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Product Information

Anti-MRP3

produced in rabbit, affinity isolated antibody

Catalog Number **M0318**

Synonym: Anti-Multidrug Resistance Associated Protein 3

Product Description

Anti-MRP3 is produced in rabbit using as immunogen a synthetic peptide corresponding to the C-terminal amino acid residues 1507-1527 of human MRP3 (GeneID: 8714) with N-terminal added cysteine, conjugated to KLH. The corresponding sequence in rat and mouse differs by three residues. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-MRP3 recognizes human and rat MRP3. Applications include immunoblotting (~180 kDa) and immunofluorescence staining. Detection of the MRP3 band by immunoblotting is specifically inhibited with the immunizing peptide.

Multidrug Resistance-associated Protein 3 (MRP3), also designated ABCC3, is a member of the CFTR/MRP (ABCC) subfamily of the large ATP-Binding Cassette (ABC) transporter family of transmembrane proteins. Seven MRPs are known. These integral glycoproteins function as export 'pumps' and extrude a broad range of compounds from the cell. Together with MDR1 (Pgp1) and the Lung Resistance-related Protein (LRP, MVP) MRP1-3 are involved in the simultaneous expression of cellular resistance to a variety of structurally and functionally unrelated drugs (Multidrug Resistance).^{1,2} This phenomenon is considered a major obstacle to successful chemotherapy. MRP3 is normally expressed in the liver, gallbladder, kidney tubules, adrenal, pancreas, placenta, ileum, colon, and outer root sheath of hair follicles.¹⁻⁸ Localization pattern appears to vary in different species. MRP3 is predominantly localized to the basolateral membrane of polarized epithelial cells. MRP3 transports endogenous and exogenous anionic conjugates from hepatocytes and enterocytes into the blood. Up regulation of MRP3 expression may be found in certain tumors and liver cells under cholestatic conditions and agents.^{5,7} It is also up regulated in the MRP2-deficient Dubin-Johnson patients.

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody concentration: 1.2-1.5 mg/ml

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. Repeated freezing and thawing, or storage in frost-free freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2.5-5 µg/mL is recommended using a whole cell extract of HCT-116 human colon carcinoma cells and a chemiluminescent detection reagent.

Indirect immunofluorescence: a working concentration of 15-30 µg/mL is recommended using acetone-fixed rat skin frozen sections showing staining of outer root sheaths of hair follicles.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

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