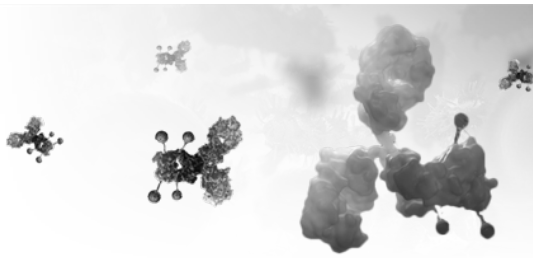

Mouse anti-Human DNA-PKcs monoclonal antibody, clone 7/EOB (CABT-B9197)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human DNA-PKcs aa. 874-1024
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	7/EOB
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IHC; IF
Format	Liquid
Concentration	250 µg/ml
Size	50 µg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	DNA-PK is a trimeric enzyme that is composed of a catalytic subunit of ~ 465 kDa (DNA-PKcs)

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	and a heterodimeric regulatory subunit of 70 kDa and 86 kDa. DNA-PKcs has been reported to be inactive alone and depends on the regulatory subunit for subcellular localization and kinase activity. DNA-PKcs belongs to the phosphatidylinositol (PI)3-kinase family and phosphorylates proteins, particularly transcription factors, but not lipids. It is most similar to the members of this family that regulate cell cycle control, DNA repair, and DNA damage. DNA-PKcs and Ku80 are involved in V(D)J recombination and DNA double-stranded break repair mechanisms. The immunodeficiency disorder SCID is the result of abnormal V(D)J recombination in T lymphocytes. In SCID mice, a portion of the DNA-PKcs C-terminal phosphatidylinositol 3-kinase domain is deleted due to a T to A nucleotide transversion that produces a premature stop codon and a truncated protein product. Thus, the mutated gene for DNA-PKcs may be the SCID gene.
Keywords	PRKDC; protein kinase, DNA-activated, catalytic polypeptide; HYRC; p350; DNAPK; DNPK1; HYRC1; IMD26; XRCC7; DNA-PKcs; DNA-dependent protein kinase catalytic subunit; p460; DNA-PK catalytic subunit; hyper-radiosensitivity of murine scid mutation, complementing 1;

GENE INFORMATION

Entrez Gene ID	5591
UniProt ID	P78527

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