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SCP3 Rabbit pAb

Catalog # AP99341

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8IZU3
Other Accession	Q8IZU3
Reactivity	Mouse
Predicted	Rat, Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27729
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SYCP3
Epitope Specificity	151-236/236
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the XLR/SYCP3 family.
SUBUNIT	Interacts with SYCP2.
Post-translational modifications	Phosphorylated.
DISEASE	Spermatogenic failure 4 (SPGF4) [MIM:270960]: An infertility disorder characterized by azoospermia, a condition of having no sperm present in the ejaculate. Testicular histology shows arrest of spermatogenesis at the pachytene stage of primary spermatocytes. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes an essential structural component of the synaptonemal complex. This complex is involved in synapsis, recombination and segregation of meiotic chromosomes. Mutations in this gene are associated with azoospermia in males and susceptibility to pregnancy loss in females. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, May 2010]

Additional Information

Gene ID	50511
Other Names	COR1; RPRGL4; SCP3; SPGF4; RNASCP3; SYCP3_HUMAN; SYCP3; SCP-3; SYCP3_MOUSE; SYCP3_RAT; synaptonemal complex protein 3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	SYCP3
Synonyms	SCP3
Function	Component of the synaptonemal complexes (SCS), formed between homologous chromosomes during meiotic prophase. Required for centromere pairing during meiosis in male germ cells (By similarity). Required for normal meiosis during spermatogenesis and male fertility (PubMed:14643120). Plays a lesser role in female fertility. Required for efficient phosphorylation of HORMAD1 and HORMAD2 (By similarity).
Cellular Location	Nucleus {ECO:0000250|UniProtKB:Q60547}. Chromosome {ECO:0000250|UniProtKB:Q60547}. Chromosome, centromere {ECO:0000250|UniProtKB:Q60547}. Note=It is present in early unpaired cores, in the lateral domains of the synaptonemal complex and in the chromosome cores when they separate at diplotene. It is found axial to the metaphase I chromosomes and in association with pairs of sister centromeres. The centromere-associated protein becomes dissociated from the centromeres at anaphase II and is not found in mitotic metaphase centromeres. {ECO:0000250|UniProtKB:Q60547}
Tissue Location	Testis-specific.

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