

For Research Use Only

XRCC5 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
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	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, IP, IF, IHC, 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

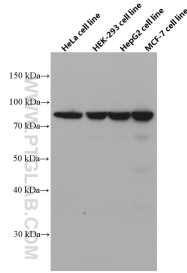
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

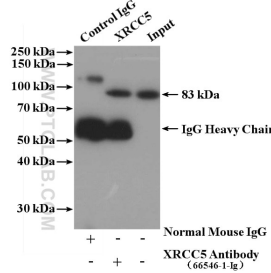
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

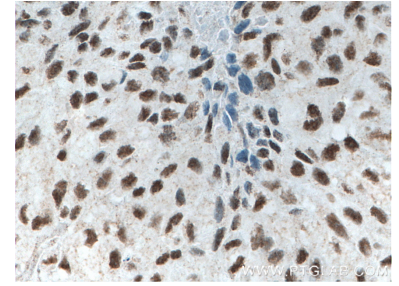
Selected Validation Data



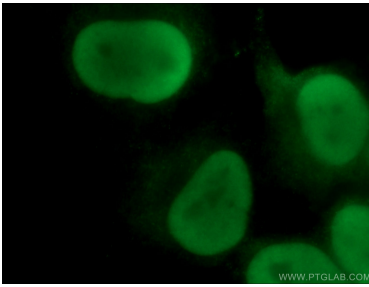
Various lysates were subjected to SDS PAGE followed by western blot with 66546-1-Ig (XRCC5 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.



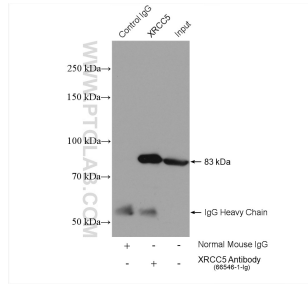
IP result of anti-XRCC5 (IP:66546-1-Ig, 5ug; Detection:66546-1-Ig 1:20000) with HeLa cells lysate 3200 ug. This data was developed using the same antibody clone with 66546-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66546-1-Ig (XRCC5 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 66546-1-Ig (XRCC5 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.



IP result of anti-XRCC5 (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.