

For Research Use Only

# RAC1 Monoclonal antibody

Catalog Number: 66122-1-Ig

Featured Product

29 Publications



## Basic Information

**Catalog Number:**

66122-1-Ig

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG2b

**Immunogen Catalog Number:**

AG17779

**GenBank Accession Number:**

BC004247

**GeneID (NCBI):**

5879

**UNIPROT ID:**

P63000

**Full Name:**

ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)

**Calculated MW:**

21 kDa

**Observed MW:**

21 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

4A4B11

**Recommended Dilutions:**

WB 1:1000-1:5000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

## Applications

**Tested Applications:**

IF/ICC, IHC, IP, WB, ELISA

**Cited Applications:**

CoIP, IF, IHC, IP, PLA, WB

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, rat, mouse, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** HEK-293 cells, human brain tissue, NIH/3T3 cells, HeLa cells, HUVEC cells, HL-60 cells, HSC-T6 cells, RAW 264.7 cells

**IP:** HL-60 cells, HSC-T6 cells, Raw 264.7 cells, HUVEC cells, HL-60 cells, NIH/3T3 cells

**IHC:** human colon cancer tissue,

**IF:** NIH/3T3 cells, HeLa cells

## Background Information

RAC1b, also named as TC25, belongs to the small GTPase superfamily and Rho family. RAC1 is a plasma membrane-associated small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its active state, it 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Qing Guan	36211372	Front Immunol	IF
Yu-Yuan Zhang	36259516	J Biol Chem	WB
Teng Zhou	25212524	Biomaterials	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

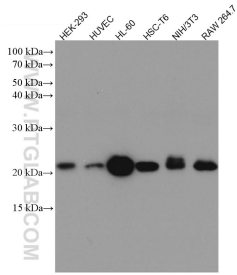
T: 4006900926

E: Proteintech-CN@ptglab.com

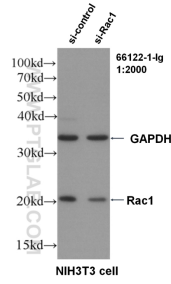
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

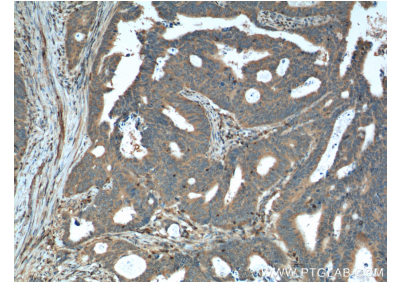
## Selected Validation Data



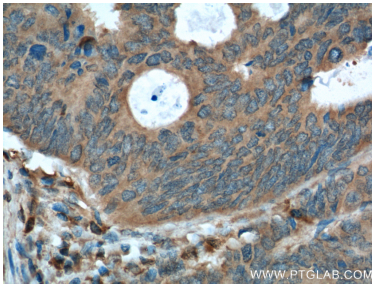
Various lysates were subjected to SDS PAGE followed by western blot with 66122-1-Ig (Rac1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



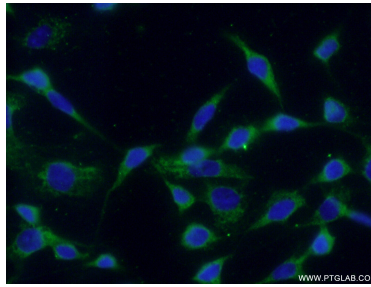
WB result of RAC1 antibody (66122-1-Ig, 1:2000) with si-control and si-RAC1 transfected NIH3T3 cells.



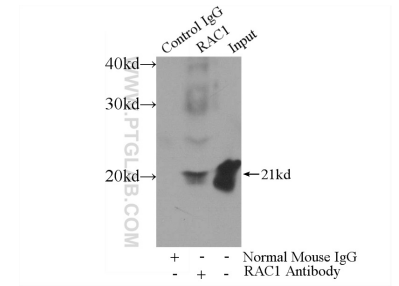
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66122-1-Ig (RAC1 Antibody) at dilution of 1:400 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66122-1-Ig (RAC1 Antibody) at dilution of 1:400 (under 40x lens).



Immunofluorescent analysis of (-20°C Ethanol) fixed NIH/3T3 cells using 66122-1-Ig(Rac1 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



IP result of anti-RAC1 (IP:66122-1-Ig, 3ug; Detection:66122-1-Ig 1:700) with HL-60 cells lysate 4000ug.