_YEAST 433 F K T A R E N A P S I V F I D E I D A I G R A R O K G N F S G A N D E R E N T L N Q I L V E M D G F T P A D H V V V L A G T N R P D

*FTSH\_THEMEA\_DTM* Walker B SRH  $\eta 3$   $\beta 5$   $\alpha 7$   $\alpha 8$  T T

FTSH\_THEMEA\_DTM 311 L I L P A L L R P G R F D R K I V V D P P D M L G R K K I L E I H T R N K P L A E D V N . . . L E I A K R T P G F V G A D L E N I L V  
 FTSH\_BACSU 311 I L D P A L L R P G R F D R I T V D R P D V I G R E A V L K V H A R N K P L D E T V N . . . L K S I A M R T P G F S G A D L E N L L  
 FTSH\_ECOLI 302 V L D P A L L R P G R F D R Q V V V G L P D V R G R E Q I L K V H M R R V P L A P D I D . . . A A I I A R G T P G F S G A D L A N I V  
 O80860\_ARATH 377 I L D S A L L R P G R F D R Q V S V D V P D V K G R T I L K V H A G N K K F D N D V S . . . L E I I A M R T P G F S G A D L A N L L  
 RCA1\_YEAST 499 I L D K A L L R P G R F D R H I N I D K P E I E G R K A I F A V H L H H L K L A G E T I F D L K N R L A A I T P G F S G A D I A N V C

*FTSH\_THEMEA\_DTM*  $\alpha 9$   $\alpha 10$   $\alpha 11$

FTSH\_THEMEA\_DTM 375 N E A A L L A A R E G R D K I T M K D F E E A I D R V A G P A R K S K I L I S P K E K R I I A Y H E A G H A V V S T V V P N G E P V  
 FTSH\_BACSU 375 N E A A L V A A R Q N K K T D A R D I D E A T D R V A G P A K K S R V I S K E R N I V A Y H E G H T V I G L V L D E A D M V  
 FTSH\_ECOLI 366 N E A A L F A A R G N K R T V S M V E F E K A K D K I M M G A E R R S M V M T E A Q K E S T A Y H E A G H A I I G R L V P H D P V  
 O80860\_ARATH 441 N E A A I L A A R R A R T S I S S K E I D S I D R I V A G E E . T V M T D G K S K S L V A Y H E G H A V C G T L P G H D A V  
 RCA1\_YEAST 565 N E A A L I A A R S D E D A V K L N H F E Q A I E R V I G V E R K S K L L S P E E K K V V A Y H E A G H A V C G W Y L K Y A D P L

*FTSH\_THEMEA\_DTM*  $\beta 6$  T T  $\alpha 12$   $\alpha 13$   $\alpha 14$   $\eta 4$  Zn2+

FTSH\_THEMEA\_DTM 441 H R I S I I P R G Y K A L G Y T L H L F E E D K Y L V S R N E I L D K L T A L L G G R A E E V V F G . . . D V T S G A N D I E R A  
 FTSH\_BACSU 441 H K V T I V P R . G A G G Y A V M L P R E D R Y F Q T K P E L L D K I V G L L G R V A E E I I F G . . . B V S T G A H N D F Q R A  
 FTSH\_ECOLI 432 H K V T I I P R . G R A L G Y T F F L P E D A I S A S R Q K L E S I S T L Y G G R L A E E I I Y G P E V S T G A S N D I K V A  
 O80860\_ARATH 506 Q K V T L I P R . G Q A R G L T W F I P S D D P T L I S K Q Q L F A R I V G G L G G R A A E E I I F G D S B V T T G A V G D L Q Q I  
 RCA1\_YEAST 631 L K V S I I P R G G G A L G Y A Q Y L P G . D I F L L T E Q Q L K D R M T M S L G G R V S E E I H F P . . . S V T S G A S D D F K K V

*FTSH\_THEMEA\_DTM*  $\alpha 15$  T T T  $\alpha 16$

FTSH\_THEMEA\_DTM 505 E T I A R N M V C Q L G M S E E L G P L A W G K E E Q . E V F L G K E I T R L R N Y S E E V A S K I D E E V K K I V T N C Y E R A K  
 FTSH\_BACSU 504 T N I A R R M V T E F G M S E K L G P L Q F G S Q G G Q V F L G R D F N N E Q N Y S D Q I A Y E I D Q E I Q R I I K E C Y E R A K  
 FTSH\_ECOLI 497 T I A R N M V T Q W F S E K L G P L I Y A E F E G . E V F L G R S V A K A K H M S D E T A R I D E V K A L I E R N Y R A K  
 O80860\_ARATH 571 T G V A R Q M V T F G M S D I F . P W S L M D S S A . Q S D V I R M M A R N S M S E K L A E I D S A V K K L S D S A Y E I A L  
 RCA1\_YEAST 694 T S M A T A M V T E L G M S D K I G W V N Y Q K R D D . . . . . S D L T K P F S D E T G D I I D S E V Y R I V Q E C H D R C T

*FTSH\_THEMEA\_DTM*  $\alpha 17$   $\beta 7$   $\alpha 18$

FTSH\_THEMEA\_DTM 570 E I T R K Y R K Q I D N I V E I L L E K E T I E G D E L R R I L S E E F E K V V . . . . .  
 FTSH\_BACSU 570 Q I L T E N R D K I L E I A Q T L L K V E T I D A E Q I K H L I D H G T L P E R N F S D K E N D D V N I L T K T E K K D D T  
 FTSH\_ECOLI 562 Q I L T D N M D I L H A M K D A L M K Y E T I D A P Q I D D L M A R R D V R P P A G W E E P G A S N N S G D N G P T K A P R P V D E  
 O80860\_ARATH 635 S H I K N N R E A M D K L V E V L L E K E T I G G D P F R A I L S E F T E I P P N R V P S S T T T P A S A P T P A A V . . . . .  
 RCA1\_YEAST 752 K I L K E A E D V E K I A Q V L L K K E V L T R E D M I D L L G K R F P P E R N D A F D K Y L N D Y E T E K I R K E E K N E K R