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Product Datasheet

Human BMP2 protein, His and GST tag, Unconjugated GTX00202-PRO

Article Name	Human BMP2 protein, His and GST tag, Unconjugated
Biozol Catalog Number	GTX00202-PRO
Supplier Catalog Number	GTX00202-pro
Alternative Catalog Number	GTX00202-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	650
UniProt	P12643
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His and GST-Tag, Gln283~Arg396 (NP_001191.1)

Application Notes

Bone morphogenetic protein 2 (BMP2) belongs to the TGF-beta superfamily of proteins. It 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. BMP2 is also involved 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, Noggin (NOG) 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 NOG. Briefly, BMP2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to NOG-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-BMP2 pAb, then aspirated and 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 37C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of BMP2 and NOG was in a dose dependent manner.