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**Product Name: PRKDC Mouse Monoclonal Antibody****Catalog #: AMM80953**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	IHC,ICC,ELISA
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Mouse IgG1
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	PBS containing 0.03% sodium azide.
<b>Purification</b>	Affinity Purification

**Application**

<b>Dilution Ratio</b>	IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000
<b>Molecular Weight</b>	46.9kDa

**Antigen Information**

<b>Gene Name</b>	PRKDC
<b>Alternative Names</b>	HYRC; p350; DNAPK; DNPk1; HYRC1; XRCC7; DNA-PKcs; PRKDC
<b>Gene ID</b>	5591.0
<b>SwissProt ID</b>	P78527
<b>Immunogen</b>	Purified recombinant fragment of human PRKDC expressed in E. Coli.

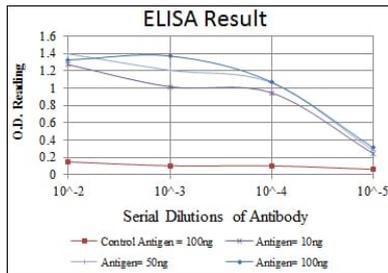
**Background**

The PRKDC gene encodes the catalytic subunit of a nuclear DNA-dependent serine/threonine protein kinase (DNA-PK). The second component is the autoimmune antigen Ku (MIM 152690), which is encoded by the G22P1 gene on chromosome 22q. On its own, the catalytic subunit of DNA-PK is inactive and relies on the G22P1 component to direct it to the DNA and trigger its

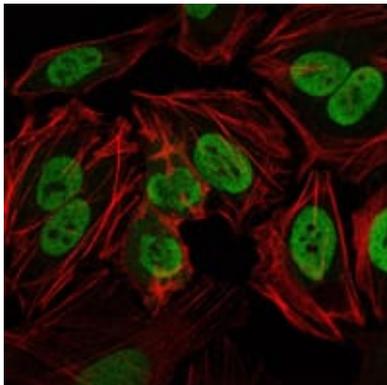
kinase activity; PRKDC must be bound to DNA to express its catalytic properties.

## Research Area

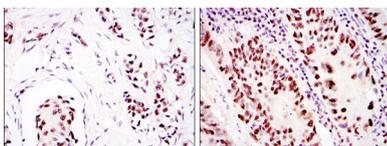
## Image Data



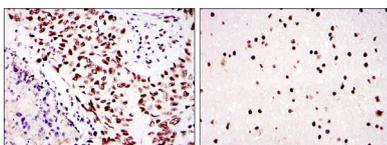
Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng);



Immunofluorescence analysis of HeLa cells using PRKDC mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Immunohistochemical analysis of paraffin-embedded human breast cancer (left) and colon cancer (right) using PRKDC mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human lung cancer (left) and brain tissues (right) using PRKDC mouse mAb with DAB staining.