DNA PKcs ANTIBODY FITC Conjugated

Catalog No: #C00869F

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Description

Product Name	DNA PKcs ANTIBODY FITC Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	ICC,IF
Species Reactivity	Hu Ms Rt
Immunogen Description	KLH conjugated synthetic peptide derived from human DNA PKcs
Conjugates	FITC
Target Name	DNA PKcs
Other Names	DNA-dependent protein kinase catalytic subunit; DNA-PK catalytic subunit; DNA-PKcs; DNPK1; p460; PRKDC; HYRC; HYRC1; Variant; DNAPK; DNAPK catalytic subunit; p350; PRKDC; Protein Kinase DNA Activated Catalytic Polypeptide; XRCC 7; XRCC7; PRKDC_HUMAN.
Accession No.	NCBI Gene ID5591
Uniprot	P78527
GeneID	5591;
Excitation Emission	494nm 518nm
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Application Details

ICC=1:50-200 IF=1:50-200

Background

Serine threonine-protein kinase that acts as a molecular sensor for DNA damage. Involved in DNA nonhomologous end joining (NHEJ) required for double-strand break (DSB) repair and V(D)J recombination. Must be bound to DNA to express its catalytic properties. Promotes processing of hairpin DNA structures in V(D)J recombination by activation of the hairpin endonuclease artemis (DCLRE1C). The assembly of the DNA-PK complex at DNA ends is also required for the NHEJ ligation step. Required to protect and align broken ends of DNA. May also act as a scaffold protein to aid the localization of DNA repair proteins to the site of damage. Found at the ends of chromosomes, suggesting a further role in the maintenance of telomeric stability and the prevention of chromosomal end fusion. Also involved in modulation of transcription. Recognizes the substrate consensus sequence [ST]-Q. Phosphorylates 'Ser-139' of histone variant H2AX H2AFX, thereby regulating DNA damage response mechanism. Phosphorylates DCLRE1C, c-Abl ABL1, histone H1, HSPCA, c-jun JUN, p53 TP53, PARP1, POU2F1, DHX9, SRF, XRCC1, XRCC1, XRCC4, XRCC5, XRCC6, WRN, c-myc MYC and RFA2. Can phosphorylate C1D not only in the presence of linear DNA but also in the presence of supercoiled DNA. Ability to phosphorylate TP53 p53 in the presence of supercoiled DNA is dependent on C1D.

Note: This product is for in vitro research use only