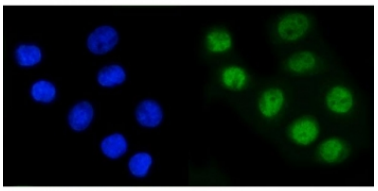
RAD21 Antibody / Cohesin Complex Protein Antibody (RQ7197)

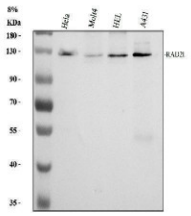
Catalog No.	Formulation	Size
RQ7197	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

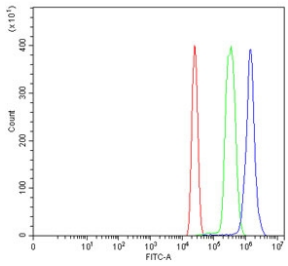
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O60216
Localization	Nuclear, cytoplasmic
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This RAD21 Antibody / Cohesin Complex Protein Antibody is available for research use only.



RAD21 Antibody Human Cancer Cell IF. Immunofluorescent staining of FFPE human SiHa cells using RAD21 Antibody (green) with DAPI nuclear counterstain (blue). HIER was performed by steaming sections in pH 6 citrate buffer for 20 minutes prior to staining. RAD21 Antibody, a Cohesin Complex Protein Antibody, demonstrates strong nuclear localization in SiHa cells, consistent with the role of RAD21 in the cohesin complex, chromosome organization, sister chromatid cohesion, and regulation of genome stability.



RAD21 Antibody Human Cell WB. Western blot analysis of human HeLa, MOLT4, HEL, and A431 cell lysates using RAD21 Antibody at 0.5 ug/ml. Lane 1: HeLa, Lane 2: MOLT4, Lane 3: HEL, Lane 4: A431. An HRP-conjugated secondary antibody with ECL substrate was used for detection. RAD21 Antibody, a Cohesin Complex Protein Antibody, detects a band at approximately 130 kDa, consistent with the reported migration pattern of RAD21. The observed molecular weight is higher than the predicted 72 kDa size and may reflect post-translational modification and altered SDS-PAGE migration of the cohesin complex protein.



RAD21 Antibody Human Immune Cell FACS. Flow cytometric analysis of human HL60 cells using RAD21 Antibody at 1 ug/million cells. Cells were blocked with goat serum and compared against cells alone (red) and isotype control (green). RAD21 Antibody, a Cohesin Complex Protein Antibody, demonstrates a clear positive shift (blue), confirming RAD21 detection in HL60 cells and supporting its use for studying cohesin complex function, chromosome organization, and genome stability pathways.

Description

RAD21 Antibody recognizes RAD21, a core component of the cohesin complex that plays essential roles in sister chromatid cohesion, chromosome organization, transcriptional regulation, and DNA repair. Together with SMC1, SMC3, and STAG proteins, RAD21 forms a ring-like cohesin structure that physically links sister chromatids following DNA replication and ensures accurate chromosome segregation during mitosis and meiosis. In addition to its role in cell division, cohesin regulates three-dimensional genome architecture by controlling chromatin looping and interactions between regulatory DNA elements. RAD21 Antibody is widely used to investigate chromosome dynamics, genome organization, and mechanisms controlling cell cycle progression.

The cohesin complex has important functions beyond chromosome segregation, including regulation of gene expression, DNA damage responses, and maintenance of genomic stability. RAD21 participates in the repair of DNA double-strand breaks by facilitating homologous recombination and coordinating chromatin structure at damaged genomic regions. Altered RAD21 expression or cohesin dysfunction has been associated with developmental disorders, genomic instability, and multiple cancers. As a Cohesin Complex Protein Antibody, RAD21 Antibody is valuable for studying chromatin biology, DNA repair pathways, and cell cycle regulation.

RAD21 has gained significant attention in cancer research because abnormal cohesin activity can influence tumor progression, transcriptional programs, and responses to DNA-damaging therapies. Increased RAD21 expression has been reported in several tumor types and may contribute to therapy resistance by enhancing DNA repair capacity and promoting survival following genotoxic stress. Studies of RAD21 and other cohesin components provide important insight into how chromatin organization and genome maintenance pathways contribute to cancer development.

RAD21 Antibody, a Cohesin Complex Protein Antibody, is an excellent tool for investigating sister chromatid cohesion, chromosome segregation, DNA damage repair, transcriptional control, and genome organization. NSJ Bioreagents offers RAD21 antibodies suitable for researchers studying cell cycle regulation, chromatin structure, cancer biology, and the molecular mechanisms responsible for maintaining genomic integrity.

Explore additional Epigenetics Antibodies for targets involved in chromatin organization, transcriptional regulation, DNA accessibility, and genome stability.

Application Notes

Optimal dilution of the RAD21 Antibody / Cohesin Complex Protein Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids D292-K529) was used as the immunogen for the RAD21 antibody.

Storage

After reconstitution, the RAD21 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.