Figure S1. IMQ increases the expression of surface molecules in Flt3L-DCs. Bone marrow-derived DCs were isolated from C57BL/6 mice and cultured for 9 days in the presence of recombinant human Flt3L at 200 ng/ml, without adding additional media. Subsequently, the Flt3L-DCs ($6x10^6$ cells/well) were harvested and treated with IMQ (0.1, 0.5, 1 and 2 μg/ml) or LPS (100 ng/ml) for 20 h. (A) CD40, CD80, CD86 and MHCII expression on $CD11c^+$ cells was analyzed by flow cytometry. (B) Bar graphs showing fold changes in the MFI relative to the medium group. (C) IL-12p40 and IL-6 levels in supernatants were quantified using ELISAs. Data are presented as the mean ± SD (n=3; biological replicates). $^*P<0.05$, $^{**}P<0.01$, $^{***}P<0.001$ and $^{****}P<0.0001$ vs. medium group; one-way ANOVA with the Bonferroni post hoc test. DC, dendritic cell; Flt3L, FMS-like tyrosine kinase 3 ligand; Flt3L-DCs, Flt3L-derived DCs; IMQ, imiquimod; LPS, lipopolysaccharide; MFI, mean fluorescence intensity; MHC, major histocompatibility complex.

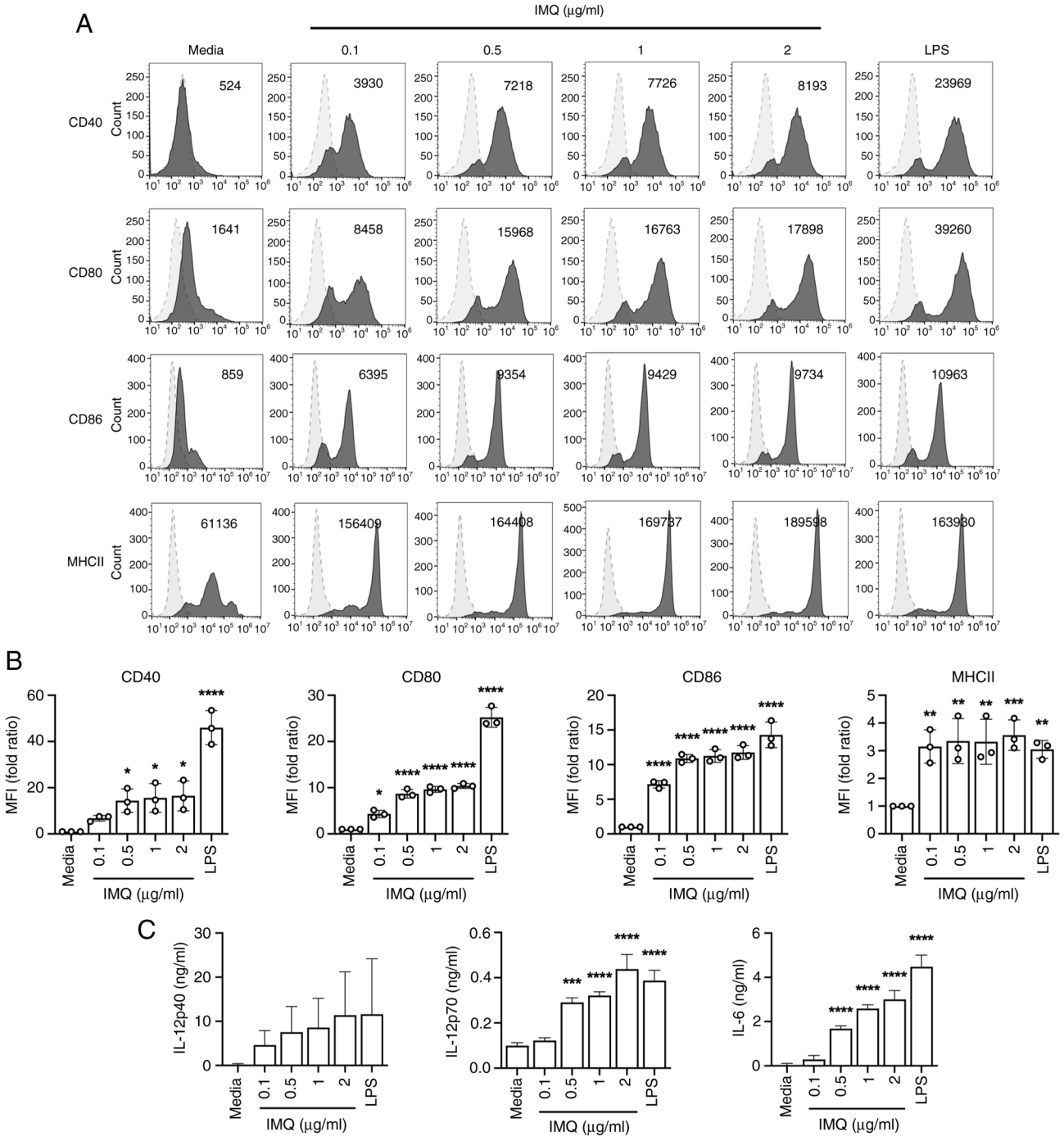

Figure S2. IMQ-treated DCs promote Th9 polarization of naïve $CD4^+$ T cells. Immature DCs were treated with OVA (20 ng/ml) for 2 h and OVA-DCs were then stimulated with IMQ (1 μg/ml) or LPS (100 ng/ml) for 6 h. Following this, the DCs were co-cultured with OT-II naïve $CD4^+$ T cells at a 1:10 ratio for 3 days. (A) IL-9^+ and $Foxp3^+$ $CD4^+$ T cells were measured by flow cytometry. (B) Proportions of IL-9^+ and $Foxp3^+$ $CD4^+$ T cells are presented as the mean ± SD (n=3; biological replicates). (C) IL-9 and IL-10 levels in supernatants were quantified by ELISAs. $^{**}P<0.01$ and $^{****}P<0.0001$ compared with the medium group; as determined using one-way ANOVA with the Bonferroni post hoc test. DC, dendritic cell; IMQ, imiquimod; LPS, lipopolysaccharide; OVA, ovalbumin; Th, T helper.