

AM32054SU-N**Monoclonal Antibody to ABCC1 / MRP1 - Supernatant**

Alternate names:	ATP-binding cassette sub-family C member 1, LTC4 transporter, Multidrug resistance-associated protein 1
Quantity:	1 ml
Concentration:	~ 250 µg Ig/ml
Background:	MRP1 (also known as ABCC, GS-X, ABC29) functions as a multispecific organic anion transporter, with (oxidized) glutathione, cysteinyl leukotrienes, and activated aflatoxin B1 as substrates. This protein also transports glucuronides and sulfate conjugates of steroid hormones and bile salts. It also transports drugs and other hydrophobic compounds in presence of glutathione. MRP1 protein is found predominantly in the heart, lung, small intestine, brain, and skin.
Uniprot ID:	P33527
NCBI:	NP_004987.2
GeneID:	4363
Host / Isotype:	Mouse / IgG1
Clone:	MRPm6
Immunogen:	Bacterial fusion protein of MRP, containing a segment of 170 amino acids in the carboxy terminal end and part of the carboxy proximal nucleotide binding domain of the protein.
Format:	State: Serum-Free Tissue Culture Supernatant Preservatives: 0.09% Sodium Azide Stabilizers: 0.7% BSA
Applications:	Flow Cytometry: 1/20-1/50. Cell permeabilization required with 10% lysing solution followed by primary antibody and anti-Mouse-FITC. Western blotting: 1/20-1/50. Immunocytochemistry on Aceton-Fixed Cell Preparation: 1/20-1/50. Immunohistochemistry on Acetone-Fixed Frozen Sections: 1/20-1/50, Immunocytochemistry on Formalin-Fixed Paraffin Embedded Tissues 1/20. Microwave pretreatment (0.01M Citrate Buffer, 10min at 100°C) may increase the performance of this antibody. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This Monoclonal antibody <i>MRPm6</i> reacts with an internal epitope of MRP, a 180-195 kD transmembrane transporter protein overexpressed in various Human non-P-glycoprotein MDR tumor cell lines. <i>MRPm6</i> does not cross react with the Human <i>MDR1</i> and <i>MDR3</i> gene products (Flens et al. 1994).
Species Reactivity:	Tested: Human.

- Add. Information:** **Mab producing cells:** The hybridoma cell line was obtained by fusion of lymph node cells from an immunized mouse (Balb/C) with SP2/0 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.
- 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.
Shelf life: one year from despatch.
- General Readings:**
1. Cole SP, Bhardwaj G, Gerlach JH, Mackie JE, Grant CE, Almquist KC, et al. Overexpression of a transporter gene in a multidrug-resistant human lung cancer cell line. *Science*. 1992 Dec 4;258(5088):1650-4. PubMed PMID: 1360704.
 2. Flens MJ, Izquierdo MA, Scheffer GL, Fritz JM, Meijer CJ, Scheper RJ, et al. Immunochemical detection of the multidrug resistance-associated protein MRP in human multidrug-resistant tumor cells by monoclonal antibodies. *Cancer Res*. 1994 Sep 1;54(17):4557-63. PubMed PMID: 7914828.
 3. Zaman GJ, Flens MJ, van Leusden MR, de Haas M, Mulder HS, Lankelma J, et al. The human multidrug resistance-associated protein MRP is a plasma membrane drug-efflux pump. *Proc Natl Acad Sci U S A*. 1994 Sep 13;91(19):8822-6. PubMed PMID: 7916458.
 4. Schadendorf D, Makki A, Stahr C, van Dyck A, Wanner R, Scheffer GL, et al. Membrane transport proteins associated with drug resistance expressed in human melanoma. *Am J Pathol*. 1995 Dec;147(6):1545-52. PubMed PMID: 7495278.
 5. Nooter K, Westerman AM, Flens MJ, Zaman GJ, Scheper RJ, van Wingerden KE, et al. Expression of the multidrug resistance-associated protein (MRP) gene in human cancers. *Clin Cancer Res*. 1995 Nov;1(11):1301-10. PubMed PMID: 9815925.
 6. Flens MJ, Zaman GJ, van der Valk P, Izquierdo MA, Schroeijers AB, Scheffer GL, et al. Tissue distribution of the multidrug resistance protein. *Am J Pathol*. 1996 Apr;148(4):1237-47. PubMed PMID: 8644864.
 7. Scheffer GL, Kool M, Heijn M, de Haas M, Pijnenborg AC, Wijnholds J, et al. Specific detection of multidrug resistance proteins MRP1, MRP2, MRP3, MRP5, and MDR3 P-glycoprotein with a panel of monoclonal antibodies. *Cancer Res*. 2000 Sep 15;60(18):5269-77. PubMed PMID: 11016657.