

### **DISP1 Antibody**

Catalog # ASC11417

### **Specification**

### **DISP1 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

**Application Notes** 

WB, IHC, IF <u>096F81</u> NP 116279, 25952134

Human, Mouse

Rabbit Polyclonal

IgG

DISP1 antibody can be used for detection of DISP1 by Western blot at  $1 - 2 \mu g/mL$ .

Antibody can also be used for

immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20

μg/mL.

### **DISP1 Antibody - Additional Information**

Gene ID **84976** 

# **Target/Specificity**

DISP1; At least two isoforms of DISP1 are known to exist; this antibody will detect both isoforms. DISP1 antibody is predicted to not cross-react with EMX1.

#### **Reconstitution & Storage**

DISP1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

DISP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **DISP1 Antibody - Protein Information**

Name DISP1

**Synonyms DISPA** 

### **Function**

Functions in hedgehog (Hh) signaling. Regulates the release and extracellular accumulation of cholesterol-modified hedgehog proteins and is hence required for effective production of the Hh signal (By similarity). Synergizes with SCUBE2 to cause an increase in SHH secretion (PubMed:<a href="http://www.uniprot.org/citations/22902404" target="\_blank">22902404</a>).

#### **Cellular Location**

Membrane; Multi-pass membrane protein

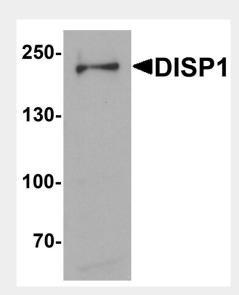


# **DISP1 Antibody - Protocols**

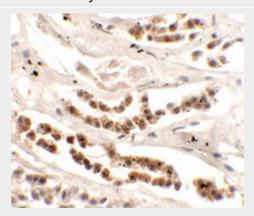
Provided below are standard protocols that you may find useful for product applications.

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

# **DISP1 Antibody - Images**

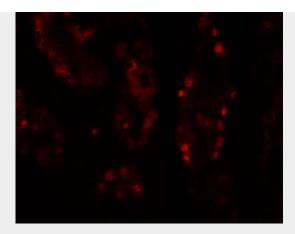


Western blot analysis of DISP1 in 3T3 cell lysate with DISP1 antibody at 1 µg/mL.



Immunohistochemistry of DISP1 in human kidney tissue with DISP1 antibody at 2.5 μg/mL.





Immunofluorescence of DISP1 in human kidney tissue with DISP1 antibody at 20  $\mu g/mL$ .

# **DISP1 Antibody - Background**

DISP1 Antibody: DISP1 is the mammalian homolog of the Drosophila Dispatched segment-polarity gene and a key regulator of the Hedgehog (Hh) signaling pathway during embryonic development. DISP1 is required to move Shh from site of synthesis during embryogenesis; mutations in the gene result in lethality at mid-gestation and prevents specification of ventral cell types in the neural tube. Recent results have shown that DISP1 mediates the basolateral secretion of Shh and regulates growth of mammalian long bones through the control of lhh.

# **DISP1 Antibody - References**

Caspary T, Garcia-Garcia MJ, Huangfu D, et al. Mouse dispatched homolog1 is required for long-range, but not juxtacrine, Hh signaling. Curr. Biol. 2002; 12:1628-32

Etheridge LA, Crawford TQ, Zhang S, et al. Evidence for a role of vertebrate Disp1 in long-range Shh signaling. Development 2010; 137:133-40.

Tsiairis CD and McMahon AP. Disp1 regulates growth of mammalian long bones through the control of Ihh distribution. Dev. Biol. 2008; 317:480-5.