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GDF6 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7483b

Specification

GDF6 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q6KF10

GDF6 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP7483b was selected from the C-term region of human GDF6. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GDF6 Antibody (C-term) Blocking Peptide - Protein Information

Name GDF6

GDF6 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - References

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

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 (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides