

**Catalog #: 61159** 

#### **Aliases**

PRKDC; Protein Kinase, DNA-Activated, Catalytic Subunit; DNPK1; P460; DNA-Dependent Protein Kinase Catalytic Subunit; DNA-PKcs; DNA-PKC; DNAPK; XRCC7; HYRC1; P350; HYRC; Protein Kinase, DNA-Activated, Catalytic Polypeptide; DNA-PK Catalytic Subunit; EC 2.7.11.1; DNAPKc; Hyper-Radiosensitivity Of Murine Scid Mutation, Complementing 1; DNA-PKCS; DNAPKC; IMD26

### **Background**

Gene Name: PRKDC NCBI Gene Entry: 5591 UniProt Entry: P78527

### **Application Information**

Molecular Weight: Predicted, 469 kDa, observed, 469 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 23GB2055

Species Reactivity: Human

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC)

#### Immunogen

A synthesized peptide derived from human DNA-PKcs

#### **Isotype**

Rabbit IgG

### **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

#### **Storage**

Store at -20 °C for one year.

#### **Recommended Dilutions**

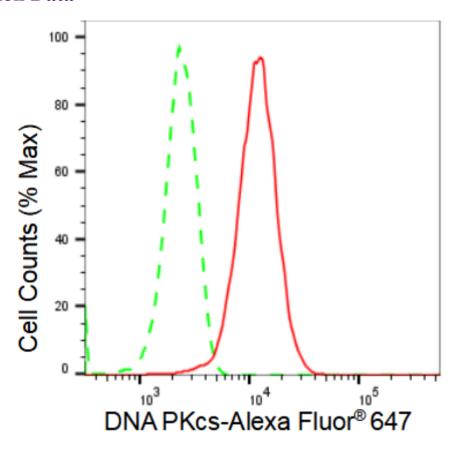
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

Immunocytochemistry (IC): 1:100-1:1,000

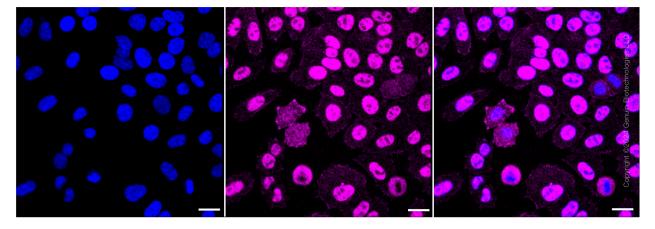
**Note:** This product is for research use only.

#### **Validation Data**

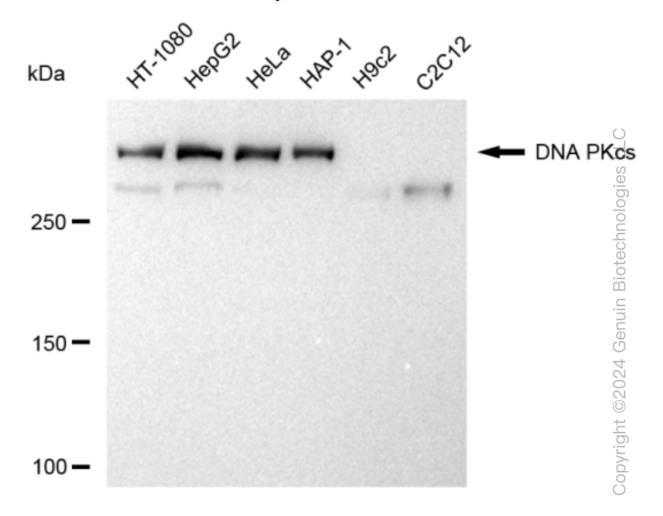


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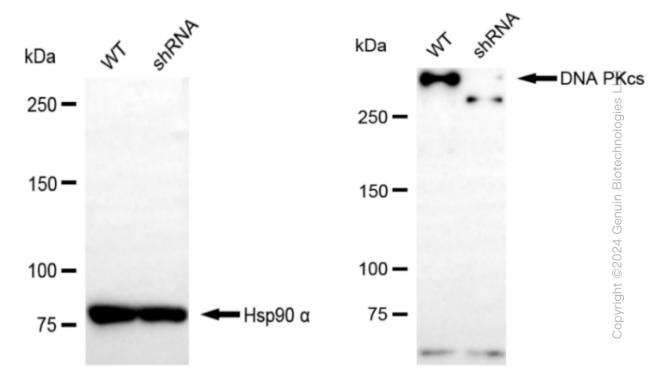
Flow cytometric analysis of DNA PKcs expression in HepG2 cells using DNA PKcs antibody (Cat#61159, 1:2,000). Green, isotype control; red, DNA PKcs.



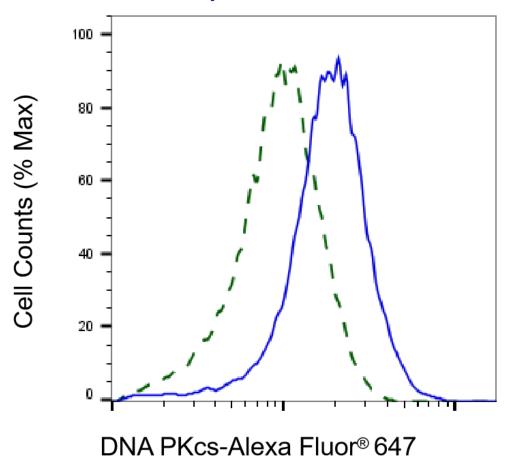
Immunocytochemical staining of HepG2 cells with DNA PKcs antibody (Cat#61159, 1:1,000). Nuclei were stained blue with DAPI; DNA PKcs was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



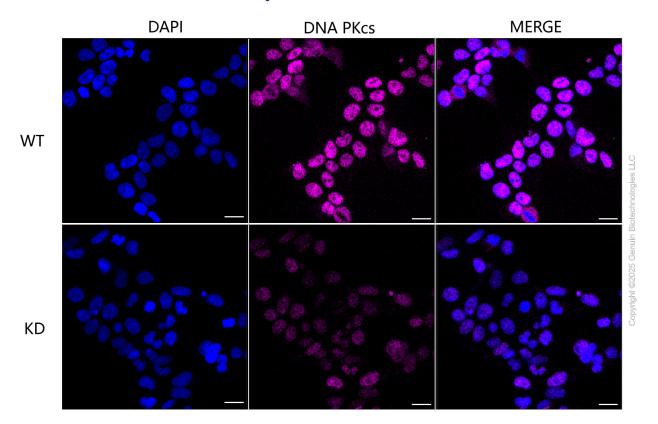
Western blotting analysis using anti-DNA PKcs antibody (Cat#61159). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-DNA PKcs antibody (Cat#61159, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-DNA PKcs antibody (Cat#61159). DNA PKcs expression in wild type (WT) and DNA PKcs shRNA knockdown (KD) HeLa cells with 30 μg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-DNA PKcs antibody (Cat#61159, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).



Validation of DNA PKcs knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-DNA PKcs antibody (Cat#61159, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of Hela cells using anti-DNA PKcs antibody (Cat#61159, 1:1,000), Top panel: wild-type (WT); Bottom panal: DNA PKcs shRNA knockdown (KD). Nuclei were stained blue with DAPI; DNA PKcs was stained magenta with Alexa Fluor® 647. Scale bar, 20  $\mu$ m.

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