abcam

Product datasheet

Anti-Rho antibody [EP487Y] ab40673

重组 RabMAb

★★★★★ 3 Abreviews 12 References 8 图像

概述

产品名称	Anti-Rho抗体[EP487Y]
描述	兔单克隆抗体[EP487Y] to Rho
宿主	Rabbit
特异性	This antibody is specific for Rho. It is also expected to detect RhoA, RhoB and RhoC.
经测试应用	**适用于:** ICC/IF, WB, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human Rho (N terminal). The exact sequence is proprietary.
阳性对照	HL60 cell lysate.
常规说明	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 production For more information **see here**. 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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
纯度	Protein A purified
克隆	单克隆
克隆编号	EP487Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab40673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
ICC/IF		1/250.
WB	★★★★★ (3)	1/1000 - 1/5000. Detects a band of approximately 22 kDa (predicted molecular weight: 21 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.

靶标

功能 Regulates a signal transduction pathway linking plasma membrane receptors to the assembly of focal adhesions and actin stress fibers. Involved in a microtubule-dependent signal that is required for the myosin contractile ring formation during cell cycle cytokinesis. Plays an essential role in cleavage furrow formation. Required for the apical junction formation of keratinocyte cell-cell adhesion. Serves as a target for the yopT cysteine peptidase from Yersinia pestis, vector of the plague, and Yersinia pseudotuberculosis, which causes gastrointestinal disorders. Stimulates PKN2 kinase activity. May be an activator of PLCE1. Activated by ARHGEF2, which promotes the exchange of GDP for GTP. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. The MEMO1-RHOA-DIAPH1 signaling pathway plays an important role in ERBB2-dependent stabilization of microtubules at the cell cortex. It controls the localization of APC and CLASP2 to the cell membrane, via the regulation of GSK3B activity. In turn, membrane-bound APC allows the localization of the MACF1 to the cell membrane, which is required for microtubule capture and stabilization.

序列相似性 Belongs to the small GTPase superfamily. Rho family.

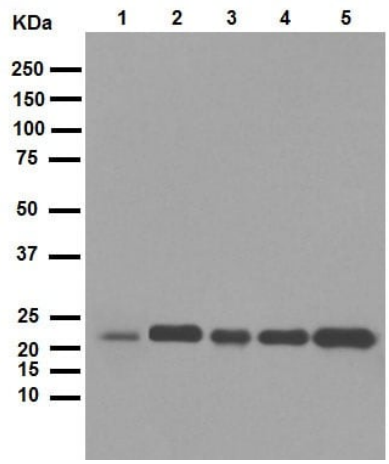
结构域 The basic-rich region is essential for yopT recognition and cleavage.

翻译后修饰 Substrate for botulinum ADP-ribosyltransferase.
Cleaved by yopT protease when the cell is infected by some Yersinia pathogens. This removes the lipid attachment, and leads to its displacement from plasma membrane and to subsequent cytoskeleton cleavage.
AMPylation at Tyr-34 and Thr-37 are mediated by bacterial enzymes in case of infection by H.somnus and V.parahaemolyticus, respectively. AMPylation occurs in the effector region and leads to inactivation of the GTPase activity by preventing the interaction with downstream effectors, thereby inhibiting actin assembly in infected cells. It is unclear whether some human enzyme mediates AMPylation; FICD has such ability in vitro but additional experiments remain to be done to confirm results in vivo.
Phosphorylation by PRKG1 at Ser-188 inactivates RHOA signaling.
Ubiquitinated by the BCR(BACURD1) and BCR(BACURD2) E3 ubiquitin ligase complexes, leading to its degradation by the proteasome, thereby regulating the actin cytoskeleton and cell migration.

细胞定位 Cell membrane. Cytoplasm > cytoskeleton. Cleavage furrow. Cytoplasm > cell cortex. Midbody. Localized to cell-cell contacts in calcium-treated keratinocytes (By similarity). Translocates to the

equatorial region before furrow formation in a ECT2-dependent manner. Localizes to the equatorial cell cortex (at the site of the presumptive furrow) in early anaphase in a activated form and in a myosin- and actin-independent manner.

图片



Western blot - Anti-Rho antibody [EP487Y] (ab40673)

All lanes : Anti-Rho antibody [EP487Y] (ab40673) at 1/1000 dilution (purified)

Lane 1 : A431 cell lysate
Lane 2 : MCF7 cell lysate
Lane 3 : HeLa cell lysate
Lane 4 : K562 cell lysate
Lane 5 : Jurkat cell lysate

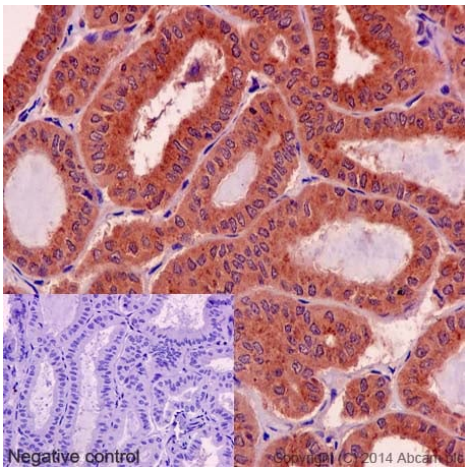
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 21 kDa
Observed band size: 22 kDa

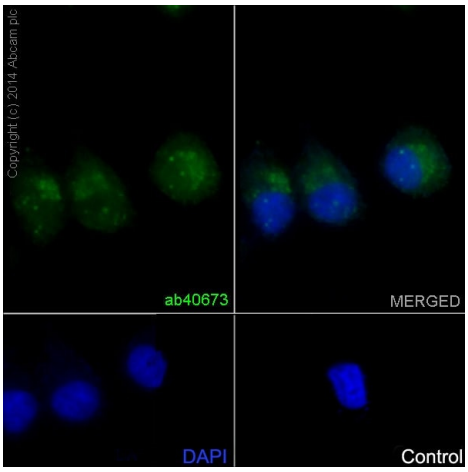
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



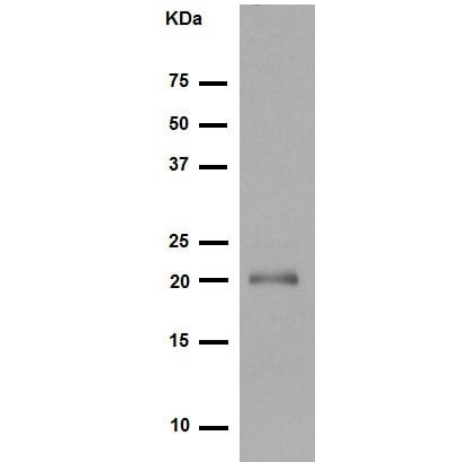
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Rho antibody [EP487Y] (ab40673)

Immunohistochemical staining of paraffin embedded human thyroid carcinoma with purified ab40673 at a working dilution of 1 in 250. The secondary antibody used is a HRP polymer for rabbit IgG. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-Rho antibody [EP487Y] (ab40673)

Immunofluorescence staining of MCF7 cells with purified ab40673 at a working dilution of 1 in 250, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti rabbit, used at a dilution of 1 in 500. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative control is shown in bottom right hand panel - for the negative control, PBS was used as primary, followed by an Alexa Fluor® 488 goat anti-rabbit secondary (**ab150077**) at a dilution of 1/500.



Western blot - Anti-Rho antibody [EP487Y] (ab40673)

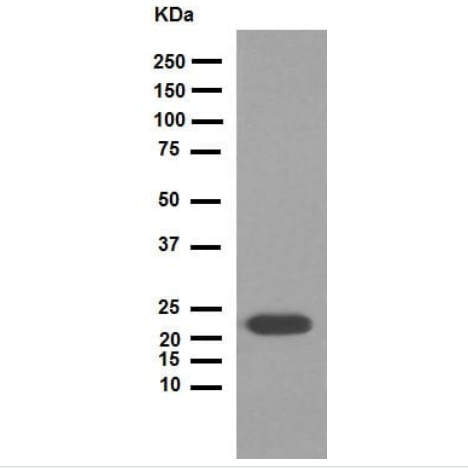
Anti-Rho antibody [EP487Y] (ab40673) at 1/1000 dilution (purified) + Mouse kidney tissue lysate at 10 µg

Secondary
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 21 kDa
Observed band size: 22 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-Rho antibody [EP487Y] (ab40673)

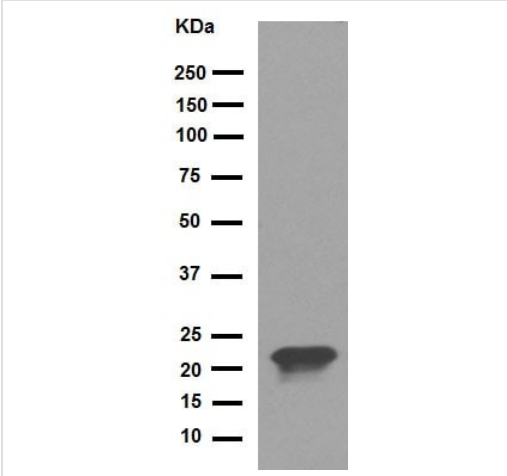
Anti-Rho antibody [EP487Y] (ab40673) at 1/1000 dilution (purified) + C6 cell lysate at 20 µg

Secondary
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 21 kDa
Observed band size: 22 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-Rho antibody [EP487Y] (ab40673)

Anti-Rho antibody [EP487Y] (ab40673) at 1/5000 dilution (purified) + HL-60 cell lysate at 20 µg

Secondary

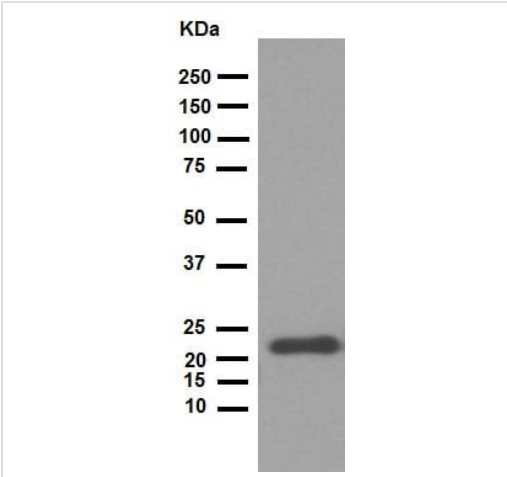
HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 21 kDa

Observed band size: 22 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-Rho antibody [EP487Y] (ab40673)

Anti-Rho antibody [EP487Y] (ab40673) at 1/1000 dilution (purified) + MDA-MB-435 at 20 µg

Secondary

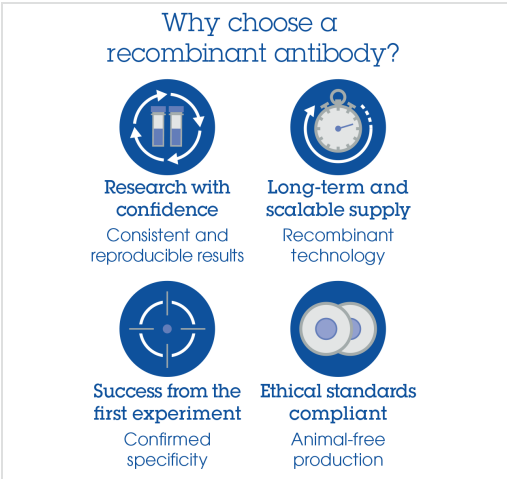
HRP goat anti-rabbit (H+L)

Predicted band size: 21 kDa

Observed band size: 22 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Anti-Rho antibody [EP487Y] (ab40673)

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