

HUMAN IBSP PROTEIN, HIS TAG**Cat.#:** 11954**Product Name:** Human IBSP Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** BSP;BNSP;SP-II;BSP-II**Target:** IBSP**UNIPROT ID:** P21815**Description:** Recombinant Human IBSP Protein with C-terminal 6xHis tag**Background:** The protein encoded by this gene is a major structural protein of the bone matrix. It constitutes approximately 12% of the noncollagenous proteins in human bone and is synthesized by skeletal-associated cell types, including hypertrophic chondrocytes, osteoblasts, osteocytes, and osteoclasts. The only extraskelatal site of its synthesis is the trophoblast. This protein binds to calcium and hydroxyapatite via its acidic amino acid clusters, and mediates cell attachment through an RGD sequence that recognizes the vitronectin receptor. [provided by RefSeq, Jul 2008]**Species/Host:** HEK293**Molecular Weight:** The protein has a predicted molecular mass of 34.3 kDa after removal of the signal peptide. The apparent molecular mass of IBSP-His is approximately 55–70 kDa due to glycosylation.**Molecular Characterization:** IBSP(Phe17–Gln317) 6×His tag**Purity:** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.**Storage & Shipping:** Store at –20°C to –80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at –80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



Figure 1. Human IBSP Protein, His Tag on SDS-PAGE under reducing condition.