# abcam

### Product datasheet

## Recombinant Human Ku80 protein ab132946

#### 1 图像

## 描述

序列

产品名称 重组人Ku80蛋白

表达系统 Wheat germ

Accession P13010

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

rr /<del>ps</del>

MVRSGNKAAVVLCMDVGFTMSNSIPGIESPFEQAKKVITMFV

QRQVFAEN

KDEIALVLFGTDGTDNPLSGGDQYQNITVHRHLMLPDFDLLE

DIESKIQE

GSQQADSLDALIVSMDVIQHETIGKKFEKRHIEIFTDLSSRF

SKSQLDII

 ${\tt IHSLKKCDISLQFFLPFSLGKEDGSGDRGDGPFRLGGHGPSF}$ 

PLKGITEQ

QKEGLEIVKMVMISLEGEDGLDEIYSFSESLRKLCVFKKIER

**HSIHWPCR** 

LTIGSNLSIRIAAYKSILQERVKKTWTVVDAKTLKKEDIQKE

**TVYCLNDD** 

DETEVLKEDIIQGFRYGSDIVPFSKVDEEQMKYKSEGKCFSV

**LGFCKSSQ** 

VQRRFFMGNQVLKVFAARDDEAAAVALSSLIHALDDLDMVAI

VRYAYDKR

ANPQVGVAFPHIKHNYECLVYVQLPFMEDLRQYMFSSLKNSK

KYAPTFAO

LNAVDALIDSMSLAKKDEKTDTLEDLFPTTKIPNPRFQRLFQ

**CLLHRALH** 

PREPLPPIQQHIWNMLNPPAEVTTKSQIPLSKIKTLFPLIEA

KKKDQVTA

QEIFQDNHEDGPTAKKLKTEQGGAHFSVSSLAEGSVTSVGSV

**NPAENFRV** 

LVKQKKASFEEASNQLINHIEQFLDTNETPYFMKSIDCIRAF

REEAIKFS

EEQRFNNFLKALQEKVEIKQLNHFWEIVVQDGIALITKEEAS

GSSVTAEE AKKFLAPKDKPSGDTAAVFEEGGDVDDLLDMI

1

预**测分子量** 106 kDa including tags

**氨基酸** 1 to 732

#### 技术指标

Our Abpromise guarantee covers the use of ab132946 in the following tested applications.

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

应**用** ELISA

Western blot SDS-PAGE

形式 Liquid

补充说明

#### 制备和贮存

稳定性和存储 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 HCI

#### 常规信息

序列相似性

功能 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. In association with NAA15, the XRCC5/6 dimer binds to the osteocalcin promoter and activates osteocalcin expression. The XRCC5/6 dimer 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. XRCC5 probably acts as the catalytic subunit of 5'-dRP activity, and 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.

Belongs to the ku80 family.

Contains 1 Ku domain.

发展阶段 Expression increases during promyelocyte differentiation.

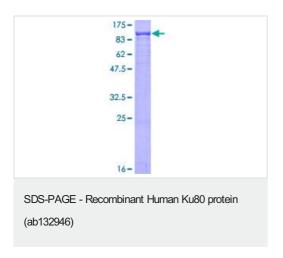
结**构域** The EEXXXDDL motif is required for the interaction with catalytic subunit PRKDC and its

recruitment to sites of DNA damage.

翻译后修饰 Phosphorylated on serine residues. Phosphorylation by PRKDC may enhance helicase activity.

Sumoylated.

#### 图片



12.5% SDS-PAGE analysis of ab132946 stained with Coomassie Blue

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