

DISP1 Antibody

Catalog # ASC11417

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q96F81
Other Accession	NP_116279 , 25952134
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	170934
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	DISP1 antibody can be used for detection of DISP1 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	84976
Other Names	Protein dispatched homolog 1, DISP1, DISPA
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.

Protein Information

Name	DISP1 {ECO:0000305 PubMed:15489334}
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: 22902404).
Cellular Location	Membrane; Multi-pass membrane protein

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 Ihh.

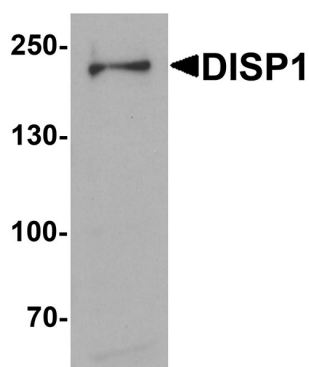
References

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

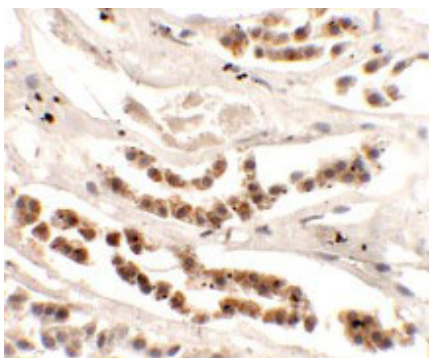
Etheridge LA, Crawford TQ, Zhang S, et al. Evidence for a role of vertebrate Disp1 in long-range Shh signaling. *Development* 2010; 137:133-40.

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

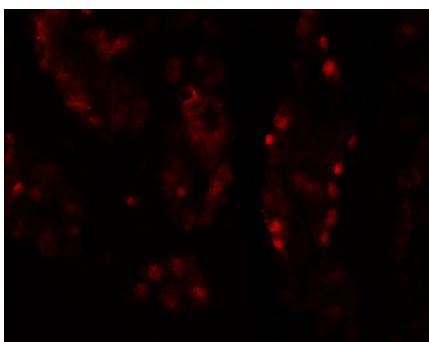
Images



Western blot analysis of DISP1 in 3T3 cell lysate with DISP1 antibody at 1 $\mu\text{g/mL}$.



Immunohistochemistry of DISP1 in human kidney tissue with DISP1 antibody at 2.5 $\mu\text{g/mL}$.



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

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