

Rev04
 Update: May,11,2022

DATASHEET

BMP-7, Human

Cat. No.: Z02751

Product Introduction

Species	Human
Protein Construction	BMP-7 (Ser293-His431) Accession # P18075
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/μg of protein by LAL method
Expression System	E. coli
Theoretical Molecular Weight	15.7 kDa
Application	1. Molecular standard (Western, ELISA) in studying secreted BMP-7; 2. Preparing antibodies for BMP-7 monomer; 3. Molecule standard in detecting secreted BMP-7 in reduced SDS-PAGE.
Formulation	Lyophilized from a 0.2 μm filtered solution in 30% acetonitrile, 0.1% TFA.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in 10 mM HAc to a concentration of 0.1-1.0 mg/mL.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target Background : Human BMP-7 is one of at least 15 structurally and functionally related BMPs, which are members of the transforming growth factor β (TGF- β) superfamily. BMPs were originally identified as protein regulators of cartilage and bone formation. However, they have since been shown to be involved in embryogenesis and morphogenesis of various tissues and organs. BMPs have also been shown to regulate the growth, differentiation, chemotaxis and apoptosis of various cell types, including mesenchymal cells, epithelial cells, hematopoietic cells and neuronal cells. BMP-7 is synthesized as large precursor molecules which are cleaved by proteolytic enzymes. The active form can consist of a dimer of two identical proteins or a heterodimer of two related bone morphogenetic proteins.

Synonyms : Bone morphogenetic protein 7; Osteogenic protein 1; OP-1; INN: Eptotermin alfa; BMP7

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.