

TTK Polyclonal antibody

Catalog Number: 10381-1-AP

Featured Product

10 Publications

Basic Information

Catalog Number:

10381-1-AP

Size:

150ul, Concentration: 800 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0405

GenBank Accession Number:

BC000633

GeneID (NCBI):

7272

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 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

FC, IF, IHC, IP, WB, ELISA

Cited Applications:

IF, IHC, WB

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: MDA-MB-453s cells,

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

IF: 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

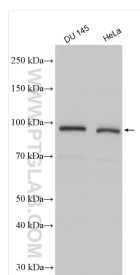
For technical support and original validation data for this product please contact:

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

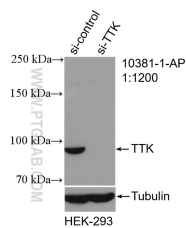
E: proteintech@ptglab.com
W: ptglab.com

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

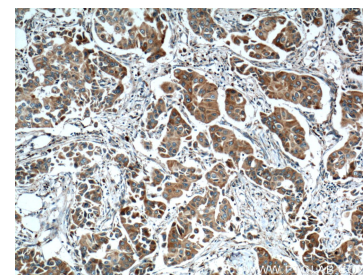
Selected Validation Data



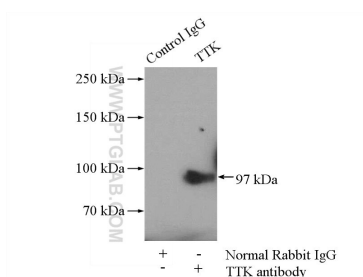
Various lysates were subjected to SDS PAGE followed by western blot with 10381-1-AP (TTK antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



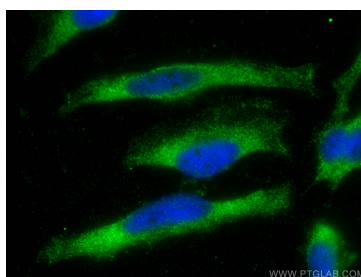
WB result of TTK antibody (10381-1-AP; 1:1200; incubated at room temperature for 1.5 hours) with sh-Control and sh-TTK transfected HEK-293 cells.



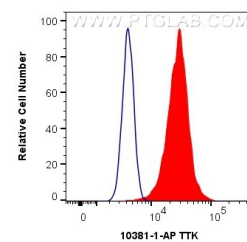
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10381-1-AP (TTK Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP Result of anti-TTK (IP:10381-1-AP, 4ug; Detection:10381-1-AP 1:300) with MDA-MB-453s cells lysate 2800ug.



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).



1X10⁶ 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).