

## Mouse anti-Human Ku70 Monoclonal Antibody | anti-XRCC6 antibody

Ku70 Antibody

| CATALOG # | HOST  | REACTIVITY | APPLICATIONS                                           |
|-----------|-------|------------|--------------------------------------------------------|
| AAA290516 | Mouse | Human      | Immunoprecipitation, Immunocytochemistry, Western Blot |

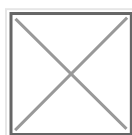
### PRODUCT SYNONYMS

Ku70; Monoclonal Antibody; Ku70 Antibody; Purified Mouse Monoclonal Antibody (Mab); 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; ATP-dependent DNA helicase 2 subunit 1; ATP-dependent DNA helicase II 70 kDa subunit; CTC box binding factor 75 kDa subunit; CTC box-binding factor 75 kDa subunit; CTC75; CTCBF; DNA repair protein XRCC6; G22P1; Ku 70; Ku autoantigen 70kDa; Ku autoantigen p70 subunit; Ku autoantigen; 70kDa; Ku p70; Ku70 DNA binding component of DNA-dependent protein kinase complex (thyroid autoantigen 70 kDa; Kup70; Lupus Ku autoantigen protein p70; ML8; Thyroid autoantigen 70kD (Ku antigen); Thyroid autoantigen; Thyroid lupus autoantigen; Thyroid lupus autoantigen p70; Thyroid-lupus autoantigen; TLAA; X ray repair complementing defective repair in Chinese hamster cells 6; X-ray repair complementing defective repair in Chinese hamster cells 6; X-ray repair cross-complementing protein 6; XRCC 6; XRCC6; XRCC6\_HUMAN.; anti-XRCC6 antibody

### PRODUCT SPECIFICATIONS

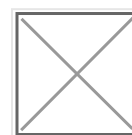
|                                                 |                                                                                                                                                        |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Mouse                                                                                                                                                  |
| Reactivity                                      | Human                                                                                                                                                  |
| Clonality                                       | Monoclonal                                                                                                                                             |
| Form/Format                                     | Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and 50% glycerol.                                                 |
| Sequence Length                                 | 609                                                                                                                                                    |
| Applicable Applications for anti-XRCC6 antibody | IP (Immunoprecipitation), ICC (Immunocytochemistry), WB (Western Blot)                                                                                 |
| Antigen Source                                  | Human                                                                                                                                                  |
| Antigen Type                                    | Recombinant Protein                                                                                                                                    |
| Preparation and Storage                         | Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles. |

### IMAGES



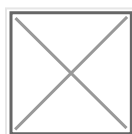
#### IP (Immunoprecipitation)

Immunoprecipitation analysis of HeLa cell lysates using Ku70 mouse mAb.



#### ICC (Immunocytochemistry)

Immunocytochemistry staining of HeLa cells fixed with -20 degree C Methanol and using anti-Ku70 antibody (dilution 1:200).



#### WB (Western Blot)

Western blot detection of Ku70 in HeLa, A549, COS7 and K562 cell lysates using Ku70 mouse mAb (1:1000 diluted). Predicted band size: 70KDa. Observed band size: 67KDa.

## ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-XRCC6 antibody | Single-stranded DNA-dependent ATP-dependent helicase. Has a role in chromosome translocation. The DNA helicase II complex binds preferentially to fork-like ends of double-stranded DNA in a cell cycle-dependent manner. It works in the 3'-5' direction. Binding to DNA may be mediated by XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The XRCC5/6 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA by 100-fold. The XRCC5/6 dimer is probably involved in stabilizing broken DNA ends and bringing them together. The assembly of the DNA-PK complex to DNA ends is required for the NHEJ ligation step. Required for osteocalcin gene expression. Probably also acts as a 5'-deoxyribose-5-phosphate lyase (5'-dRP lyase), by catalyzing the beta-elimination of the 5' deoxyribose- 5-phosphate at an abasic site near double-strand breaks. 5'-dRP lyase activity allows to 'clean' the termini of abasic sites, a class of nucleotide damage commonly associated with strand breaks, before such broken ends can be joined. The XRCC5/6 dimer together with APEX1 acts as a negative regulator of transcription. |
| Product Categories/Family for anti-XRCC6 antibody   | Cancer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| References                                          | Chan J.Y.,et al.J. Biol. Chem. 264:3651-3654(1989). Reeves W.H.,et al.J. Biol. Chem. 264:5047-5052(1989). Griffith A.J.,et al.Mol. Biol. Rep. 16:91-97(1992). Ota T.,et al.Nat. Genet. 36:40-45(2004). Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DBJ databases.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                        |
|----------------------------------|------------------------------------------------------------------------|
| NCBI GI #                        | 573014815                                                              |
| NCBI GeneID                      | 2547                                                                   |
| NCBI Accession #                 | NP_001275905.1                                                         |
| NCBI GenBank Nucleotide #        | NM_001288976.1                                                         |
| UniProt Accession #              | P12956; Q6FG89; Q9UCQ2; Q9UCQ3; B1AHC8                                 |
| Molecular Weight                 | 69843                                                                  |
| NCBI Official Full Name          | X-ray repair cross-complementing protein 6 isoform 1                   |
| 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                                   |
| NCBI Protein Information         | X-ray repair cross-complementing protein 6                             |
| UniProt Protein Name             | X-ray repair cross-complementing protein 6                             |
| UniProt Gene Name                | XRCC6                                                                  |
| UniProt Synonym Gene Names       | G22P1; 5'-dRP lyase Ku70; CTC75; CTCBF; Ku70; TLAA                     |
| UniProt Entry Name               | XRCC6_HUMAN                                                            |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/ku70-antibody-immunoprecipitation-immunocytochemistry-western-blot-elisa/290516>