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Anti-ABCA7 Antibody

Catalog # AP53727

Product Information

Application	WB
Primary Accession	Q8IZY2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	234350

Additional Information

Gene ID	10347
Other Names	ATP-binding cassette sub-family A member 7; ABCA-SSN; Autoantigen SS-N; Macrophage ABC transporter
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ABCA7. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ABCA7 (HGNC:37)
Function	Catalyzes the translocation of specific phospholipids from the cytoplasmic to the extracellular/lumenal leaflet of membrane coupled to the hydrolysis of ATP (PubMed:24097981). Transports preferentially phosphatidylserine over phosphatidylcholine (PubMed:24097981). Plays a role in lipid homeostasis and macrophage- mediated phagocytosis (PubMed:12917409, PubMed:12925201, PubMed:14570867, PubMed:14592415). Binds APOA1 and may function in apolipoprotein-mediated phospholipid efflux from cells (PubMed:12917409, PubMed:14570867, PubMed:14592415). May also mediate cholesterol efflux (PubMed:14570867). May regulate cellular ceramide homeostasis during keratinocyte differentiation (PubMed:12925201). Involved in lipid raft organization and CD1D localization on thymocytes and antigen-presenting cells, which plays an important role in natural killer T-cell development and activation (By similarity). Plays a role in phagocytosis of apoptotic cells by macrophages (By similarity). Macrophage phagocytosis is stimulated by APOA1 or APOA2, probably by stabilization of

ABCA7 (By similarity). Also involved in phagocytic clearance of amyloid-beta by microglia cells and macrophages (By similarity). Further limits amyloid-beta production by playing a role in the regulation of amyloid-beta A4 precursor protein (APP) endocytosis and/or processing (PubMed:26260791). Amyloid-beta is the main component of amyloid plaques found in the brains of Alzheimer patients (PubMed:26260791).

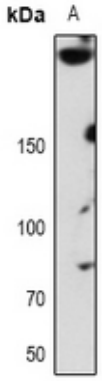
Cellular Location

Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane {ECO:0000250|UniProtKB:Q91V24}; Multi-pass membrane protein. Early endosome membrane {ECO:0000250|UniProtKB:Q91V24}; Multi-pass membrane protein. Cytoplasm {ECO:0000250|UniProtKB:Q91V24}. Cell projection, ruffle membrane {ECO:0000250|UniProtKB:Q91V24}. Cell projection, phagocytic cup {ECO:0000250|UniProtKB:Q91V24} 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 (By similarity). {ECO:0000250|UniProtKB:Q91V24}

Tissue Location

Expressed in leukocytes (at protein level) (PubMed:10873640). Widely expressed (PubMed:10873640). Highly expressed in myelo-lymphatic tissues including peripheral leukocytes, thymus, spleen and bone marrow (PubMed:10873640, PubMed:11435699). Expressed in the hippocampus and the cerebellum (PubMed:27472885). Isoform 2: Abundant in lymph node, spleen, thymus and trachea (PubMed:14592415) Isoform 1: Strongly expressed in brain and bone marrow (PubMed:14592415).

Images



Western blot analysis of ABCA7 expression in RAW264.7 (A) whole cell lysates. (Predicted band size: 234 kD; Observed band size: 235 kD)

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