ERGIC2 Antibody / ERGIC and golgi 2 Antibody (FY13630)

Catalog No.	Formulation	Size
FY13630	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q96RQ1
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Immunoprecipitation: 2ug per 500ug of lysate ELISA: 0.1-0.5 ug/ml
Limitations	This ERGIC2 Antibody / ERGIC and golgi 2 Antibody is intended for research use only.

ERGIC2 Antibody by IF in U2OS cells. Immunofluorescence analysis using ERGIC and golgi 2 Antibody reveals strong green nuclear fluorescence with a weaker cytoplasmic signal in U2OS cells. Red alpha-tubulin counterstaining highlights the cytoskeleton. Cells were treated with enzyme-based antigen retrieval and incubated with 5 ug/mL primary antibody overnight at 4oC before fluorescent secondary antibody detection. The image depicts the observed staining pattern without establishing organelle-specific colocalization.

ERGIC2 Antibody by IHC in human prostate carcinoma. Immunohistochemistry of paraffin-embedded human prostate carcinoma using ERGIC and golgi 2 Antibody shows brown staining in glandular epithelial structures with hematoxylin-counterstained nuclei. Heat-mediated antigen retrieval was performed using EDTA buffer at pH 8.0. Sections were blocked with goat serum and incubated with 2 ug/mL primary antibody overnight at 4oC, followed by HRP-conjugated secondary antibody and DAB visualization.

ERGIC2 Antibody by IHC in human lung carcinoma. Immunohistochemistry of paraffin-embedded human lung carcinoma using ERGIC and golgi 2 Antibody shows brown staining in tumor cells and adjacent tissue structures with hematoxylin-counterstained nuclei. Heat-mediated antigen retrieval was performed using EDTA buffer at pH 8.0. Sections were blocked with goat serum and incubated with 2 ug/mL primary antibody overnight at 4oC, followed by HRP-conjugated secondary antibody and DAB visualization.

ERGIC2 Antibody by WB in human PC-3 and HeLa cells. Western blot analysis using ERGIC and golgi 2 Antibody detects a prominent immunoreactive band consistent with the expected molecular weight of approximately 43 kDa. Lanes 1 and 2 contain PC-3 and HeLa whole-cell lysates, respectively. Reduced samples containing 30 ug total protein per lane were resolved by 10% SDS-PAGE and transferred to nitrocellulose. The membrane was blocked with 5% nonfat milk, incubated with 0.5 ug/mL primary antibody overnight at 4oC, and probed with an HRP-conjugated secondary antibody. Signal was visualized by chemiluminescence.

ERGIC2 Antibody by IP in HeLa. Immunoprecipitation of ERGIC and golgi 2 Antibody from HeLa whole-cell lysate was assessed by Western blot. Lane 1 contains 30 ug input lysate, lane 2 a rabbit IgG control immunoprecipitate, and lane 3 the antibody-specific immunoprecipitate prepared with 2 ug antibody and 500 ug lysate. An immunoreactive band consistent with the expected approximately 43 kDa protein is visible in input and the specific immunoprecipitate. The 50 kDa signal in immunoprecipitation lanes is consistent with immunoglobulin heavy chain.

Description

ERGIC2 Antibody / ERGIC and golgi 2 Antibody recognizes a membrane-associated protein linked to the early secretory pathway. ERGIC2 is associated with the endoplasmic reticulum-Golgi intermediate compartment (ERGIC) and Golgi region, which coordinate the movement of newly synthesized proteins and lipids between intracellular membrane systems. This trafficking network must balance forward transport toward the Golgi with retrieval of resident proteins that belong in earlier compartments.

After proteins leave the endoplasmic reticulum, transport intermediates deliver them to the ERGIC, a dynamic collection of membrane structures that serves as a sorting and transit station. Cargo molecules may proceed toward the Golgi apparatus, while other components are returned to the ER. The fidelity of these movements depends on vesicle coats, membrane fusion machinery, cargo receptors, and proteins that help maintain compartment identity. ERGIC2 has been implicated in this organizational environment, although its direct molecular activities are less completely defined than those of several well-characterized trafficking factors.

Localization to an organelle does not by itself establish whether a protein acts as a cargo selector, structural organizer, or regulator of transport. For ERGIC2, the distinction remains important because the ERGIC is continually remodeled as secretory demand changes. The protein's membrane association suggests that its function may be connected to compartment architecture or interactions with other trafficking components, but specific mechanisms require direct experimental support.

Disruption of early secretory transport can affect protein maturation, glycosylation, membrane composition, and signaling through receptors that depend on correct intracellular delivery. Such effects can extend to processes as diverse as extracellular matrix production and cellular stress adaptation. Studying individual ERGIC-associated proteins helps separate defects in transport itself from secondary responses to accumulated cargo.

NSJ Bioreagents offers this ERGIC2 Antibody to support investigation of ERGIC2 within the membrane-trafficking system connecting the ER and Golgi. A clearer understanding of its binding partners and functional requirements may reveal how less-characterized proteins contribute to the organization and continuity of the secretory pathway.

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Application Notes

Working dilutions of the ERGIC2 Antibody / ERGIC and golgi 2 Antibody may require optimization according to the experimental protocol.

Immunogen

The ERGIC2 Antibody was generated using e. coli-derived human ERGIC2 recombinant protein (amino acids E63-H377).

Storage

After reconstitution, the ERGIC2 Antibody may be stored at 4oC for up to one month. For longer storage, aliquot and freeze at -20oC for up to six months. Avoid repeated freezing and thawing.

Alternate Names

ERGIC2 antibody, Endoplasmic reticulum-Golgi intermediate compartment protein 2 antibody, ERGIC and golgi 2 antibody, PTX1 antibody, ERV41 antibody, CDA14 antibody

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