

# Summary

Name	Bone Sialoprotein 2/IBSP/Sialoprotein II
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/µg as determined by LAL test.
Construction	Recombinant Mouse Bone Sialoprotein 2 is produced by our Mammalian expression system and the target gene encoding Phe17-Gln324 is expressed with a 6His tag at the C-terminus.
Accession #	AAA21726.1
Host	Human Cells
Species	Mouse
Predicted Molecular Mass	35.1 KDa
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq$ -70°C, stable for 6 months after receipt. Store at $\leq$ -70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

### **SDS-PAGE** image



# Background



# Alternative NamesBNSP; Bone sialoprotein 2; Bone sialoprotein; BSP; BSP2; BSP1; Cell binding<br/>sialoprotein; IBSP; Integrin binding sialoprotein; SP IIBackgroundBone sialoprotein 2(IBSP) is a monomeric non-collagenous member of the SIBLING<br/>family of extracellular matrix proteins. It is principally associated with the early<br/>stages of bone mineralization. Mouse IBSP is synthesized as a 324 amino acid (aa)<br/>precursor that contains a 16 aa signal sequence and a 308 aa mature region. The<br/>mature segment is divided into a basic N-terminus (aa 17 - 62), a central region (aa<br/>63 - 233), and an acidic C-terminus (aa 234 - 317). IBSP is highly glycosylated,<br/>sulfated and phosphorylated. Phosphorylation promotes HAp nucleation, while<br/>carbohydrate may regulate cell adhesion. IBSP binds tightly to hydroxyapatite,<br/>appears to form an integral part of the mineralized matrix. It is probably important<br/>to cell-matrix interaction and promotes Arg-Gly-Asp-dependent cell attachment.

### Note

For Research Use Only, Not for Diagnostic Use.