

Product datasheet for **TA336399**

Chk2 (CHEK2) Mouse Monoclonal Antibody [Clone ID: 73C175.1.1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	73C175.1.1
Applications:	IHC, WB
Recommend Dilution:	WB: 2 ug/ml, IHC: , IHC-P:
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	A portion of amino acids 100-150 of human Chk2 protein was used as immunogen for this antibody.
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	0.5 mg/ml
Purification:	Protein G purified
Gene Name:	checkpoint kinase 2
Database Link:	NP_009125 Entrez Gene 50883 Mouse Entrez Gene 11200 Human
Background:	Chk2 (checkpoint kinase 2) is the mammalian homolog of the <i>Saccharomyces cerevisiae</i> Rad53 and is required for the DNA damage and replication checkpoints (1). In response to low-dose ionizing radiation (IR), which occurs in an ataxia telangiectasia mutated (ATM)-dependent manner, Chk2 can phosphorylate the mitosis-inducing phosphatase Cdc25C on an inhibitory site, blocking entry into mitosis, and p53 on a regulatory site, causing G1 arrest (2,3). In human tissues, Chk2 is homogeneously expressed in renewing cell populations such as epidermis or intestine, heterogeneous in conditionally renewing tissues, and absent or at low level in static tissues such as muscle or brain (4). Mutations in Chk2 inactivates DNA damage checkpoint pathway involving Chk2 in lung cancer suggesting that reduced expression of Chk2 may be responsible for the development of lung cancer (5). The Chk2 ^{-/-} knockout cells are resistant to DNA damage-induced apoptosis, defective for p53 stabilization and for induction of p53-dependent transcripts such as p21 in response to gamma irradiation (6).



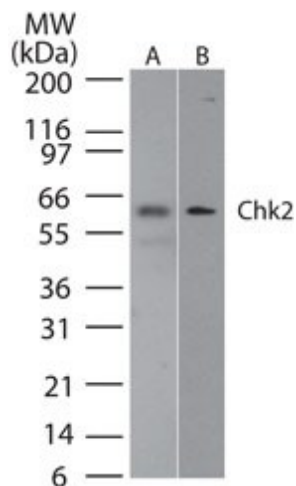
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Synonyms: CDS1; CHK2; hCds1; HuCds1; LFS2; PP1425; RAD53

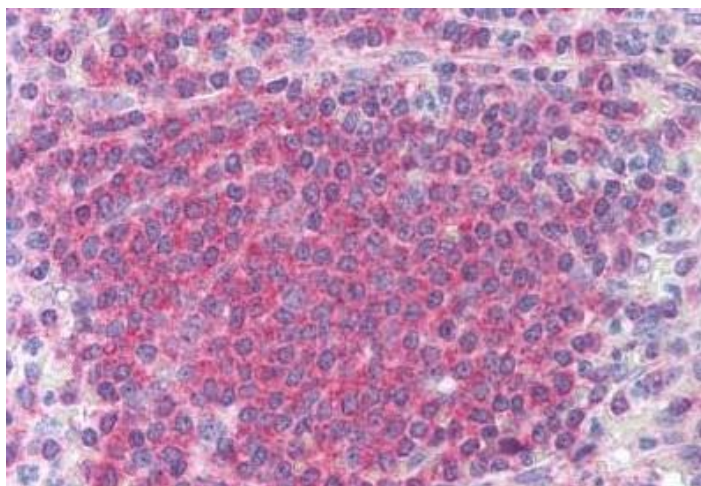
Protein Families: Druggable Genome, Protein Kinase, Stem cell - Pluripotency

Protein Pathways: Cell cycle, p53 signaling pathway

Product images:



Western Blot: Chk2 Antibody (73C175.1.1) TA336399 - analysis of Chk2 in A) human HEK293 and B) mouse NIH3T3 lysate using Chk2 antibody at 2 ug/ml.



Immunohistochemistry-Paraffin: Chk2 Antibody (73C175.1.1) TA336399 - Staining of human spleen. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval. Antibody concentration 10 ug/ml.