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TRPM3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59119

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9HCF6
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	197571

Additional Information

Gene ID	80036
Other Names	Transient receptor potential cation channel subfamily M member 3, Long transient receptor potential channel 3, LTrpC-3, LTrpC3, Melastatin-2, MLSN2, TRPM3, KIAA1616, LTRPC3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	TRPM3 (HGNC:17992)
Synonyms	KIAA1616, LTRPC3
Function	Constitutively active, non-selective divalent cation- conducting channel that is permeable to Ca(2+), Mn(2+), and Mg(2+), with a high permeability for Ca(2+). However, can be enhanced by increasing temperature and by ligands, including the endogenous neurosteroid pregnenolone sulfate and sphingosine-1 and suppressed by intracellular Mg(2+) (PubMed:12672799, PubMed:12672827, PubMed:32343227). Implicated in a variety of cellular processes, including insulin/peptide secretion, vascular constriction and dilation, noxious heat sensing, inflammatory and spontaneous pain sensitivity. In neurons of the dorsal root ganglia, functions as thermosensitive channel for the detection of noxious heat and spontaneous pain. Suggested to function as an ionotropic steroid receptor in beta-cell, indeed pregnenolone sulfate leads to Ca(2+) influx and enhanced insulin secretion. Mediates Zn(2+) uptake into the lumen of pancreatic beta cell secretory

granules, thereby regulating insulin secretion (By similarity). Forms heteromultimeric ion channels with TRPM1 which are permeable for Ca(2+) and Zn(2+) ions (PubMed:21278253). Exists as multiple splice variants which differ significantly in their biophysical properties (By similarity).

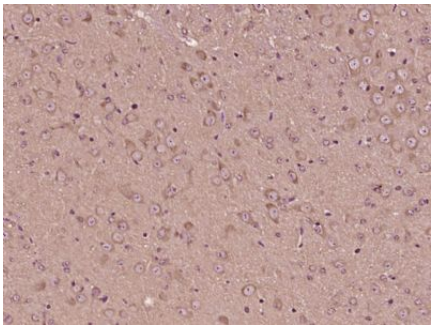
Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:J9SQF3}

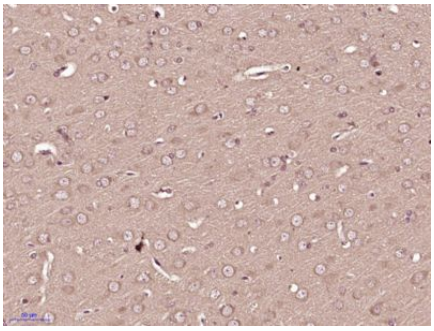
Tissue Location

Expressed primarily in the kidney and, at lower levels, in brain, testis, ovary, pancreas and spinal cord. Expression in the brain and kidney was determined at protein level. In the kidney, expressed predominantly in the collecting tubular epithelium in the medulla, medullary rays, and periglomerular regions; in the brain, highest levels are found in the cerebellum, choroid plexus, the locus coeruleus, the posterior thalamus and the substantia nigra. Down- regulated in renal tumors compared to normal kidney. Expressed in the lens (PubMed:25090642).

Images



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TRPM3) Polyclonal Antibody, Unconjugated (AP59119) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TRPM3) Polyclonal Antibody, Unconjugated (AP59119) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.