

Supplementary Materials:

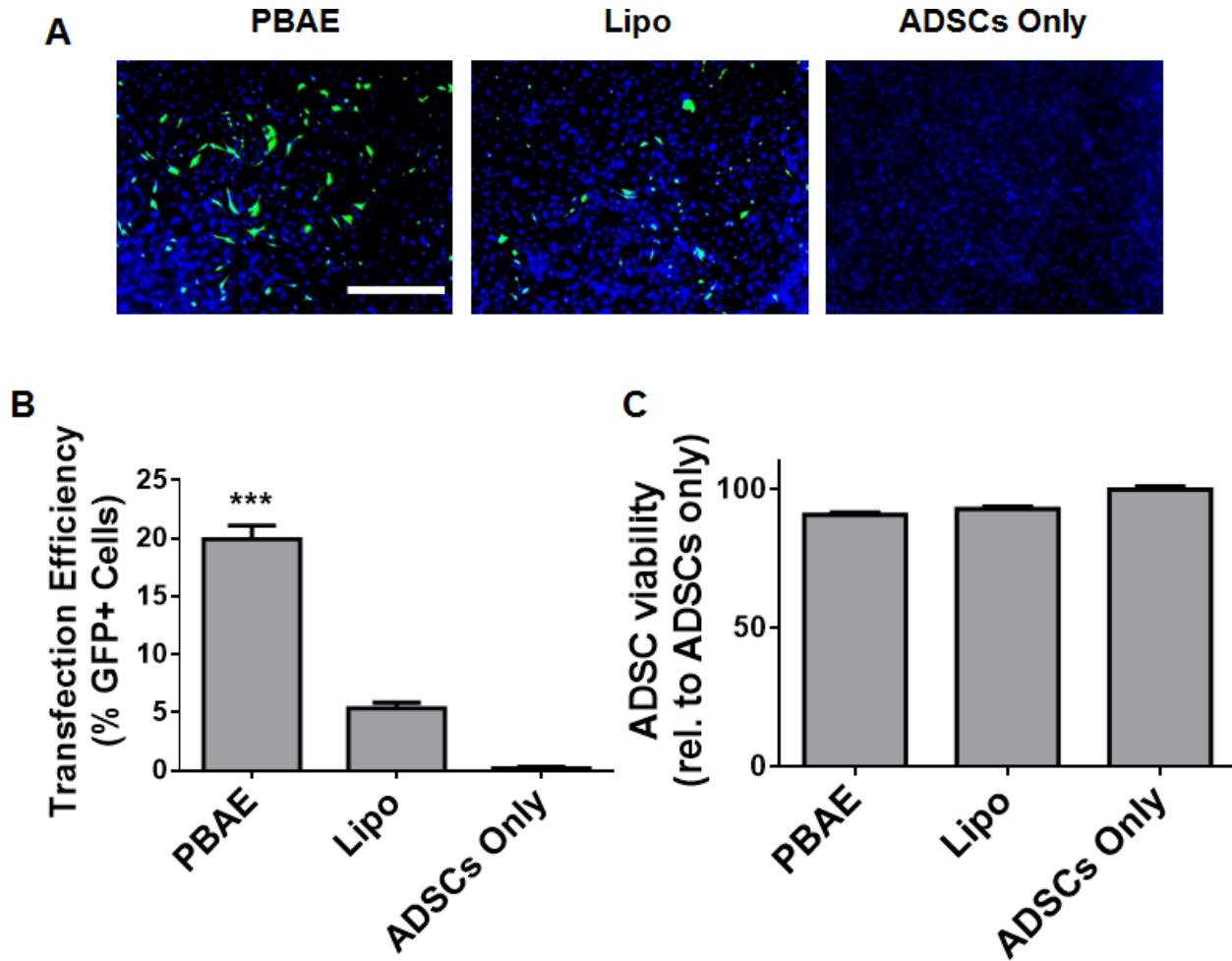


Fig. S1. Improvement of transfection efficiency and low cytotoxicity with PBAE

nanoparticles. Wild-type ADSCs were transfected with the reporter GFP via PBAE nanoparticles or Lipofectamine 2000 (Lipo). **(A)** Immunofluorescence imaging of GFP-transfected ADSCs (green, GFP) and cell nuclei (blue, 4',6-diamidino-2-phenylindole) (scale bar: 200 μ m). **(B)** FACS of GFP-positive cells. **(C)** Viability of transfected mouse ADSCs. All data are reported as mean \pm standard error, n=4. ***p<0.001 compared with ADSCs only.

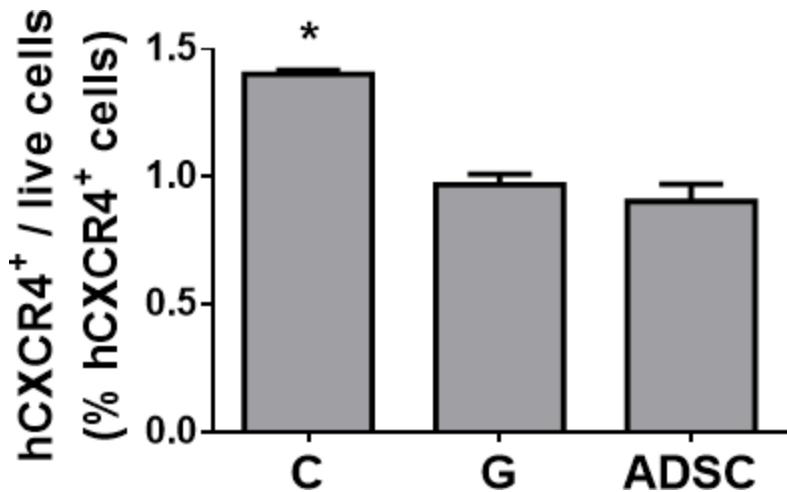


Fig. S2 Cell-surface expression of human CXCR4 on transfected mouse ADSCs. FACS

performed on ADSCs tagged with anti-human CXCR4 antibodies (reported as a percentage of live cells). Abbreviations: C: CXCR4; G: GFP; h, human. All data are reported as mean \pm standard error, n=4. *p<0.05 compared with ADSC controls.

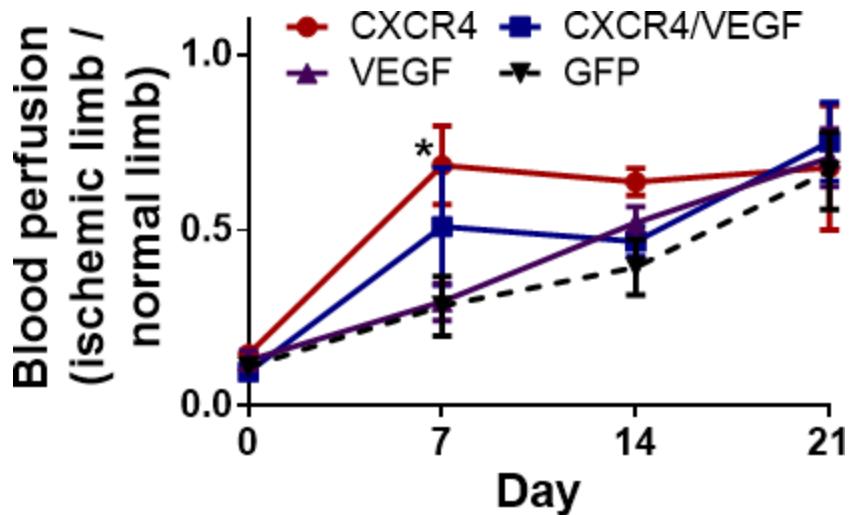


Fig. S3 Blood reperfusion of ischemic hindlimbs. Quantification of blood reperfusion revealed faster blood recovery due to CXCR4. All data are reported as mean \pm standard error, n=8.
*p<0.05 compared with GFP-ADSC controls.

Table S1. Primers used for qRT-PCR.

Gene Name	Primer sequence
<i>mGAPDH</i>	Forward (5'-AACGACCCCTTCATTGAC-3') Reverse (5'-TCCACGACATACTCAGCAC-3')
<i>hCXCR4</i>	Forward (5'- TTCTACCCAATGACTTG TG-3') Reverse (5'- ATGTAGTAAGGCAGCCAACA-3')
<i>hVEGF</i>	Forward (5'-TACCTCCACCATGCCAAGTG-3') Reverse (5'-TGATGATTCDTGCCCTCCTCC-3')
<i>mVEGF</i>	Forward (5'-GCCCTGGAGTGC GTGCCACGTCAGAGAGCA-3') Reverse (5'-TGGCGATTAGCAGCAGATA-3')
<i>mbFGF</i>	Forward (5'-GCCAGCGGCATCACCTCGCT-3') Reverse (5'-TATGGCCTCTGTCCAGGTCCC GT-3')
<i>mHGF</i>	Forward (5'-TTGCCCATGAATTGACCTC-3') Reverse (5'-ACATCAGTCTCATTCACAGC-3')
<i>mlL-18</i>	Forward (5'-CAACCAACAAGTGATATTCTCCAT G-3') Reverse (5'-GATCCACACTCTCCAGCTGCA-3')
<i>mTNF-α</i>	Forward (5'-CATCTCTCAAATTGAGTGACAA-3') Reverse (5'-TGGGAGTAGACAAGGTACAACCC-3')
<i>mlL-6</i>	Forward (5'-TGGCTAAGGACCAAGACCATCCAA-3') Reverse (5'-AACGCACTAGGTTGCCGAGTAGA-3')
<i>mlL-10</i>	Forward (5'-GGTTGCCAAGCCTTATCGGA-3') Reverse (5'-ACCTGCTCCACTGCCTTGCT-3')