

Product datasheet for **AP23321PU-N**

Chk2 (CHEK2) (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western blot: 0.75 µg/ml.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a sequence at the C-terminal of human CHK2
Specificity:	This antibody detects CHK2 (C-term).
Formulation:	5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ N State: Aff - Purified State: Lyophilized Ig fraction
Reconstitution Method:	0.2ml of distilled water will yield a concentration of 500µg/ml.
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	checkpoint kinase 2
Database Link:	Entrez Gene 50883 Mouse Entrez Gene 114212 Rat Entrez Gene 11200 Human O96017



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Background:

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 treatment². Furthermore, oligomerization of CHK2 increases the efficiency of transautophosphorylation, resulting in the release of active CHK2 monomers that proceed to enforce checkpoint control in irradiated cells³. 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 yeast⁴. There is a wide expression of small amounts of CHK2 mRNA with larger amounts in human testis, spleen, colon, and peripheral blood leukocytes.

Synonyms:

CHEK2, CHEK-2, CHK-2, RAD53, Cds1

Protein Families:

Druggable Genome, Protein Kinase, Stem cell - Pluripotency

Protein Pathways:

Cell cycle, p53 signaling pathway

Product images: