

For Research Use Only

# TTK Polyclonal antibody

Catalog Number: 10381-1-AP

Featured Product

12 Publications



## Basic Information

### Catalog Number:

10381-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0405

### GenBank Accession Number:

BC000633

### GeneID (NCBI):

7272

### UNIPROT ID:

P33981

### Full Name:

TTK protein kinase

### Calculated MW:

97 kDa

### Observed MW:

96-97 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:4000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 ul suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB: DU 145 cells, HEK-293 cells, MCF-7 cells, HeLa cells

IP: DU 145 cells,

IHC: human breast cancer tissue, human kidney tissue, human liver cancer tissue, human testis tissue, mouse colon tissue

IF/ICC: HeLa cells,

FC (Intra): HeLa cells,

## Background Information

Mps1 family of kinases colocalizes with mitotic checkpoint proteins in kinetochores and/or spindle pole bodies/centrosomes. TTK has been shown to be a cell cycle-regulated kinase displaying maximum activity during M phase (PMID:15618221). Its kinase activity is required for proper chromosome segregation during mitosis through its involvements in microtubule-chromosome attachment error correction and the mitotic checkpoint (PMID:20937696). TTK mRNA is present at relatively high levels in testis and thymus, tissues which contain a large number of proliferating cells, but is not detected in most other benign tissues (PMID:1639825). It has 2 isoforms produced by alternative splicing (PMID:25137017).

## Notable Publications

Author	Pubmed ID	Journal	Application
Que Wu	29147457	Oxid Med Cell Longev	
Saipeng Chen	31605696	Exp Cell Res	WB
Yongqu Lu	33134313	Front Mol Biosci	IHC

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

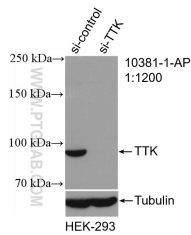
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

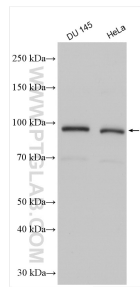
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

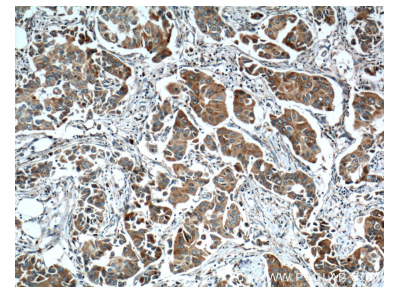
## Selected Validation Data



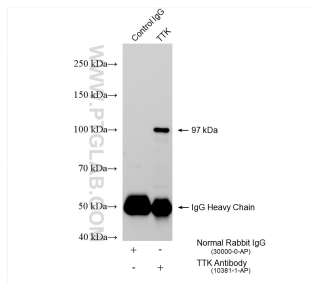
WB result of TTK antibody (10381-1-AP; 1:1200; incubated at room temperature for 1.5 hours) with sh-Control and sh-TTK transfected HEK-293 cells.



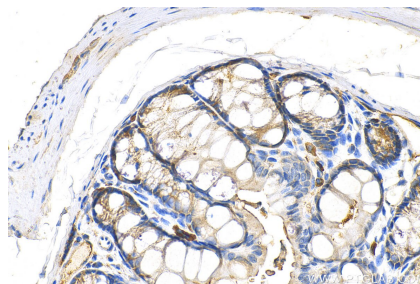
Various lysates were subjected to SDS PAGE followed by western blot with 10381-1-AP (TTK antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



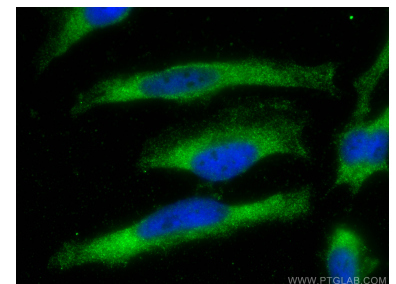
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10381-1-AP (TTK Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



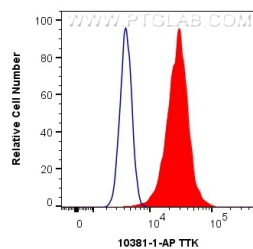
IP result of anti-TTK (IP:10381-1-AP, 4ug; Detection:10381-1-AP 1:600) with DU 145 cells lysate 1280 ug.



Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 10381-1-AP (TTK antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using TTK antibody (10381-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human TTK (10381-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).