[KD Validated] Anti-Phospho-DNA PKcs (Ser2056) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021851

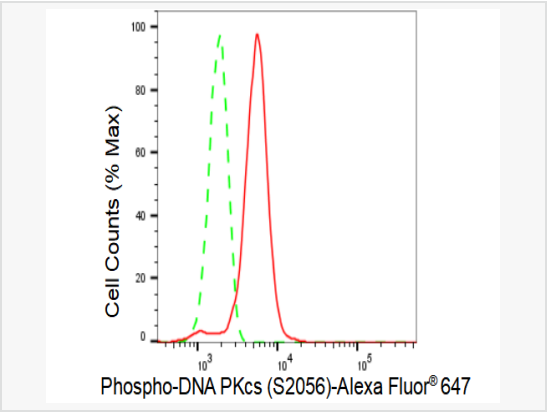
Product Information

Application	WB, FC, IF (Cell)/ICC
Reactivity	Human
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	37B56S55
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Phospho-DNA PKcs (Ser2056)
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-Phospho-DNA PKcs (Ser2056) Rabbit mAb [37B56S55] is for research use only and not for use in diagnostic or therapeutic procedures.

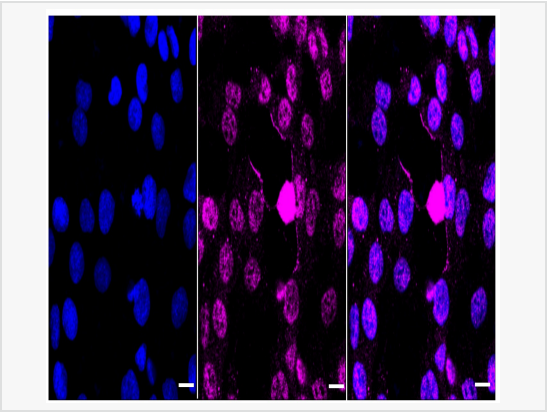
Protein Information

Synonyms	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.
Calculated MW	Calculated MW: 469 kDa, Observed MW: 469 kDa
Uniprot ID	P78527
Gene ID	5591
Background	The PRKDC gene encodes the catalytic subunit of a nuclear DNA-dependent serine/threonine protein kinase (DNA-PK). The second component is the autoimmune antigen Ku (MIM 152690), which is encoded by the G22P1 gene on chromosome 22q. On its own, the catalytic subunit of DNA-PK is inactive and relies on the G22P1 component to direct it to the DNA and trigger its kinase activity; PRKDC must be bound to DNA to express its catalytic properties.

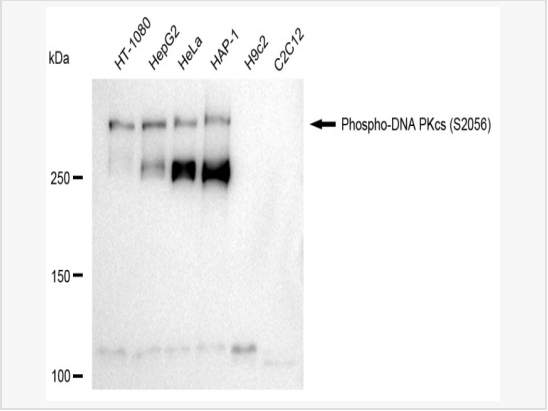
Validation Images



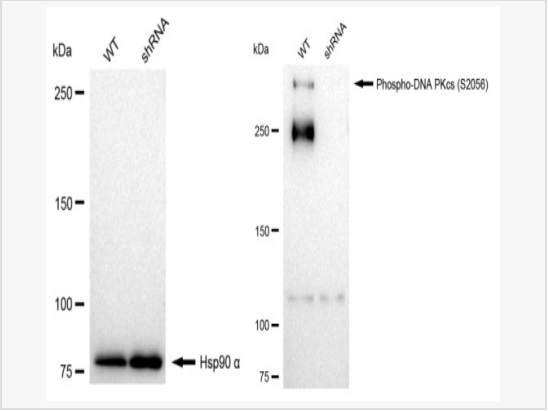
Flow cytometric analysis of Phospho-DNA PKcs (S2056) expression in HT-1080 cells using Phospho-DNA PKcs (S2056) antibody (R021851, 1:2,000). Green, isotype control; red, Phospho-DNA PKcs (S2056).



Immunocytochemical staining of HT-1080 cells with Phospho-DNA PKcs (S2056) antibody (R021851, 1:1,000). Nuclei were stained blue with DAPI; Phospho-DNA PKcs (S2056) 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 Phospho-DNA PKcs (S2056) antibody (R021851). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Phospho-DNA PKcs (S2056) antibody (R021851, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Phospho-DNA PKcs (S2056) antibody (R021851). Phospho-DNA PKcs (S2056) expression in wild type (WT) and phospho-DNA PKcs (S2056) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Phospho-DNA PKcs (S2056) antibody (R021851, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.