

TRPC3 Antibody

Catalog # ASC10454

Specification

TRPC3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>Q13507</u> <u>CAA74083</u>, <u>2225937</u> Human, Mouse Rabbit Polyclonal IgG 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.

TRPC3 Antibody - 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°C for three months and -20°C, 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.

TRPC3 Antibody - Protein Information

Name TRPC3

Synonyms TRP3

Function

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Forms a receptor-activated non-selective calcium permeant cation channel (PubMed:<a href="http://www.uniprot.org/citations/29726814" target="_blank">29726814</a>, PubMed:<a href="http://www.uniprot.org/citations/30139744" target="_blank">30139744</a>, PubMed:<a href="http://www.uniprot.org/citations/35051376" target="_blank">35051376</a>, PubMed:<a href="http://www.uniprot.org/citations/36051376" target="_blank">9417057</a>, PubMed:<a href="http://www.uniprot.org/citations/36051376" target="_blank">9417057</a>, PubMed:<a href="http://www.uniprot.org/citations/36051376" target="_blank">9417057</a>, PubMed:<a href="http://www.uniprot.org/citations/9417057" target="_blank">9417057</a>, PubMed:<a href="http://www.uniprot.org/citations/9417057" target="_blank">9417057</a>, PubMed:<a
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href="http://www.uniprot.org/citations/9930701" target="_blank">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

TRPC3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TRPC3 Antibody - Images



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

TRPC3 Antibody - 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.

TRPC3 Antibody - 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.