

# Product datasheet

info@arigobio.com

ARG59339 anti-TRPM4 antibody

Package: 50 μg Store at: -20°C

### Summary

Product Description Rabbit Polyclonal antibody recognizes TRPM4

Tested Reactivity Hu, Ms

Tested Application IHC-P, WB

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name TRPM4

Species Human

Immunogen Recombinant protein corresponding to F1079-D1214 of Human TRPM4.

Conjugation Un-conjugated

Alternate Names hTRPM4; Transient receptor potential cation channel subfamily M member 4; PFHB1B; Melastatin-4;

LTrpC4; TRPM4B; Long transient receptor potential channel 4; LTrpC-4; Calcium-activated non-selective

cation channel 1

# **Application Instructions**

Application table	Application	Dilution
	IHC-P	0.5 - 1 μg/ml
	WB	0.1 - 0.5 μg/ml
Application Note	IHC-P: Antigen Retrieval: By heat mediation.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

## **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol TRPM4

Gene Full Name transient receptor potential cation channel, subfamily M, member 4

Background The protein encoded by this gene is a calcium-activated nonselective ion channel that mediates

transport of monovalent cations across membranes, thereby depolarizing the membrane. The activity of the encoded protein increases with increasing intracellular calcium concentration, but this channel does not transport calcium. Two transcript variants encoding different isoforms have been found for

this gene. [provided by RefSeq, Aug 2010]

Function Calcium-activated non selective (CAN) cation channel that mediates membrane depolarization. While it

is activated by increase in intracellular Ca(2+), it is impermeable to it. Mediates transport of

monovalent cations (Na(+) > K(+) > Cs(+) > Li(+)), leading to depolarize the membrane. It thereby plays a central role in cadiomyocytes, neurons from entorhinal cortex, dorsal root and vomeronasal neurons, endocrine pancreas cells, kidney epithelial cells, cochlea hair cells etc. Participates in T-cell activation by modulating Ca(2+) oscillations after T lymphocyte activation, which is required for NFAT-dependent IL2 production. Involved in myogenic constriction of cerebral arteries. Controls insulin secretion in pancreatic beta-cells. May also be involved in pacemaking or could cause irregular electrical activity under conditions of Ca(2+) overload. Affects T-helper 1 (Th1) and T-helper 2 (Th2) cell motility and cytokine production through differential regulation of calcium signaling and NFATC1 localization. Enhances cell proliferation through up-regulation of the beta-catenin signaling pathway. [UniProt]

Calculated Mw 134 kDa

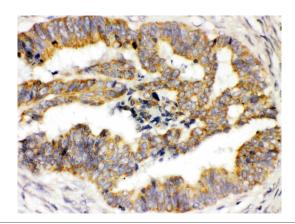
PTM Phosphorylation by PKC leads to increase the sensitivity to Ca(2+).

Sumoylated. Desumoylated by SENP1. [UniProt]

Cellular Localization Isoform 1: Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum. Golgi apparatus.

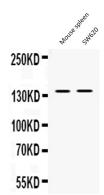
Isoform 2: Cell membrane. Endoplasmic reticulum. Golgi apparatus. [UniProt]

#### **Images**



### ARG59339 anti-TRPM4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer stained with ARG59339 anti-TRPM4 antibody at 1 ug/ml dilution.



# ARG59339 anti-TRPM4 antibody WB image

Western blot: Mouse spleen and SW620 whole cell lysates stained with ARG59339 anti-TRPM4 antibody at 0.5 ug/ml dilution.