

Active Recombinant Mouse BMP8B Protein, His-tagged

Cat. No. BMP8B-2693M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse BMP8B Protein(20-399 aa), fused with N-terminal His Tag, was expressed in E.coli.
Species	Mouse
Source	E.coli
ProteinLength	20-399 aa
Form	PBS, pH7.4, containing 0.01% Sarcosyl, 5%Trehalose.
Bio-activity	Bone Morphogenetic Protein 8B (BMP8B) is a protein that belongs to the bone morphogenetic protein family, which is involved in the regulation of growth and differentiation of various cell types, including osteoblasts, chondrocytes, and neurons. It plays a role in skeletal development and tissue repair processes. Besides, Bone Morphogenetic Protein 8A (BMP8A) has been identified as an interactor of BMP8B, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse BMP8B and recombinant human BMP8A. Briefly, a functional ELISA assay was conducted to detect the interaction of recombinant mouse BMP8B and recombinant human BMP8A. Briefly, BMP8B was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to BMP8A-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-BMP8B pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37°C, wells were aspirated

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and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 μ stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant mouse BMP8B and recombinant human BMP8A was shown in Figure 1, the EC50 for this effect is 0.078ug/mL. Bone Morphogenetic Protein 8B (BMP8B) belongs to the bone morphogenetic protein family, which is involved in the regulation of growth and differentiation of various cell types, including osteoblasts, chondrocytes, and neurons. It also plays a role in skeletal development and tissue repair processes. To test the effect of BMP8B on cell proliferation, DU145 cells were seeded into triplicate wells of 96-well plates and allowed to attach, replaced with various concentrations of recombinant mouse BMP8B. After incubated for 72 h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μ of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Cell viability was assessed by CCK-8 assay after incubation with recombinant mouse BMP8B for 72h. The result was shown in Figure 1. It was obvious that BMP8B significantly decreased cell viability of DU145 cells. The ED50 of recombinant mouse BMP8B is 1.58 μ g/ml.

Molecular Mass	46.7kDa
Endotoxin	<1.0EU per 1 μ g (determined by the LAL method).
Purity	>90%
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

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GENE INFORMATION

Gene Name	Bmp8b bone morphogenetic protein 8b [Mus musculus]
Official Symbol	BMP8B
Synonyms	BMP8B; bone morphogenetic protein 8b; bone morphogenetic protein 8B; BMP-8B; Op3;
Gene ID	12164
mRNA Refseq	NM_007559
Protein Refseq	NP_031585
Activity	
SDS-PAGE	

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