

## Product datasheet for **TA327296**

### Chk2 (CHEK2) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:50- 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human CHEK2
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	checkpoint kinase 2
Database Link:	<a href="#">NP_009125</a> <a href="#">Entrez Gene 50883 Mouse</a> <a href="#">Entrez Gene 114212 Rat</a> <a href="#">Entrez Gene 11200 Human</a> <a href="#">O96017</a>



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**Background:**

Chk2 is the mammalian orthologue of the budding yeast Rad53 and fission yeast Cds1 checkpoint kinases. The amino-terminal domain of Chk2 contains a series of seven serine or threonine residues (Ser19, Thr26, Ser28, Ser33, Ser35, Ser50, and Thr68) each followed by glutamine (SQ or TQ motif). These are known to be preferred sites for phosphorylation by ATM/ATR kinases. After DNA damage by ionizing radiation (IR), UV irradiation, or hydroxyurea treatment, Thr68 and other sites in this region become phosphorylated by ATM/ATR. The SQ/TQ cluster domain, therefore, seems to have a regulatory function. Phosphorylation at Thr68 is a prerequisite for the subsequent activation step, which is attributable to autophosphorylation of Chk2 at residues Thr383 and Thr387 in the activation loop of the kinase domain.

**Synonyms:**

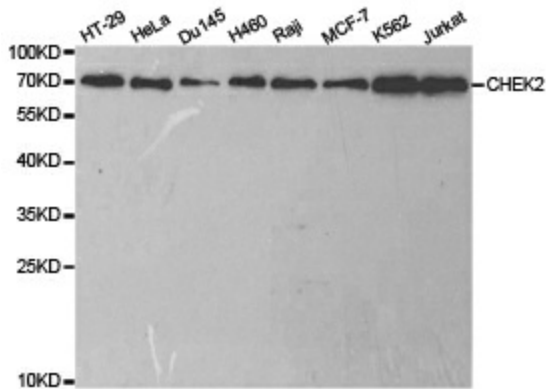
CDS1; CHK2; hCds1; HuCds1; LFS2; PP1425; RAD53

**Protein Families:**

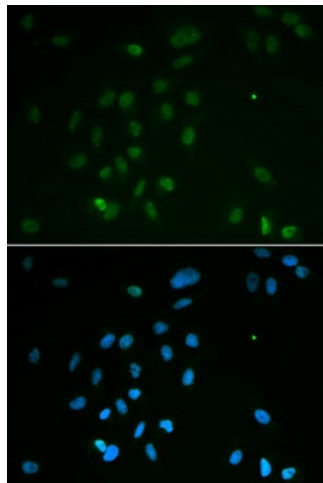
Druggable Genome, Protein Kinase, Stem cell - Pluripotency

**Protein Pathways:**

Cell cycle, p53 signaling pathway

**Product images:**


Western blot analysis of extracts of various cell lines, using CHEK2 antibody.



Immunofluorescence analysis of MCF7 cell using CHEK2 antibody. Blue: DAPI for nuclear staining.