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TTK (MPS1) Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8103a

Specification

TTK (MPS1) Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P33981
Other Accession	Q4R945
Reactivity	**Human**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**97072**
Antigen Region	**2-32**

TTK (MPS1) 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 (MPS1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-32 amino acids from the N-terminal region of human TTK (MPS1).

Dilution
WB~~1:1000
IHC-P~~1:50~100

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 (MPS1) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TTK (MPS1) Antibody (N-term) - Protein Information

Name TTK

Synonyms MPS1, MPS1L1

Function Phosphorylates proteins on serine, threonine, and tyrosine (PubMed:18243099, PubMed:29162720). Probably associated with cell proliferation (PubMed:18243099). Phosphorylates MAD1L1 to promote mitotic checkpoint signaling (PubMed:29162720). Essential for chromosome alignment by enhancing AURKB activity (via direct CDCA8 phosphorylation) at the centromere, and for the mitotic checkpoint (PubMed:18243099).

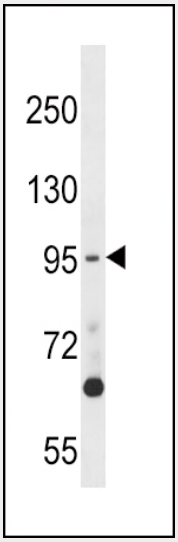
Tissue Location
Present in rapidly proliferating cell lines.

TTK (MPS1) 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 Cytomety
- Cell Culture

TTK (MPS1) Antibody (N-term) - Images



TTK Antibody (M1) (Cat. #AP8103a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the TTK antibody detected the TTK protein (arrow).

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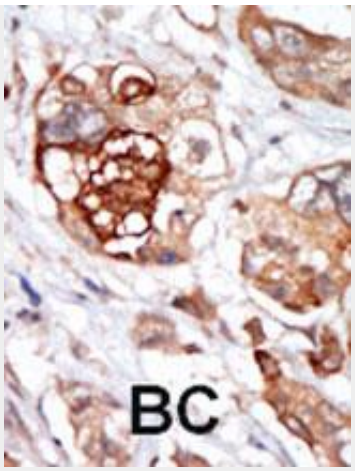

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

TTK (MPS1) Antibody (N-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

TTK (MPS1) Antibody (N-term) - References

Mills, G.B., et al., J. Biol. Chem. 267(22):16000-16006 (1992).
Lindberg, R.A., et al., Unpublished.