#12683 Store at -20°C

MDR1/ABCB1 (D3H1Q) Rabbit mAb

☑ 100 µl
(10 western blots)

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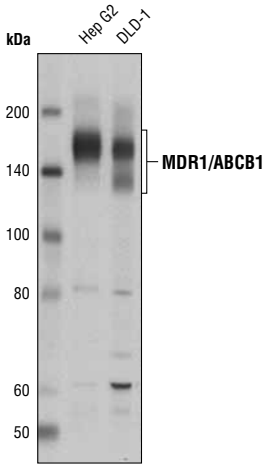
Entrez Gene ID #5243
UniProt ID #P08183

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP	H, (Mk)	130-180 kDa	Rabbit IgG**
Endogenous			

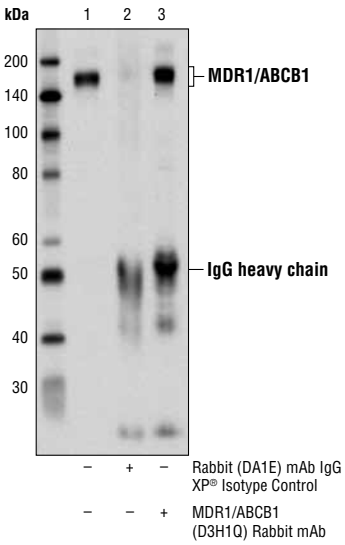
Background: MDR1/ABCB1 belongs to the Mdr/Tap subfamily of the ATP binding cassette transporter superfamily (1). Multidrug resistance 1 (MDR1) serves as an efflux pump for xenobiotic compounds with broad substrate specificity. MDR1 substrates include therapeutic agents such as actinomycin D, etoposide, imatinib and doxorubicin, as well as endogenous molecules including β-amyloids, steroid hormones, lipids, phospholipids, cholesterol and cytokines (2). Research studies have shown that MDR1 reduces drug accumulation in cancer cells, allowing the development of drug resistance (3-5). On the other hand, MDR1 expressed in the plasma membrane of cells in the blood-brain, blood-cerebral spinal fluid or blood-placenta barriers restricts the permeability of drugs into these organs from the apical or serosal side (6,7). MDR1 is also expressed in normal tissues with excretory function such as small intestine, liver and kidney (7). Intracellular MDR1 has been detected in the ER, vesicles and nuclear envelope, and has been associated with cell trafficking machinery (8). Other reported functions of MDR1 include viral resistance, cytokine trafficking (9,10), and lipid homeostasis in the peripheral and central nervous system (11-13).

Specificity/Sensitivity: MDR1/ABCB1 (D3H1Q) Rabbit mAb recognizes endogenous levels of total MDR1 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human MDR1 protein.



Western blot analysis of extracts from Hep G2 and DLD-1 cells using MDR1/ABCB1 (D3H1Q) Rabbit mAb.



Immunoprecipitation of MDR1/ABCB1 from Hep G2 cell extracts using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or MDR1/ABCB1 (D3H1Q) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using MDR1/ABCB1 (D3H1Q) Rabbit mAb.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

Background References:

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Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.