

## HUMAN BMP2 PROTEIN, HFC TAG

**Cat.#:** 11875

**Product Name:** Human BMP2 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** BDA2;BMP2A;SSFSC;SSFSC1

**Target:** BMP2

**UNIPROT ID:** P12643

**Description:** Recombinant Human BMP2 Protein with C-terminal human Fc tag

**Background:** This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer, which plays a role in bone and cartilage development. Duplication of a regulatory region downstream of this gene causes a form of brachydactyly characterized by a malformed index finger and second toe in human patients. [provided by RefSeq, Jul 2016]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 39.0 kDa after removal of the signal peptide. The apparent molecular mass of BMP2-hFc is approximately 35-55 kDa due to glycosylation.

**Molecular Characterization:** BMP2(Gln283-Arg396) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% 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 BMP2 Protein, hFc Tag on SDS-PAGE under reducing condition.