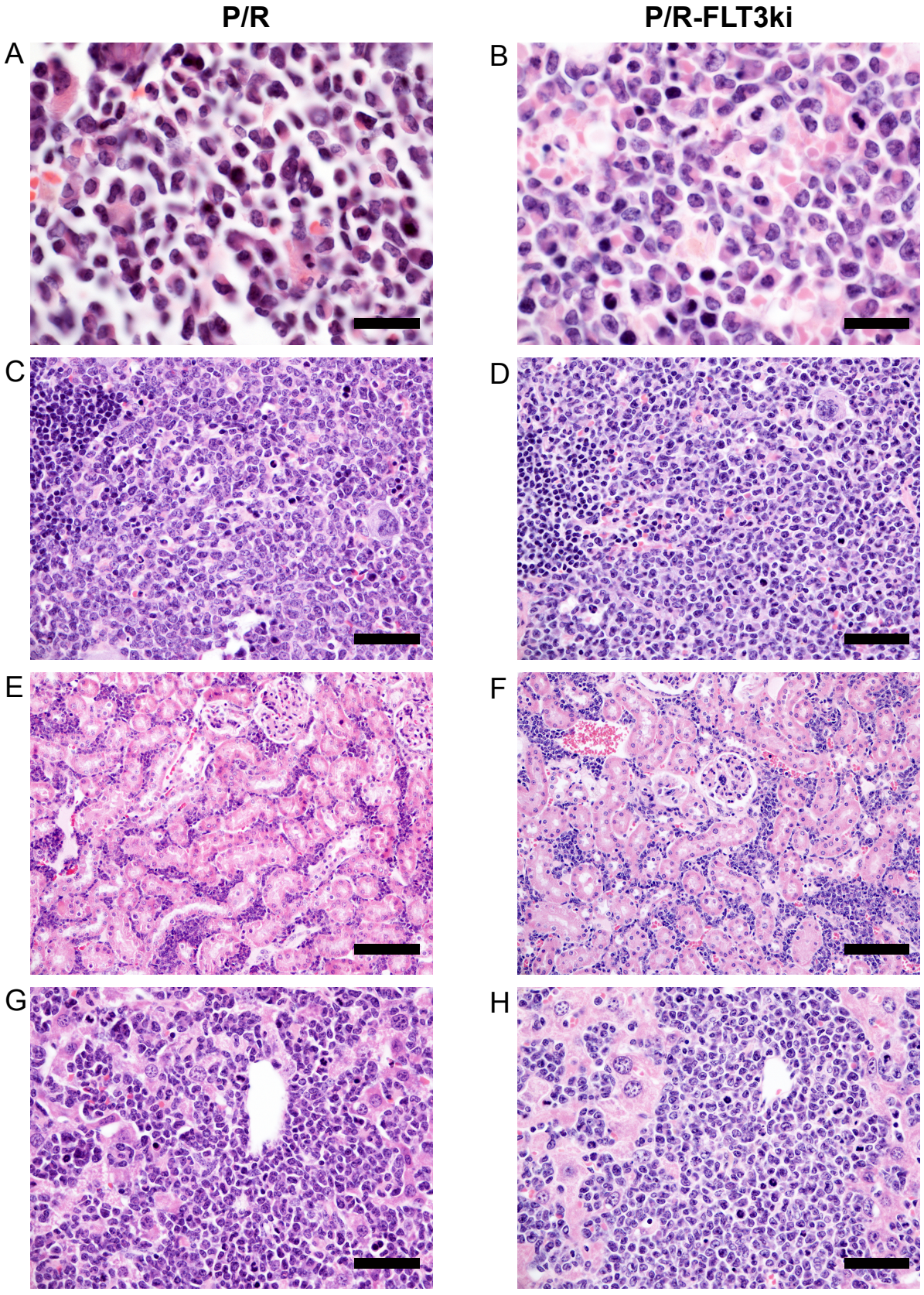

Figure S1

Figure S1: Histological analysis of tissue sections from P/R and P/R-FLT3ki leukemic mice. Paraffin embedded sections were stained with hematoxylin & eosin (H&E).Photographs were taken on a Nikon Eclipse 80i microscope with a Nikon Digital Sight camera using NIS-Elements F4.30 software at a resolution of 2560 × 1920. Using Adobe Photoshop CS2, images were re-sized and set at a resolution of 300 pixels/inch, autocontrast was applied, and unsharp mask was used to improve image clarity. (A,B) Bone marrow sections, scale bar 20 µm. (C,D) Spleen sections, scale bar 50 µm. (E,F) Kidney sections, scale bar 100 µm. (G,H) Liver sections, scale bar 50 µm.

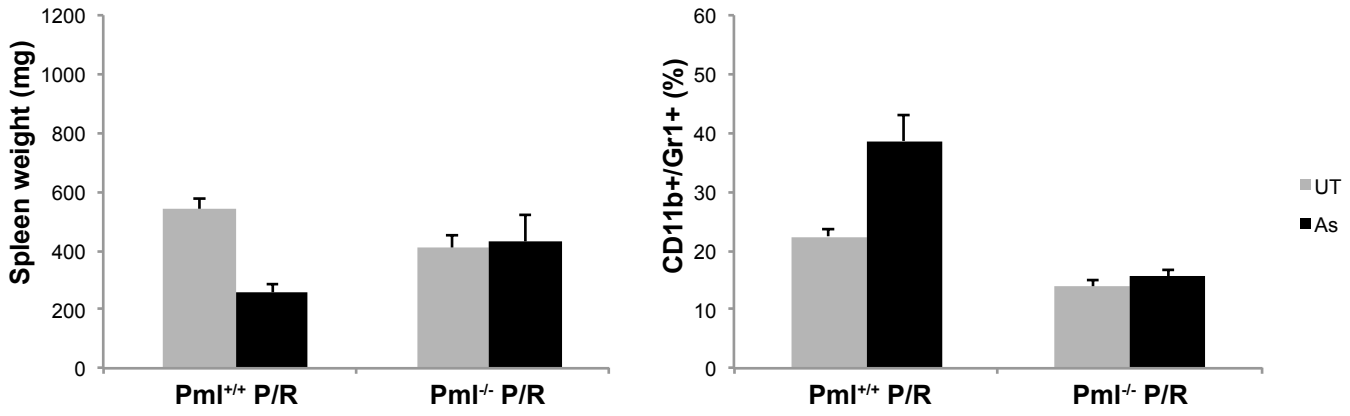

Figure S2

Figure S2: *Pml*$^{-/-}$ APL are resistants to arsenic. Spleen size (left) and percentage of differentiation (CD11^{+}/Gr1^{+}, right) of untreated (UT) or As 4-d-treated APL mice in *Pml*$^{+/+}$ or *Pml*$^{-/-}$ genetic background. Data are expressed as mean ± s.d of independent experiments

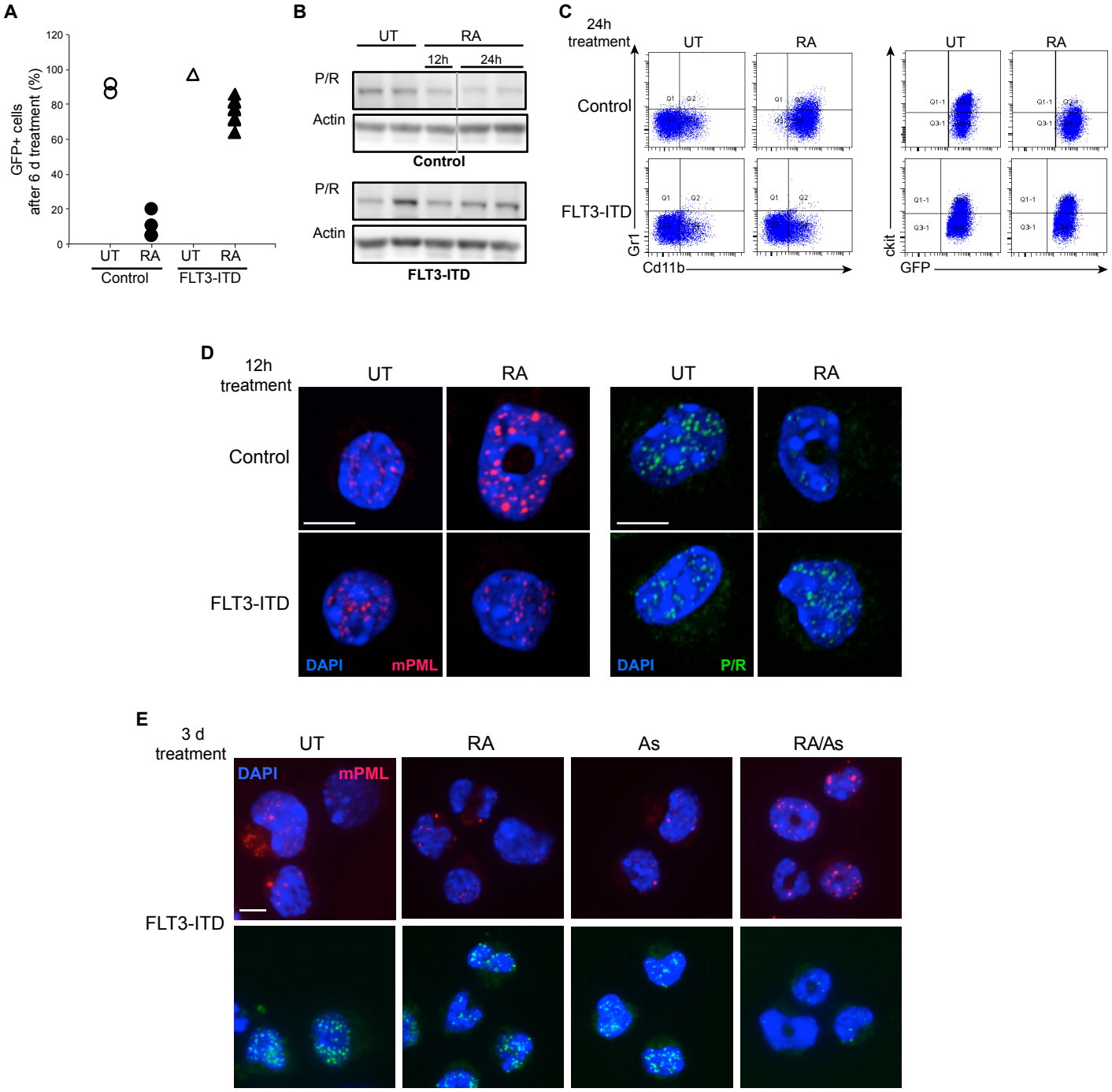

Figure S3

Figure S3: Overexpression of *FLT3*-ITD in APL cells. (A) Percentages of GFP-positive APL cells in bone marrow of untreated (UT) or ATRA 6-d-treated (RA) P/R mice (Control, circle) and P/R+FLT3-ITD mice (FLT3-ITD, triangle). (B) Western blot of PML/RARA (P/R) and Actin expression in the bone marrow of untreated (UT) or ATRA-treated P/R and P/R+FLT3-ITD mice. (C) FACs analysis after 24h of in vivo ATRA-treatment of P/R and P/R+FLT3-ITD mice. (D) PML NB reformation and PML/RARA degradation assessed by immunofluorescence analysis of murine PML (red) and PML/RARA (green) with DAPI (blue) in bone marrow cells of P/R and P/R+FLT3-ITD APL mice 12h-treated with ATRA (scale bar 5 µm). (E) Immunofluorescence analysis of murine PML (red) and PML/RARA (green) with DAPI (blue) in bone marrow cells of P/R+FLT3-ITD APL mice 3-d-treated with ATRA, As or combined ATRA/As (scale bar 5 µm).