

Basic Information

Product Name	Anti-DNA-PKcs/PRKDC Antibody
Gene Name	PRKDC
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	mouse, rat
Tested Application	IHC
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human DNA PKcs.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Dilution Ratios	Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH 6.0, or pH 8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

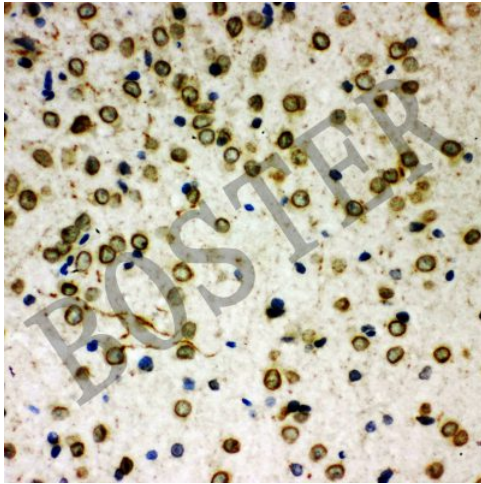
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

PRKDC (Protein Kinase DNA-Activated Catalytic Subunit), also called DNAPK, HYRC1, p350 or DNP1, is an enzyme that in humans is encoded by the PRKDC gene. DNA-PKcs belongs to the phosphatidylinositol 3-kinase-related kinase protein family. Satoh et al. (1997) mapped the MCM4 gene to 8q11.2 by FISH. Based on the close proximity of the PRKDC and MCM4 genes, it was assumed that the PRKDC gene also maps to this location. Anderson and Lees-Miller (1992) noted that DNA-PK had been shown in vitro to phosphorylate several transcription factors, suggesting that it functions in cell homeostasis by modulating transcription. Daniel et al. (1999) demonstrated that the PRKDC protein participates in retroviral DNA integration, which is catalyzed by the viral protein integrase.

Selected Validation Data



IHC analysis of DNA-PKcs/PRKDC using anti-DNA-PKcs/PRKDC antibody (BA2918-1) .

DNA-PKcs/PRKDC was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was incubated with rabbit anti-DNA-PKcs/PRKDC Antibody (BA2918-1) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.