

For Research Use Only

CoraLite® Plus 647-conjugated XRCC5 Monoclonal antibody



Catalog Number:CL647-66546

Basic Information

Catalog Number: CL647-66546	GenBank Accession Number: BC019027	Purification Method: Protein G purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 7520	CloneNo.: 2G5E7
Source: Mouse	Full Name: X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)	Excitation/Emission maximum wavelengths: 654 nm / 674 nm
Isotype: IgG1	Calculated MW: 732 aa, 83 kDa	
Immunogen Catalog Number: AG9512	Observed MW: 80-83 kDa	

Applications

Tested Applications:
FC (Intra)

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 -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.

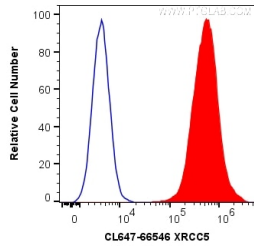
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

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



1X10⁶ HeLa cells were intracellularly stained with 0.2 ug Coralite® Plus 647 Anti-Human XRCC5 (CL647-66546, Clone:2G5E7) (red), or 0.2 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).