KU70,XRCC6 Monoclonal antibody

Catalog Number:66607-1-Ig   8 Publications

Basic Information

Catalog Number: 66607-1-Ig	**GenBank Accession Number:** BC008343	**Purification Method:** Protein A purification
Size: 1000 μg/ml	**GeneID (NCBI):** 2547	**CloneNo.:** 3C12D9
Source: Mouse	**UNIPROT ID:** P12956	**Recommended Dilutions:** WB 1:20000-1:100000
Isotype: IgG1	**Full Name:** X-ray repair complementing defective repair in Chinese hamster cells 6	IHC 1:2000-1:8000 IF 1:500-1:2000
Immunogen Catalog Number: AG21301	**Calculated MW:** 75 kDa	
	Observed MW: 70 kDa	

Applications

Tested Applications:
FC, IF/ICC, IHC, WB, ELISA

Cited Applications:
ChIP, CoIP, IF, IP, WB

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 : HeLa cells, human breast cancer tissue, 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-standed DNA in a cell cycle-dependent manner, which may be mediated by XRCC6. XRCC6/5 can form a heterdimer, 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 stablize broken DNA ends and bringing them together. Otherwise, XRCC5/6 heterdimer 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,IF,IP
Tao Wang	35036867	iScience	IF

Storage

Storage:
Store at -20℃. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage
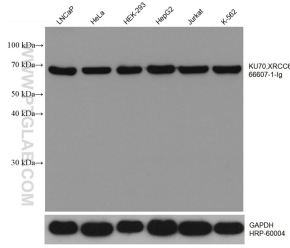
Various lysates were subjected to SDS PAGE followed by western blot with 66607-1-Ig (KU70,XRCC6 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.
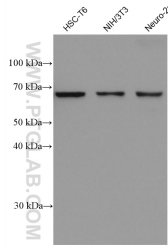

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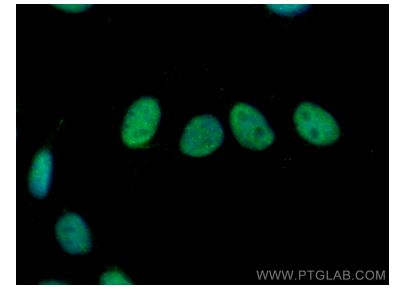

Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using KU70,XRCC6 antibody (66607-1-Ig, Clone: 3C12D9) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).
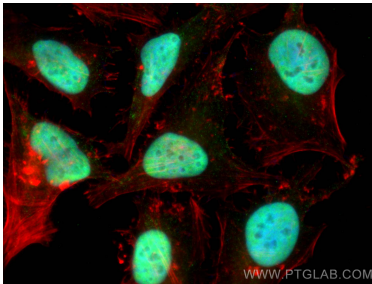
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using KU70,XRCC6 antibody (66607-1-Ig, Clone: 3C12D9) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).
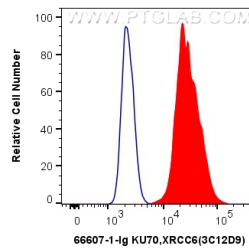
1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human KU70,XRCC6 (66607-1-Ig, Clone:3C12D9) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).
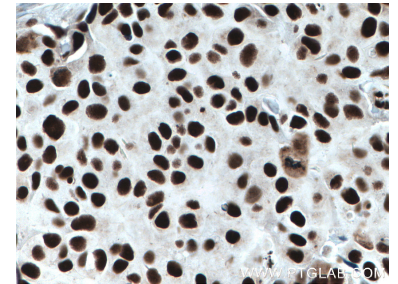
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66607-1-Ig (KU70,XRCC6 antibody) at dilution of 1:4000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).