

MONOCLONAL ANTIBODIES

AGAINST MEMBRANE TRANSPORTER PROTEINS

SOLVO Biotechnology is introducing **Monoclonal Antibodies** (Mabs) against a range of ABC membrane transporters.

ATP Binding Cassette (ABC) transporters form a special family of membrane proteins, characterized by homologous ATP-binding and large multispanning transmembrane domains.

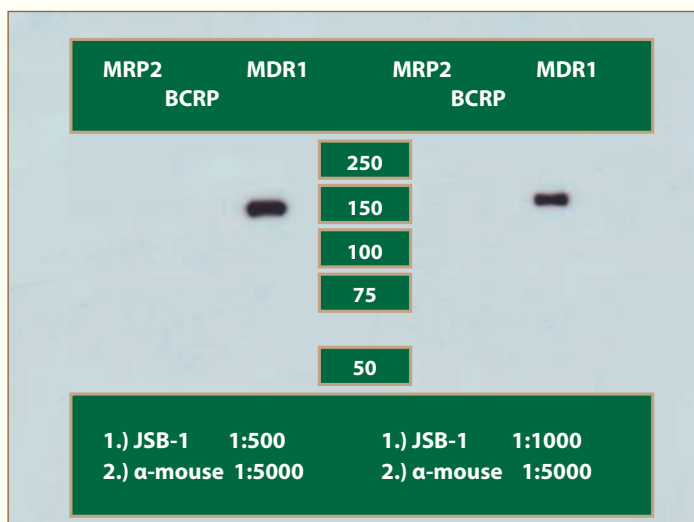
ABC transporters are present in the brush border membrane of intestinal cells, the canalicular and sinusoidal membrane of hepatocytes, the luminal and basolateral membrane in the proximal tubules of the kidney and in the endothelial cell of the brain capillaries and in the epithelial cells of the choroid plexus. Several members of this family are primary active transporters, which pump substrates out of cells by using ATP as an energy source. Many drugs act as either substrates and/or inhibitors of various ABC transporters and this can have a significant effect on the absorption, distribution, metabolism and excretion (ADME) of these drugs, their toxicity, and the potential for adverse drug-drug interactions. Overexpression of certain ABC transporters also participates in the Multidrug Resistance (MDR) of tumors. Monoclonal antibodies reactive to MDR related transporters are essential in the study of the presence and physiological functions of the transporters and the extent of their contribution to MDR.

SOLVO has developed and commercialized by far the most numerous and in many cases most inventive technologies to study transporter – drug interactions. By complementing its wide portfolio of transporter assays with Mabs, SOLVO builds up a unique and comprehensive product and service portfolio for membrane transporters.

Monoclonal antibodies have various applications. They can be used to detect the presence and quantity of their substance by a Western Blot test or an immunofluorescence test. Mabs can be very useful in the detection of antigen in fixed tissue sections (immunohistochemistry). They can also be employed to purify a substance with immunoprecipitation and affinity chromatography.

The following Monoclonal Antibodies are available from SOLVO:

MDR1/P-gp						
Cat. Number	Clone	Type	Ig-isotype	Reactivity (Species)	Quantity	Application
SB-JSB-1-MAB	JSB-1	mouse	mouse IgG1	human	0.5, 1mL	FC, IB, IC, IH



Western Blot detection of P-glycoprotein overexpression using JSB-1 (SB-JSB-1-MAB) on SOLVO membrane preparation

