### For Research Use Only

# RAC1 Monoclonal antibody

Catalog Number:66122-1-lg

Featured Product 35 Publications



#### **Basic Information**

Catalog Number: GenBank Accession Number:

66122-1-lg BC004247 GeneID (NCBI): 150ul, Concentration: 1000 ug/ml by 5879

Nanodrop: **UNIPROT ID:** P63000

Mouse Full Name:

Isotype: ras-related C3 botulinum toxin lgG2b substrate 1 (rho family, small GTP binding protein Rac1)

Immunogen Catalog Number: Calculated MW: AG17779

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 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.

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

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

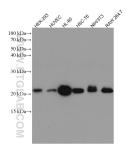
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

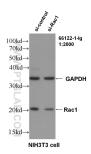
E: proteintech@ptglab.com W: ptglab.com

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

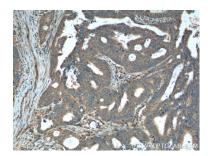
### **Selected Validation Data**



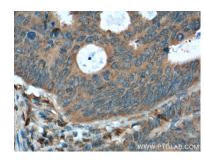
Various lysates were subjected to SDS PAGE followed by western blot with 66122-1-1g (Rac1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



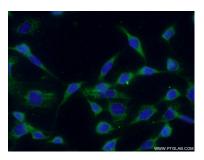
WB result of RAC1 antibody (66122-1-lg, 1:2000) with si-control and si-RAC1 transfected NIH3T3 cells



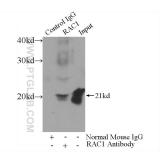
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 66122-1-1g (RAC1 Antibody) at dilution of 1:400 (under 10x lens).



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



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



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