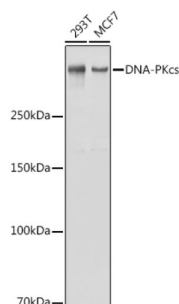
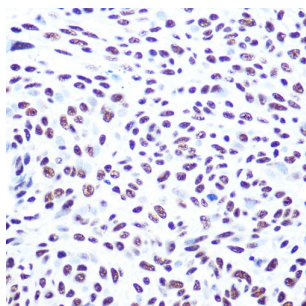


DNA-Dependent Protein Kinase Catalytic Subunit (PRKDC) Antibody

Catalogue No.: abx001229



Western blot analysis of various lysates using DNA-PKcs Antibody at 1/1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1/10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Exposure time: 1s.



Immunohistochemistry analysis of paraffin-embedded Human esophageal cancer using DNA-PKcs Antibody at dilution of 1/100 (40x lens). High pressure antigen retrieval performed in 0.01 M Citrate buffer (pH 6.0) prior to IHC staining.

PRKDC Antibody is a Rabbit Polyclonal antibody against PRKDC. PRKDC, also named as HYRC, HYRC1, DNPK1 and p460, belongs to the PI3/PI4-kinase family. PRKDC is a serine/threonine-protein kinase that acts as a molecular sensor for DNA damage. Involved in DNA nonhomologous end joining (NHEJ), PRKDC is required for double-strand break (DSB) repair and V(D)J recombination. PRKDC must be bound to DNA to express its catalytic properties. It promotes processing of hairpin DNA structures in V(D)J recombination by activation of the hairpin endonuclease artemis (DCLRE1C). It is required to protect and align broken ends of DNA. PRKDC may also act as a scaffold protein to aid the localization of DNA repair proteins to the site of damage. It is found at the ends of chromosomes, suggesting a further role in the maintenance of telomeric stability and the prevention of chromosomal end fusion. It also involved in modulation of transcription. It recognizes the substrate consensus sequence [ST]-Q. PRKDC phosphorylates 'Ser-139' of histone variant H2AX/H2AFX, thereby regulating DNA damage response mechanism. It phosphorylates DCLRE1C, c-Abl/ABL1, histone H1, HSPCA, c-jun/JUN, p53/TP53, PARP1, POU2F1, DHX9, SRF, XRCC1, XRCC4, XRCC5, XRCC6, WRN, c-myc/MYC and RFA2. The antibody recognizes the C-term of PRKDC.

Target: DNA-Dependent Protein Kinase Catalytic Subunit (PRKDC)

Clonality: Polyclonal

Reactivity: Human

Tested Applications: ELISA, WB, IHC

Host: Rabbit

Recommended dilutions: ELISA: 1 µg/ml, WB: 1/500 - 1/1000, IHC-P: 1/50 - 1/200. Not tested in IHC-F. Optimal dilutions/concentrations should be determined by the end user.

Conjugation: Unconjugated

Datasheet

Version: 7.0.0
Revision date: 29 Sep 2025



Immunogen:	Recombinant protein corresponding to PRKDC. The exact sequence is proprietary.
Isotype:	IgG
Form:	Liquid
Purification:	Purified by affinity chromatography.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P78527 (UniProt , ExPASy)
Gene Symbol:	PRKDC
GeneID:	5591
OMIM:	600899
NCBI Accession:	NP_008835.5
HGNC:	9413
KEGG:	hsa:5591
Ensembl:	ENSG00000253729
String:	9606.ENSP00000313420
Molecular Weight:	Calculated MW: 469 kDa Observed MW: 450 kDa
Buffer:	PBS, pH 7.3, containing 0.09% sodium azide, 50% glycerol.
Concentration:	> 0.2 mg/ml
Note:	THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.