

CoraLite® Plus 647-conjugated XRCC5 Monoclonal antibody

Catalog Number: **CL647-66546**

Basic Information

Catalog Number:

CL647-66546

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG9512

GenBank Accession Number:

BC019027

GeneID (NCBI):

7520

UNIPROT ID:

P13010

Full Name:

X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)

Calculated MW:

732 aa, 83 kDa

Observed MW:

80-83 kDa

Purification Method:

Protein G purification

CloneNo.:

2G5E7

Excitation/Emission maxima wavelengths:

654 nm / 674 nm

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:

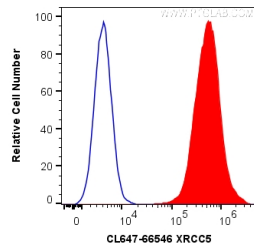
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

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).