

# **Product datasheet for AP06052PU-N**

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OriGene Technologies, Inc.

## **Chk2 (CHEK2) Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on Paraffin sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 31-80 of Human Chk2.

**Specificity:** This antibody detects endogenous levels of Chk2 protein (region surrounding Ser62).

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction Preservative: 0.05% sodium azide

Concentration: 1.0 mg/ml

**Purification:** Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-

PAGE)

Conjugation: Unconjugated

Storage: Store 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.

**Predicted Protein Size:** ~ 62 kDa

**Gene Name:** checkpoint kinase 2

Database Link: Entrez Gene 11200 Human

096017





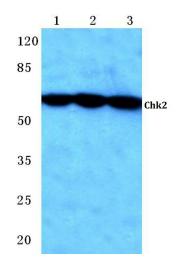
#### Background:

Cell cycle events are regulated by the sequential activation and deactivation of cyclin dependent kinases (Cdks) and by proteolysis of cyclins. Chk1 and Chk2 are involved in these processes as regulators of Cdks. Chk1 and Chk2 both function as essential components in the G2 DNA damage checkpoint by phosphorylating Cdc25C in response to DNA damage. Phosphorylation inhibits Cdc25C activity, thereby blocking mitosis. Cdc25A, Cdc25B and Cdc25C protein tyrosine phosphatases function as mitotic activators by dephosphorylating Cdc2 p34 on regulatory tyrosine residues. It has also been shown that Chk1 can phosphorylate Wee1 in vitro, providing evidence that the hyperphosphorylated form of Wee1, seen in cells delayed by Chk1 overexpression, is due to phosphorylation by Chk1.

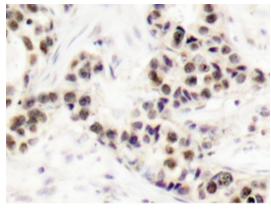
Synonyms:

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

# **Product images:**



Western blot (WB) analysis of Chk2 antibody at 1/500 dilution Lane 1:MCF-7 cell lysate Lane 2:Mouse liver tissue lysate Lane 3:Rat liver tissue lysate



Immunohistochemical analysis in paraffinembedded human breast carcinoma tissue using CHK2 antibody.