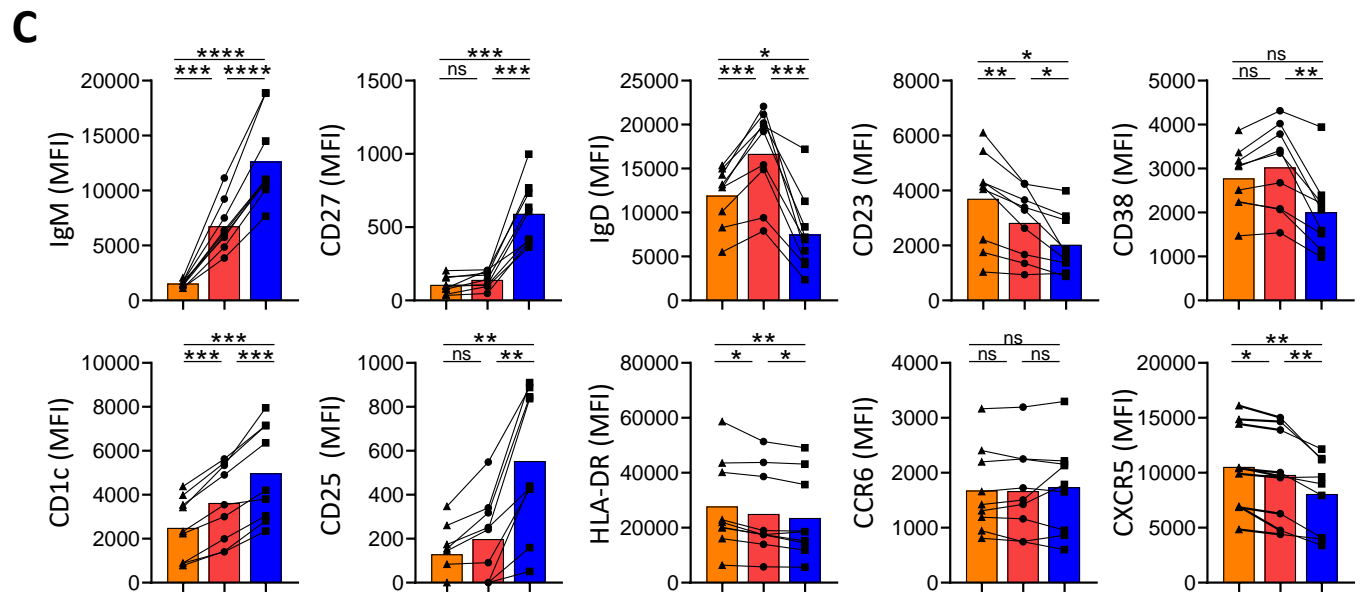
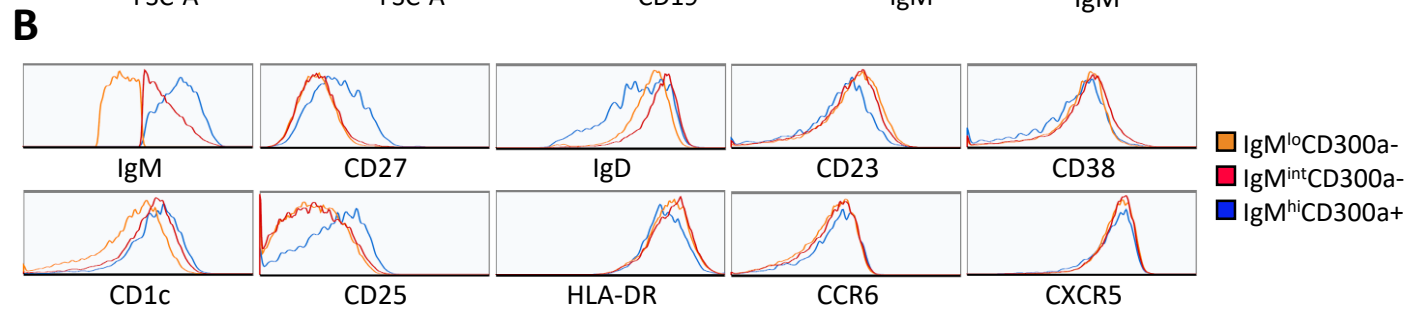
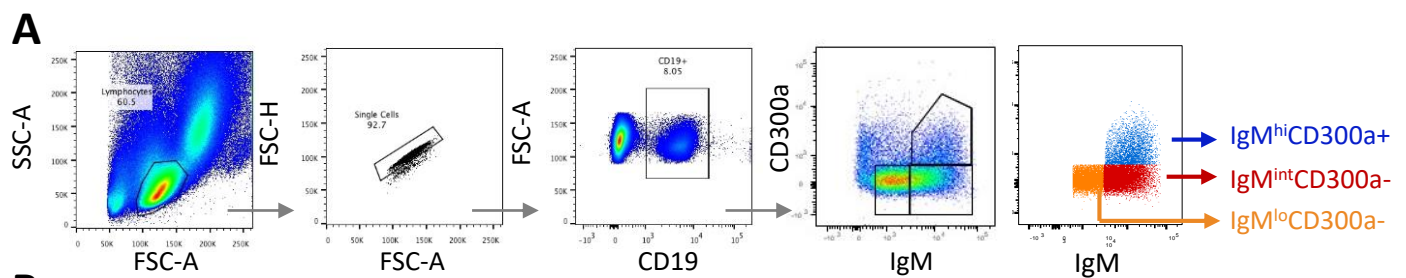
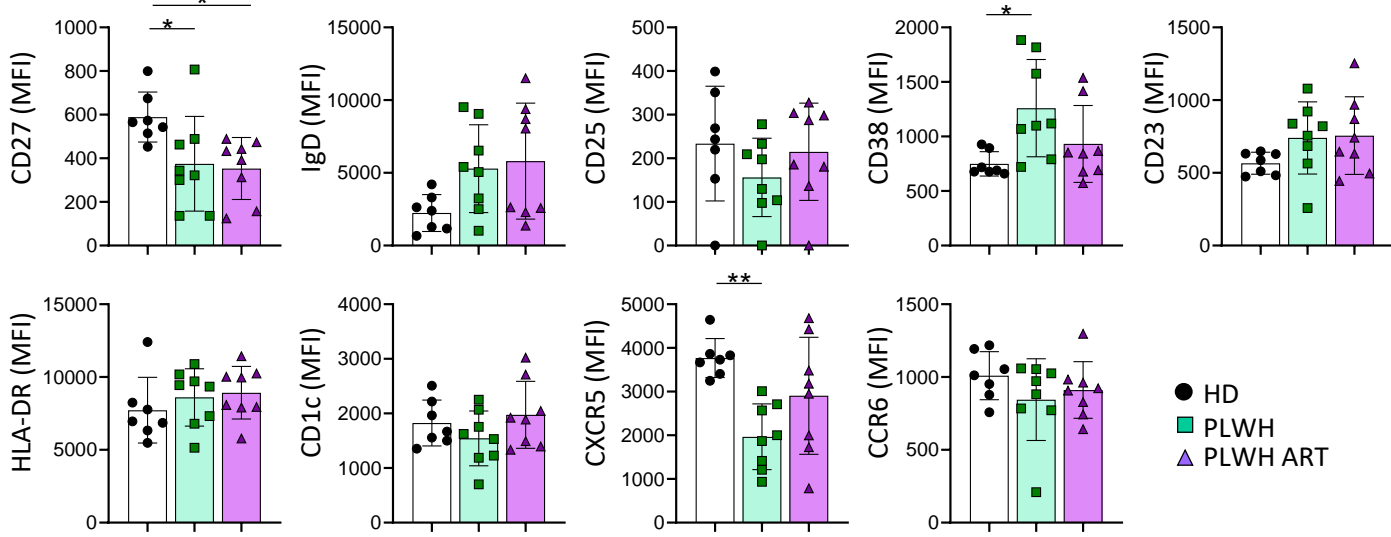
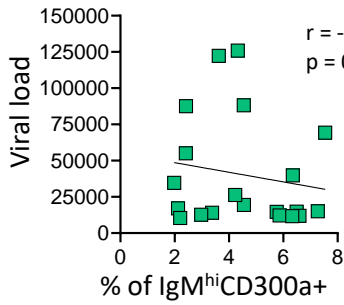
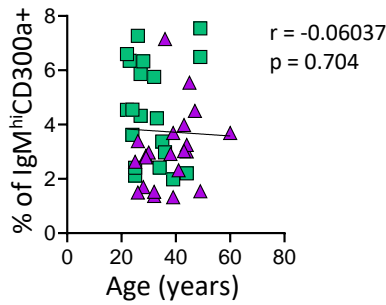
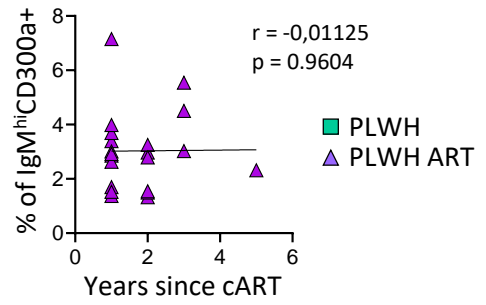


Supplementary Figure S1. Phenotypical characterization of $\text{IgM}^{\text{hi}}\text{CD27}^+\text{300a}^+$ and $\text{IgM}^{\text{hi}}\text{CD27}^+\text{300a}^-$. (A) Pseudocolor plots of concatenated peripheral CD19^+ B cells from healthy donors in which $\text{IgM}^{\text{hi}}\text{CD27}^+$ were analyzed based on CD300a expression. CD300a^+ (green) and CD300a^- (pink) B cell subsets are distinguished. (B) Dot-bar graphs showing the median fluorescence intensity (MFI) of IgD, CD23, CD38, CD1c, CD25, CD86, HLA-DR, CD10, CD20 and CD21 in the indicated $\text{IgM}^{\text{hi}}\text{CD27}^+$ B cell subsets. Each dot represents a donor. Statistical significance was determined using t-test or Wilcoxon matched-pairs signed rank test. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$, ns: not significant.



Supplementary Figure S2. Phenotypical characterization of IgM^{hi}CD300a⁺, IgM^{int}CD300a⁻ and IgM^{lo}CD300a⁻ B cells from peripheral blood of healthy donors. (A) Pseudocolor plots of concatenated peripheral CD19⁺ B cells from healthy donors in which IgM^{lo}CD300a⁻ (orange), IgM^{int}CD300a⁻ (red) and IgM^{hi}CD300a⁺ (blue) B cell subsets are distinguished. (B) Histograms showing expression of IgM, CD27, IgD, CD23, CD38, CD1c, CD25, HLA-DR, CCR6 and CXCR5 in each B cell subset. (C) Dot-bar graphs showing the median fluorescence intensity (MFI) of IgM, CD27, IgD, CD23, CD38, CD1c, CD25, HLA-DR, CCR6 and CXCR5 in the indicated B cell subsets (n = 9). Each dot represents a donor. Means ± SEMs are shown. Statistical significance was determined by the Friedman test. *p < 0.05, **p < 0.01, ***p < 0.001, ****p < 0.0001, ns: not significant.

A**B****C****D**

Supplementary Figure S3. (A) Dot-bar graphs showing the median fluorescence intensity (MFI) of CD27, IgD, CD25, CD38, CD23, HLA-DR, CD1c, CXCR5 and CCR6 in $\text{IgM}^{\text{hi}}\text{CD300a}^+$ B cells from healthy donors (HD, white) ART naïve PLWH (PLWH, green) and PLWH under ART (PLWH ART, purple). Graphs showing the correlation of percentage of $\text{IgM}^{\text{hi}}\text{CD300a}^+$ to the months viral load (B), age in years (C) and years since ART (D) in ART naïve PLWH (PLWH, green squares) and PLWH under ART (PLWH ART, purple triangles). Kruskal-Wallis test (A) and Spearman (B, D) and Pearson (C) correlation tests were used.