

DATASHEET

Version: 2016-08-17

Chk1 Antibody (Ser²⁸⁰), pAb, Rabbit**Cat. No.:** A01179-40**Size:** 40 µg**Synonyms:** Rabbit Anti-Chk1 (Ser²⁸⁰) pAb;**Description:**

Chk1 is a serine/threonine kinase first identified as a checkpoint kinase in *Schizosaccharomyces pombe*. Chk1 is an evolutionarily conserved protein kinase that functions to ensure genomic integrity upon genotoxic stress. Chk1 is activated through phosphorylation by ATR/ATM and plays an important role in DNA damage checkpoint control, embryonic development, and tumor suppression. The activation of Chk1 in response to DNA replication blockages and certain forms of genotoxic stress involves phosphorylation of Ser317 and Ser345. Chk1 is also phosphorylated at Ser280 and Ser296 following DNA damage. Activated Chk1 further activates downstream factors that mediate cell cycle arrest and other cell physiological events through phosphorylation. These key cell cycle factors include p53, Cdc25C and more.

GenScript **Rabbit Anti-Chk1 (Ser²⁸⁰) Polyclonal Antibody** is developed in rabbit using a KLH-coupled synthetic peptide derived from the residues surrounding Ser 280 of human Chk1 (Swiss Prot: O14757).

Immunogen: Synthetic peptide (KLH-coupled) derived from residues surrounding Ser 280 of human Chk1 (Swiss Prot: O14757)

Host: Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Predicated Band Size:**

54 kD

Observed Band Size:**Example**

58 kD

Formulation:

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide.

Ig Subclass: Rabbit IgG

Specificity: GenScript Rabbit Anti-Chk1 (Ser²⁸⁰) Polyclonal Antibody detects endogenous levels of human Chk1 protein.

Purification: Immunoaffinity chromatography

Applications:

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.05-0.2 µg/ml**Western blot:** 0.5-2 µg/ml**Other applications:** user-optimized

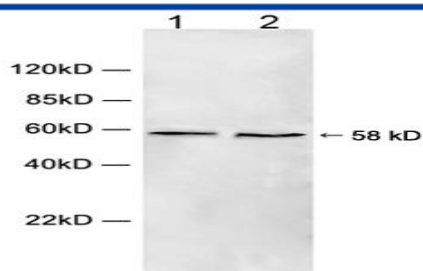
Species Reactivity: Human. This product has not yet been tested with other species.

Reconstitution:

Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody concentration of 0.5 mg/ml.

Storage:

The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.



Western blot analysis of cell lysate using 1 µg/ml Rabbit Anti-Chk1 (Ser²⁸⁰) Polyclonal Antibody (GenScript, A01179)

Lane 1: HeLa cell lysate

Lane 2: HEK293 cell lysate

The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG.