**Background**

The two members of the large family of ABC transporters known to confer multidrug resistance in human cancer cells are the Mdr1 P-glycoprotein and the multidrug-resistance protein MRPI. MRPI is an integral membrane protein that contains an Mdr-like core, an N-terminal membrane-bound region and a cytoplasmic linker, and it is expressed in various cerebral cells, as well as in lung, testis and peripheral blood. The MRP gene family also includes MRPI, which is alternatively designated cMOAT (for canalicular multispecific organic anion transporter) and MRP3, which are both conjugate export pumps expressed predominantly in hepatocytes. MRP2 localizes exclusively to the apical membrane and is constitutively expressed at a high level in normal liver cells. Conversely, MRP3 localizes to the basolateral membrane where it also mediates the transport of the organic anion S-(2,4-dinitrophenyl)-glutathione toward the basolateral side of the membrane. MRP3 is normally expressed at comparatively lower levels than MRP2 and increases only when secretion across the apical membrane by MRP2 is impaired. MRP6 protein is highly expressed in liver and kidney, whereas MRP4 and MRP5 are detected in various tissues yet at much lower levels of expression.

**References**


**Chromosomal Location**

Genetic locus: ABCC5 (human) mapping to 3q27.1; Abcc5 (mouse) mapping to 16 A3.

**Source**

MRP5 (E-10) is a mouse monoclonal antibody raised against amino acids 1-100 mapping near the N-terminus of MRP5 of human origin.

**Product**

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

**Applications**

MRP5 (E-10) is recommended for detection of MRP5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MRP5 siRNA (h): sc-35965, MRP5 siRNA (m): sc-35966, MRP5 shRNA Plasmid (h): sc-35966-SH, MRP5 shRNA Plasmid (m): sc-35966-SH, MRP5 shRNA (h) Lentiviral Particles: sc-35965-V and MRP5 shRNA (m) Lentiviral Particles: sc-35966-V.

Molecular Weight of MRP5: 185 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, NIH/3T3 whole cell lysate: sc-2210 or PC-12 cell lysate: sc-2250.

**Recommended Support Reagents**

To ensure optimal results, the following support reagents are recommended:

**Data**

![Western Blot Analysis of MRP5 Expression](image)

MRP5 (E-10) sc-376965. Western blot analysis of MRP5 expression in NIH/3T3 (A) and PC-12 (B) whole cell lysates.

MRP5 (E-10) sc-376965. Western blot analysis of MRP5 expression in SK-N-SH whole cell lysate.

**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.

**Research Use**

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