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SPPL2a Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6312c

Specification

SPPL2a Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q8TCT8

SPPL2a Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP6312c was selected from the C-term region of human SPPL2a. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SPPL2a Antibody (C-term) Blocking Peptide - 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:16829952, PubMed:16829951, 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:<a

href="http://www.uniprot.org/citations/17557115" target="_blank">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 (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SPPL2a Antibody (C-term) Blocking Peptide - Images

SPPL2a Antibody (C-term) Blocking Peptide - 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 (C-term) Blocking Peptide - References

Friedmann, E., et al., J. Biol. Chem. 279(49):50790-50798 (2004).Grigorenko, A.P., et al., Biochemistry Mosc. 67(7):826-835 (2002).Weihofen, A., et al., Science 296(5576):2215-2218 (2002).