## SANTA CRUZ BIOTECHNOLOGY, INC.

# ABCC13 (I-18): sc-83183



## BACKGROUND

The ATP-binding cassette (ABC) superfamily is comprised of transmembrane proteins involved in energy-dependent transport of a variety of substrates across membranes. ABCC13 is a 274 amino acid protein belonging to the MRP subfamily of the ABC transporter family. ABCC13 contains one ABC transmembrane type-1 domain, but does not contain Walker A, Walker B, and signature C motifs that are present in most ABC proteins, which indicates ABCC13 is not a functional transporter. ABCC13 has highest levels in colon and is present at lower levels in brain, liver, placenta, lung, ovary and pancreas. ABCC13 is expressed as five isoforms produced by alternative splicing.

## REFERENCES

- Dean, M., Rzhetsky, A. and Allikmets, R. 2001. The human ATP-binding cassette (ABC) transporter superfamily. Genome Res. 11: 1156-1166.
- Yabuuchi, H., Takayanagi, S., Yoshinaga, K., Taniguchi, N., Aburatani, H. and Ishikawa, T. 2002. ABCC13, an unusual truncated ABC transporter, is highly expressed in fetal human liver. Biochem. Biophys. Res. Commun. 299: 410-417.
- Gardiner, K., Slavov, D., Bechtel, L. and Davisson, M. 2002. Annotation of human chromosome 21 for relevance to Down syndrome: gene structure and expression analysis. Genomics 79: 833-843.
- Brun, M.E., Ruault, M., Ventura, M., Roizès, G. and De Sario, A. 2003. Juxtacentromeric region of human chromosome 21: a boundary between centromeric heterochromatin and euchromatic chromosome arms. Gene 312: 41-50.
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## CHROMOSOMAL LOCATION

Genetic locus: ABCC13 (human) mapping to 21q11.2.

### SOURCE

ABCC13 (I-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ABCC13 of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83183 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 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

ABCC13 (I-18) is recommended for detection of ABCC13 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 ABC family members.

ABCC13 (I-18) is also recommended for detection of ABCC13 in additional species, including equine, canine and bovine.

Molecular Weight of ABCC13: 31 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HEK293 whole cell lysate: sc-45136 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



ABCC13 (I-18): sc-83183. Western blot analysis of ABCC13 expression in HEK293 (A), Hep G2 (B), HeLa (C), SW480 (D), JAR (E) and A549 (F) whole cell lysates.

#### **PROTOCOLS**

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

