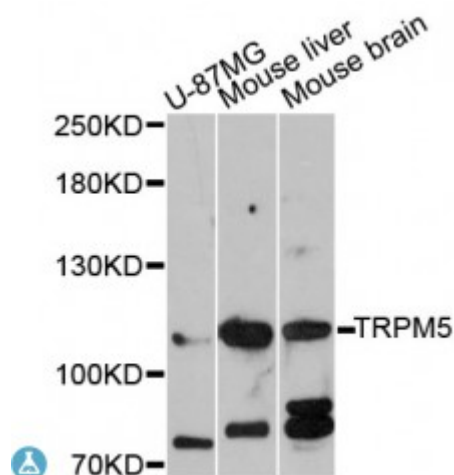


Anti-TRPM5 Antibody



Description

This gene encodes a member of the transient receptor potential (TRP) protein family, which is a diverse group of proteins with structural features typical of ion channels. This protein plays an important role in taste transduction, and has characteristics of a calcium-activated, non-selective cation channel that carries Na⁺, K⁺, and Cs⁺ ions equally well, but not Ca²⁺ ions. It is activated by lower concentrations of intracellular Ca²⁺, and inhibited by higher concentrations. It is also a highly temperature-sensitive, heat activated channel showing a steep increase of inward currents at temperatures between 15 and 35 degrees Celsius. This gene is located within the Beckwith-Wiedemann syndrome critical region-1 on chromosome 11p15.5, and has been shown to be imprinted, with exclusive expression from the paternal allele.

Model	STJ114243
Host	Rabbit
Reactivity	Human, Mouse
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1026-1165 of human TRPM5 (NP_055370.1).
Gene ID	29850
Gene Symbol	TRPM5
Dilution range	WB 1:200 - 1:500
Tissue Specificity	Strongly expressed in fetal brain, liver and kidney, and in adult prostate, testis, ovary, colon and peripheral blood leukocytes, Also expressed in a large proportion of Wilms' tumors and rhabdomyosarcomas, In monochromosomal

cell lines shows exclusive paternal expression

Purification

Affinity purification

Note

For Research Use Only (RUO).

Protein Name

Transient receptor potential cation channel subfamily M member 5 Long transient receptor potential channel 5 LTrpC-5 LTrpC5 MLSN1- and TRP-related gene 1 protein

Molecular Weight

131.451 kDa

Clonality

Polyclonal

Conjugation

Unconjugated

Isotype

IgG

Formulation

PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction

Store at -20C. Avoid freeze / thaw cycles.

Database Links

[HGNC:14323](#)[OMIM:604600](#)[Reactome:R-HSA-3295583](#)

Alternative Names

Transient receptor potential cation channel subfamily M member 5 Long transient receptor potential channel 5 LTrpC-5 LTrpC5 MLSN1- and TRP-related gene 1 protein

Function

Voltage-modulated Ca(2+)-activated, monovalent cation channel (VCAM) that mediates a transient membrane depolarization and plays a central role in taste transduction, Monovalent-specific, non-selective cation channel that mediates the transport of Na(+), K(+) and Cs(+) ions equally well, Activated directly by increases in intracellular Ca(2+), but is impermeable to it, Gating is voltage-dependent and displays rapid activation and deactivation kinetics upon channel stimulation even during sustained elevations in Ca(2+), Also activated by a fast intracellular Ca(2+) increase in response to inositol 1,4,5-triphosphate-producing receptor agonists, The channel is blocked by extracellular acidification, External acidification has 2 effects, a fast reversible block of the current and a slower irreversible enhancement of current inactivation, Is a highly temperature-sensitive, heat activated channel showing a steep increase of inward currents at temperatures between 15 and 35 degrees Celsius, Heat activation is due to a shift of the voltage-dependent activation curve to negative potentials, Activated by arachidonic acid in vitro, May be involved in perception of bitter, sweet and umami tastes, May also be involved in sensing semiochemicals,

Cellular Localization

Cell membrane