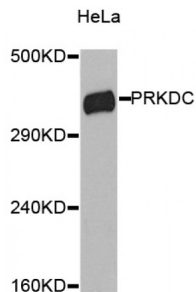


Protein Kinase, DNA Activated, Catalytic Polypeptide (PRKDC) Antibody

Catalogue No.: abx001229



Western blot analysis of extracts of HeLa cells, using PRKDC antibody (abx001229).

PRKDC Antibody is a Rabbit Polyclonal antibody against PRKDC. PRKDC, also named as HYRC, HYRC1, DNP1 and p460, belongs to the PI3/PI4-kinase family. PRKDC is a serine/threonine-protein kinase that acts as a molecular sensor for DNA damage. Involved in DNA nonhomologous end joining (NHEJ), PRKDC is required for double-strand break (DSB) repair and V(D)J recombination. PRKDC must be bound to DNA to express its catalytic properties. It promotes processing of hairpin DNA structures in V(D)J recombination by activation of the hairpin endonuclease artemis (DCLRE1C). It is required to protect and align broken ends of DNA. PRKDC may also act as a scaffold protein to aid the localization of DNA repair proteins to the site of damage. It is found at the ends of chromosomes, suggesting a further role in the maintenance of telomeric stability and the prevention of chromosomal end fusion. It also involved in modulation of transcription. It recognizes the substrate consensus sequence [ST]-Q. PRKDC phosphorylates 'Ser-139' of histone variant H2AX/H2AFX, thereby regulating DNA damage response mechanism. It phosphorylates DCLRE1C, c-Abl/ABL1, histone H1, HSPCA, c-jun/JUN, p53/TP53, PARP1, POU2F1, DHX9, SRF, XRCC1, XRCC4, XRCC5, XRCC6, WRN, c-myc/MYC and RFA2. The antibody recognizes the C-term of PRKDC.

Target: PRKDC

Reactivity: Human, Mouse

Host: Rabbit

Clonality: Polyclonal

Tested Applications: WB

Recommended dilutions: WB: 1/500 - 1/2000. Optimal dilutions/concentrations should be determined by the end user.

Immunogen: A synthetic peptide of human PRKDC.

Purification: Affinity purified.

Form: Liquid

Abbexa Ltd, Innovation Centre, Cambridge Science Park, Cambridge, CB4 0EY, UK
Telephone: +44 (0) 1223 755950 - Fax: +44 (0) 1223 755951 - E-Mail: info@abbexa.com

Isotype:	IgG
Conjugation:	Unconjugated
Storage:	Aliquot and store at -20 °C. Avoid repeated freeze/thaw cycles.
Molecular Weight:	Calculated MW: 465 kDa/469 kDa Observed MW: 460 kDa
Swiss Prot:	P78527
GeneID:	5591
Gene Symbol:	PRKDC
Concentration:	> 1 mg/ml
Buffer:	PBS, pH 7.3, 0.02% sodium azide, 50% glycerol.
Note:	This product is for research use only.