Elabscience®

Recombinant Human/Mouse/Rat BMP-2 Protein

Catalog Number: PKSR030454

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Species	Human/Mouse/Rat	
Source	E.coli-derived Human/Mouse/Rat BMP-2 protein Gln283-Arg396, with an C-terminal	
	His	
Calculated MW	13.8 kDa	
Observed MW	14 kDa	
Accession	P12643	
Bio-activity	Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The	
	ED_{50} for this effect is <1.0 µg/mL.	
Properties		
Purity	> 95 % as determined by reducing SDS-PAGE.	
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.	
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80	
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of	
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.	
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.	
Formulation	Lyophilized from sterile 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.	
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants	
	before lyophilization.	
	Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	

Data

kDa 120 90	MK	R
60		
40		
30		
22		
14		-

> 95 % as determined by reducing SDS-PAGE.

Background

Bone Morphogenetic Protein-2 (BMP-2) is one of the bone-growth regulatory factors that belong to the transforming growth factor-beta (TGF-beta) superfamily of proteins. BMPs are synthesized as large precursor molecules, which are cleaved by proteolytic enzymes. The active form of BMP-2 can consist of a dimer of two identical proteins or a heterodimer of two related bone morphogenetic proteins.