

For Research Use Only

TRPM4 Polyclonal antibody

Catalog Number: 21985-1-AP **2 Publications**



Basic Information

Catalog Number: 21985-1-AP	GenBank Accession Number: BC132727	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 700 µg/ml by Nanodrop and 380 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 54795	Recommended Dilutions: WB 1:500-1:3000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q8TD43	
Isotype: IgG	Full Name: transient receptor potential cation channel, subfamily M, member 4	
Immunogen Catalog Number: AG17132	Calculated MW: 1214 aa, 134 kDa	
	Observed MW: 130-150 kDa	

Applications

Tested Applications: IHC, WB, ELISA	Positive Controls: WB : 37°C incubated HEK-293 cells, IHC : mouse brain tissue,
Cited Applications: WB,IF	
Species Specificity: human, mouse	
Cited Species: human	

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

TRPM4 is a Calcium-activated nonselective cation channel. It is activated by increase in intracellular Ca²⁺, mediates transport of monovalent cations (Na⁺ > K⁺ > Cs⁺ > Li⁺), leading to depolarize the membrane. It thereby plays a central role in cardiomyocytes, neurons from entorhinal cortex, dorsal root and vomeronasal neurons, endocrine pancreas cells, kidney epithelial cells, cochlea hair cells etc. TRPM4 participates in T-cell activation by modulating Ca²⁺ oscillations after T lymphocyte activation, which is required for NFAT-dependent IL2 production. It's also involved in myogenic constriction of cerebral arteries.

Notable Publications

Author	Pubmed ID	Journal	Application
Fengxiang Ye	38103473	Tissue Cell	WB
Xiaoshi Ma	38022698	Comput Struct Biotechnol J	IF

Storage

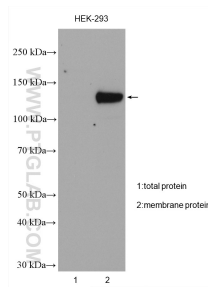
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

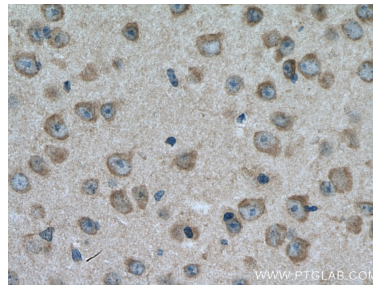
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



HEK-293 cells(total protein heated at 100°C, membrane protein incubated at 37°C) were subjected to SDS PAGE followed by western blot with 21985-1-AP (TRPM4 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 21985-1-AP (TRPM4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).