

ABCF3 (C-19): sc-102282

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 peptides comprise several subfamilies. 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. The gene encoding ABCF3 maps to a region that correlates with cervical cancer. Also, high expression levels of ABCF3 have been found in cells of melanocytic origin, suggesting a role for ABCF3 in tumorigenesis. Two isoforms of ABCF3 exist due to alternative splicing events.

REFERENCES

- Dean, M., et al. 1995 Evolution of ATP-binding cassette transporter genes. *Curr. Opin. Genet. Dev.* 5: 779-785.
- 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.
- Schmitz, G., et al. 2000. ABC transporters in cellular lipid trafficking. *Curr. Opin. Lipidol.* 11: 493-501.
- Dean, M., et al. 2001. The human ATP-binding cassette (ABC) transporter superfamily. *Genome Res.* 11: 1156-1166.
- Bunting, K.D., et al. 2002. ABC transporters as phenotypic markers and functional regulators of stem cells. *Stem Cells* 20: 11-20.
- Choi, Y.W., et al. 2007. Gene expression profiles in squamous cell cervical carcinoma using array-based comparative genomic hybridization analysis. *Int. J. Gynecol. Cancer* 17: 687-696.
- Heimerl, S., et al. 2007. Mapping ATP-binding cassette transporter gene expression profiles in melanocytes and melanoma cells. *Melanoma Res.* 17: 265-273.

CHROMOSOMAL LOCATION

Genetic locus: ABCF3 (human) mapping to 3q27.1; Abcf3 (mouse) mapping to 16 A3.

SOURCE

ABCF3 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ABCF3 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-102282 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ABCF3 (C-19) is recommended for detection of ABCF3 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); non cross-reactive with other ABCF family members.

ABCF3 (C-19) is also recommended for detection of ABCF3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ABCF3 siRNA (h): sc-78379, ABCF3 siRNA (m): sc-140761, ABCF3 shRNA Plasmid (h): sc-78379-SH, ABCF3 shRNA Plasmid (m): sc-140761-SH, ABCF3 shRNA (h) Lentiviral Particles: sc-78379-V and ABCF3 shRNA (m) Lentiviral Particles: sc-140761-V.

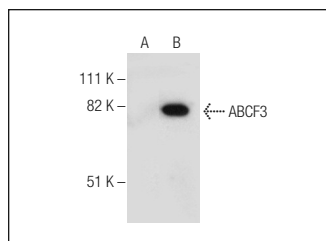
Molecular Weight of ABCF3: 80 kDa.

Positive Controls: ABCF3 (h): 293T Lysate: sc-112383.

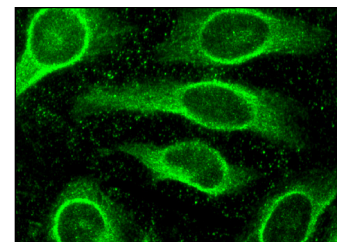
RECOMMENDED SECONDARY REAGENTS

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



ABCF3 (C-19): sc-102282. Western blot analysis of ABCF3 expression in non-transfected: sc-117752 (A) and human ABCF3 transfected: sc-112383 (B) 293T whole cell lysates.



ABCF3 (C-19): sc-102282. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

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 or our catalog for detailed protocols and support products.