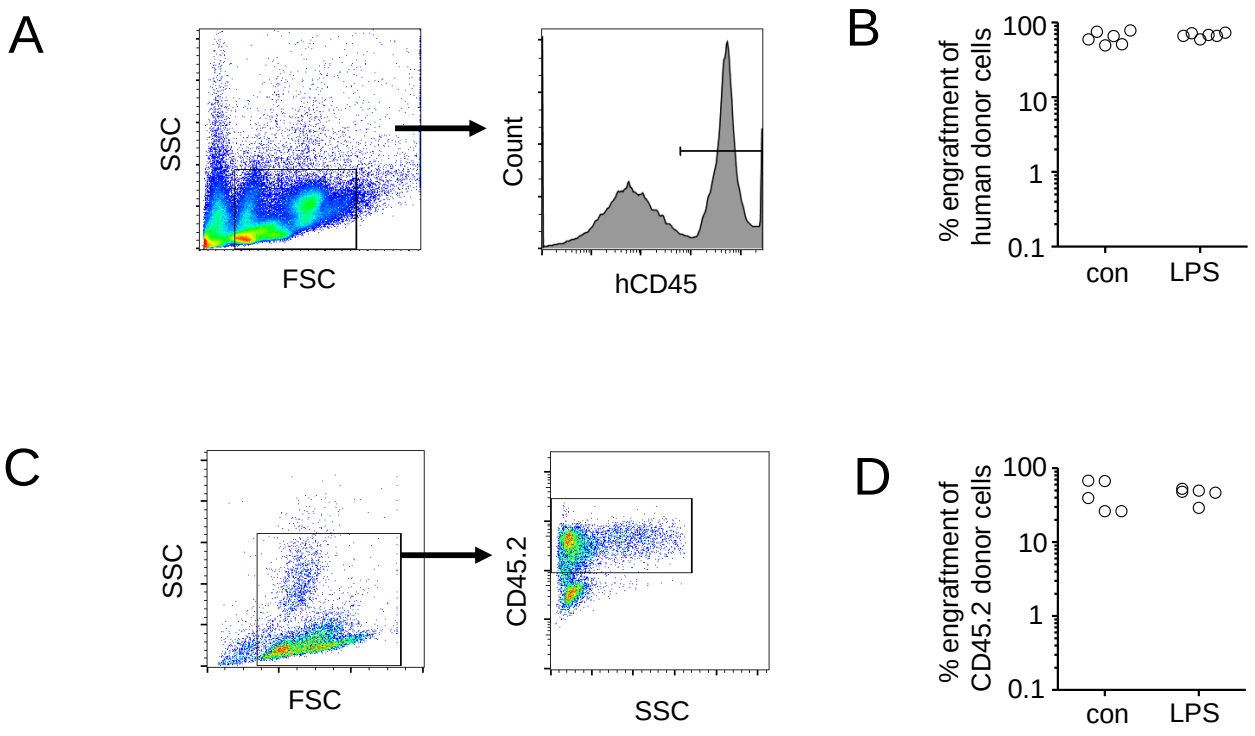
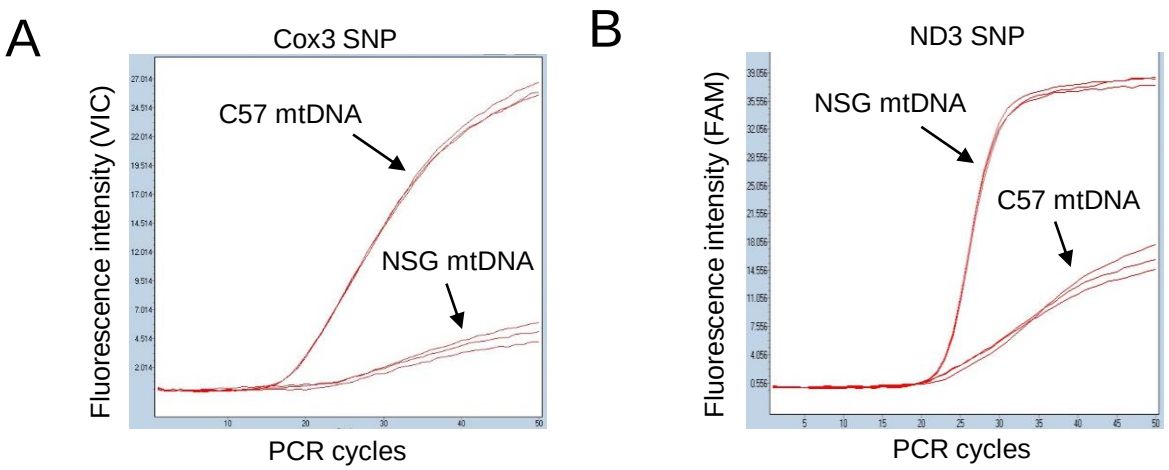
Supplementary Figure 1



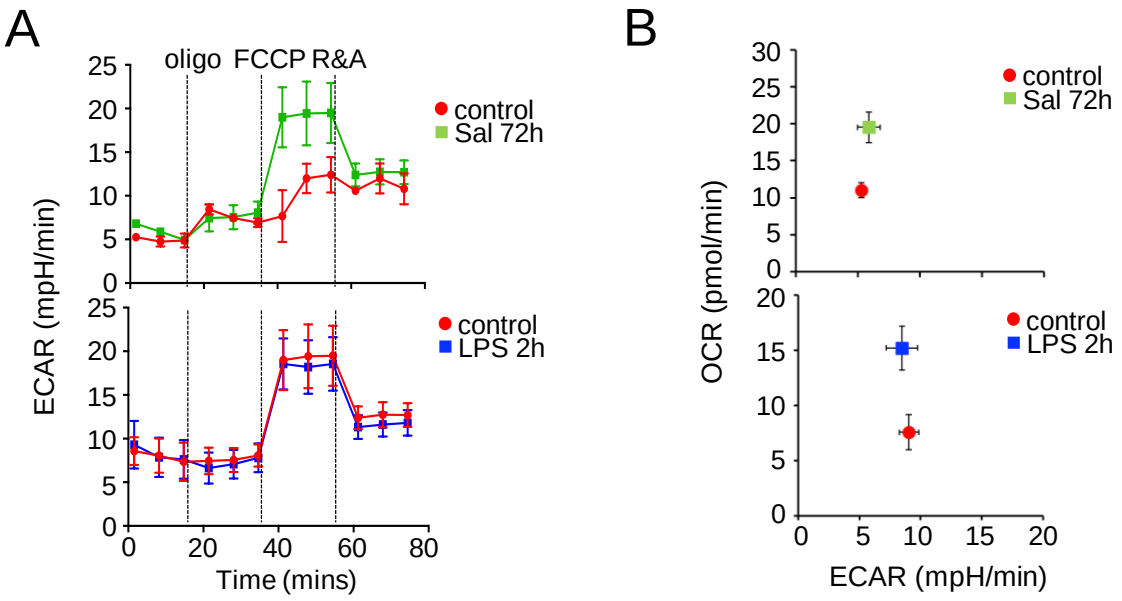
Supplementary Figure 1. Engraftment data for NSG used in figure 1. (A and B) Human CD34+ injected into NSG mice and BM analysed for human CD45 3months post injection. (C and D) C57Bl/6 lineage negative cells injected into NSG mice and BM analysed for mouse CD45.2 1 month post injection.

Supplementary Figure 2



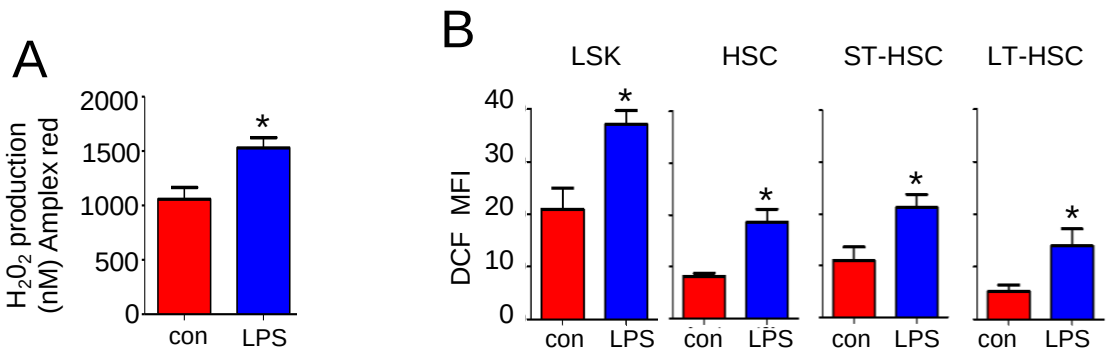
Supplementary Figure 2. TaqMan RT-qPCR analysis of NSG and C57Bl/6 DNA. (A) PCR using Cox3 primer show positive fluorescence on VIC for C57Bl/6 DNA but negative for NSG DNA. (B) Analysis with ND3 primer on FAM show positive fluorescence for NSG DNA but negative for C57Bl/6 DNA.

Supplementary Figure 3



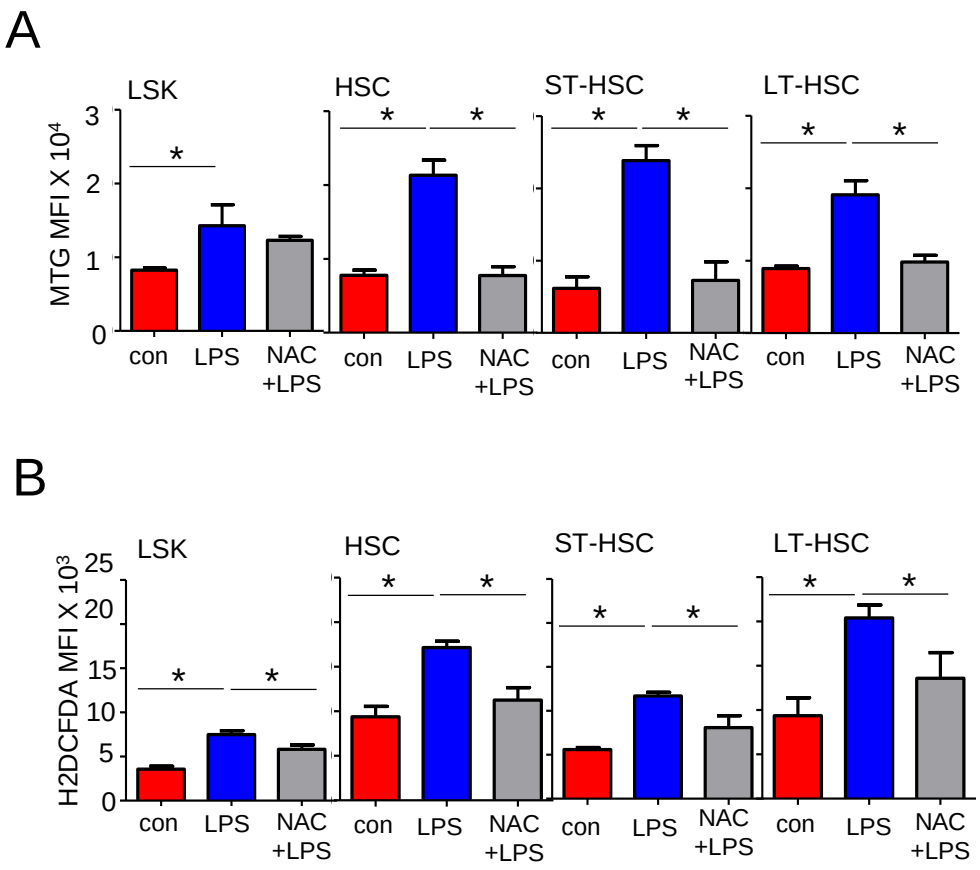
Supplementary Figure 3. (A) ECAR levels measured by acidification in LSK from control and S.typhurium or control and LPS treated animals. (B) Basal ECAR compared to basal OCR levels provides a snap-shot of the bioenergetic profile of LSK in vivo before and after treatment with salmonella or LPS.

Supplementary Figure 4



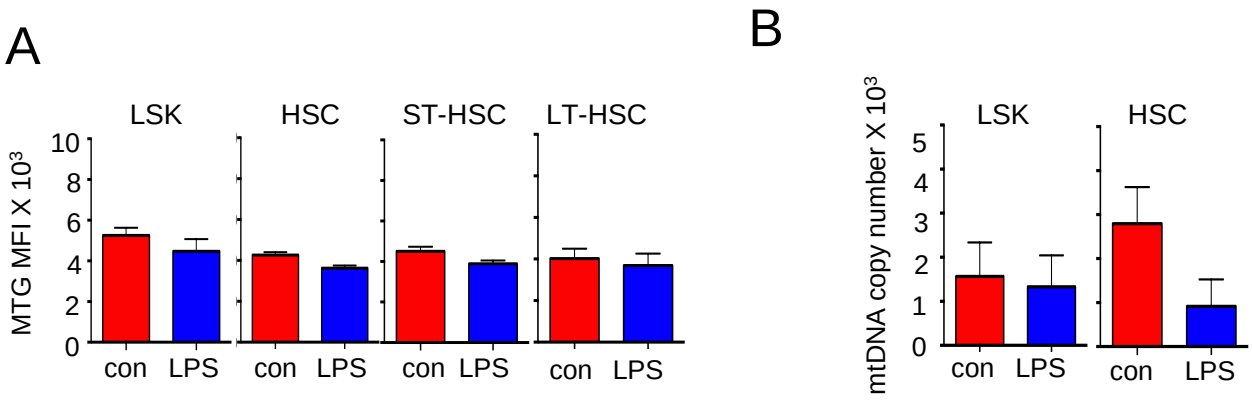
Supplementary Figure 4. ROS is elevated in LPS treated animals. C57Bl/6 mice were treated with LPS or control PBS intraperitoneal injections. After 2 hours the mice were sacrificed and the bone marrow extracted. (A) $1x10^6$ bone marrow cells were analyzed by Amplex Red assay. (B) C57/Bl6 mice were infected with LPS for 2 hours and bone marrow extracted. Cells were stained with DCF, Sca 1, CD117, CD48, CD150 and CD34 analyzed by flow cytometry of H2DCFDA fluorescence. Data shown are means ± SD of n=5 mice. *p<0.05.

Supplementary Figure 5



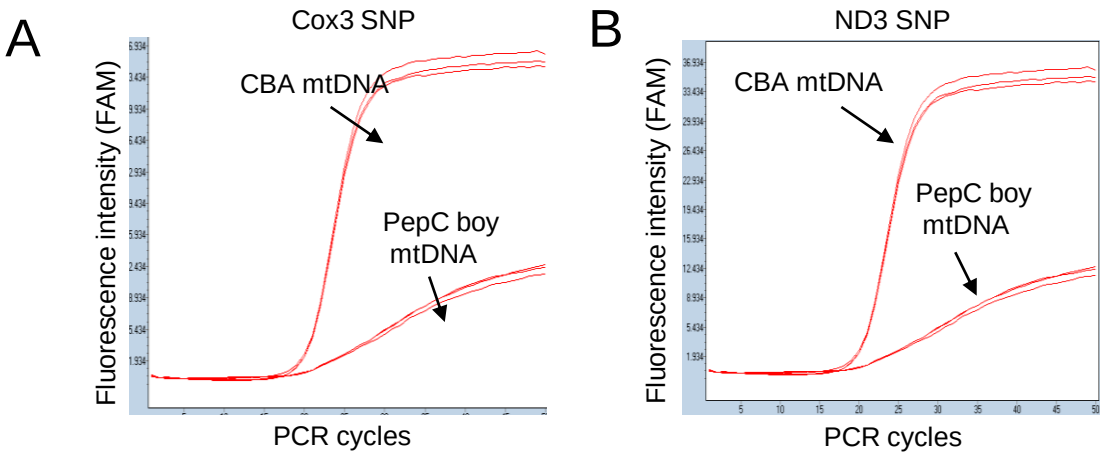
Supplementary Figure 5. Pre-treatment with ROS suppresser NAC reversed LPS elicited mitochondrial mass increase. C57Bl/6 mice were pretreated with NAC for 1 hour and then injected with LPS for 2 hours. The mice were sacrificed and the bone marrow was extracted MTG or H2DCFDA , Sca 1, CD117, CD48, CD150 and CD34 (A) The cells were analyzed for mitochondrial mass by MTG fluorescence within the progenitor cells. (B) Flow cytometry analysis of H2DCFDA fluorescence in the progenitor cells. Data shown are means ± SD of n=5 mice. *p<0.05.

Supplementary Figure 6



Supplementary Figure 6. HSC from CGD animals do not acquire mitochondria upon LPS treatment. CGD mice were injected with LPS for 2 hours. The mice were sacrificed and the bone marrow was and anaysled for MTG, Sca 1, CD117, CD48, CD150 and CD34 (A) The cells were analyzed for mitochondrial mass by MTG fluorescence within the progenitor cells. (B) HSC and LSK were sorted by FACs and analysed for mtDNA using real-time PCR. Data shown are means ± SD of n=5 mice. *p<0.05.

Supplementary Figure 7



Supplementary Figure 7. TaqMan RT-qPCR analysis of CBA and PepCboy DNA. (A) PCR using Cox3 primer show positive fluorescence on FAM for CBA DNA but negative for PepCboy DNA. (B) Analysis with ND3 primer on FAM show positive fluorescence for CBA DNA but negative for PepCboy DNA.

Movie S1. Immunofluorescent staining of CX43 of lineage negative cells (green) and BMSC mitochondria (red) were co-cultured with 10μM H_2O_2. Z-stack movie was constructed to illustrate mitochondria from BMSC (red) inside the lineage negative cells.

Movie S2. Immunofluorescent staining of CX43 of lineage negative cells (green) and BMSC mitochondria (red) were co-cultured with 10μM H_2O_2 in the presence of GAP27 (100μM). Z-stack movie was constructed to illustrate mitochondria from BMSC (red) were not inside the lineage negative cells.