

Datasheet for ABIN4913419

**anti-RAC1 antibody****2** Images[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	RAC1
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This RAC1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Immunogen:	This antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between amino acids from human.
Clone:	13C4
Isotype:	IgG2b
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein G.

## Target Details

Target:	RAC1
Abstract:	<a href="#">RAC1 Products</a>
Background:	Synonyms: MIG5, Rac-1, TC-25, p21-Rac1, Ras-related C3 botulinum toxin substrate 1, Cell

## Target Details

migration-inducing gene 5 protein, Ras-like protein TC25, RAC1, TC25

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.

Gene ID:	5879
UniProt:	<a href="#">P63000</a>
Pathways:	<a href="#">WNT Signaling</a> , <a href="#">Regulation of Actin Filament Polymerization</a> , <a href="#">Cell-Cell Junction Organization</a> , <a href="#">Thromboxane A2 Receptor Signaling</a> , <a href="#">VEGF Signaling</a>

## Application Details

Application Notes:	WB 1:300-5000 IHC-P 1:200-400
Restrictions:	For Research Use only

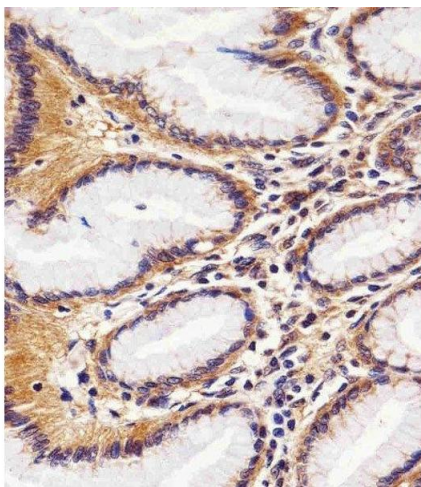
## Handling

Format:	Liquid
Concentration:	0.5 µg/µL
Buffer:	0.01M TBS( pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

## Handling

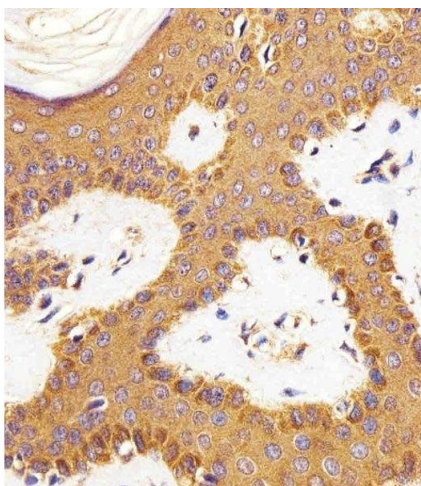
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months

## Images



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 1.** Paraformaldehyde-fixed, paraffin embedded Human stomach tissue, Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 15 minutes, Blocking buffer (3% BSA) at room temperature for 30min, Antibody incubation with RAC1 (1301CT276.121.104) Monoclonal Antibody (bsm-51282M) at 1:25 for 1 hour at 37°C, followed by a conjugated secondary antibody for 20 minutes and DAB staining.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Paraformaldehyde-fixed, paraffin embedded human skin tissue, Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 15 minutes, Blocking buffer (3% BSA) at room temperature for 30min, Antibody incubation with RAC1 (1301CT276.121.104) Monoclonal Antibody (bsm-51282M) at 1:25 for 1 hour at 37°C, followed by a conjugated secondary antibody for 20 minutes and DAB staining.