

Rabbit RAC2 Polyclonal Antibody | anti-RAC2 antibody

RAC2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326053	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

RAC2; Polyclonal Antibody; RAC2 Antibody; EN 7; EN-7; EN7; GX; HSPC 022; HSPC022; p21 Rac 2; p21 Rac2; p21-Rac2; p21Rac2; RAC 2; Rac2; RAC2_HUMAN; Ras related C3 botulinum toxin substrate 2 (rho family; small GTP binding protein Rac2; Ras related C3 botulinum toxin substrate 2; Ras related C3 botulinum toxin substrate 3 (rho family; small GTP binding protein Rac2); Ras related C3 botulinum toxin substrate 3; Ras-related C3 botulinum toxin substrate 2; Rho family small GTP binding protein Rac 2; Rho family small GTP binding protein Rac2; Small G protein; anti-RAC2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	RAC2 antibody detects endogenous levels of total RAC2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	192
Applicable Applications for anti-RAC2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human RAC2
Subcellular Location	Cytoplasm. Membrane-associated when activated.
Tissue Specificity	Hematopoietic specific.
Predicted Cross Reactivity	Pig, Bovine, Horse, Rabbit, Dog, Chicken
Similarity	Pig (80%), Bovine (80%), Horse (80%), Rabbit (90%), Dog (80%), Chicken (80%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326053 at 1/100 staining Mouse lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of Jurkat using RAC2 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-RAC2 antibody

Description: Rac and Cdc42 are members of the Rho-GTPase family. In mammals, Rac exists as three isoforms, Rac1, Rac2 and Rac3, which are highly similar in sequence. Rac1 and Cdc42, the most widely studied of this group, are ubiquitously expressed. Rac2 is expressed in cells of hematopoietic origin, and Rac3, while highly expressed in brain, is also found in many other tissues. Rac and Cdc42 play key signaling roles in cytoskeletal reorganization, membrane trafficking, transcriptional regulation, cell growth and development (1). GTP binding stimulates the activity of Rac/Cdc42, and the hydrolysis of GTP to GDP through the protein's intrinsic GTPase activity, rendering it inactive. GTP hydrolysis is aided by GTPase activating proteins (GAPs), while exchange of GDP for GTP is facilitated by guanine nucleotide exchange factors (GEFs). Another level of regulation is achieved through the binding of RhoGDI, a guanine nucleotide dissociation inhibitor, which retains Rho family GTPases, including Rac and Cdc42, in their inactive GDP-bound state (2, 3).

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, phagocytosis of apoptotic cells and epithelial cell polarization. Augments the production of reactive oxygen species (ROS) by NADPH oxidase.

Subunit Structure: Interacts with DOCK2, which may activate it. Interacts with S100A8 and calprotectin (S100A8/9).

Post-translational Modifications: (Microbial infection) Glycosylated at Tyr-32 by Photorehabdus 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.

Similarity: Belongs to the small GTPase superfamily. Rho family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506381
NCBI GeneID	5880
NCBI Accession #	NP_002863.1
NCBI GenBank Nucleotide #	NM_002872.4
UniProt Accession #	P15153; Q9UDJ4
Molecular Weight	Observed: 21 kDa Predicted: 22 kDa
NCBI Official Full Name	ras-related C3 botulinum toxin substrate 2
NCBI Official Synonym Full Names	Rac family small GTPase 2
NCBI Official Symbol	RAC2
NCBI Official Synonym Symbols	Gx; EN-7; HSPC022; p21-Rac2
NCBI Protein Information	ras-related C3 botulinum toxin substrate 2
UniProt Protein Name	Ras-related C3 botulinum toxin substrate 2
UniProt Gene Name	RAC2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/rac2-antibody-immunohistochemistry-western-blot-elisa/326053>