

Ku70 Monoclonal Antibody

Catalog No: #27220

Package Size: #27220-1 50ul #27220-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

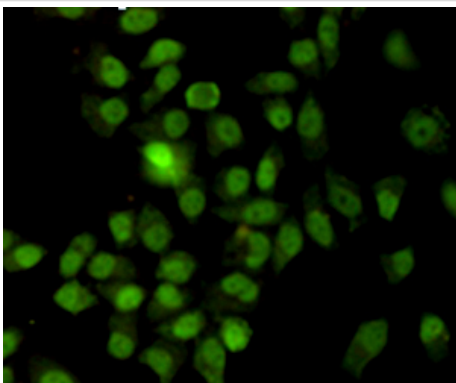
Product Name	Ku70 Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	7B1-E12-G4
Isotype	IgG1
Purification	Affinity purified
Applications	WB ICC IP
Species Reactivity	Hu Mk
Specificity	This antibody detects endogenous levels of Ku70 and does not cross-react with related proteins.
Immunogen Type	Recombinant Protein
Immunogen Description	Purified recombinant human Ku70 protein fragments expressed in E.coli.
Target Name	Ku70
Other Names	5'-deoxyribose-5-phosphate lyase Ku70; 5"-dRP lyase Ku70; 70 kDa subunit of Ku antigen; ATP dependent DNA helicase 2 subunit 1; ATP dependent DNA helicase II 70 kDa subunit; ATP-dependent DNA helicase 2 subunit 1;
Accession No.	Uniprot: P12956 Gene ID: 2547
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GeneID	2547;
SDS-PAGE MW	67kd
Formulation	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and 50% glycerol.
Storage	store at -20Λ C

Application Details

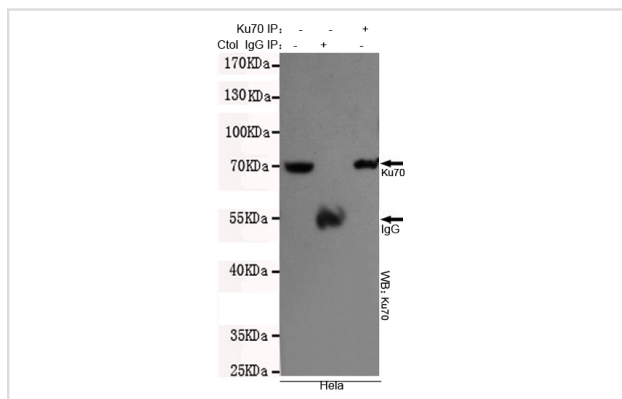
Western blotting: 1:1000

Immunocytochemistry: 1:200

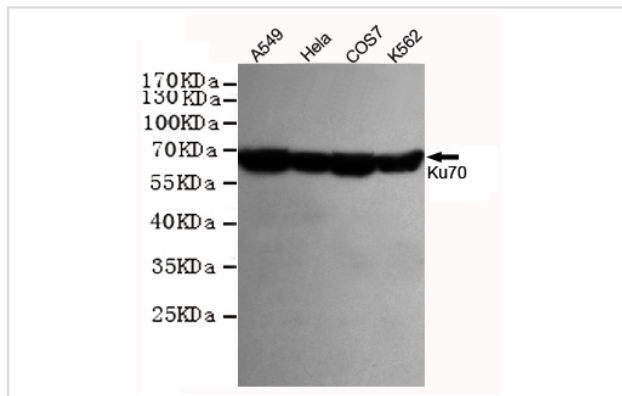
Images



Immunocytochemistry staining of HeLa cells fixed with -20°C Methanol and using anti-Ku70 antibody (dilution 1:200).



Immunoprecipitation analysis of HeLa cell lysates using Ku70 antibody.



Western blot detection of Ku70 in HeLa, A549, COS7 and K562 cell lysates using Ku70 antibody (1:1000 diluted). Predicted band size: 70 kDa. Observed band size: 67 kDa.

Background

Single-stranded DNA-dependent ATP-dependent helicase. Has a role in chromosome translocation. The DNA helicase II complex binds preferentially to fork-like ends of double-stranded DNA in a cell cycle-dependent manner. It works in the 3'-5' direction. Binding to DNA may be mediated by XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The XRCC5/6 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA by 100-fold. The XRCC5/6 dimer is probably involved in stabilizing broken DNA ends and bringing them together. The assembly of the DNA-PK complex to DNA ends is required for the NHEJ ligation step. Required for osteocalcin gene expression. Probably also acts as a 5'-deoxyribose-5-phosphate lyase (5'-dRP lyase), by catalyzing the beta-elimination of the 5' deoxyribose-5-phosphate at an abasic site near double-strand breaks. 5'-dRP lyase activity allows to 'clean' the termini of abasic sites, a class of nucleotide damage commonly associated with strand breaks, before such broken ends can be joined. The XRCC5/6 dimer together with APEX1 acts as a negative regulator of transcription.

Note: This product is for in vitro research use only