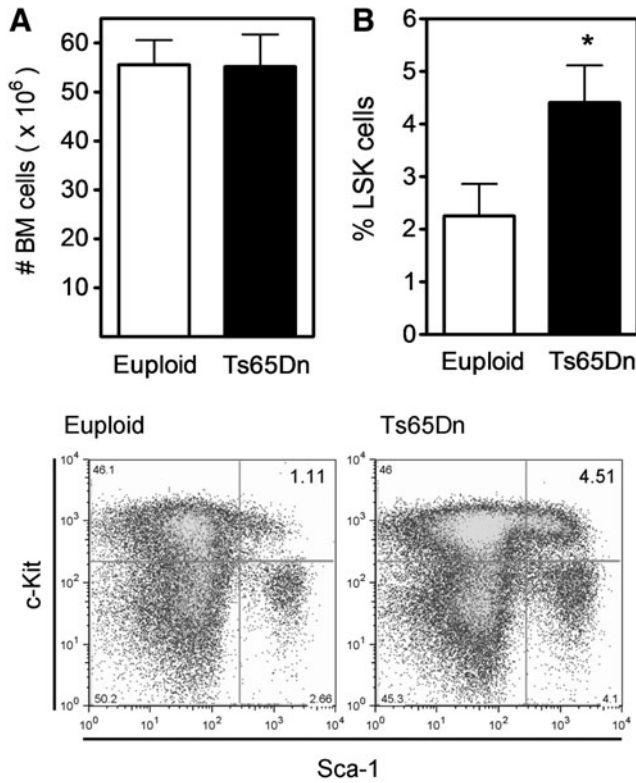
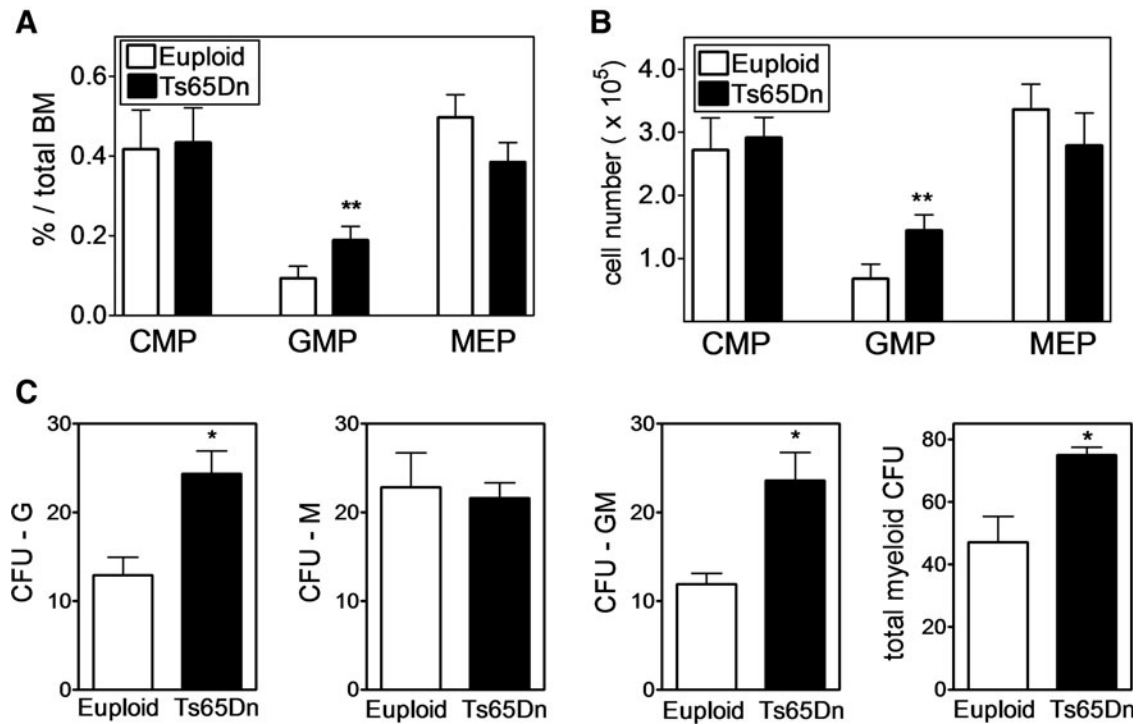


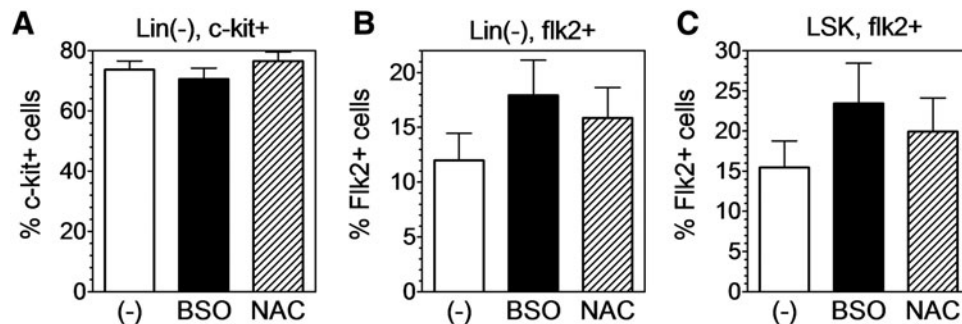
## Supplementary Data



**SUPPLEMENTARY FIG. S1. Bone marrow populations. Altered bone marrow populations in Ts65Dn mice.** (A) Bone marrow cellularity (total viable, nucleated cells) is similar in euploid (*open bars*) and Ts65Dn (*closed bars*) mice ( $n=6$ ). (B) Expansion of the LSK population in the bone marrow of Ts65Dn mice. The plots below are representative examples of LSK populations in the Lin<sup>-</sup> gate. The graph shows the quantitation of the percentage of LSK cells in the Lin<sup>-</sup> population from Ts65Dn (*closed bars*) or euploid (*open bars*) BMC ( $n=6$ ,  $*p < 0.05$ ). BMC, bone marrow cells; LSK, (Lin)<sup>-</sup> Sca-1<sup>+</sup>, c-Kit<sup>+</sup>; Lin<sup>-</sup>, lineage-negative.



**SUPPLEMENTARY FIG. S2. Myeloid progenitor populations and function in Ts65Dn mice.** (A) Myeloid progenitor frequency in the bone marrow was assessed *ex vivo* by flow cytometry as defined and described in the Materials and Methods section. Common myeloid progenitor (CMP), granulocyte-monocyte progenitor (GMP), megakaryocyte-erythroid progenitor counts. (B) Myeloid progenitor populations as a percentage of nucleated BMC ( $n=6$ ,  $*p<0.05$ ;  $**p<0.005$ ). (C) Myeloid colony forming assays were performed using total BMC from euploid (*open bars*) or Ts65Dn (*closed bars*) mice that were cultured in Methocult 3534 media. Colonies were enumerated after 12 days ( $n=4$ ,  $*p<0.05$ ). CFU-G, granulocyte colony forming unit; CFU-M, monocyte colony forming unit; CFU-GM, granulocyte-monocyte colony forming unit.



**SUPPLEMENTARY FIG. S3. Treatment with BSO or NAC *in vitro* does not downregulate c-kit or Flk2.** Lin(-) BMC were left untreated (*open bars*) or treated with 0.1mM BSO (*closed bars*) or 1mM NAC (*hatched bars*) under lymphoid promoting conditions as in Figure 5. Cells were harvested after 2 days and surface stained as in Figure 1. The data represent the percent Lin(-) cells positive for (A) c-kit or (B) Flk2, or (C) the percent LSK cells positive for Flk2 ( $n=5$ ,  $*p<0.05$ ). BSO, buthionine sulfoximine; NAC, acetylcysteine.