Product Data Sheet

MORPHOPLANT
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Recombinant Human Bone Morphogenetic Protein – 2 (rhBMP-2)

Description

Source:	*E.coli*-derived, purified by proprietary chromatographic techniques Gln283 – Arg396, Accession # P12643
Structure/ Form:	Disulfide-linked homodimer, non-glycosylated, 115 amino acids
Predicted Molecular Mass:	26 kDa (dimer)

Specifications

SDS-PAGE:	26 kDa, non-reducing conditions
Activity:	Measured by its ability to induce alkaline phosphatase production by MC3T3 cells [1, 2]. The $K_{0.5}$ is typically 2-20 nM.
Purity:	> 95 %, determined by SDS-PAGE
Endotoxin Level:	< 0.05 EU per 1 µg of the protein by the LAL method.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated (100 µg/ml) solution containing 5 g/ l sucrose and 5 mM sodium citrate (pH 3.5).

Preparation and Storage

Solubility:	It is recommended to reconstitute the lyophilized BMP-2 in sterile H_2O, which can be further dialyzed to other aqueous solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt store it immediately at the temperature recommended below.
Stability & Storage:	Please avoid freeze-thaw cycles. • 2-8 °C: 4 weeks after reconstruction • -20 - -70 °C: 3 months after reconstruction • -20 - -70 °C: 12 months as supplied

References:

[1] K. Zurlinden, M. Laub, D.S. Dohle, K.P. Jennissen (2012), Immobilization and Controlled Release of Vascular (VEGF) and Bone Growth Factors (BMP-2) on Bone Replacement Materials, Biomed Tech (57). 989-992

[2] M. Laub, M. Chatzinikolaidou, H.P. Jennissen (2007), Aspects of BMP-2 binding to receptors and collagen: Influence of cell senescence on receptor binding and absence of high-affinity stoichiometric binding to collagen, Mat.-wiss. u. Werkstofftech. (38), 1019-1026

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Not for human use.

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