

# TRPC4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16760b

# **Specification**

# TRPC4 Antibody (C-term) - Product Information

Application WB,E
Primary Accession O9UBN4

Other Accession P79100, NP 001129427.1, NP 001129428.1

Reactivity
Predicted
Bovine
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Bovine
Rabbit
Polyclonal
Rabbit IgG
112101
812-840

# TRPC4 Antibody (C-term) - Additional Information

#### **Gene ID 7223**

## **Other Names**

Short transient receptor potential channel 4, TrpC4, Trp-related protein 4, hTrp-4, hTrp4, TRPC4

## Target/Specificity

This TRPC4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 812-840 amino acids from the C-terminal region of human TRPC4.

# **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

TRPC4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# TRPC4 Antibody (C-term) - Protein Information

#### Name TRPC4



Function Forms a receptor-activated non-selective calcium permeant cation channel (PubMed:11042129, PubMed:11713258, PubMed:16144838, PubMed:39478185). Acts as a cell-cell contact-dependent endothelial calcium entry channel (PubMed:19996314). Forms a homomeric ion channel or a heteromeric ion channel with TRPC1; the heteromeric ion channel has reduced calcium permeability compared to the homomeric channel (PubMed:39478185). Also permeable to monovalent ions including sodium, lithium and cesium ions (PubMed:39478185).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Note=Enhanced insertion into the cell membrane after activation of the EGF receptor

## **Tissue Location**

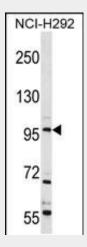
Strongly expressed in placenta. Expressed at lower levels in heart, pancreas, kidney and brain. Expressed in endothelial cells. Isoform alpha was found to be the predominant isoform. Isoform beta was not found in pancreas and brain

### TRPC4 Antibody (C-term) - Protocols

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

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

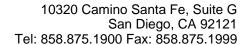
# TRPC4 Antibody (C-term) - Images



TRPC4 Antibody (C-term) (Cat. #AP16760b) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the TRPC4 antibody detected the TRPC4 protein (arrow).

# TRPC4 Antibody (C-term) - Background

Form a receptor-activated non-selective calcium permeant cation channel. Acts as a cell-cell contact-dependent endothelial calcium entry channel. Probably operated by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases or G-protein coupled receptors. Mediates cation entry, with an enhanced permeability to barium over calcium. May also be





activated by intracellular calcium store depletion.

# TRPC4 Antibody (C-term) - References

Mace, K.E., et al. J. Cell. Physiol. 225(2):444-453(2010) von Spiczak, S., et al. Neuromolecular Med. 12(3):292-299(2010) Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010): Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Schaefer, M., et al. J. Biol. Chem. 277(5):3752-3759(2002)