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GOLPH3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7445a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9H4A6
Other Accession	Q9ERE4, Q9CRA5
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18062
Calculated MW	33811
Antigen Region	1-30

Additional Information

Gene ID	64083
Other Names	Golgi phosphoprotein 3, Coat protein GPP34, Mitochondrial DNA absence factor, MIDAS, GOLPH3, GPP34
Target/Specificity	This GOLPH3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GOLPH3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GOLPH3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GOLPH3
Synonyms	GPP34

Function	Phosphatidylinositol-4-phosphate-binding protein that links Golgi membranes to the cytoskeleton and may participate in the tensile force required for vesicle budding from the Golgi. Thereby, may play a role in Golgi membrane trafficking and could indirectly give its flattened shape to the Golgi apparatus. May also bind to the coatomer to regulate Golgi membrane trafficking. May play a role in anterograde transport from the Golgi to the plasma membrane and regulate secretion. Has also been involved in the control of the localization of Golgi enzymes through interaction with their cytoplasmic part. May play an indirect role in cell migration. Has also been involved in the modulation of mTOR signaling. May also be involved in the regulation of mitochondrial lipids biosynthesis.
Cellular Location	Golgi apparatus, Golgi stack membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein; Cytoplasmic side Mitochondrion intermembrane space. Cell membrane Endosome. Note=Phosphatidylinositol 4-phosphate-binding and oligomerization participate in the recruitment onto Golgi membranes.
Tissue Location	Detected in muscle fibers of patients with mitochondrial diseases; not detected in normal muscle fibers

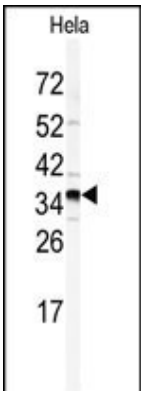
Background

The Golgi complex plays a key role in the sorting and modification of proteins exported from the endoplasmic reticulum. This protein is a peripheral membrane protein of the Golgi stack and may have a regulatory role in Golgi trafficking.

References

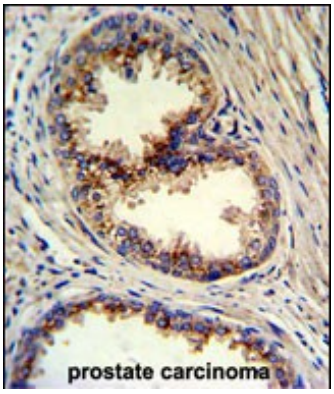
Ota T., Suzuki Y., Nishikawa T.Nat. Genet. 36:40-45(2004) Bell A.W., Ward M.A.J. Biol. Chem. 276:5152-5165(2001)

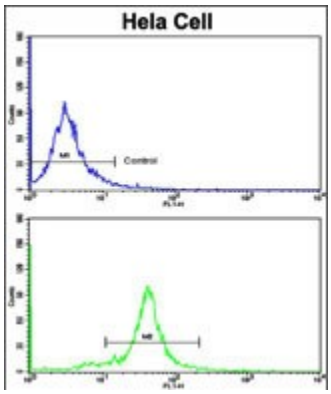
Images



Western blot analysis of GOLPH3 antibody (N-term) (Cat.#AP7445a) in Hela cell line lysates (35ug/lane). GOLPH3 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human prostate carcinoma reacted with GOLPH3 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of hela cells using GOLPH3 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- GOLPH3 Mediated Golgi Stress Response in Modulating N2A Cell Death upon Oxygen-Glucose Deprivation and Reoxygenation Injury.
- Overexpression of Golgi phosphoprotein-3 (GOLPH3) in glioblastoma multiforme is associated with worse prognosis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.