

# **Product datasheet for TP720579**

#### OriGene Technologies, Inc.

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## Glutamine Synthetase (GLUL) (NM 002065) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human glutamate-ammonia ligase (glutamine synthetase) (GLUL),

transcript variant 1

Species: Human Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

Thr2-Asn373

Tag: C-His

Predicted MW: 43.0 kDa

Concentration: lot specific

**Purity:** >95% as determined by SDS-PAGE and Coomassie blue staining

Buffer: Provided lyophilized from a 0.2 μm filtered solution of 20 mM Tris-HCl, 150 mM NaCl

**Endotoxin:** < 0.1 EU per µg protein as determined by LAL test

Storage: Store at -80°C.

Stability: Stable for at least 3 months from date of receipt under proper storage and handling

conditions.

**RefSeq:** NP 002056

Locus ID: 2752

UniProt ID: <u>P15104</u>, <u>A8YXX4</u>

Cytogenetics: 1q25.3

**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:**

