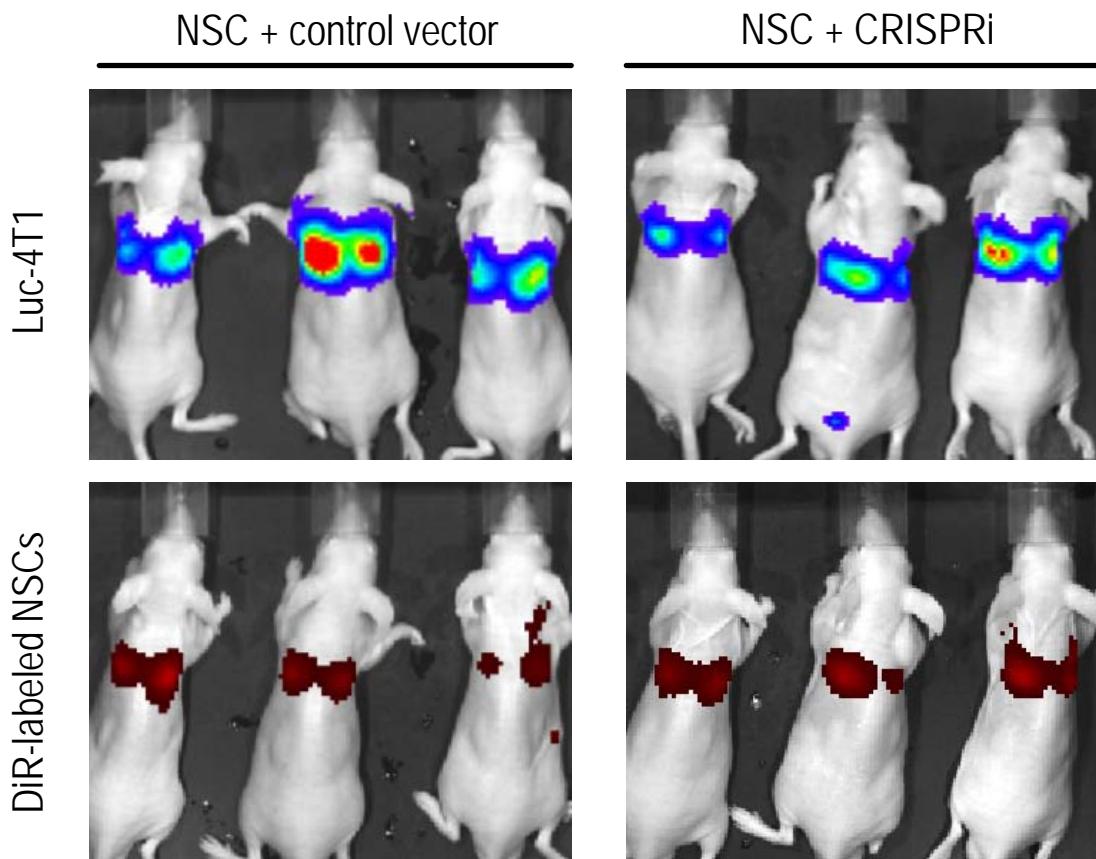
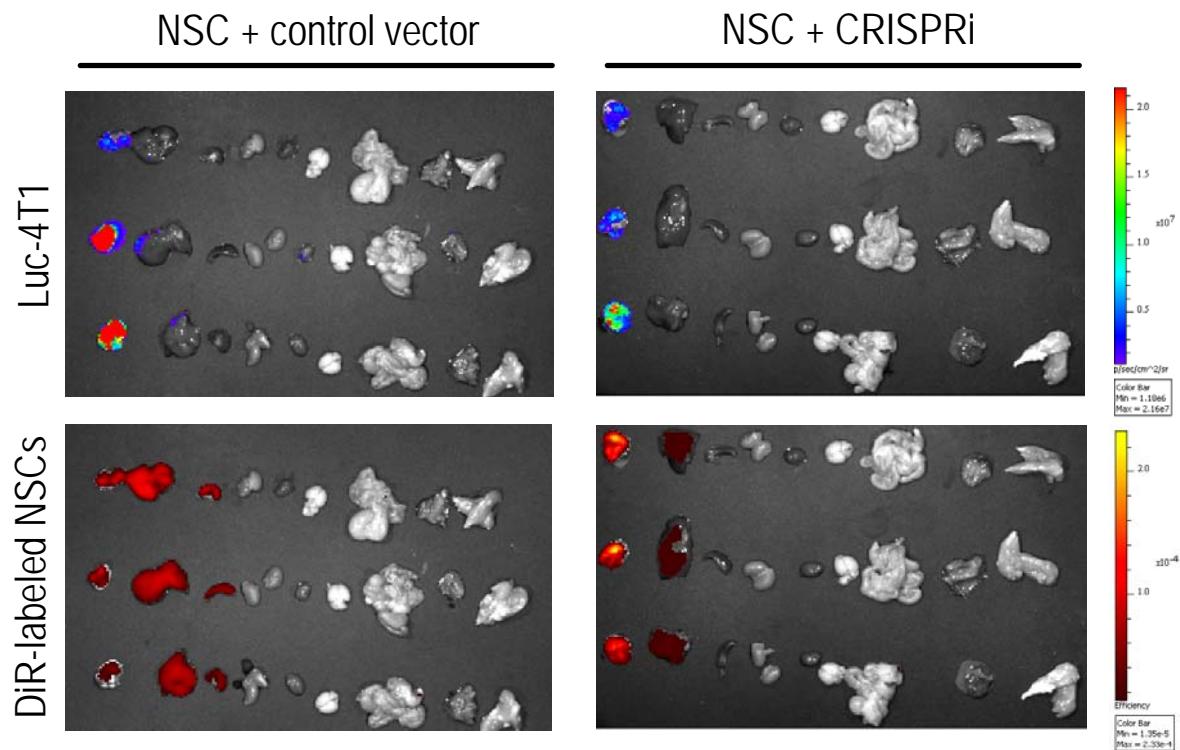


**Supplementary Table 1. qPCR primers**

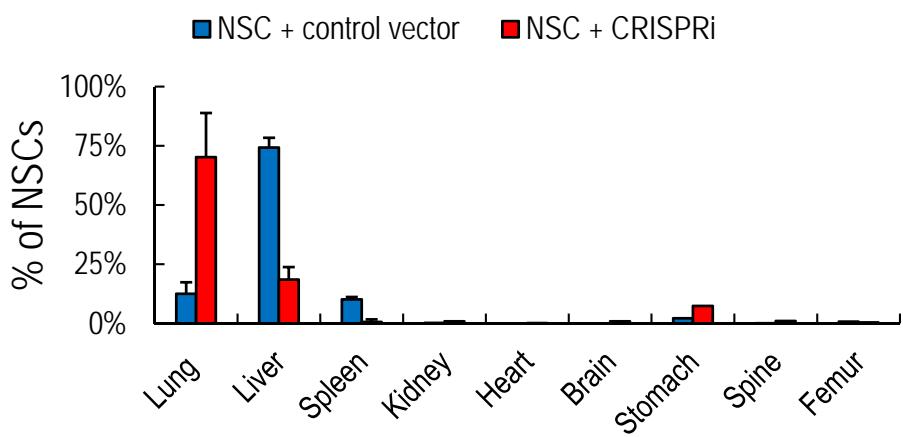
Genes	Primer Sequence
hsa-miR-199a-5p	F: 5'-CCAGTGTTCAGACTACCTGTTCAA-3'
hsa-miR-199a-3p	F: 5'-ACAGTAGTCTGCACATTGGTAAAA-3'
hsa-miR-214	F: 5'-ACAGCAGGCACAGACAGGCAGTAAA-3'
cel-LIN-4	F: 5'-TCCCTGAGACCTCAAGTGTGAAAA-3'
HIF1A	F: 5'-ACAGCAGCCAGACGGATCATGC-3' R: 5'-GCAGTAGGTTCTGCTGCCTTGT-3'
MET	F: 5'-CCAATCTTTATTAGTGGTGGGAGCA-3' R: 5'-GCTGTTGCAGGAAGGAGTGG-3'
MAPK1	F: 5'-GCGCGGGGCCGGAGATGGTC-3' R: 5'-TGAAGCGCAGTAAGATTTT-3'
CXCR4	F: 5'-CGCATCTGGAGAACCACTGCTTAGC-3' R: 5'-GAGGTGGCCACTGACAGGT-3'
GAPDH	F: 5'-TGCACCACCAACTGCTTAGC-3' R: 5'-GGCATGGACTGTGGTCATGAG-3'



**Supplementary Figure 1:** Whole body images showing the presence of luc-4T1 tumor and DiR-labeled NSCs in mice. The luminescent images show luc-4T1 tumor formation. The fluorescent images show the presence of NSCs.



**Supplementary Figure 2: Ex vivo organs images showing the tumor tropism of NSCs in mice.** The luminescent images show luc-4T1 tumor metastases in the lung. The fluorescent images show the organ distribution of NSCs. The organs shown in each panel from left to right: lung, liver, spleen, kidney, heart, brain, stomach, spinal cord and femur.



**Supplementary Figure 3: Organ distribution of NSCs.** Histogram showing the percentages of NSCs distributed in different organs (n=3). Error bars: s.d.