

# ABCA13 (K-18): sc-163601

## BACKGROUND

ABCA13 (ATP-binding cassette, sub-family A (ABC1), member 13) is a 5,058 amino acid protein, the largest ABC transporter protein, that belongs to the ABC transporter superfamily. The ABC1 subfamily is the only major ABC subfamily exclusive to multicellular eukaryotes. Encoded by a gene that maps to human chromosome 7p12.3, ABCA13 is expressed in testis, bone marrow and trachea and participates in ATP and nucleotide binding. ABCA13 is a multi-pass membrane protein that contains two ABC transporter domains and exists as three alternatively spliced isoforms. ABCA13 consists of at least 12 transmembrane  $\alpha$ -helix domains, which probably arrange to form one main chamber that contains multiple binding sites for substrates. ABCA13 is predicted to have two large extracellular domains and two nucleotide binding domains, which is representative of ABCA proteins. ABCA13 may be linked to schizophrenia, bipolar disorder and depression.

## REFERENCES

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- Tang, L., et al. 2010. Hematopoietic stem cells exhibit a specific ABC transporter gene expression profile clearly distinct from other stem cells. *BMC Pharmacol.* 10: 12.
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## CHROMOSOMAL LOCATION

Genetic locus: ABCA13 (human) mapping to 7p12.3; Abca13 (mouse) mapping to 11 A1.

## SOURCE

ABCA13 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ABCA13 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163601 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ABCA13 (K-18) is recommended for detection of ABCA13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 ABCA family members.

ABCA13 (K-18) is also recommended for detection of ABCA13 in additional species, including equine and bovine.

Suitable for use as control antibody for ABCA13 siRNA (h): sc-89663, ABCA13 siRNA (m): sc-140746, ABCA13 shRNA Plasmid (h): sc-89663-SH, ABCA13 shRNA Plasmid (m): sc-140746-SH, ABCA13 shRNA (h) Lentiviral Particles: sc-89663-V and ABCA13 shRNA (m) Lentiviral Particles: sc-140746-V.

Molecular Weight of ABCA13: 576 kDa.

## 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) 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.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.