

ACOT8 (H-320): sc-7018

BACKGROUND

ACOT8 (Acyl-CoA thioesterase 8) also designated, TEII p35 or hTE, is a novel human thioesterase that has been found to interact with the HIV protein Nef using yeast two-hybrid screening. Nef is an auxiliary gene of the human immunodeficiency virus (HIV) which facilitates virus replication and enhances infectivity. The roles of Nef in HIV-infected cells are likely to be mediated by specific interactions with cellular proteins. The interaction between Nef and ACOT8 is correlated with CD4 downregulation, suggesting that ACOT8 may be involved in Nef-mediated CD4 downregulation in HIV-infected cells. ACOT8 is 42% identical to thioesterase II from *Escherichia coli*, and it has no significant homology with the two types of animal thioesterases that have previously been cloned (type I and type II thioesterases).

REFERENCES

1. Miller, M.D., Warmerdam, M.T., Gaston, I., Greene, W.C. and Feinberg, M.B. 1994. The human immunodeficiency virus-1 Nef gene product: a positive factor for viral infection and replication in primary lymphocytes and macrophages. *J. Exp. Med.* 179: 101-113.
2. Spina, C.A., Kwok, T.J., Chowes, M.Y., Guatelli, J.C. and Richmann, D.D. 1994. The importance of Nef in the induction of human immunodeficiency virus type 1 replication from primary quiescent CD4 lymphocytes. *J. Exp. Med.* 179: 115-123.

CHROMOSOMAL LOCATION

Genetic locus: PTE1 (human) mapping to 20q12-q13.1; Pte1 (mouse) mapping to 2 H3.

SOURCE

ACOT8 (H-320) is a rabbit polyclonal antibody raised against amino acids 1-320 of ACOT8 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ACOT8 (H-320) is recommended for detection of ACOT8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ACOT8 (H-320) is also recommended for detection of ACOT8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ACOT8 siRNA (h): sc-41058, ACOT8 shRNA Plasmid (h): sc-41058-SH and ACOT8 shRNA (h) Lentiviral Particles: sc-41058-V.

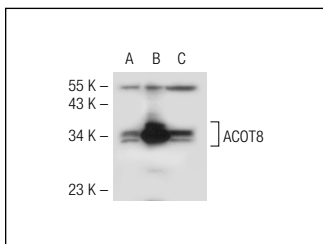
Molecular Weight of ACOT8: 35 kDa.

Positive Controls: human small intestine tissue.

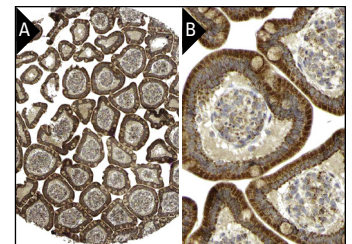
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ACOT8 (H-320): sc-7018. Western blot analysis of ACOT8 expression in non-transfected 293T: sc-117752 (A), mouse ACOT8 transfected 293T: sc-126376 (B) and Ramos (C) whole cell lysates.



ACOT8 (H-320): sc-7018. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

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.



Try **ACOT8 (C-3): sc-7343**, our highly recommended monoclonal alternative to ACOT8 (H-320).