

# **SCUBE2 Antibody**

Catalog # ASC11166

# **Specification**

# **SCUBE2 Antibody - Product Information**

**Application Primary Accession** Other Accession Reactivity Host Clonality Isotype

**Application Notes** 

WB, ICC, IF **09N036** 

NP 066025, 283046663

Human, Rat **Rabbit Polyclonal** 

SCUBE2 antibody can be used for detection of SCUBE2 by Western blot at 1 μg/mL.

Antibody can also be used for

immunocytochemistry starting at 20

μg/mL. For immunofluorescence start at 20

μg/mL.

# **SCUBE2 Antibody - Additional Information**

Gene ID Target/Specificity SCUBE2:

57758

### **Reconstitution & Storage**

SCUBE2 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**

SCUBE2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **SCUBE2 Antibody - Protein Information**

Name SCUBE2 (HGNC:30425)

**Synonyms** CEGP1

#### **Function**

Lipid-binding protein required for SHH long-range signaling by binding to the dually lipid-modified SHH (ShhNp) and by promoting ShhNp mobilization, solubilization and release from the cell membrane (PubMed: <a href="http://www.uniprot.org/citations/22902404" target=" blank">22902404</a>, PubMed:<a href="http://www.uniprot.org/citations/22677548" target="\_blank">22677548</a>). Acts by enhancing the proteolytic processing (shedding) of the lipid-modified N- and C- terminal of ShhNp at the cell surface (PubMed: <a

 $href="http://www.uniprot.org/citations/24522195"\ target="\_blank">24522195</a>).\ Synergizes$ with DISP1 to increase SHH secretion (PubMed:<a



href="http://www.uniprot.org/citations/22902404" target="\_blank">22902404</a>). Probable cell surface coreceptor for VEGFR2 involved in VEGFR2-mediated angiogenesis (PubMed:<a href="http://www.uniprot.org/citations/27834687" target=" blank">27834687</a>).

#### **Cellular Location**

Secreted. Cell surface. Note=Secreted and tethered at the cell surface (PubMed:19480626).

#### **Tissue Location**

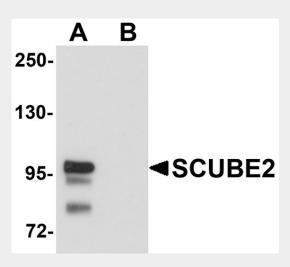
Expressed in a broad spectrum of adult tissues (PubMed:12270931).

# **SCUBE2 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

# SCUBE2 Antibody - Images

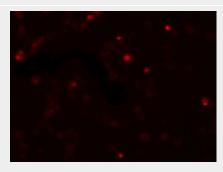


Western blot analysis of SCUBE2 in Daudi cell lysate with SCUBE2 antibody at 1  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide.





Immunocytochemistry of SCUBE2 in Daudi cells with SCUBE2 antibody at 20 µg/mL.



Immunofluorescence of SCUBE2 in Daudi cells with SCUBE2 antibody at 20 μg/mL.

# SCUBE2 Antibody - Background

SCUBE2 Antibody: SCUBE2 is a member of a family of secreted glycoproteins that contain N-terminal EGF-like repeats and C-terminal cysteine-rich motifs and CUB domain and are expressed in embryonic neuroectoderm and vascular epithelium. SCUBE2 is a close homolog to SCUBE1 and can form a heterodimeric complex with SCUBE1. SCUBE2 is thought to participate in the Hedgehog signaling pathway by specifically interacting with Sonic Hedgehog (SHH) and the receptor PTCH1, enhancing the SHH signaling activity in the raft microdomains of the plasma membrane, and may thus play important roles in organ development and tumor progression.

## **SCUBE2 Antibody - References**

Grimmond S, Larder R, Van Hateren N, et al. Cloning, mapping, and expression analysis of a gene encoding a novel mammalian EGF-related protein (SCUBE1). Genomics2000; 70:74-81. Yang RB, Ng CK, Wasserman SM, et al. Identification of a novel family of cell-surface proteins expressed in human vascular endothelium. J. Biol. Chem.2002; 277:46364-73. Grimmond S, Larder R, Van Hateren N, et al. Cloning, mapping, and expression analysis of a gene encoding a novel mammalian EGF-related protein (SCUBE1). Genomics2000; 70:74-81. Tsai M, Cheng C, Lin Y, et al. Isolation and characterization of a secreted, cell-surface glycoprotein SCUBE2 from humans. Biochem. J. 2009; 422:119-28.