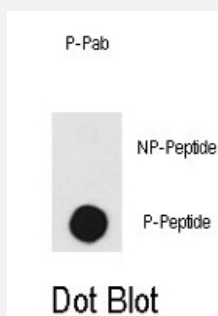


PRKDC (phospho T2609) polyclonal antibody

Catalog # PAB1636 Size 400 uL

Applications



Dot Blot (Peptide)

Dot blot analysis of PRKDC (phospho T2609) polyclonal antibody (Cat # PAB1636) on nitrocellulose membrane. 50 ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of PRKDC.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding T2609 of human PRKDC.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein A purification
Recommend Usage	Dot Blot (1:500) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Dot Blot (Peptide)

Dot blot analysis of PRKDC (phospho T2609) polyclonal antibody (Cat # PAB1636) on nitrocellulose membrane. 50 ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed.

Gene Info — PRKDC

Entrez GeneID [5591](#)

Protein Accession# [P78527](#)

Gene Name PRKDC

Gene Alias DNA-PKcs, DNAPK, DNPK1, HYRC, HYRC1, XRCC7, p350

Gene Description protein kinase, DNA-activated, catalytic polypeptide

Omim ID [600899](#)

Gene Ontology [Hyperlink](#)

Gene Summary The PRKDC gene encodes the catalytic subunit of a nuclear DNA-dependent serine/threonine protein kinase (DNA-PK). The second component is the autoimmune antigen Ku (MIM 152690), which is encoded by the G22P1 gene on chromosome 22q. On its own, the catalytic subunit of DNA-PK is inactive and relies on the G22P1 component to direct it to the DNA and trigger its kinase activity; PRKDC must be bound to DNA to express its catalytic properties.[supplied by OMIM]

Other Designations hyper-radiosensitivity of murine scid mutation, complementing 1

Publication Reference

- [Autophosphorylation of the catalytic subunit of the DNA-dependent protein kinase is required for efficient end processing during DNA double-strand break repair.](#)

Ding Q, Reddy YV, Wang W, Woods T, Douglas P, Ramsden DA, Lees-Miller SP, Meek K.

Molecular and Cellular Biology 2003 Aug; 23(16):5836.

- [Regulatory interactions between the checkpoint kinase Chk1 and the proteins of the DNA-dependent protein kinase complex.](#)

Goudelock DM, Jiang K, Pereira E, Russell B, Sanchez Y.

The Journal of Biological Chemistry 2003 May; 278(32):29940.

- [Novel localization of the DNA-PK complex in lipid rafts: a putative role in the signal transduction pathway of the ionizing radiation response.](#)

Lucero H, Gae D, Taccioli GE.

The Journal of Biological Chemistry 2003 Apr; 278(24):22136.

Pathway

- [Cell cycle](#)
- [Non-homologous end-joining](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Bone Neoplasms](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Central Nervous System Neoplasms](#)
- [DNA Damage](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)

- [Hematologic Diseases](#)
- [Hodgkin Disease](#)
- [Kidney Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Multiple Sclerosis](#)
- [Neoplasms](#)
- [Occupational Diseases](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)