

32-4382: Recombinant Human Osteocrin

Alternative Name : Osteocrin, Musclin, OSTN.

Description

Source : Escherichia Coli. The recombinant Human Osteocrin is produced with N-terminal fusion of His Tag. The Human Osteocrin His-Tagged Fusion Protein is 13.6 kDa containing 106 amino acid residues of the human Osteocrin and 16 additional amino acid residues - His Tag . 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.

Product Info

Amount :	10 µg
Purification :	Greater than 95% as determined by SDS-PAGE.
Content :	Filtered (0.4µm) and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer, pH 4.0.
Storage condition :	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.
Amino Acid :	MRGSHHHHHH GMASHMVDVT TTEAFDSGVI DVQSTPTVRE EKSATDLTAK LLLLDELVSL ENDVIETKKK RSFSGFGSPL DRLSAGSVDH KGKQRKVVDH PKRRFGIPMD RIGRNRLSNS RG.

Application Note

It is recommended to add 0.1M Acetate buffer pH4 to prepare a working stock solution of approximately 0.5 mg/mL and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10⁻⁶ µg/ml. In higher concentrations the solubility of this antigen is limited. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.