Datasheet for ABIN757162

anti-CHEK2 antibody (pSer516)

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Overview

Quantity:	100 µL
Target:	CHEK2
Binding Specificity:	pSer516
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human CHK2 around the phosphorylation site of ser516
Isotype:	IgG
Cross-Reactivity:	Human
Predicted Reactivity:	Mouse,Rat,Dog,Pig,Chicken,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	CHEK2
Alternative Name:	CHK2 (CHEK2 Products)

Target Details

Background:	Synonyms: Chk2 Ser516, bA444G7, CHK2 checkpoint homolog, CHK2_HUMAN, Serine/threonine-protein kinase Chk2, CDS 1, CDS1, Checkpoint kinase 2, Checkpoint like protein CHK2, Chek 2, Chek2, Chk 2, CHK2 checkpoint homolog S. pombe, CHK2 checkpoint homolog, HuCds 1, HuCds1, LFS 2, LFS2, PP1425, RAD 53, RAD53, Rad53 homolog, Serine/threonine protein kinase Chk2. Background: Chk2 is a serine/threonine kinase involved in the control of cell cycle checkpoints, and may also participate in transduction of the DNA damage and replicational stress signals. Chk2 is the mammalian ortholog of the budding yeast Rad53 and fission yeast Cds1 checkpoint kinases. The amino-terminal domain of Chk2 contains a series of seven serine and threonine residues (Ser19, Thr26, Ser28, Ser33, Ser35, Ser50 and Thr68) followed by glutamine (SQ or TQ motif). These are known to be preferred sites for phosphorylation by ATM/ATR kinases. Indeed, after DNA damage by ionizing radiation (IR), UV irradiation or hydroxyurea treatment, Thr68 and other sites in this region become phosphorylated by ATM/ATR. The SQ/TQ cluster domain, therefore, seems to have a regulatory function. Phosphorylation at Thr68 is a prerequisite for the subsequent activation step, which is attributable to autophosphorylation of Chk2 on residues Thr383 and Thr387 in the activation loop of the kinase domain. Chk2 inhibits CDC25C phosphatase by phosphorylating it on Ser-216, preventing the entry into mitosis. This kinase may have a role in meiosis as well. Kinase activity is up regulated by autophosphorylation and the protein is rapidly phosphorylated in response to DNA damage and to replication block.
Gene ID:	11200
Pathways:	p53 Signaling, Apoptosis, Cell Division Cycle

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
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:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months