

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; Cenexin1 variant 1; KKT 4; KKT4; ODF 2; ODF 84; ODF2/1; ODF2/2; ODF84; Outer dense fiber of sperm tail 2; 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 2; Testis specific autoantigen; ODFP2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	91kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Cenexin1:1-100/829
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Cenexin1 is an isoform of ODF2, that unlike ODF2 is present in several somatic cell types. Cenexin1 acts as 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 of Plk1 is required for proper microtubule function. Cenexin1 recruits Plk1 via a C-terminal extension of cenexin1 that is not present in ODF2. Cenexin1 is required for proper mitotic progression; depletion of Cenexin1 ultimately leads to chromosome missegregation and apoptosis. The ODF2 (outer dense fiber 2) gene encodes both ODF2 and Cenexin1, 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 elastic recoil of 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 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.

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, centriole. Cytoplasm, cytoskeleton, spindle pole. Note=Localized at the microtubule organizing centers in interphase and spindle poles 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:

O5BJF6

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

Important Note:

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