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**Product Name: XRCC5 Mouse Monoclonal Antibody****Catalog #: AMM81012**

For research use only.

**Summary**

|                      |   |
|----------------------|---|
| <b>Description</b>   | Mouse monoclonal Antibody   |
| <b>Host</b>          | Mouse   |
| <b>Application</b>   | WB,IHC,ICC,ELISA,FC   |
| <b>Reactivity</b>    | Human,Mouse   |
| <b>Conjugation</b>   | Unconjugated  |
| <b>Modification</b>  | Unmodified  |
| <b>Isotype</b>       | Mouse IgG1  |
| <b>Clonality</b>     | Monoclonal  |
| <b>Form</b>          | Liquid  |
| <b>Concentration</b> | 1mg/ml  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>      | Ice bags  |
| <b>Buffer</b>        | Purified antibody in PBS with 0.05% sodium azide.                           |
| <b>Purification</b>  | Affinity Purification   |

**Application**

|                         |   |
|-------------------------|---|
| <b>Dilution Ratio</b>   | WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400 |
| <b>Molecular Weight</b> | 86kDa   |

**Antigen Information**

|                          |  |
|--------------------------|--|
| <b>Gene Name</b>         | XRCC5  |
| <b>Alternative Names</b> | KU80; KUB2; Ku86; NFIV; KARP1; KARP-1; FLJ39089                    |
| <b>Gene ID</b>           | 7520.0   |
| <b>SwissProt ID</b>      | P13010   |
| <b>Immunogen</b>         | Purified recombinant fragment of human XRCC5 expressed in E. Coli. |

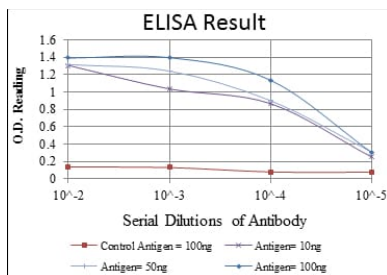
**Background**

The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein which is also known as ATP-dependant DNA helicase II or DNA repair protein XRCC5. Ku is the DNA-binding component of the DNA-dependent protein kinase, and it functions together with the DNA ligase IV-XRCC4 complex in the repair of DNA double-strand break by non-

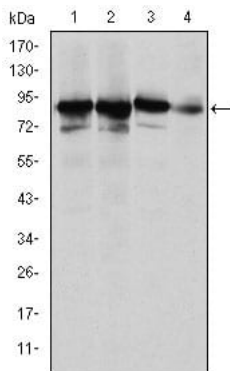
homologous end joining and the completion of V(D)J recombination events. This gene functionally complements Chinese hamster xrs-6, a mutant defective in DNA double-strand break repair and in ability to undergo V(D)J recombination. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity.

## Research Area

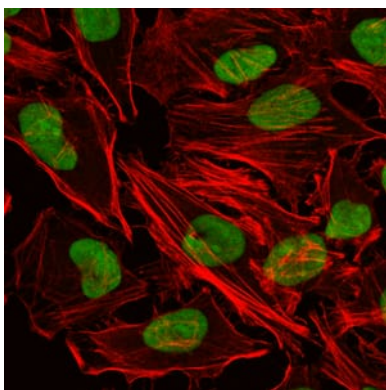
## Image Data



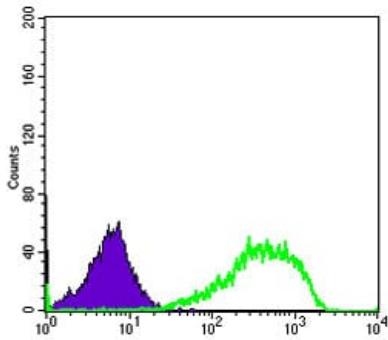
Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng);



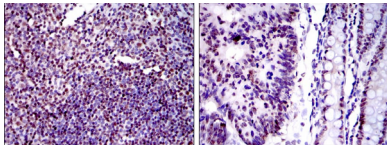
Western blot analysis using XRCC5 mouse mAb against HeLa (1), MCF-7 (2), A549 (3) and NIH/3T3 (4) cell lysate.



Immunofluorescence analysis of HeLa cells using XRCC5 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Hela cells using XRCC5 mouse mAb (green) and negative control (purple).



Immunohistochemical analysis of paraffin-embedded human tonsil tissues (left) and human colon cancer tissues (right) using XRCC5 mouse mAb with DAB staining.