

B cell subtype	Genes
Memory B cells	CD19,CD27,IGHD,CD38,CD24,CD20,MS4A1,PTPRC,PAX5,CD24,CD38,CD79A,JCHAIN,SSR4,FKBP11,SEC11C,DERL3,PRDX4,IgLL5,CD79B,TCL1A,IgLL5,HLA-DQA1,HLA-DQB1,CD138,CD38,CD27,VPREB3,IgLL5
Naive B cells	CD19,IGHD,CD38,CD24,CD20,MS4A1,PTPRC,PAX5,CD24,CD38,CD79A,JCHAIN,SSR4,FKBP11,SEC11C,DERL3,PRDX4,IgLL5,CD79B,TCL1A,IgLL5,HLA-DQA1,HLA-DQB1,CD138,CD38,VPREB3,IgLL5
Plasma B cells	CD27,IGHD,CD38,CD24,CD20,MS4A1,PTPRC,PAX5,CD24,CD38,CD79A,JCHAIN,SSR4,FKBP11,SEC11C,DERL3,PRDX4,IgLL5,CD79B,TCL1A,IgLL5,HLA-DQA1,HLA-DQB1,CD138,CD38,VPREB3,IgLL5
Pre-B cells	CD19,CD27,IGHD,CD24,PTPRC,PAX5,CD24,CD38,CD79A,NSMCE1,PCDH9,ACSM3,CCDC191,TCL1A,CD79B,TCL1A,IgLL5,HLA-DQA1,HLA-DQB1,VPREB3,IgLL5
Pro-B cells	CD27,IGHD,CD24,PTPRC,PAX5,CD24,CD38,CD79A,DNTT,C10orf10,VPREB1,ARPP21,CD99,IgLL1,CD9,CD79B,TCL1A,IgLL5,HLA-DQA1,HLA-DQB1,VPREB3,IgLL5

Supplementary Table 4. Human gene symbols for B cell subtype classification.