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Product datasheet for TA328677

TRPC1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide QLYDKGYTSKEQKDC, corresponding to amino acid residues 557-571 of human TRPC1.Intracellular.
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 1
Database Link:	NP_003295 Entrez Gene 22063 MouseEntrez Gene 89821 RatEntrez Gene 7220 Human P48995

View online »

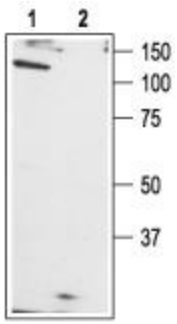
Background: The Transient Receptor Potential (TRP) superfamily is one of the largest ion channel families and consists of diverse groups of proteins. In mammals about 28 genes encode the TRP ion channel subunits. The mammalian TRP superfamily comprises six subfamilies known as the TRPC (canonical), TRPV (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. TRPC1 was the first mammalian TRP protein that was reported to form an ion channel.2 It can co-assemble with other TRPC subunits (TRPC3, TRPC4, TRPC5) to form heterotetramers whose properties are distinct from that of their homomeric form. The existence of the TRPC1 homomers has not been established as yet. The TRPC1, TRPC4 and TRPC5 can be activated either by Ca2+ store depletion or by GPCR stimulation pathways, while TRPC3, TRPC6 and TRPC7 form non-selective cationic channels that are activated by the stimulation of GPCRs. TRPC1, 4 and TRPC5 are assumed to form components of store operated channels in some cell types such as salivary gland cells, endothelial cells and vascular smooth muscle cells.

Synonyms: HTRP-1; TRP1

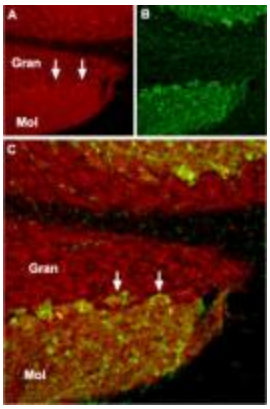
Protein Families: Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane

Protein Pathways: Calcium signaling pathway, Huntington's disease, Parkinson's disease

Product images:



Western blot analysis of rat brain membranes: 1. Anti-TRPC1 antibody, (1:200). 2. Anti-TRPC1 antibody, preincubated with the control peptide antigen.



Expression of TRPC1 in mouse cerebellum. Immunohistochemical staining of mouse cerebellum frozen sections using Anti-TRPC1 antibody. A. TRPC1 (red) appears in Purkinje cells (arrows) and in the molecular (Mol) and granule (Gran) layers. B. Staining with mouse anti-parvalbumin (PV) in the same brain section. C. Confocal merge of TRPC1 and PV demonstrates partial co-localization in the Purkinje and the molecular layers.