

| PerC B-1a (n=310 total sequences) |                    |  | PerC B-1b (n=340 total sequences) |                  |  | Spleen B-1a (n=214 total sequences) |                  |  | Spleen B-1b (n=155 total sequences) |                  |  |               |
|-----------------------------------|--------------------|--|-----------------------------------|------------------|--|-------------------------------------|------------------|--|-------------------------------------|------------------|--|---------------|
| CDR-H3 Sequence                   | V-D-J              | Number of CDR-H3 specific replicates (%) | CDR-H3 Sequence                   | V-D-J            | Number of CDR-H3 specific replicates (%) | CDR-H3 Sequence                     | V-D-J            | Number of CDR-H3 specific replicates (%) | CDR-H3 Sequence                     | V-D-J            | Number of CDR-H3 specific replicates (%) |               |
| AGDYDGYWYFDV                      | VH12 - DH2 - JH1   | 217 (70 %)                               | AGDRDGYWYFDV                      | VH12 - DH2 - JH1 | 91 (26.8 %)                              | AREVTTMYFFDY                        | VH1 - DH2 - JH2  | 30 (14 %)                                | AREDYYGSSYYFDY                      | VH1 - DH1 - JH2  | 15 (9.7 %)                               |               |
| ARSYYYGSSYYFDY                    | VH1 - DH1-1 - JH2  | 13 (4.2 %)                               | AREDYYGSSYYFDY                    | VH1 - DH2 - JH2  | 52 (15.3 %)                              | AGDYDGYWYFDV                        | VH12 - DH2 - JH1 | 20 (9.3 %)                               | TYYGNYENYTDY                        | VH14 - DH2 - JH4 | 14 (9.0 %)                               |               |
| AGDRWGYWYFDV                      | VH12 - DH4 - JH1   | 13 (4.2 %)                               | AREVTTMYFFDY                      | VH1 - DH2 - JH2  | 18 (5.3 %)                               | MRYGDYWYFDV                         | VH11 - DH2 - JH1 | 8 (3.7 %)                                | ARAYGSSPYWYFDV                      | VH1 - DH1 - JH1  | 6 (3.9 %)                                |               |
| ARYYGNYWYFDV                      | VH1 - DH2 - JH1    | 6 (1.9 %)                                | AGDLLGYWYFDV                      | VH12 - DH2 - JH1 | 11 (3.2 %)                               | MRYSNYWYFDV                         | VH11 - DH2 - JH1 | 8 (3.7 %)                                | ARDDGYHGDWYFDV                      | VH1 - DH2 - JH1  | 4 (2.6 %)                                |               |
| AGDLLGYWYFDV                      | VH12 - DH2 - JH1   | 5 (1.6 %)                                | AREATLDFFDY                       | VH1 - DH1 - JH2  | 5 (1.5 %)                                | AGSDGYWYFDV                         | VH12 - DH2 - JH1 | 6 (2.8 %)                                | ATGSSFDY                            | VH1 - DH1 - JH2  | 3 (1.9 %)                                |               |
| ARDYYWYFDV                        | VH1 - DH2 - JH1    | 4 (1.3 %)                                | ARWDYDYPYRAMDY                    | VH1 - DH1- JH4   | 5 (1.5 %)                                | TRYYGSSAMDY                         | VH6 - DH1 - JH4  | 6 (2.8 %)                                | ASITTVVATPYFFDY                     | VH1 - DH1 - JH2  | 3 (1.9 %)                                |               |
| AGSDGYWYFDV                       | VH12 - DH2 - JH1   | 4 (1.3 %)                                | ATGSSFDY                          | VH1 - DH1 - JH2  | 3 (0.9 %)                                | ASYGNYWYFDV                         | VH1 - DH2 - JH1  | 4 (1.9 %)                                | MRYGDYWYFDV                         | VH11 - DH2 - JH1 | 3 (1.9 %)                                |               |
| AGDYGYWYFDV                       | VH12 - DH1-1 - JH1 | 3 (1.0 %)                                | AGDTTGYWYFDV                      | VH12 - DH2 - JH1 | 3 (0.9 %)                                | ARSYYYGSSYYFDY                      | VH1 - DH1 - JH2  | 4 (1.9 %)                                | MRYSNYWYFDV                         | VH11 - DH2 - JH1 | 3 (1.9 %)                                |               |
| ASYGNYWYFDV                       | VH1 - DH2 - JH1    | 2 (0.6 %)                                | TYYGNYENYTDY                      | VH14 - DH1 - JH4 | 3 (0.9 %)                                | AGDYGYWYFDV                         | VH12 - DH1 - JH1 | 4 (1.9 %)                                | AGSDGYWYFDV                         | VH12 - DH2 - JH1 | 2 (1.3 %)                                |               |
| ATYYSNYWYFDV                      | VH1 - DH2 - JH1    | 2 (0.6 %)                                | ARRGNSYGNTFWYFDV                  | VH3 - DH1 - JH1  | 3 (0.9 %)                                | AKNDYGIYYAMDY                       | VH2 - DH1 - JH4  | 4 (1.9 %)                                | AGDRNGYYHFDV                        | VH12 - DH2 - JH1 | 2 (1.3 %)                                |               |
| AREGDYYYGSSYWYFAY                 | VH1 - DH1-1 - JH3  | 2 (0.6 %)                                | ARSYGYAMDY                        | VH1 - DH2 - JH4  | 2 (0.6 %)                                | AKNEWLLERYAMDY                      | VH2 - DH2 - JH4  | 3 (1.4 %)                                | AGDRDGYWYFDV                        | VH12 - DH2 - JH1 | 2 (1.3 %)                                |               |
| MRYSNYWYFDV                       | VH11 - DH2 - JH1   | 2 (0.6 %)                                | ARGGFAY                           | VH1 - DH1 - JH3  | 2 (0.6 %)                                | ARSYGYAMDY                          | VH1 - DH3 - JH4  | 2 (0.9 %)                                | TYYANSENYTDY                        | VH14 - DH2 - JH4 | 2 (1.3 %)                                |               |
| AGDTTGYWYFDV                      | VH12 - DH4 - JH1   | 2 (0.6 %)                                | ASGLGVYWYFDV                      | VH1 - DH1 - JH1  | 2 (0.6 %)                                | ARYDYDEGDY                          | VH1 - DH2 - JH2  | 2 (0.9 %)                                | ARRGDYFDY                           | VH2 - DH1 - JH2  | 2 (1.3 %)                                |               |
| AGDRTGYWYFDV                      | VH12 - DH4 - JH1   | 2 (0.6 %)                                | ARSNYAMDY                         | VH1 - DH2 - JH4  | 2 (0.6 %)                                | ARMGNYGSRYFDV                       | VH1 - DH1 - JH1  | 2 (0.9 %)                                |                                     |                  |  |               |
| AGDPYDGYGFAY                      | VH12 - DH2 - JH3   | 2 (0.6 %)                                | AREDYYGSSNYFFDY                   | VH1 - DH1 - JH2  | 2 (0.6 %)                                | ARGWLLRYYYAMDY                      | VH1 - DH2 - JH4  | 2 (0.9 %)                                |                                     |                  |  |               |
| AGDRDGYWYFDV                      | VH12 - DH2 - JH1   | 2 (0.6 %)                                | AGDNDGYGFAY                       | VH12 - DH1 - JH3 | 2 (0.6 %)                                | ARRDGYGFAY                          | VH1 - DH2 - JH3  | 2 (0.9 %)                                |                                     |                  |  |               |
| AKLR*XLL*L                        | VH2 - DH1-1 - JH2  | 2 (0.6 %)                                | AGDRDGYYSFDV                      | VH12 - DH1 - JH3 | 2 (0.6 %)                                | ANWAY                               | VH1 - DH4 - JH3  | 2 (0.9 %)                                |                                     |                  |  |               |
| ARYYYGSSYAMDY                     | VH7 - DH1-1 - JH4  | 2 (0.6 %)                                | AGSDGYWYFDV                       | VH12 - DH2 - JH1 | 2 (0.6 %)                                | AREDYYGSSYYFDY                      | VH1 - DH1 - JH2  | 2 (0.9 %)                                |                                     |                  |  |               |
|                                   |                    |  | TTPSPNSNSFDY                      | VH14 - DH1 - JH2 | 2 (0.6 %)                                | VRDGITTVVAWDYAMDY                   | VH10 - DH1 - JH4 | 2 (0.9 %)                                |                                     |                  |  |               |
|                                   |                    |  | TPHYYGSPWFAY                      | VH14 - DH2 - JH3 | 2 (0.6 %)                                | AGDPDGYDFDV                         | VH12 - DH2 - JH1 | 2 (0.9 %)                                |                                     |                  |  |               |
|                                   |                    |  | TYYGNYESVMDY                      | VH14 - DH1 - JH4 | 2 (0.6 %)                                | AGDKTYWYFDV                         | VH12 - DH4 - JH1 | 2 (0.9 %)                                |                                     |                  |  |               |
|                                   |                    |  | ARNGGLWSYAMDY                     | VH2 - DH1 - JH4  | 2 (0.6 %)                                | AGDRTGYWYFDV                        | VH12 - DH4 - JH1 | 2 (0.9 %)                                |                                     |                  |  |               |
|                                   |                    |  | TRYYGSSAMDY                       | VH6 - DH2 - JH4  | 2 (0.6 %)                                | ARRDYGGSSYDYWYFDV                   | VH2 - DH1 - JH1  | 2 (0.9 %)                                |                                     |                  |  |               |
|                                   |                    |  | TYDYDWYFDV                        | VH6 - DH2 - JH1  | 2 (0.6 %)                                |                                     |                  |  |                                     |                  |  |               |
| Frequency of replicate sequences: |                    | <b>91.5 %</b>                            |                                   |                  |  | <b>65.6 %</b>                       |                  |  | <b>54.2 %</b>                       |                  |  | <b>39.3 %</b> |