

**Anti-Rad21 Rabbit Monoclonal Antibody**  
Catalog # ABO13621

**Specification**

---

**Anti-Rad21 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	<a href="#">O60216</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Rad21 Rabbit Monoclonal Antibody . Tested in WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Rad21 Rabbit Monoclonal Antibody - 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

**Calculated MW**

71690 MW KDa

**Application Details**

WB 1:500-1:1000<br>FC 1:50

**Subcellular Localization**

Nucleus. Chromosome. Chromosome, centromere. Associates with chromatin. Before prophase it is scattered along chromosome arms. During prophase, most of cohesin complexes dissociate from chromatin probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. At anaphase, it is cleaved by separase/ESPL1, leading to the dissociation of the complex from chromosomes, allowing chromosome separation. Once cleaved by caspase-3, the C-terminal 64 kDa cleavage product translocates to the cytoplasm, where it may trigger apoptosis..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Rad21

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-Rad21 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/11509732" target="\_blank">11509732</a>). The cohesin complex may also play a role in spindle pole assembly during mitosis (PubMed:<a href="http://www.uniprot.org/citations/11590136" target="\_blank">11590136</a>). 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:<a href="http://www.uniprot.org/citations/25575569" target="\_blank">25575569</a>). 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)

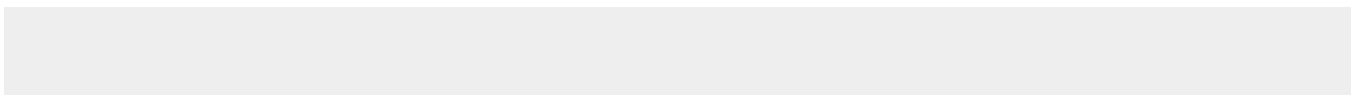
**Tissue Location**

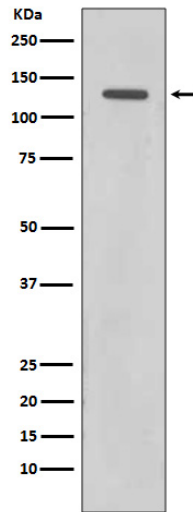
Expressed in the gut (at protein level).

**Anti-Rad21 Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Rad21 Rabbit Monoclonal Antibody - Images**



Western blot analysis of Rad21 expression in HeLa cell lysate.