

Ku-80 Polyclonal Antibody

Catalog No: YT6204

Reactivity: Human; Mouse

Applications: IHC;IF;WB

Target: Ku-80

Fields: >>Non-homologous end-joining

P13010

Gene Name: XRCC5 G22P2

Protein Name: Ku-80

Human Gene Id: 7520

Human Swiss Prot

No:

Immunogen: Synthesized peptide derived from human Ku-80

Specificity: This antibody detects endogenous levels of human Ku-80

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: IHC 1:50-200, WB 1:500-2000. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 82kD

1/2



Background:

The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein which is also known as ATP-dependant DNA helicase II or DNA repair protein XRCC5. Ku is the DNA-binding component of the DNA-dependent protein kinase, and it functions together with the DNA ligase IV-XRCC4 complex in the repair of DNA double-strand break by non-homologous end joining and the completion of V(D)J recombination events. This gene functionally complements Chinese hamster xrs-6, a mutant defective in DNA double-strand break repair and in ability to undergo V(D)J recombination. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity. [provided by RefSeq, Jul 2008],

Function:

developmental stage:Expression increases during promyelocyte differentiation., disease:Individuals with systemic lupus erythematosus (SLE) and related disorders produce extremely large amounts of autoantibodies to p70 and p86., domain:The EEXXXDDL motif is required for the interaction with catalytic subunit PRKDC and its recruitment to sites of DNA damage., 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 t

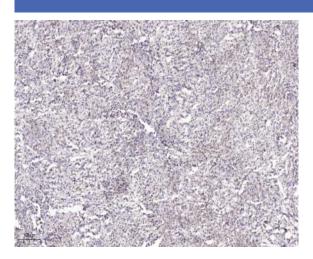
Subcellular Location:

Expression:

Nucleus . Nucleus, nucleolus . Chromosome .

Cervix carcinoma, Coronary artery, Heart, Neuroblastoma, Osteoblast, Thy

Products Images



Immunohistochemical analysis of paraffin-embedded human Small intestinal stromal tumor. 1, Tris-EDTA,pH9.0 was used for antigen retrieval. 2 Antibody was diluted at $1:200(4^{\circ}$ overnight.3,Secondary antibody was diluted at 1:200(room temperature, 45min).