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Anti-TRPC4 Antibody

Catalog # ABO11615

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.

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
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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.

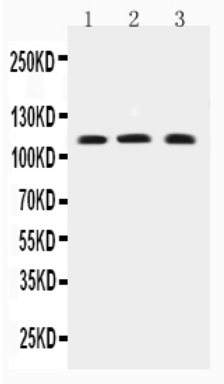
Protein Information

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

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.