SANTA CRUZ BIOTECHNOLOGY, INC.

ABCA6 (T-13): sc-107358



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 upregulated 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

- Allikmets, R., Gerrard, B., Hutchinson, A. and Dean, M. 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.
- Klucken, J., Büchler, C., Orsó, E., Kaminski, W.E., Porsch-Ozcürümez, M., Liebisch, G., Kapinsky, M., Diederich, W., Drobnik, W., Dean, M., Allikmets, R. and Schmitz, G. 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.
- Kaminski, W.E., Wenzel, J.J., Piehler, A., Langmann, T. and Schmitz, G. 2001. ABCA6, a novel a subclass ABC transporter. Biochem. Biophys. Res. Commun. 285: 1295-1301.
- Dean, M., Rzhetsky, A. and Allikmets, R. 2001. The human ATP-binding cassette (ABC) transporter superfamily. Genome Res. 11: 1156-1166.
- Hosgood, H.D., Menashe, I., Shen, M., Yeager, M., Yuenger, J., Rajaraman, P., He, X., Chatterjee, N., Caporaso, N.E., Zhu, Y., Chanock, S.J., Zheng, T. and Lan, Q. 2008. Pathway-based evaluation of 380 candidate genes and lung cancer susceptibility suggests the importance of the cell cycle pathway. Carcinogenesis 29: 1938-1943.
- Saito, A., Kawamoto, M. and Kamatani, N. 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. E-published.

CHROMOSOMAL LOCATION

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

SOURCE

ABCA6 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABCA6 of mouse 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-107358 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ABCA6 (T-13) is recommended for detection of ABCA6 of mouse and rat 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 ABC family members.

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 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) Immunofluo-rescence: 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.

MONOS Satisfation Guaranteed

Try **ABCA6 (A-12): sc-514140**, our highly recommended monoclonal alternative to ABCA6 (T-13).