Datasheet for ABIN351218

anti-TRPM7 antibody (4th Cytoplasmic Loop)

2 Images

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Overview

Quantity:	500 µg
Target:	TRPM7
Binding Specificity:	4th Cytoplasmic Loop
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TRPM7 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Rabbit antibody to TRPM7
Immunogen:	A synthetic peptide from the 4th cytoplasmic loop of human TRPM7 (LTRPC7) conjugated to blue carrier protein was used as the antigen.
Isotype:	IgG
Specificity:	Specific for TRPM7.
Cross-Reactivity:	Human, Rat
Cross-Reactivity (Details):	Other species not yet tested.
Purification:	IgG

Target Details

Target:	TRPM7
Alternative Name:	TRPM7 (TRPM7 Products)
Background:	TRPCs mammalian homologs of the Drosophila transient receptor potential (trp) protein are ion channels that are thought to mediate capacitative calcium entry into the cell. TRP-PLIK is a protein that is both an ion channel and a kinase. As a channel it conducts calcium and monovalent cations to depolarize cells and increase intracellular calcium. As a kinase it is capable of phosphorylating itself and other substrates. The kinase activity is necessary for channel function as shown by its dependence on intracellular ATP and by the kinase mutants. 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). CATALYTIC ACTIVITY: ATP + a protein: ADP + a phosphoprotein. COFACTOR: Binds 1 zinc ion per subunit. SUBUNIT: Homodimer. Forms heterodimers with TRPM6. SUBCELLULAR LOCATION: Membrane, Multi-pass membrane protein.
UniProt:	Q96QT4

Application Details

Application Notes:	IHC WB (confirmed by recombinant protein). A concentration of 10-50 µg,ml is recommended. The optimal concentration should be determined by the end user. Not yet tested in other applications.
Restrictions:	For Research Use only

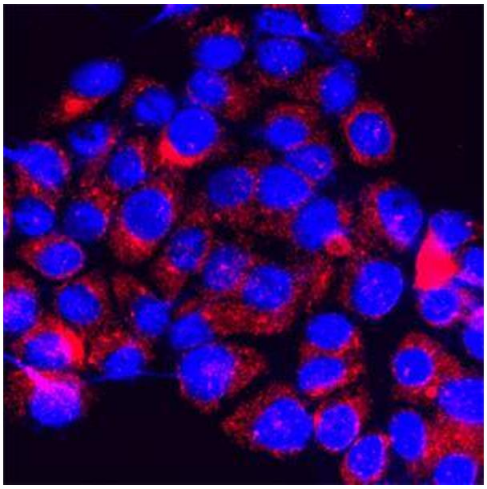
Handling

Format:	Lyophilized
Reconstitution:	Reconstitute in 500 µL of sterile water. Centrifuge to remove any insoluble material.
Handling Advice:	Avoid freeze and thaw cycles.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain the lyophilised/reconstituted antibodies frozen at -20C for long term storage and refrigerated at 2-8C for a shorter term. When reconstituting glycerol (1:1) may be added for an additional stability. Avoid freeze and thaw cycles.

Handling

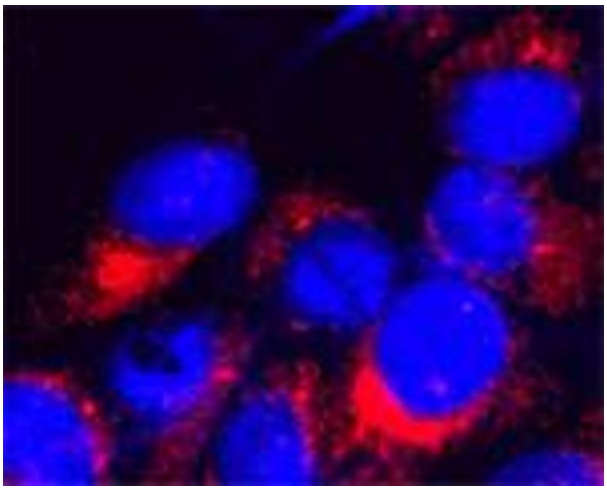
Expiry Date:	12 months

Images



Immunofluorescence

Image 1. IF on PC12 cells at a concentration of 30 µg/ml using Rabbit antibody to 4th cytoplasmic loop of human TRPM7 (LTRPC7): IgG (ABIN351218), DAPI counterstained appearing in blue.



Immunofluorescence

Image 2. IF on PC12 cells at a concentration of 30 µg/ml using Rabbit antibody to 4th cytoplasmic loop of human TRPM7 (LTRPC7): IgG (ABIN351218), DAPI counterstained.

