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Product datasheet

Anti-RAC1 + Cdc42 (phospho S71) antibody ab5482

1 Abreviews 7 References 画像数 3

製品の概要

製品名	Anti-RAC1 + Cdc42 (phospho S71) antibody
製品の詳細	Rabbit polyclonal to RAC1 + Cdc42 (phospho S71)
由来種	Rabbit
特異性	Cdc 42 [pS71] (100% homologous) and Rho A/B/C [pS73] (92% homologous) are expected to react.
アプリケーション	**適用あり:** IHC-P, WB
種交差性	**交差種:** Human
免疫原	Synthetic peptide corresponding to Human RAC1 + Cdc42 (phospho S71). The sequence is conserved in human and mouse RAC 1, 2, and 3, and Cdc 42 human, mouse, rat, dog and frog.
ポジティブ・コントロール	WB: A431 cells treated with EGF. IHC-P: human skin, human stomach tissues
特記事項	RAC, Cdc 42 and Rho A, B, and C are members of a small RhoGTPase family that bind and hydrolyze GTP. GTP bound RAC 1 and cdc 42 play a pivotal role in controlling cell shape, adhesion, growth and transformation. Active Rac 1 is implicated in regulating serum response element (SRE), NFAT 1 and nuclear factor kappa B (NF kappa B) transcription activities. Activated RAC 1 and Cdc 42 bind and activate PAK 1, which in turn activates key downstream signaling proteins including MEKK 1 and JNK. RAC 1 and Cdc 42 are phosphorylated on serine 71, a putative Akt site located between the protein binding domain and GTP binding domain. Phosphorylation of RAC 1 on serine 71 regulates its GTP binding and GTPase 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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

	cycles.
バッファー	pH: 7.30 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.1% BSA BSA is IgG and protease free
精製度	Immunogen affinity purified
特記事項（精製）	The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated RAC 1. The final product is generated by affinity chromatography using a RAC 1 derived peptide that is phosphorylated at serine 71.
一次抗体 備考	RAC, Cdc 42 and Rho A, B, and C are members of a small RhoGTPase family that bind and hydrolyze GTP. GTP bound RAC 1 and cdc 42 play a pivotal role in controlling cell shape, adhesion, growth and transformation. Active Rac 1 is implicated in regulating serum response element (SRE), NFAT 1 and nuclear factor kappa B (NF kappa B) transcription activities. Activated RAC 1 and Cdc 42 bind and activate PAK 1, which in turn activates key downstream signaling proteins including MEKK 1 and JNK. RAC 1 and Cdc 42 are phosphorylated on serine 71, a putative Akt site located between the protein binding domain and GTP binding domain. Phosphorylation of RAC 1 on serine 71 regulates its GTP binding and GTPase 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

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab5482の使用に適用されます

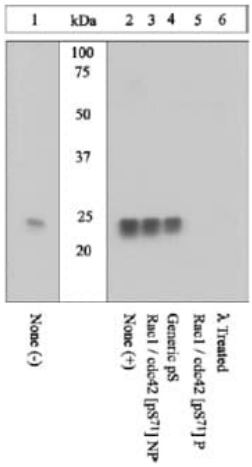
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/20 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★☆☆☆☆ (1)	1/1000. Detects a band of approximately 23 kDa.

ターゲット情報

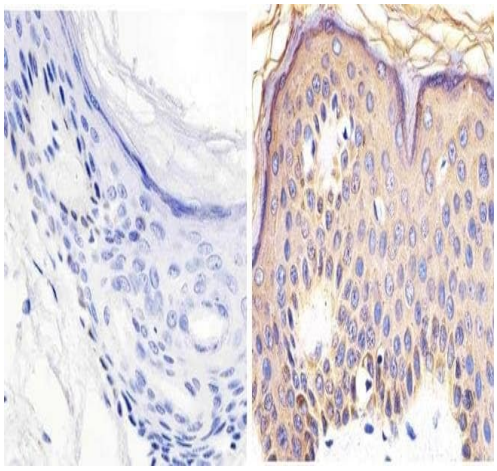
関連性	Cdc42/Rac belongs to the superfamily of small GTPases that are structurally linked to the proto-oncogene product p21ras and are important for the control of cell growth and differentiation as well as for intracellular organization. Cdc42/Rac is an important upstream regulator of the protein kinase cascade that controls the SAPK/JNK and p38 activity. Recent data also suggest that constitutive active forms of Cdc42 can induce apoptosis through a mechanism requiring signaling through SAPK/JNK.
細胞内局在	Cell membrane; Lipid anchor; Cytoplasmic side.

画像



Western blot - Anti-RAC1 + Cdc42 (phospho S71) antibody (ab5482)

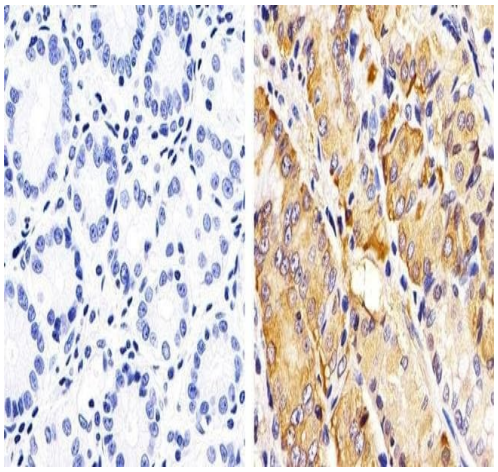
Peptide Competition and Phosphatase Treatment:
Lysates prepared from A431 cells left unstimulated (1) or stimulated with EGF (2-6) were resolved by SDS-PAGE on a 10% polyacrylamide gel and transferred to PVDF. Membranes were either not treated (1-5) or treated with lambda phosphatase (6), blocked with a 5% BSA-TBST buffer for one hour at room temperature, and incubated with ab5482 antibody for two hours at room temperature in a 3% BSATBST buffer, following prior incubation with: no peptide (1, 2, 6), the nonphosphopeptide corresponding to the immunogen (3), a generic phosphoserine containing peptide (4), or, the phosphopeptide immunogen (5), After washing, membranes were incubated with goat F(ab')2 anti-rabbit IgG HRP conjugate and bands were detected using the Pierce SuperSignal method. The data show that the peptide corresponding to ab5482 blocks the antibody signal. The data also shows that phosphatase stripping eliminates the signal, verifying that the antibody is pho



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RAC1 + Cdc42 (phospho S71) antibody (ab5482)

Immunohistochemiscal analysis of paraffin-embedded human skin tissue labeling RAC1 + Cdc42 (phospho S71) with ab5482 at 1/100 dilution (right) compared to a negative control without primary antibody (left).

To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with ab5482 diluted in 3% BSA-PBS at a dilution of 1/100 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RAC1 + Cdc42 (phospho S71) antibody (ab5482)

Immunohistochemical analysis of paraffin-embedded human stomach tissue labeling RAC1 + Cdc42 (phospho S71) with ab5482 at 1/20 dilution (right) compared to a negative control without primary antibody (left).

To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with ab5482 diluted in 3% BSA-PBS at a dilution of 1/20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

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