

MDR3 Antibody

Datasheet

For Research Use Only

Description	Catalog No.	Size
MDR3 Concentrate	FP-A062-01	0.1 ml
MDR3 Concentrate	FP-A062-05	1 ml
MDR3 Predilute	FP-A062-70	7 ml

Description

Multidrug Resistance 3 (MDR3), also known as ATP Binding Cassette Subfamily B Member 4 (ABCB4), is a membrane-associated protein belonging to the superfamily of ATP-binding cassette transporters. MDR3 is an energy-dependent phospholipid efflux translocator that mediates the translocation of phosphatidylcholine across the canalicular membrane of the hepatocyte, and also acts as a positive regulator of biliary lipid secretion. Defects in MDR3 are associated with progressive familial intrahepatic cholestasis type 3 and gallbladder disease type 1. Co-overexpression of MDR3 and MRP1 has been documented as correlating with blastemal subtype and high-risk prognosis of Wilms' tumor patients.

Specifications

Clone	IHC621
Source	Mouse Monoclonal
Applications	IHC (P)
Formulation	Tris Buffer, pH 7.3 - 7.7, with 1% BSA and <0.1% Sodium Azide

IHC Procedure*

Positive Control Tissue	Adrenal Cortex
Concetrated Dilution	1:50 – 1:200
Pretreatment	Perform heat-induced epitope retrieval (HIER) at pH 9 for 10 to 30 minutes
Incubation Time and Temp	10 to 30 minutes at room temperature
Detection	Refer to the detection system manual

*Result should confirmed by an established diagnostic procedure.

Result

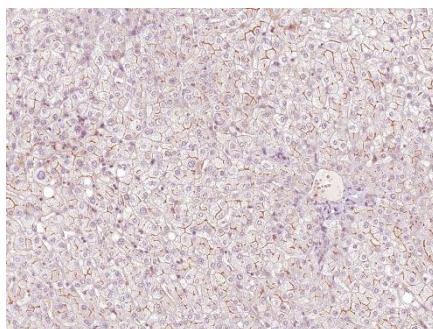


Figure. MDR3 on Liver

Storage and Handling

Must store the reagent at 2-8 °C. Do not freeze. Do not use the reagent after expiration date on vial. To ensure proper stability and delivery of the antibody after each run, replace the cap and immediately place the bottle in a refrigerator in an upright position. Positive and negative controls should be simultaneously run with unknown specimens, as there are no conclusive characteristics to suggest instability of the antibody.

Precautions

The product is for research use only. Do not use for diagnosis purpose. Ensure proper handling procedures are used with all reagents. Always wear laboratory coats, disposable gloves, and other appropriate laboratory equipment when handling reagents. Do not ingest reagents, and avoid contact with eyes and mucous membranes. Wash eyes with copious amounts of water if contact occurs.

References

1. **Hontecillas-Prieto L**, et al. “Correction: Multidrug resistance transporter profile reveals MDR3 as a marker for stratification of blastemal Wilms tumour patients.” *Oncotarget*. 2017 Sep 8;8(38):64652.
2. **van Helvoort A**, et al. “MDR1 P-glycoprotein is a lipid translocase of broad specificity, while MDR3 P-glycoprotein specifically translocates phosphatidylcholine.” *Cell*. 1996 Nov 1;87(3):507-17.
3. **Morita SY**, et al. “Bile salt-dependent efflux of cellular phospholipids mediated by ATP binding cassette protein B4.” *Hepatology*. 2007 Jul;46(1):188-99.
4. **Crawford AR**, et al. “Hepatic secretion of phospholipid vesicles in the mouse critically depends on mdr2 or MDR3 P-glycoprotein expression. Visualization by electron microscopy.” *J Clin Invest*. 1997 Nov 15;100(10):2562-7.
5. **Rosmorduc O**, et al. “MDR3 gene defect in adults with symptomatic intrahepatic and gallbladder cholesterol cholelithiasis.” *Gastroenterology*. 2001 May;120(6):1459-67.

Technical Support

Contact FemtoPath Technical Support at +886232338585 or email to femtopath@hongjing.com.tw for questions regarding this product.