

	ALC#	1500	2200	1500	2800	1300	1800	1300	2900	2800	1900	1800	2900	2800	1200	2100	2400
Parent gates	Final gate	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
Lymphs	%CD3+	66.2	77.6	49.2	62	78	83.7	70.8	82.5	64.6	68.4	81.2	65.8	70.9	66.9	81.7	74.9
Lymphs	#CD3+	993	1707.2	738	1736	1014	1506.6	920.4	2392.5	1808.8	1299.6	1461.6	1908.2	1985.2	802.8	1715.7	1797.6
Lymphs	%CD3-	33.8	22.4	50.8	38	22	16.3	29.2	17.5	35.4	31.6	18.8	34.2	29.1	33.1	18.3	25.1
Lymphs	#CD3-	507	492.8	762	1064	286	293.4	379.6	507.5	991.2	600.4	338.4	991.8	814.8	397.2	384.3	602.4
Lymphs	%CD19+	15.1	9.23	13.1	18.6	6.09	7.61	12.5	7.69	14.9	9.97	8.88	26.8	9.28	6.4	10.3	7.18
Lymphs	#CD19+	226.5	203.06	196.5	520.8	79.17	136.98	162.5	223.01	417.2	189.43	159.84	777.2	259.84	76.8	216.3	172.32
Lymphs	%CD20+	15.8	9.43	13.1	18.6	6.11	7.62	12.6	7.82	14.9	10.1	8.99	26.7	9.5	6.44	10	7.06
Lymphs	#CD20+	237	207.46	196.5	520.8	79.43	137.16	163.8	226.78	417.2	191.9	161.82	774.3	266	77.28	210	169.44
Lymphs	%CD19+ CD20+	15.7	9.48	13.2	18.6	6.11	7.59	12.6	7.78	14.8	10	8.93	26.7	9.46	6.41	10	7.01
Lymphs	#CD19+ CD20+	235.5	208.56	198	520.8	79.43	136.62	163.8	225.62	414.4	190	160.74	774.3	264.88	76.92	210	168.24
Lymphs, CD19+	%IgM+	41	26.5	37.2	30.7	22.6	29.2	47.3	65.7	41.2	49.2	36.9	30.1	24.6	37.7	32.6	41.5
Lymphs, CD19+	#IgM+	92.865	53.8109	73.098	159.8856	17.89242	39.99816	76.8625	146.51757	171.8864	93.19956	58.98096	233.9372	63.92064	28.9536	70.5138	71.5128
Lymphs, CD19+	%IgM- IgD-	15.6	10.8	12.4	18.8	15	22.1	16.2	25.4	26.1	24.8	34.7	14	23.6	48.1	30.8	39.1
Lymphs, CD19+	#IgM- IgD-	35.334	21.93048	24.366	97.9104	11.8755	30.27258	26.325	56.64454	108.8892	46.97864	55.46448	108.808	61.32224	36.9408	66.6204	67.37712
Lymphs, CD19+	%Trans	8.41	4.08	2.79	4.52	4.77	4.98	3.72	7.65	7.42	6.16	5.48	3.94	3.89	8.29	5.53	2.41
Lymphs, CD19+	#Trans	19.04865	8.284848	5.48235	23.54016	3.776409	6.821604	6.045	17.060265	30.95624	11.668888	8.759232	30.62168	10.107776	6.36672	11.96139	4.152912
Lymphs, CD19+	%MN	74.6	81.7	54.5	80.2	71.6	70.1	82.2	57.3	66.3	57.8	73.8	86.3	79.1	48.8	44.8	69.7
Lymphs, CD19+	#MN	168.969	165.90002	107.0925	417.6816	56.68572	96.02298	133.575	127.78473	276.6036	109.49054	117.96192	670.7236	205.53344	37.4784	96.9024	120.10704
Lymphs, CD19+	%MA	10.8	8.25	37.8	11.7	13.1	17.2	10.5	28.8	21.8	29.5	16.5	5.88	12.5	35.6	24.4	16.8
Lymphs, CD19+	#MA	24.462	16.75245	74.277	60.9336	10.37127	23.56056	17.0625	64.22688	90.9496	55.88185	26.3736	45.69936	32.48	27.3408	52.7772	28.94976
Lymphs, CD19+	%RM	2	1.45	1.16	1.78	6.8	5.07	2.52	4.75	2.51	3.95	2.91	2.81	3.16	4.89	16.4	8.38
Lymphs, CD19+	#RM	4.53	2.94437	2.2794	9.27024	5.38356	6.944886	4.095	10.592975	10.47172	7.482485	4.651344	21.83932	8.210944	3.75552	35.4732	14.440416
Lymphs, CD19+	%PB	0.33	2.18	0.44	0.31	0.2	0.57	0.16	0.45	0.13	0.74	0.11	0.12	0.19	0.45	2.56	0.76
Lymphs, CD19+	#PB	0.74745	4.426708	0.8646	1.61448	0.15834	0.780786	0.26	1.003545	0.54236	1.401782	0.175824	0.93264	0.493696	0.3456	5.53728	1.309632
Lymphs, CD19+	CD267+	40	21.7	41.3	25.4	39.4	38.5	17.5	58	56.6	56.4	45.5	18.7	31.7	78.9	69.8	44.6
Lymphs, CD19+	#CD267+	90.6	44.06402	81.1545	132.2832	31.19298	52.7373	28.4375	129.3458	236.1352	106.83852	72.7272	145.3364	82.36928	60.5952	150.9774	76.85472
Lymphs, CD19+	%CD 267+++	0.56	0.36	1.19	0.54	1.07	0.58	0.73	1.73	0.53	0.66	0.62	0.39	0.74	0.94	0.86	1.1
Lymphs, CD19+	#CD 267+++	0.50736	0.15863047	0.96573855	0.71432928	0.33376489	0.30587634	0.20759375	2.23768234	1.25151656	0.70513423	0.45090864	0.56681196	0.60953267	0.56959488	1.29840564	0.84540192
Lymphs, CD19+, Trans	%CD267+	13.9	16.3	18.7	17.3	16.4	26.8	7.1	22.8	21.9	28.9	23.8	14.2	15.6	33.3	39.6	24.5
Lymphs, CD19+, Trans	#CD267+	2.64776235	1.35043022	1.02519945	4.07244768	0.61933108	1.82818987	0.429195	3.88974042	6.77941656	3.37230863	2.08469722	4.34827856	1.57681306	2.12011776	4.73671044	1.01746344
Lymphs, CD19+, MN	%CD267+	28.9	15.6	22.1	18.7	26.3	32.8	7.31	37.1	48	36.6	37.6	12.6	24.4	64.9	53.9	31.1
Lymphs, CD19+, MN	#CD267+	48.832041	25.8804031	23.6674425	78.1064592	14.9083444	31.4955374	9.7643325	47.4081348	132.769728	40.0735376	44.3536819	84.5111736	50.1501594	24.3234816	52.2303936	37.3532894
Lymphs, CD19+, MA	%CD267+	90.6	81.6	89.6	84.5	89.8	90.5	89.1	97.6	97	96.1	95.1	79.7	95.4	96.8	98	94
Lymphs, CD19+, MA	#CD267+	22.162572	13.6699992	66.552192	51.488892	9.31340046	21.3223068	15.2026875	62.6854349	88.221112	53.7024579	25.0812936	36.4223899	30.98592	26.4658944	51.721656	27.2127744
Lymphs, CD19+, RM	%CD267+	96.5	95.8	94.3	92	93	94.8	87	96.6	95.4	92.8	100	84.5	88.7	93.8	93.9	91.1
Lymphs, CD19+, RM	#CD267+	1.93	1.3891	1.09388	1.6376	6.324	4.80636	2.1924	4.5885	2.39454	3.6656	2.91	2.37445	2.80292	4.58682	15.3996	7.63418
Lymphs, CD19+	%Kappa+	56.2	63.4	60.1	59.5	58.8	62.1	56.8	56.5	54	53	54.2	55.4	56.3	48.7	59.8	55.4
Lymphs, CD19+	#Kappa+	127.293	128.74004	118.0965	309.876	46.55196	85.06458	92.3	126.00065	225.288	100.3979	86.63328	430.5688	146.28992	37.4016	129.3474	95.46528
Lymphs, CD19+, Trans	%Kappa+	59.4	59.2	62.6	61.5	61.2	59.7	55.3	62.5	57.2	62.1	57.6	63.1	60.7	58.7	64.1	59.7
Lymphs, CD19+, Trans	#Kappa+	11.3148981	4.90463002	3.4319511	14.4771984	2.31116231	4.07249759	3.342885	10.6626656	17.7069693	7.24637945	5.04531763	19.3222801	6.13542003	3.73726464	7.66725099	2.47928846
Lymphs, CD19+, MN	%Kappa+	56.2	63.1	61.9	59.3	61.2	61.8	57.3	60	54	56.7	54.8	56.5	57.1	49	65.8	59.5
Lymphs, CD19+, MN	#Kappa+	94.960578	104.682913	66.2902575	247.685189	34.6916606	59.3422016	76.538475	76.670838	149.365944	62.0811362	64.6431322	378.958834	117.359594	18.364416	63.7617792	71.4636888
Lymphs, CD19+, MA	%Kappa+	57.3	67.2	58.8	60.9	60.6	67.6	53.5	56.9	54.1	47.6	53.4	44.6	55.6	47.6	56.8	49.4
Lymphs, CD19+, MA	#Kappa+	14.016726	11.2576464	43.674876	37.1085624	6.28498962	15.9269386	9.1284375	36.5450947	49.2037336	26.5997606	14.0835024	20.3819146	18.05888	13.0142208	29.9774496	14.3011814
Lymphs, CD19+, RM	%Kappa+	51.5	25.5	20.4	47.6	28	49	23.3	19.9	38.2	17.3	33.3	15.8	37.5	27.6	49.4	24.4
Lymphs, CD19+, RM	#Kappa+	2.33295	0.75081435	0.4649976	4.41263424	1.5073968	3.40299414	0.954135	2.10800203	4.00019704	1.29446991	0.29443008	3.45061256	3.079104	1.03652352	17.5237608	3.5234615

Table S3

Parent gates	Final gate	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
Lymphs, CD19+, Trans	%95+	26.53	22.93	20.68	26.2	8.12	25.19	12.37	10.47	7.19	11.88	8.67	4.84	4.74	8.09	17.73	21.94
Lymphs, CD19+, Trans	#95+	5.05360685	1.89971565	1.13374998	6.16752192	0.30664441	1.71836205	0.7477665	1.78620975	2.22575366	1.38626389	0.75942541	1.48208931	0.47910858	0.51506765	2.12075445	0.91114889
Lymphs, CD19+, MN	%95+	4.25	6.44	10.4	7.65	4.2	6.01	4.2	4.89	4.67	5.71	3.8	1.57	3.89	7.98	4.32	12.77
Lymphs, CD19+, MN	#95+	7.1811825	10.6839613	11.13762	31.9526424	2.38080024	5.7709811	5.61015	6.2486733	12.9173881	6.25190983	4.48255296	10.5303605	7.99525082	2.99077632	4.18618368	15.337669
Lymphs, CD19+, MA	%95+	38.3	48.7	34.6	58.55	30.22	44.23	47.7	29.64	33.41	43.7	29.24	55.15	40.49	18.74	32.92	55.66
Lymphs, CD19+, MA	#95+	9.368946	8.15844315	25.699842	35.6766228	3.13419779	10.4208357	8.1388125	19.0368472	30.3862614	24.4203685	7.71164064	25.203197	13.151152	5.12366592	17.3742542	16.1134364
Lymphs, CD19+, RM	%95+	77.55	83.37	81.47	81.15	78.91	71.59	91.9	86.4	73.1	88.64	85.76	95.2	79.67	83.4	69.04	91.74
Lymphs, CD19+, RM	#95+	3.513015	2.45472127	1.85702718	7.52279976	4.2481672	4.97184389	3.763305	9.1523304	7.65482732	6.6324747	3.98899261	20.7910326	6.54165908	3.13210368	24.4906973	13.2476376
Lymphs, CD19+, Trans	%IgM+	76.1	59.87	62.3	70.34	45.36	65.4	86.35	88.9	68.9	74.4	64.7	73.31	65.5	78	66	71.1
Lymphs, CD19+, Trans	#IgM+	14.4960227	4.9601385	3.41550405	16.5581485	1.71297912	4.46132902	5.2198575	15.1665756	21.3288494	8.68165267	5.6672231	22.4487536	6.62059328	4.9660416	7.8945174	2.95272043
Lymphs, CD19+, MN	%IgM+	36.9	21.83	19.51	25.11	9.7	36.8	36.37	55.7	29.18	37.4	32.4	38.12	23.7	39.3	30.7	40.5
Lymphs, CD19+, MN	#IgM+	62.349561	36.2159744	20.8937468	104.87985	5.49851484	35.3364566	48.5812275	71.1760946	80.7129305	40.949462	38.2196621	255.679836	48.7114253	14.7290112	29.7490368	48.6433512
Lymphs, CD19+, MA	%IgM+	48.36	26.89	69.08	25.3	48.92	53.99	36.17	58.23	43.64	35.98	35.36	18.54	43.61	40.55	43.7	27.98
Lymphs, CD19+, MA	#IgM+	11.8298232	4.50473381	51.3105516	15.4162008	5.07362528	12.7203463	6.17150625	37.3993122	39.6904054	20.1062896	9.32570496	8.47266134	14.164528	11.0866944	23.0636364	8.10014285
Lymphs, CD19+, Trans	%IgM+	5.17	0	12.83	3.1	3.51	20.66	2.7	2.55	1.11	2.71	2.86	1.21	3.76	1.04	10.54	3.19
Lymphs, CD19+, Trans	#IgM+	0.234201	0	0.29244702	0.28737744	0.18896296	1.43481345	0.110565	0.27012086	0.11623609	0.20277534	0.13302844	0.26425577	0.30873149	0.03905741	3.73887528	0.46064927
Lymphs, CD19+, RM	%CD267-CD95+	20.1	15	11.6	13.6	3.82	7.19	10	3.66	2.04	2.38	2.48	1.5	2.43	0.74	2.43	4.24
Lymphs, CD19+, Trans	#CD267-CD95+	3.82877865	1.2427272	0.6359526	3.20146176	0.14425882	0.49047333	0.6045	0.6244057	0.6315073	0.27771953	0.21722895	0.4593252	0.06468977	0.04711373	0.29066178	0.17608347
Lymphs, CD19+, Trans	%CD267+CD95+	6.43	7.93	9.08	12.6	4.3	18	2.37	6.81	5.15	9.5	6.19	3.34	4.1	7.35	15.3	17.7
Lymphs, CD19+, Trans	#CD267+CD95+	1.2248282	0.65698845	0.49779738	2.96606016	0.16238559	1.22788872	0.1432665	1.16180405	1.59424636	1.10854436	0.54219646	1.02276411	0.41441882	0.46795392	1.83009267	0.73506542
Lymphs, CD19+, Trans	%CD267-CD95-	7.2	6.61	9.58	4.6	11.7	10.1	4.74	17.5	16.8	19.2	16.4	12.1	17	25.4	24.3	7.42
Lymphs, CD19+, Trans	#CD267-CD95-	1.3715028	0.54762845	0.52520913	1.08284736	0.44183985	0.688982	0.286533	2.98554638	5.20064832	2.2404265	1.43651405	3.70522328	1.71832192	1.61714688	2.90661777	0.30814607
Lymphs, CD19+, Trans	%CD267-CD95-	66.3	70.5	69.7	69.2	80.2	64.7	82.9	72.1	76	68.9	74.9	83.1	78.2	66.5	58	70.7
Lymphs, CD19+, Trans	#CD267-CD95-	12.629255	5.84081784	3.82119795	16.2897907	3.02868002	4.41357779	5.011305	12.3004511	23.5267424	8.03986383	6.56066477	25.4466161	7.90428083	4.2338688	6.9376062	2.93610878
Lymphs, CD19+, Trans	%CD267-IgM+	68.9	51.5	50.4	64.8	38.2	52.5	81.8	69.3	52	56.4	47.4	64.3	51.9	52.6	43.4	54.8
Lymphs, CD19+, Trans	#CD267-IgM+	13.1245199	4.26669672	2.7631044	15.2540237	1.44258824	3.5813421	4.94481	11.8227636	16.0972448	6.58125283	4.15187597	19.6897402	5.24593574	3.34889472	5.19124326	2.27579578
Lymphs, CD19+, Trans	%CD267+IgM+	7.2	8.37	11.9	5.54	7.16	12.9	4.55	19.6	16.9	18	17.3	9.01	13.6	25.4	22.6	16.3
Lymphs, CD19+, Trans	#CD267+IgM+	1.3715028	0.69344178	0.65239965	1.30412486	0.27039088	0.87998692	0.2750475	3.34381194	5.23160456	2.10039984	1.51534714	2.75901337	1.37465754	1.61714688	2.70327414	0.67692466
Lymphs, CD19+, Trans	%CD267+IgM-	6.68	5.29	6.31	11.6	8.59	13.7	2.55	4.62	5.42	10.6	5.26	5.18	7.55	7.35	17	9.54
Lymphs, CD19+, Trans	#CD267+IgM-	1.27244982	0.43826846	0.34593629	2.73065856	0.32439353	0.93455975	0.1541475	0.78818424	1.67782821	1.23690213	0.4607356	1.58620302	0.76313709	0.46795392	2.0334363	0.3961878
Lymphs, CD19+, Trans	%CD267-IgM-	17.2	34.8	31.4	18	46.1	20.9	11.1	6.46	25.6	15	30	21.5	27	14.7	17	19.4
Lymphs, CD19+, Trans	#CD267-IgM-	3.2763678	2.8831271	1.7214579	4.2372288	1.74092455	1.42571524	0.670995	1.10209312	7.92479744	1.7503332	2.6277696	6.5836612	2.72909952	0.93590784	2.0334363	0.80566493
Lymphs, CD19+, Trans, CD267+	%CD23dim	0	0	0	0	0	1	0	0	1	1	1	0	0	1	1	0
Lymphs, CD19+, MN	%CD267-CD95+	1.07	3.36	4.58	2.93	1.48	1.87	2.55	0.69	0.62	1.08	0.65	0.36	0.27	0.9	0.25	2.07
Lymphs, CD19+, MN	#CD267-CD95+	1.8079683	5.57424067	4.9048365	12.2380709	0.83894866	1.79562973	3.4061625	0.88171464	1.71494232	1.18249783	0.76675248	2.41460496	0.55494029	0.3373056	0.242256	2.48621573
Lymphs, CD19+, MN	%CD267+CD95+	3.18	3.08	5.82	4.72	2.72	4.14	1.65	4.2	4.05	4.63	3.15	1.21	3.62	7.08	4.07	10.7
Lymphs, CD19+, MN	#CD267+CD95+	5.3732142	5.10972062	6.2327835	19.7145715	1.54185158	3.97535137	2.2039875	5.36695866	11.2024458	5.069412	3.71580048	8.11575556	7.44031053	2.65347072	3.94392768	12.8514533
Lymphs, CD19+, MN	%CD267+CD95-	25.4	11.6	15.6	14	22.8	25.5	5.64	34	43.9	31.9	33.2	12.6	24.9	57.6	48.3	21.7
Lymphs, CD19+, MN	#CD267+CD95-	42.918126	19.2444023	16.70643	58.475424	12.9243442	24.4858599	7.53363	43.4468082	121.42898	34.9274823	39.1633574	84.5111736	51.1778266	21.5875584	46.8038592	26.0632277
Lymphs, CD19+, MN	%CD267-CD95-	70.4	82	74	78.4	73	68.5	90.2	61.1	51.4	62.3	63	85.8	71.2	34.4	47.3	65.5
Lymphs, CD19+, MN	#CD267-CD95-	118.954176	136.038016	79.24845	327.462374	41.3805756	65.7757413	120.48465	78.07647	142.17425	68.2166064	74.3160096	575.480849	146.339809	12.8925696	45.8348352	78.6701112
Lymphs, CD19+, MN	%CD267-IgM+	20.4	15.4	12.3	18	4.78	21.7	32.6	30.1	7.68	18.5	15.2	31.2	13.6	11.6	10.2	30.5
Lymphs, CD19+, MN	#CD267-IgM+	34.469676	25.5486031	13.1723775	75.182688	2.70957742	20.8369867	43.54545	38.4632037	21.2431565	20.2557499	17.9302118	209.265763	27.9525478	4.3474944	9.8840448	36.6326472
Lymphs, CD19+, MN	%CD267+IgM+	16.5	6.43	7.21	7.11	4.92	15.1	3.77	25.6	21.5	18.9	17.2	6.92	10.1	27.7	20.5	10
Lymphs, CD19+, MN	#CD267+IgM+	27.879885	10.6673713	7.72136925	29.6971618	2.78893742	14.49947	5.0357775	32.7128909	59.469774	20.6937121	20.2894502	46.4140731	20.7588774	10.3815168	19.864992	12.010704
Lymphs, CD19+, MN	%CD267+IgM-	12.4	7.45	13.7	11.6	20	13.9	3.52	12.6	27	17.2	19.1	5.67	18.4	37	31.9	22.8
Lymphs, CD19+, MN	#CD267+IgM-	20.952156	12.3595515	14.6716725	48.4510656	11.337144	13.3471942	4.70184	16.100876	74.682972	18.8323729	22.5307267	38.0300281	37.818153	13.867008	30.9118656	27.3844051
Lymphs, CD19+, MN	%CD267-IgM-	50.7	70.7	66.8	63.3	70.3	49.3	60.1	31.6	43.9	45.4	48.5	56.2	57.9	23.7	37.4	36.7
Lymphs, CD19+, MN	#CD267-IgM-	85.667283	117.291314	71.53779	264.392453	39.8500612	47.3393291	80.278575	40.3799747	121.42898	49.7087052	57.2115312	376.946663	119.003862	8.8823808	36.2414976	44.0792837

Table S3

Parent gates	Final gate	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
Lymphs, CD19+, MA	%CD267-CD95+	3.6	10.4	2.7	7.05	2.22	3.63	6.2	1.04	1.61	2.2	3.04	8.05	2.59	1.44	0.82	3.06
Lymphs, CD19+, MA	#CD267-CD95+	0.880632	1.7422548	2.005479	4.2958188	0.23024219	0.85524833	1.057875	0.66795955	1.46428856	1.2294007	0.80175744	3.67879848	0.841232	0.39370752	0.43277304	0.88586266
Lymphs, CD19+, MA	%CD267+CD95+	34.7	38.3	31.9	51.5	28	40.6	41.5	28.6	31.8	41.5	26.2	47.1	37.9	17.3	32.1	52.6
Lymphs, CD19+, MA	#CD267+CD95+	8.488314	6.41618835	23.694363	31.380804	2.9039556	9.56558736	7.0809375	18.3688877	28.9219728	23.1909678	6.9098832	21.5243986	12.30992	4.7299584	16.9414812	15.2275738
Lymphs, CD19+, MA	%CD267-CD95-	55.7	42.3	57.8	33.1	61.3	49.9	47.7	69.1	65.2	54.5	68.8	33	57.6	79.6	65.9	41.7
Lymphs, CD19+, MA	#CD267+CD95-	13.625334	7.08628635	42.932106	20.1690216	6.35758851	11.7567194	8.1388125	44.3807741	59.2991392	30.4556083	18.1450368	15.0807888	18.70848	21.7632768	34.7801748	12.0720499
Lymphs, CD19+, MA	%CD267-CD95-	5.96	8.96	7.64	8.38	8.49	5.9	4.69	1.24	1.4	1.74	1.98	11.9	1.92	1.64	1.22	2.68
Lymphs, CD19+, MA	#CD267-CD95-	1.4579352	1.50101952	5.6747628	5.10623568	0.88052082	1.39007304	0.80023125	0.79641331	1.2732944	0.97234419	0.52219728	5.43822384	0.623616	0.44838912	0.64388184	0.77585357
Lymphs, CD19+, MA	%CD267-IgM+	4.26	1.49	4.88	1	1.82	2.49	1.97	0.83	0.84	0.58	0.46	4.14	0.11	0.55	0.2	0.38
Lymphs, CD19+, MA	#CD267-IgM+	1.0420812	0.24961151	3.6247176	6.099336	0.18875711	0.58665794	0.33613125	0.5330831	0.76397664	0.32411473	0.12131856	1.8919535	0.035728	0.1503744	0.1055544	0.11000909
Lymphs, CD19+, MA	%CD267+IgM+	44.1	25.4	64.2	24.3	47.1	51.5	34.2	57.4	42.8	35.4	34.9	14.4	43.5	40	43.5	27.6
Lymphs, CD19+, MA	#CD267+IgM+	10.787742	4.2551223	47.685834	14.8068648	4.88486817	12.1336884	5.835375	36.8662291	38.9264288	19.7821749	9.2043864	6.58070784	14.1288	10.93632	22.958082	7.99013376
Lymphs, CD19+, MA	%CD267+IgM-	46.5	55.2	25.4	60.3	42	39	54.9	40.3	54.2	60.6	60.1	65.3	52	57	54.4	66.8
Lymphs, CD19+, MA	#CD267+IgM-	11.37483	9.2473524	18.866358	36.7429608	4.3559334	9.1886184	9.3673125	25.8834326	49.2946832	33.8644011	15.8505336	29.8416821	16.8896	15.584256	28.7107968	19.3384397
Lymphs, CD19+, MA	%CD267-IgM-	5.2	17.9	5.57	14.4	9.1	7.03	8.93	1.45	2.12	3.42	4.57	16.1	4.4	2.53	1.84	5.16
Lymphs, CD19+, MA	#CD267-IgM-	1.272024	2.99868855	4.1372289	8.7744384	0.94378557	1.65630737	1.52368125	0.93128976	1.92813152	1.91115927	1.20527352	7.35759696	1.42912	0.69172224	0.97110048	1.49380762
Lymphs, CD19+, RM	%CD267-CD95+	3.45	4.17	8.57	5.75	3.51	2.59	14.2	3.4	4	7.24	2.86	14.9	9.77	5.7	5.04	7.64
Lymphs, CD19+, RM	#CD267-CD95+	0.156285	0.12278023	0.19534458	0.5330388	0.18896296	0.17987255	0.58149	0.36016115	0.4188688	0.54173191	0.13302844	3.25405868	0.80220923	0.21406464	1.78784928	1.10324778
Lymphs, CD19+, RM	%CD267+CD95+	74.1	79.2	72.9	75.4	75.4	69	77.7	83	69.1	81.4	82.9	80.3	69.9	77.7	64	84.1
Lymphs, CD19+, RM	#CD267+CD95+	3.35673	2.33194104	1.6616826	6.98976096	4.05920424	4.79197134	3.181815	8.79216925	7.23595852	6.09074279	3.85596418	17.536974	5.73944986	2.91803904	22.702848	12.1443899
Lymphs, CD19+, RM	%CD267-CD95-	22.4	12.5	17.1	16.6	17.5	25	8.11	13.6	26.2	11.3	14.3	4.33	19.5	16.1	30	7.64
Lymphs, CD19+, RM	#CD267+CD95-	1.01472	0.36804625	0.3897774	1.53885984	0.942123	1.7362215	0.3321045	1.4406446	2.74359064	0.84552081	0.66514219	0.94564256	1.60113408	0.60463872	10.64196	1.10324778
Lymphs, CD19+, RM	%CD267-CD95-	0	4.17	1.43	2.21	3.51	3.45	0	0	0.67	0	0	0.52	0.75	0.52	0.96	0.64
Lymphs, CD19+, RM	#CD267-CD95-	0	0.12278023	0.03259542	0.2048723	0.18896296	0.23959857	0	0	0.07016052	0	0	0.11356446	0.06158208	0.0195287	0.34054272	0.09241866
Lymphs, CD19+, RM	%CD267-IgM+	0	0	1.43	0	0	0.86	0	0	0	0	0	0	0	0	0.24	0.64
Lymphs, CD19+, RM	#CD267-IgM+	0	0	0.03259542	0	0	0.05972602	0	0	0	0	0	0	0	0	0.08513568	0.09241866
Lymphs, CD19+, RM	%CD267+IgM+	5.17	0	11.4	3.1	3.51	19.8	2.7	2.55	1.11	2.71	2.86	1.21	3.76	1.04	10.3	2.55
Lymphs, CD19+, RM	#CD267+IgM+	0.234201	0	0.2598516	0.28737744	0.18896296	1.37508743	0.110565	0.27012086	0.11623609	0.20277534	0.13302844	0.26425577	0.30873149	0.03905741	3.6537396	0.36823061
Lymphs, CD19+, RM	%CD267+IgM-	91.4	91.7	78.6	88.9	89.5	73.3	83.1	94	94.2	90	94.3	83	85.7	92.7	83.7	89.2
Lymphs, CD19+, RM	#CD267+IgM-	4.14042	2.69998729	1.7916084	8.24124336	4.8182862	5.09060144	3.402945	9.9573965	9.86436024	6.7342365	4.38621739	18.1266356	7.03677901	3.48136704	29.6910684	12.8808511
Lymphs, CD19+, RM	%CD267-IgM-	3.45	8.33	8.57	7.96	7.02	6.03	14.2	3.4	4.67	7.24	2.86	15.7	10.5	6.22	5.76	7.64
Lymphs, CD19+, RM	#CD267-IgM-	0.156285	0.24526602	0.19534458	0.73791111	0.37792591	0.41877663	0.58149	0.36016115	0.48902932	0.54173191	0.13302844	3.42877324	0.86214912	0.23359334	2.04325632	1.10324778
Lymphs, CD19+	%CD27-	77.4	83.4	73.8	82	85.2	84.4	81.6	60	71.6	68.4	76.2	88.9	86.5	55.3	68	73.5
Lymphs, CD19+	#CD27-	175.311	169.35204	145.017	427.056	67.45284	115.61112	132.6	133.806	298.7152	129.57012	121.79808	690.9308	224.7616	42.4704	147.084	126.6552
Lymphs, CD19+, CD 27-	%CD10+	3.32	3.33	3.99	3.37	7.53	0.83	16.5	8.3	8.86	8.76	11	2.57	7.28	7.5	3.78	2.93
Lymphs, CD19+, CD 27-	#CD10+	5.8203252	5.63942293	5.7861783	14.3917872	5.07919885	0.9595723	21.879	11.105898	26.4661667	11.3503425	13.3977888	17.7569216	16.3626445	3.18528	5.5597752	3.71099736
Lymphs, CD19+, IgD-	%CD27-	1.27	1.04	0.54	0.84	0.53	0.94	1.26	1.14	2.51	2.14	3.26	0.96	2.69	4.17	3.49	6.14
Lymphs, CD19+, IgD-	#CD27-	2.87655	2.111824	1.0611	4.37472	0.419601	1.287612	2.0475	2.542314	10.47172	4.053802	5.210784	7.46112	6.989696	3.20256	7.54887	10.580448
Lymphs, CD19+, CD21-	%CD27-	0.094	0.1	0.077	0.12	0.065	0.13	0.48	0.41	0.34	1.1	2.05	0.2	1.21	0.81	2.04	4.98
Lymphs, CD19+, CD21-	#CD27-	0.21291	0.20306	0.151305	0.62496	0.0514605	0.178074	0.78	0.914341	1.41848	2.08373	3.27672	1.5544	3.144064	0.62208	4.41252	8.581536
Lymphs, CD19+	%CD24+, CD38++	4.28	3.91	4.67	3.94	2.7	1.28	2.43	3.88	1.52	2.05	1.48	3.28	1.79	2.03	1.38	2.06
Lymphs, CD19+	#CD24+, CD38++	9.6942	7.939646	9.17655	20.51952	2.13759	1.753344	3.94875	8.652788	6.34144	3.883315	2.365632	25.49216	4.651136	1.55904	2.98494	3.549792
Lymphs	%CD38++ CD138+	0.16	0.091	0.023	0.048	0.032	0.054	0.068	0.092	0.075	0.19	0.14	0.12	0.17	0.14	0.023	0.036
Lymphs	#CD38++ CD138+	2.4	2.002	0.345	1.344	0.416	0.972	0.884	2.668	2.1	3.61	2.52	3.48	4.76	1.68	0.483	0.864
Lymphs, CD38++ CD138+	%CD20-	78.7	53.6	38.5	85.5	65.4	89.3	45.2	29.4	28.6	24.6	21.7	62.7	16.2	29.8	94.4	53.8
Lymphs, CD38++ CD138+	#CD20-	1.8888	1.073072	0.132825	1.14912	0.272064	0.867996	0.399568	0.784392	0.6006	0.88806	0.54684	2.18196	0.77112	0.50064	0.455952	0.464832
Lymphs, CD3+	%CD4+CD8-	61.1	64.6	67.8	66.7	50.6	64.8	70.2	58.3	44.6	74.8	63.3	69.8	66.4	69.9	37.3	71.1
Lymphs, CD3+	#CD4+CD8-	606.723	1102.8512	500.364	1157.912	513.084	976.2768	646.1208	1394.8275	806.7248	972.1008	925.1928	1331.9236	1318.1728	537.0732	639.9561	1278.0936
Lymphs, CD3+	%CD8+CD4-	36.1	29.5	28.4	25.3	36.9	27.6	23.6	33.7	42.6	21.6	33.1	26.7	29.2	26.3	59.4	24.3

Table S3

Parent gates	Final gate	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
Lymphs, CD3+	#CD8+CD4-	358.473	503.624	209.592	439.208	374.166	415.8216	217.2144	806.2725	770.5488	280.7136	483.7896	509.4894	579.6784	211.1364	1019.1258	436.8168
Lymphs, CD3+	%CD4-CD8-	2.02	4.82	3.27	7.75	8.7	6.93	5.48	6.15	12.3	3.2	2.86	3.21	3.87	6.54	2.88	4.23
Lymphs, CD3+	#CD4-CD8-	20.0586	82.28704	24.1326	134.54	88.218	104.40738	50.43792	147.13875	222.4824	41.5872	41.80176	61.25322	76.82724	52.50312	49.41216	76.03848
Lymphs, CD3+	%CD4+CD8+	0.78	1.06	0.53	0.25	3.85	0.65	0.71	1.77	0.57	0.4	0.73	0.31	0.52	0.31	0.41	0.39
Lymphs, CD3+	#CD4+CD8+	7.7454	18.09632	3.9114	4.34	39.039	9.7929	6.53484	42.34725	10.31016	5.1984	10.66968	5.91542	10.32304	2.48868	7.03437	7.01064
Lymphs, CD3-	%CD16+CD56+	40.1	27.5	18.3	39.9	12.9	26.5	37.1	15.7	50.6	56.6	37.6	18.5	59.3	66.3	13.2	62.8
Lymphs, CD3-	#CD16+CD56	203.307	135.52	139.446	424.536	36.894	77.751	140.8316	79.6775	501.5472	339.8264	127.2384	183.483	483.1764	263.3436	50.7276	378.3072
Lymphs, CD3-	%CD16+CD56--	2.26	2.27	5.06	3.43	5.02	9.3	5.58	4.1	3.44	8.14	5.98	3.35	4.24	10.2	4.18	5.12
Lymphs, CD3-	#CD16+CD56--	11.4582	11.18656	38.5572	36.4952	14.3572	27.2862	21.18168	20.8075	34.09728	48.87256	20.23632	33.2253	34.54752	40.5144	16.06374	30.84288
Lymphs, CD3-	%CD16-CD56+	2.35	1.89	1.96	1.52	1.81	1.43	1.97	1.81	1.56	0.92	2.92	2.14	2.44	2.58	3.38	2.89
Lymphs, CD3-	#CD16-CD56+	11.9145	9.31392	14.9352	16.1728	5.1766	4.19562	7.47812	9.18575	15.46272	5.52368	9.88128	21.22452	19.88112	10.24776	12.98934	17.40936
Lymphs, CD3-	%CD16+	42.36	29.77	23.36	43.33	17.92	35.8	42.68	19.8	54.04	64.74	43.58	21.85	63.54	76.5	17.38	67.92
Lymphs, CD3-	#CD16+	214.7652	146.70656	178.0032	461.0312	51.2512	105.0372	162.01328	100.485	535.64448	388.69896	147.47472	216.7083	517.72392	303.858	66.79134	409.15008
Lymphs, CD3-	%CD 56+	42.45	29.39	20.26	41.42	14.71	27.93	39.07	17.51	52.16	57.52	40.52	20.64	61.74	68.88	16.58	65.69
Lymphs, CD3-	#CD 56+	215.2215	144.83392	154.3812	440.7088	42.0706	81.94662	148.30972	88.86325	517.00992	345.35008	137.11968	204.70752	503.05752	273.59136	63.71694	395.71656