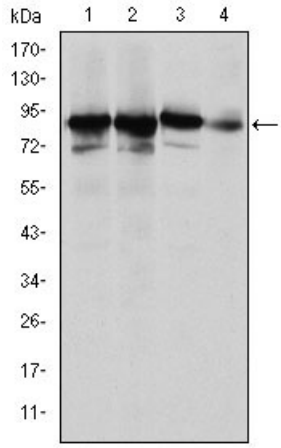
Ku-80 Monoclonal Antibody

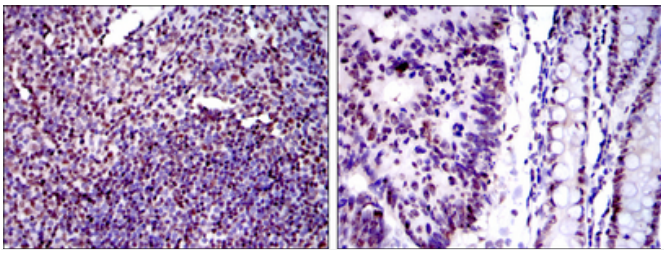
Catalog No	BYab-00069
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;FCM;ELISA
Gene Name	XRCC5
Protein Name	X-ray repair cross-complementing protein 5
Immunogen	Purified recombinant fragment of human Ku-80 expressed in E. Coli.
Specificity	Ku-80 Monoclonal Antibody detects endogenous levels of Ku-80 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	XRCC5; G22P2; X-ray repair cross-complementing protein 5; 86 kDa subunit of Ku antigen; ATP-dependent DNA helicase 2 subunit 2; ATP-dependent DNA helicase II 80 kDa subunit; CTC box-binding factor 85 kDa subunit; CTC85; CTCBF; DNA repair pr
Observed Band	
Cell Pathway	Nucleus . Nucleus, nucleolus . Chromosome .
Tissue Specificity	Cervix carcinoma,Coronary artery,Heart,Neuroblastoma,Osteoblast,Thy
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
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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

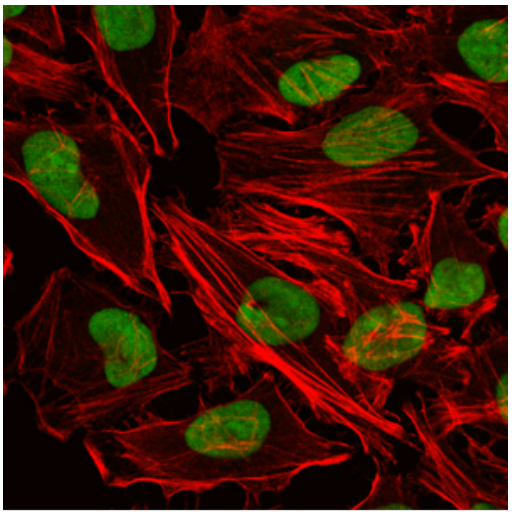
Products Images



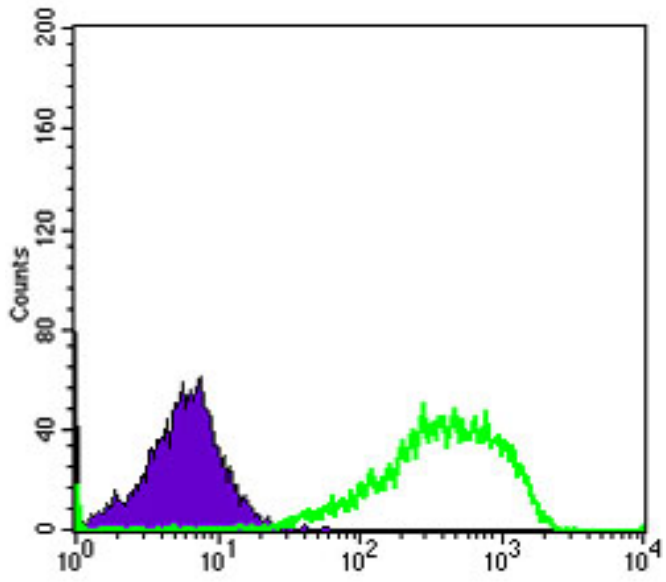
Western Blot analysis using Ku-80 Monoclonal Antibody against HeLa (1), MCF-7 (2), A549 (3) and NIH/3T3 (4) cell lysate.



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).