

VRK2 Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a partial recombinant VRK2.****Catalog # AT4522a****Specification**

VRK2 Antibody (monoclonal) (M01) - Product Information

Application	IF, WB, E
Primary Accession	Q86Y07
Other Accession	BC027854
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	58141

VRK2 Antibody (monoclonal) (M01) - 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

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.

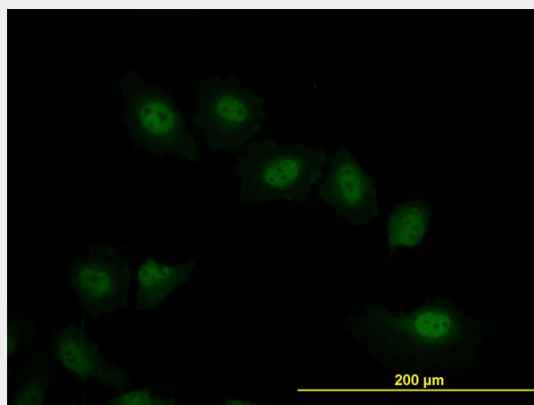
VRK2 Antibody (monoclonal) (M01) - Protocols

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

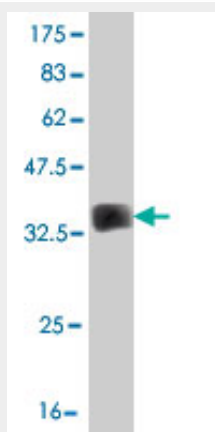
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

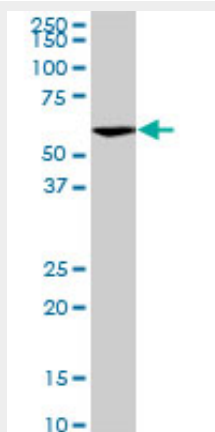
VRK2 Antibody (monoclonal) (M01) - Images



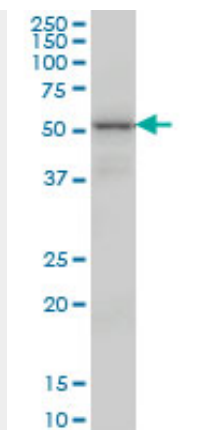
Immunofluorescence of monoclonal antibody to VRK2 on HeLa cell. [antibody concentration 10 ug/ml]



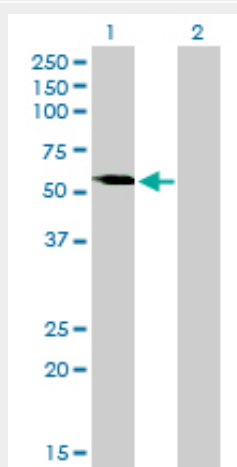
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .



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



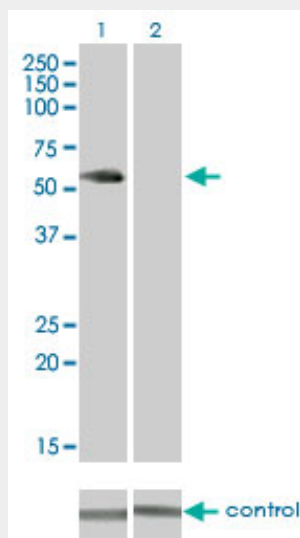
VRK2 monoclonal antibody (M01), clone 3B10 Western Blot analysis of VRK2 expression in K-562 (Cat # AT4522a)



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

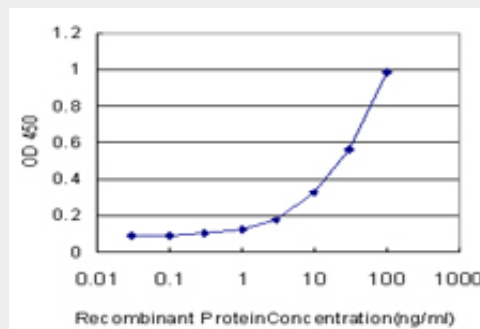
Lane 1: VRK2 transfected lysate(58.1 kDa).

Lane 2: Non-transfected lysate.



Western blot analysis of VRK2 over-expressed 293 cell line, cotransfected with VRK2 Validated

Chimera RNAi ((Cat # AT4522a)



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

VRK2 Antibody (monoclonal) (M01) - 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.

VRK2 Antibody (monoclonal) (M01) - 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-García 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.