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Post-meiotic DNA double-strand breaks are conserved in fission yeast

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Abstract

In mammals, spermiogenesis is characterized by transient formation of DNA double-strand breaks (DSBs) in the whole population of haploid spermatids. DSB repair in such haploid context may represent a mutational transition. Using a combination of pulsed-field gel electrophoresis and specific labelling of DSBs at 3'OH DNA ends, we showed that post-meiotic, enzyme-induced DSBs are also observed in the synchronizable pat1-114 mutant of *Shizosaccharomyces pombe* as well as in a wild-type strain, while DNA