

Recombinant human IBSP/Sialoprotein II protein

Catalog Number: ATGP4129

PRODUCT INFORMATION

Expression system

HEK293

Domain

17-317aa

UniProt No.

P21815

NCBI Accession No.

NP_004958.2

Alternative Names

Bone sialoprotein II, bone sialoprotein 2, BSP II, BSP, BSP-II, SP-II, Cell-binding sialoprotein, Integrin-binding sialoprotein, IBSP, BNSP

PRODUCT SPECIFICATION

Molecular Weight

34.3kDa (307aa)

Concentration

0.5mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured by the ability of the immobilized protein to support the adhesion of MCF7 human breast cancer cells. When cells are added to Human IBSP coated plates 3 ug/ml. This effect is more to 40%.

Tag

His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

IBSP, also known as Sialoprotein II, is a monomeric noncollagenous member of the SIBLING family of extracellular matrix (ECM) proteins. It is synthesized by platelets, osteoblasts, osteocytes, odontoblasts, osteoclasts and bone marrow stromal cells. It is a key mediator of the hypertrophic chondrocytes-induced angiogenesis. It was associated with the severity of histological cartilage lesions and with vascular density at the osteochondral junction. Recombinant human IBSP/Sialoprotein II, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

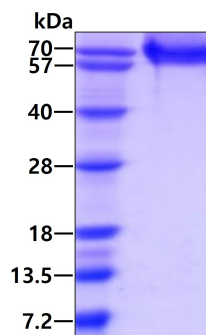
FSMKNLHRRV KIEDSEENG VFKYRPRYYLY KHAYFYPHLK RFPVQGSSDS SEENGDDSS EEEEEETS N EGENNEESNE
DEDSEAENTT LSATTLGYGE DATPGTGYTG LAAIQLPKKA GDITNKATKE KESDEEEEEEE E EGNENESE AEVDENEQGI
NGTSTNSTEA ENGNSSGGD NGEEGEEESV TGANAEDTTE TGRQKGKTSK TTTSPNGGFE PTTTPQVYRT TSPPF GKTTT
VEYEGEY EY T GANEYDNGYE IYSENGEPR GDNYRAYEDE YSYFKGQGYD GYDGQNYHH Q<HHHHHH>

General References

Pesesse L., et al. (2014) Osteoarthritis Cartilage. 22:547-556.
Kruger TE., et al. (2014) Crit Rev Oncol Hematol. 89:330-341.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain