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Product datasheet for MG227492

Trpm5 (NM_020277) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trpm5 (NM_020277) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Trpm5
Synonyms:	9430099A16Rik; LTrpC-5; Ltrpc5; Mtr1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG227492 representing NM_020277
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAAACAACCCAGAGCTCCTGCCCCGGCAGCCCCCCAGATACTGAGGATGGCTGGGAGCCCATCCTAT
GCAGGGGAGAGATCAACTTCGGAGGGTCTGGGAAGAAGCGAGGCAAGTTTGTGAAGGTGCCAAGCAGTGT
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CTGGTGGGTGAGGAACGACCTTTGGCTATGAAGTCGTGGCTTCGGGATGTCCTGCGCAAGGGGCTGGTGA
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GAGACAGGGAGTACCTAGAGTCTGGCTTGCCACCCTCTGACACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227492 representing NM_020277
Red=Cloning site Green=Tags(s)

MQTTQSSCPGSPPDTEDGWEPILCRGEINFGGSGKKRGKFVKVPSSVAPSVLFELLLTEWHLPAPNLVVS
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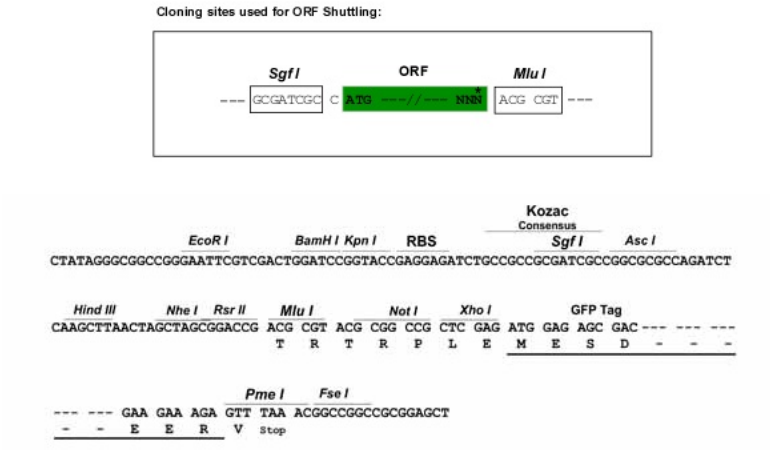
TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1393_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

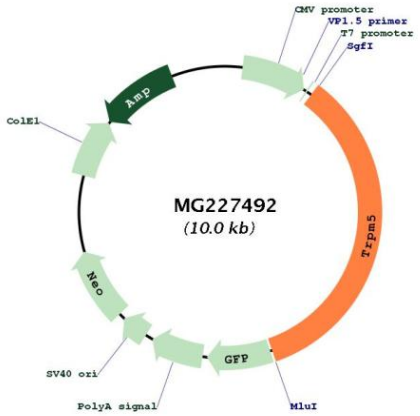


ACCN: NM_020277

ORF Size: 3474 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_020277.2, NP_064673.2
RefSeq Size:	4383 bp
RefSeq ORF:	3477 bp
Locus ID:	56843
UniProt ID:	Q9JJH7
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]

Product images:



Circular map for MG227492