

ABCB9 Rabbit pAb

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Catalog # AP54668

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9NP78
Reactivity	Rat, Mouse
Predicted	Pig, Dog, Human, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	84475
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ABCB9
Epitope Specificity	321-420/766
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	Integral membrane protein. Lysosomal. May be localized in the endoplasmic reticulum.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	ATP-binding cassette (ABC) transporters are an evolutionarily conserved family of widely-expressed proteins that use ATP hydrolysis to catalyze the transport of various molecules across extracellular and intracellular membranes. As the largest family of transmembrane proteins, ABC genes comprise several subfamilies (ABC1, ABCA, ABCE, ABCF, MDR/TAP, MRP, ALD, OABP, GCN20 and White (also known as ABCG)). In bacteria, ABC transporters are used to import compounds that cannot be obtained by diffusion. Eukaryotic ABC transporters are largely responsible for trafficking hydrophobic compounds either within the cell as part of a metabolic process or outside the cell for transport to other organs, or for secretion from the body. ABCB9 (also designated Transporter associated with antigen processing (TAP)-like or TAPL) forms a homodimer, which is localized in lysosomes. It functions as an ATP-dependent peptide transporter that shows a broad peptide specificity ranging from 6-mer up to 59-mer peptides. ABCB9 transports these peptides with low affinity but high efficiency.

Additional Information

Gene ID	23457
Other Names	ABC-type oligopeptide transporter ABCB9, 7.4.2.6, ATP-binding cassette sub-family B member 9, ATP-binding cassette transporter 9, ABC transporter 9 protein, hABCB9, TAP-like protein, TAPL, ABCB9 (HGNC:50)

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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.

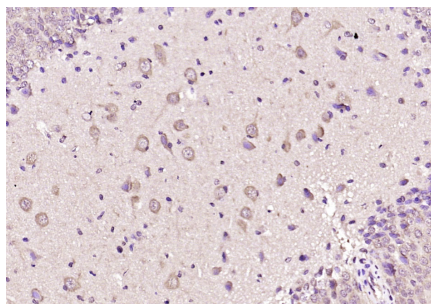
Protein Information

Name	ABCB9 (HGNC:50)
Function	ATP-dependent low-affinity peptide transporter which translocates a broad spectrum of peptides from the cytosol to the lysosomal lumen for degradation (PubMed: 15863492 , PubMed: 17977821 , PubMed: 18434309 , PubMed: 22641697 , PubMed: 25646430 , PubMed: 30353140 , PubMed: 30877195 , PubMed: 31417173). Displays a broad peptide length specificity from 6-mer up to at least 59-mer peptides with an optimum of 23-mers (PubMed: 15863492 , PubMed: 25646430). Binds and transports smaller and larger peptides with the same affinity (PubMed: 31417173). Favors positively charged, aromatic or hydrophobic residues in the N- and C-terminal positions whereas negatively charged residues as well as asparagine and methionine are not favored (PubMed: 15863492 , PubMed: 17977821 , PubMed: 18434309).
Cellular Location	Lysosome membrane; Multi-pass membrane protein {ECO:0000255 PROSITE-ProRule:PRU00441, ECO:0000269 PubMed:10748049, ECO:0000269 PubMed:15577206, ECO:0000269 PubMed:17897319, ECO:0000269 PubMed:17977821, ECO:0000269 PubMed:18175933, ECO:0000269 PubMed:18952056, ECO:0000269 PubMed:20377823, ECO:0000269 PubMed:21212514}. Note=May be located in membrane rafts Takes an intracellular route from the endoplasmic reticulum (ER), via Golgi and early endosomes to late endosomal and lysosomal compartments (PubMed:30877195).
Tissue Location	Highly expressed in testis, and at moderate levels in brain, spinal cord, and thyroid. Not expressed in monocytes but strongly expressed during differentiation of monocytes to dendritic cells and macrophages.

Background

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Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ABCB9) Polyclonal Antibody, Unconjugated (AP54668) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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