

TTK Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17197a**Specification**

TTK Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	P33981
Other Accession	Q4R945 , NP_003309.2
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	97072
Antigen Region	6-35

TTK Antibody (N-term) - Additional Information**Gene ID** 7272**Other Names**

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

Target/Specificity

This TTK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 6-35 amino acids from the N-terminal region of human TTK.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TTK Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TTK Antibody (N-term) - Protein Information**Name** TTK

Synonyms MPS1, MPS1L1

Function Involved in mitotic spindle assembly checkpoint signaling, a process that delays anaphase until chromosomes are bioriented on the spindle, and in the repair of incorrect mitotic kinetochore-spindle microtubule attachments (PubMed:[18243099](#), PubMed:[28441529](#), PubMed:[29162720](#)). Phosphorylates MAD1L1 to promote the mitotic spindle assembly checkpoint (PubMed:[18243099](#), PubMed:[29162720](#)). Phosphorylates CDCA8/Borealin leading to enhanced AURKB activity at the kinetochore (PubMed:[18243099](#)). Phosphorylates SKA3 at 'Ser-34' leading to dissociation of the SKA complex from microtubules and destabilization of microtubule-kinetochore attachments (PubMed:[28441529](#)). Phosphorylates KNL1, KNTC1 and autophosphorylates (PubMed:[28441529](#)). Phosphorylates MCRS1 which enhances recruitment of KIF2A to the minus end of spindle microtubules and promotes chromosome alignment (PubMed:[30785839](#)).

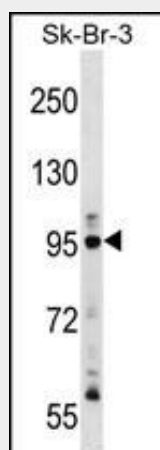
Tissue Location

Present in rapidly proliferating cell lines.

TTK Antibody (N-term) - 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 (N-term) - Images

TTK Antibody (N-term) (Cat. #AP17197a) western blot analysis in SK-BR-3 cell line lysates (35ug/lane). This demonstrates the TTK antibody detected the TTK protein (arrow).

TTK Antibody (N-term) - 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 (N-term) - References

Cui, Y., et al. J. Biol. Chem. 285(43):32988-32998(2010)
Maciejowski, J., et al. J. Cell Biol. 190(1):89-100(2010)
Santaguida, S., et al. J. Cell Biol. 190(1):73-87(2010)
Hewitt, L., et al. J. Cell Biol. 190(1):25-34(2010)
Lan, W., et al. J. Cell Biol. 190(1):21-24(2010)