

For Research Use Only

# pan Ras Monoclonal antibody

Catalog Number: 60309-1-Ig

Featured Product

17 Publications



## Basic Information

### Catalog Number:

60309-1-Ig

### Size:

150ul, Concentration: 830 ug/ml by Nanodrop and 500 ug/ml by Bradford method using BSA as the standard;

### Source:

Mouse

### Isotype:

IgG1

### Immunogen Catalog Number:

AG2700

### GenBank Accession Number:

BC013572

### GeneID (NCBI):

3845

### UNIPROT ID:

P01116

### Full Name:

v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog

### Calculated MW:

188 aa, 21 kDa

### Observed MW:

21 kDa

### Purification Method:

Protein G purification

### CloneNo.:

4H4G7

### Recommended Dilutions:

WB 1:20000-1:50000

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

IHC 1:50-1:500

IF/ICC 1:400-1:1600

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat, pig, rabbit, chicken

### 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**: fetal human brain tissue, pig brain tissue, HEK-293 cells, Neuro-2a cells, ROS1728 cells, rabbit brain tissue, rat brain tissue, mouse brain tissue, chicken brain tissue, human brain tissue

**IP**: mouse brain tissue,

**IHC**: human breast cancer tissue, human colon cancer tissue, human lung cancer tissue, human ovary cancer tissue

**IF/ICC**: HEK-293 cells,

**FC (Intra)**: HeLa cells,

## Background Information

The 21 kDa guanine-nucleotide binding proteins (K-Ras, H-Ras, and N-Ras) belong to the Ras oncogene family, whose members are related to the transforming genes of mammalian sarcoma retroviruses. K-Ras, H-Ras, and N-Ras have similar structure and sequences. These proteins can bind GTP and GDP, and they have intrinsic GTPase activity. The ras genes are ubiquitously expressed although mRNA analysis suggests different level expression in tissue. Mutations in each ras gene frequently were found in different tumors, suggesting their involvement in the development of specific neoplasia. This antibody can recognize K-Ras, H-Ras, and N-Ras.

## Notable Publications

Author	Pubmed ID	Journal	Application
Peng Yuan	27793842	Cancer Res	WB
Jia-Qing Zhang	33079330	Reprod Sci	WB
Wei Wang	33021072	J Cell Mol Med	WB

## Storage

### Storage:

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

### Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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

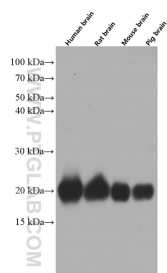
For technical support and original validation data for this product please contact:

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

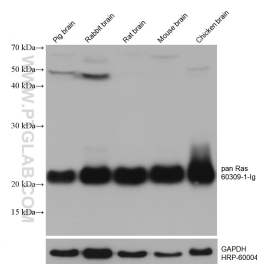
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

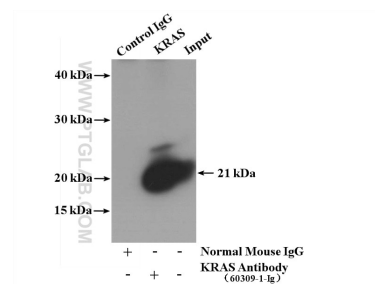
## Selected Validation Data



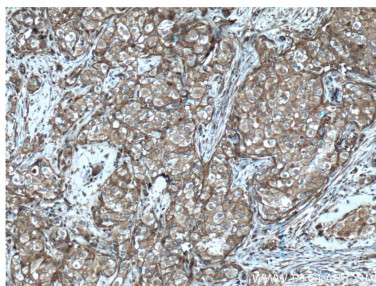
Various lysates were subjected to SDS PAGE followed by western blot with 60309-1-Ig (pan Ras Antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



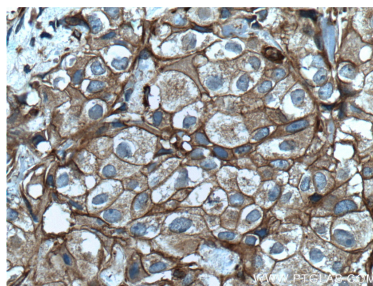
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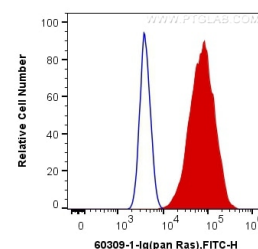
IP result of anti-pan Ras (IP: 60309-1-Ig, 5ug; Detection: 60309-1-Ig 1:2000) with mouse brain tissue lysate 4000 ug.



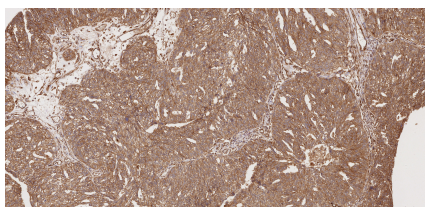
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60309-1-Ig (pan Ras Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



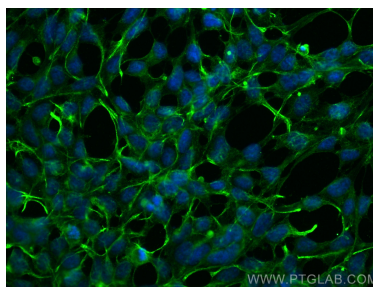
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60309-1-Ig (pan Ras Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human pan Ras (60309-1-Ig, Clone: 4H4G7) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 60309-1-Ig (pan Ras antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using pan Ras antibody (60309-1-Ig, Clone: 4H4G7) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).