

## Supplementary Tables and Figures

**Table S1.** Sequences of primers used for a reverse transcription-quantitative polymerase chain reaction

Gene symbol	Forward primer	Reverse primer
<i>IRF4</i>	GCTCTATGCGAAAAGACTGTG	CCAAAGCATAGAGTCACCTGG
<i>BLIMPI</i>	GGCTGAGTTGAAGAGAAGTGT	AACGTGTGCCCTTGGTATG
<i>HPRT</i>	CCTGGCGTCGTGATTAGTGAT	AGACGTTCAGTCCTGTCCATAA

**Table S2:** Correlation between demographics data and miR-125-5p expression

variables	miR-125b-5p expression
<b>Age of onset, years</b>	P: 0.153 r: 0.488
<b>Delay of diagnosis, years</b>	P: 0.356 r: -0.327
<b>Course of disease, years</b>	P: 0.156 r: -.0485
<b>Follow-up, years</b>	P: 0.342 r: -.0336
<b>Age, years</b>	P: 0.583 r: -0.198

\**p*-value <0.05 is statistically significant

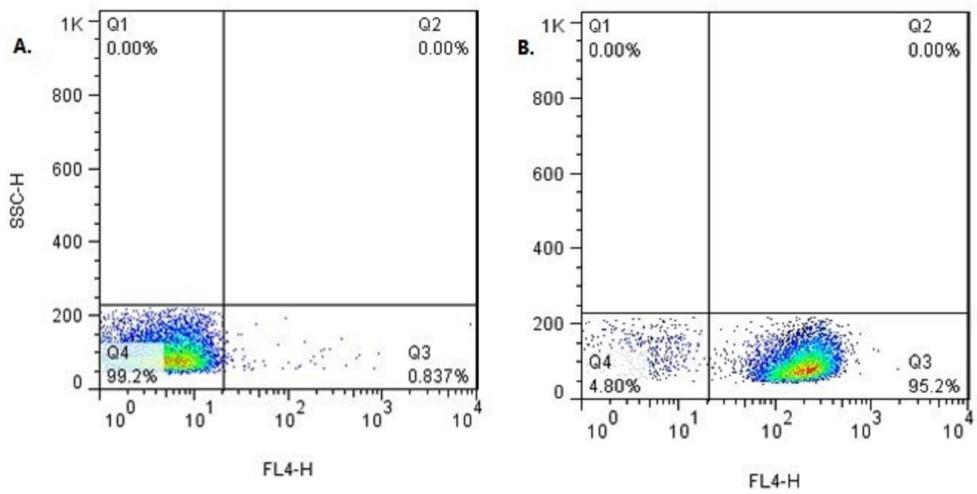
	Predicted consequential pairing of target region (top) and miRNA (bottom)	Site type	Context++ score	Context++ score percentile	Weighted context++ score	Conserved branch length	Pct
Position 592-599 of IRF4 3' UTR	5' ...AUGUCUGUGCCAUUUCAGGGA... hsa-miR-4319 3'         CACC GAA CGAG UCCU	8mer	-0.40	98	-0.40	6.854	0.96
Position 592-599 of IRF4 3' UTR	5' ...AUGUCUGUGCCAUUUCAGGGA... hsa-miR-125b-5p 3'         AGUGU CAA UCC CAG AGU CCCU	8mer	-0.39	98	-0.39	6.854	0.96
Position 592-599 of IRF4 3' UTR	5' ...AUGUCUGUGCCAUUUCAGGGA... hsa-miR-125a-5p 3'         AGUGU CAA UUU CCA GAG UCCC U	8mer	-0.38	97	-0.38	6.854	0.96

(A)

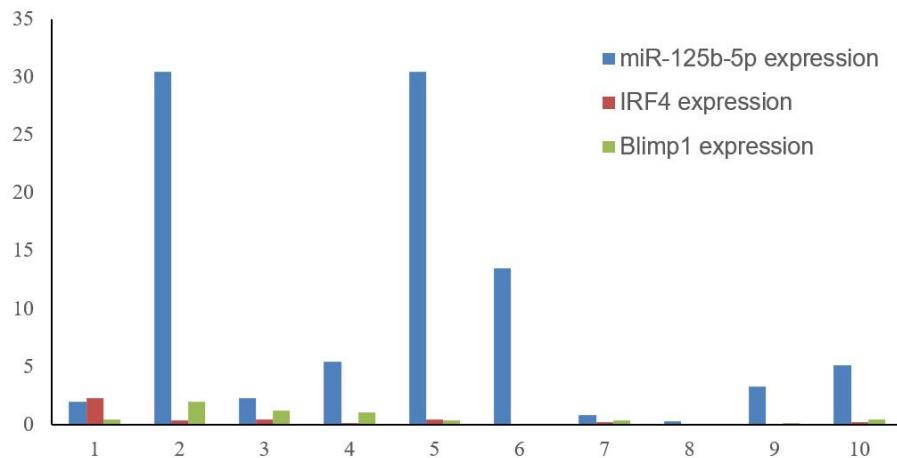
	Predicted consequential pairing of target region (top) and miRNA (bottom)	Site type	Context++ score	Context++ score percentile	Weighted context++ score	Conserved branch length	Pct
Position 166-172 of PRDM1 3' UTR	5' ...CAAAGUUCAGAAUCAGGGC... hsa-miR-125b-5p 3'         AGUGU CAA UCC CAG AGU CCCU	7mer-m8	-0.39	98	-0.39	4.901	0.83
Position 166-172 of PRDM1 3' UTR	5' ...CAAAGUUCAGAAUCAGGGC... hsa-miR-125a-5p 3'         AGUGU CAA UUU CCA GAG UCCC U	7mer-m8	-0.36	97	-0.36	4.901	0.83
Position 166-172 of PRDM1 3' UTR	5' ...CAAAGUUCAGAAUCAGGGC... hsa-miR-4319 3'         CACC GAA CGAG UCCU	7mer-m8	-0.34	96	-0.34	4.901	0.83

(B)

**Figure S1.** pairing seed sequence of miR-125b-5p with 3' UTRs *IRF-4* (A) and *BLIMP-1*(B) genes is shown by Targetscan database respectively.



**Figure S2:** Flow cytometry results in detecting the purity of isolated B (A) lymphocytes Isotype B Cells (B).



**Figure S3:** Relative expressions of miR-125b, *IRF-4* and *BLIMP-1* in each CVID patient.