

Basic Information

Product Name	Anti-CHEK2 (Phospho-T68) Antibody (Clone#27C74)
Gene Name	CHEK2
Source	Rabbit
Clonality	Monoclonal
Isotype	IgG
Species Reactivity	human
Tested Application	WB, IP
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.
Immunogen	A synthesized peptide derived from human Phospho-Chk2 (T68)
Concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	61 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 ImmunoPrecipitation (IP):1:50

Storage

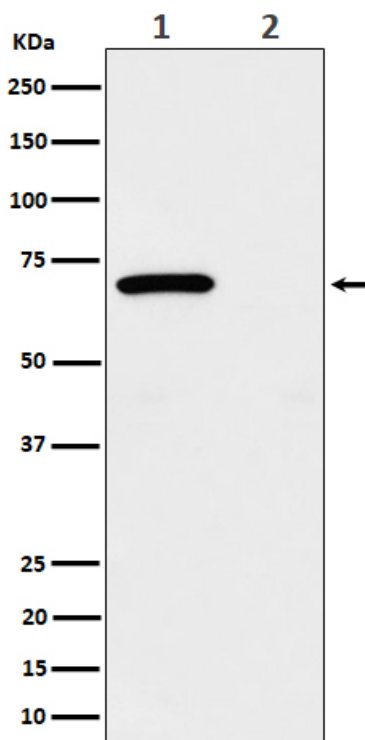
12 months from date of receipt, -20°C as supplied.

Background Information

CHK2, a protein kinase that is activated in response to DNA damage, is involved in cell cycle arrest. Mapped on 22q12.1, CHK2 has a potential regulatory region rich in SQ and TQ amino acid pairs. It regulates BRCA1 function after DNA damage by phosphorylating serine-988 of BRCA1. Additionally, CHK2 can be modified by phosphorylation and activated in response to ionizing radiation, and can be also modified in response to hydroxyurea treatment. Furthermore, oligomerization of CHEK2 increases the efficiency of transautophosphorylation, resulting in the release of active CHEK2 monomers that proceed to enforce checkpoint control in irradiated cells. Moreover, CHK2 is a tumor suppressor gene conferring predisposition to sarcoma, breast cancer, and brain tumors, and that their observations provided a link between the central role of p53 inactivation in human cancer and the well-defined G2 checkpoint in yeast. There is a wide expression of small amounts of CHK2 mRNA with larger amounts in human testis, spleen, colon,

and peripheral blood leukocytes.

Selected Validation Data



Western blot analysis of Phospho-Chk2 (T68) expression in (1) 293 treated with UV and Untreated cell lysate; (2) Untreated.