

## Product datasheet for **TA328747**

### Trpm5 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide GSGKKRGKFKVPS(C), corresponding to amino acid residues 32-45 of mouse TRPM5. Intracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN <sub>3</sub> .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	transient receptor potential cation channel, subfamily M, member 5
Database Link:	<a href="#">NP_064673</a> <a href="#">Entrez Gene 29850 Human</a> <a href="#">Entrez Gene 365391 Rat</a> <a href="#">Entrez Gene 56843 Mouse</a> <a href="#">Q9JH7</a>



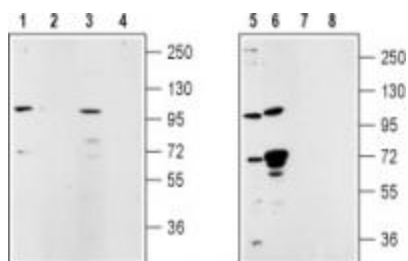
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**Background:**

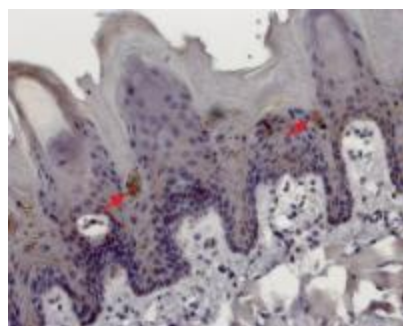
The mammalian melastatin-related transient receptor potential (TRPM) is a subfamily of the TRP family. The family was named after the first discovered member, melastatin (TRPM1) whose gene was identified in metastatic and benign melanomas. The TRPM family consists of eight members designated as TRPM1-8 that can be further divided into four pairs: TRPM1 and TRPM3; TRPM2 and TRPM8; TRPM4 and TRPM5; and TRPM6 and TRPM7. The TRPM proteins share structural homology with other members of the TRP superfamily channels; six putative transmembrane domains, and cytoplasmic N- and C-termini. However, due to their long N- and C-termini they are also named the long TRP channel family. TRPM4 and TRPM5 are the only TRP channels that are permeable to monovalent cations but not to Ca<sup>2+</sup>. TRPM4 is expressed as at least two alternative spliced isoforms, TRPM4a and TRPM4b which consist of shorter and longer N-terminal regions, respectively. TRPM4a displays little activity, TRPM4b and TRPM5 appear to be directly activated by an increase in intracellular Ca<sup>2+</sup> concentration<sup>4,5</sup>. TRPM5 is primarily expressed in taste buds and also in stomach, small intestine, uterus and testes. Regulation of TRPM5 by G-protein-coupled receptors and PLC-mediated IP<sub>3</sub> production has been substantiated by the colocalization of TRPM5, of a taste-cell-specific PLC isoform and of receptors for sweet, bitter and amino acid (umami) tastes in taste tissue. It has furthermore been shown that desensitization of TRPM5 following receptor stimulation can be reversed by phosphatidylinositol (4,5)-bisphosphate (PIP<sub>2</sub>), the substrate of PLC.

**Synonyms:**

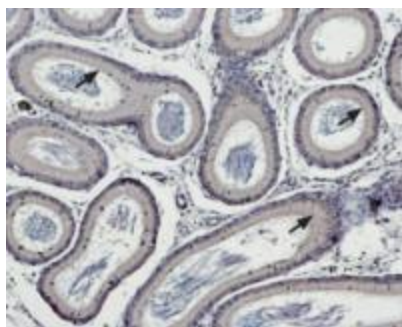
LTrpC5; MTR1

**Product images:**


Western blot analysis of rat lung membrane (lanes 1 and 2), rat testes (lanes 3 and 4), mouse ms1 cells (lanes 5 and 7) and human LNCaP cell (lanes 6 and 8) lysates: 1, 3, 5, 6. Anti-TRPM5 antibody, (1:200). 2, 4, 7, 8. Anti-TRPM5 antibody, preincubated with the control peptide antigen.



Expression of TRPM5 in rat tongue. Immunohistochemical staining of rat tongue paraffin embedded sections using Anti-TRPM5 antibody, (1:100). TRPM5 is expressed in discrete groups of cells deep in the sulcus of the papillae. Hematoxylin is used as the counterstain.



Expression of TRPM5 in rat testes.  
Immunohistochemical staining of rat epididymis paraffin embedded sections using Anti-TRPM5 antibody, (1:100). TRPM5 is expressed in principal cells within the epididymal epithelium (arrows). Hematoxylin is used as the counterstain.