

Product datasheet for **RC205371**

Neuronal membrane glycoprotein M6 a (GPM6A) (NM_201591) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neuronal membrane glycoprotein M6 a (GPM6A) (NM_201591) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Neuronal membrane glycoprotein M6 a
Synonyms:	GPM6; M6A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205371 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGAGAATATGGAAGAGGGACAGACACAAAAAGGGTGTGGTGAATGCTGTATCAAATGCCTGGGGG
GCATTCCTATGCCTCTCTGATTGCCACCATCCTGCTCTATGCGGGTGTGGCCTGTTCTGTGGCTGCGG
TCATGAAGCGCTTCTGGAAGTCAACATTCTGCAAACCTACTTTGAGATGGCAAGAAGTCTGGAGAC
ACACTGGATGTTTTTACCATGATTGACATCTTTAAGTATGTGATCTACGGCATCGCAGCTGCGTTCTTTG
TGTATGGCATTGCTGATGGTGAAGGTTTCTTCAACTGGGGCCATCAAAGATCTCTATGGGGATTT
CAAAATCACCACTGTGGCAGATGTGTGAGCGCTTGGTTCAATATGCTGACATATCTTTTATGTTGGCC
TGCTGGGAGTCACGGCTTTACCTCACTGCCAGTTTACATGTACTTCAATCTGTGGACCATCTGCCGGA
ACACCACATTAGTGGAGGGAGCAAATCTCTGCTGGACCTTCGTCAAGTTGGAATTGTGACAATTGGAGA
GGAAAAGAAAATTTGACTGTCTCTGAGAATTTCTTGAGGATGTGCGAATCTACTGAGCTGAACATGACC
TTCCACTGTTTTATTGTGGCACTGTCTGGAGCTGGGGCAGCAGTCATTGCTATGGTTCACTACCTTATGG
TTCTGTCTGCCAACTGGGCTATGTGAAAGACGCTGCCGGATGCAGAAGTATGAAGACATCAAGTCGAA
GGAAGAGCAAGAGCTTCATGACATCCACTCTACTCGCTCAAAGAGCGGCTCAATGCATACACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205371 protein sequence
Red=Cloning site Green=Tags(s)

MEENMEEGQTQKGCFECCIKCLGGIPYASLIATILLYAGVALFCGCGHEALSGTVNILQTYFEMARTAGD
 TLDVFTMIDIFKYVIYGIAAAFFVYGILLMVEGFFTTGAIKDLYGDFKITTCGRCVSAWFIMLTYLFLA
 WLGVTAFATSLPVYMYFNLWTICRNTTLVEGANLCLDLRQFGIVTIGEEKICTVSENFLRMCESTELNMT
 FHLFIVALAGAGAAVIAMVHYLMVLSANWAYVKDACRMQKYEDIKSKEEQELHDIHSTRSKERLNAYT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6537_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_201591

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_201591.2](#)

RefSeq Size: 3697 bp

RefSeq ORF: 837 bp

Locus ID: 2823

UniProt ID: [P51674](#)

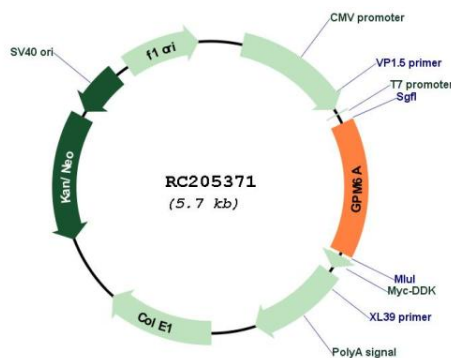
Cytogenetics: 4q34.2

Protein Families: Transmembrane

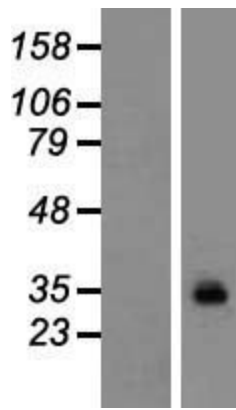
MW: 31.2 kDa

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]

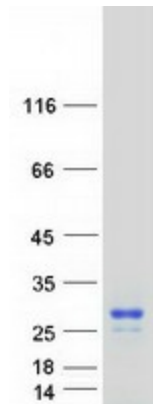
Product images:



Circular map for RC205371



Western blot validation of overexpression lysate (Cat# [LY404475]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205371 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GPM6A protein (Cat# [TP305371]). The protein was produced from HEK293T cells transfected with GPM6A cDNA clone (Cat# RC205371) using MegaTran 2.0 (Cat# [TT210002]).