

Product datasheet for **MR205788**

Glul (NM_008131) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glul (NM_008131) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Glul
Synonyms:	Glns; GS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205788 representing NM_008131 Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCCACCTCAGCAAGTTCCTCACTTGAACAAAGGCATCAAGCAAATGTACATGTCCCTGCCCCAGGGTG
AGAAAGTCCAAGCCATGTATATCTGGGTGATGGTACCGGAGAAGGACTGCGCTGCAAGACCCGTACCTT
GGACTGTGAGCCCAAGTGTGTGAAGAGTTACCTGAGTGGAACTTTGATGGCTCTAGTACCTTTCACTCT
GAAGGCTCCAACAGCGACATGTACCTCCATCCTGTTGCCATGTTTCGAGACCCCTTCGCAAAGACCCCA
ACAAGCTGGTGTATGTGAAGTTTTCAAGTATAACCGGAAGCCTGCAGAGACCAACTTGAGGCACATCTG
TAAACGGATAATGGACATGGTGAGCAACCAGCACCCCTGGTTTGGAAATGGAGCAGGAATATACTCTTATG
GGAACAGACGGCCACCCATTTGGTTGGCCTTCCAATGGCTTCCCTGGACCCCAAGGCCCGTATTACTGCG
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AGTCAAGATCACGGGGACAAATGCGGAGGTTATGCCTGCCAGTGGGAATCCAGATAGGACCCTGTGAG
GGGATCCGAATGGGAGATCATCTTTGGATAGCCCGTTTATCTTGATCGGGTGTGCGAAGACTTTGGGG
TGATAGCAACCTTTGACCCCAAGCCATTCCAGGGAAGTGAATGGTGCAGGCTGCCATACCAACTTCAG
CACCAAGGCCATGCGGGAGGAGAATGGTCTGAAGTGCATTGAGGAGGCCATTGACAACTGAGCAAGAGG
CACCAGTACCACATCCGCGCCTACGATCCCAAGGGGGCCTGGACAACGCCCGGCGTCTGACTGGATTCC
ACGAAACCTCCAACATCAACGACTTTTCTGCCGTGTTGCCAACCGCGGTGCCAGTATCCGATTCCCCG
GACTGTGCGCCAGGAGAAGAAGGCTACTTTGAAGACCGTCCGCTTCTGCCAATTGTGACCCCTATGCG
GTGACAGAAGCCATCGTCCGCACGTGTCTCCTCAACGAAACAGGCGACGAACCCTTCCAATACAAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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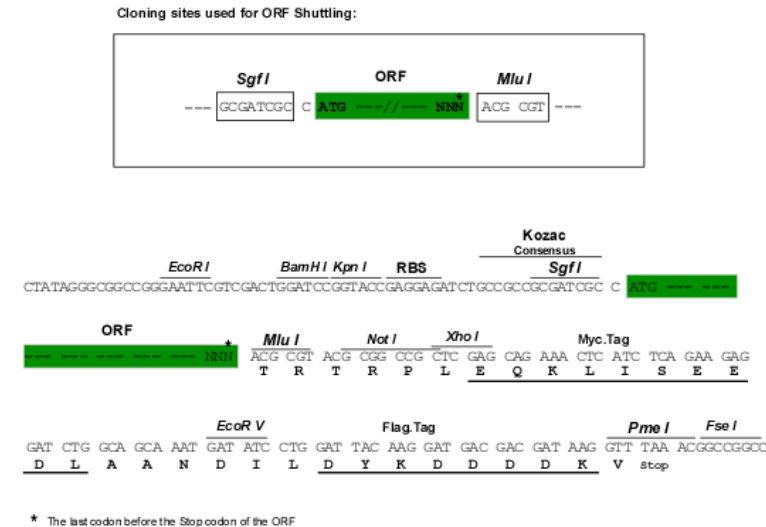
Protein Sequence: >MR205788 representing NM_008131
 Red=Cloning site Green=Tags(s)

MATSASSHLNKGIKQMYMSLPQGEKVQAMYIWDGTGEGLRCKTRTLDCPEPKVEELPEWNFDGSSTFQS
 EGSNSDMYLPVAMFRDPFRKDPNKLVLCEVFKYNRKAETNLRHICKRIMDMVSNQHPWFGMEQEYTLN
 GTDGHFPGWPSNGFPGPGPYCGVGADKAYGRDIVEAHYRACL YAGVKITGTNAEVMQAQWFEQIGPCE
 GIRMGDHLWIARFILHRVCEDFGVIATFDPKPIPGNWNAGCHTNFSTKAMREENGLKCIEEAIDKLSKR
 HQYHIRAYDPKGGLDNARRLTGFHETSNINDFSAGVANRGASIRIPRTVGQEKKG YFEDRRPSANCDPYA
 VTEAIVRTCLLNETGDEPFQYKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Cloning Scheme:



ACCN: NM_008131

ORF Size: 1119 bp

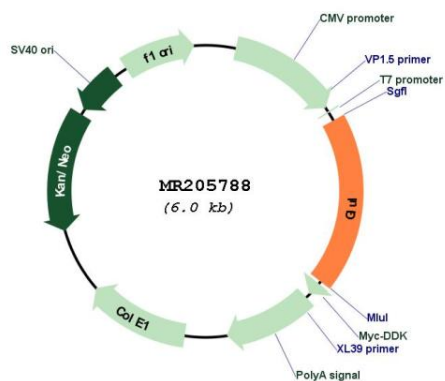
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none"> 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>NM_008131.2</u>
RefSeq Size:	2782 bp
RefSeq ORF:	1122 bp
Locus ID:	14645
UniProt ID:	<u>P15105</u>
Cytogenetics:	1 G3
MW:	42.6 kDa
Gene Summary:	<p>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]</p>

Product images:



Circular map for MR205788