SUPPLEMENTAL MATERIAL

Hayakawa et al., https://doi.org/10.1084/jem.20160712

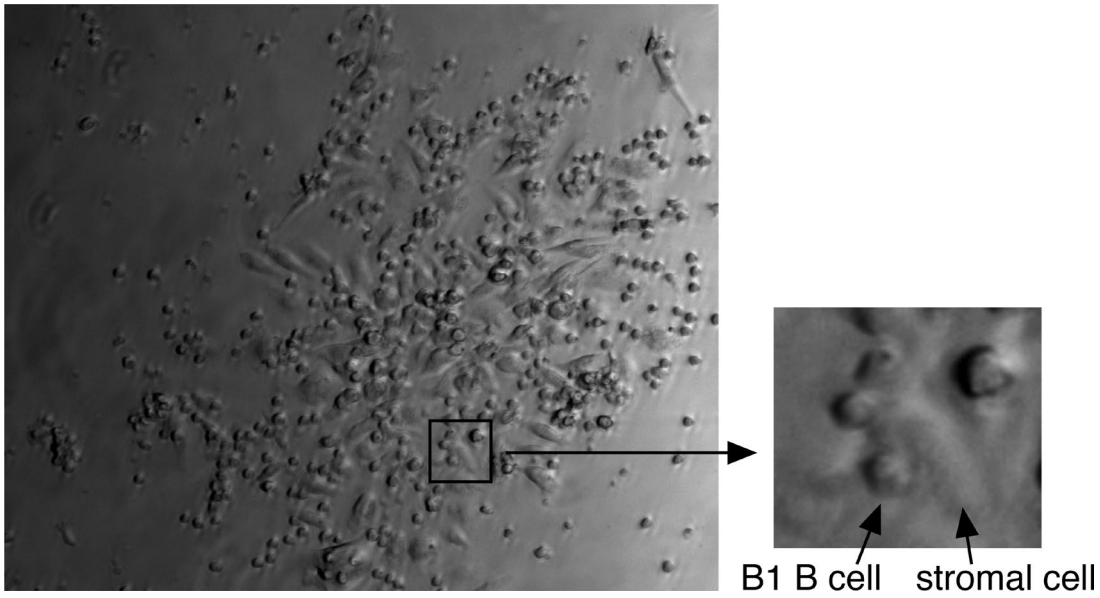
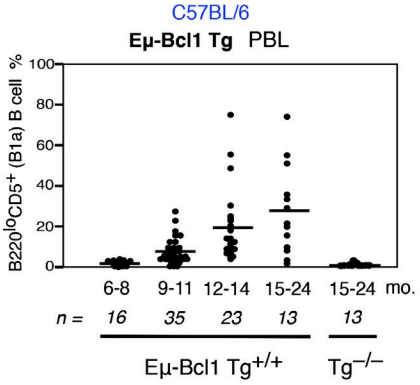


Figure S1. **B1 B-CLL cells interacting with stromal cells in spleen.** Photomicrography of the cultured (2 d) spleen cells of TC$^+$ mice at CLL stage (6 mo old). Round cells are the tumor CD5$^+$ B1 B cells interacting with stromal cells.



old Eμ-Bcl1 Tg B1a (> 12 mo.)

BCR set	V_H / V_k	*mice n=23 BCR n=52*
1	**V_H12-1** (V261) / V_k4-91	1
2	**J558-64** (V332) / V_k12-89	2
3	**Q52-1** (V222) / V_k9-96	1
4	**J558-67** (V328) / V_k1-117	5
5	**V_H11-2**/ (V235) / V_k9-128	1

old Eμ-Bcl1 Tg B1a with > 50 % BCR VH

Eμ-Bcl1 Tg B1a >50% BCR *n=*	VH family	(IGVH)	VH gene	(V base2)
4	**J558**	(V1)	J558-5	(V281)
1			J558-8	(V364)
1			J558-16	(V357)
1			J558-40	(V435)
3			J558-55	(V346)
1			J558-64	(V332)
5			J558-67	(V328)
1			J558-92	(V362)
1	**VH12**	(V12)	VH12-1	(V261)
2	**SM7**	(V14)	SM7-1	(V247)
1			SM7-3	(V231)
1	**VH3660**	(V3)	VH3660-1	(V126)
1	**S107**	(V7)	S107-2	(V245)

Figure S2. **CD5$^+$B220^{lo} B cell (B1a) increase in PBL of Eμ-Bcl-1 (cyclin D1) transgenic mice with aging, expressing BCRs including stereotyped BCRs and biased VHs as found in CLL.** PBL and B1a BCR analysis of Eμ-Bcl-1$^{+/+}$ transgenic mice (Bodrug et al., 1994) on C57BL/6 background. (left) Percentage of B1a B cells in PBL. Increased B1a population in aged mice, in contrast to C57BL/6 mice lacking the Eμ-Bcl-1 transgene, without significant increase of total PBL number. (middle and right) Summary of heavy chain sequence data of B1a cells in spleen of aged (>12 mo) Eμ-Bcl-1 transgenic mice. Although BCRs of most B1a cells in aged Eμ-Bcl1 Tg mice were not monoclonal, 23 mice showed >50% identical VH usage (as increased cells) as listed in the right table (with CDR3 similar to TCL1$^+$ CLL data). In the total heavy chain data list (*n = 52*), the presence of VH/D/J of stereotyped BCRs, as found in TCL1$^+$ CLL, was identified by analysis of light chain sequence of the same mouse sample.

Table S1 lists mouse V_H gene nomenclature. Table S2 lists BCR-stereotyped sets with HCDR3 and LCDR3 used by TC^+ CLLs (total 155 samples). Table S3 lists BCR-stereotyped sets with other V_H/CDR3 used by TC^+ CLLs (total 155 samples). Tables S1–S3 are available as Excel files.

REFERENCE

Bodrug, S.E., B.J. Warner, M.L. Bath, G.J. Lindeman, A.W. Harris, and J.M. Adams. 1994. Cyclin D1 transgene impedes lymphocyte maturation and collaborates in lymphomagenesis with the myc gene. *EMBO J.* 13:2124–2130.