abcam

Product datasheet

Anti-GM130 antibody [EP892Y] - BSA and Azide free ab215966



27 References 11 Images

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Product name Anti-GM130 antibody [EP892Y] - BSA and Azide free

Description Rabbit monoclonal [EP892Y] to GM130 - BSA and Azide free

Host species Rabbit

Specificity Mouse and rat cell lines pc12, 3t3, raw 264.7 were tested positive in WB. However, brain, kidney,

spleen and heart were negative from the two species.

Tested applications Suitable for: Flow Cyt (Intra), IP, ICC/IF, IHC-P, WB

Species reactivity Reacts with: Dog, Human, African green monkey

Predicted to work with: Cow, Monkey

Does not react with: Mouse, Rat

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa, MCF7, MDCK(NBL-2), MDBK(BL-1) and COS-1 cell lysates. IHC-P: Human cervix

carcinoma and liver tissues. ICC/IF: HeLa and MCF7 cells.

General notes ab215966 is the carrier-free version of <u>ab52649</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

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For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clone number Monoclonal EP892Y

Isotype IgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab215966 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration. PFA fixation should be most suitable.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols. Overnight incubation is recommended.
WB		Use at an assay dependent concentration. Detects a band of approximately 140 kDa (predicted molecular weight: 112 kDa).

Target

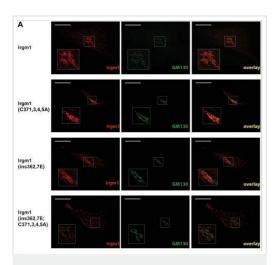
Function Golgi auto-antigen; probably involved in maintaining cis-Golgi structure.

Sequence similarities Belongs to the GOLGA2 family.

Domain Extended rod-like protein with coiled-coil domains.

Cellular localization Golgi apparatus > Golgi stack membrane.

Images



Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966)

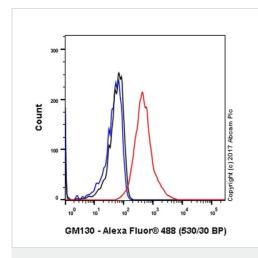
Image from Henry S.C. et al PLoS One. 2014 Apr 21;9(4):e95021. doi: 10.1371/journal.pone.0095021. eCollection 2014.

Effect of Irgm1 palmitoylation mutation on Golgi association

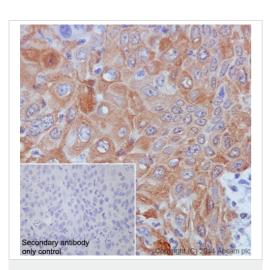
lrgm1 KO MEF were transfected with plasmids expressing wild-type or mutant lrgm1 proteins, as indicated. The cells were exposed to 100 U/ml IFN- γ for 24 h, stained with anti-lrgm1 and anti-GM130 antibodies, and used for immunofluorescence analysis. The experiment was performed 3 times, with at least 20 cells analyzed per group in each experiment. (A) Shown are images from representative cells. The scale bar represents 20 μ m.

Cells are 4% paraformaldehyde fixed, 0.2% saponinpermeabilized.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52649).



Flow Cytometry (Intracellular) - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966) Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling GM130 (red) with <u>ab52649</u> at a 1/20 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor[®] 488) (<u>ab150077</u>) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (<u>ab172730</u>). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.

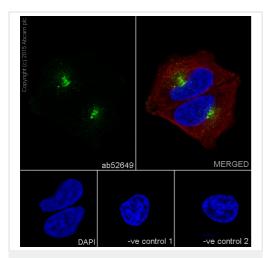


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GM130 antibody

[EP892Y] - BSA and Azide free (ab215966)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervix carcinoma tissue labelling GM130 with purified ab52649 at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52649</u>).

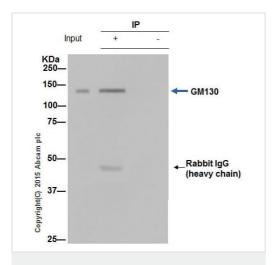


Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966)

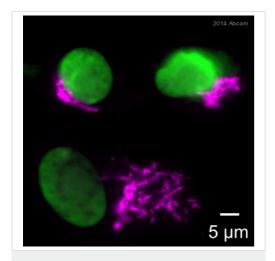
Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling GM130 with purified <u>ab52649</u> at 1/50. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. <u>ab150077</u>, an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. <u>ab7291</u>, a mouse anti-tubulin (1/1000) and <u>ab150120</u>, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500) were also used.

Control 1: primary antibody (1/50) and secondary antibody, **ab150120**, an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500).

Control 2: $\underline{ab7291}$ (1/1000) and secondary antibody, $\underline{ab150077}$, an Alexa Fluor® 488-conjugated goat anti-rabbit lgG (1/500).



Immunoprecipitation - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966)



Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966)

This image is courtesy of an Abreview submitted by Aaron Halpen.

<u>ab52649</u> (purified) at 1/20 immunoprecipitating GM130 in HeLa whole cell lysate.

Lane 1 (input): HeLa whole cell lysate (10µg)

Lane 2 (+): <u>ab52649</u> + HeLa whole cell lysate (10µg).

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab52649</u> in HeLa whole cell lysate.

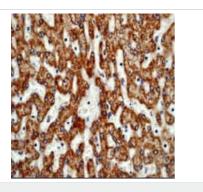
For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1500 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52649).

Unpurified <u>ab52649</u> staining GM130 (magenta) in monkey kidney cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde and blocked with 3% BSA + 0.5% Triton X-100 for 45 minutes at 25°C. Samples were incubated with primary antibody (1/1500 in 3% BSA + 0.5% Triton X-100) for 45 minutes at 25°C. An Alexa Fluor[®] 647-conjugated donkey antirabbit IgG polyclonal (2 µg/ml) was used as the secondary antibody. Nuclei stained with Picogreen.

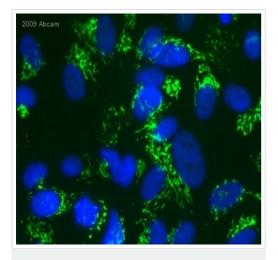


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GM130 antibody

[EP892Y] - BSA and Azide free (ab215966)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling GM130 with unpurified <u>ab52649</u> at a dilution of 1/500.

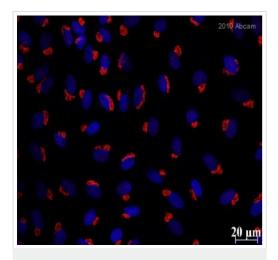
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52649</u>).



Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966)

This image is courtesy of an Abreview submitted by Madimir Mlenkovic.

Unpurified <u>ab52649</u> staining GM130 in human ARPE-19 cells by ICC/IF (immunocytochemistry/immunofluorescence). Cells were formaldehyde fixed, permeabilized by 0.5% TX-100 and blocked with 5% serum for 20 minutes at 25°C. The sample was incubated with the primary antibody (1/500 in 1% goat serum, 0.1%TX100, 1 x PBS) for 16 hours at 4°C. An Alexa Fluor[®] 488-conjugated Goat anti-rabbit polyclonal (1/500) was used as the secondary.



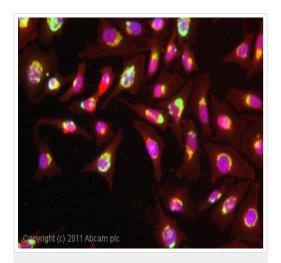
Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966)

This image is courtesy of an Abreview submitted by JL Balligand.

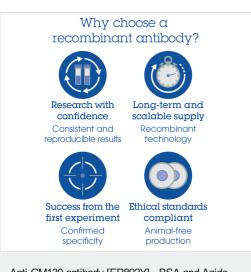
Unpurified <u>ab52649</u> staining GM130 in Bovine brain microvascular endothelial cells by ICC/IF

(Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% saponin and blocked with 5% BSA for 90 minutes at 37°C. Samples were incubated with primary antibody (1/100 in 0.1% saponin + 1% BSA) for 18 hours at 4°C. An undiluted Alexa Fluor® 568-conjugated Goat anti-rabbit IgG polyclonal was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52649</u>).



Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966) ICC/IF image of unpurified <u>ab52946</u> stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (unpurified <u>ab52946</u>, 1μg/ml) overnight at +4°C. The secondary antibody (green) was DyLight[®] 488 goat anti-rabbit lgG - H&L, preadsorbed (<u>ab96899</u>) used at a 1/250 dilution for 1h. Alexa Fluor[®] 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43μM.



Anti-GM130 antibody [EP892Y] - BSA and Azide free (ab215966)

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