

Recombinant Human Bone Morphogenetic Protein 3 (rHuBMP-3)

ChemWhat Technical Data Sheet (TDS)

Catalog Number:	108-03
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 24.8 kDa, a homodimeric protein consisting of two 110 amino acid non-glycosylated polypeptide chains.
Quantity:	10µg/50µg/1000µg
AA Sequence:	QWIEPRNCAR RYLKVDFAI GWSEWIISPK SFDAYYCSGA CQFPMPKSLK PSNHATIQSI VRAVGVVPGI PEPCCVPEKM SLSILFFDE NKNVVLKVYP NMTVESCACR
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by its ability to inhibit BMP-2-induced activity in murine MC3T3-E1 cells.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 30 % Acetonitrile and 0.1 % TFA.
Endotoxin:	Less than 1 EU/µg of rHuBMP-3 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 4 mM HCl to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -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. <ul style="list-style-type: none">● 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:	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE.

Human Bone Morphogenetic Protein 3

Bone Morphogenetic Protein 3 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. BMPs were originally identified as protein regulators of cartilage and bone formation. They have since been shown to be involved in embryogenesis and morphogenesis of various tissues and organs. BMPs also regulate the growth, differentiation, chemotaxis, and apoptosis of various cell types. Similar to most other TGF-beta family proteins, BMPs are highly conserved across animal species. At the amino acid sequence level, mature human and rat BMP-3 are 98% identical.