



**Figure S1. Representative FACS Sort of Patient-Derived PBMCs.** Cells were filtered for size and granularity (A), then (in this case) CD3<sup>+</sup>/CD8<sup>+</sup>/CD14<sup>+</sup> cells eliminated (B). The CD27<sup>+</sup> / CD20<sup>hi</sup> / IgG<sup>+</sup> / p62-E1<sup>+</sup> B cells (C and D) were collected in individual wells. In some samples, both CD20<sup>hi/lo</sup> populations were carried forward.