ARG41365
anti-Rad21 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Rad21
Tested Reactivity	Hu
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Rad21
Species	Human
Immunogen	Synthetic peptide derived from Human Rad21.
Conjugation	Un-conjugated
Alternate Names	CDLS4; hHR21; NXP-1; NXP1; MCD1; HR21; SCC1; Nuclear matrix protein 1; Double-strand-break repair protein rad21 homolog; HRAD21; SCC1 homolog

Application Instructions

Application table

Application	Dilution
FACS	1:50
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 128 kDa

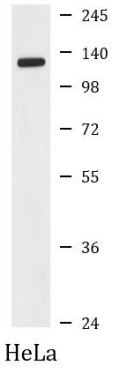
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	RAD21
Gene Full Name	RAD21 cohesin complex component
Background	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. [provided by RefSeq, Jul 2008]
Function	Cleavable component of the cohesin complex, involved in chromosome cohesion during cell cycle, in DNA repair, and in apoptosis. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At metaphase-anaphase transition, this protein is cleaved by separase/ESPL1 and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Also plays a role in apoptosis, via its cleavage by caspase-3/CASP3 or caspase-7/CASP7 during early steps of apoptosis: the C-terminal 64 kDa cleavage product may act as a nuclear signal to initiate cytoplasmic events involved in the apoptotic pathway. [UniProt]
Calculated Mw	72, 128 kDa
PTM	Cleaved by separase/ESPL1 at the onset of anaphase. Cleaved by caspase-3 and caspase-7 at the beginning of apoptosis. The cleavage by ESPL1 and caspase-3 take place at different sites. Phosphorylated; becomes hyperphosphorylated in M phase of cell cycle. The large dissociation of cohesin from chromosome arms during prophase may be partly due to its phosphorylation by PLK. [UniProt]
Cellular Localization	Nucleus. Chromosome, centromere. [UniProt]

Images



ARG41365 anti-Rad21 antibody WB image

Western blot: HeLa cell lysate stained with ARG41365 anti-Rad21 antibody.