

Table 4. Molecular genetic characteristics of immunoglobulin heavy chain (IgH chain) V region segments and HCDR3 of TCL1 mice

Animal no.	Source	Isotype	V _H family	V _H gene	% difference from germ line	HCDR3 length	D	RF*	J _H gene	HCDR3	pI
TCL1-012	Spleen	IgM	12	NC1-A7	0.7%	13	SP2.9	3	1	AG DYDG YWYFDV	3.1
			1	XE1	3.1%	12	FL16.1	3	4	AR SGY YYAMDY	5.95
TCL1-001	Spleen	IgM	1	V165.1	0.3%	14	FL16.1	3	1	AR RYYGSS WYFDV	8.79
TCL1-009	Spleen	IgM	1	V6	3.5%	14	FL16.1	3	1	AR RYYGSS WYFDV	8.79
TCL1-017	LN	IgM	3	XE2	1.0%	12	FL16.1	3	1	AR EDYYGS GAF	4.12
			7	V13	0.3%	15	ST4 + SP2.5	2 + 1	1	VK AVSMVTT GTSMS	8.9
			9	VGK1A	1.7%	12	SP2.x	3	1	AR SSNY GYFDY	5.95
TCL1-015	Spleen	IgM	1	22.11	4.2%	14	SP2.9	3	1	AR RSPDG YWYFDV	6.09
TCL1-016	Spleen	IgM, IgG	2	VOX-1	0.3%	7	SP2.13	2	2	AK L VDY	5.95
			1	V1S6	7.9%	21	SP2.12	3	2	AR EVDYSYYSYDAE NYAMDF	3.43
			1	J558.47	7.6%	15	ST4	1	3	AR PPQVGLQT WFAH	9.01
			5	V5S10	7.0%	12	SP2.12	3	1	AR HGYSNYL DF	7.14
			1	J558.33	1.7%	7	ND	NA	1	TK EGA Y	6.27
			1	V1S16	0.6%	14	SP2.9	2	2	TI RGWLPSY YFDY	6.08
			7	V7S3	0.3%	14	SP2.9	3	1	AR DNGYYEG AMDY	3.7
TCL1-007	LN	IgM, IgG	2	Vox-1	0.7%	7	SP2.13	2	2	AK L VDY	5.95

Animal no.	Source	Isotype	V _H family	V _H gene	% difference from germ line	HCDR3 length	D	RF*	J _H gene	HCDR3	pI
TCL1-008	LN	IgM	1	V303	0.3%	19	FL16.1	3	1	AR KGKNYYGSSY WYYFDY	9.19
			1	V1S61	0.7%	11	Q52	2	4	AP NWAY AMDY	3.43
			1	V165.1	1.0%	11	Q52	2	4	AP NWAY AMDY	3.43
	Spleen		1	V119.1	1.0%	15	SP2.9	3	4	AR SRGYLYY AMDY	8.67

Red letters indicate basic, positively charged amino acids; green letters indicate acidic, negatively charged amino acids.

*, D segment reading frame. RF no. 1 starts from the first nucleotide of germ-line segment, no. 2 starts from the second, and no. 3 starts from the third.

ND, not detectable; NA, not applicable.