

## KU70 Polyclonal Antibody

Catalog number: 10723-1-AP

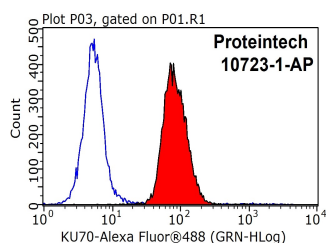
Size: 20 µg/150 µl

Source: Rabbit

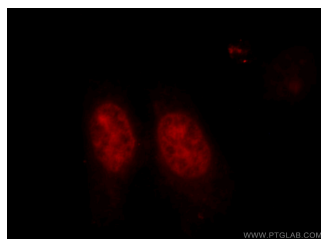
Isotype: IgG

Synonyms:

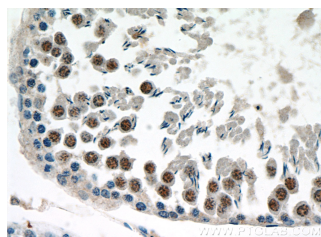
XRCC6; 5 dRP lyase Ku70, 70 kDa subunit of Ku antigen, CTC75, CTCBF, DNA repair protein XRCC6, G22P1, KU70, ML8, Thyroid lupus autoantigen, TLAA, XRCC6



1X10<sup>6</sup> HepG2 cells were stained with 0.2 µg KU70, XRCC6 antibody (10723-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



Immunofluorescent analysis of HepG2 cells, using XRCC6 antibody 10723-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



Immunohistochemical of paraffin-embedded rat testis using 10723-1-AP(KU70, XRCC6 antibody) at dilution of 1:50 (under 40x lens)

### Background

X-ray repair cross-complementing protein 6<sup>XI</sup> XRCC<sup>XI</sup> gene encodes subunit p70 of the p70/p80 autoantigen which has a role in DNA repair or transposition. DNA helicase II complex binds preferentially to fork-like ends of double-stranded DNA in a cell cycle-dependent manner, which may be mediated by XRCC6. XRCC6/5 can form a heterodimer, which function as a regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA, and also it can stabilize broken DNA ends and bring them together. Otherwise, XRCC5/6 heterodimer together with APEX1 can negatively regulate of transcription.

### Applications

|                          |                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------|
| Tested applications:     | ELISA, WB, IHC, IF, FC, IP                                                           |
| Cited applications:      | WB                                                                                   |
| Species specificity:     | Human, Rat; other species not tested.                                                |
| Cited species:           | Human                                                                                |
| Calculated KU70 MW:      | 75 kDa                                                                               |
| Observed KU70 MW:        | 70 kDa                                                                               |
| Positive WB detected in  | HeLa cells, A431 cells, A549 cells, MCF7 cells                                       |
| Positive IP detected in  | HeLa cells                                                                           |
| Positive IHC detected in | Human colon cancer tissue, rat testis tissue                                         |
| Positive IF detected in  | HepG2 cells                                                                          |
| Positive FC detected in  | HepG2 cells                                                                          |
| Recommended dilution:    | WB: 1:500-1:5000<br>IP: 1:500-1:5000<br>IHC: 1:20-1:200<br>IF: 1:10-1:100<br>FC: N/A |

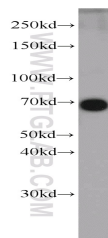
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

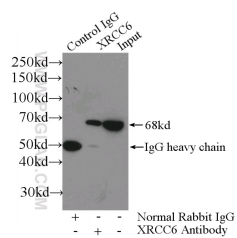
|                           |                                                                        |
|---------------------------|------------------------------------------------------------------------|
| Immunogen:                | Ag1043                                                                 |
| GenBank accession number: | BC008343                                                               |
| Gene ID (NCBI):           | 2547                                                                   |
| Full name:                | X-ray repair complementing defective repair in Chinese hamster cells 6 |

### Product information

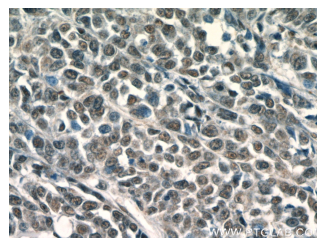
|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| Purification method: | Antigen affinity purification                                       |
| Storage:             | PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C. |



HeLa cells were subjected to SDS PAGE followed by western blot with 10723-1-AP(KU70,XRCC6 antibody) at dilution of 1:1000



IP Result of anti-KU70,XRCC6 (IP:10723-1-AP, 3ug; Detection:10723-1-AP 1:1000) with HeLa cells lysate 1600ug.



Immunohistochemical of paraffin-embedded human colon cancer using 10723-1-AP(KU70,XRCC6 antibody) at dilution of 1:50 (under 40x lens)