

### 产品概述 (Summary)

产品名称 (Production Name) Ku-70 (Acetyl Lys539) Rabbit Polyclonal Antibody

描述 (Description) Rabbit polyclonal Antibody

宿主 (Host) Rabbit

 应用 (Application)
 WB,IHC,ICC/IF,ELISA

 种属反应性 (Reactivity)
 Human,Rat,Mouse

## 产品性能 (Performance)

偶联物 (Conjugation)Unconjugated修饰 (Modification)Acetylated

同种型 (Isotype) IgG

克隆 (Clonality) Polyclonal 形式 (Form) Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid 存放说明 (Storage)

freeze/thaw cycles.

Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% 储存溶液 (Buffer)

New type preservative N.

**纯化方式 (Purification)** Affinity purification

# 免疫原信息 (Immunogen)

基因名 (Gene Name) XRCC6

XRCC6; G22P1; X-ray repair cross-complementing protein 6; 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

别名 (Alternative Names) subunit; CTC box-binding factor 75 kDa subunit; CTC75; CTCBF; DNA repair

protein XRCC6; Lupus Ku autoantigen protein p70; Ku70; Thyroid-lupus autoantigen; TLAA; X-ray repair complementing defective repair in Chinese

hamster cells 6

基因 ID (Gene ID) 2547.0

P12956.Synthesized acetyl-peptide derived from the human Ku-70 around the 蛋白 ID(SwissProt ID)

acetylation site of K539.

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## 产品应用 (Application)

稀释比 (Dilution Ratio) WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000

蛋白分子量 (Molecular Weight) 70kDa

#### 研究背景 (Background)

The p70/p80 autoantigen is a nuclear complex consisting of two subunits with molecular masses of approximately 70 and 80 kDa. The complex functions as a single-stranded DNA-dependent ATP-dependent helicase. The complex may be involved in the repair of nonhomologous DNA ends such as that required for double-strand break repair, transposition, and V(D)J recombination. High levels of autoantibodies to p70 and p80 have been found in some patients with systemic lupus erythematosus. [provided by RefSeq, Jul 2008], developmental stage: Expression does not increase during promyelocyte differentiation., disease: Individuals with systemic lupus erythematosus (SLE) and related disorders produce extremely large amounts of autoantibodies to p70 and p86. Existence of a major autoantigenic epitope or epitopes on the C-terminal 190 amino acids of p70 containing the leucine repeat. The majority of autoantibodies to p70 in most sera from patients with SLE seem to be reactive with this region, 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 the catalytic subunit PRKDC to DNA by 100-fold. The Ku p70/p86 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.,induction:In osteoblasts, by FGF2.,PTM:Phosphorylation by PRKDC may enhance helicase activity. Phosphorylation of Ser-51 does not affect DNA repair., similarity: Belongs to the ku70 family,,similarity:Contains 1 Ku domain.,similarity:Contains 1 SAP domain.,subunit:Heterodimer of a 70 kDa and a 80 kDa subunit. The dimer associates in a DNA-dependent manner with PRKDC to form the DNA-dependent protein kinase complex DNA-PK, and with the LIG4-XRCC4 complex. The dimer also associates with NARG1, and this complex binds to the osteocalcin promoter and activates osteocalcin expression. In addition, the 70 kDa subunit binds to the osteoblast-specific transcription factors MSX2, RUNX2 and DLX5. Interacts with ELF3. Interactis with XRCC6BP1.,

#### 研究领域(Research Area)

Non-homologous end-joining;

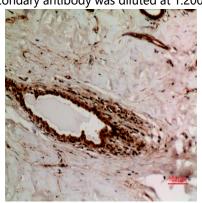
#### 图片 (Image Data)

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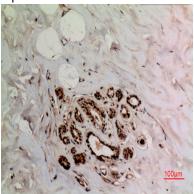


25

Western Blot analysis of Jurkat cells using Acetyl-Ku-70 (K539) Polyclonal Antibody. Antibody was diluted at 1:500. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-breast, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-breast, antibody was diluted at 1:100

# 注意事项 (Note)

For research use only.

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