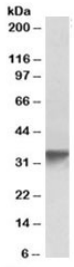
GOLPH3 Antibody (R33520)

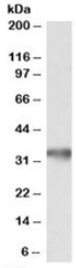
Catalog No.	Formulation	Size
R33520-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Predicted Reactivity	Dog, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	64083
Applications	Western Blot : 0.1-0.3ug/ml ELISA (peptide) LOD : 1:128000
Limitations	This GOLPH3 antibody is available for research use only.



Western blot testing of human platelet lysate with GOLPH3 antibody at 0.3ug/ml. Predicted molecular weight ~34 kDa.



Western blot testing of mouse brain lysate with GOLPH3 antibody at 0.1ug/ml. Predicted molecular weight ~34 kDa.

Description

GOLPH3 Antibody targets Golgi phosphoprotein 3, a conserved peripheral membrane protein associated primarily with the Golgi apparatus. GOLPH3, also known as GPP34 and GMx33, participates in Golgi organization and intracellular membrane trafficking. The protein interacts with components of the membrane and cytoskeletal machinery, helping coordinate processes involved in Golgi structure, vesicle formation and the movement of proteins and lipids through the secretory pathway.

GOLPH3 binds phosphatidylinositol 4-phosphate (PI4P), a phosphoinositide enriched in Golgi membranes. This interaction contributes to the recruitment and retention of GOLPH3 at the Golgi apparatus. GOLPH3 also interacts with MYO18A, an unconventional myosin associated with the actin cytoskeleton. The GOLPH3-MYO18A interaction has been implicated in generating forces that influence Golgi morphology and membrane trafficking. A GOLPH3 Antibody can therefore support studies examining Golgi-associated protein expression, intracellular localization and mechanisms regulating membrane dynamics.

GOLPH3 has also received substantial attention in cancer biology. Increased expression or amplification of GOLPH3 has been reported in multiple tumor types, and the protein has been investigated for its potential contribution to oncogenic signaling. Studies have connected GOLPH3 with pathways regulating cellular proliferation, survival, migration and responses to stress. Its relationship with mTOR signaling has further linked Golgi-associated functions with broader mechanisms controlling cell growth and cancer-associated signaling.

In addition to its roles in trafficking and growth regulation, GOLPH3 has been studied in cellular responses to DNA damage. Changes involving the GOLPH3 pathway can influence Golgi morphology following cellular stress, suggesting functional connections among the Golgi apparatus, actin cytoskeleton and stress-response mechanisms. These diverse activities make Golgi phosphoprotein 3 relevant to research spanning membrane trafficking, organelle biology and cancer.

NSJ Bioreagents provides antibodies for research into Golgi function, intracellular transport and cancer-associated cellular processes. A GOLPH3 Antibody can support studies of Golgi phosphoprotein 3 expression and localization, Golgi organization, membrane trafficking and signaling mechanisms associated with cellular growth and disease.

For broader research into GOLPH3 function, Golgi organization and intracellular membrane trafficking, see our GOLPH3 Antibody page.

Application Notes

Optimal dilution of the GOLPH3 antibody should be determined by the researcher.

Immunogen

Amino acids DLATKRVRQLLDLD were used as the immunogen for this GOLPH3 antibody.

Storage

Aliquot and store the GOLPH3 antibody at -20oC.

Alternate Names

GOLPH3 antibody, Golgi phosphoprotein 3 antibody, Golgi phosphoprotein 3A antibody, GPP34 antibody, GMx33 antibody

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