

Product datasheet for **RG205432**

Neuronal membrane glycoprotein M6 a (GPM6A) (NM_005277) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neuronal membrane glycoprotein M6 a (GPM6A) (NM_005277) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Neuronal membrane glycoprotein M6 a
Synonyms:	GPM6; M6A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205432 representing NM_005277 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGAGAATATGGAAGAGGGACAGACACAAAAAGGGTGTGTTTGAATGCTGTATCAAATGCCTGGGGG
GCATTCCTATGCCTCTCTGATTGCCACCATCCTGCTCTATGCGGGTGTGCCCTGTTCTGTGGCTGCGG
TCATGAAGCGCTTCTGGAAGTCAACATTCTGCAAACCTACTTTGAGATGGCAAGAAGTCTGGAGAC
ACACTGGATGTTTTTACCATGATTGACATCTTTAAGTATGTGATCTACGGCATCGCAGCTCGCTTCTTTG
TGTATGGCATTGCTGATGGTGAAGGTTTCTCACAAGTGGGCCATCAAAGATCTCTATGGGGATTT
CAAAATCACCACTGTGGCAGATGTGTGAGCGCTTGTTTCAATATGCTGACATATCTTTTCAATGTTGGCC
TGCTGGGAGTCACGGCTTTACCTCACTGCCAGTTTACATGTACTTCAATCTGTGGACCATCTGCCGGA
ACACCACATTAGTGGAGGGAGCAAATCTCTGCTTGGACCTTCGTCAAGTTTGAATTGTGACAATTGGAGA
GGAAAAGAAAATTTGACTGTCTCTGAGAAATTTCTTGAGGATGTGCGAATCTACTGAGCTGAACATGACC
TTCCACTTGTGTTATGTGGCACTTGCTGGAGCTGGGGCAGCAGTCATTGCTATGGTTCACTACCTTATGG
TTCTGTCTGCCAACTGGGCTATGTGAAAGACGCTGCCGGATGCAGAAGTATGAAGACATCAAGTCGAA
GGAAGAGCAAGAGCTTCATGACATCCACTCTACTCGCTCAAAGAGCGGCTCAATGCATACACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205432 representing NM_005277
 Red=Cloning site Green=Tags(s)

MEENMEEGQTQKGCFECCIKCLGGIPYASLIATILLYAGVALFCGCGHEALSGTVNILQTYFEMARTAGD
 TLDVFTMIDIFKYVIYGIAAAFVYIGILLMVEGFFTTGAIKDLYGDFKITTCGRCSVSAWIMLTYLFLMLA
 WLGVTAFATSLPVYMYFNLWTICRNTTLVEGANLCLDLRQFGIVTIGEEKICTVSENFLRMCESTELNMT
 FHLFIVALAGAGAAVIAMVHYLMVLSANWAYVKDACRMQKYEDIKSKEEQELHDIHSTRSKERLNAVY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005277

ORF Size: 834 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_005277.4](#)

RefSeq Size: 3021 bp

RefSeq ORF: 837 bp

Locus ID: 2823

UniProt ID: [P51674](#)

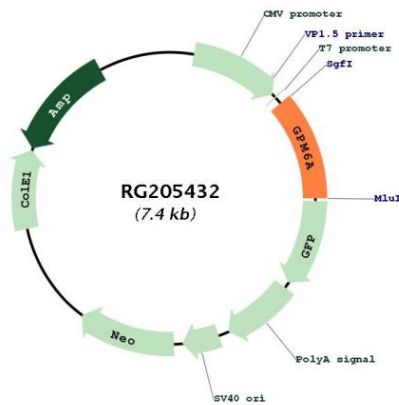
Cytogenetics: 4q34.2

Domains: Myelin_PLP

Protein Families: Transmembrane

Gene Summary: 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. 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]

Product images:



Circular map for RG205432