

ABCA6 (F-5): sc-515203

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

- 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.
- 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.
- Kaminski, W.E., et al. 2001. ABCA6, a novel a subclass ABC transporter. *Biochem. Biophys. Res. Commun.* 285: 1295-1301.
- Dean, M., et al. 2001. The human ATP-binding cassette (ABC) transporter superfamily. *Genome Res.* 11: 1156-1166.
- 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.
- 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 (human) mapping to 17q24.2.

SOURCE

ABCA6 (F-5) is a mouse monoclonal antibody raised against amino acids 786-845 mapping within an internal region of ABCA6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ABCA6 (F-5) is available conjugated to agarose (sc-515203 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515203 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515203 PE), fluorescein (sc-515203 FITC), Alexa Fluor® 488 (sc-515203 AF488), Alexa Fluor® 546 (sc-515203 AF546), Alexa Fluor® 594 (sc-515203 AF594) or Alexa Fluor® 647 (sc-515203 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515203 AF680) or Alexa Fluor® 790 (sc-515203 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ABCA6 (F-5) is recommended for detection of ABCA6 of human 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 (h): sc-93825, ABCA6 shRNA Plasmid (h): sc-93825-SH and ABCA6 shRNA (h) Lentiviral Particles: sc-93825-V.

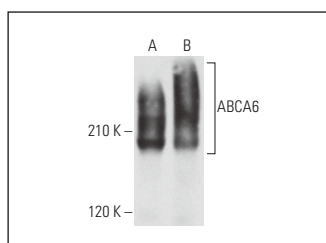
Molecular Weight of ABCA6: 184 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257 or human liver extract: sc-363766.

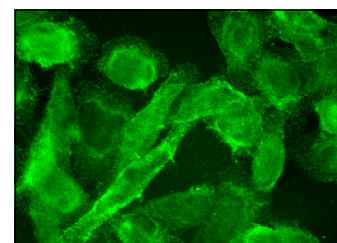
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ABCA6 (F-5): sc-515203. Western blot analysis of ABCA6 expression in RT-4 whole cell lysate (A) and human liver tissue extract (B).



ABCA6 (F-5): sc-515203. Immunofluorescence staining of formalin-fixed SW480 cells showing membrane localization.

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 for detailed protocols and support products.