10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRPC6 Rabbit pAb

Catalog # AP97151

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9Y210
Other Accession	Q9Y210
Predicted	Rat, Pig, Human, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	106326
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TRPC6
Epitope Specificity	651-750/931
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the transient receptor (TC 1.A.4) family. STrpC subfamily. TRPC6 sub-subfamily.Contains 4 ANK repeats.
SUBUNIT	Interacts with MX1 and RNF24.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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). [provided by RefSeq].

Additional Information

Gene ID	7225
Other Names	FSGS2; TRP6; LLHWJM002; LLHWJM003; LLHWJM004; TRP-6; Trrp6; mtrp6; TRPC6_HUMAN; TRPC6; Transient receptor protein 6 (TRP-6); TRPC6_MOUSE; Calcium entry channel; transient receptor potential cation channel subfamily C member 6; focal segmental glomerulosclerosis 2; transient receptor potential cation channel, subfamily C, member 6
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=0.2 □g/Test,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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