

Product datasheet for **TR312716**

GNB3 Human shRNA Plasmid Kit (Locus ID 2784)

Product data:

Product Type:	shRNA Plasmids
Product Name:	GNB3 Human shRNA Plasmid Kit (Locus ID 2784)
Locus ID:	2784
Synonyms:	CSNB1H
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	GNB3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2784). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001297571 , NM_002075 , NM_002075.1 , NM_002075.2 , NM_002075.3 , NM_001297571.1 , BC002454 , BC002454.2 , BC000115 , BC015920 , NM_001297571.2 , NM_002075.4
UniProt ID:	P16520
Summary:	Heterotrimeric guanine nucleotide-binding proteins (G proteins), which integrate signals between receptors and effector proteins, are composed of an alpha, a beta, and a gamma subunit. These subunits are encoded by families of related genes. This gene encodes a beta subunit which belongs to the WD repeat G protein beta family. Beta subunits are important regulators of alpha subunits, as well as of certain signal transduction receptors and effectors. A single-nucleotide polymorphism (C825T) in this gene is associated with essential hypertension and obesity. This polymorphism is also associated with the occurrence of the splice variant GNB3-s, which appears to have increased activity. GNB3-s is an example of alternative splicing caused by a nucleotide change outside of the splice donor and acceptor sites. Alternative splicing results in multiple transcript variants. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Jul 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 .



**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).