

Recombinant Human Osteocrin, His-tagged

Cat. No. OSTN-168H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Osteocrin (His-tagged) produced in <i>E.coli</i> contains 106 amino acids and has a molecular mass of 13.6 kDa.
Species	Human
Source	<i>E.coli</i>
Description	Osteocrin is a recently identified secreted protein expression of which was only detected in bone, peaking just after birth and decreasing markedly with age. A 1280-bp mRNA encodes osteocrin producing a mature protein of 103 amino acids with a molecular mass of 11.4 kDa. In primary osteoblastic cell cultures osteocrin expression coincided with matrix formation then decreased in very mature cultures. Treatment of cultures with 1,25-dihydroxyvitamin D3 resulted in a rapid dose-dependent down-regulation of osteocrin expression, suggesting direct regulation. Chronic treatment of primary cultures with osteocrin-conditioned media inhibited mineralization and reduced osteocalcin and alkaline phosphatase expression. These results suggest that osteocrin represents a novel, unique vitamin D-regulated bone-specific protein that appears to act as a soluble osteoblast regulator.
Sequences Of Amino Acids	MRGSHHHHHH GMASHMVDVT TTEAFDSGVI DVQSTPTVRE EKSATDLTAK LLLLDELVSL ENDVIETKKK RSFSGFGSPL DRLSAGSVDH KGKQRKVVDH PKRRFGIPMD RIGRNRLSNS RG.
Specificity	The amino acid sequence of the recombinant human Osteocrin is 100% homologous

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	to the amino acid sequence of the human Osteocrin without signal sequence.
Formulation	Sterile filtered and lyophilized from 0.5 mg/ml in 5mM TRIS, 25mM NaCl, pH 7.5.
Purification Method	One-step procedure using affinity Ni-NTA chromatography.
Purity	>95 % (SDS-PAGE analyzed).
Reconstitution	Add 0.2 ml of dH ₂ O and let the lyophilized pellet dissolve completely. Storage: Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.
Applications	Western blotting, ELISA.
Stability/Shelf Life	The lyophilized protein remains stable until the expiry date when stored at -20°C.

GENE INFORMATION

Gene Name	OSTN osteocrin [Homo sapiens]
Synonyms	OSTN; osteocrin; MUSCLIN; Musclin
Gene ID	344901
mRNA Refseq	NM_198184
Protein Refseq	NP_937827
MIM	610280

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UniProt ID	P61366
Chromosome Location	3q29
Function	hormone activity

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