For Research Use Only

## CoraLite®594-conjugated Phospho-CHEK2 (Thr68) Recombinant antibody

Catalog Number: CL594-81740



**Basic Information** 

Catalog Number:GenBank Accession Number:Purification Method:CL594-81740BC004207Protein A purification

 Concentration:
 GeneI D (NCBI):
 CloneNo.:

 1000 ug/ml
 11200
 1L2

Source: UNIPROT ID: Recommended Dilutions:

Rabbit 096017 FC (Intra): 0.25 ug per 10^6 cells in a

Isotype: Full Name: 100 μl suspension

CHK2 checkpoint homolog (S. pombe) Excitation/Emission maxima
Calculated MW:

64 kDs. 588 nm / 604 nm

61 kDa Observed MW: 65 kDa

**Applications** 

Tested Applications:

FC (Intra)

Species Specificity:

human

Positive Controls:

FC (Intra): MMS treated PC-3 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)

Storage

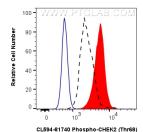
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment. Storage Buffer.

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



1X10^6 PC-3 cells untreated (dashed lines) or treated with MMS which intracellularly stained with 0.25 ug Coralite®594 Phospho-Chek2 (Thr68) Recombinant Antibody (CL594-81740, Clone:1L2) (red), or 0.25 ug Coralite®594 Rabbit IgG Isotype Control RecAb (CL594-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.