

## HumanKine<sup>®</sup> recombinant human BMP-4 protein



Animal Component-Free

Human cell expressed

Tag-Free

Endotoxin Free

### Product Description

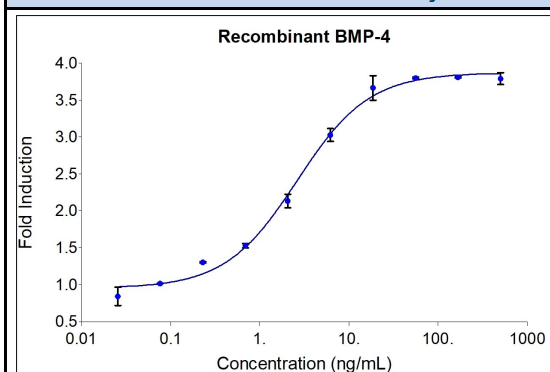
Animal-free Recombinant Human BMP-4 is expressed in human 293 cells as a disulfide linked homodimeric glycoprotein with an apparent molecular mass of 34 kDa. This cytokine is produced in a serum-free, chemically defined media.

Alternative Names	BMP 2B, BMP 4, BMP2B, BMP2B1, BMP4, BMP-4, Bone morphogenetic protein 2B, bone morphogenetic protein 4, DVR4, MCOP56, ZYME
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived BMP-4 protein
Species Reactivity	human,mouse

### Specifications

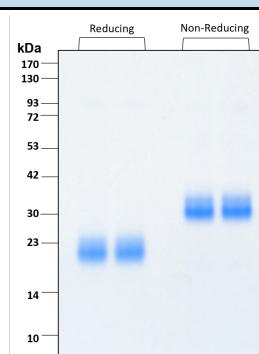
Test	Method	Specification
Activity (EC50)	Dose-dependent induction of alkaline phosphatase production in the ATDC-5 cell line (mouse chondrogenic cell line)	1.5-9 ng/mL
Molecular Mass	SDS-PAGE	20 to 24 kDa reduced, 32 to 38 kDa non-reduced, homodimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<1 EU/μg

### Activity Data



Recombinant human BMP-4 (HZ-1045) 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 hours before lysis and

### SDS-PAGE



Preparation	
Shipping Temperature	ambient temperature
Formulation	2x PBS + 6% Ethanol, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 4 mM HCl containing 0.1% endotoxin-free recombinant human serum albumin (HSA). Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

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