

RAC2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21363b

Product Information

Application W	/B, IF, E
Primary Accession P	<u>15153</u>
Reactivity H	uman, Mouse
Host R	abbit
Clonality p	olyclonal
Isotype R	abbit IgG
Clone Names R	B52171
Calculated MW 2	1429

Additional Information

Gene ID	5880
Other Names	Ras-related C3 botulinum toxin substrate 2, GX, Small G protein, p21-Rac2, RAC2
Target/Specificity	This RAC2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 178-192 amino acids from the C-terminal region of human RAC2.
Dilution	WB~~1:2000 IF~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RAC2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAC2 (<u>HGNC:9802</u>)
Function	Plasma membrane-associated small GTPase which cycles between an active GTP-bound and inactive GDP-bound state (PubMed: <u>30723080</u>). In its 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. Regulatory subunit of the phagocyte NADPH oxidase complex

	that mediates the transfer of electrons from cytosolic NADPH to O2 to produce the superoxide anion (O2(-)) (PubMed: <u>1660188</u>).
Cellular Location	Cytoplasm. Note=Membrane-associated when activated
Tissue Location	Hematopoietic specific.

Background

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.

References

Didsbury J.,et al.J. Biol. Chem. 264:16378-16382(1989). Puhl H.L. III,et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004). Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases. Dunham I.,et al.Nature 402:489-495(1999).

Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryonic fibroblast cell line) cells labeling RAC2 with AP21363b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on NIH/3T3 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).



All lanes : Anti-RAC2 Antibody (C-term) at 1:2000 dilution Lane 1: MOLT-4 whole cell lysates Lane 2: HL-60 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.