

## 12-4172: Phospho-Chk2 (Thr68) (Clone: D12) rabbit mAb APC conjugate

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	Chk2T68-D12
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human, Mouse
<b>Conjugate :</b>	APC
<b>Format :</b>	Conjugated
<b>Alternative Name :</b>	Serine/threonine-protein kinase Chk2, Cds1 homolog, Hucds2, CHEK2, RAD53
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phosphor-peptide corresponding to residues surrounding to Thr68 of human phospho Chk2

### Description

Checkpoint kinase 2 (Chk2) plays a major role in the checkpoint response to DNA damage. Chk2 is initially inactive in its monomeric, unphosphorylated form. Phosphorylation at Thr68 induces homodimerization, initiating autophosphorylation within the kinase loop at Ser516 and phosphorylation events within the auto-inhibitory loop at Thr383 and Thr387. After these phosphorylations, active dimers and monomers can then phosphorylate substrates such as Cdc25C and BRCA1. In humans, Chk2 genetic deletion and missense variants have been found to be associated with increased risk of breast and colon cancer. Constitutively phosphorylated Chk2 at Thr68 has been found in many human cancer cell lines, especially ones with mutations in p53.

### Product Info

<b>Amount :</b>	10 Tests / 100 Tests
<b>Content :</b>	1X PBS, 0.09% NaN <sub>3</sub> , 0.2% BSA
<b>Storage condition :</b>	Store at 2-8°C. Avoid repeated freeze and thaw cycles.

### Application Note

For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ L per million cells or 5  $\mu$ L per 100  $\mu$ L of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.

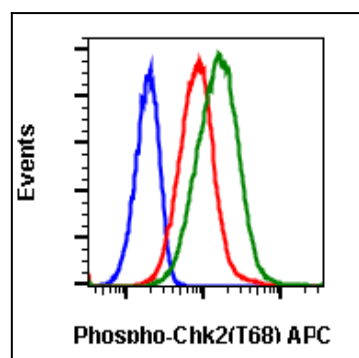


Fig-1: Flow cytometric analysis of HeLa cells, unstained and untreated as negative control (blue) or stained and untreated (red) or stained and treated with UV plus TPA (green) using Phospho-Chk2 (Thr68) antibody CHK2T68-D12 APC conjugate.