

### SPPL2a Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6312a

## **Specification**

## SPPL2a Antibody (N-term) - Product Information

IHC-P, WB,E Application **Primary Accession Q8TCT8** Reactivity Human **Rabbit** Host Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 58143 **Antigen Region** 108-138

## SPPL2a Antibody (N-term) - Additional Information

### **Gene ID 84888**

### **Other Names**

Signal peptide peptidase-like 2A, SPP-like 2A, SPPL2a, 3423-, Intramembrane protease 3, IMP-3, Presenilin-like protein 2, SPPL2A, IMP3, PSL2

### Target/Specificity

This SPPL2a antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 108-138 amino acids from the N-terminal region of human SPPL2a.

# **Dilution**

IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

SPPL2a Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# SPPL2a Antibody (N-term) - Protein Information

Name SPPL2A {ECO:0000303|PubMed:15385547, ECO:0000312|HGNC:HGNC:30227}



**Function** Intramembrane-cleaving aspartic protease (I-CLiP) that cleaves type II membrane signal peptides in the hydrophobic plane of the membrane. Functions in FASLG, ITM2B and TNF processing (PubMed:16829951, PubMed:16829952, PubMed:17557115, PubMed:17965014). Catalyzes the intramembrane cleavage of the anchored fragment of shed TNF-alpha (TNF), which promotes the release of the intracellular domain (ICD) for signaling to the nucleus (PubMed:16829952). Also responsible for the intramembrane cleavage of Fas antigen ligand FASLG, which promotes the release of the intracellular FasL domain (FasL ICD) (PubMed:17557115). Essential for degradation of the invariant chain CD74 that plays a central role in the function of antigen-presenting cells in the immune system (By similarity). Plays a role in the regulation of innate and adaptive immunity (PubMed:16829952). Catalyzes the intramembrane cleavage of the simian foamy virus envelope glycoprotein gp130 independently of prior ectodomain shedding by furin or furin-like proprotein convertase (PC)-mediated cleavage proteolysis (PubMed:23132852).

#### **Cellular Location**

Late endosome membrane; Multi-pass membrane protein. Lysosome membrane {ECO:0000250|UniProtKB:Q9JJF9}; Multi- pass membrane protein {ECO:0000250|UniProtKB:Q9JJF9}. Membrane; Multi-pass membrane protein; Lumenal side Note=Colocalizes with palmitoylated and myristoylated proteins at the plasma membrane

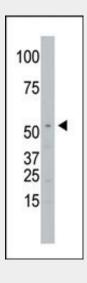
Tissue Location Ubiquitous..

## SPPL2a Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# SPPL2a Antibody (N-term) - Images

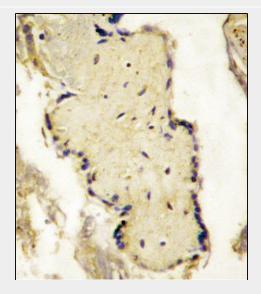




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The anti-SPPL2a Pab (Cat. #AP6312a) is used in Western blot to detect SPPL2a in Jurkat cell lysate.



Formalin-fixed and paraffin-embedded placenta tissue reacted with SPPL2a Antibody (N-term)(Cat.#AP6312a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## SPPL2a Antibody (N-term) - Background

By searching sequence databases for homologs of Dictyostelium discoideum Impas, which shares homology with presenilin, followed by PCR of lymphocyte and hippocampus cDNA libraries, Grigorenko et al. (2002) cloned SPPL2a. This protein, which may act as an intramembrane protease, contains an N-terminal protease-associated (PA) domain, several transmembrane regions, a hydrophilic loop, conservative sequences around the first and second aspartate residues, and an invariant PAL motif near the C terminus.

## SPPL2a Antibody (N-term) - References

Grigorenko, A. P., et al. Biochemistry 67: 826-834 (2002).