

Product datasheet for **MG224248**

Gpr161 (NM_001081126) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Gpr161 (NM_001081126) Mouse Tagged ORF Clone
 Tag: TurboGFP
 Symbol: Gpr161
 Synonyms: Gm208; Gm208Gpr; vl
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-AC-GFP (PS100010)
 E. coli Selection: Ampicillin (100 ug/mL)
 Restriction Sites: SgfI-MluI
 Cloning Scheme:

Cloning sites used for ORF Shuttling:



Kozac
Consensus

EcoR I BamH I Kpn I RBS Sgf I Asc I

CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGCCAGATCT

Hind III Nhe I Rsr II Mlu I Not I Xho I GFP Tag

CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

T R T R P L E M E S D - - -

Pme I Fse I

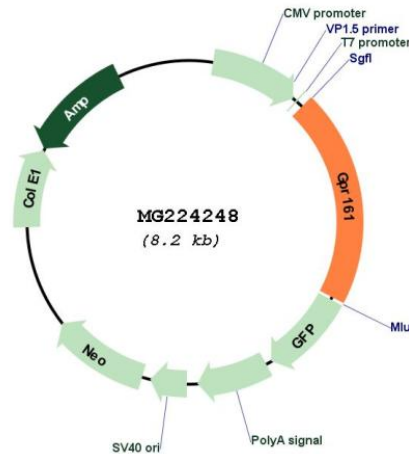
--- --- GAA GAA AGA GTT TAA ACGGCCGCCCGGAGCT

- - E E R V stop



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Plasmid Map:



ACCN: NM_001081126

ORF Size: 1674 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_001081126.2](#)

RefSeq Size: 1943 bp

RefSeq ORF: 1677 bp

Locus ID: 240888

UniProt ID: [B2RPY5](#)

Cytogenetics: 1 72.64 cM

Gene Summary: Key negative regulator of Shh signaling, which promotes the processing of GLI3 into GLI3R during neural tube development. Recruited by TULP3 and the IFT-A complex to primary cilia and acts as a regulator of the PKA-dependent basal repression machinery in Shh signaling by increasing cAMP levels, leading to promote the PKA-dependent processing of GLI3 into GLI3R and repress the Shh signaling. In presence of SHH, it is removed from primary cilia and is internalized into recycling endosomes, preventing its activity and allowing activation of the Shh signaling. Its ligand is unknown.[UniProtKB/Swiss-Prot Function]