DNA-PKcs Conjugated Monoclonal Antibody

Catalog No: #C27182

Package Size: #C27182-AF350 100ul #C27182-AF405 100ul #C27182-AF488 100ul #C27182-AF555 100ul #C27182-AF594 100ul #C27182-AF647 100ul #C27182-AF680 100ul #C27182-AF750 100ul #C27182-Biotin 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	DNA-PKcs Conjugated Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Specificity	This antibody detects endogenous levels of DNA-PKcs,and does not cross-react with related proteins.
Immunogen Description	Purified recombinant human DNA-PKcs protein fragments expressed in E.coli
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	DNA dependent protein kinase catalytic subuni; 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.	Swiss-Prot#: P78527NCBI Gene ID:5591
Uniprot	P78527
GeneID	5591;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Background

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