

For Research Use Only

VRK2 Polyclonal antibody

Catalog Number:12946-1-AP

Featured Product

4 Publications



Basic Information

Catalog Number:

12946-1-AP

Size:

150ul , Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4019

GenBank Accession Number:

BC027854

GeneID (NCBI):

7444

UNIPROT ID:

Q86Y07

Full Name:

vaccinia related kinase 2

Calculated MW:

508 aa, 58 kDa

Observed MW:

50 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

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

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IP, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

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 : HepG2 cells, human liver tissue, mouse skeletal muscle tissue, K-562 cells, U2OS cells, BxPC-3 cells

IP : K-562 cells,

IHC : human stomach tissue,

Background Information

Vaccinia-related kinase 2 (VRK2) is a serine/threonine kinase that plays a significant role in various cellular processes, including cell survival, proliferation, and DNA damage response. The VRK2 gene is known to produce two main splice variants: VRK2A and VRK2B, with VRK2A being the predominant form in humans. VRK2 is involved in several key biological functions. It is known to enhance cell survival by acting as an anti-apoptotic factor, which is particularly crucial in cancer biology. The overexpression of VRK2 has been linked to increased drug sensitivity in cancer cells, suggesting that this kinase may play a role in therapeutic responses. Additionally, high levels of VRK2 protein have been associated with improved survival rates in specific subgroups of astrocytomas, a type of brain tumor. (PMID: 29872222; 37943248; 24079673)

Notable Publications

Author	Pubmed ID	Journal	Application
Jionghuang Chen	35173553	Int J Biol Sci	WB
Yanwei Lu	33420362	Oncogene	WB
Mei-Yu Yin	37452335	BMC 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

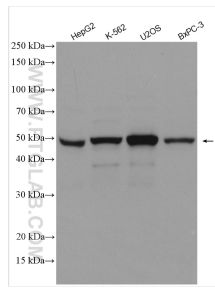
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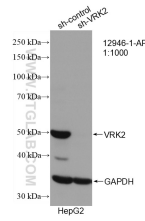
E: proteintech@ptglab.com
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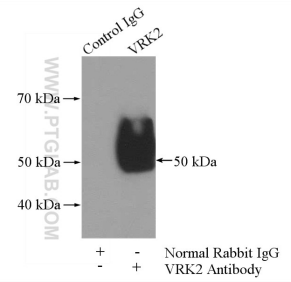
Selected Validation Data



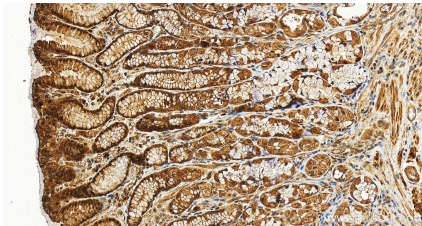
Various lysates were subjected to SDS PAGE followed by western blot with 12946-1-AP (VRK2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



WB result of VRK2 antibody (12946-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-VRK2 transfected HepG2 cells.



IP result of anti-VRK2 (IP:12946-1-AP, 4ug; Detection:12946-1-AP 1:500) with K-562 cells lysate 3600ug.



Immunohistochemical analysis of paraffin-embedded human normal stomach slide using 12946-1-AP (VRK2 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).