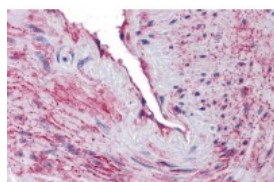




## SCUBE3 Antibody

CATALOG NUMBER: 5847



Immunohistochemistry of SCUBE3 in  
blood vessel tissue with SCUBE3 antibody  
at 10 ug/mL.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human
<b>TESTED APPLICATIONS:</b>	ELISA, IHC-P
<b>APPLICATIONS:</b>	SCUBE3 antibody can be used for detection of SCUBE3 by immunohistochemistry at 5 ug/mL.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>PREDICTED MOLECULAR WEIGHT:</b>	Predicted: 109 kDa
<b>IMMUNOGEN:</b>	SCUBE3 antibody was raised against a 15 amino acid peptide near the center of human SCUBE3.  The immunogen is located within amino acids 440 - 490 of SCUBE3.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	SCUBE3 Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	SCUBE3 Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	SCUBE3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	SCUBE3 Antibody: CEGF3, CEGF3, Signal peptide, CUB and EGF-like domain-containing protein 3
<b>ACCESSION NO.:</b>	NP_689966
<b>PROTEIN GI NO.:</b>	31377568
<b>OFFICIAL SYMBOL:</b>	SCUBE3

## Background

**BACKGROUND:** SCUBE3 Antibody: SCUBE3 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 is highly expressed in primary osteoblasts and bones, and to a lesser extent in heart (1,2). Other studies have shown that overexpression of SCUBE3 in mice induced cardiac hypertrophy, suggesting that it may also play a role in the regulation of cardiac growth. SCUBE3 has been shown to be an endogenous TGF-beta receptor ligand (3,4) and is thought to promote lung cancer cell mobility and invasiveness. In lung cancer cells, the secreted SCUBE3 protein was cleaved by MMP2 and MMP9, allowing the activation of the TGF-beta receptor, the increase of Smad2/3 transcriptional activity and the upregulation of expression of proteins such as TGF-beta1, VEGF, Snail, and Slug.

- REFERENCES:**
- 1) Wu BT, Su YH, Tsai MT, et al. A novel secreted, cell-surface glycoprotein containing multiple epidermal growth factor-like repeats and one CUB domain is highly expressed in primary osteoblasts and bones. J. Biol. Chem. 2004; 279:37485-90.
  - 2) 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.
  - 3) Yang HY, Cheng CF, Djoko B, et al. Transgenic overexpression of the secreted, extracellular EGF-CUB domain containing protein SCUBE3 induces cardiac hypertrophy in mice. Cardiovas. Res. 2007; 75:139-47.
  - 4) Wu YY, Peck K, Chang YL, et al. SCUBE3 is an endogenous TGF- receptor ligand and regulates the epithelial-mesenchymal transition in lung cancer. Oncogene 2011; 30:3682-93.

FOR RESEARCH USE ONLY

December 12, 2016