

GLG1 Antibody / Golgi apparatus protein 1 (FY13229)

Catalog No.	Formulation	Size
FY13229	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q92896
Applications	Western Blot : 0.25-0.5ug/ml Immunohistochemistry : 2-5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This GLG1 antibody is available for research use only.

Description

GLG1 antibody detects Golgi apparatus protein 1, also known as Golgi glycoprotein 1 or E-selectin ligand 1, a type I transmembrane protein involved in protein trafficking, glycosylation, and cell adhesion. The UniProt recommended name is Golgi apparatus protein 1 (GLG1). This protein serves as a key component of the Golgi matrix and participates in sorting and processing of glycoproteins destined for secretion or membrane localization.

Functionally, GLG1 antibody identifies a 1,474-amino-acid type I membrane glycoprotein containing multiple FG (phenylalanine-glycine)-like and epidermal growth factor (EGF)-like repeats. GLG1 acts as a recycling receptor in the Golgi, binding fibroblast growth factors (FGFs) and contributing to their intracellular trafficking. It also functions as a ligand for E-selectin, mediating leukocyte adhesion to endothelial cells during inflammation. Within the Golgi, GLG1 organizes cisternal structure and assists in the retrieval of escaped proteins from post-Golgi compartments.

The GLG1 gene is located on chromosome 16q22.1 and is widely expressed in epithelial, endothelial, and secretory tissues. Its expression is tightly regulated by growth factors and stress signals, ensuring efficient vesicular transport and glycoprotein processing.

Pathologically, GLG1 dysregulation has been linked to cancer progression, congenital disorders of glycosylation, and inflammatory diseases. Overexpression promotes tumor cell migration and metastasis by enhancing adhesion to E-selectin and modulating FGF signaling. Conversely, reduced GLG1 disrupts protein trafficking and Golgi integrity. Research using GLG1 antibody supports studies in vesicular transport, cell adhesion, and tumor biology.

GLG1 antibody is validated for western blotting, immunohistochemistry, and immunofluorescence to detect Golgiassociated proteins. NSJ Bioreagents provides GLG1 antibody reagents optimized for studies in glycoprotein trafficking, Golgi organization, and cell adhesion signaling.

Structurally, Golgi apparatus protein 1 contains a long luminal region with repetitive domains, a single transmembrane helix, and a short cytoplasmic tail responsible for Golgi retention. The proteinÂ's modular structure supports both structural and signaling functions within secretory pathways. This antibody enables exploration of GLG1Â's role in Golgi function, protein sorting, and inflammatory cell adhesion.

Application Notes

Optimal dilution of the GLG1 antibody should be determined by the researcher.

Immunogen

E.coli-derived human GLG1 recombinant protein (Position: E173-K1040) was used as the immunogen for the GLG1 antibody.

Storage

After reconstitution, the GLG1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.