

#### Anti-Golgin 97/GOLGA1 Antibody Picoband<sup>™</sup> (monoclonal, 8E4H1) Catalog # ABO16614

## Specification

# Anti-Golgin 97/GOLGA1 Antibody Picoband<sup>™</sup> (monoclonal, 8E4H1) - Product Information

Application	WB, IF, ICC, FC
Primary Accession	<u>Q92805</u>
Host	Mouse
lsotype	lgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	
Anti-Golgin 97/GOLGA1 Antibody Picoban	d™ (monoclonal, 8F4H1) , Te

Anti-Golgin 97/GOLGA1 Antibody Picoband<sup>™</sup> (monoclonal, 8E4H1) . Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human.

Reconstitution Adding 0.2 ml of distilled water will yield a concentration of 500  $\mu$ g/ml.

# Anti-Golgin 97/GOLGA1 Antibody Picoband™ (monoclonal, 8E4H1) - Additional Information

Gene ID 2800

Other Names Golgin subfamily A member 1, Golgin-97, GOLGA1

Calculated MW 97 kDa KDa

**Application Details** Western blot, 0.25-0.5 μg/ml, Human<br> Immunocytochemistry/Immunofluorescence, 5 μg/ml, Human<br> Flow Cytometry, 1-3 μg/1x10<sup>6</sup> cells, Human<br>

**Contents** Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.

Immunogen E.coli-derived human Golgin 97/GOLGA1 recombinant protein (Position: M1-K752).

**Purification** Immunogen affinity purified.

Storage

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.



# Anti-Golgin 97/GOLGA1 Antibody Picoband™ (monoclonal, 8E4H1) - Protein Information

## Name GOLGA1

#### Function

Involved in vesicular trafficking at the Golgi apparatus level. Involved in endosome-to-Golgi trafficking. Mechanistically, captures transport vesicles arriving from endosomes via the protein TBC1D23 (PubMed:<a href="http://www.uniprot.org/citations/29084197" target="\_blank">29084197</a>, PubMed:<a href="http://www.uniprot.org/citations/38552021" target="\_blank">38552021</a>). Recognized vesicles are then tethered to the trans-Golgi before subsequent SNARE engagement and vesicle fusion. Selectively regulates E-cadherin transport from the trans-Golgi network in tubulovesicular carriers (PubMed:<a href="http://www.uniprot.org/citations/34969853" target=" blank">34969853</a>).

#### **Cellular Location**

Golgi apparatus membrane; Peripheral membrane protein. Golgi apparatus, trans-Golgi network membrane Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:Q9CW79}

## Anti-Golgin 97/GOLGA1 Antibody Picoband<sup>™</sup> (monoclonal, 8E4H1) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# Anti-Golgin 97/GOLGA1 Antibody Picoband™ (monoclonal, 8E4H1) - Images



Figure 1. Western blot analysis of Golgin 97/GOLGA1 using anti-Golgin 97/GOLGA1 antibody (M13524-1).

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 U-87MG whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human PC-3 whole cell lysates,

Lane 4: human HepG2 whole cell 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 mouse anti-Golgin 97/GOLGA1 antigen affinity purified monoclonal antibody (Catalog # M13524-1) at 0.5  $\mu$ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Golgin 97/GOLGA1 at approximately 97 kDa. The expected band size for Golgin 97/GOLGA1 is at 88 kDa.



Figure 2. IF analysis of Golgin 97/GOLGA1 using anti-Golgin 97/GOLGA1 antibody (M13524-1). Golgin 97/GOLGA1 was detected in an immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5  $\mu$ g/mL mouse anti-Golgin 97/GOLGA1 Antibody (M13524-1) overnight at 4°C. Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Figure 3. Flow Cytometry analysis of A549 cells using anti-Golgin 97/GOLGA1 antibody (M13524-1).

Overlay histogram showing A549 cells stained with M13524-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Golgin 97/GOLGA1 Antibody (M13524-1, 1  $\mu$ g/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10  $\mu$ g/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype



control antibody (Green line) was mouse IgG (1  $\mu$ g/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

## Anti-Golgin 97/GOLGA1 Antibody Picoband™ (monoclonal, 8E4H1) - Background

Golgin subfamily A member 1 is a protein that in humans is encoded by the GOLGA1 gene. The Golgi apparatus, which participates in glycosylation and transport of proteins and lipids in the secretory pathway, consists of a series of stacked cisternae (flattened membrane sacs). Interactions between the Golgi and microtubules are thought to be important for the reorganization of the Golgi after it fragments during mitosis. This gene encodes one of the golgins, a family of proteins localized to the Golgi. This encoded protein is associated with Sjogren's syndrome.