

DNA-PKcs Monoclonal Antibody

Catalog No: #27182



Package Size: #27182-1 50ul #27182-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

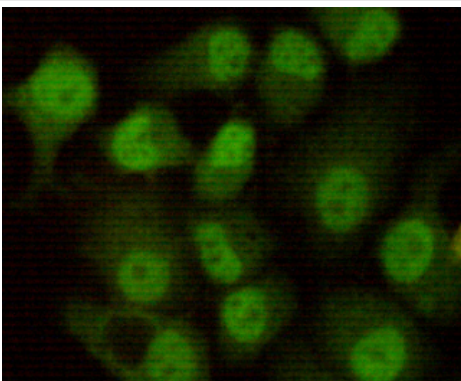
Product Name	DNA-PKcs Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	8D3-B12-F11
Isotype	IgG2b
Purification	Affinity purified
Applications	WB IP ICC
Species Reactivity	Hu
Specificity	This antibody detects endogenous levels of DNA-PKcs, and does not cross-react with related proteins.
Immunogen Type	Recombinant Protein
Immunogen Description	Purified recombinant human DNA-PKcs protein fragments expressed in E.coli
Target Name	DNA-PKcs
Other Names	DNA dependent protein kinase catalytic subunit; DNA PKcs; DNA-dependent protein kinase catalytic subunit; DNA-PK catalytic subunit; DNA-PKcs; DNAPK; DNPK1; hyper radiosensitivity of murine scid mutation, complementing 1; HYRC; HYRC1; p350; p460; PRKDC;
Accession No.	Uniprot: P78527 Gene ID: 5591
SDS-PAGE MW	450kd
Formulation	Purified mouse monoclonal in PBS(pH 7.4)containing with 0.2% sodium azide,50% glycerol.
Storage	store at -20 \wedge C

Application Details

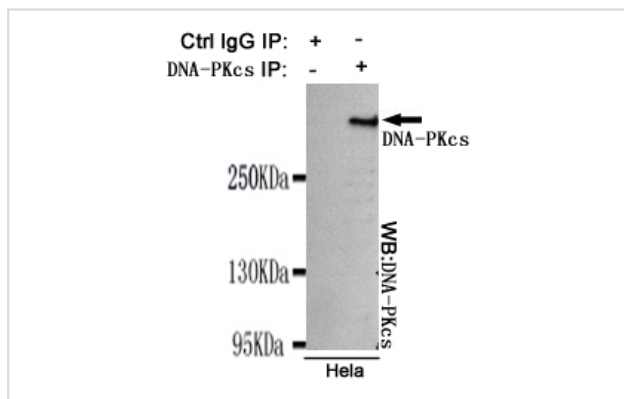
Western blotting: 1:1000

Immunocytochemistry: 1:200

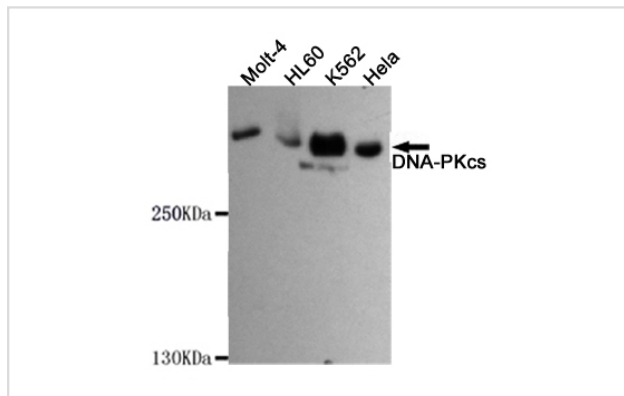
Images



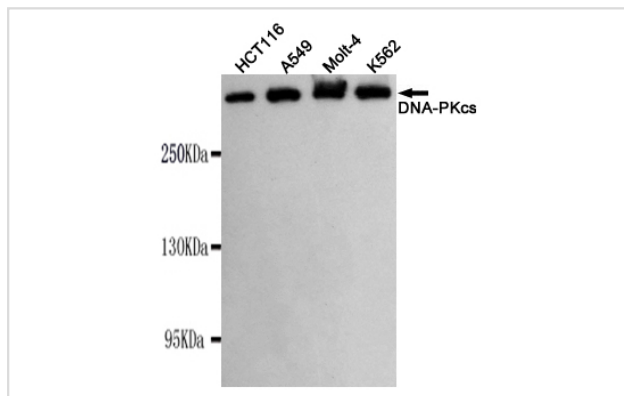
Immunocytochemistry stain of HeLa using PRKDC antibody (1:200).



Immunoprecipitation analysis of HeLa cell lysates using PRKDC antibody



Western blot detection of PRKDC in HeLa, K562, HL-60 & MOLT-4 cell lysates using PRKDC antibody (1:1000 diluted). Predicted band size: 450KDa, Observed band size: 450KDa



Western blot detection of PRKDC in K562, Molt-4, A549 and HCT116 cell lysates using PRKDC antibody (1:1000 diluted). Predicted band size: 450KDa, Observed band size: 450KDa.

Background

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, 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 p53/TP53 in the presence of supercoiled DNA is dependent on C1D.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.