

For Research Use Only

CoraLite®594-conjugated XRCC5 Monoclonal antibody



Catalog Number:CL594-66546

Basic Information

Catalog Number: CL594-66546	GenBank Accession Number: BC019027	Purification Method: Protein G purification
Size: 100ul , Concentration: 2000 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 7520	CloneNo.: 2G5E7
Source: Mouse	Full Name: X-ray repair complementing defectivel repair in Chinese hamster cells 5 (double-strand-break rejoining)	Recommended Dilutions: 1:50-1:500
Isotype: IgG1	Calculated MW: 732 aa, 83 kDa	Excitation/Emission maxima wavelengths: 593 nm / 614 nm
Immunogen Catalog Number: AG9512		

Applications

Tested Applications: FC (Intra), IF	Positive Controls: IF : HeLa cells,
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. Thus, Ku80 and Ku86 are the same protein.

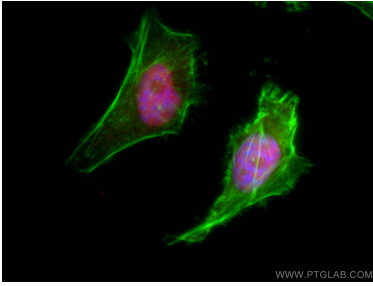
Storage

Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

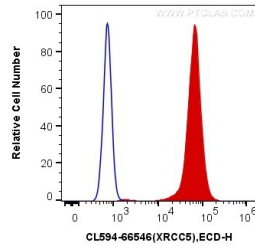
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite®594-conjugated XRCC5 antibody (CL594-66546, Clone: 2G5E7) at dilution of 1:100.



1X10⁶ HeLa cells were intracellularly stained with 0.2 ug CoraLite®594 Anti-Human XRCC5 (CL594-66546, Clone:2G5E7) (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).