Ver. CN20230810

Recombinant Human BMP-4 Protein

Product Information

Product Name	Cat#	Size
Recombinant Human BMP-4 Protein	92053ES20	20 μg
	92053ES60	100 μg

Product Description

Bone morphogenetic protein-4 (BMP-4) is one of nine structurally related BMPs belonging to the transforming growth factor-beta (TGF-beta) superfamily of secreted proteins. The human BMP-4 shares 98 % sequence indentity with mouse BMP-4. Mature BMP-4 is a dimer that binds to a multimeric transmembrane receptor with serine/threonine kinase activity. BMP-4, a stimulator of chondrogenesis, both in vitro and in vivo, is a potential therapeutic agent for cartilage regeneration.

Product Properties

Synonyms	BMP2B, BMP-2B, BMP2B1, BMP2BMCOPS6, BMP4,DVR4, MCOPS6, OFC11, ZYME
Accession	P12644
Source	E.coli-derived human BMP-4 protein, Ser293-Arg408, E399D.
Molecular Weight	The recombinant Human BMP4 predicts a molecular mass of 13.25 kDa.
Tag	None
Purity	> 95% by SDS-PAGE
Biological Activity	Measured by its ability to induce alkaline phosphatase production by MC3T3-E1 mouse osteoblastic cells. The ED_{50} for this effect is typically 0.08-0.4ug/mL.
Endotoxin	< 1.0 EU per 1μg of the protein by the LAL method.
Formulation	Lyophilized from sterile 30% Acetonitrile, 1/1000 TFA. Normally 5% - 8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20℃ to -80℃ for 1 year.
Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.