

## Product Information

### Anti-Ku80 (XRCC5) (418-439)

Produced in rabbit, Affinity Isolated Antibody

Product Number **K 3264**

#### Product Description

Anti-Ku80 (XRCC5) (418-439) is produced in rabbit using as immunogen a peptide corresponding to the human 80 kDa Ku80 protein (amino acids 418-439). This sequence is 100% conserved between human, mouse, rat, and hamster. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Ku80 (XRCC5) (418-439) reacts with amino acid residues 418-439 (LVYVQLPFMEDLRQYMFSSLKN) of human 80 kDa Ku80. The antibody may be used in immunoblotting (~82.5 kDa, calculated).

Telomere length maintenance, an activity essential for chromosome stability and genome integrity, is regulated by telomerase- and telomere-associated factors. The DNA repair protein Ku (a heterodimer of Ku70 and Ku80 subunits) associates with mammalian telomeres and contributes to telomere maintenance. The Ku heterodimer functions at two kinds of DNA ends: telomeres and double-strand breaks. The role that Ku plays at these two classes of termini must be distinct, because Ku is required for accurate and efficient joining of double-strand breaks while similar DNA repair events are normally prohibited at chromosome ends.

#### Reagent

The antibody is supplied as a solution of ~1 mg/mL in phosphate buffered saline containing 0.02% sodium azide.

#### Precautions and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

#### Storage/Stability

Store at -20 °C. The product may be stored at 2-8 °C for up to three months. For prolonged storage, freeze in working aliquots at -20 °C. Avoid repeated freezing and thawing. Do not store in a "frost-free" freezer.

#### Product Profile

For immunoblotting, a minimum working antibody dilution of 1:500 is recommended.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working dilutions by titration.

#### References

1. Park, S.J., et al., *J. Biol. Chem.*, **279**, 6046-6055 (2004).

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