

# Recombinant Rat BMP3 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP52642

Size: 10ug, 100ug

Protein Name: Bone morphogenetic protein 3 (BMP-3)

Synonym: Bmp3, Bmp-3

UniProt ID: P49002

UniProt Link: [www.uniprot.org/uniprotkb/P49002/entry](http://www.uniprot.org/uniprotkb/P49002/entry)

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 468 AA

Molecular Weight: 53 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MAGARGLLCLWLGCFCNLNAQGQRPNLHLPGLRGTESSDRMTGGGPPSPDLRPHDKVSEHMLWLY  
DRYSGSNRAQATRTPGSQLPGPQPLRGGNTVRSFRAAAAGTLQRKGLHTFNLTSLTKSENILSATLY  
FYIGELVNTSVNCPESQGCSHDSQRQHIQIDLSAWTLQSNQSQLLGHLSVDTAKPYRDSMSWLSKDI  
TQLLRKAKQDEEFLIGNITSRAHELPKRMILLFPEPYILVYANDAAICEPESVSSSLQRHRDFTAGTVP  
RLDSHVREALSVERRKKRSTGILLPLQNNELPGAHEYQYKEAGVWEERKPYKSLQTQPPEKSRSKKK  
QRKGPHQKGQTLQFDEQTLKKARRKQWIEPRNCARRYLKVDFADIGWSEWIISPKSFDAYYCSGAC  
QFPMPKSLKPSNHATIQSIVRAVGVVSGIPEPCCVPEKMSSLSILFFDENKNVVLKVYPNMTVDSCAC  
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## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant Bone morphogenetic protein 3 (BMP-3) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** Negatively regulates bone density. Antagonizes the ability of certain osteogenic BMPs to induce osteoprogenitor differentiation and ossification (By similarity).

**Subcellular Localization:** Secreted.

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.