For Research Use Only

CoraLite®594-conjugated XRCC5 Monoclonal antibody

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Catalog Number:CL594-66546

Basic Information

Catalog Number:
CL594-66546

Size:
908 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 1:50-1:500

Excitation/Emission maxima wavelengths:
588 nm / 604 nm

Applications

Tested Applications:
FC (Intra), IF/ICC

Species Specificity:
Human

Positive Controls:

IF : 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 heterdimer of XRCC5/XRCC6 enhanced teh 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 publised papers indicated that the MW of XRCC5 is 86kDa, while more papers suggested that XRCC5 is a 80kDa protein, as it was firstly introducted 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:
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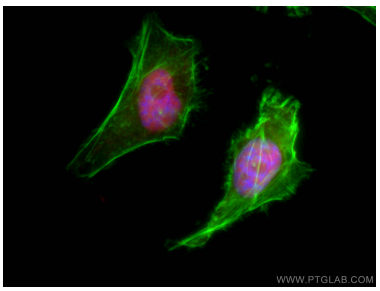
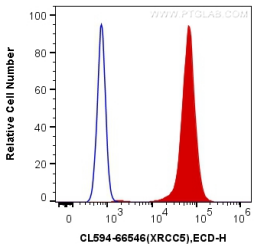
Selected Validation Data



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



1X10^6 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).