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GOLPH3 Antibody (C-term)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2219b

Product Information

Application	WB, E
Primary Accession	Q9H4A6
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	905CT9.1.1
Calculated MW	33811

Additional Information

Gene ID	64083
Other Names	Golgi phosphoprotein 3, Coat protein GPP34, Mitochondrial DNA absence factor, MIDAS, GOLPH3, GPP34
Target/Specificity	Purified His-tagged GOLPH3 protein was used to produced this monoclonal antibody.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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 (C-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

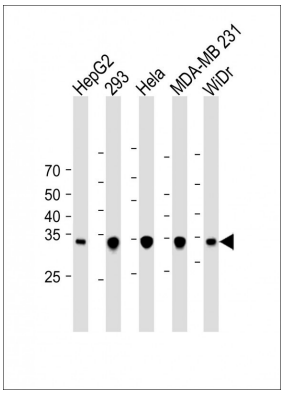
Background

Mediates the cis and medial Golgi localization of mannosyltransferases through direct binding of their cytosolic domains. Involved in modulation of mTOR signaling. Involved in the regulation of mitochondrial lipids, leading to increase of mitochondrial mass. Potential oncogene.

References

Bell A.W., et al. J. Biol. Chem. 276:5152-5165(2001).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Gregory S.G., et al. Nature 441:315-321(2006).
Bechtel S., et al. BMC Genomics 8:399-399(2007).
Nakashima-Kamimura N., et al. J. Cell Sci. 118:5357-5367(2005).

Images



All lanes: Anti-GOLPH3 Antibody (C-term) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: 293 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: MDA-MB-231 whole cell lysate Lane 5: WiDr whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution. Observed band size: 34 KDa Blocking/Dilution buffer: 5% NFDM/TBST.