

Product datasheet for **TL312740**

Glutamine Synthetase (GLUL) Human shRNA Plasmid Kit (Locus ID 2752)

Product data:

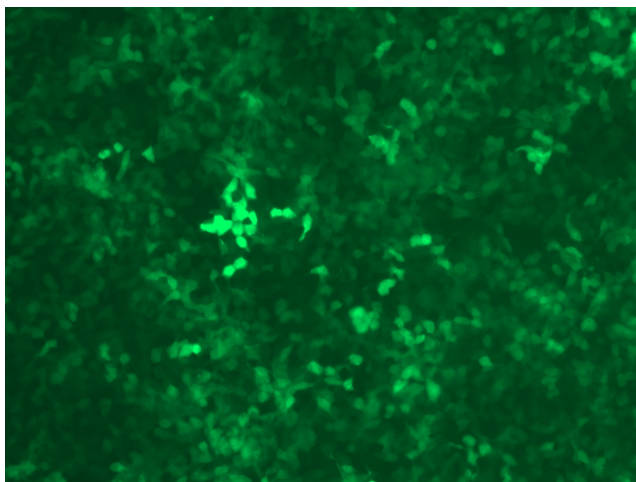
Product Type:	shRNA Plasmids
Product Name:	Glutamine Synthetase (GLUL) Human shRNA Plasmid Kit (Locus ID 2752)
Locus ID:	2752
Synonyms:	GLNS; GS; PIG43; PIG59
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	GLUL - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 2752). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<u>NM_001033044</u> , <u>NM_001033056</u> , <u>NM_002065</u> , <u>NM_001033056.1</u> , <u>NM_001033056.2</u> , <u>NM_001033056.3</u> , <u>NM_002065.1</u> , <u>NM_002065.2</u> , <u>NM_002065.3</u> , <u>NM_002065.4</u> , <u>NM_002065.5</u> , <u>NM_002065.6</u> , <u>NM_001033044.1</u> , <u>NM_001033044.2</u> , <u>NM_001033044.3</u> , <u>BC011700</u> , <u>BC011700.2</u> , <u>BC018992</u> , <u>BC018992.1</u> , <u>BC011852</u> , <u>BC011852.2</u> , <u>BC010037</u> , <u>BC031964</u> , <u>BC051726</u> , <u>BC127883</u> , <u>BM662182</u> , <u>BM690132</u> , <u>NM_001033044.4</u>
UniProt ID:	<u>P15104</u>
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .


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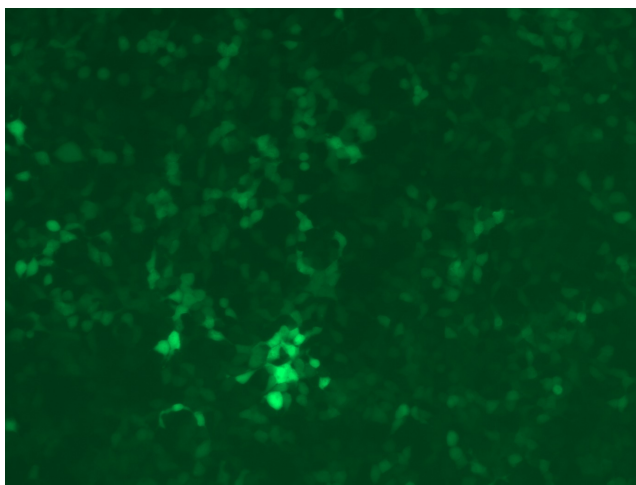
**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

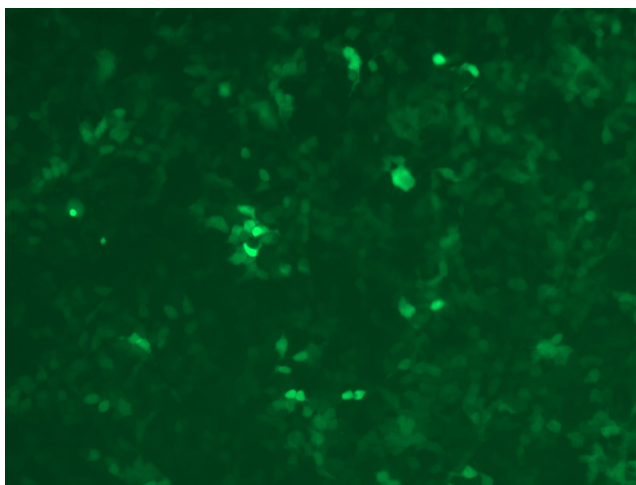
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

Product images:


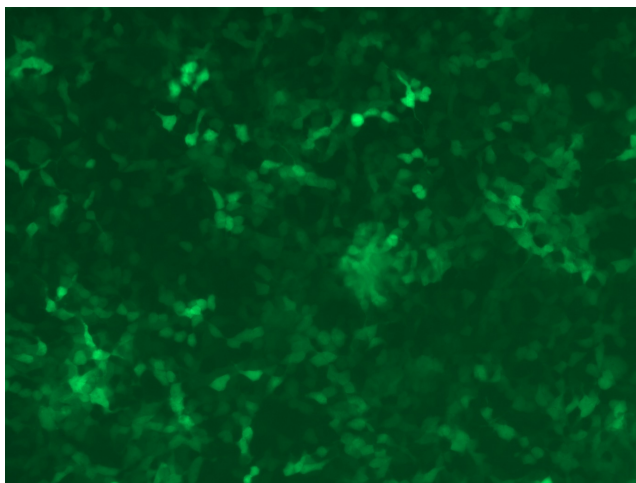
GFP signal was observed under microscope at 48 hours after transduction of TL312740A virus into HEK293 cells. TL312740A virus was prepared using lenti-shRNA TL312740A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL312740B virus into HEK293 cells. TL312740B virus was prepared using lenti-shRNA TL312740B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL312740C] virus into HEK293 cells. [TL312740C] virus was prepared using lenti-shRNA [TL312740C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL312740D] virus into HEK293 cells. [TL312740D] virus was prepared using lenti-shRNA [TL312740D] and [TR30037] packaging kit.