

**SPO11 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP59210****Specification****SPO11 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">Q9Y5K1</a>
Reactivity	Rat, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPO11
Epitope Specificity	151-330/396
Isotype	IgG
<b>Purity</b>	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nuclear
SIMILARITY	Belongs to the TOP6A family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

Spo11 is a type II topoisomerase that is thought to generate the chromosome breaks that initiate meiotic recombination. The Spo11 protein initiates meiotic recombination by generating DNA double-strand breaks (DSBs) and is required for meiotic synapsis in *S. cerevisiae*. The DSBs are located mostly in promoter regions, where the chromatin is in an open configuration, and cluster in domains along the chromosome. Expression of the Spo11 is detected mainly in the testis, in agreement with its predicted function in the initiation of meiotic recombination. Disruption of Spo11 leads to severe gonadal abnormalities from defective meiosis and results in infertility.

**SPO11 Polyclonal Antibody - Additional Information****Gene ID** 23626**Other Names**

Meiotic recombination protein SPO11, 5.6.2.2, Cancer/testis antigen 35, CT35, SPO11

**Target/Specificity**

Highly expressed in testis.

**Dilution**

<span class = "dilution\_WB">WB~~1:1000</span><br /><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br /><span class = "dilution\_FI">FI~~N/A</span>

= "dilution\_IHC-F" > IHC-F~~N/A </span> <br /> <span class = "dilution\_IF" > IF~~1:50~200 </span> <br /> <span class = "dilution\_E" > E~~N/A </span>

**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.

**SPO11 Polyclonal Antibody - Protein Information**

**Name** SPO11

**Function**

Component of a topoisomerase 6 complex specifically required for meiotic recombination. Together with TOP6BL, mediates DNA cleavage that forms the double-strand breaks (DSB) that initiate meiotic recombination. The complex promotes relaxation of negative and positive supercoiled DNA and DNA decatenation through cleavage and ligation cycles. Essential for the phosphorylation of SMC3, HORMAD1 and HORMAD2.

**Cellular Location**

Nucleus.

**Tissue Location**

Highly expressed in testis.

**SPO11 Polyclonal 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](#)

**SPO11 Polyclonal Antibody - Images**