

Recombinant Swine BMP-4 protein(His Tag)

Catalog Number: PKSS000011

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

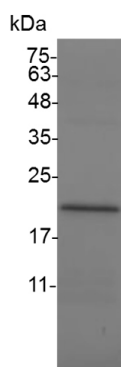
Description

| | |
|----------------------|--|
| Species | Porcine |
| Source | E.coli-derived Porcine BMP-4 protein Arg 227-Cya 408, with an C-terminal His |
| Calculated MW | 21.7 kDa |
| Observed MW | 17-25 kDa |
| Accession | NP_001094501.1 |
| Bio-activity | Not validated for activity |

Properties

| | |
|-----------------------|---|
| Purity | > 98 % 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. |
| Reconstitution | Please refer to the specific buffer information in the printed manual. |

Data



> 98 % as determined by reducing SDS-PAGE.

Background

Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes, including neurogenesis, vascular development, angiogenesis and osteogenesis. Acts in concert with PTHLH/PTHRP to stimulate ductal outgrowth during embryonic mammary development and to inhibit hair follicle induction. Initiates the canonical BMP signaling cascade by associating with type I receptor BMPR1A and type II receptor BMPR2. Once all three components are bound together in a complex at the cell surface, BMPR2 phosphorylates and activates BMPR1A. In turn, BMPR1A propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target genes. Can also signal through non-canonical BMP pathways such as ERK/MAP kinase, PI3K/Akt or SRC cascades. For example, induces SRC phosphorylation which, in turn, activates VEGFR2, leading to an angiogenic response.

For Research Use Only

Toll-free: 1-888-852-8623
Web: www.elabscience.com

Tel: 1-832-243-6086
Email: techsupport@elabscience.com

Fax: 1-832-243-6017