

## **SUPPLEMENTAL ONLINE MATERIAL**

**Title:** Restricted T cell receptor repertoire in CLL-like monoclonal B cell lymphocytosis and early stage CLL

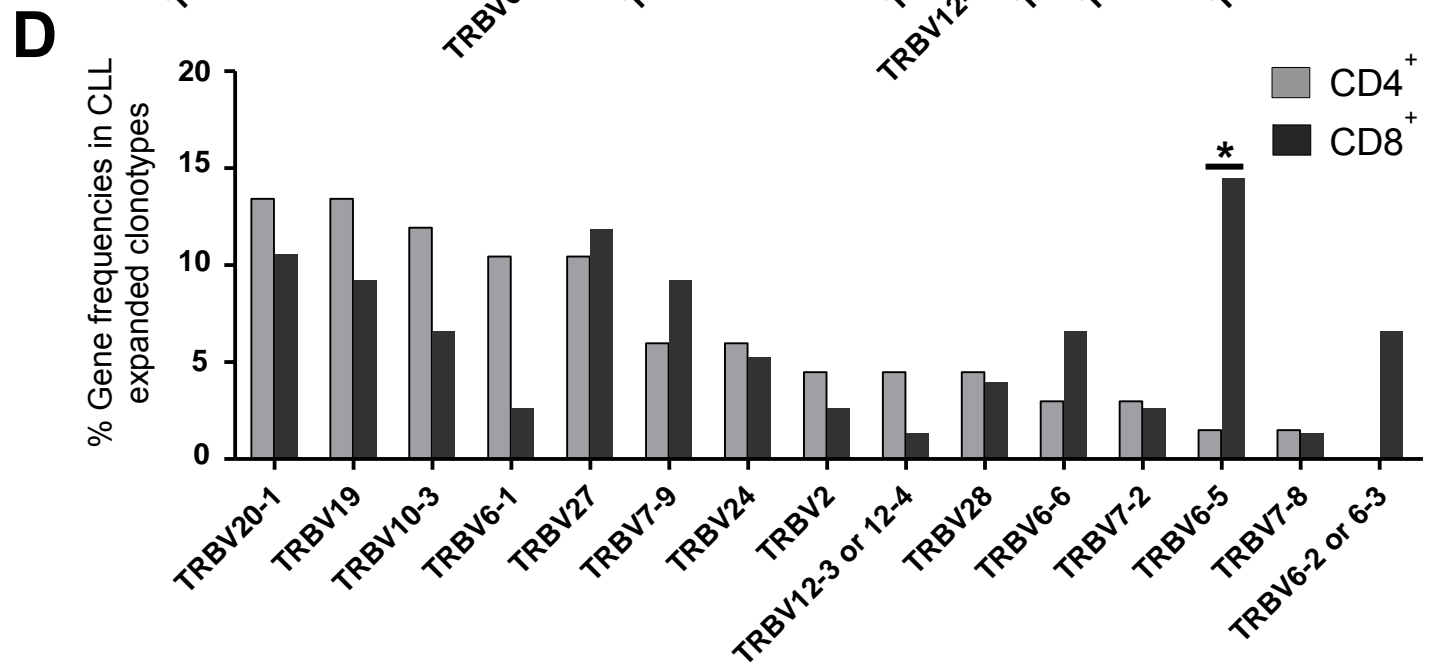
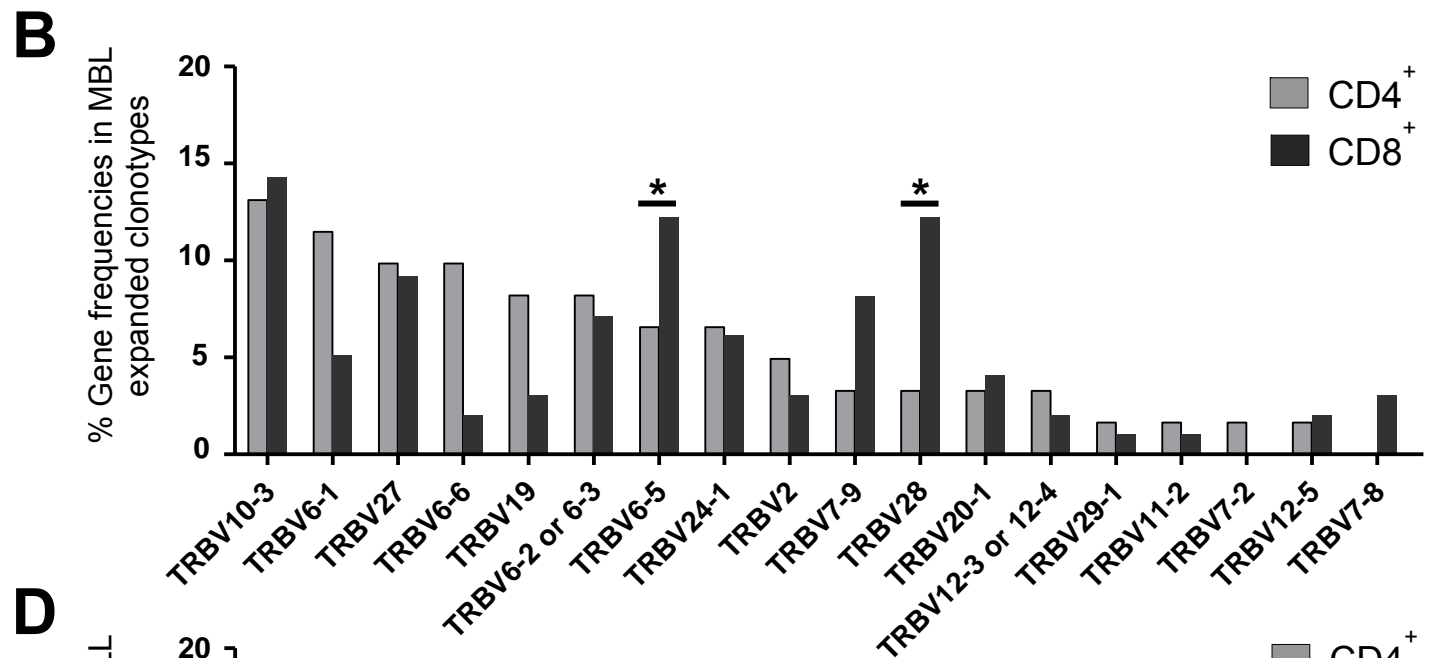
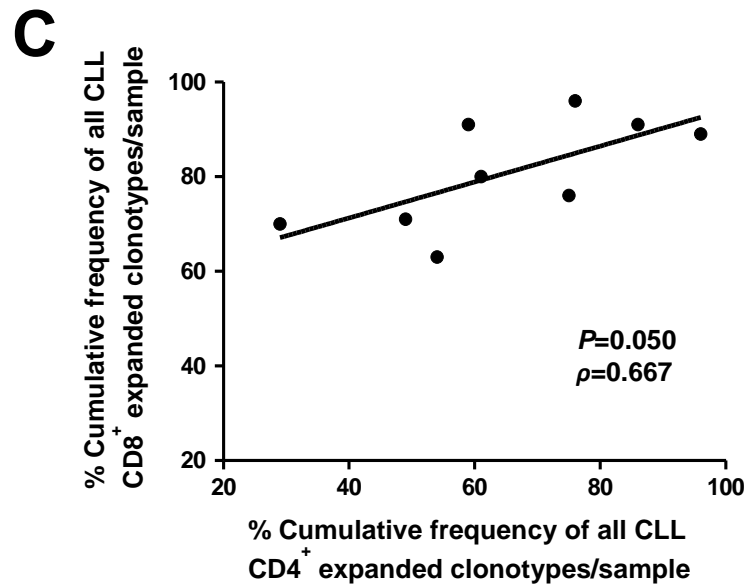
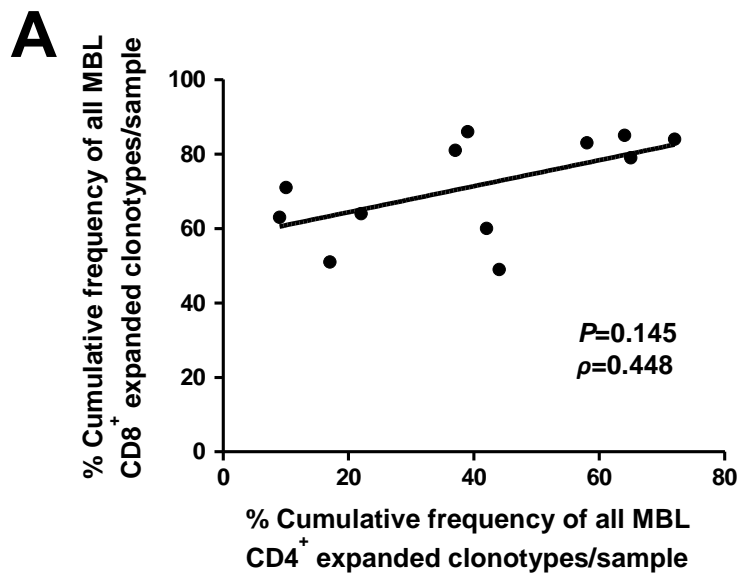
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Gene	All clonotypes				Expanded clonotypes			
	MBL		CLL		MBL		CLL	
	Freq.	Range	Freq.	Range	Freq.	Range	Freq.	Range
TRBV10-3	15.43	(3.45-31.25)	11.64	(0-21.74)	13.11	(0-33.33)	11.94	(0-33.33)
TRBV6-1	9.50	(0-34.62)	10.05	(0-25.00)	11.48	(0-50.00)	10.45	(0-33.33)
TRBV28	7.72	(0-12.82)	8.47	(0-18.52)	3.28	(0-12.50)	4.48	(0-14.29)
TRBV27	7.42	(0-17.24)	6.88	(0-16.67)	9.84	(0-33.33)	10.45	(0-33.33)
TRBV6-2/6-3	7.12	(0-14.29)	3.17	(0-9.38)	8.2	(0-50.00)	ND	NA
TRBV19	6.53	(0-12.50)	10.05	(0-21.74)	8.2	(0-25.00)	13.43	(0-22.22)
TRBV20-1	5.93	(0-17.86)	8.47	(0-14.81)	3.28	(0-16.67)	13.43	(0-33.33)
TRBV6-6	5.34	(0-20.83)	4.23	(0-16.67)	9.84	(0-33.33)	2.99	(0-20.00)
TRBV24	5.04	(0-17.65)	5.29	(0-50.00)	6.56	(0-16.67)	5.97	(0-100)
TRBV6-5	4.45	(0-9.68)	6.35	(0-20.00)	6.56	(0-50.00)	1.49	(0-8.33)
TRBV2	4.45	(0-11.54)	4.23	(0-12.00)	4.92	(0-50.00)	4.48	(0-16.67)
TRBV7-9	3.86	(0-12.90)	4.23	(0-33.33)	3.28	(0-50.00)	5.97	(0-60.00)
TRBV29-1	2.67	(0-5.13)	3.17	(0-50.00)	1.64	(0-33.33)	1.49	(0-10.00)
TRBV7-8	2.37	(0-6.45)	2.12	(0-8.33)	ND	NA	1.49	(0-8.33)
TRBV12-3/12-4	1.78	(0-5.88)	5.29	(0-15.38)	3.28	(0-16.67)	4.48	(0-20.00)
TRBV7-2	1.78	(0-10.34)	1.06	(0-3.70)	1.64	(0-25.00)	2.99	(0-20.00)
TRBV12-5	1.48	(0-6.25)	1.59	(0-8.33)	1.64	(0-50.00)	ND	NA
TRBV11-2	1.19	(0-4.76)	0.53	(0-8.33)	1.64	(0-14.29)	ND	NA
TRBV5-1	1.19	(0-6.25)	ND	NA	ND	NA	ND	NA
TRBV14	0.89	(0-6.25)	0.53	(0-3.85)	1.64	(0-11.11)	ND	NA
TRBV5-4	0.59	(0-4.17)	ND	NA	ND	NA	ND	NA
TRBV30	0.59	(0-4.76)	1.06	(0-4.00)	ND	NA	2.99	(0-14.29)
TRBV15	0.59	(0-4.17)	ND	NA	ND	NA	ND	NA
TRBV6-4	0.59	(0-4.17)	ND	NA	ND	NA	ND	NA
TRBV11-1	0.30	(0-4.17)	ND	NA	ND	NA	ND	NA
TRBV6-9	0.30	(0-3.45)	ND	NA	ND	NA	ND	NA
TRBV13	0.30	(0-3.23)	ND	NA	ND	NA	ND	NA
TRBV5-5	0.30	(0-3.13)	ND	NA	ND	NA	ND	NA
TRBV6-8	0.30	(0-4.76)	ND	NA	ND	NA	ND	NA
TRBV10-2	ND	NA	0.53	(0-3.33)	ND	NA	ND	NA
TRBV18	ND	NA	0.53	(0-4.00)	ND	NA	1.49	(0-14.29)
TRBV7-6	ND	NA	0.53	(0-3.13)	ND	NA	ND	NA

**Table S1.** TRBV gene repertoire of the CD4<sup>+</sup> T cell fraction when all clonotypes or only expanded clonotypes were considered. The frequencies (%) of all detected genes are shown for each case. Freq.: frequency; ND: not detected; NA: not applicable.

Gene	All clonotypes				Expanded clonotypes			
	MBL		CLL		MBL		CLL	
	Freq.	Range	Freq.	Range	Freq.	Range	Freq.	Range
TRBV6-5	10.99	(0-29.17)	11.28	(0-40.00)	12.24	(0-40.00)	14.47	(0-50.00)
TRBV10-3	10.64	(0-22.22)	9.23	(0-18.18)	14.29	(0-33.33)	6.58	(0-20.00)
TRBV28	9.22	(0-33.33)	7.69	(0-30.00)	12.24	(0-100)	3.95	(0-33.33)
TRBV6-2 or TRBV6-3	7.80	(0-28.57)	8.21	(0-22.22)	7.14	(0-33.33)	6.58	(0-50.00)
TRBV27	7.80	(0-17.39)	8.21	(0-25.00)	9.18	(0-20.00)	11.84	(0-40.00)
TRBV7-9	7.45	(0-25.00)	4.62	(0-15.38)	8.16	(0-28.57)	9.21	(0-66.67)
TRBV19	7.09	(0-28.57)	11.28	(0-26.67)	3.06	(0-14.29)	9.21	(0-33.33)
TRBV6-1	5.67	(0-23.53)	5.13	(0-25.00)	5.10	(0-20.00)	2.63	(0-25.00)
TRBV12-3 or TRBV12-4	3.90	(0-18.18)	2.05	(0-10.00)	2.04	(0-14.29)	1.32	(0-16.67)
TRBV6-6	3.90	(0-16.67)	5.64	(0-33.33)	2.04	(0-33.33)	6.58	(0-50.00)
TRBV20-1	3.90	(0-20.00)	7.69	(0-22.73)	4.08	(0-50.00)	10.53	(0-33.33)
TRBV24	3.55	(0-11.11)	5.13	(0-16.67)	6.12	(0-33.33)	5.26	(0-28.57)
TRBV2	3.19	(0-11.76)	3.08	(0-16.67)	3.06	(0-14.29)	2.63	(0-25.00)
TRBV29-1	2.48	(0-8.33)	1.03	(0-6.25)	1.02	(0-14.29)	ND	NA
TRBV7-8	2.13	(0-11.76)	1.54	(0-5.88)	3.06	(0-20.00)	1.32	(0-16.67)
TRBV14	1.42	(0-11.11)	1.03	(0-7.69)	1.02	(0-14.29)	1.32	(0-14.29)
TRBV12-5	1.42	(0-14.29)	ND	NA	2.04	(0-14.29)	ND	NA
TRBV5-1	1.42	(0-5.26)	ND	NA	2.04	(0-14.29)	ND	NA
TRBV7-2	1.42	(0-11.11)	1.03	(0-13.33)	ND	NA	2.63	(0-18.18)
TRBV6-4	1.06	(0-18.18)	ND	NA	ND	NA	ND	NA
TRBV18	0.71	(0-11.11)	ND	NA	ND	NA	ND	NA
TRBV7-7	0.71	(0-9.09)	ND	NA	ND	NA	ND	NA
TRBV11-2	0.71	(0-5.88)	1.54	(0-10.00)	1.02	(0-14.29)	1.32	(0-16.67)
TRBV30	0.71	(0-11.11)	0.51	(0-10.00)	1.02	(0-20.00)	ND	NA
TRBV7-6	0.35	(0-3.13)	1.03	(0-6.67)	ND	NA	1.32	(0-9.09)
TRBV15	0.35	(0-5.26)	1.03	(0-7.69)	ND	NA	ND	NA
TRBV4-3	ND	NA	0.51	(0-3.45)	ND	NA	ND	NA
TRBV10-2	ND	NA	0.51	(0-3.45)	ND	NA	ND	NA
TRBV11-3	ND	NA	0.51	(0-10.00)	ND	NA	1.32	(0-25.00)
TRBV5-4	ND	NA	0.51	(0-11.11)	ND	NA	ND	NA

**Table S2.** TRBV gene repertoire of the CD8<sup>+</sup> T cell fraction when all clonotypes or only expanded clonotypes were considered. The frequencies (%) of all detected genes are shown for each case. Freq.: frequency; ND: not detected; NA: not applicable.



**Figure S1.** Comparative study of the TR repertoire between CD4<sup>+</sup> and CD8<sup>+</sup> T cells in MBL (A and B) and CLL (C and D). Correlations between the percentage cumulative frequency of all expanded CD4<sup>+</sup> and CD8<sup>+</sup> T cell clonotypes/sample are shown for MBL (A) and CLL (C).  $\rho$ : Spearman's rho correlation coefficient. The TRBV gene repertoire of the CD4<sup>+</sup> and CD8<sup>+</sup> expanded T cell clonotypes are compared for MBL (B) and CLL (D). Significant differences ( $P<0.05$ ) are shown with \*.