

**ABCA2 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP21066a****Specification**

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**ABCA2 Blocking Peptide (Center) - Product Information**Primary Accession [Q9BZC7](#)**ABCA2 Blocking Peptide (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**

The synthetic peptide sequence is selected from aa 1339-1353 of HUMAN ABCA2

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**ABCA2 Blocking Peptide (Center) - 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 (PubMed: [15238223](http://www.uniprot.org/citations/15238223), PubMed: [21810484](http://www.uniprot.org/citations/21810484), PubMed: [24201375](http://www.uniprot.org/citations/24201375)) (Probable). 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](http://www.uniprot.org/citations/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:<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 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

**ABCA2 Blocking Peptide (Center) - Images****ABCA2 Blocking Peptide (Center) - Background**

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

**ABCA2 Blocking Peptide (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).