

Product datasheet for **TA328770**

Trpc4 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 (C)KYSALNPRESWD, corresponding to amino acid residues 458-469 of rat TRPC4. 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 4
Database Link:	NP_536321 Entrez Gene 7223 Human Entrez Gene 22066 Mouse Entrez Gene 84494 Rat



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Background:

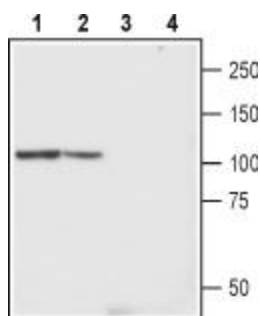
The Transient Receptor Potential (TRP) superfamily is one of the largest ion channel families and consists of diverse groups of proteins. In mammals about 28 genes encode the TRP ion channel subunits. The mammalian TRP superfamily comprises six subfamilies known as the TRPC (canonical), TRPV (vanilloid), 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. the 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. TRPC4 can form heterotetramers with TRPC1. TRPC4, TRPC1 and TRPC5 can be activated either by Ca²⁺ store depletion or by GPCR stimulation pathways and are also 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:

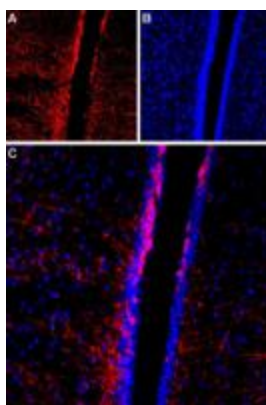
hTrp-4; HTRP4; MGC119570; MGC119571; MGC119572; MGC119573; OTTHUMP00000018273; OTTHUMP00000018277; TRP4

Note:

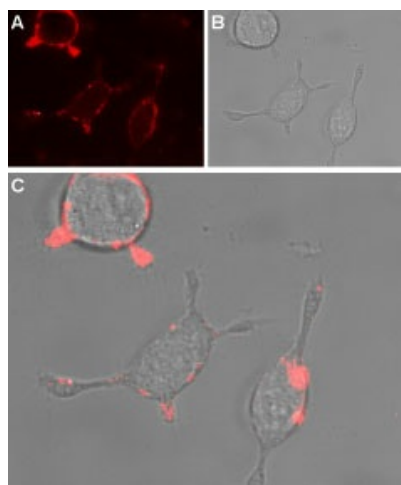
This antibody was tested in live cell imaging. Please see IF/ICC data for detail.

Product images:

Western blot analysis of rat and mouse brain lysates: 1. Anti-TRPC4 (extracellular) antibody, (1:200). 2. Anti-TRPC4 (extracellular) antibody, preincubated with the control antigen.



Expression of TRPC4 in rat brain. Immunohistochemical staining of rat third ventricle region using Anti-TRPC4 (extracellular) antibody. A. TRPC4 staining (red) is detected along the wall of the third ventricle (horizontal arrow) and astrocytic fibers extending from the wall (vertical arrow). B. Nucleus staining using DAPI as the counterstain (blue). C. Merge images of A and B.



Expression of TRPC4 in rat PC12 cells. Immunocytochemical staining of intact living rat Pheochromocytoma (PC12) cells. A. Extracellular staining of cells using Anti-TRPC4 (extracellular) antibody, (1:50) followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red). B. Live view of the cells. C. Merged image of A and B.