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Goat Anti-ABCC4 / MRP4 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1010a

Specification

Goat Anti-ABCC4 / MRP4 Antibody - Product Information

Application	**WB, IHC, IF, ICC, E**
Primary Accession	O15439
Other Accession	NP_005836, 10257, 170924 (rat)
Reactivity	**Human, Rat**
Predicted	**Mouse**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5mg/ml**
Isotype	**IgG**
Calculated MW	**149527**

Goat Anti-ABCC4 / MRP4 Antibody - Additional Information

Gene ID 10257

Other Names
Multidrug resistance-associated protein 4, ATP-binding cassette sub-family C member 4, MRP/cMOAT-related ABC transporter, Multi-specific organic anion transporter B, MOAT-B, ABCC4, MRP4

Dilution
WB~~1:1000
IHC~~1:100~500
IF~~1:50~200
ICC~~N/A
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-ABCC4 / MRP4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ABCC4 / MRP4 Antibody - Protein Information

Name ABCC4

Synonyms MOATB, MRP4

Function
ATP-dependent transporter of the ATP-binding cassette (ABC) family that actively extrudes physiological compounds and xenobiotics from cells. Transports a range of endogenous molecules that have a key role in cellular communication and signaling, including cyclic nucleotides such as cyclic AMP (cAMP) and cyclic GMP (cGMP), bile acids, steroid conjugates, urate, and prostaglandins (PubMed:11856762, PubMed:12523936, PubMed:12835412, PubMed:12883481, PubMed:15364914, PubMed:15454390, PubMed:16282361, PubMed:17959747, PubMed:18300232, PubMed:26721430). Mediates the ATP-dependent efflux of glutathione conjugates such as leukotriene C4 (LTC4) and leukotriene B4 (LTB4) too. The presence of GSH is necessary for the ATP-dependent transport of LTB4, whereas GSH is not required for the transport of LTC4 (PubMed:17959747). Mediates the cotransport of bile acids with reduced glutathione (GSH) (PubMed:12523936, PubMed:12883481, PubMed:16282361). Transports a wide range of drugs and their metabolites, including anticancer, antiviral and antibiotics molecules (PubMed:11856762, PubMed:12105214, PubMed:15454390, PubMed:17344354, PubMed:18300232). Confers resistance to anticancer agents such as methotrexate (PubMed:11106685).

Cellular Location
Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Its localization to the basolateral or apical membranes is tissue-dependent.

Tissue Location
Widely expressed, with particularly high levels in prostate, but is barely detectable in liver. sinusoidal membrane of hepatocytes

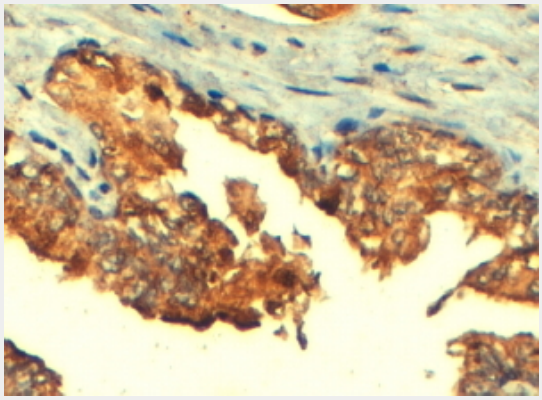
Goat Anti-ABCC4 / MRP4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

- Flow Cytomety
- Cell Culture

Goat Anti-ABCC4 / MRP4 Antibody - Images



AF1010a (4 µg/ml) staining of paraffin embedded Human Prostate. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

Goat Anti-ABCC4 / MRP4 Antibody - Background

The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MRP subfamily which is involved in multi-drug resistance. The specific function of this protein has not yet been determined; however, this protein may play a role in cellular detoxification as a pump for its substrate, organic anions. Alternative splicing results in multiple splice variants encoding different isoforms.

Goat Anti-ABCC4 / MRP4 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. A Japanese-specific allele in the GALNT11 gene. Yuasa I, et al. Leg Med (Tokyo), 2010 Jul. PMID 20547088. Aryl hydrocarbon receptor and NF-E2-related factor 2 are key regulators of human MRP4 expression. Xu S, et al. Am J Physiol Gastrointest Liver Physiol, 2010 Jul. PMID 20395535. The multidrug-resistance protein 4 polymorphism is a new factor accounting for thiopurine sensitivity in Japanese patients with inflammatory bowel disease. Ban H, et al. J Gastroenterol, 2010 Apr 15. PMID 20393862. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.