



Rabbit Anti-SPO11 antibody

SL9302R

Product Name:	SPO11
Chinese Name:	减数分裂重组蛋白SPO11抗体
Alias:	Meiotic recombination protein SPO 11; Meiotic recombination protein SPO11; MGC39953; SPO 11; SPO11 meiotic protein covalently bound to DSB homolog; SPO11 meiotic protein covalently bound to DSB like; SPO11_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SPO11:151-330/396
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:	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 <i>S. cerevisiae</i> . 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.

Function:

Required for meiotic recombination. Mediates DNA cleavage that forms the double-strand breaks (DSB) that initiate meiotic recombination (By similarity). Essential for the phosphorylation of SMC3, HORMAD1 and HORMAD2 (By similarity).

Subcellular Location:

Nuclear

Tissue Specificity:

Highly expressed in testis.

Similarity:

Belongs to the TOP6A family.

SWISS:

Q9Y5K1

Gene ID:

23626

Database links:

[Entrez Gene: 23626](#)Human

[Entrez Gene: 26972](#)Mouse

[Entrez Gene: 100125974](#)Pig

[Entrez Gene: 366261](#)Rat

[Omim: 605114](#)Human

[SwissProt: Q9Y5K1](#)Human

[SwissProt: Q9WTK8](#)Mouse

[Unigene: 159737](#)Human

[Unigene: 23495](#)Mouse

Important Note:

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