

**TTK Antibody (monoclonal) (M02)**  
**Mouse monoclonal antibody raised against a partial recombinant TTK.**  
**Catalog # AT4391a**

## Specification

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### TTK Antibody (monoclonal) (M02) - Product Information

Application	WB, E
Primary Accession	<a href="#">P33981</a>
Other Accession	<a href="#">BC000633</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	97072

### TTK Antibody (monoclonal) (M02) - Additional Information

**Gene ID** 7272

#### Other Names

Dual specificity protein kinase TTK, Phosphotyrosine picked threonine-protein kinase, PYT, TTK, MPS1, MPS1L1

#### Target/Specificity

TTK (AAH00633, 1 a.a. ~ 176 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

TTK Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

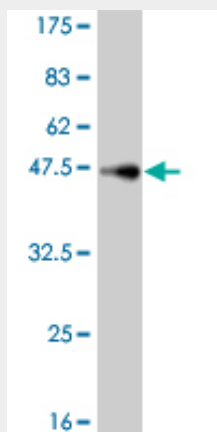
### TTK Antibody (monoclonal) (M02) - Protocols

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

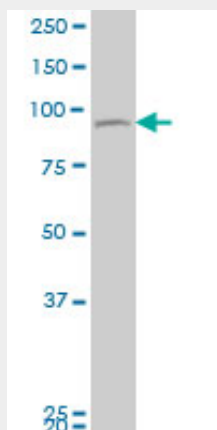
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

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

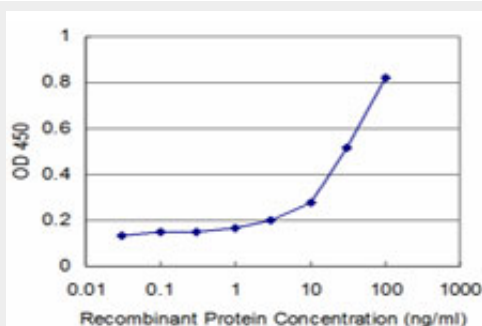
## TTK Antibody (monoclonal) (M02) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (44.99 kDa) .



TTK monoclonal antibody (M02), clone 4G9 Western Blot analysis of TTK expression in Jurkat (Cat # AT4391a )



Detection limit for recombinant GST tagged TTK is approximately 0.3ng/ml as a capture antibody.

## TTK Antibody (monoclonal) (M02) - Background

This gene encodes a dual specificity protein kinase with the ability to phosphorylate tyrosine, serine and threonine. Associated with cell proliferation, this protein is essential for chromosome alignment at the centromere during mitosis and is required for centrosome duplication. It has been found to be a critical mitotic checkpoint protein for accurate segregation of chromosomes during mitosis. Tumorigenesis may occur when this protein fails to degrade and produces excess centrosomes resulting in aberrant mitotic spindles. Alternative splicing results in multiple transcript variants.

#### **TTK Antibody (monoclonal) (M02) - References**

Mps1 directs the assembly of Cdc20 inhibitory complexes during interphase and mitosis to control M phase timing and spindle checkpoint signaling. Maciejowski J, et al. J Cell Biol, 2010 Jul 12. PMID 20624902. Dissecting the role of MPS1 in chromosome biorientation and the spindle checkpoint through the small molecule inhibitor reversine. Santaguida S, et al. J Cell Biol, 2010 Jul 12. PMID 20624901. Sustained Mps1 activity is required in mitosis to recruit O-Mad2 to the Mad1-C-Mad2 core complex. Hewitt L, et al. J Cell Biol, 2010 Jul 12. PMID 20624899. A chemical tool box defines mitotic and interphase roles for Mps1 kinase. Lan W, et al. J Cell Biol, 2010 Jul 12. PMID 20624898. Centrosome-related genes, genetic variation, and risk of breast cancer. Olson JE, et al. Breast Cancer Res Treat, 2010 May 28. PMID 20508983.