

Basic Information

Product Name	Anti-KU70/XRCC6 Antibody	
Gene Name	XRCC6	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, ICC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Ku70(530-545aa YPPDYNPEGKVKRKH).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	70KD	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry: 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

XRCC6(X-Ray Repair, Complementing Defective, In Chinese Hamster, 6), also called Ku70, G22P1 or TLAA, is a protein that in humans, is encoded by the XRCC6 gene. In addition, the XRCC6 gene encodes subunit p70 of the p70/p80 autoantigen which 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 XRCC6 gene is mapped to 22q13.2. XRCC6 and Mre11 are differentially expressed during meiosis. XRCC6 interacts with Baxa, a mediator of mitochondrial-dependent apoptosis. Disruption of both FANCC and XRCC6 suppressed sensitivity to crosslinking agents, diminished chromosome breaks, and reversed defective homologous recombination. Ku70 binds directly to free DNA ends, committing them to NHEJ repair. In early meiotic prophase, however, when meiotic recombination is most probably initiated, Mre11 was abundant, whereas XRCC6 was not detectable.

Selected Validation Data

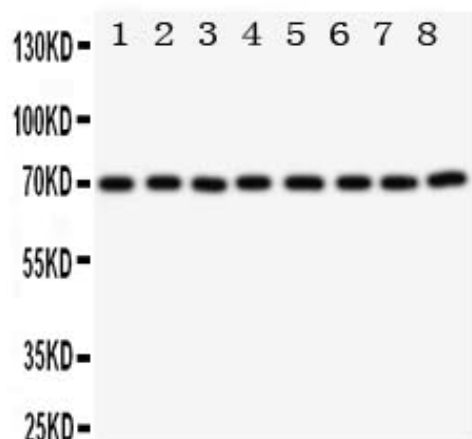


Figure 1. Western blot analysis of Anti-XRCC6 antibody (BA1810). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: HT1080 whole cell lysates, Lane 2: SGC whole cell lysates, Lane 3: MM453 whole cell lysates, Lane 4: SW620 whole cell lysates, Lane 5: HELA whole cell lysates, Lane 6: A431 whole cell lysates, Lane 7: A549 whole cell lysates, Lane 8: RAJI whole cell lysates, Use rabbit Anti-XRCC6 1:1000, probed with a goat Anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for XRCC6 at approximately 70KD. The expected band size for XRCC6 is at 70KD.

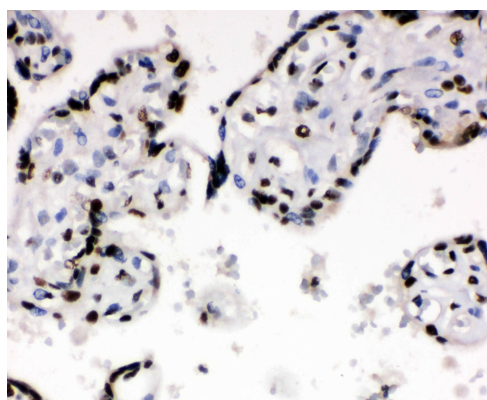


Figure 2. IHC analysis using Anti-XRCC6 antibody (BA1810) detected in paraffin-embedded section of human placenta tissue. Biotinylated goat Anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

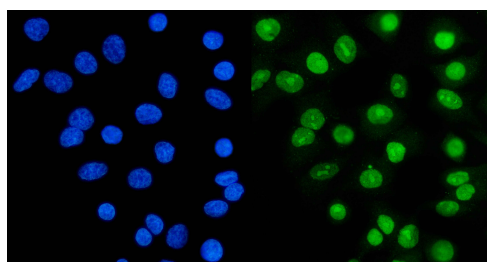


Figure 5. ICC analysis using anti-XRCC6 antibody (BA1810). was detected in immersion fixed A549 cell line. Cells were stained using the DyLight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).

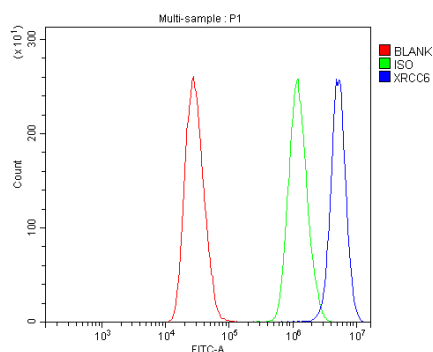


Figure 6. Flow cytometry analysis of MCF-7 cell (1×10^6) DyLight 488 conjugated goat anti-rabbit IgG (blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).

Product datasheet

Anti-KU70/XRCC6 Antibody

Catalog Number: **BA1810**



antibody and ELISA experts

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