

Datasheet for ABIN2857049  
**anti-CHEK1 antibody (C-Term)**



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2 Images

## Overview

Quantity:	100 µL
Target:	CHEK1
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK1 antibody is un-conjugated
Application:	Immunofluorescence (IF), Immunocytochemistry (ICC)

## Product Details

Immunogen:	Carrier-protein conjugated synthetic peptide encompassing a sequence within the C-terminus region of human Chk1. The exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human
Characteristics:	Rabbit Polyclonal antibody to Chk1 (CHK1 checkpoint homolog (S. pombe)) Chk1 (non-phospho Ser345) antibody [C1C2-3], Internal
Purification:	Purified by antigen-affinity chromatography.

## Target Details

Target:	CHEK1
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## Target Details

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Alternative Name: [checkpoint kinase 1 \(CHEK1 Products\)](#)

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Background: Required for checkpoint mediated cell cycle arrest in response to DNA damage or the presence of unreplicated DNA. May also negatively regulate cell cycle progression during unperturbed cell cycles. 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. Inhibition of CDC25 activity leads to increased inhibitory tyrosine phosphorylation of CDK-cyclin complexes and blocks cell cycle progression. Binds to and phosphorylates RAD51 at 'Thr-309', which may enhance the association of RAD51 with chromatin and promote DNA repair by homologous recombination. Binds to and phosphorylates TLK1 at 'Ser-743', which prevents the TLK1-dependent phosphorylation of the chromatin assembly factor ASF1A. This may affect chromatin assembly during S phase or DNA repair. May also phosphorylate multiple sites within the C-terminus of TP53, which promotes activation of TP53 by acetylation and enhances suppression of cellular proliferation.

Cellular Localization: Nucleus , Cytoplasm

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Molecular Weight: 54 kDa

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Gene ID: 1111

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UniProt: [O14757](#)

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Pathways: [p53 Signaling](#), [Apoptosis](#), [Cell Division Cycle](#), [DNA Damage Repair](#)

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## Application Details

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Application Notes: ICC/IF: 1:100-1:1000. Optimal dilutions/concentrations should be determined by the researcher. Not tested in other applications.

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Restrictions: For Research Use only

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## Handling

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Format: Liquid

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Concentration: 1 mg/mL

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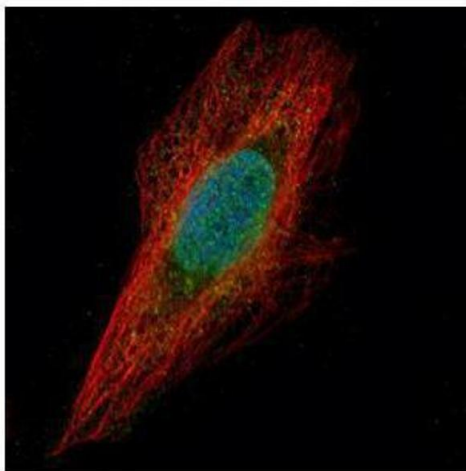
Buffer: 1XPBS ( pH 7), 20 % Glycerol, 0.01 % Thimerosal

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## Handling

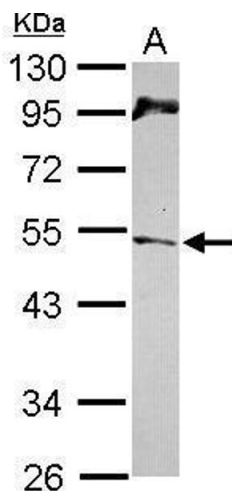
Preservative:	Thimerosal (Merthiolate)
Precaution of Use:	This product contains Thimerosal (Merthiolate): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

## Images



### Immunofluorescence

**Image 1.** ICC/IF Image Confocal immunofluorescence analysis (Olympus FV10i) of paraformaldehyde-fixed HeLa, using Chk1, antibody (Green) at 1:500 dilution. Alpha-tubulin filaments were labeled with (Red) at 1:2000.



### Western Blotting

**Image 2.** WB Image Sample (30 ug of whole cell lysate) A: NT2D1 10% SDS PAGE antibody diluted at 1:1000