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VRK2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant VRK2.
Catalog # AT4522a

Product Information

Application	WB, IF, E
Primary Accession	Q86Y07
Other Accession	BC027854
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	3B10
Calculated MW	58141

Additional Information

Gene ID	7444
Other Names	Serine/threonine-protein kinase VRK2, Vaccinia-related kinase 2, VRK2
Target/Specificity	VRK2 (AAH27854, 260 a.a. ~ 360 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	VRK2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

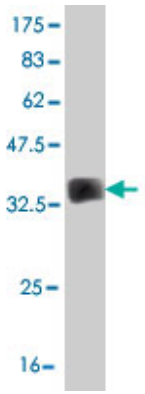
This gene encodes a member of the vaccinia-related kinase (VRK) family of serine/threonine protein kinases. This gene is widely expressed in human tissues and has increased expression in actively dividing cells, such as those in testis, leukocytes, fetal liver, and carcinomas. Its protein localizes to the endoplasmic reticulum and has been shown to phosphorylate casein and undergo autophosphorylation. Multiple alternatively spliced transcript variants have been found for this gene.

References

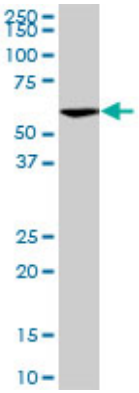
Common variants conferring risk of schizophrenia. Stefansson H, et al. Nature, 2009 Aug 6. PMID 19571808.Proteomics identification of nuclear Ran GTPase as an inhibitor of human VRK1 and VRK2

(vaccinia-related kinase) activities. Sanz-Garc?a M, et al. Mol Cell Proteomics, 2008 Nov. PMID 18617507.The C/H3 domain of p300 is required to protect VRK1 and VRK2 from their downregulation induced by p53. Valbuena A, et al. PLoS One, 2008 Jul 9. PMID 18612383.Modulation of interleukin-1 transcriptional response by the interaction between VRK2 and the JIP1 scaffold protein. Blanco S, et al. PLoS One, 2008 Feb 20. PMID 18286207.Vaccinia-related kinase 2 modulates the stress response to hypoxia mediated by TAK1. Blanco S, et al. Mol Cell Biol, 2007 Oct. PMID 17709393.

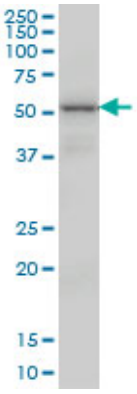
Images



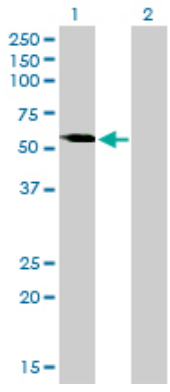
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



VRK2 monoclonal antibody (M01), clone 3B10. Western Blot analysis of VRK2 expression in U-2 OS ((Cat # AT4522a)

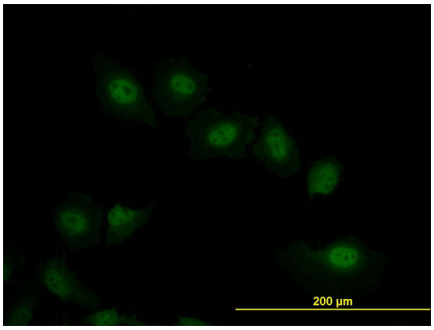


VRK2 monoclonal antibody (M01), clone 3B10 Western Blot analysis of VRK2 expression in K-562 ((Cat # AT4522a)

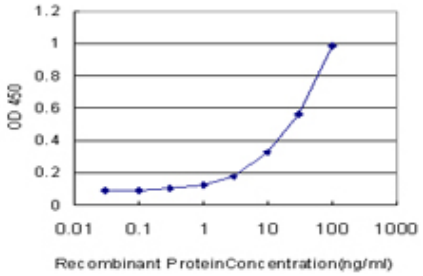


Western Blot analysis of VRK2 expression in transfected 293T cell line by VRK2 monoclonal antibody (M01), clone 3B10.

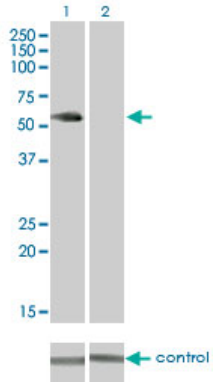
Lane 1: VRK2 transfected lysate(58.1 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to VRK2 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged VRK2 is approximately 1ng/ml as a capture antibody.



Western blot analysis of VRK2 over-expressed 293 cell line, cotransfected with VRK2 Validated Chimera RNAi ((Cat # AT4522a)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.