

Product datasheet for TA325371

Chk1 (CHEK1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WE

Recommended Dilution: WB: 1:500-1:2000

Reactivity: Human

Modifications: Phospho-specific

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: The antiserum was produced against a synthesized A synthesized peptide derived from

human Chk1 around the phosphorylation site of Sersine 280.

Formulation: Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50%

glycerol.

Concentration: lot specific

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using

epitope-specific peptide.

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: checkpoint kinase 1

Database Link: NP 001107593

Entrez Gene 1111 Human

<u>O14757</u>



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Background:

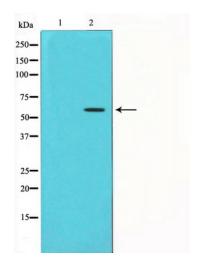
Serine/threonine-protein kinase which is required for checkpoint-mediated cell cycle arrest and activation of DNA repair in response to the presence of DNA damage or unreplicated DNA. May also negatively regulate cell cycle progression during unperturbed cell cycles. This regulation is achieved by a number of mechanisms that together help to preserve the integrity of the genome. Recognizes the substrate consensus sequence [R-X-X-S/T]. Binds to and phosphorylates CDC25A, CDC25B and CDC25C. Phosphorylation of CDC25A at 'Ser-178' and 'Thr-507' and phosphorylation of CDC25C at 'Ser-216' creates binding sites for 14-3-3 proteins which inhibit CDC25A and CDC25C. Phosphorylation of CDC25A at 'Ser-76', 'Ser-124', 'Ser-178', 'Ser-279' and 'Ser-293' promotes proteolysis of CDC25A. Phosphorylation of CDC25A at 'Ser-76' primes the protein for subsequent phosphorylation at 'Ser-79', 'Ser-82' and 'Ser-88' by NEK11, which is required for polyubiquitination and degradation of CDCD25A.

Synonyms: CHK1

Protein Families: Druggable Genome, Protein Kinase, Stem cell - Pluripotency

Protein Pathways: Cell cycle, p53 signaling pathway

Product images:



Western blot analysis on HeLa cell lysate using Phospho-Chk1 (Ser280) Antibody