

KD-Validated Anti-RAD21 Cohesin Complex Component Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1678

Product Information

Application	WB, FC, ICC
Primary Accession	O60216
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB1390
Calculated MW	71690
Gene Name	RAD21
Aliases	RAD21; RAD21 Cohesin Complex Component; HHR21; SCC1; KIAA0078; Double-Strand-Break Repair Protein Rad21 Homolog; Sister Chromatid Cohesion 1; Nuclear Matrix Protein 1; SCC1 Homolog; Kleisin; NXP-1; HR21; NXP1; Protein Involved In DNA Double-Strand Break Repair; RAD21 (S. Pombe) Homolog; RAD21 Homolog (S. Pombe); RAD21 Homolog; HRAD21; CDLS4; MCD1; MGS
Immunogen	A synthesized peptide derived from human RAD21

Additional Information

Gene ID	5885
Other Names	Double-strand-break repair protein rad21 homolog, hHR21, Nuclear matrix protein 1, NXP-1, SCC1 homolog, 64-kDa C-terminal product, 64-kDa carboxy-terminal product, 65-kDa carboxy-terminal product, RAD21

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: 25575569). 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.