

Product datasheet for **TP511808**

Trpm4 (NM_175130) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse transient receptor potential cation channel, subfamily M, member 4 (Trpm4), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211808 representing NM_175130 Red =Cloning site Green =Tags(s)

MVGPEKEQSWIPKIFRKKVCTTFIVDLSDDAGGTLCCQCGQPRDAHPSVAVEDAFGAAVTEWNSDEHTTE
KPTDAYGDLDFYSGRKHSNFLRLSDRTPATVYSLVTRSWGFRAPNLVSVLGGSGGPVLTWLQDLLR
RGLVRAAQSTGAWIVTGGLHTGIGRHVGVAVRDHQASTGSSKVVAMGVAPWGVVRNRDMLINPKGSFPA
RWRWRGDPEDGVEFPLDYNYSAFFLVDDGTYGRLGGENFRRLRFESYVAQKQKTGVGGTGIDIPVLLLLID
GDEKMLKRIEDATQAQLPCLLVAGSGGAADCLVETLEDLAPGSGGLRRGEARDRIRRYFPKGDPEVLQA
QVERIMTRKELLTVYSSEEDGSEEFETIVLRALVKACGSSEASAYLDELRLAVAWNRVDIAQSELFRGDIQ
WRSFHLEASLMDALLNDRPEFVRLISHGLSLGHFLTPVRLAQLYSAVSPNSLIRNLLDQASHASSKSP
PVNGTVELRPPNVGQVLRLLGETCAPRYPARNTRDSYLGQDHRENDLLMDWANKQPSTDASFEQAPWS
DLIIWALLLNRAQMAIYFWEKGSNSVASALGACLLLRVMARLESEAEAAARRKDLAATFESMSVDLFGEC
YHNSEERAARLLLRRCPLWGEATCLQLAMQADARAFFAQDGVQSLTQKWWGEMDSTTPIWALLLAFFCP
PLIYTNLIVFRKSEEEPTQKDLDFDMDSSINGAGPPGTVEPSAKVALERRRRRPRGRALCCGKFSKRWS
FWGAPVTAFLGNVVSYLLFLLLFAHVLLVDFQPTKPSVSELLLYFWAFTLLCEELRQGLGGWWSLASGG
RGPDRAPLRHRLHLYLSDTNQCDLLALTCFLLGVGCRLTPGLFDLGRVLCDFMIFTLRLLHIFTVNK
QLGPKIVIVSKMMKDVFFFLFCVWLVAYGVATEGILRPQDRSLPSILRRVYRYPYLQIFGQIPQEEMD
VALMIPGNCSMERGSWAHPEGPVAGSCVSYANWLWVLLLVFLLVANILLNLLIAMFSYTFSKVHGNS
DLYWKAQRYSLIREFHSRPALAPPLIIISHVRLIKWLRRCRRRANLPASPVFHFVCLSKEAERKL
LTWESVHKENFLLAQARDKRDSERLKRTSQKVDTALKQLGQIREYDRRLRGLEREVQHCSRVLTWMAE
ALSHSALLPPGAPPPPSPTGSKD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	136.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method



[View online »](#)

Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_780339
Locus ID:	68667
UniProt ID:	Q7TN37
RefSeq Size:	4245
Cytogenetics:	7 B3
RefSeq ORF:	3639
Synonyms:	1110030C19Rik; AW047689; LTrpC-4; LTRPC4; TRPM4B
Summary:	Calcium-activated non selective (CAN) cation channel that mediates membrane depolarization. While it is activated by increase in intracellular Ca(2+), it is impermeable to it (PubMed:17188667, PubMed:29211714). Mediates transport of monovalent cations (Na(+) > K(+) > Cs(+) > Li(+)), leading to depolarize the membrane. It thereby plays a central role in cardiomyocytes, neurons from entorhinal cortex, dorsal root and vomeronasal neurons, endocrine pancreas cells, kidney epithelial cells, cochlea hair cells etc. Participates in T-cell activation by modulating Ca(2+) oscillations after T lymphocyte activation, which is required for NFAT-dependent IL2 production. Involved in myogenic constriction of cerebral arteries. Controls insulin secretion in pancreatic beta-cells. May also be involved in pacemaking or could cause irregular electrical activity under conditions of Ca(2+) overload. Affects T-helper 1 (Th1) and T-helper 2 (Th2) cell motility and cytokine production through differential regulation of calcium signaling and NFATC1 localization. Enhances cell proliferation through up-regulation of the beta-catenin signaling pathway (By similarity). Essential for the migration but not the maturation of dendritic cells (PubMed:18758465).[UniProtKB/Swiss-Prot Function]