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ABCA2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21066a

Product Information

Application	WB, E
Primary Accession	Q9BZC7
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51550
Calculated MW	269833

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 E~~Use at an assay dependent concentration.
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.

Protein Information

Name	ABCA2 (HGNC:32)
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:15238223, PubMed:21810484, PubMed:24201375). 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:24201375). 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:22086926, PubMed:26510981). 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

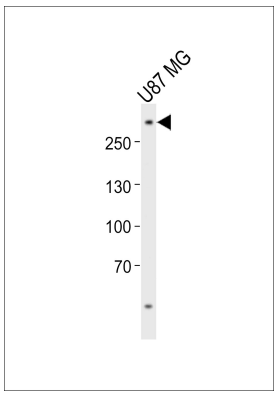
Background

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

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).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.