

For Research Use Only

XRCC5 Recombinant antibody, PBS Only

Catalog Number:80325-6-PBS



Basic Information

Catalog Number: 80325-6-PBS	GenBank Accession Number: BC019027	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 7520	CloneNo.: 240301G6
Source: Rabbit	UNIPROT ID: P13010	
Isotype: IgG	Full Name: X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)	
Immunogen Catalog Number: AG9454	Calculated MW: 732 aa, 83 kDa	
	Observed MW: 80 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:
human

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.

Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

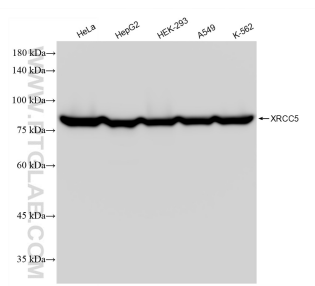
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

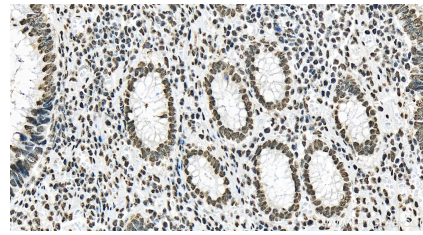
E: proteintech@ptglab.com
W: ptglab.com

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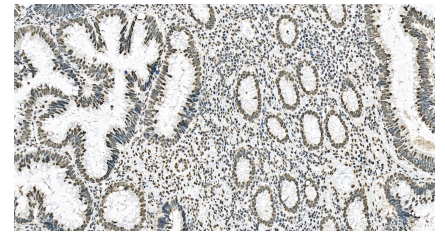
Selected Validation Data



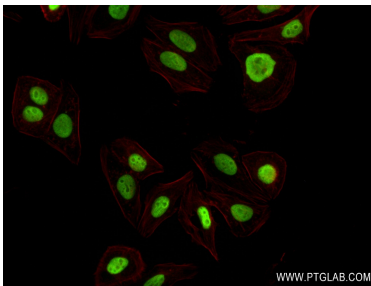
Various lysates were subjected to SDS PAGE followed by western blot with 80325-6-RR (XRC5 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80325-6-PBS in a different storage buffer formulation.



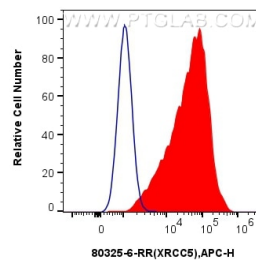
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 80325-6-RR (XRC5 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80325-6-PBS in a different storage buffer formulation.



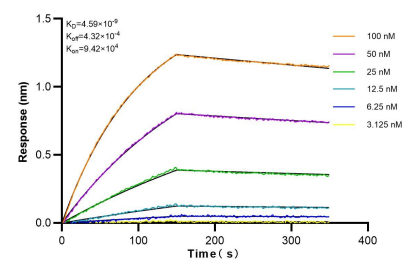
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 80325-6-RR (XRC5 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80325-6-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using XRC5 antibody (80325-6-RR, Clone: 240301G6) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 80325-6-PBS in a different storage buffer formulation.



1×10^6 MCF-7 cells were intracellularly stained with 0.25 μ g XRC5 Recombinant antibody (80325-6-RR, Clone:240301G6) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 μ g Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 80325-6-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 80325-6-RR against Human XRC5 were performed. The affinity constant is 4.59 nM.