DNA-PKCS (phospho Thr2647) Monoclonal Antibody

Catalog No	BYmab-00249
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	PRKDC
Protein Name	DNA-dependent protein kinase catalytic subunit
Immunogen	The antiserum was produced against synthesized peptide derived from human DNA-PK around the phosphorylation site of Thr2647. AA range:2613-2662
Specificity	Phospho-DNA-PKCS (T2647) Monoclonal Antibody detects endogenous levels of DNA-PKCS protein only when phosphorylated at T2647.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PRKDC; HYRC; HYRC1; DNA-dependent protein kinase catalytic subunit; DNA-PK catalytic subunit; DNA-PKcs; DNPK1; p460
Observed Band	
Cell Pathway	Nucleus . Nucleus, nucleolus .
Tissue Specificity	Brain,Cervix carcinoma,Epithelium,Fetal lung,Placen
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Inhibited by wortmannin. Activity of the enzyme seems to be attenuated by autophosphorylation.,function: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
Background	This gene encodes the catalytic subunit of the DNA-dependent protein kinase (DNA-PK). It functions with the Ku70/Ku80 heterodimer protein in DNA double strand break repair and recombination. The protein encoded is a member of the PI3/PI4-kinase family.[provided by RefSeq, Jul 2010],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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