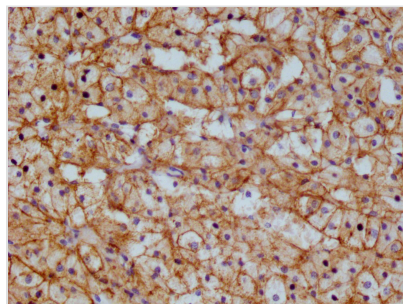




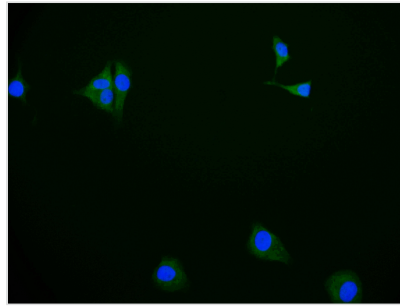
ABCB1 Recombinant Monoclonal Antibody

Product Code	CSB-RA983422A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P08183
Immunogen	A synthesized peptide derived from human ABCB1
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF; Recommended dilution: IHC:1:50-1:200, IF:1:50-1:200
Relevance	Translocates drugs and phospholipids across the membrane (PubMed:8898203, PubMed:2897240, PubMed:9038218). 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:9038218). {ECO:0000269 PubMed:2897240, ECO:0000269 PubMed:8898203, ECO:0000269 PubMed:9038218}.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Metabolism; Signal transduction; Stem cells
Gene Names	ABCB1
Clone No.	11H10

Image



IHC image of CSB-RA983422A0HU diluted at 1:100 and staining in paraffin-embedded human adrenal gland tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of HepG2 cell with CSB-RA983422A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 583-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Description

The generation of the ABCB1 recombinant monoclonal antibody involves a well-defined process comprising the following steps: B cells are obtained from an animal immunized with a synthesized peptide derived from human ABCB1. Total RNA is extracted from the harvested B cells, and reverse transcription is performed to convert the RNA into cDNA. The ABCB1 antibody genes are amplified using PCR with primers specific to the antibody constant regions. These amplified genes are then cloned into an expression vector. The recombinant vector is transfected into host cells, facilitating the expression of the ABCB1 recombinant monoclonal antibodies. The cell culture supernatant is collected, and the ABCB1 recombinant monoclonal antibody is purified using affinity chromatography. The purified ABCB1 recombinant monoclonal antibody is subjected to thorough characterization and validation. This includes analyzing the antibody's specificity and functionality using techniques ELISA, IHC, and FC. These tests confirm the antibody's ability to specifically react with human ABCB1 protein.