Recombinant Human/Mouse/Rat mature BMP-2 Protein

Catalog No.: RP02510S

Sequence Information

Species
Human,Mouse, Rat

Gene ID
650

Swiss Prot
P12643

Tags
No tag

Synonyms
BDA2,BMP2A,BMP2

Product Information

Source
E.coli

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
12.78 kDa

Observed MW
15-20 kDa

Endotoxin
< 1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of 0.1% TFA, 30% ACN. Contact us for customized product form or formulation.

Reconstitution
Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

BMP-2 like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. It is involved in the hedgehog pathway, TGF beta signaling pathway, and in cytokine-cytokine receptor interaction. It is also involved in cardiac cell differentiation and epithelial to mesenchymal transition. Like many other proteins from the BMP family, BMP-2 has been demonstrated to potently induce osteoblast differentiation in a variety of cell types. BMP-2 may be involved in white adipogenesis and may have metabolic effects.

Basic Information

Description
Recombinant Human/Mouse/Rat mature BMP-2 Protein is produced by Escherichia coli expression system. The target protein is expressed with sequence (Ala284-Arg396) of Human/Mouse/Rat BMP-2 (NP_001191.1) fused with no tag.

Activity
Measured by its ability to induce alkaline phosphatase production by ATDC5 mouse chondrogenic cells.The ED_{50} for this effect is 24.59-98.36 ng/mL, corresponding to a specific activity of 1.02×10^4~4.07×10^4 units/mg.

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

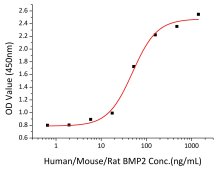
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

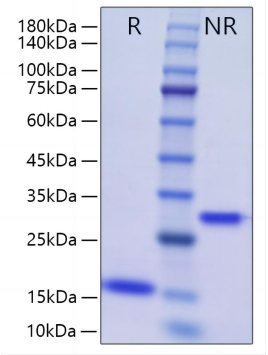
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Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



Recombinant Human/Mouse/Rat mature BMP-2 Protein induce alkaline phosphatase production by ATDC5 mouse chondrogenic cells.The ED_{50} for this effect is 24.59-98.36 ng/mL, corresponding to a specific activity of 1.02×10^4~4.07×10^4 units/mg.



Recombinant Human/Mouse/Rat mature BMP-2 Protein was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.