Best Tools for immunology Research

Ku-80 Monoclonal Antibody

Catalog No :	YM0409
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF;FCM;ELISA
Target :	Ku-80
Fields :	>>Non-homologous end-joining
Gene Name :	XRCC5
Protein Name :	X-ray repair cross-complementing protein 5
Human Gene Id :	7520
Human Swiss Prot No :	P13010
Mouse Gene Id :	22596
Mouse Swiss Prot No :	P27641
Immunogen :	Purified recombinant fragment of human Ku-80 expressed in E. Coli.
Specificity :	Ku-80 Monoclonal Antibody detects endogenous levels of Ku-80 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 83kD

Cell Pathway : Non-homologous end-joining;

P References :
1. Breast Cancer Res. 2009;11(6):R83.
2. Biochem Biophys Res Commun. 2009 Dec 18;390(3):738-42.

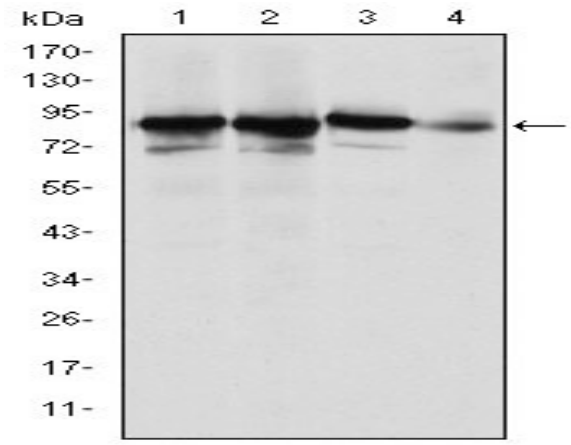
Background : The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein which is also known as ATP-dependant DNA helicase II or DNA repair protein XRCC5. Ku is the DNA-binding component of the DNA-dependent protein kinase, and it functions together with the DNA ligase IV-XRCC4 complex in the repair of DNA double-strand break by non-homologous end joining and the completion of V(D)J recombination events. This gene functionally complements Chinese hamster xrs-6, a mutant defective in DNA double-strand break repair and in ability to undergo V(D)J recombination. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity. [provided by RefSeq, Jul 2008],

Function : developmental stage:Expression increases during promyelocyte differentiation.,disease:Individuals with systemic lupus erythematosus (SLE) and related disorders produce extremely large amounts of autoantibodies to p70 and p86.,domain:The EEXXXDDL motif is required for the interaction with catalytic subunit PRKDC and its recruitment to sites of DNA damage.,function: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 p70. Involved in DNA nonhomologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The Ku p70/p86 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of t

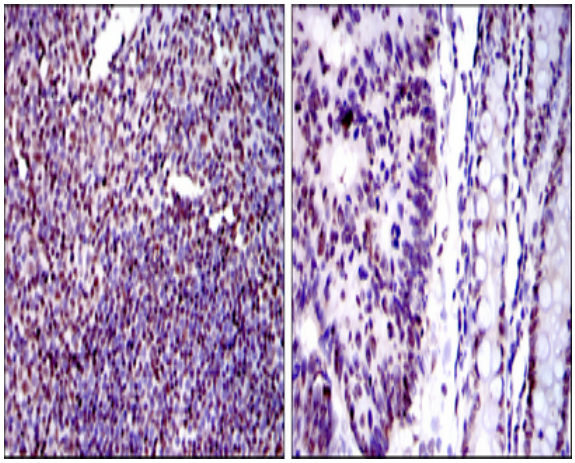
Subcellular Location : Nucleus . Nucleus, nucleolus . Chromosome .

Expression : Cervix carcinoma,Coronary artery,Heart,Neuroblastoma,Osteoblast,Thy

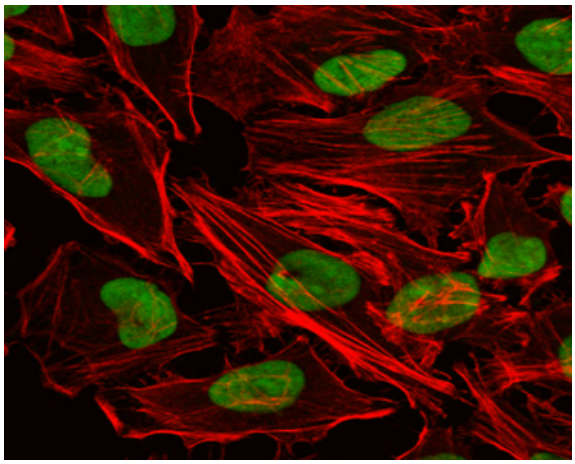
Products Images



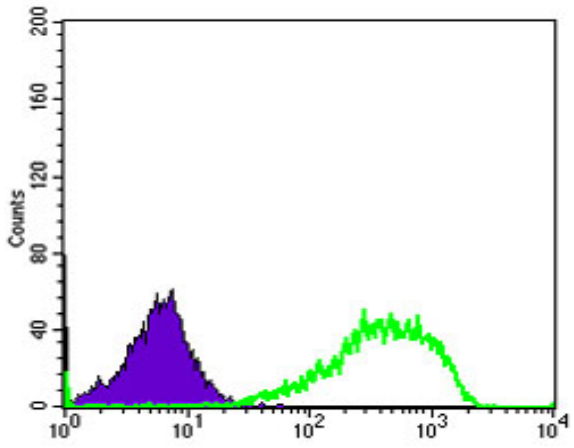
Western Blot analysis using Ku-80 Monoclonal Antibody against HeLa (1), MCF-7 (2), A549 (3) and NIH/3T3 (4) cell lysate.



Immunohistochemistry analysis of paraffin-embedded human tonsil tissues (left) and human colon cancer tissues (right) with DAB staining using Ku-80 Monoclonal Antibody.



Immunofluorescence analysis of Hela cells using Ku-80 Monoclonal Antibody (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Hela cells using Ku-80 Monoclonal Antibody (green) and negative control (purple).