



## Rabbit Anti-ABCA7 antibody

SL11180R

<b>Product Name:</b>	ABCA7
<b>Chinese Name:</b>	三磷酸腺苷结合盒Transporter7抗体
<b>Alias:</b>	ABC transporter ABCA7; ABC transporter member 7; ABCA SSN; ABCX; ATP binding cassette sub family A (ABC1) member 7; ATP binding cassette sub family A member 7; ATP binding Cassette Transporter A7; FLJ40025; Macrophage ABC transporter; ABCA7_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/testICC=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.
<b>Molecular weight:</b>	234kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human ABCA7:251-350/2146<Extracellular>
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	ATP-binding cassette (ABC) transporters are an evolutionarily conserved family of widely-expressed proteins that use ATP hydrolysis to catalyze the transport of various molecules across extracellular and intracellular membranes. Eukaryotic ABC

transporters are largely responsible for trafficking hydrophobic compounds either within the cell as part of a metabolic process, outside the cell for transport to other organs, or for secretion from the body. The cholesterol-responsive transporter, ABCA7, maps to human chromosome 19 and mouse chromosome 10 and has been reported as a candidate regulator of ceramide transport in epidermal lipid reorganization. High expression levels of ABCA7 have been reported in myelolymphatic tissues, reticuloendothelial cells, peripheral leukocytes, thymus, spleen and bone marrow. This expression pattern of the two alternatively-spliced isoforms also indicates an involvement in lipid homeostasis in cells of the immune system, though the complete role of ABCA7 is not yet known. Full-length type I ABCA7 has shown plasma membrane localization, while the type II splicing variant has shown expression predominantly in the endoplasmic reticulum.

**Function:**

Plays a role in phagocytosis by macrophages of apoptotic cells. Binds APOA1 and may function in apolipoprotein-mediated phospholipid efflux from cells. May also mediate cholesterol efflux. May regulate cellular ceramide homeostasis during keratinocytes differentiation.

**Subcellular Location:**

Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Endosome membrane; Multi-pass membrane protein.

Note=Localizes to cell membrane ruffles and phagocytic cups of macrophages stimulated with C1q or apoptotic cells. Localizes to the cytoplasm of resting macrophages, probably in Golgi and endosomes. Localizes to the apical brush border of cells in the proximal tubules of kidney. Isoform 2 may localize to the endoplasmic reticulum.

**Tissue Specificity:**

Expressed in leukocytes (at protein level). Widely expressed. Highly expressed in myelo-lymphatic tissues including peripheral leukocytes, thymus, spleen and bone marrow. Isoform 2 is more abundant in lymph node, spleen, thymus and trachea than isoform 1 which is more strongly expressed in brain and bone marrow.

**Similarity:**

Belongs to the ABC transporter superfamily. ABCA family. Contains 2 ABC transporter domains.

**SWISS:**

Q8IZY2

**Gene ID:**

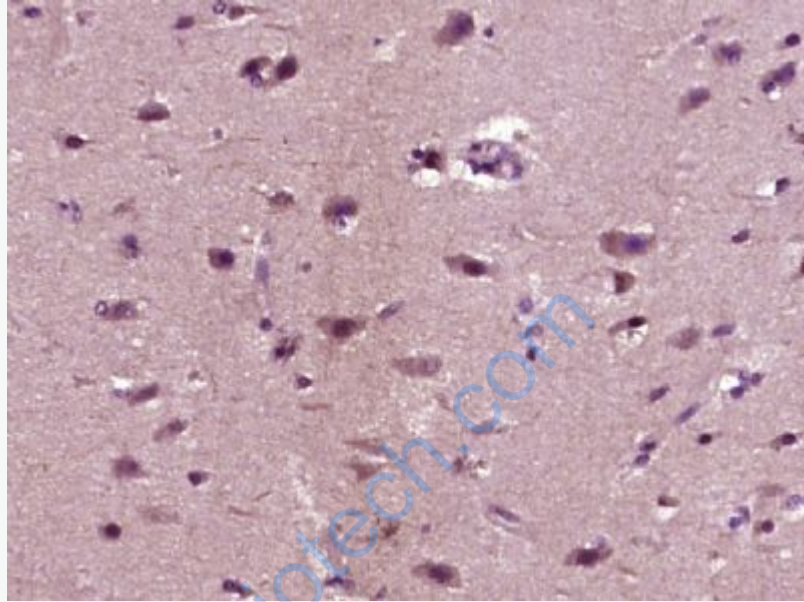
10347

**Database links:**

UniProtKB/Swiss-Prot: Q8IZY2.3

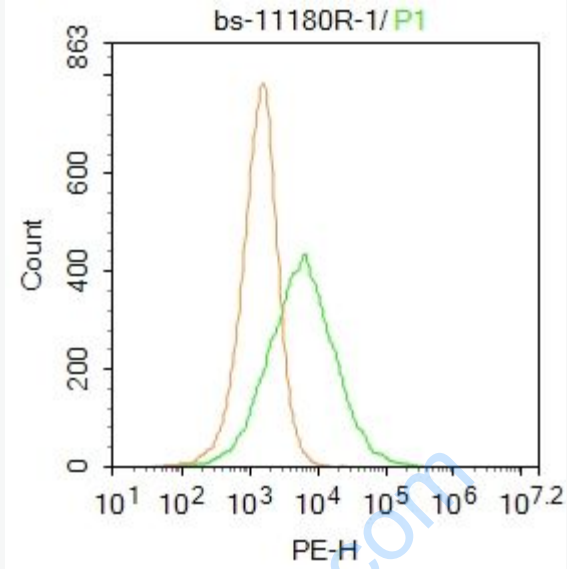
**Important Note:**

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 (ABCA7) Polyclonal Antibody, Unconjugated (SL11180R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: Hela.

Primary Antibody (green line): Rabbit Anti-ABCA7 antibody (SL11180R)

Dilution:  $1\mu\text{g} / 10^6$  cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution:  $1\mu\text{g} / \text{test}$ .

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 20% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.