

KRAS Polyclonal antibody

Catalog Number: 12063-1-AP

Featured Product

161 Publications

Basic Information

Catalog Number:

12063-1-AP

Source:

Rabbit

Isotype:

IgG

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:

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 10⁶ 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 brain tissue

IHC: human lung cancer tissue, human colon cancer tissue, human kidney tissue, human pancreas cancer tissue, mouse kidney tissue, mouse liver 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 Buffer:

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

Aliquoting is unnecessary for -20°C storage

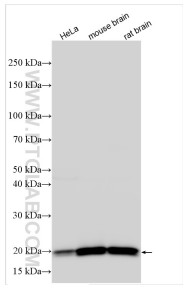
For technical support and original validation data for this product please contact:

T: 4006900926

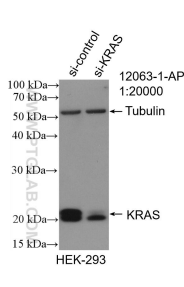
E: Proteintech-CN@ptglab.comW: ptgcn.com

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

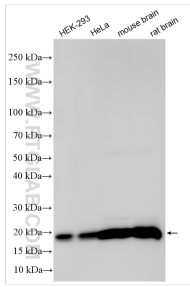
Selected Validation Data



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



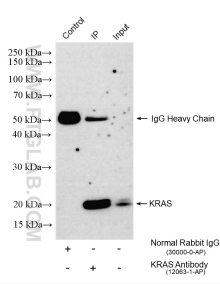
WB result of KRAS antibody (12063-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-KRAS transfected HEK-293 cells.



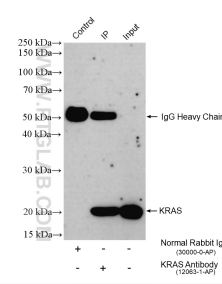
Various lysates were subjected to SDS PAGE followed by western blot with 12063-1-AP (KRAS antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours.



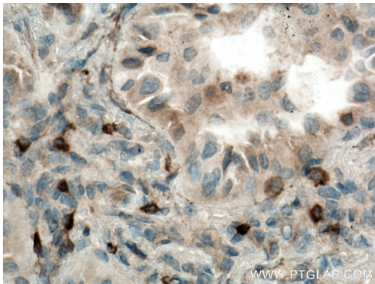
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:800 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



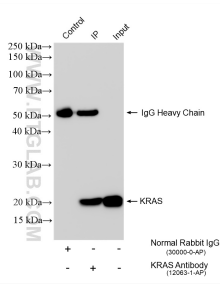
IP result of anti-KRAS (IP:12063-1-AP, 4ug; Detection:12063-1-AP 1:8000) with MKN-45 cells lysate 1560 ug.



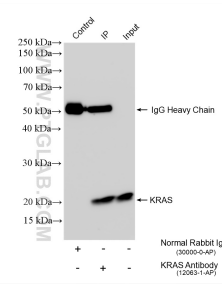
IP result of anti-KRAS (IP:12063-1-AP, 4ug; Detection:12063-1-AP 1:8000) with HGC-27 cells lysate 1520 ug.



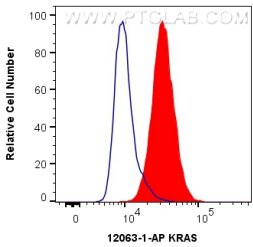
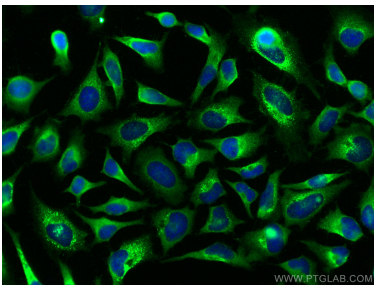
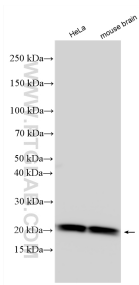
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:800 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



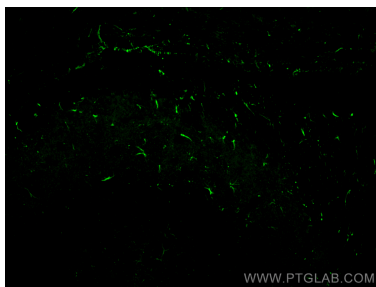
IP result of anti-KRAS (IP:12063-1-AP, 4ug; Detection:12063-1-AP 1:20000) with mouse brain tissue lysate 1720 ug.



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

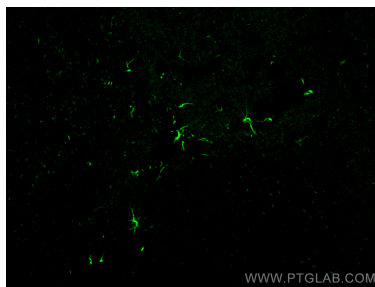


Various lysates were subjected to SDS PAGE followed by western blot with 12063-1-AP (KRAS antibody) at dilution of 1:60000 incubated at room temperature for 1.5 hours.



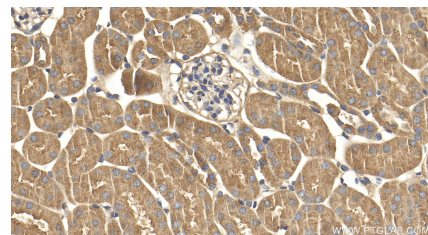
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using KRAS antibody (12063-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

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).

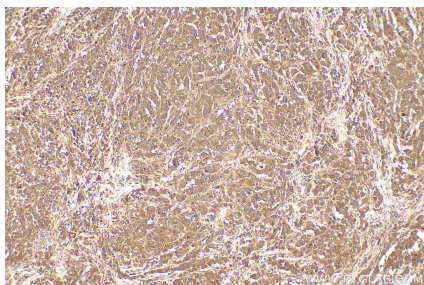


Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using KRAS antibody (12063-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

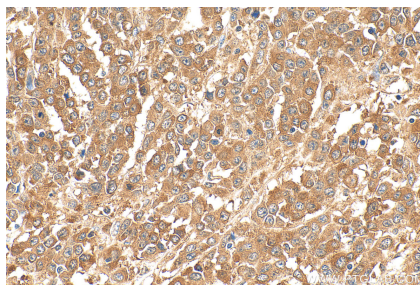
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human KRAS (12063-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.



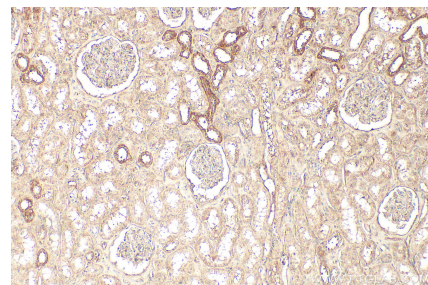
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



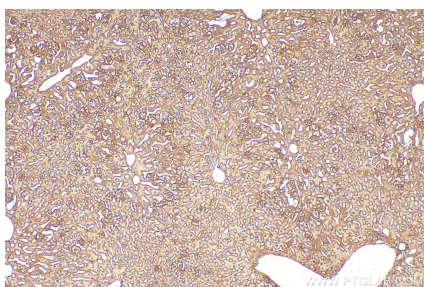
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 12063-1-AP (KRAS 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 mouse liver tissue slide using 12063-1-AP (KRAS antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).