SANTA CRUZ BIOTECHNOLOGY, INC.

ABCA6 (A-12): sc-514140

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The ATP-binding cassette (ABC) superfamily is comprised of transmembrane proteins involved in energy-dependent transport of a variety of substrates across membranes. ABCA6 is a 1,617 amino acid protein belonging to the ABC transporter family. ABCA6 is up-regulated during monocyte differentiation into macrophages, suggesting a role in macrophage lipid homeostasis. ABCA6 contains two ABC transporter domains and is expressed as three isoforms produced by alternative splicing. ABCA6 is present at highest levels in adult liver, with significant levels found in many adult tissues and fetal lung, kidney and liver.

REFERENCES

1. Allikmets, R., et al. 1996. Characterization of the human ABC superfamily: isolation and mapping of 21 new genes using the expressed sequence tags database. Hum. Mol. Genet. 5: 1649-1655.
2. Klucken, J., et al. 2000. ABCG1 (ABC8), the human homolog of the *Drosophila* white gene, is a regulator of macrophage cholesterol and phospholipid transport. Proc. Natl. Acad. Sci. USA 97: 817-822.
3. Kaminski, W.E., et al. 2001. ABCA6, a novel a subclass ABC transporter. Biochem. Biophys. Res. Commun. 285: 1295-1301.
4. Dean, M., et al. 2001. The human ATP-binding cassette (ABC) transporter superfamily. Genome Res. 11: 1156-1166.
5. Hosgood, H.D., et al. 2008. Pathway-based evaluation of 380 candidate genes and lung cancer susceptibility suggests the importance of the cell cycle pathway. Carcinogenesis 29: 1938-1943.
6. Saito, A., et al. 2009. Association study between single-nucleotide polymorphisms in 199 drug-related genes and commonly measured quantitative traits of 752 healthy Japanese subjects. J. Hum. Genet. 54: 317-323.

CHROMOSOMAL LOCATION

Genetic locus: Abca6 (mouse) mapping to 11 E1.

SOURCE

ABCA6 (A-12) is a mouse monoclonal antibody raised against amino acids 711-838 mapping within an internal region of ABCA6 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 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.

PROTOCOLS

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

APPLICATIONS

ABCA6 (A-12) is recommended for detection of ABCA6 of mouse origin by Western Blotting (starting dilution 1:100, 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 ABCA6 siRNA (m): sc-140752, ABCA6 shRNA Plasmid (m): sc-140752-SH and ABCA6 shRNA (m) Lentiviral Particles: sc-140752-V.

Molecular Weight of ABCA6: 184 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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