

Product datasheet for **AM06242SU-N**

Chk2 (CHEK2) Mouse Monoclonal Antibody [Clone ID: 1C12B8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1C12B8
Applications:	ELISA, IF, IHC, WB
Recommended Dilution:	ELISA: 1/10000. Western Blotting: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. Immunohistochemistry on Paraffin Sections: 1/200 - 1/1000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human CHK2 (aa481-531) expressed in E. Coli.
Specificity:	Recognizes CHK2
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for 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 11200 Human O96017



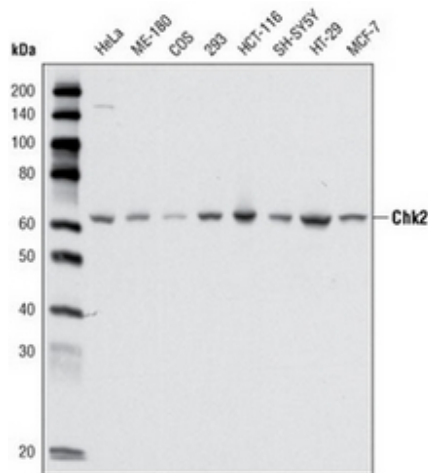
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Background:

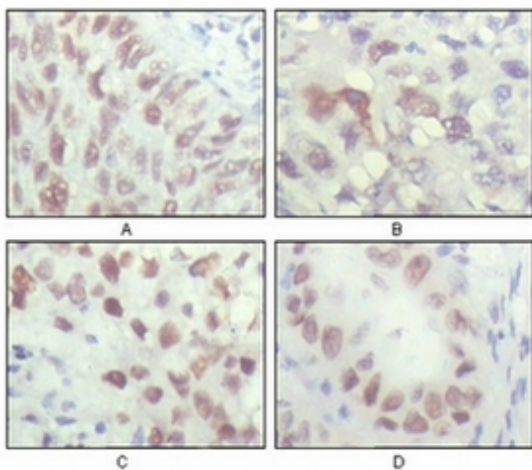
In response to DNA damage and replication blocks, cell cycle progression is halted through the control of critical cell cycle regulators. The protein encoded by this gene is a cell cycle checkpoint regulator and putative tumor suppressor. It contains a forkhead-associated protein interaction domain essential 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.

Synonyms:

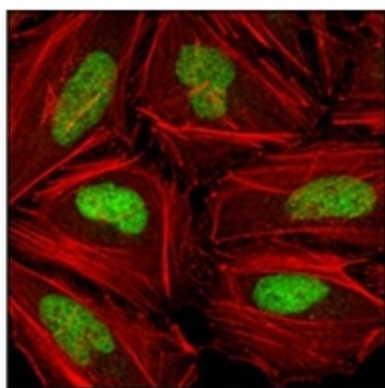
CHEK2, CHEK-2, CHK-2, RAD53, Cds1

Product images:

Western blot analysis using CHK2 antibody Cat.-No AM06242SU-N against cell lysate from various cell types.



Immunohistochemical analysis of paraffin-embedded human lung carcinoma (A), liver carcinoma (B), breast carcinoma (C) and kidney carcinoma (D), showing nuclear localization with DAB staining using CHK2 antibody Cat.-No AM06242SU-N



Confocal immunofluorescence analysis of HeLa cells using CHK2 antibody Cat.-No AM06242SU-N (green), showing nuclear localization. Red: Actin filaments have been labeled with DY-554 phalloidin.