

Active Recombinant Human BMP2 protein, His-tagged

Cat. No. BMP2-259H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human BMP2 protein(P12643)(24~396 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	24-396 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Bone morphogenetic protein 2 (BMP2) belongs to the TGF- β superfamily of proteins. It plays an important role in the development of bone and cartilage. BMP2 is involved in the hedgehog pathway, TGF beta signaling pathway, and in cytokine-cytokine receptor interaction. It also participated in cardiac cell differentiation and epithelial to mesenchymal transition. Like many other proteins from the BMP family, BMP2 has been demonstrated to potently induce osteoblast differentiation in a variety of cell types. Besides, Follistatin Like Protein1(FSTL1) has been identified as an interactor of BMP2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human BMP2 and recombinant human FSTL1. Briefly, BMP2 were diluted serially in PBS, with 0.01% BSA(pH7.4). Duplicate samples of 100 μ were then transferred to FSTL1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-BMP2 pAb, then aspirated and

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µl stop solution to the wells and read at 450 nm immediately. The binding activity of BMP2 and FSTL1 was in a dose dependent manner.

Molecular Mass	46.1kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
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 ddH ₂ O to a concentration of 0-0.1 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	BMP2 bone morphogenetic protein 2 [Homo sapiens]
Official Symbol	BMP2
Synonyms	BMP2; bone morphogenetic protein 2; BMP2A; BMP-2A; bone morphogenetic protein 2A; BDA2;
Gene ID	650
mRNA Refseq	NM_001200
Protein Refseq	NP_001191

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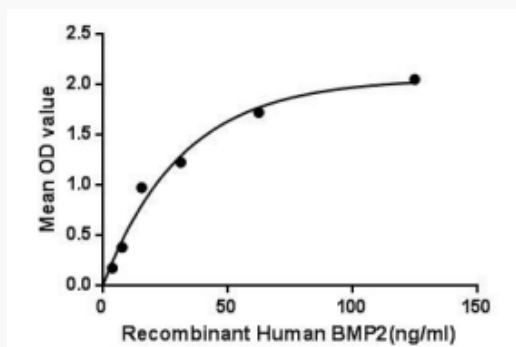
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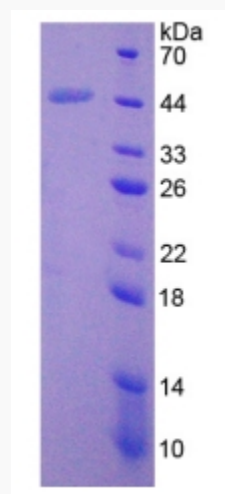
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UniProt ID P12643

Activity



SDS-PAGE



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