

## BMP-7

### Bone Morphogenetic Protein-7 human, recombinant, *E. coli*

Cat. No.	Amount
PR-408	10 µg

For *in vitro* use only  
Quality guaranteed for 12 months  
Store at -20°C

#### Avoid freeze / thaw cycles

#### Form

Lyophilized. BMP-7 was lyophilized from a 1 mg/ml solution containing 10 mM sodium citrate pH 3.5.

#### Solubility

It is recommended to reconstitute the lyophilized BMP-7 in sterile bidest. H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

#### Molecular Weight

16 kDa

#### Purity

≥ 95% by SDS-PAGE, RP-HPLC and FPLC

#### Description

Bone morphogenetic proteins (BMPs) are key regulators of bone formation.

Bone morphogenetic protein-7 (BMP7), a member of the TGFβ superfamily of cytokines, plays pivotal roles during embryogenic renal and eye development. In adults, BMP-7 expression is retained in only a few tissues, most prominently in kidney.

In experimental rodent models of obstructive or diabetic nephropathy, exogenously administered BMP-7 reduces glomerular and tubulointerstitial fibrosis and preserves renal function.

BMPs are 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.

Recombinant human BMP-7 produced in *E. coli* is a monomeric, non-glycosylated, polypeptide chain containing 139 amino acids and having a molecular mass of 15.68 kDa.

BMP-7 is purified by proprietary chromatographic techniques.

#### Selected References:

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