Product Datasheet

Chk2(Phospho-Ser516) Antibody

Catalog No: #11147

Package Size: #11147-1 50ul #11147-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

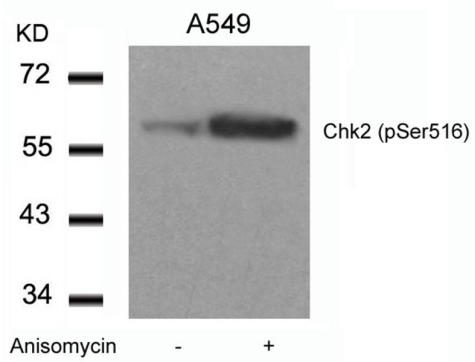
Product Name	Chk2(Phospho-Ser516) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of Chk2 only when phosphorylated at serine 516.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 516 (Q-P-S(p)-T-S) derived from Human Chk2.
Target Name	Chk2
Modification	Phospho
Other Names	CHEK2; Cds1;
Accession No.	Swiss-Prot: O96017NCBI Protein: NP_001005735.1
Uniprot	O96017
GeneID	11200;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), 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.

Application Details

Predicted MW: 62kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from A549 cells untreated or treated with Anisomycin using Chk2(Phospho-Ser516) Antibody #11147.

Background

In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by Chk2 gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential for activation in response to DNA damage and is rapidly phosphorylated in response to replication blocks and DNA damage. When activated, the encoded protein is known to inhibit CDC25C phosphatase, preventing entry into mitosis, and has been shown to stabilize the tumor suppressor protein p53, leading to cell cycle arrest in G1. In addition, this protein interacts with and phosphorylates BRCA1, allowing BRCA1 to restore survival after DNA damage. Mutations in this gene have been linked with Li-Fraumeni syndrome, a highly penetrant familial cancer phenotype usually associated with inherited mutations in TP53. Also, mutations in this gene are thought to confer a predisposition to sarcomas, breast cancer, and brain tumors. This nuclear protein is a member of the CDS1 subfamily of serine/threonine protein kinases. Three transcript variants encoding different isoforms have been found for this gene.

Wu X, Chen J et al.(2003)J Biol Chem; 278(38): 36163-8

Schwarz JK, et al.(2003)Mol Cancer Res; 1(8): 598-609

Lou Z, et al.(2003) Nature; 421(6926): 957-61

Note: This product is for in vitro research use only