

ABCA2 Antibody (Internal) Goat Polyclonal Antibody Catalog # ALS15778

### **Specification**

# ABCA2 Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution IHC-P, E <u>O9BZC7</u> Human, Horse, Dog Goat Polyclonal 270kDa KDa IHC-P~~N/A E~~N/A

# ABCA2 Antibody (Internal) - Additional Information

Gene ID 20

**Other Names** ATP-binding cassette sub-family A member 2, ATP-binding cassette transporter 2, ATP-binding cassette 2, ABCA2, ABC2, KIAA1062

**Target/Specificity** Human ABCA2. This antibody is expected to recognize both reported isoforms (NP\_001597.2; NP\_997698.1).

**Reconstitution & Storage** Store at -20°C. Minimize freezing and thawing.

Precautions

ABCA2 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

### **ABCA2** Antibody (Internal) - Protein Information

Name ABCA2 (<u>HGNC:32</u>)

Synonyms ABC2, KIAA1062

Function

Probable lipid transporter that modulates cholesterol sequestration in the late endosome/lysosome by regulating the intracellular sphingolipid metabolism, in turn participates in cholesterol homeostasis (Probable) (PubMed:<a href="http://www.uniprot.org/citations/15238223" target="\_blank">15238223</a>, PubMed:<a href="http://www.uniprot.org/citations/21810484" target="\_blank">21810484</a>, PubMed:<a href="http://www.uniprot.org/citations/21810484" target="\_blank">21810484</a>, PubMed:<a href="http://www.uniprot.org/citations/24201375" target="\_blank">24201375</a>). May alter the transbilayer distribution of ceramide in the intraluminal membrane lipid bilayer, favoring its retention in the outer leaflet that results in



increased acid ceramidase activity in the late endosome/lysosome, facilitating ceramide deacylation to sphingosine leading to the sequestration of free cholesterol in lysosomes (PubMed:<a href="http://www.uniprot.org/citations/24201375" target="\_blank">24201375</a>). In addition regulates amyloid-beta production either by activating a signaling pathway that regulates amyloid precursor protein transcription through the modulation of sphingolipid metabolism or through its role in gamma-secretase processing of APP (PubMed:<a href="http://www.uniprot.org/citations/22086926" target="\_blank">22086926</a>, PubMed:<a href="http://www.uniprot.org/citations/26510981" target="\_blank">26510981</a>). May play a role in myelin formation (By similarity).

#### **Cellular Location**

Endosome membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Note=Forms discrete, punctate intracellular vesicles.

#### **Tissue Location**

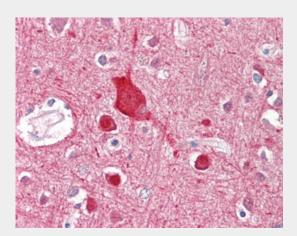
[Isoform 3]: Highly expressed in the brain, peripheral blood leukocytes and ovary, whereas lower levels of expression is observed in kidney and liver

# ABCA2 Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# ABCA2 Antibody (Internal) - Images



Anti-ABCA2 antibody IHC staining of human brain, cortex.

# ABCA2 Antibody (Internal) - Background

Probable transporter, its natural substrate has not been found yet. May have a role in macrophage lipid metabolism and neural development.

### ABCA2 Antibody (Internal) - References



Kaminski W.E., et al. Biochem. Biophys. Res. Commun. 281:249-258(2001). Vulevic B., et al.Cancer Res. 61:3339-3347(2001). Humphray S.J., et al.Nature 429:369-374(2004). Kikuno R., et al.DNA Res. 6:197-205(1999). Nakajima D., et al.DNA Res. 9:99-106(2002).