

Cluster	Members	V <sub>H</sub>	V <sub>D</sub>	V <sub>J</sub>	V-D Length	D-J Length	D 5'-Exo	D 3'-Exo	J-Exo
B	29	V3-07*01	D3-09*01	J6*02	21	15	3	10	2
C	25	V4-34*01	D3-03*01	J6*02	10	24	0	6	2
D	2	V1-46*01	D3-03*01	J6*02	9	25	4	6	3
E	4	V1-02*02	D3-03*01	J6*03	4	23	0	4	0
F	5	V4-34*01	D3-16*02	J6*03	9	15	4	2	0
G	2	V1-02*02	D3-22*01	J6*02	16	16	7	3	10
H	2	V4-04*02	D3-22*01	J6*02	6	23	1	0	8
I	9	V4-34*12	D2-02*01	J4*02	54	9	4	12	2
J	3	V3-07*01	D3-03*01	J6*02	14	14	0	6	1
IG1	1	V3-07*01	D3-03*01	J6*03	8	29	2	4	9
IG2	1	V2-70*01	D3-22*01	J6*02	10	48	3	7	25
IG3	1	V1-02*02	D3-22*01	J6*02	11	21	6	0	5
IG4	1	V1-03*01	D3-03*02	J6*02	17	9	0	8	0
IG5	1	V4-34*01	D3-03*01	J6*02	12	29	2	6	7
PG16	1	V3-33*05	D3-03*01	J6*03	34	9	1	18	2
PG9	1	V3-33*05	D3-03*01	J6*03	34	0	1	2	9

Table 1: Each of the nine clusters and independent sequences (IG1-5) and their representative V, D, and J genes are shown. V-D and D-J lengths are the nucleotide lengths of those junctions. D 5'-, D 3'-, and J-Exo were the amount of nucleotides excised in the junctions to make a productive recombination. Point mutations in the junction are not shown.