10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRPC3 Antibody

Catalog # ASC10454

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q13507
Other Accession	CAA74083, 2225937
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	105538
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	TRPC3 antibody can be used for the detection of TRPC3 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 2 μg/mL. For immunofluorescence start at 20 μg/mL.

Additional Information

Gene ID	7222
Other Names	TRPC3 Antibody: TRP3, TRP3, Short transient receptor potential channel 3, Transient receptor protein 3, TrpC3, transient receptor potential cation channel, subfamily C, member 3
Target/Specificity	TRPC3;
Reconstitution & Storage	TRPC3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	TRPC3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRPC3
Synonyms	TRP3
Function	Forms a receptor-activated non-selective calcium permeant cation channel (PubMed:29726814, PubMed:30139744, PubMed:35051376, PubMed:9417057, PubMed:9930701, PubMed:10611319).
Cellular Location	Cell membrane; Multi-pass membrane protein

Tissue Location	Expressed predominantly in brain and at much lower levels in ovary, colon, small intestine, lung, prostate, placenta and testis

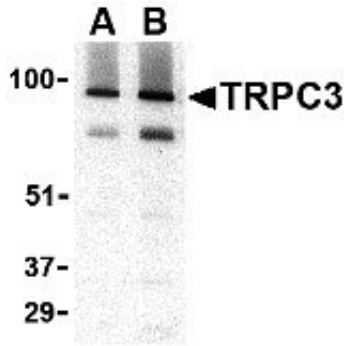
Background

TRPC3 Antibody: The mammalian transient receptor potential (TRP) superfamily can be divided into three major families including the "canonical TRP" (TRPC) family. The seven members of this family share the activation through PLC-coupled receptors and have been suggested to be components of receptor-regulated cation channels in different cell types. Furthermore, the members of the TRPC3/6/7 subfamily can be activated by diacylglycerol analogs, suggesting a possible mechanism of activation of these channels by PLC-coupled receptors. TRPC3 encodes a Ca2+-permeant channel that is agonist-activated but not store-operated or directly receptor-activated. TRPC3 physically interacts with TRPC6 and TRPC7 and forms functional tetrameric channels.

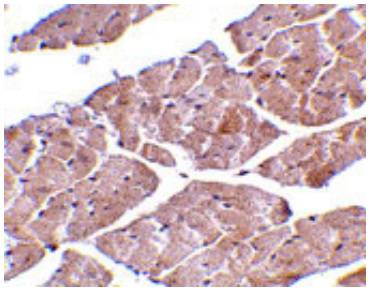
References

Contell C, Birnbaumer V, Flockerzi V, et al. A unified nomenclature for the superfamily of TRP cation channels. Mol. Cell 2002; 9:229-31.
Trebak M, Vazquez G, Bird GSJ, et al. The TRPC3/6/7 subfamily of cation channels. Cell Calcium 2003; 33:451-61.
Zitt C, Obukhov AG, Strubing C, et al. Expression of TRPC3 in Chinese hamster ovary cells results in calcium-activated cation currents not related to store depletion. J. Cell. Biol. 1997; 1333-41.
Dietrich A, Kalwa H, Rost BR, et al. The diacylglycerol-sensitive TRPC3/6/7 subfamily of cation channels: functional characterization and physiological relevance. Pflugers Arch. 2005; 451:72-80.

Images



Western blot analysis of TRPC3 in human brain tissue lysate with TRPC3 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of TRPC3 in mouse heart tissue with TRPC3 antibody at 2 µg/mL.

Immunofluorescence of TRPC3 in Mouse Heart cells with TRPC3 antibody at 20 µg/mL.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.