

Product datasheet

Anti-Rab5 antibody [1/Rab5] ab288769

KO VALIDATED Recombinant

7 Images

Overview

Product name	Anti-Rab5 antibody [1/Rab5]
Description	Mouse monoclonal [1/Rab5] to Rab5
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB Unsuitable for: ICC
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type HAP1, HeLa and MCF7 whole cell lysate. Human brain, heart and kidney lysates. IHC-P: Human astrocytoma. Human breast carcinoma. Human placenta and kidney tissues.
General notes	<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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	1/Rab5

Isotype

IgG2a

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab288769 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
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 24 kDa.

Application notes

Is unsuitable for ICC.

Target

Function

Required for the fusion of plasma membranes and early endosomes.

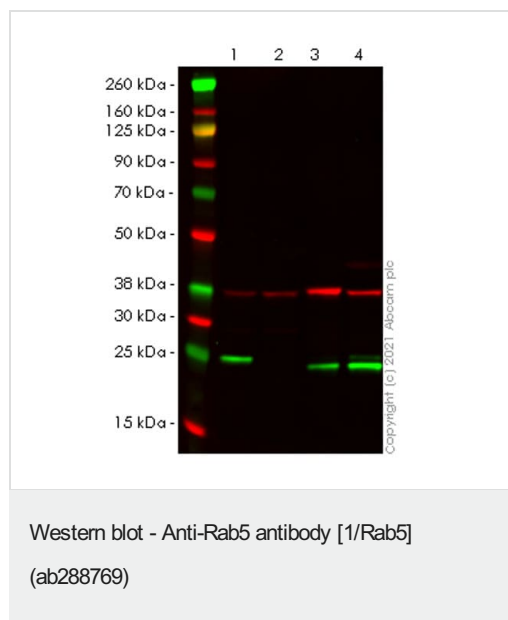
Sequence similarities

Belongs to the small GTPase superfamily. Rab family.

Cellular localization

Cell membrane. Early endosome membrane. Melanosome. Enriched in stage I melanosomes.

Images



All lanes : Anti-Rab5 antibody [1/Rab5] (ab288769) at 1/1000 dilution

Lane 1 : Wild-type HAP1 (human chronic myelogenous leukemia near-haploid cell) whole cell lysate

Lane 2 : Rab5 knockout HAP1 whole cell lysate

Lane 3 : HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

Lane 4 : MCF7 (human breast adenocarcinoma epithelial cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Mouse IgG H&L (IRDye® 800CW) (**ab216772**) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) (**ab216777**) at 1/10000 dilution

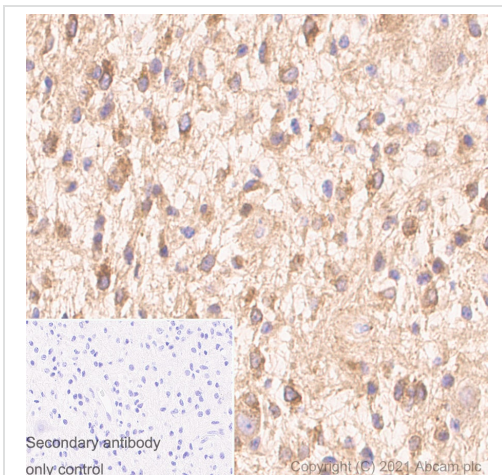
Predicted band size: 24 kDa

Observed band size: 23 kDa

Blocking and diluting buffer: Intercept[®] (TBS) Blocking Buffer diluted with an equal volume of 0.1% TBS

Performed under reducing conditions.

False colour image of Western blot: Anti-Rab5 antibody (ab288769) staining at 1/1000 dilution, shown in green; Rabbit anti-GAPDH antibody [EPR16891] (**ab181602**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab288769 was shown to bind specifically to Rab5. A band was observed at 24 kDa in wild-type HAP1 cell lysates with no signal observed at this size in Rab5 knockout cell lysates. To generate this image, wild-type and Rab5 knockout HAP1 cell lysates were analyzed. First, samples were run on an SDS-PAGE gel then transferred onto an immobilon-FL PVDF membrane. Membranes were blocked in Intercept[®] (TBS) Blocking Buffer diluted with an equal volume of 0.1% TBS before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat Anti-Mouse IgG H&L (IRDye[®] 800CW) (**ab216772**) and Goat Anti-Rabbit IgG H&L (IRDye[®] 680RD) (**ab216777**) at 1/10000 dilution.



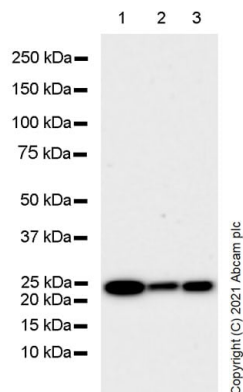
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rab5 antibody [1/Rab5] (ab288769)

Immunohistochemical analysis of paraffin-embedded human astrocytoma tissue labeling Rab5 with ab288769 at 1/100 (8.35 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond[™] Polymer Refine Detection). Positive staining on human astrocytoma.

The section was incubated with ab288769 for 30 mins at room temperature and followed by specific mouse IgG2a antibody for 8mins. 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 with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Western blot - Anti-Rab5 antibody [1/Rab5]
(ab288769)

All lanes : Anti-Rab5 antibody [1/Rab5] (ab288769) at 1/1000 dilution

Lane 1 : Human brain tissue lysate

Lane 2 : Human heart tissue lysate

Lane 3 : Human kidney tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

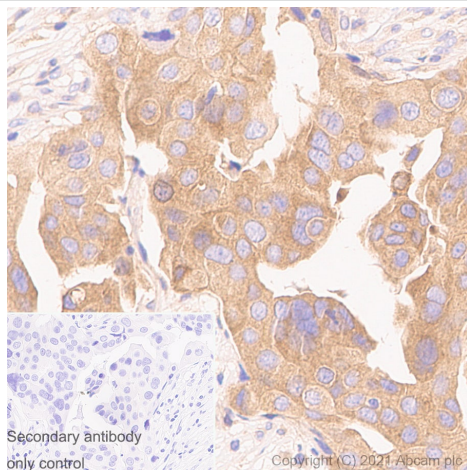
All lanes : Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

Predicted band size: 24 kDa

Observed band size: 23 kDa

Blocking and diluting buffer: 5% NFDm/TBST

Exposure time: 70 seconds

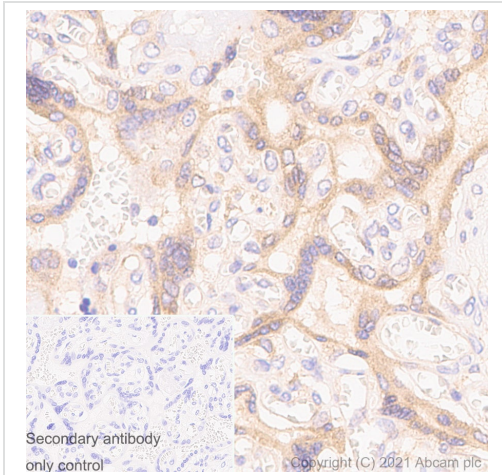


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rab5 antibody [1/Rab5]
(ab288769)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labeling Rab5 with ab288769 at 1/100 (8.35 µg/ml) dilution followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection). Positive staining on human breast carcinoma. The section was incubated with ab288769 for 30 mins at room temperature and followed by specific mouse IgG2a antibody for 8mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. The sample was counterstained with Hematoxylin.

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

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

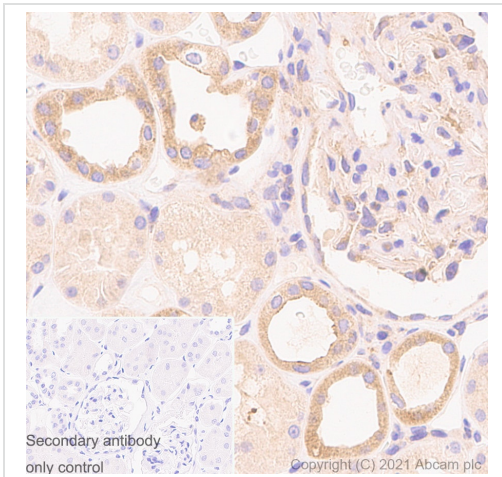


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rab5 antibody [1/Rab5] (ab288769)

Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling Rab5 with ab288769 at 1/100 (8.35 µg/ml) dilution followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection). Positive staining on human placenta. The section was incubated with ab288769 for 30 mins at room temperature and followed by specific mouse IgG2a antibody for 8mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. The sample was counterstained with Hematoxylin.

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

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rab5 antibody [1/Rab5] (ab288769)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling Rab5 with ab288769 at 1/100 (8.35 µg/ml) dilution followed by a ready to use LeicaDS9800 (BOND™ Polymer Refine Detection). Positive staining on human kidney. The section was incubated with ab288769 for 30 mins at room temperature and followed by specific mouse IgG2a antibody for 8mins. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. The sample was counterstained with Hematoxylin.

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

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Why choose a recombinant antibody?



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

Anti-Rab5 antibody [1/Rab5] (ab288769)

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

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