

# Rad21 Rabbit mAb

Catalog # AP76683

# **Product Information**

**Application** WB, IHC-P, IHC-F, ICC

Primary Accession 060216

**Reactivity** Human, Hamster

**Host** Rabbit

**Clonality** Monoclonal Antibody

Calculated MW 71690

## **Additional Information**

**Gene ID** 5885

Other Names RAD21

**Dilution** WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A ICC~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

#### **Protein Information**

Name RAD21

**Function** [Double-strand-break repair protein rad21 homolog]: As a member of the

cohesin complex, involved in sister chromatid cohesion from the time of DNA replication in S phase to their segregation in mitosis, a function that is essential for proper chromosome segregation, post-replicative DNA repair, and the prevention of inappropriate recombination between repetitive regions (PubMed:11509732). The cohesin complex may also play a role in spindle pole assembly during mitosis (PubMed:11590136). In interphase, cohesins may function in the control of gene expression by binding to numerous sites within the genome (By similarity). May control RUNX1 gene expression (Probable). Binds to and represses APOB gene promoter

(PubMed:<u>25575569</u>). May play a role in embryonic gut development, possibly

through the regulation of enteric neuron development (By similarity).

**Cellular Location** [Double-strand-break repair protein rad21 homolog]: Nucleus. Nucleus matrix

Chromosome Chromosome, centromere. Cytoplasm, cytoskeleton, spindle

pole. Note=Associates with chromatin (PubMed:11073952,

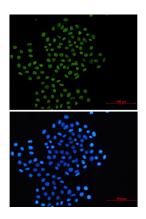
PubMed:11590136). Before prophase, scattered along chromosome arms (PubMed:11073952). During prophase and prometaphase, most cohesins dissociate from the arms of condensing chromosome, possibly through PLK1-mediated phosphorylation (PubMed:11931760). A small amount of cohesin remains in centromeric regions and is removed from chromosomes

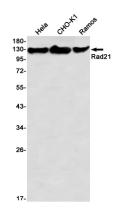
only at the onset of anaphase. At anaphase, cleavage by separase/ESPL1 leads to the dissociation of cohesin from chromosomes and chromosome separation (PubMed:11073952, PubMed:11509732)

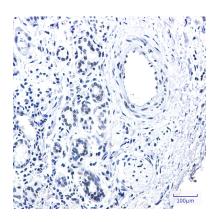
### **Tissue Location**

Expressed in the gut (at protein level).

# **Images**







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