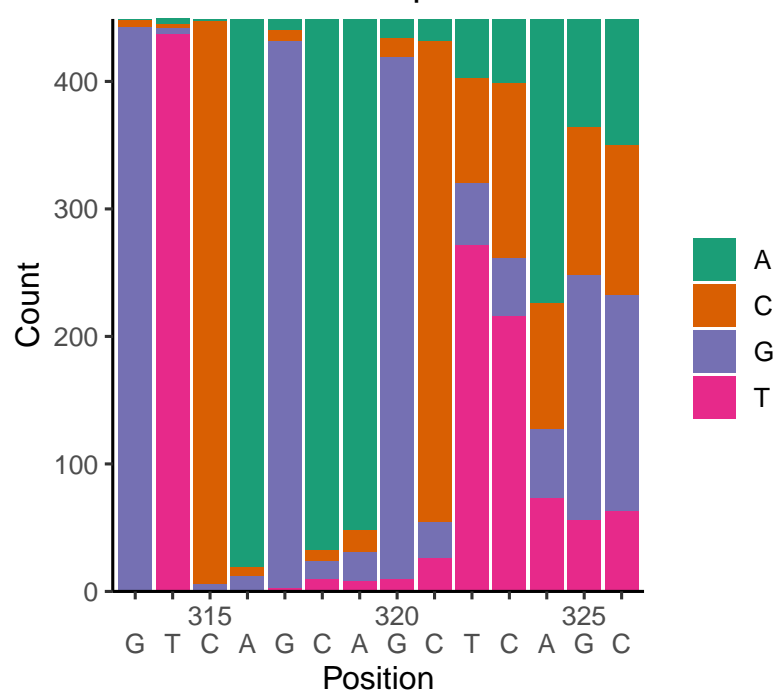
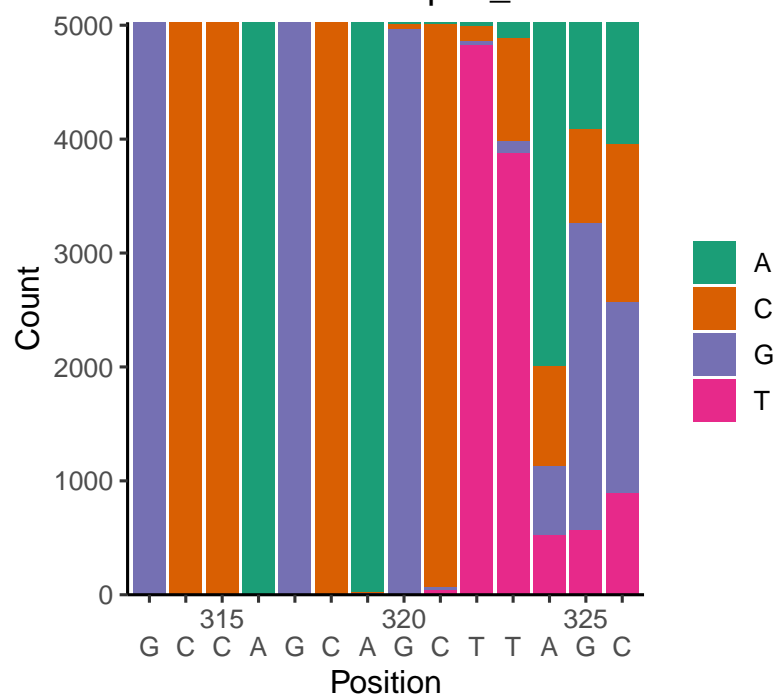


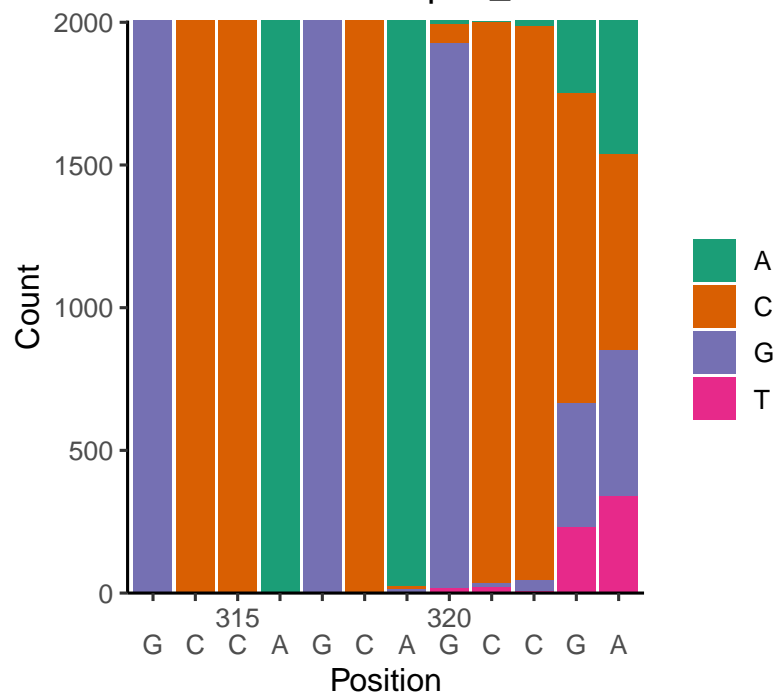
Gene TRBV7-1\*ap01\_G291C\_T296C\_C314T



Gene TRBV7-2\*ap01\_G297A



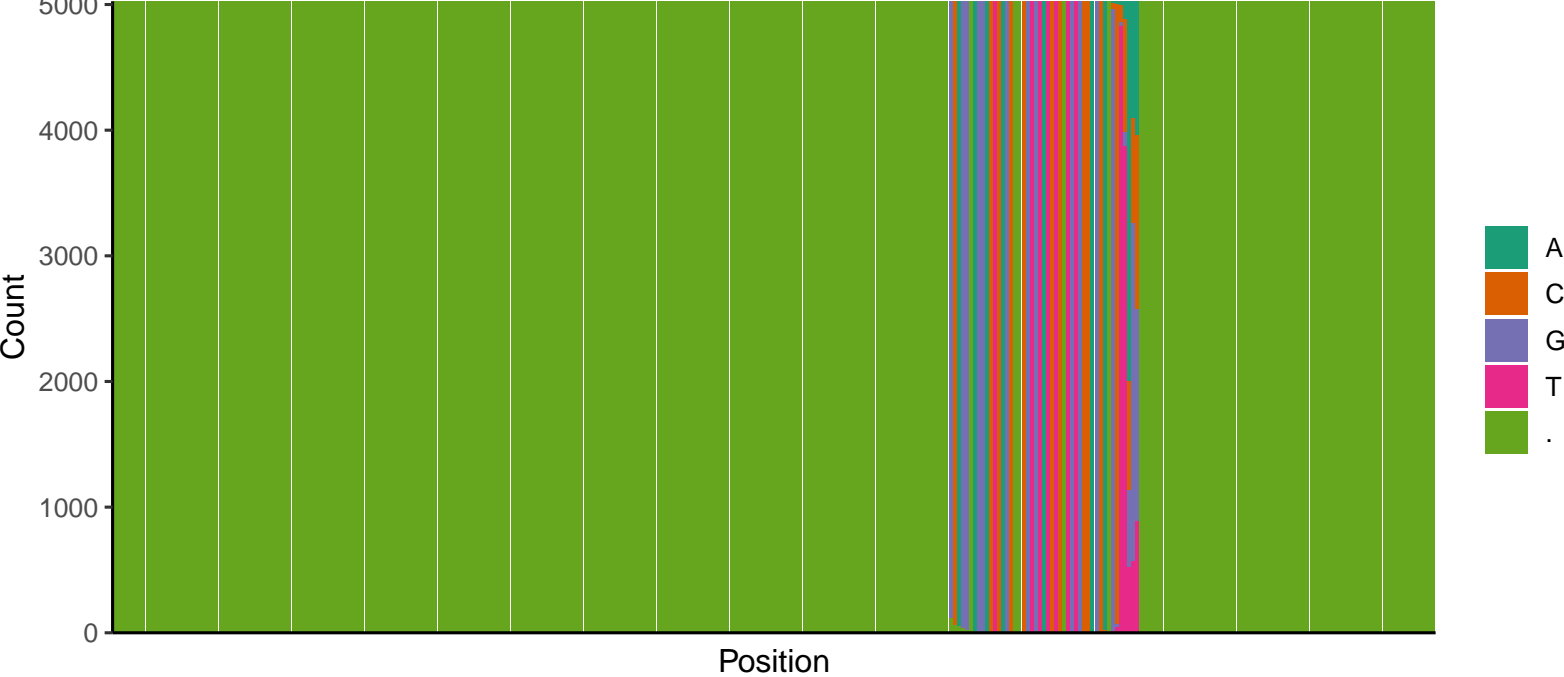
Gene TRBV7-8\*ap03\_C297A



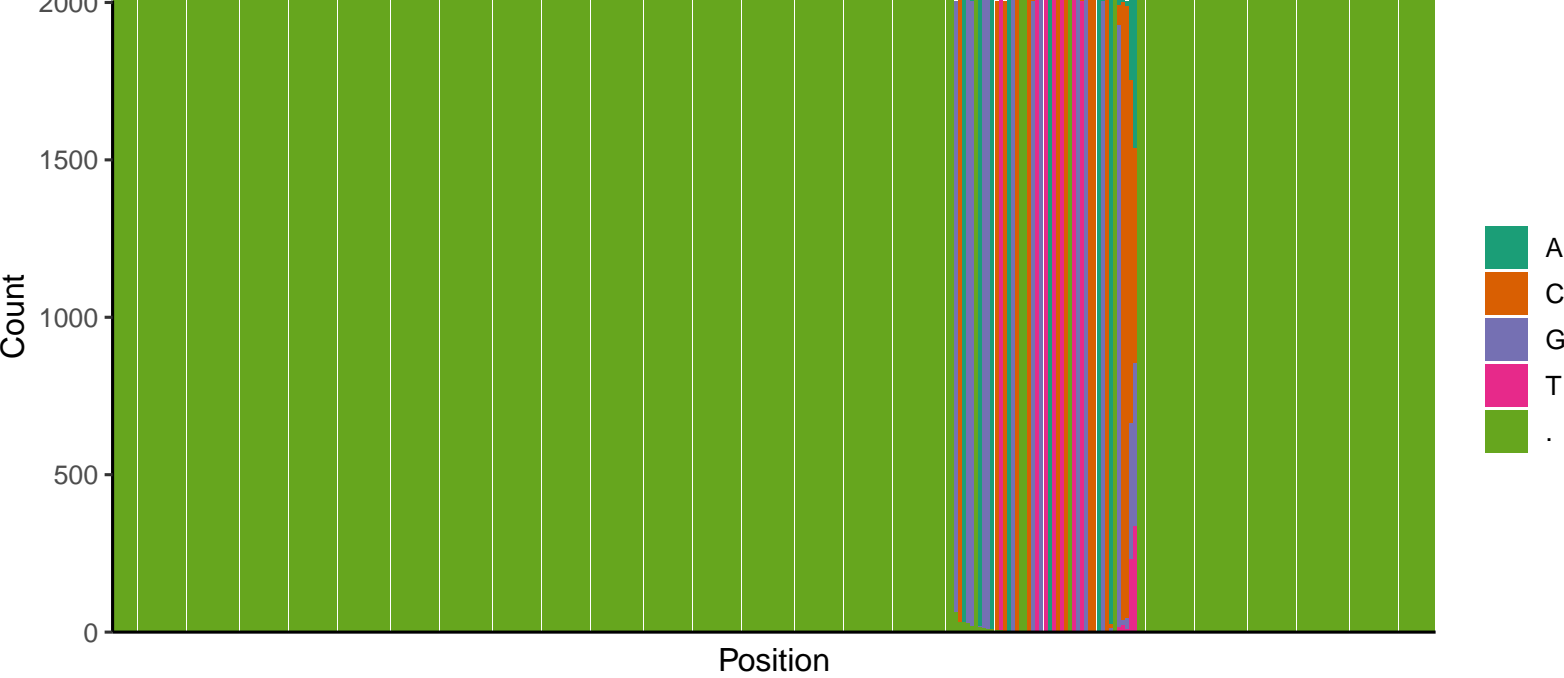
Gene TRBV7-1\*ap01\_G291C\_T296C\_C314T



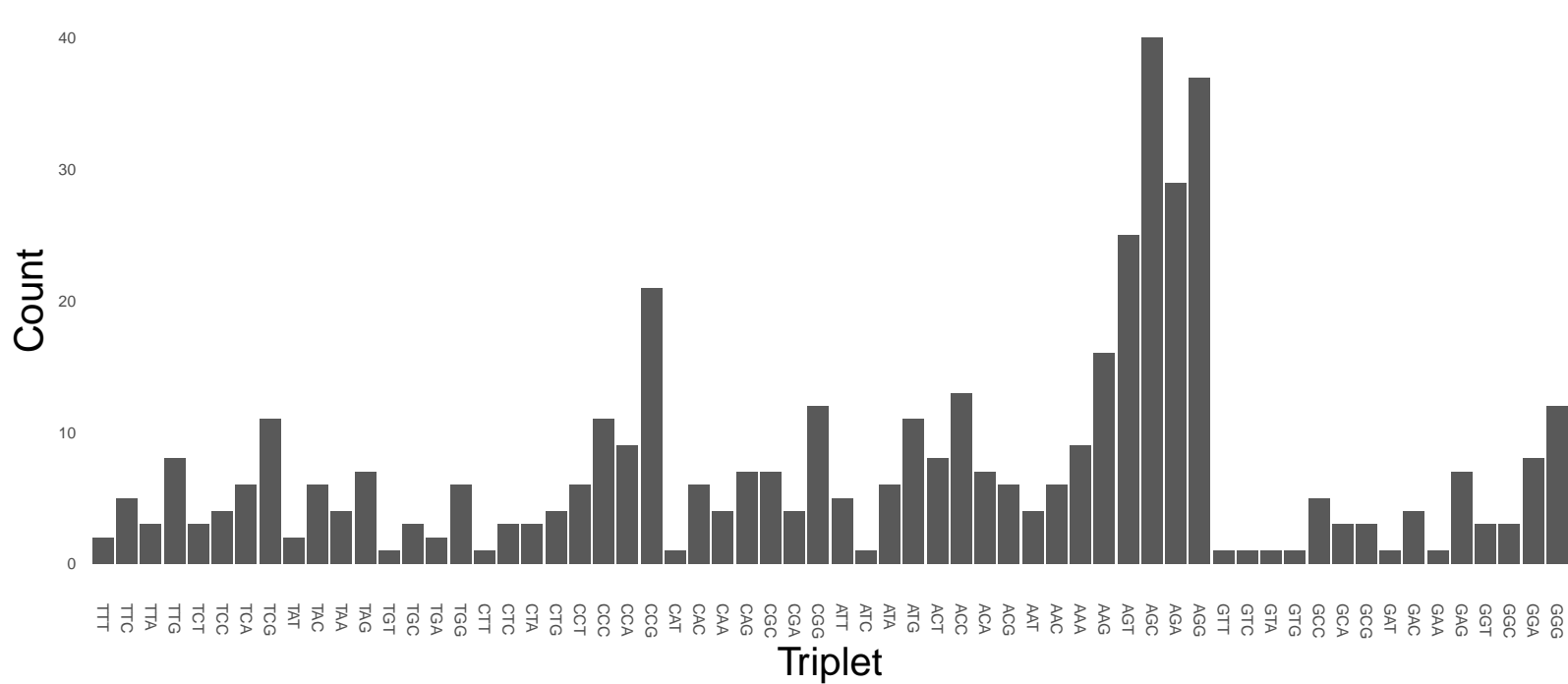
Gene TRBV7-2\*ap01\_G297A



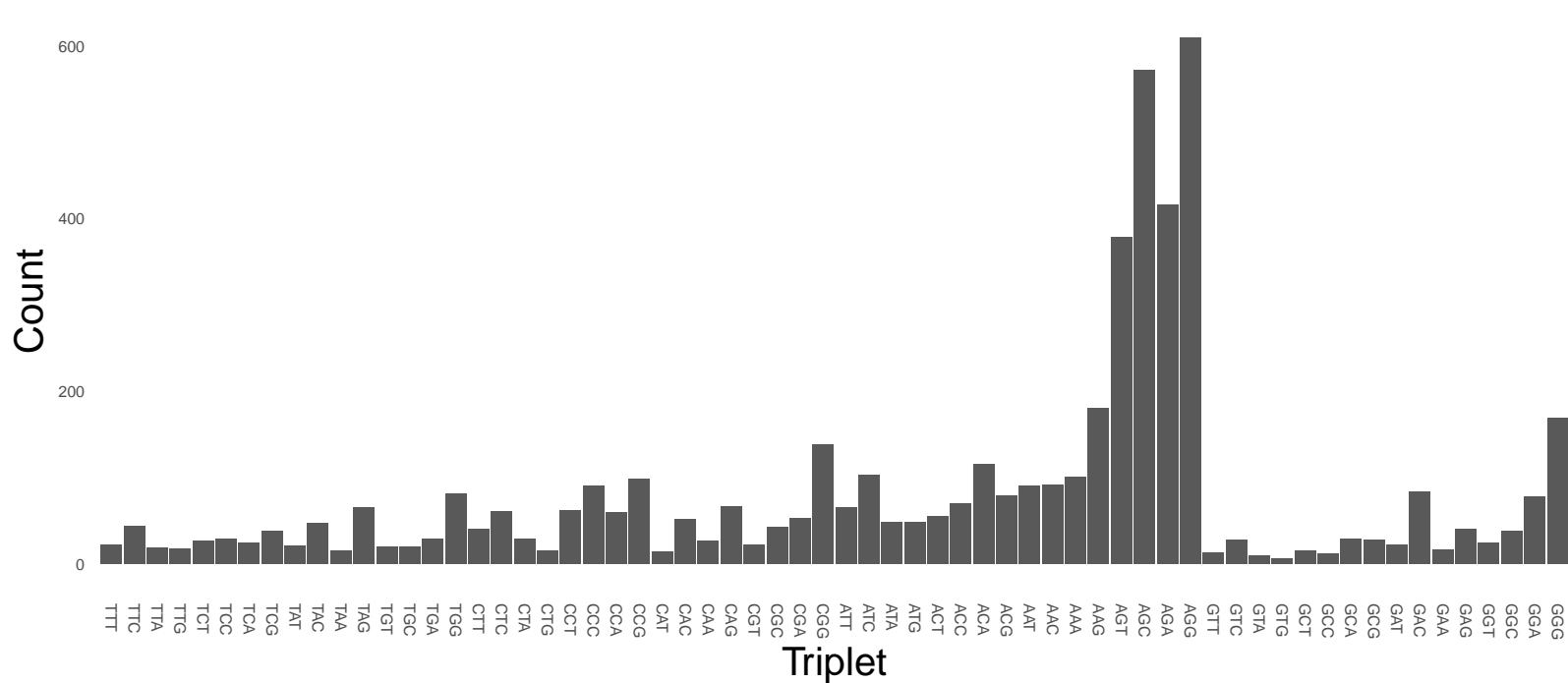
Gene TRBV7-8\*ap03\_C297A



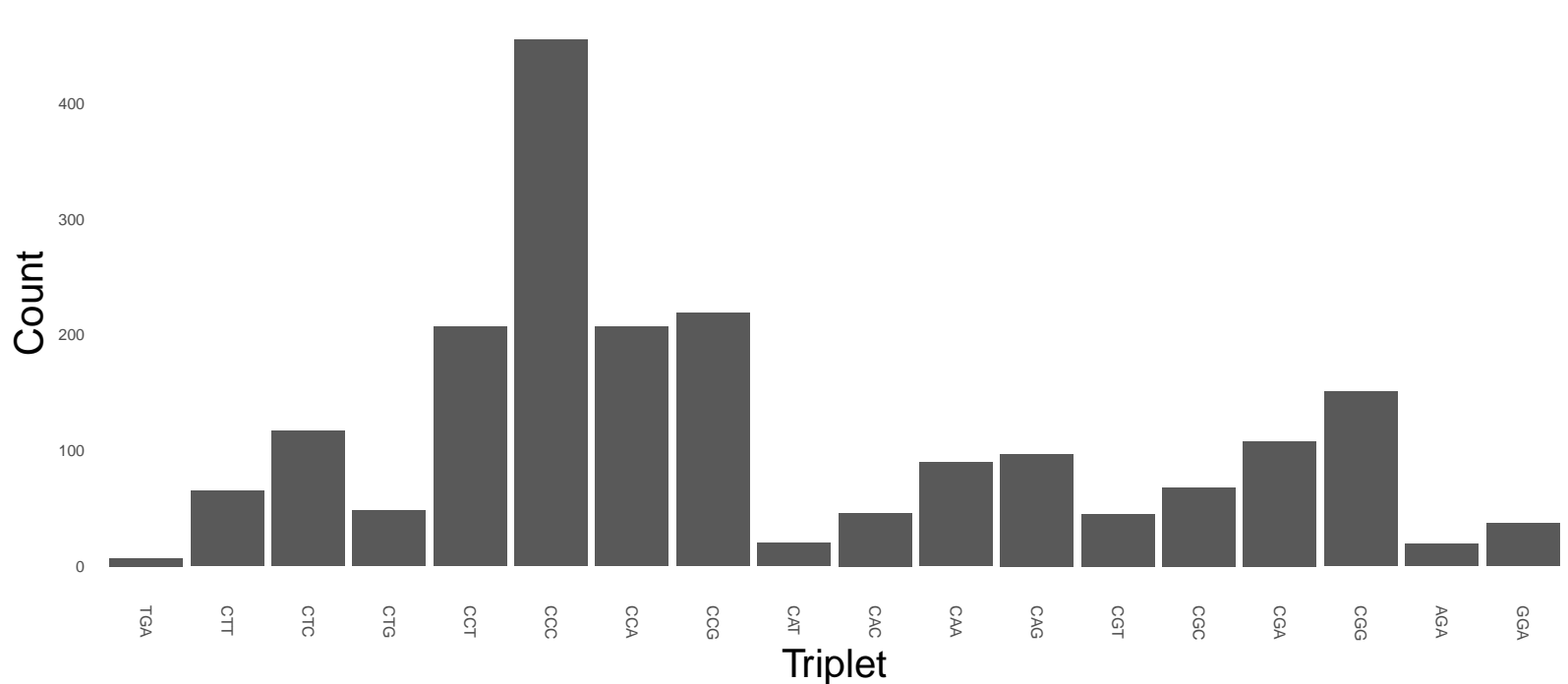
TRBV7-1\*ap01\_G291C\_T296C\_C314T- Final 3 nucleotides as a triplet



TRBV7-2\*ap01\_G297A- Final 3 nucleotides as a triplet

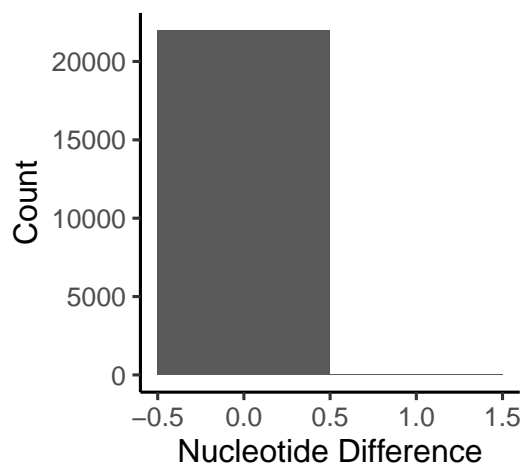


TRBV7-8\*ap03\_C297A- Final 3 nucleotides as a triplet



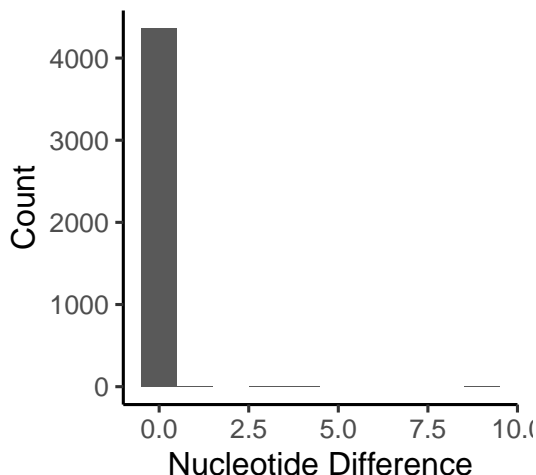
### TRBV20-1\*ap01

22034 sequences assigned  
21998 (99.8%) exact matches, in which:  
21976 unique CDR3  
13 unique J



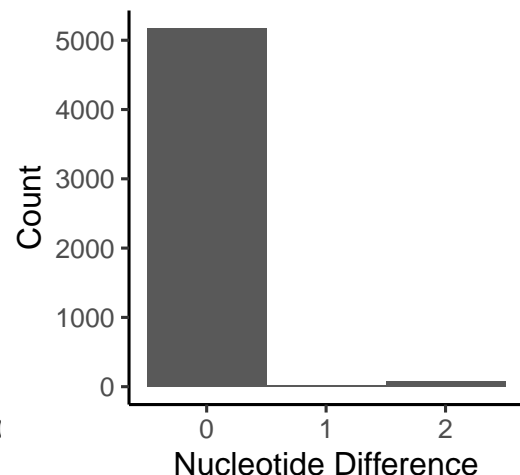
### TRBV10-2\*ap01

4372 sequences assigned  
4361 (99.7%) exact matches, in which:  
4360 unique CDR3  
13 unique J



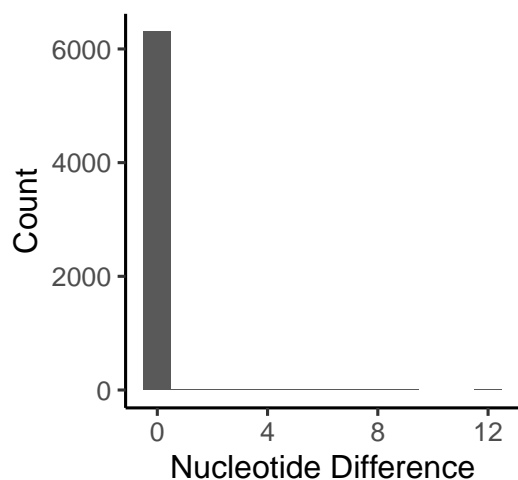
### TRBV13\*ap01

5271 sequences assigned  
5171 (98.1%) exact matches, in which:  
5169 unique CDR3  
13 unique J



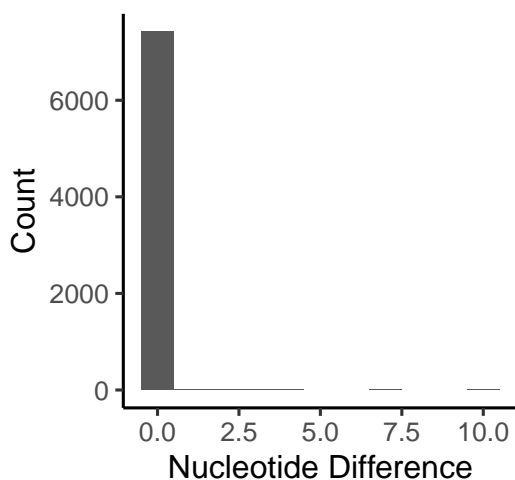
### TRBV10-1\*ap01

6333 sequences assigned  
6303 (99.5%) exact matches, in which:  
6302 unique CDR3  
13 unique J



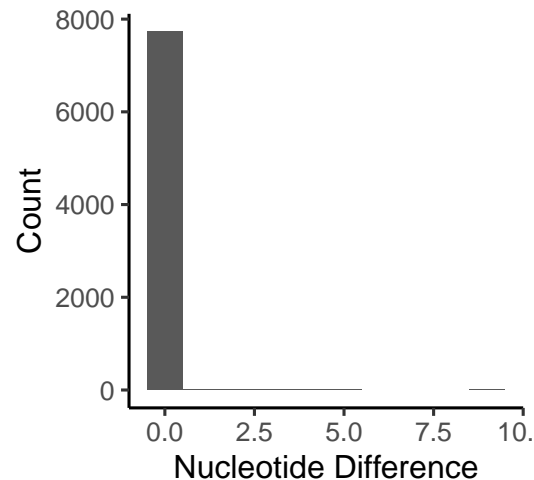
### TRBV10-3\*ap01

7450 sequences assigned  
7419 (99.6%) exact matches, in which:  
7416 unique CDR3  
13 unique J



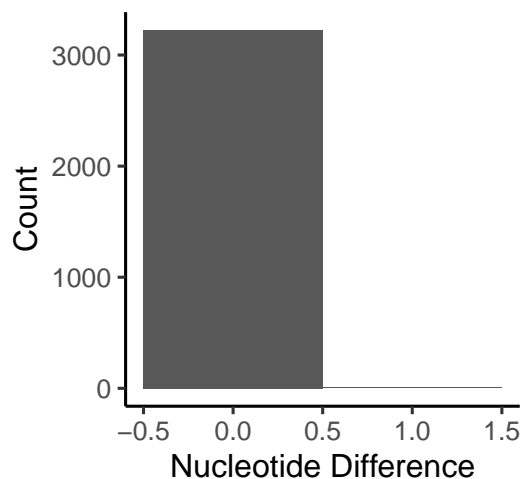
### TRBV14\*ap01

7748 sequences assigned  
7728 (99.7%) exact matches, in which:  
7727 unique CDR3  
13 unique J



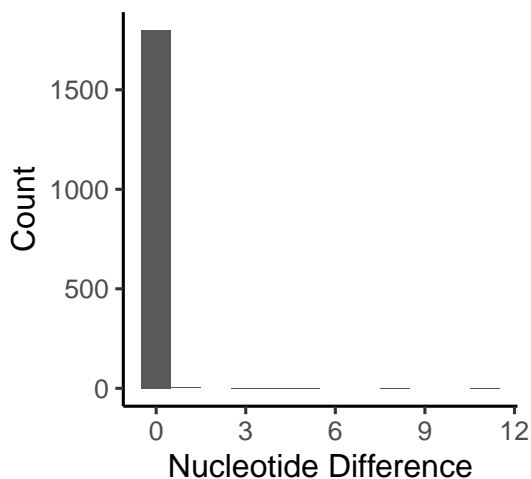
### TRBV20-1\*ap02

3231 sequences assigned  
3225 (99.8%) exact matches, in which:  
3222 unique CDR3  
13 unique J



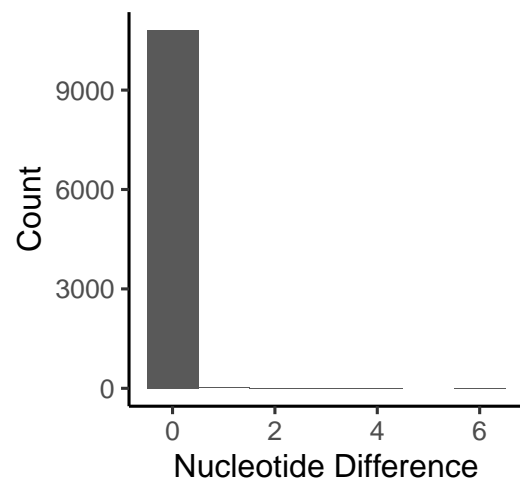
### TRBV1\*ap01

1810 sequences assigned  
1800 (99.4%) exact matches, in which:  
1796 unique CDR3  
13 unique J



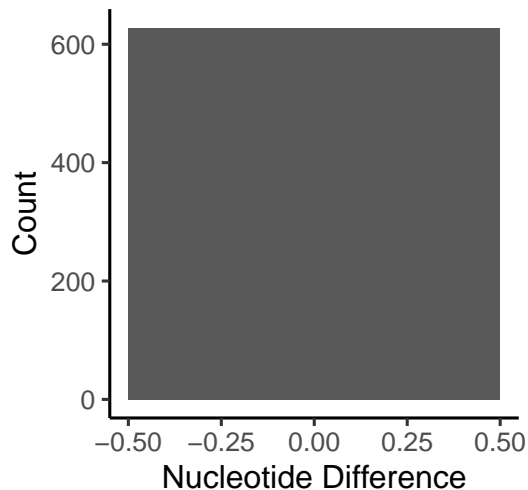
### TRBV15\*ap02

10837 sequences assigned  
10812 (99.8%) exact matches, in which:  
10801 unique CDR3  
13 unique J



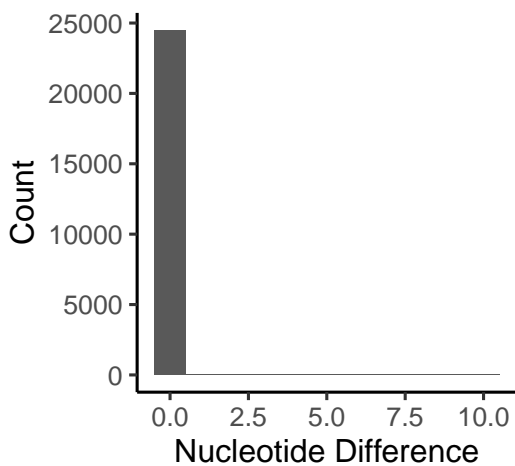
### TRBV16\*ap01

628 sequences assigned  
628 (100%) exact matches, in which:  
628 unique CDR3  
13 unique J



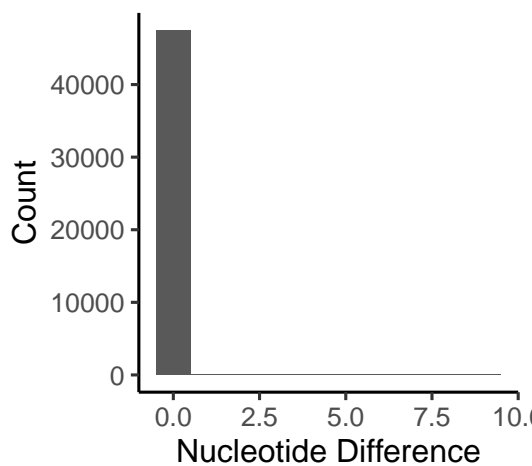
### TRBV19\*ap01

24577 sequences assigned  
24494 (99.7%) exact matches, in which:  
24492 unique CDR3  
13 unique J



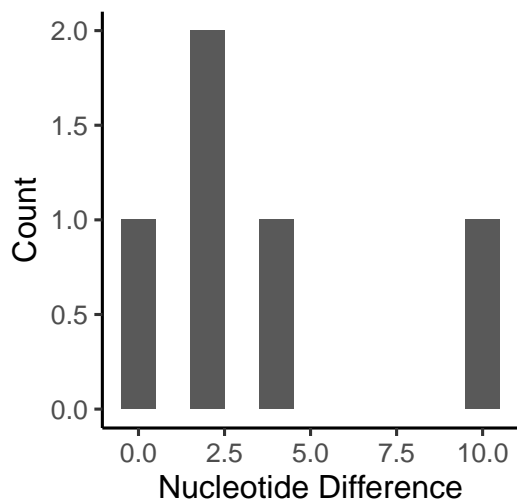
### TRBV27\*ap01

47662 sequences assigned  
47495 (99.6%) exact matches, in which:  
47394 unique CDR3  
13 unique J



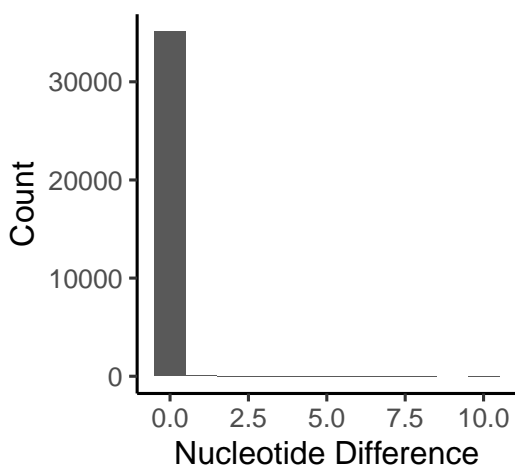
### TRBV17\*ap01

5 sequences assigned  
1 (20%) exact matches, in which:  
1 unique CDR3  
1 unique J



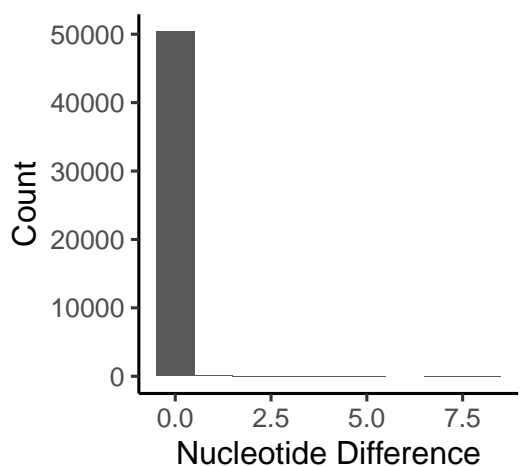
### TRBV2\*ap01

35238 sequences assigned  
35128 (99.7%) exact matches, in which:  
35075 unique CDR3  
13 unique J



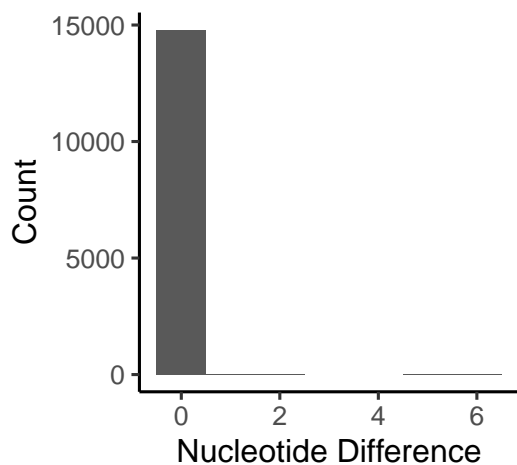
### TRBV28\*ap01

50508 sequences assigned  
50404 (99.8%) exact matches, in which:  
50387 unique CDR3  
13 unique J



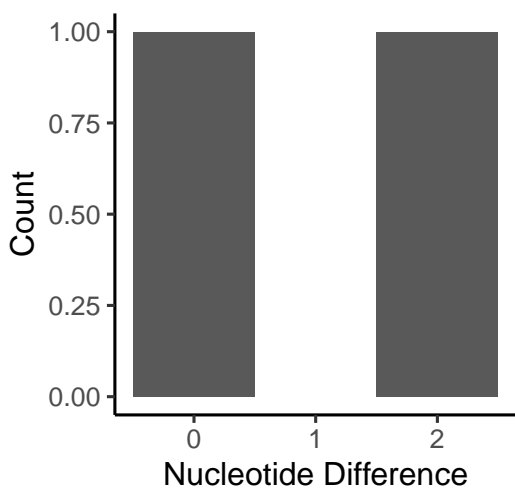
### TRBV18\*ap01

14812 sequences assigned  
14795 (99.9%) exact matches, in which:  
14792 unique CDR3  
13 unique J



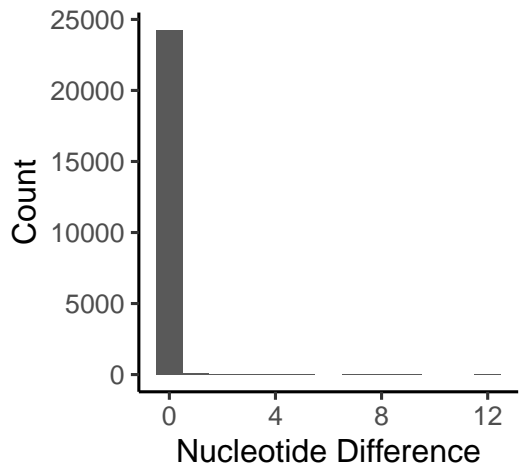
### TRBV26\*ap01

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



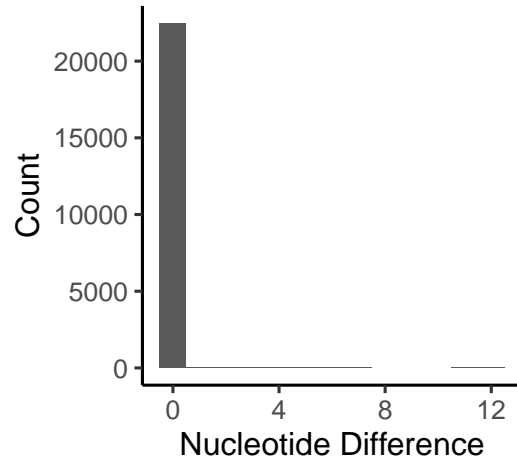
### TRBV30\*ap01

24389 sequences assigned  
24270 (99.5%) exact matches, in which:  
24213 unique CDR3  
13 unique J



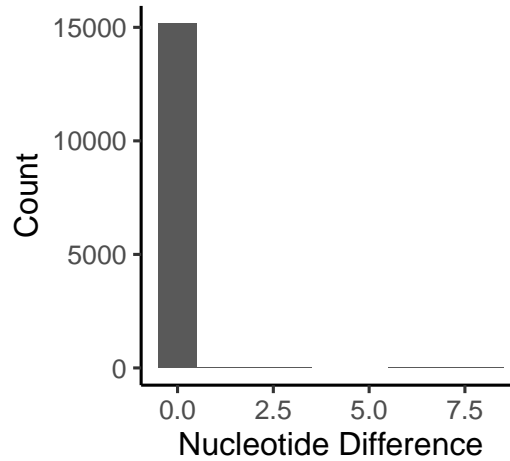
### TRBV9\*ap01

22535 sequences assigned  
22476 (99.7%) exact matches, in which:  
22450 unique CDR3  
13 unique J



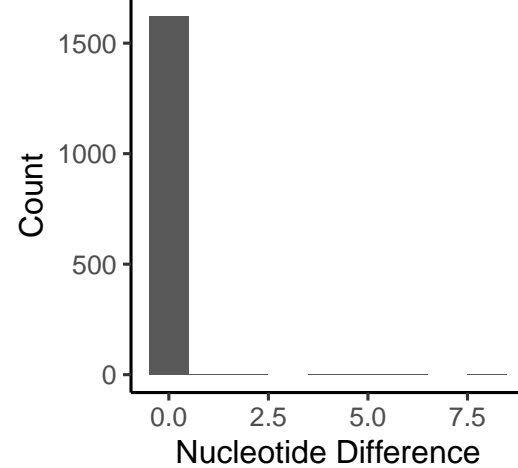
### TRBV11-2\*ap01

15211 sequences assigned  
15185 (99.8%) exact matches, in which:  
15183 unique CDR3  
13 unique J



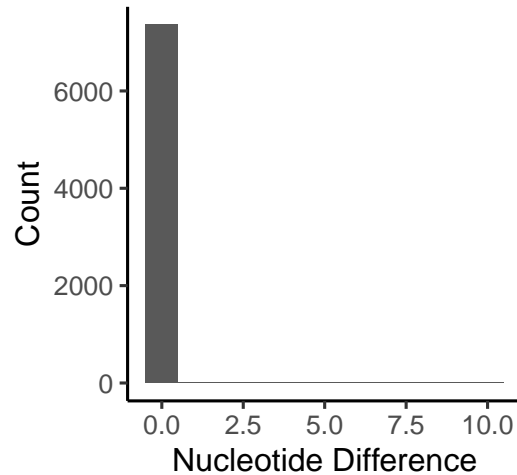
### TRBV12-2\*ap01

1629 sequences assigned  
1621 (99.5%) exact matches, in which:  
1621 unique CDR3  
13 unique J



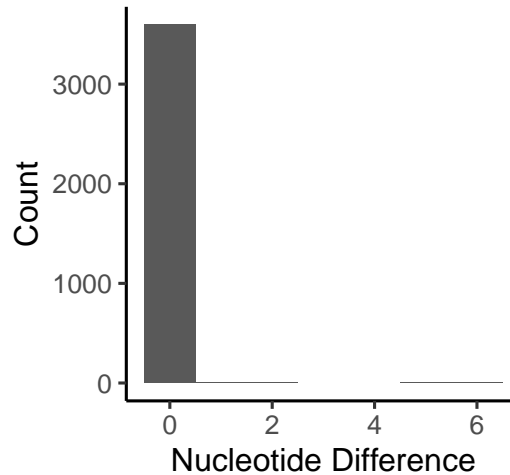
### TRBV21-1\*ap01

7429 sequences assigned  
7360 (99.1%) exact matches, in which:  
7359 unique CDR3  
13 unique J



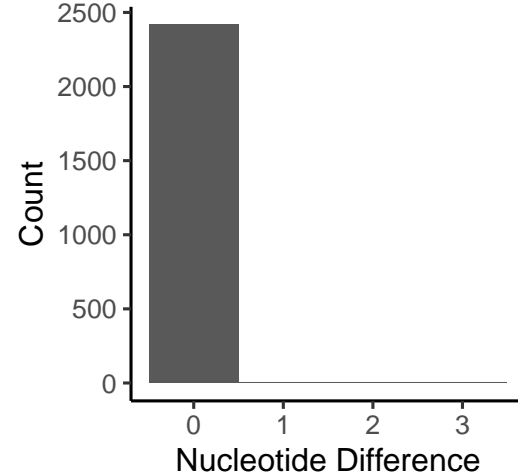
### TRBV11-3\*ap01

3610 sequences assigned  
3596 (99.6%) exact matches, in which:  
3595 unique CDR3  
13 unique J



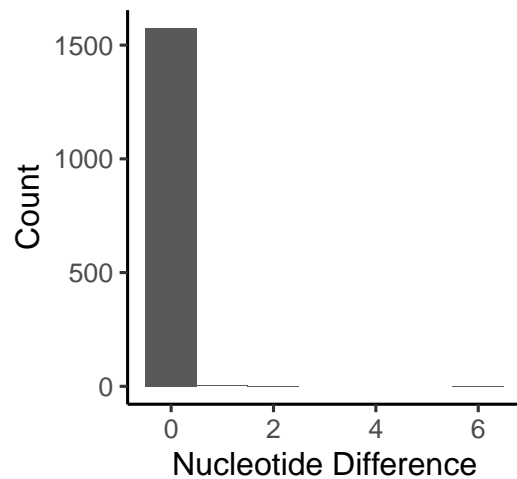
### TRBV12-5\*ap01

2428 sequences assigned  
2417 (99.5%) exact matches, in which:  
2417 unique CDR3  
13 unique J



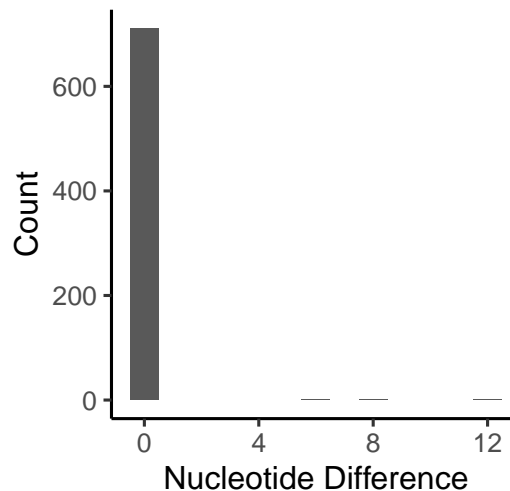
### TRBV11-1\*ap01

1580 sequences assigned  
1575 (99.7%) exact matches, in which:  
1573 unique CDR3  
13 unique J



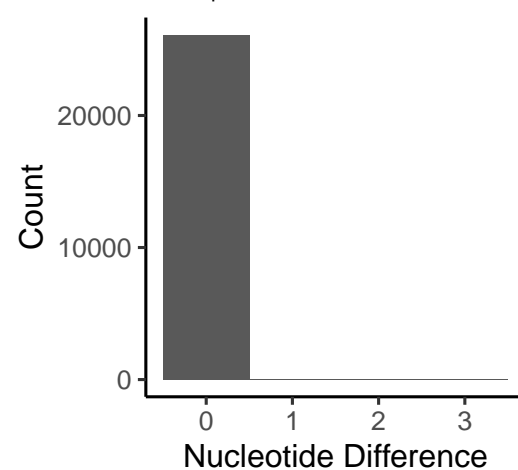
### TRBV12-1\*ap01

714 sequences assigned  
711 (99.6%) exact matches, in which:  
711 unique CDR3  
13 unique J



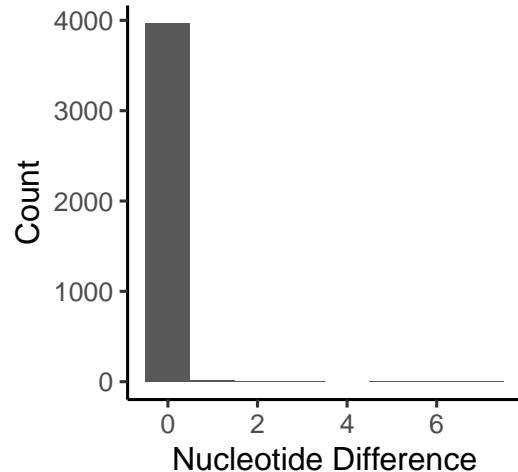
### TRBV12-34\*ap01

26165 sequences assigned  
26112 (99.8%) exact matches, in which:  
26104 unique CDR3  
13 unique J



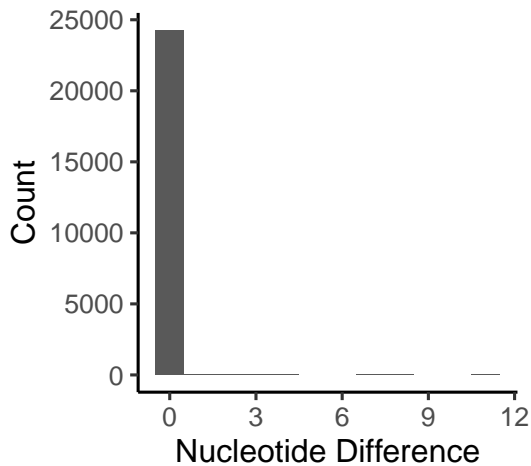
### TRBV23-1\*ap01

3993 sequences assigned  
3966 (99.3%) exact matches, in which:  
3964 unique CDR3  
14 unique J



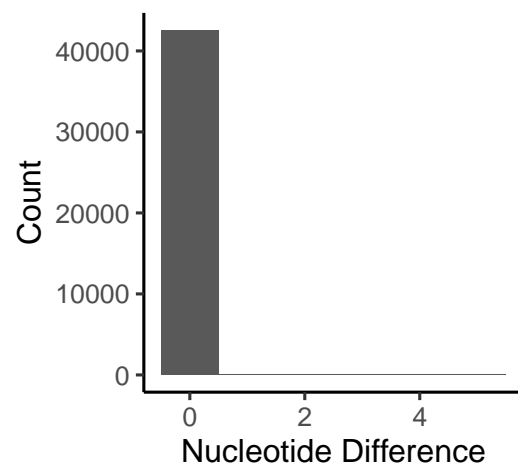
### TRBV4-1\*ap01

24311 sequences assigned  
24269 (99.8%) exact matches, in which:  
24260 unique CDR3  
13 unique J



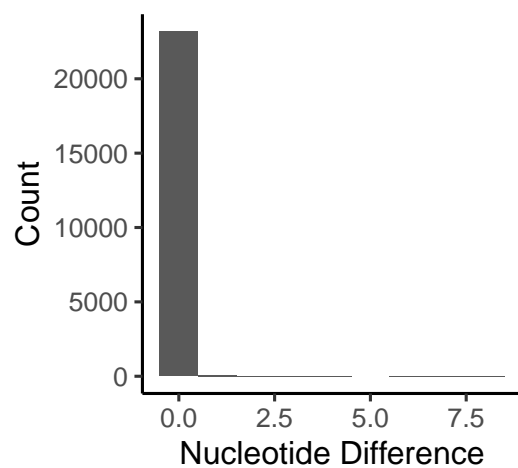
### TRBV5-1\*ap01

42651 sequences assigned  
42565 (99.8%) exact matches, in which:  
42497 unique CDR3  
13 unique J



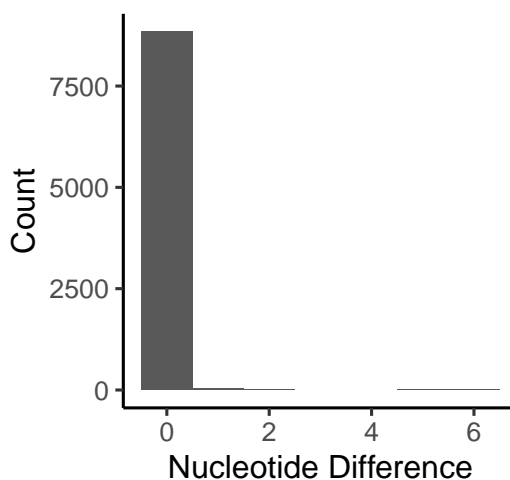
### TRBV3-12\*ap01

23262 sequences assigned  
23181 (99.7%) exact matches, in which:  
23138 unique CDR3  
14 unique J



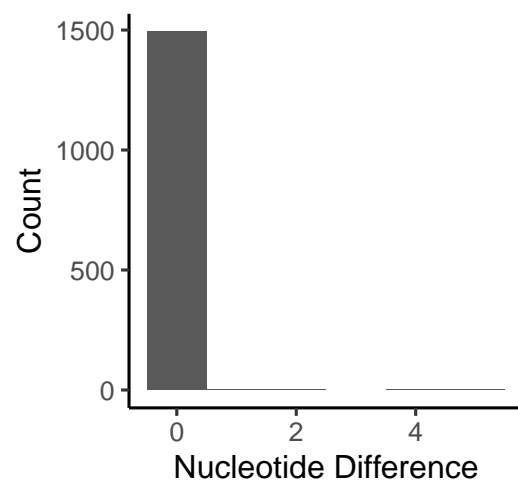
### TRBV4-2\*ap01

8876 sequences assigned  
8840 (99.6%) exact matches, in which:  
8836 unique CDR3  
13 unique J



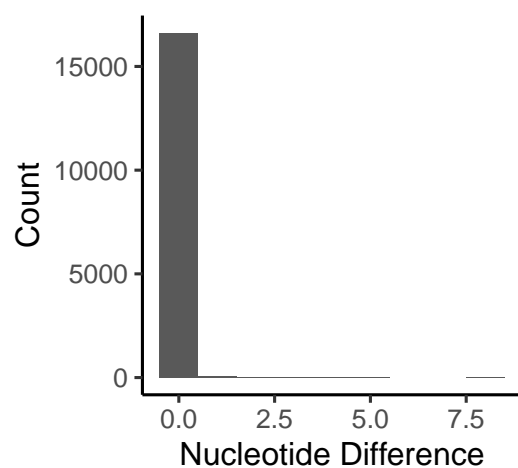
### TRBV5-3\*ap01

1499 sequences assigned  
1493 (99.6%) exact matches, in which:  
1492 unique CDR3  
13 unique J



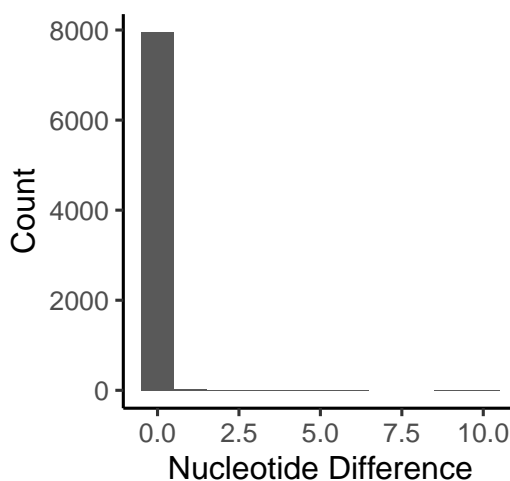
### TRBV24-1\*ap01

16698 sequences assigned  
16623 (99.6%) exact matches, in which:  
16591 unique CDR3  
13 unique J



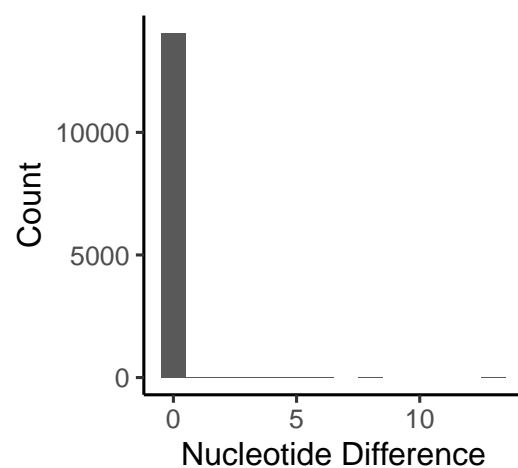
### TRBV25-1\*ap01

8010 sequences assigned  
7955 (99.3%) exact matches, in which:  
7941 unique CDR3  
13 unique J



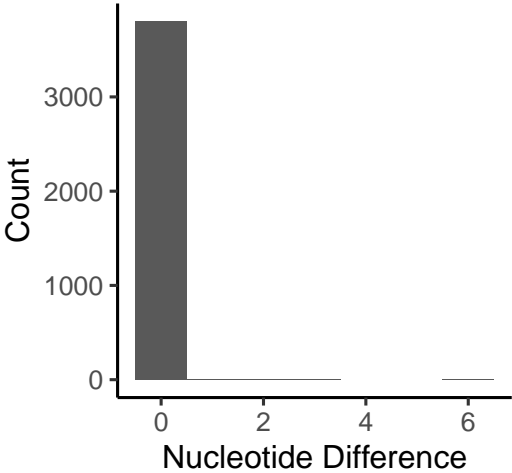
### TRBV5-4\*ap01

14089 sequences assigned  
14061 (99.8%) exact matches, in which:  
14060 unique CDR3  
13 unique J



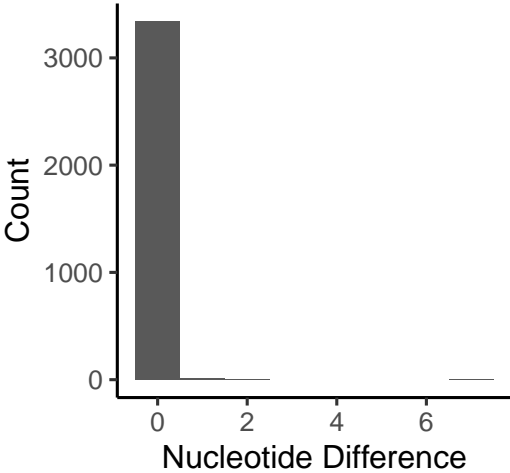
TRBV5-5\*ap01

3815 sequences assigned  
3801 (99.6%) exact matches, in which:  
3796 unique CDR3  
13 unique J



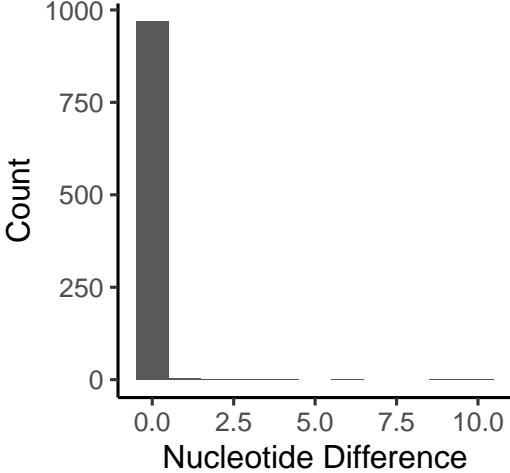
TRBV5-8\*ap01

3361 sequences assigned  
3340 (99.4%) exact matches, in which:  
3340 unique CDR3  
13 unique J



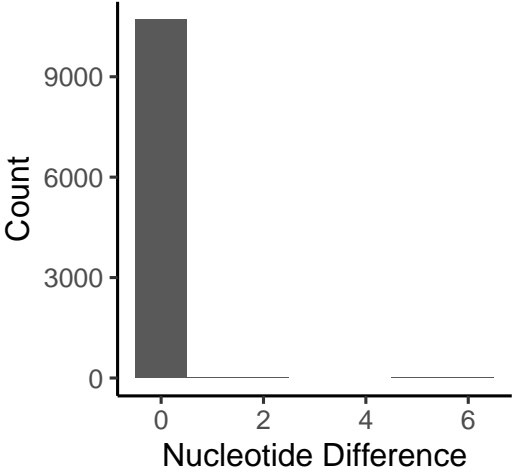
TRBV6-7\*ap01

982 sequences assigned  
969 (98.7%) exact matches, in which:  
969 unique CDR3  
13 unique J



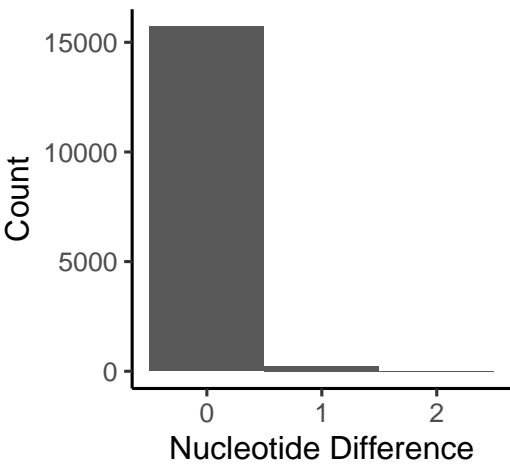
TRBV5-6\*ap01

10731 sequences assigned  
10703 (99.7%) exact matches, in which:  
10644 unique CDR3  
13 unique J



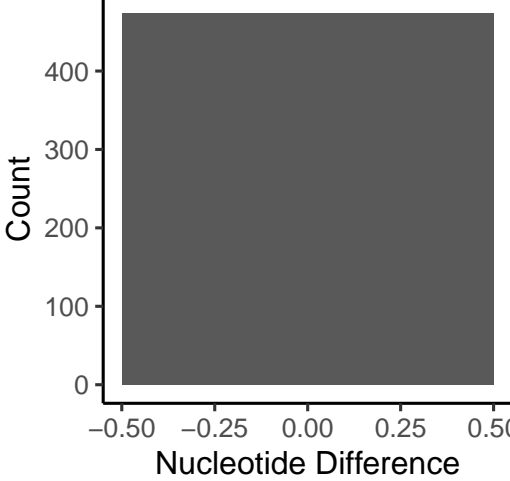
TRBV6-1\*ap01

15972 sequences assigned  
15723 (98.4%) exact matches, in which:  
15703 unique CDR3  
14 unique J



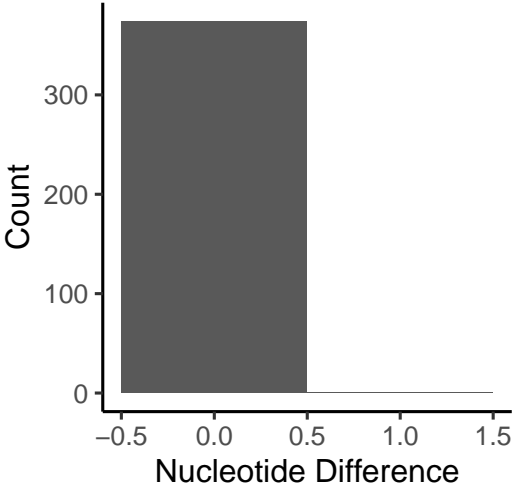
TRBV6-8\*ap01

474 sequences assigned  
474 (100%) exact matches, in which:  
474 unique CDR3  
13 unique J



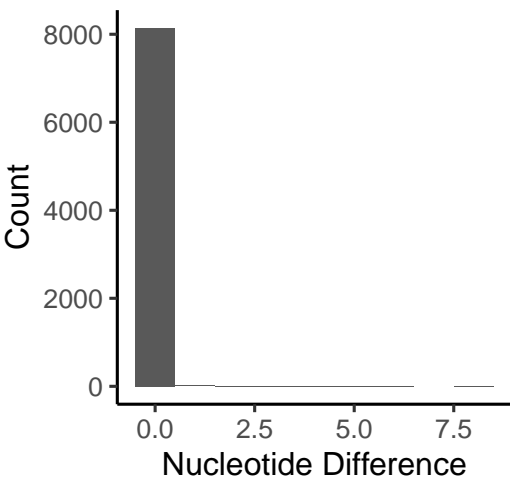
TRBV5-7\*ap01

375 sequences assigned  
374 (99.7%) exact matches, in which:  
372 unique CDR3  
13 unique J



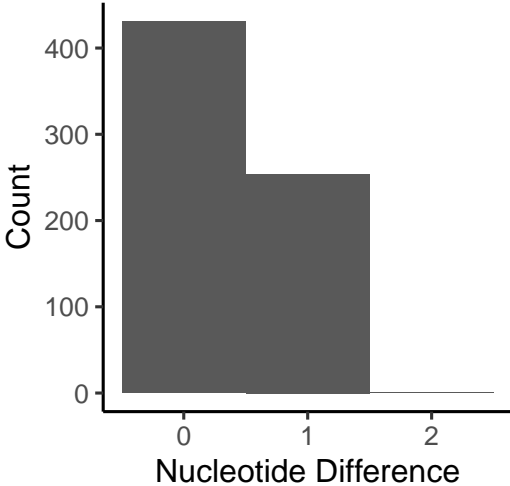
TRBV6-4\*ap01

8187 sequences assigned  
8141 (99.4%) exact matches, in which:  
8137 unique CDR3  
13 unique J



TRBV6-9\*ap01

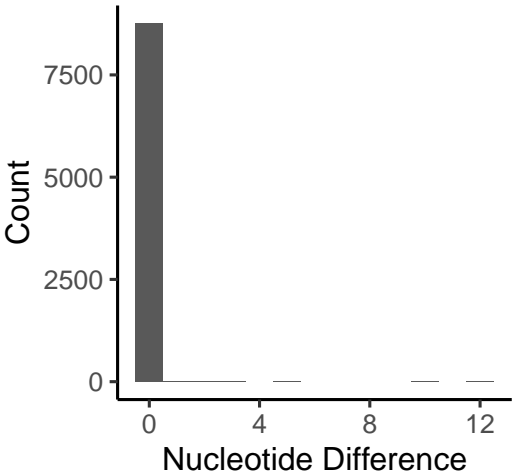
686 sequences assigned  
431 (62.8%) exact matches, in which:  
430 unique CDR3  
13 unique J





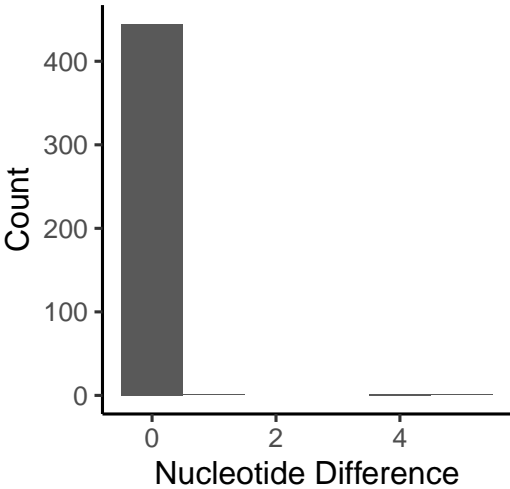
TRBV6-23\*ap01

8787 sequences assigned  
8759 (99.7%) exact matches, in which:  
8750 unique CDR3  
13 unique J



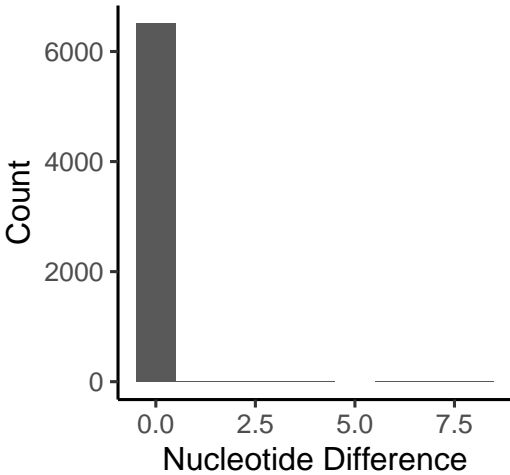
TRBV7-1\*ap01\_G291C\_

449 sequences assigned  
445 (99.1%) exact matches, in which:  
445 unique CDR3  
13 unique J



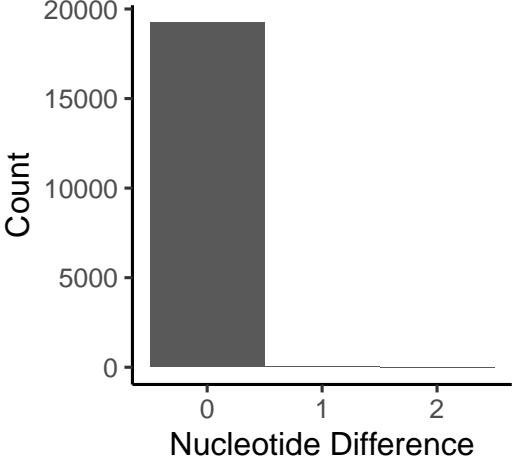
TRBV7-3\*ap01

6537 sequences assigned  
6511 (99.6%) exact matches, in which:  
6510 unique CDR3  
13 unique J



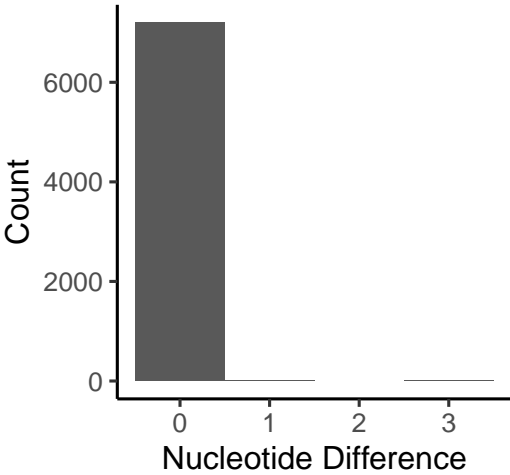
TRBV6-56\*ap01

19281 sequences assigned  
19247 (99.8%) exact matches, in which:  
19233 unique CDR3  
13 unique J



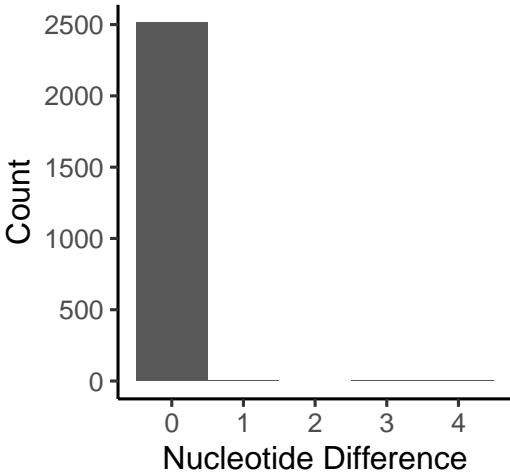
TRBV7-2\*ap01

7202 sequences assigned  
7197 (99.9%) exact matches, in which:  
7197 unique CDR3  
13 unique J



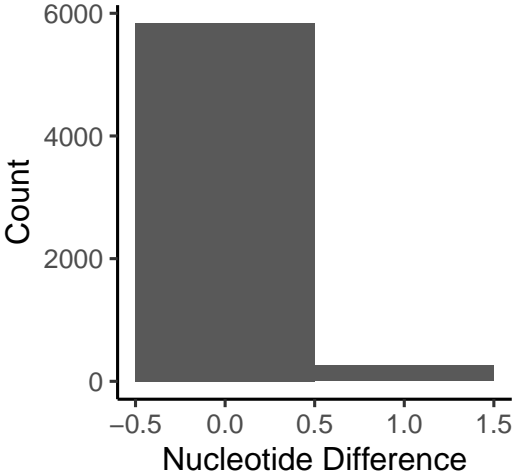
TRBV7-3\*ap03

2519 sequences assigned  
2513 (99.8%) exact matches, in which:  
2512 unique CDR3  
13 unique J



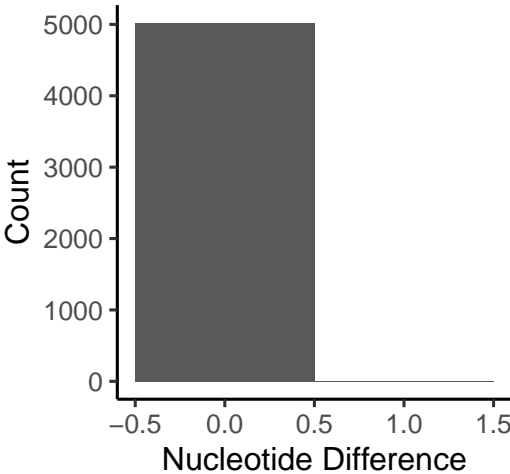
TRBV6-56\*ap02

6098 sequences assigned  
5841 (95.8%) exact matches, in which:  
5838 unique CDR3  
13 unique J



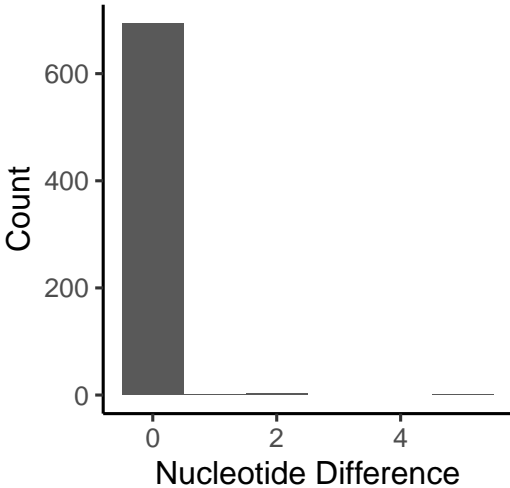
TRBV7-2\*ap01\_G297A

5026 sequences assigned  
5019 (99.9%) exact matches, in which:  
5019 unique CDR3  
13 unique J



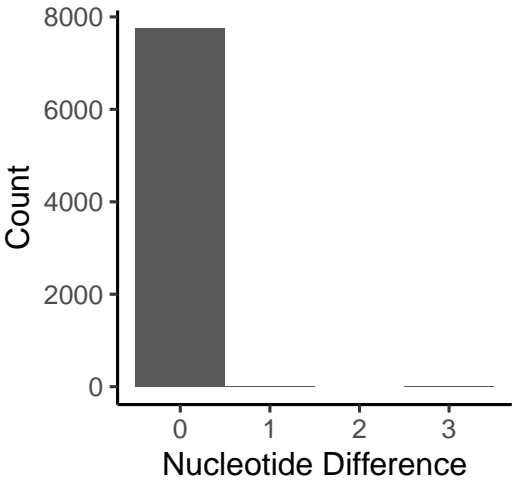
TRBV7-4\*ap01

699 sequences assigned  
694 (99.3%) exact matches, in which:  
694 unique CDR3  
13 unique J



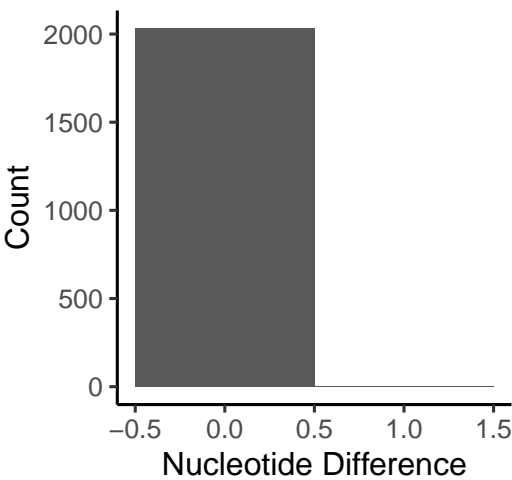
TRBV7-6\*ap01

7766 sequences assigned  
7751 (99.8%) exact matches, in which:  
7747 unique CDR3  
14 unique J



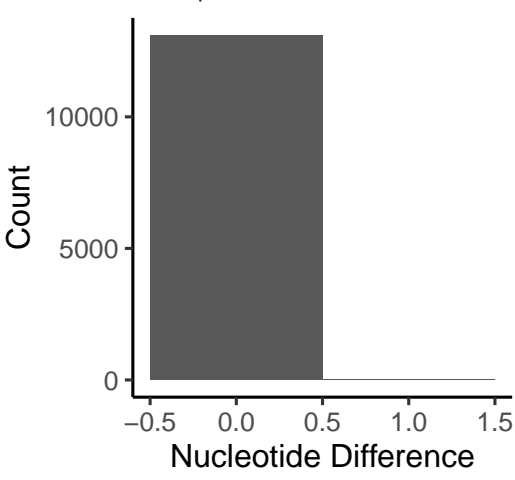
TRBV7-8\*ap03

2037 sequences assigned  
2032 (99.8%) exact matches, in which:  
2031 unique CDR3  
13 unique J



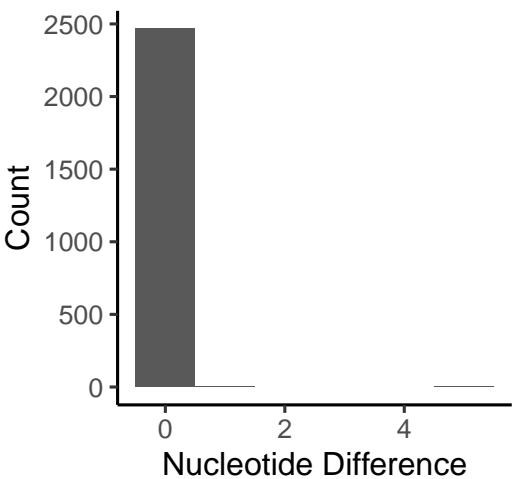
TRBV29-1\*ap01

13141 sequences assigned  
13105 (99.7%) exact matches, in which:  
13068 unique CDR3  
13 unique J



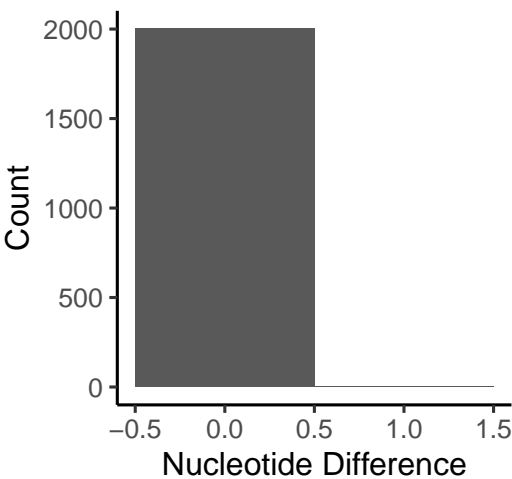
TRBV7-7\*ap01

2471 sequences assigned  
2467 (99.8%) exact matches, in which:  
2467 unique CDR3  
13 unique J



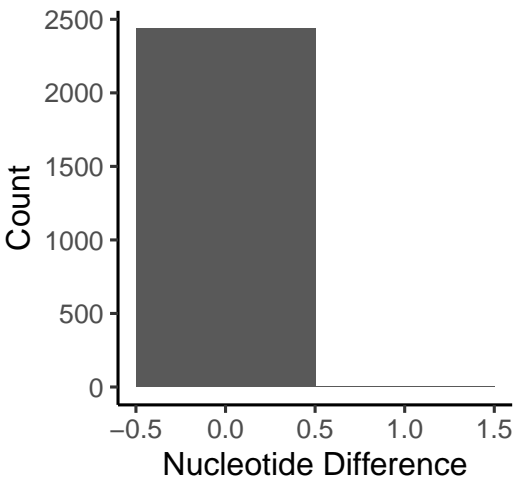
TRBV7-8\*ap03\_C297A

2006 sequences assigned  
2002 (99.8%) exact matches, in which:  
2002 unique CDR3  
13 unique J



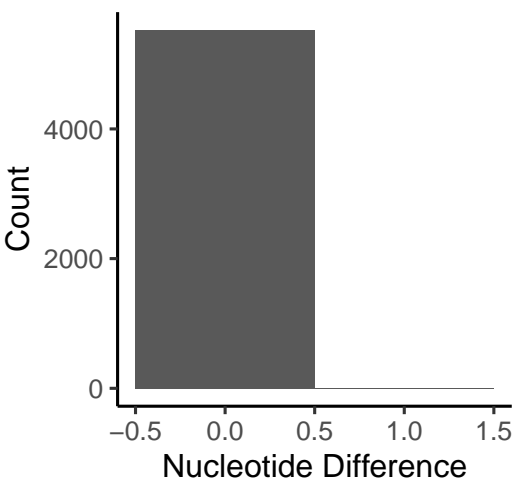
TRBV29-1\*ap02

2441 sequences assigned  
2436 (99.8%) exact matches, in which:  
2430 unique CDR3  
13 unique J



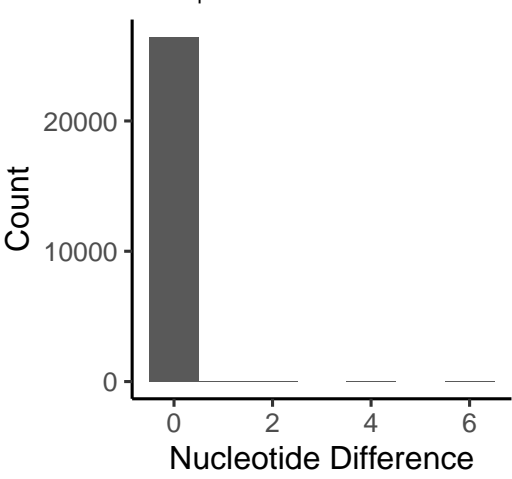
TRBV7-8\*ap01

5529 sequences assigned  
5525 (99.9%) exact matches, in which:  
5525 unique CDR3  
13 unique J

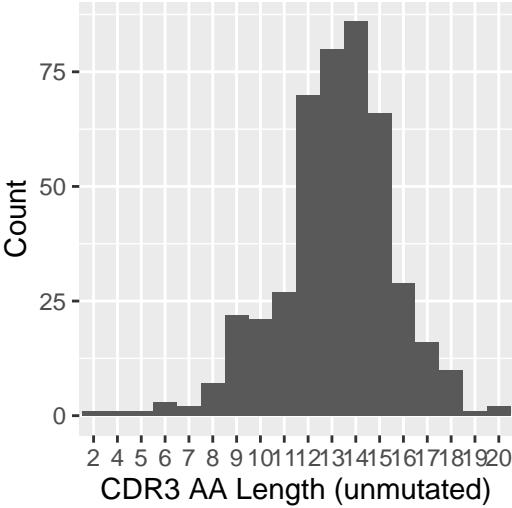


TRBV7-9\*ap01

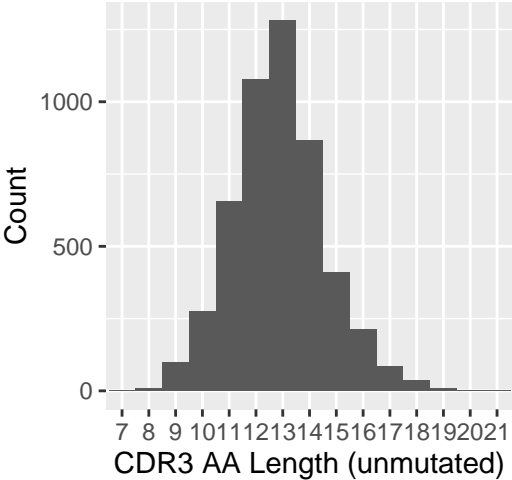
26497 sequences assigned  
26459 (99.9%) exact matches, in which:  
26455 unique CDR3  
13 unique J



TRBV7-1\*ap01\_G291C\_T296C\_C314T



TRBV7-2\*ap01\_G297A



TRBV7-8\*ap03\_C297A

