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ABCB9 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6115a

Specification

ABCB9 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q9NP78
Other Accession	NP_062571

ABCB9 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 23457

Other Names
ATP-binding cassette sub-family B member 9, ATP-binding cassette transporter 9, ABC transporter 9 protein, hABCB9, TAP-like protein, TAPL, ABCB9, KIAA1520

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6115a was selected from the C-term region of human ABCB9 . 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.

ABCB9 Antibody (C-term) Blocking Peptide - 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.

ABCB9 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

ABCB9 Antibody (C-term) Blocking Peptide - Images

ABCB9 Antibody (C-term) Blocking Peptide - Background

The membrane-associated protein ABCB9 is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance as well as antigen presentation. The function of this half-transporter has not yet been determined; however, this protein may play a role in lysosomes. Alternative splicing of this gene results in three known products which are likely to have different substrate specifications.

ABCB9 Antibody (C-term) Blocking Peptide - References

Kobayashi, A., et al., Biochem. Biophys. Res. Commun. 309(4):815-822 (2003).Zhang, F., et al., J. Biol. Chem. 275(30):23287-23294 (2000).Allikmets, R., et al., Hum. Mol. Genet. 5(10):1649-1655 (1996).