For Research Use Only

CoraLite® Plus 488-conjugated XRCC5 Recombinant antibody

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Catalog Number: CL488-80325-6

Catalog Number: GenBank Accession Number: **Purification Method: Basic Information** CL488-80325-6 BC019027 Protein A purification

> GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 ug/ml by 7520 240301G6

Nanodrop: **UNIPROT ID:** Recommended Dilutions: P13010 IF/ICC 1:50-1:500

Rabbit Full Name: Excitation/Emission maxima

Isotype: X-ray repair complementing defectivewavelengths: 493 nm / 522 nm repair in Chinese hamster cells 5 IgG

(double-strand-break rejoining) Immunogen Catalog Number:

Calculated MW: AG9454

732 aa, 83 kDa Observed MW: 80 kDa

Applications

Tested Applications: Positive Controls: IF/ICC, FC (Intra) IF/ICC: HepG2 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 DNAdependent 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 $activate\ osteocal cin\ expression.\ The\ XRCC5/6\ dimer\ acts\ as\ a\ negative\ regulator\ of\ transcription\ when\ together\ with$ 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.

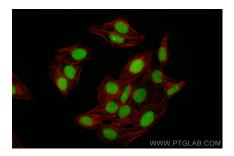
Storage

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

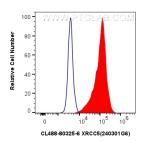
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Coralite® Plus 488 XRCC5 antibody (CL488-80325-6, Clone: 240301G6) at dilution of 1:200.



1x10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488-conjugated KRCC5 Recombinant antibody (CL488-80325-6, Clone:240301G6)(red), or 0.4 ug CoraLite® Plus 488-conjugated Rabbit 1gG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).