

Product datasheet for **RC224023**

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

Product data:

Product Type:	Expression Plasmids
Product Name:	GPCR TGR7 (MRGPRD) (NM_198923) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GPCR TGR7
Synonyms:	MRGD; TGR7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224023 representing NM_198923 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACCAGACTTTGAATAGCAGTGGGACCGTGGAGTCAGCCCTAAACTATTCCAGAGGGAGCACAGTGC
ACACGGCCTACCTGGTGTGAGCTCCCTGGCCATGTTACCTGCCTGTGCGGGATGGCAGGCAACAGCAT
GGTGATCTGGCTGCTGGGCTTTCGAATGCACAGGAACCCCTTCTGCATCTATATCCTCAACCTGGCGCA
GCCGACCTCCTCTTCTTTCAGCATGGCTTCCACGCTCAGCCTGGAAACCCAGCCCTGGTCAATACCA
CTGACAAGGTCCACGAGCTGATGAAGAGACTGATGTACTTTGCCACACAGTGGGCTGAGCCTGCTGAC
GGCCATCAGCACCCAGCGCTGTCTCTGTCTCTCCCTATCTGGTTCAAGTGTACCGGCCAGGCAC
CTGTACGCTGGGTGTGTGGCCTGCTGTGGACGCTCTGTCTCCTGATGAACGGGTTGACCTCTTCTTCT
GCAGCAAGTTCTTGAAATCAATGAAGATCGGTGCTTCAGGGTGGACATGGTCCAGGCCGCCCTCATCAT
GGGGGTCTTAACCCAGTGATGACTCTGTCCAGCCTGACCCTCTTTGTCTGGGTGCGGAGGAGCTCCAG
CAGTGGCGGGCAGCCACACGGCTGTTCTGGTGGTCTGCTGCTGCTGGTGTCTCCTCATCTGTT
CCCTGCCTCTGAGCATCTACTGGTTTGTGCTCTACTGGTTGAGCCTGCCGCCGAGATGCAGGTCTGTG
CTTCAGCTTGTACGCCTCTCCTCGTCCGTAAGCAGCAGCGCCAAACCCGTCATCTACTTCTGGTGGGC
AGCCGGAGGAGCCACAGGCTGCCACCAGTCCCTGGGACTGTGCTCCAACAGGCGCTTCGCGAGGAGC
CCGAGCTGGAAGTGGGAGACGCCACCGTGGCACCAATGAGATGGGGCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC224023 representing NM_198923
Red=Cloning site Green=Tags(s)

MNQTLNSSGTVESALNYSRGSTVHTAYLVLSLAMFTCLCGMAGNSMVIWLLGFRMHRNPF CIYILNLAA
 ADLLFLFSMASTLSLETQPLVNTDKVHELMKRLMYFAYTVGLSLLTAISTQRCLSVLFPFIWFKCHRPRH
 LSAWVCGLLWTLCLLMNGLTSSFCCKFLKFNEDRCFRVDMVQAALIMGVLPVMTLSSSLTLFVWVRRSSQ
 QWRRQPTRLFVVVLASVLVFLICSLPLSIYWFVLYWLSLPPEMQVLCFSLSRLSSSVSSSANPVIYFLVG
 SRRSHRLPTRSLGTVLQQALREEPELEGETPTVGTNEMGA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6114_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



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.

RefSeq: [NM_198923.2](#), [NP_944605.2](#)

RefSeq Size: 966 bp

RefSeq ORF: 966 bp

Locus ID: 116512

UniProt ID: [Q8TDS7](#)

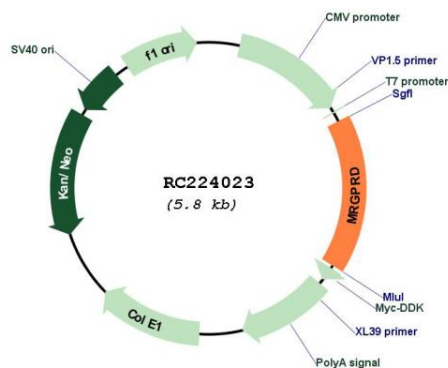
Cytogenetics: 11q13.3

Protein Families: Druggable Genome, Transmembrane

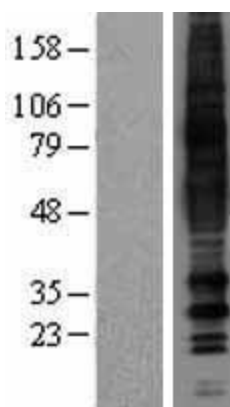
MW: 35.9 kDa

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 RC224023



Western blot validation of overexpression lysate (Cat# [LY403698]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224023 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).