

Human Bone Morphogenetic Protein 2 (BMP2) Protein (Active)

Catalogue No.:abx655568



Expression: Recombinant

Tested Applications: WB, SDS-PAGE

- Host: E. coli
- Conjugation: Unconjugated

Form: Lyophilized



Purity:	> 92%
Reconstitution:	To keep the original salt concentration, we recommend reconstituting to the original concentration prior to lyophilization (see Concentration) in ddH_2O . If a lower concentration is required, dilute in 20 mM Tris, 150 mM NaCl, pH 8.0. If a higher concentration is required, the product can be reconstituted directly in 20 mM Tris, 150 mM NaCl, pH 8.0, though please note that this will change the overall salt concentration. The stock concentration should be between 0.1-1.0 mg/ml. Do not vortex.
Storage:	Store at 2-8 °C for up to one month. Store at -80 °C for up to one year. Avoid repeated freeze/thaw cycles.
Molecular Weight:	Calculated MW: 46.1 kDa Observed MW (SDS-PAGE): 46 kDa
Sequence Fragment:	Leu24-Arg396
Sequence:	LVPELGR RKFAAASSGR PSSQPSDEVL SEFELRLLSM FGLKQRPTPS RDAVVPPYML DLYRRHSGQP GSPAPDHRLE RAASRANTVR SFHHEESLEE LPETSGKTTR RFFFNLSSIP TEEFITSAEL QVFREQMQDA LGNNSSFHHR INIYEIIKPA TANSKFPVTR LLDTRLVNQN ASRWESFDVT PAVMRWTAQG HANHGFVVEV AHLEEKQGVS KRHVRISRSL HQDEHSWSQI RPLLVTFGHD GKGHPLHKRE KRQAKHKQRK RLKSSCKRHP LYVDFSDVGW NDWIVAPPGY HAFYCHGECP FPLADHLNST NHAIVQTLVN SVNSKIPKAC CVPTELSAIS MLYLDENEKV VLKNYQDMVV EGCGCR
Tag:	N-terminal His tag
Buffer:	Prior to lyophilization: 20 mM Tris, 150 mM NaCl, pH 8.0, containing 0.01% Sarcosyl, 5% Trehalose.
Activity:	Active
Biological Activity:	Bone Morphogenetic Protein 2 (BMP2) plays an important role in the development of bone and cartilage. It is involved in the hedgehog pathway, TGF beta signaling pathway, and in cytokine-cytokine receptor interaction. It also paticipates 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. Follistatin-Like Protein 1 (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 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to FSTL1-coated microplate wells and incubated for 2 h at 37°C. Wells were washed with PBST and incubated for 1 h with anti-BMP2 polyclonal antibody, then aspirated and washed 3 times. After incubation with HRP-conjugated secondary antibody, wells were aspirated and washed 3 times. TMB substrate solution was added and wells were incubated for 15-25 minutes at 37 °C. Finally, 50 µl stop solution was added to the wells and the absorbance was read at 450 nm immediately. The binding activity of BMP2 and FSTL1 is shown in Figure 3.
Endotoxin Level:	< 1.0 EU per 1 µg (LAL method)
Concentration:	Prior to lyophilization: 200 μg/ml



Note:THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC
OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.