

Datasheet: AHP318

Description:	RABBIT ANTI DNA PKcs
Specificity:	DNA PKcs
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			1/100
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/2000
Gel Super Shift Assays	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) This product requires heat mediated treatment of paraffin sections. Bio-Rad recommend the use of antigen unmasking fluid for this purpose. A two hour incubation with AHP318 is recommended.

Target Species

Human

Species Cross Reactivity

Reacts with: Hamster, Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Serum - liquid

Antiserum Preparation Antisera to DNA-PKcs were raised by repeated immunisation of rabbit with highly purified antigen. Whole serum is supplied.

Preservative Stabilisers <0.1% Sodium Azide (NaN₃)

Immunogen Human DNA-PKcs fragment.

External Database Links

UniProt:
[P78527](#) [Related reagents](#)

Entrez Gene:
[5591](#) PRKDC [Related reagents](#)

Synonyms HYRC, HYRC1

RRID AB_322027

Specificity **Rabbit anti DNA PKcs antibody** recognizes the human DNA-dependent protein kinase catalytic subunit, also known as DNA-PKcs, DNPk1 or p460. DNA PKcs is a 4128 amino acid ~460 kDa nuclear protein encoded by the PRKDC gene, acting as a molecular sensor for DNA damage. Mutation of the PRKDC gene can result in Immunodeficiency 26 with or without neurologic abnormalities ([IMD26](#)) ([van der Burg et al. 2009](#)).

References

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4. Koike, M. *et al.* (1999) Differential subcellular localization of DNA-dependent protein kinase components Ku and DNA-PKcs during mitosis. [J Cell Sci. 112: 4031-9.](#)
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11. Gaymes, T.J. *et al.* (2006) Histone deacetylase inhibitors (HDI) cause DNA damage in leukemia cells: a mechanism for leukemia-specific HDI-dependent apoptosis? [Mol Cancer Res. 4 \(8\): 563-73.](#)
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13. Jayaram, S. *et al.* (2008) E1B 55k-independent dissociation of the DNA ligase IV/XRCC4 complex by E4 34k during adenovirus infection. [Virology.382: 163-70.](#)
14. Hoek, M. *et al.* (2011) An analysis of CAF-1-interacting proteins reveals dynamic and direct interactions with the KU complex and 14-3-3 proteins. [J Biol Chem. 286 \(12\): 10876-87.](#)

Further Reading 1. Finnie, N.J. *et al.* (1995) DNA-dependent protein kinase activity is absent in xrs-6 cells: implications for site-specific recombination and DNA double-strand break repair. [Proc Natl Acad Sci U S A. 92 \(1\): 320-4.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10081 available at: <https://www.bio-rad-antibodies.com/SDS/AHP318>
10081

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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