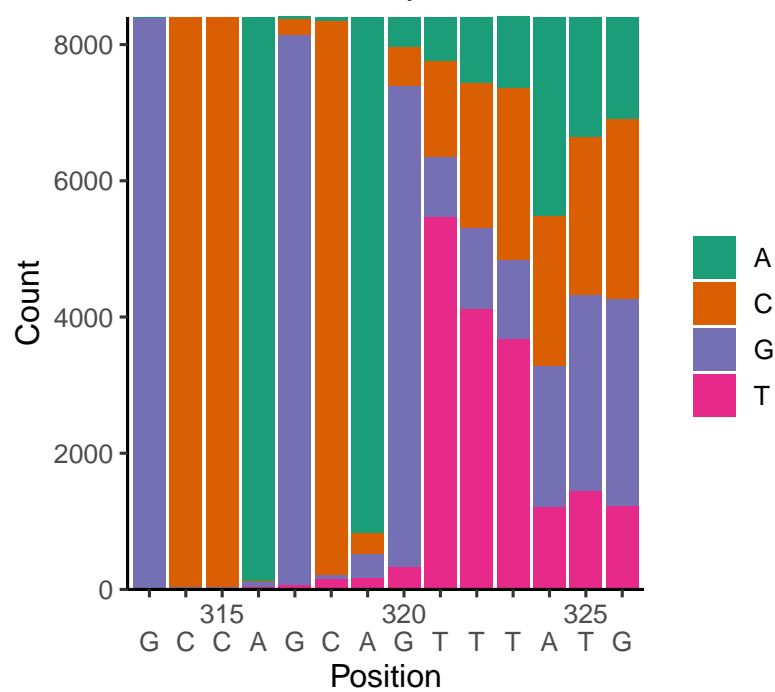
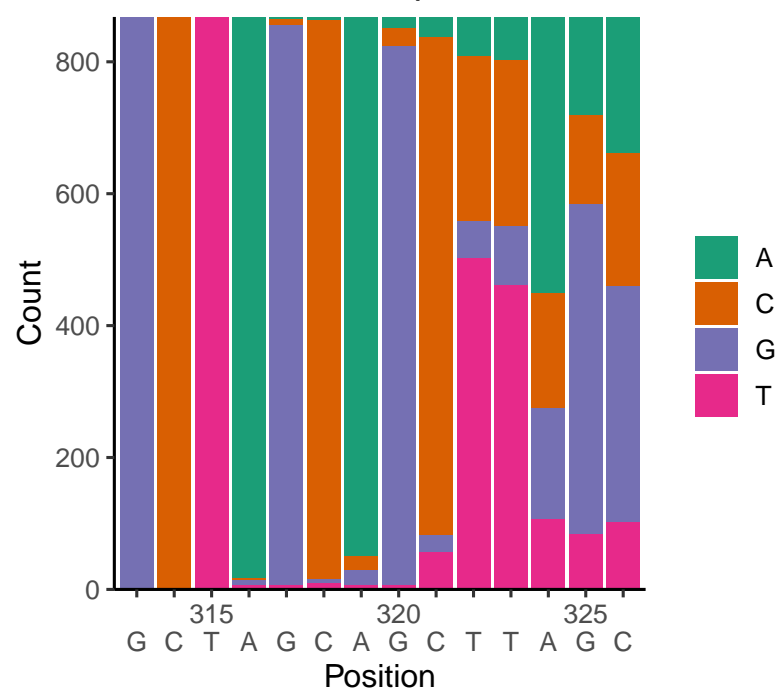


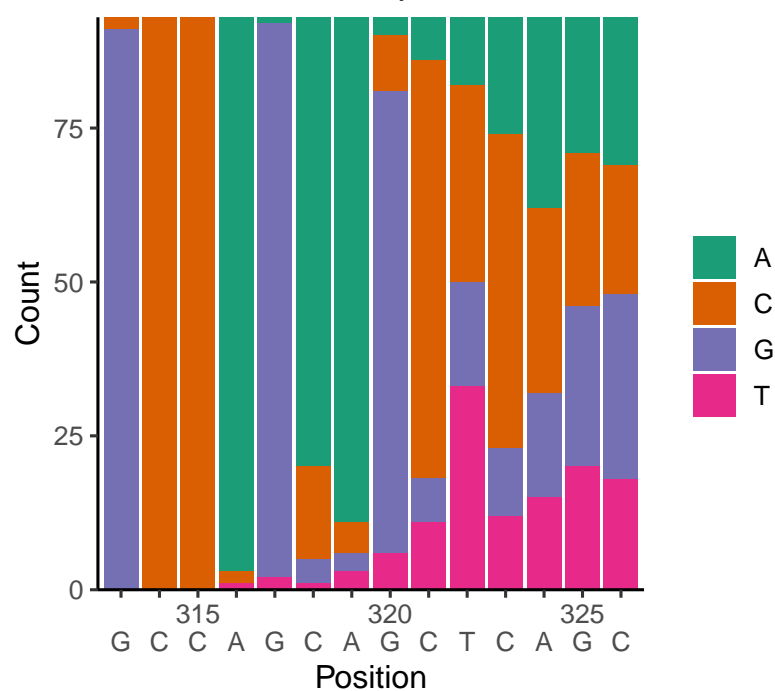
Gene TRBV28*ap01_A297G



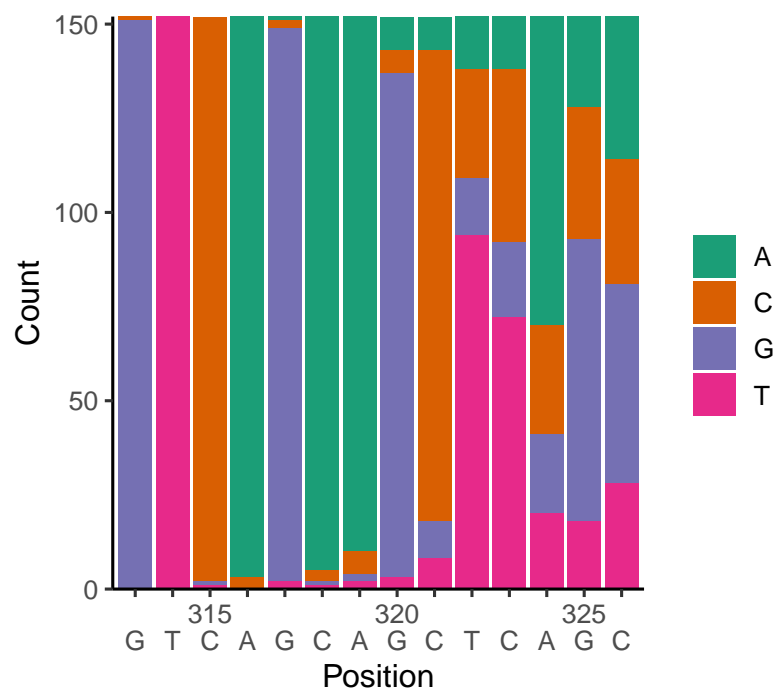
Gene TRBV7-7*ap01_C315T



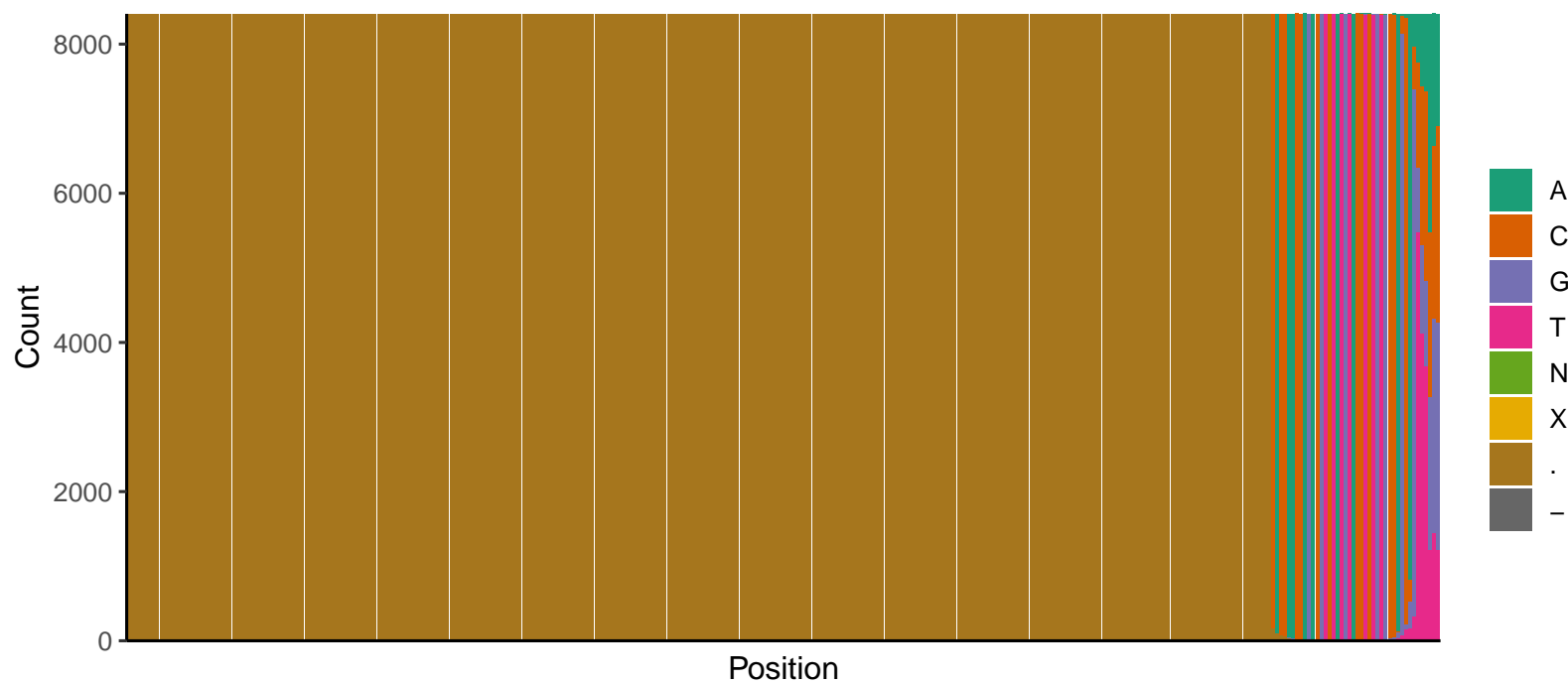
Gene TRBV7-1*ap01_T296C



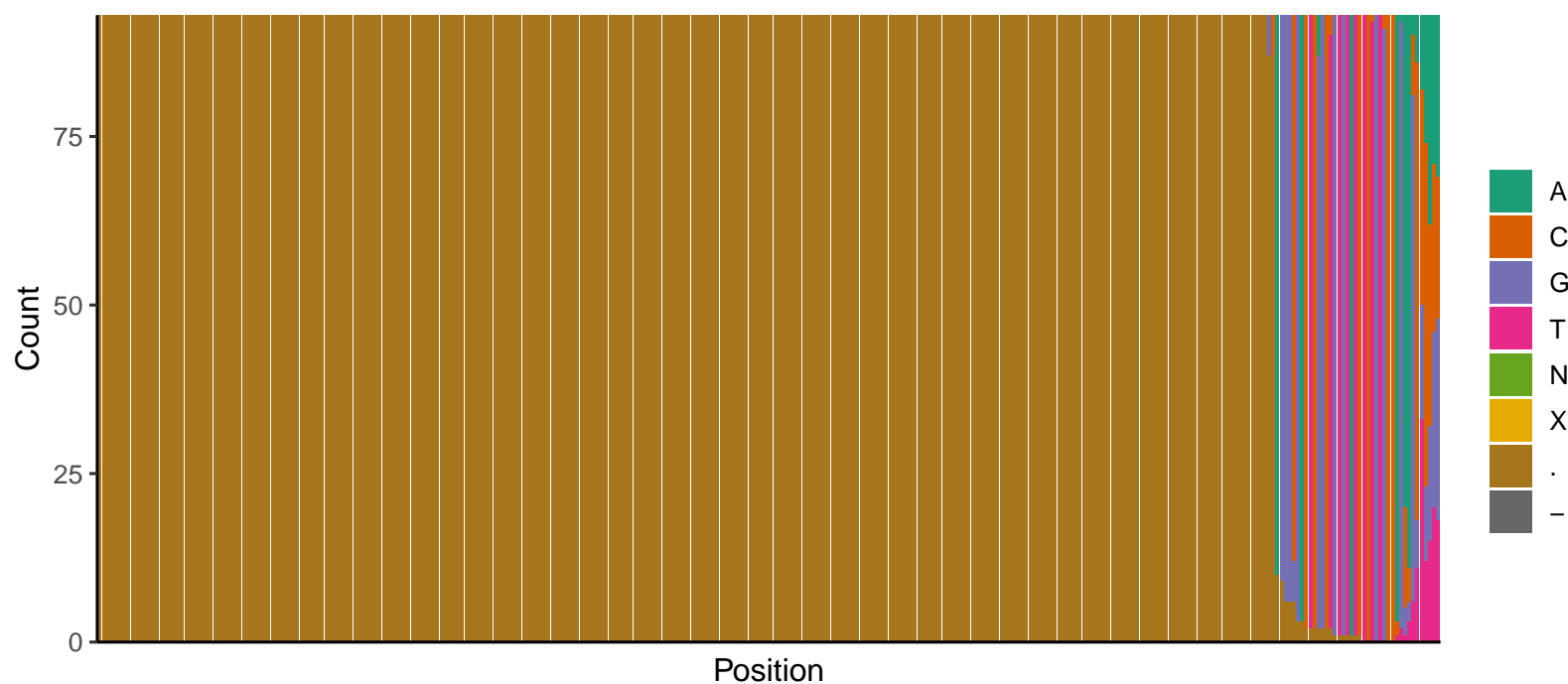
Gene TRBV7-1*ap01_T296C_C314T



Gene TRBV28*ap01_A297G



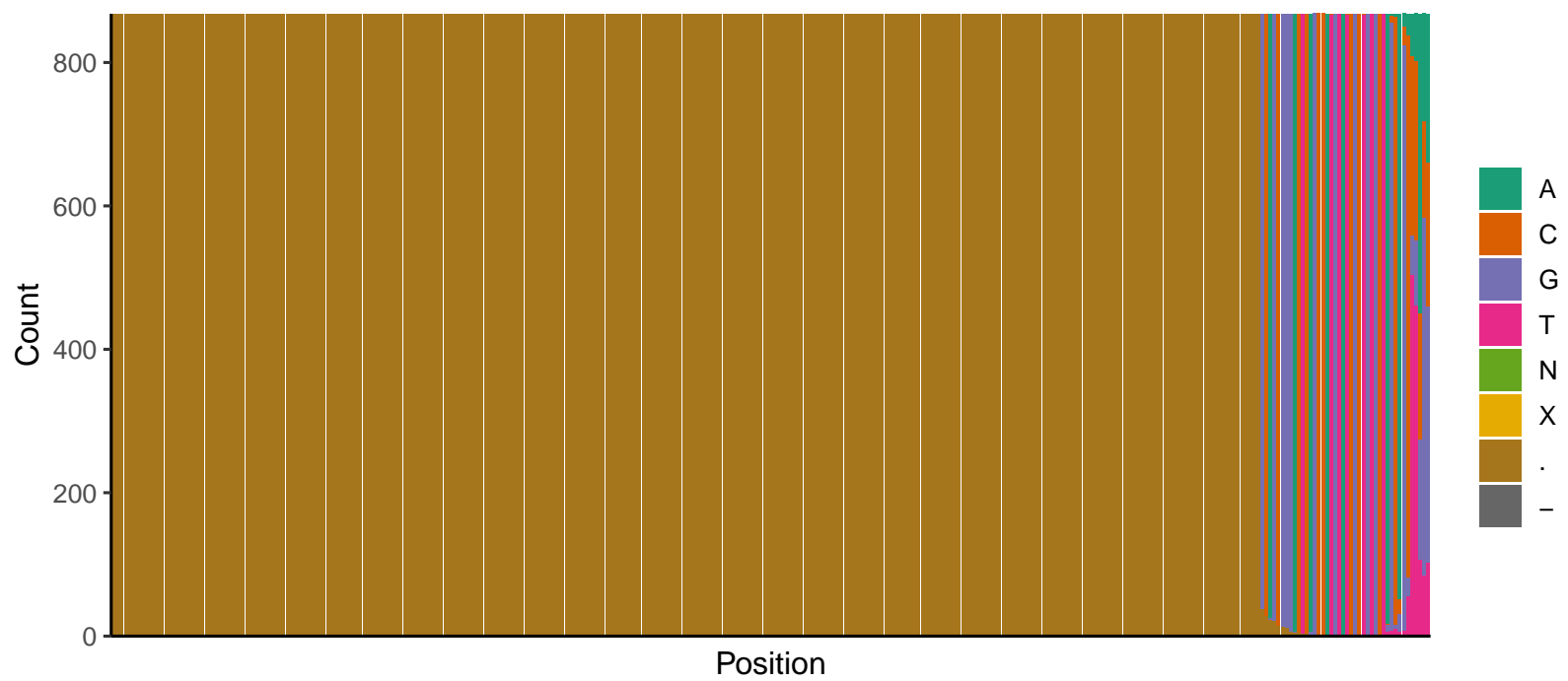
Gene TRBV7-1*ap01_T296C



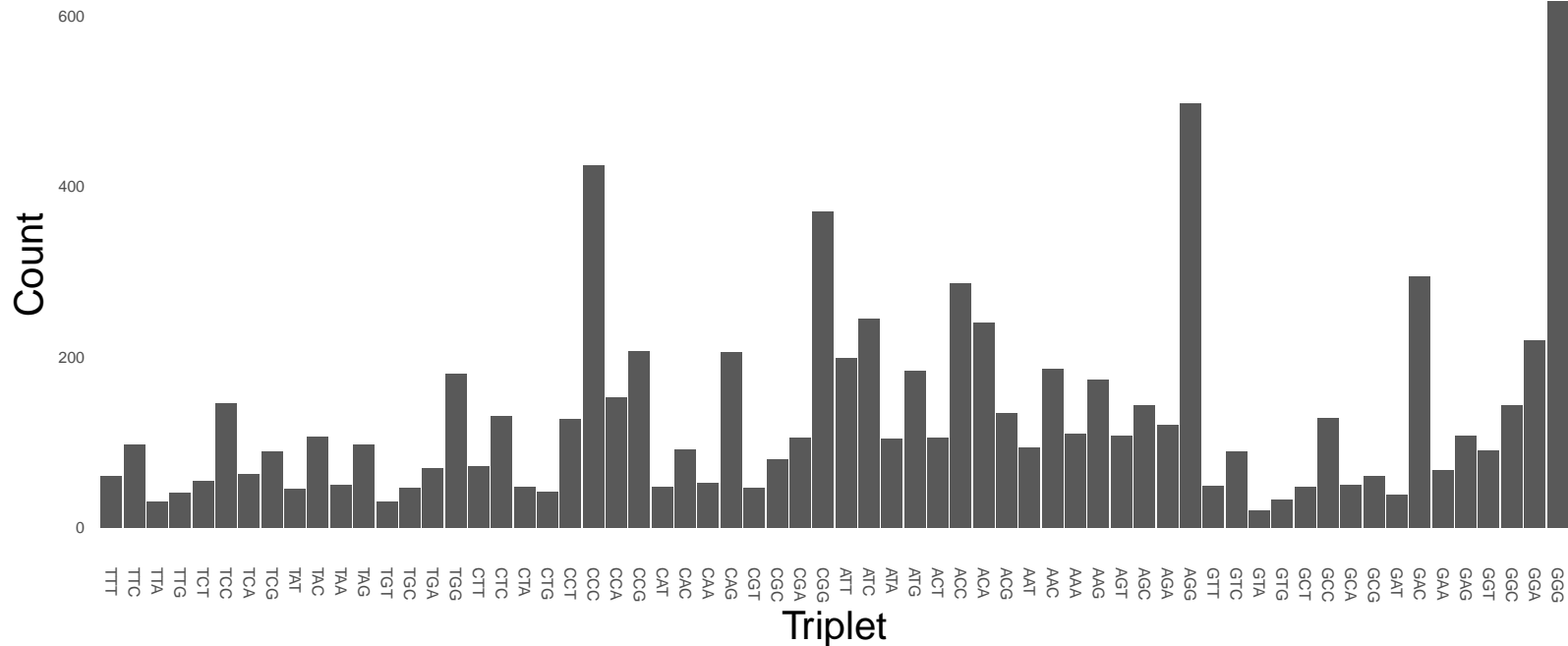
Gene TRBV7-1*ap01_T296C_C314T



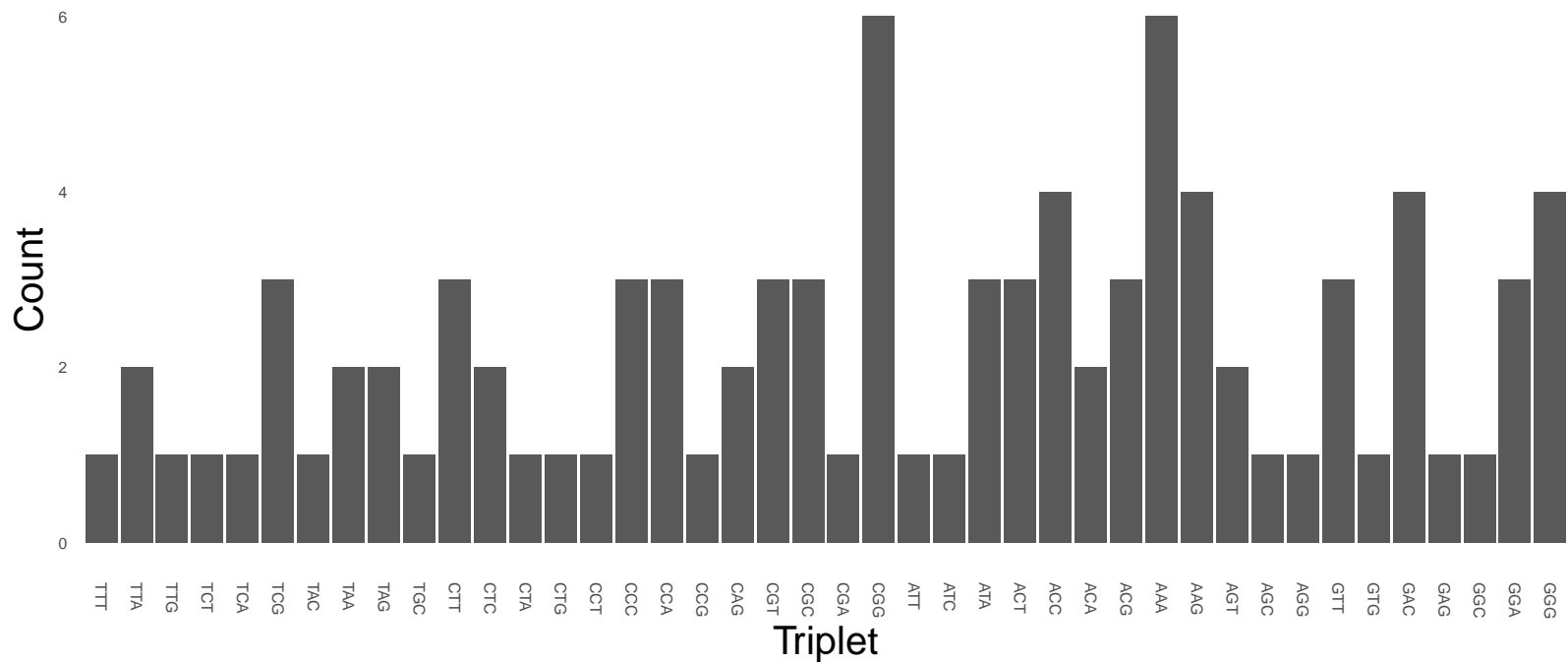
Gene TRBV7-7*ap01_C315T



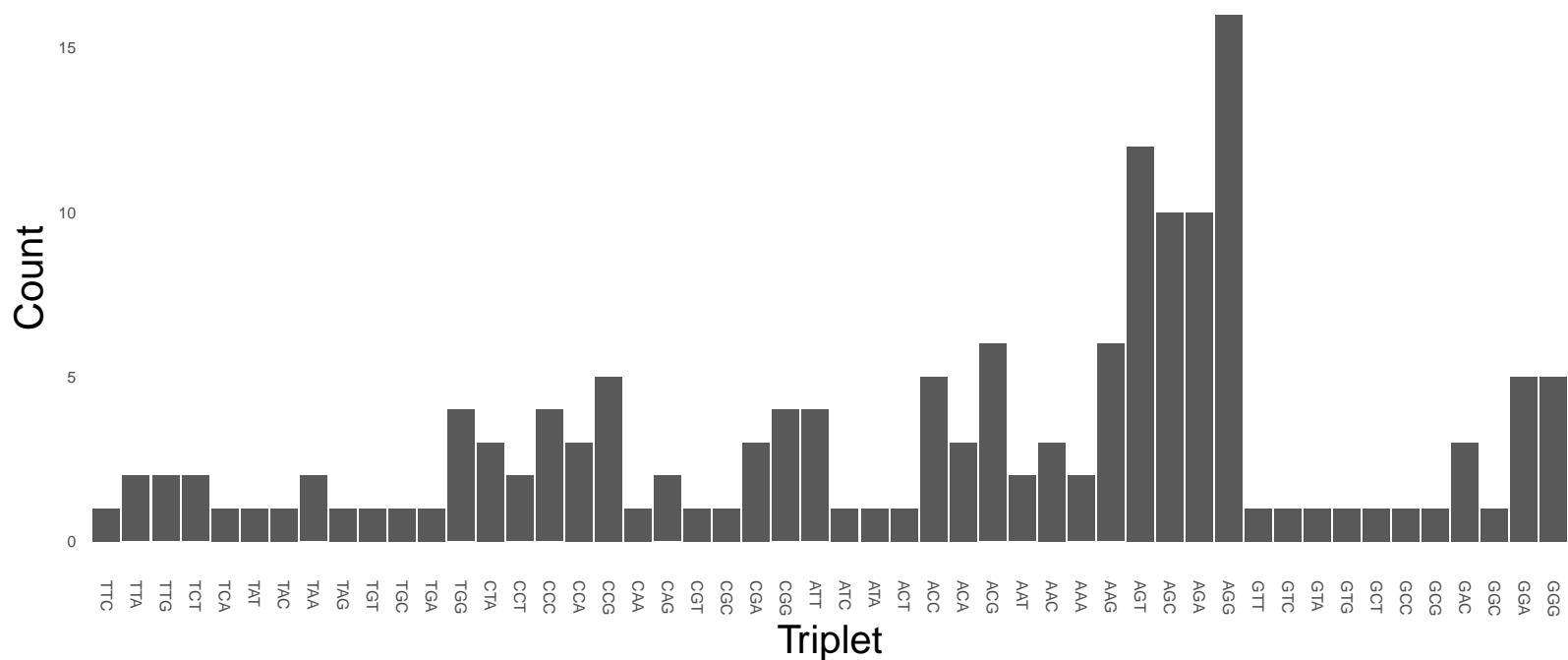
TRBV28*ap01_A297G– Final 3 nucleotides as a triplet



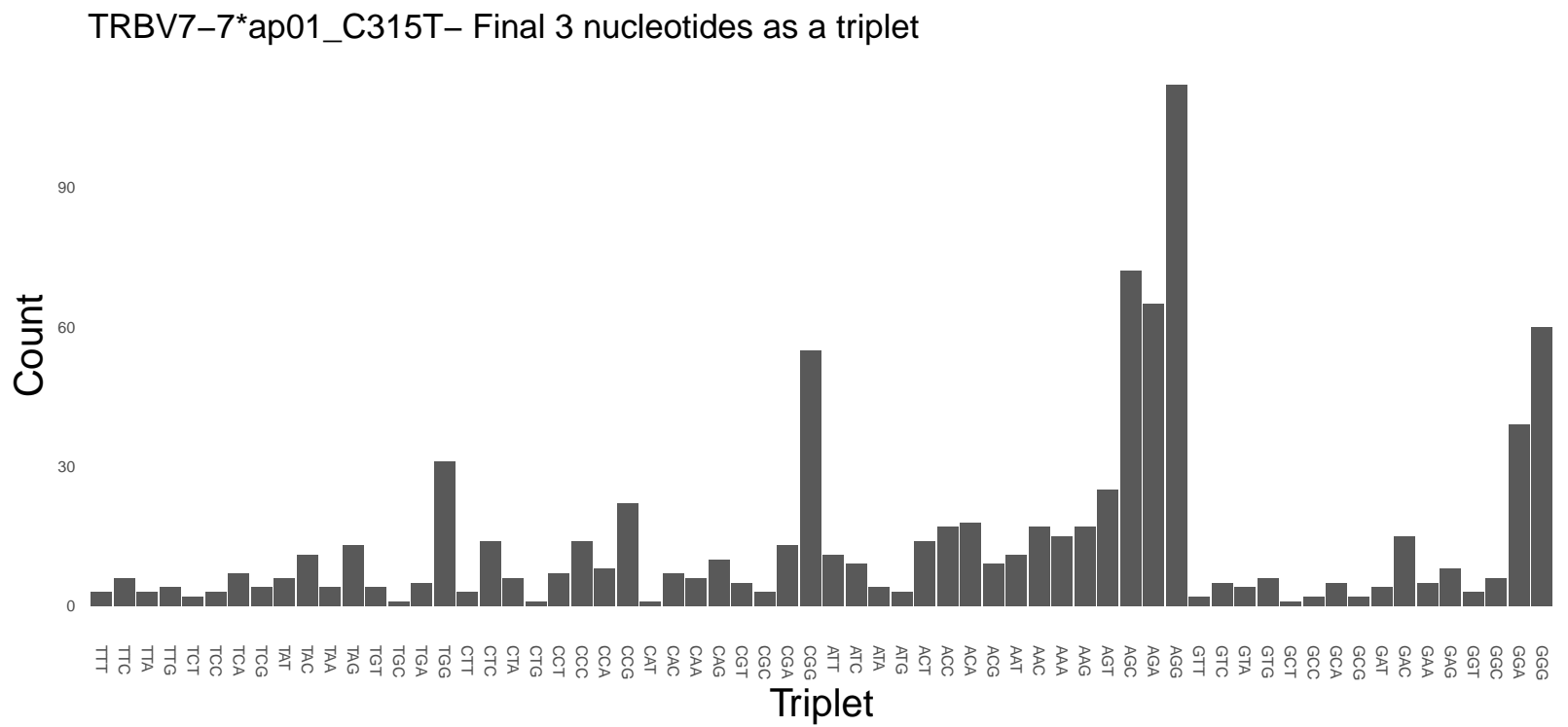
TRBV7–1*ap01_T296C– Final 3 nucleotides as a triplet



TRBV7–1*ap01_T296C_C314T– Final 3 nucleotides as a triplet

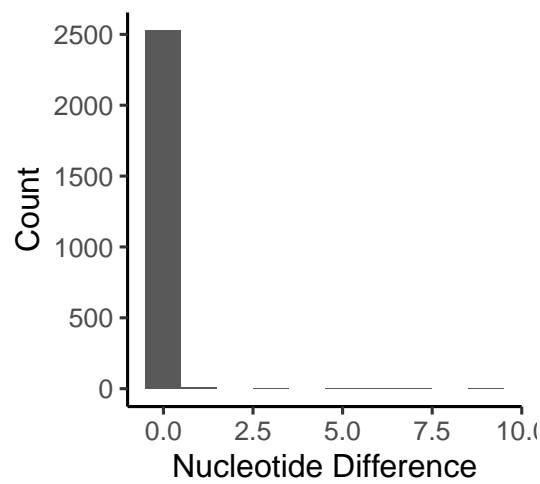


TRBV7-7*ap01_C315T- Final 3 nucleotides as a triplet



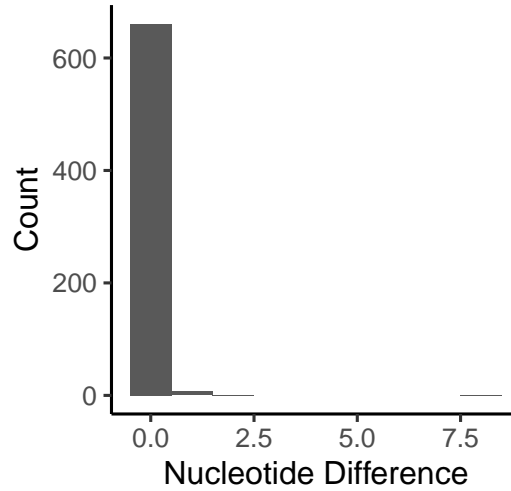
TRBV10-1*ap01

2545 sequences assigned
2528 (99.3%) exact matches, in which:
2494 unique CDR3
13 unique J



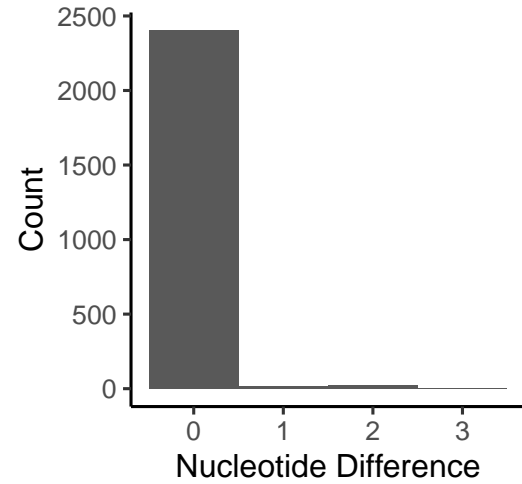
TRBV10-2*ap01

670 sequences assigned
661 (98.7%) exact matches, in which:
657 unique CDR3
13 unique J



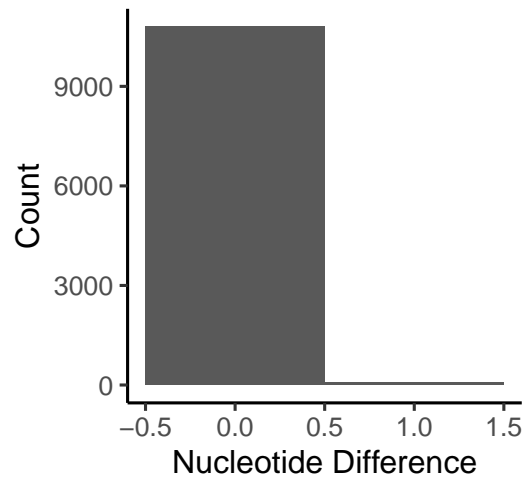
TRBV13*ap01

2445 sequences assigned
2403 (98.3%) exact matches, in which:
2338 unique CDR3
14 unique J



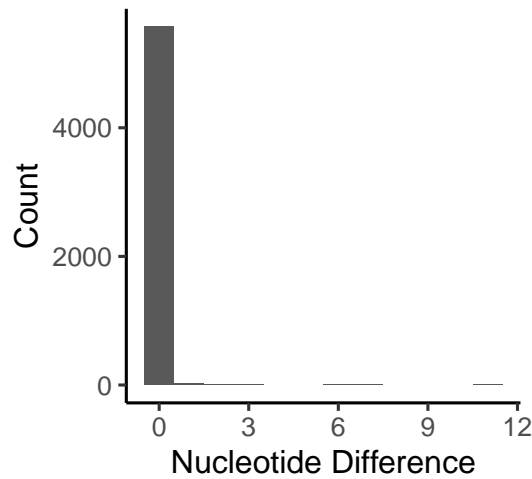
TRBV20-1*ap01

10858 sequences assigned
10797 (99.4%) exact matches, in which:
10672 unique CDR3
13 unique J



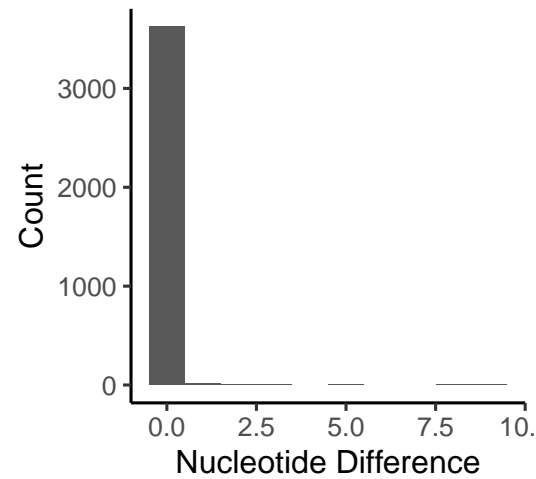
TRBV10-3*ap01

5612 sequences assigned
5571 (99.3%) exact matches, in which:
5500 unique CDR3
13 unique J



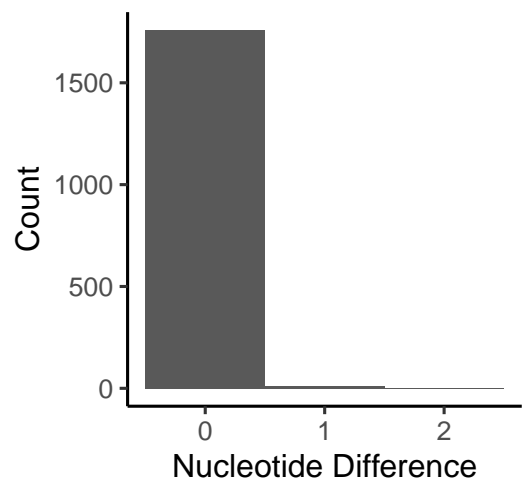
TRBV14*ap01

3643 sequences assigned
3624 (99.5%) exact matches, in which:
3592 unique CDR3
13 unique J



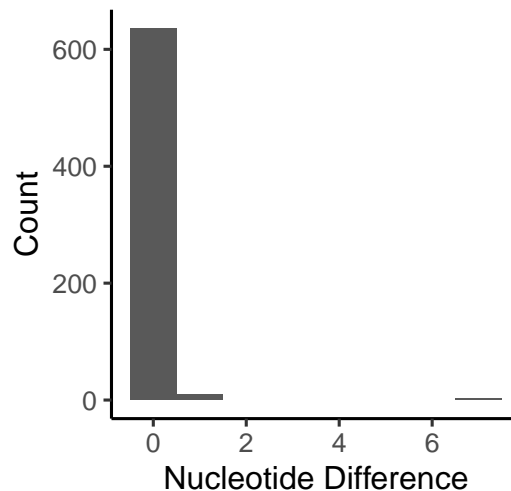
TRBV20-1*ap02

1770 sequences assigned
1759 (99.4%) exact matches, in which:
1736 unique CDR3
13 unique J



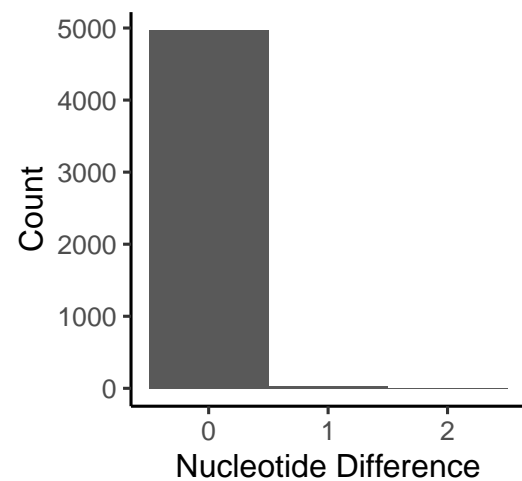
TRBV1*ap01

647 sequences assigned
636 (98.3%) exact matches, in which:
611 unique CDR3
13 unique J



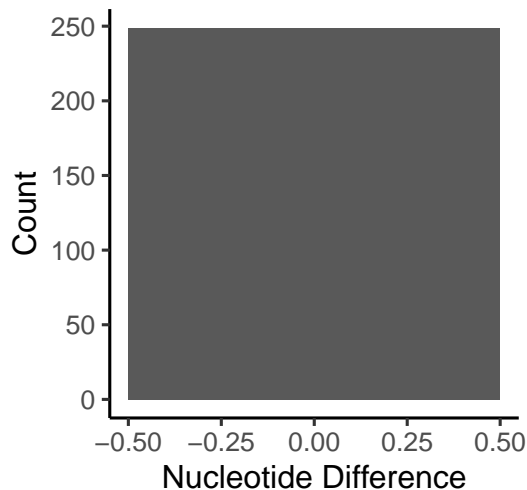
TRBV15*ap02

5003 sequences assigned
4972 (99.4%) exact matches, in which:
4885 unique CDR3
13 unique J



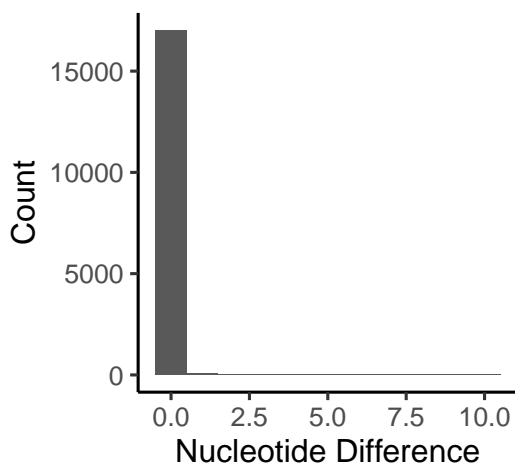
TRBV16*ap01

249 sequences assigned
249 (100%) exact matches, in which:
247 unique CDR3
13 unique J



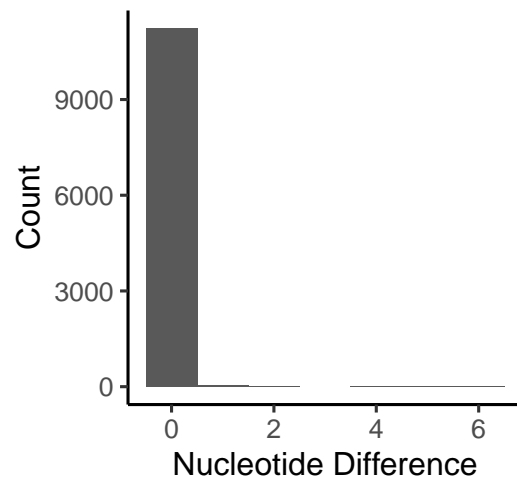
TRBV19*ap01

17120 sequences assigned
17023 (99.4%) exact matches, in which:
16925 unique CDR3
13 unique J



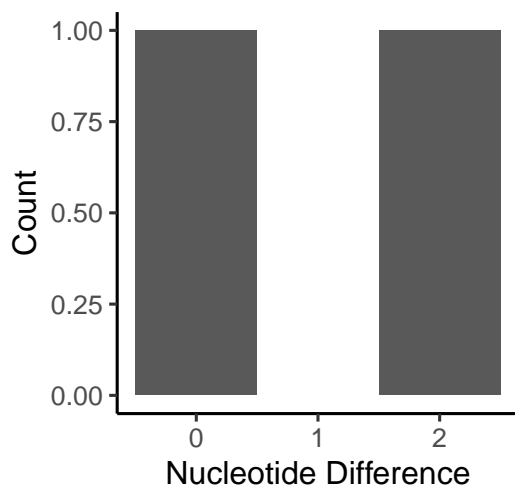
TRBV28*ap01

11277 sequences assigned
11229 (99.6%) exact matches, in which:
11141 unique CDR3
13 unique J



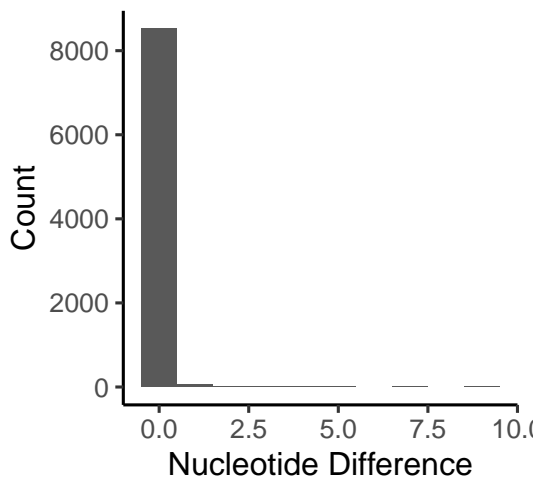
TRBV17*ap01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



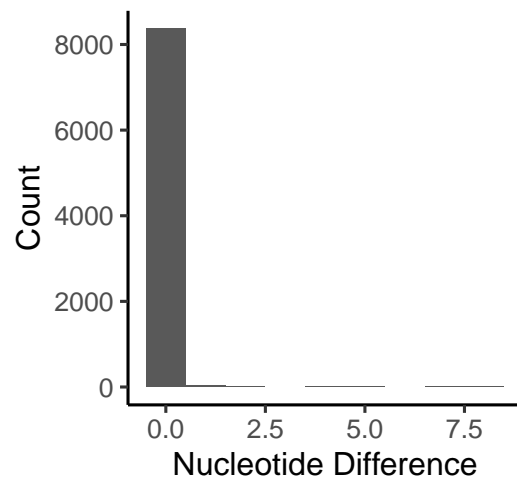
TRBV2*ap01

8582 sequences assigned
8522 (99.3%) exact matches, in which:
8406 unique CDR3
13 unique J



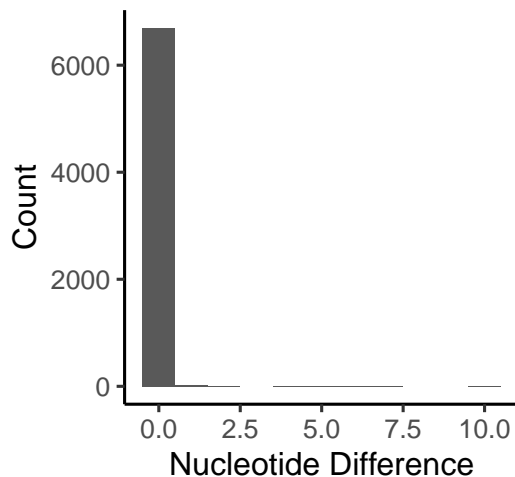
TRBV28*ap01_A297G

8406 sequences assigned
8368 (99.5%) exact matches, in which:
8307 unique CDR3
13 unique J



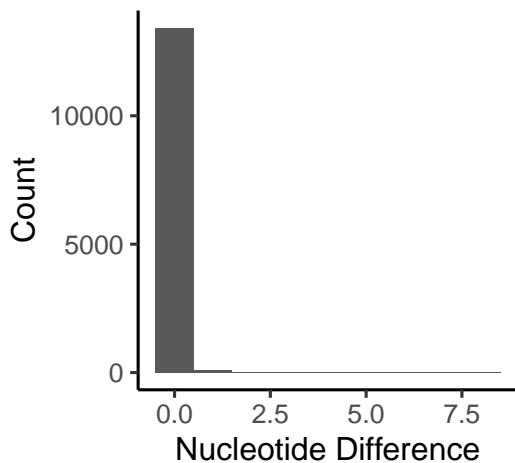
TRBV18*ap01

6723 sequences assigned
6694 (99.6%) exact matches, in which:
6647 unique CDR3
13 unique J



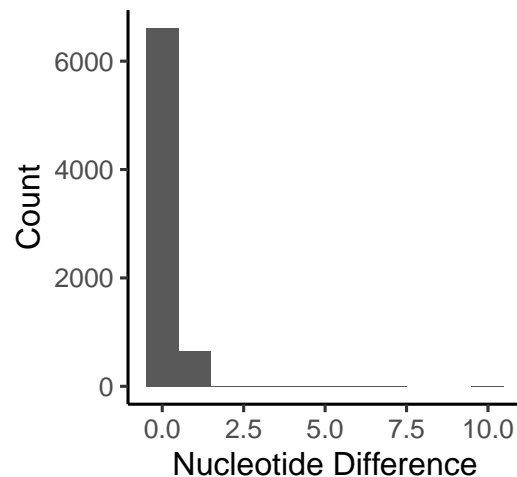
TRBV27*ap01

13529 sequences assigned
13427 (99.2%) exact matches, in which:
13238 unique CDR3
13 unique J



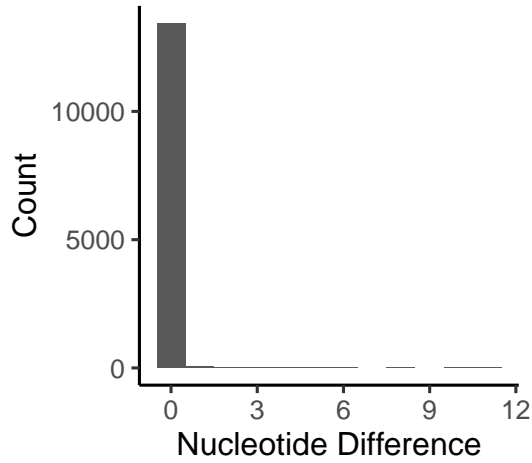
TRBV30*ap01

7282 sequences assigned
6611 (90.8%) exact matches, in which:
6460 unique CDR3
13 unique J



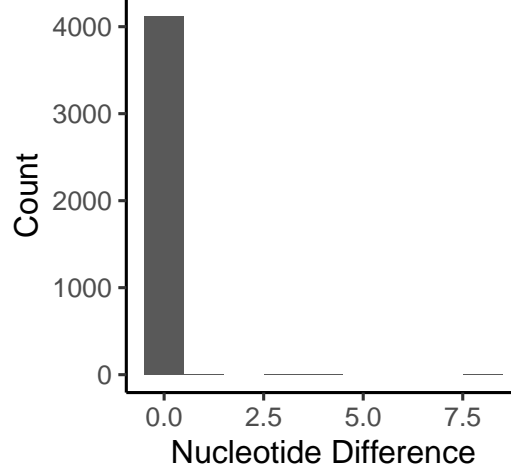
TRBV9*ap01

13508 sequences assigned
13440 (99.5%) exact matches, in which:
13317 unique CDR3
13 unique J



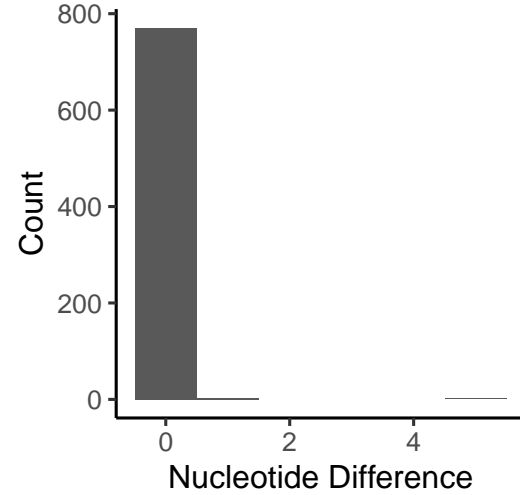
TRBV11-2*ap01

4127 sequences assigned
4118 (99.8%) exact matches, in which:
4096 unique CDR3
13 unique J



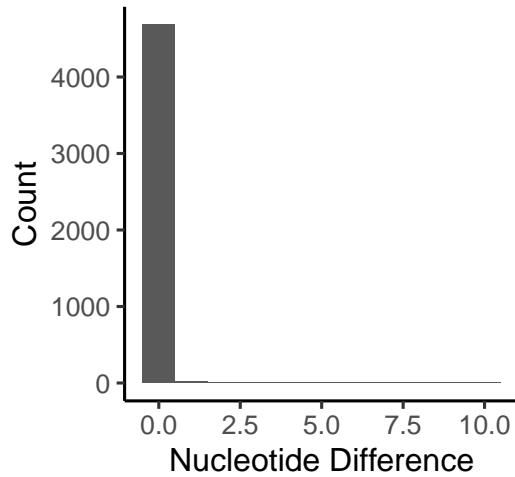
TRBV12-2*ap01

776 sequences assigned
771 (99.4%) exact matches, in which:
761 unique CDR3
13 unique J



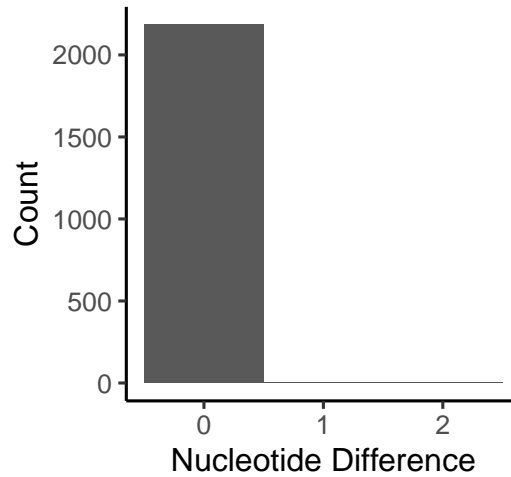
TRBV21-1*ap01

4731 sequences assigned
4683 (99%) exact matches, in which:
4656 unique CDR3
13 unique J



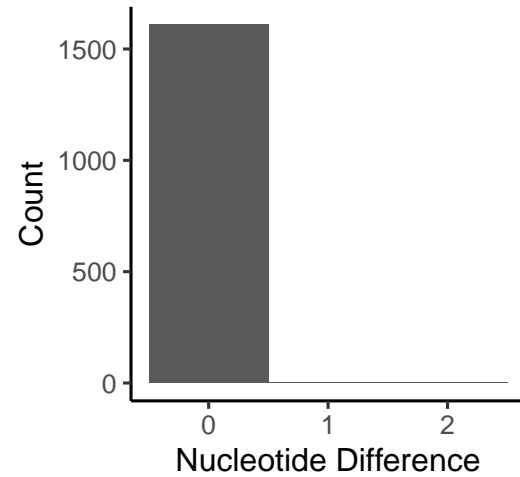
TRBV11-3*ap01

2192 sequences assigned
2184 (99.6%) exact matches, in which:
2176 unique CDR3
13 unique J



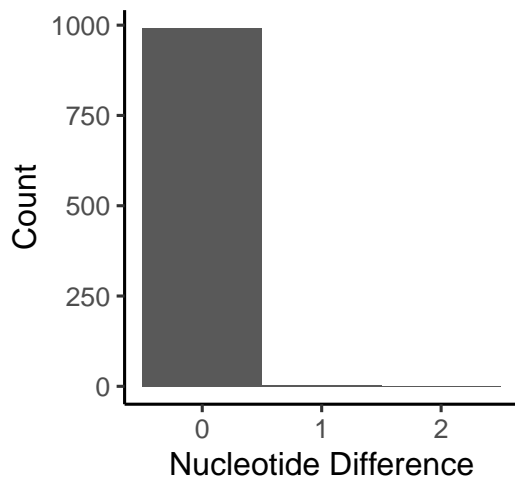
TRBV12-5*ap01

1615 sequences assigned
1609 (99.6%) exact matches, in which:
1597 unique CDR3
13 unique J



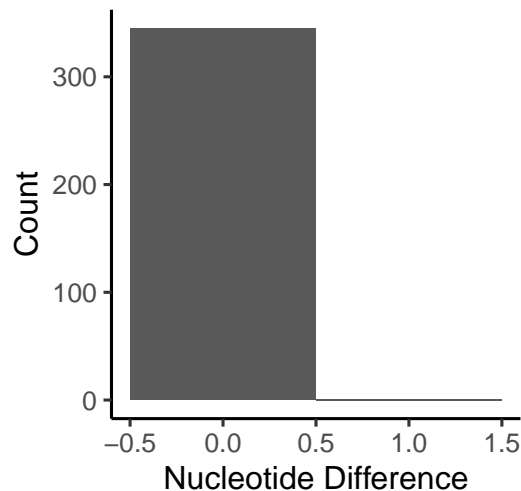
TRBV11-1*ap01

996 sequences assigned
992 (99.6%) exact matches, in which:
988 unique CDR3
13 unique J



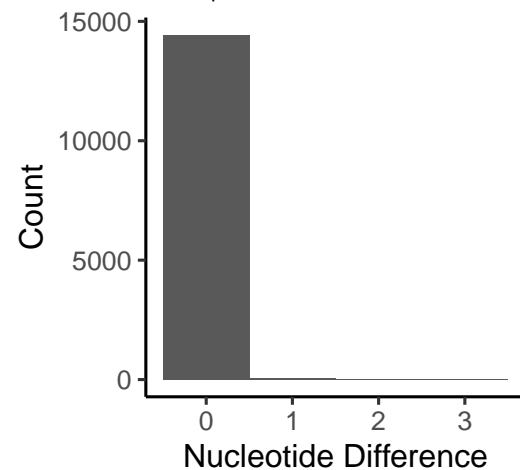
TRBV12-1*ap01

346 sequences assigned
345 (99.7%) exact matches, in which:
344 unique CDR3
13 unique J



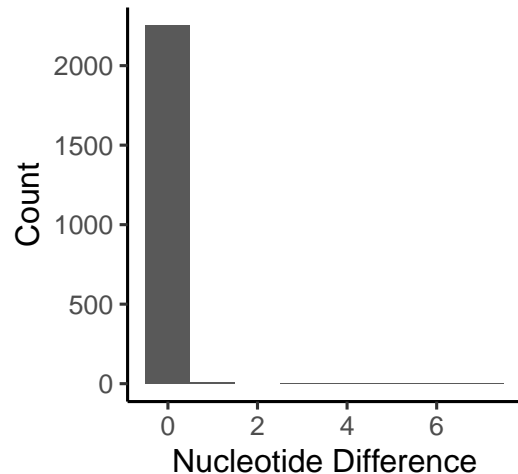
TRBV12-34*ap01

14520 sequences assigned
14437 (99.4%) exact matches, in which:
14272 unique CDR3
13 unique J



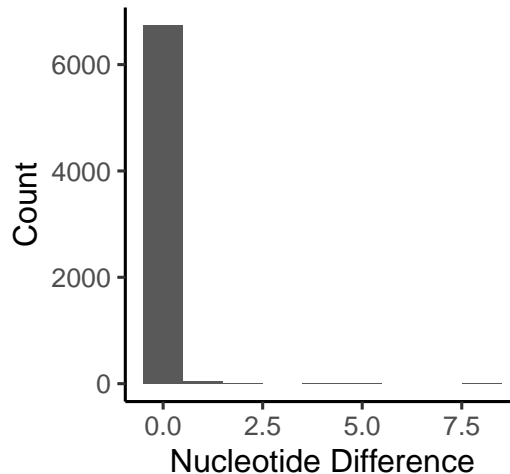
TRBV23-1*ap01

2274 sequences assigned
2253 (99.1%) exact matches, in which:
2223 unique CDR3
13 unique J



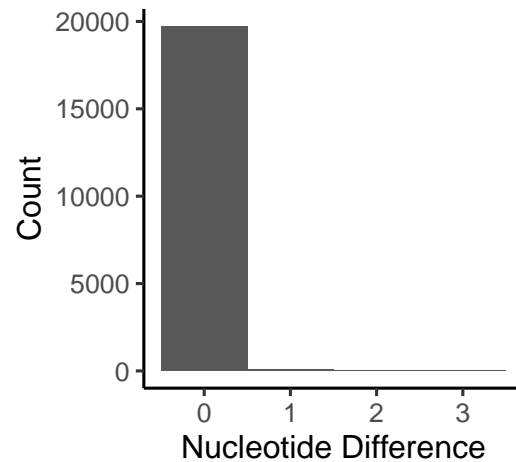
TRBV4-1*ap01

6794 sequences assigned
6737 (99.2%) exact matches, in which:
6601 unique CDR3
13 unique J



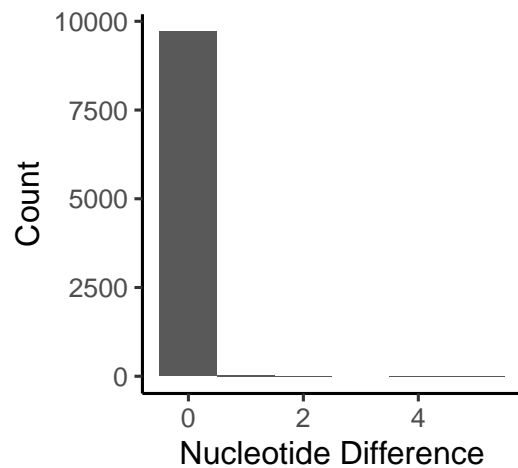
TRBV5-1*ap01

19841 sequences assigned
19731 (99.4%) exact matches, in which:
19424 unique CDR3
13 unique J



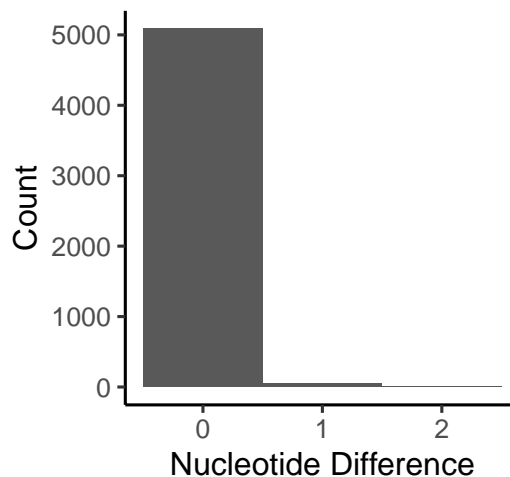
TRBV3-12*ap01

9748 sequences assigned
9713 (99.6%) exact matches, in which:
9663 unique CDR3
13 unique J



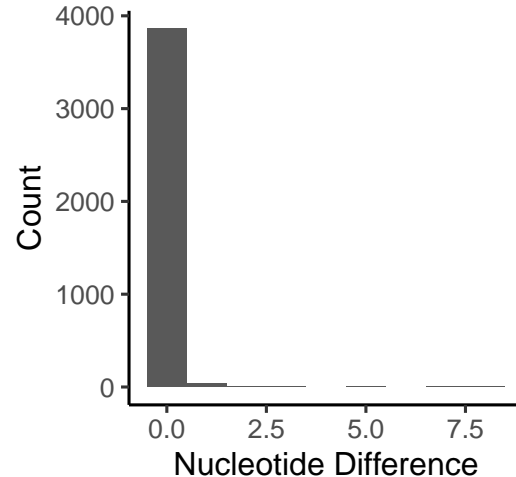
TRBV4-2*ap01

5136 sequences assigned
5087 (99%) exact matches, in which:
5008 unique CDR3
13 unique J



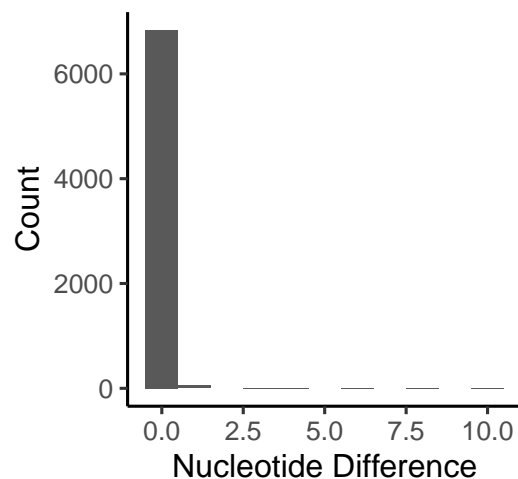
TRBV25-1*ap01

3908 sequences assigned
3861 (98.8%) exact matches, in which:
3761 unique CDR3
13 unique J



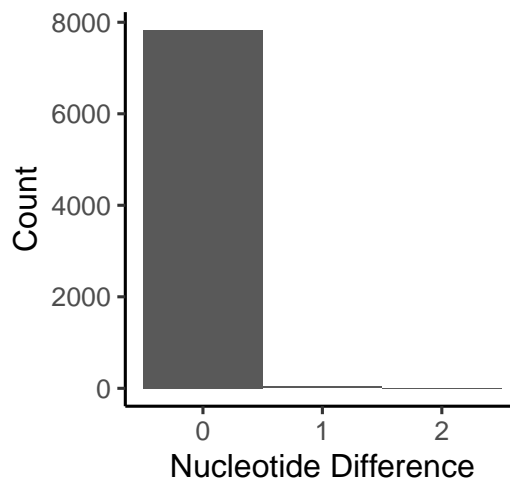
TRBV24-1*ap01

6900 sequences assigned
6836 (99.1%) exact matches, in which:
6719 unique CDR3
13 unique J



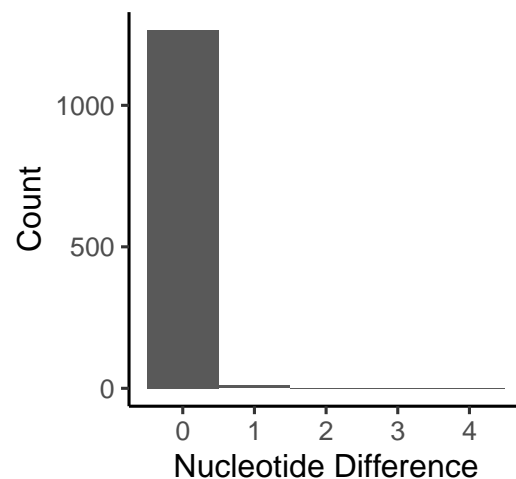
TRBV4-3*ap01

7869 sequences assigned
7830 (99.5%) exact matches, in which:
7701 unique CDR3
13 unique J



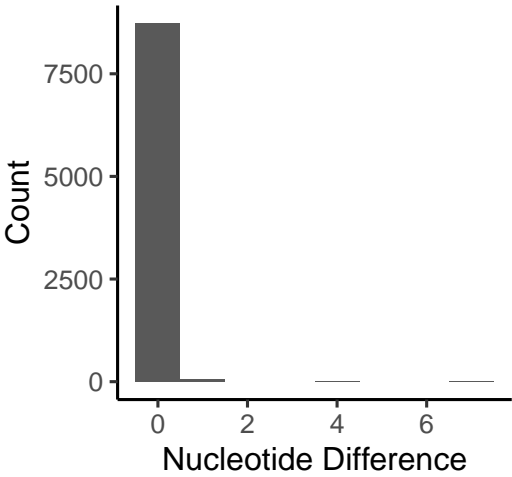
TRBV5-3*ap01

1279 sequences assigned
1266 (99%) exact matches, in which:
1258 unique CDR3
13 unique J



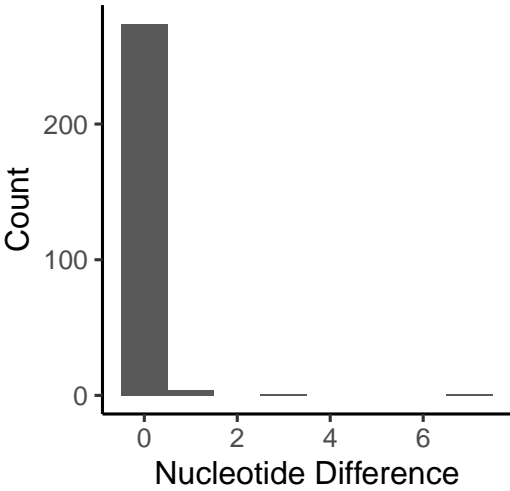
TRBV5-4*ap01

8793 sequences assigned
8727 (99.2%) exact matches, in which:
8591 unique CDR3
13 unique J



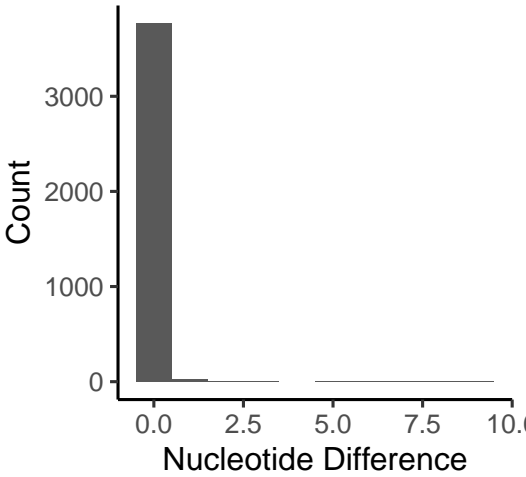
TRBV5-7*ap01

280 sequences assigned
274 (97.9%) exact matches, in which:
266 unique CDR3
13 unique J



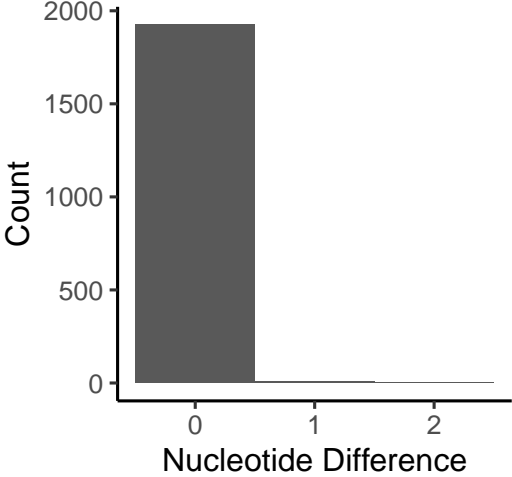
TRBV6-4*ap01

3803 sequences assigned
3766 (99%) exact matches, in which:
3736 unique CDR3
13 unique J



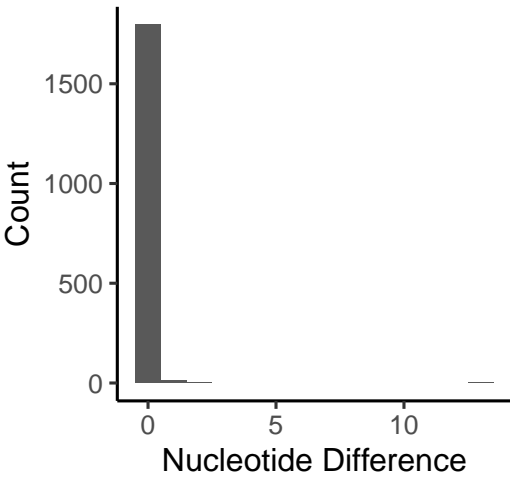
TRBV5-5*ap01

1937 sequences assigned
1925 (99.4%) exact matches, in which:
1919 unique CDR3
13 unique J



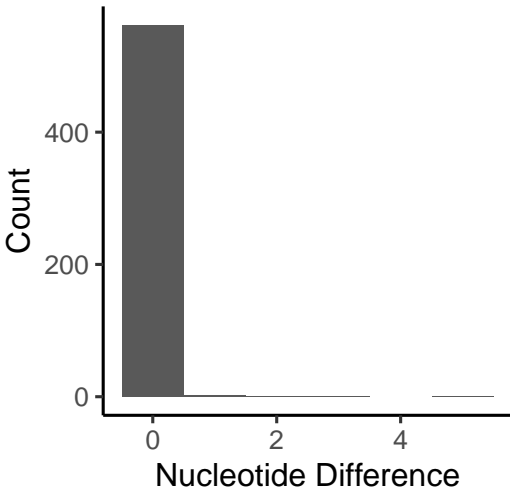
TRBV5-8*ap01

1811 sequences assigned
1796 (99.2%) exact matches, in which:
1781 unique CDR3
13 unique J



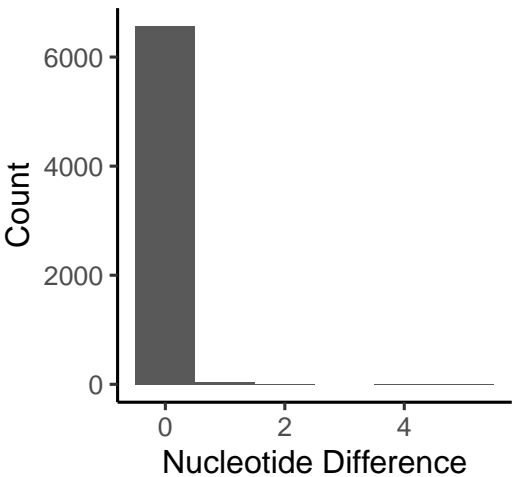
TRBV6-7*ap01

568 sequences assigned
562 (98.9%) exact matches, in which:
555 unique CDR3
13 unique J



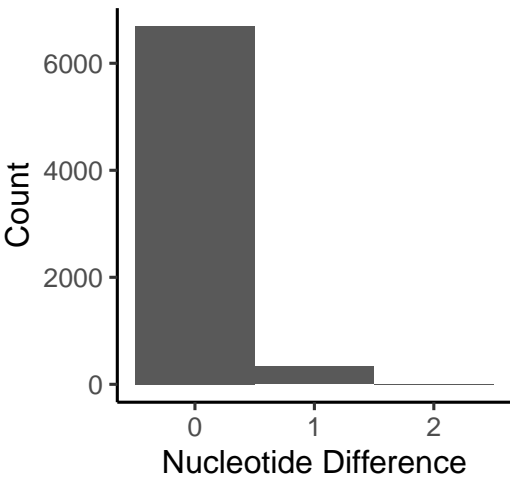
TRBV5-6*ap01

6620 sequences assigned
6568 (99.2%) exact matches, in which:
6385 unique CDR3
13 unique J



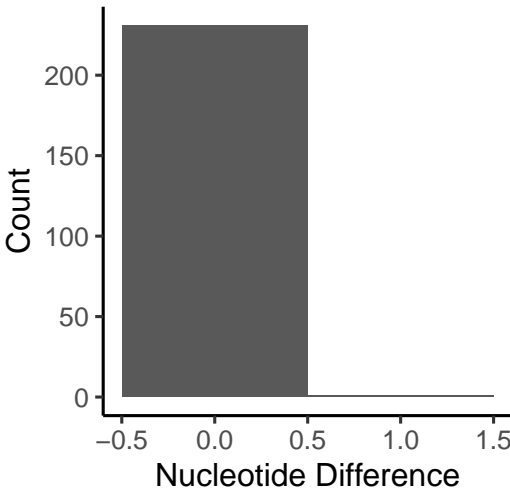
TRBV6-1*ap01

7033 sequences assigned
6696 (95.2%) exact matches, in which:
6600 unique CDR3
13 unique J



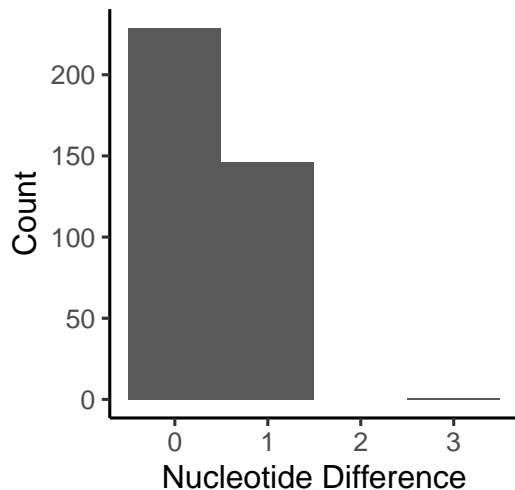
TRBV6-8*ap01

232 sequences assigned
231 (99.6%) exact matches, in which:
225 unique CDR3
13 unique J



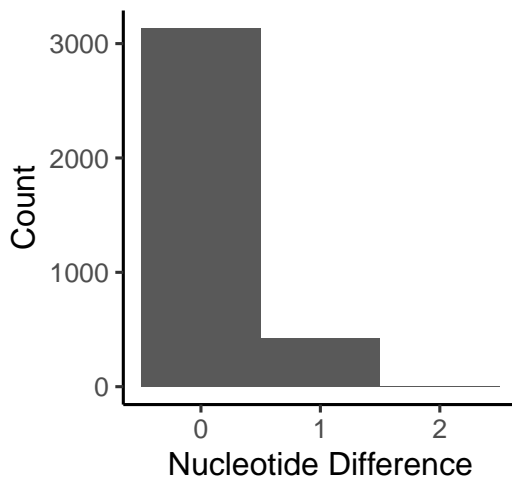
TRBV6-9*ap01

376 sequences assigned
229 (60.9%) exact matches, in which:
223 unique CDR3
13 unique J



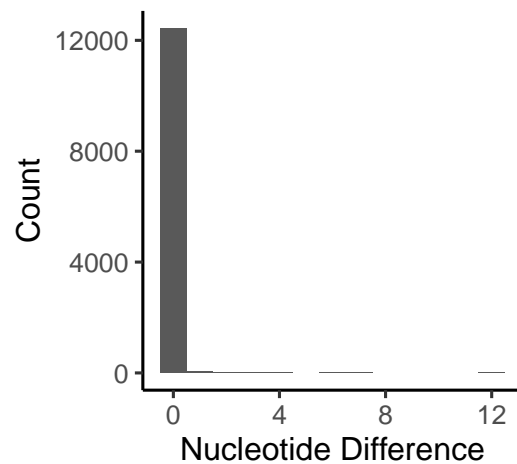
TRBV6-56*ap02

3560 sequences assigned
3133 (88%) exact matches, in which:
3075 unique CDR3
13 unique J



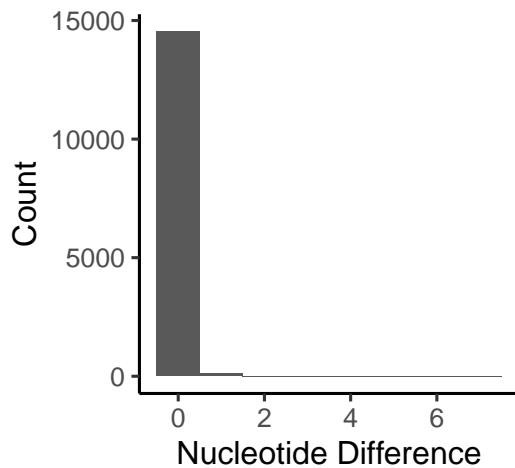
TRBV7-2*ap01

12495 sequences assigned
12440 (99.6%) exact matches, in which:
12320 unique CDR3
13 unique J



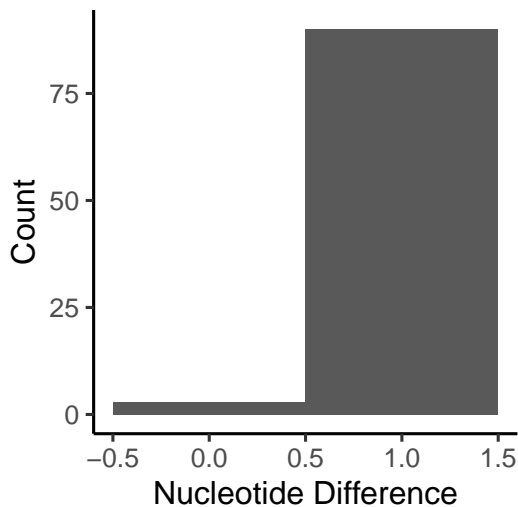
TRBV6-23*ap01

14661 sequences assigned
14538 (99.2%) exact matches, in which:
14266 unique CDR3
13 unique J



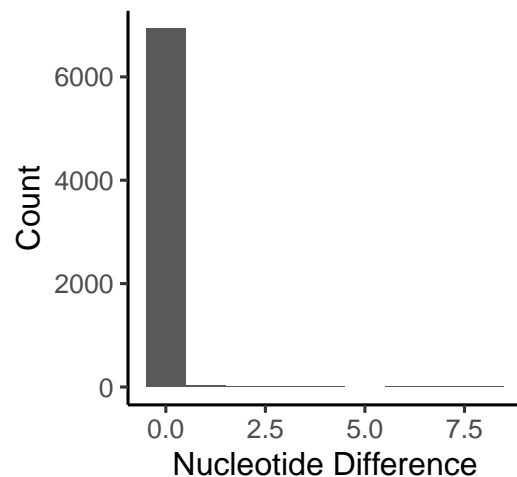
TRBV7-1*ap01_T296C

93 sequences assigned
3 (3.2%) exact matches, in which:
3 unique CDR3
3 unique J



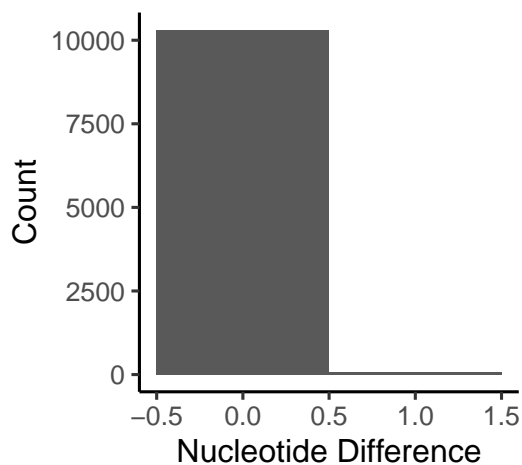
TRBV7-3*ap01

6963 sequences assigned
6931 (99.5%) exact matches, in which:
6895 unique CDR3
13 unique J



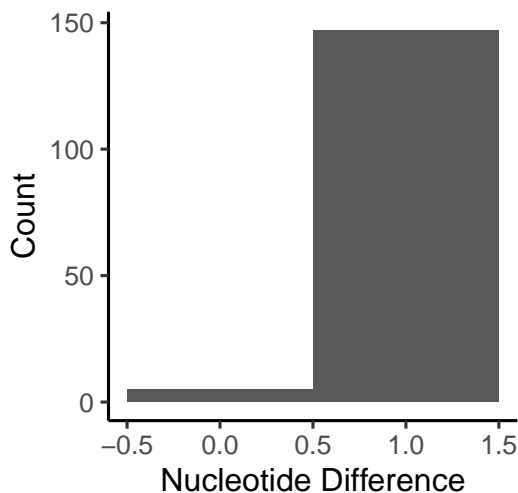
TRBV6-56*ap01

10392 sequences assigned
10312 (99.2%) exact matches, in which:
10099 unique CDR3
13 unique J



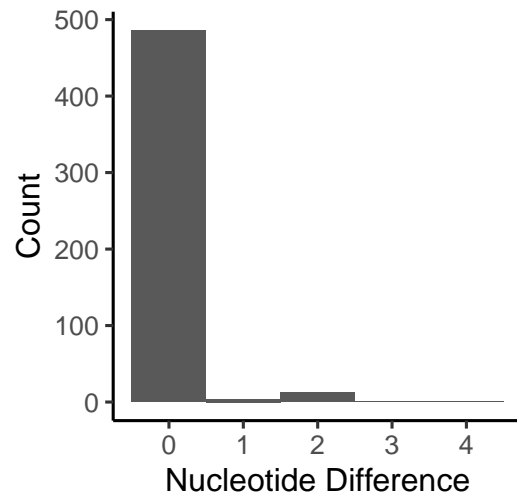
TRBV7-1*ap01_T296C_(

152 sequences assigned
5 (3.3%) exact matches, in which:
5 unique CDR3
4 unique J



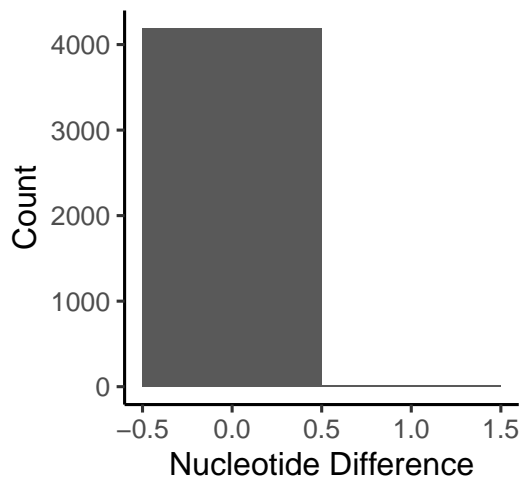
TRBV7-4*ap01

505 sequences assigned
486 (96.2%) exact matches, in which:
480 unique CDR3
13 unique J



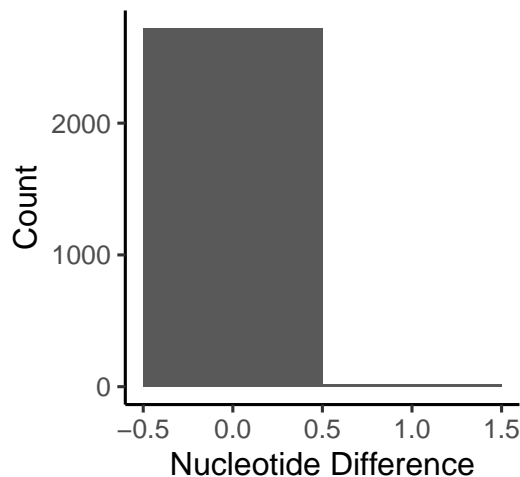
TRBV7-6*ap01

4210 sequences assigned
4189 (99.5%) exact matches, in which:
4144 unique CDR3
13 unique J



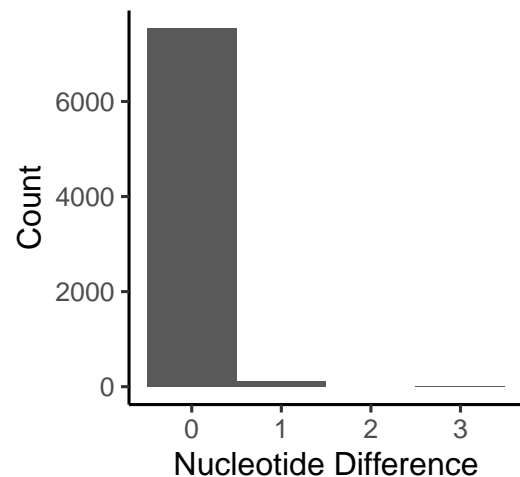
TRBV7-8*ap01

2737 sequences assigned
2719 (99.3%) exact matches, in which:
2682 unique CDR3
13 unique J



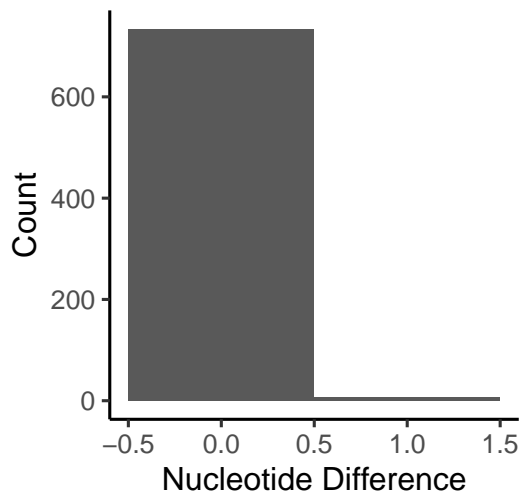
TRBV29-1*ap01

7653 sequences assigned
7537 (98.5%) exact matches, in which:
7284 unique CDR3
13 unique J



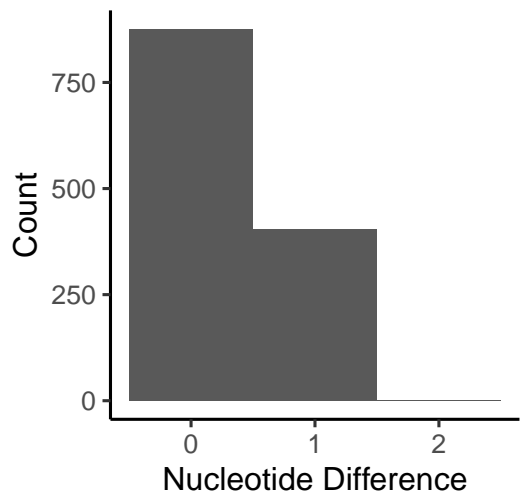
TRBV7-7*ap01

740 sequences assigned
734 (99.2%) exact matches, in which:
726 unique CDR3
13 unique J



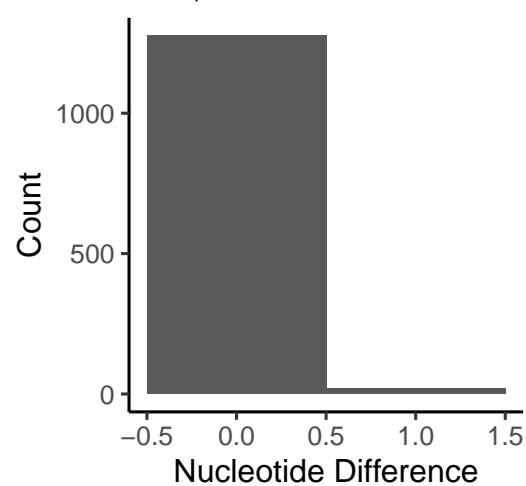
TRBV7-8*ap03

1281 sequences assigned
876 (68.4%) exact matches, in which:
865 unique CDR3
13 unique J



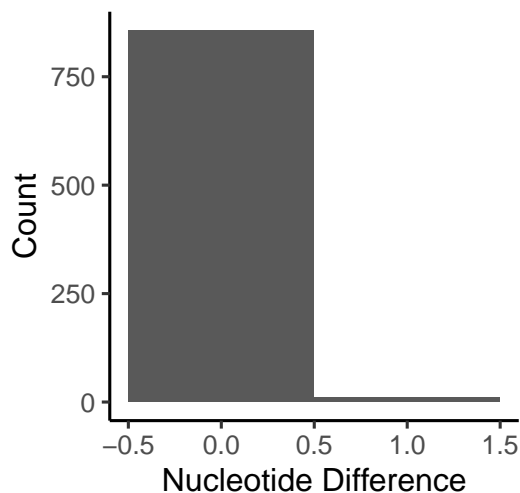
TRBV29-1*ap02

1294 sequences assigned
1276 (98.6%) exact matches, in which:
1236 unique CDR3
13 unique J



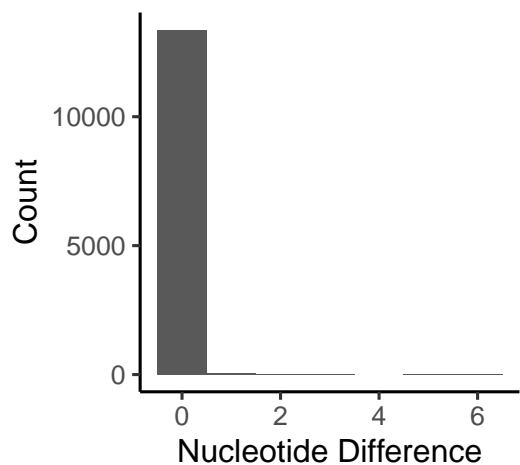
TRBV7-7*ap01_C315T

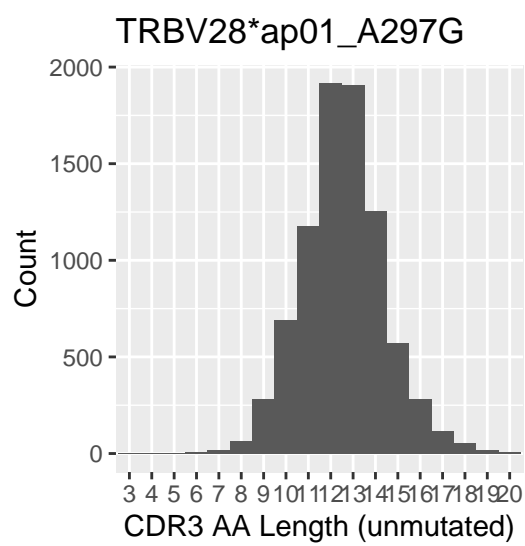
868 sequences assigned
857 (98.7%) exact matches, in which:
841 unique CDR3
13 unique J



TRBV7-9*ap01

13441 sequences assigned
13371 (99.5%) exact matches, in which:
13223 unique CDR3
13 unique J







[illegible]