



### Supplementary Figure S1

Ex vivo induction into CD83 phenotype within the immune organoid.

Naïve B cells with 40LB cells were co-encapsulated with the immune organoids. Left panel shows the histogram overlay of flow cytometry analysis indicating a shift in CD84 signal. Right panel indicates Median fluorescence intensity of CD19+CD83+ cells inside the organoids and comparative controls (\* $p < 0.05$ , Analysis of variance (ANOVA),  $n = 3$ , data represents Mean  $\pm$  Standard Error)