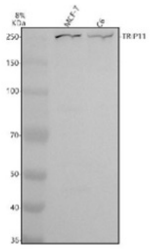
TRIP11 Antibody / Thyroid receptor-interacting protein 11 / GMAP-210 (FY12775)

Catalog No.	Formulation	Size
FY12775	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, Rat
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	Q15643
Applications	Western Blot: 0.25-0.5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This TRIP11 antibody is available for research use only.



Western blot analysis of TRIP11 using anti-TRIP11 antibody. Electrophoresis was performed on a 8% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human MCF-7 whole cell lysates, Lane 2: rat C6 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 rabbit anti-TRIP11 antibody at 0.5 ug/ml overnight at 4oC, 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 was developed using an ECL Plus Western Blotting Substrate. A major band is observed just above the 250 kDa marker, consistent with the expected full-length TRIP11 protein (predicted ~228 kDa) and its known slower electrophoretic migration due to coiled-coil structure and post-translational modifications.

Description

TRIP11 antibody detects Thyroid receptor-interacting protein 11 (also known as GMAP-210), a large coiled-coil Golgi

microtubule-associated protein involved in maintaining Golgi structure and vesicle trafficking. Encoded by the TRIP11 gene on chromosome 14q32.12, this protein functions as a tethering factor that anchors vesicles to the Golgi membrane, facilitating directional transport between the endoplasmic reticulum (ER) and Golgi apparatus. GMAP-210 is essential for Golgi organization, ciliary assembly, and protein glycosylation, linking cytoskeletal dynamics to secretory pathway regulation.

TRIP11/GMAP-210 contains an N-terminal GRAB domain that interacts with the small GTPase ARF1 and a C-terminal acidic motif that binds to vesicular membranes. These dual binding regions enable the protein to bridge vesicles and the Golgi surface, stabilizing Golgi ribbon structure and promoting vesicle docking. In addition, its extended coiled-coil conformation provides a physical scaffold that organizes Golgi cisternae and positions them relative to the microtubule network. Depletion or mutation of GMAP-210 results in Golgi fragmentation, defective cargo trafficking, and impaired ciliary protein transport.

The TRIP11 antibody is widely used in cell biology, neurobiology, and developmental research to study Golgi morphology and vesicle tethering. Western blot analysis typically identifies a 210 kilodalton band corresponding to full-length GMAP-210, while immunofluorescence reveals Golgi-localized perinuclear staining. This antibody enables detailed visualization of Golgi organization, vesicle docking, and intracellular transport pathways.

Mutations in TRIP11 cause achondrogenesis type 1A, a lethal skeletal dysplasia resulting from defective protein secretion and ciliary dysfunction. Beyond skeletal disease, altered expression of GMAP-210 affects neural development, epithelial polarization, and secretion of extracellular matrix proteins. The TRIP11 antibody supports research into Golgi-associated transport, ciliogenesis, and protein trafficking disorders. NSJ Bioreagents provides this antibody validated for its applications, ensuring precise detection in studies of Golgi dynamics and secretory pathway organization.

Application Notes

Optimal dilution of the TRIP11 antibody should be determined by the researcher.

Immunogen

E.coli-derived human GMAP-210/TRIP11 recombinant protein (Position: Q1292-R1926) was used as the immunogen for the TRIP11 antibody.

Storage

After reconstitution, the TRIP11 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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