abcam

ab280974

Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control

Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974) is a mouse monoclonal antibody used in **Flow Cytometry (Intra), IHC-P, ICC/IF**.

Recombinant

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	R312-MouseIgG1
Purification technique	Affinity purification Protein A
Concentration	1.005 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Application	Flow Cyt (Intra)
Reactivity	Reacts
Dilution info	1/500
Notes	-

Application	ICC/IF

Reactivity	Reacts
Dilution info	1/20
Notes	-

Application	IHC-P
Reactivity	Reacts
Dilution info	1/100
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974) is a mouse recombinant monoclonal antibody and is validated for use in Flow Cytometry (Intra), Flow Cytometry (Flow Cyt), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF). **Other related products**
We have a range of other formats of antibody clone [R312-MouseIgG1] also available for your convenience: ab280974, Carrier free - ab281291, FITC - ab314952, PE - ab322670

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

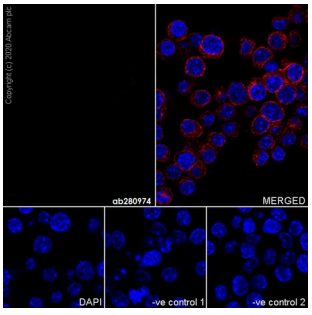
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

8 product images



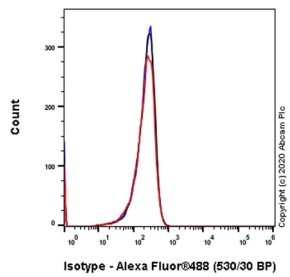
Immunocytochemistry/ Immunofluorescence - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Immunocytochemistry/ Immunofluorescence staining using mouse Anti- antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized RAW 264.7 cells labelling Mouse IgG1 with ab280974 at 1/20 dilution, followed by ab150113 Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). ab179513 Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution followed by ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (Red). The nuclear counterstain was DAPI (Blue).
Confocal image showing **no staining** in RAW 264.7 cells.

Negative control 1: ab280974 at a 1/20 dilution followed by ab150080 at a 1/1000 dilution.

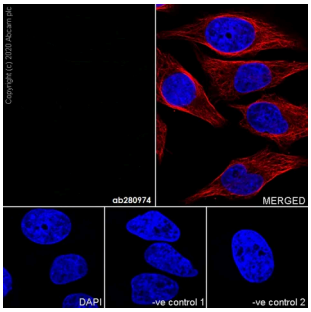
Negative control 2: ab179513 at a 1/200 dilution followed by ab150113 at a 1/1000 dilution.



Flow Cytometry (Intracellular) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Flow Cytometry (Intracellular) staining using mouse Anti- antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling Mouse IgG1 with ab280974 at 1/500 dilution (0.1µg) (Red) compared with a Mouse IgG1, kappa monoclonal [MOPC-21] - isotype control ab18443 (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti mouse IgG (Alexa Fluor® 488, ab150113) at 1/2000 dilution was used as the secondary antibody.



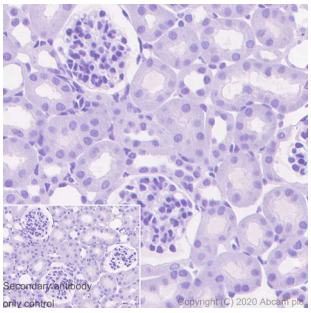
Immunocytochemistry/ Immunofluorescence - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Immunocytochemistry/ Immunofluorescence staining using mouse Anti- antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa cells labelling Mouse IgG1 with ab280974 at 1/20 dilution, followed by ab150113 Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). ab179513 Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution followed by ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (Red). The nuclear counterstain was DAPI (Blue).
Confocal image showing **no staining** in HeLa cells.

Negative control 1: ab280974 at a 1/20 dilution followed by ab150113 at a 1/1000 dilution.

Negative control 2: ab179513 at a 1/200 dilution followed by ab150080 at a 1/1000 dilution.



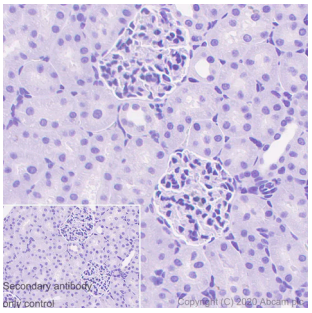
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti- antibody

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling Mouse IgG1 with ab280974 at 1/100 dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with ab280974 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
No staining on the mouse kidney.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



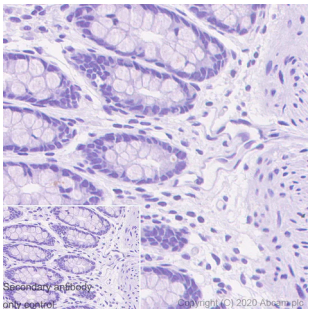
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti- antibody

Immunohistochemical analysis of paraffin-embedded rat kidney tissue labeling Mouse IgG1 with ab280974 at 1/100 dilution followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with ab280974 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
No staining on the rat kidney.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



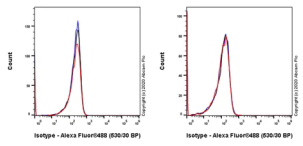
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti- antibody

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Mouse IgG1 with ab280974 at 1/100 dilution followed by ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The section was incubated with ab280974 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.
No staining on the human colon.

Secondary antibody only control: Secondary antibody is ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

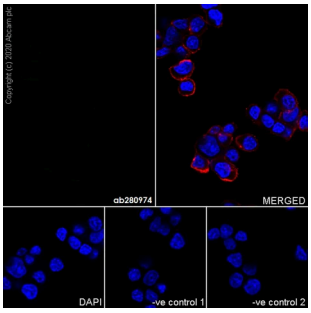
Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins.



Flow Cytometry (Intracellular) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Flow Cytometry (Intracellular) staining using mouse Anti- antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized RAW 264.7 (Human cervix adenocarcinoma epithelial cell, Left) / PC-12 (Rat adrenal gland pheochromocytoma, Right) cells labelling Mouse IgG1 with ab280974 at 1/500 dilution (0.1µg) (Red) compared with a Mouse IgG1, kappa monoclonal [MOPC-21] - isotype control ab18443 (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti mouse IgG (Alexa Fluor® 488, ab150113) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control (ab280974)

Immunocytochemistry/ Immunofluorescence staining using mouse Anti- antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized PC-12 cells labelling Mouse IgG1 with ab280974 at 1/20 dilution, followed by ab150113 Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). ab179513 Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution followed by ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (Red). The nuclear counterstain was DAPI (Blue).
Confocal image showing **no staining** in PC-12 cells.

Negative control 1: ab280974 at a 1/20 dilution followed by ab150080 at a 1/1000 dilution.

Negative control 2: ab179513 at a 1/200 dilution followed by ab150113 at a 1/1000 dilution.

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