

35-1141: Polyclonal Antibody to Chk2 (Phospho-Ser516)

Clonality :	Polyclonal
Application :	WB
Reactivity :	Human
Gene :	CHEK2
Gene ID :	11200
Uniprot ID :	O96017
Format :	Purified
Alternative Name :	CHEK2, Cds1
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 516 (Q-P-S(p)-T-S) derived from Human Chk2.

Description

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

Product Info

Amount :	50 µl / 100 µl
Content :	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 condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 62kd, Western blotting: 1:500~1:1000

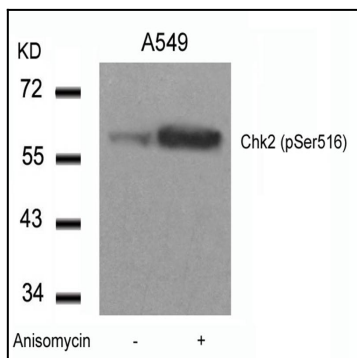


Figure 1: Western blot analysis of extracts from A549 cells untreated or treated with Anisomycin using Chk2(Phospho-Ser516) Antibody 35-1141 .