

For Research Use Only

# KU70,XRCC6 Monoclonal antibody

Catalog Number: 66607-1-Ig **12 Publications**



## Basic Information

<b>Catalog Number:</b> 66607-1-Ig	<b>GenBank Accession Number:</b> BC008343	<b>Purification Method:</b> Protein G purification
<b>Source:</b> Mouse	<b>GeneID (NCBI):</b> 2547	<b>CloneNo.:</b> 3C12D9
<b>Isotype:</b> IgG1	<b>UNIPROT ID:</b> P12956	<b>Recommended Dilutions:</b> WB: 1:20000-1:100000 IHC: 1:2000-1:8000 IF-P: 1:50-1:500 IF-Fro: 1:200-1:800 IF/ICC: 1:1000-1:4000 FC (Intra): 0.40 ug per 10 <sup>6</sup> cells in a 100 µl suspension
<b>Immunogen Catalog Number:</b> AG21301	<b>Full Name:</b> X-ray repair complementing defective repair in Chinese hamster cells 6	
	<b>Calculated MW:</b> 75 kDa	
	<b>Observed MW:</b> 70 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, IF-Fro, FC (Intra), ELISA	<b>Positive Controls:</b> <b>WB:</b> LNCaP cells, HSC-T6 cells, NIH/3T3 cells, RAW 264.7 cells, HeLa cells, HEK-293 cells, HepG2 cells, Jurkat cells, K-562 cells, Neuro-2a cells <b>IHC:</b> human breast cancer tissue, human colon cancer tissue, human lung cancer tissue <b>IF-P:</b> human breast cancer tissue, <b>IF-Fro:</b> mouse breast cancer, <b>IF/ICC:</b> HeLa cells, HepG2 cells <b>FC (Intra):</b> HepG2 cells,
<b>Cited Applications:</b> WB, IF, IP, ColP, ChIP	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

X-ray repair cross-complementing protein 6 (XRCC6) 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 bringing them together. Otherwise, XRCC5/6 heterodimer together with APEX1 can negatively regulate of transcription.

## Notable Publications

Author	Pubmed ID	Journal	Application
Qidong Li	36417875	Cell Rep	IF
Yan Wang	33667382	Immunity	WB,IP,IF
Tao Wang	35036867	iScience	IF

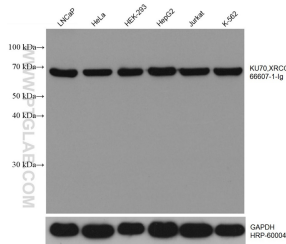
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

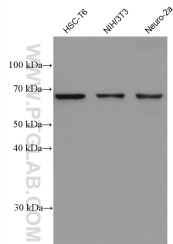
For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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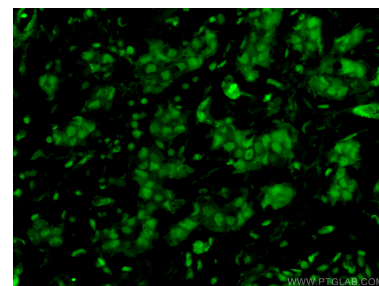
## Selected Validation Data



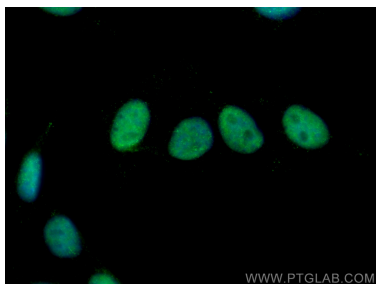
Various lysates were subjected to SDS PAGE followed by western blot with 66607-1-Ig (KU70, XRCC6 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



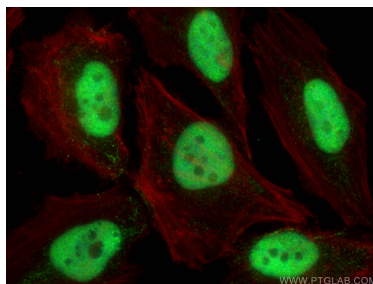
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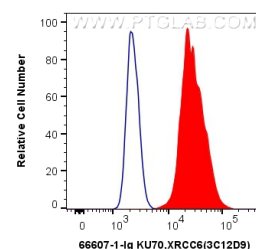
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 66607-1-Ig (KU70, XRCC6 antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



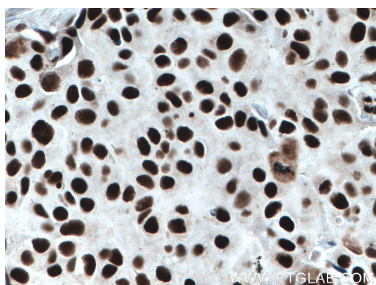
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using KU70, XRCC6 antibody (66607-1-Ig, Clone: 3C12D9) at dilution of 1:800 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



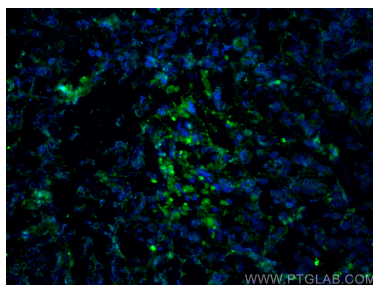
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using KU70, XRCC6 antibody (66607-1-Ig, Clone: 3C12D9) at dilution of 1:2000 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human KU70, XRCC6 (66607-1-Ig, Clone: 3C12D9) and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66607-1-Ig (KU70, XRCC6 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse breast cancer using KU70, XRCC6 antibody (66607-1-Ig, Clone: 3C12D9) at dilution of 1:400 and CoraLite488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).