



Datasheet for ABIN389543

## anti-CHEK1 antibody (pSer317)



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3 Images

1 Publication

### Overview

Quantity:	400 µL
Target:	CHEK1
Binding Specificity:	pSer317
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Dot Blot (DB)

### Product Details

Immunogen:	This CHK1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S317 of human CHK1.
Clone:	RB7845-RB18425
Isotype:	Ig Fraction
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

### Target Details

Target:	CHEK1
Alternative Name:	CHK1 ( <a href="#">CHEK1 Products</a> )

## Target Details

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Background:	Checkpoint pathways control the order and timing of cell cycle transitions and ensure that critical events, such as DNA replication and chromosome segregation, are completed with high fidelity. The <i>S. pombe</i> Chk1 gene encodes a protein kinase that is required for the DNA damage checkpoint. Antibodies against CHK1 recognized a 54-kD protein on immunoblots of mammalian cell extracts. However,CHK1 is modified in response to DNA damage. In vitro, CHK1 directly phosphorylated a regulator of CDC2 tyrosine phosphorylation, CDC25C. In response to DNA damage, CHK1 phosphorylates and inhibits CDC25C, thus preventing activation of the CDC2-cyclin B complex and mitotic entry. CHK1 directly phosphorylates CDC25A during an unperturbed cell cycle, and that phosphorylation of CDC25A by CHK1 is required for cells to delay cell cycle progression in response to double-strand DNA breaks.
Molecular Weight:	54434
Gene ID:	1111
NCBI Accession:	<a href="#">NP_001107593</a> , <a href="#">NP_001107594</a> , <a href="#">NP_001231775</a> , <a href="#">NP_001265</a>
UniProt:	<a href="#">O14757</a>
Pathways:	<a href="#">p53 Signaling</a> , <a href="#">Apoptosis</a> , <a href="#">Cell Division Cycle</a> , <a href="#">DNA Damage Repair</a>

## Application Details

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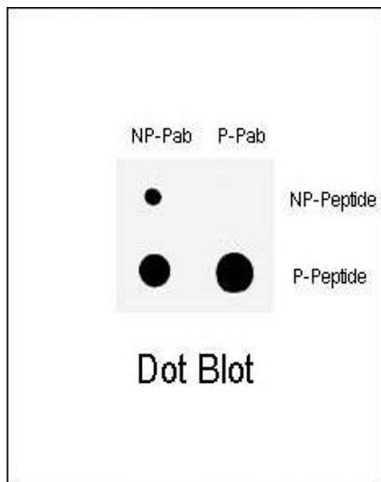
Application Notes:	WB: 1:1000. IHC-P: 1:50~100. DB: 1:500
Restrictions:	For Research Use only

## Handling

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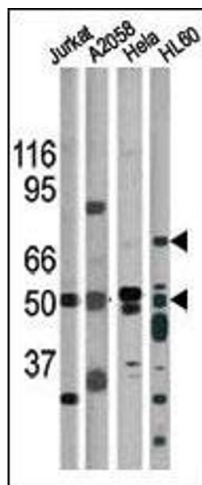
Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

Product cited in: Awate, De Benedetti: "TLK1B mediated phosphorylation of Rad9 regulates its nuclear/cytoplasmic localization and cell cycle checkpoint." in: **BMC molecular biology**, Vol. 17, pp. 3, (2016) ([PubMed](#)).



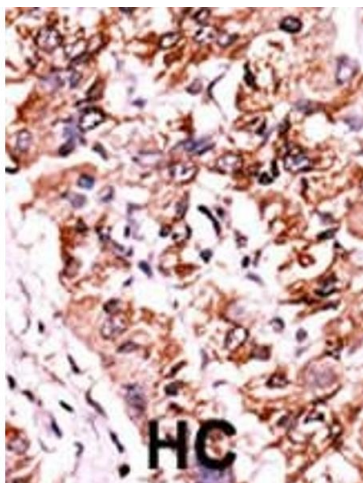
#### Dot Blot

**Image 1.** Dot blot analysis of anti-Phospho-CHK1- Antibody (ABIN389543 and ABIN2839588) on nitrocellulose membrane. 50 ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibodies working concentration was 0.5 µg per ml.



#### Western Blotting

**Image 2.** The anti-Phospho-CHK1- Pab (ABIN391324 and ABIN2841354) is used in Western blot for detection in, from left to right, Jurkat, , HeLa, and HL60 tissue lysates.



#### Immunohistochemistry (Paraffin-embedded Sections)

**Image 3.** Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.