For Research Use Only

Phospho-CHEK2 (Thr68) Recombinant antibody

Catalog Number:81740-1-RR 1 Publications

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Basic Information

Catalog Number:
81740-1-RR

Size:
1000 ug/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC004207

GeneID (NCBI):
11200

UNIPROT ID:
O96017

Full Name:
CHK2 checkpoint homolog (S. pombe)

Calculated MW:
61 kDa

Observed MW:
65 kDa

Purification Method:
Protein A purification

CloneNo.:
1L2

Recommended Dilutions:
WB 1:5000-1:50000

Applications

Tested Applications:
WB, FC (Intra), ELISA

Cited Applications:
WB

Species Specificity:
human

Cited Species:
human

Positive Controls:

WB : MMS treated PC-3 cells, UV treated HeLa cells

Background Information

Serine/threonine-protein kinase Chk2 (CHEK2) is a serine/threonine kinase which is activated upon DNA damage and is implicated in pathways that govern DNA repair, cell cycle arrest or apoptosis in response to the initial damage. ATM phosphorylates CHEK2 on T68. Phosphorylation on T68 and subsequent full activation of CHEK2 was shown to require priming phosphorylation on adjacent residues by Polo-like kinase 3 (PLK3) and the dualspecificity tyrosine and serine/threoninekinase TTK/hMPS1. Additionally TTK appears to phosphorylate T68. Phosphorylation of T68 promotes the binding of the N-terminal SQ/TQ-rich cluster of one CHEK2 molecule with the FHA domain of another CHEK2 molecule. (PMID: 28553140, PMID: 18004398, PMID: 33322746)

Notable Publications

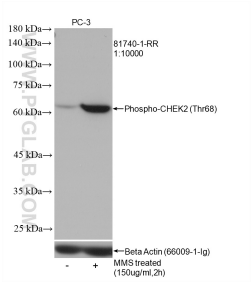
Author	Pubmed ID	Journal	Application
Yukun Wang	39090319	EMBO Rep	WB

Storage

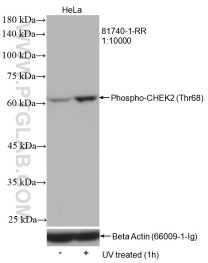
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

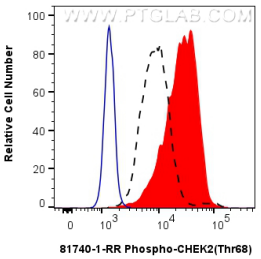
Selected Validation Data



Non-treated PC-3 and MMS treated PC-3 cells were subjected to SDS PAGE followed by western blot with 81740-1-RR (Phospho-CHEK2 (Thr68) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin antibody as loading control.



Non-treated HeLa and UV treated HeLa cells were subjected to SDS PAGE followed by western blot with 81740-1-RR (Phospho-CHEK2 (Thr68) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin antibody as loading control.



1X10^6 PC-3 cells untreated (dashed lines) or treated with MMS which intracellularly stained with 0.06 ug Phospho-CHEK2 (Thr68) Recombinant antibody (81740-1-RR, Clone:1L2) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.06 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.