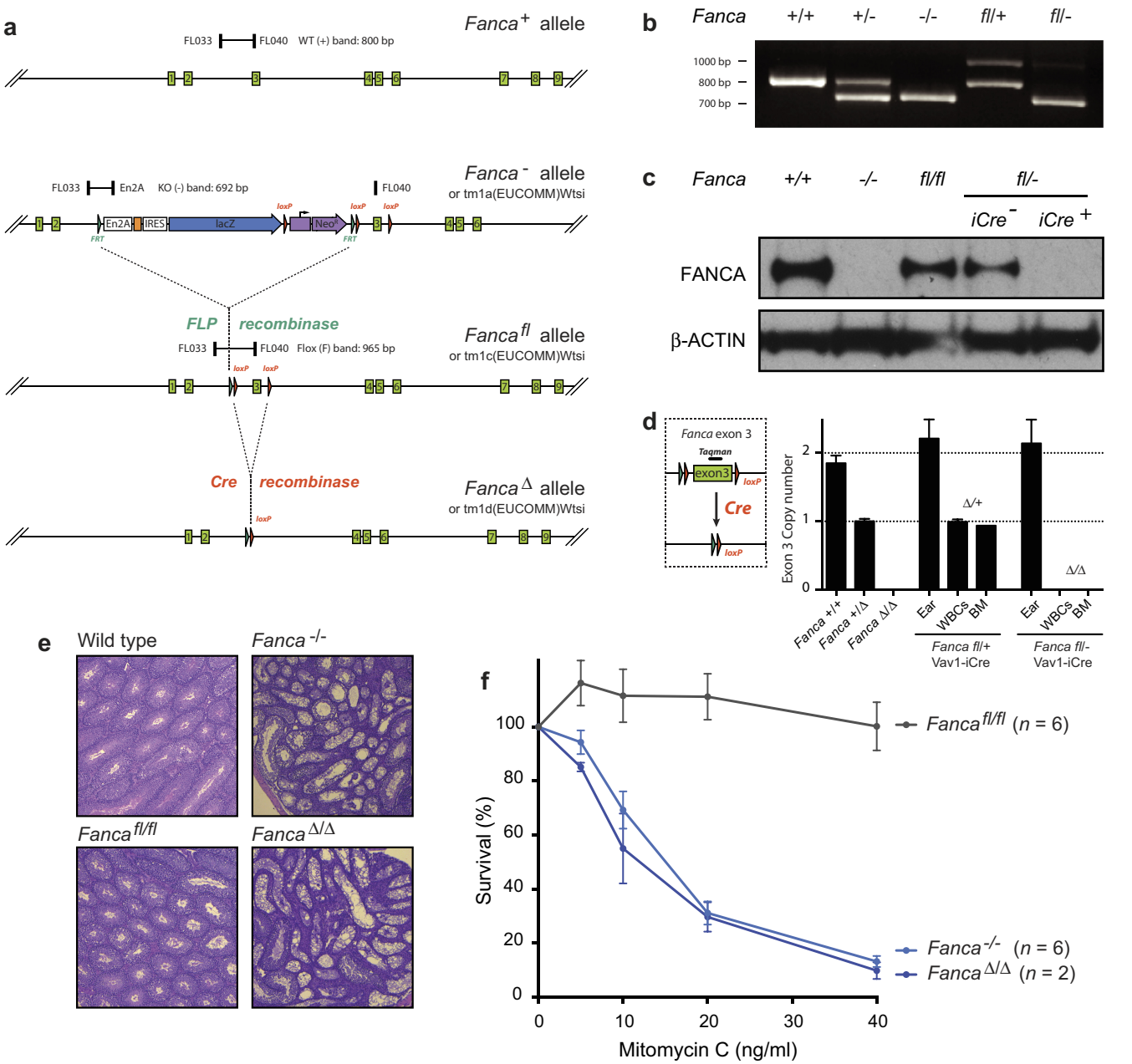

Extended Data Figure 3 | Generation of a conditional *Fanca* allele. **a**, Mice carrying the previously reported *Fanca*$^{-}$ allele (*Fanca*$^{tm1a(EUCOMM)Wtsi}$) were crossed with mice carrying the FLP recombinase, yielding the *Fanca*^{fl} allele (*Fanca*$^{tm1c(EUCOMM)Wtsi}$). This allele restores FANCA expression as shown by western blot (Fig. 3). Cre-mediated recombination of *Fanca*^{fl} yields the *Fanca*$^{\Delta}$ allele (*Fanca*$^{tm1d(EUCOMM)Wtsi}$), which lacks exon 3 and leads to loss of FANCA protein (Fig. 3). **b**, Genotyping PCRs for the wild-type, *Fanca*$^{-}$ and *Fanca*^{fl} alleles with primers FL033, FL040 and En2A; showing bands of the expected sizes. **c**, Western blot (single experiment) showing complete absence of FANCA protein in the spleens of *Fanca*$^{-/-}$ and *Fanca*$^{fl/-}$ *Vav1*-iCre mice. For gel source data, see Supplementary Fig. 1. **d**, Determination of the number of exon 3 copies by quantitative PCR. Wild-type, *Fanca*$^{+/\Delta}$ *and Fanca*$^{\Delta/\Delta}$ mice carry 2, 1 and 0 copies, respectively. *Fanca*^{fl} *Vav1*-iCre mice show tissue-specific deletion of exon 3 in white blood cells (WBCs) and bone marrow ($n = 4$ technical replicates; bars: mean, s.d.). **e**, Microscopic analysis of haematoxylin and eosin-stained sections of testes (original magnification, ×50) from wild-type, *Fanca*$^{-/-}$, *Fanca*$^{fl/fl}$ and *Fanca*$^{\Delta/\Delta}$ males at 12 weeks, showing impaired spermatogenesis in testes of *Fanca*$^{-/-}$ and *Fanca*$^{\Delta/\Delta}$ mice (one experiment). **f**, Sensitivity assay of transformed mouse-embryonic fibroblasts (MEFs) derived from *Fanca*$^{-/-}$, *Fanca*$^{fl/fl}$ and *Fanca*$^{\Delta/\Delta}$ embryos, showing hypersensitivity of both *Fanca*$^{-/-}$ and *Fanca*$^{\Delta/\Delta}$ cells to the cross-linking agent mitomycin C (n = number of experiments, each carried out in quadruplicate; bars: mean, s.e.m.).