

## Product datasheet for MC226099

### Gpm6a (NM\_001253756) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gpm6a (NM_001253756) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gpm6a
Synonyms:	Gpm6; M6A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC226099 representing NM_001253756 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTAGAAGTTTCTTCACTGGGGCTATCAAAGATCTCTATGGAGACTTCAAATCACCACCTGTG  
 GCAGATGTGTGAGCGCTTGGTTTATCATGCTGACATACCTCTTCATGTTGGCTGGCTGGGAGTCACAGC  
 TTTCACCTCACTGCCCGTGTACATGTATTCAATGTGTGGACCATCTGCCGGAACACCACTCTAGTGGAG  
 GGAGCAAATCTCTGCTTGGATCTGCGTCAGTTTGGGATTGTGACAATTGGAGAGGAAAAGAAATTTGTA  
 CTGCCTCTGAGAACTTCTGAGGATGTGTGAATCTACTGAGCTGAATATGACCTTCCACTTGTTTCATTGT  
 GGCACTTGCTGGAGCTGGAGCAGCAGTTATTGCTATGGTCCACTACCTGATGGTTCTGTCTGCCAACTGG  
 GCCTATGTGAAAGATGCCTGCCGCATGCAGAAGTACGAAGACATCAAGTCAAAGGAAGAGCAGGAGCTGC  
 ACGACATCCATTCTACTCGCTCCAAAGAGCGGCTCAATGCGTACACA**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001253756
Insert Size:	540 bp
OTI Disclaimer:	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).


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<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u><a href="#">NM_001253756.1</a></u> , <u><a href="#">NP_001240685.1</a></u>
<b>RefSeq Size:</b>	3158 bp
<b>RefSeq ORF:</b>	540 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 (3) has a different segment in its 5' UTR and lacks an alternate exon in the 5' coding region, which results in the use of a downstream start codon, compared to variant 1. The resulting protein (isoform 3) is shorter when it is compared to isoform 1.</p>