PACS-1a (4): sc-136344

BACKGROUND

Phosphofurin acidic cluster sorting protein-1 (PACS-1) is related to a family of cytosolic proteins, including HIV-1 Nef and β-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 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.

REFERENCES


CHROMOSOMAL LOCATION

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

SOURCE

PACS-1a (4) is a mouse monoclonal antibody raised against amino acids 733-927 of PACS-1a of rat origin.

PRODUCT

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

PACS-1a (4) is available conjugated to agarose (sc-136344 AC), 500 µg/0.25 ml agarose in 1 ml, for IP, and to HRP (sc-136344 HRP), 200 µg/ml, for WB, IHCP and ELISA.

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 (4) is recommended for detection of PACS-1a of human origin, PACS-1 of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]; non cross-reactive with PACS-1b.

SELECT PRODUCT CITATIONS


RESEARCH USE

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