

ABCA9 (E-17): sc-163608

BACKGROUND

ABCA9 (ATP-binding cassette, sub-family A (ABC1), member 9) is a 1,624 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 heart, brain and fetal tissues, ABCA9 is a multi-pass membrane protein that contains two ABC transporter domains and exists as five alternatively spliced isoforms. ABCA9 exhibits membrane subcellular localization and may play a role in monocyte differentiation and lipid homeostasis. ABCA9 is up-regulated during monocyte differentiation into macrophages and down-regulated by cholesterol loading of macrophages. Spanning 85 kb, ABCA9 contains 39 exons, with a non-coding first exon. ABCA9 is one of five ABC1 family members that maps to human chromosome 17q24.

REFERENCES

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3. Annino, T., et al. 2003. Evolutionary analysis of a cluster of ATP-binding cassette (ABC) genes. *Mamm. Genome* 14: 7-20.
4. Wakaumi, M., et al. 2005. Acute digoxin loading reduces ABCA8A mRNA expression in the mouse liver. *Clin. Exp. Pharmacol. Physiol.* 32: 1034-1041.
5. de Grouw, E.P., et al. 2006. Preferential expression of a high number of ATP binding cassette transporters in both normal and leukemic CD34⁺CD38⁻ cells. *Leukemia* 20: 750-754.
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7. Li, G., et al. 2007. Evolutionary dynamics of the ABCA chromosome 17q24 cluster genes in vertebrates. *Genomics* 89: 385-391.
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CHROMOSOMAL LOCATION

Genetic locus: ABCA9 (human) mapping to 17q24.2.

SOURCE

ABCA9 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABCA9 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-163608 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ABCA9 (E-17) is recommended for detection of ABCA9 of 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); non cross-reactive with other ABCA family members.

Suitable for use as control antibody for ABCA9 siRNA (h): sc-94171, ABCA9 shRNA Plasmid (h): sc-94171-SH and ABCA9 shRNA (h) Lentiviral Particles: sc-94171-V.

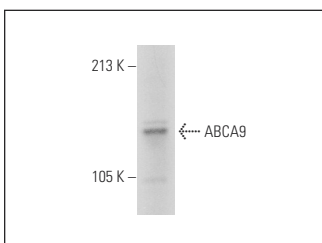
Molecular Weight of ABCA9: 184 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ABCA9 (E-17): sc-163608. Western blot analysis of ABCA9 expression in HeLa whole cell lysate.

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.