

## Product datasheet for **TP762417**

### Glutamine Synthetase (GLUL) (NM\_001033056) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human glutamate-ammonia ligase (GLUL), transcript variant 3, full length, with N-terminal His tag, expressed in E.coli, 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding the full length of GS
Tag:	N-His
Predicted MW:	42.1 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	>80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	50 mM Tris-HCl, pH 8.0, 8 M urea
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 after receiving vials.
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:	<a href="#">NP_001028228</a>
Locus ID:	2752
UniProt ID:	<a href="#">P15104</a> , <a href="#">A8YXX4</a>
RefSeq Size:	4083
Cytogenetics:	1q25.3
RefSeq ORF:	1119
Synonyms:	GLNS; GS; PIG43; PIG59



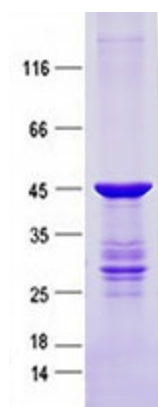
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**Summary:**

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:**

Purified recombinant protein GS was analyzed by SDS-PAGE gel and Coomassie Blue Staining.