

# Human BMP-4 Recombinant Protein

## Product Details

Size	100 µg
Species	Human, Mouse
Published Species	Human, Mouse
Expression system	HEK293 cells
Molecular weight	34 kDa
Class	Recombinant
Type	Protein
Purity	>95% by SDS-PAGE
Endotoxin concentration	<1 EU/µg
Activity	ED50 = 2 - 10 ng/mL; determined by the dose-dependent induction of alkaline phosphatase production in ATDC-5 cells.
Conjugate	Unconjugated
Form	Lyophilized
Purification	sequential chromatography
Storage buffer	HCl
Contains	no preservative
Storage conditions	-20°C

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-dependent	-
ELISA (ELISA)	Assay-dependent	-
Functional Assay (FN)	Assay-dependent	6 Publications
Control (Ctrl)	Assay-dependent	-

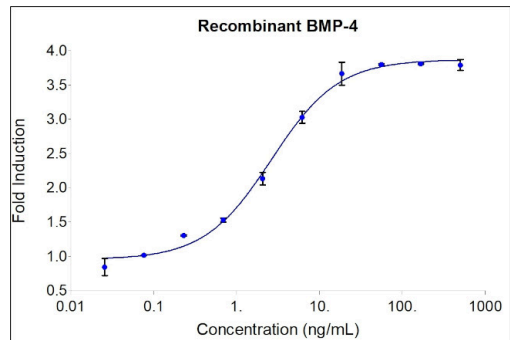
## Product Specific Information

### Carrier-Free

**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized recombinant human BMP-4 in 4 mM HCl containing 0.1% human serum albumin. Further dilutions should be made in low endotoxin medium or a buffered solution containing a carrier protein such as heat inactivated FCS or tissue culture grade BSA.

**Storage:** Store this lyophilized preparation at -20°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at -20°C. Avoid repeated freeze/thaw cycles.

Product Images For Human BMP-4 Recombinant Protein



**Human BMP-4 Protein (PHC9531) in FN**  
Recombinant human BMP-4 (Product # PHC9531) stimulates dose-dependent induction of alkaline phosphatase production in the ATDC-5 mouse chondrogenic cell line. Alkaline phosphatase production was assessed using pNPP as a chromogenic substrate. ATDC-5 cells were treated with increasing concentrations of recombinant human BMP-4 for 72 hrs hours before lysis and addition of pNPP. The EC50 was determined using a 4-parameter non-linear regression model. Activity determination was conducted in triplicate on a validated bioassay. The EC50 values range from 1.5-9 ng/mL.

6 References

Functional Assay (6)

<p><b>STAR protocols</b></p> <p><b>An Optimized Protocol for ChIP-Seq from Human Embryonic Stem Cell Cultures.</b></p> <p>Authors: Sullivan AE,Santos SDM</p>	<p><b>Year</b> 2020</p> <p><b>Species</b> Human</p> <p><b>Dilution</b> 50 ng/mL</p>
<p><b>Nature communications</b></p> <p><b>Targeting QKI-7 in vivo restores endothelial cell function in diabetes.</b></p> <p>Authors: Yang C, Eleftheriadou M, Kelaini S, Morrison T, González MV, Caines R, Edwards N, Yacoub A, Edgar K, Moez A, Ivetic A, Zampetaki A, Zeng L, Wilkinson FL, Lois N, Stitt AW, Grieve DJ, Margariti A</p>	<p><b>Year</b> 2020</p> <p><b>Species</b> Human</p> <p><b>Dilution</b> 25 ng/mL</p>

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