

Anti-GLG1 Antibody Picoband®

Catalog Number: A07510-1

About GLG1

Golgi apparatus protein 1 is a protein that in humans is encoded by the GLG1 gene. The GLG1 gene, also known as Golgi apparatus protein 1, encodes a protein involved in maintaining the structural integrity and function of the Golgi apparatus, a vital organelle involved in protein processing and trafficking within the cell. GLG1 is associated with the formation of Golgi stacks and the regulation of vesicular transport between the endoplasmic reticulum and Golgi complex. It plays a critical role in protein glycosylation, sorting, and secretion. Dysregulation of GLG1 expression or function has been implicated in various cellular processes and diseases, including cancer progression, neurodegenerative disorders, and congenital disorders of glycosylation. Understanding the molecular mechanisms underlying GLG1 function is essential for unraveling its role in cellular physiology and its potential as a therapeutic target for diseases associated with Golgi dysfunction.

Overview

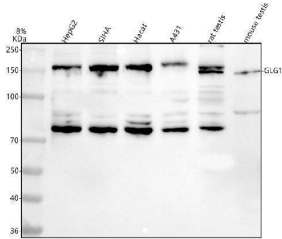
Product Name	Anti-GLG1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-GLG1 Antibody Picoband® catalog # A07510-1. Tested in WB, IHC, FCM, ELISA applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q92896

Technical Details

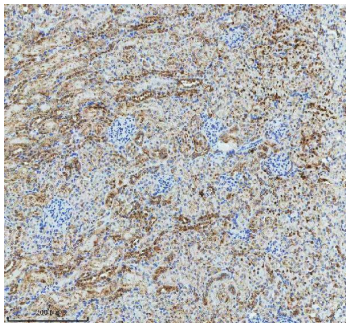
Immunogen	E.coli-derived human GLG1 recombinant protein (Position: E173-K1040). Human GLG1 shares 98.5% and 98% amino acid (aa) sequence identity with mouse and rat GLG1, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human ELISA, 0.1-0.5 ug/ml, -

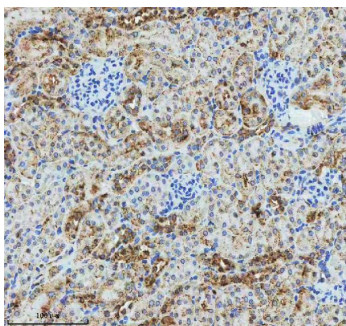
Anti-GLG1 Antibody Picoband® (A07510-1) Images



Western blot analysis of GLG1 using anti-GLG1 antibody (A07510-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: human SiHa whole cell lysates, Lane 3: human Hacat whole cell lysates, Lane 4: human A431 whole cell lysates, Lane 5: rat testis tissue lysates, Lane 6: mouse testis tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GLG1 antigen affinity purified polyclonal antibody (Catalog # A07510-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for GLG1 at approximately 150 kDa. The expected band size for GLG1 is at 135 kDa.

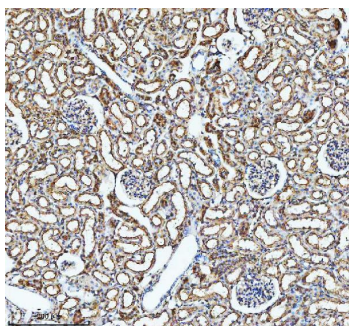


IHC analysis of GLG1 using anti-GLG1 antibody (A07510-1). GLG1 was detected in a paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-GLG1 Antibody (A07510-1) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

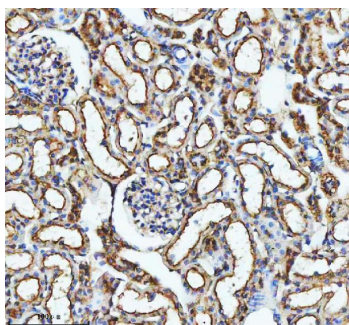


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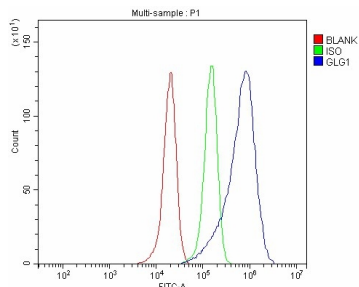
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Flow Cytometry analysis of SiHa cells using anti-GLG1 antibody (A07510-1). Overlay histogram showing SiHa cells stained with A07510-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GLG1 Antibody (A07510-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-GLG1 Antibody

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