

## Product datasheet for **TA374729**

### Chk2 (CHEK2) Rabbit Polyclonal Antibody

#### Product data:

|                         |   |
|-------------------------|---|
| Product Type:           | Primary Antibodies  |
| Applications:           | WB  |
| Recommended Dilution:   | WB,1:500 - 1:2000   |
| Reactivity:             | Human, Mouse, Rat   |
| Modifications:          | Phospho S516  |
| Host:                   | Rabbit  |
| Isotype:                | IgG   |
| Clonality:              | Polyclonal  |
| Immunogen:              | A synthetic phosphorylated peptide around S516 of human Chk2 (NP_009125.1). |
| Formulation:            | Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.                     |
| Concentration:          | lot specific  |
| Purification:           | Affinity purification   |
| Conjugation:            | Unconjugated  |
| Storage:                | Store at -20°C. Avoid freeze / thaw cycles.                                 |
| Stability:              | Shelf life: one year from despatch.   |
| Predicted Protein Size: | 15-38kDa/50-65kDa   |
| Gene Name:              | checkpoint kinase 2   |
| Database Link:          | <a href="#">Entrez Gene 11200 Human O96017</a>                              |



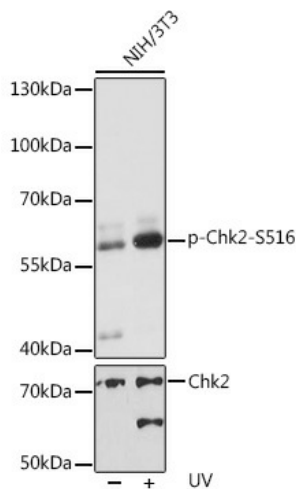
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**Background:**

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. Several transcript variants encoding different isoforms have been found for this gene.

**Synonyms:**

bA444G7; CDS1; CHK2; HuCds1; LFS2; OTTHUMP00000199044; OTTHUMP00000199045; OTTHUMP00000199116; PP1425; RAD53

**Product images:**

Western blot analysis of extracts of NIH/3T3 cells, using Phospho-Chk2-S516 pAb (TA374729) at 1:1000 dilution or Chk2 antibody (A0466). NIH/3T3 cells were treated by UV at room temperature for 15-30 minutes. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% BSA. | Detection: ECL Basic Kit. | Exposure time: 10s.