



# Anti-CHEK2 (aa 64-73) polyclonal antibody (CPBT-67886RH)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

This product detects human Checkpoint kinase 2 (Chk2), phosphorylated at threonine 68 (Thr68). Chk2 is a serine/threonine-protein kinase which functions as a cell cycle checkpoint regulator. ATM and ATR kinases are activated in response to ionizing and ultraviolet radiation, and phosphorylate Thr68 and other sites in the amino-terminal region of Chk2, leading to Chk2 dimerisation and activation. Activated Chk2 phosphorylates and inhibits Cdc25C phosphatase, preventing the entry into mitosis, and has been shown to stabilize the tumour suppressor protein p53, leading to cell cycle arrest in G1. In addition, Chk2 can phosphorylate BRCA1, allowing BRCA1 to restore survival after DNA damage. Chk2 is a putative tumour suppressor protein, with mutations in the Chk2 gene linked to Li-Fraumeni syndrome, a familial cancer usually associated with inherited mutations in TP53. Western Blotting detects a band of approximately 61kDa.

<b>Specificity</b>	CHEK2
<b>Immunogen</b>	Synthetic peptide corresponding to amino acids 64-73 of human Chk2.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Chimpanzee, Mouse, Rat
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA; WB
<b>Format</b>	Purified IgG - liquid
<b>Size</b>	50 µg

<b>Preservative</b>	0.01% Sodium Azide
<b>Storage</b>	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">CHEK2 checkpoint kinase 2 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	CHEK2
<b>Synonyms</b>	CHEK2; checkpoint kinase 2; CDS1; CHK2; LFS2; RAD53; hCds1; HuCds1; PP1425; serine/threonine-protein kinase Chk2; cds1 homolog; CHK2 checkpoint homolog; checkpoint-like protein CHK2;
<b>Entrez Gene ID</b>	<a href="#">11200</a>
<b>Protein Refseq</b>	<a href="#">NP_001005735</a>
<b>UniProt ID</b>	O96017
<b>Chromosome Location</b>	22q12.1
<b>Pathway</b>	Cell Cycle; Cell Cycle Checkpoints; Cell cycle; DNA damage response; DNA damage-induced cell cycle checkpoints; FOXM1 transcription factor network; G1/S DNA Damage Checkpoints; G2/M Checkpoints;
<b>Function</b>	ATP binding; identical protein binding; metal ion binding; protein binding; protein homodimerization activity; protein kinase binding; protein serine/threonine kinase activity; ubiquitin protein ligase binding;