

## Anti-Ku80 Antibody

### ORDERING INFORMATION

**Catalog No.:** 12525

**Size:** 100 ug IgG in PBS, pH 7.4, purified by immunoaffinity chromatography.

### BACKGROUND

Telomere length maintenance, essential to chromosome stability and genome integrity, is regulated by telomerase and telomere-associated factors. The Ku proteins are eukaryotic nuclear proteins involved in DNA repair and telomere maintenance. They exist as a heterodimer of 70 and 80 kDa subunits (Ku 70 and Ku 80). Ku heterodimers bind to DNA ends at telomeres and at double-strand breaks where they interact with DNA-dependent protein kinase (DNA PK) and participate in targeting of DNA PK to DNA. The Ku proteins may participate in DNA repair and replication, cell signaling, proliferation, transcriptional activation, and apoptosis.

### BACKGROUND REFERENCE

Park SJ et al. (2004) J Biol Chem 279:6046-55.

*For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.*

### SPECIFICATION SUMMARY

**Immunogen:** Synthetic peptide corresponding to amino acids 323-338 (FSKVDEEQMKYKSEGK) of Ku80 conjugated to KLH at the C-terminus.

**Host Species:** Rabbit

**Stabilizers:** None

**Preservatives:** None. Available on request.

### SPECIFICITY

This antibody recognizes human, mouse, rat, and hamster Ku80.

### APPLICATIONS

*Immunoblotting:* use at 1:500 dilution. A band of approximately 80 kDa is detected.

Positive control: A431 and AR42J whole cell lysates.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid multiple freeze-thaw cycles.