

ARG55010 anti-VRK1 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes VRK1
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	1015CT2.1.1
Isotype	IgG1
Target Name	VRK1
Immunogen	Purified His-tagged VRK1 protein.
Conjugation	Un-conjugated
Alternate Names	Serine/threonine-protein kinase VRK1; EC 2.7.11.1; PCH1A; Vaccinia-related kinase 1; PCH1

Application Instructions

Application table	Application	Dilution
	WB	1:5000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	

Properties

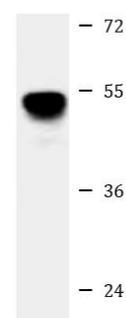
Form	Liquid
Buffer	Crude Ascites and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 7443 Human
	Swiss-port # Q99986 Human

Gene Symbol	VRK1
Gene Full Name	vaccinia related kinase 1
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. [provided by RefSeq, Jul 2008]
Function	Serine/threonine kinase involved in Golgi disassembly during the cell cycle: following phosphorylation by PLK3 during mitosis, required to induce Golgi fragmentation. Acts by mediating phosphorylation of downstream target protein. Phosphorylates 'Thr-18' of p53/TP53 and may thereby prevent the interaction between p53/TP53 and MDM2. Phosphorylates casein and histone H3. 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. Phosphorylates ATF2 which activates its transcriptional activity. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	45 kDa
PTM	Autophosphorylated at various serine and threonine residues. Autophosphorylation does not impair its ability to phosphorylate p53/TP53. Phosphorylation by PLK3 leads to induction of Golgi fragmentation during mitosis.
Cellular Localization	Cytoplasm. Nucleus. Cytoplasm, cytoskeleton, spindle. Note=Dispersed throughout the cell but not located on mitotic spindle or chromatids during mitosis

Images



HeLa

ARG55010 anti-VRK1 antibody WB image

Western blot: 35 µg of HeLa cell lysate stained with ARG55010 anti-VRK1 antibody.