

Datasheet for ABIN7464252

anti-CHEK2 antibody (pThr68)



Overview

Quantity:	100 μL
Target:	CHEK2
Binding Specificity:	pThr68
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)
Product Details	
Immunogen:	Carrier-protein conjugated synthetic peptide surrounding phospho Thr68 of human Chk2. The
	exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Purified by antigen-affinity chromatography.
Grade:	KO Validated
Target Details	
Target:	CHEK2
Alternative Name:	checkpoint kinase 2 (CHEK2 Products)

Background:

Checkpoint kinase 2 , CDS1 , CHK2 , HuCds1 , LFS2 , PP1425 , RAD53 , hCds1,In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated, the encoded protein is known to inhibit CDC25C phosphatase, preventing entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, this protein interacts with and phosphorylates BRCA1, allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome, a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53. Also, mutations in this gene are thought to confer a predisposition to sarcomas, breast cancer, and brain tumors. This nuclear protein is a member of the CDS1 subfamily of serine/threonine protein kinases. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Molecular Weight:	61 kDa
Gene ID:	11200
UniProt:	096017
Pathways:	p53 Signaling, Apoptosis, Cell Division Cycle

Application Details

Application Notes:	WB: 1:500-1:3000. ICC/IF: 1:100-1:1000. Optimal dilutions/concentrations should be determined
	by the researcher. Not tested in other applications.
Comment:	Positive Control: 293T (100µM etoposide for 2hr) , HeLa Validation: KO/KD, Orthogonal
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.73 mg/mL
Buffer:	1XPBS (pH 7), 1 % BSA, 20 % Glycerol, 0.025 % ProClin 300
Preservative:	ProClin

Handling

Precaution of Use:	This product contains ProClin: 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.