

# Anti-ABCA7 Antibody

Catalog # AP53727

## **Product Information**

Application WB Primary Accession Q8IZY2

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW234350

## **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** Recognizes endogenous levels of ABCA7 protein.

**Dilution** WB~~1/500 - 1/1000

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) 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:<u>12925201</u>, PubMed:<u>14570867</u>, PubMed:<u>14592415</u>). Binds APOA1 and may function in apolipoprotein-mediated phospholipid efflux from cells (PubMed:<u>12917409</u>, PubMed:<u>14570867</u>, PubMed:<u>14592415</u>). May also mediate cholesterol efflux (PubMed:<u>14570867</u>). May regulate cellular

ceramide homeostasis during keratinocyte differentiation

(PubMed:<u>12925201</u>). 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}

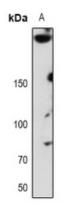
#### **Tissue Location**

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).

# **Background**

Rabbit polyclonal antibody to ABCA7

# **Images**



Western blot analysis of ABCA7 expression in RAW264.7 (A) whole cell lysates.

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