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## DMC1 Rabbit pAb

Catalog Number: bs-13010R

Target Protein: DMC1

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ICC/IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Human, Mouse, Rat, Pig, Cow, Chicken, Horse)

Predicted MW: 38 kDa

Subcellular Nucleus

Locations:

Entrez Gene: 11144

Swiss Prot: Q14565

Source: KLH conjugated synthetic peptide derived from human DMC1: 251-340/340.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** 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.

## PRODUCT SPECIFIC PUBLICATIONS

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[IF=3.91] Dong, Wei-tao, et al. "iTRAQ proteomic analysis of the interactions between Bombyx mori nuclear polyhedrosis virus and silkworm." Journal of Proteomics (2017). WB ; ="Other Species" . 28755911

[IF=2.74] Niayale Robert. et al. Expression of Rad51 and the histo-morphological evaluation of testis of the sterile male cattle-yak. Theriogenology. 2021 Sep;172:239 WB,IF,IHC ; Bovine . 34298284