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# KD-Validated Anti-ABCC1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1330

## Product Information

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| **Application** | WB, FC |
| **Primary Accession** | P33527 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | 25GB2970 |
| **Calculated MW** | 171591 |
| **Gene Name** | ABCC1 |
| **Aliases** | ABCC1; ATP Binding Cassette Subfamily C Member 1 (ABCC1 Blood Group); GS-X; MRP1; MRP; ATP-Binding Cassette, Sub-Family C (CFTR/MRP), Member 1; Glutathione-S-Conjugate-Translocating ATPase ABCC1; ATP Binding Cassette Subfamily C Member 1; Multidrug Resistance-Associated Protein 1; Glutathione S-Conjugate Export Pump; Leukotriene C(4) Transporter; LTC4 Transporter; ATP-Binding Cassette Transporter Variant ABCC1delta-Ex13&14; ATP-Binding Cassette Transporter Variant ABCC1delta-Ex25&26; ATP-Binding Cassette Transporter Variant ABCC1delta-Ex13; ATP-Binding Cassette Transporter Variant ABCC1delta-Ex25; ATP-Binding Cassette Sub-Family C Member 1; Multidrug Resistance Associated Protein 1; EC 3.6.3.44; EC 7.6.2.2; EC 7.6.2.3; EC 3.6.3; DFNA77; ABC29; ABCC |
| **Immunogen** | A synthesized peptide derived from human MRP1 |

## Additional Information

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| **Gene ID** | 4363 |
| **Other Names** | Multidrug resistance-associated protein 1, 7.6.2.2, ATP-binding cassette sub-family C member 1, Glutathione-S-conjugate-translocating ATPase ABCC1, Leukotriene C(4) transporter, LTC4 transporter, ABCC1 (HGNC:51), MRP, MRP1 |

## Protein Information

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| **Name** | ABCC1 ( HGNC:51) |
| **Function** | ATP-dependent transporter of the ATP-binding cassette (ABC) family that hydrolyzes ATP to enable the active transport of organic anions conjugated with glutathione, glucuronate or sulfate. Operates at the plasma membrane where it mediates the efflux of substrates from the cytoplasm into the extracellular space. The rate of transport is in some way coupled to the reduced glutathione (GSH) intracellular levels (PubMed:10064732, PubMed:11114332, PubMed:16230346, PubMed:8640791, PubMed:7961706, PubMed:9281595). Mediates the systemic release of glutathione-conjugated leukotriene C4 (LTC4) from myeloid cells such as mast cells, as part of the |

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| | inflammatory response (PubMed:10064732, PubMed:11114332, PubMed:7961706, PubMed:8640791). Exports S- geranylgeranyl-glutathione (GGG) in lymphoid cells and stromal compartments of lymphoid organs. ABCC1 (via extracellular transport) with GGT5 (via GGG catabolism) establish GGG gradients within lymphoid tissues to position P2RY8-positive lymphocytes at germinal centers in lymphoid follicles and restrict their chemotactic transmigration from blood vessels to the bone marrow parenchyma (By similarity). Mediates basolateral export of GSH-conjugated R- and S-prostaglandin A2 diastereomers in polarized epithelial cells (PubMed:9426231). Can export both GSH and its oxidized form GSSG in a protective mechanism that limits cellular damage especially during oxidative stress. Regulates GSH and GSSG release from astrocytes to maintain glutathione redox equilibrium in the brain (PubMed:16230346, PubMed:8640791). Transports signaling molecules. Appears to selectively recognize cyclic 2'3'-GMP-AMP (cGAMP) produced by mammals but not 3'3'-cGAMP produced by bacteria. Mediates 2'3'-cGAMP export and limits intracellular cGAMP- mediated cGAS-STING signaling and type I interferon synthesis (PubMed:36070769, PubMed:39765229). Exports sphingosine 1-phosphate from mast cells independently of their degranulation (PubMed:17050692). Confers resistance to anticancer drugs by mediating ATP- and GSH- dependent drug export (PubMed:9281595). Similarly to MRP2, transports various steroids, bile acids and bilirubin conjugates (PubMed:8640791, PubMed:9355767). |
| **Cellular Location** | Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein |
| **Tissue Location** | Lung, testis and peripheral blood mononuclear cells |

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