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Datasheet for 600-401-A46

Cenexin-1 Antibody

Overview

Description:	Anti-Cenexin-1 (RABBIT) Antibody - 600-401-A46
Item No.:	600-401-A46
Size:	100 µg
Applications:	ELISA, WB, IF
Reactivity:	Human, Chimpanzee, Macaque Monkey
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-Cenenxin1 antibody, anti-Cenenxin-1, anti-Cenenxin 1, ODF84 antibody, Outer dense fiber of sperm tail 2, Cenexin1 variant 1 antibody, KKT 4 antibody, Outer dense fiber protein 2, ODF2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ODF2
Reactivity:	Human, Chimpanzee, Macaque Monkey

Immunogen Type:	Conjugated Peptide
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.
Purity/Specificity:	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.
Relevant Links:	• NCBI - NP_702915 • UniProtKB - Q5BJF6 • GeneID - 4957

Application Details

Tested Applications:	ELISA, WB
Suggested Applications:	IF (Based on references)
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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IHC:	User Optimized
WB:	1:200 - 1:2,000

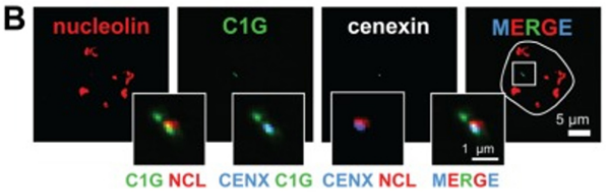
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

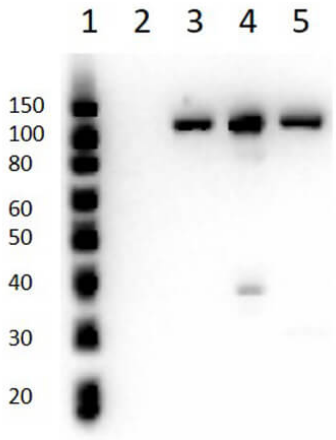
Shipping & Handling

Shipping Condition:	Dry Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy
Non-random distribution of nucleolin toward the mature centriole. Co-visualization of nucleolin and centrin-1-GFP (C1G) together with cenexin (B) in U2OS-centrin-1-GFP cells. Enlarged images of the centrosome area (displayed on the 3 color merged images) are presented in the insets as 2 color merged images to facilitate colocalization visualization. Nucleolin was detected with a monoclonal antibody (detected with a secondary antibody coupled to Alexa647) [red]; centrin-1-GFP (C1G) detection was enhanced with a GFP booster [green], while cenexin was detected with polyclonal antibody (p/n 600-401-A46) (detected with a secondary antibody coupled to Alexa555) [in white on the unmerged image and in blue on merged images]. Outline of the nuclei, counterstained with DAPI (not shown) is highlighted on the merged images. Scale bars represent 5 µm on full size images and 1 µm on enlarged insets. Fig 3. PMID: 25590348



Western Blot
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: 10µg/lane. Primary Antibody: Anti-Cenexin-1 at 1.0µg/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.

References

- Gaume et al. Centrosomal nucleolin is required for microtubule network organization. *Cell Cycle* (2015)

Disclaimer

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