

## PRODUCT INFORMATION SUMMARY

### Human BMP-4

Purified Factor	Product Number	HC51211B	5.0 ug
	Product Number	HC51211A	1.0 ug

#### DESCRIPTION:

Human Bone Morphogenic Protein (BMP)-4 is a protein in the TGF Beta superfamily of proteins. BMP-4 is involved in cartilage and of bone gro and development. Low levels of BMP-4 has been associated with several bone diseases including Fibrodysplasia Ossificans. BMP-4 is a homodimeric protein with 36 kDa molecular weight, expressed in HeLa cells.

**SOURCE:** HeLa cells  
Purity > 97% by HPLC analysis  
Endotoxin < 0.1 ng per ug BMP-4  
Sterile-filtered and lyophilized additive-free.

**BIOLOGICAL ACTIVITY:** Observed effect on induction of alkaline phosphatase production by ATDC-5 cells.

#### HANDLING AND STORAGE:

Purified Human BMP-4 factor is provided lyophilized. Store lyophilized, at -20° C. Microcentrifuge before reconstitution (see below). Upon reconstitution with **5-10 mM Citric acid, pH 3.0**, to concentration of 100.0 ug/mL, further dilute in PBS **containing 2.0 mg/mL albumin** and store small aliquots at -20° C, for long-term storage, at high concentration -up to 3 months.

**Before opening vial**, it is recommended to microcentrifuge vial for 30 seconds to spin-down any lyophilized material that may adhere to top of vial. The small amounts of protein may adhere to the vial as a very thin coat of lyophilized material, and may be difficult to see as a pellet.

#### WARRANTY:

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product.

**RESEARCH USE ONLY -NOT for DRUG USE**