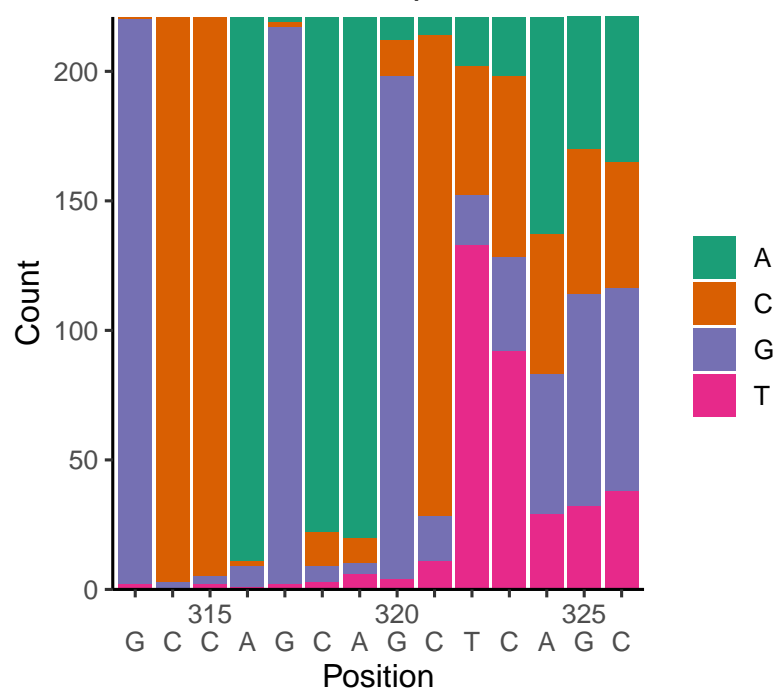
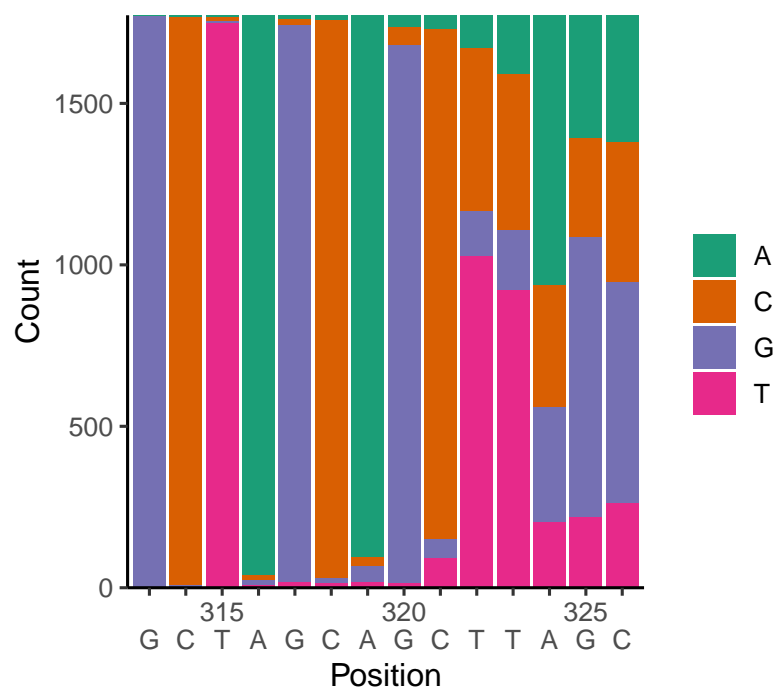


Gene TRBV7-1\*ap01\_G291C\_T296C

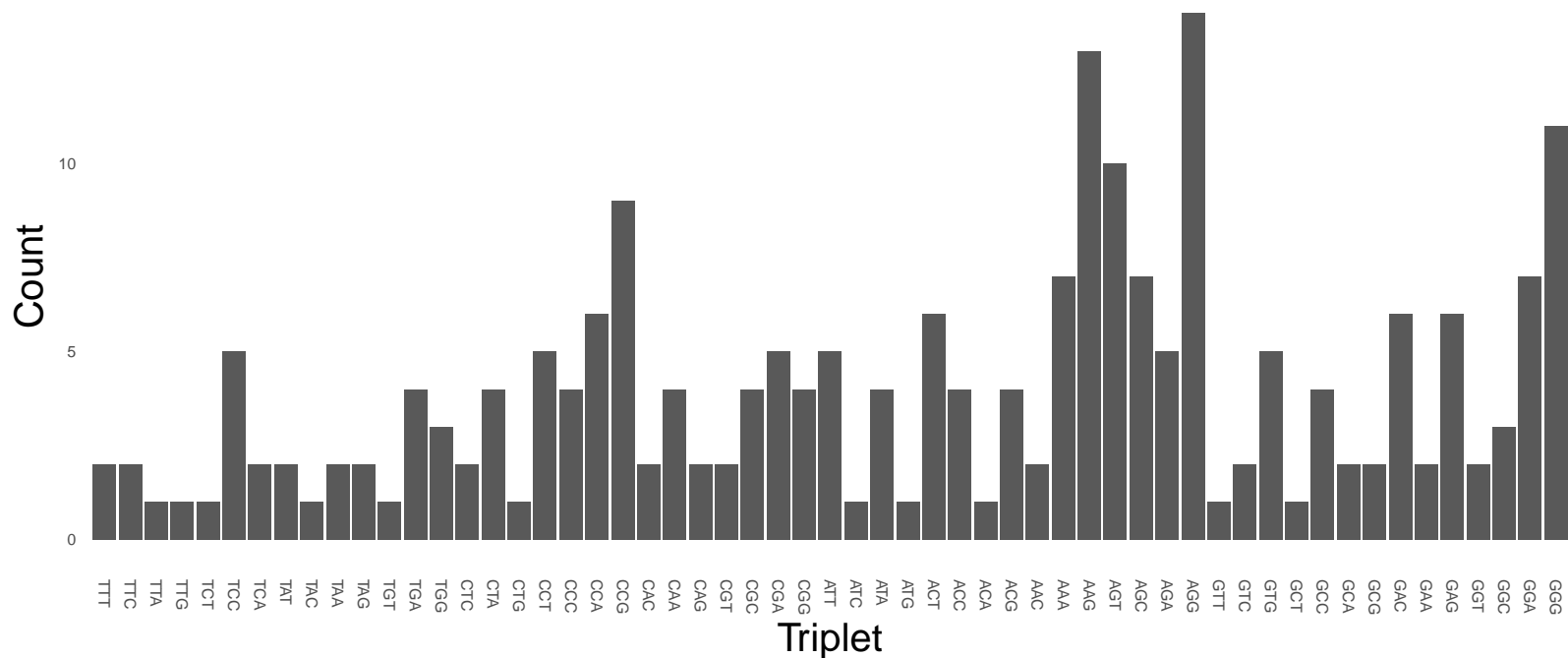


Gene TRBV7-7\*ap01\_C315T

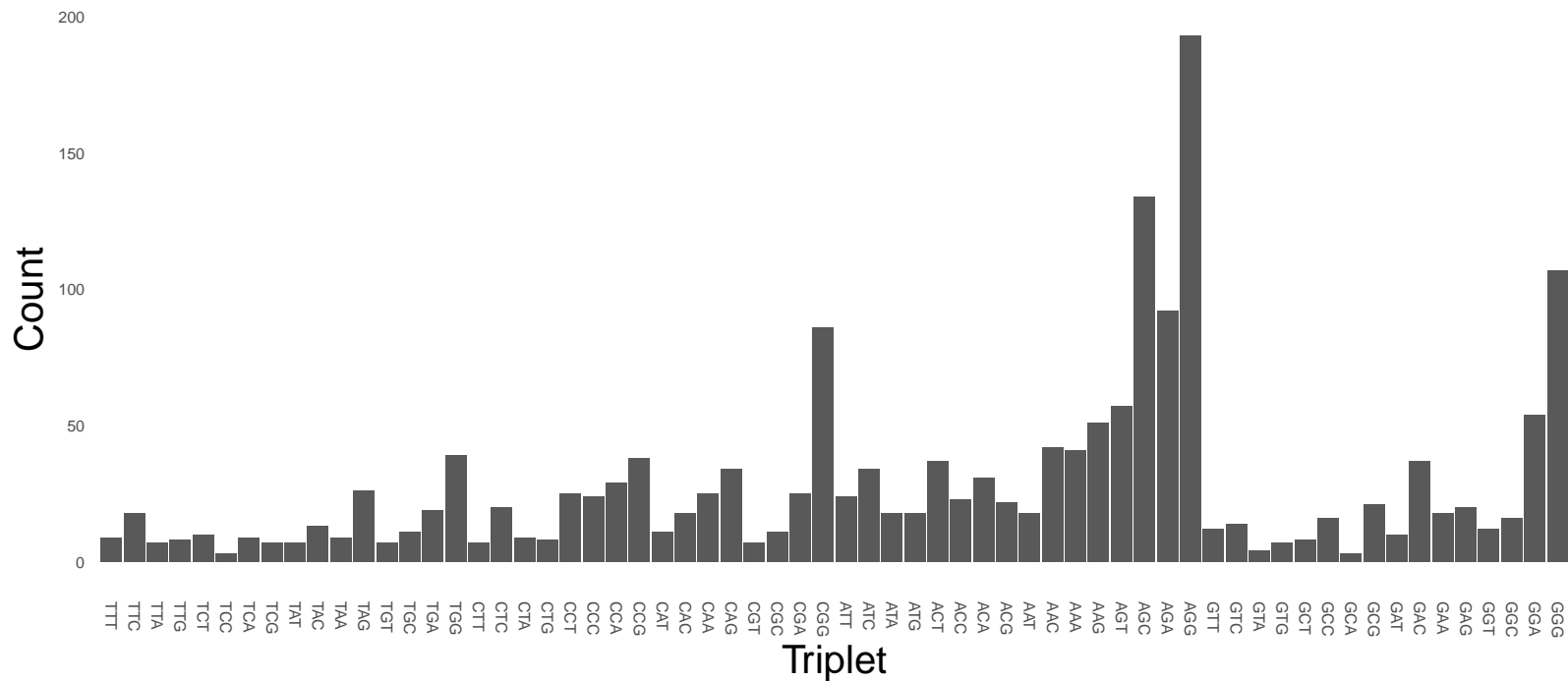




TRBV7-1\*ap01\_G291C\_T296C- Final 3 nucleotides as a triplet

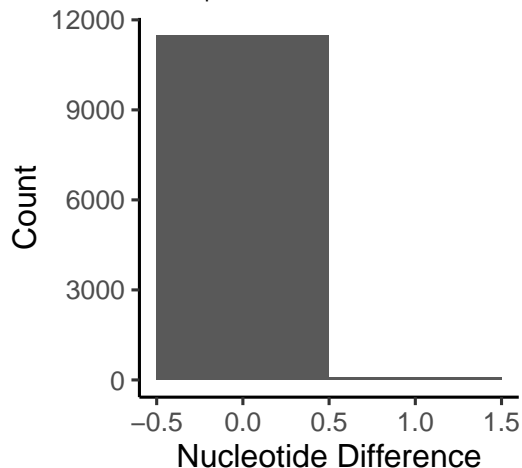


TRBV7-7\*ap01\_C315T- Final 3 nucleotides as a triplet



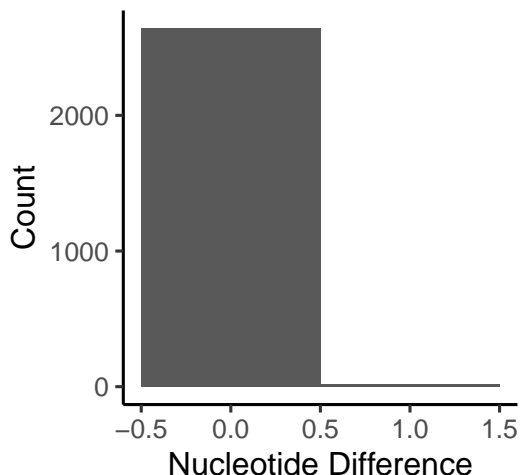
### TRBV20-1\*ap01

11589 sequences assigned  
11490 (99.1%) exact matches, in which:  
11369 unique CDR3  
13 unique J



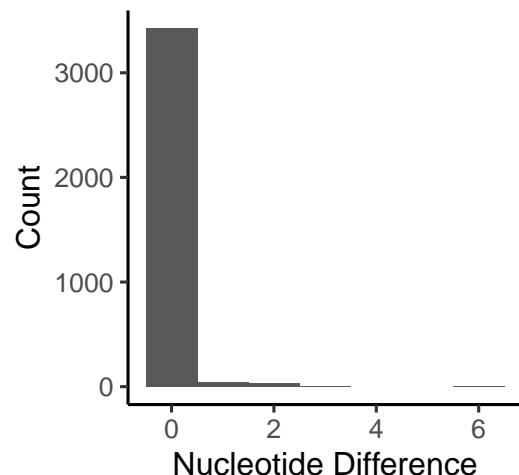
### TRBV10-2\*ap01

2657 sequences assigned  
2641 (99.4%) exact matches, in which:  
2608 unique CDR3  
13 unique J



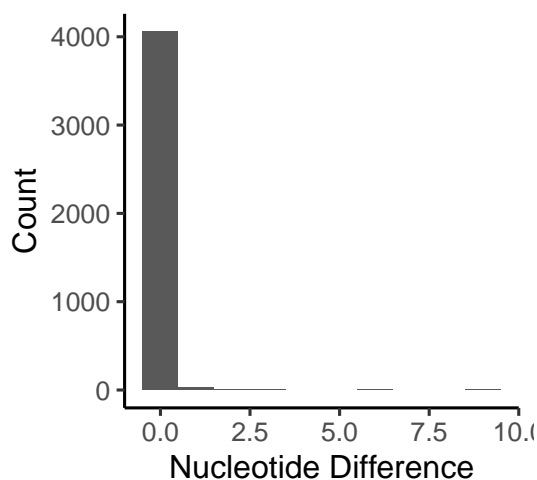
### TRBV13\*ap01

3502 sequences assigned  
3424 (97.8%) exact matches, in which:  
3345 unique CDR3  
13 unique J



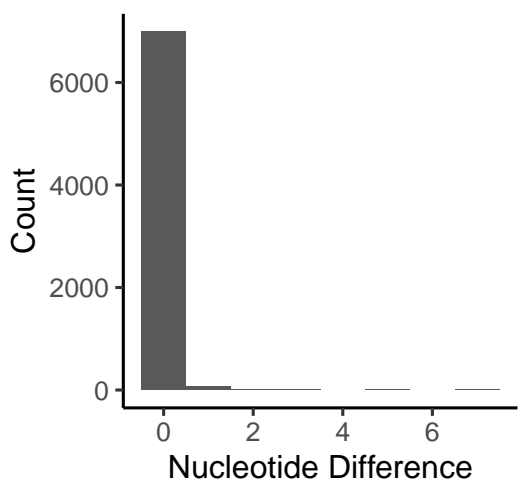
### TRBV10-1\*ap01

4092 sequences assigned  
4057 (99.1%) exact matches, in which:  
3995 unique CDR3  
13 unique J



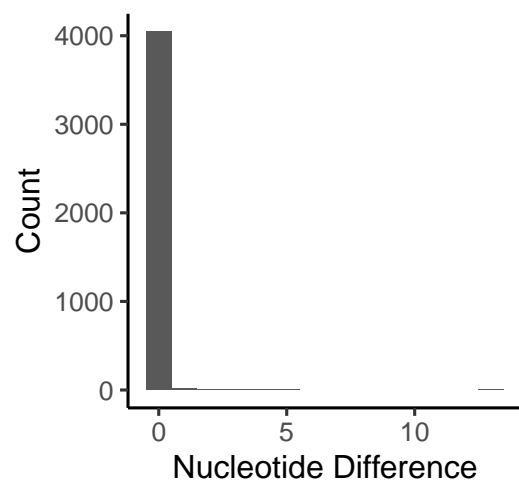
### TRBV10-3\*ap01

7070 sequences assigned  
6991 (98.9%) exact matches, in which:  
6906 unique CDR3  
13 unique J



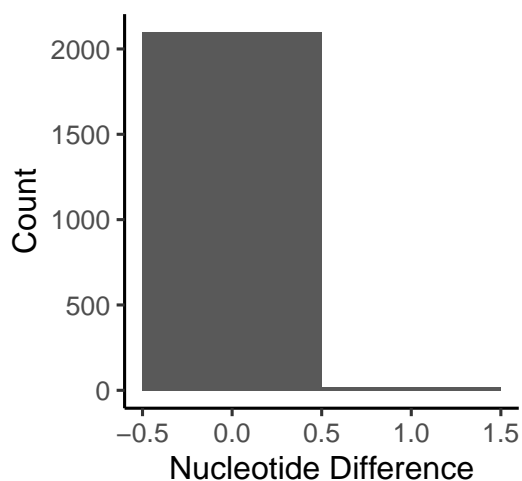
### TRBV14\*ap01

4069 sequences assigned  
4045 (99.4%) exact matches, in which:  
4016 unique CDR3  
13 unique J



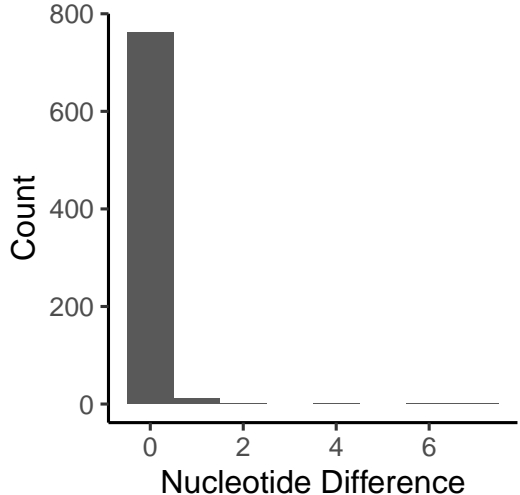
### TRBV20-1\*ap02

2118 sequences assigned  
2099 (99.1%) exact matches, in which:  
2087 unique CDR3  
13 unique J



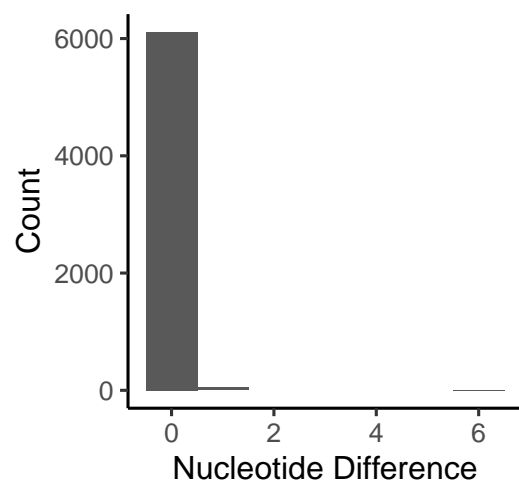
### TRBV1\*ap01

778 sequences assigned  
762 (97.9%) exact matches, in which:  
746 unique CDR3  
13 unique J



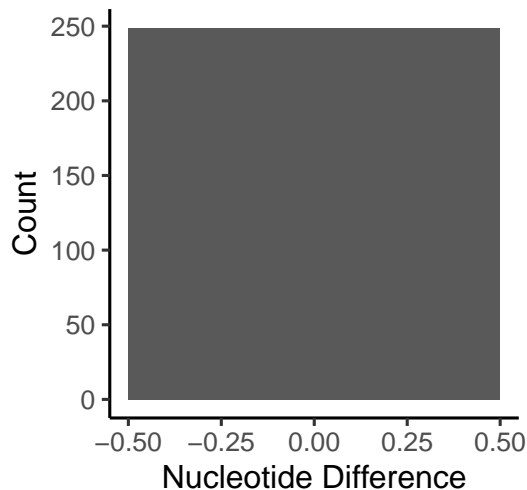
### TRBV15\*ap02

6162 sequences assigned  
6111 (99.2%) exact matches, in which:  
6020 unique CDR3  
13 unique J



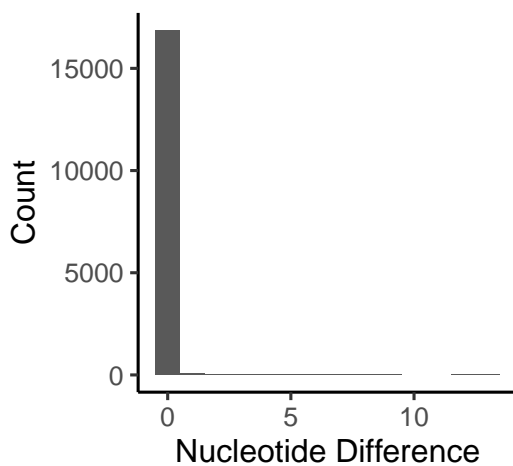
### TRBV16\*ap01

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



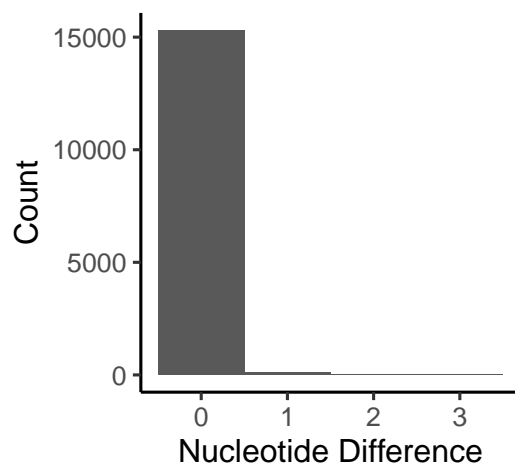
### TRBV19\*ap01

16989 sequences assigned  
16870 (99.3%) exact matches, in which:  
16800 unique CDR3  
13 unique J



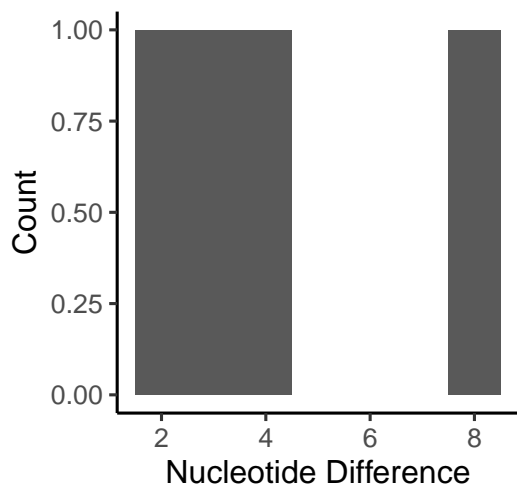
### TRBV28\*ap01

15405 sequences assigned  
15310 (99.4%) exact matches, in which:  
15165 unique CDR3  
13 unique J



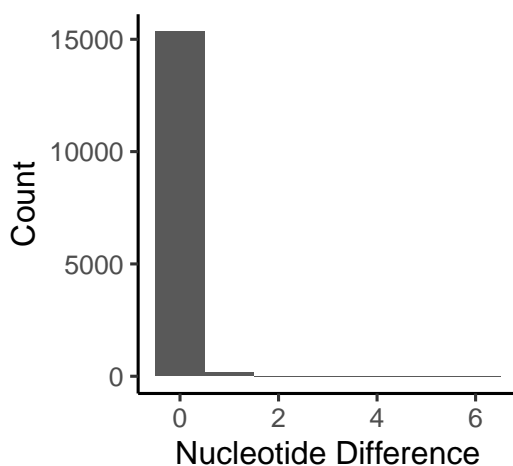
### TRBV17\*ap01

4 sequences assigned  
No exact matches.



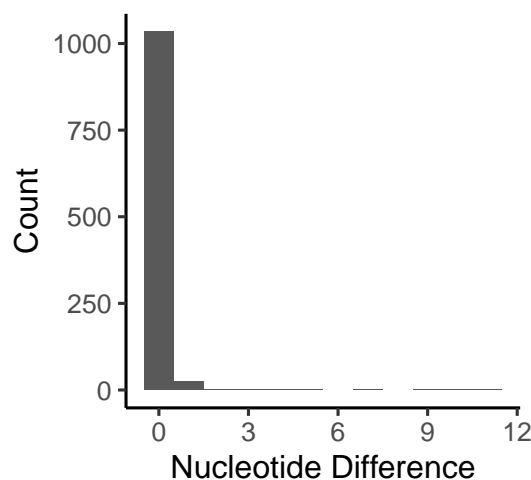
### TRBV2\*ap01

15536 sequences assigned  
15348 (98.8%) exact matches, in which:  
15089 unique CDR3  
13 unique J



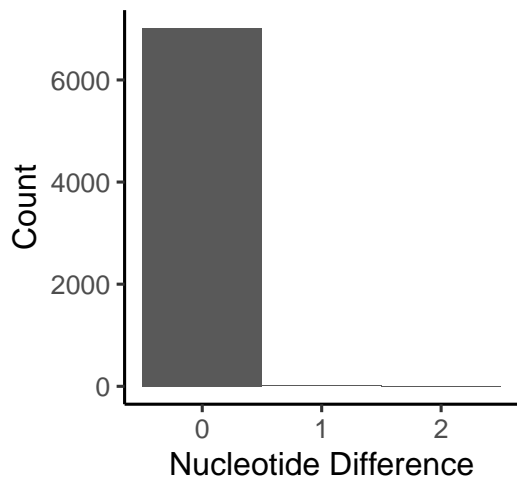
### TRBV30\*ap02

1070 sequences assigned  
1034 (96.6%) exact matches, in which:  
1019 unique CDR3  
13 unique J



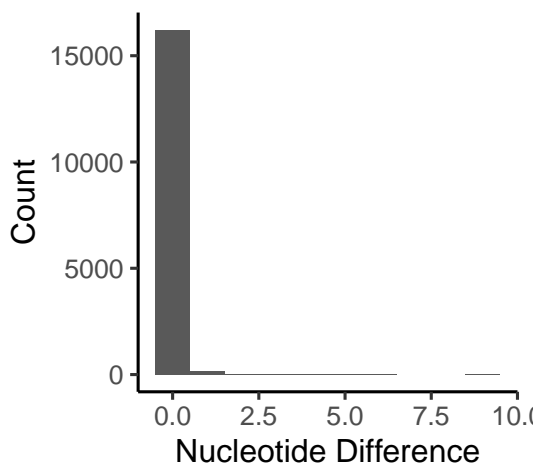
### TRBV18\*ap01

7032 sequences assigned  
7016 (99.8%) exact matches, in which:  
6985 unique CDR3  
13 unique J



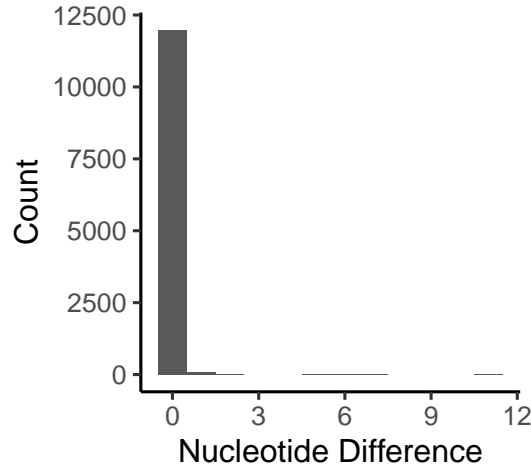
### TRBV27\*ap01

16394 sequences assigned  
16219 (98.9%) exact matches, in which:  
15945 unique CDR3  
13 unique J



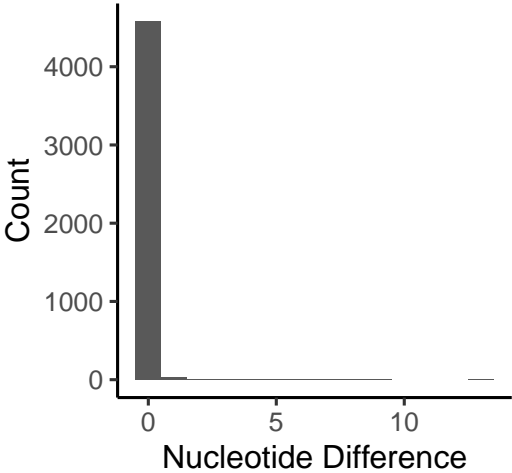
### TRBV9\*ap01

12083 sequences assigned  
11986 (99.2%) exact matches, in which:  
11864 unique CDR3  
13 unique J



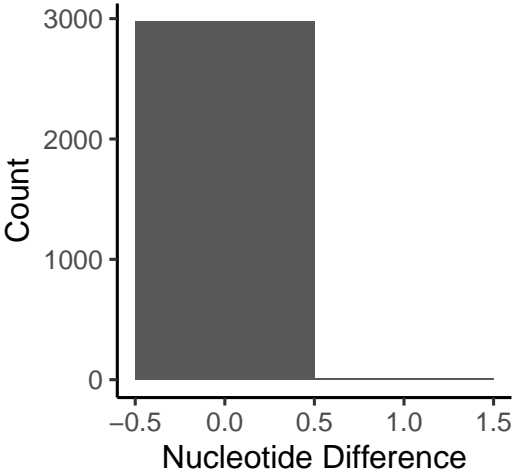
TRBV21-1\*ap01

4640 sequences assigned  
4579 (98.7%) exact matches, in which:  
4557 unique CDR3  
13 unique J



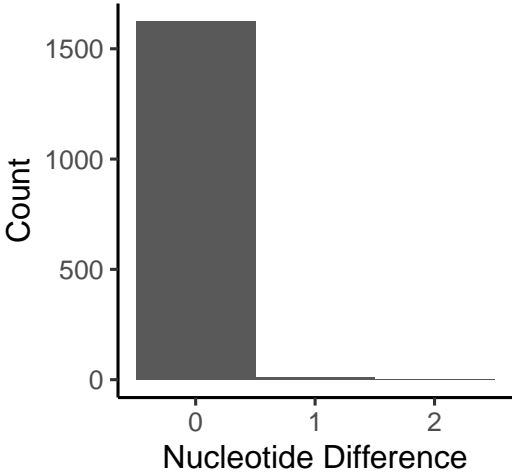
TRBV11-3\*ap01

2991 sequences assigned  
2977 (99.5%) exact matches, in which:  
2956 unique CDR3  
13 unique J



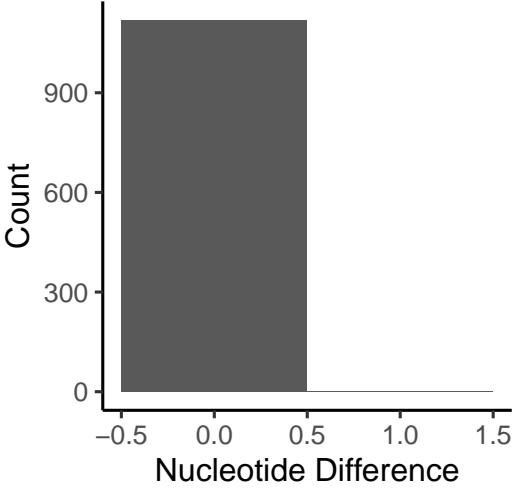
TRBV12-5\*ap01

1636 sequences assigned  
1624 (99.3%) exact matches, in which:  
1611 unique CDR3  
13 unique J



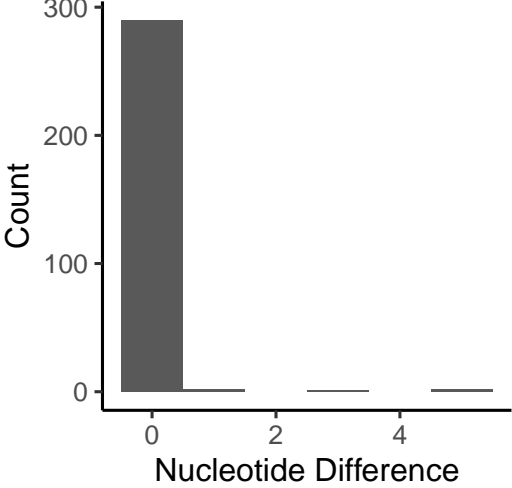
TRBV11-1\*ap01

1121 sequences assigned  
1119 (99.8%) exact matches, in which:  
1111 unique CDR3  
13 unique J



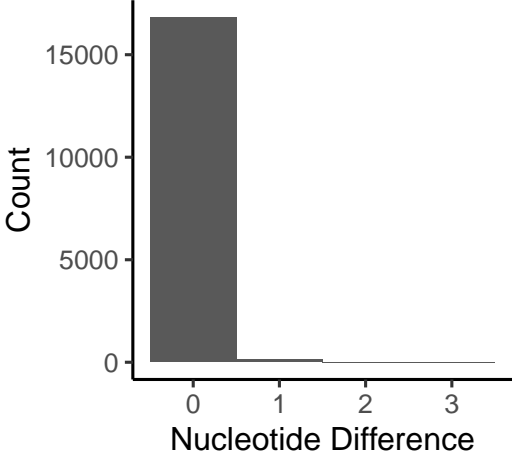
TRBV12-1\*ap01

295 sequences assigned  
290 (98.3%) exact matches, in which:  
288 unique CDR3  
13 unique J



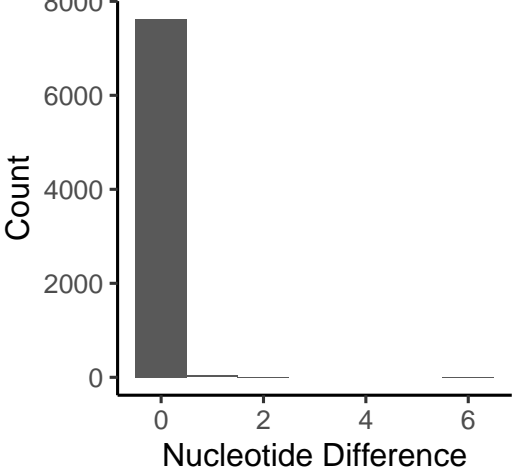
TRBV12-34\*ap01

16950 sequences assigned  
16816 (99.2%) exact matches, in which:  
16597 unique CDR3  
13 unique J



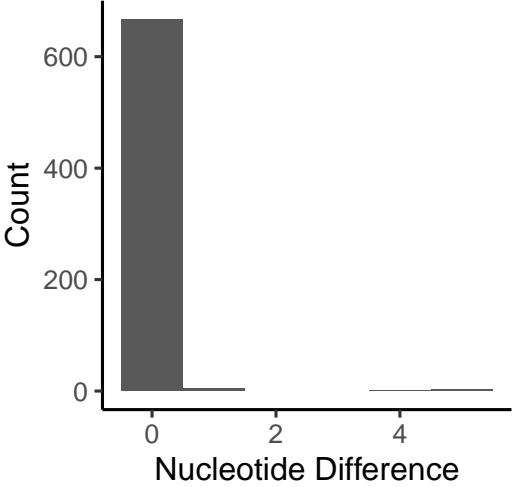
TRBV11-2\*ap01

7666 sequences assigned  
7623 (99.4%) exact matches, in which:  
7573 unique CDR3  
13 unique J



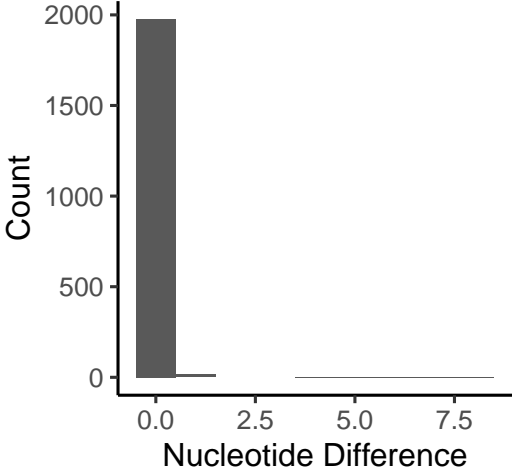
TRBV12-2\*ap01

674 sequences assigned  
667 (99%) exact matches, in which:  
663 unique CDR3  
13 unique J



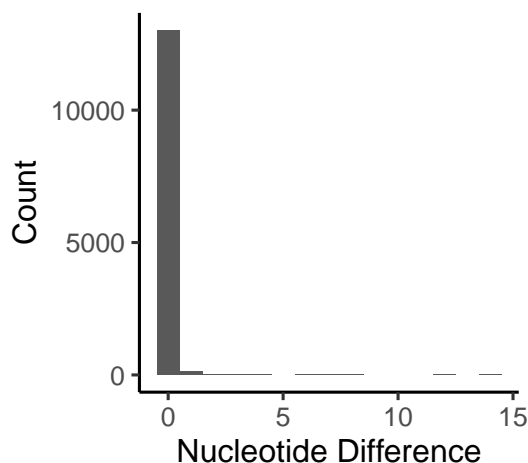
TRBV23-1\*ap01

1999 sequences assigned  
1977 (98.9%) exact matches, in which:  
1964 unique CDR3  
13 unique J



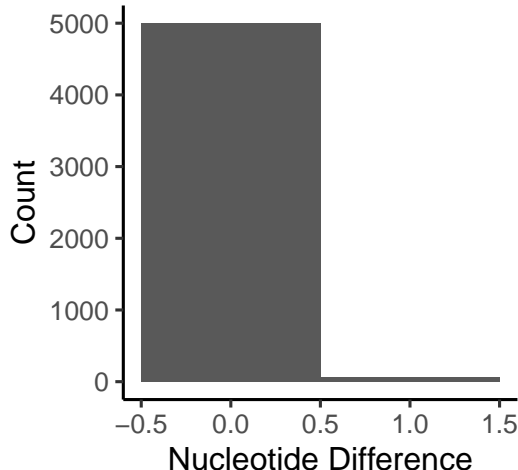
### TRBV3-12\*ap01

13171 sequences assigned  
13020 (98.9%) exact matches, in which:  
12831 unique CDR3  
13 unique J



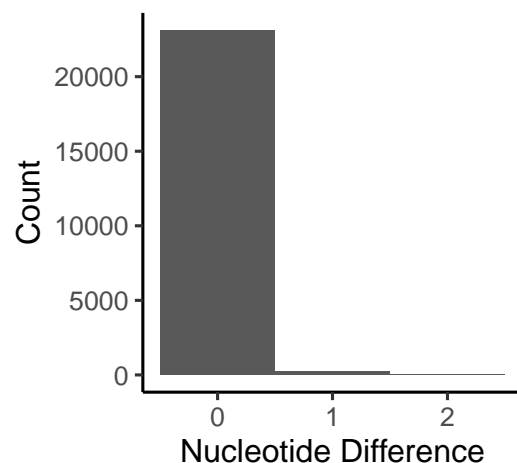
### TRBV4-2\*ap01

5054 sequences assigned  
4997 (98.9%) exact matches, in which:  
4920 unique CDR3  
13 unique J



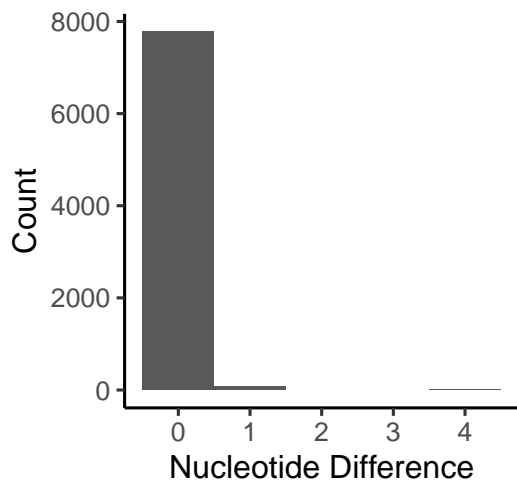
### TRBV5-1\*ap01

23327 sequences assigned  
23118 (99.1%) exact matches, in which:  
22632 unique CDR3  
13 unique J



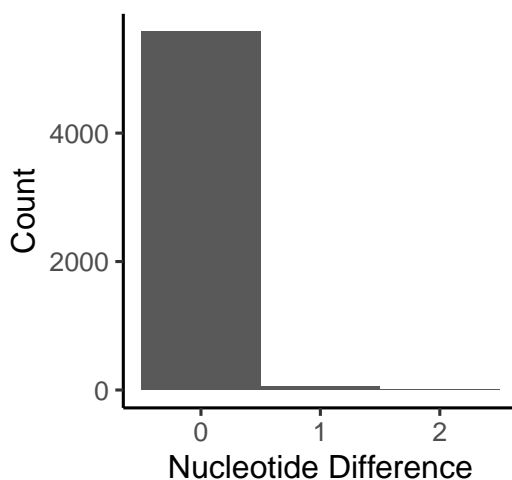
### TRBV4-1\*ap01

7848 sequences assigned  
7777 (99.1%) exact matches, in which:  
7620 unique CDR3  
13 unique J



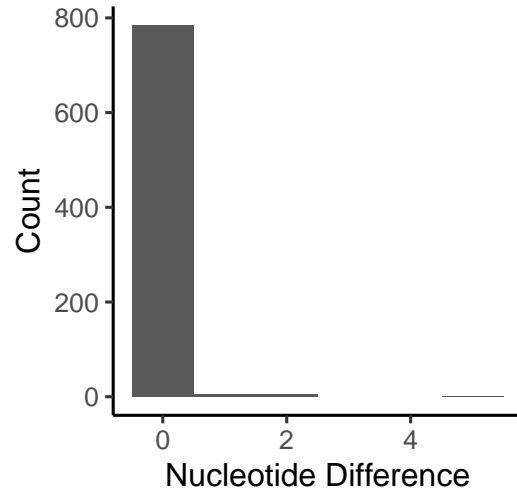
### TRBV4-3\*ap01

5633 sequences assigned  
5579 (99%) exact matches, in which:  
5508 unique CDR3  
13 unique J



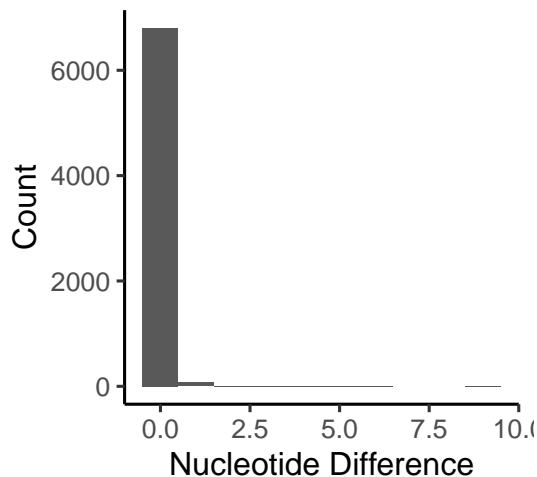
### TRBV5-3\*ap01

798 sequences assigned  
785 (98.4%) exact matches, in which:  
776 unique CDR3  
13 unique J



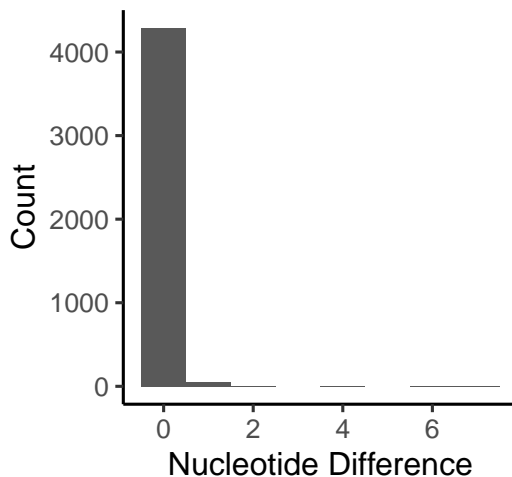
### TRBV24-1\*ap01

6890 sequences assigned  
6802 (98.7%) exact matches, in which:  
6698 unique CDR3  
13 unique J



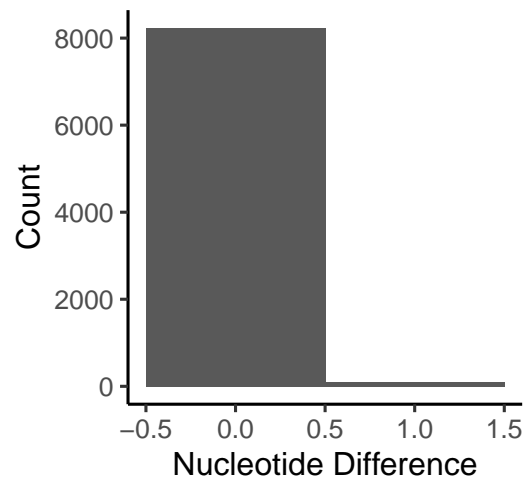
### TRBV25-1\*ap01

4348 sequences assigned  
4287 (98.6%) exact matches, in which:  
4183 unique CDR3  
13 unique J



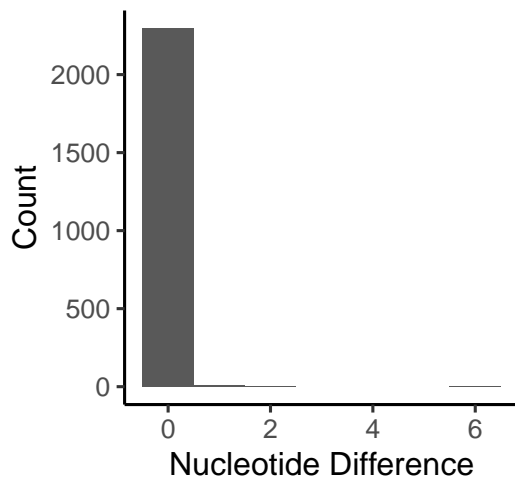
### TRBV5-4\*ap01

8328 sequences assigned  
8231 (98.8%) exact matches, in which:  
8133 unique CDR3  
13 unique J



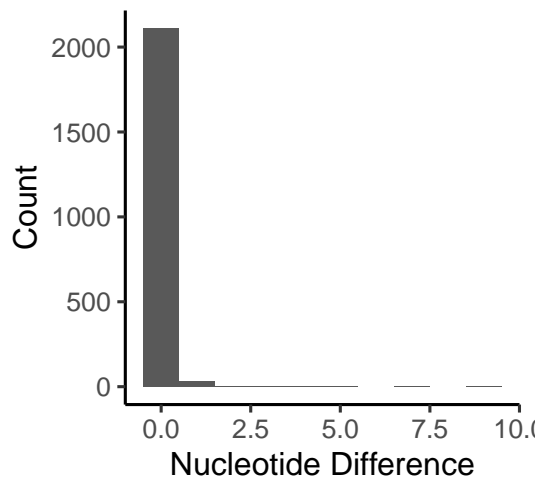
### TRBV5-5\*ap01

2310 sequences assigned  
2296 (99.4%) exact matches, in which:  
2279 unique CDR3  
13 unique J



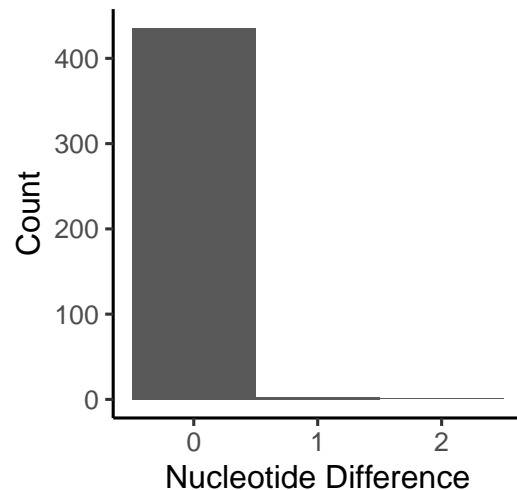
### TRBV5-8\*ap01

2150 sequences assigned  
2110 (98.1%) exact matches, in which:  
2091 unique CDR3  
13 unique J



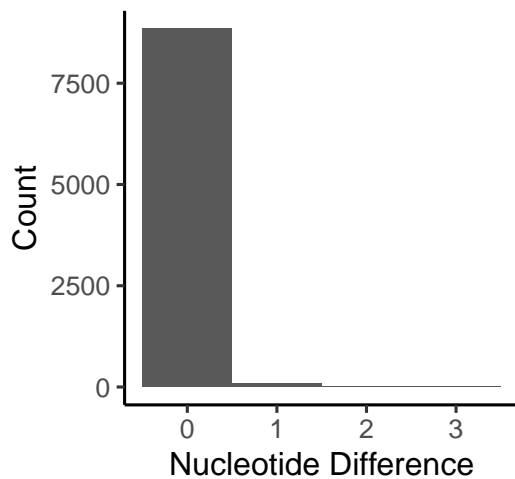
### TRBV6-7\*ap01

440 sequences assigned  
436 (99.1%) exact matches, in which:  
427 unique CDR3  
13 unique J



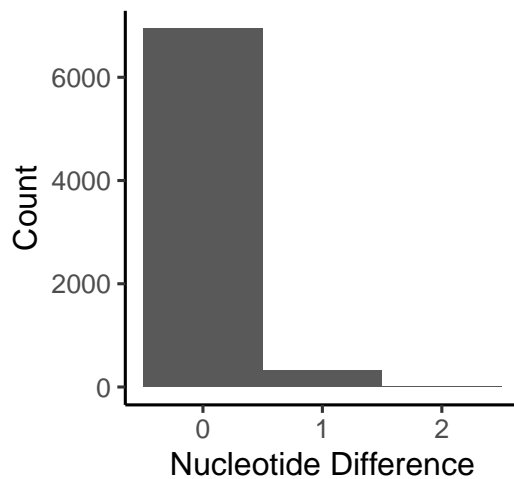
### TRBV5-6\*ap01

8927 sequences assigned  
8846 (99.1%) exact matches, in which:  
8629 unique CDR3  
13 unique J



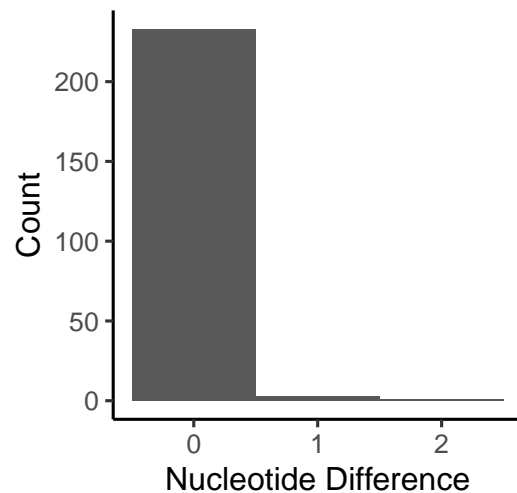
### TRBV6-1\*ap01

7254 sequences assigned  
6941 (95.7%) exact matches, in which:  
6801 unique CDR3  
13 unique J



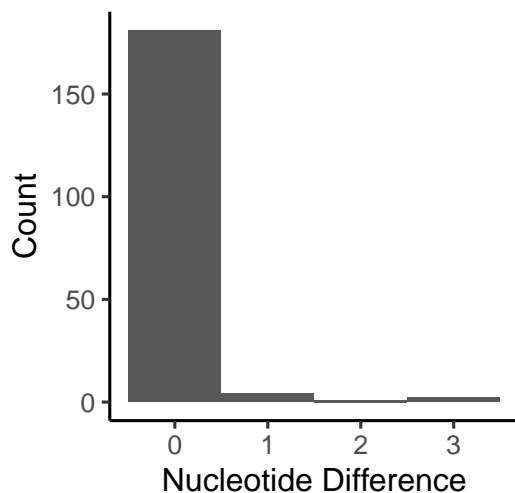
### TRBV6-8\*ap01

237 sequences assigned  
233 (98.3%) exact matches, in which:  
226 unique CDR3  
13 unique J



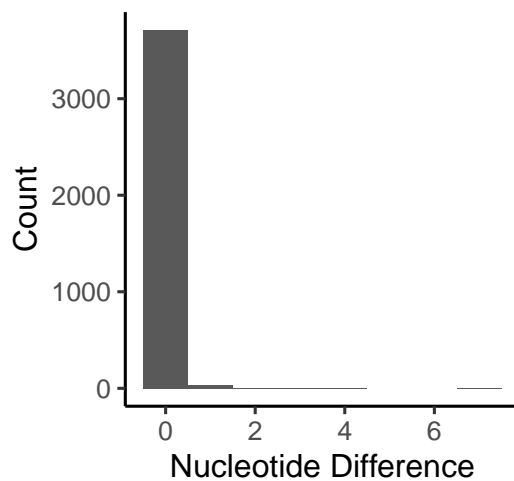
### TRBV5-7\*ap01

188 sequences assigned  
181 (96.3%) exact matches, in which:  
178 unique CDR3  
13 unique J



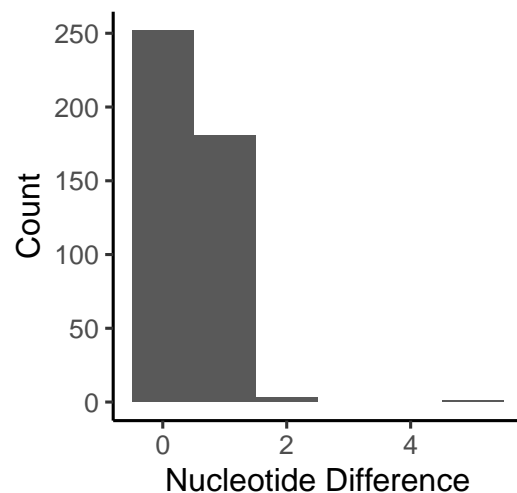
### TRBV6-4\*ap01

3751 sequences assigned  
3711 (98.9%) exact matches, in which:  
3676 unique CDR3  
13 unique J



### TRBV6-9\*ap01

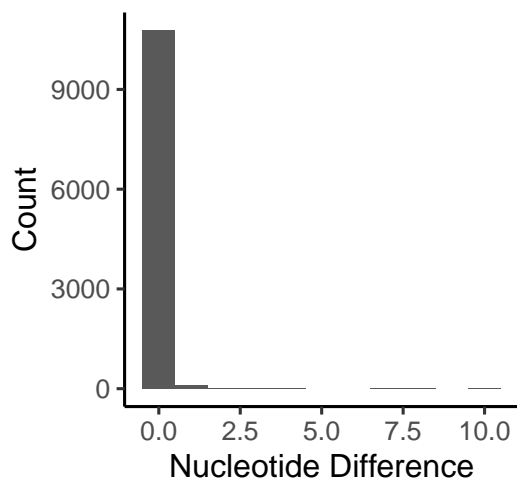
437 sequences assigned  
252 (57.7%) exact matches, in which:  
249 unique CDR3  
13 unique J





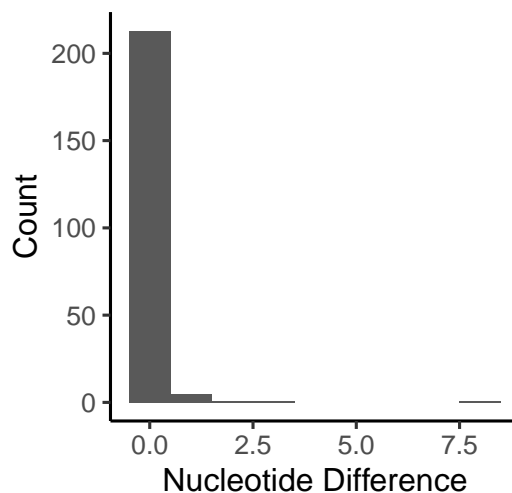
### TRBV6-23\*ap01

10888 sequences assigned  
10775 (99%) exact matches, in which:  
10549 unique CDR3  
13 unique J



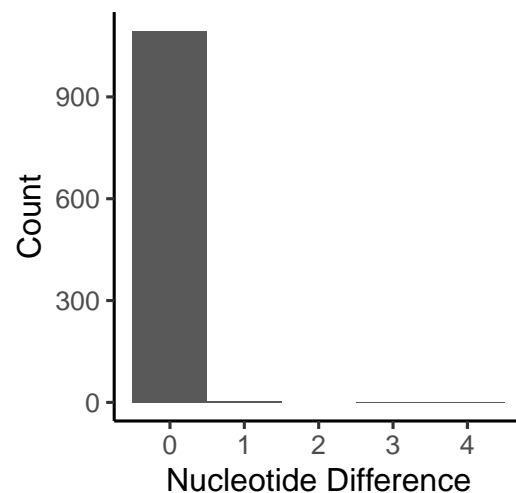
### TRBV7-1\*ap01\_G291C\_

221 sequences assigned  
213 (96.4%) exact matches, in which:  
212 unique CDR3  
13 unique J



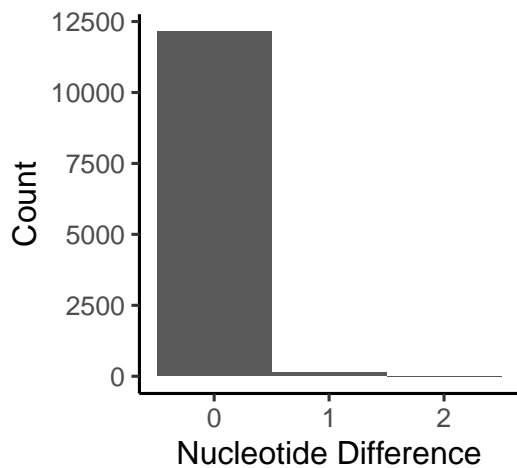
### TRBV7-3\*ap03

1102 sequences assigned  
1095 (99.4%) exact matches, in which:  
1084 unique CDR3  
13 unique J



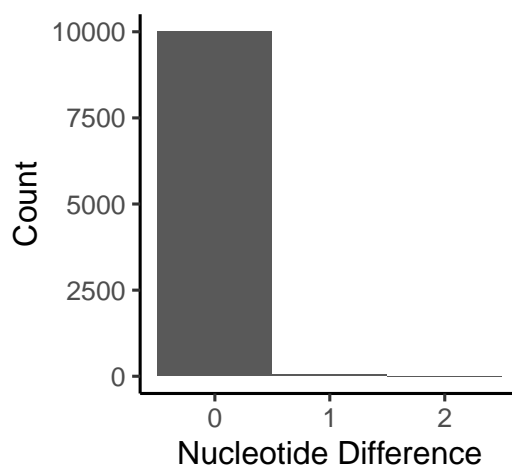
### TRBV6-56\*ap01

12291 sequences assigned  
12150 (98.9%) exact matches, in which:  
11897 unique CDR3  
13 unique J



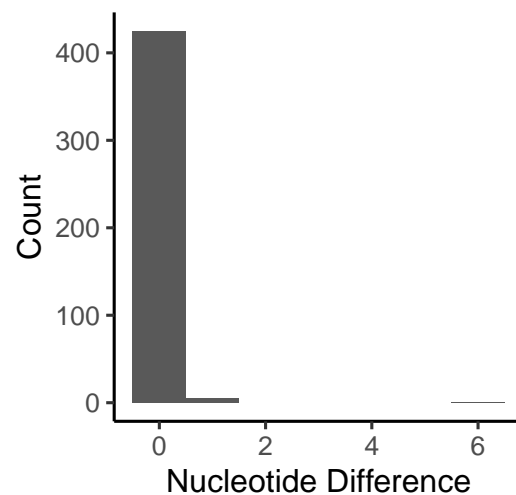
### TRBV7-2\*ap01

10059 sequences assigned  
10009 (99.5%) exact matches, in which:  
9929 unique CDR3  
13 unique J



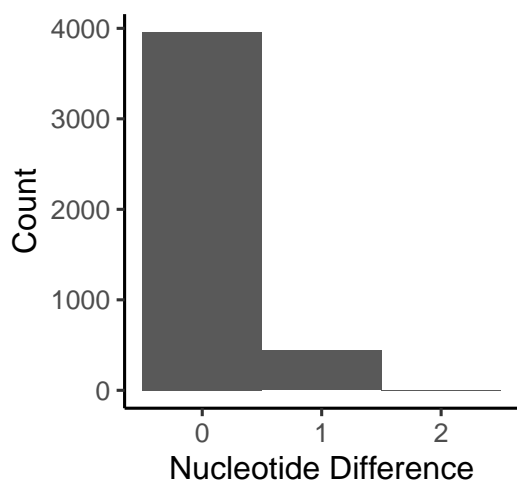
### TRBV7-4\*ap01

431 sequences assigned  
425 (98.6%) exact matches, in which:  
418 unique CDR3  
13 unique J



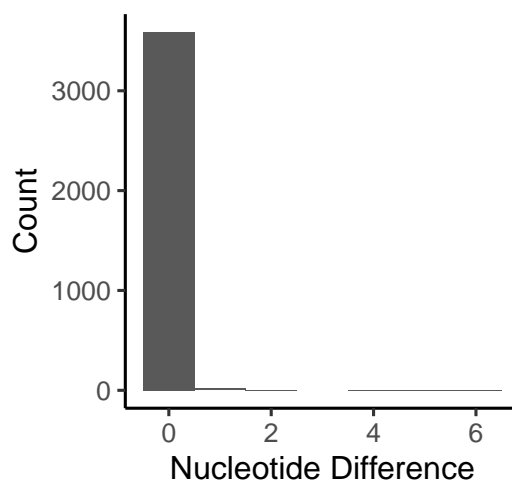
### TRBV6-56\*ap02

4403 sequences assigned  
3959 (89.9%) exact matches, in which:  
3881 unique CDR3  
13 unique J



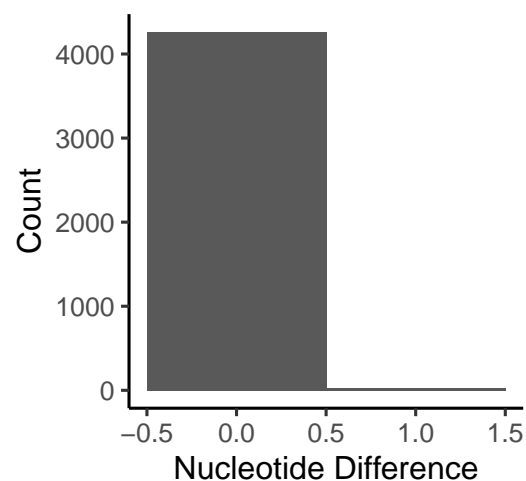
### TRBV7-3\*ap01

3612 sequences assigned  
3588 (99.3%) exact matches, in which:  
3568 unique CDR3  
13 unique J



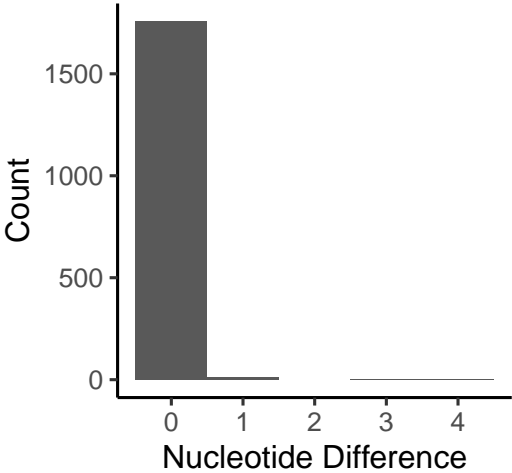
### TRBV7-6\*ap01

4290 sequences assigned  
4261 (99.3%) exact matches, in which:  
4219 unique CDR3  
13 unique J



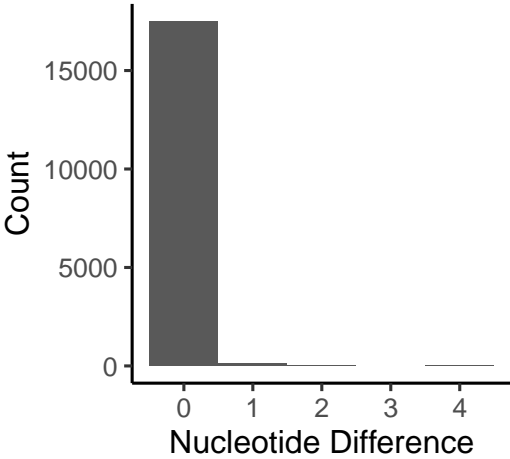
TRBV7-7\*ap01\_C315T

1773 sequences assigned  
1757 (99.1%) exact matches, in which:  
1744 unique CDR3  
13 unique J



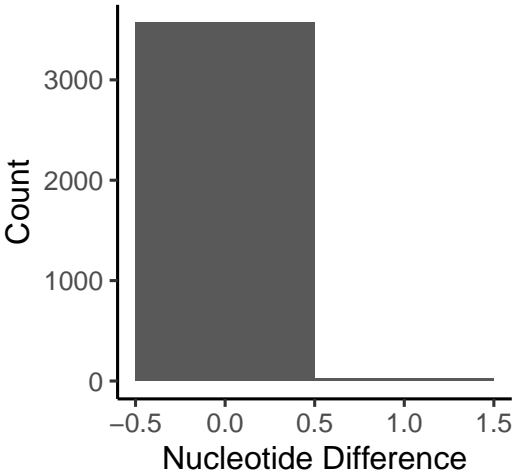
TRBV7-9\*ap01

17648 sequences assigned  
17508 (99.2%) exact matches, in which:  
17331 unique CDR3  
13 unique J



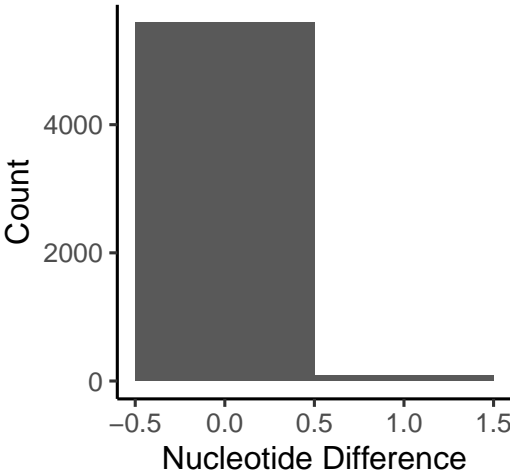
TRBV7-8\*ap01

3597 sequences assigned  
3569 (99.2%) exact matches, in which:  
3516 unique CDR3  
13 unique J



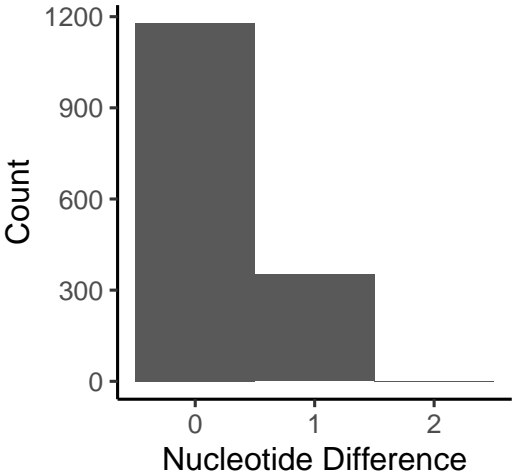
TRBV29-1\*ap01

5681 sequences assigned  
5591 (98.4%) exact matches, in which:  
5437 unique CDR3  
13 unique J



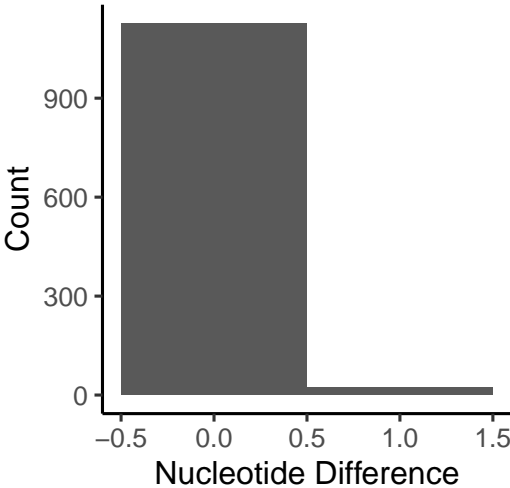
TRBV7-8\*ap03

1532 sequences assigned  
1179 (77%) exact matches, in which:  
1166 unique CDR3  
13 unique J

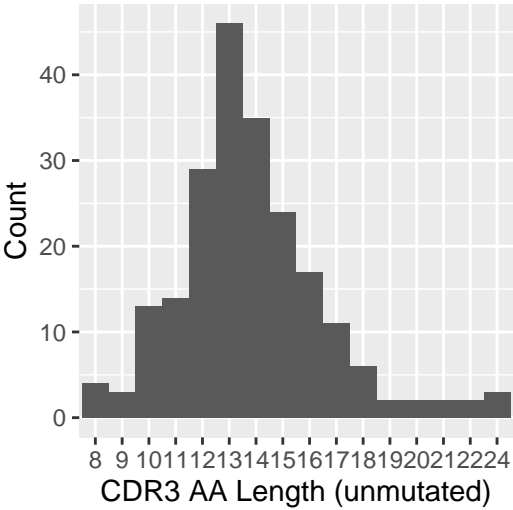


TRBV29-1\*ap02

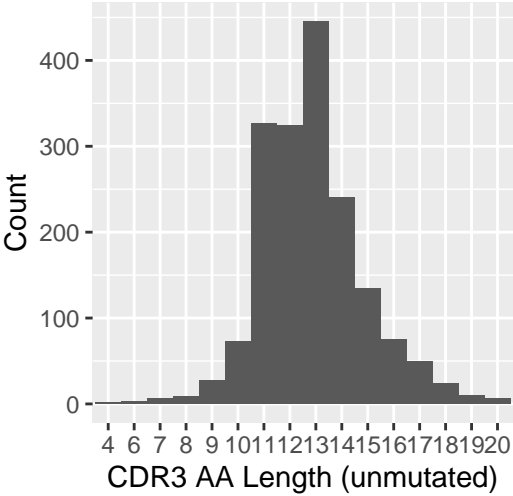
1149 sequences assigned  
1127 (98.1%) exact matches, in which:  
1100 unique CDR3  
13 unique J



TRBV7-1\*ap01\_G291C\_T296C



TRBV7-7\*ap01\_C315T





[illegible]