For Research Use Only

Phospho-Chk1 (Ser296) Polyclonal antibody

Catalog Number:28805-1-AP 5 Publications

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Basic Information

Catalog Number:
28805-1-AP

Size:
210 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC004202

GeneID (NCBI):
1111

UNIPROT ID:
O14757

Full Name:
CHK1 checkpoint homolog (S. pombe)

Calculated MW:
54 kDa

Observed MW:
55 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:8000

Applications

Tested Applications:
WB, ELISA

Cited Applications:
WB

Species Specificity:
Human, mouse, rat

Cited Species:
human, mouse

Positive Controls:

WB : Calyculin A treated HEK-293T cells,

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). Activation of Chk1 involves phosphorylation at Ser317 and Ser345 by ATM/ATR, followed by autophosphorylation of Ser296. Activation occurs in response to blocked DNA replication and certain forms of genotoxic stress.

Notable Publications

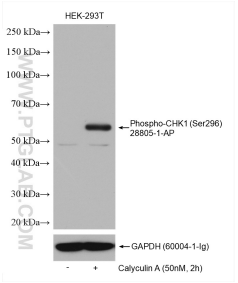
Author	Pubmed ID	Journal	Application
Chao Mei	35187743	Cell Prolif	WB
Xiaomin Wei	39187478	Cell Death Discov	WB
Jia-Wen Chen	37798514	Arch Toxicol	WB

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

Selected Validation Data



Non-treated HEK-293T and Calyculin A treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 28805-1-AP (Phospho-Chk1 (Ser296) antibody) at dilution of 1:2000 incubated at 4℃ overnight. The membrane was stripped and re-blotted with GAPDH antibody as loading control.