
Product Name: RAC1 Mouse Monoclonal Antibody**Catalog #: AMM85963**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,FC
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2b
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:500,FC 1:50-1:200
Molecular Weight	21.5kDa

Antigen Information

Gene Name	RAC1
Alternative Names	Ras-related C3 botulinum toxin substrate 1, Cell migration-inducing gene 5 protein, Ras-like protein TC25, p21-Rac1, RAC1, TC25
Gene ID	5879.0
SwissProt ID	P63000
Immunogen	This antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between amino acids from human.

Background

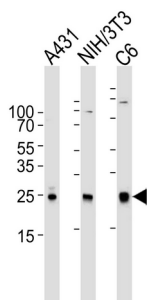
Plasma membrane-associated small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its

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.

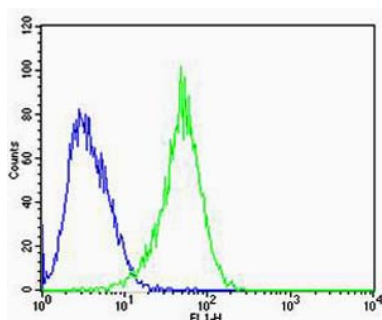
Research Area

PI3K-Akt signaling pathway, MAPK signaling pathway, Hippo signaling pathway

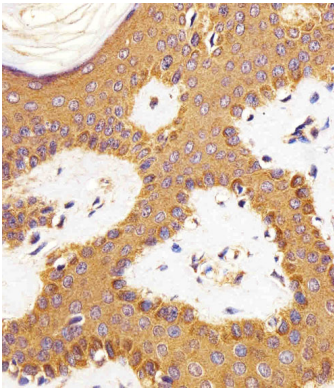
Image Data



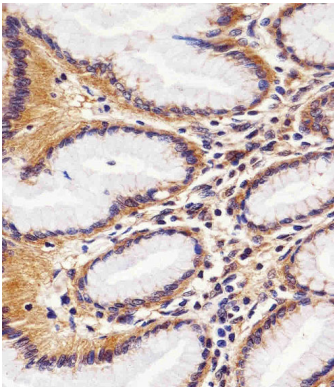
Western blot analysis of lysates from A431, mouse NIH/3T3, rat C6 cell line (from left to right), using RAC1 Antibody. RAC1 Mouse Monoclonal Antibody was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35µg per lane.



Flow cytometric analysis of U-87 MG cells using RAC1(green, Cat#AMM85963) compared to an isotype control of mouse IgG2b(blue). AP20600c was diluted at 1:100 dilution. An Alexa Fluor® 488 goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded H.skin section using RAC1(Cat#AMM85963). AMM85963 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H.stomach section using RAC1(Cat#AMM85963). AMM85963 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.