## Supplementary methods

Bone marrow isolation & culture

Bone marrow cells (BMCs) were flushed from both tibias and femurs of each mouse using phosphatebuffered saline plus 1% fetal bovine serum buffer. BMCs were separated from red blood cells by

100 ng/ml Flt-3, 20 ng/ml thrombopoietin, 20 ng/ml IL-3 and 20 ng/ml IL-6.

density centrifugation using Histopaque® reagent according to manufacturer's instructions. The BMCs were either assayed by flow cytometric analysis fresh or cultured in serum-free StemSpan®

BMCs were either assayed by flow cytometric analysis fresh or cultured in serum-free StemSpan® media supplemented with 1% penicillin/streptomycin/glutamine, 100 ng/ml human stem cell factor,