

Anti-Rac1 + Rac2 + Rac3 antibody [EPR18631] ab180683

リコンビナント **RabMAb**

4 References [画像数 4](#)

製品の概要

製品名	Anti-Rac1 + Rac2 + Rac3 antibody [EPR18631]
製品の詳細	Rabbit monoclonal [EPR18631] to Rac1 + Rac2 + Rac3
由来種	Rabbit
アプリケーション	適用あり: WB
種交差性	交差種: Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Recombinant human Rac1, Rac2 and Rac3 full length protein. Human fetal brain lysate. HEK-293, HeLa, HUVEC, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates.
特記事項	<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> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	<p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR18631
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ab180683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。

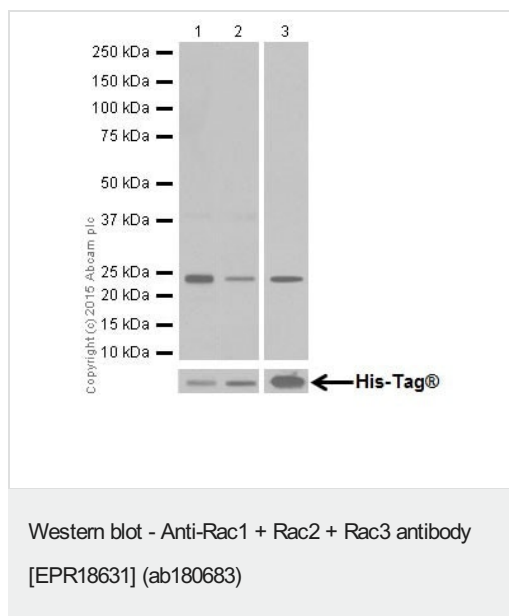
アプリケーション	Abreviews	特記事項
WB		1/2000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).

ターゲット情報

関連性

Rac1 function: Plasma membrane-associated small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its active state, binds to a variety of effector proteins to regulate cellular responses such as secretory processes, phagocytosis of apoptotic cells, epithelial cell polarization and growth-factor induced formation of membrane ruffles. Rac1 p21/rho GDI heterodimer is the active component of the cytosolic factor sigma 1, which is involved in stimulation of the NADPH oxidase activity in macrophages. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. Stimulates PKN2 kinase activity. In concert with RAB7A, plays a role in regulating the formation of RBs (ruffled borders) in osteoclasts. In glioma cells, promotes cell migration and invasion. In podocytes, promotes nuclear shuttling of NR3C2; this modulation is required for a proper kidney functioning. Required for atypical chemokine receptor ACKR2-induced LIMK1-PAK1-dependent phosphorylation of cofilin (CFL1) and for up-regulation of ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation. In synapses, seems to mediate the regulation of F-actin cluster formation performed by SHANK3. Isoform B has an accelerated GEF-independent GDP/GTP exchange and an impaired GTP hydrolysis, which is restored partially by GTPase-activating proteins. It is able to bind to the GTPase-binding domain of PAK but not full-length PAK in a GTP-dependent manner, suggesting that the insertion does not completely abolish effector interaction. Enzyme regulation: Regulated by guanine nucleotide exchange factors (GEFs) which promote the exchange of bound GDP for free GTP, GTPase activating proteins (GAPs) which increase the GTP hydrolysis activity, and GDP dissociation inhibitors which inhibit the dissociation of the nucleotide from the GTPase. GTP hydrolysis is stimulated by ARHGAP30. Rac2 function: Plasma membrane-associated small GTPase which cycles between an active GTP-bound and inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses, such as secretory processes, phagocytose of apoptotic cells and epithelial cell polarization. Augments the production of reactive oxygen species (ROS) by NADPH oxidase. Enzyme regulation: Regulated by guanine nucleotide exchange factors (GEFs) which promote the exchange of bound GDP for free GTP, GTPase activating proteins (GAPs) which increase the GTP hydrolysis activity, and GDP dissociation inhibitors which inhibit the dissociation of the nucleotide from the GTPase. Rac3 function: Plasma membrane-associated small GTPase which cycles between an active GTP-bound and inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses, such as cell spreading and the formation of actin-based protusions including lamellipodia and membrane ruffles. Promotes cell adhesion and spreading on fibrinogen in a C1B1 and alpha-IIb/beta3 integrin-mediated manner.

画像



All lanes : Anti-Rac1 + Rac2 + Rac3 antibody [EPR18631] (ab180683) at 1/2000 dilution

Lane 1 : Recombinant Human Rac1 full length protein

Lane 2 : Recombinant Human Rac2 full length protein

Lane 3 : Recombinant Human Rac3 full length protein

Lysates/proteins at 0.01 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

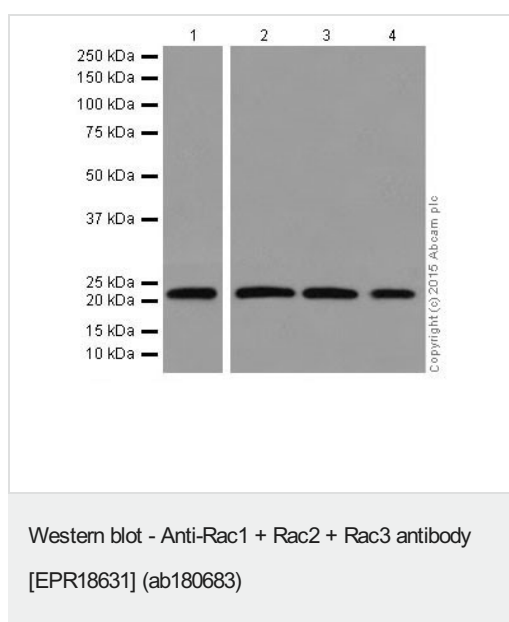
Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time:

Lanes 1 & 2: 1 second.

Lane 3: 3 minutes.

Recombinant human Rac1 full length protein contains aa1-192 with a C-terminal His-Tag®; Recombinant human Rac2 full length protein contains aa1-192 with a C-terminal His-Tag®; Recombinant human Rac3 full length protein contains aa1-192 with a C-terminal His-Tag®. All three recombinant Rac's were made in house.



All lanes : Anti-Rac1 + Rac2 + Rac3 antibody [EPR18631] (ab180683) at 1/2000 dilution

Lane 1 : Human fetal brain lysate

Lane 2 : HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate

Lane 3 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

Lane 4 : HUVEC (Human umbilical vein endothelial cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form

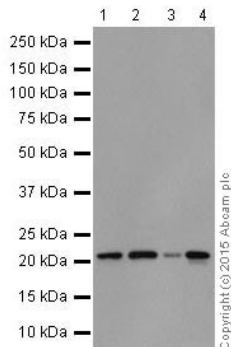
of IgG at 1/10000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 3 seconds; Lane 2-4 : 15 seconds.



Western blot - Anti-Rac1 + Rac2 + Rac3 antibody
[EPR18631] (ab180683)

All lanes : Anti-Rac1 + Rac2 + Rac3 antibody [EPR18631]
(ab180683) at 1/2000 dilution

Lane 1 : C6 (Rat glial tumor cells) whole cell lysate

Lane 2 : RAW 264.7 (Mouse macrophage cells transformed with
Abelson murine leukemia virus) whole cell lysate

Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell
lysate

Lane 4 : NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at
1/100000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

Exposure time: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Rac1 + Rac2 + Rac3 antibody [EPR18631]
(ab180683)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors