#### For Research Use Only

# RAC1 Monoclonal antibody

Catalog Number:66122-1-lg

Featured Product

44 Publications



**Basic Information** 

Catalog Number: 66122-1-lg Concentration: 1000 µ g/ml

Mouse Isotype:

Immunogen Catalog Number:

AG17779

Source:

lgG2b

GenBank Accession Number:

BC004247 GeneID (NCBI): 5879 UNIPROT ID: P63000

ras-related C3 botulinum toxin substrate 1 (rho family, small GTP

binding protein Rac1)

Calculated MW: 21 kDa Observed MW: 21 kDa

**Full Name:** 

Purification Method:

Protein A purification

CloneNo.: 4A4B11

Recommended Dilutions:

WB: 1:1000-1:5000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC: 1:50-1:500 IF/ICC: 1:50-1:500

**Applications** 

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications: WB, IHC, IF, IP, CoIP, PLA Species Specificity: human, mouse, rat

Cited Species: human, mouse, rat, 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/ICC: 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 Buffe

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

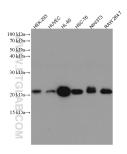
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

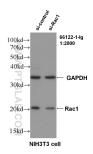
W: ptgcn.coi

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

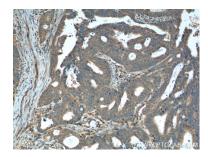
### **Selected Validation Data**



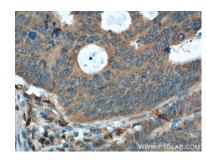
Various lysates were subjected to SDS PAGE followed by western blot with 66122-1-1g (Rac1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



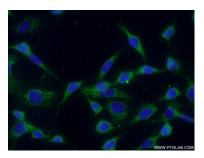
WB result of RAC1 antibody (66122-1-lg, 1:2000) with si-control and si-RAC1 transfected NIH3T3 cells



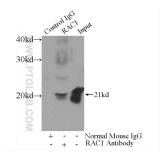
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 66122-1-lg (RAC1 Antibody) at dilution of 1:400 (under 10x lens).



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



Immunofluorescent analysis of (-20  $^{\circ}$  Ethanol ) fixed NIH/3T3 cells using 66122-1-lg(Rac1 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated 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.