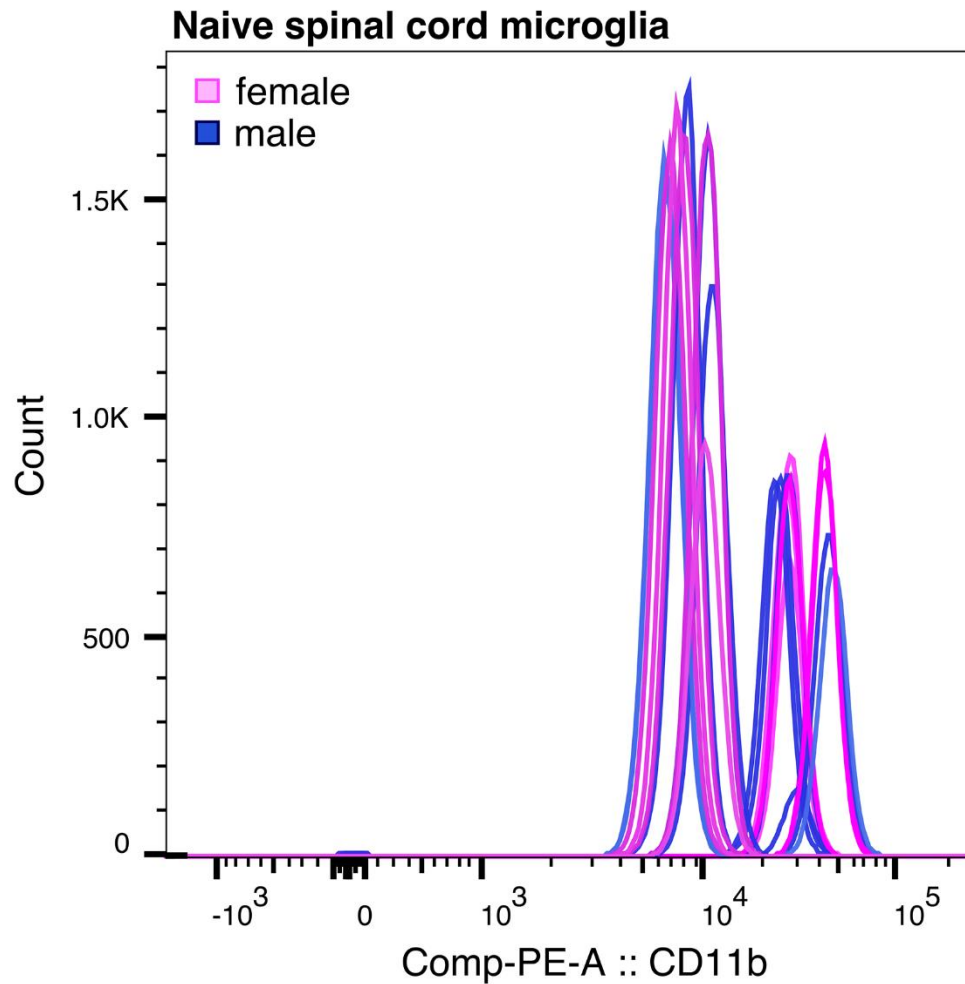
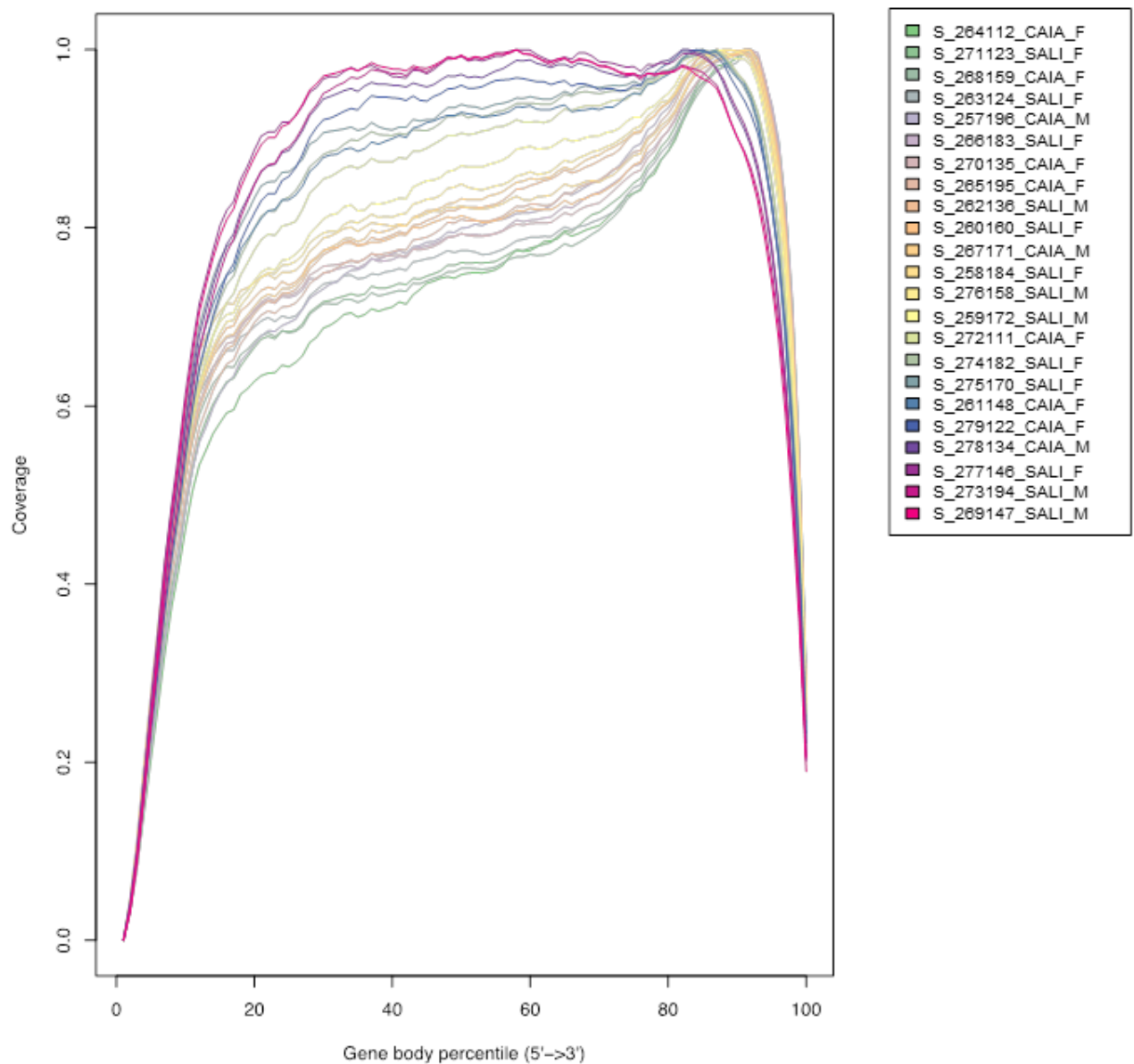


Suppl. Fig. S1. Live and immune cell numbers from whole and dorsal lumbar spinal cord.

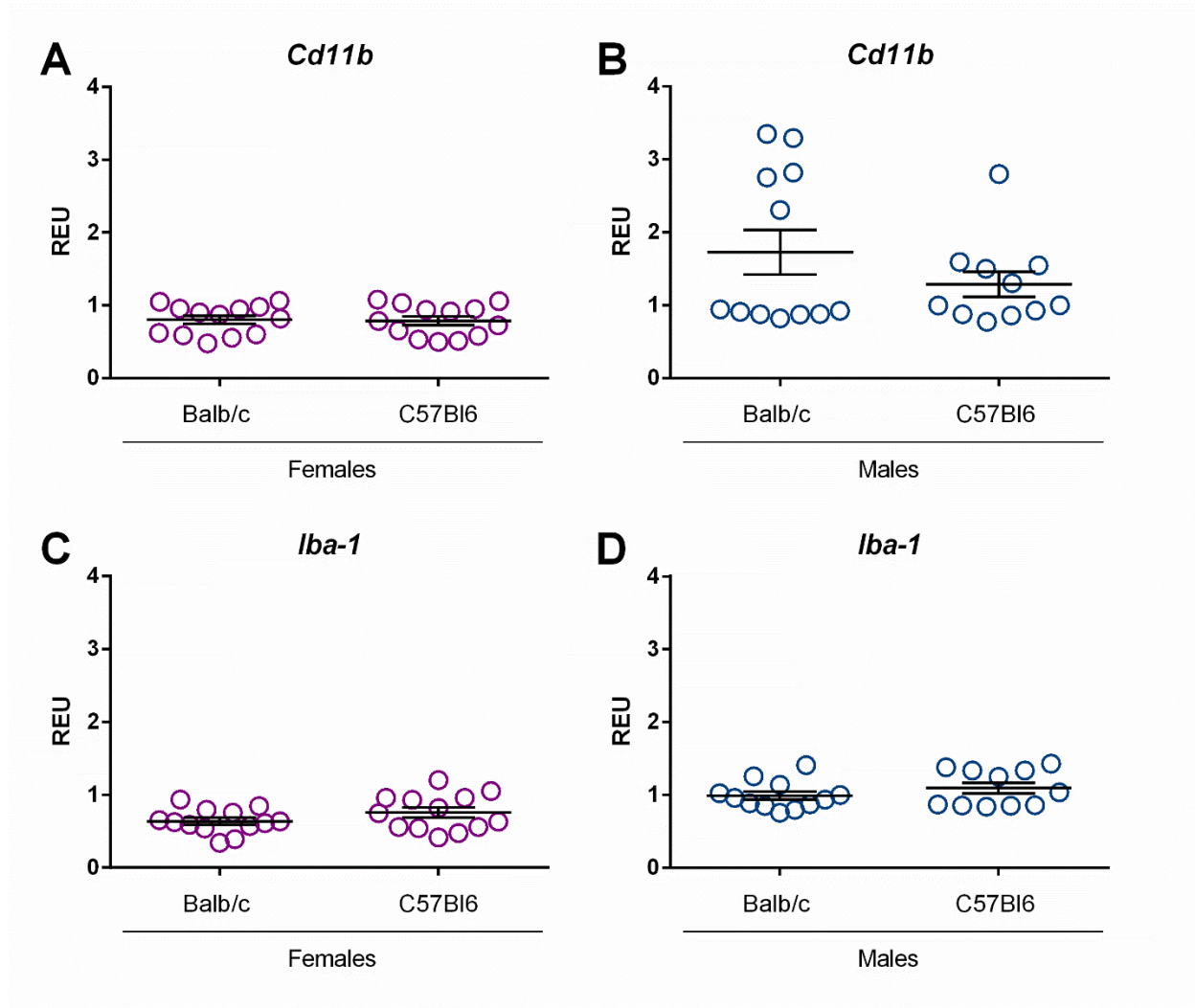
Plotted is the percentage of **(A)** live cells amongst all cells extracted from whole spinal cord of naïve female and male mice or **(B)** dorsal lumbar spinal cord of saline or CAIA treated male and female mice. Each dot represents a biological replicate, while lines are means + SEM. **(C,D)** are the equivalent plots for all CD45 positive immune cells as a percentage of live cells. Since the vast majority of immune cells in the spinal cord are microglia, differences between female and male mice can also be observed when merely plotting CD45 positivity **(D)**.



Suppl. Fig. S2. Mean fluorescent intensity of naïve spinal cord microglia did not differ between male and female mice. Plotted is a histogram of the mean fluorescent intensity for CD11b of each microglial sample (gated on live CD45 positive singlets). Samples were obtained in several rounds of sex-matched sorting experiments over several weeks. Differences in intensity and cell counts are only discernible between technical batches, but not between male and female microglia obtained from $n = 11$ mice. Gating was kept constant within each technical batch.



Suppl. Fig. S3. Coverage plots for each sequenced sample. Lines represent the percent coverage over gene bodies (5' to 3'). As expected from SMARTer library preps, there was a slight 3' bias in some of the samples, e.g. S_264112_CAIA_F_P, while others displayed very uniform coverage of reads across gene bodies (e.g. S_269147_SALI_M_C). The extent of bias was comparable to that reported in the literature. SALI = saline; CAIA = Collagen type-II induced arthritis; M = Male; F = Female.



Suppl. Fig. S4. *Cd11b* and *Iba-1* mRNA levels in naive lumbar spinal cords are comparable between mouse strains. *Cd11b* and *Iba-1* mRNA levels were measured in lumbar spinal cords of (A,C) male Balb/cAnNRj and C57BL6/J mice as well as (B,D) female Balb/cAnNRj and C57BL6/J mice. Data is presented as mean \pm SEM, n=11-13 per group, C57BL/6 vs. Balb/c mice.