

Sec23IP (Q-12): sc-160784

BACKGROUND

COPII-coated vesicles form on the endoplasmic reticulum by the stepwise recruitment of three cytosolic components: Sar1-GTP to initiate coat formation, Sec23/24 heterodimer to select SNARE and cargo molecules, and Sec13/31 to induce coat polymerization and membrane deformation. Sec23 is the functional human counterpart of the yeast COPII component Sec23p, which suggests that it plays a similar role in mammalian protein export from the ER. Sec23IP (Sec23 interacting protein), also known as P125 or MSTP053, is a 1,000 amino acid protein that is ubiquitously expressed and interacts with Sec23 through its N-terminus. Sec23IP is suggested to assist in the early secretory pathway as well as in the organization of exit sites of the endoplasmic reticulum. A member of the PA-PLA1 family, Sec23IP exists as two alternatively spliced isoforms containing one DDHD domain and a SAM (sterile α motif) domain.

REFERENCES

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- Tani, K., et al. 1999. p125 is a novel mammalian Sec23p-interacting protein with structural similarity to phospholipid-modifying proteins. *J. Biol. Chem.* 274: 20505-20512.
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- Bi, X., et al. 2002. Structure of the Sec23/24-Sar1 pre-budding complex of the COPII vesicle coat. *Nature* 419: 271-277.

CHROMOSOMAL LOCATION

Genetic locus: SEC23IP (human) mapping to 10q26.11; Sec23ip (mouse) mapping to 7 F3.

SOURCE

Sec23IP (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Sec23IP of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 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-160784 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Sec23IP (Q-12) is recommended for detection of Sec23IP of mouse, rat 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).

Sec23IP (Q-12) is also recommended for detection of Sec23IP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Sec23IP siRNA (h): sc-90706, Sec23IP siRNA (m): sc-153309, Sec23IP shRNA Plasmid (h): sc-90706-SH, Sec23IP shRNA Plasmid (m): sc-153309-SH, Sec23IP shRNA (h) Lentiviral Particles: sc-90706-V and Sec23IP shRNA (m) Lentiviral Particles: sc-153309-V.

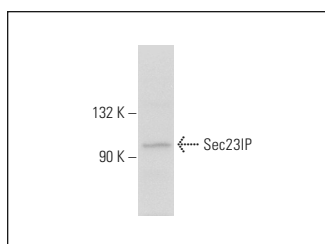
Molecular Weight of Sec23IP: 111 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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



Sec23IP (Q-12): sc-160784. Western blot analysis of Sec23IP expression in HeLa whole cell lysate.

RESEARCH USE

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