

ERGIC-3 (P-16): sc-85554

BACKGROUND

Cycling proteins play important roles in the organization and function of the early secretory pathway by participating in membrane traffic and selective transport of cargo between the endoplasmic reticulum (ER), the intermediate compartment (ERGIC) and the Golgi. A family of membrane bound, ubiquitous proteins involved in the selective transport of newly synthesized glycoproteins from the ER to the ERGIC include VIP36, ERGIC-53, ERGIC-1, ERGIC-2 and ERGIC-3. ERGIC-1, also designated ERGIC32, is thought to modulate the activity of a complex formed by ERGIC-2 (also designated Erv41) and ERGIC-3 (also designated Erv46). ERGIC-2 and ERGIC-3 are both mammalian homologs of yeast proteins abundant in COPII-coated vesicles and localize to the *cis*-face of the Golgi apparatus.

REFERENCES

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- Kamiya, Y., Yamaguchi, Y., Takahashi, N., Arata, Y., Kasai, K., Ihara, Y., Matsuo, I., Ito, Y., Yamamoto, K. and Kato, K. 2005. Sugar-binding properties of VIP36, an intracellular animal lectin operating as a cargo receptor. *J. Biol. Chem.* 280: 37178-37182.

CHROMOSOMAL LOCATION

Genetic locus: ERGIC3 (human) mapping to 20q11.22; Ergic3 (mouse) mapping to 2 H1.

SOURCE

ERGIC-3 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ERGIC-3 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.

Blocking peptide available for competition studies, sc-85554 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ERGIC-3 (P-16) is recommended for detection of ERGIC-3 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ERGIC-3 (P-16) is also recommended for detection of ERGIC-3 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for ERGIC-3 siRNA (h): sc-77283, ERGIC-3 siRNA (m): sc-144929, ERGIC-3 shRNA Plasmid (h): sc-77283-SH, ERGIC-3 shRNA Plasmid (m): sc-144929-SH, ERGIC-3 shRNA (h) Lentiviral Particles: sc-77283-V and ERGIC-3 shRNA (m) Lentiviral Particles: sc-144929-V.

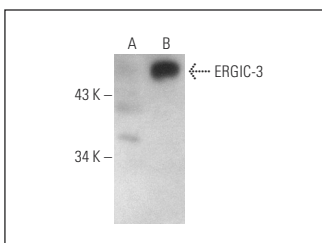
Molecular Weight of ERGIC-3: 43/26/44 kDa.

Positive Controls: ERGIC-3 (m): 293T Lysate: sc-126805 or Hep G2 cell lysate: sc-2227.

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



ERGIC-3 (P-16): sc-85554. Western blot analysis of ERGIC-3 expression in non-transfected: sc-117752 (A) and mouse ERGIC-3 transfected: sc-126805 (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.