SANTA CRUZ BIOTECHNOLOGY, INC.

ABCA12 (N-16): sc-48435

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The ATP binding cassette (ABC) transporters, or traffic ATPases, constitute an expansive family of proteins accountable for the transport of a wide variety of substrates across cell membranes in both prokaryotic and eukaryotic cells. They also aid in the regulation of lipid transport and membrane trafficking. ABCA12 (ATP-binding cassette, subfamily A, member 12) contains two transmembrane (TM) domains, each with six membrane-spanning segments and two nucleotide-binding domains (NBDs), which are located in the cytoplasm. ABCA12 is expressed in normal human keratinocytes (RT-PCR reveals expression in placenta, testis, fetal brain and skin) and is upregulated during keratinization. Immunoelectron microscopy reveals that the ABCA12 protein is located in lamellar granules in the upper epidermal keratinocytes of human skin. The ABCA12 gene, which synthesizes a 2,595 amino acid protein, may produce an alternative splice variant with an in-frame deletion leading to truncation of 79 amino acids.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ABCA12 (human) mapping to 2q35; Abca12 (mouse) mapping to 1 C3.

SOURCE

ABCA12 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABCA12 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48435 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ABCA12 (N-16) is recommended for detection of ABCA12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ABCA12 (N-16) is also recommended for detection of ABCA12 in additional species, including equine and canine.

Suitable for use as control antibody for ABCA12 siRNA (h): sc-60109, ABCA12 siRNA (m): sc-60110, ABCA12 shRNA Plasmid (h): sc-60109-SH, ABCA12 shRNA Plasmid (m): sc-60110-SH, ABCA12 shRNA (h) Lentiviral Particles: sc-60109-V and ABCA12 shRNA (m) Lentiviral Particles: sc-60110-V.

Molecular Weight of ABCA12: 293 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.