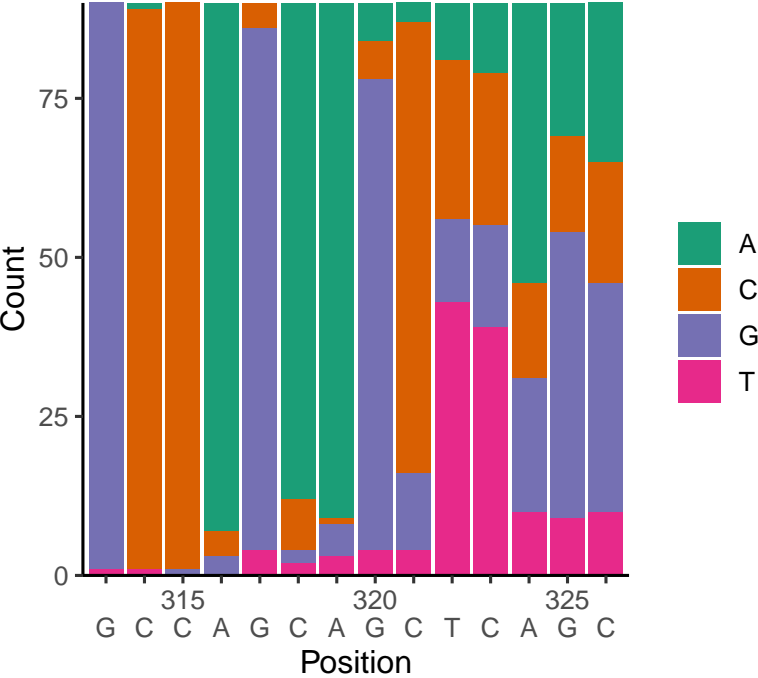
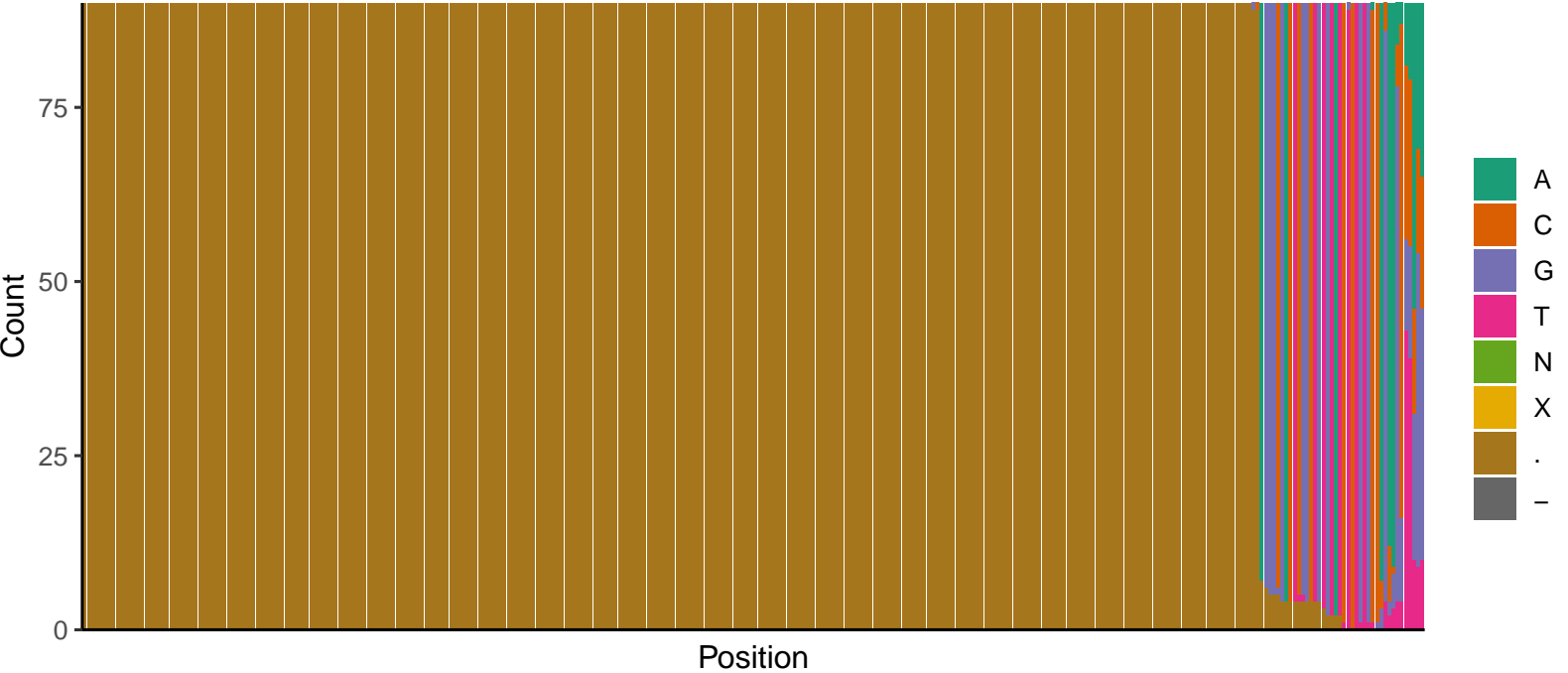


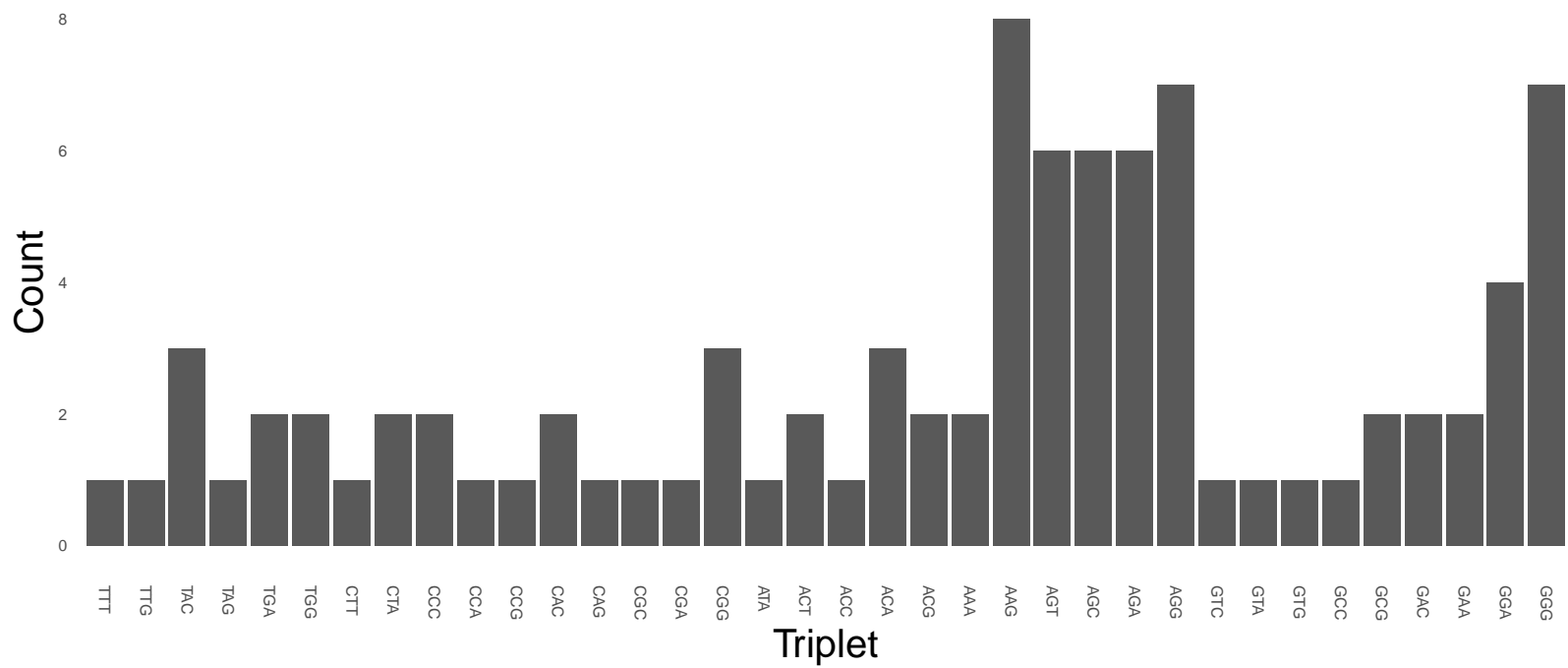
Gene TRBV7-1\*ap01\_G291C\_T296C



Gene TRBV7-1\*ap01\_G291C\_T296C

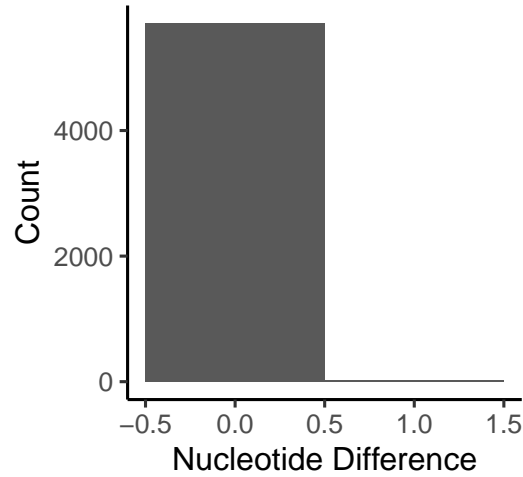


TRBV7-1\*ap01\_G291C\_T296C- Final 3 nucleotides as a triplet



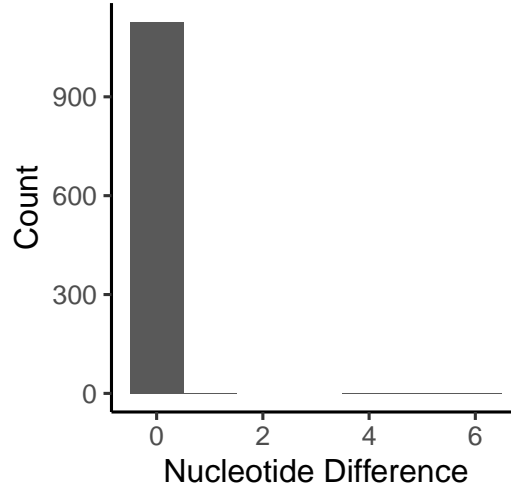
### TRBV20–1\*ap01

5732 sequences assigned  
5706 (99.5%) exact matches, in which:  
5681 unique CDR3  
13 unique J



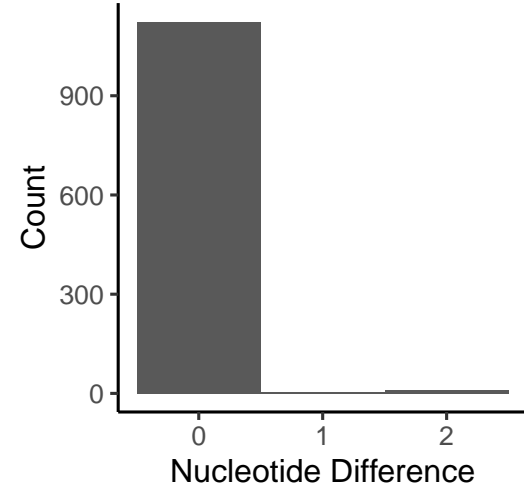
### TRBV10–2\*ap01

1132 sequences assigned  
1128 (99.6%) exact matches, in which:  
1124 unique CDR3  
13 unique J



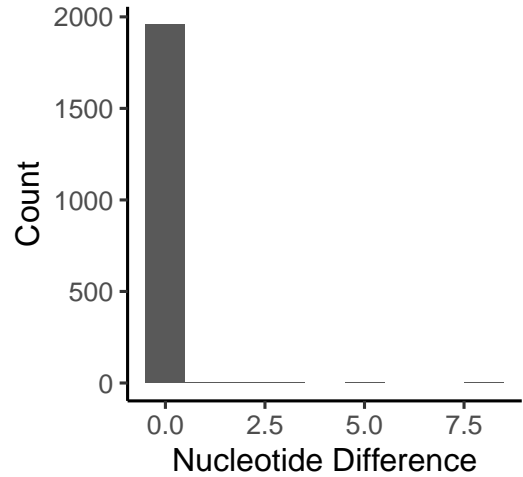
### TRBV13\*ap01

1140 sequences assigned  
1124 (98.6%) exact matches, in which:  
1122 unique CDR3  
13 unique J



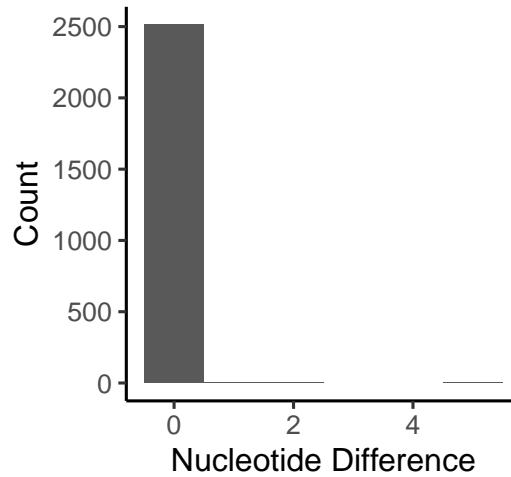
### TRBV10–1\*ap01

1967 sequences assigned  
1957 (99.5%) exact matches, in which:  
1954 unique CDR3  
13 unique J



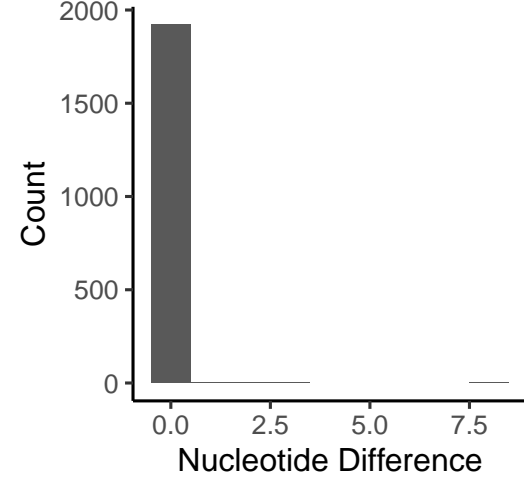
### TRBV10–3\*ap01

2521 sequences assigned  
2513 (99.7%) exact matches, in which:  
2509 unique CDR3  
13 unique J



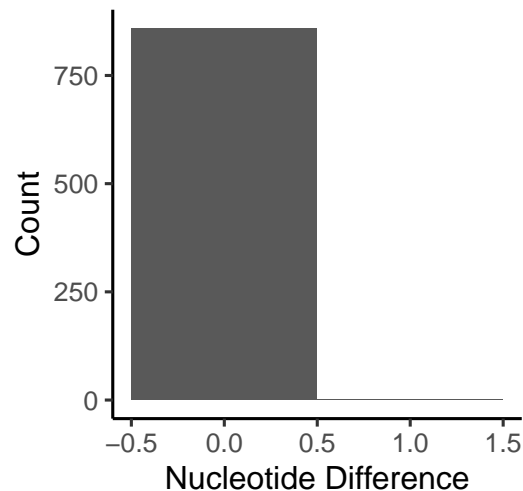
### TRBV14\*ap01

1925 sequences assigned  
1921 (99.8%) exact matches, in which:  
1918 unique CDR3  
13 unique J



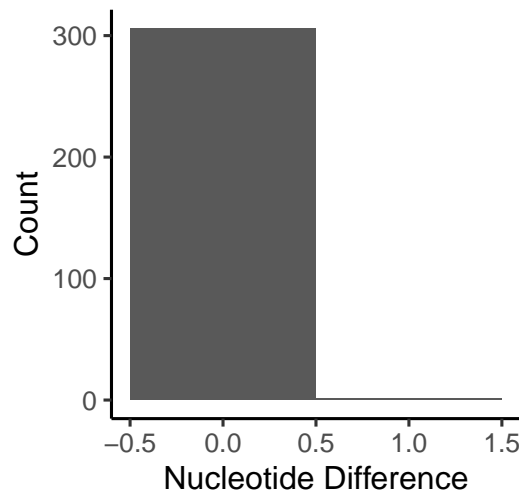
### TRBV20–1\*ap02

861 sequences assigned  
859 (99.8%) exact matches, in which:  
853 unique CDR3  
13 unique J



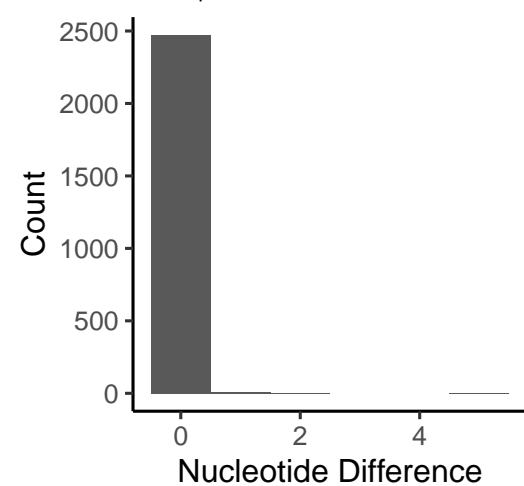
### TRBV1\*ap01

307 sequences assigned  
306 (99.7%) exact matches, in which:  
305 unique CDR3  
13 unique J



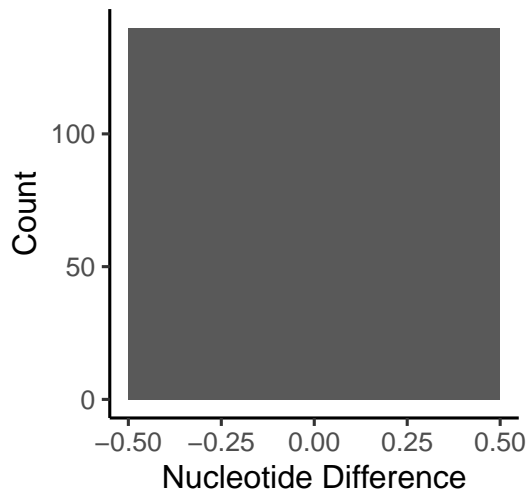
### TRBV15\*ap02

2482 sequences assigned  
2472 (99.6%) exact matches, in which:  
2462 unique CDR3  
13 unique J



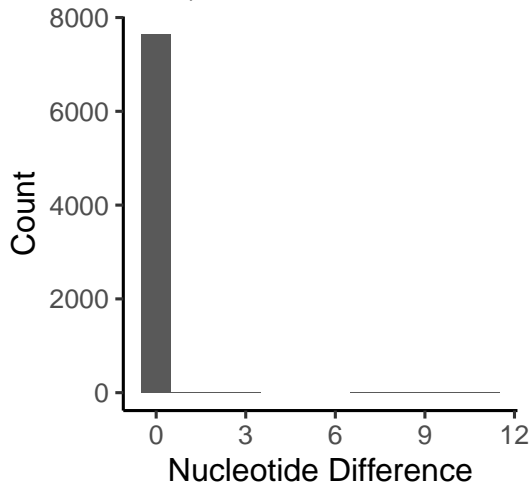
### TRBV16\*ap01

140 sequences assigned  
140 (100%) exact matches, in which:  
139 unique CDR3  
13 unique J



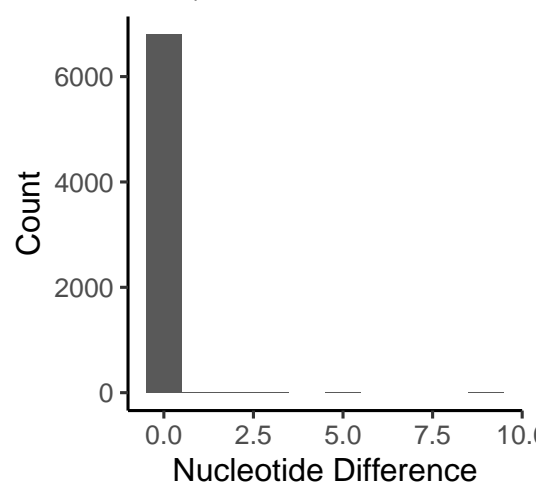
### TRBV19\*ap01

7663 sequences assigned  
7640 (99.7%) exact matches, in which:  
7634 unique CDR3  
13 unique J



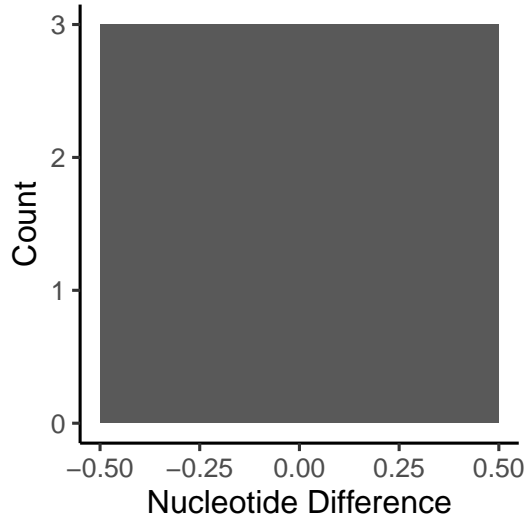
### TRBV27\*ap01

6825 sequences assigned  
6801 (99.6%) exact matches, in which:  
6777 unique CDR3  
13 unique J



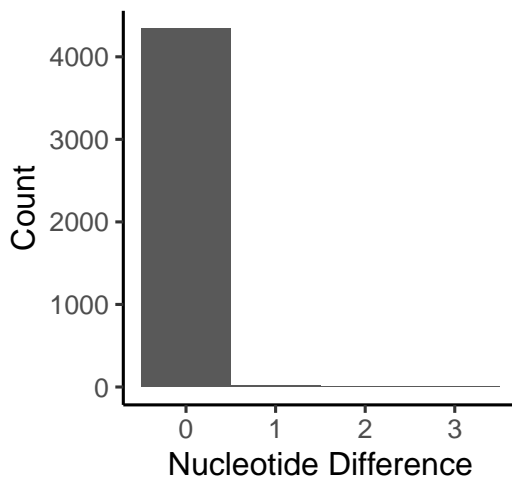
### TRBV17\*ap01

3 sequences assigned  
3 (100%) exact matches, in which:  
3 unique CDR3  
2 unique J



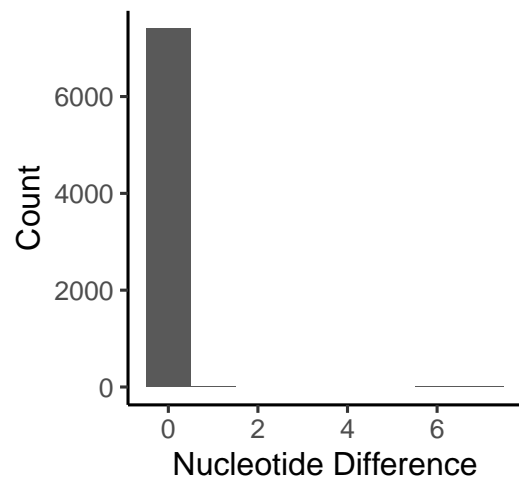
### TRBV2\*ap01

4358 sequences assigned  
4340 (99.6%) exact matches, in which:  
4324 unique CDR3  
13 unique J



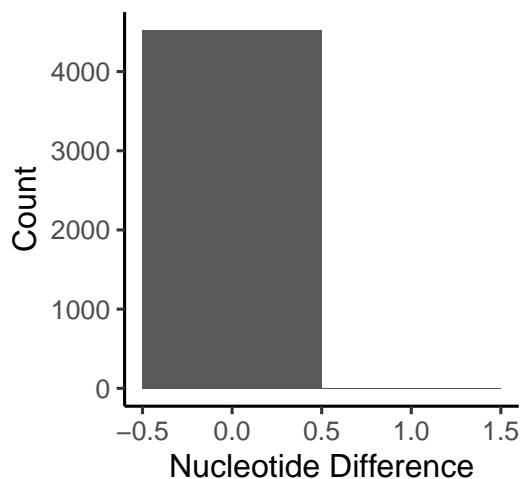
### TRBV28\*ap01

7416 sequences assigned  
7401 (99.8%) exact matches, in which:  
7381 unique CDR3  
13 unique J



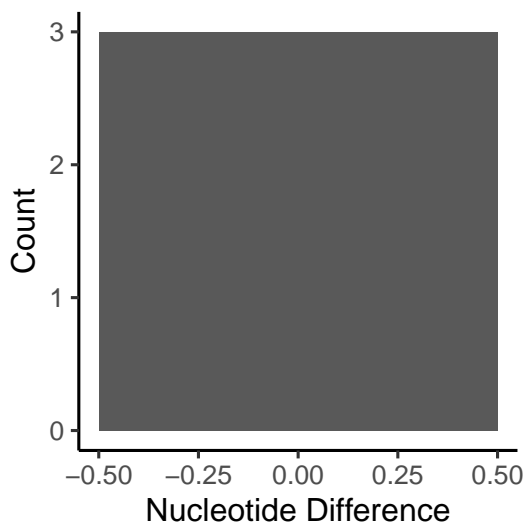
### TRBV18\*ap01

4529 sequences assigned  
4524 (99.9%) exact matches, in which:  
4514 unique CDR3  
13 unique J



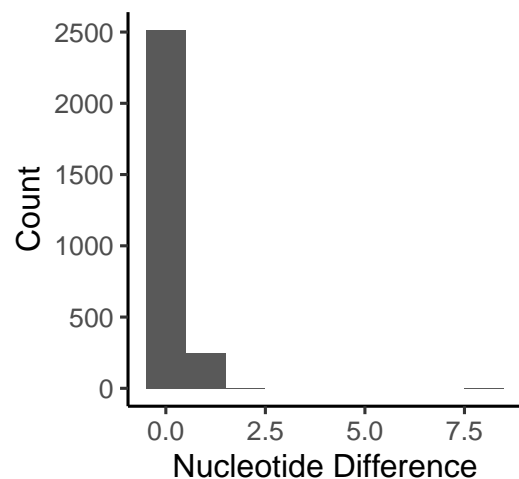
### TRBV26\*ap01

3 sequences assigned  
3 (100%) exact matches, in which:  
3 unique CDR3  
2 unique J



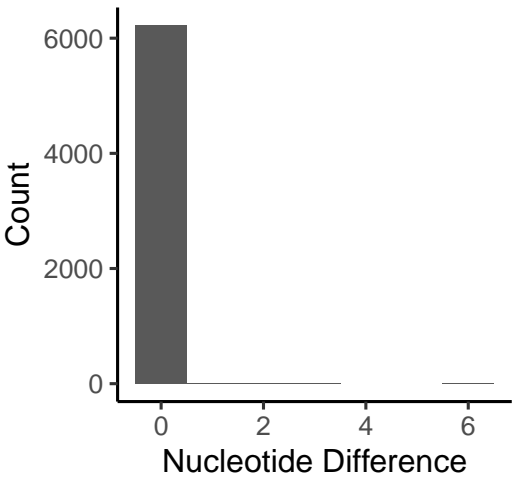
### TRBV30\*ap01

2765 sequences assigned  
2514 (90.9%) exact matches, in which:  
2502 unique CDR3  
13 unique J



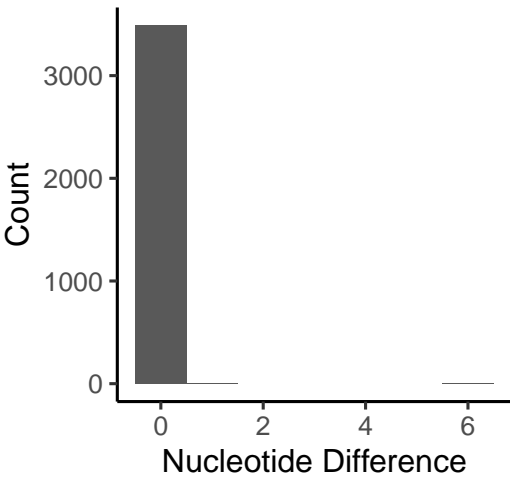
TRBV9\*ap01

6239 sequences assigned  
6222 (99.7%) exact matches, in which:  
6200 unique CDR3  
13 unique J



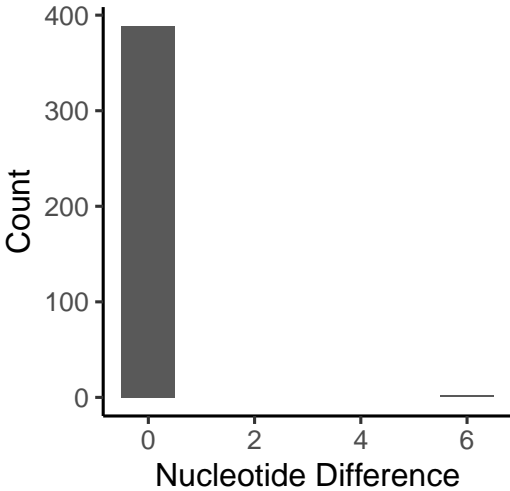
TRBV11-2\*ap01

3491 sequences assigned  
3489 (99.9%) exact matches, in which:  
3481 unique CDR3  
13 unique J



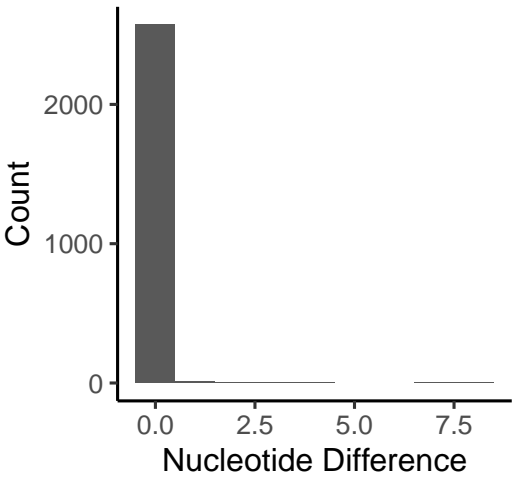
TRBV12-2\*ap01

391 sequences assigned  
389 (99.5%) exact matches, in which:  
389 unique CDR3  
13 unique J



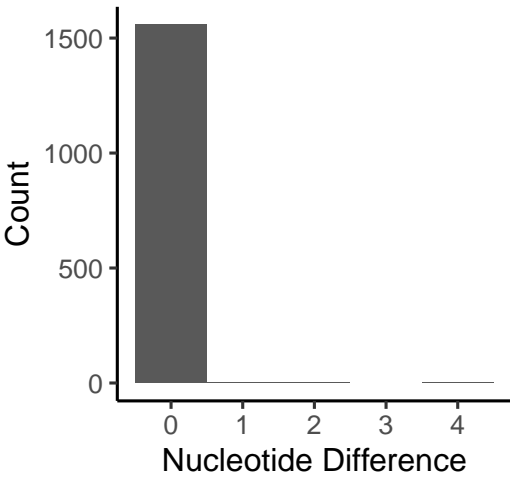
TRBV21-1\*ap01

2590 sequences assigned  
2572 (99.3%) exact matches, in which:  
2572 unique CDR3  
13 unique J



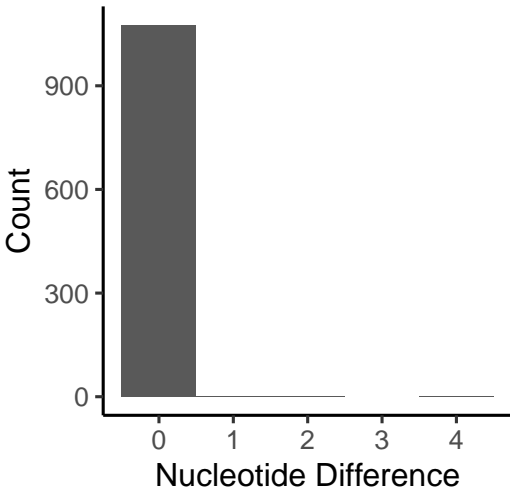
TRBV11-3\*ap01

1563 sequences assigned  
1558 (99.7%) exact matches, in which:  
1555 unique CDR3  
13 unique J



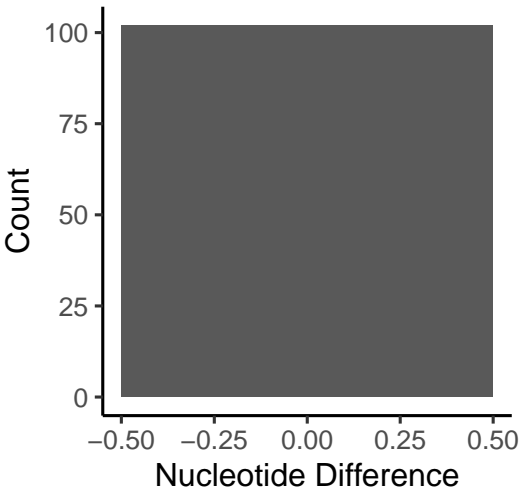
TRBV12-5\*ap01

1079 sequences assigned  
1076 (99.7%) exact matches, in which:  
1076 unique CDR3  
13 unique J



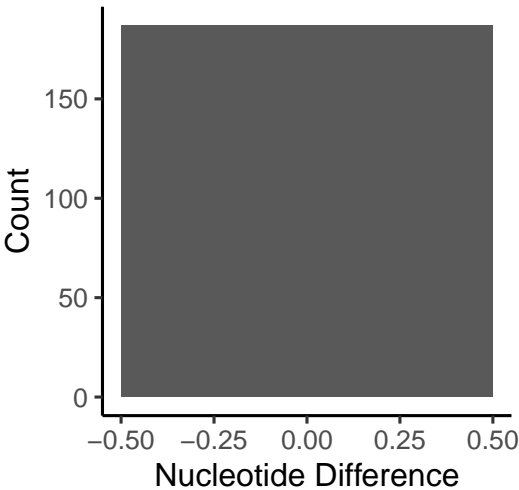
TRBV11-1\*ap01

102 sequences assigned  
102 (100%) exact matches, in which:  
102 unique CDR3  
13 unique J



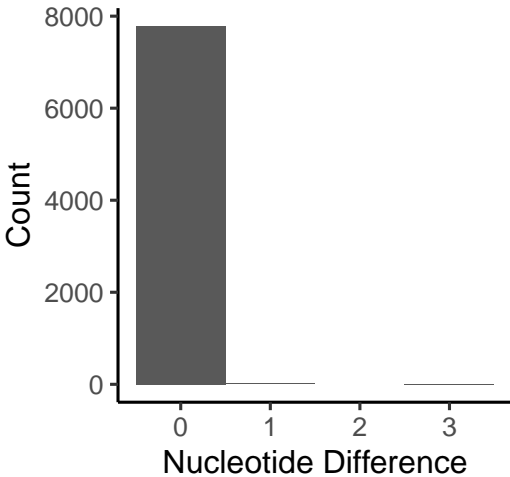
TRBV12-1\*ap01

187 sequences assigned  
187 (100%) exact matches, in which:  
187 unique CDR3  
13 unique J



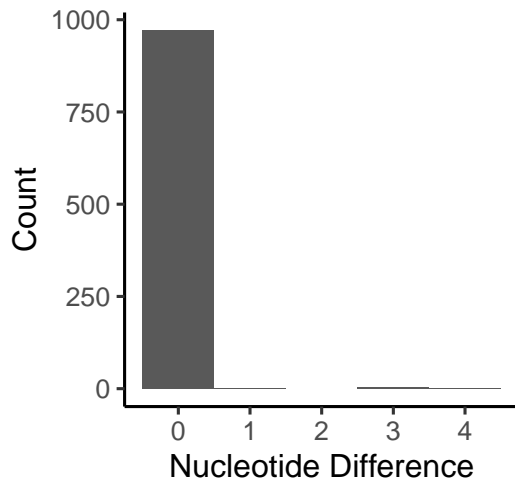
TRBV12-34\*ap01

7806 sequences assigned  
7785 (99.7%) exact matches, in which:  
7773 unique CDR3  
14 unique J



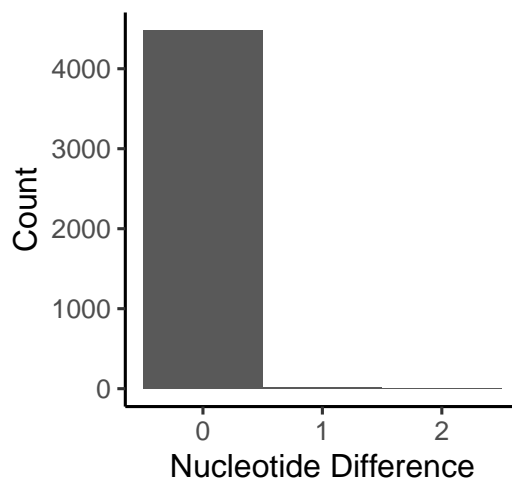
### TRBV23-1\*ap01

978 sequences assigned  
971 (99.3%) exact matches, in which:  
971 unique CDR3  
13 unique J



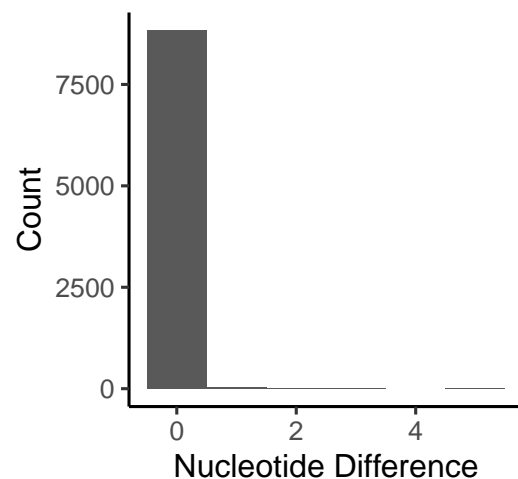
### TRBV4-1\*ap01

4493 sequences assigned  
4479 (99.7%) exact matches, in which:  
4463 unique CDR3  
13 unique J



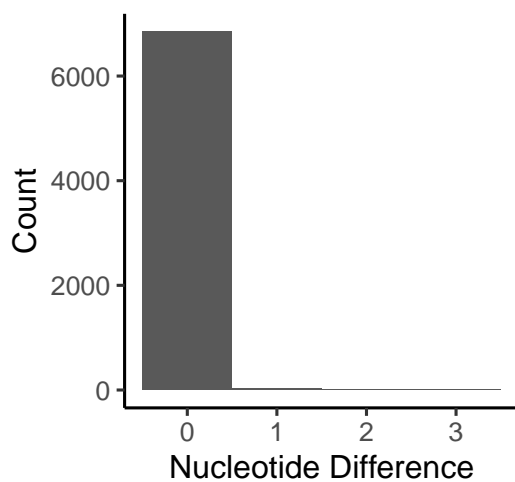
### TRBV5-1\*ap01

8862 sequences assigned  
8832 (99.7%) exact matches, in which:  
8782 unique CDR3  
13 unique J



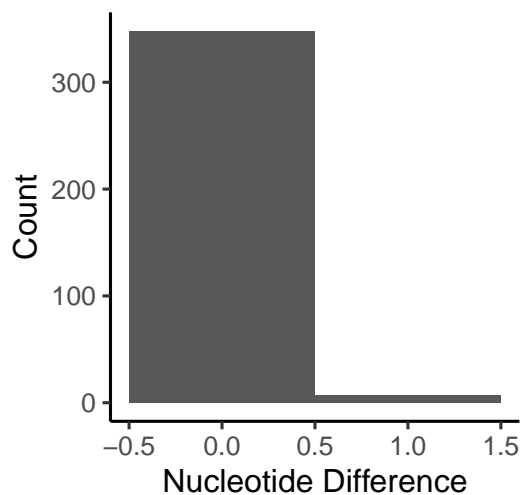
### TRBV3-12\*ap01

6880 sequences assigned  
6847 (99.5%) exact matches, in which:  
6828 unique CDR3  
13 unique J



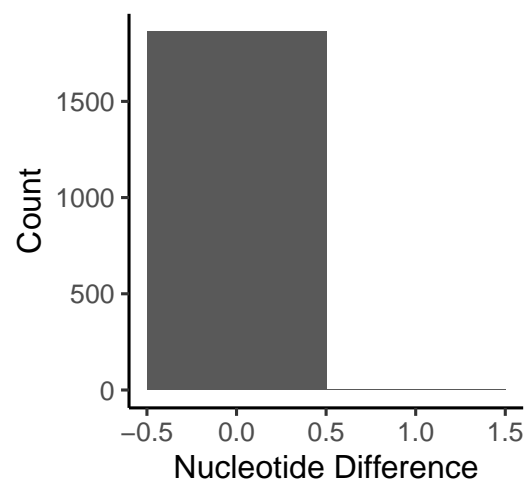
### TRBV4-2\*ap01

355 sequences assigned  
348 (98%) exact matches, in which:  
347 unique CDR3  
13 unique J



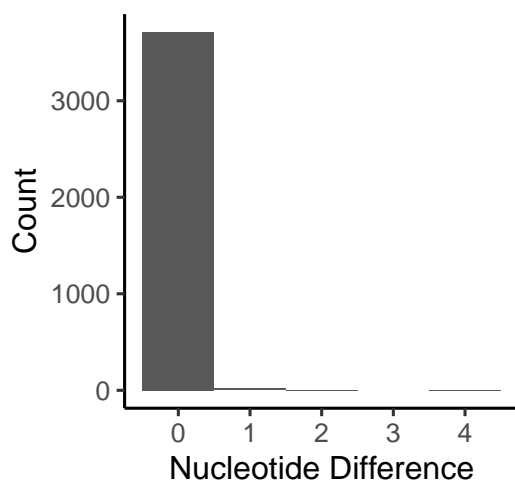
### TRBV25-1\*ap01

1866 sequences assigned  
1862 (99.8%) exact matches, in which:  
1859 unique CDR3  
13 unique J



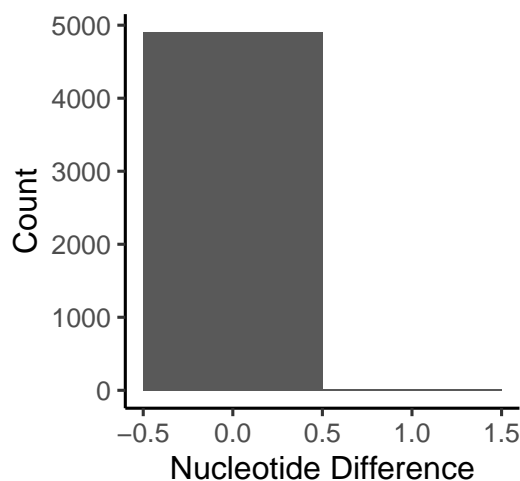
### TRBV24-1\*ap01

3737 sequences assigned  
3712 (99.3%) exact matches, in which:  
3706 unique CDR3  
13 unique J



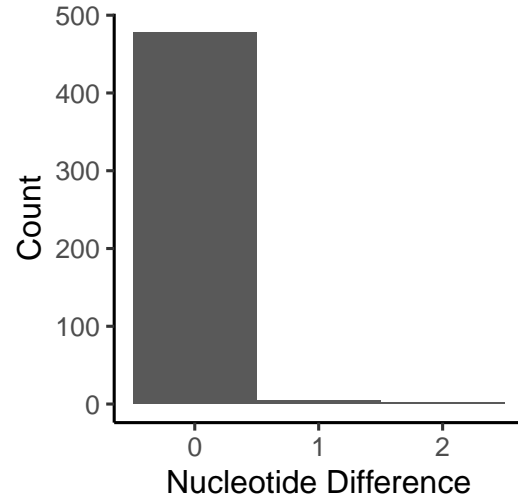
### TRBV4-3\*ap01

4923 sequences assigned  
4906 (99.7%) exact matches, in which:  
4888 unique CDR3  
13 unique J



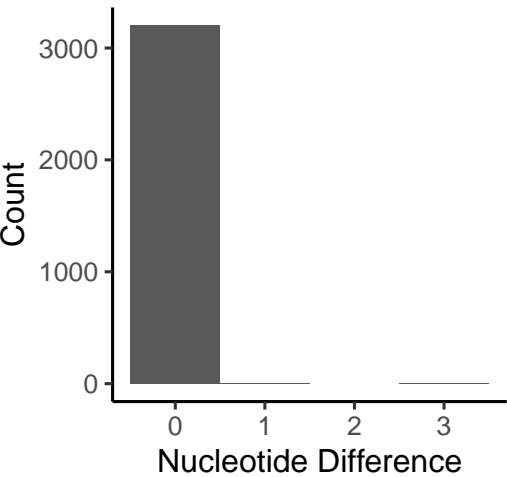
### TRBV5-3\*ap01

484 sequences assigned  
478 (98.8%) exact matches, in which:  
477 unique CDR3  
13 unique J



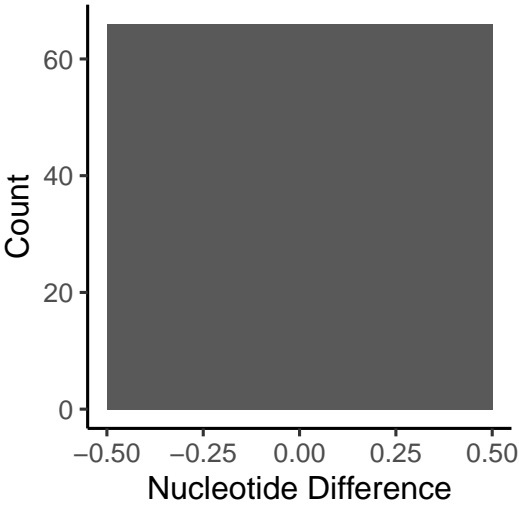
TRBV5-4\*ap01

3207 sequences assigned  
3202 (99.8%) exact matches, in which:  
3196 unique CDR3  
13 unique J



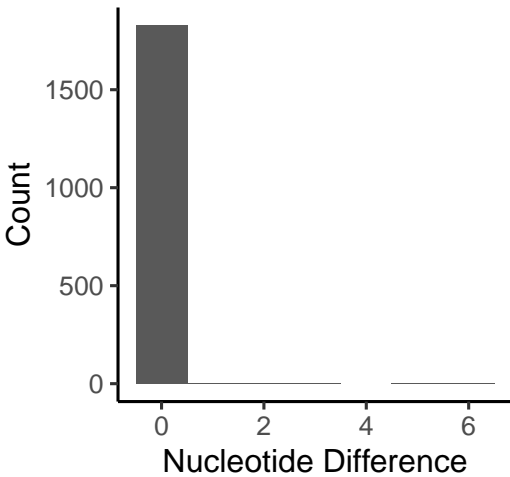
TRBV5-7\*ap01

66 sequences assigned  
66 (100%) exact matches, in which:  
66 unique CDR3  
13 unique J



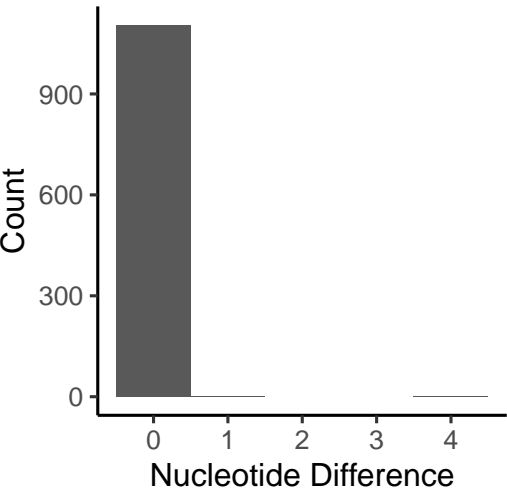
TRBV6-4\*ap01

1838 sequences assigned  
1828 (99.5%) exact matches, in which:  
1827 unique CDR3  
13 unique J



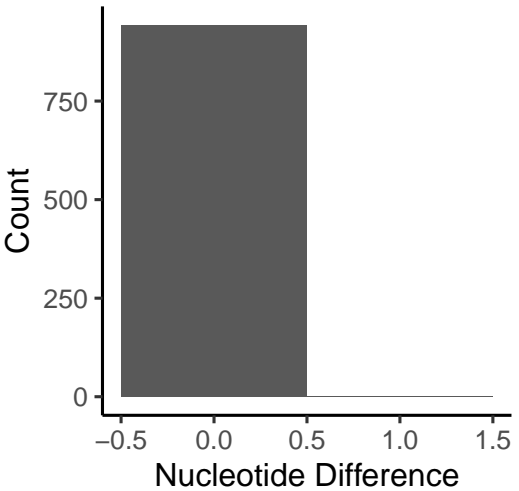
TRBV5-5\*ap01

1107 sequences assigned  
1105 (99.8%) exact matches, in which:  
1105 unique CDR3  
13 unique J



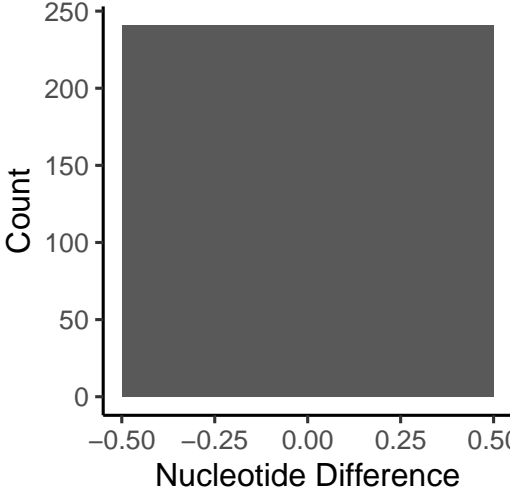
TRBV5-8\*ap01

945 sequences assigned  
943 (99.8%) exact matches, in which:  
943 unique CDR3  
13 unique J



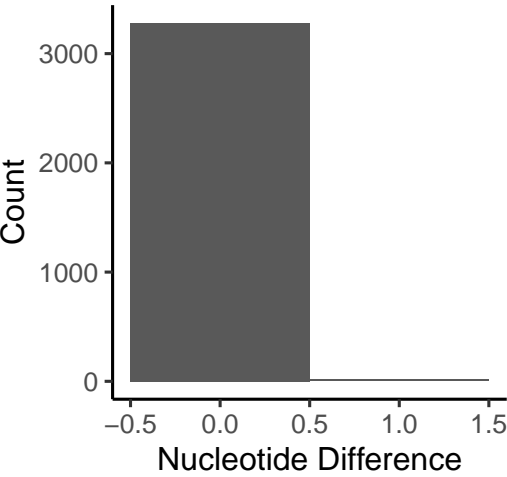
TRBV6-7\*ap01

241 sequences assigned  
241 (100%) exact matches, in which:  
239 unique CDR3  
13 unique J



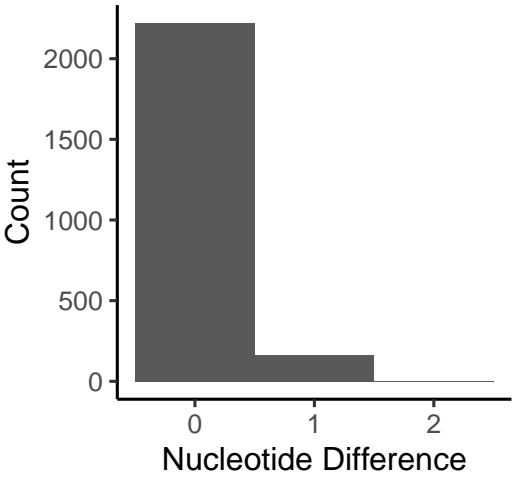
TRBV5-6\*ap01

3296 sequences assigned  
3280 (99.5%) exact matches, in which:  
3265 unique CDR3  
13 unique J



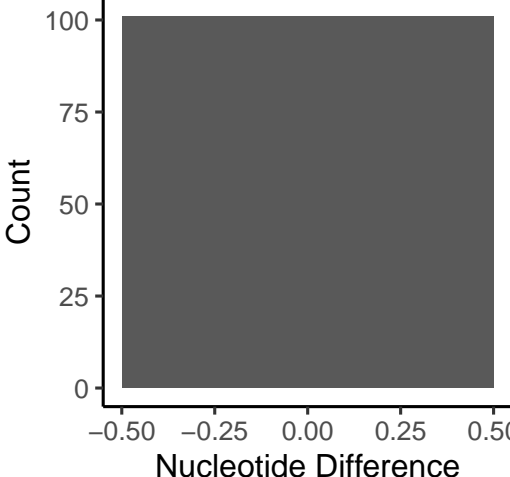
TRBV6-1\*ap01

2385 sequences assigned  
2221 (93.1%) exact matches, in which:  
2214 unique CDR3  
13 unique J



TRBV6-8\*ap01

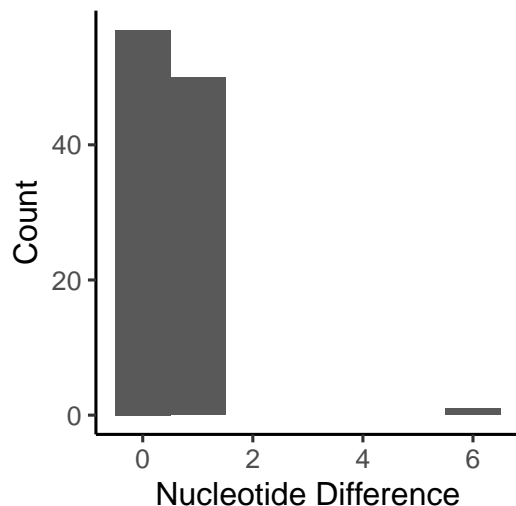
101 sequences assigned  
101 (100%) exact matches, in which:  
99 unique CDR3  
13 unique J





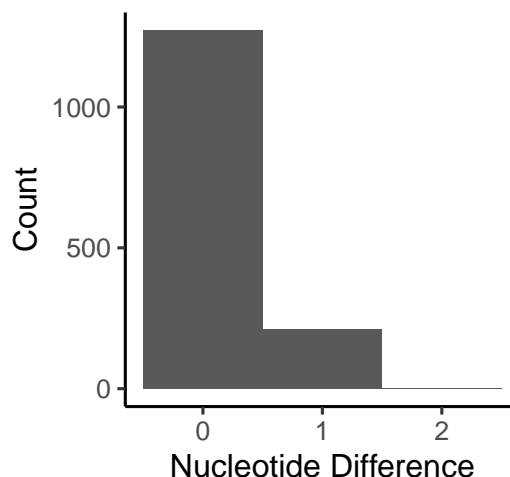
### TRBV6-9\*ap01

108 sequences assigned  
57 (52.8%) exact matches, in which:  
57 unique CDR3  
11 unique J



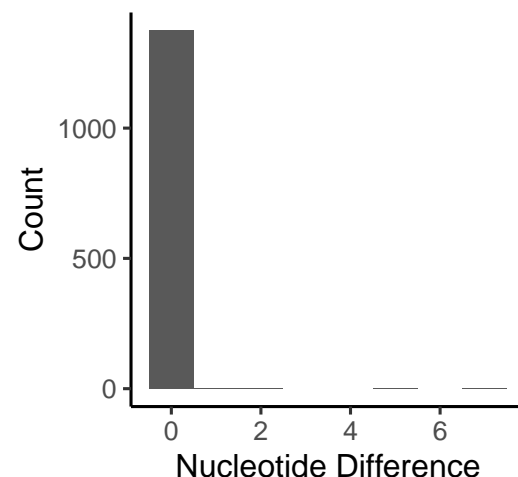
### TRBV6-56\*ap02

1486 sequences assigned  
1272 (85.6%) exact matches, in which:  
1267 unique CDR3  
13 unique J



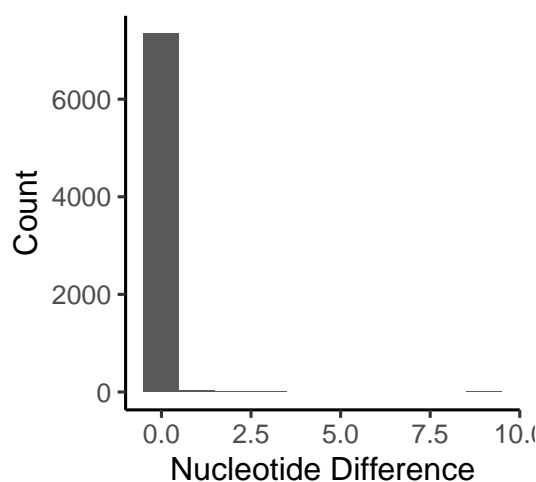
### TRBV7-3\*ap02

1380 sequences assigned  
1375 (99.6%) exact matches, in which:  
1373 unique CDR3  
13 unique J



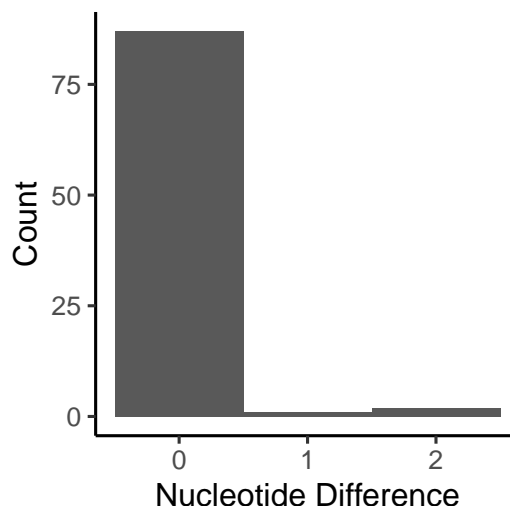
### TRBV6-23\*ap01

7366 sequences assigned  
7341 (99.7%) exact matches, in which:  
7317 unique CDR3  
13 unique J



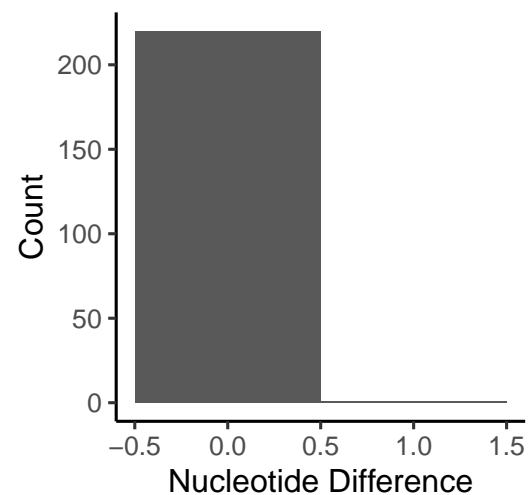
### TRBV7-1\*ap01\_G291C\_T

90 sequences assigned  
87 (96.7%) exact matches, in which:  
87 unique CDR3  
13 unique J



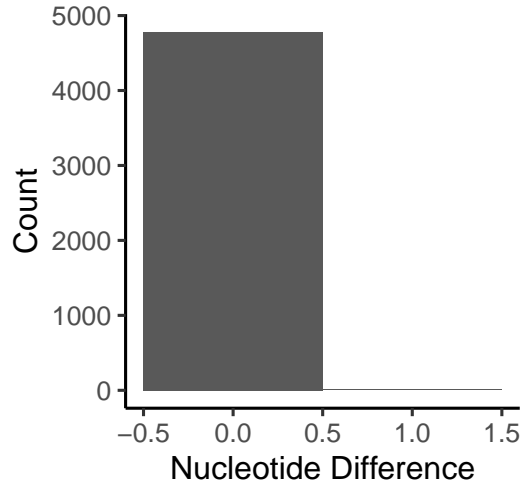
### TRBV7-4\*ap01

221 sequences assigned  
220 (99.5%) exact matches, in which:  
220 unique CDR3  
13 unique J



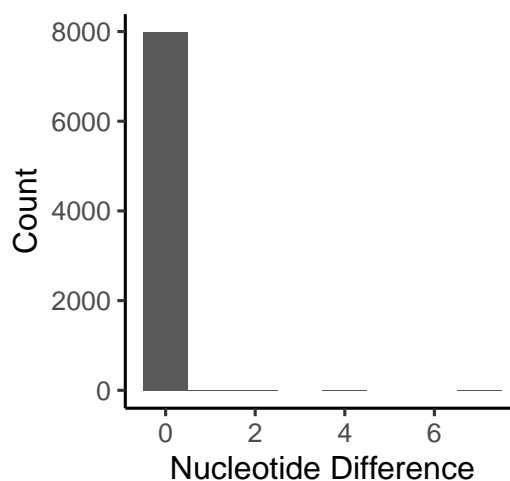
### TRBV6-56\*ap01

4793 sequences assigned  
4780 (99.7%) exact matches, in which:  
4768 unique CDR3  
13 unique J



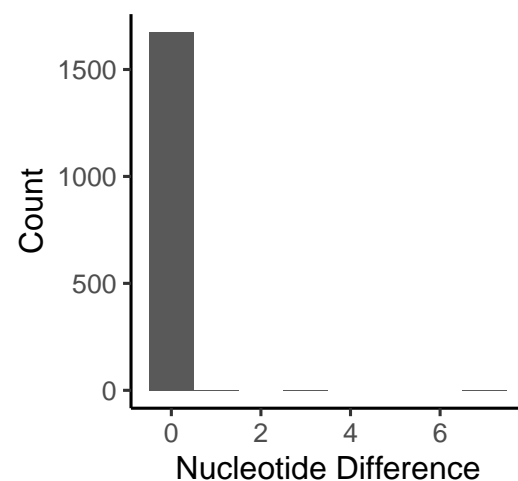
### TRBV7-2\*ap01

8002 sequences assigned  
7988 (99.8%) exact matches, in which:  
7975 unique CDR3  
13 unique J



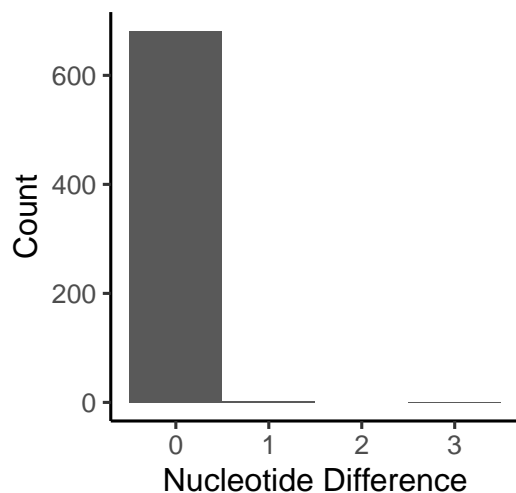
### TRBV7-6\*ap01

1678 sequences assigned  
1675 (99.8%) exact matches, in which:  
1670 unique CDR3  
13 unique J



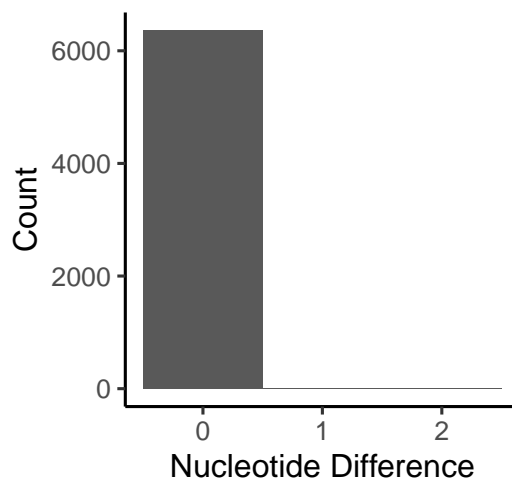
### TRBV7-7\*ap01

686 sequences assigned  
682 (99.4%) exact matches, in which:  
679 unique CDR3  
13 unique J



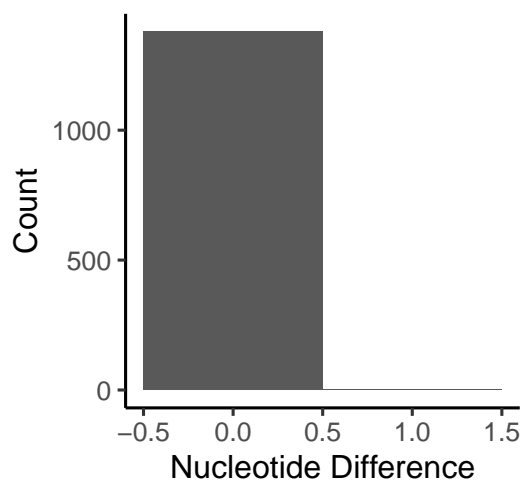
### TRBV7-9\*ap01

6373 sequences assigned  
6362 (99.8%) exact matches, in which:  
6348 unique CDR3  
13 unique J



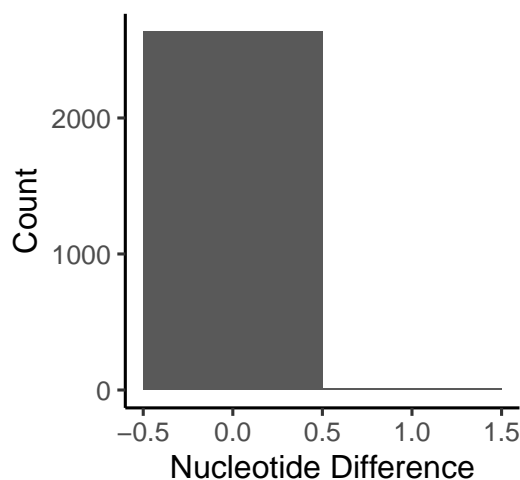
### TRBV7-8\*ap01

1382 sequences assigned  
1379 (99.8%) exact matches, in which:  
1376 unique CDR3  
13 unique J



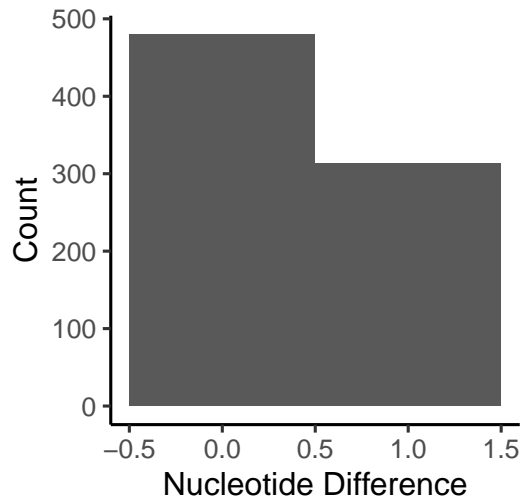
### TRBV29-1\*ap01

2648 sequences assigned  
2634 (99.5%) exact matches, in which:  
2626 unique CDR3  
13 unique J



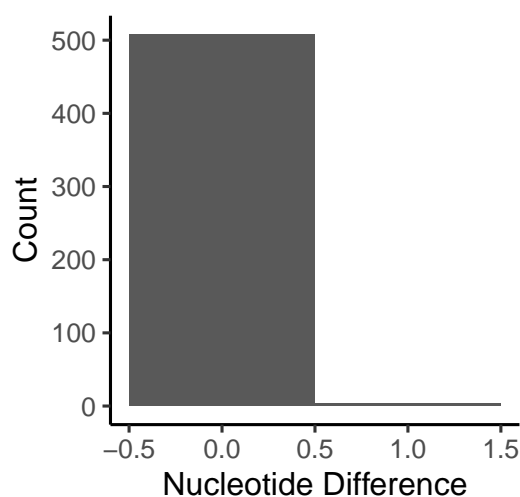
### TRBV7-8\*ap03

793 sequences assigned  
480 (60.5%) exact matches, in which:  
479 unique CDR3  
13 unique J



### TRBV29-1\*ap02

511 sequences assigned  
508 (99.4%) exact matches, in which:  
507 unique CDR3  
13 unique J



TRBV7-1\*ap01\_G291C\_T296C

