abcam

Product datasheet

# Anti-Rab4 antibody [EPR3042] - Early Endosome Marker ab108974

敲除验证 重组 RabMAb

**4 References** 7 图像

## 概述

| | |
|---|---|
| **产品名称** | Anti-Rab4抗体[EPR3042] - Early Endosome Marker |
| **描述** | 兔单克隆抗体[EPR3042] to Rab4 - Early Endosome Marker |
| **宿主** | Rabbit |
| **经测试应用** | **适用于:** WB, ICC/IF<br>**不适用于:** Flow Cyt or IHC-P |
| **种属反应性** | **与反应:** Mouse, Rat, Human |
| **免疫原** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **阳性对照** | HeLa, MCF7, PC12, Neuro-2a, mouse brain, rat brain and fetal brain cell lysates |
| **常规说明** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## 性能

| | |
|---|---|
| **形式** | Liquid |
| **存放说明** | 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. Stable for 12 months at -20°C. |
| **存储溶液** | pH: 7.20<br>Preservative: 0.01% Sodium azide<br>Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA |
| **纯度** | Protein A purified |
| **克隆** | 单克隆 |
| **克隆编号** | EPR3042 |

| | |
|---|---|
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用ab108974于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

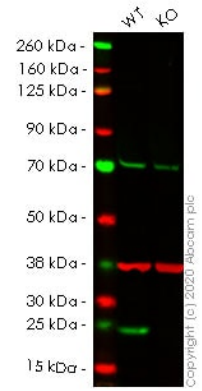
| 应用 | Ab评论 | 说明 |
|---|---|---|
| **WB** | | 1/2000 - 1/10000. Detects a band of approximately 25 kDa (predicted molecular weight: 24 kDa). |
| **ICC/IF** | | 1/100 - 1/250. |

**应用说明** Is unsuitable for Flow Cyt or IHC-P.

## 靶标

| | |
|---|---|
| **功能** | Protein transport. Probably involved in vesicular traffic. |
| **序列相似性** | Belongs to the small GTPase superfamily. Rab family. |
| **翻译后修饰** | Phosphorylated by CDK1 kinase during mitosis. |
| **细胞定位** | Membrane. Cytoplasm. Generally associated with membranes. Cytoplasmic when phosphorylated by CDK1. |

## 图片




Western blot - Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974)

**All lanes :** Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa cell lysate
**Lane 2 :** RAB4A knockout HeLa cell lysate

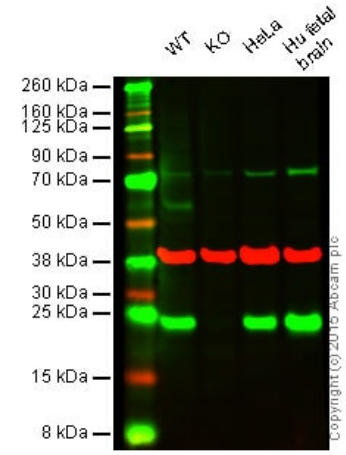
Lysates/proteins at 40 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 24 kDa
**Observed band size:** 24 kDa

**Lanes 1- 2:** Merged signal (red and green). Green - ab108974 observed at 24 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

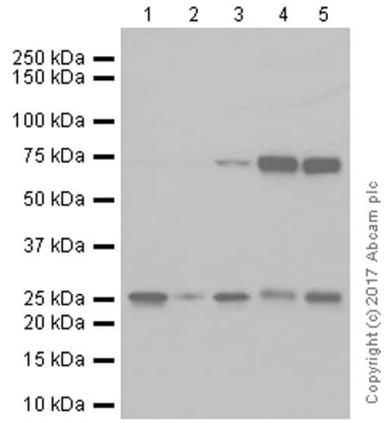
ab108974 was shown to react with Rab4 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab264781** (knockout cell lysate **ab257624**) was used. Wild-type HeLa and RAB4A knockout HeLa cell lysates were subjected to SDS-PAGE. ab108974 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) overnight at 4°C at a 1 in 1000 Dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.




Western blot - Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974)

**Lane 1:** Wild-type HAP1 cell lysate (20 µg)
**Lane 2:** Rab4 knockout HAP1 cell lysate (20 µg)
**Lane 3:** HeLa cell lysate (20 µg)
**Lane 4:** Human fetal brain cell lysate (20 µg)
**Lanes 1 - 4:** Merged signal (red and green). Green - ab108974 observed at 24 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

Unpurified ab108974 was shown to recognize Rab4 when Rab4 knockout samples were used, along with additional cross-reactive bands. Wild-type and Rab4 knockout samples were subjected to SDS-PAGE. Unpurified ab108974 and **ab8245** (loading control to GAPDH) were both diluted 1/2000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.




Western blot - Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974)

**All lanes :** Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974) at 1/2000 dilution (purified)

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates
**Lane 2 :** PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates
**Lane 3 :** Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysates
**Lane 4 :** Mouse brain lysates
**Lane 5 :** Rat brain lysates

Lysates/proteins at 20 µg per lane.

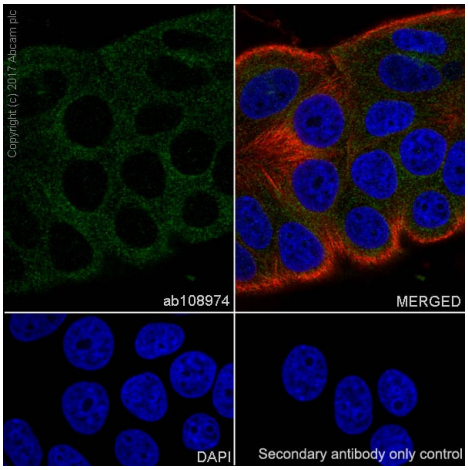
**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 24 kDa

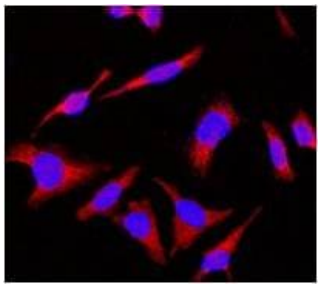
**Observed band size:** 25 kDa

Blocking and diluting buffer: 5% NFDM/TBST



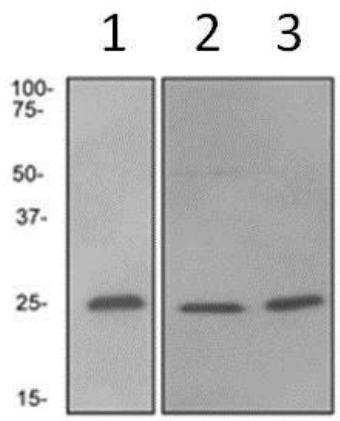

Immunocytochemistry/ Immunofluorescence - Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Rab4 with purified ab108974 at 1:100 dilution (8.8µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). **ab150077** Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunocytochemistry/ Immunofluorescence - Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974)

Immunofluorescent staining of Rab4 in HeLa cells, using unpurified ab108974 at a 1/100 dilution.




Western blot - Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974)

**All lanes :** Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974) at 1/2000 dilution (unpurified)

**Lane 1 :** MCF7 cell lysates

**Lane 2 :** PC12 cell lysates

**Lane 3 :** Fetal brain cell lysates

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 24 kDa

**Observed band size:** 25 kDa


Anti-Rab4 antibody [EPR3042] - Early Endosome Marker (ab108974)



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