www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

PRODUCT DATASHEET

Anti-GM130 (C-terminal region) Antibody

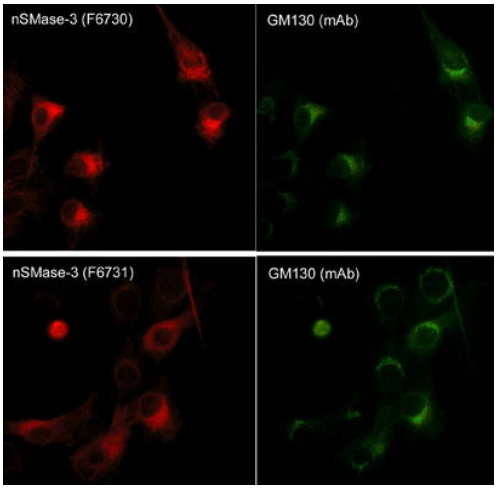
phosphosolutions ANTIBODIES THAT WORK

Product Details

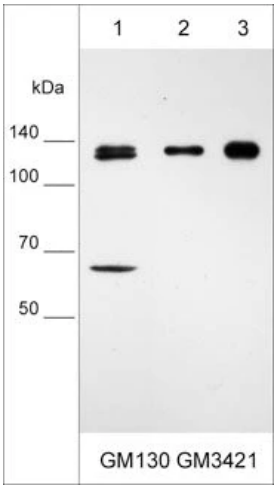
Available Variants	100 µL (SKU:GM3421)
Conjugate	Unconjugated
Isotype	IgG1
Clone	M342
Gene Name	GOLGA2
Host Species	Mouse
Format	Protein A Purified
Physical State	Liquid
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Applications	ELISA, ICC, WB
Dilution Ranges	WB: 1:500 ICC: 1:50
Species Reactivity	Human, Mouse, Rat
Immunogen	Clone M342 was generated from a recombinant protein corresponding to amino acid residues in the C-terminal region of human GM130. This sequence has high homology to similar regions in rat and mouse GM130.
Specificity	This antibody detects a 130 kDa* protein corresponding to the apparent molecular mass of GM130 on SDS-PAGE immunoblots of mouse C2C12 cells. In immunocytochemistry, anti-GM130 specifically stains Golgi in mouse C2C12 cells.
Molecular Weight	130
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at

	-20°C.
UniProt ID	Q08379 UniProt Summary: Peripheral membrane component of the cis-Golgi stack that acts as a membrane skeleton that maintains the structure of the Golgi apparatus, and as a vesicle thether that facilitates vesicle fusion to the Golgi membrane (Probable). Required for normal protein transport from the endoplasmic reticulum to the Golgi apparatus and the cell membrane. Together with p115/USO1 and STX5, involved in vesicle tethering and fusion at the cis-Golgi membrane to maintain the stacked and inter-connected structure of the Golgi apparatus. Plays a central role in mitotic Golgi disassembly: phosphorylation at Ser-37 by CDK1 at the onset of mitosis inhibits the interaction with p115/USO1, preventing tethering of COPI vesicles and thereby inhibiting transport through the Golgi apparatus during mitosis. Also plays a key role in spindle pole assembly and centrosome organization. Promotes the mitotic spindle pole assembly by activating the spindle assembly factor TPX2 to nucleate microtubules around the Golgi and capture them to couple mitotic membranes to the spindle: upon phosphorylation at the onset of mitosis, GOLGA2 interacts with importin-alpha via the nuclear localization signal region, leading to recruit importin-alpha to the Golgi membranes and liberate the spindle assembly factor TPX2 from importin-alpha. TPX2 then activates AURKA kinase and stimulates local microtubule nucleation. Upon filament assembly, nascent microtubules are further captured by GOLGA2, thus linking Golgi membranes to the spindle. Regulates the meiotic spindle pole assembly, probably via the same mechanism. Also regulates the centrosome organization. Also required for the Golgi ribbon formation and glycosylation of membrane and secretory proteins.
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
NCBI Gene ID	2801

Product Images



Immunocytochemical labeling of GM130 in C2C12 cells. The cells were double-labeled with GM130 (golgi protein) mouse monoclonal and nSMase-3 rabbit polyclonal antibodies, then detected using appropriate secondary antibody conjugated to Cy2 or Cy3.



Western blot analysis of GM130 expression in human cells: MCF7 breast carcinoma (lane 1), A549 adenocarcinoma (lane 2), and MDA-MB-231 breast carcinoma (lane 3). The blot was probed with mouse monoclonal anti-GM130 (C-terminal region) at 1:500.