

Product datasheet

Recombinant Human Ku70 protein ab132938

1 Image

Description

<b>Product name</b>	Recombinant Human Ku70 protein
<b>Expression system</b>	Wheat germ
<b>Accession</b>	<a href="#">P12956</a>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human

**Sequence**

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MSGWESYYKTEGDEEEAEEEQEENLEASGDYKYSGRD
SLIFLVDASKAMFE
SQSEDELTPFDMSIQCIQSVYISKIISDRDLLAVFYGT
EKDKNSVNFK
NIYVLQELDNPQAKRILELDQFKGQQGQKRFQDMMGH
GSDYSLSEVLWVC
ANLFSQVQFKMSHKRIMLFTNEDNPHGNDSAKASRAR
TKAGDLRDTGIFL
DLMHLKPKGGFDISLFYRDIISIAEDEDLRVHFEESKL
EDLLRKVRAKE
TRKRALSRLKLNKDIVISVGIYNLVQKALKPPPIKLYR
ETNEPVKTKT
RTFNTSTGGLLLPSDTKRSQIYGSRQIILEKEETEELKRF
DDPGLMLMGF
KPLVLLKHHYLRPSLFVYPEESLVIGSSTLFSALLIKCL
EKEVAALCRY
TPRRNIPPYFVALVPQEEELDDQKIQVTPPGFQLVFLP
FADDKRKMPFTE
KIMATPEQVQGMKAMEKLRFTYRSDSFENPVLQQHFR
NLEALALDLMEP
EQAVDLTLPKVEAMNKRLGSLVDEFKELVYPPDYNPE
GKVTKRKHDFNEGS
GSKRPKVEYSEEELKTHISKGTGKFTVPMLEACRAY
GLKSGLKKQELL EALTKHFQD
    
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<b>Predicted molecular weight</b>	93 kDa including tags
<b>Amino acids</b>	1 to 609

## Specifications

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Our [Abpromise guarantee](#) covers the use of **ab132938** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	ELISA Western blot SDS-PAGE
<b>Form</b>	Liquid
<b>Additional notes</b>	

## Preparation and Storage

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<b>Stability and Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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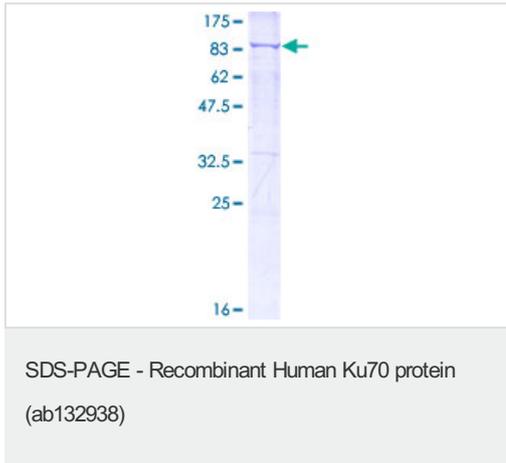
## General Info

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<b>Function</b>	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.
<b>Sequence similarities</b>	Belongs to the ku70 family. Contains 1 Ku domain. Contains 1 SAP domain.
<b>Developmental stage</b>	Expression does not increase during promyelocyte differentiation.
<b>Post-translational modifications</b>	Phosphorylation by PRKDC may enhance helicase activity. Phosphorylation of Ser-51 does not affect DNA repair.
<b>Cellular localization</b>	Nucleus. Chromosome.

## Images

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12.5% SDS-PAGE analysis of ab132938 stained with Coomassie Blue

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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