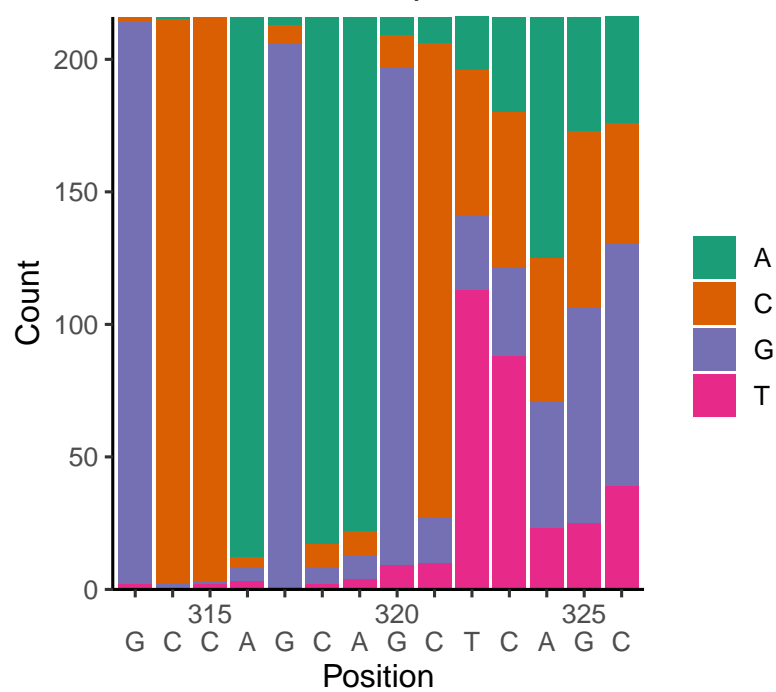
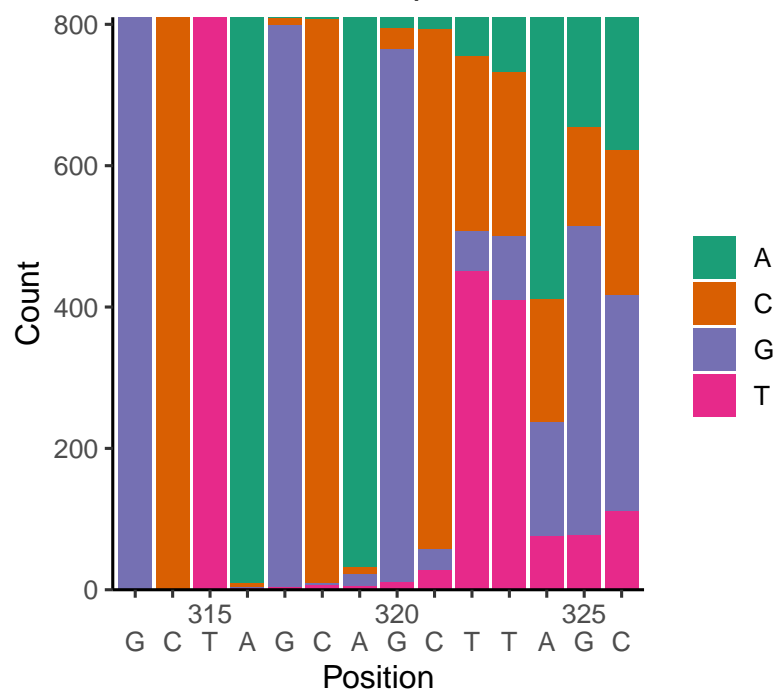


Gene TRBV7-1\*ap01\_G291C\_T296C

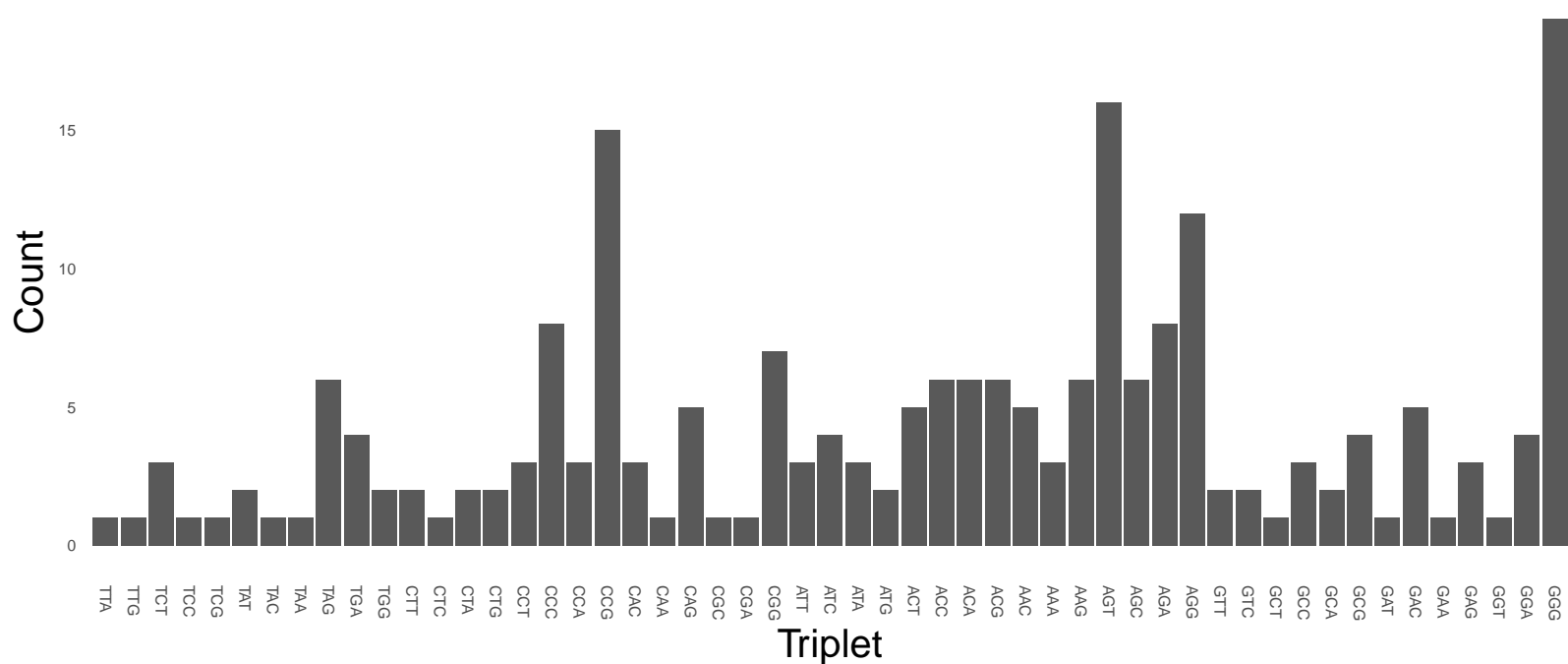


Gene TRBV7-7\*ap01\_C315T

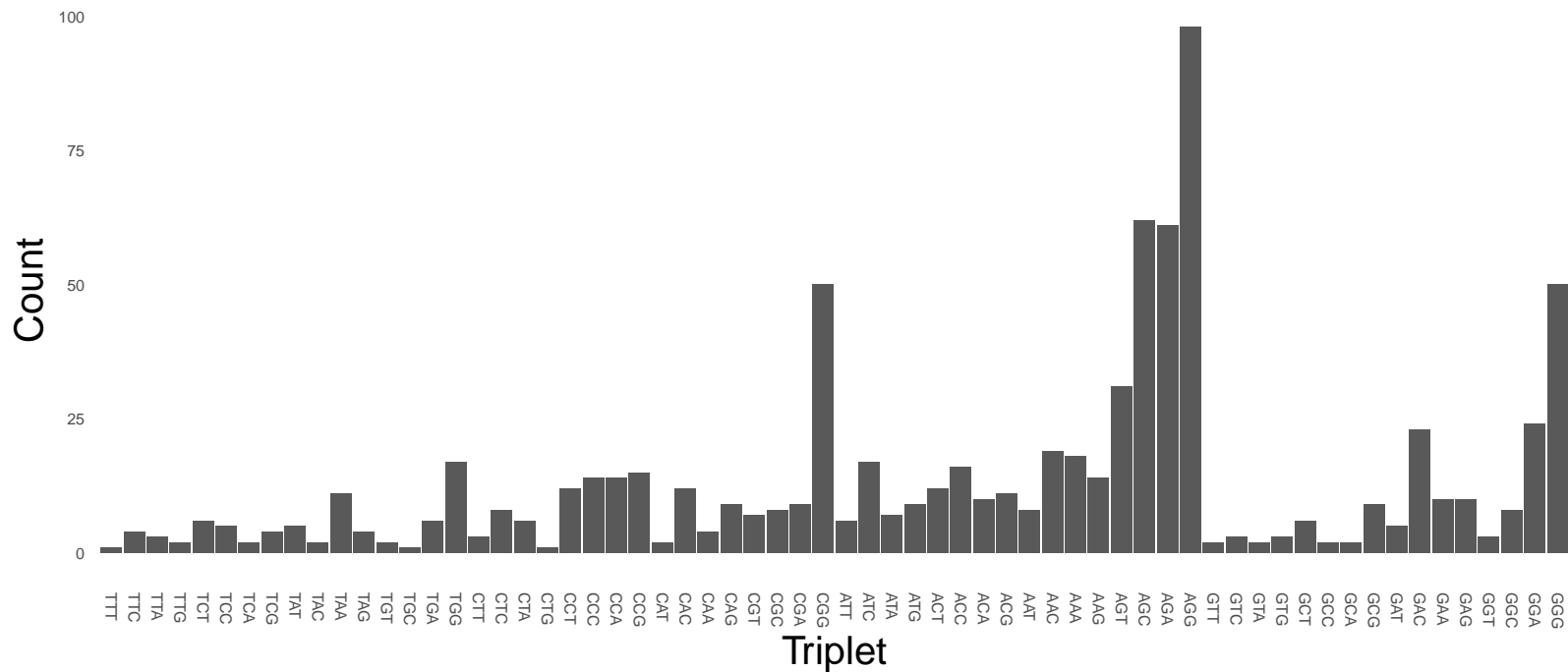




TRBV7-1\*ap01\_G291C\_T296C- Final 3 nucleotides as a triplet

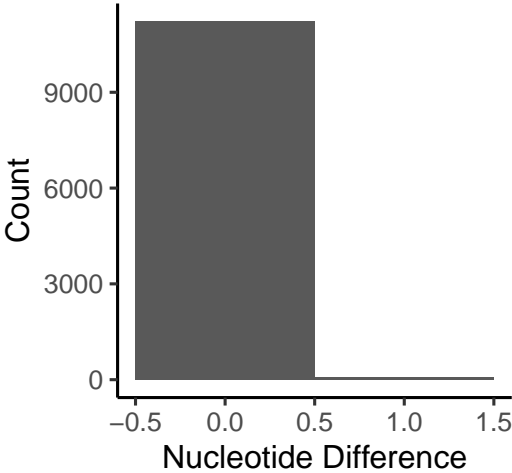


TRBV7-7\*ap01\_C315T- Final 3 nucleotides as a triplet



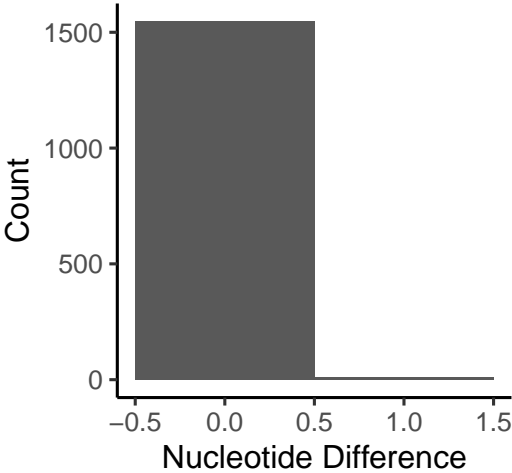
TRBV20-1\*ap01

11304 sequences assigned  
11220 (99.3%) exact matches, in which:  
11149 unique CDR3  
13 unique J



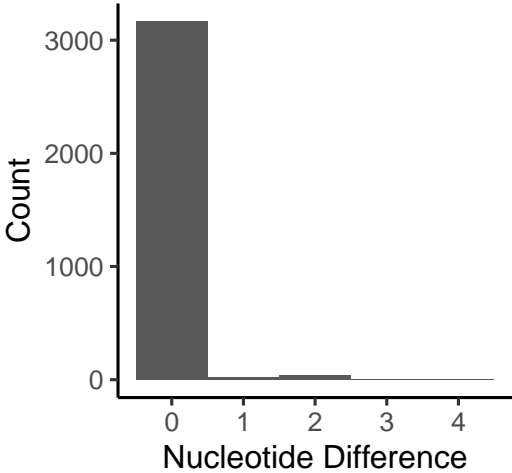
TRBV10-2\*ap01

1559 sequences assigned  
1547 (99.2%) exact matches, in which:  
1527 unique CDR3  
13 unique J



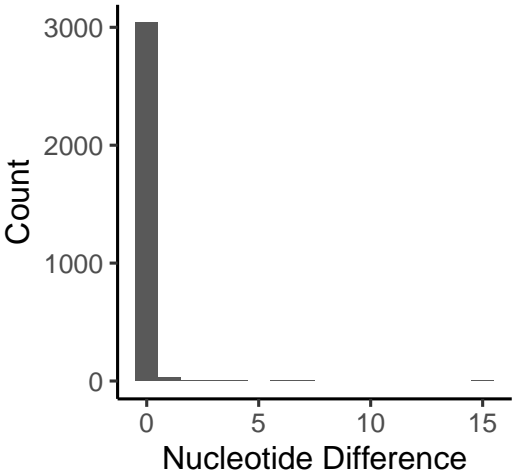
TRBV13\*ap01

3229 sequences assigned  
3166 (98%) exact matches, in which:  
3111 unique CDR3  
13 unique J



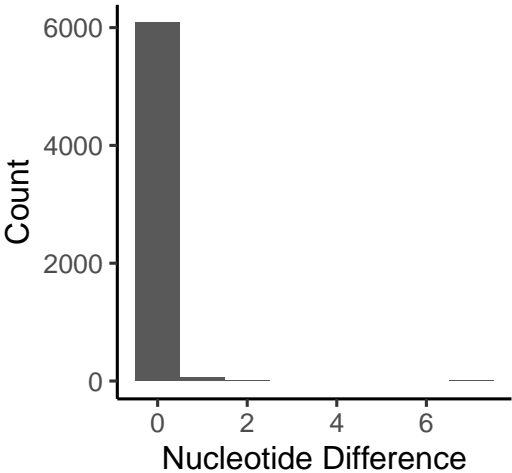
TRBV10-1\*ap01

3079 sequences assigned  
3039 (98.7%) exact matches, in which:  
3004 unique CDR3  
13 unique J



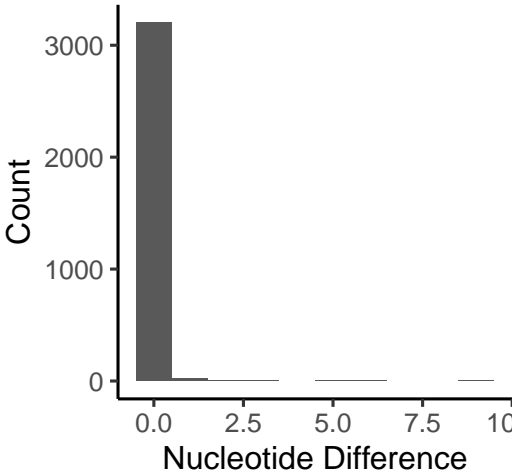
TRBV10-3\*ap01

6148 sequences assigned  
6083 (98.9%) exact matches, in which:  
6021 unique CDR3  
13 unique J



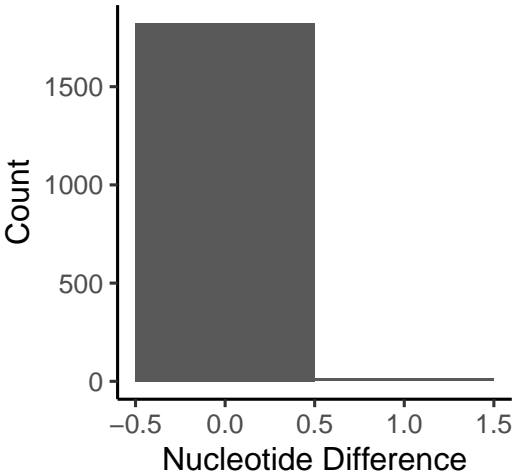
TRBV14\*ap01

3226 sequences assigned  
3201 (99.2%) exact matches, in which:  
3185 unique CDR3  
13 unique J



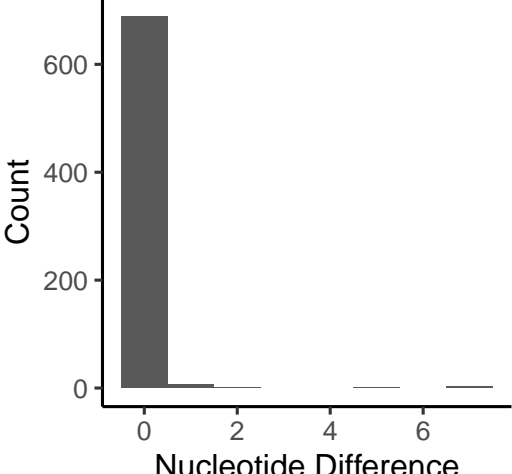
TRBV20-1\*ap02

1838 sequences assigned  
1824 (99.2%) exact matches, in which:  
1810 unique CDR3  
13 unique J



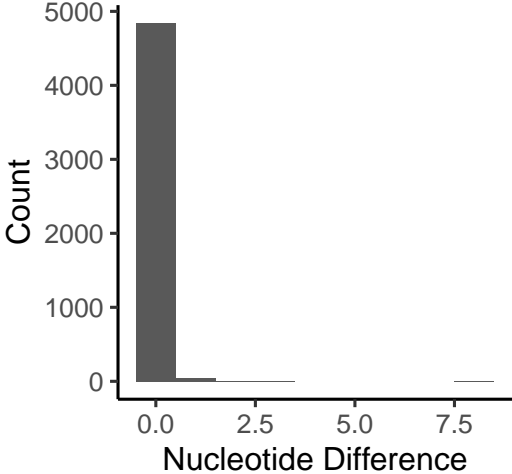
TRBV1\*ap01

701 sequences assigned  
689 (98.3%) exact matches, in which:  
673 unique CDR3  
13 unique J



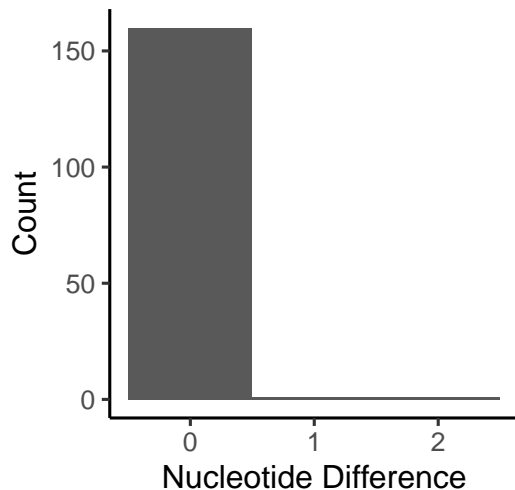
TRBV15\*ap02

4890 sequences assigned  
4842 (99%) exact matches, in which:  
4780 unique CDR3  
13 unique J



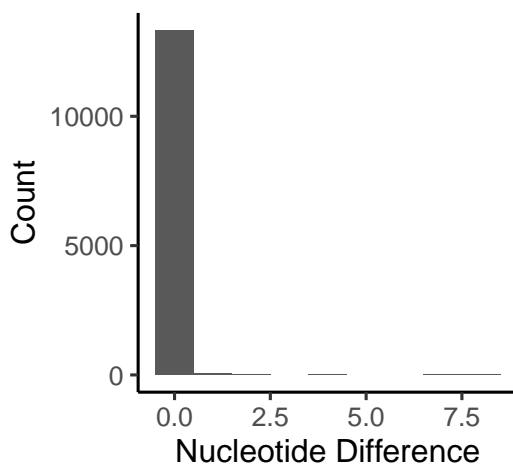
### TRBV16\*ap01

162 sequences assigned  
160 (98.8%) exact matches, in which:  
160 unique CDR3  
12 unique J



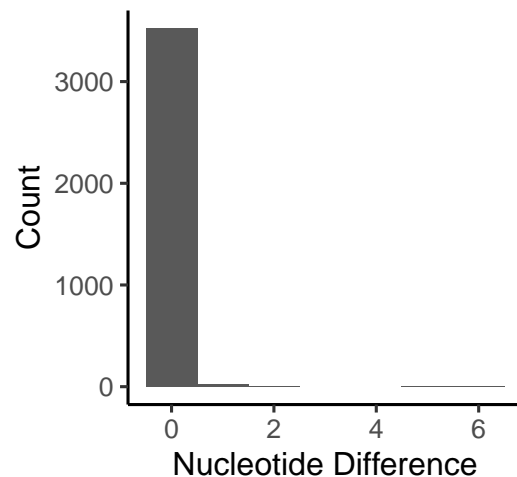
### TRBV19\*ap01

13413 sequences assigned  
13331 (99.4%) exact matches, in which:  
13275 unique CDR3  
13 unique J



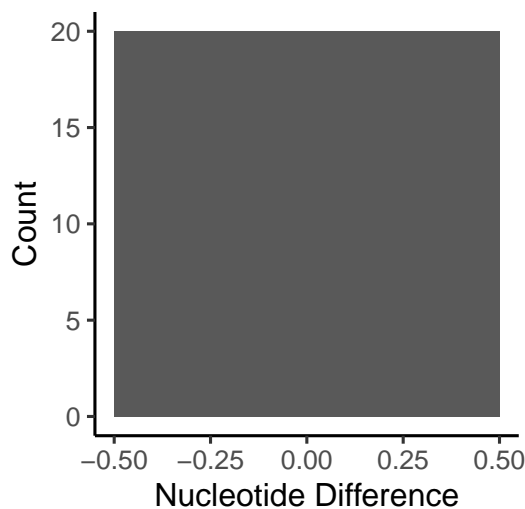
### TRBV28\*ap01

3551 sequences assigned  
3523 (99.2%) exact matches, in which:  
3509 unique CDR3  
13 unique J



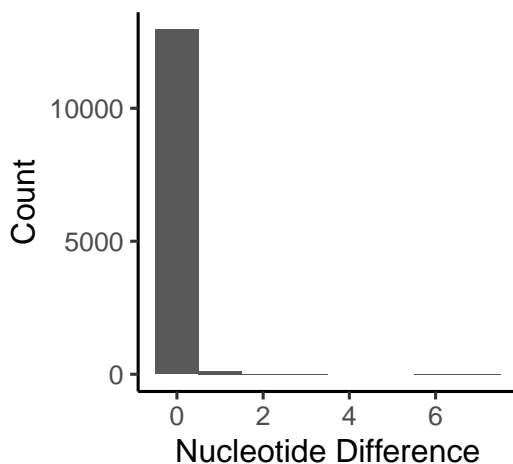
### TRBV17\*ap01

20 sequences assigned  
20 (100%) exact matches, in which:  
20 unique CDR3  
8 unique J



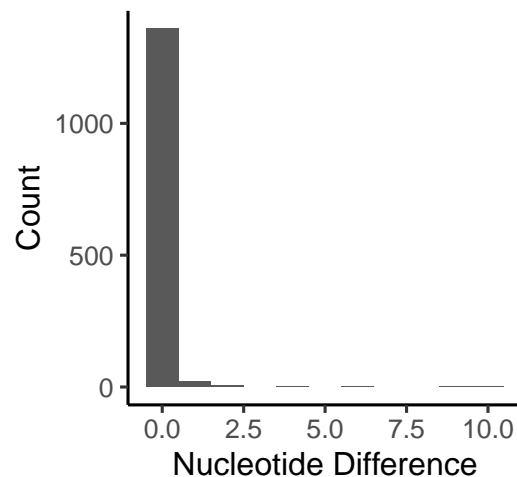
### TRBV2\*ap01

13102 sequences assigned  
12963 (98.9%) exact matches, in which:  
12771 unique CDR3  
13 unique J



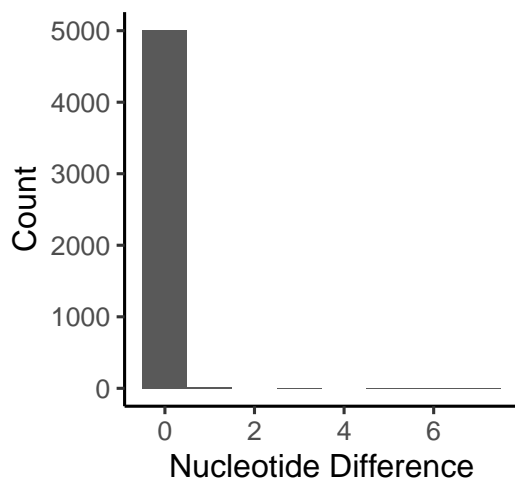
### TRBV30\*ap02

1387 sequences assigned  
1359 (98%) exact matches, in which:  
1336 unique CDR3  
13 unique J



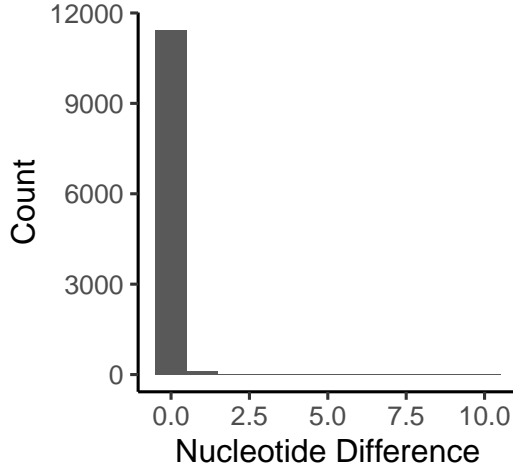
### TRBV18\*ap01

5027 sequences assigned  
5009 (99.6%) exact matches, in which:  
4993 unique CDR3  
13 unique J



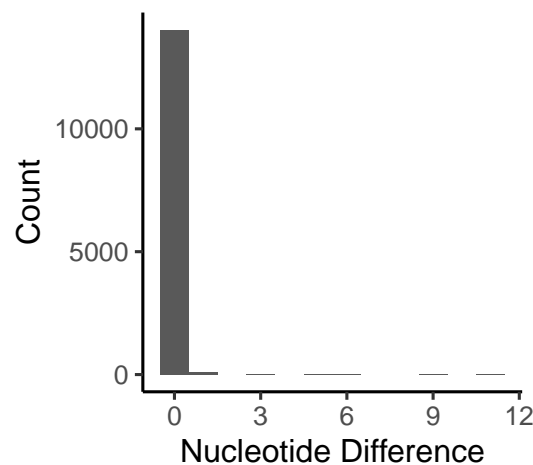
### TRBV27\*ap01

11574 sequences assigned  
11442 (98.9%) exact matches, in which:  
11301 unique CDR3  
13 unique J



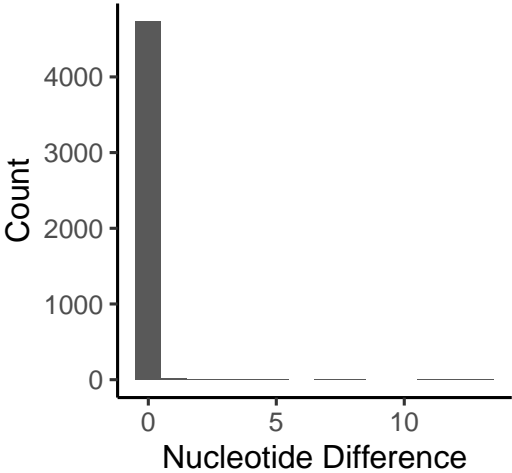
### TRBV9\*ap01

14126 sequences assigned  
14030 (99.3%) exact matches, in which:  
13934 unique CDR3  
13 unique J



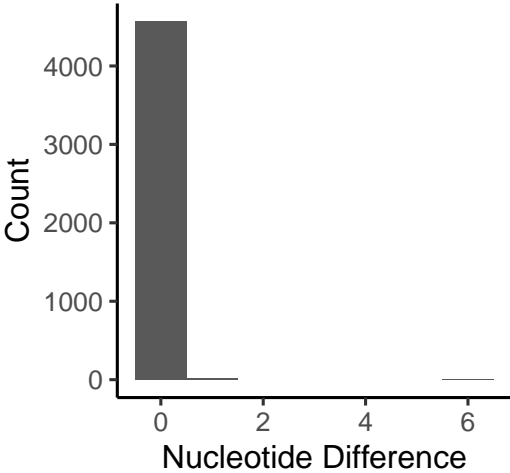
TRBV21-1\*ap01

4785 sequences assigned  
4733 (98.9%) exact matches, in which:  
4713 unique CDR3  
13 unique J



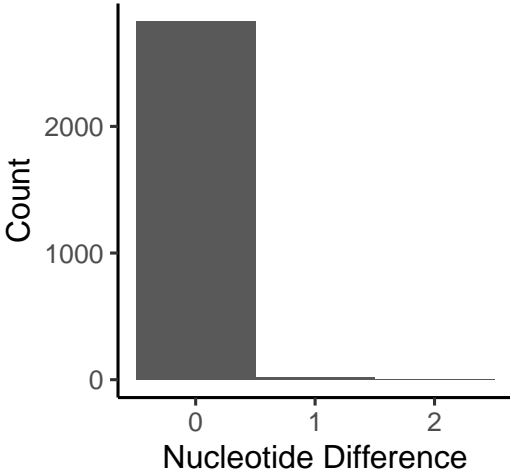
TRBV11-3\*ap01

4594 sequences assigned  
4568 (99.4%) exact matches, in which:  
4547 unique CDR3  
13 unique J



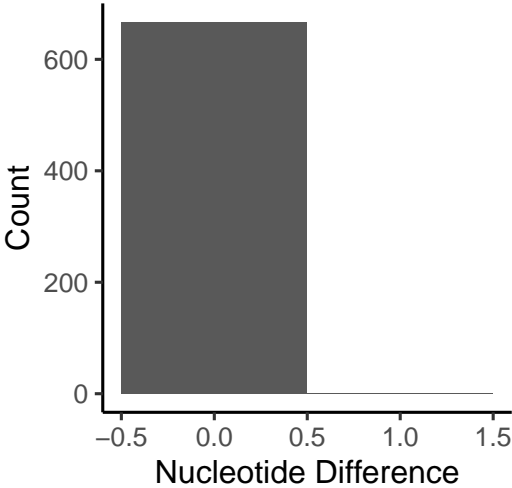
TRBV12-5\*ap01

2847 sequences assigned  
2829 (99.4%) exact matches, in which:  
2802 unique CDR3  
13 unique J



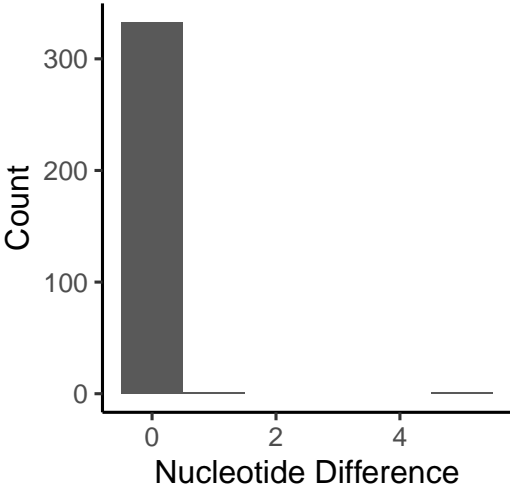
TRBV11-1\*ap01

668 sequences assigned  
667 (99.9%) exact matches, in which:  
664 unique CDR3  
13 unique J



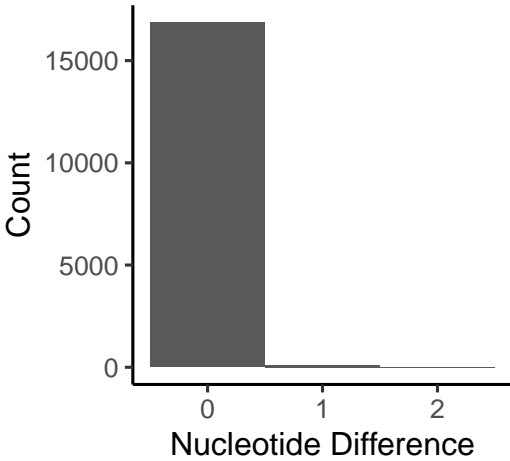
TRBV12-1\*ap01

335 sequences assigned  
333 (99.4%) exact matches, in which:  
329 unique CDR3  
13 unique J



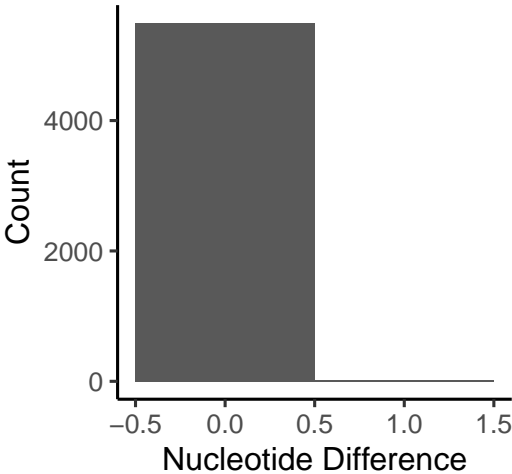
TRBV12-34\*ap01

16991 sequences assigned  
16867 (99.3%) exact matches, in which:  
16696 unique CDR3  
14 unique J



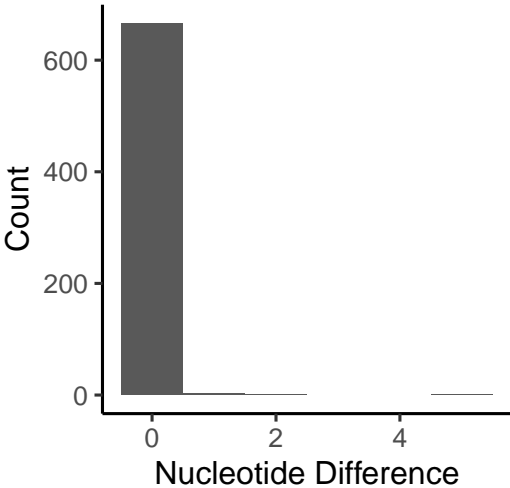
TRBV11-2\*ap01

5521 sequences assigned  
5496 (99.5%) exact matches, in which:  
5473 unique CDR3  
13 unique J



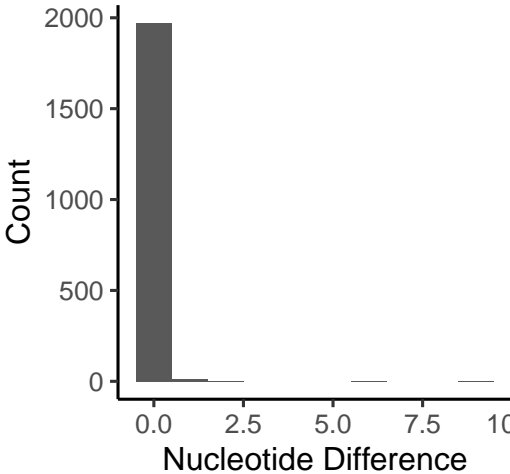
TRBV12-2\*ap01

670 sequences assigned  
666 (99.4%) exact matches, in which:  
658 unique CDR3  
13 unique J



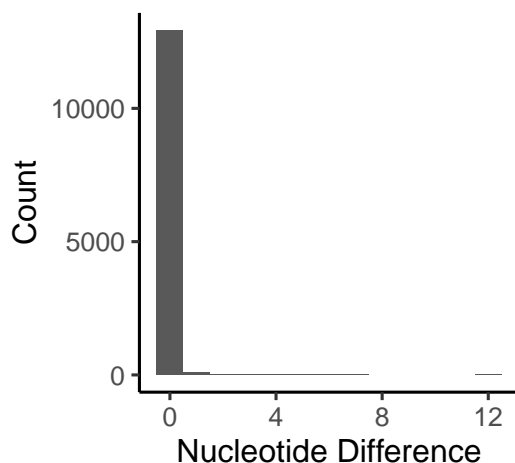
TRBV23-1\*ap01

1988 sequences assigned  
1971 (99.1%) exact matches, in which:  
1962 unique CDR3  
13 unique J



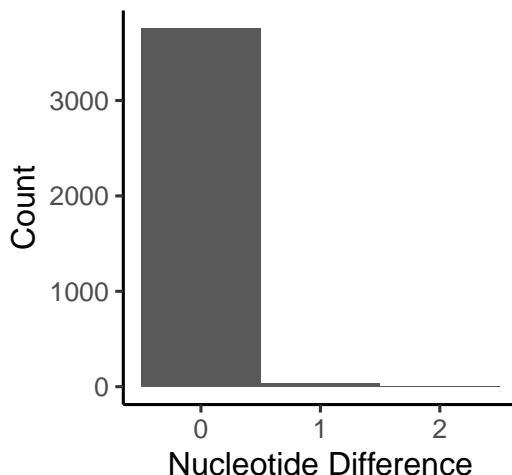
### TRBV3–12\*ap01

13035 sequences assigned  
12935 (99.2%) exact matches, in which:  
12777 unique CDR3  
13 unique J



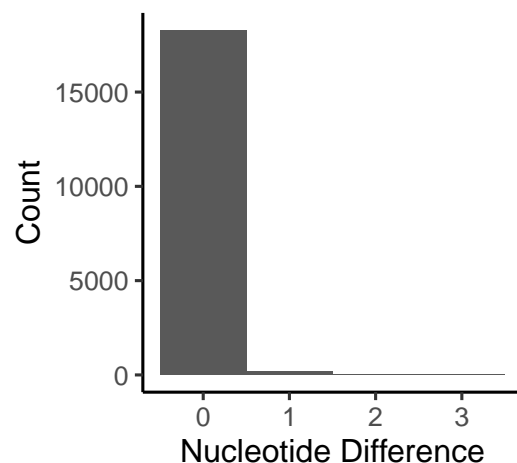
### TRBV4–2\*ap01

3793 sequences assigned  
3756 (99%) exact matches, in which:  
3701 unique CDR3  
13 unique J



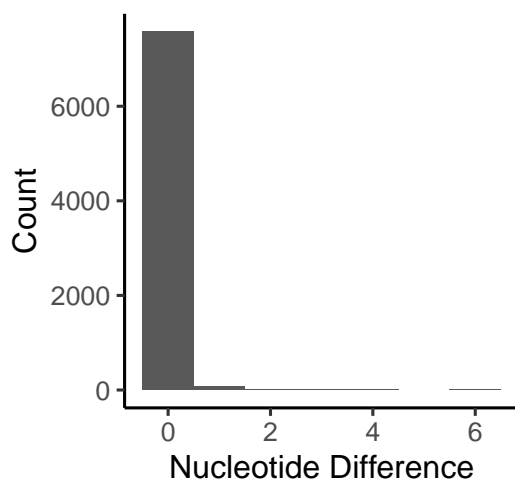
### TRBV5–1\*ap01

18450 sequences assigned  
18282 (99.1%) exact matches, in which:  
17959 unique CDR3  
13 unique J



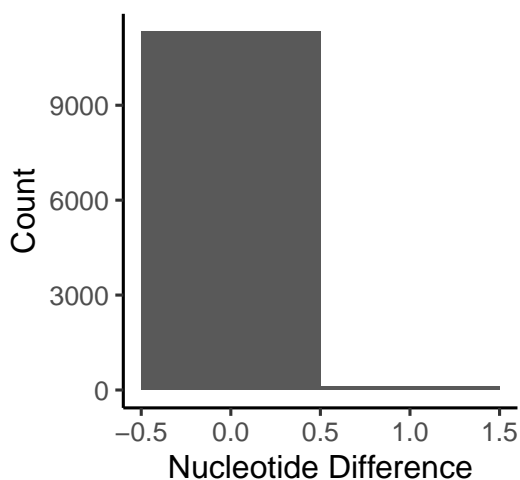
### TRBV24–1\*ap01

7657 sequences assigned  
7576 (98.9%) exact matches, in which:  
7468 unique CDR3  
13 unique J



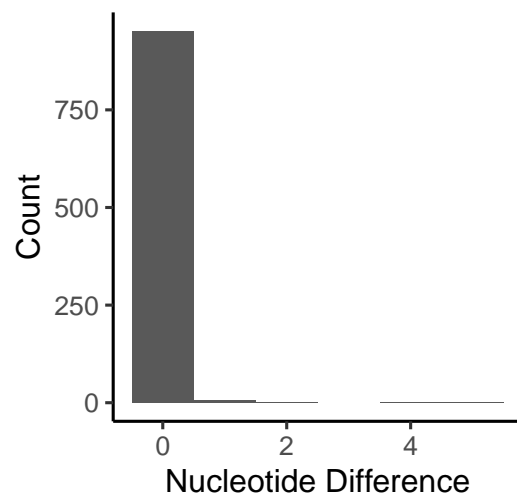
### TRBV4–3\*ap01

11433 sequences assigned  
11324 (99%) exact matches, in which:  
11174 unique CDR3  
13 unique J



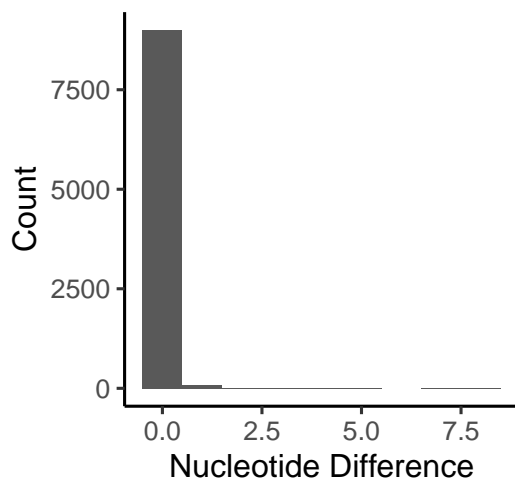
### TRBV5–3\*ap01

962 sequences assigned  
952 (99%) exact matches, in which:  
944 unique CDR3  
13 unique J



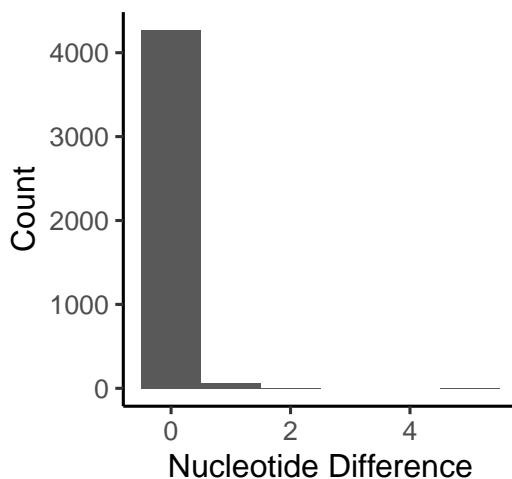
### TRBV4–1\*ap01

9085 sequences assigned  
8999 (99.1%) exact matches, in which:  
8846 unique CDR3  
13 unique J



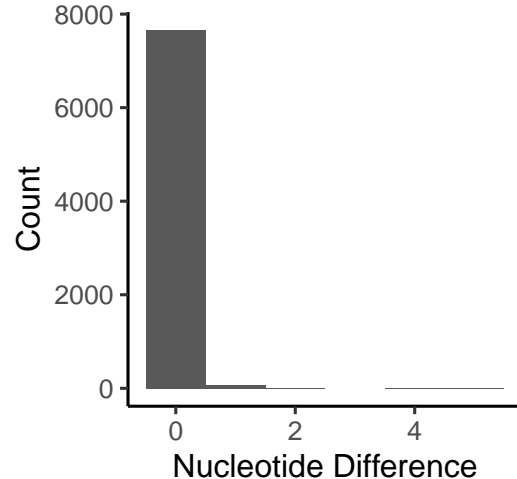
### TRBV25–1\*ap01

4335 sequences assigned  
4270 (98.5%) exact matches, in which:  
4193 unique CDR3  
13 unique J



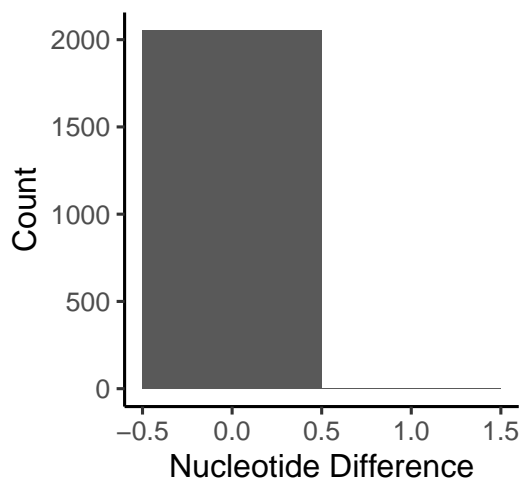
### TRBV5–4\*ap01

7735 sequences assigned  
7659 (99%) exact matches, in which:  
7545 unique CDR3  
13 unique J



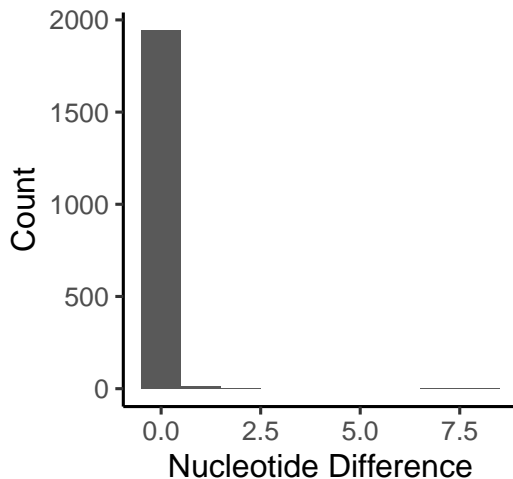
### TRBV5-5\*ap01

2057 sequences assigned  
2053 (99.8%) exact matches, in which:  
2047 unique CDR3  
13 unique J



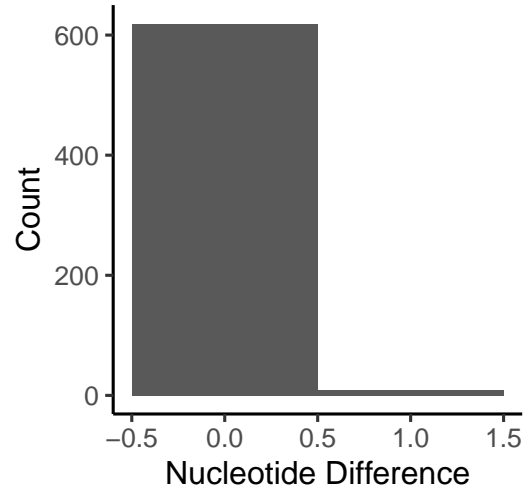
### TRBV5-8\*ap01

1959 sequences assigned  
1943 (99.2%) exact matches, in which:  
1931 unique CDR3  
13 unique J



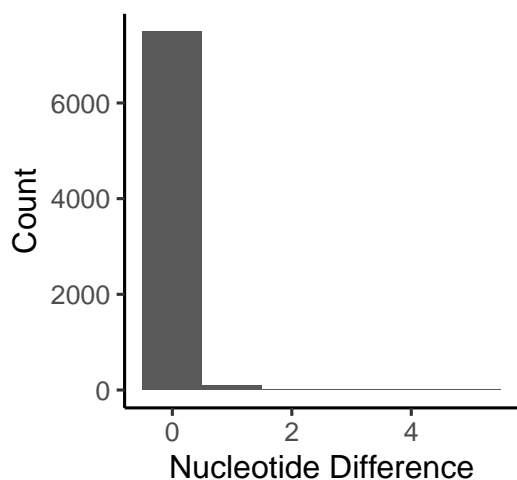
### TRBV6-7\*ap01

628 sequences assigned  
619 (98.6%) exact matches, in which:  
610 unique CDR3  
13 unique J



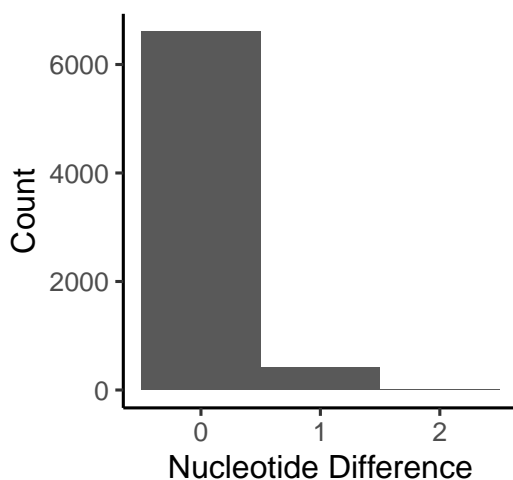
### TRBV5-6\*ap01

7581 sequences assigned  
7489 (98.8%) exact matches, in which:  
7331 unique CDR3  
13 unique J



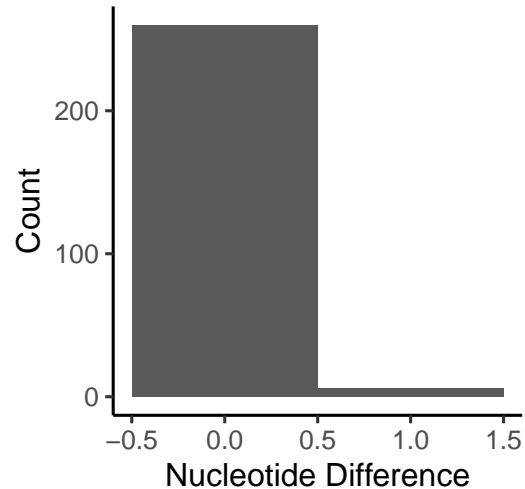
### TRBV6-1\*ap01

7022 sequences assigned  
6604 (94%) exact matches, in which:  
6486 unique CDR3  
13 unique J



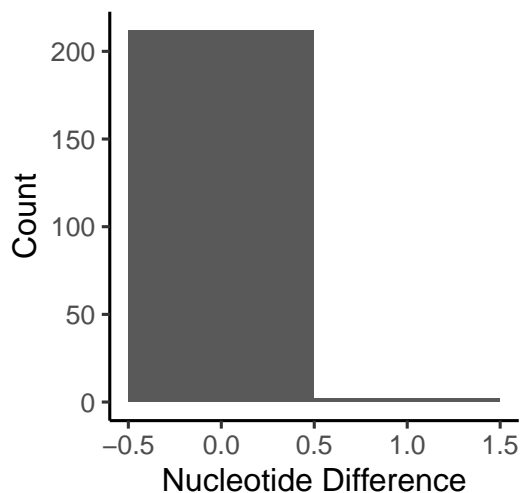
### TRBV6-8\*ap01

266 sequences assigned  
260 (97.7%) exact matches, in which:  
254 unique CDR3  
13 unique J



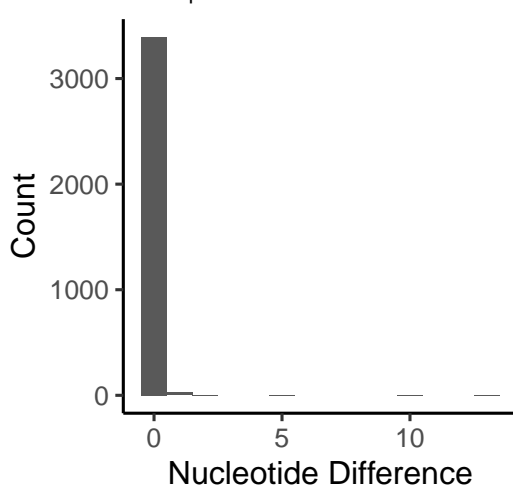
### TRBV5-7\*ap01

214 sequences assigned  
212 (99.1%) exact matches, in which:  
203 unique CDR3  
13 unique J



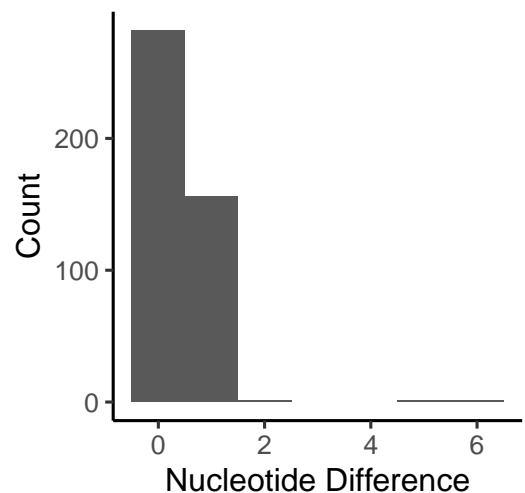
### TRBV6-4\*ap01

3425 sequences assigned  
3393 (99.1%) exact matches, in which:  
3362 unique CDR3  
13 unique J



### TRBV6-9\*ap01

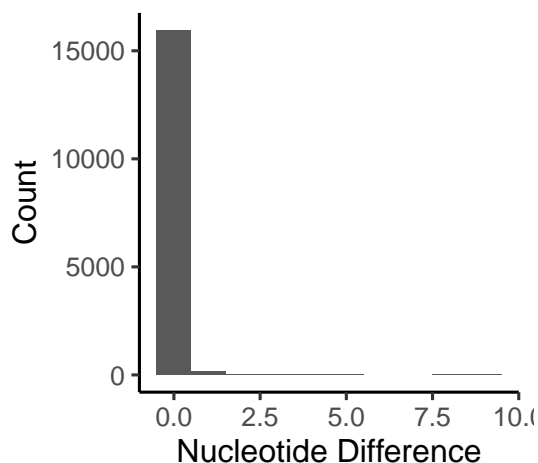
441 sequences assigned  
282 (63.9%) exact matches, in which:  
275 unique CDR3  
13 unique J





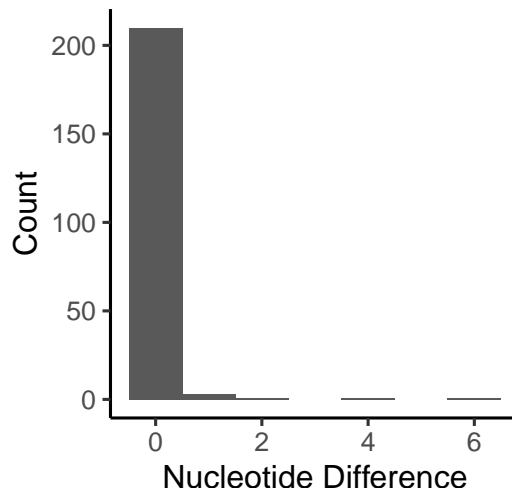
### TRBV6-23\*ap01

16151 sequences assigned  
15955 (98.8%) exact matches, in which:  
15607 unique CDR3  
13 unique J



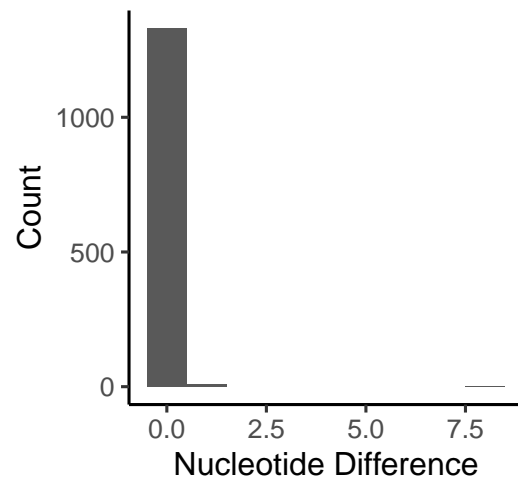
### TRBV7-1\*ap01\_G291C\_

216 sequences assigned  
210 (97.2%) exact matches, in which:  
208 unique CDR3  
13 unique J



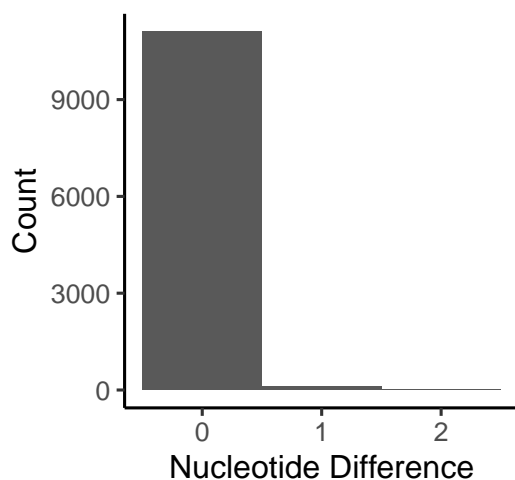
### TRBV7-3\*ap02

1339 sequences assigned  
1330 (99.3%) exact matches, in which:  
1325 unique CDR3  
13 unique J



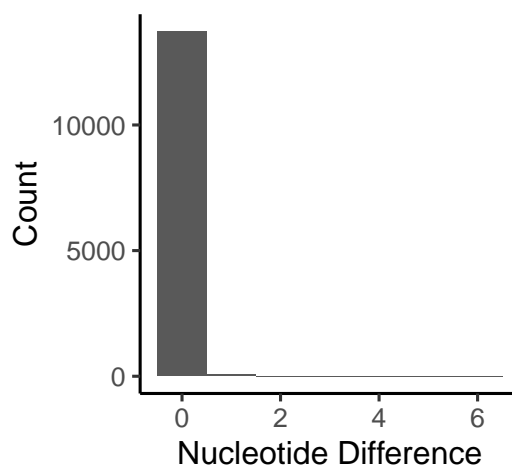
### TRBV6-56\*ap01

11230 sequences assigned  
11103 (98.9%) exact matches, in which:  
10876 unique CDR3  
13 unique J



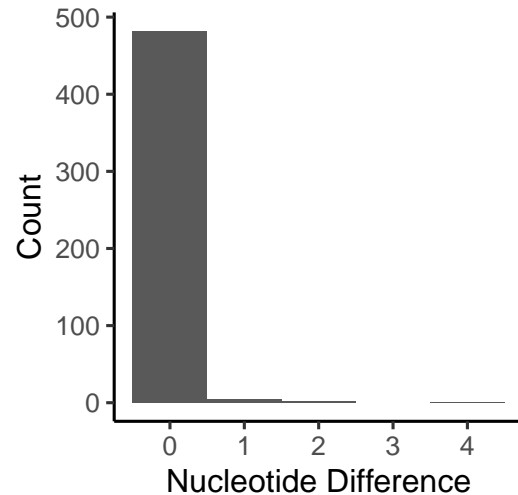
### TRBV7-2\*ap01

13801 sequences assigned  
13721 (99.4%) exact matches, in which:  
13620 unique CDR3  
13 unique J



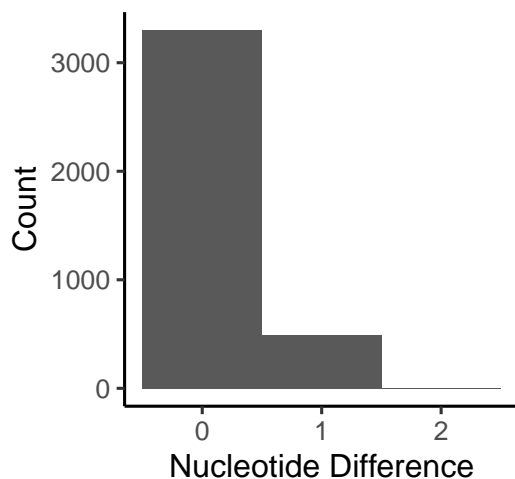
### TRBV7-4\*ap01

490 sequences assigned  
482 (98.4%) exact matches, in which:  
479 unique CDR3  
13 unique J



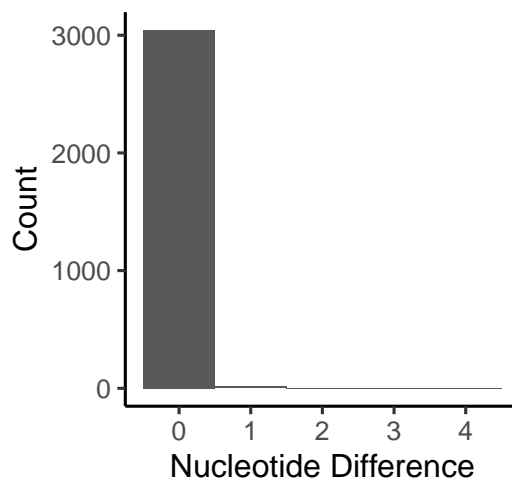
### TRBV6-56\*ap02

3796 sequences assigned  
3301 (87%) exact matches, in which:  
3245 unique CDR3  
13 unique J



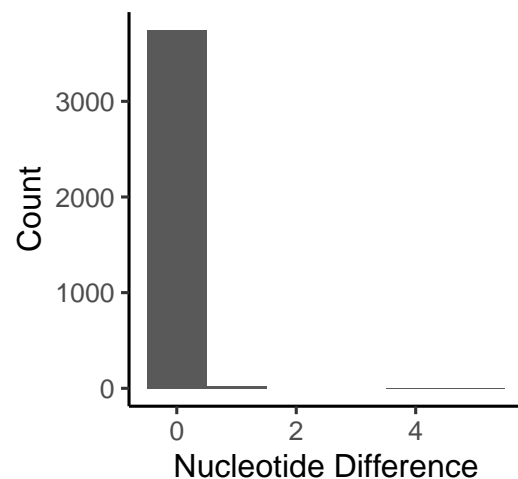
### TRBV7-3\*ap01

3061 sequences assigned  
3044 (99.4%) exact matches, in which:  
3030 unique CDR3  
13 unique J



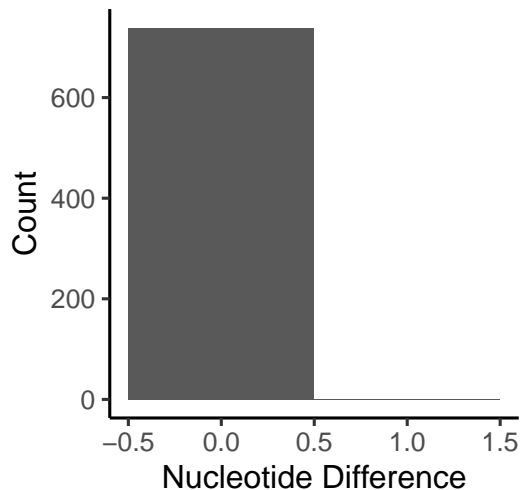
### TRBV7-6\*ap01

3773 sequences assigned  
3745 (99.3%) exact matches, in which:  
3716 unique CDR3  
13 unique J



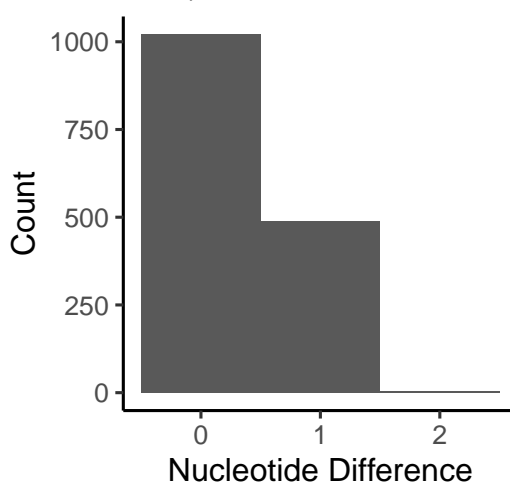
### TRBV7-7\*ap01

740 sequences assigned  
739 (99.9%) exact matches, in which:  
728 unique CDR3  
13 unique J



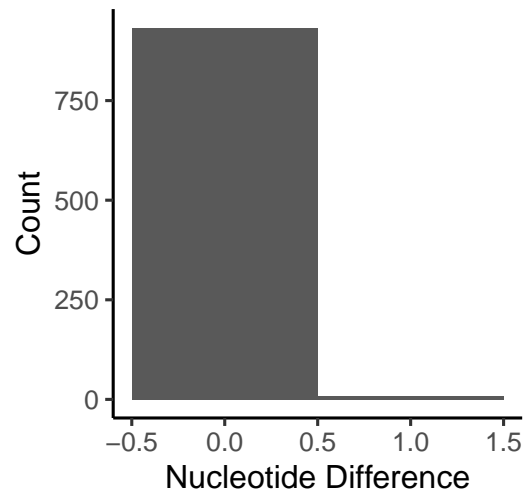
### TRBV7-8\*ap03

1515 sequences assigned  
1021 (67.4%) exact matches, in which:  
1008 unique CDR3  
13 unique J



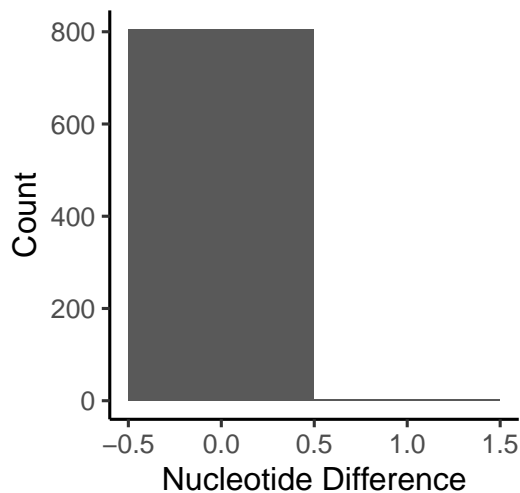
### TRBV29-1\*ap02

941 sequences assigned  
933 (99.1%) exact matches, in which:  
906 unique CDR3  
13 unique J



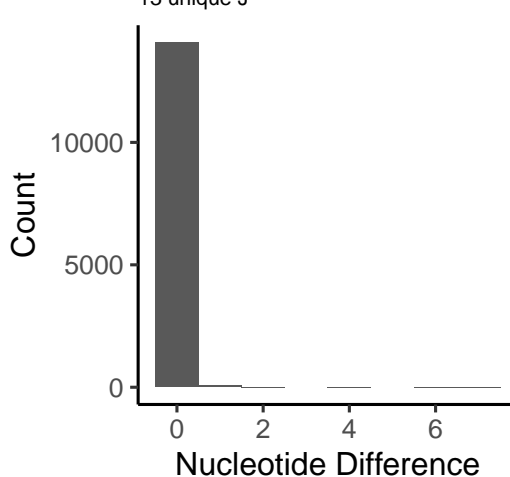
### TRBV7-7\*ap01\_C315T

810 sequences assigned  
806 (99.5%) exact matches, in which:  
799 unique CDR3  
13 unique J



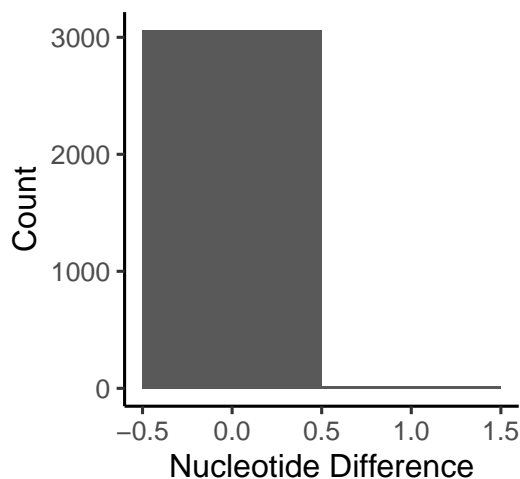
### TRBV7-9\*ap01

14169 sequences assigned  
14081 (99.4%) exact matches, in which:  
13970 unique CDR3  
13 unique J



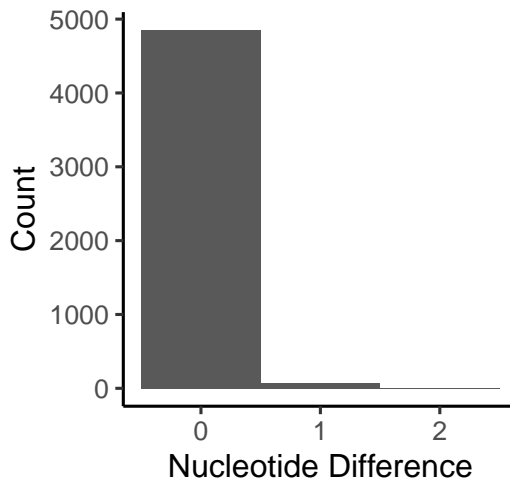
### TRBV7-8\*ap01

3083 sequences assigned  
3062 (99.3%) exact matches, in which:  
3025 unique CDR3  
13 unique J

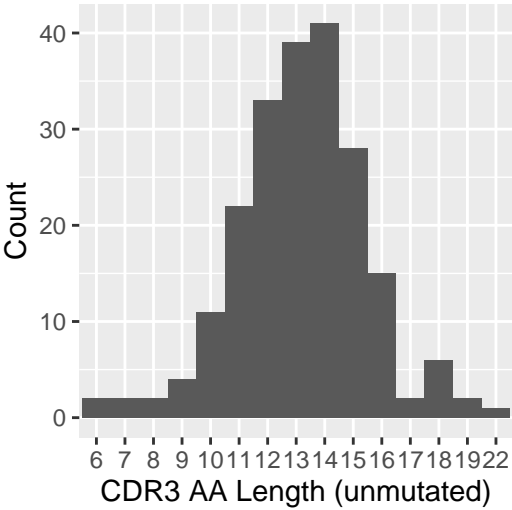


### TRBV29-1\*ap01

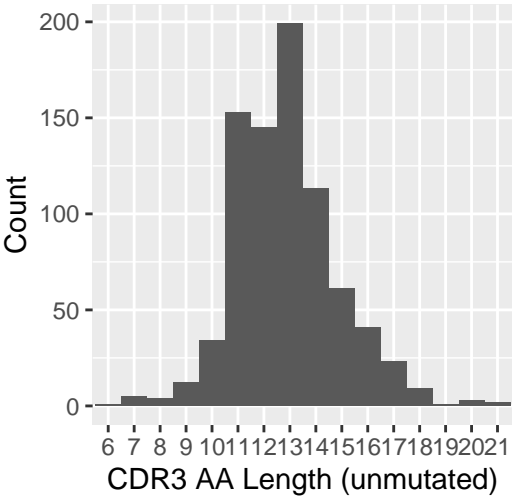
4929 sequences assigned  
4852 (98.4%) exact matches, in which:  
4729 unique CDR3  
13 unique J



TRBV7-1\*ap01\_G291C\_T296C



TRBV7-7\*ap01\_C315T





[illegible]