

Product datasheet for AM32051SU-N

OriGene Technologies, Inc.

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MRP2 (ABCC2) Mouse Monoclonal Antibody [Clone ID: M2I-4]

Product data:

Product Type: Primary Antibodies

Clone Name: M2I-4

Applications: IF, IHC, WB

Recommended Dilution: Western blotting: Use 1/20-1/50 dilution and anti Mouse HRP

Immunocytochemistry: Use 1/20-1/50 on acetone fixed cytospin preparations.

Immunohistochemistry on Acetone Fixed Frozen Sections: 1/20 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.

Reactivity: Human

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Bacterial fusion protein of cMOAB/MRP2, containing amino acids 215-310 of the protein.

Specificity: This Monoclonal antibody *M2I-4* reacts with an internal epitope of cMOAT/MRP2, a 170-180

kD transmembrane protein.

It did not cross react with the Human MDR1, MRP1, MRP3 and MRP5 gene products.

Formulation: State: Supernatant

State: Serum Free Culture Supernatant

Stabilizer: 0.7% BSA

Preservative: 0.09% Sodium Azide

Concentration: lot specific

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: ATP binding cassette subfamily C member 2

Database Link: Entrez Gene 1244 Human

Q92887





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 MRP1. MRP1 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 MRP2, 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 asolateral 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.

cMOAT/MRP2 is 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.

Synonyms:

Note:

CMOAT1, CMRP, Multidrug resistance-associated protein 2

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.