10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Signal peptide peptidase-like 2B (SPPL2b) Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP6312b

Specification

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

Primary Accession Q8TCT7

Signal peptide peptidase-like 2B (SPPL2b) Antibody (Center) 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 AP6312b was selected from the Center 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 (Center) 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, PubMed:16829951, PubMed:17965014, PubMed:19114711, PubMed: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 (Center) 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 (Center) Blocking peptide - Images

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

Signal peptide peptidase (SPP) is an aspartyl protease that mediates clearance of signal peptides by proteolysis within the endoplasmic reticulum (ER). Like presenilins, SPP contains a critical GXGD motif in its C-terminal catalytic center. Several presenilin homologues/SPP-like proteins (PSHs/SPPL) have been identified. Unlike the ER localization of SPP and other SPPL proteins, SPPL2b is targeted through the secretory pathway to endosomes/lysosomes.

Signal peptide peptidase-like 2B (SPPL2b) Antibody (Center) 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).