Data Sheet (Cat.No.TMAC-00834)

Anti-Phospho-CHEK1 (Ser286) Polyclonal Antibody

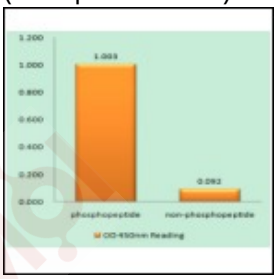
Product Details

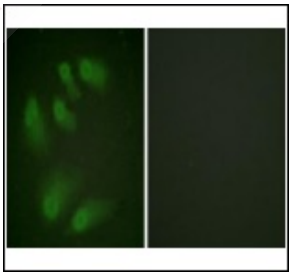
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Actual: 55 kDa.
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

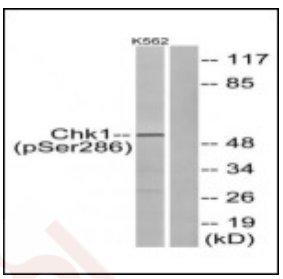
Applications

Verified Activity:

1. Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and NonPhosphopeptide (Phospho-right), using Chk1 (Phospho-Ser286) Antibody.
2. Immunofluorescence analysis of HeLa cells, using Chk1 (Phospho-Ser286) Antibody. The picture on the right is blocked with the phospho peptide.
3. Western blot analysis of lysates from K562 cells treated with Na3VO4 0.3uM 40', using Chk1 (Phospho-Ser286) Antibody. The lane on the right is blocked with the phospho peptide.







Application:	ELISA,IF,WB
Recommended	WB: 1:500-2000; IF: 1:200-1000; ELISA: 1:5000

Properties

Stability & Storage:	Store at -15°C to -25°C for 12 months (Do not lower than -25°C). Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthesized phosphopeptide: human Chk1 around the phosphorylation site of Ser286. AA range:256-305
Antigen Species:	Human
Uniprot ID:	O14757
Synonyms:	CHEK1 (p-S286);CHEK1 (p-Ser286);p-CHEK1 (Ser286);p-CHEK1 (S286)

Research 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.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481