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Datasheet for ABIN964697 anti-TRPC6 antibody (C-Term)

2 Images

Publication

1



Overview

| Quantity: | 100 µg |
|----------------------|--|
| Target: | TRPC6 |
| Binding Specificity: | C-Term |
| Reactivity: | Human, Mouse |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Application: | Western Blotting (WB), Immunohistochemistry (IHC), ELISA |

Product Details

| Purpose: | TRPC6 Antibody |
|-----------------------------|---|
| Immunogen: | 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: Conjugated Peptide |
| Clone: | 3F2-H10-F2 |
| Isotype: | IgG1 kappa |
| Cross-Reactivity (Details): | This antibody is specific for human TRPC6 protein. |
| Characteristics: | Synonyms: mouse anti-TRPC6 Antibody, TRPC 6, TRP6, short transient receptor potential channel 6 and transient receptor potential cation channel subfamily C member 6 |
| Purification: | This product was purified from concentrated tissue culture supernate by Protein A chromatography. |

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Product Details

Sterility:

Sterile filtered

Target Details

| Target: | TRPC6 |
|-------------------|---|
| Alternative Name: | TRPC6 (TRPC6 Products) |
| Background: | 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, |
| Gene ID: | 7225, 5730102 |
| UniProt: | Q9Y210 |

Application Details

| Application Notes: | Immunohistochemistry Dilution: 2.5 µg/mL |
|--------------------|---|
| | Application Note: Anti-TRPC6 monoclonal antibody (200-301-B59) clone # 3F2.H10.F2 was |
| | developed by Rockland Immunochemicals Inc. against human TRPC6 using conventional |
| | hybridoma technology by fusing splenocytes of a host animal immunized with a synthetic |
| | peptide corresponding to the cytosolic domain of TRPC6 with myeloma cells. The screening of |
| | clones during the subcloning process was based on immunohistochemistry using human |
| | tissue microarrays. The pathologist analyzing the staining patterns of clones reported that the |
| | antibody shows strong to moderate staining consistent with the localization of human TRPC6 |
| | in adrenal cortex, neurons, Purkinje cells, colon epithelium, cardiac myocytes, renal tubules, |
| | hepatocytes, skeletal muscle, pancreatic exocrine and islet cells, germinal center lymphocytes, |
| | plasma cells, Sertoli cells of the testes as well as staining more faintly other tissues known to |

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/4 | Product datasheet for ABIN964697 | 03/28/2025 | Copyright antibodies-online. All rights reserved. be positive for the target protein (e.g., 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. The pattern of reactivity observed for this clone was also similar to other antibodies used for benchmarking purposes. Specific conditions for reactivity should be optimized by the end user, however, we suggest the use of formalin-fixed paraffin-embedded sections for immunohistochemistry. No pre-treatment of sample is required. While immunohistochemistry was used as the primary screening and release validation immunoassay, clone #3F2.H10.F2 was also screened by western blotting against known positive and negative control lysates. A single band is detected by this antibody in TRPC6 positive cells and tissues, however, the molecular weight of the band (~30 kDa) is not consistent with full length human TRPC6 (181 kDa). The band detected by this antibody may be the cleaved cytosolic domain of TRPC6 as the immunogen used for antibody production corresponds to an amino acid sequence located within this domain. However, no additional data is available to elucidate the molecular composition of this band. Western Blot Dilution: 1:500- 1:2,000 ELISA Dilution: 1:10,000 - 1:50,000 Other: User Optimized

Restrictions:

For Research Use only

Handling

| Format: | Liquid |
|--------------------|---|
| Concentration: | 1.0 mg/mL |
| Buffer: | Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide |
| 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 -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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. |

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Expiry Date:

Publications

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).

Images



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

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