

# Rabbit Anti-ABCA1 antibody

# SL23419R

Product Name:	ABCA1
Chinese Name:	腺苷三磷酸结合盒转运体A1抗体
Alias:	ABC1; ATP binding cassette transporter A1; ABC 1; ABC Transporter 1; ABCA 1; ABCA1; ATP binding Cassette 1; ATP binding cassette sub family A ABC1 member 1; ATP binding cassette sub family A member 1; ATP binding cassette sub-family A member 1; ATP binding Cassette Transporter 1; ATP-binding Cassette 1; ATP-binding Cassette Transporter 1; CERP; Cholesterol Efflux Regulatory Protein; FLJ14958; HDLDT1; Membrane bound; MGC164864; MGC165011; TD; TGD; ABCA1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Horse, Rabbit, Zebrafish, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	254kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ABCA1:501-600/2261 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

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. In humans, this protein functions as a cholesterol efflux pump in the cellular lipid removal pathway. Mutations in the human gene have been associated with Tangier's disease and familial high-density lipoprotein deficiency.

#### Function:

cAMP-dependent and sulfonylurea-sensitive anion transporter. Key gatekeeper influencing intracellular cholesterol transport.

#### Subunit:

Interacts with MEGF10.

### **Subcellular Location:**

Membrane; Multi-pass membrane protein.

# Tissue Specificity:

Widely expressed in adult tissues. Highest levels are found in pregnant uterus and uterus.

#### Product Detail:

#### Post-translational modifications:

Phosphorylation on Ser-2054 regulates phospholipid efflux. Palmitoylation by DHHC8 is essential for membrane localization.

#### DISEASE:

Defects in ABCA1 are a cause of high density lipoprotein deficiency type 1 (HDLD1) [MIM:205400]; also known as analphalipoproteinemia or Tangier disease (TGD). HDLD1 is a recessive disorder characterized by absence of high density lipoprotein (HDL) cholesterol from plasma, accumulation of cholesteryl esters, premature coronary artery disease (CAD), hepatosplenomegaly, recurrent peripheral neuropathy and progressive muscle wasting and weakness.

Defects in ABCA1 are a cause of high density lipoprotein deficiency type 2 (HDLD2) [MIM:604091]; also known as familial hypoalphalipoproteinemia (FHA). HDLD2 is inherited as autosomal dominant trait. It is characterized by moderately low HDL cholesterol, predilection toward premature coronary artery disease (CAD) and a reduction in cellular cholesterol efflux.

#### Similarity:

Belongs to the ABC transporter superfamily. ABCA family.

## **SWISS:**

O95477

# Gene ID:

19

## Database links:

Entrez Gene: 19Human

Entrez Gene: 11303 Mouse

Entrez Gene: 313210Rat

Omim: 600046Human

SwissProt: O95477Human

SwissProt: P41233Mouse

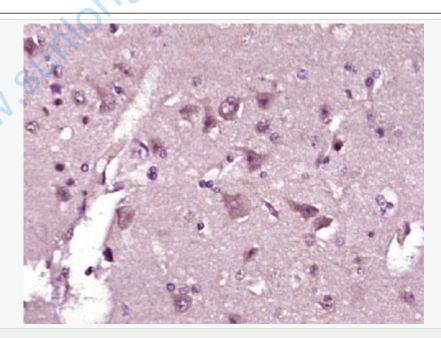
Unigene: 429294Human

<u>Unigene: 277376</u>Mouse

<u>Unigene: 148916</u>Rat

# Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



## Picture:

Paraformaldehyde-fixed, paraffin embedded (human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase

by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ABCA1) Polyclonal Antibody,
Unconjugated (SL23419R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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