

Product datasheet

Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free ab281291

Recombinant

[1 References](#) [9 Images](#)

Overview

Product name	Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free
Tested applications	Suitable for: Flow Cyt (Intra), IHC-P, ICC/IF
Immunogen	The details of the immunogen for this antibody are not available.
General notes	<p>ab281291 is the carrier-free version of ab280974. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>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.</p> <p>ab281291 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.</p> <p><i>Maxpar® is a trademark of Fluidigm Canada Inc.</i></p> <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	Constituent: 100% PBS
Carrier free	Yes

Purity	Protein A purified
Clonality	Monoclonal
Clone number	R312-MouseIgG1
Isotype	IgG1

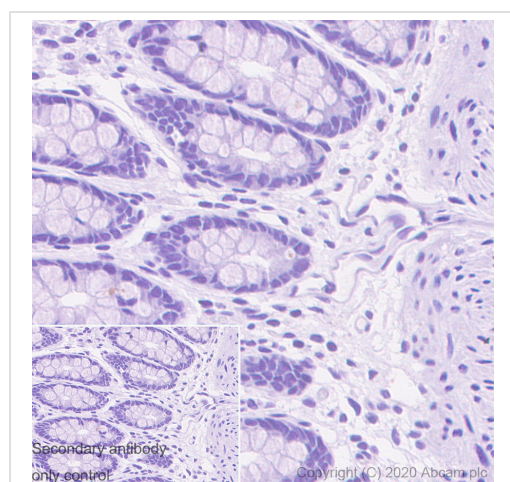
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab281291 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.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free (ab281291)

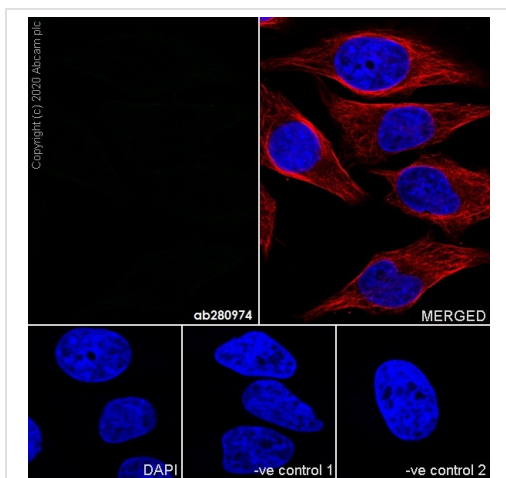
This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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.



Immunocytochemistry/ Immunofluorescence -
 Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype
 control - BSA and Azide free (ab281291)

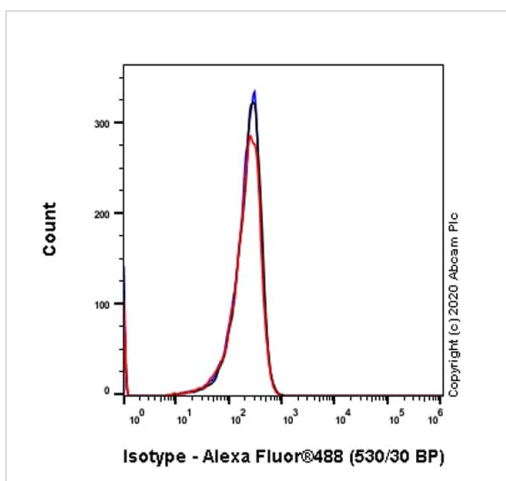
This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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 **ab150080** at a 1/1000 dilution.

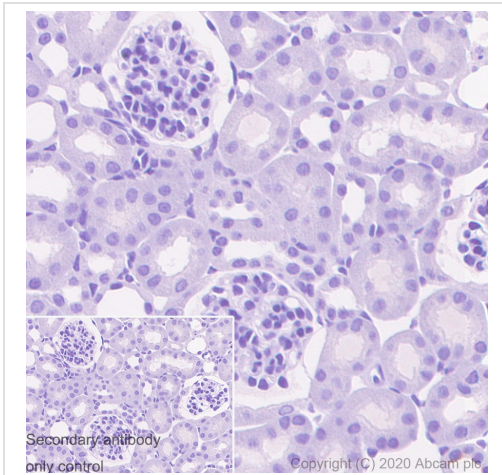
Negative control 2: ab179513 at a 1/200 dilution followed by **ab150113** at a 1/1000 dilution.



Flow Cytometry (Intracellular) - Mouse IgG1
 monoclonal [R312-MouseIgG1]-Isotype control
 - BSA and Azide free (ab281291)

This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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 (0.1 µg) (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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free (ab281291)

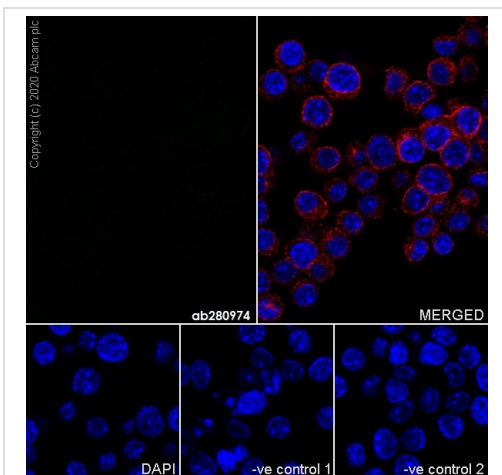
This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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.



Immunocytochemistry/ Immunofluorescence - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free (ab281291)

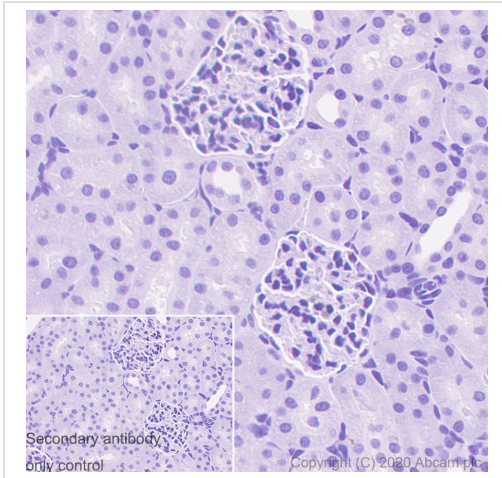
This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free (ab281291)

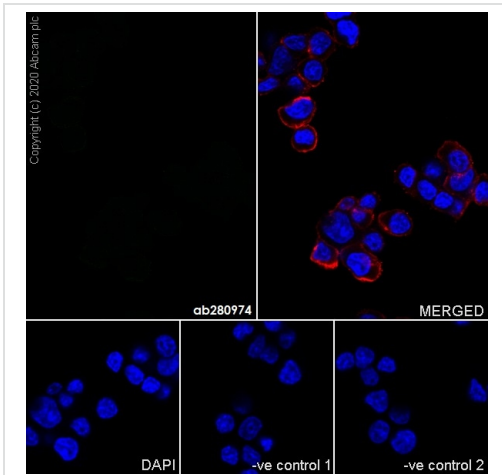
This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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.



Immunocytochemistry/ Immunofluorescence - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free (ab281291)

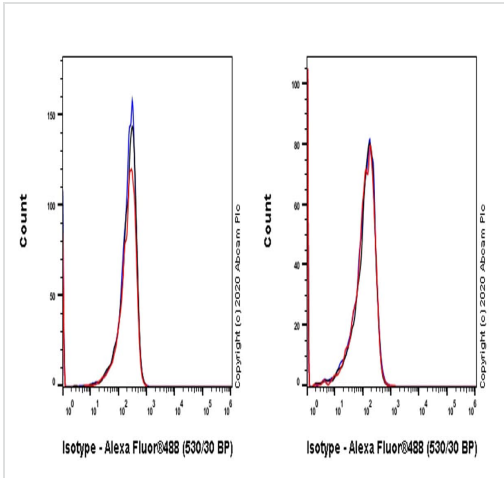
This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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.







Flow Cytometry (Intracellular) - Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free (ab281291)

This data was developed using **ab280974**, the same antibody clone in a different buffer formulation.

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 (0.1 µg) (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.

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Mouse IgG1 monoclonal [R312-MouseIgG1]-Isotype control - BSA and Azide free (ab281291)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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