

NOTUM Antibody

Catalog # ASC10954

Specification

NOTUM Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Application Notes

O6P988
NP_848588, 194394139
Human, Mouse, Rat
Rabbit
Polyclonal
IgG
NOTUM antibody can be used for detection of NOTUM by Western blot at 0.5 - 1
μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5
μg/mL. For immunofluorescence start at 20

NOTUM Antibody - Additional Information

Gene ID
Target/Specificity

NOTUM;

147111

μg/mL.

WB. IHC. IF

Reconstitution & Storage

NOTUM 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

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

NOTUM Antibody - Protein Information

Name NOTUM (HGNC:27106)

Function

Carboxylesterase that acts as a key negative regulator of the Wnt signaling pathway by specifically mediating depalmitoleoylation of WNT proteins. Serine palmitoleoylation of WNT proteins is required for efficient binding to frizzled receptors (PubMed:http://www.uniprot.org/citations/25731175).

Cellular Location

Secreted {ECO:0000250|UniProtKB:Q9VUX3}.

Tissue Location

Rarely expressed in adult normal tissues.

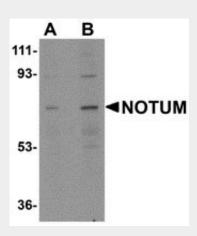


NOTUM Antibody - Protocols

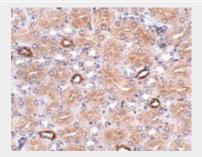
Provided below are standard protocols that you may find useful for product applications.

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

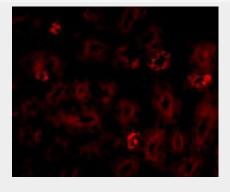
NOTUM Antibody - Images



Western blot analysis of NOTUM in human kidney tissue lysate with NOTUM antibody at (A) 0.5 and (B) 1 $\mu g/mL$.



Immunohistochemistry of NOTUM in human brain tissue with NOTUM antibody at 2.5 µg/mL.





Immunofluorescence of NOTUM in Mouse Kidney cells with NOTUM antibody at 20 µg/mL.

NOTUM Antibody - Background

NOTUM Antibody: In Drosophila, the notum gene is regulated by the Wingless pathway and encodes a secreted hydrolase that modifies heparan sulfate proteoglycans. The mammalian homolog has been shown to be able to cleave glypicans and can release GPI-anchored proteins from the mammalian cell surface. Like the Drosophilia NOTUM, the mammalian protein can act as a negative regulator of the Wnt signaling pathway. NOTUM is expressed at a low level in most mammalian tissues, although it is overexpressed in a subset of human hepatocellular carcinomas. Its transcription is regulated by beta-catenin/TCF and is a target of the Wnt signaling pathway, forming a negative feedback loop that regulates the expression and activity of the Wnt pathway.

NOTUM Antibody - References

Giraldez AJ, Copley RR, and Cohen SM. HSPG modification by the secreted enzyme Notum shapes the wingless morphogen gradient. Dev. Cell2002; 667-76.

Traister A, Shi W, and Filmus J. Mammalian Notum induces the release of glypicans and other GPI-anchored proteins from the cell surface. Biochem. J.2008; 410:503-11.

Torisu Y, Watanabe A, Nonaka A, et al. Human homolog of NOTUM, overexpressed in hepatocellular carcinoma, is regulated transcriptionally by b-catenin/TCF. Cancer Sci.2008; 6:1139-46.