Product Datasheet

DNA PKcs Rabbit mAb

Catalog No: #48923

Package Size: #48923-1 50ul #48923-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

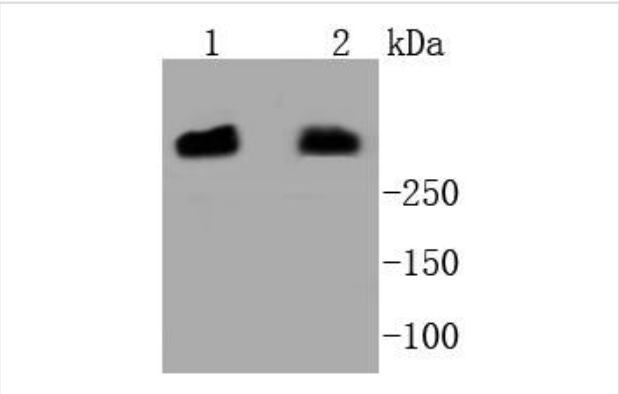
Description

Product Name	DNA PKcs Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC57-08
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	DNA dependent protein kinase catalytic subunit antibody DNA PK catalytic subunit antibody DNA-dependent protein kinase catalytic subunit antibody DNA-PK catalytic subunit antibody DNA-PKcs antibody DNAPK antibody DNAPK catalytic subunit antibody DNPK 1 antibody DNPK1 antibody Hyper radiosensitivity of murine scid mutation, complementing 1 antibody HYRC 1 antibody HYRC antibody HYRC1 antibody IMD26 antibody p350 antibody p460 antibody PKRDC antibody PRKDC antibody PRKDC_HUMAN antibody Protein Kinase DNA Activated Catalytic Polypeptide antibody XRCC 7 antibody XRCC7 antibody
Accession No.	Swiss-Prot#:P78527
Calculated MW	469 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

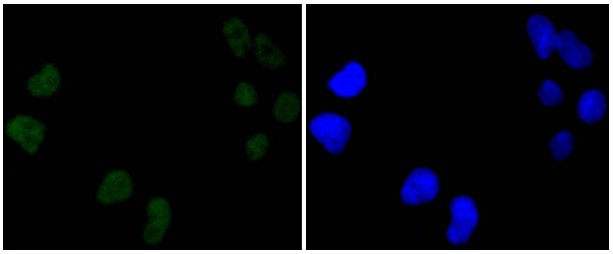
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200ICC: 1:50-1:200

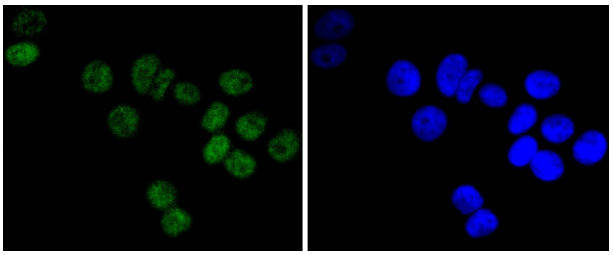
Images



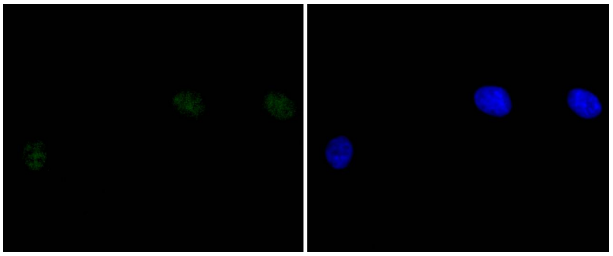
Western blot analysis of DNA PKcs on different lysates using anti-DNA PKcs antibody at 1/1,000 dilution. Positive control:
Lane 1: Hela Lane 2: MCF-7



ICC staining DNA PKcs in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining DNA PKcs in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining DNA PKcs in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

The phosphatidylinositol kinase (PIK) family members fall into two distinct subgroups. The first subgroup contains proteins such as the PI 3- and PI 4-kinases and the second group comprises the PIK-related kinases. The PIK-related kinases include Atm, DNA-PKCS and FRAP. These proteins have in common a region of homology at their carboxy termini that is not present in the PI 3- and PI 4-kinases. The Atm gene is mutated in the autosomal recessive disorder ataxia telangiectasia (AT) that is characterized by cerebellar degeneration (ataxia) and the appearance of dilated blood vessels (telangiectases) in the conjunctivae of the eyes. AT cells are hypersensitive to ionizing radiation, impaired in mediating the inhibition of DNA synthesis and they display delays in p53 induction. DNA-PK is a heterotrimeric DNA binding enzyme that is composed of a large subunit, DNA-PKCS, and two smaller subunits collectively known as Ku. The loss of DNA-PK leads to defects in DSB repair and V(D)J recombination. FRAP can autophosphorylate on serine and bind to rapamycin/FKBP. FRAP is also an upstream regulator of S6 kinase and has been implicated in the regulation of p27 and p21 expression.

References

1. YoΩ½oΩ½ce ? & West SC Senataxin, defective in the neurodegenerative disorder ataxia with oculomotor apraxia 2, lies at the interface of transcription and the DNA damage response. Mol Cell Biol 33:406-17 (2013). 2. Wang Y et al. MicroRNA-138 Modulates DNA Damage Response by Repressing Histone H2AX Expression. Mol Cancer Res 9:1100-11 (2011).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.