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Datasheet for ABIN964697

anti-TRPC6 antibody (C-Term)

2 Images

1 Publication

Overview

Quantity:	100 µg
Target:	TRPC6
Binding Specificity:	C-Term
Reactivity:	Human, Chimpanzee
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TRPC6 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	This monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to a region near the carboxy terminus of human TRPC6 protein. Immunogen Type: Peptide
Clone:	3F2-H10-F2
Isotype:	IgG1 kappa
Specificity:	This product was purified from concentrated tissue culture supernate by Protein A chromatography. This antibody is specific for human TRPC6 protein. A BLAST analysis was used to suggest cross-reactivity with TRPC6 from chimpanzee based on 100% homology with the immunizing sequence. Cross-reactivity with TRPC6 from other sources has not been determined.
Cross-Reactivity:	Chimpanzee

Product Details

Characteristics: TRPC6, also known as TRP6, short transient receptor potential channel 6 and transient receptor potential cation channel subfamily C member 6, is thought to form a receptor-activated non-selective calcium permeant cation channel. TRPC6 is probably operated by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases or G-protein coupled receptors. It is activated by diacylglycerol (DAG) in a membrane-delimited fashion, independently of protein kinase C and may not to be activated by intracellular calcium store depletion. Defects in this gene are a cause of focal segmental glomerulosclerosis (FSGS). Expression of this protein has been reported in tissues such as placenta, lung, spleen, ovary, small intestine, and renal podocytes. Immunohistochemistry studies using polyclonal antibodies to this target have shown moderate to strong staining in cell types such as neurons, breast, respiratory, squamous and prostate epithelium, epidermis, placental trophoblasts, dendritic cells, and subsets of immune cells, and faint to moderate staining of adrenal, colon, ganglion cells, hepatocytes, heart, and testis.

Sterility: Sterile filtered

Target Details

Target: TRPC6

Alternative Name: TRPC6 ([TRPC6 Products](#))

Background: TRPC6, also known as TRP6, short transient receptor potential channel 6 and transient receptor potential cation channel subfamily C member 6, is thought to form a receptor-activated non-selective calcium permeant cation channel. TRPC6 is probably operated by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases or G-protein coupled receptors. It is activated by diacylglycerol (DAG) in a membrane-delimited fashion, independently of protein kinase C and may not to be activated by intracellular calcium store depletion. Defects in this gene are a cause of focal segmental glomerulosclerosis (FSGS). Expression of this protein has been reported in tissues such as placenta, lung, spleen, ovary, small intestine, and renal podocytes. Immunohistochemistry studies using polyclonal antibodies to this target have shown moderate to strong staining in cell types such as neurons, breast, respiratory, squamous and prostate epithelium, epidermis, placental trophoblasts, dendritic cells, and subsets of immune cells, and faint to moderate staining of adrenal, colon, ganglion cells, hepatocytes, heart, and testis.

Synonyms: TRPC6, TRP6, short transient receptor potential channel 6 and transient receptor potential cation channel subfamily C member 6

Gene ID: 7225, 5730102

Target Details

UniProt: [Q9Y210](#)

Application Details

Application Notes: This monoclonal antibody is suitable for ELISA, immunohistochemistry and western blotting. Expect a band approximately 106 kDa in size corresponding to TRPC6 protein by western blotting in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user. Use formalin-fixed paraffin-embedded sections for immunohistochemistry. No pre-treatment of sample is required. Strong staining was observed in adrenal, Purkinje neurons, cortical neurons, heart, ganglion cells, renal tubules, Sertoli cells, hepatocytes, skeletal muscle, exocrine pancreas, and germinal centers of lymphoid follicles. Moderate staining was observed in colon epithelium and plasma cells, B-lymphocytes, and parafollicular cells of the thyroid. Faint staining was seen in respiratory epithelium. Prostate and placenta were negative for staining. The antibody produced minimal to no background staining and appeared very specific at 2.5 µg/mL.

Comment: Gene Name: TRPC6

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.0 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

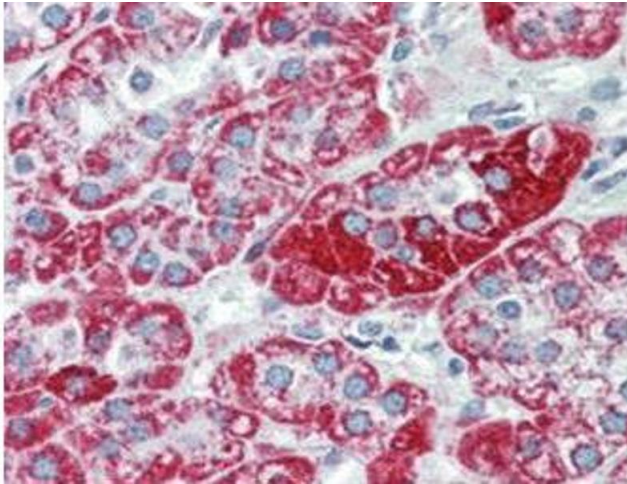
Storage: 4 °C/-20 °C

Storage Comment: Store vial at 4 °C prior to restoration. For extended storage aliquot contents and freeze at -20 °C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4 °C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening.

Expiry Date: 12 months

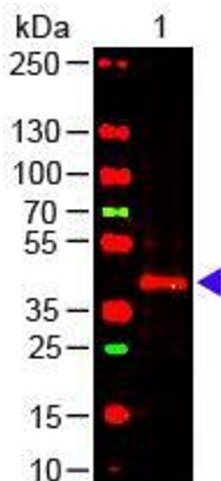
Product cited in: Alonso-González, Cabo, San José, Gago, Suazo, García-Suárez, Cobo, Vega: "Human Digital Meissner Corpuscles Display Immunoreactivity for the Multifunctional Ion Channels Trpc6 and Trpv4." in: **Anatomical record (Hoboken, N.J. : 2007)**, Vol. 300, Issue 6, pp. 1022-1031, (2018) ([PubMed](#)).

Validation report #102194 for Western Blotting (WB)



Immunohistochemistry

Image 1. Immunohistochemistry using anti-TRPC6 monoclonal antibody shows detection of TRPC6 in human adrenal (cortex) tissue (40X). The antibody was used a dilution to 2.5 µg/mL. The image shows strong staining with minimal background staining. Tissue was formalin fixed and paraffin embedded. No pre-treatment of sample was required. The image shows the localization of antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. Personal communication, Andrew Elston, Lifespan Biosciences, Seattle, WA.



Western Blotting

Image 2. Western Blot of Mouse anti-TRPC6 Antibody Lane 1: Mouse Kidney WCL Load: 10 µg per lane Primary antibody: TRPC6 Antibody at 1:1000 for overnight at 4°C Secondary antibody: 649 donkey anti-mouse at 1:20,000 for 30 min at RT Block: ABIN925618 for 30 min at RT