antibodies - online.com







anti-CHEK1 antibody (pSer280)

IgG

Human

Images



0,400	
Over	$(/) \rightarrow (/)$
O V C I	V I C V V

Quantity:	100 μL
Target:	CHEK1
Binding Specificity:	pSer280
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CHEK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA
Product Details	
Immunogen:	Peptide sequence around phosphorylation site of serine 280 (V-T-S(p)-G-G) derived from Human Chk1.

Purification:

Cross-Reactivity:

Isotype:

	•	,	J	,	•		•	
conjugates. Ant	tibodies we	re purified by	affinity-chrom	natograph	ny usin	g epito	pe-specif	ic
phosphopeptide	e. Non-pho	spho specific	antibodies we	ere remov	ed by	chrom	atogramp	hy usi

Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH

Target Details

Target:	CHEK1
Alternative Name:	CHEK1 (CHEK1 Products)

Background:

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.

Conn CW, et al. (2004) Dev Cell, 7(2): 275-81

King FW, et al. (2004)Cell Cycle, 3(5): 634-7

Shtivelman E, et al. (2002) Curr Biol, 12(11): 919-24

Aliases: C85740 antibody, Cell cycle checkpoint kinase antibody, Checkpoint, S. pombe, homolog of, 1 antibody, Checkpoint kinase 1 antibody, Checkpoint kinase 1 homolog (S. pombe) antibody, CHEK 1 antibody, Chek1 antibody, Chk 1 antibody, Chk1 antibody, CHK1 checkpoint homolog (S. pombe) antibody, CHK1_HUMAN antibody, EC 2.7.11.1 antibody, rad27 antibody, Serine/threonine protein kinase Chk1 antibody, Serine/threonine-protein kinase CHK1 antibody, STT3, subunit of the oligosaccharyltransferase complex, homolog A (S. cerevisiae) antibody

UniProt:

014757

Pathways:

p53 Signaling, Apoptosis, Cell Division Cycle, DNA Damage Repair

Application Details

Application Notes:

WB:1:500-1:1000,

Restrictions:

For Research Use only

Handling

Format:	Liquid
Buffer:	Supplied at 1.0 mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
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:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

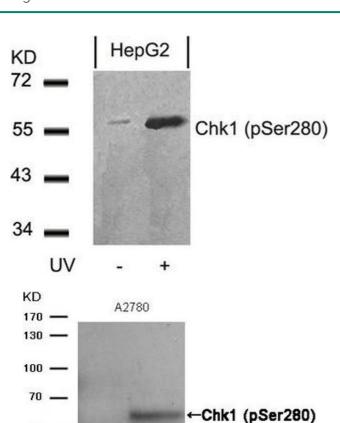
Images

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CIP



Western Blotting

Image 1. Western blot analysis of extracts from HepG2 cells untreated or treated with UV using Chk1(Phospho-Ser280) Antibody.

Western Blotting

Image 2. Western blot analysis of extracts from A2780 cells, treated with calf intestinal phosphatase (CIP), using Chk1 (Phospho-Ser280) Antibody.