

## Product datasheet for **MR224248**

### **Gpr161 (NM\_001081126) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gpr161 (NM_001081126) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gpr161
Synonyms:	Gm208; Gm208Gpr; vl
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR224248 representing NM\_001081126  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGACTCGACCCACCCACACACTCTCTGGCTGTATTTCTGTCCGATGCTCTGCTACCCG  
 CATCCCGAGGGGCACTGACCATGAGCCTCAACTCCTCCCTCAGCTACAGGAAGGAACTGAGCAACCTCAC  
 TGCAACAGAGGGTGGTGAAGGGGTGCCGTCTCTGAGTTCATCGCCATCATCATCACTGTCTCGTC  
 TGCTGGGCAACCTGGTATTGTAGTACCTTGTACAAGAAGTCTACCTCCTCACCCCTCAGCAACAAGT  
 TCGTCTTCAGCCTGACCTGTCCAATTCTGTTGTCGGTGTGGTGTGCCGTTCTGGTGTACTAGCTC  
 CATCCGGAGGGAATGGATTTTCGGCGTGGTTGGTGAACCTCTCTGCCCTCTCTACCTGCTGATCAGC  
 TCAGCCAGCATGCTCACGCTTGGGGTATTGCCATCGATCGTACTACGCCGCTCTGTATCCAATGGTGT  
 ACCCCATGAAGATCACAGGAACCGAGCTGTGATGGCTCTCGTCTACATCTGGCTCCACTCTCTATTGG  
 CTGTCTCGCGCCCTATTTGGTTGGTTCATCGGTGGAGTTGATGAGTTCAAGTGGATGTGTGTGGCCGG  
 TGGCACCAGGAACCCGGCTACACCAATTTCTGGCAGATCTGGTGTGCCCTGTTCCCTTTCTCATATGC  
 TAGTGTGCTACGGTTTCATCTTCCGGGTGGCCAGGGTCAAGGCCGAAAGGTGCACTGTGGCAGCGTGGT  
 CACTGTGGAGGAGGACTCTCAGAGGAGCGGGAGGAAGAATTCTAGTACCTCCACTTCTCTCCGGCAGT  
 AGGAGGAATGCCCTTCAAGGAGTGGTCTATTACGCTAACCAGTGCAAAGCCCTCATCACCATCTGGTGG  
 TCATTGGCGCCTTCATGGTCACTGGGGCCCTACATGGTTGTCATTACCTCAGAGGCACTCTGGGGAA  
 GAACTGTGTCTCCCAACCCTGGAGACTTGGGCCACATGGCTGTCCTTTACCAGTGCCATCTGCCACCCT  
 CTGATCTACGGACTCTGGAACAAGACTGTGCGCAAGGAGCTCTGGGCATGTGCTTTGGGACCGTTATT  
 ACGGGAAATCCTTTGTGCAGCGACAGAGGACTCCAGGCTCTTCCAGCATTTCCAACAGGATCACAGACTT  
 GGGTCTGTCCCCACATCTCACGGCGCTCATGGCAGGCGGACAGTCCCTGGGACACAGCAGCAGCACCGGT  
 GACACAGGCTTACGTAATCTCAGGATTCAGGGACGGATGTGATGCTGTTGGAAGATGGCACTTCTGAGG  
 ACAACCCTCCCAAGCACTGCACTTGGCCACCAAGAGGAGGAGCTCCGTGACATTTGAGGACGAAGTGA  
 ACAGATCAAAGAGGCGCCAAGAACTCTTCTTTCATGTGAAAGCTGAAGTACACAAATCCTTGGACAGT  
 TACGCAGCCAGCTTGGCTAAAGCCATTGAGGCTGAAGCCAAAATCAACTATTTGGGGAGGAGGCTCTGC  
 CAGGGGTCTTGTTCACAGCACGG[AT]CCGTCCAGGGGCTGGCTTTGGGGCCGTCGAGGCAGCAGAAC  
 TCTTGTGAATCAGAGGCTGCAGCTACAGAGCATCAAAGAAGGCAATGTCTTAGCTGCAGAACAGAGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR224248 representing NM\_001081126  
 Red=Cloning site Green=Tags(s)

MDSHHTHTLLAVFPVQHALLTASRGALTMSLNSSLRYKELSNLTATEGGEGGAVSEFIAIIITVLV  
 CLGNLVIIVTLYKSYLLTSLNKFVSLTSLNLLSVLVPFVVTSSIRREWIFGVVWCNFSALLYLLIS  
 SASMLTLGVIAIDRYAVLYPMVYPMKITGNRAVMALVYIWLHSLIGCLPPLFGWSSVEFDEFKVMCVA  
 WHQEPGYTIFWQIWALFPFLIMLVYGFIFRVARVKARKVHCVTVVTVEEDSQRSRKNSSSTSSSGS  
 RRNALQGVVYSANQCKALITILVVIGAFMVTWGPYMVVITSEALWGKNCVSPTLETWATWLSFTSAICHP  
 LIYGLWNTVRKELLGMCFGDRYYRESFVQRQRTSRLFSISNRIIDLGLSPHLTALMAGGQSLGHSSTG  
 DTGFSYSQDSGTDVMLLEDGTSEDNPPQHCTCPPKRRSSVTFEVEVEIQEAAKNSLLHVKAIEVHKSLS  
 YAASLAKAIEAEAKINLFGEEALPGVLFARXXVPGAGFGRRRSRTL VNQRLQLQSIKEGNVLAEEQR

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9015\\_c10.zip](https://cdn.origene.com/chromatograms/mm9015_c10.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001081126

ORF Size: 1677 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\\_001081126.1](#), [NM\\_001081126.2](#), [NP\\_001074595.1](#)

RefSeq Size: 1943 bp

RefSeq ORF: 1677 bp

Locus ID: 240888

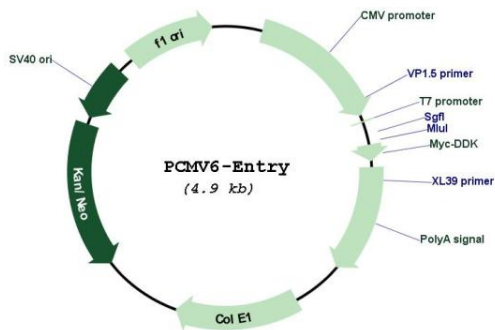
UniProt ID: [B2RPY5](#)

**Cytogenetics:** 1 72.64 cM

**MW:** 62.1 kDa

**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]

**Product images:**



Circular map for MR224248