

Product datasheet for **TA328769**

Trpc1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	WB: 1:200-1:2000; FC: 1:50-1:600
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)SMGQMLQDFGK, corresponding to amino acid residues 495-505 of rat TRPC1. 2nd extracellular loop.
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% NaN ₃ .
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_446010 Entrez Gene 7220 Human Entrez Gene 22063 Mouse Entrez Gene 89821 Rat Q9QX01



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Background:

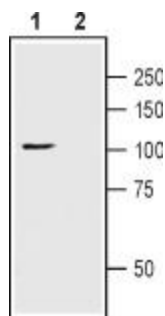
The Transient Receptor Potential (TRP) superfamily is one of the largest ion channel families and consists of diverse groups of proteins. In mammals about 28 genes encode the TRP ion channel subunits. The mammalian TRP superfamily comprises six subfamilies known as the TRPC (canonical), TRPV (vanilloid), 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. 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:

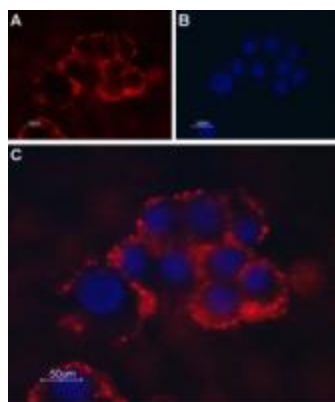
HTRP-1; MGC133334; MGC133335; TRP-1; TRP1

Note:

This antibody was tested in live cell imaging. Please see IF/ICC data for detail.

Product images:


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



Expression of TRPC1 in PC12 cells. Immunocytochemical staining of intact living PC12 cells. A. Extracellular staining of cells with Anti-TRPC1 (extracellular) antibody, (1:50) followed by goat anti-rabbit-AlexaFluor-594 secondary antibody. B. Nuclear staining with DAPI as the counterstain. C. Merged images of A and B.