

## Product datasheet for **SC123793**

### TRPM8 (BC001135) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TRPM8 (BC001135) Human Untagged Clone
Tag:	Tag Free
Symbol:	TRPM8
Synonyms:	LTRPC6; MGC2849; OTTHUMP00000065206; short form of the TRPM8 cationic channel; transient receptor potential cation channel, subfamily M, member 8; transient receptor potential subfamily M member 8; TRPP8
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for BC001135 edited GGCACGAGGCTGCCTTTCTCCACCAGAGACTCTTCCTCAGGGAGGACTTGGTGAATTTTA TTCAAGCAAATTTTAAGAAACGAGAATGTGTCTTTTACCAAAGATTCCAAGGCCACGC TCAATGAAATCCTTCTCCTGTCCACACCATCGTGCTTATCAGGGAGAATGTGTGCAAG TGTGGCTATGCCCAGAGCCAGCACATGGAAGGCACCCAGATCAACCAAAGTGAGAAATGG AACTACAAGAAACACACCAAGGAATTTCTACCGACGCCTTTGGGGATATTGAGTTTGGAG ACACTGGGGAAGAAAGGGAAGTATACGTCTGTCTGCGACACGGACGCGGAAATCCTT TACGAGCTGCTGACCCAGCACTGGCACCTGAAAACACCCAACCTGGTCATTTCTGTGACC GGGGGCGCAAGAACTTCGCCCTGAAGCCGCGCATGCGCAAGATCTTCAGCCGGCTCATC TACATCGCGCAGTCCAAAGGTGCTTGGATTCTCACGGGAGGCACCCATTATGGCCTGATG AAGTACATCGGGGAGGTGGTGAGAGATAACACCATCAGCAGGAGTTGAGAGGAGAATATT GTGGCCATTGGCATAGCAGCTTGGGGCATGGTCTCAACCGGGACACCCTCATCAGGAAT TGCGATGCTGAGGTACCGGTGGGACAGGAGGAGTCTGCTAGGTCACATGGAAGAAAGAC CATGGCATGGCCTGTGGCCTGAACCCTGGGGCTCTGTGATGGAGCCAGCCAGATCATGG GGAAGTCTGCCTTTCAAGGAGTGCCTTTGGGACCTTAAAGGAATTGAAAACAAGGATGAC GTACCTAATTAAGTCTGGGAAAGAGTTAACAATGAATGTTTTGTTCATTAATGTTGTT CTCAGCAATCTCAAAAAAAAAAAAAAAAAA



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for BC001135 unedited GAGACCTGGATTTGTAATACGACTTTATATAGGCGGCCGCAATTCGGCACGAGGCTTG CCTTTCTCCACCAAACTCTTCCCTCAGGGAGGACTTGGTGAATTTTATTCAAGCAAATT TTAAGAAACGAGAATGTGTCTTTTACCAAAGATTCCAAGGCCACGCTCAATGAAATCC TTCCTTCTGTCCACACCATCGTGCTTATCAGGGAGAATGTGTGCAAGTGTGGCTATGCC CAGAGCCAGCACATGGAAGGCACCCAGATCAACCAAAGTGAGAAATGGAACAAGAAA CACACCAAGGAATTTCTACCGACGCCTTTGGGGATATTGAGTTGAGACACTGGGGAAG AAAGGGAAGTATATACGTCTGTCCTGCGACACGGACGCGGAAATCCTTTACGAGCTGCTG ACCCAGCACTGGCACCTGAAAACACCCAACCTGGTCATTTCTGTGACCGGGGCGCCAAG AACTTCGCCCTGAAGCCGCGCATGCGCAAGATCTTACGCCGCTCATCTACATCGCGCAG TCCAAAGTGCTTGGATTCTCACGGGAGGCACCCATTATGGCCTGATGAAGTACATCGGG GAGGTGGTGAGAGATAACACCATCAGCAGGAGTTCAGAGGAGAATATTGTGGCCATTGGC ATAGCAGCTTGGGGCATGGTCTCCAACCGGGACACCTCATCANGAATTGCGATGCTGAN GTACCNGTGGGACAGAGAGGTCTGCTAGGTCACATGGAAGATAGACCATGGCATGGGC CTGTGGCCTGAACCCTGGGGCTCTGTGATGGAGCCAGCCAGATCATGGGGAAGTCTGCCT TTCAAGGAGTAGCCTTTGGGACCTTAAAGGATTTGAAACAAGGATGACGTAACATAATTA ACTGCTGGGAAAAGATT
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	BC001135
<b>Insert Size:</b>	930 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">BC001135.1</a> , <a href="#">AAH01135.1</a>
<b>RefSeq Size:</b>	930 bp
<b>RefSeq ORF:</b>	579 bp
<b>Locus ID:</b>	79054
<b>Cytogenetics:</b>	2q37.1
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane

**Gene Summary:**

Receptor-activated non-selective cation channel involved in detection of sensations such as coolness, by being activated by cold temperature below 25 degrees Celsius. Activated by icilin, eucalyptol, menthol, cold and modulation of intracellular pH. Involved in menthol sensation. Permeable for monovalent cations sodium, potassium, and cesium and divalent cation calcium. Temperature sensing is tightly linked to voltage-dependent gating. Activated upon depolarization, changes in temperature resulting in graded shifts of its voltage-dependent activation curves. The chemical agonist menthol functions as a gating modifier, shifting activation curves towards physiological membrane potentials. Temperature sensitivity arises from a tenfold difference in the activation energies associated with voltage-dependent opening and closing. In prostate cancer cells, shows strong inward rectification and high calcium selectivity in contrast to its behavior in normal cells which is characterized by outward rectification and poor cationic selectivity. Plays a role in prostate cancer cell migration (PubMed:25559186). Isoform 2 and isoform 3 negatively regulate menthol- and cold-induced channel activity by stabilizing the closed state of the channel.[UniProtKB/Swiss-Prot Function]