

## Rabbit Anti-Cenexin1 antibody

SL10309R

**Product Name** Cenexin1

**Chinese Name** 精子尾部结构蛋白抗体

**Alias** Cenexin1/ODF2; sperm tail structural protein; 84 kDa outer dense fiber protein; Cenexin 1; Cenexin 1; Cenexin 1; KKT 4; KKT4; ODF 2; ODF 84; ODF2; ODF2/1; ODF2/2; ODF84; Outer dense fiber of sperm tails 2; outer dense fiber of sperm tails; Outer dense fiber of sperm tails protein 2; outer dense fiber of sperm tails, 84 kD; Outer dense fiber protein 2; Sperm outer dense fiber major protein; Sperm outer dense fiber major protein specific autoantigen; ODFP2\_HUMAN.

**Research Area** immunology Developmental biology Signal transduction

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Rat, (predicted: Human, )  
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:100-500  
(Paraffin sections need antigen repair)

**Applications** not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 91kDa

**Cellular localization** cytoplasmic

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human Cenexin1: 1-100/829

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic.

**PubMed**

applications.

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Cenexin1 is an isoform of ODF2, that unlike ODF2 is present in several somatic cell types. Cenexin1 is a general scaffold protein that is specifically localised to the distal/subdistal appendages of mother centrioles. Cenexin1 is required for proper localization of Plk1 to the centrosomes. This centrosomal localization is required for proper microtubule function. Cenexin1 recruits Plk1 via a C-terminal extension of cenexin1 not present in ODF2. Cenexin1 is required for proper mitotic progression; depletion of Cenexin1 results in defects in chromosome segregation and apoptosis. The ODF2 (outer dense fiber 2) gene encodes both Cenexin1 and Cenexin2, which have very different functions. ODF2 is a major component of sperm tail outer dense fibers (ODFs). ODFs are filamentous structures located on the outside of the axoneme in the midpiece and principal piece of the mammalian sperm tail. They may help to maintain the passive elastic structures and the sperm tail, and may also modulate sperm motility.

**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 effect 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 NIN to the centrosomes. Required for the formation and/or maintenance of normal CETN1 assembly.

**Product Detail**

**Subunit:**

Self-associates. Associates with microtubules and forms a fibrillar structure partially linked to the microtubule network. Interacts via its C-terminus with PLK1. Interacts with ODF1.

**Subcellular Location:**

Cytoplasm, cytoskeleton, centrosome. Cell projection, cilium. Cytoplasm, cytoskeleton, centrosome, spindle pole. Note=Localized at the microtubule organizing centers in mitosis. Localized at the distal/subdistal appendages of mother centrioles.

**Tissue Specificity:**

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.

**Post-translational modifications:**

Tyrosine phosphorylated.

**Similarity:**

Belongs to the ODF2 family.

**SWISS:**

Q5BJF6



**Gene ID:**  
4957

**Database links:**

[Entrez Gene: 4957](#) Human

[Entrez Gene: 18286](#) Mouse

[Omim: 602015](#) Human

[SwissProt: Q5BJF6](#) Human

[SwissProt: A3KGV1](#) Mouse

[Unigene: 129055](#) Human

[Unigene: 330116](#) Mouse