

For Research Use Only

CoraLite®555-conjugated XRCC5 Monoclonal antibody

Catalog Number: CL555-66546



Basic Information

Catalog Number:

CL555-66546

Concentration:

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

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.40 µg per 10⁶ cells in a
100 µl suspension

Excitation/Emission maxima
wavelengths:

557 nm / 570 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

human

Positive Controls:

IF/ICC : HeLa cells,

FC (Intra) : HeLa cells,

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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

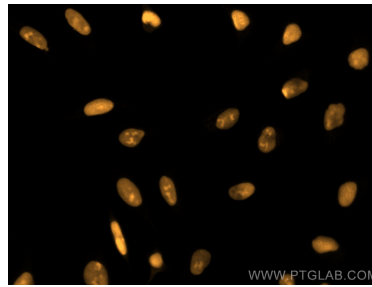
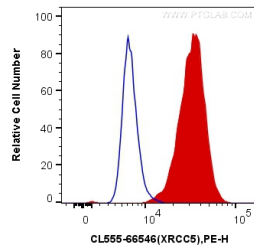
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



1×10^6 HeLa cells were intracellularly stained with 0.4 μ g CoraLite@555 Anti-Human XRCC5 (CL555-66546, Clone: 2G5E7) (red), or 0.4 μ g Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).

Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite@555 XRCC5 antibody (CL555-66546, Clone: 2G5E7) at dilution of 1:200.