

VRK1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7408c**Specification**

VRK1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q99986
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	45476
Antigen Region	366-396

VRK1 Antibody (Center) - Additional Information**Gene ID** 7443**Other Names**

Serine/threonine-protein kinase VRK1, Vaccinia-related kinase 1, VRK1

Target/Specificity

This VRK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 366-396 amino acids from the Central region of human VRK1.

Dilution

WB~~1:2000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

VRK1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

VRK1 Antibody (Center) - Protein Information**Name** VRK1 {ECO:0000303|PubMed:9344656, ECO:0000312|HGNC:HGNC:12718}

Function Serine/threonine kinase involved in cell cycle, nuclear condensation and transcription regulation (PubMed:[14645249](#), PubMed:[18617507](#), PubMed:[19103756](#)). Involved in Golgi disassembly during the cell cycle: following phosphorylation by PLK3 during mitosis, required to

induce Golgi fragmentation (PubMed:[19103756](#)). Phosphorylates 'Thr-18' of p53/TP53 and may thereby prevent the interaction between p53/TP53 and MDM2 (PubMed:[10951572](#)). Phosphorylates KAT5 in response to DNA damage, promoting KAT5 association with chromatin and histone acetyltransferase activity (PubMed:[33076429](#)). Phosphorylates BANF1: disrupts its ability to bind DNA, reduces its binding to LEM domain-containing proteins and causes its relocalization from the nucleus to the cytoplasm (PubMed:[16495336](#)). Phosphorylates ATF2 which activates its transcriptional activity (PubMed:[15105425](#)).

Cellular Location

Nucleus. Cytoplasm. Note=Dispersed throughout the cell but not located on mitotic spindle or chromatids during mitosis

Tissue Location

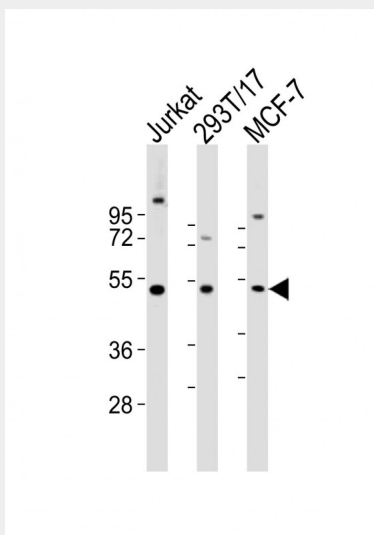
Widely expressed. Highly expressed in fetal liver, testis and thymus.

VRK1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

VRK1 Antibody (Center) - Images



All lanes : Anti-VRK1(E381) antibody at 1:2000 dilution Lane 1: Jurkat whole cell lysates Lane 2: 293T/17 whole cell lysates Lane 3: MCF-7 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFD/MTBST.

VRK1 Antibody (Center) - Background

This gene encodes a member of the vaccinia-related kinase (VRK) family of serine/threonine protein kinases. This gene is widely expressed in human tissues and has increased expression in actively dividing cells, such as those in testis, thymus, fetal liver, and carcinomas. Its protein localizes to the nucleus and has been shown to promote the stability and nuclear accumulation of a transcriptionally active p53 molecule and, in vitro, to phosphorylate Thr18 of p53 and reduce p53 ubiquitination. This gene, therefore, may regulate cell proliferation. This protein also phosphorylates histone, casein, and the transcription factors ATF2 (activating transcription factor 2) and c-JUN.

VRK1 Antibody (Center) - References

Nezu, J., et al., Genomics 45(2):327-331 (1997).