

## Product datasheet for PH304039

### Glutamine Synthetase (GLUL) (NM\_001033056) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	GLUL MS Standard C13 and N15-labeled recombinant protein (NP_001028228)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC204039
Predicted MW:	42.1 kDa
Protein Sequence:	>RC204039 protein sequence Red=Cloning site Green=Tags(s)  MTTSASSHLNKGIKQVYMSLPQGEKVQAMYIWIDGTGEGLRCKTRTLDSEPKCVEELPEWNFDGSSTLQS EGSNSDMYLVPAAMFRDPFRKDPNKLVLCEVFKYNRRPAETNLRHTCKRIMDMVSNQHPWFGMEQEYTLM GTDGHPFGWPSNGFPGPQGPYYCGVGADRAYGRDIVEAHYRACLYAGVKIAGTNAEVMPAQWQFQIGPCE GISMGDHLWVARFILHRVCEDFGVIATFDPKPIPGNWNAGAGCHTNFSTKAMREENGLKYIEEAIEKLSKR HQYHIRAYDPKGGLDNARRLTGFHETSNINDFSAGVANRSASIRIPRTVGQEKKGYFEDRRPSANCDPFS VTEALIRTCLLNETGDEPFQYKN  TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_001028228</u>
RefSeq Size:	4083
RefSeq ORF:	1119
Synonyms:	GLNS; GS; PIG43; PIG59
Locus ID:	2752



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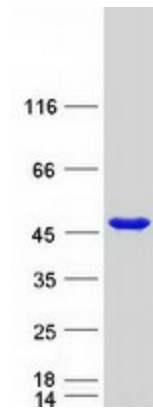
UniProt ID: [P15104](#), [A8YXX4](#)

Cytogenetics: 1q25.3

**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# [TP304039]). The protein was produced from HEK293T cells transfected with GLUL cDNA clone (Cat# [RC204039]) using MegaTran 2.0 (Cat# [TT210002]).