abcam

Product datasheet

Anti-PNK/PNKP antibody [EPR11934(B)] ab170954

Recombinant RabMAb

1 References 8 Images

Overview

Product name Anti-PNK/PNKP antibody [EPR11934(B)]

Description Rabbit monoclonal [EPR11934(B)] to PNK/PNKP

Host species Rabbit

Suitable for: ICC/IF, IHC-P, WB **Tested applications**

Unsuitable for: Flow Cyt or IP

Reacts with: Human Species reactivity

Does not react with: Mouse, Rat

Synthetic peptide within Human PNK/PNKP aa 50-150 (Cysteine residue). The exact sequence is **Immunogen**

proprietary.

Database link: Q96T60

Positive control HeLa, Jurkat and PC3 cell lysates; Human testis lysate; Human kidney and pancreas tissues;

PC3 cells.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply - Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

1

Purity Tissue culture supernatant

Clonality Monoclonal

Clone number EPR11934(B)

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab170954 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100 - 1/250.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000 - 1/10000. Predicted molecular weight: 57 kDa.

Application notes Is unsuitable for Flow Cyt or IP.

Target

Function Catalyzes the phosphorylation of DNA at 5'-hydroxyl termini and can dephosphorylate its 3'-

phosphate termini. Plays an important function in DNA repair following ionizing radiation or

oxidative damage.

Tissue specificity Expressed in many tissues with highest expression in spleen and testis, and lowest expression in

small intestine (PubMed:10446192). Expressed in higher amount in pancreas, heart and kidney

and at lower levels in brain, lung and liver (PubMed:10446193).

Involvement in disease Defects in PNKP are the cause of microcephaly seizures and development delay (MCSZ)

[MIM:613402]. It is characterized by microcephaly, infantile-onset seizures, severe intellectual disability and delayed motor milestones with absent speech or only achieving a few words. Most patients also have behavioral problems with hyperactivity. Microcephaly is progressive and without neuronal migration or structural abnormalities, consistent with primary microcephaly.

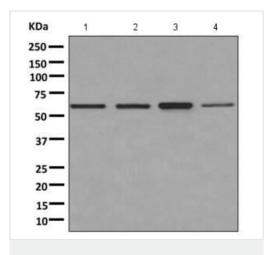
Sequence similarities In the N-terminal section; belongs to the DNA 3' phosphatase family.

Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization Nucleus.

Images



Western blot - Anti-PNK/PNKP antibody [EPR11934(B)] (ab170954)

All lanes: Anti-PNK/PNKP antibody [EPR11934(B)] (ab170954)

at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : Jurkat cell lysate

Lane 3: PC3 cell lysate

Lane 4: Human testis lysate

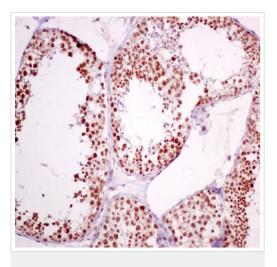
Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-rabbit HRP at 1/2000 dilution

Developed using the ECL technique.

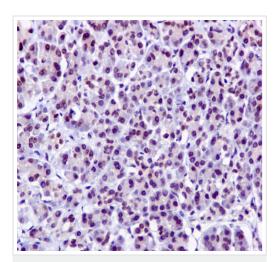
Predicted band size: 57 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PNK/PNKP antibody
[EPR11934(B)] (ab170954)

ab170954 showing +ve staining in Human testis tissue.

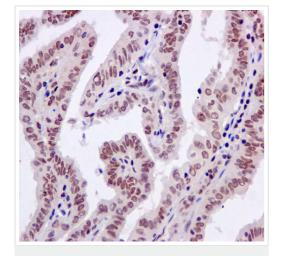
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PNK/PNKP antibody
[EPR11934(B)] (ab170954)

ab170954 showing +ve staining in Human normal pancreas tissue.

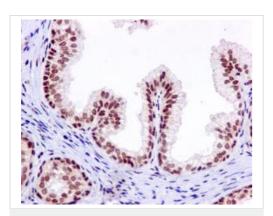
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PNK/PNKP antibody
[EPR11934(B)] (ab170954)

ab170954 showing +ve staining in Human thyroid gland carcinoma tissue.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

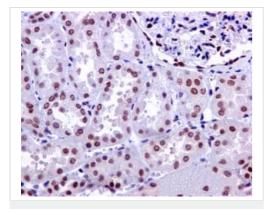


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PNK/PNKP antibody
[EPR11934(B)] (ab170954)

Immunohistochemical analysis of paraffin-embedded Human prostate tissue, labeling PNK/PNKP using ab170954 at a 1/100 dilution.

The use of an HRP/AP polymerized secondary antibody is recommended.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

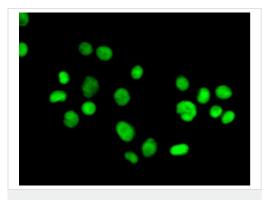


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PNK/PNKP antibody
[EPR11934(B)] (ab170954)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue, labeling PNK/PNKP using ab170954 at a 1/100 dilution.

The use of an HRP/AP polymerized secondary antibody is recommended.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-PNK/PNKP antibody [EPR11934(B)] (ab170954) Immunofluorescence analysis of PC3 cells, labeling PNK/PNKP using ab170954 at a 1/100 dilution.



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