PrimeGene Recombinant Human Bone Morphogenetic Protein 7 a biotechne brand (rHuBMP-7)

PrimeGene Technical Data Sheet

Catalog Number:	108-07
Source:	Escherichia coli.
Molecular Weight:	Approximately 15.7 kDa, a monomeric, non-glycosylated polypeptide chain containing 139 amino
	acids.
Quantity:	2µg/10µg/1000µg
AA Sequence:	STGSKQRSQN RSKTPKNQEA LRMANVAENS SSDQRQACKK HELYVSFRDL
	GWQDWIIAPE GYAAYYCEGE CAFPLNSYMN ATNHAIVQTL VHFINPETVP KPCCAPTQLN
	AISVLYFDDS SNVILKKYRN MVVRACGCH
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Data is not available.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 30 % acetonitrile, 0.1 % TFA.
Endotoxin:	Less than 1 EU/µg of rHuBMP-7 as determined by LAL method.
Applications:	1. Molecular standard (Western, ELISA) in studying secreted BMP-7;
	2. Preparing antibodies for BMP-7 monomer;
,	3. Molecule standard in detecting secreted BMP-7 in reduced SDS-PAGE.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the
	bottom. Reconstitute in 10 mM HAc to a concentration less than 0.2 mg/mL. Stock solutions should
	be apportioned into working aliquots and stored at \leq -20 °C. Further dilutions should be made in
	appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature
	recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
	• 12 months from date of receipt, -20 to -70 °C as supplied.
	• 1 month, 2 to 8 °C under sterile conditions after reconstitution.
	• 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further
	evaluation purposes. NOT FOR HUMAN USE.

Human Bone Morphogenetic Protein 7

Bone Morphogenetic Protein 7 is one of the BMPs, some of which belong to the TGF-beta superfamily (BMP2-7). There are more than thirteen BMPs have been discovered nowadays and they are involved in inducing cartilage and bone formation. BMP-7 is mainly expressed in kidney and bladder. It is also present in developing eyes, brain and ear during embryogenesis. BMP-7 also named osteogenic protein-1 (OP-1) is a potent osteoinductive cytokine and plays role in osteoblast differentiation, SMAD1 production and renal development and repair. Human BMP-7 is synthesized with a signal sequence (29 a.a.), a propeptide (263 a.a.), and a growth factor domain (139 a.a.). The growth factor domain of human BMP-7 shares 98 % a.a. sequence identity with mouse and rat BMP-7.

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