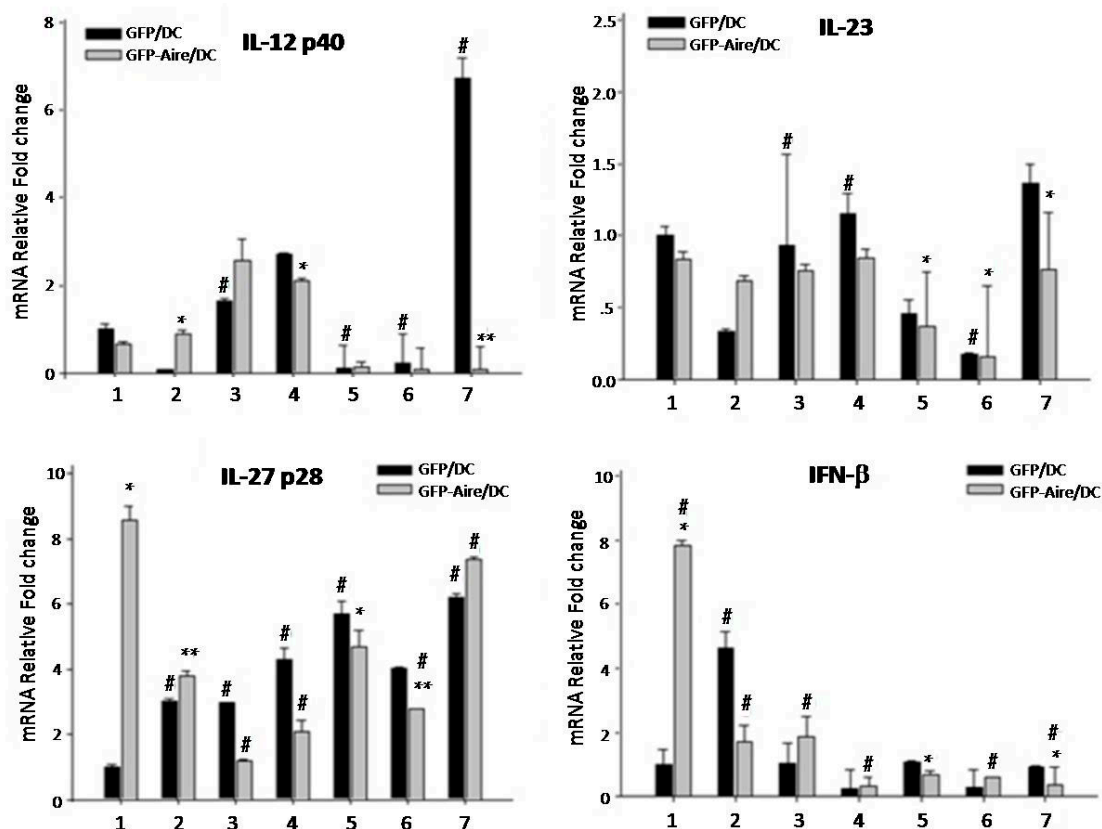
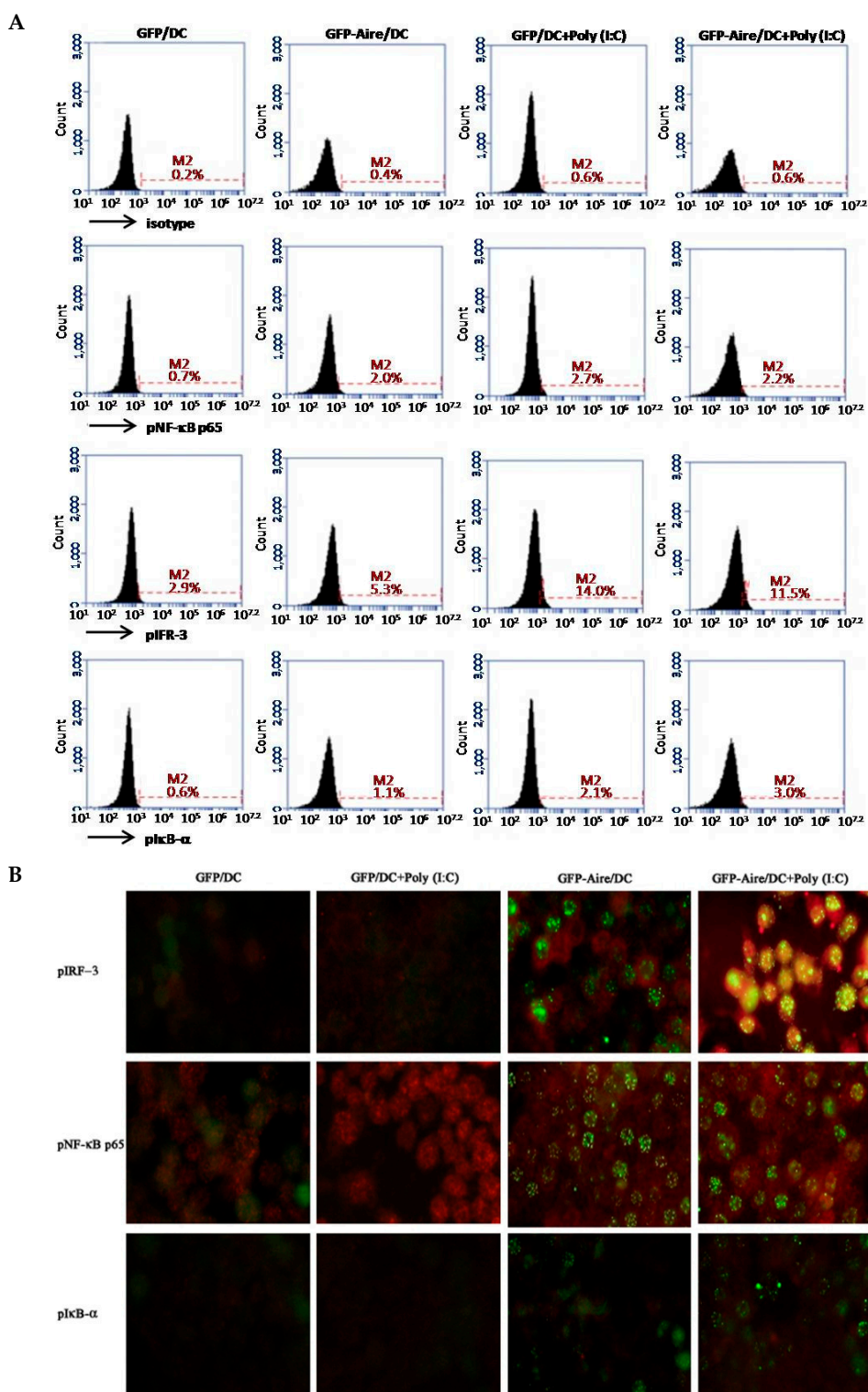


# Supplementary Material: Autoimmune Regulator Expression in DC2.4 Cells Regulates the NF- $\kappa$ B Signaling and Cytokine Expression of the Toll-Like Receptor 3 Pathway

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**Figure S1.** Effects of Aire on downstream gene expression in GFP-Aire/DC cells treated with a lower dose of Poly (I:C). The levels of IL-12 p40, IL-23, IL-27 p28, and IFN- $\beta$  transcript expression in GFP-Aire/DC and GFP/DC cells were detected by RT-qPCR. All qPCR data are shown as the gene expression relative to GAPDH expression and are depicted as the fold change relative to GFP/DC cells, which were normalized to 1. *x*-axis: (1): Control; (2,3): 3 h Poly I:C at 1 and 12.5 mg/mL, respectively; (4,5): 6 h Poly I:C at 1 and 12.5 mg/mL, respectively; (6,7): 12 h Poly I:C at 1 and 12.5 mg/mL, respectively. \*  $p < 0.05$ , \*\*  $p < 0.01$  compared with the GFP/DC control; #  $p < 0.05$  compared with the GFP-Aire/DC control.



**Figure S2.** (A) Immunofluorescent detection of NF-κB, IRF-3, and IκB-α (red) in GFP/DC and GFP-Aire/DC treated with Poly (I:C) via confocal microscopy. Original magnification: 200×; (B) Phospho-NF-κB, IκB-α, and IRF-3 expression were detected by FCM. The results are representative of at least three independent experiments.

**Table S1.** Oligonucleotide primer sequences.

Gene	Sequences	Size (bp)
<i>GAPDH</i>	S: 5'-GACTTCAACAGCAACTCCCCTC-3' AS: 5'-TAGCCGTATTCATTGTCATACCAG-3'	107
<i>TLR1</i>	S: 5'-CTGAGGGTCCTGATAATGTCCTAC-3' AS: 5'-GATCACCTTTAGCTCATTGTGGG-3'	114
<i>TLR2</i>	S: 5'-TTGCGTTACATCTTGGAACCTG-3' AS: 5'-ACTACGCTGACTCCGAGGG-3'	96
<i>TLR3</i>	S: 5'-CAACGGTTCCTTCTCCTATCTC-3' AS: 5'-TTGCTTAGTAAATGCTCGCTC-3'	139
<i>TLR4</i>	S: 5'-CTTCATTCAAGACCAAGCCTTTC-3' AS: 5'-AACCGATGGACGTGTAACCAG-3'	126
<i>TLR5</i>	S: 5'-TCTACAACATATCCACCGAAGACTG-3' AS: 5'-TTATGACTACAAGGGTGATGACGAG-3'	123
<i>TLR6</i>	S: 5'-ACAACATTCCCAGTAGATACCACA-3' AS: 5'-TCCTCATTGACTAAGGCTAACTTC-3'	148
<i>TLR7</i>	S: 5'-TGAGGGCATTCCCCTAACAC-3' AS: 5'-TCCAGATGGTTCAGCCTACGG-3'	96
<i>TLR8</i>	S: 5'-TTCCTCACATTCCTTACCACCTC-3' AS: 5'-GTGATAGATAAACCAAACATCCCAG-3'	87
<i>TLR9</i>	S: 5'-TCTGTCTTACTACACCGCTATTTG-3' AS: 5'-AAACTACCCTTTACAGCCAACC-3'	93
<i>IL-12p40</i>	S: 5'-ACTGGAACACACAAGAACGAGAG-3' AS: 5'-CTTCAAGTCCTCATAGATGCTACCA-3'	108
<i>IL-23</i>	S: 5'-AAATAATGTGCCCGTATCCAGT-3' AS: 5'-TCCCCTTTGAAGATGTCAGAGTC-3'	140
<i>IL-27p28</i>	S: 5'-CTCTGCTTCCTCGCTACCAC-3' AS: 5'-GGGGCAGCTTCTTTTCTTCT-3'	234
<i>IFN-<math>\beta</math></i>	S: 5'-AAGAGTTACACTGCCTTTGCCATC-3' AS: 5'-CACTGTCTGCTGGTGGAGTTCATC-3'	135
<i>MyD88</i>	S: 5'-TCCGGCAACTAGAACAGACAGACT-3' AS: 5'-GCCGGCAGACCTTTTCTCAAT-3'	119
<i>NF-<math>\kappa</math>B</i>	S: 5'-GGACCTATGAGACCTTCAAGAG-3' AS: 5'-CTACCCGAACTCAACTTCTGT-3'	111
<i>TICAM</i>	S: 5'-GATGGAGAGGTCCACAAGGA-3' AS: 5'-GAGTGTAGCGTGGGGAGTGT-3'	109
<i>IRF-3</i>	S: 5'-AGCCTGCATCAAATCAACC-3' AS: 5'-CCACCTTTCTGGCGAAGA-3'	180