

Anti-Cenexin-1 (RABBIT) Antibody

Cenexin-1 Antibody Catalog # ASR5415

Specification

Anti-Cenexin-1 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate Unconjugated

Target Species Human

Reactivity Chimpanzee, Human Clonality Polyclonal

Application WB, IHC, E, I, LCI

Application Note This affinity purified antibody has been

tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 93 kDa in size corresponding to Cenexin-1 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 affinity purified antibody was

prepared from whole rabbit serum

produced by repeated immunizations with a synthetic peptide corresponding to residues near the carboxy terminus.

Preservative 0.01% (w/v) Sodium Azide

Anti-Cenexin-1 (RABBIT) Antibody - Additional Information

Gene ID 4957

Other Names 4957

Purity

This product was affinity purified from monospecific antiserum by immunoaffinity chromatography using peptide coupled to agarose beads. This antibody is specific for human Cenexin-1 protein. A BLAST analysis was used to suggest cross-reactivity with Cenexin-1 from human, chimpanzee and macaque based on 100% homology with the immunizing sequence. Cross-reactivity with Cenexin-1from 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-Cenexin-1 (RABBIT) Antibody - Protein Information

Name ODF2

Function

Seems to be a major component of sperm tail outer dense fibers (ODF). ODFs are filamentous structures located on the outside of the axoneme in the midpiece and principal piece of the mammalian sperm tail and may help to maintain the passive elastic structures and elastic recoil of the sperm tail. May have a modulating influence on sperm motility. Functions as a general scaffold protein that is specifically localized at the distal/subdistal appendages of mother centrioles. Component of the centrosome matrix required for the localization of PLK1 and NIN to the centrosomes. Required for the formation and/or maintenance of normal CETN1 assembly.

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, cilium {ECO:0000250|UniProtKB:A3KGV1}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole Cytoplasm, cytoskeleton, spindle pole {ECO:0000250|UniProtKB:A3KGV1} Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:A3KGV1} Note=Localized at the microtubule organizing centers in interphase and spindle poles in mitosis. Localized at the distal/subdistal appendages of mother centrioles. {ECO:0000250|UniProtKB:A3KGV1}

Tissue Location

Testis-specific (at protein level). Highly expressed in cytoplasm of step 2 round spermatids. Detected in the middle piece and extends to about half the principal piece of the sperm tails.

Anti-Cenexin-1 (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-Cenexin-1 (RABBIT) Antibody - Images





Western Blot of Rabbit Anti-Cenexin 1 Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: Hu Semen Lysate. Lane 3: MCF7 WCL (p/n W09-000-360). Lane 4: MOLT4 WCL (p/n W09-001-GK2). Lane 5: HeLa WCL (p/n W09-000-364). Load: 10 μ g/lane. Primary Antibody: Anti-Cenexin-1 at 1.0 μ g/mL overnight at 2-8°C. Secondary Antibody: Goat anti-Rabbit IgG HRP (p/n 611-103-122) at 1:40000 for 30mins at RT. Block: 5% Casein/PBS. Predicted MW: ~95kDa. Observed MW: ~100kDa.

Anti-Cenexin-1 (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. Cenexin-1, also known as ODF2 and outer dense fiber of sperm tails 2, are cytoskeletal structures that surround the axoneme in the middle piece and principal piece of the sperm tail. The fibers function in maintaining the elastic structure and recoil of the sperm tail as well as in protecting the tail from shear forces during epididymal transport and ejaculation. Defects in the outer dense fibers lead to abnormal sperm morphology and infertility. Cenexin-1 is one of the major outer dense fiber proteins. Multiple protein isoforms are encoded by transcript variants of the cenexin gene; however, not all isoforms and variants have been fully described.