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SPPL2B Rabbit pAb

Catalog # AP97815

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q8TCT7
Other Accession	Q8TCT7
Predicted	Rat, Pig, Human, Mouse, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64644
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPPL2B
Epitope Specificity	55-135/592
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase A22B family. Contains 1 PA (protease associated) domain.
SUBUNIT	Monomer. Homodimer. Interacts with ITM2B and TNF.
Post-translational modifications	Glycosylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the GXGD family of aspartic proteases. The GXGD proteases are transmembrane proteins with two conserved catalytic motifs localized within the membrane-spanning regions. This enzyme localizes to endosomes, lysosomes, and the plasma membrane. It cleaves the transmembrane domain of tumor necrosis factor alpha to release the intracellular domain, which triggers cytokine expression in the innate and adaptive immunity pathways. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	56928
Other Names	IMP-4; IMP4; PSH4; PSL1; SPP2B_HUMAN; SPPL2B; SPP-like 2B; Intramembrane protease 4 (IMP-4); Presenilin homologous protein 4 (PSH4); Presenilin-like protein 1; 3.4.23.-; KIAA1532; signal peptide peptidase like 2B; intramembrane protease 4
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

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:16829951, PubMed:16829952, PubMed:17965014, PubMed:19114711, PubMed:22194595). Catalyzes the intramembrane cleavage of the anchored fragment of shed TNF (TNF), which promotes the release of the intracellular domain (ICD) for signaling to the nucleus (PubMed:16829951, PubMed:16829952). 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.

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