## For Research Use Only

# KRAS Polyclonal antibody

Catalog Number: 12063-1-AP

Featured Product

153 Publications

GenBank Accession Number:



### **Basic Information**

Catalog Number: 12063-1-AP Concentration: 750 ug/ml

Source: UNIPROT ID:
Rabbit P01116

Isotype: Full Name:
IgG v-Ki-ras2 Kirsten rat sarcoma viral

Immunogen Catalog Number:

AG2700

Calculated MW: 188 aa, 21 kDa Observed MW: 21 kDa

BC013572

3845

GeneID (NCBI):

oncogene homolog

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions: WB: 1:5000-1:50000

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

protein lysate IHC: 1:400-1:1600 IF/ICC: 1:200-1:800

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

# **Applications**

**Tested Applications:** 

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

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

human, mouse, rat, chicken, zebrafish

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: HeLa cells, A549 cells, HEK-293 cells, human brain tissue, human kidney tissue, mouse kidney tissue, rat kidney tissue, rat liver tissue, mouse brain tissue, rat brain tissue

IP: HeLa cells, HGC-27 cells, MKN-45 cells, mouse

IHC: human lung cancer tissue, human kidney tissue, human pancreas cancer tissue, mouse kidney tissue

IF/ICC : HeLa cells,
FC (Intra) : HeLa cells,

# **Background Information**

KRAS, also called p21, is a member of the Ras superfamily of proteins. It is located on human chromosome 12, and contains four coding exons and a 5' non-coding exon (PMID: 12778136). KRAS is a membrane-anchored guanosine triphosphate/guanosine diphosphate (GTP/GDP)-binding protein and is widely expressed in most human cells. Like other members of the Ras family, the KRAS protein is a GTPase, and it is involved in intracellular signal transduction and mainly responsible for EGFR-signaling activation (PMID: 19117687). KRAS mutations have been found in various malignancies, including lung adenocarcinoma, mucinous adenoma, ductal carcinoma of the pancreas and colorectal carcinoma.

### **Notable Publications**

| Author        | Pubmed ID | Journal      | Application |
|---------------|-----------|--------------|-------------|
| Wang Jiang    | 33052229  | Theranostics | WB,IHC      |
| Linyu Sun     | 34555354  | Mol Cell     | WB          |
| Makiko Tsuboi | 28912272  | J Biol Chem  | 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

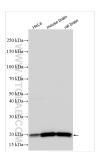
For technical support and original validation data for this product please contact:

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

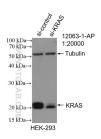
W: ptgcn.coi

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

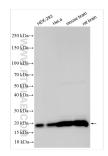
### Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 12063-1-AP (KRAS antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



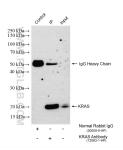
WB result of KRAS antibody (12063-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-KRAS transfected HEK-293 cells.



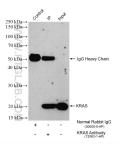
Various lysates were subjected to SDS PAGE followed by western blot with 12063-1-AP (KRAS antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



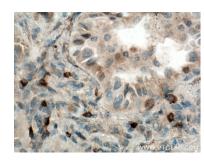
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:800 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



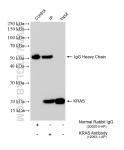
IP result of anti-KRAS (IP:12063-1-AP, 4ug; Detection:12063-1-AP 1:8000) with MKN-45 cells lysate 1560 ug.



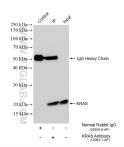
IP result of anti-KRAS (IP:12063-1-AP, 4ug; Detection:12063-1-AP 1:8000) with HGC-27 cells lysate 1520 ug.



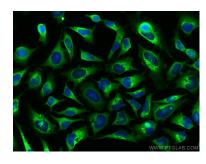
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:800 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

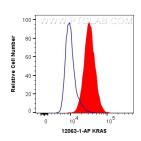


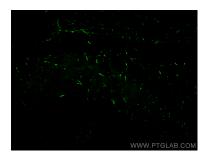
IP result of anti-KRAS (IP:12063-1-AP, 4ug; Detection:12063-1-AP 1:20000) with mouse brain tissue lysate 1720 ug.



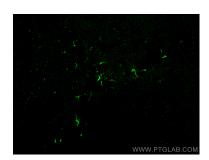
IP result of anti-KRAS (IP:12063-1-AP, 4ug; Detection:12063-1-AP 1:20000) with HeLa cells lysate 1200 ug.





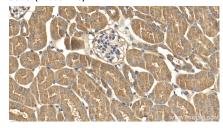


Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using KRAS antibody (12063-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using KRAS antibody (12063-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human KRAS (12063-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit 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 paraffinembedded mouse kidney tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using KRAS antibody (12063-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).