**Mdr-1 (G-1): sc-13131**

**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 (Mdr1) 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 7q21.12. The mouse homolog of Mdr-1 is known as Mrdr-3. Interestingly, a murine protein by the name of Mrdr-1 exists and is encoded by the murine Abcb1b gene, but it is not homologous with human Mdr-1.

**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 IgG2b 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.

**DATA**

**SELECT PRODUCT CITATIONS**

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

**SELECTED REFERENCES**

**WEB SITE**
See our website at www.scbt.com for detailed protocols and support products.