

**TRPC3 Antibody**  
Catalog # ASC11946**Specification****TRPC3 Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q13507</a>
Other Accession	<a href="#">NP_001124170</a> , <a href="#">194733735</a>
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°C for three months and -20°C, 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:<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/9417057" target="\_blank">9417057</a>, PubMed:<a href="http://www.uniprot.org/citations/9930701" target="\_blank">9930701</a>, PubMed:<a href="http://www.uniprot.org/citations/10611319" target="\_blank">10611319</a>).

### Cellular Location

Cell membrane; Multi-pass membrane protein

### Tissue Location

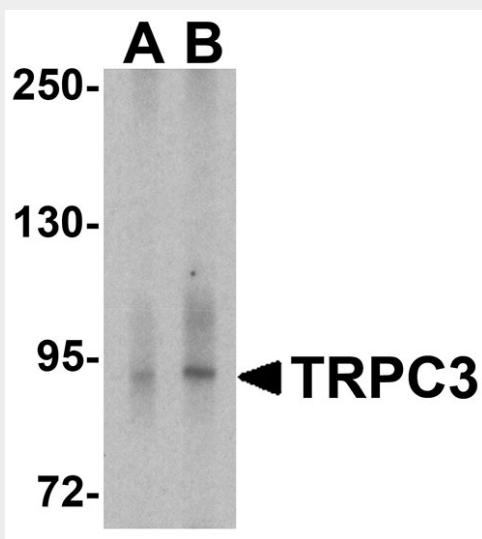
Expressed predominantly in brain and at much lower levels in ovary, colon, small intestine, lung, prostate, placenta and testis

### TRPC3 Antibody - Protocols

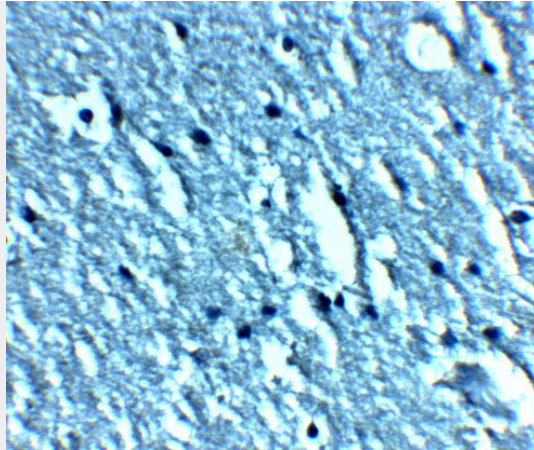
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.



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 Ca<sup>2+</sup>-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.