

Product datasheet for **TR316463**

Osteocalcin (BGLAP) Human shRNA Plasmid Kit (Locus ID 632)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Osteocalcin (BGLAP) Human shRNA Plasmid Kit (Locus ID 632)
Locus ID:	632
Synonyms:	BGP; bone gamma-carboxyglutamate (gla) protein; bone gamma-carboxyglutamate (gla) protein (osteocalcin); bone Gla protein; gamma-carboxyglutamic acid-containing protein; OC; Osteocalcin; OTTHUMP00000016586; PMF1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	BGLAP - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector (Gene ID = 632). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_000711 , NM_199173 , NM_199173.1 , NM_199173.2 , NM_199173.3 , NM_199173.4 , NM_199173.5 , BC113432 , BC113434 , NM_199173.6
UniProt ID:	P02818
Summary:	This gene encodes a highly abundant bone protein secreted by osteoblasts that regulates bone remodeling and energy metabolism. The encoded protein contains a Gla (gamma carboxyglutamate) domain, which functions in binding to calcium and hydroxyapatite, the mineral component of bone. Serum osteocalcin levels may be negatively correlated with metabolic syndrome. Read-through transcription exists between this gene and the neighboring upstream gene, PMF1 (polyamine-modulated factor 1), but the encoded protein only shows sequence identity with the upstream gene product. [provided by RefSeq, Jun 2015]
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).