

ABCA3 (H-120): sc-134560

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 and are involved in the regulation of lipid transport and membrane trafficking. ABCA3 (ATP-binding cassette 3), also designated ATP-binding cassette transporter 3 and ABC transporter 3, has typical structural features of the ABC transporter family and consists of a 1,704 amino acid polypeptide with two homologous repeats, each consisting of six putative transmembrane helices and an ATP-binding cassette motif. ABCA3, the gene encoding the human ABCA3 protein, maps near the polycystic kidney disease type 1 (PKD1) gene on chromosome 16p13.3. The ABCA3 gene is expressed at highest levels in lung. Biochemical and molecular research indicates that ABCA3 is targeted to vesicle membranes and located in the limiting membrane of lamellar bodies and may play a key role in lipid organization during the formation of lamellar bodies.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ABCA3 (human) mapping to 16p13.3; Abca3 (mouse) mapping to 17 A3.3.

SOURCE

ABCA3 (H-120) is a rabbit polyclonal antibody raised against amino acids 1261-1380 mapping within an internal region of ABCA3 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.

STORAGE

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

APPLICATIONS

ABCA3 (H-120) is recommended for detection of ABCA3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for ABCA3 siRNA (h): sc-60113, ABCA3 siRNA (m): sc-60114, ABCA3 shRNA Plasmid (h): sc-60113-SH, ABCA3 shRNA Plasmid (m): sc-60114-SH, ABCA3 shRNA (h) Lentiviral Particles: sc-60113-V and ABCA3 shRNA (m) Lentiviral Particles: sc-60114-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.