**BACKGROUND**

Cells selected for resistance to a single cytotoxic drug may become cross-resistant to a broad range of drugs with different structures and cellular targets. This phenomenon is called multiple drug resistance (MDR). Mdr proteins (Mdrs) are members of a highly conserved superfamily of ATP-binding cassette transport proteins. Mdr-1 is an apical transmembrane protein that is an integral part of the blood-brain barrier and functions as a drug-transport pump transporting a variety of drugs from the brain back into the blood. The Mdr-1 gene is known as ABCB1 and is located on human chromosome 7. The mouse homolog of Mdr-1 is known as Mdr-3. Interestingly, a murine protein by the name of Mdr-1 exists and is encoded by the murine Abcb1b gene, but it is not homologous with human Mdr-1.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ABCB1 (human) mapping to 7q21.12.

**SOURCE**

Mdr-1 (G-1) is a mouse monoclonal antibody raised against amino acids 1040-1280 of Mdr-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

Mdr-1 (G-1) is recommended for detection of Mdr-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:200-1,000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with Mdr-3.

Suitable for use as control antibody for Mdr-1 siRNA (h): sc-29395, Mdr-1 shRNA Plasmid (h): sc-29395-SH and Mdr-1 shRNA (h) Lentiviral Particles: sc-29395-V.

Molecular Weight of Mdr-1: 170 kDa.

Positive Controls: MES-SA/Dx5 whole cell lysate: sc-2284, HeLa whole cell lysate: sc-2200 or ZR-75-1 cell lysate: sc-2241.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


