



Figure 8. Pachytene Stage of Spermatogenesis Showing the Dependence of Sex Body Formation on H2AX

In normal mammalian spermatocytes, a nuclear structure, the sex body (*arrow, labeled green in right panels*), is seen to encompass the unpaired XY bivalent (*labeled in left panels*). The synaptonemal complex, which aligns paired chromosomes, is stained red. H2AX is normally enriched in the sex body (H2AX^{+/+}). In H2AX^{-/-} spermatocytes, the sex body does not form and a sex body epitope becomes dispersed over autosomes (*lower right panel*). Bar, 10 μ m. Images courtesy of Shantha Mahadevaiah and Paul Burgoyne (Fernandez-Capetillo et al. 2003).