

**Anti-SCP3 Antibody**  
Catalog # ABO12720**Specification**

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**Anti-SCP3 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q8IZU3</a>
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.

**Anti-SCP3 Antibody - Additional Information**

**Gene ID** 50511

**Other Names**

Synaptonemal complex protein 3, SCP-3, SYCP3, SCP3

**Calculated MW**

27729 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Nucleus . Chromosome . In tripartite segments of synaptonemal complexes, irrespective of whether these are synapsed or unsynapsed. .

**Tissue Specificity**

Testis-specific. .

**Protein Name**

Synaptonemal complex protein 3

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**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.**

**Anti-SCP3 Antibody - 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:<a href="http://www.uniprot.org/citations/14643120" target="\_blank">14643120</a>). 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}

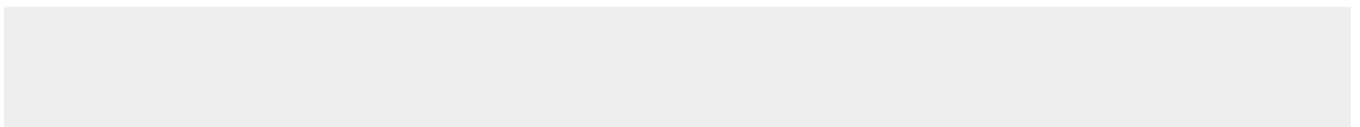
**Tissue Location**

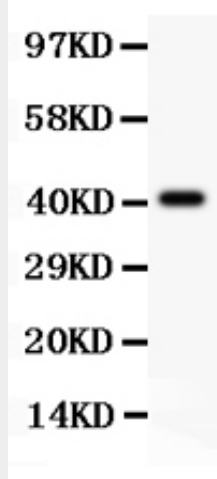
Testis-specific.

**Anti-SCP3 Antibody - Protocols**

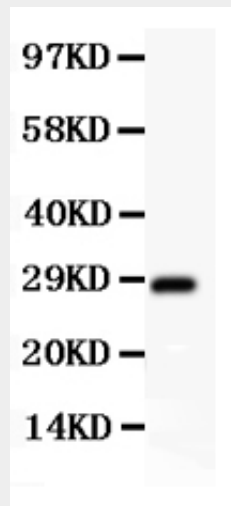
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-SCP3 Antibody - Images**



Anti-SCP3 Picoband antibody, ABO12720-1.jpg All lanes: Anti SCP3 (ABO12720) at 0.5ug/ml WB: Recombinant Human SCP3 Protein 0.5ng Predicted bind size: 41KD Observed bind size: 41KD



Anti-SCP3 Picoband antibody, ABO12720-2.jpg All lanes: Anti SCP3 (ABO12720) at 0.5ug/ml WB: HT1080 Whole Cell Lysate at 40ug Predicted bind size: 28KD Observed bind size: 28KD

### Anti-SCP3 Antibody - 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.