

ABCB6 (24.39): sc-135727

BACKGROUND

The ATP-binding cassette (ABC) superfamily is comprised of transmembrane proteins involved in energy-dependent transport of a variety of substrates across membranes. ABCB6 is a 842 amino acid protein belonging to the heavy metal importer subfamily of the ABC transporter family. Upregulated at the protein level by cellular porphyrins, ABCB6 binds to heme and a porphyrin and assists in their ATP-dependent uptake into the mitochondria. ABCB6 also plays an important role in heme synthesis. ABCB6 contains one ABC transmembrane type-1 domain and one ABC transporter domain and forms a homodimer in the mitochondrion outer membrane, plasma membrane and the Golgi apparatus. Widely expressed, ABCB6 has highest expression in skeletal muscle and heart. ABCB6 is present as two isoforms produced by alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ABCB6 (human) mapping to 2q35; Abcb6 (mouse) mapping to 1 C3.

SOURCE

ABCB6 (24.39) is a mouse monoclonal antibody raised against recombinant ABCB6 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.

APPLICATIONS

ABCB6 (24.39) is recommended for detection of ABCB6 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ABCB6 siRNA (h): sc-94721, ABCB6 siRNA (m): sc-140757, ABCB6 shRNA Plasmid (h): sc-94721-SH, ABCB6 shRNA Plasmid (m): sc-140757-SH, ABCB6 shRNA (h) Lentiviral Particles: sc-94721-V and ABCB6 shRNA (m) Lentiviral Particles: sc-140757-V.

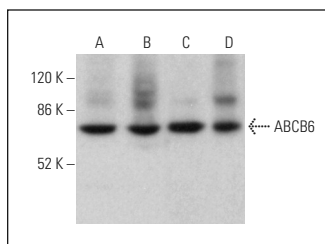
Molecular Weight of ABCB6 isoforms: 104/79 kDa.

Positive Controls: COLO 205 whole cell lysate: sc-364177, Hep G2 cell lysate: sc-2227 or C6 whole cell lysate: sc-364373.

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).

DATA



ABCB6 (24.39): sc-135727. Western blot analysis of ABCB6 expression in COLO 205 (A), Hep G2 (B) and C6 (C) whole cell lysates and rat brain tissue extract (D).

SELECT PRODUCT CITATIONS

- Grebowski, J., et al. 2016. *Leishmania tarentolae* as a host for heterologous expression of functional human ABCB6 transporter. *Biochim. Biophys. Acta* 1858: 2617-2624.

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. Not for resale.