

# ABCF2 (E-2): sc-390496

## 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. 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. ABCF2 in particular plays a putative role in tumor suppression at metastatic sites and in the endocrine pathway for breast cancer and may be a prognostic marker for clear cell ovarian adenocarcinoma.

## REFERENCES

1. Park, H.J., et al. 2005. Amygdalin inhibits genes related to cell cycle in SNU-C4 human colon cancer cells. *World J. Gastroenterol.* 11: 5156-5161.
2. Tsuda, H., et al. 2005. Identification of overexpression and amplification of ABCF2 in clear cell ovarian adenocarcinomas by cDNA microarray analyses. *Clin. Cancer Res.* 11: 6880-6888.
3. Ogawa, Y., et al. 2006. Clinical role of ABCF2 expression in breast cancer. *Anticancer Res.* 26: 1809-1814.

## CHROMOSOMAL LOCATION

Genetic locus: ABCF2 (human) mapping to 7q36.1; Abcf2 (mouse) mapping to 5 A3.

## SOURCE

ABCF2 (E-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 531-543 near the C-terminus of ABCF2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ABCF2 (E-2) is available conjugated to agarose (sc-390496 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390496 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390496 PE), fluorescein (sc-390496 FITC), Alexa Fluor® 488 (sc-390496 AF488), Alexa Fluor® 546 (sc-390496 AF546), Alexa Fluor® 594 (sc-390496 AF594) or Alexa Fluor® 647 (sc-390496 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390496 AF680) or Alexa Fluor® 790 (sc-390496 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390496 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## STORAGE

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

## APPLICATIONS

ABCF2 (E-2) is recommended for detection of ABCF2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

ABCF2 (E-2) is also recommended for detection of ABCF2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ABCF2 siRNA (h): sc-60119, ABCF2 siRNA (m): sc-60120, ABCF2 shRNA Plasmid (h): sc-60119-SH, ABCF2 shRNA Plasmid (m): sc-60120-SH, ABCF2 shRNA (h) Lentiviral Particles: sc-60119-V and ABCF2 shRNA (m) Lentiviral Particles: sc-60120-V.

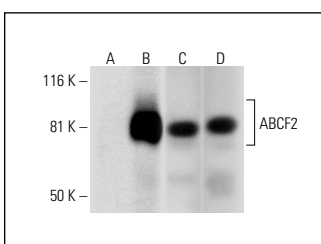
Molecular Weight of ABCF2: 71 kDa.

Positive Controls: ABCF2 (m): 293T Lysate: sc-118161, HeLa whole cell lysate: sc-2200 or MDA-MB-231 cell lysate: sc-2232.

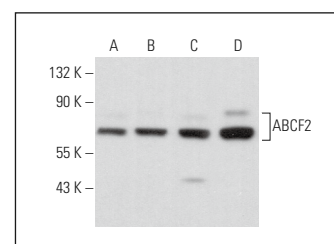
## RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



ABCF2 (E-2): sc-390496. Western blot analysis of ABCF2 expression in non-transfected 293T: sc-117752 (A), mouse ABCF2 transfected 293T: sc-118161 (B), HeLa (C) and NIH/3T3 (D) whole cell lysates.



ABCF2 (E-2): sc-390496. Western blot analysis of ABCF2 expression in MDA-MB-231 (A), BT-20 (B), MCF7 (C) and RAW 264.7 (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Bao, L., et al. 2017. ABCF2, an Nrf2 target gene, contributes to cisplatin resistance in ovarian cancer cells. *Mol. Carcinog.* 56: 1543-1553.

## RESEARCH USE

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