

ABCC11 (4H6): sc-517150

BACKGROUND

ATP-binding cassette (ABC) transporters belong to an evolutionarily conserved family of proteins that catalyze the transport of molecules across extra- and intracellular membranes through the energy of ATP hydrolysis. ABC genes comprise seven subfamilies, designated ABC1, MDR/TAP, MRP, ALD, OABP, GCN20 and White. The complete human ABCC subfamily has 12 identified members (ABCC1-12), nine from the multidrug resistance-like subgroup, two from the sulfonyleurea receptor subgroup, and the CFTR gene. The human ABCC11 gene maps to chromosome 16q12.1 and encodes a 1,382 amino acid protein. The human ABCC12 gene maps to chromosome 16q12.1 and encodes a 1,359 amino acid protein. Transcripts of ABCC11 and ABCC12 genes are present in various adult human tissues, including liver, lung and kidney, and also in several fetal tissues. Their chromosomal localization, potential function and expression patterns identify them as candidates for paroxysmal kinesigenic choreoathetosis, a disorder characterized by attacks of involuntary movements and postures, chorea and dystonia. Other inherited disorders where ABC transporters are implicated include cystic fibrosis, neurological disease, retinal degeneration, cholesterol and bile transport defects, anemia and drug response.

REFERENCES

1. Tammur, J., et al. 2001. Two new genes from the human ATP-binding cassette transporter superfamily, ABCC11 and ABCC12, tandemly duplicated on chromosome 16q12. *Gene* 273: 89-96.
2. Yabuuchi, H., et al. 2001. Multiple splicing variants of two new human ATP-binding cassette transporters, ABCC11 and ABCC12. *Biochem. Biophys. Res. Commun.* 288: 933-939.
3. Bera, T.K., et al. 2001. MRP8, a new member of ABC transporter superfamily, identified by EST database mining and gene prediction program, is highly expressed in breast cancer. *Mol. Med.* 7: 509-516.
4. Dean, M., et al. 2001. The human ATP-binding cassette (ABC) transporter superfamily. *Genome Res.* 11: 1156-1166.
5. Chen, Z.S., et al. 2005. Transport of bile acids, sulfated steroids, estradiol 17- β -D-glucuronide, and leukotriene C4 by human multidrug resistance protein 8 (ABCC11). *Mol. Pharmacol.* 67: 545-557.

CHROMOSOMAL LOCATION

Genetic locus: ABCC11 (human) mapping to 16q12.1.

SOURCE

ABCC11 (4H6) is a mouse monoclonal antibody raised against amino acids 433-532 representing partial length ABCC11 of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain 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.

APPLICATIONS

ABCC11 (4H6) is recommended for detection of ABCC11 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Suitable for use as control antibody for ABCC11 siRNA (h): sc-43594, ABCC11 shRNA Plasmid (h): sc-43594-SH and ABCC11 shRNA (h) Lentiviral Particles: sc-43594-V.

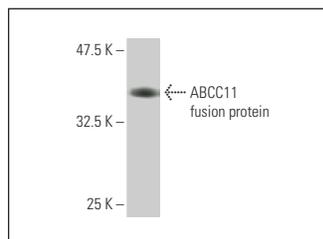
Molecular Weight of ABCC11: 170-190 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



ABCC11 (4H6): sc-517150. Western blot analysis of human recombinant ABCC11 fusion protein.

RESEARCH USE

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

PROTOCOLS

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