BSEP (P-18): sc-17294



The Power to Question

BACKGROUND

ATP-binding cassette (ABC) transporters are an evolutionary 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 secretion of bile salt molecules from blood into bile is a major driving force for bile formation. Bile salt export pump (BSEP) is a member of the MDR/TAP subfamily of ABC transporters that mediates the transport of bile acids across the hepatocyte canalicular membrane and regulates bile acid-dependent bile secretion. BSEP contains putative phosphorylation sites for protein kinase A, protein kinase C (PKC) and Ca²⁺-calmodulin dependent kinase II, whose regulation may be dependent on bile salt concentration.

CHROMOSOMAL LOCATION

Genetic locus: ABCB11 (human) mapping to 2q31.1; Abcb11 (mouse) mapping to 2 C2.

SOURCE

BSEP (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BSEP of mouse origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17294 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

BSEP (P-18) is recommended for detection of BSEP of mouse, rat and, to a lesser extent, 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).

BSEP (P-18) is also recommended for detection of BSEP in additional species, including equine and canine.

Suitable for use as control antibody for BSEP siRNA (h): sc-41157, BSEP siRNA (m): sc-41158, BSEP shRNA Plasmid (h): sc-41157-SH, BSEP shRNA Plasmid (m): sc-41158-SH, BSEP shRNA (h) Lentiviral Particles: sc-41157-V and BSEP shRNA (m) Lentiviral Particles: sc-41158-V.

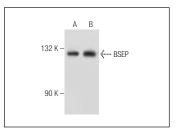
Molecular Weight of BSEP: 160-190 kDa.

Positive Controls: rat liver extract: sc-2395 or C3H/10T1/2 cell lysate: sc-3801.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



BSEP (P-18): sc-17294. Western blot analysis of BSEP expression in K-562 (**A**) and U266 (**B**) whole cell lysates

SELECT PRODUCT CITATIONS

- 1. Ruiz, M.L., et al. 2005. Mechanisms involved in spironolactone-induced choleresis in the rat. Role of multidrug resistance-associated protein 2. Biochem. Pharmacol. 69: 531-539.
- 2. Kong, J., et al. 2014. Enhancement of interaction of BSEP and HAX-1 on the canalicular membrane of hepatocytes in a mouse model of cholesterol cholelithiasis. Int. J. Clin. Exp. Pathol. 7: 1644-1650.

RESEARCH USE

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

PROTOCOLS

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



Try **BSEP (F-6):** sc-74500, our highly recommended monoclonal alternative to BSEP (P-18). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **BSEP (F-6):** sc-74500.

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