

**GDF-5 Polyclonal Antibody** 

Catalog # AP73485

## Specification

# **GDF-5** Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB, IHC-P P43026 Human, Mouse, Rat Rabbit Polyclonal

## **GDF-5** Polyclonal Antibody - Additional Information

Gene ID 8200

**Other Names** GDF5; CDMP1; Growth/differentiation factor 5; GDF-5; Cartilage-derived morphogenetic protein 1; CDMP-1; Radotermin

Dilution

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** -20°C

## **GDF-5** Polyclonal Antibody - Protein Information

Name GDF5

Synonyms BMP14, CDMP1

Function

Growth factor involved in bone and cartilage formation. During cartilage development regulates differentiation of chondrogenic tissue through two pathways. Firstly, positively regulates differentiation of chondrogenic tissue through its binding of high affinity with BMPR1B and of less affinity with BMPR1A, leading to induction of SMAD1-SMAD5-SMAD8 complex phosphorylation and then SMAD protein signaling transduction (PubMed:<a

href="http://www.uniprot.org/citations/15530414" target="\_blank">15530414</a>, PubMed:<a href="http://www.uniprot.org/citations/21976273" target="\_blank">21976273</a>, PubMed:<a href="http://www.uniprot.org/citations/24098149" target="\_blank">24098149</a>, PubMed:<a href="http://www.uniprot.org/citations/25092592" target="\_blank">25092592</a>). Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG (PubMed:<a href="http://www.uniprot.org/citations/21976273" target="\_blank">21976273</a>). Required to



prevent excessive muscle loss upon denervation. This function requires SMAD4 and is mediated by phosphorylated SMAD1/5/8 (By similarity). Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:<a href="http://www.uniprot.org/citations/11276205" target="\_blank">11276205</a>).

**Cellular Location** Secreted. Cell membrane

**Tissue Location** 

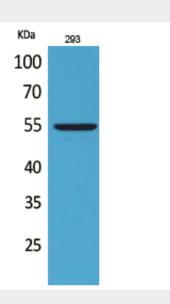
Predominantly expressed in long bones during embryonic development. Expressed in monocytes (at protein level)

## **GDF-5 Polyclonal Antibody - Protocols**

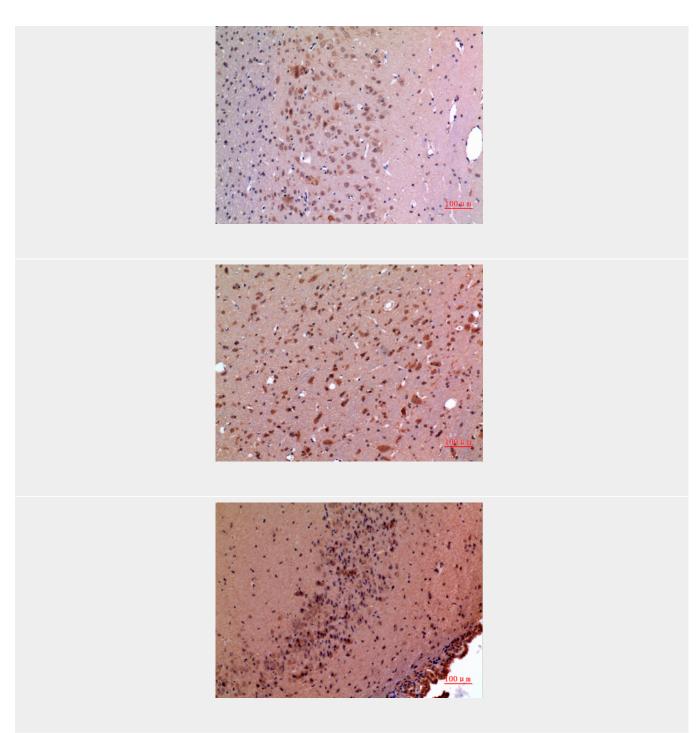
Provided below are standard protocols that you may find useful for product applications.

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

#### **GDF-5 Polyclonal Antibody - Images**







## **GDF-5 Polyclonal Antibody - Background**

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