10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-TRPC4 Antibody
Catalog # ABO11615

Specification

Anti-TRPC4 Antibody - Product Information

Application	**WB**
Primary Accession	Q9UBN4
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Short transient receptor potential channel 4(TRPC4) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TRPC4 Antibody - Additional Information

Gene ID 7223

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

Calculated MW
112101 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Enhanced insertion into the cell membrane after activation of the EGF receptor.

Tissue Specificity
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. .

Protein Name
Short transient receptor potential channel 4

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human TRPC4(961-977aa LNLPDTVTHEDYVTTRL).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage **At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the transient receptor (TC 1.A.4) family. STrpC subfamily. TRPC4 sub-subfamily.

Anti-TRPC4 Antibody - 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

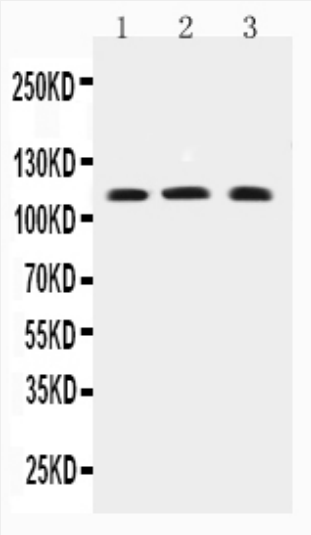
Anti-TRPC4 Antibody - Protocols

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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-TRPC4 Antibody - Images



Anti-TRPC4 antibody, ABO11615, All Western blottingAll lanes: Anti-TRPC4(ABO11615) at 0.5ug/mlLane 1: COLO320 Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: PANC Whole Cell Lysate at 40ugPredicted bind size: 112KDObserved bind size: 112KD

Anti-TRPC4 Antibody - Background

The short transient receptor potential channel 4(TRPC4), also known as Trp-related protein 4, is a protein that in humans is encoded by the TRPC4 gene. TRPC4 is a member of the transient receptor potential cation channels. It is mapped to 13q13.3. This protein forms a non-selective calcium-permeable cation channel that is activated by Gq-coupled receptors andtyrosine kinases, and plays a role in multiple processes including endothelial permeability, vasodilation, neurotransmitter release and cell proliferation. TRPC4 also has an essential role in endothelial-dependent regulation of vascular tone, endothelial permeability, and neurotransmitter release from thalamic interneurons.