For Research Use Only

CoraLite® Plus 488-conjugated DNA-PKcs Recombinant antibody

Catalog Number:CL488-85370-2

proteintech®
Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
CL488-85370-2

Size:
100ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_006904

GeneID (NCBI):
5591

UNIPROT ID:
P78527

Full Name:
protein kinase, DNA-activated, catalytic polypeptide

Calculated MW:
469 kDa

Observed MW:
350-460 kDa

Purification Method:
Protein A purification

CloneNo.:
242676E6

Recommended Dilutions:
IF/ICC: 1:50-1:500

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
IF/ICC

Species Specificity:
human

Positive Controls:

IF/ICC : HepG2 cells,

Background Information

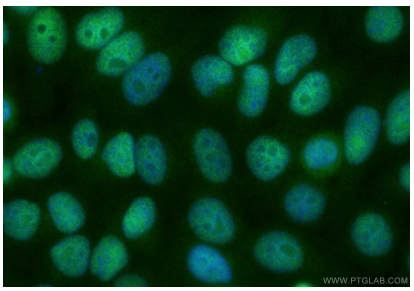
PRKDC, also named as HYRC, HYRC1, DNPK1 and p460, belongs to the PI3/PI4-kinase family. PRKDC is a serine/threonine-protein kinase that acts as a molecular sensor for DNA damage. Involved in DNA nonhomologous end joining (NHEJ), PRKDC is required for double-strand break (DSB) repair and V(D)J recombination. 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.

Storage

Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CoraLite® Plus 488 DNA-PKcs antibody (CL488-85370-2, Clone: 242676E6) at dilution of 1:200.