

Chk1(Phospho-Ser280) Antibody

Catalog No: #11140



Package Size: #11140-1 50ul #11140-2 100ul #11140-4 25ul

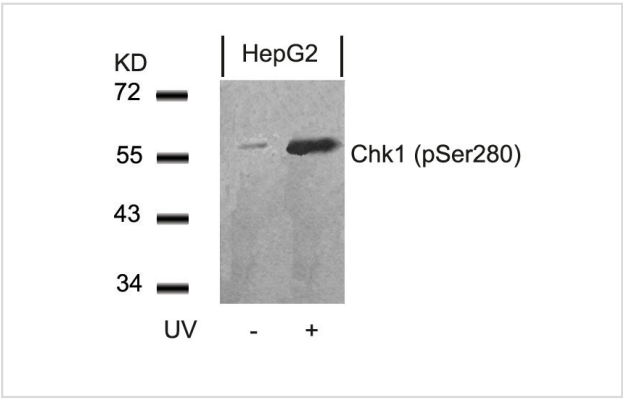
Overview

Product Name	Chk1(Phospho-Ser280) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB
Species Reactivity	Hu
Immunogen Type	Peptide-KLH
Target Name	Chk1
Modification	Phospho-Ser280
Alternative Names	CHEK1; Chk1;

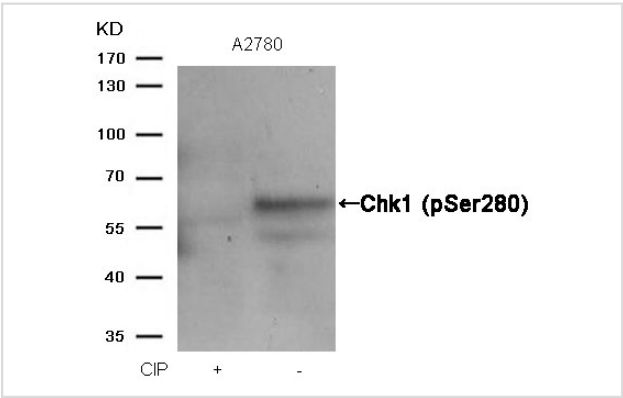
Application Details

Predicted MW: 56kd
Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from HepG2 cells untreated or treated with UV using Chk1(Phospho-Ser280) Antibody #11140.



Western blot analysis of extracts from A2780 cells, treated with calf intestinal phosphatase (CIP), using Chk1 (Phospho-Ser280) Antibody #11140.

Descriptions

Immunogen	Peptide sequence around phosphorylation site of serine 280 (V-T-S(p)-G-G) derived from Human Chk1.
Specificity	The antibody detects endogenous level of Chk1 only when phosphorylated at serine 280.
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.
Accession NO.	Swiss-Prot: O14757NCBI Protein: NP_001107593.1

Related Information

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

Note: This product is for in vitro research use only and is not intended for use in humans or animals.