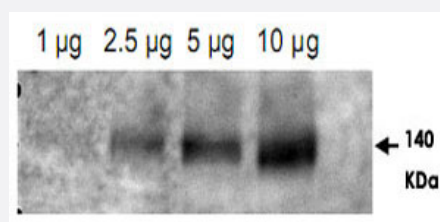


ABCB1 polyclonal antibody

Catalog # PAB9962 Size 100 ug

Applications

Western Blot (Transfected lysate)



Western blot using ABCB1 polyclonal antibody (Cat # PAB9962) shows detection of ABCB1 in crude membrane extracts from HF insect cells over-expressing human ABCB1.

The extract was loaded onto a gel in the amounts indicated followed by electrophoresis and transfer to nitrocellulose.

The membrane was probed with the primary antibody diluted to 1 : 600, followed by Peroxidase Conjugated Affinity Purified Anti-Rabbit IgG at 1 : 10,000.

Personal Communication, Anna Calcagno, CCR-NCI, Bethesda, MD.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of ABCB1.
Immunogen	A synthetic peptide corresponding to amino acids 262-277 of human ABCB1.
Host	Rabbit
Reactivity	Dog, Human, Monkey, Mouse, Rat
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:10000-1:50000) Western Blot (1:200-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)

Storage Instruction

Store at 4°C. For long term storage store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Transfected lysate)

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Personal Communication, Anna Calcagno, CCR-NCI, Bethesda, MD.

- Immunohistochemistry

- Enzyme-linked Immunoabsorbent Assay

Gene Info — ABCB1

Entrez GeneID[5243](#)**Protein Accession#**[NP_000918:P08183](#)**Gene Name**

ABCB1

Gene Alias

ABC20, CD243, CLCS, GP170, MDR1, MGC163296, P-GP, PGY1

Gene Description

ATP-binding cassette, sub-family B (MDR/TAP), member 1

Omim ID[171050](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

The membrane-associated 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 MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier. [provided by RefSeq]

Other Designations

ATP-binding cassette, subfamily B, member 1|P-glycoprotein 1|P-glycoprotein 1|colchicin sensitivity|doxorubicin resistance|multidrug resistance 1|multidrug resistance protein 1

Publication Reference

- [The remarkable transport mechanism of P-glycoprotein: a multidrug transporter.](#)

Al-Shawi MK, Omote H.

Journal of Bioenergetics and Biomembranes 2005 Dec; 37(6):489.

- [Epigenetic changes to the MDR1 locus in response to chemotherapeutic drugs.](#)

Baker EK, Johnstone RW, Zalcborg JR, El-Osta A.

Oncogene 2005 Dec; 24(54):8061.

Application: WB, Human, CEM-Bcl2, SW620 cells

- [Modulation of MDR1 gene expression in multidrug resistant MCF7 cells by low concentrations of small interfering RNAs.](#)

Stierlé V, Laigle A, Jollès B.

Biochemical Pharmacology 2005 Nov; 70(10):1424.

Application: WB, Human, MCF-7 cells

Pathway

- [ABC transporters](#)

Disease

- [Acquired Immunodeficiency Syndrome](#)
- [Acute Disease](#)
- [Addison Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Alcoholism](#)
- [Alzheimer disease](#)

- [Amnesia](#)
- [Anemia](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Bipolar Disorder](#)
- [Birth Weight](#)
- [Body Weight](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Central Nervous System Diseases](#)
- [Central Nervous System Neoplasms](#)
- [Child Development Disorders](#)
- [Cholangitis](#)
- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cognition Disorders](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)

- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Restenosis](#)
- [Crohn Disease](#)
- [Cystadenocarcinoma](#)
- [Cystic fibrosis](#)
- [Delayed Graft Function](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diarrhea](#)
- [Disease Progression](#)
- [Drug Toxicity](#)
- [Drug-Induced Liver Injury](#)
- [Duodenal Ulcer](#)
- [Dyskinesia](#)
- [Dyslipidemias](#)
- [Edema](#)
- [Encephalomyelitis](#)
- [Endometrial Neoplasms](#)
- [Epilepsies](#)
- [Epilepsy](#)
- [Esophageal Neoplasms](#)
- [Familial Mediterranean fever](#)
- [Femur Head Necrosis](#)

- [Gastritis](#)
- [Gastroesophageal Reflux](#)
- [Gastrointestinal Diseases](#)
- [Gastrointestinal Stromal Tumors](#)
- [Gastroparesis](#)
- [Genetic Predisposition to Disease](#)
- [Gilbert Disease](#)
- [Gingival Hyperplasia](#)
- [Gingival Overgrowth](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Hashimoto Disease](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hemophilia A](#)
- [Hemorrhage](#)
- [Hepatitis B](#)
- [Heroin Dependence](#)
- [HIV Infections](#)
- [HIV Seropositivity](#)
- [Hyperbilirubinemia](#)
- [Hypercholesterolemia](#)
- [Hyperlipidemias](#)

- [Hyperlipoproteinemia Type II](#)
- [Hypertension](#)
- [Hyperthyroidism](#)
- [Hyponatremia](#)
- [Hypotension](#)
- [Hypothyroidism](#)
- [Infection](#)
- [Infertility](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)
- [Leukopenia](#)
- [Liver Cirrhosis](#)
- [Liver Diseases](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malaria](#)

- [Marijuana Abuse](#)
- [Mental Disorders](#)
- [Mental Status Schedule](#)
- [Metabolic Syndrome X](#)
- [Microsatellite Instability](#)
- [Miosis](#)
- [Mood Disorders](#)
- [Movement Disorders](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Myasthenia Gravis](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Nausea](#)
- [Neoplasm](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Nephrotic Syndrome](#)
- [Nervous System Diseases](#)
- [Neuropsychological Tests](#)
- [Neurotoxicity Syndromes](#)
- [Neutropenia](#)
- [Obesity](#)

- [Opioid-Related Disorders](#)
- [Opportunistic Infections](#)
- [Osteonecrosis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pain](#)
- [Pain Threshold](#)
- [Pancreatitis](#)
- [Parkinson disease](#)
- [Peptic Ulcer](#)
- [Peripheral Nervous System Diseases](#)
- [Postoperative Complications](#)
- [Postoperative Nausea and Vomiting](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pruritus](#)
- [Psychiatric Status Rating Scales](#)
- [Psychomotor Performance](#)
- [Psychotic Disorders](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Respiratory Distress Syndrome](#)
- [Respiratory Insufficiency](#)
- [Retinal Diseases](#)
- [Schizophrenia](#)

- [Schizophrenic Psychology](#)
- [Sclerosis](#)
- [Skin Neoplasms](#)
- [Sleep](#)
- [Sleep Stages](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Stroke](#)
- [Thrombocytopenia](#)
- [Tobacco Use Disorder](#)
- [Tremor](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urogenital Neoplasms](#)
- [Urologic Neoplasms](#)
- [Vasculitis](#)
- [Vision Disorders](#)
- [Vomiting](#)
- [Water Intoxication](#)
- [Weight Gain](#)
- [Werner syndrome](#)