For Research Use Only

DNA-PKcs Recombinant antibody

Catalog Number:85370-2-RR



Basic Information	Catalog Number: 85370-2-RR Size: 100ul , Concentration: 1000 µg/ml by Nanodrop; Source: Rabbit Isotype: IgG	GenBank Accession Number: NM_006904 GeneID (NCBI): 5591 UNIPROT ID: P78527 Full Name: protein kinase, DNA-activated, catalytic polypeptide Calculated MW: 469 kDa	Purification Method: Protein A purification CloneNo.: 242676E6 Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:250-1:1000
		Observed MW: 350-460 kDa	
Applications	Tested Applications: Positive C WB, IHC, IF/ICC, ELISA WB : HeLa		Controls:
	Species Specificity:	IHC : human colon cancer tissue,	
	Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0		
Background Information	PRKDC, also named as HYRC, HYRC 1, 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 chromosomal, 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.		
Storage	Storage: Store at -20°C. Stable for one year after Storage Buffer: PBS with 0.02% sodium azide and 50°	er shipment. % glycerol pH 7.3.	
*** 20ul sizes contain 0.1% BSA	Audoring is unnecessary for -20 C S	เบเอริร	

For technical support and original validation data for this product please contact:T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
in USA), or 1(312) 455-8498 (outside USA)E: proteintech@ptglab.comW: ptglab.comW: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data





HeLa cells were subjected to SDS PAGE followed by western blot with 85370-2-RR (DNA-PKcs antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using DNA-PKcs antibody (85370-2-RR, Clone: 242676E6) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using DNA-PKcs antibody (85370-2-RR, Clone: 242676E6) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 85370-2-RR (DNA-PKcs antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



85370-2-RR DNA-PKcs

1x10^6 HepG2 cells were intracellularly stained with 0.25 ug DNA-PKcs Recombinant antibody (85370-2-RR, Clone:242676E6) and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).