

TRPC6 Antibody
Catalog # ASC10450**Specification**

TRPC6 Antibody - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q9Y210
Other Accession	AAH93658 , 7225
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 100, 102 kDa

Application Notes	Observed: 93 kDa KDa TRPC6 antibody can be used for the detection of TRPC6 by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 20 µg/mL.
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TRPC6 Antibody - Additional InformationGene ID **7225****Other Names**

TRPC6 Antibody: TRP6, FSGS2, TRP6, Short transient receptor potential channel 6, Transient receptor protein 6, TrpC6, transient receptor potential cation channel, subfamily C, member 6

Target/Specificity

TRPC6 antibody was raised against a 14 amino acid synthetic peptide from near the carboxy terminus of human TRPC6.

The immunogen is located within the last 50 amino acids of TRPC6.

Reconstitution & Storage

TRPC6 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

TRPC6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TRPC6 Antibody - Protein Information**Name** TRPC6 {ECO:0000303|PubMed:9930701, ECO:0000312|HGNC:HGNC:12338}**Function**

Forms a receptor-activated non-selective calcium permeant cation channel (PubMed:<a

[19936226](http://www.uniprot.org/citations/19936226), PubMed: [23291369](http://www.uniprot.org/citations/23291369), PubMed: [26892346](http://www.uniprot.org/citations/26892346), PubMed: [9930701](http://www.uniprot.org/citations/9930701)). Probably is operated by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases or G-protein coupled receptors. Activated by diacylglycerol (DAG) in a membrane-delimited fashion, independently of protein kinase C (PubMed: [26892346](http://www.uniprot.org/citations/26892346)). Seems not to be activated by intracellular calcium store depletion.

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

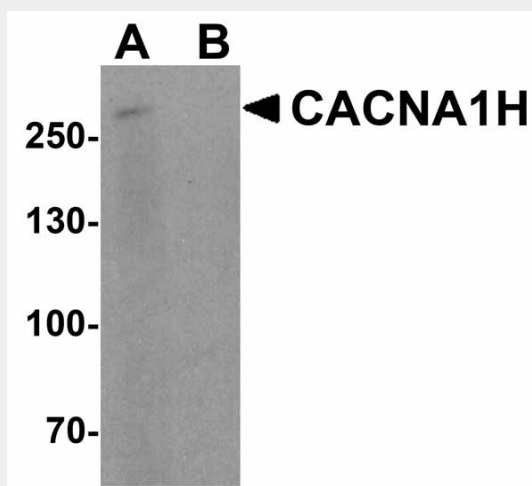
Expressed primarily in placenta, lung, spleen, ovary and small intestine. Expressed in podocytes and is a component of the glomerular slit diaphragm.

TRPC6 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](#)

TRPC6 Antibody - Images



Western blot analysis of CACNA1H in 293 cell lysate with CACNA1H antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.

TRPC6 Antibody - Background

TRPC6 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 TRPC6/6/7 subfamily can be activated by diacylglycerol (DAG) analogs, suggesting a possible mechanism of activation of these channels by PLC-coupled receptors. When expressed in transfected cells, TRPC6 acts as a non-selective store-independent receptor-activated cation channel. It is activated by DAG in a PKC-independent manner and is insensitive to IP3 activation. There is increasing evidence that TRPC6 encodes endogenous DAG-activated receptor-operated cation channels in vivo.

TRPC6 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.
Dietrich A, Kalwa H, Rost BR, et al. The diacylglycerol-sensitive TRPC6/6/7 subfamily of cation channels: functional characterization and physiological relevance. *Pflugers Arch.* 2005; 451:72-80.
Trebak M, Vazquez G, Bird GSJ, et al. The TRPC6/6/7 subfamily of cation channels. *Cell Calcium* 2003; 33:451-61