

#4697 Store at -20C

Human BMP-2 Recombinant Protein

10 µg



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MW (kDa):	UniProt ID:	Entrez-Gene Id:
26	#P12643	650

Background

Bone morphogenetic proteins (BMPs) were first identified as molecules that can induce ectopic bone and cartilage formation (1,2). BMPs are synthesized as precursor proteins that are processed by cleavage to produce mature proteins. BMPs initiate signaling by binding to a receptor complex containing type I and type II serine/threonine receptor kinases that then phosphorylate Smad (mainly Smad1, 5 and 8), resulting in the translocation of Smad to the nucleus. BMP was also reported to activate MAPK pathways in some systems (3,4).

Endotoxin

Purity

>95%

Source / Purification

Recombinant human BMP-2 was expressed in *E. coli* and is supplied in a lyophilized form.

Bioactivity

The ED50 as determined by the cytolysis of MC3T3-E1 cells is less than 50 ng/ml.

Background

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Background References

1. Wang, E.A. et al. (1988) *Proc Natl Acad Sci USA* 85, 9484-8.
2. Wozney, J.M. et al. (1988) *Science* 242, 1528-34.
3. Kawabata, M. et al. (1998) *Cytokine Growth Factor Rev* 9, 49-61.
4. Nohe, A. et al. (2004) *Cell Signal* 16, 291-9.

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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