

Datasheet for ABIN713411
anti-RAC1 antibody (pSer71)

3 Images

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Overview

Quantity:	100 µL
Target:	RAC1
Binding Specificity:	pSer71
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RAC1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human RAC1 around the phosphorylation site of Ser71
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	RAC1
Abstract:	RAC1 Products

Target Details

Background:	<p>Synonyms: MIG5, Rac-1, TC-25, p21-Rac1, Ras-related C3 botulinum toxin substrate 1, Cell migration-inducing gene 5 protein, Ras-like protein TC25, RAC1, TC25</p> <p>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. 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.</p>
Gene ID:	5879
UniProt:	P63000
Pathways:	WNT Signaling , Regulation of Actin Filament Polymerization , Cell-Cell Junction Organization , Thromboxane A2 Receptor Signaling , VEGF Signaling

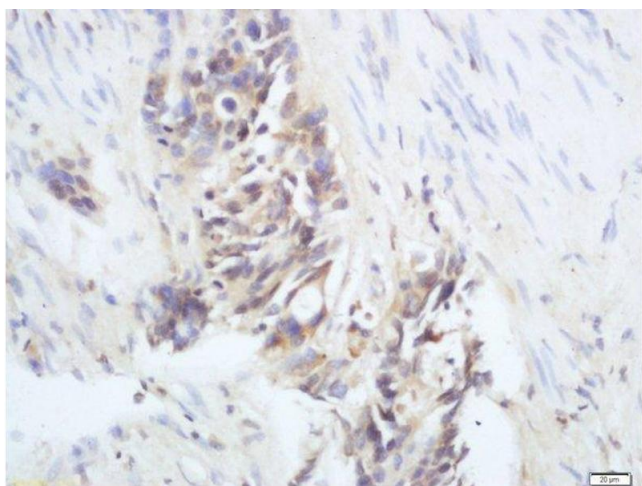
Application Details

Application Notes:	WB 1:100-1000 IHC-P 1:100-500 IF(IHC-P) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

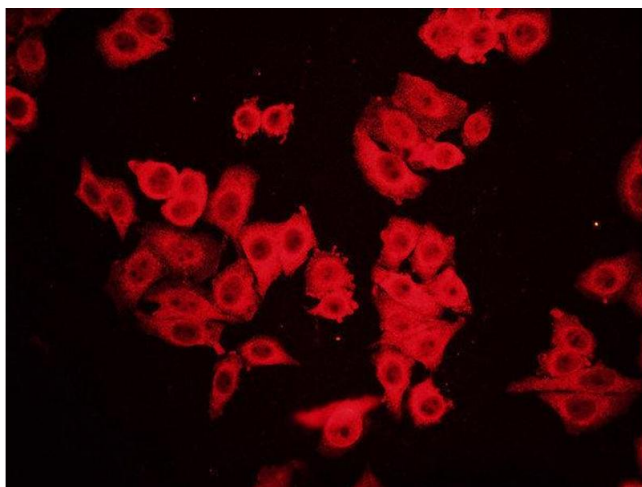
Format:	Liquid
Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 1 % BSA, 50 % glycerol and 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months

Images



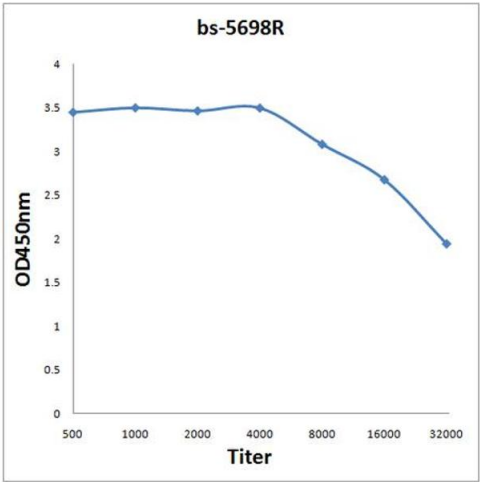
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin embedded human colon cancer labeled with Anti-phospho-RAC1(Ser71) Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunofluorescence (Cultured Cells)

Image 2. FHC cells probed with Rabbit Anti-RAC1(Ser71) Polyclonal Antibody Alexa Fluor Cy3



ELISA

Image 3. Antigen: 0.2 µg/100 µL Primary: Antiserum, 1:500, 1:1000, 1:2000, 1:4000, 1:8000, 1:16000, 1:32000; Secondary: HRP conjugated Goat-Anti-Rabbit IgG at 1: 5000; TMB staining; Read the data in MicroplateReader by 450