

BMP-13 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10637

Specification

BMP-13 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>O6KF10</u> Human Rabbit Polyclonal Rabbit IgG 50662

BMP-13 Antibody - Additional Information

Gene ID 392255

Application & Usage

Western blot analysis (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Recombinant human BMP-13 can be used as a positive control. Both monomer and dimer of BMP-13 can be detected.

Other Names BMP13, BMP-13, BMP 13, bone morphogenic 13, bmp

Target/Specificity BMP13

Antibody Form Liquid

Appearance Colorless liquid

Formulation 100 μ g (0.5 mg/ml) affinity purified rabbit anti-BMP-13 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

Background Descriptions

Precautions



BMP-13 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BMP-13 Antibody - Protein Information

Name GDF6

Synonyms BMP13, GDF16

Function

Growth factor that controls proliferation and cellular differentiation in the retina and bone formation. Plays a key role in regulating apoptosis during retinal development. Establishes dorsalventral positional information in the retina and controls the formation of the retinotectal map (PubMed:23307924). Required for normal formation of bones and joints in the limbs, skull, digits and axial skeleton. Plays a key role in establishing boundaries between skeletal elements during development. Regulation of GDF6 expression seems to be a mechanism for evolving species-specific changes in skeletal structures. Seems to positively regulate differentiation of chondrogenic tissue through the growth factor receptors subunits BMPR1A, BMPR1B, BMPR2 and ACVR2A, leading to the activation of SMAD1- SMAD5-SMAD8 complex. The regulation of chondrogenic differentiation is inhibited by NOG (PubMed:26643732). Also involved in the induction of adipogenesis from mesenchymal stem cells. This mechanism acts through the growth factor receptors subunits BMPR1A, BMPR2 and ACVR2A and the activation of SMAD1-SMAD5-SMAD8 complex and MAPK14/p38 (By similarity).

Cellular Location Secreted.

BMP-13 Antibody - Protocols

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

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

BMP-13 Antibody - Images

BMP-13 Antibody - Background

BMPs (bone morphogenetic proteins) belong to the TGF-β superfamily of structurally related signaling proteins. These ligands mediate numerous physiological processes. BMPs initiate, promote and maintain cartilage and bone development, growth, remodeling and repair, in both prenatal development and postnatal growth of eye, heart, kidney, skin, and other tissues. Expression of BMP-13 has been found in the hypertrophic chondrocytes of ossifying long bone centers.