For Research Use Only

## RAD21 Recombinant antibody, PBS Only proteintech®

Featured Product Catalog Number:84920-4-PBS



**Purification Method:** 

Protein A purfication

CloneNo.:

242172E3

**Basic Information** 

Catalog Number: GenBank Accession Number:

84920-4-PBS BC050381

GeneID (NCBI): Size: 5885

100ug, Concentration: 1 mg/ml by Nanodrop; **UNIPROT ID:** 060216 Source: Rabbit Full Name:

Isotype: RAD21 homolog (S. pombe)

IgG Calculated MW: Immunogen Catalog Number: 631 aa, 72 kDa AG25481 Observed MW:

140 kDa

**Applications** 

**Tested Applications:** 

WB, IF/ICC, FC (Intra), Indirect ELISA

Species Specificity: human, mouse, rat

## **Background Information**

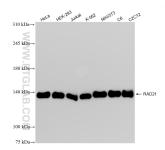
RAD21, also named as Nuclear matrix protein 1, is a 631 amino acid protein, which belongs to the rad21 family. The calculated molecular weight of RAD21 is 72 kDa, but the phosphorylated RAD21 is about 120 kDa. The protein encoded by this gene is highly similar to the gene product of Schizosaccharomyces pombe rad21, a gene involved in the repair of DNA double-strand breaks, as well as in chromatid cohesion during mitosis. This protein is a nuclear phospho-protein, which becomes hyperphosphorylated in cell cycle M phase. The highly regulated association of this protein with mitotic chromatin specifically at the centromere region suggests its role in sister chromatid cohesion in mitotic cells.

Storage

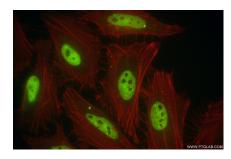
Storage: Store at -80°C. Storage Buffer:

PBS Only

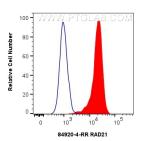
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84920-4-RR (RAD21 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84920-4-PBS in a different storage buffer formulation.

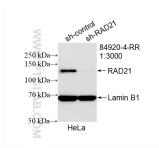


Immunofluorescent analysis of (4% PFA) fixed HeLa cells using RAD21 antibody (84920-4-RR, Clone: 242172E3) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84920-4-PBS in a different storage buffer formulation

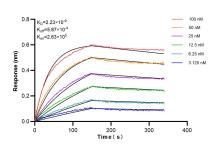


1x10^6 Jurkat cells were intracellularly stained with 0.25 ug RAD21 Recombinant antibody (84920-4-RR, Clone:242172E3) and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 84920-4-PBS in a





WB result of RAD21 antibody (84920-4-RR; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-RAD21 transfected HeLa cells. This data was developed using the same antibody clone with 84920-4-PBS in a different storage buffer formulation.



Biolayer interferometry (BLL) kinetic assays of 84920-4-RR against Human RAD21 were performed. The affinity constant is 2.23 nM.