

## Multidrug Resistance-related protein cMOAT/MRP2, clone M<sub>2</sub>I-4 Monoclonal Antibody

**Catalog No.:** MON 9026

**Quantity:** 1 ml

### Specificity

M<sub>2</sub>I-4 reacts with an internal epitope of cMOAT/MRP2, a 170-180 kD transmembrane protein known as the canalicular multi-organic anion transporter, absent in patients with the Dubin-Johnson syndrome, an autosomal recessive liver disorder characterized by chronic conjugated hyperbilirubinemia. cMOAT/MRP2 is closely related to the multidrug resistance related protein MRP, and cMOAT/MRP2 overexpression has been observed in a subset of cisplatin resistant cell lines. M<sub>2</sub>I-4 was raised against a bacterial fusion protein of cMOAB/MRP2, containing amino acids 215-310 of the protein. M<sub>2</sub>I-4 did not cross react with the human *MDR1*, *MRP1*, *MRP3* and *MRP5* gene products.

### Immunoglobulin type

Mouse IgG<sub>1</sub>

### Use

M<sub>2</sub>I-4 has potential value for detection of MRP2-mediated drug-resistance in human tumor samples. Immunocytochemistry: use 1:20-50 dil. on acetone fixed cytospin preparations. For immunohistochemistry: M<sub>2</sub>I-4 (use 1:20) on acetone fixed frozen sections can be followed by incubation with rabbit anti mouse IgG and a monoclonal mouse APAAP complex. After biotinylated rabbit anti mouse IgG and streptavidin conjugated to horseradish peroxidase. Flow cytometry: optimal conditions still to be established. Western blotting: use 1:20-50 dil, and anti-mouse HRP.

### Presentation

1 ml vials (>> 200 tests) containing antibody in serumfree culture supernatant, with 0.7% BSA and 0.1% sodium azide. Concentration approx. 500µg/ml.

### Literature

- Paulusma et al, Congenital jaundice in rats with a mutation in a multidrug resistance associated protein gene. *Science* 271, 1126-1128, 1996.
- Kool et al., Analysis of expression of cMOAB (MRP2), MRP3, MRP4 and MRP5, homologs of the multidrug resistance-associated protein gene (MRP1), in human cancer cell lines. *Cancer Res* 57, 3537-3547, 1997.

Safety information about the cell lines and culture media used in the production of the Mab.

### Mab producing cells:

The hybridoma cell line was obtained by fusion of lymph node cells from an immunized mouse (Balb/c) with SP2/O mouse myeloma cells.

### Culture medium:

RPMI-1640 (Gibco, Paisley, Scotland UK), supplemented with Nutridoma-SR (Boehringer, Indianapolis, USA). The medium does not contain serum nor added enzymes. The antibody solution has been filtered through a 0.22 micron filter.

### NOTE:

This monoclonal antibody has been produced in a clinical laboratory in which no animal viruses are being studied or cultured.



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