

**Catalog No.: RP03361LQ** **Recombinant**

Species	Gene ID	Swiss Prot
Human	1111	O14757

## N-GST

CHEK1; CHK1; Checkpoint kinase-1; Cell cycle checkpoint kinase; CHK1 checkpoint homolog

<b>Source</b>	<b>Purification</b>
Baculovirus-Insect Cells	≥ 90 % as determined by SDS-PAGE; ≥ 90 % as determined by HPLC.

## 80.9 kDa 70-85 kDa

< 1 EU/μg of the protein by LAL method.

Supplied as a 0.22 µm filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 20% glycerol, 5 mM DTT, 0.1 M Trehalose. (pH 7.5). Contact us for customized product form or formulation.

Please use running water to thaw it quickly.

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Checkpoint kinase 1, commonly referred to as Chk1, is a serine/threonine-specific protein kinase that, in humans, is encoded by the CHEK1 gene. Chk1 has a N-terminal kinase domain, a linker region, a regulatory SQ/TQ domain and a C-terminal domain, and contains four Ser/Gln residues. Chk 1 activation occurs primarily through the phosphorylation of the conserved sites, Ser-317, Ser-345 and less often at Ser-366. Chk1 coordinates the DNA damage response (DDR) and cell cycle checkpoint response. Activation of Chk1 results in the initiation of cell cycle checkpoints, cell cycle arrest, DNA repair and cell death to prevent damaged cells from progressing through the cell cycle.

Recombinant Human Checkpoint kinase 1/CHEK1 Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Ala2-Thr476) of Human CHEK1 (Accession #Q14757) fused with a N-GST tag.

The activity of CHK1 is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

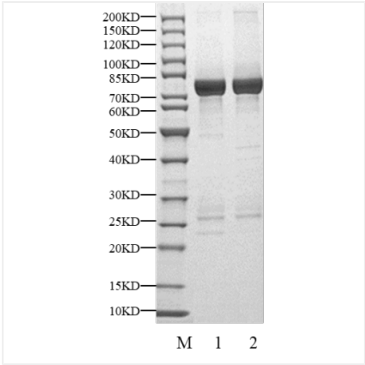
Store at -70°C. This product is stable at  $\leq -70^{\circ}\text{C}$  for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10  $\mu$ L are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

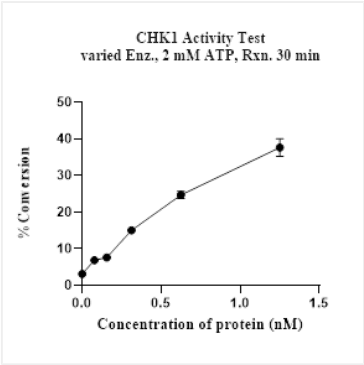
Avoid repeated freeze/thaw cycles.



Validation Data



Recombinant Human Checkpoint kinase 1/CHEK1 Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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