32-20561: Recombinant Human BMP-6(Discontinued)

Reactivity :   Human, Mouse, Rat

Alternative Name : Bone Morphogenetic Protein-6, VGR, VG-1-related protein

Description

Source:HEK293 cells

TGF-Beta family members are key modulators of cell proliferation, differentiation, matrix synthesis, and apoptosis. As implied by their name, BMPs initiate, promote, and regulate the development, growth, and remodeling of bone and cartilage. In addition to this role, BMPs are also involved in prenatal development and postnatal growth, remodeling, and maintenance of a variety of other tissues and organs. Increasing evidence indicates that BMP-Smad signaling has a tumor suppressing activity, and that BMPs can inhibit tumor growth. BMP-6 is abnormally expressed in breast cancer cell lines, however, its function in promoting breast cancer development is unknown. The mature and functional form of BMP-6 is a homodimer of two identical 139 amino acid polypeptide chains linked by a single disulfide bond. Each monomer is expressed as the C-terminal part of a precursor polypeptide, which contains a 20 amino acid signal peptide and a 354 amino acid propeptide. This precursor undergoes intracellular dimerization, and upon secretion it is processed by a furin-type protease. Recombinant Human BMP-6 is a 26.2 kDa homodimeric glycoprotein consisting of two 117 amino acid subunits, which correspond to amino acid residues 397 to 513 of the full-length BMP-6 precursor.

Product Info

Amount :   2 µg / 10 µg

Purification : Purity:>= 95% by SDS-PAGE gel and HPLC analyses.

Content :   This recombinant protein is supplied in lyophilized form.

Amino Acid :   VSSASDYNSS ELKTACRKHE LYVSFQDLGW QDWIIAPKGY AANYCDGECS FPLNAHMNAT NHAIVQTLVH LMNPEYVPKP CCAPTKLNAI SVLYFDDNSN VILKKYRNMV VRACGCH

Application Note

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED_{50} this effect is 0.03-0.06 µg/ml.