

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human Golgi Glycoprotein 1/GLG1 in direct ELISA. Detects human and mouse GLG1 in Western Blots.
Source	Monoclonal Mouse IgG ₁ Clone # 858238
Purification	Protein A or G purified from hybridoma culture supernatant
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

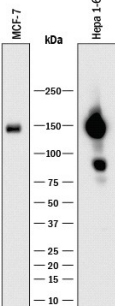
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

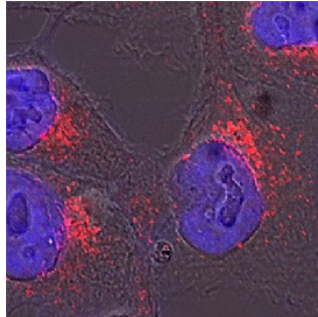
DATA

Western Blot



Detection of Human and Mouse Golgi Glycoprotein 1/GLG1 by Western Blot.
Western blot shows lysates of MCF-7 human breast cancer cell line and Hepa 1-6 mouse hepatoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human/Mouse Golgi Glycoprotein 1/GLG1 Monoclonal Antibody (Catalog # MAB78791) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). 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 1.

Immunocytochemistry



Golgi Glycoprotein 1/GLG1 in HeLa Human Cell Line. Golgi Glycoprotein 1/GLG1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human/Mouse Golgi Glycoprotein 1/GLG1 Monoclonal Antibody (Catalog # MAB78791) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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 known as 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.