

IMP5 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP56335

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q8IUH8
Reactivity	Rat
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.
SIMILARITY	Belongs to the peptidase A22B family.
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 {ECO:0000303 PubMed:15385547}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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.
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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 maturing 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 localised in spermatids (at protein level)

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