

## **ABCA12 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54667

### **Specification**

## **ABCA12 Polyclonal Antibody - Product Information**

Application

Primary Accession
Reactivity
Rost
Clonality
Rat, Pig, Dog
Rabbit
Polyclonal

Calculated MW 293237

# **ABCA12 Polyclonal Antibody - 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

#### Dilution

<span class ="dilution\_E">E~~N/A</span>

### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **ABCA12 Polyclonal Antibody - Protein Information**

Name ABCA12 (HGNC:14637)

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:<a href="http://www.uniprot.org/citations/16007253" target="\_blank">16007253</a>, PubMed:<a href="http://www.uniprot.org/citations/20869849" target="\_blank">20869849</a>). In the meantime, participates in the transport of the lamellar granules-associated proteolytic enzymes, in turn regulates desquamation and keratinocyte differentiation (PubMed:<a href="http://www.uniprot.org/citations/19179616" target="blank">19179616</a>/a>). Furthermore, is essential for the regulation of cellular



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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 Polyclonal Antibody - Protocols**

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

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

**ABCA12 Polyclonal Antibody - Images**