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California Bioscience

Product Datasheet

Product Name	Osteocrin Human Recombinant
Cata No	CB501040
Source	*Escherichia Coli.*
Synonyms	Osteocrin, Musclin, OSTN.

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. 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 (underlined).

MRGSHHHHHH GMASHMVDVT TTEAFDSGVI DVQSTPTVRE EKSATDLTAK LLLLDELVSL ENDVIETKKK RSFSGFGSPLDRLSAGSVDH KGKQRKVVDH PKRRFGIPMD RIGRNRLSNS RG

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95% as determined by SDS-PAGE.

Formulation

Sterile filtered and lyophilized from 0.5 mg/ml in 5mM TRIS, 25mM NaCl, pH 7.5.

Reconstitution

Add 0.2 ml of dH_2O and let the lyophilized pellet dissolve completely.

Stability

Store lyophilized protein at -20℃. Aliquot the product after reconstitution to **avoid repeated freezing/thawing cycles**. Reconstituted protein can be stored at 4℃ for a limited period of time; it d oes not show any change after two weeks at 4℃. The lyophilized protein remains stable until the expiry date when stored at -20℃.

Applications

Western blotting, ELISA

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