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Product datasheet for TA328732

Trpc3 Rabbit Polyclonal Antibody

Product data:

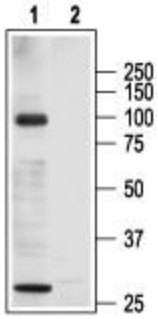
Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide HKLSEKLNPSVLRC, corresponding to amino acid residues 822-835 of mouse TRPC3.Â Intracellular, C-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	transient receptor potential cation channel, subfamily C, member 3
Database Link:	NP_062383 Entrez Gene 7222 HumanEntrez Gene 60395 RatEntrez Gene 22065 Mouse

View online »

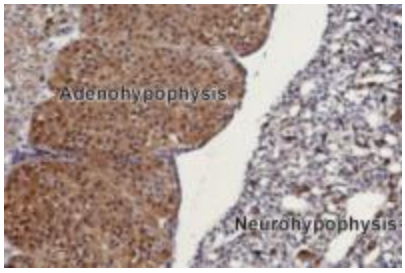
Background: The Transient Receptor Potential (TRP) superfamily is one of the largest ion channel families and consists of diverse groups of proteins. In mammals about 28 genes encode the TRP ion channel subunits. The mammalian TRP superfamily comprises six subfamilies known as the TRPC (canonical), TRPV (vanilloid), TRPM (melastatin), TRPML (mucolipins), TRPP (polycystin) and the TRPA (ANKTM1) ion channels. The TRPC subfamily consists of seven proteins named TRPC1 to 7 which can be further divided into four subgroups based on their sequence homology and functional similarities: 1. TRPC1 2. TRPC4 and TRPC5 3. TRPC3, TRPC6, TRPC7 4. TRPC2. They are highly expressed in the central nervous system and to a lesser extent in peripheral tissues. TRPC3, TRPC6 and TRPC7 form non-selective cationic channels that are activated by the stimulation of GPCRs. Different modes of activation, DAG and SOC, were described for the TRPC3 channel by different investigators working with heterologous expression systems.

Synonyms: hTrp-3; hTrp3; TRP-3; TRP3

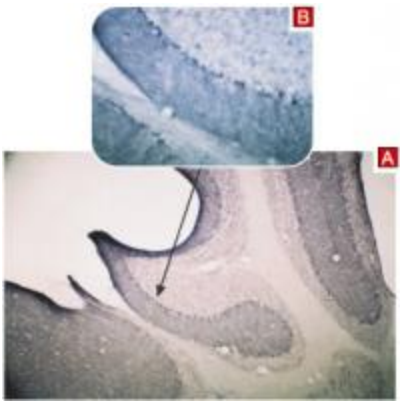
Product images:



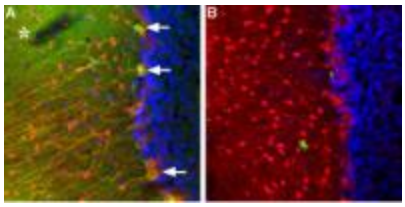
Western blot analysis of rat heart membranes: 1. Anti-TRPC3 antibody, (1:200). 2. Anti-TRPC3 antibody, preincubated with the control peptide antigen.



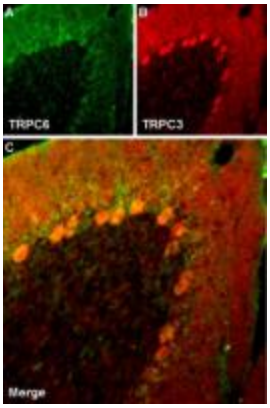
Expression of TRPC3 in rat pituitary gland. Immunohistochemical staining of rat pituitary gland paraffin embedded sections using Anti-TRPC3 antibody, (1:100). TRPC3 is mainly expressed in the adenohypophysis (on left). Hematoxilin is used as the counterstain.



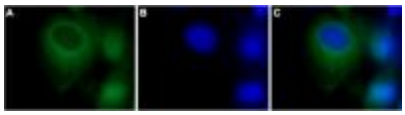
Expression of TRPC3 in mouse cerebellum. Immunohistochemical staining of mouse cerebellum using Anti-TRPC3 antibody (A). Immunoreactivity appears in the molecular layer and in Purkinje cells (B).



IHC staining of TRPC3 in rat cerebellum using Anti-TRPC3 antibody. A. TRPC3 (green) appears in Purkinje cells (arrows) including both soma and dendrites and as well as in the molecular layer neuropil (asterisk). Staining of the same section with mouse anti-parvalbumin (red) reveals that TRPC3 is not expressed in molecular layer interneurons. B. Pre-incubating Anti-TRPC3 with the TRPC3 peptide antigen blocks staining. DAPI is used as the counterstain (blue).



Colocalization of TRPC6 and TRPC3 in rat cerebellum. Immunohistochemical staining of rat cerebellum frozen section using guinea pig Anti-TRPC6 antibody and rabbit Anti-TRPC3 antibody. A. TRPC6 staining (green) appears in molecular layer and in Purkinje cells. B. In the same section, staining of TRPC3 (red) appears as well in both molecular layer and Purkinje cells. C. Merge images of A and B indicates extensive co-localization. DAPI is used as the counterstain (blue).



Expression of TRPC3 in rat C6 brain glioma cells. Immunocytochemical staining of Paraformaldehyde-fixed and permeabilized rat C6 brain glioma cells. A. Staining using Anti-TRPC3 antibody, (1:500) followed by goat anti-rabbit-AlexaFluor-488 secondary antibody. B. Nuclear staining using the cell-permeable dye Hoechst 33342. C. Merged image of panels A and B.