



Phospho-CHEK1 (Ser286) Antibody

Product Code	CSB-PA064953
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O14757
Immunogen	Peptide sequence around phosphorylation site of serine 286 (S-E-S(p)-P-S) derived from Human Chk1.
Raised In	Rabbit
Species Reactivity	Human
Specificity	The antibody detects endogenous level of Chk1 only when phosphorylated at serine 286.
Tested Applications	ELISA,WB;WB:1:500-1:1000
Relevance	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. Enomoto M, et al. (2009)J Biol Chem 284, 34223-3 Ikegami Y, et al. (2008)Biochem Biophys Res Commun 377, 1227-31 Shiromizu T, et al. (2006)Genes Cells 11, 477-85
Form	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	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
Clonality	Polyclonal



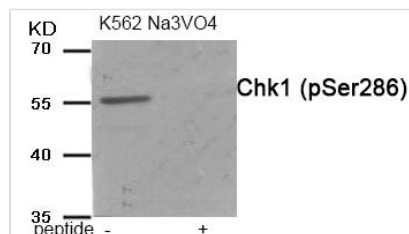
Alias CHEK1; CHK1; CHK1 checkpoint homolog;

Product Type Polyclonal Antibody

Species Homo sapiens (Human)

Target Names CHEK1

Image



Western blot analysis of extracts from K562 cells treated with Na₃VO₄ using Chk1 (Phospho-Ser286) antibody. The lane on the right is treated with the antigen-specific peptide.

Product Modify Phospho-Ser286