For Research Use Only

Phospho-Chk1 (Ser345) Polyclonal antibody



Catalog Number: 28803-1-AP

2 Publications

Basic Information

Catalog Number: 28803-1-AP Size: 330 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: 50 kDa

Positive Controls:

WB: Calyculin A treated NIH/3T3 cells, Calyculin A

Purification Method:

WB 1:500-1:2000 IF 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

treated HeLa cells

IF: Calyculin A treated HeLa cells,

Applications

Tested Applications: IF/ICC, WB, ELISA Cited Applications: WB

Species Specificity: Human, mouse Cited Species: human

Background Information

The checkpoint kinase 1 (Chk1) is a conserved kinase that imposes cell cycle delays in response to impediments to DNA replication. Chk1 kinase is downstream of the ATR kinase. ATR phosphorylates Chk1 kinase and other proteins to ensure replication is being blocked as to avoid replication fork collapse and DNA damage. Activation of Chk1 involves phosphorylation at Ser317 and Ser345 by ATM/ATR, followed by autophosphorylation of Ser296. 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. (PMID:22941630, PMID: 32571801, PMID:19276361)

Notable Publications

Author	Pubmed ID	Journal	Application
Mengmeng Li	38006806	Phytomedicine	WB
Haochen Su	37517142	Transl Oncol	WB

Storage

Storage

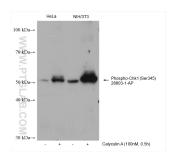
Store at -20°C. Stable for one year after shipment.

Storage Buffer

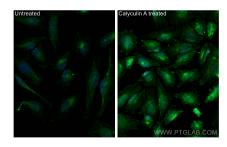
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Non-treated and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 28803-1-AP (Phospho-Chk1 (Ser345) antibody) at dilution of 1:1000 incubated at room temperature for 1 hours.



Immunofluorescent analysis of (4% PFA) fixed Calyculin A treated HeLa cells using Phospho-Chk1 (Ser345) antibody (28803-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).