

DESCRIPTION

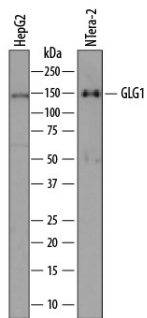
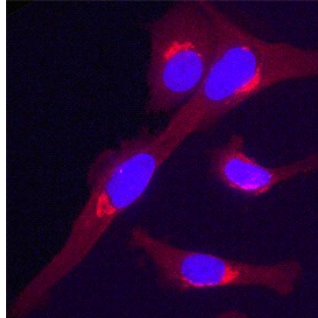
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Golgi Glycoprotein 1/GLG1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Golgi Glycoprotein 1/GLG1 Lys1048-Asn1145 Accession # Q92896
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Golgi Glycoprotein 1/GLG1 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line and Ntera-2 human testicular embryonic carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Sheep Anti-Human/Mouse/Rat Golgi Glycoprotein 1/GLG1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7879) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Golgi Glycoprotein 1/GLG1 at approximately 150 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunocytochemistry</p>  <p>Golgi Glycoprotein 1/GLG1 in PC-12 Rat Cell Line. Golgi Glycoprotein 1/GLG1 was detected in immersion fixed PC-12 rat adrenal pheochromocytoma cell line using Sheep Anti-Human/Mouse/Rat Golgi Glycoprotein 1/GLG1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7879) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to the Golgi complex. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

GLG1 (Golgi complex-Localized Glycoprotein 1; also CFR1, E-Selectin ligand-1/ESL-1, MG-160 and Cys-rich FGF receptor) is a 150-160 kDa (reducing; 130 kDa nonreducing) glycoprotein. It is expressed in both Golgi and/or the cell membrane of multiple cell types, including neutrophils (from rodents; not humans), liver stellate cells, neurons, cardiac myocytes, monocytes and bronchial epithelial cells. In the blood, GLG1/ESL-1 collaborates with PSGL-1 to mediate leukocyte binding to endothelial cell surfaces. PSGL-1 initiates leukocyte tethering while GLG1 promotes slow rolling. GLG1 also serves as an intra-Golgi receptor for multiple FGFs, including FGF-1, -2, -4, -18 and possibly -3, and as a component of an unusual latent TGF-β complex. Mature human GLG1 is an 1150 amino acid (aa) type I transmembrane protein. It contains a 1116 aa extracellular/luminal region (aa 30-1145) plus a short 13 aa cytoplasmic segment. The extracellular region possesses a 16 aa poly-Gln segment followed by 16 Cys-rich repeats (aa 116-1101). There are three potential isoform variants, one of which possess a 24 aa extension at the C-terminus, a second that couples the aforementioned C-terminal extension to a deletion of aa 147-157, and a third that contains a 14 aa substitution for aa 685-1179. It is suggested that the longer C-terminus retains GLG1 in the Golgi, while shorter cytoplasmic segments allow for presentation at the cell membrane. Over aa 1048-1145, human and mouse are identical in aa sequence.