

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 µg/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 reconstitution, 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

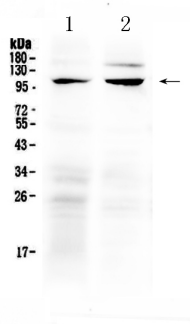


Figure 1. Western blot analysis of TRPC6 using anti-TRPC6 antibody (ABO12868).

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