

ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP14142a**Specification**

ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P08183](#)**ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 5243**Other Names**

Multidrug resistance protein 1, ATP-binding cassette sub-family B member 1, P-glycoprotein 1, CD243, ABCB1, MDR1, PGY1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP14142a was selected from the N-term region of ABCB1. 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.

ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide - Protein Information**Name** ABCB1 ([HGNC:40](#))**Synonyms** MDR1, PGY1**Function**

Translocates drugs and phospholipids across the membrane (PubMed:2897240, PubMed:35970996, PubMed:8898203, PubMed:9038218, PubMed:35507548). Catalyzes the flop of phospholipids from the cytoplasmic to the exoplasmic leaflet of the apical membrane.

Participates mainly to the flop of phosphatidylcholine, phosphatidylethanolamine, beta-D-glucosylceramides and sphingomyelins (PubMed:8898203). Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:2897240, PubMed:35970996, PubMed:9038218).

Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441} Apical cell membrane. Cytoplasm Note=ABCB1 localization is influenced by C1orf115 expression levels (plasma membrane versus cytoplasm). Localized to the apical membrane of enterocytes (PubMed:28408210).

Tissue Location

Expressed in small intestine (PubMed:28408210). Expressed in liver, kidney and brain.

ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide - Images

ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide - Background

The membrane-associated protein encoded by this gene 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. The protein encoded by this gene is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier.

ABCB1/p170/p-Glycoprotein/MDR Antibody (N-term) Blocking peptide - References

Burk, O., et al. Clin. Pharmacol. Ther. 88(5):685-694(2010) Wallentin, L., et al. Lancet 376(9749):1320-1328(2010) Grimm, C., et al. Anticancer Res. 30(9):3487-3491(2010) Kitada, K., et al. Cancer Genet. Cytogenet. 178(2):120-127(2007) Chambers, T.C., et al. Biochem. J. 299 (PT 1), 309-315 (1994) :