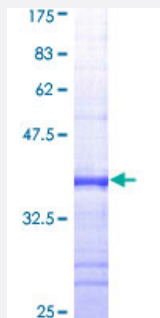


ABCB1 (Human) Recombinant Protein (Q01)

Catalog # H00005243-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ABCB1 partial ORF (NP_000918, 620 a.a. - 709 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	GIYFKLVMTAGNEVELENAADESKSEIDALEMSSNDSRSSLIRKRSTRRSVRGSQAQDRKLST KEALDESIPPVSFWRIMKLNLTWP
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	35.64
Interspecies Antigen Sequence	Mouse (73); Rat (70)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ABCB1

Entrez GeneID [5243](#)

GeneBank Accession# [NM_000927](#)

Protein Accession# [NP_000918](#)

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

- [Quantitative Atlas of Membrane Transporter Proteins: Development and Application of a Highly Sensitive Simultaneous LC/MS/MS Method Combined with Novel In-silico Peptide Selection Criteria.](#)

Kamiie J, Ohtsuki S, Iwase R, Ohmine K, Katsukura Y, Yanai K, Sekine Y, Uchida Y, Ito S, Terasaki T.

Pharmaceutical Research 2008 Jan; 25(6):1469.

Application: Quant, Human, LLC-GA5-CoL300 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](#)