



OST α (T-14): sc-100079

BACKGROUND

The heteromeric transporter OST α /OST β facilitates the transport of bile and other steroid solutes across the basolateral epithelial cell membrane of intestine, liver, testis, kidney and adrenal gland. OST α /OST β expression is induced by bile acids through ligand-dependent transactivation of their genes by FXR (Farnesoid X-activated receptor). This genetic regulation suggests that in response to changes in intracellular bile acid levels, bile acids adjust the rate of their own efflux from enterocytes. OST α (organic solute transporter subunit α) is a 340 amino acid multi-pass membrane protein that requires interaction with OST β in order to reach the plasma membrane. In OST α null mice, transileal transport of taurocholate was reduced by more than 80% and bile acid pool size was reduced by more than 65% when compared with wildtype mice, suggesting that OST α is critical for intestinal bile acid transport. Though widely expressed, OST α is present at highest levels in ileum.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OST α (human) mapping to 3q29; Osta (mouse) mapping to 16 B3.

SOURCE

OST α (T-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of OST α of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100079 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OST α (T-14) is recommended for detection of OST α of mouse and 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 OST α siRNA (h): sc-78006, OST α siRNA (m): sc-151335, OST α shRNA Plasmid (h): sc-78006-SH, OST α shRNA Plasmid (m): sc-151335-SH, OST α shRNA (h) Lentiviral Particles: sc-78006-V and OST α shRNA (m) Lentiviral Particles: sc-151335-V.

Molecular Weight of OST α : 40 kDa.

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.

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 or our catalog for detailed protocols and support products.