

Goat anti-TRPM2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF4512a**Specification**

Goat anti-TRPM2 Antibody - Product Information

Application	IHC, IF, FC, Pep-ELISA
Primary Accession	O94759
Other Accession	NP_003298.1 , NP_001307279.1 , NP_001307280.1
Reactivity	Human, Mouse, Bovine
Host	Goat
Clonality	Polyclonal
Calculated MW	171198

Goat anti-TRPM2 Antibody - Additional Information**Gene ID** 7226**Other Names**

TRPM2; transient receptor potential cation channel, subfamily M, member 2; EREG1; KNP3; LTRPC2; MGC133383; NUDT9H; NUDT9L1; TRPC7; estrogen responsive element associated gene 1; long transient receptor potential channel 2; transient receptor potential cha

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat anti-TRPM2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat anti-TRPM2 Antibody - Protein Information**Name** TRPM2**Function**

[Isoform 1]: Nonselective, voltage-independent cation channel that mediates Na(+) and Ca(2+) influx, leading to increased cytoplasmic Ca(2+) levels (PubMed:11960981, PubMed:12594222, PubMed:11385575, PubMed:11509734, PubMed:11804595, PubMed:15561722, PubMed:16601673, PubMed:19171771, PubMed:20660597, PubMed:25620041, PubMed:27383051, PubMed:27068538, PubMed:28775320, PubMed:29745897, PubMed:30467180). Functions as a ligand-gated ion channel (PubMed:19171771, PubMed:25620041, PubMed:28775320, PubMed:30467180). Binding of ADP- ribose to the cytoplasmic Nudix domain causes a conformation change; the channel is primed but still requires Ca(2+) binding to trigger channel opening (PubMed:19171771, PubMed:25620041, PubMed:28775320, PubMed:29745897, PubMed:30467180). Extracellular calcium passes through the channel and increases channel activity (PubMed:19171771). Contributes to Ca(2+) release from intracellular stores in response to ADP-ribose (PubMed:19454650). Plays a role in numerous processes that involve signaling via intracellular Ca(2+) levels (Probable). Besides, mediates the release of lysosomal Zn(2+) stores in response to reactive oxygen species, leading to increased cytosolic Zn(2+) levels (PubMed:25562606, PubMed:27068538). Activated by moderate heat (35 to 40 degrees Celsius) (PubMed:16601673). Activated by intracellular ADP- ribose, beta-NAD (NAD(+)) and similar compounds, and by oxidative stress caused by reactive oxygen or nitrogen species (PubMed:11960981, PubMed:11385575, PubMed:11509734, PubMed:11804595, PubMed:15561722, PubMed:16601673, PubMed:19171771, PubMed:25620041, PubMed:27383051, PubMed:27068538, PubMed:30467180). The precise physiological activators are under debate; the true, physiological activators may be ADP-ribose and ADP-ribose-2'-phosphate (PubMed:20650899, PubMed:25918360). Activation by ADP-ribose and beta-NAD is strongly increased by moderate heat (35 to 40 degrees Celsius) (PubMed:16601673). Likewise, reactive oxygen species lower the threshold for activation by moderate heat (37 degrees Celsius) (PubMed:22493272). Plays a role in mediating behavioral and physiological responses to moderate heat and thereby contributes to body temperature homeostasis. Plays a role in insulin secretion, a process that requires increased cytoplasmic Ca(2+) levels (By similarity). Required for normal IFNG and

cytokine secretion and normal innate immune immunity in response to bacterial infection. Required for normal phagocytosis and cytokine release by macrophages exposed to zymosan (in vitro). Plays a role in dendritic cell differentiation and maturation, and in dendritic cell chemotaxis via its role in regulating cytoplasmic Ca(2+) levels (By similarity). Plays a role in the regulation of the reorganization of the actin cytoskeleton and filopodia formation in response to reactive oxygen species via its role in increasing cytoplasmic Ca(2+) and Zn(2+) levels (PubMed:27068538). Confers susceptibility to cell death following oxidative stress (PubMed:12594222, PubMed:25562606).

Cellular Location

Cell membrane; Multi-pass membrane protein. Perikaryon {ECO:0000250|UniProtKB:E9PTA2}. Cell projection {ECO:0000250|UniProtKB:E9PTA2}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:E9PTA2}. Lysosome Note=Detected at the cell membrane and in intracellular vesicles in cortical neurons. Detected on neuronal cell bodies and neurites (By similarity). Detected on the cell membrane in polymorphonuclear neutrophils. Detected on cytoplasmic vesicles and lysosomes in immature bone marrow dendritic cells (By similarity) {ECO:0000250|UniProtKB:E9PTA2, ECO:0000250|UniProtKB:Q91YD4} [Isoform 2]: Cell membrane; Multi-pass membrane protein

Tissue Location

Highly expressed in brain and peripheral blood cells, such as neutrophils. Also detected in bone marrow, spleen, heart, liver and lung. Isoform 2 is found in neutrophil granulocytes

Goat anti-TRPM2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat anti-TRPM2 Antibody - Images