

Product datasheet for **RG220560**

GPR31 (NM_005299) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GPR31 (NM_005299) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: GPR31
Synonyms: 12-HETER; HETER; HETER1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG220560 representing NM_005299
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCCATCCAAACTGCTCAGCCCCAGCACTGTGGTGGCCACAGCTGTGGGTGCTTGCTGGGGCTGG
 AGTGTGGGCTGGGTCTGCTGGGCAACGCGGTGGCGCTGTGGACCTTCTGTTCCGGGTGAGGGTGTGGAA
 GCCGTACGCTGTCTACCTGCTCAACCTGGCCCTGGCTGACCTGCTGTTGGCTGCGTGCCTTTCCTG
 GCCGCTTCTACCTGAGCCTCCAGGCTTGGCATCTGGCCGTGTGGGCTGCTGGGCCCTGCGCTTCTG
 TGGACCTCAGCCGAGCGTGGGATGGCCTTCTGGCCGCGTGGCTTTGGACCGGTACCTCCGTGTGGT
 CCACCCTCGGCTTAAGGTCAACCTGCTGTCTCCTCAGGCGGCCCTGGGGTCTCGGGCCTCGTCTGGCTC
 CTGATGGTCGCCCTCACCTGCCCGGCTTGTCTATCTCTGAGGCCGCCAGAACTCCACCAGGTGCCACA
 GTTTCTACTCCAGGGCAGACGGCTCCTTCAGCATCATCTGGCAGGAAGCACTCTCCTGCCTTCAGTTTGT
 CCTCCCCTTTGGCCTCATCGTGTCTGCAATGCAGGCATCATCAGGGCTCTCCAGAAAAGACTCCGGGAG
 CCTGAGAAACAGCCCAAGCTTACGCGGGCCAGGCACTGGTCACCTTGGTGGTGGTGTGTTTGTCTGT
 GCTTTCTGCCCTGCTTCTGGCCAGAGTCTGTGACATCTCCAGAATCTGGGAGCTGCAGGGCCCT
 TTGTGCAGTGGCTCATACCTCGGATGTCACGGGCAGCCTCACCTACCTGCACAGTGTGCTCAACCCCGTG
 GTATACTGCTTCTCCAGCCCCACCTTACAGAGCTCCTATCGGAGGGTCTTCCACACCCCTCCGAGGCAAAG
 GGCAGGCAGCAGAGCCCCAGATTTCAACCCAGAGACTCCTATTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG220560 representing NM_005299
 Red=Cloning site Green=Tags(s)

MPFPNCSAPSTVVAVGVLGLEGGLLGNVALWTFLLFRVVRVWPKYAVYLLNLALADLLLAACL PFL
 AAFYLSLQAWHLGRVGCWALRFLDL SRSVGMFLAAVALDRYL RVVHPRLKVNLLSPQAALGVSGLVWL
 LMVALTCPGLLISEAAQNSTRCHSFYSRADGSFSIIWQEAL SCLQFVLPFGLIVFCNAGIIRALQKRLRE
 PEKQPKLQRAQALVTLVVVLFALCFLPCFLARVLMHIFQNLGSCRALCAVAHTSDVTGSLTYLHSLNPNV
 VYCFSSPTFRSSYRRVFHTLRGKGQAAEPPDFNPRDSYS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005299

ORF Size: 957 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_005299.1](#), [NP_005290.1](#)

RefSeq Size: 960 bp

RefSeq ORF: 960 bp

Locus ID: 2853

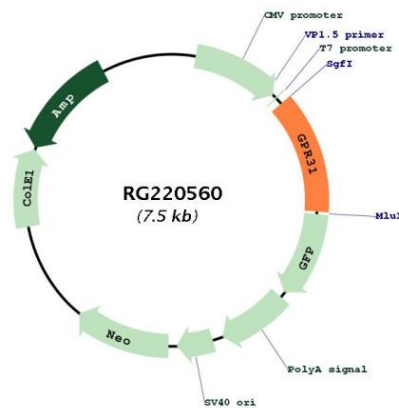
UniProt ID: [O00270](#)

Cytogenetics: 6q27

Protein Families: Druggable Genome, GPCR, Transmembrane

Gene Summary: High-affinity receptor for 12-(S)-hydroxy-5,8,10,14-eicosatetraenoic acid (12-S-HETE). 12-(S)-HETE is an arachidonic acid metabolite secreted by platelets and tumor cells, and known to induce endothelial cells retraction allowing invasive cell access to the subendothelial matrix, which is a critical step for extravasation or metastasis. Ligand-binding lead to activation of ERK1/2 (MAPK3/MAPK1), MEK, and NF-kappa-B.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG220560