Figure S1. Imatinib treatment didn’t restore the expression of Msr1 in LSCs
Expression of the Msr1 gene was not restored by BCR-ABL kinase inhibitor imatinib treatment.
Figure S2. Msrl<sup>−/−</sup> bone marrow cells do not exhibit a homing defect
Bone marrow cells (6 × 10<sup>6</sup>) from GFP mice (CD45.2) were mixed 1:1 with either bone marrow cells from wild type mice (CD45.2) or those from Msrl<sup>−/−</sup> mice (CD45.2) and then transplanted by tail vein injection into wild type recipient mice (CD45.1). Three hours after the transplantation, by FACS analysis, CD45.2<sup>+</sup> bone marrow cells, representing the donor cells, were first identified and then analyzed for the percentages of GFP<sup>+</sup> and GFP<sup>−</sup> populations. The ratio of non-GFP and GFP populations were shown.
Figure S3. *Msr1* is over-expressed in human leukemic cells

(A) *pMSCV-Msr1-GFP* construct was made and *pMSCV-GFP* retrovirus was used as a control. (B) *pMSCV-Msr1-GFP* construct expressed MSR1 and GFP together while the *pMSCV-GFP* construct only expressed GFP in 293T cells. (C) Human leukemic cells were transduced with *pMSCV-Msr1-GFP* or *pMSCV-GFP* retrovirus. GFP+ K562 cells were sorted out and the expression of MSR1 was measured by FACS.