

## Product datasheet for **RG200721**

### GLB1 (NM\_001079811) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GLB1 (NM_001079811) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GLB1
Synonyms:	EBP; ELNR1; MPS4B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG200721 representing NM\_001079811  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCGGGTTCTCTGTTTCGCATCCTCCTTCTGCTGCTGGTTCTGCTGCTTCTGGGCCCTACGCGGGCT  
 TGCGCAATGCCACCCAGAGGATGTTTAAAATTGACTATAGCCGGGACTCCTTCTCAAGGATGGCCAGCC  
 ATTTTCGCTACATCTCAGGAAGCATTCACTACTCCCGTGTGCCCGCTTCTACTGGAAGGACCGGCTGCTG  
 AAGATGAAGATGGCTGGGCTGAACGCCATCCAGACGTATGTGCCCTGGAACCTTTCATGAGCCCTGGCCAG  
 GACAGTACCAGTTTTCTGAGGACCATGATGTGGAATATTTTCTCGGCTGGCTCATGAGCTGGGACTGCT  
 GGTATCCTGAGGCCCGGCCCTACATCTGTGCAGAGTGGGAAATGGGAGGATTACCTGCTTGGCTGCTA  
 GAGAAAGAGTCTATTCTTCTCCGCTCCTCCGACCCAGATTACCTGGCAGCTGTGGACAAGTGGTGGGAG  
 TCCTTCTGCCAAGATGAAGCCTCCTCTATCAGAATGGAGGGCCAGTTATAACAGTGCAGTTGAAAA  
 TGAATATGGCAGTACTTTGCCGTGATTTTGACTACCTGCGCTTCTGCAGAAGCGCTTTCGCCACCAT  
 CTGGGGGATGATGTGGTTCTGTTTACCCTGATGGAGCACATAAAACATTCCTGAAATGTGGGGCCCTGC  
 AGGGCCTCTACACCACGGTGGACTTTGGAACAGGCAGCAACATCAGAGTCTTTCCTAAGCCAGAGGAA  
 GTGTGAGCCCAAAGACCTTGATCAATTCTGAATTCTATACTGGCTGGCTAGATCACTGGGGCCAACT  
 CACTCCACAATCAAGACCGAAGCAGTGGCTTCTCCCTCTATGATATACTGGCCGTGGGGCGAGTGTGA  
 ACTTGTACATGTTTATAGGTGGGACCAATTTTGCCTATTGGAATGGGGCCAACCTCACCTATGCAGCACA  
 GCCCACCAGCTACGACTATGATGCCCACTGAGTGAGGCTGGGGACCTCACTGAGAAGTATTTTGTCTGT  
 CGAAACATCATCCAGAAGTTTAAAAAGTACCAGAAGTCCATCCCTCCATCTACACCAAAGTTTGCAT  
 ATGGAAAAGTCACTTTGAAAAAGTTAAAGACAGTGGGAGCAGCTCTGGACATTCTGTGTCCCTCTGGGCC  
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 GAAAGCTGGAGCCACTCTGGACCTTCTGGTAGAGAACATGGGACGTGTGAACTATGGTGCATATATCAAC  
 GATTTTAAAGGTTTGGTTTCTAACCTGACTCTCAGTTCCAATATCCTCACGGACTGGACGATCTTCCAC  
 TGGACACTGAGGATGCAGTGCAGCCACCTGGGGGCTGGGGACACCGTGACAGTGGCCACCATGATGA  
 AGCCTGGGCCCAACTCATCCAACACACGCTCCCGCCTTTTATATGGGGAACCTCTCCATTCCAGT  
 GGGATCCAGACTTGCCCAAGGACCTTTATCCAGTTTCTGGATGGACCAAGGGCCAGGTCTGGATTA  
 ATGGCTTTAACCTTGCCGCTATTGGCCAGCCGGGGCCCTCAGTTGACCTGTTTGTGCCCCAGCACAT  
 CCTGATGACCTCGGCCCAACACCATCACCGTCTGGAACCTGGAGTGGGCACCTGCAGCAGTGTGAT  
 CCAGAACTATGTGCTGTGACGTTCTGGACAGGCCAGTTATTGGCTCATCTGTGACCTACGATCATCCCT  
 CCAAACTGTTGAAAAAAGACTCATGCCCCACCCCGCAAAAAAACAAGATTCATGGCTGGACCATGT  
 A

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG200721 representing NM\_001079811  
Red=Cloning site Green=Tags(s)

```

MPGFLVRILLVVLLVLLVLPTRGLRNATQRMFEIDYSRDSFLKDGQPFYISGSIHYSRVPRFYWKDRLL
KMKMAGLNAIQTYVPWNFHEPWPQYQFSEDHDVEYFLRLAHELGLLVILRPGPYICAEWEMGGLPAWLL
EKESILLRSSDPDYLAADVCKWLVLLPKMKPLLQNGGPVITVQVENEYGSYFACDFDYLRFQKRFRRH
LGDDVVLFITTDGAHKTFKCGALQGLYTTVDFGTGSNITDAFLSQRKCEPKGPLINSEFYTGWLDHWGQP
HSTIKTEAVASSLYDILARGASVNL YMF IGGTNFAYWNGANSPYAAQPTS YDYDAPLSEAGDLTEKYFAL
RNIIQKFEKVPEGP IPPSTPKFAYGKVTLEKLTVGAALDILCPSGP IKS LYPLTFI QVKQHYGFVLYRT
TLPQDCSNAPLSSPLNGVHDRAYVAVDGIPQGVLERNNVITL NITGKAGATLDLLVENMGRVNYGAYIN
DFKGLVSNLTLSSNILTDWITIFPLDTEAVRSHLGGWGHRS GHHDEAWAHNSSNYTLPAFYMGNF SIPS
GIPDLPQDTFIQFPGWTKQVWINGFNLGRYWPARGPQLT LFV PQHILM TSAPNTITVLELEWAPCSDD
PELCAVTFVDRPVI GSSVTYDHP SKPVEKRLMPPPPQKNKDSWLDHV
    
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001079811

**ORF Size:** 2031 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\\_001079811.1](#), [NP\\_001073279.1](#)

**RefSeq Size:** 2500 bp

**RefSeq ORF:** 1944 bp

**Locus ID:** 2720

**UniProt ID:** [P16278](#)

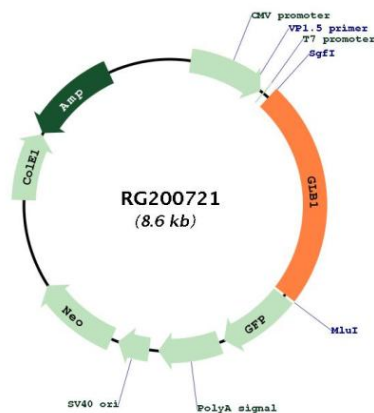
**Cytogenetics:** 3p22.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Galactose metabolism, Glycosaminoglycan degradation, Glycosphingolipid biosynthesis - ganglio series, Lysosome, Metabolic pathways, Other glycan degradation, Sphingolipid metabolism

**Gene Summary:** This gene encodes a member of the glycosyl hydrolase 35 family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature lysosomal enzyme. This enzyme catalyzes the hydrolysis of a terminal beta-linked galactose residue from ganglioside substrates and other glycoconjugates. Mutations in this gene may result in GM1-gangliosidosis and Morquio B syndrome. [provided by RefSeq, Nov 2015]

**Product images:**



Circular map for RG200721