

Recombinant Human BGLAP protein, His/GST-tagged

Cat. No. BGLAP-1472H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human BGLAP(Ala21~Pro99) fused with His/GST tag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Ala21~Pro99
Description	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.
Form	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Molecular Mass	40.8kDa
AA Sequence	MSPILGYWKI KGLVQPTRLL LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID GDVKLTQSMA IIRYIADKHN MLGGCPKERA EISMLEGAVL DIRYGVSRIA YSKDFETLKV DFLSKLPEML KMFEDRLCHK TYLNGDHVTH

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PDFMLYDALD VVLYMDPMCL DAFPKLVCFK KRIEAIQID KYLKSSKYIA
WPLQGWQATF GGGDHPPKSD GSTSGSGHHH HHHSAGLVPR GSTAIGMKET
AAAKFERQHM DSPDLGTLEV LFQGPLGSEF- AGAKPSGAES SKGAAFVSKQ
EGSEVVKRPR RYLYQWLGA VPYPDPLEPR REVCELNPDC DELADHIGFQ
EAYRRFYGP

Endotoxin <1.0EU per 1g (determined by the LAL method)

Purity > 95%

Applications SDS-PAGE; WB; ELISA; IP.

Storage Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.

Reconstitution Reconstitute in sterile PBS, pH7.2-pH7.4.

GENE INFORMATION

Gene Name BGLAP bone gamma-carboxyglutamate (gla) protein [Homo sapiens]

Official Symbol BGLAP

Synonyms BGLAP; bone gamma-carboxyglutamate (gla) protein; osteocalcin; bone Gla protein; gamma-carboxyglutamic acid-containing protein; bone gamma-carboxyglutamate (gla) protein (osteocalcin); OC; BGP;

Gene ID 632

mRNA Refseq NM_199173

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Protein Refseq	NP_954642
MIM	112260
UniProt ID	P02818
Chromosome Location	1q25-q31
Pathway	Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; DNA Replication, organism-specific biosystem; FGF signaling pathway, organism-specific biosystem; Glucocorticoid receptor regulatory network, organism-specific biosystem; M Phase, organism-specific biosystem; Mitotic M-M/G1 phases, organism-specific biosystem;
Function	calcium ion binding; hydroxyapatite binding; structural constituent of bone; structural molecule activity;

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