

Product datasheet for **MG222215**

Gphn (NM_172952) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gphn (NM_172952) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gphn
Synonyms:	5730552E08Rik; AI662856; BC027112; C230040D23; geph; GPH; GPHRYN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222215 representing NM_172952
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGACCGAGGAATGATCCTCACCAACCACGACCATCAAATCCGTGTCGGAGTCTCACAGTGAGTG
 ATAGCTGCTTCAGGAATCTTGCAGAAGACCGCAGTGGGATAAATCTAAAAGATCTTGTCCAAGATCCTTC
 TTTGTTGGGTGGGACTATATCGGCATACAAGATAGTACCAGATGAAATAGAAGAAATCAAGGAAACACTC
 ATAGACTGGTGTGATGAAAAGGAACTTAATTTAATATTAACAACCTGGAGGAACGGGGTTTGCACCACGAG
 ATGTCACCTCCAGAGGCCACAAAAGAAGTAATAGAGCGGGAAGCGCCAGGGATGGCCCTGGCAATGCTGAT
 GGGATCGCTCAATGTCACACCTCTGGGCATGCTCTCTAGACCAGTGTGTGAATAAGGGGAAAACCTCTG
 ATAATTAACCTACCTGGTAGCAAGAAAGGATCTCAGGAATGCTTTCAGTTCATACTGCCAGCTCTACCTC
 ATGCCATTGACCTTTTACGTGATGCCATTGTAAAAGTAAAGGAGGTGCATGATGAACTTGAAGATTTACC
 TTCCCCACCACCTCTCTCTCCACCTCTACAACCTAGCCACATAAACAGACAGAAGACAAAAGGAGTT
 CAGTGTGAAGAAGAGGAAGAAGAAAAGAACAGTGGTGTAGCTTCAACAGAAGATAGTTCCTCATCAC
 ATATAACTGCAGCAGCTCTTGTGCAAAGATTCAGACTCCATCATTTTCTCGTGGTGTTCAGGTGCTCCC
 ACGAGACACAGCCTCCCTTAGCACTACTCCTTCAGAATCGCCCGTGCTCAGGCTACATCTCGCCTCTCT
 ACAGCTTCTTGTCCAACCAAAAACAAATTAGACGGCCGGATGAAAGCAAAGGAGTTGCTAGTAGAGTTG
 GATCCCTCAAAGCTCGGCTTCCGTGCTCATCTACCTATAGTGTATCTGAGGTCCAGTCCAGGTGCAG
 CAGCAAGGAGAACATTCTAAGAGCCAGTACAGTGTGTAGATATCACCAGGTGGCTAGAAGACATCGC
 ATGTCTCCTTTTCCCCTGACGTCTATGGACAAAGCCTTACATTACAGTCTGGAGATGACTCCGGTGTG
 GTACAGAAATCATCAATTACCGAGATGGAATGGGGCGAGTCTTGTCTCAAGATGTATATGCAAAAAGACAA
 CCTACCCCATTCCTGCATCAGTAAAAGATGGCTATGCTGTTTCGAGCTGCTGATGGTCCAGGGGATCGT
 TTCATCATTGGGGAATCCAAGCTGGTGTGAGCAGCAACTCAGACAGTAATGCCAGGACAAGTGTGCGGG
 TTACAACAGGTGCTCCAATCCCCTGCGGTGCTGATGCAGTAGTGAAGTTGAAGATACTGAACTCATCAG
 GGAATCAGATGATGGTACTGAAGAACTTGAAGTACGAATTCTGGTGAAGCTCGGCCAGGCCAAGATATC
 CGACCCATCGGCCATGACATTAAGAGAGGGGAGTGTGTTTTGGCCAAAGGAACCCATATGGGCCCTTCAG
 AGATTGGTCTCCTTGCAACTGTGGGTGTCACAGAAGTGAAGTTAATAAGTTTCCAGTGGTTGCCGTTAT
 GTCACAGGGAATGAGCTGCTAAATCCTGAAGATGATCTTACCAGGAAAGATTCGGGACAGCAATCGA
 TCAACACTTCTAGCAACAATTCAGGAACATGGTTACCAACAATCAACCTGGGAATTGTAGGAGACAACC
 CAGATGACTTACTCAATGCCTTGAATGAGGGTATCAGCCGTGCTGATGTCATCATCACGTACAGGAGGTGT
 GTCATGGGGGAAAAGGACTATCTCAAGCAGGTGCTGGACATTGATCTTTCATGCTCAGATCCATTTTGGC
 AGAGTTTTTATGAAGCCAGGCTTCCAACAACATTTGCAACTTTGGATATTGATGGTGTAAAGAAAATTA
 TTTTTGCACTACCAGGGAATCCTGTATCAGCTGTGGTACCTGCAACCTCTTTGTTGTACCTGCACTGAG
 AAAGATGCAGGGTATCTGGATCCTCGGCCAACCATCATCAAAGCCAGGTTATCGTGTGATGTAAAACCTG
 GACCTCGCCAGAATACCACCGGTGTACTGACTTGGCATCACCAGAACCCTGCCCCTGGGCCCAGA
 GTACAGGTAATCAGATGAGCAGCCGTCTGATGAGCATGCCAGTGCCAAATGGATTATTGATGCTACCTCC
 AAAGACAGAGCAGTACGTGGAACCTCACAAAGGCGAGGTGGTAGATGTCATGGTATTGGACGGCTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG222215 representing NM_172952
 Red=Cloning site Green=Tags(s)

MATEGMILTNDHQIRVGLTVSDSCFRNLAEDRSGINLKDLVQDPSLLGGTISAYKIVPDEIEEIKETL
 IDWCDEKELNLILTTGGTGFAPRDVTPEATKEVIEREAPGMALMLMGLNVTPLGMLSRPVCGRGKTL
 IINLPGSKKGSQECFQF ILPALPHAIDLRLDAIVKVKVEHDELEDLPSPPPPLSPPTTSPHKQTEDKGV
 QCEEEEEKDKSGVASTEDSSSSHITAALAAKIPDSIISRGVQLPRDTASLSTTPSESPRAQATSRLS
 TASCPTPKQIRRPDESKGVASRVGSLKARLPSCSSTYSVSEVQSRCSSKENILRASHSAVDITKVARRRH
 MSPFPLTSMDFKITVLEMTPLVLTGTEIINYRDGMGRVLAQDVYAKDNLPPFPASVKDGYAVRAADGPGDR
 FIIGESQAGEQPTQTVMPGQVMRVTTGAPIPCGADAVVQVEDTELIRESDDGTEELEVRILVQARPGQDI
 RPIGHDIKRGECVLAKGTHMGPSEIGLLATVGVTEVEVNKFPVVAVMSTGNELLNPEDDLLPGKIRDSNR
 STLLATI QEHGYPTINL GIVGDNPDLLNALNEGISRADVIITSGGVSMGEKDYKQVLDIDLHAQIHFG
 RVFMKPLPTTFATLDIDGVRKIIIFALPGNPVSAVVT CNL FVVPALRKMQGILDRPTI I KARLSCDVKL
 DPRPEYHRCILTWHHQEPLPWAQSTGNQMSRRLMSMRSANGLLMLPPKTEQYVELHKGEVVDVMVIGRL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172952

ORF Size: 2307 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_172952.3](#), [NP_766540.2](#)

RefSeq Size: 3307 bp

RefSeq ORF: 2310 bp

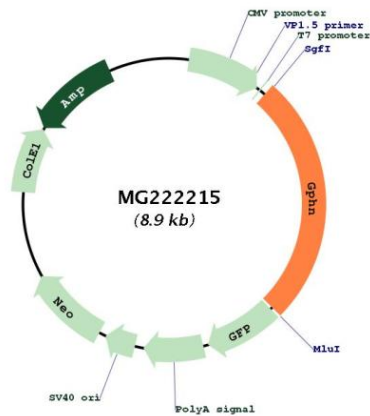
Locus ID: 268566

UniProt ID: [Q8BUV3](#)

Cytogenetics: 12 C3

Gene Summary: Microtubule-associated protein involved in membrane protein-cytoskeleton interactions. It is thought to anchor the inhibitory glycine receptor (GLYR) to subsynaptic microtubules. Catalyzes two steps in the biosynthesis of the molybdenum cofactor. In the first step, molybdopterin is adenylated. Subsequently, molybdate is inserted into adenylated molybdopterin and AMP is released.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG222215