

## CERTIFICATE OF ANALYSIS

### Product Information

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Product Name:	Bone Morphogenetic Protein-2 (BMP-2), human
Cat. No.:	Z02913-10; Z02913-50; Z02913-1
Lot No.:	P50021605
Size:	10 µg/vial; 50 µg/vial; 1 mg/vial
Storage Condition:	Lyophilized recombinant human Bone Morphogenetic Protein-2 (rhBMP-2) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhBMP-2 should be stable up to 2 weeks at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) can be added. Avoid repeated freeze-thaw cycles.

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### Quality Control

Test Items	Specifications	Results
Physical Appearance	White Freeze-dried Powder	Conformed
Purity (SDS-PAGE)	> 95%	Conformed
Biological Activity (ED <sub>50</sub> ) <sup>*</sup>	< 0.2 µg/ml	0.03 µg/mL
Biological Activity (ED <sub>50</sub> ) <sup>**</sup>	< 1 µg/ml	0.03 µg/mL
Molecular Weight	26 kDa (non-reducing)	Conformed
Bacterial Endotoxin	< 1 EU/µg	Conformed

\* : Assay #1: Measured by its ability to induce alkaline phosphatase production by ATDC-5 Cells. The ED<sub>50</sub> for this effect is typically 0.02 µg/mL.

\*\* : Assay #2: Measured by its ability to induce alkaline phosphatase production by C2C12 cells. The ED<sub>50</sub> for this effect is typically 0.2-1 µg/mL.

### Caution:

For laboratory use only. Not for household use. If you have any questions about the Certificate of Analysis, please contact our customer service representative at 1-877-436-7274 (Toll-Free), or 1-732-885-9188.

Certified by: Joe Wang Date: 09/25/2016

Protein Products Department