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TTK (phospho Thr676) Polyclonal Antibody

Catalog # AP67994

Product Information

Application	IHC-P, IF, ICC, E
Primary Accession	P33981
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	97072

Additional Information

Gene ID	7272
Other Names	TTK; MPS1; MPS1L1; Dual specificity protein kinase TTK; Phosphotyrosine picked threonine-protein kinase; PYT
Dilution	IHC-P~~Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

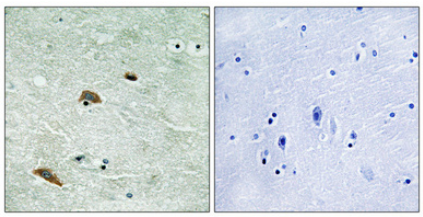
Protein Information

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.

Background

Phosphorylates proteins on serine, threonine, and tyrosine. Probably associated with cell proliferation. Essential for chromosome alignment by enhancing AURKB activity (via direct CDCA8 phosphorylation) at the centromere, and for the mitotic checkpoint.

Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.