SANTA CRUZ BIOTECHNOLOGY, INC.

# ABCD3 (H-195): sc-20973

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

The peroxisomal membrane contains several ATP-binding cassette (ABC) transporters, ABCD1-4 that are known to be present in the human peroxisome membrane. All four proteins are ABC half-transporters, which dimerize to form an active transporter. A mutation in the ABCD1 gene causes X-linked adreno-leukodystrophy (X-ALD), a peroxisomal disorder which affects lipid storage. ABCD2 in mouse is expressed at high levels in the brain and adrenal organs, which are adversely affected in X-ALD. The peroxisomal membrane comprises two quantitatively major proteins, PMP22 and ABCD3. ABCD3 is associated with irregularly shaped vesicles which may be defective peroxisomes or peroxisome precursors. ABCD1 localizes to peroxisomes. ABCB7 is a half-transporter involved in the transport of heme from the mitochondria to the cytosol.

## CHROMOSOMAL LOCATION

Genetic locus: ABCD3 (human) mapping to 1p21.3; Abcd3 (mouse) mapping to 3 G1.

## SOURCE

ABCD3 (H-195) is a rabbit polyclonal antibody raised against amino acids 280-475 of ABCD3 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.

## 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.

## APPLICATIONS

ABCD3 (H-195) is recommended for detection of ABCD3 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).

ABCD3 (H-195) is also recommended for detection of ABCD3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ABCD3 siRNA (h): sc-41147, ABCD3 siRNA (m): sc-41148, ABCD3 shRNA Plasmid (h): sc-41147-SH, ABCD3 shRNA Plasmid (m): sc-41148-SH, ABCD3 shRNA (h) Lentiviral Particles: sc-41147-V and ABCD3 shRNA (m) Lentiviral Particles: sc-41148-V.

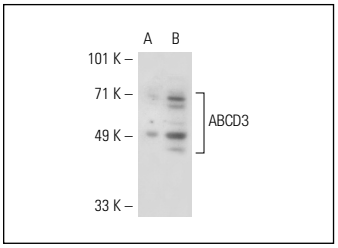
Molecular Weight of ABCD3: 75 kDa.

Positive Controls: ABCD3 (h): 293 Lysate: sc-111305 or HeLa whole cell lysate: sc-2200.

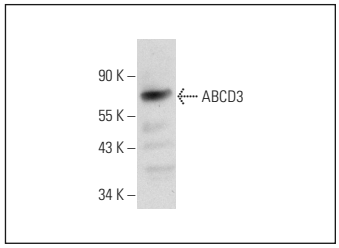
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA




ABCD3 (H-195): sc-20973. Western blot analysis of ABCD3 expression in non-transfected: sc-110760 (**A**) and human ABCD3 transfected: sc-111305 (**B**) 293 whole cell lysates.




ABCD3 (H-195): sc-20973. Western blot analysis of ABCD3 expression in HeLa whole cell lysate.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.