

Product datasheet for SC311798

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Glutamine Synthetase (GLUL) (AL832942) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Glutamine Synthetase (GLUL) (AL832942) Human Untagged Clone

Tag: Tag Free Symbol: GLUL

Synonyms: CMT4B2; DENND7B; MTMR13

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for AL832942, the custom clone sequence may differ by one or more

nucleotides

Restriction Sites: Please inquire

ACCN: AL832942

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: 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.

RefSeq: <u>AL832942.1</u>, <u>CAH56315.1</u>

RefSeq Size: 5670 bp





Glutamine Synthetase (GLUL) (AL832942) Human Untagged Clone - SC311798

 RefSeq ORF:
 5670 bp

 Locus ID:
 2752

 Cytogenetics:
 1q25.3

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

pathways, Nitrogen metabolism

Gene 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]