

Marker	Clone	Mass	Type
CD19	HIB19	142	δ
CD5	UCHT2	143	δ
*IgG	G18-145	144	δ
CD4	RPA-T4	145	β
IgD	IA6-2	146	δ
CD20	2H7	147	δ
CD16	3G8	148	β
IgA	polyclonal	148	α
Igλ	MHL-38	151	δ
CD45	HI30	154	δ
CD27	L128	155	β
*p-PLCγ	K86-6 89.37	156	α
CD33	MW53	158	β
CD22	HIB22	159	δ
Igκ	MHK-49	160	δ
CD79B	CB3-1	162	β
CD40	5C3	165	δ
CD44	BJ18	166	β
CD38	HIT2	167	δ
CD8	SK1	168	δ
CD3	UCHT1	170	δ
IgM	MHM-88	172	δ
HLA-DR	L243	174	δ
**SHP-1	C14H6	175	β
Iridium	N/A	193	δ

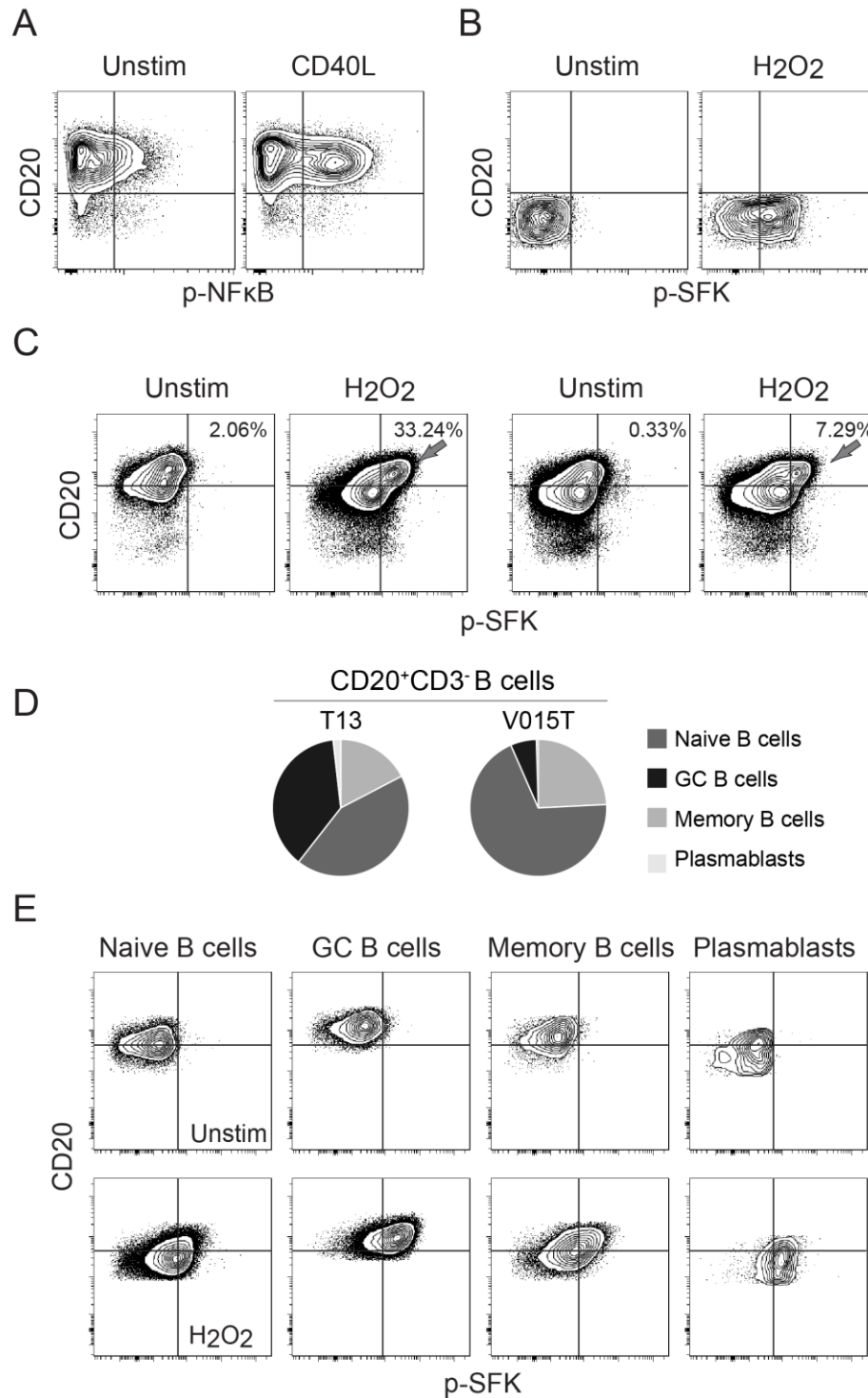
Marker Type Key:
α- Mass cytometry panel 1 only
β- Mass cytometry panel 2 only
δ- Both panels

All antibodies were purchased from Fluidigm, unless otherwise specified

*BD Biosciences antibody

**Cell signaling technology antibody

Table S1. Mass Cytometry Panels.



Supplemental Figure 1. Populations (CD3⁻ cells and CD3⁺CD20⁻ cells) defined in figure 1 for A-C and gating schematic for D and E (Naïve B cells, GC B cells, Memory B cells, plasmablasts) shown in figure 3. (A) Contour plots show p-NFκB in unstimulated cells and cells stimulated by CD40L for 15 minutes in CD3⁺ cells. (B-D) Cells were either left unstimulated or stimulated by 3.3mM of H₂O₂ for 2 minutes. (B) Contour plots show p-SFK (i.e. p-LCK) in CD20⁺ CD3⁺ tonsillar T cells (C) Contour plots show two other CD3⁺ healthy tonsil specimens (T13 left-two plots, V015T right-two plots) and their response to H₂O₂ stimulation. Sensitivity to H₂O₂ in a CD20^{hi} B cell population is indicated (gray arrows). (D) Population portions of identified B cell subsets for two tonsils is shown. (E) Contour plots show raw data for B cell population responses to H₂O₂ (bottom row). Data for one representative tonsil (T13, n=3) is shown.