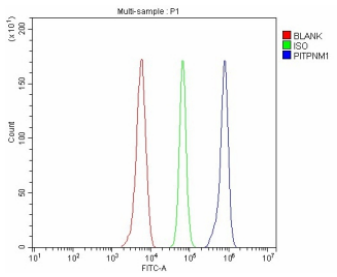
PITPNM1 Antibody / Phosphatidylinositol transfer protein membrane associated 1 (FY12014)

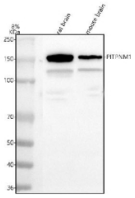
Catalog No.	Formulation	Size
FY12014	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse, 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	O00562
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This PITPNM1 antibody is available for research use only.



Flow Cytometry analysis of Raji cells using anti-PITPNM1 antibody. Overlay histogram showing Raji cells stained with (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-PITPNM1 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Western blot analysis of PITPNM1 using anti-PITPNM1 antibody. Lane 1: rat brain tissue lysates, Lane 2: mouse brain 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-PITPNM1 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 enhanced chemiluminescent. Expected size for PITPNM1 ~135 kDa. Observed strong band at ~150 kDa and a lighter band at ~120 kDa in mouse/rat brain lysate. The higher band likely corresponds to full-length or modified PITPNM1, while the lighter band may reflect a splice variant or truncated form. Alternative isoforms of PITPNM1 and membrane-associated processing of this multi-domain protein have been reported in the literature.

Description

PITPNM1 antibody detects Phosphatidylinositol transfer protein membrane associated 1, encoded by the PITPNM1 gene. Phosphatidylinositol transfer protein membrane associated 1 is a large multi-domain protein localized to membranes and involved in phosphoinositide signaling and vesicular trafficking. PITPNM1 antibody provides researchers with a reagent to study lipid metabolism, intracellular signaling, and membrane dynamics.

Phosphatidylinositol transfer protein membrane associated 1 is part of the retinal degeneration B protein family. Research using PITPNM1 antibody has shown that it binds and transfers phosphatidylinositol and phosphatidic acid between membranes. This transfer activity regulates phosphoinositide pools that are critical for vesicular transport, endocytosis, and exocytosis. By maintaining lipid composition, PITPNM1 ensures membrane identity and function.

Studies with PITPNM1 antibody have revealed that the protein localizes to the Golgi apparatus, endoplasmic reticulum, and plasma membrane. This localization supports its function in coordinating vesicular trafficking between secretory and endocytic pathways. PITPNM1 interacts with Rab and Arf proteins, integrating lipid metabolism with trafficking machinery. These findings highlight its role in cellular logistics and signaling.

Phosphatidylinositol transfer protein membrane associated 1 has been linked to neuronal biology and retinal function. Research using PITPNM1 antibody has suggested that it contributes to photoreceptor maintenance, and mutations in related family members are associated with retinal degeneration. Dysregulation of PITPNM1 expression has also been implicated in cancer, where altered lipid signaling supports proliferation and survival. This underscores the significance of PITPNM1 in both physiology and pathology.

PITPNM1 antibody is widely applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting detects expression in diverse tissues, immunohistochemistry reveals subcellular distribution in the Golgi and ER, and immunofluorescence highlights its role in vesicular trafficking. These approaches make PITPNM1 antibody a valuable tool in lipid biology and membrane trafficking research.

By supplying validated PITPNM1 antibody reagents, NSJ Bioreagents supports studies into phosphoinositide signaling, membrane dynamics, and disease. Detection of Phosphatidylinositol transfer protein membrane associated 1 provides researchers with insights into how lipid transfer proteins coordinate cellular processes.

Application Notes

Optimal dilution of the PITPNM1 antibody should be determined by the researcher.

Immunogen

E.coli-derived human Nir2/PITPNM1 recombinant protein (Position: E418-R831) was used as the immunogen for the PITPNM1 antibody.

Storage

After reconstitution, the PITPNM1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.