

## Product datasheet for **MC226697**

### **Gpm6a (NM\_001253754) Mouse Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Gpm6a (NM\_001253754) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Gpm6a  
**Synonyms:** Gpm6; M6A  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC226697 representing NM\_001253754  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGGGTGCTTCGAGTGTGCATTAATGCCTGGGAGGTATCCCTATGCTTCTCTGATTGCAACCATCC  
TGCTGTATGCAGGCGTTGCCCTGTTCTGTGGCTGTGGCCATGAAGCCCTTCTGGAACAGTCAACATTCT  
GCAGACCTACTTTGAGTTGGCAAGGACTGCTGGAGACACTGGATGTTTTCACTATGATTGACATCTTT  
AAGTATGTGATCTATGGCATTGCGGCTGCTTTCTTTGTCTATGGCATTTTACTGATGGTAGAAGGTTTCT  
TCACAACTGGGGCTATCAAAGATCTCTATGGAGACTTCAAATACCCACCTGTGGCAGATGTGTGAGCGC  
TTGGTTTATCATGCTGACATACCTCTTCATGTTGGCCTGGCTGGGAGTCACAGCTTTCACCTCACTGCC  
GTGTACATGTATTTCAATGTGTGGACCATCTGCCGGAACACCACTCTAGTGGAGGGAGCAAATCTCTGCT  
TGGATCTGCGTCAGTTTGGGATTGTGACAATTGGAGAGGAAAAGAAAATTTGACTGCCTCTGAGAACTT  
CCTGAGGATGTGTGAATCTACTGAGCTGAATATGACCTTCCACTGTTCATTGTGGCACTGTCTGGAGCT  
GGAGCAGCAGTTATTGCTATGGTCCACTACCTGATGGTTCTGTCTGCCAACTGGGCTATGTGAAAGATG  
CCTGCCGCATGCAGAAGTACGAAGACATCAAGTCAAAGGAAGAGCAGGAGCTGCACGACATCCATTCTAC  
TCGCTCAAAGAGCGGCTCAATGCGTACACATA**AA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001253754  
**Insert Size:** 804 bp



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|-------------------------------|--|
| <b>OTI Disclaimer:</b>        | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).   |
| <b>OTI Annotation:</b>        | Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.   |
| <b>Components:</b>            | 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).   |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>  |
| <b>RefSeq:</b>                | <u><a href="#">NM_001253754.1</a></u> , <u><a href="#">NP_001240683.1</a></u>  |
| <b>RefSeq Size:</b>           | 2980 bp  |
| <b>RefSeq ORF:</b>            | 804 bp   |
| <b>Locus ID:</b>              | 234267   |
| <b>UniProt ID:</b>            | <u><a href="#">P35802</a></u>  |
| <b>Cytogenetics:</b>          | 8 B1.3   |
| <b>Gene Summary:</b>          | <p>Involved in neuronal differentiation, including differentiation and migration of neuronal stem cells. Plays a role in neuronal plasticity and is involved in neurite and filopodia outgrowth, filopodia motility and probably synapse formation. Gpm6a-induced filopodia formation involves mitogen-activated protein kinase (MAPK) and Src signaling pathways. Conflictingly, PubMed:22162747 reports that induced cellular protrusions are simple membrane-wrapped tubules without actin or tubulin-based cytoskeletons and with Gpm6a gliding along membrane edges indicative for a function in actin-independent membrane deformation. May be involved in neuronal NGF-dependent Ca(2+) influx. May be involved in regulation of endocytosis and intracellular trafficking of G-protein-coupled receptors (GPCRs); enhances internalization and recycling of mu-type opioid receptor.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) has a different segment for its 5' end which results in the use of an alternate start codon, compared to variant 1. The encoded protein (isoform 2) has a distinct N-terminus and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p> |