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Product datasheet for MG227160

Trpv1 (NM_001001445) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trpv1 (NM_001001445) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Trpv1
Synonyms:	OTRPC1; TRPV1alpha; TRPV1beta; VR-1; Vr1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG227160 representing NM_001001445
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGAAATGGGCTAGCTTAGACTCGGATGAATCTGAGCCCCCAGCCCAAGAGAACTCCTGCCCGGACC
CTCCAGACAGAGACCCTAACTCCAAGCCGCCTCCAGCCAAGCCCCACATCTTTGCTACCAGGAGTCGCAC
CCGGCTTTTTGGGAAGGGTGACTCAGAAGAGGCCTCTCCCATGGACTGCCCTTATGAGGAAGGCGGGCTG
GCCTCCTGCCCTATCATCACCGTCAGCTCTGTTGTCACTCTCCAGAGGTCTGTGGATGGACCTACCTGTC
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CATCTTCGACGCTGTGGCTCAGAGCAACTGCCAGGAGCTGGAGAGCCTGCTGTCCTTCCTGCAGAAGAGC
AAGAAGCGCCTGACTGACAGCGAGTTCAAAGACCCAGAGACGGGAAAGACCTGTCTGCTCAAAGCCATGC
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GAAGCAGTTTGTCAATGCCAGCTACACAGACAGCTACTACAAGGGCCAGACAGCATTACACATTGCCATT
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GGGACTTCTTCAAGAAAACCAAAGGGAGGCCTGGCTTCTACTTTGGTGAGCTGCCCCTGTCCCTGGCTGC
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CCTATGGGCCCGTGCACTCCTCCCTTTATGACCTGTCCTGCATTGACACCTGTGAGAAGAATTCAGTGCT
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TTCCGAGGGATCCAGTATTTCCTGCAGAGGCGACCATCCCTCAAGAGTTTGTTTGTGGACAGCTACAGTG
AGATACTTTTCTTTGTACAGTCACTGTTCATGCTGGTGTCTGTGGTACTGTACTTCAGCCATCGCAAGGA
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CAGCAGATGGGCATCTATGCTGTCATGATTGAGAAGATGATCCTCAGAGACCTGTGTCGGTTTATGTTCG
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GGTGAACTGGACTACCTGGAACACCAACGTGGGCATCATCAACGAGGACCCAGGCAACTGTGAGGGCGTC
AAGCGCACCCTGAGCTTCTCCCTGCGGTCAGGCCGAGTTTCAGGGAGAAACTGGAAGAACTTTGCCCTGG
TTCCCCTTCTGAGGGACGCAAGCACTCGAGATAGGCATAGCACCCAGCCGGAAGAAGTTCAGCTGAAGCA
CTATACGGGATCCCTTAAGCCAGAGGATGCTGAGGTCTTCAAGGATTCCATGGCCCCAGGGGAGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227160 representing NM_001001445
Red=Cloning site Green=Tags(s)

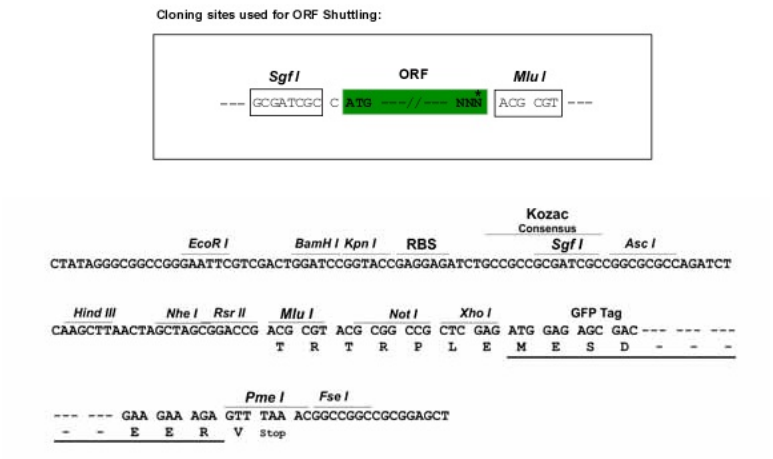
MEKWASLDSDESEPPAQENSCPDPPDRDPNSKPPPAKPHIFATRSRTRLFGKGDSEEASPMDCPYEEGGL
ASCPIITVSSVVTLQRSVDGPTCLRQTSQDSVSTGVETPPRLYDRRSIFDAVAQSNCQELESLLSFLQKS
KKRLTDSEFKDPETGKTCLLKAMLNLHNGQNDTIALLLDIARKTDSLKQFVNASYTDSYYKGQTALHIAI
ERRNMALVTLLVENGADVQAAANGDFFKKTKGRPGFYFGELPLSLAACTNQLAIVKFLLQNSWQPADISA
RDSVGNTVLHALVEVADNTADNTKFVTNMYNEILILGAKLHPTLKLEELTNKKGLTPLALAASSGKIGVL
AYILQREIHEPECRHLSRKFTEWAYGPVHSSLYDLSCIDTCEKNSVLEVIAYSSSETPNRHDMLLVEPLN
RLLQDKWDRFVKRIFYFNFFVYCLYMIIFTTAAYYRPVEGLPPYKLNNTVGDYFRVTGEILSVSGGVYFF
FRGIQYFLQRRPSLKSLFVDSYSEILFFVQSLFMLVSVVLYFSHRKEYVASMVFSLAMGWTNMLYYTRGF
QQMGIYAVMIEKMILRDLCRFMFVYLVFLFGFSTAVVTLIEDGKNNSLPVESPPHKCRGSACRPGNSYNS
LYSTCLELFKFTIGMGDLEFTENYDFKAVFIILLLAYVILTYILLLNMLIALMGETVNKIAQESKNIWKL
QRAITILDTEKSFLKCMRKAFRSGKLLQVGFTPDGKDDFRWCFRVDEVNWTTWNTNVGIINEDPGNCEGV
KRTLSFSLRSGRVSGRNWKNFALVPLLRDASTRDRHSTQPEEVQLKHYTGSLKPEDAEVFKDSMAPGEK

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1534_a04.zip

Restriction Sites: SgfI-MluI

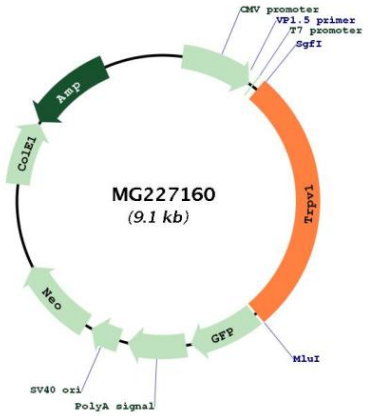
Cloning Scheme:



ACCN:	NM_001001445
ORF Size:	2517 bp
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. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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_001001445.2
RefSeq Size:	2520 bp
RefSeq ORF:	2520 bp
Locus ID:	193034
UniProt ID:	Q704Y3
Cytogenetics:	11 45.25 cM
Gene Summary:	Ligand-activated non-selective calcium permeant cation channel involved in detection of noxious chemical and thermal stimuli (PubMed:15194687, PubMed:15489017). Seems to mediate proton influx and may be involved in intracellular acidosis in nociceptive neurons. Involved in mediation of inflammatory pain and hyperalgesia (PubMed:10764638). Sensitized by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases, which involves PKC isozymes and PCL. Activation by vanilloids, like capsaicin, and temperatures higher than 42 degrees Celsius, exhibits a time- and Ca(2+)-dependent outward rectification, followed by a long-lasting refractory state. Mild extracellular acidic pH (6.5) potentiates channel activation by noxious heat and vanilloids, whereas acidic conditions (pH <6) directly activate the channel. Can be activated by endogenous compounds, including 12-hydroperoxytetraenoic acid and bradykinin. Acts as ionotropic endocannabinoid receptor with central neuromodulatory effects. Triggers a form of long-term depression (TRPV1-LTD) mediated by the endocannabinoid anandamine in the hippocampus and nucleus accumbens by affecting AMPA receptors endocytosis (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG227160