

## Product datasheet for **TA319347**

### DNA PKcs (PRKDC) Rabbit Polyclonal Antibody

#### Product data:

|                       |   |
|-----------------------|---|
| Product Type:         | Primary Antibodies  |
| Applications:         | WB  |
| Recommended Dilution: | ELISA: 1:300,000, WB: 1:500 - 1:2,000   |
| Reactivity:           | Human, Chimpanzee   |
| Host:                 | Rabbit  |
| Isotype:              | IgG   |
| Clonality:            | Polyclonal  |
| Immunogen:            | This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids surrounding Thr 2609 of human DNA PKcs. |
| Formulation:          | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2  |
| Concentration:        | lot specific  |
| Conjugation:          | Unconjugated  |
| Storage:              | Store at -20°C as received.   |
| Stability:            | Stable for 12 months from date of receipt.  |
| Gene Name:            | protein kinase, DNA-activated, catalytic polypeptide  |
| Database Link:        | <a href="#">NP_008835</a><br><a href="#">Entrez Gene 5591 Human</a><br><a href="#">P78527</a>   |
| Synonyms:             | DNA-PKcs; DNAPK; DNPk1; HYRC; HYRC1; IMD26; p350; XRCC7   |



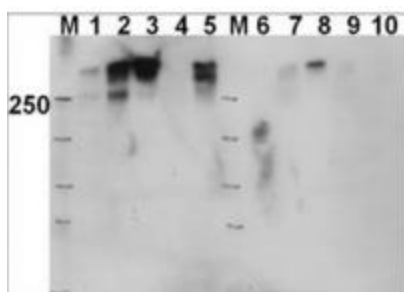
[View online »](#)

**Note:** DNA dependent Protein Kinase (also called DNAPK, DNPk1, HYRC1, Protein Kinase DNA Activated Catalytic Polypeptide, XRCC7 and p460) consists of the 460 kDa DNA PKcs and a heterodimeric regulatory complex comprised of p70 Ku and p80 Ku (Ku autoantigen). DNA PKcs is a nuclear protein serine/threonine kinase present in a wide variety of eukaryotic species. DNA PKcs phosphorylates transcription factors, Sp1, Oct-1, p53 and SV40 large T antigen. DNA PKcs is involved in repairing double stranded DNA breaks. At the onset of apoptosis, DNA PKcs is rapidly inactivated by cleavage of the catalytic subunit into smaller polypeptides. Proteolysis of DNA PKcs is inhibited by the cysteine protease inhibitors iodoacetamide and N-ethylmaleimide. Alternative splicing can occur for this protein to produce at least two isoforms.

**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Cell cycle, Non-homologous end-joining

**Product images:**



WB using Anti-DNAPKcs antibody shows detection of a 460 kDa band corresponding to human DNAPKcs in various preparations. Lane 1: Fus1 untreated, Lane 2: Fus1 IR (20Gy, 4h), Lane 3: Fus1 DNAPK inhibitor + IR, Lane 4: MO59J (DNAPK-) untreated, Lane 5: MO59J IR, Lane 6: Fus1 untreated, Lane 7: Fus1 IR (20Gy, 4h), Lane 8: Fus1 DNAPK inhibitor + IR, Lane 9: MO59J untreated, Lane 10: MO59J IR. The primary antibody was used at 1:1,000.