

ABCA2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21066a

Specification

ABCA2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u> 09BZC7</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	269833
Antigen Region	1339-1373

ABCA2 Antibody (Center) - 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

This ABCA2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1339-1373 amino acids from the Central region of human ABCA2.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

ABCA2 Antibody (Center) - 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:<u>15238223</u>, PubMed:<u>21810484</u>, PubMed:<u>24201375</u>). 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:<u>24201375</u>). 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:<u>22086926</u>, PubMed:<u>26510981</u>). 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

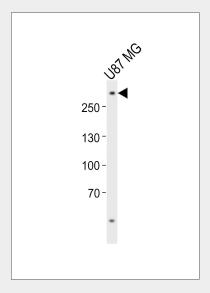
[Isoform 3]: Highly expressed in the brain, peripheral blood leukocytes and ovary, whereas lower levels of expression is observed in kidney and liver

ABCA2 Antibody (Center) - Protocols

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

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

ABCA2 Antibody (Center) - Images



Western blot analysis of lysate from U-87 MG cell line, using ABCA2 Antibody (Center)(Cat. #AP21066a). AP21066a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000



dilution was used as the secondary antibody. Lysate at 20ug.

ABCA2 Antibody (Center) - Background

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

ABCA2 Antibody (Center) - 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).