

## Product datasheet for **RC220615L3V**

### TRPM8 (NM\_024080) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	TRPM8 (NM_024080) Human Tagged ORF Clone Lentiviral Particle
Symbol:	TRPM8
Synonyms:	LTrpC-6; LTRPC6; trp-p8; TRPP8
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_024080
ORF Size:	3312 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC220615).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_024080.3</a>
RefSeq Size:	5674 bp
RefSeq ORF:	3315 bp
Locus ID:	79054
UniProt ID:	<a href="#">Q7Z2W7</a>
Cytogenetics:	2q37.1
Domains:	ion_trans
Protein Families:	Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane



[View online »](#)

MW: 127.5 kDa

**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]