

Product datasheet for **RG224023**

GPCR TGR7 (MRGPRD) (NM_198923) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	GPCR TGR7
Synonyms:	MRGD; TGR7
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG224023 representing NM_198923
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACCAGACTTTGAATAGCAGTGGGACCGTGGAGTCAGCCCTAACTATTCCAGAGGGAGCACAGTGC
ACACGGCTACCTGGTGTGAGCTCCCTGGCCATGTTACCTGCCTGTGCGGGATGGCAGGCAACAGCAT
GGTGATCTGGCTGCTGGGCTTTCGAATGCACAGGAACCCCTTCGCATCTATATCCTCAACCTGGCGGCA
GCCGACCTCCTCTTCTCTTCAGCATGGCTTCCACGCTCAGCCTGGAACCCAGCCCTGGTCAATACCA
CTGACAAGGTCCACGAGCTGATGAAGAGACTGATGTACTTTGCCTACACAGTGGGCCTGAGCCTGTGAC
GGCCATCAGCACCCAGCGCTGTCTCTGTCTCTTCCCTATCTGGTTCAAGTGTACCCGGCCAGGCAC
CTGTCAGCCTGGGTGTGTGGCCTGCTGTGGACGCTCTGTCTCTGATGAACGGGTGACCTCTTCTTCT
GCAGCAAGTTCTTGAATTCATGAAGATCGGTGCTTCAGGGTGGACATGGTCCAGGCCGCCCTCATCAT
GGGGGTCTTAACCCAGTGATGACTCTGTCCAGCCTGACCCCTTTGTCTGGGTGCGGAGGAGCTCCAG
CAGTGGCGGGCGGACGCCACACGGCTGTTCTGTGGTGGTCTTGGCCTCTGTCTGGTGTCTCTCATCTGTT
CCCTGCCTCTGAGCATCTACTGGTTGTGCTCTACTGGTTGAGCCTGCCGCCGAGATGCAGGTCTGTG
CTTCAGCTTGTACGCCTCTCTCGTCCGTAAGCAGCAGCGCCAACCCCGTCATCTACTTCTGGTGGGC
AGCCGGAGGAGCCACAGGCTGCCACAGGTCCCTGGGACTGTGCTCCAACAGGCGCTTCGCGAGGAGC
CCGAGCTGGAAGTGGGAGACGCCACCGTGGGCACCAATGAGATGGGGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG224023 representing NM_198923

Red=Cloning site Green=Tags(s)

MNQTLNSSSGTVESALNYSRGSTVHTAYLVLSLAMFTCLCGMAGNSMVIWLLGFRMHRNPFICIYILNLAA
ADLLFLFSMASTLSLETQPLVNTTDKVHELMKRLMYFAYTVGLSLLTAISTQRCLSVLFPIWFKCHRPRH
LSAWVCGLLWTLCLLMNGLTSSFCSKFLKFNEDRCFRVDMVQAALIMGVLTVMTLSSLTLFVWVRSSQ
QWRRQPTRLFVVVLASVLVFLICSLPLSIYWFVLYWLSLPPMQVLCFSLSRLSSSVSSSANPVIYFLVG
SRRSHRLPTRSLGTVLQALREEPELEGGETPTVTGNEMGA

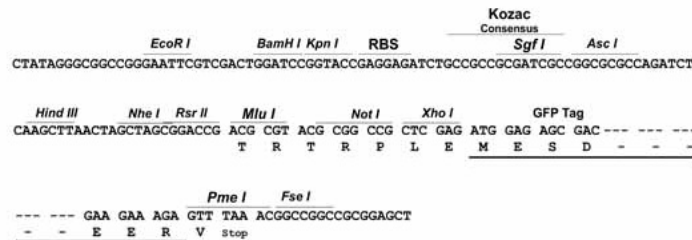
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

NM_198923

ORF Size:

963 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:

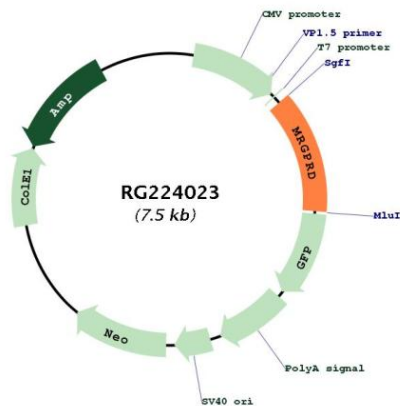
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_198923.2, NP_944605.2</u>
RefSeq Size:	966 bp
RefSeq ORF:	966 bp
Locus ID:	116512
UniProt ID:	<u>Q8TDS7</u>
Cytogenetics:	11q13.3
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	May regulate nociceptor function and/or development, including the sensation or modulation of pain. Functions as a specific membrane receptor for beta-alanine. Beta-alanine at micromolar doses specifically evoked Ca(2+) influx in cells expressing the receptor. Beta-alanine decreases forskolin-stimulated cAMP production in cells expressing the receptor, suggesting that the receptor couples with G-protein G(q) and G(i).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG224023