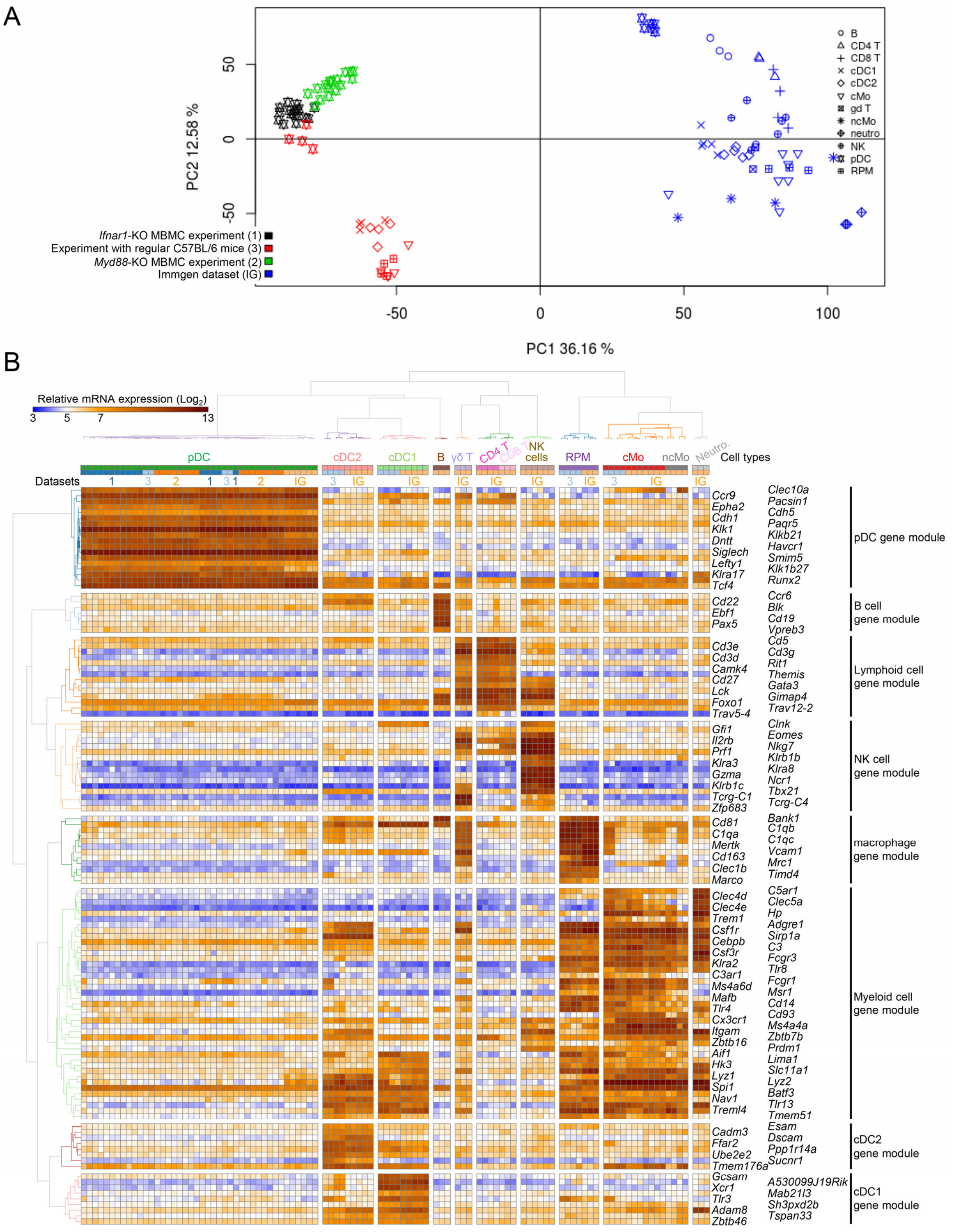
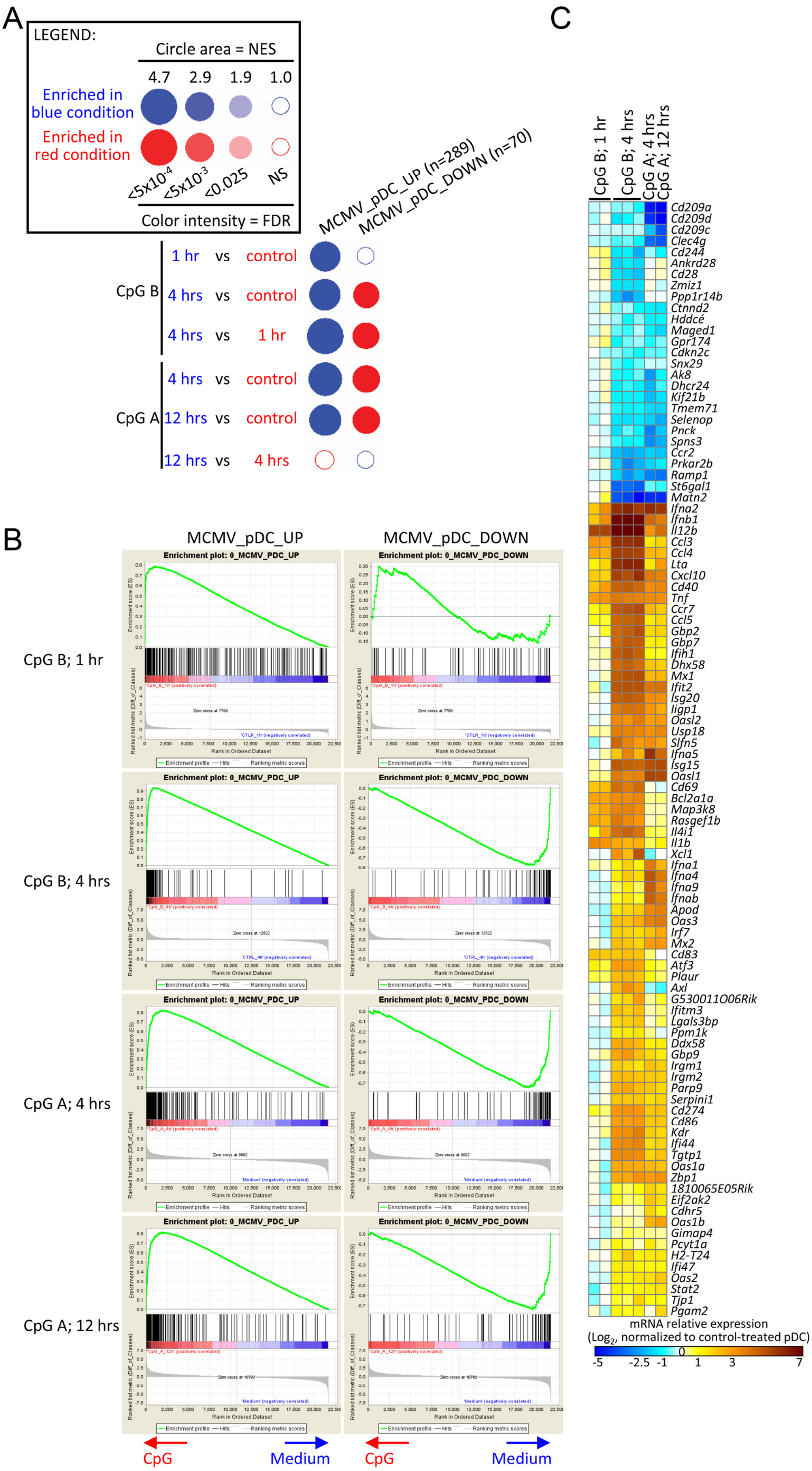
Appendix Table of contents



Appendix Figure S1

Figure S1. Comparative gene expression profiling of sorted pDC with other cells sorted from the same mice and with an Immgen compendium confirms specificity of gating strategy.

(A) Principal component analysis on microarray compendium without batch correction. **(B)** Heatmap showing the expression patterns of well know cell-type-specific genes across all samples, with hierarchical clustering of cell samples (columns) and genes (rows). The data shown are the same as in Figure EV1 but before batch correction.



Appendix Figure S2

Figure S2. The genes significantly modulated in pDC at 36 hours after MCMV infection are similarly affected upon 4 to 12 hour CpG stimulation of pDC in vitro.

(A) BubbleMAP showing the results of Gene Set enrichment analysis for the genes induced or inhibited in pDC at 36 hours after MCMV infection in vivo. The MCMV pDC gene modules were assessed for enrichment in all possible pairwise comparisons between CpG stimulation conditions using the BubbleMap module of BubbleGUM. Data are represented as Bubbles, bigger and darker for stronger and more significant enrichment, in a color matching that of the condition in which the GeneSet was enriched (blue for the stimulation indicated in blue characters on the annotation on the left of each figure, red for the condition to which the comparison is performed). The strength of the enrichment is quantified by the normalized enrichment score (NES) which represents the number and differential expression intensity of the genes enriched. The significance of the enrichment is measured by the false discovery rate (FDR) value (q) representing the likelihood that the enrichment of the GeneSet was a false-positive finding (e.g., if q=0.05, a similar enrichment is found in 5% of the random GeneSets used as controls). This q-value was further corrected for multiple testing, leading to a higher stringency of the significance threshold used. The absolute NES values generally vary between 1 (no enrichment) and 5 (extremely high enrichment). The enrichment is considered significant for absolute NES values >1 with an associated q value <0.25.

(B) Individual enrichment plots for each CpG stimulation condition and its mock counterpart.

(C) Heatmap showing the expression pattern across CpG in vitro stimulation conditions of representative genes of the modules up- or down-regulated in splenic pDC during

MCMV infection in vivo. The color scale corresponds to Log2 fold change in gene expression in pDC stimulated in vitro by CpG, relative to matched mock controls.