

Trubripossyt7a X DASV L I C P - G L L C L C A G S V S L S V F L V S L A V T V C A V W L V A L C G V C G W C Q R K L G K R N K P G V E A A D T P D S A --- R A R G E K K A I N --- D L D R D F W N N N D S S T V Q Q R W S S Y P P K E F V L N I S P Y A P Y G D
Trubripossyt7b ----- X S V S L S V F L V S V A S V V C A V W L V A L C G V C T W C Q R K M G K R N K P G V E A A S S P D S V --- R V R G E N K A I N --- D L D R D F W N N N D S S N V Q Q R W S S Y P P K E F L L N M S P Y A P Y G D
Tnigroviridissyt7a X I G G A L I C S L S C L C L C T G S V S L S V F L V S L A V T V C A V W L V A L C G V C G W C Q R K L G K R N K P G V E A A D T P D S A --- R A R G E K K A I N --- D L D R D F W N N N D S S T V Q Q R W S S Y P P K E F V L N I S P Y A P Y G D
Tnigroviridissyt7b ----- X S V S L S V F L V S V A S V V C A V W L V A L C G V C T W C Q R K M G K R N K P G V E A A S S P D S V --- R G R G E N K A I N --- D L D R D F W N N N D S S N V Q Q R W S S Y P P K E F L L N M S P Y A P Y G D
Gaculeatussy7a ----- X S V S L S V F L V S L A V T V C A V W L V A L C G V C G W C Q R K L G K R N K P G V E A D T A D T P D S A --- R G R G E K K A I N --- D L D R D F W N N N D S S T V Q Q R W S S Y P P K E F V L N I S P Y A P Y G D
Gaculeatussy7b ----- X S V S L S V F L V S V L S V I C A V W L V A L C G V C T W C Q R K L G K R N K P G V E A A S S P D S V --- R G R G E N K A I N H N D L D R D F W N N N D S S N V Q Q R W T S Y P P K E F L L N M S P Y A P Y G D
Olatipessyt7a ----- X S V S L S V F L V S L A V T V C A V W L V A L C G V C G W C Q R K L G K R N K P G V E A A D T P D S A --- R G R G E N K A I N --- D L D R D F W N N N D S S T V Q Q R W S S Y P P K E F V L N I S P Y A P Y G D
Olatipessyt7b ----- X S E S L S V F L L S V A F V I C T I W L V A L C G V C T W C Q R K L G M R N K P G V E A T G S P D S V --- R G R G E N K A I N --- D L D R D F W N N N D S S N V Q Q R W S S Y P P K E F L L N M S P Y A P Y G D
Dreriosyt7a ----- X S I S L S V L L V S L A V T V C G V W L V A L C G V C G W C Q R K L G K R N K P G V E S V G S P D S G --- R G R G E K K A I N --- D L D R D F W N N N D S S S V Q Q R W S S Y P P K E F V L N I S P Y A P Y G D
Dreriosyt7b ----- M H L N R E D E D G K G S L S L S V F L V S V G L T V C V W L V A L C G V C G W C Q R K L G M R N K P G V E T A G T P D S V S V S G R G R G E N K A I N H N D L D R D F W N N N D S S C S V Q Q R W S S Y P P K E F L L N M S P Y A P Y G D
Xtropicalissyt7var1 ----- M H I N Q E A S N T K G A P T R D V I L V S T V L T L S L S I T I I M C G L C Q W C Q R K L G K R Y K N S L E T A G T P D S T R --- G I R S E K K T L N --- D L D K D F W N N N D S - T A H Q K W S S Y P P K E F I L N I S P Y A P Y G D
Xtropicalissyt7var2 ● ----- M H I N Q E A S N T K G A P T R D V I L V S T V L T L S L S I T I I M C G L C Q W C Q R K L G K R Y K N S L E T A G T P D S T R --- G I R S E K K T L N --- D L D R D F W N N N D N - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
Acarolinensissyt7 ----- K A P S R D V L L V S A I I T I S L S V T I V L C G I C Q W C Q R K L G K R Y K N S L E T V G T P D S S R --- G - R S E K K A I N --- D L D R D F W N N N D N - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
GgallusSYT7 ----- X G K R Y K T S L E T V G T P D S S R --- G - R S E K K T I K --- R D F W N N N D N - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
TguttataSYT7 ----- X T P S R D V L L V S A I I T V S L S V T I V L C G I C Q W C Q R K M G K R Y K T S L E T V G T P D S S R --- G - R S E K K T I N --- D L D R D F W N N N D N - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
OanatinusSyt7 ----- X A P S R D V L L V S A I I T V S L S V T I V L C G I C Q W C Q R K L X --- X --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
MdomesticaSyt7 ----- X G K R Y K T S L E T V G T P D S S R --- G - R S E K K T I K --- R D F W N N N D N - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
MmusculusSyt7var1 ----- M Y R D P E A A S P - G A P T R D V L L V S A I I T V S L S V T I V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G R --- G - R G E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
MmusculusSyt7var2 ----- M Y R D P E A A S P - G A P T R D V L L V S A I I T V S L S V T I V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G --- G - R G E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
MmusculusSyt7var3 ----- M Y R D P E A A S P - G A P T R D V L L V S A I I T V S L S V T I V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G R --- G - R G E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
MmusculusSyt7var4 ● ----- M Y R D P E A A S P - G A P T R D V L L V S A I I T V S L S V T I V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G --- G - R G E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
HsapiensSYT7var1 ----- M Y R D P E A A S P - G A P S R D V L L V S A I I T V S L S V T V V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G R --- G - R S E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
HsapiensSYT7var2 ----- M Y R D P E A A S P - G A P S R D V L L V S A I I T V S L S V T V V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G R --- G - R S E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
HsapiensSYT7var3 ----- M Y R D P E A A S P - G A P S R D V L L V S A I I T V S L S V T V V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G --- G - R S E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D
HsapiensSYT7var4 ● ----- M Y R D P E A A S P - G A P S R D V L L V S A I I T V S L S V T V V L C G L C H W C Q R K L G K R Y K N S L E T V G T P D S G --- G - R S E K K A I N --- D L D R D F W N N N E S - T V Q Q K W S S Y P P K E F I L N I S P Y A P Y G D

Trubripossyt7a P R L T L N G A V S G S Q K G A A T --- G --- H G D N G G G --- P Y H S D S M K S M V T --- E G A K V G R W T T V Q G H V Q S G R L R P S D F G D P V L S Y A S T L E H I P S G P A --- R P R
Trubripossyt7b P R L T P N G A A D K G Q G G A G P S P G --- A S D G G G G A C S G A G A G P S R S D S V R S M V T --- G G S K A G R W Q T I Q S H M H A G G L R F S N F G D A S L S S A S T L E H I P S S A V A --- R P R
Tnigroviridissyt7a P R L T L N G A V S G S Q K G A A T --- G --- H G D N G G G --- P Y R S D S M K S M V T --- E G A K A G R W Q T V Q G H V Q S G R L R P S D F G D P V L S Y A S T L E H I S S G P A --- R P R
Tnigroviridissyt7b P R L T P N G A A D K G Q G G A G P L P G --- A S D S G G G A C S G A G E G P S R S D S V R S M V T --- G G S K A G R W Q T V Q S H M H A G G L R F T N F G D A S L S S A S T L E H I P S S A V A --- R P R
Gaculeatussy7a P R L T L N G A V S G G Q K G A A T --- G --- H G D D G G V --- P Y R S D S V K S M V T --- E G V K A G R W Q T V Q G H M Q S G G L R P S D F G D P V L S Y T S T L E H I --- P T --- R P R
Gaculeatussy7b P R L T P N G A V D K G Q G G A G P S P G --- A S D S G G G A C S G A G --- P S R S D S V R S M L M --- G G K A G R W Q T V Q S H M Q A G G L R F G N F G D A S L S S A S T L E H I P S S A V A --- R P R
Olatipessyt7a P R L T L N G A V S G G Q K G A A T --- G --- H G D A G G A --- P Y R S D S V K S M V T --- E G V K A G W Q T V Q G H V Q S G G L R P S N F G D P V L S Y T S T L E H I H S G P T --- R P R
Olatipessyt7b P R L T P N G A V D K G Q G G A G P S P G --- A S D S G G G A C S G T G A G P S R S D S V R S M V S --- G G S K A G R W Q T V Q S H M H A G G L R F C N F G D A S L S S A S T L E H I P S S A V A --- R P R
Dreriosyt7a P R L T L N G T V H G G Q K G A A G --- C --- V L D G G G --- P S R S D S V R S M M T --- G G I K A G R W Q T V Q S R L H S G D F K N G N L S D H T L S S V E T L D Y V P S A G A T P --- R P R
Dreriosyt7b P R L T P N G S L E K G E A G G --- G A V G G --- P S R S D S C --- I G A --- G T S R S G R W Q T L Q S H L H S G S L R P S N F G D P S L S T T S T L E H I P S S A A --- R P R
Xtropicalissyt7var1 P R L A L N G T V L S S S K S A A C G T S G --- L L - D K D G R L G D K Q F R --- S D S M K I S M S S Q S H H S E P V L G K S G R G R W H T V Q S H L A S G N L S R T N F E D P T L T A A T T L D H I P I S A G D M K C Q R P R
Xtropicalissyt7var2 ● ----- N G T V L S S S K S A A C G T S G --- L L - D K D G R L G D K Q F R --- S D S M K I S M S S Q S H H S E P V L G K S G R G R W H T V Q S H L A S G N L S R T N F E D P T L T A A T T L D H I P I S A G D M K C Q R P R
Acarolinensissyt7 P R L S L N G S L L S G A K L A A S A T - G --- L A G G R E G R H G E R P Q L --- R E D G M K S S V S A H S E P - S I G A G R G R W Q M V Q S H L A A G K L S L S N F E D S T L S T A T T L E Y I P T S A G D P K C Q R P R
GgallusSYT7 P R L S L N G S L L X G A K L T A S A T A G --- L A G D R D G R P G D K Q Q C --- A E D G M R S S I S A H S E P G A - G K A A R G R W H T V Q S H L F A G K L T L S N F E D S T L S T A T T L E Y I P T S A G D P K C Q R P R
TguttataSYT7 P R L S L X --- X F E D S T L S T A T T L E Y I P T S A G D P K F Q R P R
OanatinusSyt7 P R L S L N P P L L G P S G P A A L G T S G T L L S G A K V A A A G L A A E R E G R P G E K P P L --- P G E D A M R S S V S A H S E P - S N G K A G R G R W H T V Q S H L A A G K L S L S N F E D S T L S T A T T L E Y I P S S V G E P K C Q R P R
MdomesticaSyt7 ----- X F E D S T L S T A T T L E Y I P S S V G E P K C Q R P R
MmusculusSyt7var1 P R L S L N G T L L S G A K V A T A A A - G --- L A V E R E G R L G E K P A P V P P P G E D A L R S G G A A P S E P G S S G K A G R G R W R M V Q S H L A A G K L N L S N F E D S T L S T A T T L E S I P S S A G E P K C Q R P R
MmusculusSyt7var2 ● P R L S L --- N F E D S T L S T A T T L E S I P S S A G E P K C Q R P R
MmusculusSyt7var3 ● P R L S L --- N F E D S T L S T A T T L E S I P S S A G E P K C Q R P R
MmusculusSyt7var4 ● ----- N F E D S T L S T A T T L E S I P S S A G E P K C Q R P R
HsapiensSYT7var1 P R L S L N G T L L S G A K V A - A A A - G --- L A V E R E G R L G E K P A P V P P P G E D A L R S G G A A P S E P G S G G K A G R G R W R T V Q S H L A A G K L N L S N F E D S T L S T A T T L E S I P S S T G E P K C Q R P R
HsapiensSYT7var2 ● P R L S L --- N F E D S T L S T A T T L E S I P S S T G E P K C Q R P R
HsapiensSYT7var3 ● P R L S L --- N F E D S T L S T A T T L E S I P S S T G E P K C Q R P R
HsapiensSYT7var4 ● -----

Trubripossyt7a T L L R Q Q S L Q Q P L I R P P G P G L S H P P T T S Q S L G Q L N T A T G Q P G G G G G A G K G E G G T G S G E --- G G G T R G G P R G A R G S P T G A G A S R - Y R G G G A G G R S R A N P G S W D Y M M D Q I R K R G L D V K S F L E G K M V V L
Trubripossyt7b P L V R Q Q S L Q Q P L T H Q P P P G P N D P P V T S Q S L G Q L H T G P G G G G H R G G --- P R G V R G S A --- A G A S R - Y R G G G A - G R S R S N P G S W D H M V E Q I R H R G L D V K S F L E G K M V V L
Tnigroviridissyt7a T L L R Q Q S L Q Q P L I R P P G P G L S H P P T T S Q S L G E L N T A S G Q P G L G G G A G K G E G G S G S G E --- G G G T R G A P R G A R G S P A G A G A S R - Y R G G G A G G R S R A N P G S W D Y M M D Q I R K R G L D V K S F L E G K M V V L
Tnigroviridissyt7b P L V R Q Q S L Q Q P L T H Q P P P G P N D P P V T S Q S L G Q L H T G P G G G G H R G G --- P R G V R G S A --- A G A S R - Y R G G G A - G R S R S N P G S W D H M V E Q I R H R G L D V K S F L E G K M V V L
Gaculeatussy7a T L L R Q Q S L Q Q P L I H P P V P V L V H P P T T S Q S L G Q L H T A P Q P G G G G A G R G E A G G S G E G G L A G T R G G P R G V R G A P --- S R - H R G G G A G R S R G N P G S W D Y T M D Q M R S R G L D V K S F L E G K L V V L
Gaculeatussy7b P L V R Q Q S L Q Q P L T H Q P P P G P N D P P V T S Q S L G Q L H T G P G G G G H R G G --- P R G V R G S P --- A G A S R - H R G G G A - G R S R S N P G S W D H M M E Q I R H R G L D V K S F L E G K M V V L
Olatipessyt7a T L L R Q Q S L Q Q P L I H P S G P G L G H P P T T S Q S L G Q L H T T P G H P G G G G V G R G Q G G G T G D S R G A G T Q V A S Q A Q G S Q A G A G A S R - C R G G A G G H T R A N P G S W D Y M M D Q M R N R G L D V K S F L E G K L V V L
Olatipessyt7b P L V R Q Q S L Q Q P L T H Q P P P G P N D P P V T S Q S L G Q L H T G P G G G G H R G G --- P R G V R G S P --- A G A S R - Y R T G - A - G R S R S N P G S W D H M M E Q I R H R G L D V K S F L E G K M V V L
Dreriosyt7a T L L R Q Q S L Q Q P L I Q A P P P N L A S R P P I S Q S L G Q L H T Q P G G A G P G G G G G A G --- S R N S R G E P --- A Q - H R S A G A G G R G S G N P G S V D H M M G Q I K K R G L D V K S F L E G K M V V L
Dreriosyt7b P L V R Q Q S L Q Q P L T H Q P P P G P N D P P A T S Q S L G Q L H T G P G G G G H R G G --- P R G V R G S P A G A G A T R - Y R S G G G - A R S R S N P G S W D H M M G Q I R T R G M D V K S F L E G K M V V L
Xtropicalissyt7var1 T L L R Q Q S L Q Q P L S L H Q K H N H - C Q P T T S Q S L G Q L Q L Q H Q P P S T S S N T S N --- T R P O R T G Q N R P P T S A G S K H R P A G I R N R T N A G S W D Y V V G Q I R N R G L D M K S F L E G R M V V L
Xtropicalissyt7var2 T L L R Q Q S L Q Q P L S L H Q K H N H - C Q P T T S Q S L G Q L Q L Q H Q P P S T S S N T S N --- T R P O R T G Q N R P P T S A G S K H R P A G I R N R T N A G S W D Y V V G Q I R N R G L D M K S F L E G R M V V L
Acarolinensissyt7 T L L R Q Q S L Q Q P L S Q H Q K P N H - S Q P T T S Q S L G H L Q S H --- S S T S G - N --- P R G C R S G Q S R Q G T T A G S K Q R T A G G R S R S N P G S W D H M V G Q I R N R G L D M K S F L E G R M V V L
GgallusSYT7 T L M R Q Q S L Q Q P L S Q H Q R S N H - S Q P T T S Q S L G H L Q A H --- S S S S G G A G N --- P R G S R G G Q A R Q G I A A G S K Q R T --- S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
TguttataSYT7 T L V R Q Q S L Q Q P L S Q H Q R A N H - S Q P T T S Q S L G H L Q A H --- S G S S A A A N --- S R G S R G G P A R Q G T A A G S K Q R M A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
OanatinusSyt7 T L L R Q Q S L Q Q P L S Q H Q R A Q Q P G Q P T T S Q S L G Q L Q C H --- T G S G P G A - N --- P R G Y P R G Q A R S G S T A G A K H R G A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
MdomesticaSyt7 ----- P R A Y G R G Q A R Q G T S A G S K Y R A A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
MmusculusSyt7var1 T L M R Q Q S L Q Q P L S Q N Q Q G R Q P S Q P T T S Q S L G Q L Q A H --- A A S A P G S - N --- P R A Y G R G Q A R Q G T S A G S K Y R A A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
MmusculusSyt7var2 ● T L M R Q Q S L Q Q P L S Q N Q Q G R Q P S Q P T T S Q S L G Q L Q A H --- A A S A P G S - N --- P R A Y G R G Q A R Q G T S A G S K Y R A A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
MmusculusSyt7var3 ● T L M R Q Q S L Q Q P L S Q N Q Q G R Q P S Q P T T S Q S L G Q L Q A H --- A A S A P G S - N --- P R A Y G R G Q A R Q G T S A G S K Y R A A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
MmusculusSyt7var4 ● T L M R Q Q S L Q Q P L S Q H Q R G R Q P S Q P T T S Q S L G Q L Q A H --- M A S A P G P - N --- P R A Y G R G Q A R Q G T S A G S K Y R A A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
HsapiensSYT7var1 T L M R Q Q S L Q Q P L S Q H Q R G R Q P S Q P T T S Q S L G Q L Q A H --- M A S A P G P - N --- P R A Y G R G Q A R Q G T S A G S K Y R A A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
HsapiensSYT7var2 ● T L M R Q Q S L Q Q P L S Q H Q R G R Q P S Q P T T S Q S L G Q L Q A H --- M A S A P G P - N --- P R A Y G R G Q A R Q G T S A G S K Y R A A G G R S R S N P G S W D H V V G Q I R N R G L D M K S F L E G R M V V L
HsapiensSYT7var3 ● -----
HsapiensSYT7var4 ● -----

Trubriessyt7a
Trubriessyt7b
Tnigroviridissyt7a
Tnigroviridissyt7b
Gaculeatusyt7a
Gaculeatusyt7b
Olatipessyt7a
Olatipessyt7b
Dreriosyt7a
Dreriosyt7b
Xtropicalissyt7var1
Xtropicalissyt7var2
Acarolinensissyt7
GgallusSYT7
TguttataSYT7
OanatinusSYT7
MdomesticaSYT7
MmusculusSyt7var1
MmusculusSyt7var2
MmusculusSyt7var3
MmusculusSyt7var4
HsapiensSYT7var1
HsapiensSYT7var2
HsapiensSYT7var3
HsapiensSYT7var4

ALAIGVAEQDDFANIPDLQEEAAQAPPANQEAPPE-KR-GNKPANSP-KGQPPDADG-----HSSVTDLANSLTGDVMLSPGSEDDD-GEGPIS EKLGRIQFSIGYSFQNTTLTVKVLRL
SLAIGLAEQDDFANIPDLQEAP--ANKENNESSEKSRTPGNRPGSSP-RGQPPDSSGR-----ANSSVSDLANSVTSDMLMLSPGSEEDD-HEGPVCEKLGRIQFSVGYSFQDSTLTVKILK
ALAIGVAEQDDFANIPDLQETAQAAPPANQEAPSE-KR-GNKPANSP-KGQPPDADG-----HSSVTDLANSLTGDVMLSPGSEDDD-GEGPIS EKLGRIQFSIGYSFQNTTLTVKVLRL
SLAIGLAEQDDFANIPDLQEAP--ANKENNESSEK-RTPGNKPSSP-RGQNLDDSGR-----ANSSVSDLANSVTSDMLMLSPGSEEDD-HEGPVCEKLGRIQFSVGYSFQDSTLTVKILK
ALAIGVAEQDDFANIPDLQETAQAAPPANQEPPPE-KR-GSKPANSP-KGQPPDADG-----KSSVTDLANSLTGDVMLSPGSEEDD-HEGPVCEKLGRIQFSIGYSFQNTTLTVKILRL
SLAIGMAEQDDFANIPDLQEAP--ASKE NETTPEK-RTAGNKPGSSP-RGQTPDEGGR-----HDGNSSSVSDLANSVTSDHMLMLSPGSEEDD-HEGPVCEKLRVQFSVGYSFQDSTLTVKILK
ALAIGVAEQDDFANIPDLQETAQAAPPANQEPPPE-KR-GNKPANSP-KGHPDADG-----HSSVTDLANSLTGDVMLSPGSEEDD-GEGPIS EKLGRIQFSIGYSFQNTTLTVKVLK
SLAIGLAEQDDFANIPDLQEAP--TGKENETTPDK-RTPGNKPGSST-RGQTAEAGRRQGQSNANSSVSDLANSVTSEMLMLSPGSEEDD-HEGPVCEKLGRIQFSVGYSFQDSTLTVKILK
SLAIGLAEQDDFANIPDLQEV---PASQETPEK-RNMGNKPANSP-KGQPPDADG-----HSSVSDLANSLTGDVMLSPGSEDDD-HEGPVSEKLGRIQFSIGYSFQDSTLTVKILK
SLAIGLAEQDDFANIPDLQEA----PADTETPTDKR-SNKPSSP-KGQTPDESHR-----TDANSSVSDLANSVTSDMLMLSPGSEEEE-HEGPVCEKLGRIQFSVGYSFQDSTLTVKILK
SLVLGLSEQDDFANIPDLQTNGSQNQ--NTQGDKRLQTGCKTTSASGVPGQGQSEDPDRK---TDQHASVSDLVNSLTSEMLMLSPGSEDDDGHDTSGRENLGRIQFSVGYNFQESTLTVKILK
SLVLGLSEQDDFANIPDLQTNGSQNQ--NTQGDKRLQTGCKTTSASGVPGQGQSEDPDRK---TDQHASVSDLVNSLTSEMLMLSPGSEDDDGHDTSGRENLGRIQFSVGYNFQESTLTVKILK
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SLVLGLSEQDDFANIPDLQPPAGTQPNQPNQAQGDKRLPAGGKAVNTAPVPGQTQQDESDRK---TEPHSSVSDLVNSLTSEMLMLSPGSEEDDGHDGSSRENLRIGRIQFSVGYNFQESTLTVKIMK
SLVLGLSEQDDFANIPDLQAGTQPNQNAQGDKRLPAGGKAGNAAPAGQPPLEDSDRK---TEPHSSVSDLVNSLTSEMLMKSPCIH-----IKNEDLVH-----LDRKVMK
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-----XLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSQENLRIGRIQFSVGYNFQESTLTVKIMK
SLVLGLSEQDDFANIPDLQNPQTQOQ--NAQGDKRLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK
● NESTVQQKWSSYPKPEFILNISPAPYGDPRLSILKLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK
SLVLGLSEQDDFANIPDLQNPQTQOQ--NAQGDKRLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK
● -----KLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK
SLVLGLSEQDDFANIPDLQNPQTQOQ--NAQGDKRLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK
SLVLGLSEQDDFANIPDLQNPQTQOQ--NAQGDKRLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK
● NESTVQQKWSSYPKPEFILNISPAPYGDPRLSILKLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK
● -----KLPAGGKAVNTAPVPGQTTPHDESDDR---TEPRSSVSDLVNSLTSEMLMLSPGSEEDDAHEGCSRENLRIGRIQFSVGYNFQESTLTVKIMK

Trubriessyt7a	ITVNI	I	K	A	R	N	L	K	A	M	D	I	G	G	T	S	D	P	P	Y	V	K	V	W	L	M	H	K	D	R	V	E	K	K	T	V	M	K	R	C	L	N	P	V	F	N	E	S	F	F	D	V	P	A	H	V	L	R	E	T	T	I	I	T	V	M	D	K	D	L	S	R	N	D	V	I	G	K	I	L	S	W	K	S	G	P	A	E	V	K	H	W	K	D	M	L	A	R	P	R	T	N	V	A	Q	W	H	A	L	K	A
Trubriessyt7b	ITVSI	I	K	A	R	N	L	K	A	M	D	I	G	G	T	S	D	P	P	Y	V	K	V	W	L	M	H	K	D	R	V	E	K	K	T	V	M	K	R	C	L	N	P	V	F	N	E	S	F	F	D	V	P	A	H	V	L	R	E	T	T	I	I	T	V	M	D	K	D	L	S	R	N	D	V	I	G	K	I	L	S	W	K	S	G	P	A	E	V	K	H	W	K	D	M	G	H	P	R	T	A	V	S	Q	W	H	S	L	K	A	
Tnigroviridisys7a	ITVNI	I	K	A	R	N	L	K	A	M	D	I	G	G	T	S	D	P	P	Y	V	K	V	W	L	M	H	K	D	R	V	E	K	K	T	V	M	K	R	C	L	N	P	V	F	N	E	S	F	F	D	V	P	A	H	V	L	R	E	T	T	I	I	T	V	M	D	K	D	L	S	R	N	D	V	I	G	K	I	L	S	W	K	S	G	P	A	E	V	K	H	W	K	D	M	L	A	R	P	R	T	N	V	A	Q	W	H	A	L	K	A
Tnigroviridisys7b	ITVSI	I	K	A	R	N	L	K	A	M	D	I	G	G	T	S	D	P	P	Y	V	K	V	W	L	M	H	K	D	R	V	E	K	K	T	V	M	K	R	C	L	N	P	V	F	N	E	S	F	F	D	V	P	A	H	V	L	R	E	T	T	I	I	T	V	M	D	K	D	L	S	R	N	D	V	I	G	K	I	L	S	W	K	S	G	P	A	E	V	K	H	W	K	D	M	G	H	P	R	T	A	V	S	Q	W	H	S	L	K	A	
Gaculeatusys7a	ITVNI	I	K	A	R	N	L	K	A	M	D	I	G	G	T	S	D	P	P	Y	V	K	V	W	L	M	H	K	D	R	V	E	K	K	T	V	M	K	R	C	L	N	P	V	F	N	E	S	F	F	E	V	A	A	H	V	L	R	E	T	T	I	I	T	V	M	D	K	D	L	S	R	N	D	V	I	G	K	I	L	S	W	K	S	G	P	A	E	V	K	H	W	K	D	M	L	A	R	P	R	T	N	V	A	Q	W	H	A	L	K	A
Gaculeatusys7b	ITVSI	I	K	A	R	N	L	K	A	M	D	I	G	G	T	S	D	P	P	Y	V	K	V	W	L	M	H	K	D	R	V	E	K	K	T	V	M	K	R	C	L	N	P	V	F	N	E	S	F	F	D	V	P	A	H	V	L	R	E	T	T	I	I	T	V	M	D	K	D	L	S	R	N	D	V	I	G	K	I	L	S	W	K	S	G	P	A	E	V	K	H	W	K	D	M	G	H	P	R	T	N	V	A	Q	W	H	A	L	K	A	
Olatipessyt7a	ITVNI	I	K	A	R	N	L	K	A	M	D	I	G	G	T	S	D	P	P	Y	V	K	V	W	L	M	H	K	D	R	V	E	K	K	T	V	I	K	C	C	L	N	P	V	F	N	E	S	F	F	D	V	P	A	H	V	L	R	E	T	T	I	I	T	V	M	D	K	D	L	S	R	N	D	V	I	G	K	I	L	S	W	K	S	G	P	A	E	V	K	H	W	K	D	M	L	A	R	P	R	T	N	V	A	Q	W	H	A	L	K	A
Olatipessyt7b	ITVSI	I	K																																																																																																												