KRAS Polyclonal ANTIBODY
Catalog Number: 12063-1-AP

Basic Information
Catalog Number: 12063-1-AP
Size: 39 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG2700
GenBank Accession Number: BC013572
GeneID (NCBI): 3845
Full Name: v-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog
Calcualted MW: 188aa, 21 kDa
Observed MW: 21 kDa

Recommended Dilutions:
WB: 1:1000-1:5000
IP: 0.5-4.0 μg for IP and 1:500-1:2000 for WB
IHC: 1:500-1:500

Recommended Applications:
FC, IF, IHC, IP, WB, ELISA

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat

Cited Applications:
IF, IHC, WB

Positive Controls:
WB: HeLa cells, human brain tissue, human kidney tissue, mouse kidney tissue, HEK293 cells, rat kidney tissue, mouse brain tissue, rat brain tissue, A549 cells
IP: HeLa cells
IHC: human lung cancer tissue, human breast cancer tissue, human colon cancer tissue
IF: HeLa cells

Applications
Tested Applications:
FC, IF, IHC, IP, WB, ELISA

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. KRAS has two isoforms, a and b. This KRAS antibody (12063-1-AP) has weaker cross reaction to HRAS and NRAS.

Notable Publications

<table>
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<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
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<tbody>
<tr>
<td>Makiko Tsuboi</td>
<td>2891272</td>
<td>J Biol Chem</td>
<td>WB</td>
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<tr>
<td>Pin Gao</td>
<td>30208932</td>
<td>Breast Cancer Res</td>
<td>WB</td>
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<tr>
<td>Yong-Xia Wang</td>
<td>27769041</td>
<td>Oncotarget</td>
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Storage
Store at -20°C. Stable for one year after shipment.
Store Buffer: PBS with 0.1% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: (888) 4-PTGLAB (toll free in USA), or (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.
Various lysates were subjected to SDS PAGE followed by western blot with 12063-1-AP (KRAS antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.

Immunohistochemistry of paraffin-embedded human lung cancer tissue slide using 12063-1-AP (KRAS Antibody) at dilution of 1:200 (under 10x lens), heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunohistochemistry of paraffin-embedded human lung cancer tissue slide using 12063-1-AP (KRAS Antibody) at dilution of 1:200 (under 40x lens), heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

IP result of anti-KRAS (IP: 12063-1-AP, 4ug; Detection: 12063-1-AP 1:1000) with HeLa cells lysate 2680 ug.

Immunofluorescent analysis of (−20°C Ethanol) fixed HeLa cells using 12063-1-AP (KRAS antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) 1X10^6 HeLa cells were stained with 0.2ug KRAS antibody (12063-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.