



ABCA2 (9A2): sc-130575

BACKGROUND

The ATP binding cassette (ABC) transporters, or traffic ATPases, constitute an expansive family of proteins accountable for the transport of a wide variety of substrates across cell membranes in both prokaryotic and eukaryotic cells. They also aid in the regulation of lipid transport and membrane trafficking. The gene encoding ABCA2 (ATP-binding cassette 2), also designated (ATP-binding cassette transporter 2, ABC transporter 2 and KIAA1062) is composed of 48 exons located within a genomic region of only 21 kb. Analysis of the presumed ABCA2 promoter sequence reveals possible binding sites for transcription factors that participate in the differentiation of myeloid and neural cells. Gene expression analysis in human macrophages shows that ABCA2 mRNA is procured during cholesterol import, indicating that ABCA2 is a cholesterol-responsive gene. Research suggests that ABCA2 plays a putative role in macrophage lipid metabolism and neural development.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Abca2 (mouse) mapping to 2 A3.

RESEARCH USE

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

SOURCE

ABCA2 (9A2) is a rat monoclonal antibody raised against ABCA2 of mouse origin.

PRODUCT

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

ABCA2 (9A2) is available conjugated to either phycoerythrin (sc-130575 PE) or fluorescein (sc-130575 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

ABCA2 (9A2) is recommended for detection of ABCA2 of mouse and rat origin by 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 flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for ABCA2 siRNA (m): sc-60112, ABCA2 siRNA (r): sc-156054, ABCA2 shRNA Plasmid (m): sc-60112-SH, ABCA2 shRNA Plasmid (r): sc-156054-SH, ABCA2 shRNA (m) Lentiviral Particles: sc-60112-V and ABCA2 shRNA (r) Lentiviral Particles: sc-156054-V.

Molecular Weight of ABCA2: 270 kDa.

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 for detailed protocols and support products.