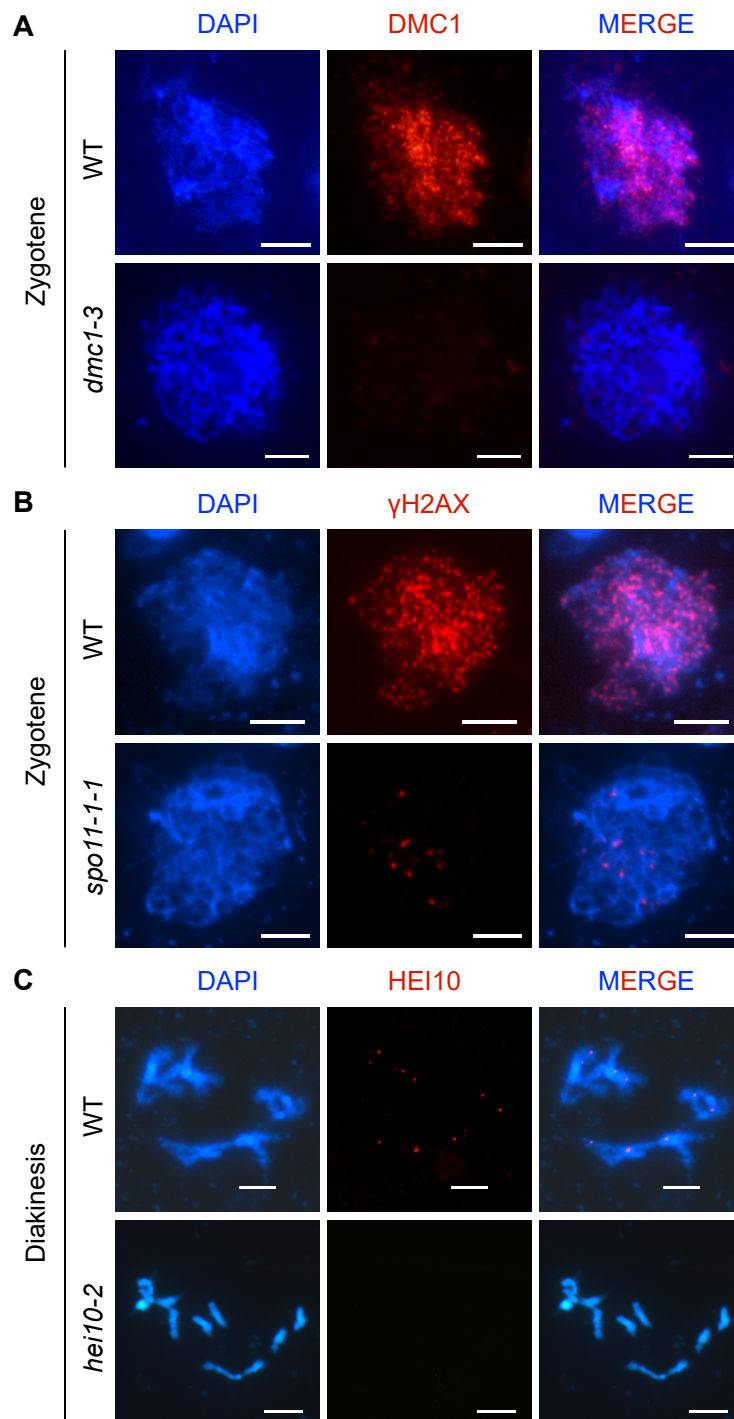


**Figure. S7**



**Figure. S7 Verification of antibodies used in this study through immunolocalization against wild type plants and corresponding mutants.**

**(A)** Immunolocalization of DMC1 in zygotene meiocytes of wild type and *dmc1-3* mutant. **(B)** Immunolocalization of  $\gamma$ H2AX in zygotene of wild type and *spo11-1-1* mutant. **(C)** Immunolocalization of HEI10 in diakinesis of wild type and *hei10-2* mutant.