

## Product datasheet for **TA328095**

### Prkdc Mouse Monoclonal Antibody [Clone ID: 10B1]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	10B1
Applications:	WB
Recommended Dilution:	WB, IF
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	Modified peptide
Formulation:	This DNA-PKcs antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. Final antibody concentration is 0.5 mg/ml.
Concentration:	lot specific
Purification:	The antibody was purified by affinity chromatography.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	470 kD
Gene Name:	protein kinase, DNA activated, catalytic polypeptide
Database Link:	<a href="#">NP_035289</a> <a href="#">Entrez Gene 5591 Human</a> <a href="#">P97313</a>



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**Background:**

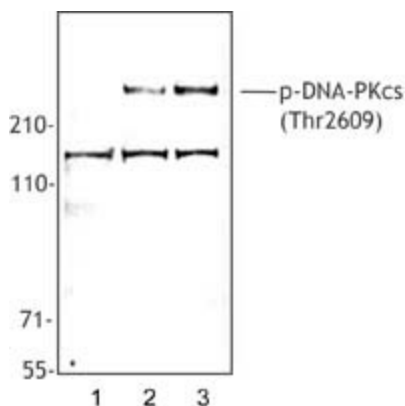
DNA-protein kinase catalytic subunit (DNA-PKcs) also known as DNA-activated kinase is a nuclear 460-470 kD serine threonine kinase involved in double-stranded DNA break repair, VDJ recombination, and transcriptional modulation. DNA-PKcs must bind DNA ends to become active. DNA-PKcs is modified by phosphorylation and has been shown to interact with Ku70/Ku80, KIP, DNA-ligase IV, and XRCC4 proteins. Phosphorylated DNA-PKcs is upregulated after DNA damage. The 10B1 monoclonal antibody recognizes phosphorylated human DNA-PKcs (Thr2609) and has been shown to be useful for immunofluorescence staining and Western blotting.

**Synonyms:**

DNA-PKcs; DNAPK; DNPK1; HYRC; HYRC1; p350; p460; XRCC7

**Note:**

reacts with Thr2609-phosphorylated DNA-PKcs

**Product images:**

MOLT4 nuclear extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with anti-DNA-PKcs (Thr2609) antibody. Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system. Lane 1, untreated MOLT4 cells. Lane 2, MOLT4 cells exposed to 2 Gy radiation. Lane 3, MOLT4 cells exposed to 10 Gy radiation. In both cases, cells were harvested 30 minutes after radiation.