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GltX (1) -M K I K T R F A P S P T G Y L H V G G A R T A L Y S W L F A R N H G G E F V L R I E D T D L E R S
TrpS (1) M T K P I V F S G A Q P S G E L T I G N Y M G A L R Q W V N M Q D D - Y H C I Y C I V D Q H A I T V

GltX (50) T P E A I E A I M D G M N W L S L E W D E G P Y Y Q T K R F D R Y N A V I D Q M L E E G T A Y K C Y
TrpS (50) R Q D A Q K L R K A T I D T L A L Y L A C G I D P E - K S T I F V Q S H V P E H A Q L G W A L N C Y

GltX (100) C S K E R L E A L R E E Q M A K G E K P R Y D G R C R H S H E H H A D D E P C V V R F A N P Q E G S
TrpS (99) T Y F G E L S R M T Q -----

GltX (150) V V F D D Q I R G P I E F S N Q E L D D L I L R R T D G S P T Y N F C V V V D D W D M E I T H V I R
TrpS (110) -- F K D K S A R Y A E N I N A G L F D Y P V L M A A D I L L Y Q T N L V P V G E D Q K Q H L E L S

GltX (200) G E D H I N N T P R Q I N I L K A L K A P V P V Y A H V S M I N G D D G K K L S K R H G - A V S V M
TrpS (158) R D I A Q R F N A L Y G E I F K V P E P F I P K S G A R V M S L L E P T K K M S K S D D N R N N V I

GltX (249) Q Y R D D G Y L P E A L I N Y L V R L G W S H G D Q E I F T R E E M I K Y F T L N A V S K S A S A F
TrpS (208) G L L E D --- P K S V V K K I K R A V T D S D E P P V V R ----- Y D V Q N K A G V S N

GltX (299) N T D K I L W L N H H Y I N A L P P E Y V A T H L Q W H I E Q E N I D T R N G P Q L A D L V K L L G
TrpS (246) L L D I L S A V T G Q S I P E L E K Q F E G - K M Y G H L K G E V A D A V S G ----- M L T E L Q

GltX (349) E R C K T L K E M A Q S C R Y F Y E D F A E F D A D A K K H L R P V A R Q P L E V V R D K L A A I
TrpS (290) E R Y H R F R N D E A F L Q Q V M K D G A E K A S A H A S R T L K A V Y E A I G F V A K P -----

GltX (399) T D W T A E N V H H A I Q A T A D E L E V G M G K V G M P L R V A V T G A G Q S P A L D V T V H A I
TrpS (335) -----

GltX (449) G K T R S I E R I N K A L D F I A E R E N Q Q
TrpS (335) -----

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Figure S7

Figure S7. Sequence alignment of GltX and TrpS.

The alignment shows that S239 in GltX aligns to S197 in TrpS in the conserved sequence motifs KKLSKR and KKMSKS in GltX and TrpS, respectively.