

## Ku70 Conjugated Monoclonal Antibody

Catalog No: #C27220



Package Size: #C27220-AF350 100ul #C27220-AF405 100ul #C27220-AF488 100ul  
 #C27220-AF555 100ul #C27220-AF594 100ul #C27220-AF647 100ul  
 #C27220-AF680 100ul #C27220-AF750 100ul #C27220-Biotin 100ul

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## Description

Product Name	Ku70 Conjugated Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Specificity	This antibody detects endogenous levels of Ku70 and does not cross-react with related proteins.
Immunogen Description	Purified recombinant human Ku70 protein fragments expressed in E.coli.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
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.	Swiss-Prot#: P12956NCBI Gene ID:2547
Uniprot	P12956
GeneID	2547;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

## Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## 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.

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Note: This product is for in vitro research use only