

Anti-SCP3 Antibody

Catalog # ABO12720

Product Information

Application	WB
Primary Accession	Q8IZU3
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Synaptonemal complex protein 3(SYCP3) detection. Tested with WB in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	50511
Other Names	Synaptonemal complex protein 3, SCP-3, SYCP3, SCP3
Calculated MW	27729
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Nucleus . Chromosome . In tripartite segments of synaptonemal complexes, irrespective of whether these are synapsed or unsynapsed. .
Tissue Specificity	Testis-specific. .
Source	Eukaryota
Protein Name	Synaptonemal complex protein 3
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human SCP3 recombinant protein (Position: E18-E223). Human SCP3 shares 72% and 73% amino acid (aa) sequences identity with mouse and rat SCP3, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

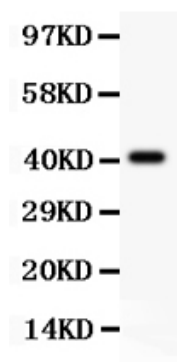
Protein Information

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.

Background

SYCP3, also known as COR1 or SCP3, is a protein that in humans is encoded by the SYCP3 gene. It is mapped to 12q23.2. 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. SYCP3 has an essential meiotic function in human spermatogenesis that is compromised by the mutant protein by dominant-negative interference. SYCP3 is linked to inherited aneuploidy in female germ cells and provides a model system for studying age-dependent degeneration in oocytes.

Images



Anti-SCP3 Picoband antibody, ABO12720-1.jpgAll lanes:
Anti SCP3 (ABO12720) at 0.5ug/mlWB: Recombinant
Human SCP3 Protein 0.5ngPredicted bind size: 41KD
Observed bind size: 41KD

Anti-SCP3 Picoband antibody, ABO12720-2.jpgAll lanes:
Anti SCP3 (ABO12720) at 0.5ug/mlWB: HT1080 Whole Cell
Lysate at 40ugPredicted bind size: 28KDObserved bind
size: 28KD



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