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Anti-CENP-Q (RABBIT) Antibody
CENP-Q Antibody
Catalog # ASR4423

Specification

Anti-CENP-Q (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**This protein A purified antibody has been tested for use in ELISA, immunofluorescence microscopy and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 26-31 kDa in size corresponding to human CENP-Q by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This protein A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full-length human CENP-Q recombinant protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-CENP-Q (RABBIT) Antibody - Additional Information

Gene ID 55166

Other Names
55166

Purity
This product was protein A purified from monospecific antiserum by immunoaffinity chromatography using protein A coupled to agarose beads. This antibody is specific for human CENP-Q protein. A BLAST analysis of the full length sequence was used to suggest partial cross-reactivity with CENP-Q based on the following percentage homologies: macaque (91%), horse (76%), bovine (74%), dog (73%), swine (71%), mouse (65%) and rat (60%). Cross-reactivity with CENP-Q from other sources has not been determined.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-CENP-Q (RABBIT) Antibody - Protein Information

Name CENPQ

Synonyms C6orf139

Function
Component of the CENPA-CAD (nucleosome distal) complex, a complex recruited to centromeres which is involved in assembly of kinetochore proteins, mitotic progression and chromosome segregation. May be involved in incorporation of newly synthesized CENPA into centromeres via its interaction with the CENPA-NAC complex (PubMed:16622420). Plays an important role in chromosome congression and in the recruitment of CENP-O complex (which comprises CENPO, CENPP, CENPQ and CENPU), CENPE and PLK1 to the kinetochores (PubMed:25395579).

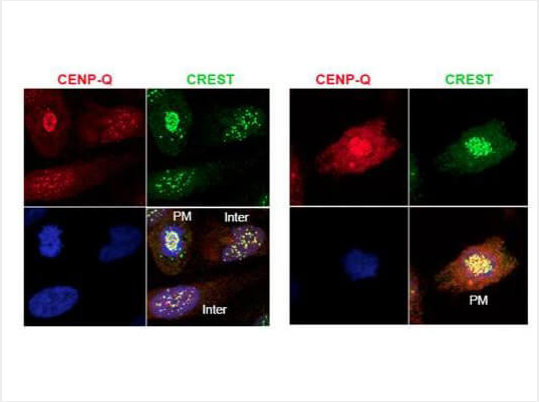
Cellular Location
Nucleus. Chromosome, centromere. Note=Localizes exclusively in the centromeres. The CENPA-CAD complex is probably recruited on centromeres by the CENPA-NAC complex

Anti-CENP-Q (RABBIT) 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-CENP-Q (RABBIT) Antibody - Images



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Immunofluorescence microscopy using Rockland's protein A purified anti-CENP-Q antibody shows detection of endogenous CENP-Q in HeLa whole cell lysate. Primary antibody was used at 1:100 followed by secondary antibody diluted 1:150. Red punctate anti-CENP-Q signal colocalizes in overlay images with green punctate anti-CREST signals at the kinetochores (attached points of sister chromatids). Visible are colocalized CENP-Q and CREST signal at various stages of the cell cycle as indicated from interphase to the end of mitosis. Nuclei are counter stained with bisbenzimide. Personal Communication, Kyung S. Lee, CCR-NCI, Bethesda, MD

Anti-CENP-Q (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Cenp-Q (also known as centromere protein Q or CENPQ) is a nuclear/centromeric protein that is one of the critical components that constitutes the CENP-O complex at the kinetochores and appears to stabilize PBIP1/CENP-U(50)/MLF1IP in the complex. This complex is important for proper recruitment of polo-like kinase 1 (Plk1) to the mitotic kinetochores. A failure in this process results in improper microtubule attachment to the kinetochores and chromosome missegregation that ultimately lead to aneuploidy.