

### **GDF-6 Polyclonal Antibody**

**Catalog # AP73836** 

#### **Specification**

## **GDF-6 Polyclonal Antibody - Product Information**

Application WB
Primary Accession O6KF10

Reactivity Human, Mouse, Rat Host Rabbit

Host Rabbit Clonality Polyclonal

# **GDF-6 Polyclonal Antibody - Additional Information**

**Gene ID** 392255

**Other Names** 

GDF6; GDF16; Growth/differentiation factor 6; GDF-6; Growth/differentiation factor 16

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

**Format** 

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

**Storage Conditions** 

-20°C

# **GDF-6 Polyclonal 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 dorsal-ventral positional information in the retina and controls the formation of the retinotectal map (PubMed:<a href="http://www.uniprot.org/citations/23307924" target="\_blank">23307924</a>). 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:<a href="http://www.uniprot.org/citations/26643732"

target="\_blank">26643732</a>). 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).

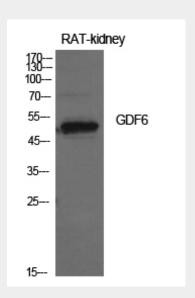
**Cellular Location** Secreted.

### **GDF-6 Polyclonal Antibody - Protocols**

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

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

# **GDF-6 Polyclonal Antibody - Images**

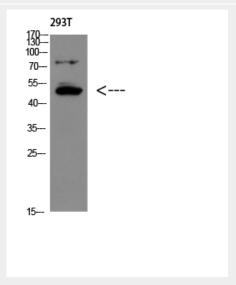


Western Blot analysis of rat kidney cells using GDF-6 Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000

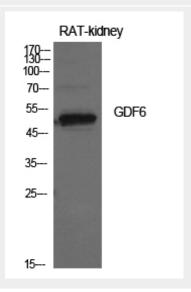




Western Blot analysis of RAT-kidney cells using GDF-6 Polyclonal Antibody diluted at  $1 \square 500$ . Secondary antibody was diluted at 1:20000

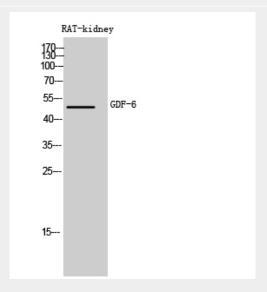


Western Blot analysis of 293T using GDF-6 Polyclonal Antibody diluted at 1:500. Secondary antibody was diluted at 1:20000

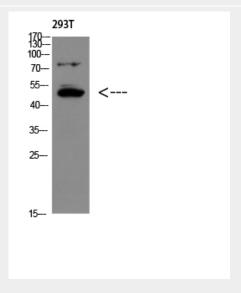




Western Blot analysis of rat kidney cells using GDF-6 Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000



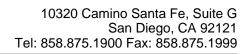
Western Blot analysis of RAT-kidney cells using GDF-6 Polyclonal Antibody diluted at 1□500. Secondary antibody was diluted at 1:20000



Western Blot analysis of 293T using GDF-6 Polyclonal Antibody diluted at 1:500. Secondary antibody was diluted at 1:20000

## **GDF-6 Polyclonal Antibody - Background**

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).