abcam

Product datasheet

Anti-TRPM7 antibody ab729

2 Abreviews 26 References 1 Image

Overview

Product name	Anti-TRPM7 antibody
Description	Goat polyclonal to TRPM7
Host species	Goat
Tested applications	**Suitable for:** ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Dog, Pig
Immunogen	Synthetic peptide: TKESESTNSVRLML, corresponding to C terminal amino acids 1852-1865 of Human TRPM7. Run BLAST with ExPASy Run BLAST with NCBI
General notes	In response to customer feedback and in-house testing the latest lot doesn't pass the WB quality testing so we have decided to remove the application for now. Please contact technical@abcam.com for more details. Please see reference He et al for details of the size of the protein detected by SDS-PAGE. Principal Names: TRPM7; transient receptor potential cation channel, subfamily M, member 7; CHAK; CHAK1; LTRPC7; FLJ20117; TRP-PLIK; LTRPC ion channel family member 7; homolog of mouse transient receptor potential-phospholipase C-interacting kinase CHaK hypothetical protein. Official Gene Symbol - TRPM7 GenBank Accession Number – XP_030709 LocusLink ID - 54822 (human). Can be blocked with Human TRPM7 peptide (**ab22777**). The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab729 in the following tested applications.

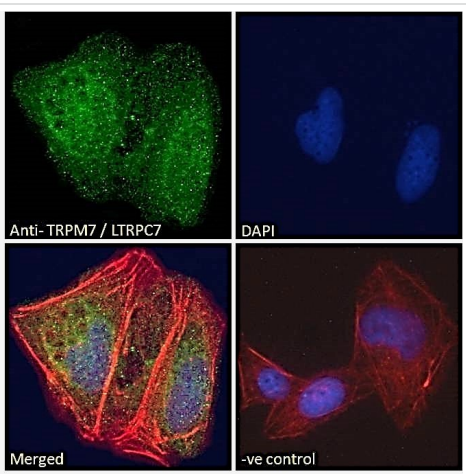
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★☆☆ (1)	Use at an assay dependent concentration.

Target

Function	Essential ion channel and serine/threonine-protein kinase. Divalent cation channel permeable to calcium and magnesium. Has a central role in magnesium ion homeostasis and in the regulation of anoxic neuronal cell death. The kinase activity is essential for the channel function. May be involved in a fundamental process that adjusts plasma membrane divalent cation fluxes according to the metabolic state of the cell. Phosphorylates annexin A1 (ANXA1).
Involvement in disease	Defects in TRPM7 are a cause of susceptibility to amyotrophic lateral sclerosis-parkinsonism/dementia complex type 1 (ALS-PDC1) [MIM:105500]; also called amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam or Guam disease. Amyotrophic lateral sclerosis-parkinsonism/dementia complex type 1 is a neurodegenerative disorder characterized by chronic, progressive and uniformly fatal amyotrophic lateral sclerosis and parkinsonism-dementia. Both diseases are known to occur in the same kindred, the same sibship and even the same individual.
Sequence similarities	In the C-terminal section; belongs to the protein kinase superfamily. Alpha-type protein kinase family. ALPK subfamily. In the N-terminal section; belongs to the transient receptor (TC 1.A.4) family. LTrpC subfamily. TRPM7 sub-subfamily. Contains 1 alpha-type protein kinase domain.
Post-translational modifications	Autophosphorylated.
Cellular localization	Membrane.

Images



Immunocytochemistry/ Immunofluorescence - Anti-TRPM7 antibody (ab729)

Immunocytochemistry/ Immunofluorescence analysis of U2OS labeling TRPM7 with ab729 at 10 ug/mL. Cells were fixed with paraformaldehyde and permeabilized with 0.15% Triton. An Alexa Fluor 488 antibody was used as the secondary antibody (2ug/mL). Actin filaments were stained with phalloidin (red) and the nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/mL) followed by Alexa Fluor 488 secondary antibody (2ug/mL).

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