

Anti-ABCG4 Antibody

Catalog # ABO11373

Product Information

Application	WB
Primary Accession	Q9H172
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for ATP-binding cassette sub-family G member 4(ABCG4) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	64137
Other Names	ATP-binding cassette sub-family G member 4, ABCG4, WHITE2
Calculated MW	71896
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human
Subcellular Localization	Membrane ; Multi-pass membrane protein .
Tissue Specificity	Highly expressed in brain tissues with the exception of the spinal cord. .
Source	Eukaryota
Protein Name	ATP-binding cassette sub-family G member 4
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human ABCG4(327-341aa AVQNGLCAMAEEKSS), different from the related mouse and rat sequences by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the ABC transporter superfamily. ABCG family. Eye pigment precursor importer (TC 3.A.1.204) subfamily.

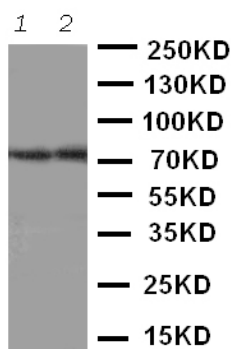
Protein Information

Name	ABCG4 (HGNC:13884)
Synonyms	WHITE2
Function	ATP-dependent transporter of the ATP-binding cassette (ABC) family that may be involved in the cellular efflux of sterols, in particular cholesterol and desmosterol (a cholesterol precursor), to high-density lipoprotein (HDL) (PubMed: 15240127 , PubMed: 33141061). May play an important role in the removal of amyloid-beta peptides from brain, in a process that can be antagonized by desmosterol. However it is unclear whether ABCG4 can directly transport amyloid-beta peptides or whether peptide export may be facilitated due to changes in the membrane lipid environment (By similarity). Induces apoptosis in various cells (PubMed: 27228027).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane {ECO:0000250 UniProtKB:Q91WA9}; Multi-pass membrane protein. Endosome membrane {ECO:0000250 UniProtKB:Q91WA9}; Multi-pass membrane protein
Tissue Location	Expressed specifically in the brain and the eye.

Background

ABCG4(ATP-Binding Cassette, Subfamily G, Member 4), is a protein that in humans is encoded by the ABCG4 gene. The protein encoded by this gene is included in the superfamily of ATP-binding cassette(ABC) transporters. This protein is a member of the White subfamily and is expressed predominantly in liver tissue. By genomic sequence analysis, Engel et al.(2001) mapped the ABCG4 gene to chromosome 11q23.3. Engel et al.(2001) demonstrated 5-fold induction of ABCG4 following treatment of normal monocyte-derived macrophages with the LXR and RXR agonists 9-cis retinoic acid and 22R hydroxycholesterol. Removal of cholesterol from macrophages by cyclodextrin decreased ABCG4 message levels.

Images



Anti-ABCG4 antibody, ABO11373, Western blotting
Lane 1: Rat Brain Tissue Lysate
Lane 2: Mouse Brain Tissue Lysate

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