

Product datasheet for **MC223768**

Trpm5 (NM_020277) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Trpm5 (NM_020277) Mouse Untagged Clone
Tag: Tag Free
Symbol: Trpm5
Synonyms: 9430099A16Rik; LTrpC-5; Ltrpc5; Mtr1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223768 representing NM_020277
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCAAACAACCCAGAGCTCCTGCCCGGCAGCCCCAGATACTGAGGATGGCTGGGAGCCCATCCTAT
 GCAGGGGAGAGATCAACTTCGGAGGGTCTGGGAAGAAGCGAGGCAAGTTTGTGAAGGTGCCAAGCAGTGT
 GGCCCCCTCCGTGCTTTTGAAGCTCCTGCTCACCGAGTGGCACCTGCCAGCCCCAACCTGGTGGTGCC
 CTGGTGGGTGAGGAACGACCTTTGGCTATGAAGTCGTGGCTTCGGGATGTCTGCCAAGGGGCTGGTGA
 AAGCAGCTCAGAGCACAGGTGCCTGGATCCTGACCAGTGCCTCCACGTGGGCCTGGCCGCCATGTTGG
 ACAAGCTGTACGTGATCACTCTCTGGCTAGCACATCCACCAAGATCCGTGTAGTGGCCATCGGAATGGCC
 TCTCTGGATCGAATCCTTACCCTCAACTTCTAGATGGTGTCCACCAAAAGGAGGATACTCCCATCCACT
 ACCCAGCAGATGAGGGCAACATTCAGGGACCCCTCGCCCCCTGGACAGCAATCTCTCCCACTTCATCCT
 TGTGGAGTCAGGCGCCCTGGGAGTGGGAACGACGGGCTGACAGAGCTGCAGCTGAGCCTGGAGAAGCAC
 ATCTCTCAGCAGAGGACAGGTTATGGGGCACCAGCTGCATCCAGATACCTGTCCCTTTGCCTGTTGGTCA
 ATGGTGACCCCAACACCCTAGAGAGGATTTCCAGGGCAGTGGAGCAGGCTGCCCATGGCTGATCCTGGC
 AGGTTCTGGTGGCATTGCTGATGTAAGTCTGCTGCCCTGGTGGAGCCAGCCTCATCTCCTGGTCCCGGAGTG
 GCTGAGAAGCAGTTCCAGAGAGAAATCCCCAGCGAGTGTCTCTTGGGAAGCCATTGTACACTGGACAG
 AGCTGTTACAGAACATTGCTGCACACCCCACTGCTCACAGTATATGACTTCGAGCAGGAGGGTTCGGA
 GGACCTGGACTGTATCCTCAAGGCACTTGTGAAAGCCTGCAAGAGCCACAGCCAAGAAGCCCAAGAC
 TACCTAGATGAGCTCAAGTTAGCAGTGGCTGGGATCGCGTGGACATTGCCAAGAGTGAATCTTCAATG
 GGGACGTGGAATGGAAGTCTGTGACTTGAAGAGGTGATGACAGATGCCCTCGTGGCAACAAGCCTGA
 CTTTGTCCGCTCTTTGTGGACAGCGGTGCTGACATGGCCGAGTCTTGGACCTATGGGCGGCTGCAGCAG
 CTTTACCATTCTGTGTCCCAAGAGCCTCCTCTTGAAGTCTGCAGCGTAAGCATGAGGAGGGTAGGC
 TGACACTGGCCGGCCTGGGTGCCAGCAGGCTCGGGAGCTGCCATTGGTCTGCCTGCCTTCTCACTCCA
 CGAGGTCTCCCGCTACTCAAAGACTTCTGCATGACGCCTGCCGTGGCTTCTACCAGGACGGGCGCAGG
 ATGGAGGAGAGAGGGCCACCTAAGCGGCCCGCAGGCCAGAAGTGGCTGCCAGACCTCAGTAGGAAGAGTG



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AAGACCCTGGAGGGACCTGTTCTCTGGGCTGTGCTGCAGAATCGTTATGAGATGGCCACATACTTCTG
 GGCCATGGGCCGGGAGGGTGTGGCTGCTGCTCTGGCTGCCTGCAAGATCATAAAGGAAATGTCCCACCTG
 GAGAAAGAGGCAGAGGTGGCCCGCACCATGCGTGAGGCCAAGTATGAGCAGCTGGCCCTGGATCTTTCT
 CAGAGTGTACGGCAACAGTGAGGACCGTGCCCTTGGCCCTGCTGGTGCGAAGGAACCACAGCTGGAGCAG
 GACCACGTGCCTGCACCTGGCCACTGAAGCTGATGCCAAGGCCTCTTTGCCCATGACGGTGTGCAAGCA
 TTCCTGACCAAGATCTGGTGGGGAGACATGGCCACAGGCACACCCATCCTACGGCTTCTGGGTGCCTTCA
 CCTGCCAGCCCTCATCTACACAAACCTCATCTCCTTCAGTGAGGATGCCCCGAGAGGATGGACCTTGA
 AGATCTGCAGGAGCCAGACAGCTTGGATATGGAAAAGAGCTTCTATGCAGCCGGGTGGCCAATTGGAG
 AAGCTAACAGAGGCACCAAGGGCTCCAGGCGATCTAGGCCACAAGCTGCCTTCTGCTCACACGGTGGA
 GGAAGTCTGGGGCGCTCCTGTGACTGTGTTCTGGGGAATGTGGTCATGTACTTCGCATTCTCTTCTCT
 GTTCACCTATGCTGCTGGTGGACTTCAGGCCACCACCCAGGGGCCGTCTGGATCCGAGGTTACCCTC
 TATTTCTGGGTGTTCACTGCTGTGAGGAAATCCGACAGGGCTTCTTACAGATGAGGACACGCACC
 TGGTGAAGAAATCACTCTGTATGTGGAAGACAACTGGAACAAGTGTGACATGGTGGCCATCTTCTGTT
 CATTGTGGGAGTCACTGTAGAATGGTGCCTCGGTGTTGAGGCTGGCAGGACCGTTCTGGCCATTGAC
 TTCATGGTGTTCACACTTCGGCTCATCCACATCTTTGCTATTCACAAGCAGTTGGGTCTAAGATCATCA
 TTGTAGAGCGAATGATGAAGGATGCTTCTTTTTCTCTTCTTCCCTGAGGATGGCTTGTGGCCTATGG
 TGTGACCACTCAGGCCCTGCTGCATCCCATGATGGCCGTTTGGAGTGGATTTTCCGCCGTGTGCTATAC
 AGGCCTTACCTGCAGATCTTTGGGCAAATCCCTCTGGATGAAATTGATGAGGCTCGTGTGAAGTGTCTC
 TTCACCTCTGCTGCTGGAAAGCTCGGCTTCTGCCCTAATCTCTATGCCAACTGGCTGGTCATTCTCT
 GCTGGTACCTTCTGCTGTGCTACTAATGTGCTGCTCATGAACCTTCTGATCGCCATGTTTCAAGTACACA
 TTCCAGGTGGTGAAGCAATGCAGACATGTTCTGGAAGTTTCAACGCTACCACCTCATCGTTGAATACC
 ATGGAAGACCAGCTCTGGCCCGCCCTTTCATCTGCTCAGCCACCTGAGCCTGGTGTCTCAAGCAGGTCTT
 CAGGAAGGAAGCCAGCATAAAGCAGCAACATCTGGAGAGAGACTTGCCTGACCCCTGGACCAGAAGATC
 ATTACCTGGGAAACGGTTCAAAGGAGAACTTCTGAGTACCATGGAGAAACGGAGGAGGACAGCGAGG
 GGGAGGTGCTGAGGAAAACGGCACACAGAGTGGACTTGATTGCCAAATACATCGGGGGGCTGAGAGAGCA
 AGAAAAGAGGATCAAGTGTCTGGAATCACAGGCCAACTACTGTATGCTCCTTGTCTCTATGACGGAT
 ACACTGGCTCCAGGAGGCACCTACTCAAGCTCTCAGAAGTGTGGTTGCAGGAGTCAAGCAGCCTCTGCTA
 GAGACAGGGAGTACCTAGAGTCTGGCTTCCACCCTCTGACACCTGA

ACGGCTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_020277
- Insert Size:** 3477 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_020277.2](#), [NP_064673.2](#)

RefSeq Size: 4383 bp

RefSeq ORF: 3477 bp

Locus ID: 56843

UniProt ID: [Q9J1H7](#)

Cytogenetics: 7 F5

Gene Summary: 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.[UniProtKB/Swiss-Prot Function]