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Anti-TRPC6 Antibody

Catalog # ABO11064

Product Information

Application	WB, IHC-P
Primary Accession	Q9Y210
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Rat, Human, Mouse
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. .
Source	Eukaryota
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.

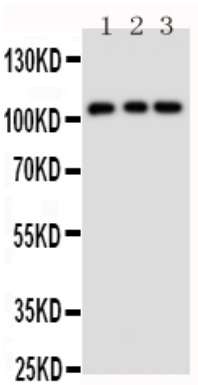
Protein Information

Name	TRPC6 {ECO:0000303|PubMed:9930701, ECO:0000312|HGNC:HGNC:12338}
Function	Non-selective, calcium-permeable cation channel (PubMed: 19936226, PubMed:23291369, PubMed:26892346, PubMed:9930701). Mediates calcium entry following G(q)-coupled receptor or receptor tyrosine kinase activation, which triggers phospholipase C (PLC)- mediated hydrolysis of phosphatidylinositides and production of diacylglycerol (DAG) that directly activates TRPC6 (PubMed:26892346). Does not appear to be activated by depletion of intracellular calcium stores (PubMed:9930701). Mediates depolarization of intrinsically photosensitive retinal ganglion cells (ipRGCs) in response to light- induced melanopsin (OPN4)-mediated phototransduction via G(q)-PLC signaling, likely by forming heteromeric TRPC6-TRPC7 channels (By similarity).
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.

Background

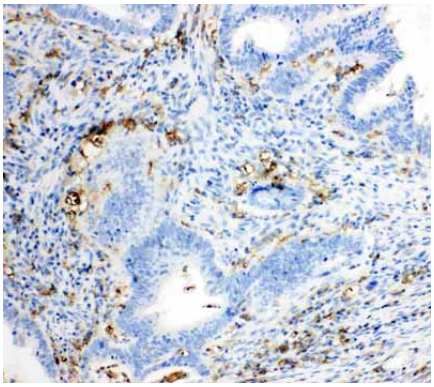
Transient receptor potential cation channel, subfamily C, member 6, also known as TRPC6, is a human gene encoding a protein of the same name. The protein encoded by this gene forms a receptor-activated calcium channel in the cell membrane. The channel is activated by diacylglycerol and is thought to 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).

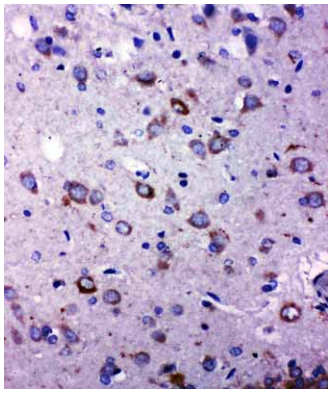
Images



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