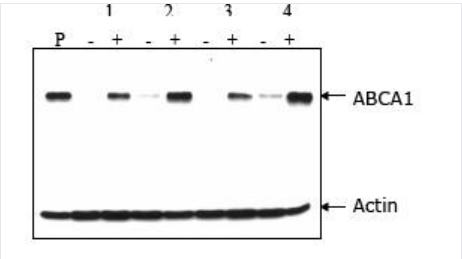
ABC A1 (ABCA1) Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	ABC A1 (ABCA1), Monoclonal Antibody
Full Product Name	ABC A1 (ATP-binding Cassette (ABC) Tansporter 1) (MaxLight 550)
Product Gene Name	anti-ABCA1 antibody
Clonality	Monoclonal
Isotype	IgG1
Clone Number	7i4
Host	Mouse
Species Reactivity	Chicken, Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight550.
Purity/Purification	Purified
Specificity	Recognizes human ABCA1. Species Crossreactivity: mouse and chicken.
Preparation and Storage	Store at 4 degree C. Do Not Freeze.
Molecular Weight	254,302 Da
Chromosome Location	Chromosome: 9; NC_000009.11 (107543283..107690527, complement). Location: 9q31.1
OMIM	205400
3D Structure	ModBase 3D Structure for O95477
Immunogen	Synthetic peptide from human ABC A1 containing amino acids 1800-2260.
Conjugate	MaxLight550
Product Categories/Family for anti-ABCA1 antibody	Antibodies; Multi Drug Resistance (MDR)
Applications Tested/Suitable for anti-ABCA1 antibody	FLISA, Immunohistochemistry (IHC), Immunoprecipitation (IP), Western Blot (WB)
Related Product Information for anti-ABCA1 antibody	MBS6246162 is an antibody targeting ABCA1. Also known as ABC A1 (ATP-binding Cassette (ABC) Tansporter 1) (MaxLight 550). Reactive in Chicken, Human, Mouse. Host: Mouse.
Other Notes	Small volumes of anti-ABCA1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-ABCA1 antibody
Western blot analysis of ABCA1 induction by cholesterol (+) in human fibroblast cells from different patients (1,2,3,4). Simultaneous bloting with anti-actin antibody was used for protein loading control. Optimal working dilutions must be determined by end user.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ABCA1. It may not necessarily be applicable to this product.

NCBI GI #	21536376
NCBI GeneID	19
NCBI Accession #	NP_005493.2
UniProt Primary Accession #	O95477
UniProt Secondary Accession #	Q5VX33; Q96S56; Q96T85; Q9NQV4; Q9UN06; Q9UN07; Q9UN08; Q9UN09
UniProt Related Accession #	O95477
GenBank Nucleotide #	NM_005502.2
NCBI Official Full Name	ATP-binding cassette sub-family A member 1
NCBI Official Synonym Full Names	ATP-binding cassette, sub-family A (ABC1), member 1
NCBI Official Symbol	ABCA1
NCBI Official Synonym Symbols	TGD; ABC1; CERP; ABC-1; HDLDT1
UniProt Protein Name	ATP-binding cassette sub-family A member 1
UniProt Synonym Protein Names	ATP-binding cassette transporter 1; ABC-1; ATP-binding cassette 1; Cholesterol efflux regulatory protein
Protein Family	ABC transporter A family
UniProt Gene Name	ABCA1
UniProt Synonym Gene Names	ABC1; CERP; ABC-1
UniProt Entry Name	ABCA1_HUMAN
NCBI Protein Information	ATP-binding cassette sub-family A member 1; membrane-bound; ATP-binding cassette transporter A1; cholesterol efflux regulatory protein
NCBI Summary for ABCA1	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 intracellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ABC1 subfamily. Members of the ABC1 subfamily comprise the only major ABC subfamily found exclusively in multicellular eukaryotes. With cholesterol as its substrate, this protein functions as a cholesteral efflux pump in the cellular lipid removal pathway. Mutations in this gene have been associated with Tangier's disease and familial high-density lipoprotein deficiency. [provided by RefSeq, Jul 2008]

UniProt Comments for ABCA1	ABCA1: an ATP-binding cassette (ABC) transporter that regulates cholesterol homeostasis and insulin secretion in beta-cells, and protects against cardiovascular disease. Inactivation of ABCA1 in beta-cells markedly impairs glucose tolerance and insulin secretion in mice. Rosiglitazone, an activator of the peroxisome proliferator-activated receptor-gamma, upregulates ABCA1 in beta-cells. ABCA1 expression in beta-cells is required for the beneficial effects of rosiglitazone on glucose tolerance. Mediates the transport of cholesterol and phospholipids from cells to HDL apolipoproteins, modulating HDL levels and atherogenesis. Induced by bacterial lipopolysaccharides (LPS) and repressed by ZNF202. Phosphorylation on Ser-2054 regulates phospholipid efflux. Unsaturated fatty acids destabilize ABCA1 by activating a PKC-delta pathway that phosphorylates ABCA1 serines. Defects in ABCA1 are a cause of high density lipoprotein deficiencies. Protein type: Membrane protein, integral; Vesicle; Transporter; Membrane protein, multi-pass; Transporter, ABC family Chromosomal Location of Human Ortholog: 9q31.1 Cellular Component: Golgi apparatus; integral to plasma membrane; perinuclear region of cytoplasm; endocytic vesicle; plasma membrane; phagocytic vesicle; external side of plasma membrane; lipid raft Molecular Function: apolipoprotein A-I receptor activity; ATPase activity; cholesterol binding; apolipoprotein binding; ATPase binding; apolipoprotein A-I binding; small GTPase binding; protein binding; syntaxin binding; phospholipid transporter activity; cholesterol transporter activity; phospholipid binding; anion transmembrane transporter activity; ATP binding; receptor binding Biological Process: response to drug; cholesterol metabolic process; regulation of Cdc42 protein signal transduction; lipoprotein metabolic process; intracellular cholesterol transport; cholesterol efflux; cellular lipid metabolic process; endosome transport; phospholipid translocation; G-protein coupled receptor protein signaling pathway; cholesterol homeostasis; reverse cholesterol transport; phospholipid efflux; platelet dense granule organization and biogenesis; lysosome organization and biogenesis; response to low density lipoprotein stimulus; positive regulation of cAMP biosynthetic process; protein amino acid lipidation; interleukin-1 beta secretion; phagocytosis, engulfment; response to nutrient; phospholipid homeostasis; peptide secretion Disease: Hypoalphalipoproteinemia, Primary; Tangier Disease; Hypercholesterolemia, Familial
Research Articles on ABCA1	**1.** Results show that Carriers of loss of function ABCA1 mutations display a larger atherosclerotic burden compared with age and sex-matched controls, implying a higher risk for CVD
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