

## Product datasheet for **TP304238M**

### Glutamine Synthetase (GLUL) (NM\_001033044) Human Recombinant Protein

#### Product data:

|                       |   |
|-----------------------|---|
| Product Type:         | Recombinant Proteins  |
| Description:          | Recombinant protein of human glutamate-ammonia ligase (glutamine synthetase) (GLUL), transcript variant 2, 100 µg |
| Species:              | Human   |
| Expression Host:      | HEK293T   |
| Expression cDNA       | >RC204238 protein sequence  |
| Clone or AA Sequence: | Red=Cloning site Green=Tags(s)  |

MTTSASSHLNKGKIQVYMSLPQGEKVQAMYIWIDGTGEGLRCKTRTLTLDSEPKVEELPEWNFDGSSTLQS  
EGNSDMYLVPAAAMFRDPFRKDPNKLVLCEVFKYNRRPAETNLRHTCKRIMDMVSNQHPWFGMEQEYTLM  
GTDGHPFGWPSNGFPGPQGPYYCGVGADRAYGRDIVEAHYRACLYAGVKIAGTNAEVMPAQWFEQIGPCE  
GISMGDHLWVARFILHRVCEDFGVIATFDPKPIPGNWNGAGCHTNFSTKAMREENGLKYIEEAIEKLSKR  
HQYHIRAYDPKGGLDNARRLTGFHETSNINDFSAGVANRSASIRIPRTVGVQEKKG YFEDRRPSANCDPFS  
VTEALIRTCLLNETGDEPFQYKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

|                |  |
|----------------|--|
| Tag:           | C-Myc/DDK  |
| Predicted MW:  | 41.9 kDa   |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method   |
| Purity:        | > 80% as determined by SDS-PAGE and Coomassie blue staining  |
| Buffer:        | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol   |
| Preparation:   | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.                                     |
| Note:          | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| Storage:       | Store at -80°C.  |
| Stability:     | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.        |
| RefSeq:        | <u><a href="#">NP_001028216</a></u>  |



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Locus ID: 2752

UniProt ID: [P15104](#), [A8YXX4](#)

RefSeq Size: 4381

Cytogenetics: 1q25.3

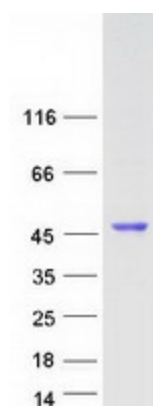
RefSeq ORF: 1119

Synonyms: GLNS; GS; PIG43; PIG59

**Summary:** The protein encoded by this gene belongs to the glutamine synthetase family. It catalyzes the synthesis of glutamine from glutamate and ammonia in an ATP-dependent reaction. This protein plays a role in ammonia and glutamate detoxification, acid-base homeostasis, cell signaling, and cell proliferation. Glutamine is an abundant amino acid, and is important to the biosynthesis of several amino acids, pyrimidines, and purines. Mutations in this gene are associated with congenital glutamine deficiency, and overexpression of this gene was observed in some primary liver cancer samples. There are six pseudogenes of this gene found on chromosomes 2, 5, 9, 11, and 12. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways, Nitrogen metabolism

### Product images:



Coomassie blue staining of purified GLUL protein (Cat# [TP304238]). The protein was produced from HEK293T cells transfected with GLUL cDNA clone (Cat# [RC204238]) using MegaTran 2.0 (Cat# [TT210002]).