

For Research Use Only

Chk1 Polyclonal antibody

Catalog Number: 10362-1-AP

Featured Product

18 Publications



Basic Information

Catalog Number:

10362-1-AP

Size:

240 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0409

GenBank Accession Number:

BC004202

GeneID (NCBI):

1111

UNIPROT ID:

O14757

Full Name:

CHK1 checkpoint homolog (S. pombe)

Calculated MW:

54 kDa

Observed MW:

50-55 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IHC 1:50-1:500

IF 1:10-1:100

Applications

Tested Applications:

FC, IF/ICC, IHC, WB, ELISA

Cited Applications:

IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

WB: mouse thymus tissue, HeLa cells, K-562 cells

IHC: human lung cancer tissue,

IF: HepG2 cells,

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

Background Information

In response to DNA damage, mammalian cells prevent cell cycle progression through the control of critical cell cycle regulators. CHK1 (synonym: CHEK1), a homolog of the Schizosaccharomyces pombe Chk1 protein kinase, is required for the DNA damage checkpoint. Human Chk1 protein is modified in response to DNA damage. In vitro Chk1 binds to and phosphorylate the dual-specificity protein phosphatases Cdc25A, Cdc25B, and Cdc25C, which control cell cycle transitions by dephosphorylating cyclin-dependent kinases. CHK1 can be autophosphorylated (PMID:22941630) and ubiquitinated (PMID:19276361). It has 3 isoforms produced by alternative splicing with the molecular weight of 54 kDa, 44 kDa and 50 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Andrew Best	25208576	Nat Commun	WB
Xiufang Song	26451628	Chem Res Toxicol	WB
Xia Li	30472087	EBioMedicine	WB

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

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

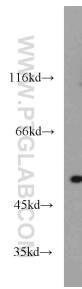
T: 4006900926

E: Proteintech-CN@ptglab.com

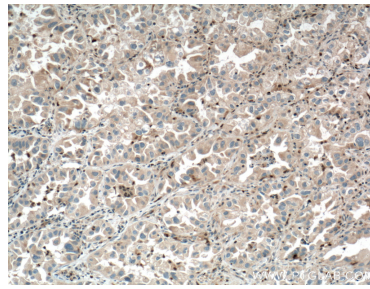
W: ptgcn.com

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

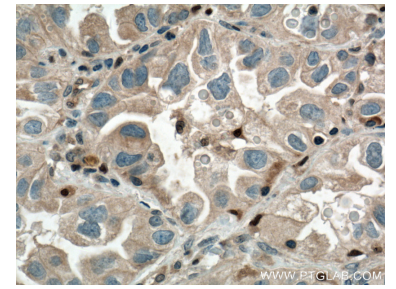
Selected Validation Data



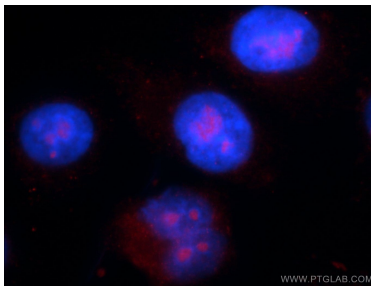
mouse thymus tissue were subjected to SDS PAGE followed by western blot with 10362-1-AP (CHK1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



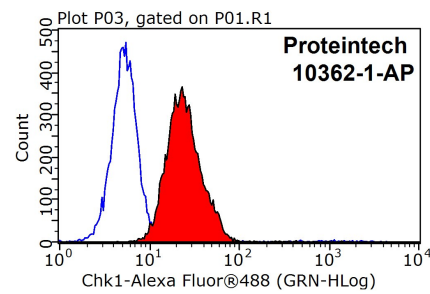
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 10362-1-AP (CHK1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 10362-1-AP (CHK1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HepG2 cells using 10362-1-AP (Chk1 antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



1×10^6 HepG2 cells were stained with 0.2ug CHK1 antibody (10362-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.