

GDF6 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7483B

Specification

GDF6 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region FC, IHC-P, WB,E <u>O6KF10</u> <u>O6HA10</u>, <u>P43028</u>, <u>P55106</u> Human, Mouse Bovine, Rat Rabbit Polyclonal Rabbit IgG 50662 326-353

GDF6 Antibody (C-term) - Additional Information

Gene ID 392255

Other Names Growth/differentiation factor 6, GDF-6, Bone morphogenetic protein 13, BMP-13, Growth/differentiation factor 16, GDF6, BMP13, GDF16

Target/Specificity

This GDF6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 326-353 amino acids from the C-terminal region of human GDF6.

Dilution FC~~1:10~50 IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GDF6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GDF6 Antibody (C-term) - 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 dorsal- ventral 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 chondrogenesis from mesenchymal stem cells. This mechanism acts through the growth factor receptors subunits BMPR1A, 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, BMPR1A, BMPR2 and ACVR2A and the activation of SMAD1-SMAD5-SMAD8 complex and MAPK14/p38 (By similarity).

Cellular Location Secreted.

GDF6 Antibody (C-term) - Protocols

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

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

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GDF6 Antibody (C-term) - Images
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Western blot analysis of GDF6 antibody (C-term) (Cat.#AP7483b) in mouse kidney tissue lysates



(35ug/lane). GDF6 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with GDF6 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of 293 cells using GDF6 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

GDF6 Antibody (C-term) - Background

GDF6 is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily of secreted signaling molecules. This protein is required for normal formation of some bones and joints in the limbs, skull, and axial skeleton. Mutations in this protein result in colobomata, which are congenital abnormalities in ocular development, and in Klippel-Feil syndrome (KFS), which is a congenital disorder of spinal segmentation.

GDF6 Antibody (C-term) - References

Tassabehji M., Fang Z.M.Hum. Mutat. 29:1017-1027(2008)