

Recombinant Rat Abcc2

Cat. No. Abcc2-2538R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Abcc2 was expressed in Sf9 cells.
Species	Rat
Source	Sf9 Cells
Description	MRP2 (ABCC2) is an organic anion transporter found in liver, kidney, and gut epithelium apical membranes. The transport of glucuronate conjugates plays a role in the detoxification of endogenous and xenobiotic substances, and may cause multidrug resistance (MDR) in tumor cells. The rat Mrp2 transporter shows 72.3% sequence identity and 85.6% sequence similarity with human MRP2. Both transporters are expressed on the canalicular membrane of the liver and are known to be responsible for the transport of some organic molecules and their conjugates to the bile.
Form	Supplied as isolated Sf9 cell membranes containing rat Mrp2 suspended in TMEP solution.
Biochem/physiol Actions	Detection of ATPase activity of the Mrp2 protein is a measure of transporter activity. The assay is performed using purified membrane vesicles from Sf9 (<i>Spodoptera frugiperda</i>) cells, expressing high levels of Mrp2 protein. ABC transporters pump substrates out of the cell by using hydrolysis of ATP as an energy source. ATP hydrolysis yields inorganic phosphate (Pi), which can be detected by a simple colorimetric reaction. The amount of Pi liberated is proportional to the activity of the

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transporter.

Analysis Note

Membrane preparations containing ABC transporters show a baseline ATPase activity that varies for different transporters. Transported substrates increase this baseline ATPase activity, while inhibitors or slowly transported compounds inhibit the baseline ATPase activity and/or the ATPase activity measured in the presence of a stimulating agent. Both activation and inhibition studies can be performed.

Storage

-70°C.

GENE INFORMATION

Gene Name

[Abcc2 ATP-binding cassette, sub-family C \(CFTR/MRP\), member 2 \[Rattus norvegicus \]](#)

Synonyms

Abcc2; ATP-binding cassette, sub-family C (CFTR/MRP), member 2; Mrp2; Cmoat; canalicular multispecific organic anion transporter 1; canalicular multidrug resistance protein; multidrug resistance associated protein 2; multidrug resistance-associated protein 2; ATP-binding cassette sub-family C member 2; calicular multispecific organic anion transporter

Gene ID

[25303](#)

mRNA Refseq

[NM_012833](#)

Protein Refseq

[NP_036965](#)

UniProt ID

[Q63120](#)

Chromosome
Location

1q51

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Pathway	ABC transporters
Function	ATP binding; ATPase activity; ATPase activity, coupled to transmembrane movement of substances; nucleotide binding; organic anion transmembrane transporter activity TAS; protein domain specific binding; transporter activity

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