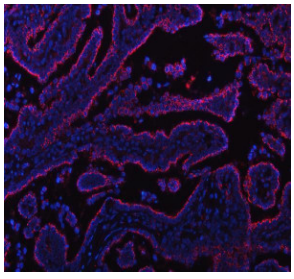
# TGOLN2 Antibody / Trans-Golgi Network Marker Antibody (FY12425)

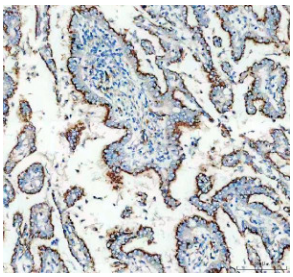
| Catalog No. | Formulation | Size |
|---|---|---|
| FY12425 | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml | 100 ug |

**Bulk quote request**

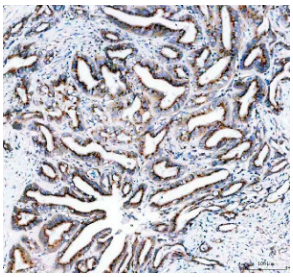
| | |
|---|---|
| **Availability** | 1-2 days |
| **Species Reactivity** | Human |
| **Format** | Lyophilized |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Immunogen affinity purified |
| **Buffer** | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4. |
| **UniProt** | O43493 |
| **Applications** | Western Blot: 0.25-0.5ug/ml<br>Flow cytometry: 1-3ug/million cells<br>ELISA: 0.1-0.5ug/ml<br>Immunofluorescence: 5ug/ml<br>Immunohistochemistry (FFPE): 2-5ug/ml |
| **Limitations** | This TGOLN2 Antibody / Trans-Golgi Network Marker Antibody is available for research use only. |



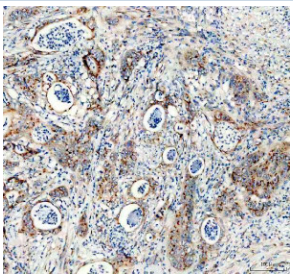
TGOLN2 Antibody Human Lung Cancer IF. Immunofluorescent staining of FFPE human lung cancer tissue using TGOLN2 Antibody. HIER was performed using pH 8 EDTA buffer, and sections were blocked with goat serum prior to staining. The tissue was incubated with rabbit anti-TGOLN2 antibody at 5 ug/ml overnight at 4Â°C. Cy3-conjugated goat anti-rabbit IgG (red) was used for detection, and nuclei were counterstained with DAPI (blue). This TGOLN2 Antibody demonstrates TGOLN2 expression within lung cancer tissue, supporting studies of trans-Golgi network function, vesicle trafficking, protein sorting, and intracellular transport pathways.



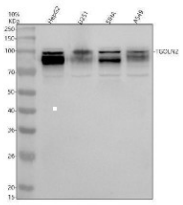
TGOLN2 Antibody Human Lung Cancer IHC. Immunohistochemical staining of FFPE human lung cancer tissue using TGOLN2 Antibody. HIER was performed using pH 8 EDTA buffer, and sections were blocked with goat serum prior to staining. The tissue was incubated with rabbit anti-TGOLN2 antibody at 2 ug/ml overnight at 4Â°C. An HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB substrate was used for detection. This TGOLN2 Antibody demonstrates TGOLN2 expression within lung cancer tissue, supporting studies of trans-Golgi network organization, vesicle trafficking, protein sorting, and intracellular transport pathways.



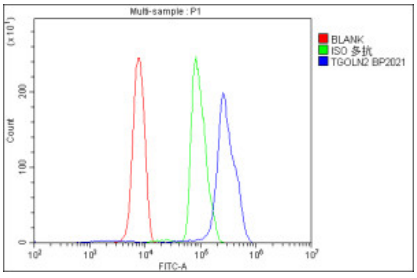
TGOLN2 Antibody Human Colon Cancer IHC. Immunohistochemical staining of FFPE human colon cancer tissue using TGOLN2 Antibody. HIER was performed using pH 8 EDTA buffer, and sections were blocked with goat serum prior to staining. The tissue was incubated with rabbit anti-TGOLN2 antibody at 2 ug/ml overnight at 4Â°C. An HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB substrate was used for detection. This TGOLN2 Antibody demonstrates TGOLN2 expression within colon cancer tissue, supporting studies of trans-Golgi network function, intracellular vesicle trafficking, protein sorting, and secretory pathway regulation.



TGOLN2 Antibody Human Colon Cancer IHC. Immunohistochemical staining of FFPE human colon cancer tissue using TGOLN2 Antibody. HIER was performed using pH 8 EDTA buffer, and sections were blocked with goat serum prior to staining. The tissue was incubated with rabbit anti-TGOLN2 antibody at 2 ug/ml overnight at 4Â°C. An HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB substrate was used for detection. This TGOLN2 Antibody demonstrates TGOLN2 expression in colon tumor cells and stromal-associated regions, supporting studies of trans-Golgi network organization, protein trafficking, vesicle transport, and regulation of secretory pathway function.



TGOLN2 Antibody Human Cancer Cell WB. Western blot analysis of human cancer cell lysates using TGOLN2 Antibody. Lane 1: human HepG2, Lane 2: human U251, Lane 3: human SiHa, Lane 4: human A549 cell lysate. The membrane was incubated with rabbit anti-TGOLN2 antibody at 0.5 ug/ml overnight at 4Â°C, followed by an HRP-conjugated goat anti-rabbit IgG secondary antibody and ECL detection. This TGOLN2 Antibody detects bands at approximately 90-100 kDa, consistent with the reported migration pattern of glycosylated TGN46/TGOLN2 protein, supporting studies of trans-Golgi network organization, protein trafficking, and vesicle transport pathways.




TGOLN2 Antibody Human Immune Cell FACS. Flow cytometric analysis of fixed and permeabilized human U937 cells using TGOLN2 Antibody at 1 ug/million cells. Cells were blocked with goat serum and compared against cells alone (red) and isotype control (green). A DyLight 488-conjugated goat anti-rabbit IgG secondary antibody was used for detection. TGOLN2 Antibody demonstrates a clear positive shift (blue), confirming intracellular TGOLN2 detection in U937 cells and supporting studies of trans-Golgi network function, protein sorting, vesicle trafficking, and secretory pathway regulation.

## Description

TGOLN2 Antibody / Trans-Golgi Network Marker Antibody recognizes trans-Golgi network integral membrane protein 2 (TGOLN2), a type I membrane glycoprotein commonly known as TGN46. TGOLN2 is primarily localized to the trans-Golgi network (TGN), where it functions in protein sorting, vesicle trafficking, membrane transport, and maintenance of Golgi organization. The trans-Golgi network serves as a major intracellular sorting hub that directs proteins and lipids toward the plasma membrane, secretory vesicles, lysosomes, and endosomal compartments. Due to its characteristic Golgi localization, TGOLN2 is widely used as a marker for studying Golgi morphology, intracellular transport, and secretory

pathway regulation. TGOLN2 Antibody / Trans-Golgi Network Marker Antibody provides researchers with a valuable tool for investigating organelle organization and vesicle-mediated trafficking pathways.

TGN46/TGOLN2 continuously cycles between the trans-Golgi network, plasma membrane, and endosomal system through regulated trafficking mechanisms. This dynamic movement supports cargo sorting and membrane recycling processes required for normal cellular function. TGOLN2 contains a luminal domain, transmembrane region, and cytoplasmic sorting signals that contribute to its localization and trafficking behavior. The protein is highly glycosylated, resulting in an apparent molecular weight by Western blot that is often significantly higher than the predicted unmodified protein size. This post-translational modification pattern is a well-recognized characteristic of mature TGN46/TGOLN2 protein.

The Golgi apparatus plays essential roles in protein modification, processing, and transport within eukaryotic cells. Disruption of Golgi structure or trafficking pathways can influence cell signaling, immune function, stress responses, and disease-associated cellular changes. Because TGOLN2 is enriched within the trans-Golgi network, it is frequently studied in research involving organelle dynamics, secretory pathway regulation, vesicle formation, and intracellular membrane organization. TGOLN2 expression analysis can provide insight into changes in Golgi architecture and cellular transport pathways across different biological systems.

Beyond its role as a structural marker, TGOLN2 has been investigated in relation to cellular communication, protein secretion, and disease biology. Changes in membrane trafficking and Golgi function are increasingly recognized as important features of cancer progression, immune regulation, and cellular adaptation. Immunofluorescence analysis of TGOLN2 enables visualization of trans-Golgi network distribution, while Western blot, immunohistochemistry, and flow cytometry applications support broader investigation of TGOLN2 expression and function.

TGOLN2 Antibody / Trans-Golgi Network Marker Antibody from NSJ Bioreagents has been validated for applications including WB, IHC, IF, and FACS using multiple human cell and tissue samples. This TGOLN2 Antibody supports studies of Golgi biology, intracellular trafficking, protein sorting, vesicle transport, and mechanisms regulating the secretory pathway.

Explore additional Cell Biology Antibodies for targets involved in organelle function, intracellular transport, protein trafficking, and cellular pathway regulation.

## Application Notes

Optimal dilution of the TGOLN2 Antibody / Trans-Golgi Network Marker Antibody should be determined by the researcher.

## Immunogen

E.coli-derived human TGN46/TGOLN2 recombinant protein (Position: E319-K436) was used as the immunogen for the TGOLN2 antibody.

## Storage

After reconstitution, the TGOLN2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

## Alternate Names

TGN46 Antibody, Trans-Golgi Network Protein 2 Antibody, TGN38 Homolog Antibody, Trans-Golgi Network Integral Membrane Protein 2 Antibody, TGOLN2 Antibody, Golgi Marker Antibody

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