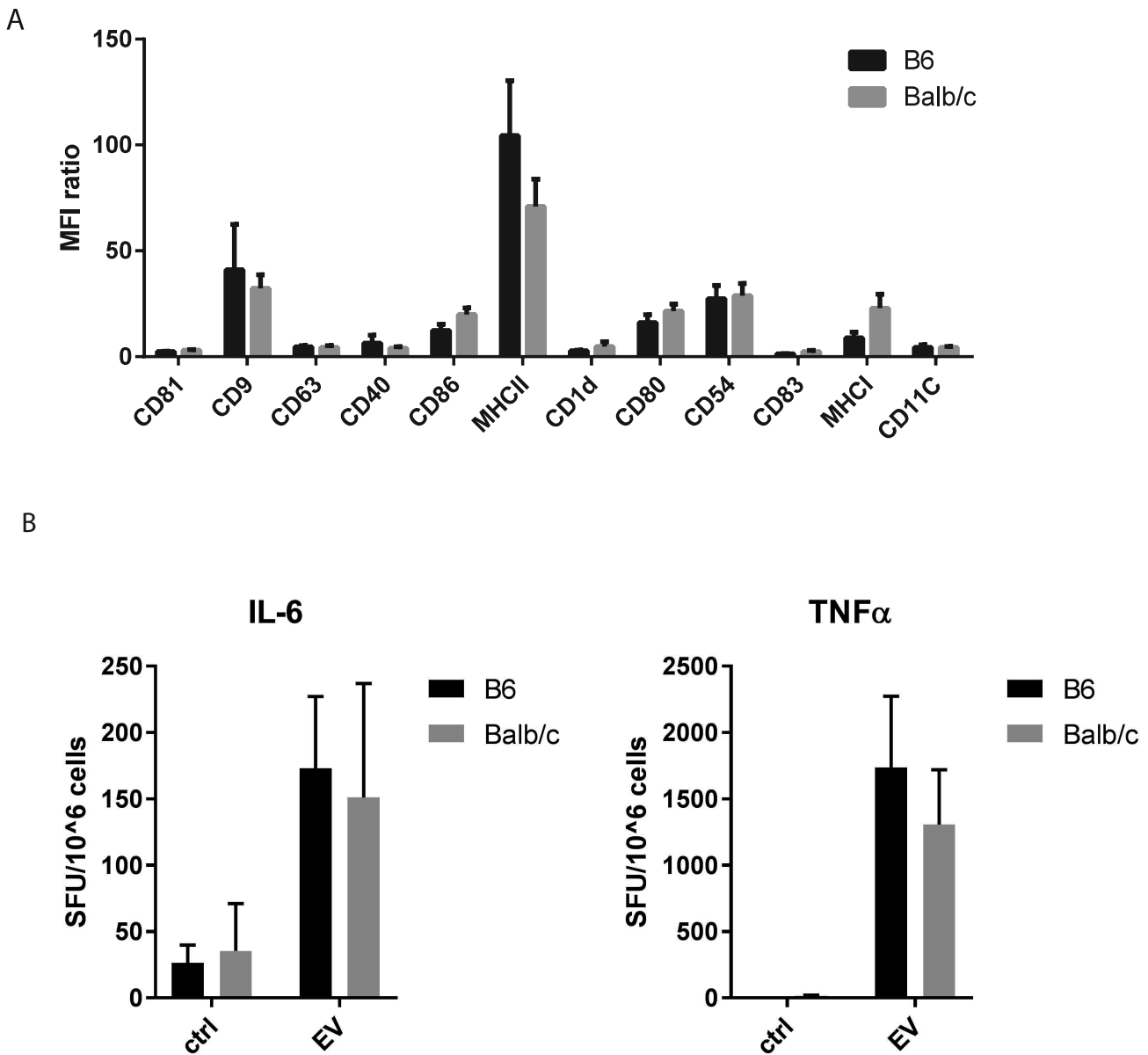


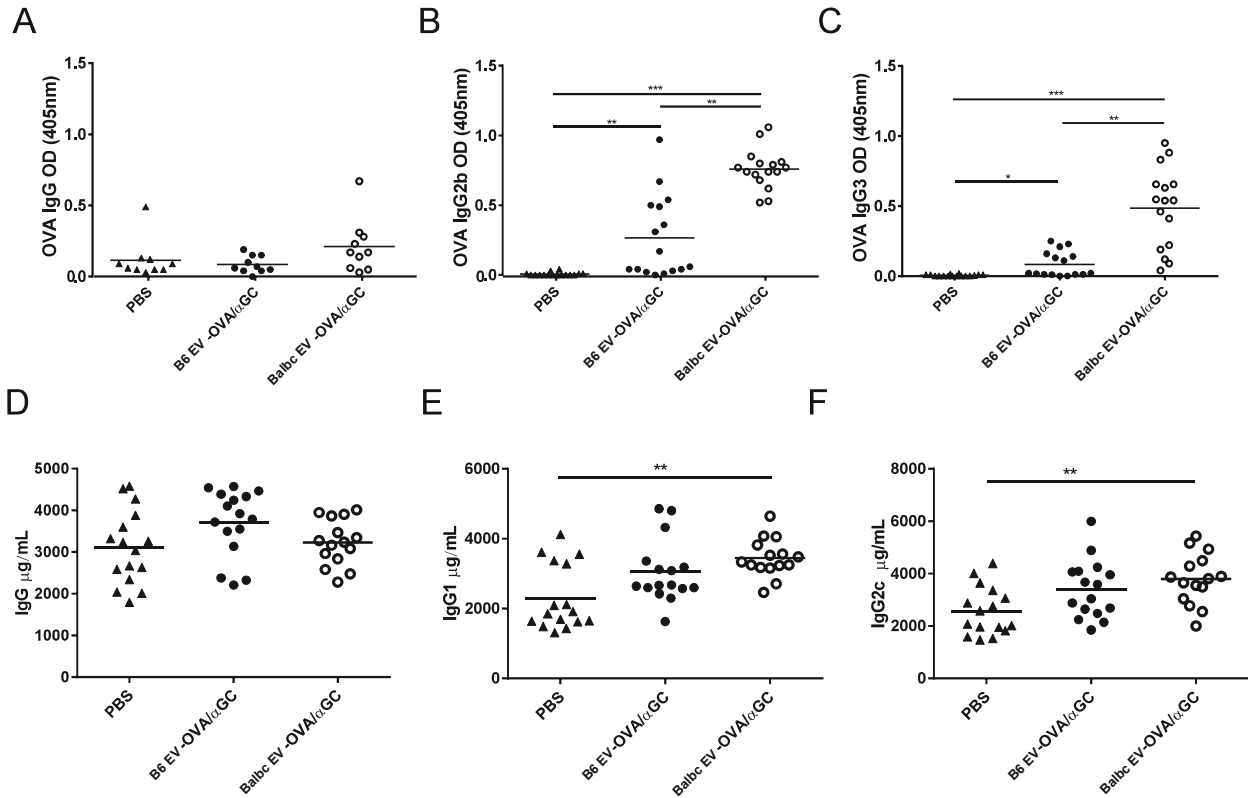
Supplemental figure 1



Supplementary figure legends

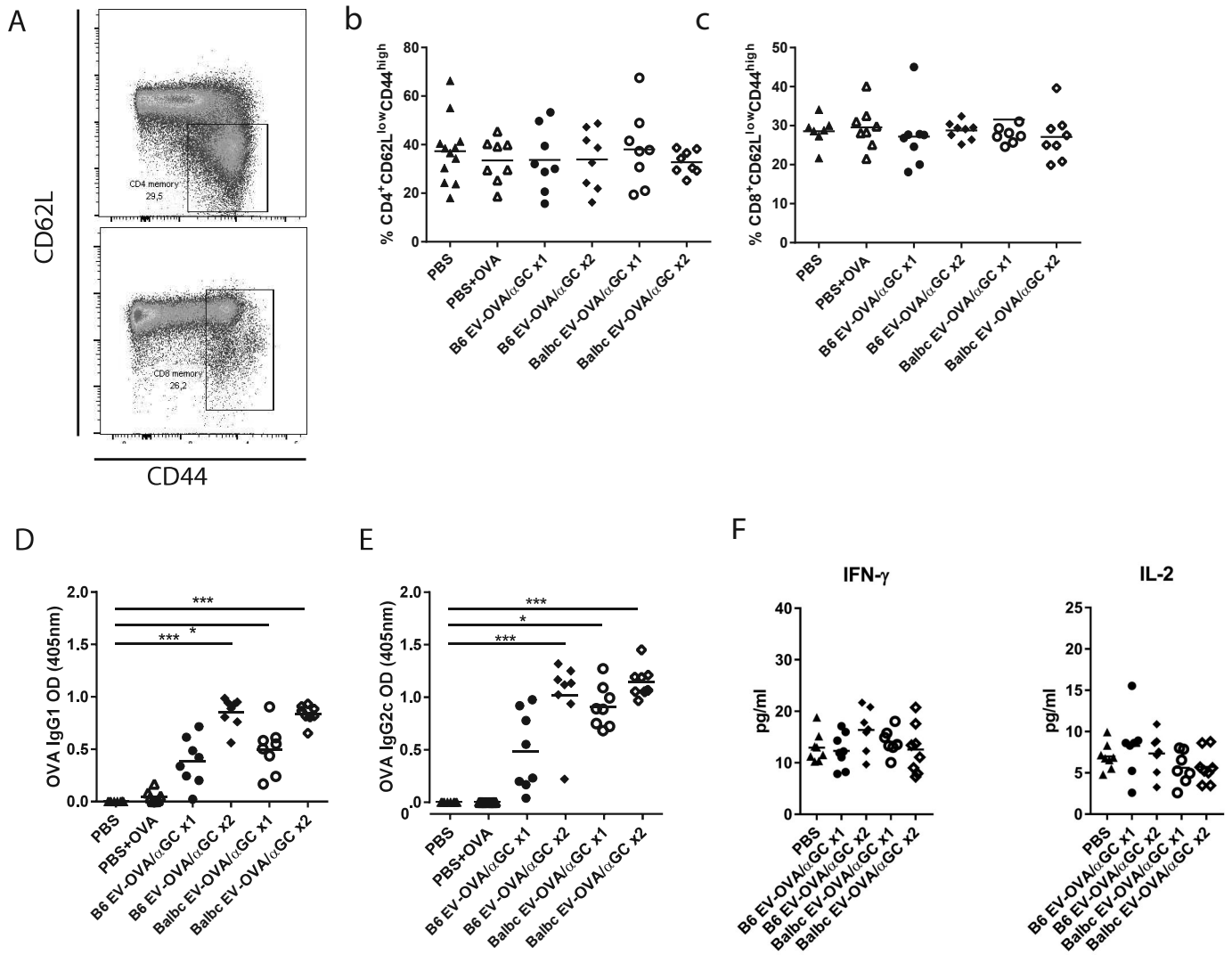
**Supplementary figure 1.** Phenotypic characterization of mature BMDCs **(A)** Histograms showing the 4MFI ratio levels of surface markers. **(B)** B6 and BALB/c derived EVs were cultured with naïve B6 splenocytes for 48 hours in a FluoroSpot. The secretion of cytokines IL-6 and TNF $\alpha$  were determined by spot forming units. Data are represented as mean  $\pm$  SEM. For the BMDC characterization, data are pooled for several cell cultures, (B6 cells n=5, BALB/c cells n=7). For the FluoroSpot, data represents one experiment (B6 n=3, BALB/c n=3).

Supplemental figure 2



**Supplementary figure 2.** (A) OVA specific IgG antibody levels were determined by ELISA in serum collected from mice sacrificed 7 days after 40  $\mu$ g of B6 EV-OVA/ $\alpha$ GC, BALB/c EV-OVA/ $\alpha$ GC or PBS i.v. injection. OVA specific (B) IgG2b and (C) IgG3 antibody levels in day 14 serum. Total (D) IgG, (E) IgG1 and (F) IgG2c serum antibody levels day 1. Data are pooled from 3 independent experiments, n=15-16. Dots represent a single mouse and data are presented as mean  $\pm$  SEM. Data were analysed by Kruskal-Wallis test with Dunn's multiple comparisons, \* P<0.05, \*\* P<0.01, \*\*\* P<0.001.

Supplemental figure 3



**Supplementary figure 3.** Long term memory experiment. **(A)** Representative plots show gating strategy for memory T cells defined as CD4<sup>+</sup>/CD8<sup>+</sup>, CD62L low, CD44 high. Mice injected with PBS or EVs have similar levels of **(B)** Memory CD4<sup>+</sup> cells and **(C)** Memory CD8<sup>+</sup> T cells. **(D)** OVA specific IgG1 and **(E)** OVA specific IgG2c antibody levels in mouse serum at the end day of the experiment. **(F)** Presence of inflammatory cytokines INF- $\gamma$  and IL-2 in the end day serum were determined by Luminex. Data are pooled from 2 independent experiments, n=7-8. Dots represent a single mouse and data are presented as mean  $\pm$  SEM. Data were analyzed by Kruskal-Wallis test with Dunn's multiple comparisons, \* P < 0.05, \*\* P < 0.01, \*\*\* P < 0.001.