



## CHK2 Mouse Monoclonal Antibody

E10-20223

**Background:** CHK2. CHK2 checkpoint homolog (*S. pombe*). 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,. 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.

**Catalog Number:** E10-20223

**Amount:** 100µg/100µl

**Clone Number:** 1C12B8

**Species:** Mouse IgG2b

**MW:** 61kDa

**Aliases:** CDS1; LFS2; CHEK2

**Entrez Gene:** 11200

**Immunogen:** Purified recombinant fragment of human CHK2 (aa481-531) expressed in *E. Coli*.

**Storage:** Store at 4 °C; for long term storage, store at -20 °C

**Formulation:** Ascitic fluid containing 0.03% sodium azide.

**Species Reactivities:** Human

**Tested Applications:** WB ,IHC,IF,ELISA. Not yet tested in other applications. Determining optimal working dilutions by titration test.

**Application notes:** WB.1/500 - 1/2000.IHC.1/200 - 1/1000.IF.1/200 - 1/1000.ELISA. Propose dilution 1/10000.

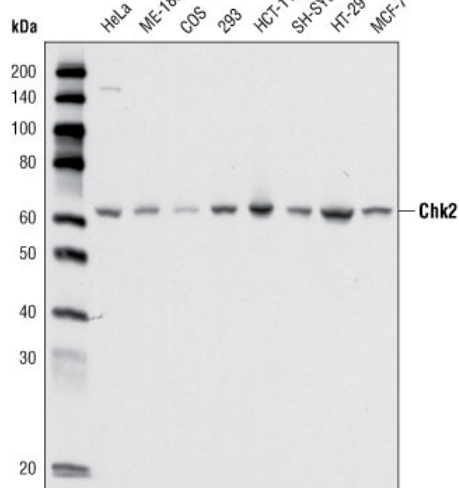


Figure 1. Western blot analysis using CHK2 mouse mAb against cell lysate from various cell types.

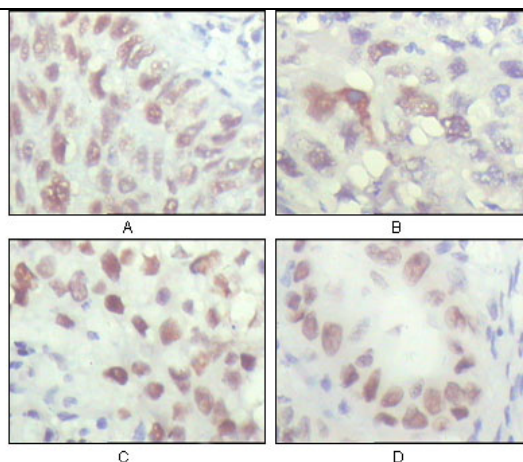


Figure 2. Immunohistochemical analysis of paraffin-embedded human lung carcinoma (A), liver carcinoma (B), breast carcinoma (C) and kidney carcinoma (D), showing nuclear localization with DAB staining using CHK2 mouse mAb.

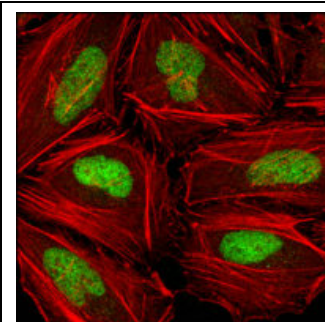


Figure 3. Confocal immunofluorescence analysis of HeLa cells using CHK2 mouse mAb (green), showing nuclear localization. Red. Actin filaments have been labeled with DY-554 phalloidin.

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