

BMP-5 Antibody

Rabbit Polyclonal Antibody Catalog # ABV11007

Specification

BMP-5 Antibody - Product Information

Application WB
Primary Accession P22003
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 51737

BMP-5 Antibody - Additional Information

Gene ID 653

Positive Control Application & Usage Recombinant human BMP-5 The antibody can be used in Western Blot analysis (0.5-4 μ g/ml). It detects monomer, dimer and trimer of BMP-5.

Other Names

Bone morphogenetic protein 5, BMP-5

Target/Specificity BMP-5

Antibody Form

Liquid

Appearance Colorless liquid

Formulation

 $100~\mu g$ (0.5 mg/ml) affinity purified rabbit anti-human BMP-5 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 5 mM EDTA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions

BMP-5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



BMP-5 Antibody - Protein Information

Name BMP5

Function

Growth factor of the TGF-beta superfamily that plays essential roles in many developmental processes, including cartilage and bone formation or neurogenesis (PubMed:11580864, PubMed:29321139). Initiates the canonical BMP signaling cascade by associating with type I receptor BMPR1A and type II receptor BMPR2 (PubMed:11580864). 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 (PubMed:29321139, PubMed:11580864). Can also signal through non-canonical pathway such as MAPK p38 signaling cascade to promote chondrogenic differentiation (PubMed:20402566). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed:30097509/a>).

Cellular Location Secreted.

Tissue LocationExpressed in the lung and liver.

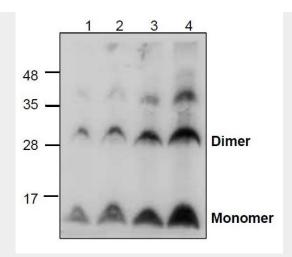
BMP-5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

BMP-5 Antibody - Images





Western blot analysis using recombinant human BMP-5.Lane 1: 50 ng;Lane2: 100 ng;Lane 3: 200 ng;Lane 4: 500 ng

BMP-5 Antibody - Background

BMPs (bone morphogenetic proteins) belong to the TGF-βsuperfamily of structurally related signaling proteins. As implied by their name, BMPs promote and regulate bone development, growth, remodeling and repair, in both prenatal development and postnatal growth of eye, heart, kidney, skin, and other tissues. Active human BMP-5 is a 31 kDa homodimeric protein consisting of two 134 amino acid polypeptide chains.