

## **Product datasheet for MC207287**

## Glul (NM\_008131) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Glul (NM\_008131) Mouse Untagged Clone

Tag: Tag Free

Symbol: Glul

**Synonyms:** Glns; GS

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM\_008131, the custom clone sequence may differ by one or more

nucleotides

ATGGCCACCTCAGCAAGTTCCCACTTGAACAAAGGCATCAAGCAAATGTACATGTCCCTGCCCCAGGGTG AGAAAGTCCAAGCCATGTATATCTGGGTTGATGGTACCGGAGAAGGACTGCGCTGCAAGACCCGTACCCT GGACTGTGAGCCCAAGTGTGTGGAAGAGTTACCTGAGTGGAACTTTGATGGCTCTAGTACCTTTCAGTCT GAAGGCTCCAACAGCGACATGTACCTCCATCCTGTTGCCATGTTTCGAGACCCCTTCCGCAAAGACCCCA ACAAGCTGGTGCTATGTGAAGTTTTCAAGTATAACCGGAAGCCTGCAGAGACCAACTTGAGGCACATCTG TAAACGGATAATGGACATGGTGAGCAACCAGCACCCCTGGTTTGGAATGGAGCAGGAATATACTCTTATG GGAACAGACGGCCACCCATTTGGTTGGCCTTCCAATGGCTTCCCTGGACCCCAAGGCCCGTATTACTGCG GTGTGGGAGCAGACAAGGCCTACGGCAGGGACATCGTGGAGGCTCACTACCGGGCCTGCTTGTATGCTGG GGGATCCGAATGGGAGATCATCTTTGGATAGCCCGTTTTATCTTGCATCGGGTGTGCGAAGACTTTGGGG TGATAGCAACCTTTGACCCCAAGCCCATTCCAGGGAACTGGAATGGTGCAGGCTGCCATACCAACTTCAG CACCAAGGCCATGCGGGAGGAGAATGGTCTGAAGTGCATTGAGGAGGCCATTGACAAACTGAGCAAGAGG CACCAGTACCACATCCGCGCCTACGATCCCAAGGGGGGCCTGGACAACGCCCGGCGTCTGACTGGATTCC ACGAAACCTCCAACATCAACGACTTTTCTGCCGGTGTTGCCAACCGCGGTGCCAGTATCCGCATTCCCCG GACTGTCGGCCAGGAGAAGAAGGGCTACTTTGAAGACCGTCGGCCTTCTGCCAATTGTGACCCCTATGCG GTGACAGAAGCCATCGTCCGCACGTGTCTCCTCAACGAAACAGGCGACGAACCCTTCCAATACAAGAACT

:AA

**Restriction Sites:** Sgfl-Mlul

ACCN: NM 008131

**Insert Size:** 1122 bp



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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).

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>BC015086</u>, <u>AAH15086</u>

RefSeq Size: 1435 bp
RefSeq ORF: 1122 bp
Locus ID: 14645
UniProt ID: P15105
Cytogenetics: 1 G3

**Gene Summary:** 

Glutamine synthetase that catalyzes the ATP-dependent conversion of glutamate and ammonia to glutamine (By similarity). Its role depends on tissue localization: in the brain, it regulates the levels of toxic ammonia and converts neurotoxic glutamate to harmless glutamine, whereas in the liver, it is one of the enzymes responsible for the removal of ammonia (PubMed:25870278). Essential for proliferation of fetal skin fibroblasts (By similarity). Independently of its glutamine synthetase activity, required for endothelial cell migration during vascular development (PubMed:30158707). Involved in angiogenesis by regulating membrane localization and activation of the GTPase RHOJ, possibly by promoting RHOJ palmitoylation (By similarity). May act as a palmitoyltransferase for RHOJ: able to autopalmitoylate and then transfer the palmitoyl group to RHOJ (By similarity). Plays a role in ribosomal 40S subunit biogenesis (By similarity). [UniProtKB/Swiss-Prot Function]