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# TRPM3 Rabbit pAb

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Catalog # AP59119

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | Q9HCF6 |
| **Reactivity** | Rat, Mouse |
| **Predicted** | Pig, Dog, Human, Rabbit, Horse, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 197571 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human TRPM3 |
| **Epitope Specificity** | 1121-1260/1732 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Membrane; Multi-pass membrane protein. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | The product of this gene belongs to the family of transient receptor potential (TRP) channels. TRP channels are cation-selective channels important for cellular calcium signaling and homeostasis. The protein encoded by this gene mediates calcium entry, and this entry is potentiated by calcium store depletion. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]. |

## Additional Information

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| **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 (HGNC:17992), KIAA1616, LTRPC3 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **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. |

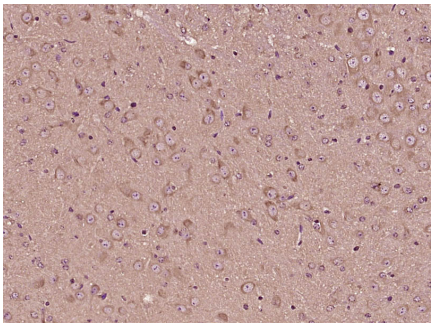
## Protein Information

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|---|---|
| **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). |

## Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

## 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.