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Anti-Rad21 Rabbit Monoclonal Antibody

Catalog # ABO13621

Specification

Anti-Rad21 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	O60216
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
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: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).

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 Cytomety
- Cell Culture

Anti-Rad21 Rabbit Monoclonal Antibody - Images

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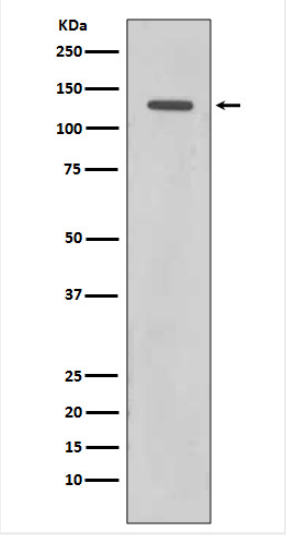

Western blot analysis of Rad21 expression in HeLa cell lysate.