

## 32-20576: Recombinant Human BMP-10(Discontinued)

**Reactivity :** Human

**Alternative Name :** Bone Morphogenetic Protein-10

### Description

#### Source:HEK293 cells

Bone morphogenetic proteins (BMPs) constitute a subfamily within the TGF-Beta superfamily of structurally related signaling proteins. Members of this superfamily are widely distributed throughout the body and are involved in diverse physiological processes during both pre- and postnatal life. BMP-10 plays a crucial role in the development of the embryonic heart by acting to stimulate and maintain cardiomyocyte proliferation. It can signal through various receptor complexes usually containing BMPR-1A, BMPR-1B, ALK1, ALK3, or ALK6. The interaction of BMP-10 with its specific receptors can induce signaling initiated by the phosphorylation of SMAD transcription factors, including SMAD1, SMAD5, or SMAD8, but can also induce SMAD independent processes. BMP-10 is structurally related to BMP-9, and both can inhibit endothelial cell proliferation and migration. Recombinant Human BMP-10 is a 24.4 kDa homodimeric disulfide-linked protein consisting of two 108 amino acid subunits, which correspond to amino acid residues 317 to 424 of the full-length BMP-10 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 :** NAKGNYCKRT PLYIDFKEIG WDSWIIAPPG YEAYECRGVC NYPLAEHLTP TKHAIQALV HLNKSQKASK  
ACCVPTKLEP ISILYLDKGV VTYKFKYEGM AVSECGCR

### Application Note

Determined by its ability to induce alkaline phosphatase production by ATDC-5 cells. The expected ED<sub>50</sub> for this effect is 4.0-6.0 ng/ml.