

Product datasheet

Anti-RAC3 antibody [EPR6680] ab129062

Recombinant RabMAb

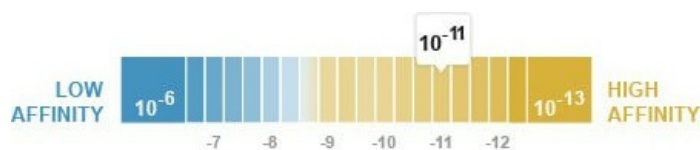
[6 References](#) [10 Images](#)

Overview

Product name	Anti-RAC3 antibody [EPR6680]
Description	Rabbit monoclonal [EPR6680] to RAC3
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human RAC3 aa 100-200. The exact sequence is proprietary.
Positive control	WB: Human brain, Mouse brain, and Rat brain lysates. IHC-P: human cerebrum, mouse cerebrum, and rat cerebrum tissues.
General notes	<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>

Properties

Form	Liquid
Storage instructions	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.
Dissociation constant (K_D)	K _D = 7.20 x 10 ⁻¹¹ M



[Learn more about K_D](#)

Storage buffer	pH: 7.20
	Preservative: 0.01% Sodium azide

	Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6680
Isotype	IgG

Applications

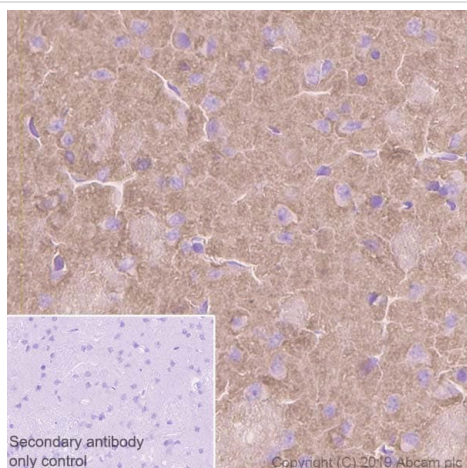
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab129062 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .

Target

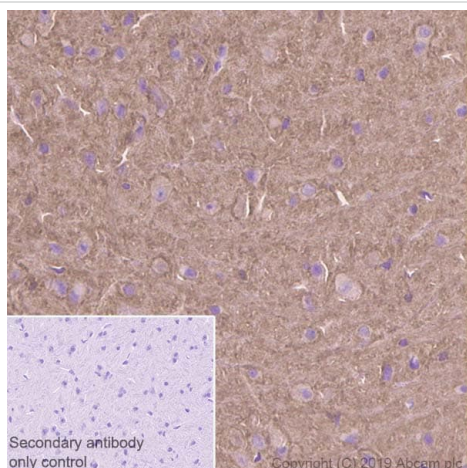
Function	Plasma membrane-associated small GTPase which cycles between an active GTP-bound and inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses, such as cell spreading and the formation of actin-based protrusions including lamellipodia and membrane ruffles. Promotes cell adhesion and spreading on fibrinogen in a CIB1 and alpha-IIb/beta3 integrin-mediated manner.
Tissue specificity	Highest levels in brain, also detected in heart, placenta and pancreas.
Sequence similarities	Belongs to the small GTPase superfamily. Rho family.
Post-translational modifications	(Microbial infection) Glycosylated at Tyr-32 by Phototaxibacterium asymbiotica toxin PAU_02230. Mono-O-GlcNAcylation by PAU_02230 inhibits downstream signaling by an impaired interaction with diverse regulator and effector proteins of Rac and leads to actin disassembly.
Cellular localization	Cytoplasm. Endomembrane system. Cell projection, lamellipodium. Cytoplasm, perinuclear region. Cell membrane. Cytoplasm, cytoskeleton. Membrane-associated when activated. Colocalizes with NRBP to endomembranes and at the cell periphery in lamellipodia. Colocalized with CIB1 in the perinuclear area and at the cell periphery.
Form	Rac3 has high sequence homology with other Rac proteins. Therefore some antibodies may show cross-reactivity.

Images



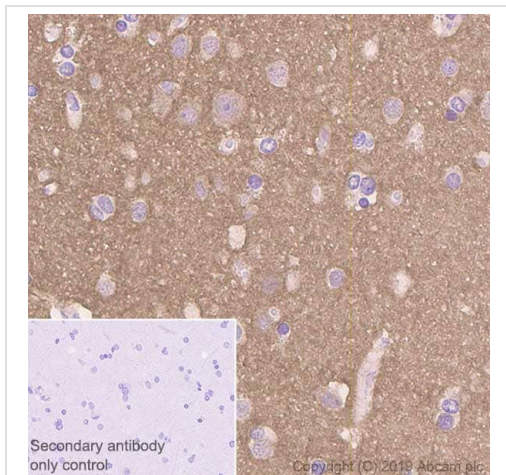
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RAC3 antibody [EPR6680] (ab129062)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling RAC3 with Purified ab129062 at 1:100 dilution (2.64 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RAC3 antibody [EPR6680] (ab129062)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebrum tissue sections labeling RAC3 with Purified ab129062 at 1:100 dilution (2.64 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RAC3 antibody [EPR6680] (ab129062)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cerebrum tissue sections labeling RAC3 with Purified ab129062 at 1:100 dilution (2.64 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-RAC3 antibody [EPR6680] (ab129062)

All lanes : Anti-RAC3 antibody [EPR6680] (ab129062) at 1/1000 dilution (Purified)

Lane 1 : Mouse brain lysates

Lane 2 : Rat brain lysates

Lysates/proteins at 15 µg per lane.

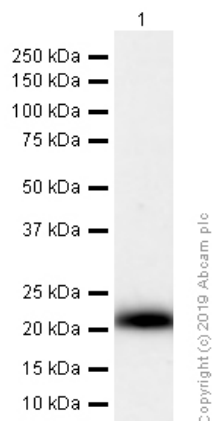
Secondary

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

Predicted band size: 21 kDa

Observed band size: 21 kDa

We are unsure how to define the extra bands.



Western blot - Anti-RAC3 antibody [EPR6680]
(ab129062)

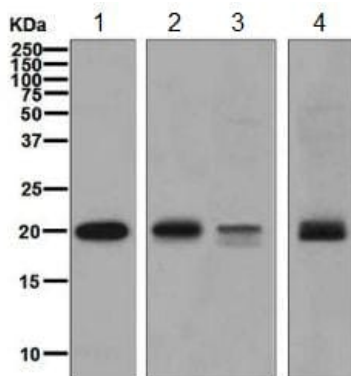
Anti-RAC3 antibody [EPR6680] (ab129062) at 1/1000 dilution
(Purified) + Human brain lysates at 20 µg

Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with
human IgG at 1/2000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa



Western blot - Anti-RAC3 antibody [EPR6680]
(ab129062)

All lanes : Anti-RAC3 antibody [EPR6680] (ab129062) at 1/1000
dilution (unpurified)

Lane 1 : 293T cell lysate

Lane 2 : Fetal brain lysate

Lane 3 : SH-SY5Y cell lysate

Lane 4 : JAR cell lysate

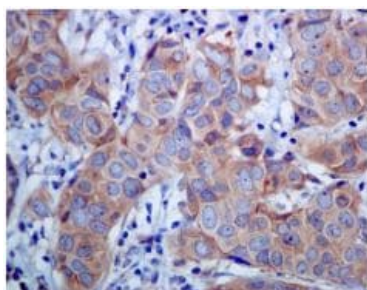
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 21 kDa

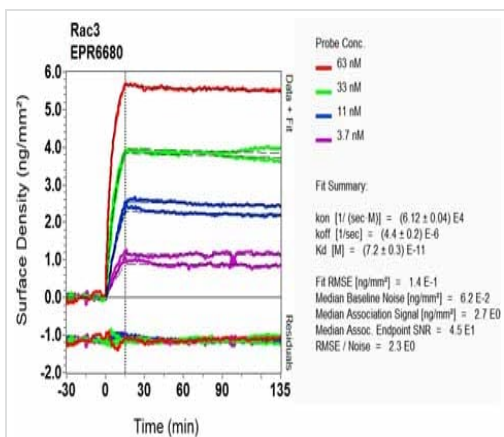
Observed band size: 21 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-RAC3 antibody
[EPR6680] (ab129062)

ab129062 (unpurified) at 1/50 dilution staining RAC3 in paraffin-
embedded Human human breast carcinoma tissue by
immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with
IHC staining protocol.

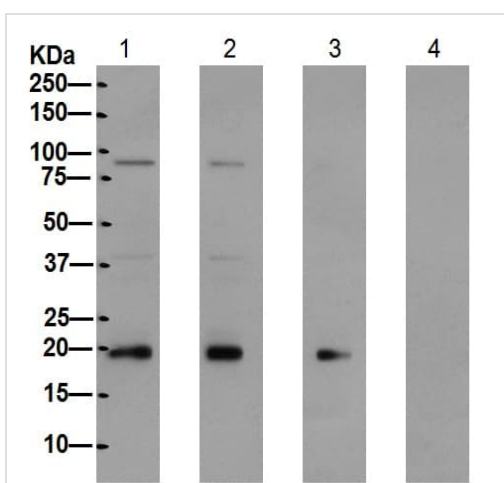


OI-RD Scanning - Anti-RAC3 antibody [EPR6680]
(ab129062)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)



Western blot - Anti-RAC3 antibody [EPR6680]
(ab129062)

All lanes : Anti-RAC3 antibody [EPR6680] (ab129062) at 1/2000 dilution (unpurified)

Lane 1 : 293 cell extract

Lane 2 : 293 cell extract with Rac1 peptide

Lane 3 : 293 cell extract with Rac2 peptide

Lane 4 : 293 cell extract with Rac3 peptide

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG at 1/1000 dilution

Predicted band size: 21 kDa

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-RAC3 antibody [EPR6680] (ab129062)

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

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