# Ku80 Rabbit mAb

Catalog No.: A12338 Recombinant 2 Publications



### **Basic Information**

### **Observed MW**

86kDa

### **Calculated MW**

83kDa

### Category

SMab Recombinant Monoclonal Antibody

### **Applications**

WB,IHC-P,IF/ICC,IP,ELISA

### **Cross-Reactivity**

Human

### CloneNo number

ARC0706

# **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.

# **Recommended Dilutions**

WB 1:1000 - 1:6000 IHC-P 1:200 - 1:800

**IF/ICC** 1:100 - 1:1000

**IP** 0.5μg-4μg antibody for 200μg-400μg extracts

of whole cells

**ELISA** Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

### **Contact**

www.abclonal.com

## **Immunogen Information**

Gene ID	Swiss Prot
7520	P13010

#### Immunogen

A synthetic peptide corresponding to a sequence within amino acids 633-732 of human Ku80 (P13010).

# **Synonyms**

KU80; KUB2; Ku86; NFIV; KARP1; KARP-1; Ku80

### **Product Information**

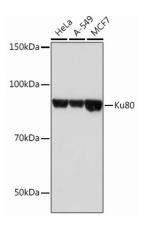
SourceIsotypePurificationRabbitIgGAffinity purification

#### Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

### **Validation Data**



Western blot analysis of various lysates, using Ku80 Rabbit mAb (A12338) at 1:1000 dilution.

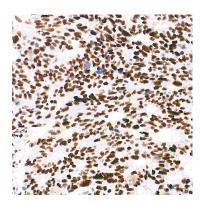
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

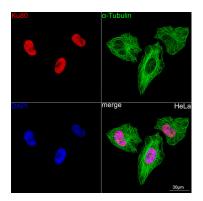
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 5s.



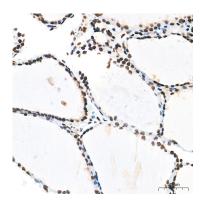
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using Ku80 Rabbit mAb (A12338) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



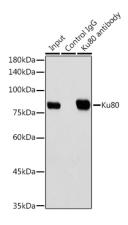
Confocal imaging of HeLa cells using Ku80 Rabbit mAb (A12338,dilution 1:100)(Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012,dilution 1:400) (Green). DAPI was used for nuclear staining (blue). Objective: 60x.



Immunohistochemistry analysis of paraffin-embedded Human lung cancer tissue using Ku80 Rabbit mAb (A12338) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human thyroid tissue using Ku80 Rabbit mAb (A12338) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunoprecipitation analysis of 300  $\mu$ g extracts of HeLa cells using 3  $\mu$ g Ku80 antibody (A12338). Western blot was performed from the immunoprecipitate using Ku80 antibody (A12338) at a dilution of 1:1000.