



Rabbit Anti-DMC1 antibody

SL13010R

Product Name:	DMC1
Chinese Name:	减数分裂同源蛋白DMC1抗体
Alias:	disrupted meiotic cDNA 1 homolog; dJ199H16.1; DMC 1; DMC1 dosage suppressor of mck1 homolog; DMC1 dosage suppressor of mck1 homolog meiosis specific homologous recombination (yeast); DMC1 homologue; DMC1H; HsLim15; LIM15; Meiotic recombination protein DMC1/LIM15 homolog; MGC150472; MGC150473; DMC1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	38kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DMC1:251-340/340
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:	DNA repair proteins are necessary for the maintenance of chromosome integrity and are involved in the elimination of premutagenic lesions from DNA. The DNA repair proteins Rad51 and Rad52 are key components of the double-strand-break repair

(DSBR) pathway. Rad51 is essential for mitotic and meiotic recombination, and its mutation in yeast and mammalian cells results in chromosome loss. Overexpression of Rad52 confers resistance to ionizing radiation and induces homologous intrachromosomal recombination. Rad52 is thought to be involved in an early stage of Rad51-mediated recombination. Additional proteins involved in the pathway include Nibrin and Dmc1. Nibrin, which complexes with Mre11 and Rad50, is absent in Nijmegen breakage syndrome (NBS) patients. Dmc1 is specifically involved in meiotic recombination. An alternative spliced form of Dmc1, designated Dmc1-D, is deleted for a region between the two motifs involved in nucleotide binding. The alternatively spliced Dmc1-D transcript is detected in both male and female germ cells, indicating that the encoded protein may have a role in mammalian genetic recombination in meiosis.

Function:

May participate in meiotic recombination, specifically in homologous strand assimilation, which is required for the resolution of meiotic double-strand breaks (By similarity).

Subunit:

Interacts with the MND1-PSMC3IP heterodimer (By similarity). Double stacked ring-shaped homooctamer. Interacts with BRCA2.

Subcellular Location:

Nucleus (Potential). Chromosome (By similarity).

Similarity:

Belongs to the RecA family. DMC1 subfamily.
Contains 1 HhH domain.

SWISS:

Q14565

Gene ID:

11144

Database links:

[Entrez Gene: 618398](#)Cow

[Entrez Gene: 11144](#)Human

[Entrez Gene: 13404](#)Mouse

[Entrez Gene: 362960](#)Rat

[Omim: 602721](#)Human

[SwissProt: Q14565](#)Human

[SwissProt: Q61880](#)Mouse

Important Note:

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

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