

GDF6 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11672A**Specification**

GDF6 Antibody (N-term) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	Q6KF10
Other Accession	NP_001001557.1
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	50662
Antigen Region	31-59

GDF6 Antibody (N-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 31-59 amino acids from the N-terminal region of human GDF6.

Dilution

WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

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

GDF6 Antibody (N-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 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).

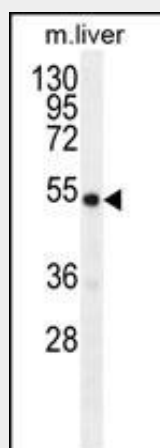
Cellular Location

Secreted.

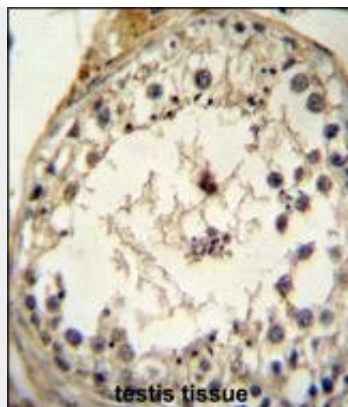
GDF6 Antibody (N-term) - Protocols

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

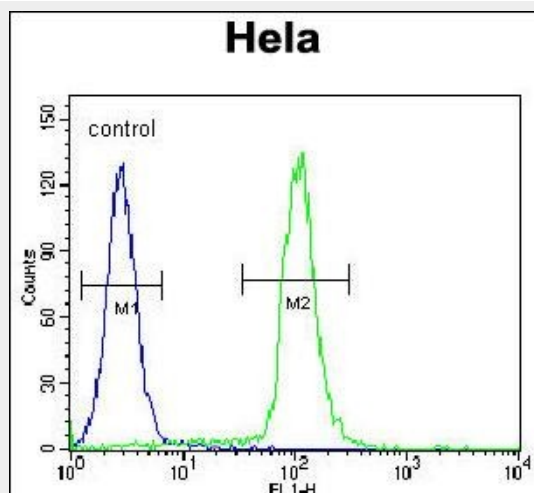
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GDF6 Antibody (N-term) - Images

GDF6 Antibody (N-term) (Cat. #AP11672a) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the GDF6 antibody detected the GDF6 protein (arrow).



GDF6 Antibody (N-term) (Cat. #AP11672a) immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GDF6 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GDF6 Antibody (N-term) (Cat. #AP11672a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

GDF6 Antibody (N-term) - Background

This gene encodes a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily of secreted signaling molecules. It is required for normal formation of some bones and joints in the limbs, skull, and axial skeleton. Mutations in this gene 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 (N-term) - References

Gonzalez-Rodriguez, J., et al. Br J Ophthalmol 94(8):1100-1104(2010)
Mikic, B., et al. J. Orthop. Res. 27(12):1603-1611(2009)
Asai-Coakwell, M., et al. Hum. Mol. Genet. 18(6):1110-1121(2009)
Zhang, X., et al. Mol. Vis. 15, 2911-2918 (2009) :
Shen, B., et al. Int. J. Biol. Sci. 5(2):192-200(2009)