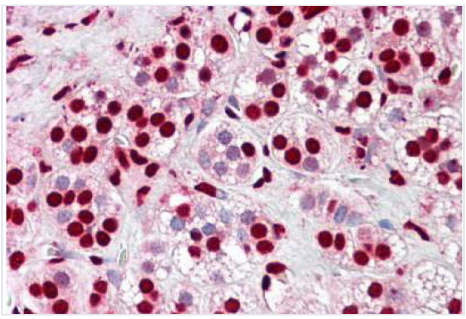
# XRCC6 Antibody – Rabbit Polyclonal

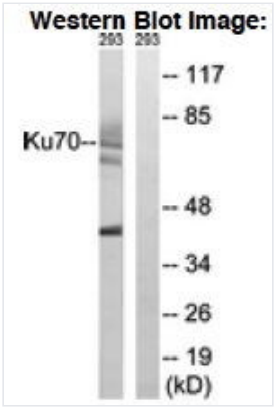
## PRODUCT OVERVIEW

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| **Product Name** | XRCC6, Polyclonal Antibody |
| **Full Product Name** | XRCC6, NT (G22P1, X-ray repair cross-complementing protein 6, ATP-dependent DNA helicase 2 subunit 1, ATP-dependent DNA helicase II 70kD subunit, X-ray repair complementing defective repair in Chinese hamster cells 6, Ku70) |
| **Product Gene Name** | anti-XRCC6 antibody |
| **Product Synonym Names** | Anti -XRCC6, NT (G22P1, X-ray repair cross-complementing protein 6, ATP-dependent DNA helicase 2 subunit 1, ATP-dependent DNA helicase II 70kD subunit, X-ray repair complementing defective repair in Chinese hamster cells 6, Ku70) |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Host** | Rabbit |
| **Species Reactivity** | Human, Mouse |
| **Form/Format** | Supplied as a liquid in PBS, (without Mg2+, Ca2+), pH 7.4, 150mM sodium chloride, 0.02% sodium azide, 50% glycerol. |
| **Purity/Purification** | Affinity Purified<br>Purified by immunoaffinity chromatography |
| **Specificity** | Recognizes human XRCC6/Ku70. Species Crossreactivity: Mouse |
| **Preparation and Storage** | May be stored at 4 degree C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20 degree C. Aliquots are stable for at least 12 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. |
| **Molecular Weight** | 69,843 Da |
| **Chromosome Location** | Chromosome: 22; NC_000022.10 (42017250..42060052). Location: 22q13.2 |
| **OMIM** | 152690 |
| **3D Structure** | ModBase 3D Structure for P12956 |
| **Immunogen** | Synthetic peptide corresponding to human XRCC6/Ku70 at N-Terminal. |
| **Product Categories/Family for anti-XRCC6 antibody** | Antibodies; Abs to DNA Replication; Repair |
| **Applications Tested/Suitable for anti-XRCC6 antibody** | ELISA (EL/EIA), Western Blot (WB), Immunohistochemistry (IHC) |
| **Application Notes for anti-XRCC6 antibody** | Suitable for use in ELISA, Western Blot, Immunohistochemistry.<br>Dilution: ELISA: 1:5000<br>Western Blot: 1:500-1:1000<br>Immunohistochemistry (Paraffin): 10ug/ml |
| **Related Product Information for anti-XRCC6 antibody** | The p70/p80 autoantigen is a nuclear complex consisting of two subunits with molecular masses of approximately 70kD & 80kD. The complex functions as a single-stranded DNA-dependent ATP-dependent helicase. The complex may be involved in the repair of nonhomologous DNA ends such as that required for double-strand break repair, transposition, and V(D)J recombination. High levels of autoantibodies to p70 and p80 have been found in some patients with systemic lupus erythematosus. |

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| **Other Notes** | Small volumes of anti-XRCC6 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for XRCC6 purchase** | MBS6009199 is an antibody targeting XRCC6. Also known as XRCC6, NT (G22P1, X-ray repair cross-complementing protein 6, ATP-dependent DNA helicase 2 subunit 1, ATP-dependent DNA helicase II 70kD subunit, X-ray repair complementing defective repair in Chinese hamster cells 6, Ku70). Reactive in Human, Mouse. Host: Rabbit. |



**Immunohistochemistry (IHC) of anti-XRCC6 antibody**
XRCC6/Ku70 IHC staining of human adrenal. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced retrieval.




**Western Blot (WB) of anti-XRCC6 antibody**
Western blot analysis of extracts from 293 cells, using Ku70. The lane on the right is treated with the synthesized peptide.

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for XRCC6. It may not necessarily be applicable to this product.

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| **NCBI GI #** | 4503841 |
| **NCBI GeneID** | 2547 |
| **NCBI Accession #** | NP_001460.1 |
| **UniProt Primary Accession #** | P12956 |
| **UniProt Secondary Accession #** | Q6FG89; Q9UCQ2; Q9UCQ3 |
| **UniProt Related Accession #** | P12956 |
| **GenBank Nucleotide #** | NM_001469.3 |
| **NCBI Official Full Name** | X-ray repair cross-complementing protein 6 |
| **NCBI Official Synonym Full Names** | X-ray repair complementing defective repair in Chinese hamster cells 6 |
| **NCBI Official Symbol** | XRCC6 |
| **NCBI Official Synonym Symbols** | ML8; KU70; TLAA; CTC75; CTCBF; G22P1 |
| **UniProt Protein Name** | X-ray repair cross-complementing protein 6 |
| **UniProt Synonym Protein Names** | 5'-deoxyribose-5-phosphate lyase Ku70; 5'-dRP lyase Ku70; 70 kDa subunit of Ku antigen; ATP-dependent DNA helicase 2 subunit 1; ATP-dependent DNA helicase II 70 kDa subunit; CTC box-binding factor 75 kDa subunit; CTC75; CTCBF; DNA repair protein XRCC6; Lupus Ku autoantigen protein p70; Ku70; Thyroid-lupus autoantigen; TLAA; X-ray repair complementing defective repair in Chinese hamster cells 6 |
| **Protein Family** | X-ray repair cross-complementing protein |
| **UniProt Gene Name** | XRCC6 |
| **UniProt Synonym Gene Names** | G22P1; 5'-dRP lyase Ku70; CTC75; CTCBF; Ku70; TLAA |
| **UniProt Entry Name** | XRCC6_HUMAN |

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| **NCBI Protein Information** | X-ray repair cross-complementing protein 6; 5'-dRP lyase Ku70; Ku autoantigen, 70kDa; DNA repair protein XRCC6; Ku autoantigen p70 subunit; 70 kDa subunit of Ku antigen; thyroid-lupus autoantigen p70; lupus Ku autoantigen protein p70; 5'-deoxyribose-5-phosphate lyase Ku70; CTC box binding factor 75 kDa subunit; CTC box-binding factor 75 kDa subunit; thyroid autoantigen 70kD (Ku antigen); ATP-dependent DNA helicase 2 subunit 1; thyroid autoantigen 70kDa (Ku antigen); ATP-dependent DNA helicase II 70 kDa subunit; ATP-dependent DNA helicase II, 70 kDa subunit |
| **NCBI Summary for XRCC6** | The p70/p80 autoantigen is a nuclear complex consisting of two subunits with molecular masses of approximately 70 and 80 kDa. The complex functions as a single-stranded DNA-dependent ATP-dependent helicase. The complex may be involved in the repair of nonhomologous DNA ends such as that required for double-strand break repair, transposition, and V(D)J recombination. High levels of autoantibodies to p70 and p80 have been found in some patients with systemic lupus erythematosus. [provided by RefSeq, Jul 2008] |
| **UniProt Comments for XRCC6** | Ku70: a mini-chromosome maintenance protein, essential for the initiation of eukaryotic genome replication. Allows DNA to undergo a single round of replication per cell cycle. Required for the entry in S phase and for cell division.<br><br>Protein type: EC 3.6.4.-; DNA repair, damage; EC 4.2.99.-; Nuclear receptor co-regulator; RNA-binding; Helicase; DNA-binding<br><br>Chromosomal Location of Human Ortholog: 22q13.2<br><br>Cellular Component: nucleoplasm; transcription factor complex; nuclear telomere cap complex; membrane; nucleolus; nucleus; cytosol<br><br>Molecular Function: protein C-terminus binding; ATP-dependent DNA helicase activity; protein binding; DNA binding; double-stranded DNA binding; damaged DNA binding; double-stranded telomeric DNA binding; 5'-deoxyribose-5-phosphate lyase activity; ATP binding<br><br>Biological Process: positive regulation of neurogenesis; V(D)J recombination; transcription, DNA-dependent; viral reproduction; positive regulation of transcription, DNA-dependent; DNA repair; DNA duplex unwinding; double-strand break repair via nonhomologous end joining; DNA ligation; double-strand break repair; positive regulation of interferon type I production; innate immune response; positive regulation of transcription from RNA polymerase II promoter; brain development; negative regulation of transcription, DNA-dependent; telomere maintenance |
| **Research Articles on XRCC6** | **1.** Because the Ku70 protein is essential for the NHEJ repair of DSBs and its downregulation impairs DNA repair, this offers a possible explanation for the increased radiosensitivity of prostate cancer cells following castration |
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