

Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP6311a**Specification**

Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide - Product Information

Primary Accession

[Q8ICT7](#)**Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 56928**Other Names**

Signal peptide peptidase-like 2B, SPP-like 2B, SPPL2b, 3423-, Intramembrane protease 4, IMP-4, Presenilin homologous protein 4, PSH4, Presenilin-like protein 1, SPPL2B, IMP4, KIAA1532, PSL1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6311a](/product/products/AP6311a) was selected from the N-term region of human SPPL2b. 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.

Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide - Protein Information**Name** SPPL2B {ECO:0000303|PubMed:15385547, ECO:0000312|HGNC:HGNC:30627}**Function**

Intramembrane-cleaving aspartic protease (I-CLiP) that cleaves type II membrane signal peptides in the hydrophobic plane of the membrane. Functions in ITM2B and TNF processing (PubMed:[16829952](http://www.uniprot.org/citations/16829952), PubMed:[16829951](http://www.uniprot.org/citations/16829951), PubMed:[17965014](http://www.uniprot.org/citations/17965014), PubMed:[19114711](http://www.uniprot.org/citations/19114711), PubMed:[22194595](http://www.uniprot.org/citations/22194595)). 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, PubMed:16829951). May play a role in the regulation of innate and adaptive immunity (PubMed:16829952). Catalyzes the intramembrane cleavage of the simian foamy virus processed leader peptide gp18 of the envelope glycoprotein gp130 dependently of prior ectodomain shedding by furin or furin-like proprotein convertase (PC)-mediated cleavage proteolysis (PubMed:23132852).

Cellular Location

Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Endosome membrane; Multi-pass membrane protein. Membrane; Multi-pass membrane protein; Lumenal side. Note=targeted through the entire secretory pathway to endosomes/lysosomes (PubMed:15998642)

Tissue Location

Expressed predominantly in adrenal cortex and mammary gland.

Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide - Images

Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide - Background

By sequencing clones obtained from a size-fractionated fetal brain cDNA library, Nagase et al. (2000) cloned KIAA1532. The deduced protein contains 601 amino acids. RT-PCR ELISA detected high expression in all tissues and specific brain regions examined. 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 IMP4. The deduced protein contains 592 amino acids. Like other IMP proteins, IMP4 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.

Signal peptide peptidase-like 2B (SPPL2b) Antibody (N-term) Blocking peptide - References

Grigorenko, A. P., et al. Biochemistry 67: 826-834 (2002). Nagase, T., et al. DNA Res. 7: 143-150 (2000).