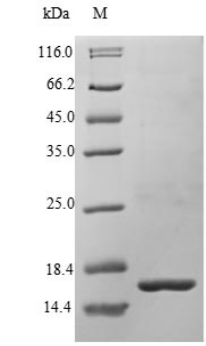
Recombinant Human Bone morphogenetic protein 3 (BMP3)

Product Code	CSB-EP002739HU
Relevance	Negatively regulates bone density. Antagonizes the ability of certain osteogenic BMPs to induce osteoprogenitor differentitation and ossification.
Abbreviation	Recombinant Human BMP3 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P12645
Alias	Bone morphogenetic protein 3A ;BMP-3AOsteogenin
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	QWIEPRNCARRYLKVDFADIGWSEWIISPKSFDAYYCSGACQFPMPKSLKPSNHATIQSIVRAVGVVPGIPEPCCVPEKMSSLSILFFDENKNVVLKVYPNMTVESCACR
Research Area	Developmental Biology
Source	E.coli
Target Names	BMP3
Expression Region	363-472aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	16.4kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The region for expressing recombinant Human BMP3 contains amino acids 363-472. The expected molecular weight for the BMP3 protein is calculated to be 16.4 kDa. This BMP3 recombinant protein is manufactured in e.coli. The N-terminal 6xHis tag was fused into the coding gene segment of BMP3, making it easier to detect and purify the BMP3 recombinant protein in the later stages of expression and purification.

Bone Morphogenetic Protein 3 (BMP3) is a protein that has garnered significant attention in biomedical research. One of its primary areas of study is in the field of osteobiology, where BMP3 plays a crucial regulatory role in bone development and maintenance. Research indicates that BMP3 is involved in physiological and pathological processes such as osteoblast differentiation, bone formation, and osteoporosis. The functional mechanisms of BMP3 in aspects like bone fracture repair and metabolic disorders have sparked widespread interest among scientists. Additionally, BMP3's exploration extends to areas such as muscle biology and joint diseases. In muscle growth and repair, BMP3 also plays a certain role. Abnormal expression of BMP3 is associated with diseases like arthritis, making it a focus of research in understanding its specific role in joint health.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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