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

SPPL2C Rabbit pAb

SPPL2C Rabbit pAb
Catalog # AP56335

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8IUH8
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74503
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPPL2C
Epitope Specificity	361-460/684
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Intramembrane proteolysis is now widely recognized as an important physiological pathway required for reverse signaling and membrane protein degradation. Aspartyl intramembrane cleaving proteases of the GXGD-type play an important regulatory role in health and disease. Signal peptide peptidase (SPP) and SPP-like (SPPL) peptidases, such as SPPL2a, SPPL2b, IMP5, and SPPL3, belong to the family of GXGD aspartic proteases. The putative catalytic domains of SPP and SPPLs are embedded in membranes in an orientation predisposed to cleave type II oriented transmembrane proteins. IMP5 (intramembrane protease 5), also known as SPPL2c (signal peptide peptidase-like 2C), is a 690 amino acid multi-pass membrane protein that may act as an intramembrane protease. IMP5 also belongs to the peptidase A22B family and two isoforms are produced by alternative splicing events.

Additional Information

Gene ID	162540
Other Names	Signal peptide peptidase-like 2C, SPP-like 2C, SPPL2c, 3.4.23.-, Intramembrane protease 5, IMP-5, SPPL2C (HGNC:28902)
Dilution	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	SPPL2C (HGNC:28902)
Function	Sperm-specific intramembrane-cleaving aspartic protease (I- CLiP) that cleaves distinct tail-anchored proteins and SNARE proteins (PubMed:30733281). In elongated spermatids, modulates intracellular Ca(2+) homeostasis by controlling PLN abundance through proteolytic cleavage (By similarity). During spermatogenesis, processes SNARE proteins and impacts vesicular trafficking which supports compartmental reorganization in maturating spermatids and may play a role in formation of the acrosome (PubMed:30733281).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein; Lumenal side
Tissue Location	Highly expressed in testis where it is primarily localized in spermatids (at protein level)

Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.