

Recombinant Human BMP-3 protein(His Tag)

Catalog Number: PKSH034129

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

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| Species | Human |
| Source | E.coli-derived Human BMP-3 protein Gln 363-Arg 472, with an C-terminal His |
| Calculated MW | 13.2 kDa |
| Observed MW | 14 kDa |
| Accession | P12645 |
| Bio-activity | Measure by its ability to inhibit BMP-2-induced alkaline phosphatase production by ATDC5 cells. The ED ₅₀ for this effect is < 10 µg/mL. |

Properties

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|-----------------------|---|
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 0.1 EU per µg of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from sterile 20 mM sodium citrate, 0.2 M NaCl, pH 3.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |

Background

Growth factor of the TGF-beta superfamily that plays an essential role in developmental process by inducing and patterning early skeletal formation and by negatively regulating bone density. Antagonizes the ability of certain osteogenic BMPs to induce osteoprogenitor differentiation and ossification. Initiates signaling cascades by associating with type II receptor ACVR2B to activate SMAD2-dependent and SMAD-independent signaling cascades including TAK1 and JNK pathways.