

Anti-TRPC6 Antibody

Catalog # ABO11064

Specification

Anti-TRPC6 Antibody - Product Information

Application WB, IHC
Primary Accession O9Y210
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Short transient receptor potential channel 6(TRPC6) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

Reconstitution

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

Anti-TRPC6 Antibody - Additional Information

Gene ID 7225

Other Names

Short transient receptor potential channel 6, TrpC6, Transient receptor protein 6, TRP-6, TRPC6, TRP6

Calculated MW

106326 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat
br>Western blot, 0.1-0.5 μg/ml, Rat, Human, Mouse
cbr>

Subcellular Localization

Membrane; Multi-pass membrane protein.

Tissue Specificity

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

Protein Name

Short transient receptor potential channel 6(TrpC6)

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 in the middle region of human TRPC6(249-265aa HDYFCKCNDCNQKQKHD), different from the related rat and mouse sequences by three amino



acids.

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. TRPC6 sub-subfamily.

Anti-TRPC6 Antibody - Protein Information

Name TRPC6 {ECO:0000303|PubMed:9930701, ECO:0000312|HGNC:HGNC:12338}

Function

Thought to form a receptor-activated non-selective calcium permeant cation channel (PubMed:19936226, PubMed:23291369). 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). 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.

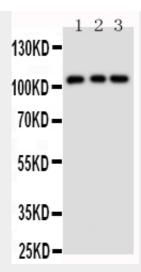
Anti-TRPC6 Antibody - Protocols

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

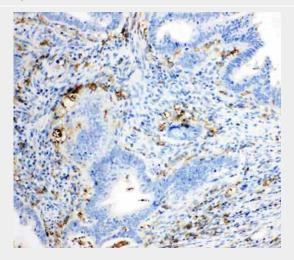
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TRPC6 Antibody - Images

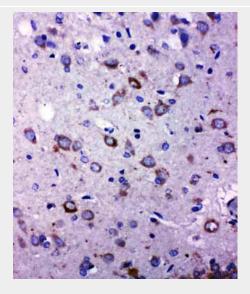




Anti-TRPC6 antibody, ABO11064, Western blottingLane 1: Rat Lung Tissue LysateLane 2: 293T Cell LysateLane 3: 293T Cell Lysate



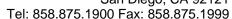
Anti-TRPC6 antibody, ABO11064, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti-TRPC6 antibody, ABO11064, IHC(P)IHC(P): Rat Brain Tissue

Anti-TRPC6 Antibody - Background







Transient receptor potential cation channel, subfamily C, member 6, also known as TRPC6, is a human gene encoding a protein of the same name. The protein encoded by this gene forms a receptor-activated calcium channel in the cell membrane. The channel is activated by diacylglycerol and is thought to be under the control of a phosphatidylinositol second messenger system. Activation of this channel occurs independently of protein kinase C and is not triggered by low levels of intracellular calcium. Defects in this gene are a cause of focal segmental glomerulosclerosis 2 (FSGS2).