

For Research Use Only

XRCC5/Ku80 Monoclonal antibody, PBS Only

Catalog Number: 66546-1-PBS



Basic Information

Catalog Number: 66546-1-PBS	GenBank Accession Number: BC019027	Purification Method: Protein G purification
Concentration: 1mg/ml	GeneID (NCBI): 7520	CloneNo.: 2G5E7
Source: Mouse	UNIPROT ID: P13010	
Isotype: IgG1	Full Name: X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)	
Immunogen Catalog Number: AG9512	Calculated MW: 732 aa, 83 kDa	
	Observed MW: 80-83 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, Indirect ELISA

Species Specificity:
human, mouse, rat

Background Information

There are at least two pathways for eukaryotes to repair DNA double-strand breaks: homologous recombination and nonhomologous end joining (NHEJ). The core NHEJ machinery includes XRCC4, DNA ligase IV and the DNA-dependent protein kinase complex, which consists of the DNA end-binding XRCC5/XRCC6 heterodimer and the catalytic subunit PRKDC. The heterodimer of XRCC5/XRCC6 enhanced the affinity of the catalytic subunit PRKDC to DNA by 100-fold. Once the XRCC5/6 dimer association with NAA15, it can bind to the osteocalcin promoter and activate osteocalcin expression. The XRCC5/6 dimer acts as a negative regulator of transcription when together with APEX1. Some published papers indicated that the MW of XRCC5 is 86kDa, while more papers suggested that XRCC5 is a 80kDa protein, as it was firstly introduced in publication. Thus, Ku80 and Ku86 are the same protein.

Storage

Storage:
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:
PBS only

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

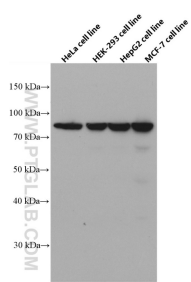
T: 4006900926

E: Proteintech-CN@ptglab.com

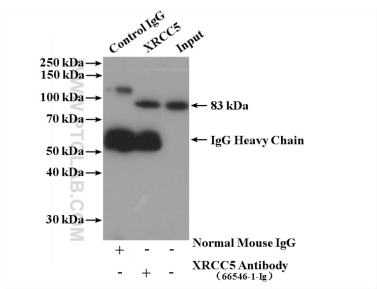
W: ptgcn.com

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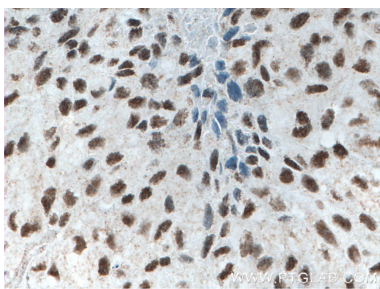
Selected Validation Data



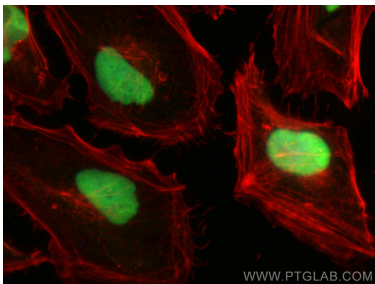
Various lysates were subjected to SDS PAGE followed by western blot with 66546-1-Ig (XRC5 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.



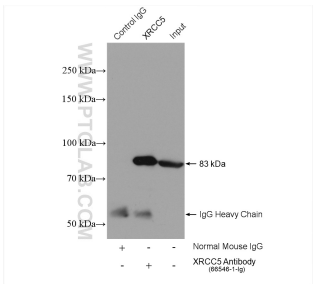
IP result of anti-XRC5/Ku80 (IP:66546-1-Ig, 5ug; Detection:66546-1-Ig 1:20000) with HeLa cells lysate 3200 ug. This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.



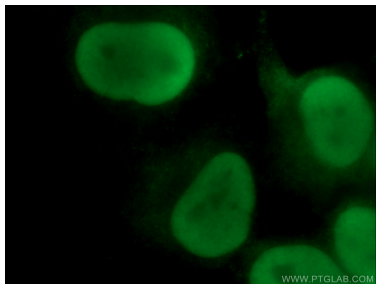
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66546-1-Ig (XRC5 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using XRC5 antibody (66546-1-Ig, Clone: 2G5E7) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red). This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.



IP result of anti-XRC5/Ku80 (IP:66546-1-Ig, 5ug; Detection:66546-1-Ig 1:40000) with HeLa cells lysate 640 ug. This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 66546-1-Ig (XRC5 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.