

# PACS-1a (R-17): sc-8466

## BACKGROUND

Phosphofurin acidic cluster sorting protein-1 (PACS-1) is related to a family of cytosolic proteins, including HIV-1 Nef and  $\beta$ -arrestin, that direct the internalization of cell surface receptors through the association with the clathrin/AP-2 sorting machinery. Similarly, PACS-1 participates in the localization of membrane proteins to the secretory pathway membrane compartments. Within the secretory pathway, the *trans*-Golgi network (TGN)/endosomal system is essential for sorting and distributing soluble and membrane associated proteins, and for producing lysosomes for exocytosis. PACS-1 is expressed from two distinct reading frames, which generate both a larger form, designated PACS-1a, and a smaller protein that is designated PACS-1b. PACS-1 proteins preferentially bind to the endoprotease, furin, as well as to the mannose 6-phosphate receptor, where they then facilitate the trafficking and localization of these proteins to the TGN, in a phosphorylation dependent manner.

## CHROMOSOMAL LOCATION

Genetic locus: PACS1 (human) mapping to 11q13.1; Pacs1 (mouse) mapping to 19 A.

## SOURCE

PACS-1a (R-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PACS-1a of rat 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-8466 P, (100  $\mu$ 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

PACS-1a (R-17) is recommended for detection of PACS-1a of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

PACS-1a (R-17) is also recommended for detection of PACS-1a in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PACS-1a siRNA (h): sc-106348, PACS-1 siRNA (m): sc-151986, PACS-1a shRNA Plasmid (h): sc-106348-SH, PACS-1 shRNA Plasmid (m): sc-151986-SH, PACS-1a shRNA (h) Lentiviral Particles: sc-106348-V and PACS-1 shRNA (m) Lentiviral Particles: sc-151986-V.

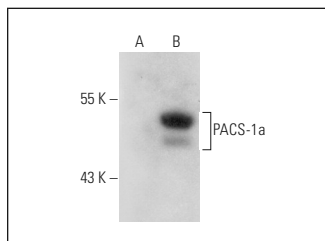
Molecular Weight of PACS-1a: 120 kDa.

Positive Controls: PACS-1 (m): 293T Lysate: sc-122347.

## 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



PACS-1a (R-17): sc-8466. Western blot analysis of PACS-1a expression in non-transfected: sc-117752 (A) and mouse PACS-1 transfected: sc-122347 (B) 293T whole cell lysates.

## 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.


 MONOS  
Satisfaction  
Guaranteed

Try **PACS-1a (4): sc-136344**, our highly recommended monoclonal alternative to PACS-1a (R-17).