abcam

Product datasheet

Anti-GM130 antibody [EP892Y] - cis-Golgi Marker ab52649



**** 38 Abreviews 250 References 13 Images

Overview

Product name Anti-GM130 antibody [EP892Y] - cis-Golgi Marker

Description Rabbit monoclonal [EP892Y] to GM130 - cis-Golgi Marker

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), ICC/IF, IHC-P, WB, IP

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

Predicted to work with: Cow, Monkey
Does not react with: Mouse, Rat

Immunogen Synthetic peptide within Human GM130 aa 1-100 (N terminal). The exact sequence is proprietary.

Database link: Q08379

Positive control WB: HeLa, MCF7, MDCK(NBL-2), MDBK(BL-1) and COS-1 cell lysates; MDCK 2 cell lysate;

COS-7 cell lysate. IHC-P: Human cervix carcinoma and liver tissues. ICC/IF: HeLa and ARPE-19

cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell lysate.

General notesThis 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

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

Storage buffer pH: 7.20

1

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EP892Y
Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab52649 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)		1/20.
ICC/IF	*** (20)	1/50 - 1/250. PFA fixation should be most suitable.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols. Overnight incubation is recommended.
WB	**** (11)	1/1000 - 1/10000. Detects a band of approximately 140 kDa (predicted molecular weight: 112 kDa).
IP		1/20 - 1/50.

Target

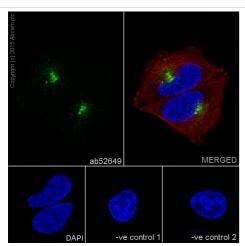
Function Golgi auto-antigen; probably involved in maintaining cis-Golgi structure.

Sequence similarities Belongs to the GOLGA2 family.

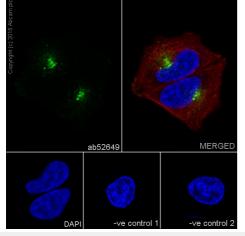
Domain Extended rod-like protein with coiled-coil domains.

Cellular localization Golgi apparatus > Golgi stack membrane.

Images



Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

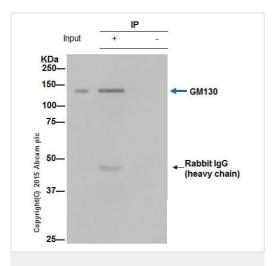


Alexa Fluor® 488-conjugated goat anti-rabbit lgG (1/500).

Control 2: ab7291 (1/1000) and secondary antibody, ab150077, an

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

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling GM130 with purified ab52649 at 1/50. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, 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. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor® 594-conjugated goat anti-



Immunoprecipitation - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

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

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

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

All lanes:

(1/500).

Lane 1: HeLa whole cell lysate at 10 µg

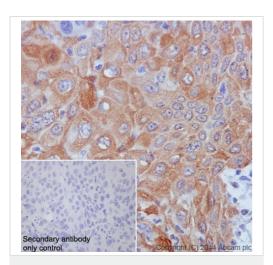
mouse IgG (1/500) were also used.

Lane 2: ab52649 + HeLa whole cell lysate at 10 µg

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab52649 in

HeLa whole cell lysate

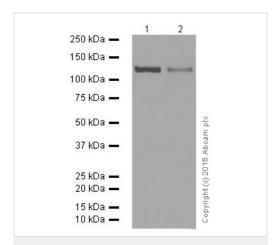
Observed band size: 130 kDa



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

[EP892Y] - cis-Golgi Marker (ab52649)

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.



Western blot - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

All lanes : Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649) at 1/1000 dilution (purified)

Lane 1 : HeLa cell lysate

Lane 2 : MCF7 cell lysate

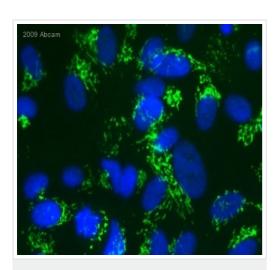
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit lgG, (H+L) at 1/1000 dilution

Predicted band size: 112 kDa Observed band size: 130 kDa

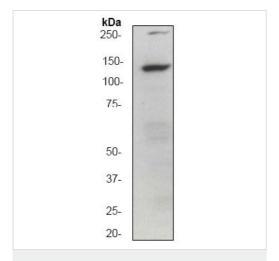
Blocking and dilution buffer: 5% NFDM/TBST.



Unpurified ab52649 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 $^{\circledR}$ 488-conjugated Goat anti-rabbit polyclonal (1/500) was used as the secondary.

Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

This image is courtesy of an Abreview submitted by Dr Vladimir Mlenkovic



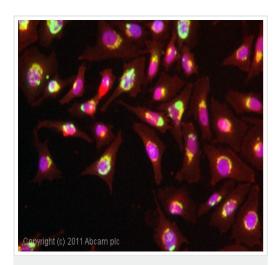
Western blot - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649) at 1/200000 dilution (unpurified) + HeLa cell lysate at 10 μg

Secondary

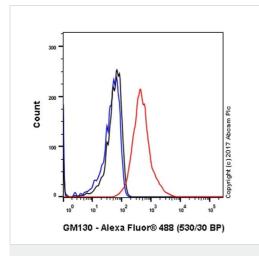
HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Predicted band size: 112 kDa



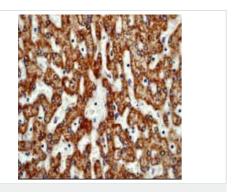
Immunocytochemistry/ Immunofluorescence - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

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.



Flow Cytometry (Intracellular) - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

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

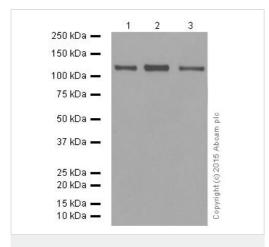


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GM130 antibody

[EP892Y] - cis-Golgi Marker (ab52649)

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

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

All lanes : Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649) at 1/5000 dilution (purified)

Lane 1 : MDCK(NBL-2) cell lysate
Lane 2 : MDCK(BL-1) cell lysate
Lane 3 : COS-1 cell lysate

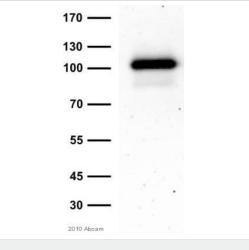
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit lgG, (H+L) at 1/1000 dilution

Predicted band size: 112 kDa **Observed band size:** 130 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649) MDCK 2 cells at 25 µg

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 112 kDa

Blocking and dilution buffer: 1XPBS-Tween, 5% milk

Exposure: 10 minutes.

250 —

130 —

100 —

70 —

55 —

40 —

35 —

25 —

15 —

Western blot - Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649) COS-7 Cell Line from African green monkey kidney whole cell lysate

Predicted band size: 112 kDa

Blocking and dilution buffer: PBS, 0.05% Tween

Exposure: 5 minutes.





Long-term and scalable supply Recombinant technology



reproducible results



Success from the first experiment Confirmed specificity

Anti-GM130 antibody [EP892Y] - cis-Golgi Marker (ab52649)

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors