## For Research Use Only

## RAD21 Recombinant antibody

Catalog Number:84920-4-RR

Featured Product



**Basic Information** 

Catalog Number: GenBank Accession Number:

84920-4-RR BC050381 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 5885

Nanodrop: **UNIPROT ID:** 060216 Rabbit Full Name:

Isotype: RAD21 homolog (S. pombe)

IgG Calculated MW: Immunogen Catalog Number: 631 aa, 72 kDa AG25481 Observed MW: 140 kDa

**Purification Method:** Protein A purfication

CloneNo.:

242172E3

Recommended Dilutions: WB 1:5000-1:50000 IF/ICC 1:250-1:1000

**Applications** 

**Tested Applications:** WB, IF/ICC, FC (Intra), ELISA

Species Specificity: human, mouse, rat

Positive Controls:

WB: HeLa cells, IF/ICC: HeLa cells,

## **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 -20°C. Stable for one year after shipment.

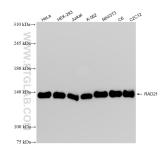
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

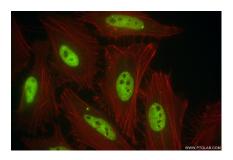
\*\*\* 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

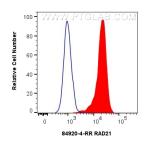
## **Selected Validation Data**



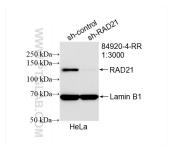
Various lysates were subjected to SDS PAGE followed by western blot with 84920-4-RR (RAD21 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 bours



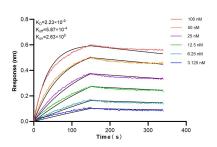
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using RAD21 antibody (84920-4-RR, Clone: 242172E3) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



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 1gG(H+L) (SA00013-2) (red), or 0.25 ug Rabbit 1gG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



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.



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