

BMP-4/BMP-2B/DVR4, Mouse, Recombinant

Cat. No. : PCK308

General Information

Synonyms	BMP-2B;DVR4
Species	Mouse
Expression host	E.coli
Sequence	MKKNKNCRRHSLYVDFSDVGWNDWIVAPPGYQAFYCHGDCPFPLADHLNSTNHAIVQTLVN SVNSSIPKACCVPTELSAISMLYLDEYDKVVLKNYQEMVVEGCGCRwith polyhistidine tag at the C-terminus.
Accession	P21275
Tag	His-tag at the C-terminus
Mol mass	12.88 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED50 for this effect is < 10 ng/mL. The specific activity of recombinant mouse BMP-4 is > 1 × 10 ⁵ IU/mg.

Product feature

Purity	> 98% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

Bone Morphogenetic Protein-4 (BMP-4) predicts a molecular mass of 13 kDa, is a vital regulatory molecule that functions throughout human development in mesoderm induction, tooth development, limb formation, bone induction, and fracture repair and is overexpressed in patients who have fibrodysplasia ossificans progressiva. BMP-4 is a critical signaling molecule required for the early differentiation of the embryo and establishing of a dorsal-ventral axis. BMP-4 is secreted from the dorsal portion of the notochord, and it acts in concert with sonic hedgehog to establish a dorsal-ventral axis for the differentiation of later structures.

SDS-PAGE

