

Product datasheet for AR31155PU-N

OriGene Technologies, Inc.

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BMP7 Human Protein

Product data:

Product Type: Recombinant Proteins

Description: BMP7 human recombinant protein, 10 μg

Species: Human Expression Host: CHO

Expression cDNA Clone MANVAENSSS DQRQACKKHE LYVSFRDLGW QDWIIAPEGY AAYYCE GECA FPLNSYMNAT

or AA Sequence: NHAIVQTLVH FINPETVPKP CCAPTQLNAI S VLYFDDSSN VILKKYRNMV VRACGCH

Predicted MW: 28.8 kDa

Purity: >98% by SDS-PAGE & HPLC analysis

Buffer: Presentation State: Purified

State: Lyophilized purified protein Buffer System: PBS without stabilizers

Biological: Determined by its ability to induce alkaline phosphatase production by ATDC-5

cells. The expected ED50 for this effect is 0.02-0.04 µg/ml.

Endotoxin: < 0.1 ng per µg of BMP-7

Reconstitution Method: Restore in PBS to a concentration not lower than 50 μg/ml.

The lyophilized sTIE-2/hFc is soluble in water and most aqueous buffers.

Preparation: Lyophilized purified protein

Protein Description: Recombinant Human BMP-7 is a 28.8 kDa homodimeric glycoprotein consisting of two 116

amino acid subunits, which correspond to amino acid residues 316 to 431 of the full-length

BMP-7 precursor.

Note: Centrifuge vials before opening!

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: <u>NP 001710</u>

Locus ID: 655



SMP7 Human Protein – AR31155PU-N

UniProt ID: P18075

Cytogenetics: 20q13.31

Synonyms: BMP-7, Bone morphogenetic protein 7, OP1, Osteogenic protein 1

Summary: This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta)

superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to

recruitment and activation of SMAD family transcription factors that regulate gene

expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer, which plays a role in bone, kidney and brown adipose tissue development. Additionally, this protein induces ectopic bone formation and may

promote fracture healing in human patients. [provided by RefSeq, Jul 2016]

Protein Families: Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell

Differentiation/IPS, Induced pluripotent stem cells, Secreted Protein, Stem cell relevant

signaling - TGFb/BMP signaling pathway

Protein Pathways: Cytokine-cytokine receptor interaction, Hedgehog signaling pathway, TGF-beta signaling

pathway