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TRPC3 Antibody
Catalog # ASC11946

Specification

TRPC3 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q13507
Other Accession	NP_001124170, 194733735
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 90, 93, 101 kDa; Observed: 93 kDa KDa**
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 2.5 µg/mL.**

TRPC3 Antibody - Additional Information

Gene ID **7222**

Target/Specificity
TRPC3; TRPC3 antibody is human, mouse and rat reactive. At least four isoforms are known to exist; this antibody will detect the three largest isoforms. TRPC3 antibody is predicted to not cross-react with TRPC6.

Reconstitution & Storage
TRPC3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

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
Forms a receptor-activated non-selective calcium permeant cation channel (PubMed:8646775, PubMed:9417057, PubMed:9930701, PubMed:20095964, PubMed:30139744, PubMed:29726814, PubMed:<a

href="http://www.uniprot.org/citations/35051376" target="_blank">35051376). May be operated by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases or G-protein coupled receptors (PubMed:8646775).

Cellular Location
Cell membrane; Multi-pass membrane protein

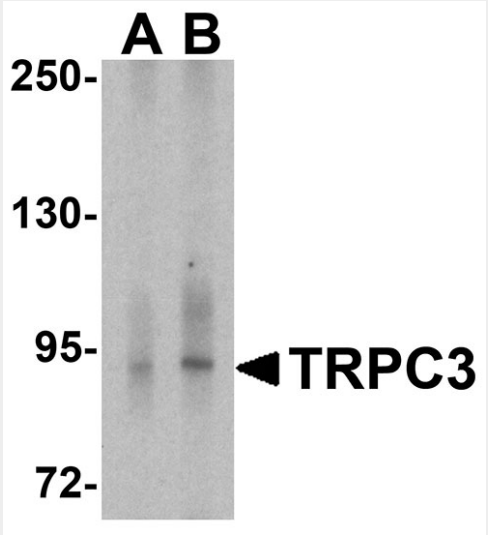
Tissue Location
Expressed predominantly in brain and at much lower levels in ovary, colon, small intestine, lung, prostate, placenta and testis

TRPC3 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRPC3 Antibody - Images



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

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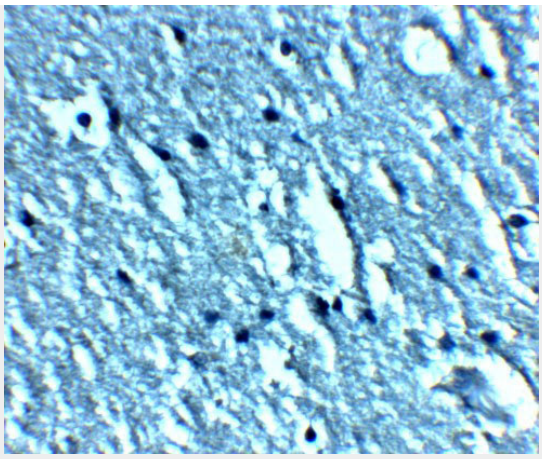

Immunohistochemistry of TRPC3 in human brain tissue with TRPC3 antibody at 2.5 µg/mL.

TRPC3 Antibody - Background

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.