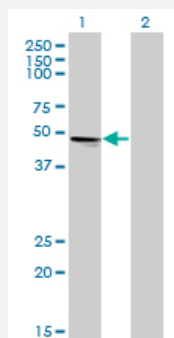


# VRK1 monoclonal antibody (M02), clone 4F9

Catalog # H00007443-M02

Size 100 ug

## Applications

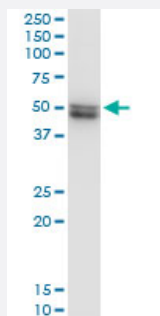


### Western Blot (Transfected lysate)

Western Blot analysis of VRK1 expression in transfected 293T cell line by VRK1 monoclonal antibody (M02), clone 4F9.

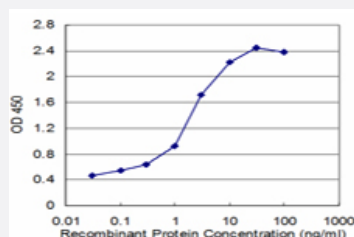
Lane 1: VRK1 transfected lysate (45.5 kDa).

Lane 2: Non-transfected lysate.



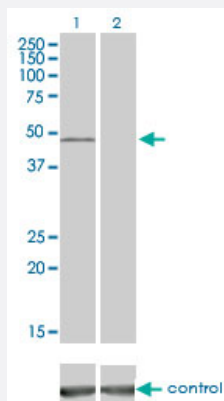
### Immunoprecipitation

Immunoprecipitation of VRK1 transfected lysate using anti-VRK1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with VRK1 monoclonal antibody.



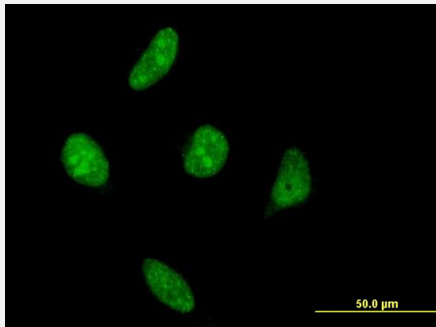
### Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged VRK1 is approximately 0.1 ng/ml as a capture antibody.



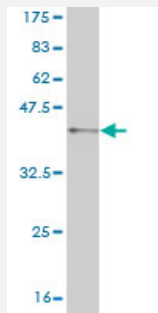
### RNAi Knockdown (Antibody validated)

Western blot analysis of VRK1 over-expressed 293 cell line, cotransfected with VRK1 Validated Chimera RNAi ( Cat # H00007443-R01V ) (Lane 2) or non-transfected control (Lane 1). Blot probed with VRK1 monoclonal antibody (M02) clone 4F9 (Cat # H00007443-M02 ). GAPDH ( 36.1 kDa ) used as specificity and loading control.



### Immunofluorescence

Immunofluorescence of monoclonal antibody to VRK1 on HeLa cell . [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (37.84 KDa) .

## Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant VRK1.
Immunogen	VRK1 (NP_003375, 287 a.a. ~ 396 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	DKCFPEKNKPGEIAKYMETVKLLDYTEKPLYENLRDILLQGLKAIGSKDDGKLDLSVVENGGLKAK TITKKRKKEIEESKEPGVEDTEWSNTQTEEAIQTRSRTKRKRVQK
Host	Mouse
Reactivity	Human
Isotype	IgG2a Kappa

**Quality Control Testing**

Antibody Reactive Against Recombinant Protein.  
Western Blot detection against Immunogen (37.84 KDa) .

**Storage Buffer**

In 1x PBS, pH 7.4

**Storage Instruction**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## Applications

- Western Blot (Transfected lysate)

Western Blot analysis of VRK1 expression in transfected 293T cell line by VRK1 monoclonal antibody (M02), clone 4F9.

Lane 1: VRK1 transfected lysate(45.5 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

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Immunoprecipitation of VRK1 transfected lysate using anti-VRK1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with VRK1 monoclonal antibody.

[Protocol Download](#)

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[Protocol Download](#)

- ELISA

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[Protocol Download](#)

- Immunofluorescence

Immunofluorescence of monoclonal antibody to VRK1 on HeLa cell . [antibody concentration 10 ug/ml]

## Gene Info — VRK1

**Entrez GeneID** [7443](#)**GeneBank Accession#** [NM\\_003384](#)**Protein Accession#** [NP\\_003375](#)**Gene Name** VRK1**Gene Alias** MGC117401, MGC138280, MGC142070**Gene Description** vaccinia related kinase 1**Omim ID** [602168](#)**Gene Ontology** [Hyperlink](#)

**Gene Summary**

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]

**Other Designations** vaccinia virus B1R-related kinase 1|vaccinia-related kinase-1