SunLong Biotech Co.,LTD
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Rabbit Anti-MDR1 antibody

SL0563R

Product Name	MDR1
Chinese Name	多药耐药蛋白/P-glycoprotein 抗体
Alias	P-Glycoprotein; Multi Drug Resistance Associated Protein, ABCB1; ATP-binding cassette sub-family B (MDR/TAP), member 1; ABC20; CD243; CD243 antigen; CLCS; Multidrug resistance protein 1; P glycoprotein 1; p-GP; gp170; P gp; PGY1; MDR1_HUMAN.
Research Area	Tumour Cardiovascular Cell biology immunology Signal transduction transcriptional regulatory factor
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat,
Applications	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	141kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human MDR1: 21-100/1272 <Cytoplasmic>
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

PubMed PubMed

P Glycoprotein, the product of the MDR1 gene, is expressed in distinct non-malignant cells, typically cells with secretory and excretory functions. It is assumed to function as an ATP-dependent drug efflux pump with broad substrate specificity. The highest expression of P Glycoprotein has been observed in kidney (proximal tubules), liver (bile canaliculi), adrenal gland and intestine, suggesting that the primary role of P Glycoprotein is in the normal secretion of physiological metabolites and ingested chemicals into bile, urine and the lumen of the intestinal tract. Elevated levels of P Glycoprotein have also been reported in multidrug-resistant cell lines and in colon, endometrial, ovarian, and breast tumors, as well as in sarcomas and leukemias / lymphomas.

Product Detail

Function:
Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells.

Subunit:
Interacts with PSMB5.

Subcellular Location:
Cell membrane; Multi-pass membrane protein.

Tissue Specificity:
Expressed in liver, kidney, small intestine and brain.

DISEASE:
Genetic variations in ABCB1 are associated with susceptibility to inflammatory bowel disease type 13 (IBD13) [MIM:612244]. Inflammatory bowel disease is characterized by a chronic relapsing intestinal inflammation. It is subdivided into Crohn disease and ulcerative colitis phenotypes. Crohn disease may involve any part of the gastrointestinal tract, but most frequently the terminal ileum and colon. Bowel inflammation is transmural and discontinuous; it may contain granulomas or be associated with intestinal or perianal fistulas. In contrast, in ulcerative colitis, the inflammation is continuous and limited to rectal and colonic mucosal layers; fistulas and granulomas are not observed. Both diseases include extraintestinal inflammation of the skin, eyes, or joints. Crohn disease and ulcerative colitis are commonly classified as autoimmune diseases.

Similarity:
Belongs to the ABC transporter superfamily. ABCB family. Multidrug resistance exporter (TC 3.A.1.201) subfamily.
Contains 2 ABC transmembrane type-1 domains.

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Contains 2 ABC transporter domains.

SWISS:
P21447

Gene ID:
5243

Database links:

Entrez Gene: 5243 Human

Entrez Gene: 18669 Mouse

Entrez Gene: 170913 Rat

Entrez Gene: 24646 Rat

Omim: 171050 Human

SwissProt: P08183 Human

SwissProt: P06795 Mouse

SwissProt: P43245 Rat

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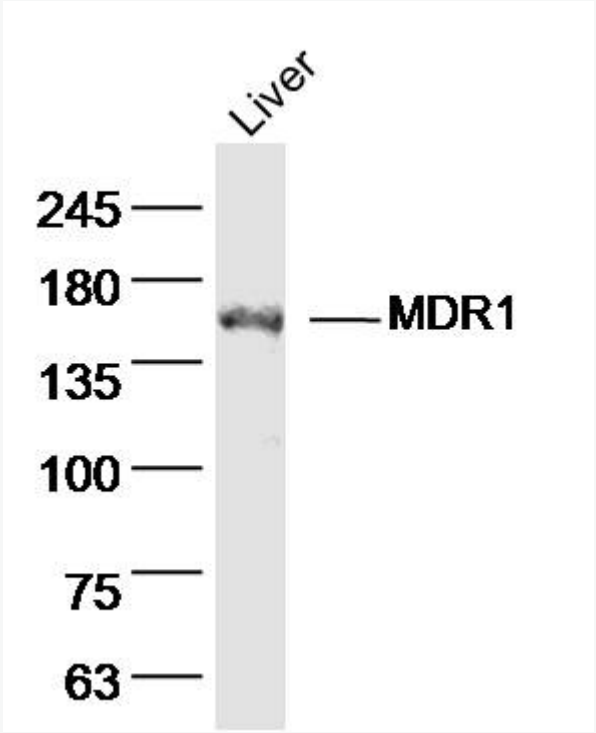
Product Picture



Sample: Liver (mouse) Lysate at 40 ug

Primary: Anti- MDR1 (SL0563R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 141kD

Observed band size: 150kD

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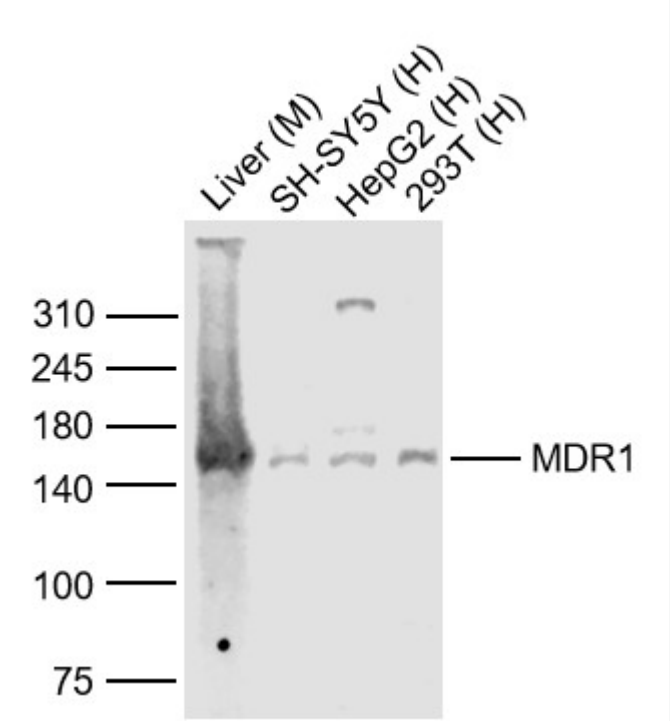

Sample:

Lane 1: Liver (Mouse) Lysate at 40 ug

Lane 2: SH-SY5Y (Human) Cell Lysate at 30 ug

Lane 3: HepG2 (Human) Cell Lysate at 30 ug

Lane 4: 293T (Human) Cell Lysate at 30 ug

Primary: Anti-MDR1 (SL0563R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 150-180 kD

Observed band size: 150 kD

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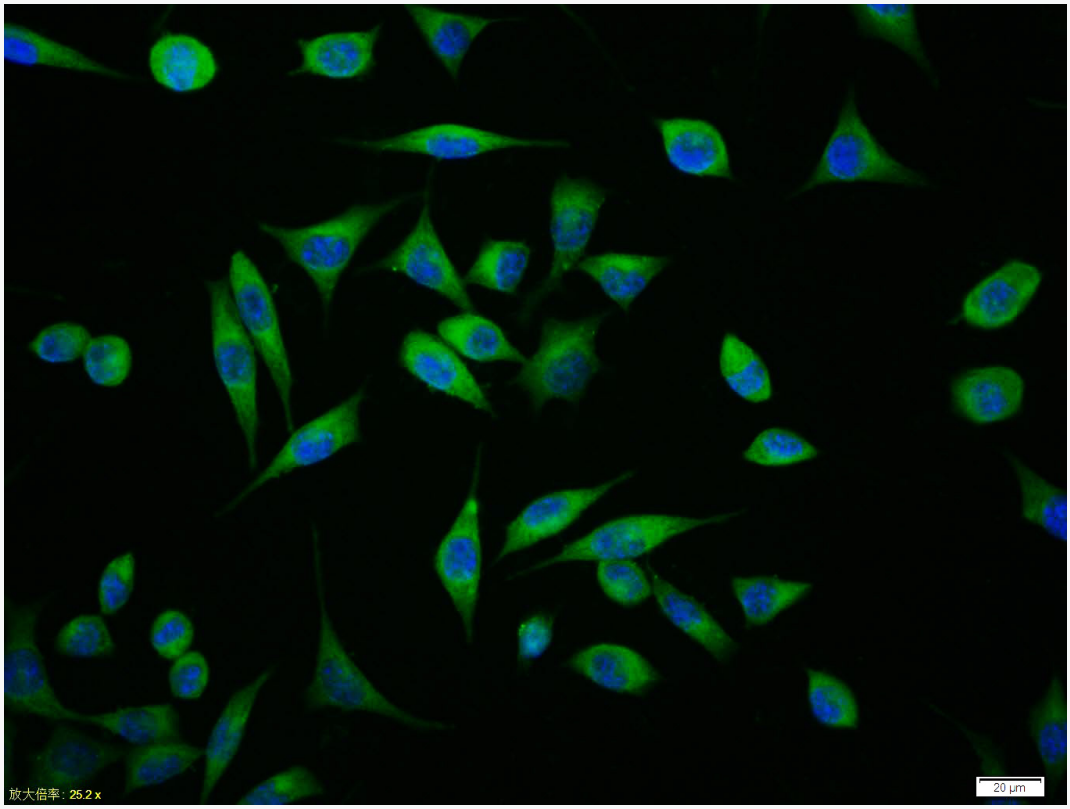

Tissue/cell:SH-SY5Y cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Antibody incubation with (MDR1) polyclonal Antibody, Unconjugated (SL0563R) 1:100, 90 minutes at 37°C; followed by a FITC conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

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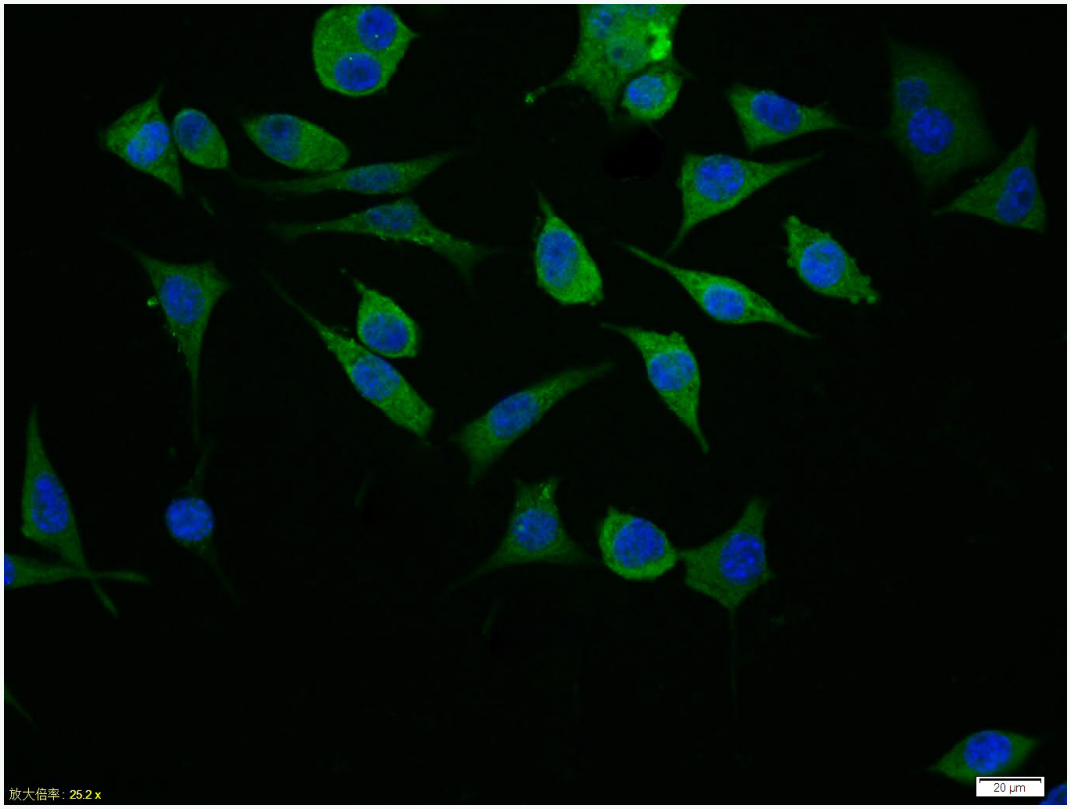

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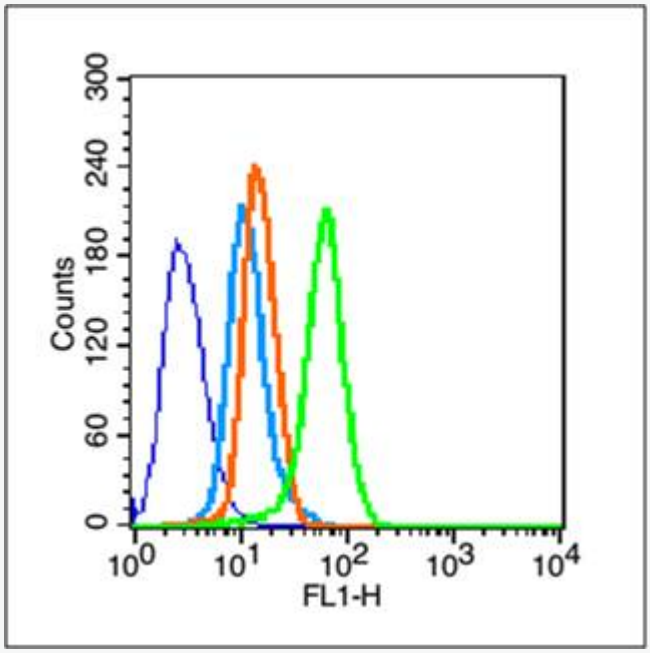

Blank control (blue line): Hela (fixed with 70% methanol (Overnight at -20°C) and then permeabilized with ice-cold 90% methanol for 30 min on ice).

Primary Antibody (green line): Rabbit Anti-MDR1 antibody (SL0563R),Dilution: 1µg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC,Dilution: 1µg /test.