

# Anti-SQSTM1 / p62 antibody [RM1079]

Knockout Tested Rabbit Recombinant Multiclonal SQSTM1 / p62 antibody. Suitable for WB, IHC-P, ICC/IF, Flow Cyt (Intra), IP, IHC-Fr and reacts with Human, Mouse, Rat samples.

Recombinant

RabMAb

KO Validated

20ul selling size

## Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Multiclonal
Immunogens	The exact immunogen used to generate this antibody is proprietary information.
Clone number	RM1079
Purification technique	Affinity purification Protein A
Concentration	0.505 mg/mL The concentration of this product may be batch-dependent <a href="#">Batch concentration finder</a> →

## Reactivity data

### WB

#### Tested

Species Human

Dilution info 1/1000

<b>Notes</b>	-
<b>Species</b>	Mouse
<b>Dilution info</b>	1/1000
<b>Notes</b>	-
<b>Species</b>	Rat
<b>Dilution info</b>	1/1000
<b>Notes</b>	-

## IHC-P

### Tested

<b>Species</b>	Human
<b>Dilution info</b>	1/1000 - 1/20000
<b>Notes</b>	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
<b>Species</b>	Mouse
<b>Dilution info</b>	1/1000
<b>Notes</b>	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
<b>Species</b>	Rat
<b>Dilution info</b>	1/1000
<b>Notes</b>	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## ICC/IF

### Tested

<b>Species</b>	Human
<b>Dilution info</b>	1/500
<b>Notes</b>	-
<b>Species</b>	Mouse

**Dilution info** 1/500

**Notes** -

---

**Species** Rat

**Dilution info** 1/500

**Notes** -

## Flow Cyt (Intra)

### Tested

**Species** Human

**Dilution info** 1/5000

**Notes** -

---

**Species** Mouse

**Dilution info** 1/5000

**Notes** -

---

**Species** Rat

**Dilution info** 1/5000

**Notes** -

## IP

### Tested

**Species** Human

**Dilution info** 1/30

**Notes** -

### Not recommended

**Species** Mouse, Rat

**Dilution info** -

**Notes** -

## IHC-Fr

### Tested

Species	Mouse
Dilution info	1/50
Notes	-

---

Species	Rat
Dilution info	1/50
Notes	-

### Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

---

## 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

This product is a recombinant multiclonal 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.

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

## 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

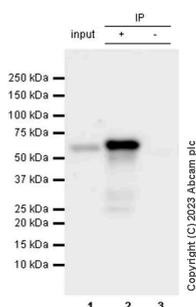
We do not recommend this combination. It is not covered by our product promise.

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.](#)

## 16 product images



### Immunoprecipitation - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

SQSTM1 was immunoprecipitated from 0.35 mg HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate with ab314504 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab314504 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)([ab131366](#)) was used at 1/5000 dilution.

Lane 1: HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 2: ab314504 IP in HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab314504 in HepG2 whole cell lysate  
 Blocking and dilution buffer and concentration: 5% NFDm/TBST.

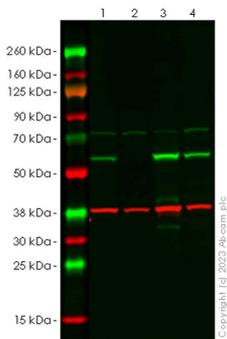
All lanes:  
Immunoprecipitation - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504) at 1/30 dilution

All lanes:  
HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate

Secondary

All lanes:  
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 62s



## Western blot - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Blocking and diluting buffer and concentration: 5% NFDm/TBST  
The samples were run on a Bis-Tris gel under reducing conditions.

Western blot: Anti-SQSTM1 / p62 antibody (ab314504) staining at 1/1000 dilution, shown in green; Mouse Anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20,000 dilution, shown in red.

In Western blot, ab314504 was shown to bind specifically to SQSTM1 / p62. Target of interest was observed at 62 kDa in wild-type HAP1 cell lysates (lane 1) with no signal observed at this size in SQSTM1 knockout cell line (lane 2). To generate this image, samples were first run on an SDS-PAGE gel then transferred onto an immobilon-FL PVDF membrane. Membranes were blocked in a fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots were washed in TBS-T, incubated with secondary antibodies Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution for 1 h at room temperature, washed again then imaged.

All lanes:  
Western blot - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504) at 1/1000 dilution

Lane 1:  
Wild type HAP1 (human chronic myelogenous leukemia cell) whole cell lysate at 20 µg

Lane 2:  
SQSTM1 knockout HAP1 whole cell lysate at 20 µg

Lane 3:  
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

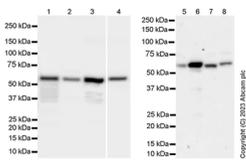
Lane 4:  
HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:  
Goat Anti-Rabbit IgG H&L (800CW) and Goat Anti-Mouse IgG H&L (680RD) at 1/20000 dilution

Performed under reducing conditions.

Observed band size: 62 kDa



## Western blot - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Blocking and diluting buffer and concentration: 5% NFDm/TBST

Exposure time: Lanes 1-4: 15 seconds; Lanes 5-8: 103 seconds

All lanes:

Western blot - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504) at 1/1000 dilution

Lane 1:

MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate at 20  $\mu$ g

Lane 2:

293T (human embryonic kidney epithelial cell) whole cell lysate at 20  $\mu$ g

Lane 3:

K-562 (human chronic myelogenous leukemia lymphoblast) whole cell lysate at 20  $\mu$ g

Lane 4:

MEF (mouse embryo fibroblast) whole cell lysate at 20  $\mu$ g

Lane 5:

C6 (rat glial tumor glial cell) whole cell lysate at 20  $\mu$ g

Lane 6:

RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 20  $\mu$ g

Lane 7:

PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate at 20  $\mu$ g

Lane 8:

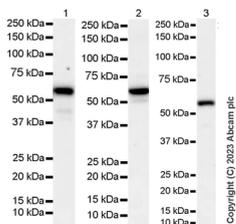
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20  $\mu$ g

Secondary

All lanes:

Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 62 kDa



## Western blot - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Blocking and diluting buffer and concentration: 5% NFDm/TBST

Exposure time: Lane 1: 103 seconds; Lane 2 and 3: 125 seconds

All lanes:

Western blot - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504) at 1/1000 dilution

Lane 1:

Human kidney tissue lysate at 20  $\mu$ g

Lane 2:

Mouse spleen tissue lysate at 20  $\mu$ g

Lane 3:

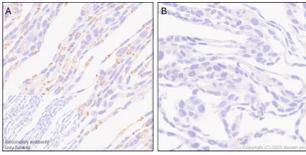
Rat spleen tissue lysate at 20  $\mu$ g

Secondary

All lanes:

Western blot - Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Observed band size: 62 kDa

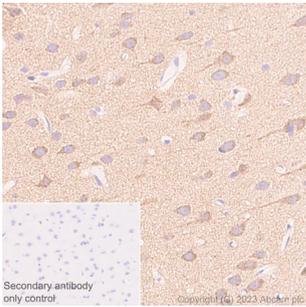


## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Immunohistochemical analysis of paraffin-embedded (A) Wild-type HCT116 (human colon epithelial) cell pellet (B) SQSTM1 knockout HCT116 ([ab266871](#)) cell pellet tissue labeling SQSTM1 with ab314504 at 1/20000 (0.025 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on (A) Wild-type HCT116 cell pellet, no staining on (B) SQSTM1 knockout HCT116 ([ab266871](#)) cell pellet. The section was incubated with ab314504 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

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

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins

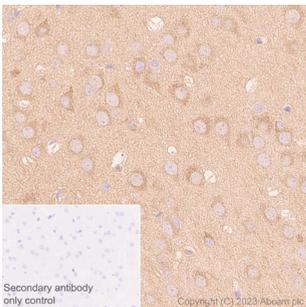


## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling SQSTM1 with ab314504 at 1/1000 (0.505 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on rat cerebrum. The section was incubated with ab314504 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

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

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins

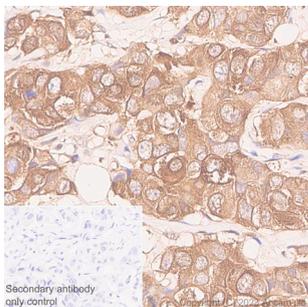


## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling SQSTM1 with ab314504 at 1/1000 (0.505 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on mouse cerebrum. The section was incubated with ab314504 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

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

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins

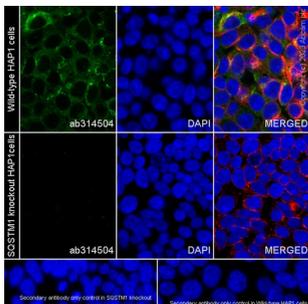


## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissue labeling SQSTM1 with ab314504 at 1/5000 (0.101 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human breast cancer. The section was incubated with ab314504 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

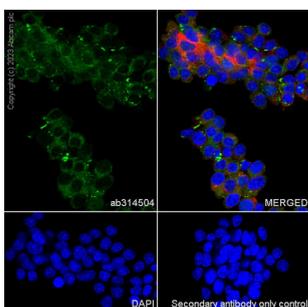
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins



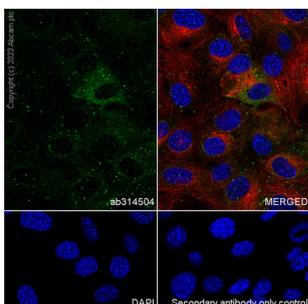
## Immunocytochemistry/ Immunofluorescence - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% TritonX-100 permeabilized SQSTM1 KO HAP1 (SQSTM1 knockout human chronic myelogenous leukemia cell line) cells labelling SQSTM1 with ab314504 at 1/500 (1.01 ug/ml) dilution, followed by [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing cytoplasmic staining in HAP1 cell line, and negative staining in SQSTM1 KO HAP1 cell line. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). [ab195889](#) Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/ml dilution.



## Immunocytochemistry/ Immunofluorescence - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

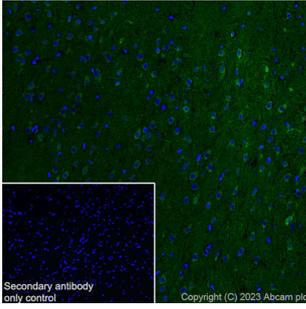
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized PC-12 (rat adrenal gland pheochromocytoma cell) cells labelling SQSTM1 with ab314504 at 1/500 (1.01 ug/ml) dilution, followed by [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing cytoplasmic staining in PC-12 cell line. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). [ab195889](#) Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/ml dilution.



## Immunocytochemistry/ Immunofluorescence - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

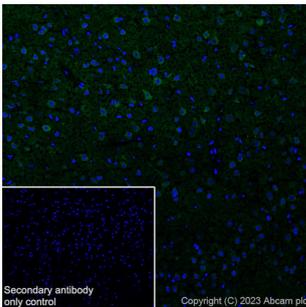
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized MEF (mouse embryo fibroblast cell) cells labelling SQSTM1 with ab314504 at 1/500 (1.01 ug/ml) dilution, followed by [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing cytoplasmic staining in MEF cell line. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). [ab195889](#) Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear

counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/ml dilution.



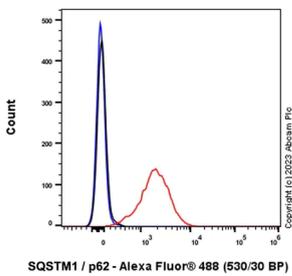
## Immunohistochemistry (Frozen sections) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat cerebrum (fresh) tissue labeling SQSTM1 with ab314504 at 1/50 (10.1 ug/ml) dilution followed by [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Confocal image showing positive staining on rat cerebrum. The nuclear counterstain was DAPI (Blue). The section was incubated with ab314504 for 60 mins at room temperature. The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution.



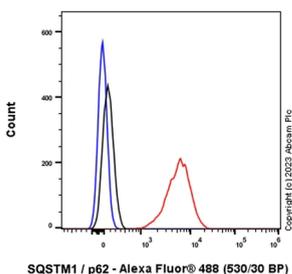
## Immunohistochemistry (Frozen sections) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebrum (fresh) tissue labeling SQSTM1 with ab314504 at 1/50 (10.1 ug/ml) dilution followed by [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Confocal image showing positive staining on mouse cerebrum. The nuclear counterstain was DAPI (Blue). The section was incubated with ab314504 for 60 mins at room temperature. The section was then mounted using Fluoromount®. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution.



## Flow Cytometry (Intracellular) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

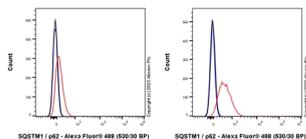
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized PC-12 (rat adrenal gland pheochromocytoma cell) cells labelling SQSTM1 with ab314504 at 1/5000 dilution (0.01 ug)/Red (Red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, [ab150081](#)) at 1/5000 dilution was used as the secondary antibody.



## Flow Cytometry (Intracellular) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized MEF (mouse embryo fibroblast) cells labelling SQSTM1 with ab314504 at 1/5000 dilution (0.01 ug)/Red (Red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody)

(Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, [ab150081](#)) at 1/5000 dilution was used as the secondary antibody.



## Flow Cytometry (Intracellular) - Anti-SQSTM1 / p62 antibody [RM1079] (ab314504)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized SQSTM1 KO HAP1 (human SQSTM1 knockout chronic myelogenous leukemia near-haploid cell) / parental HAP1 cells labelling SQSTM1 with ab314504 at 1/5000 dilution (0.01 ug)/Red (Red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, [ab150081](#)) at 1/5000 dilution was used as the secondary antibody.

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