SANTA CRUZ BIOTECHNOLOGY, INC.

ABCA5 (E-14): sc-163604

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ABCA5 (ATP-binding cassette, sub-family A (ABC1), member 5) is a 1,642 amino acid protein belonging to the ABC transporter superfamily and the ABCA family. The ABC1 subfamily is the only major ABC subfamily exclusive to multicellular eukaryotes. Ubiquitously expressed, with high expression in testis, skeletal muscle, kidney, liver and placenta, ABCA5 is a multi-pass membrane protein that contains two ABC transporter domains and exists as three alternatively spliced isoforms. ABCA5 exhibits membrane subcellular localization and may play a role in processing autolysosomes. Spanning 80 kb, ABCA5 contains 39 exons, with exon 2 containing the putative translation start site. ABCA5 is the first of five ABC1 family members that maps to human chromosome 17q24. ABCA5 is linked to lysosomal diseases and may play a role in tumor development and cardiomyocyte and follicular cell activities. ABCA5 might also be a specific urine marker for diagnosis of patients with high-grade prostatic intraepithelial neoplasia (HGPIN).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ABCA5 (human) mapping to 17q24.3; Abca5 (mouse) mapping to 11 E1.

SOURCE

ABCA5 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABCA5 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-163604 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ABCA5 (E-14) is recommended for detection of ABCA5 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); non cross-reactive with other ABCA family members.

ABCA5 (E-14) is also recommended for detection of ABCA5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ABCA5 siRNA (h): sc-94206, ABCA5 siRNA (m): sc-140751, ABCA5 shRNA Plasmid (h): sc-94206-SH, ABCA5 shRNA Plasmid (m): sc-140751-SH, ABCA5 shRNA (h) Lentiviral Particles: sc-94206-V and ABCA5 shRNA (m) Lentiviral Particles: sc-140751-V.

Molecular Weight of ABCA5: 183 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.

PROTOCOLS

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