

ABCA12 Antibody (internal regon, near C-Term) Peptide-affinity purified goat antibody Catalog # AF2774a

Specification

ABCA12 Antibody (internal regon, near C-Term) - Product Information

Application Primary Accession Other Accession Predicted Host Clonality Concentration Isotype Calculated MW E <u>Q86UK0</u> <u>NP_775099.2</u>, <u>NP_056472.2</u>, <u>26154</u> Human, Dog Goat Polyclonal 0.5 mg/ml IgG 293237

ABCA12 Antibody (internal regon, near C-Term) - Additional Information

Gene ID 26154

Other Names

ATP-binding cassette sub-family A member 12, ATP-binding cassette transporter 12, ATP-binding cassette 12, ABCA12, ABC12

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions ABCA12 Antibody (internal regon, near C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

ABCA12 Antibody (internal regon, near C-Term) - Protein Information

Name ABCA12 (<u>HGNC:14637</u>)

Synonyms ABC12

Function

Transports lipids such as glucosylceramides from the outer to the inner leaflet of lamellar granules (LGs) membrane, whereby the lipids are finally transported to the keratinocyte periphery via the trans-Golgi network and LGs and released to the apical surface of the granular keratinocytes to form lipid lamellae in the stratum corneum of the epidermis, which is essential for skin barrier function (PubMed:http://www.uniprot.org/citations/16007253"



target="_blank">16007253, PubMed:20869849). In the meantime, participates in the transport of the lamellar granules-associated proteolytic enzymes, in turn regulates desquamation and keratinocyte differentiation (PubMed:19179616). Furthermore, is essential for the regulation of cellular cholesterol homeostasis by regulating ABCA1-dependent cholesterol efflux from macrophages through interaction with NR1H2 and ABCA1 (By similarity). Plays pleiotropic roles in regulating glucose stimulated insulin secretion from beta cells, regulating the morphology and fusion of insulin granules, lipid raft abundance and the actin cytoskeleton (By similarity). Also involved in lung surfactant biogenesis (By similarity).

Cellular Location

Cytoplasmic vesicle, secretory vesicle membrane; Multi-pass membrane protein. Golgi apparatus membrane. Note=Localizes in the limiting membrane of the lamellar granules (LGs) (PubMed:17927575). Trafficks from the Golgi apparatus to the lamellar granules (LGs) at the cell periphery in the uppermost granular layer keratinocytes where ABCA12-positive LGs fuse with the keratinocyte-cell membrane to secrete their lipid content to the extracellular space of the stratum corneum (PubMed:16007253, PubMed:17927575). Co-localizes through the Golgi apparatus to the cell periphery with glucosylceramide (PubMed:17927575)

Tissue Location

Mainly expressed in the stomach, placenta, testis and fetal brain (PubMed:12697999). Expressed in the upper epidermal layers, mainly the granular layers, of skin (PubMed:16007253, PubMed:17591952, PubMed:17927575). Expressed throughout the normal interfollicular epidermis with prominent expression in the stratum granulosum (PubMed:19179616). Expressed in alpha and beta cells of pancreatic islets (PubMed:32072744).

ABCA12 Antibody (internal regon, near C-Term) - 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>

ABCA12 Antibody (internal regon, near C-Term) - Images

ABCA12 Antibody (internal regon, near C-Term) - Background

This antibody is expected to recognize both reported isoforms (NP_775099.2; NP_056472.2).

ABCA12 Antibody (internal regon, near C-Term) - References

Localization of ABCA12 from Golgi apparatus to lamellar granules in human upper epidermal keratinocytes Sakai K, Akiyama M, Sugiyama-Nakagiri Y, McMillan JR, Sawamura D, Shimizu H Exp Dermatol. 2007 Nov;16(11):920-6 PMID: 17927575