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## Product datasheet

# Anti-RhoA (phospho S188) antibody ab41435

★★★★★ 9 Abreviews 28 References 画像数 2

#### 製品の概要

製品名 Anti-RhoA (phospho S188) antibody

製品の詳細 Rabbit polyclonal to RhoA (phospho S188)

由来種 Rabbit

特異性 Phospho-Ser188-RhoA specific. RhoA immunogen sequence not found in RhoB or RhoC

proteins.

アプリケーション **適用あり**: WB

種交差性 交差種: Human

交差が予測される動物種: Rat 🔷

免疫原 Synthetic peptide corresponding to Human RhoA (phospho S188) conjugated to keyhole limpet

haemocyanin.

Database link: P06749

特記事項 Do not aliquot.

Post-translational regulation of Rho activity has been shown specifically for RhoA. This Rho protein is phosphorylated in vitro on serine 188 by cAMP- and cGMP-dependent kinases (PKA and PKG). Ser188 phosphorylation enhances RhoGDI binding and inhibits RhoA-mediated stress fiber formation. Thus, Ser188 is an important site for negative regulation of RhoA activity.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at 4°C (up to 6 months). Store at -20°C.

パッファー Preservative: 0.05% Sodium azide

Constituents: PBS, 50% Glycerol, 0.1% BSA

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精製度 Immunogen affinity purified

一次抗体 備考 Post-translational regulation of Rho activity has been shown specifically for RhoA. This Rho

protein is phosphorylated in vitro on serine 188 by cAMP- and cGMP-dependent kinases (PKA and PKG). Ser188 phosphorylation enhances RhoGDI binding and inhibits RhoA-mediated stress

fiber formation. Thus, Ser188 is an important site for negative regulation of RhoA activity.

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

#### アプリケーション

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アプリケーション	Abreviews	特記事項
WB	<b>★★★☆☆</b> (9)	1/1000. Predicted molecular weight: 22 kDa.

#### ターゲット情報

機能 Regulates a signal transduction pathway linking plasma membrane receptors to the assembly of

focal adhesions and actin stress fibers. Serves as a target for the yopT cysteine peptidase from

Yersinia pestis, vector of the plague, and Yersinia pseudotuberculosis, which causes gastrointestinal disorders. May be an activator of PLCE1. Activated by ARHGEF2, which

promotes the exchange of GDP for GTP.

配列類似性 Belongs to the small GTPase superfamily. Rho family.

ドメイン The basic-rich region is essential for yopT recognition and cleavage.

翻訳後修飾 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

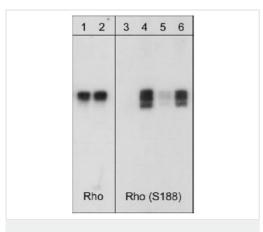
be done to confirm results in vivo.

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.

**細胞内局在** Cell membrane. Cytoplasm > cytoskeleton.

### 画像



Western blot - Anti-RhoA (phospho S188) antibody (ab41435)

Lanes 1-2: anti-Rho

Lanes 3-6: Anti-RhoA (phospho S188) antibody (ab41435) at 1/1000 dilution

**Lane 1 :** recombinant human RhoA GST fusion protein, unphosphorylated

**Lane 2 :** recombinant human RhoA GST fusion protein, phosphorylated with PKA

**Lane 3 :** recombinant human RhoA GST fusion protein, unphosphorylated

**Lane 4 :** recombinant human RhoA GST fusion protein, phosphorylated with PKA

**Lane 5 :** recombinant human RhoA GST fusion protein, phosphorylated with PKA

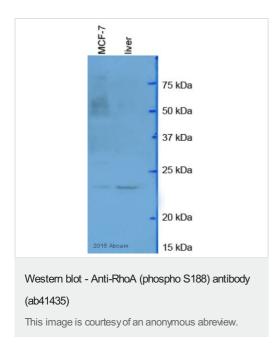
with RhoA (phospho S188) peptide

Lane 6: recombinant human RhoA GST fusion protein, phosphorylated with PKA with non-specific phosphoserine peptide

**Predicted band size:** 22 kDa **Observed band size:** 49 kDa

Membrane was incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

A fusion protein was used in this western blot; hence the difference in molecular weight compared to predicted molecular weight.



**All lanes :** Anti-RhoA (phospho S188) antibody (ab41435) at 1/1000 dilution

Lane 1: MCF7

Lane 2: human liver nuclear tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

All lanes: Polyclonal goat anti-rabbit HRP conjugate at 1/10000

dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 22 kDa **Observed band size:** 22 kDa

Exposure time: 25 seconds

Blocking: 5% milk for 1 hour at 23°C

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