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Anti-TRPC6 Picoband Antibody

Catalog # ABO12868

Product Information

Application	WB
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 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	Western blot, 0.1-0.5 □g/ml, Mouse, Rat, Human
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
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human TRPC6 recombinant protein (Position: K771-E875). Human TRPC6 shares 82.9% amino acid (aa) sequence identity with mouse TRPC6.
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.

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

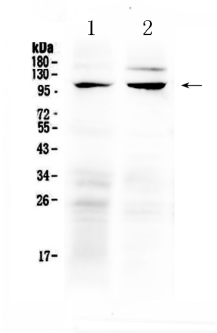


Figure 1. Western blot analysis of TRPC6 using anti-TRPC6 antibody (ABO12868).

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