SANTA CRUZ BIOTECHNOLOGY, INC.

ABCB9 (C-13): sc-46744

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

ATP-binding cassette (ABC) transporters are an evolutionarily conserved family of widely-expressed proteins that use ATP hydrolysis to catalyze the transport of various molecules across extracellular and intracellular membranes. As the largest family of transmembrane proteins, ABC genes comprise several subfamilies (ABC1, ABCA, ABCE, ABCF, MDR/TAP, MRP, ALD, OABP, GCN20 and White (also known as ABCG)). In bacteria, ABC transporters are used to import compunds that cannot be obtained by diffusion. Eukaryotic ABC transporters are largely responsible for trafficking hydrophobic compounds either within the cell as part of a metabolic process or outside the cell for transport to other organs, or for secretion from the body. ABCB9 (also designated transporter associated with antigen processing (TAP)-like or TAPL) forms a homodimer, which is localized in lysosomes. It functions as an ATP-dependent peptide transporter that shows a broad peptide specificity ranging from 6-mer up to 59-mer peptides. ABCB9 transports these peptides with low affinity but high efficiency.

REFERENCES

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4. Yamaguchi, Y., Iseoka, H., Kobayashi, A. and Maeda, M. 2004. The carboxyl terminal sequence of rat transporter associated with antigen processing (TAP)-like (ABCB9) is heterogeneous due to splicing of its mRNA. Biol. Pharm. Bull. 27: 100-104.
5. Kobayashi, A., Maeda, T. and Maeda, M. 2004. Membrane localization of transporter associated with antigen processing (TAP)-like (ABCB9) visualized *in vivo* with a fluorescence protein-fusion technique. Biol. Pharm. Bull. 27: 1916-1922.
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CHROMOSOMAL LOCATION

Genetic locus: ABCB9 (human) mapping to 12q24.31; Abcb9 (mouse) mapping to 5 F.

RESEARCH USE

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

SOURCE

ABCB9 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ABCB9 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-46744 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ABCB9 (C-13) is recommended for detection of ABCB9 isoforms 1, 2, 3 and 4 of mouse, rat and 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).

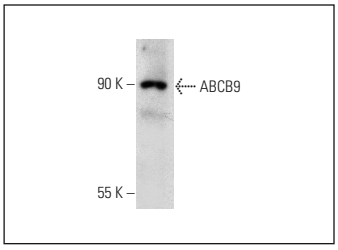
ABCB9 (C-13) is also recommended for detection of ABCB9 isoforms 1, 2, 3 and 4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ABCB9 siRNA (h): sc-60115, ABCB9 siRNA (m): sc-60116, ABCB9 shRNA Plasmid (h): sc-60115-SH, ABCB9 shRNA Plasmid (m): sc-60116-SH, ABCB9 shRNA (h) Lentiviral Particles: sc-60115-V and ABCB9 shRNA (m) Lentiviral Particles: sc-60116-V.

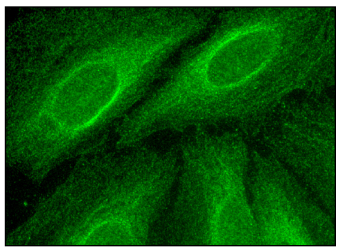
Molecular Weight of ABCB9: 84 kDa.

Positive controls: mouse thymus extract: sc-2406, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

DATA



ABCB9 (C-13): sc-46744. Western blot analysis of ABCB9 expression in mouse thymus tissue extract.



ABCB9 (C-13): sc-46744. Immunofluorescence staining of formalin-fixed HeLa cells showing cytoplasmic and membrane localization.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS Satisfaction Guaranteed

Try **ABCB9 (A-8): sc-393412** or **ABCB9 (E-2): sc-393431**, our highly recommended monoclonal alternatives to ABCB9 (C-13).