Datasheet for ABIN6241719

anti-XRCC6 antibody

3 Images

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Overview

Quantity:	100 µL
Target:	XRCC6
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This XRCC6 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunocytochemistry (ICC)

Product Details

Immunogen:	Recombinant Protein

Target Details

Target:	XRCC6
Alternative Name:	Ku70 (XRCC6 Products)
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

Target Details

	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.
UniProt:	P12956
Pathways:	DNA Damage Repair

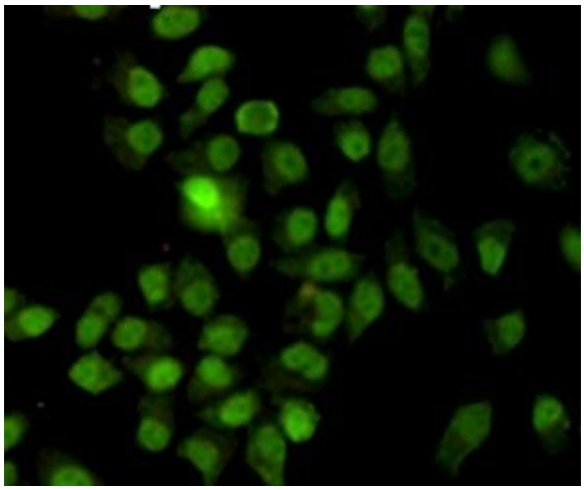
Application Details

Application Notes:	IP: 1:500. WB: 1:1000. ICC: 1:200
Restrictions:	For Research Use only

Handling

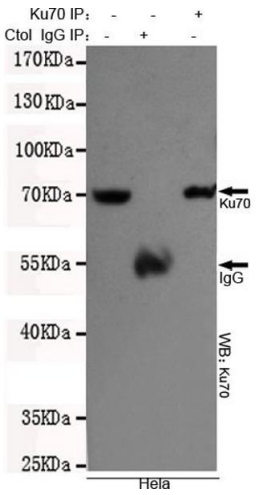
Format:	Liquid
Storage:	4 °C,-20 °C

Images



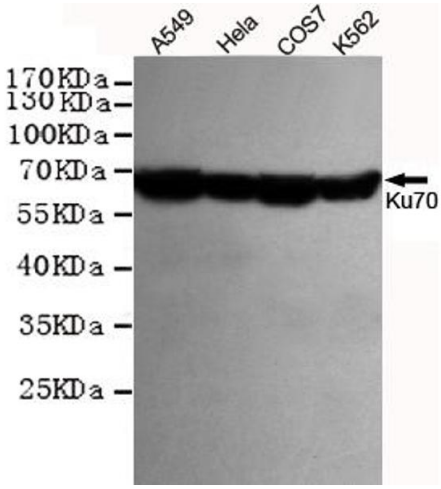
Immunocytochemistry

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



Immunoprecipitation

Image 2. Immunoprecipitation analysis of Hela cell lysates using Ku70 mouse mAb.



Western Blotting

Image 3. Western blot detection of Ku70 in Hela,A549,COS7 and K562 cell lysates using Ku70 mouse mAb (1:1000 diluted).Predicted band size:70KDa.Observed band size:67KDa.

