

## DESCRIPTION

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

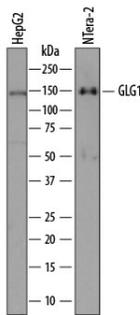
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	3-25 µg/mL	See Below

## DATA

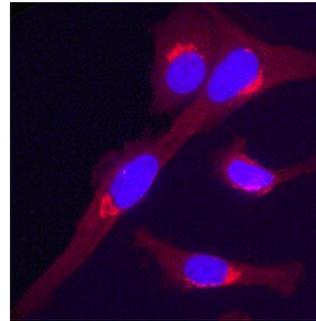
### Western Blot



#### 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.

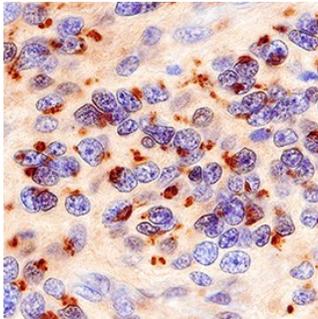
### Immunocytochemistry



#### 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](#).

### Immunohistochemistry



#### Golgi Glycoprotein 1/GLG1 in Human Astrocytoma.

Golgi Glycoprotein 1/GLG1 was detected in immersion fixed paraffin-embedded sections of human astrocytoma using Sheep Anti-Human/Mouse/Rat Golgi Glycoprotein 1/GLG1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7879) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Sheep IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC006). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to Golgi apparatus. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>

## 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- $\beta$  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.