



XRCC6 Polyclonal Antibody

E92076

Catalog Number: E92076

Amount: 100ul

Background: Ku is a heterodimeric protein composed of two subunits (Ku70 and Ku80) originally identified by researchers as autoantigens associated with several autoimmune diseases including scleroderma, polymyositis, and systemic lupus erythematosus (1). Ku is an abundant, ubiquitously expressed nuclear protein that binds to and stabilizes the ends of DNA at telomeres or double-stranded DNA breaks (2-5). The Ku70/Ku80 heterodimer has ATP-dependent DNA helicase activity and functions as the DNA-binding regulatory component of DNA-dependent protein kinase (DNA-PK) (6-8). The assembly of the DNA-PK complex at DNA ends is required for nonhomologous end-joining (NHEJ), one mechanism involved in double-stranded DNA break repair and V(D)J recombination (8). DNA-PK has been shown to phosphorylate many proteins, including p53, serum response factor, c-Jun, c-Fos, c-Myc, Oct-1, Sp-1, and RNA polymerase II (1,8). The combined activities of Ku70/Ku80 and DNA-PK implicate Ku in many cellular functions, including cell cycle regulation, DNA replication and repair, telomere maintenance, recombination, and transcriptional activation.

Species: Rabbit

Isotype: IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: CTC75; CTCBF; G22P1; KU70; ML8; TLAA;

Immunogen: Recombinant protein of human XRCC6

Purification: Affinity purification

Reactivity: H M R

Applications: WB IHC

Molecular Weight: 75kDa

Swiss-Prot No. : P12956

Gene ID: 2547

References: 1. Tuteja, R. and Tuteja, N. (2000) Crit. Rev. Biochem. Mol. Biol. 35, 1-33. 2. Blier, P.R. et al. (1993) J. Biol. Chem. 268, 7594-7601. 3. Jin, S. and Weaver, D.T. (1997) EMBO J. 16, 6874-6885. 4. Boulton, S.J. and Jackson, S.P. (1998) EMBO J. 17, 1819-1828. 5. Gravel, S. et al. (1998) Science 280, 741-744. 6. Cao, Q.P. et al. (1994) Biochemistry 33, 8548-8557. 7. Lees-Miller, S.P. et al. (1990) Mol. Cell Biol. 10, 6472-6481. 8. Collis, S.J. et al. (2005) Oncogene 24, 949-961.

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