

PKG phosphorylation site sequence alignment

1	-----MARPREPSRSAAAGAGGA---	STAGWSRPARARRPRGPTQYGNIPVVRKMLEESRTLNVNCVDYMGONAL	68
1	MEGSPSLRRM T VMREKGRRQAV-RGPAFMFNDRGTSLTAEERF-LDAAEYGNIPVVRKMLEESRTLNVNCVDYMGONAL		78
69	QLAVGNEHLEVTELLKKENLARI D ALLAISKGYVRI E AILGHPGFAASRRLTLSPCEQELR	DDDFYAYDEDGTRFS	148
79	QLAVGNEHLEVTELLKKENLARI D ALLAISKGYVRI E AILNHPGFAASKRLTLSPCEQELQ	DDDFYAYDEDGTRFS	158
149	PDITPII L AAHC K YEVVH L LLKGARI E RPHDYFCRCADCA E K Q R L DAF S H S R R I N A Y K GL A P Y L S S E D P V L T A		228
159	PDITPII L AAHC K YEVVH M LLMKGARI E RPHDYFC C GDC M E K Q R H DSF S H S R R I N A Y K GL A P Y L S S E D P V L T A		238
229	LELSNELAKLANIEKEFKNDYRK L SM Q CKDFVVGVLDLCRDSEEVEAILNGDLES V PLERH G H K ASLSRV K LA I KYEV K		308
239	LELSNELAKLANIEKEFKNDYRK L SM Q CKDFVVGVLDLCRDSEEVEAILNGDLES A EPLEV H R K ASLSRV K LA I KYEV K		318
309	KFVAHPNCQQQLLTIWYENL S GL R QTIAIKCLVV L VVAL G LPFLAI G YWIAPCSRL G KILRSPFM K FVAHAASFI I FLG		388
319	KFVAHPNCQQQLLTIWYENL S GL R QTIAIKCLVV L VVAL G LPFLAI G YWIAPCSRL G KILRSPFM K FVAHAASFI I FLG		398

PKC phosphorylation site sequence alignment

629	DHKFIENIGYVLYGIYNVTM V VLLNMLIAMINSSYQEIEDDS D VEWK F ARS K L W LSYFDDG K TLPPPF S LV P SP K SF V Y	708
639	DHKFIENIGYVLYGIYNVTM V VLLNMLIAMINSSYQEIEDDS D VEWK F ARS K L W LSYFDDG K TLPPPF S LV P SP K SF V Y	718
709	FIMRITNF S KCRRRR L QKD L EL G MG G NS K S R LN L FTQS N SR F ES H S F N S IL N Q P TRY Q Q I M K R L I K R V L K A Q V D K E N D E	788
719	FIMRIVNFP K CRRRR L QKD I EM G MG G NS K S R LN L FTQS N SR F ES H S F N S IL N Q P TRY Q Q I M K R L I K R V L K A Q V D K E N D E	798
789	VNEGELKEIKQDISSLRYELLED K SQATEEL A IL I HL K SE K LN P S A LR C E	838
799	VNEGELKEIKQDISSLRYELLED K SQATEEL A IL I HL K SE K LN P ML R C E	848

Supplementary Fig. 2: Sequence alignment of rat and human TRPC3 amino acid sequence.

Comparison of rat (top) with human (bottom) TRPC3 amino acid sequence. Yellow indicates identical amino acids. Red denotes Protein Kinase G (PKG) phosphorylation sites, green Protein Kinase C (PKC) phosphorylation sites. Note that the rat sequence is 10 amino acids shorter than the human sequence and that the main difference is found at the beginning of the two sequences, including lack of one PKG phosphorylation site in the rat clone.