

## Product Information

### Anti-Ku80 (XRCC5) (557-570)

Developed in Rabbit, Affinity isolated antibody

Product Number **K 4888**

#### Product Description

Anti-Ku80 is developed in rabbit using a synthetic peptide, HEDGPTAKKLEKTEQ, corresponding to human Ku80 (amino acids 557-570) conjugated to BSA as immunogen. The antibody is affinity-purified using the immunizing peptide immobilized on resin.

Anti-Ku80 specifically recognizes Ku80 (82.6 kDa) by immunoblotting and immunohistochemistry. The antibody recognizes human and rodent Ku80. Other species reactivity has not been confirmed.

The p70/p80 autoantigen (Ku antigen, the Ki antigen, and the 86- to 70-kD protein complex) binds to the ends of double-stranded DNA in a cell cycle-dependent manner and has a role in chromosome translocation. The p70/p80 autoantigen consists of 2 proteins of molecular mass of approximately 70,000 and 80,000 daltons that dimerize to form a 10 S DNA-binding complex. The XRCC5 or G22P2 gene encodes subunit p80 of the p70/p80 autoantigen, also known as Ku80; ATP-dependent DNA helicase II, 80 kDa subunit; Lupus Ku autoantigen protein p86 (Ku86, Ku80); 86 kDa subunit of Ku antigen; Thyroid- lupus autoantigen (TLAA); CTC box binding factor 85 kDa subunit (CTCBF, CTC85) Nuclear factor IV; DNA-repair protein XRCC5.

#### Reagent

Anti-Ku80 is provided as affinity isolated antibody in a 50% ammonium sulfate suspension in phosphate buffered saline, containing no additional preservatives.

#### Preparation Instructions

##### Method 1 for immunostaining and immunoblotting (Western blot)

1. Carefully resuspend antibody pellet to uniformity.
2. Remove a fixed amount of suspension and dissolve 1:10 in PBS or TBS to yield a 100 µg/ml solution.

##### Method 2 for immunoprecipitation, supershift, immunostaining and immunoblotting (Western blot)

1. Pellet antibodies at 10,000 – 15,000 x g for 10 minutes at 2 to 8 °C using a microcentrifuge.
2. Carefully remove as much supernatant as possible. It is not necessary to remove all the ammonium sulfate solution; a small residual amount will not effect the antibody preparation. Dissolve the pellet (antibody) in small volume (100 µL) of PBS (or TBS) at final concentration of 1 mg/ml (100 µg/100 µl). Do not allow the pellet to dry out. This can cause loss of activity. Gently allow pellet to dissolve at least 1 hour before use. Do not vortex. Mix by finger-tapping or gentle stirring.

#### Notes:

- Reconstituted antibody may be stored at 2 to 8 °C for up to one month. Addition of a preservative (15 mM sodium azide) may be necessary.
- For extended storage, add an equal volume of high purity glycerol, to a final concentration of 50% and BSA to a final concentration of 1% and store at –20 °C.
- During shipment, small volumes will occasionally become entrapped in the seal of the product vial. We recommend briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

**Storage/Stability**

Store ammonium sulfate suspension at 2 to 8 °C for up to one month.

For extended storage, freeze in working aliquots.

Reconstituted and diluted antiserum should be stored in aliquots at -20 °C.

**Product Profile**

Recommended dilutions are 1:200 to 1:1,000 for immunoblotting and immunohistochemistry.

Note: In order to obtain best results and assay sensitivity in different techniques and preparations we recommend determining optimal working dilutions by titration test.

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