

### 36-2082: Anti-DMC1 Monoclonal Antibody (Clone: 2H12/4)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	2H12/4
<b>Application :</b>	IF, WB, IHC
<b>Reactivity :</b>	Human, Mouse, Rat
<b>Gene :</b>	DMC1
<b>Gene ID :</b>	11144
<b>Uniprot ID :</b>	Q14565
<b>Alternative Name :</b>	Disrupted meiotic cDNA 1 homolog; dJ199H16.1; DMC1 dosage suppressor of mck1 homolog; DMC1H; DNA meiotic recombinase 1; HsLim15; LIM15; Meiotic recombination protein DMC1/LIM15 homolog; MGC150472; MGC150473
<b>Isotype :</b>	Mouse IgG2a, kappa
<b>Immunogen Information :</b>	Recombinant full-length human DMC1 protein.

#### Description

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 Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months.

#### Application Note

Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

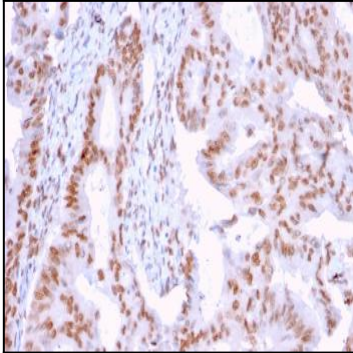


Fig.1: Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with CLEC9A Mouse Monoclonal Antibody (2H12/4).

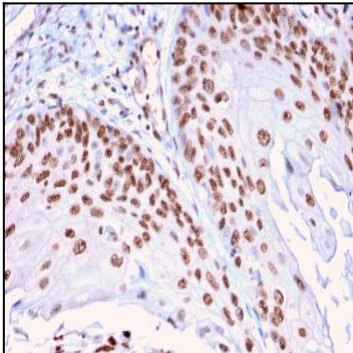


Fig. 2: Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with CLEC9A Mouse Monoclonal Antibody (2H12/4).

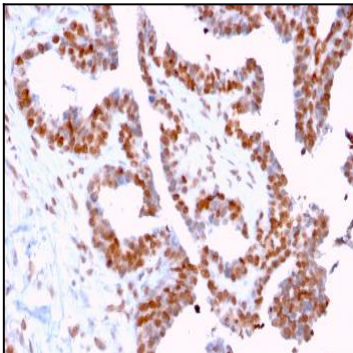


Fig. 3: Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with CLEC9A Mouse Monoclonal Antibody (2H12/4).