

Recombinant Mouse Bone Sialoprotein 2/IBSP Protein (His Tag)

Catalog Number: PKSM041355

Note: Centrifuge before opening to ensure complete recovery of vial contents.

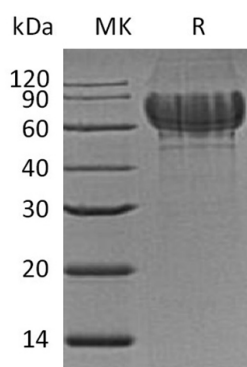
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse Bone Sialoprotein 2/IBSP protein Phe17-Gln324, with an C-terminal His
Calculated MW	35.1 kDa
Observed MW	71 kDa
Accession	AAA21726.1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Background

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

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