

KU70,XRCC6 Monoclonal antibody

Catalog Number: 66607-1-Ig 11 Publications

Basic Information

Catalog Number:

66607-1-Ig

Concentration:

1000 ug/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG21301

GenBank Accession Number:

BC008343

GeneID (NCBI):

2547

UNIPROT ID:

P12956

Full Name:

X-ray repair complementing defective repair in Chinese hamster cells 6

Calculated MW:

75 kDa

Observed MW:

70 kDa

Purification Method:

Protein G purification

CloneNo.:

3C12D9

Recommended Dilutions:

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 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, FC (Intra), ELISA

Cited Applications:

WB, IF, IP, ColP, ChIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: 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

IHC: human breast cancer tissue, human colon cancer tissue, human lung cancer tissue

IF-P: human breast cancer tissue,

IF-Fro: mouse breast cancer,

IF/ICC: HeLa cells, HepG2 cells

FC (Intra): HepG2 cells,

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

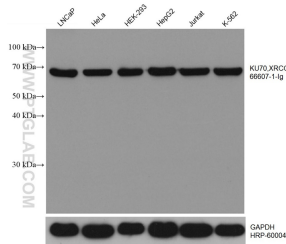
For technical support and original validation data for this product please contact:

T: 4006900926

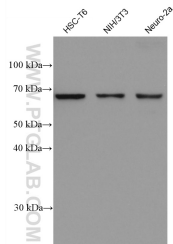
E: Proteintech-CN@ptglab.comW: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

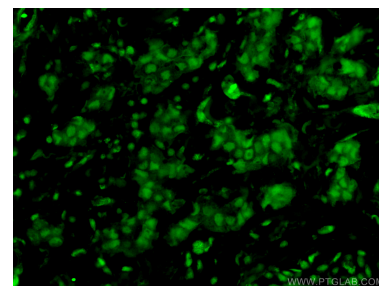
Selected Validation Data



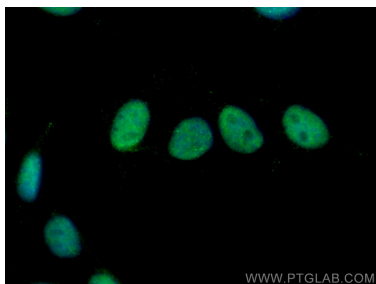
Various lysates were subjected to SDS PAGE followed by western blot with 66607-1-Ig (KU70, XRCC6 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



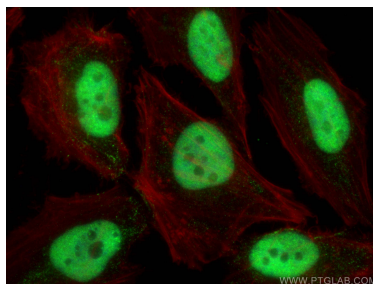
Various lysates were subjected to SDS PAGE followed by western blot with 66607-1-Ig (KU70, XRCC6 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



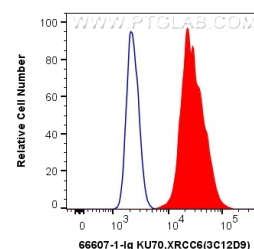
Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 66607-1-Ig (KU70, XRCC6 antibody) at dilution of 1:100 and CoraLite488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



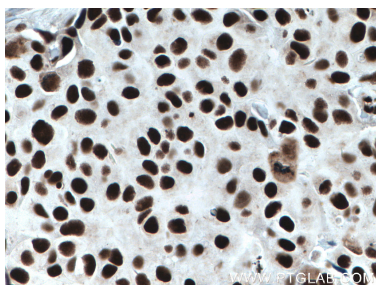
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using KU70, XRCC6 antibody (66607-1-Ig, Clone: 3C12D9) at dilution of 1:800 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



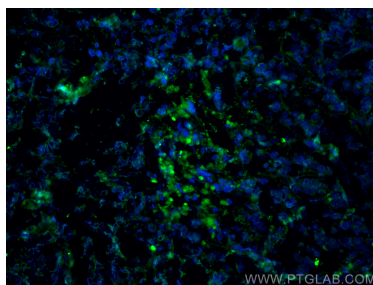
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using KU70, XRCC6 antibody (66607-1-Ig, Clone: 3C12D9) at dilution of 1:2000 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



1X10⁶ HepG2 cells were intracellularly stained with 0.4 ug Anti-Human KU70, XRCC6 (66607-1-Ig, Clone: 3C12D9) and CoraLite@488-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 CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).