

# ERGIC-3 (Y-23): sc-133558

## 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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- Orci, L., Ravazzola, M., Mack, G.J., Barlowe, C. and Otte, S. 2003. Mammalian Erv46 localizes to the endoplasmic reticulum-Golgi intermediate compartment and to *cis*-Golgi cisternae. *Proc. Natl. Acad. Sci. USA* 100: 4586-4591.
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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 (Y-23) is an affinity purified rabbit polyclonal antibody raised against synthetic ERGIC-3 peptide of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## STORAGE

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

## APPLICATIONS

ERGIC-3 (Y-23) 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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 isoform 1: 43 kDa.

Molecular Weight of ERGIC-3 isoform 2: 26 kDa.

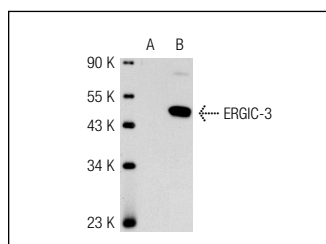
Molecular Weight of ERGIC-3 isoform 3: 44 kDa.

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

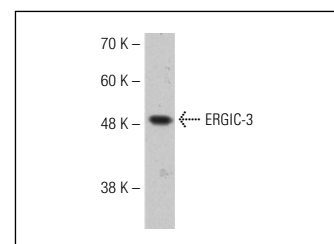
## RECOMMENDED SECONDARY REAGENTS

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).

## DATA



ERGIC-3 (Y-23): sc-133558. 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.



ERGIC-3 (Y-23): sc-133558. Western blot analysis of ERGIC-3 expression in Hep G2 whole cell lysate.

## RESEARCH USE

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

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Try **ERGIC-3 (E-3): sc-514611** or **ERGIC-3 (B-5): sc-398778**, our highly recommended monoclonal alternatives to ERGIC-3 (Y-23).