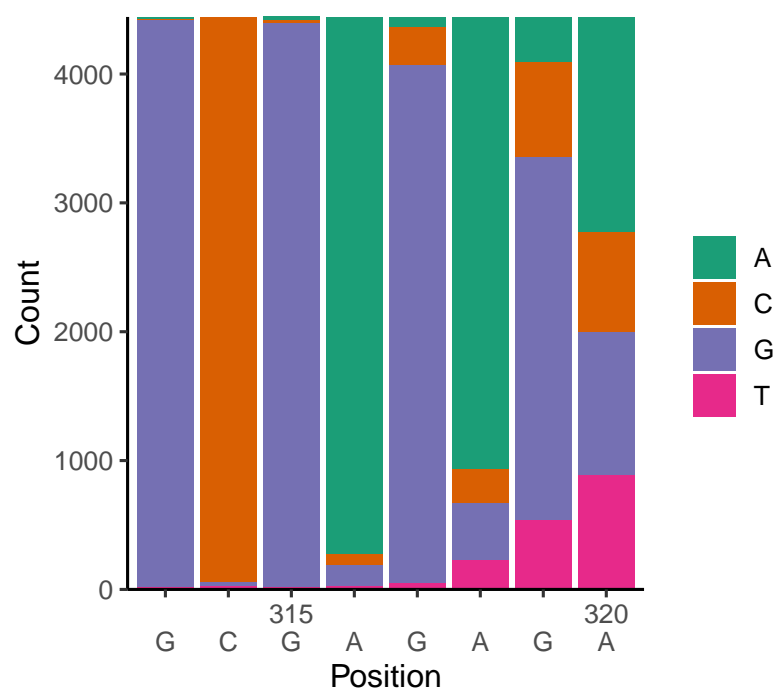
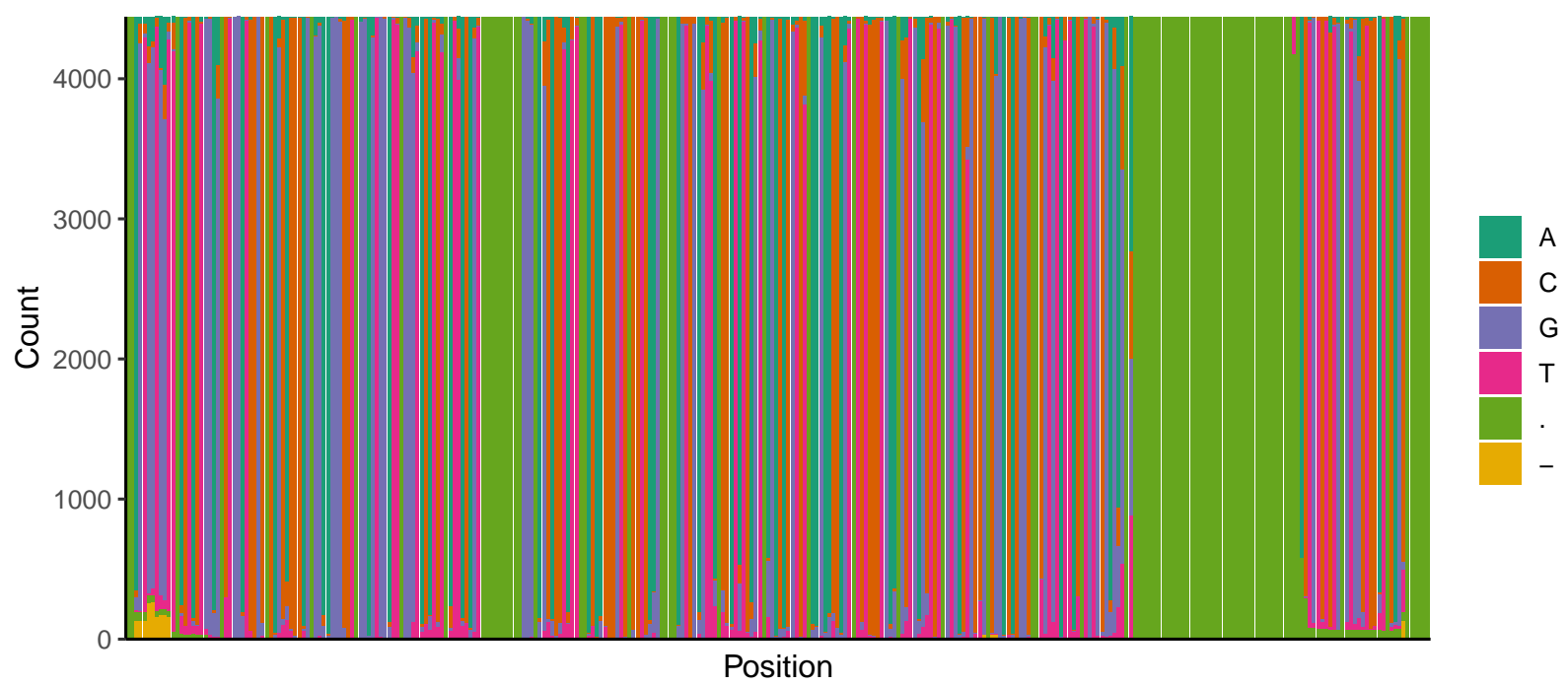


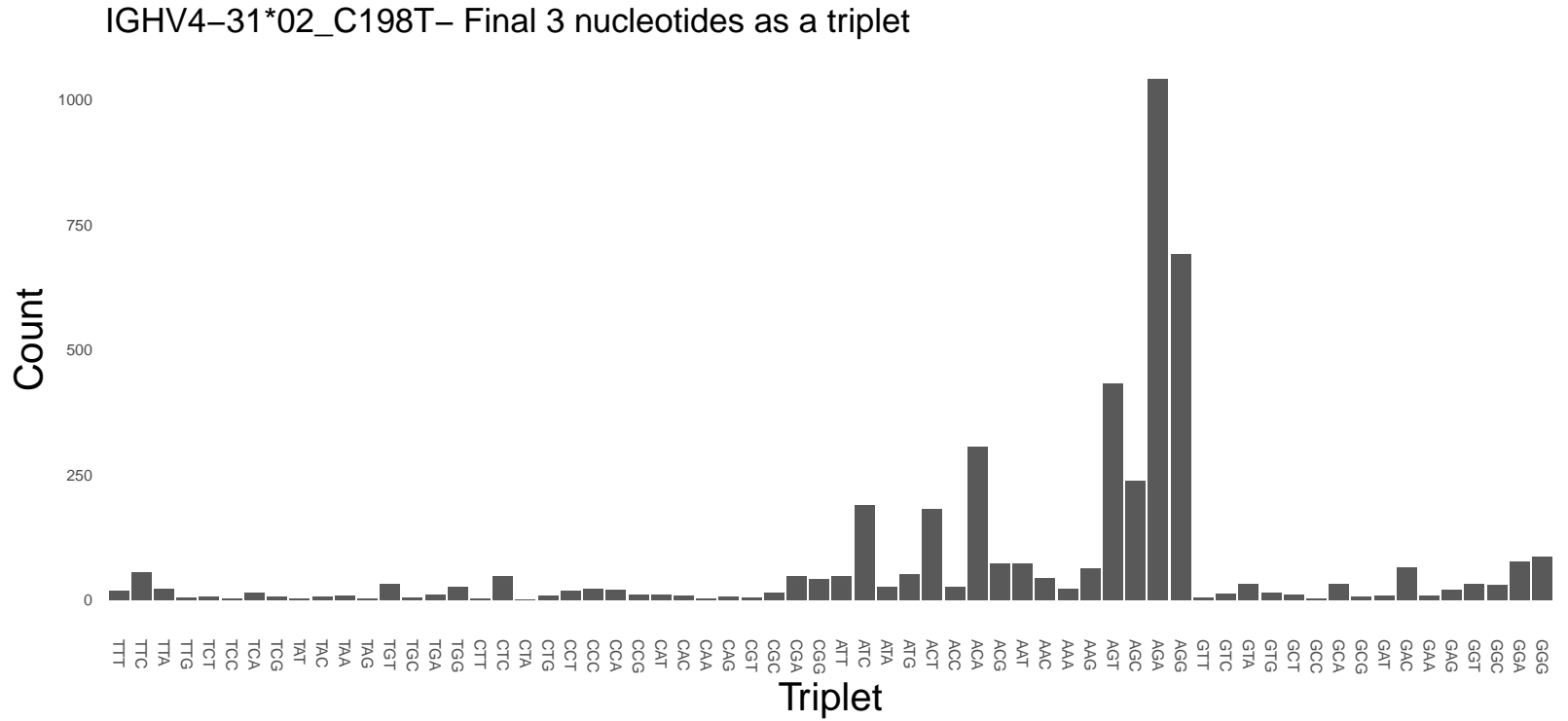
# Gene IGHV4-31\*02\_C198T



# Gene IGHV4-31\*02\_C198T

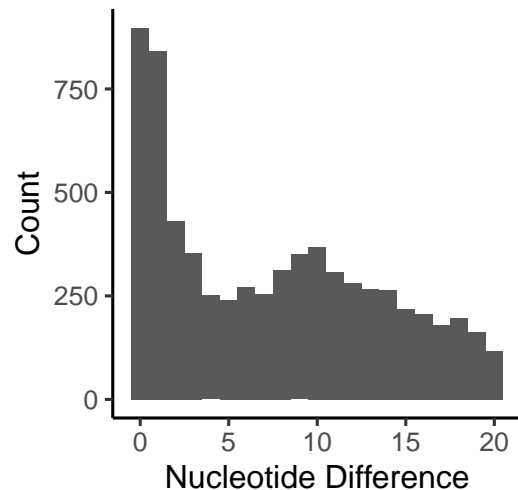


IGHV4-31\*02\_C198T- Final 3 nucleotides as a triplet



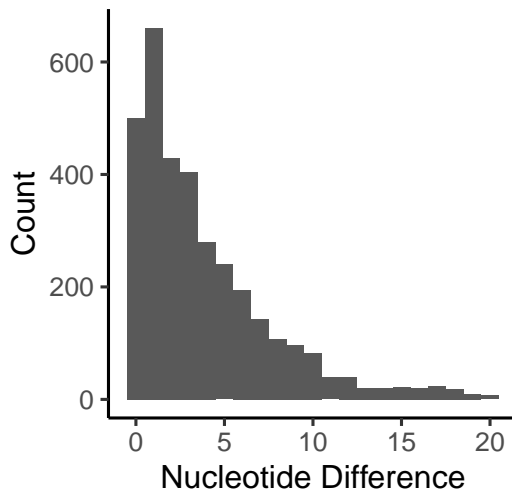
### IGHV1-2\*02

7345 sequences assigned  
898 (12.2%) exact matches, in which:  
742 unique CDR3  
7 unique J



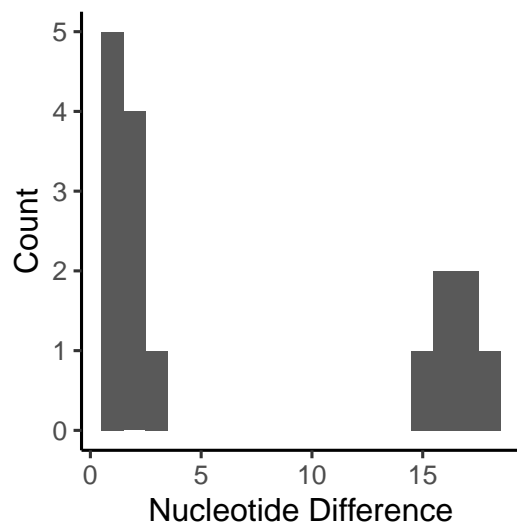
### IGHV1-8\*03

3398 sequences assigned  
501 (14.7%) exact matches, in which:  
382 unique CDR3  
7 unique J



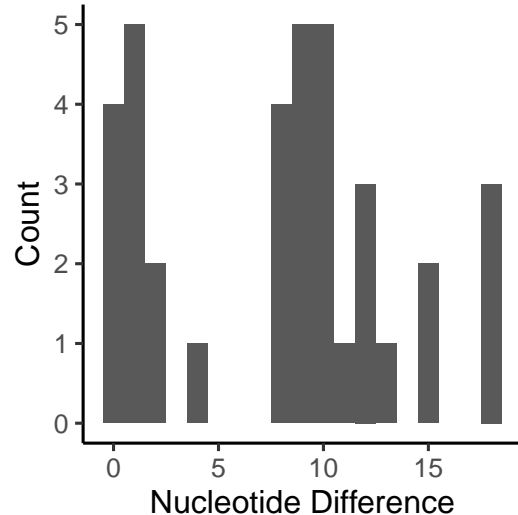
### IGHV1-45\*02

16 sequences assigned  
No exact matches.



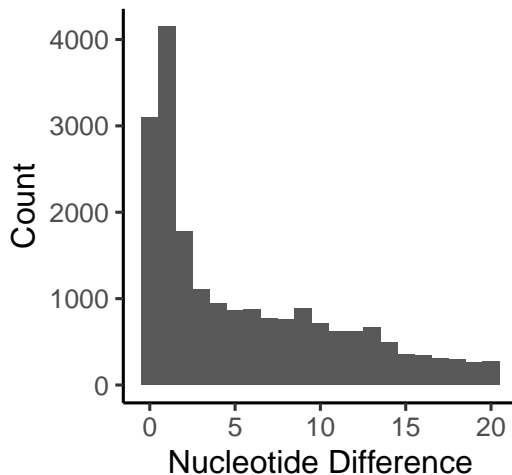
### IGHV1-3\*02

36 sequences assigned  
4 (11.1%) exact matches, in which:  
4 unique CDR3  
2 unique J



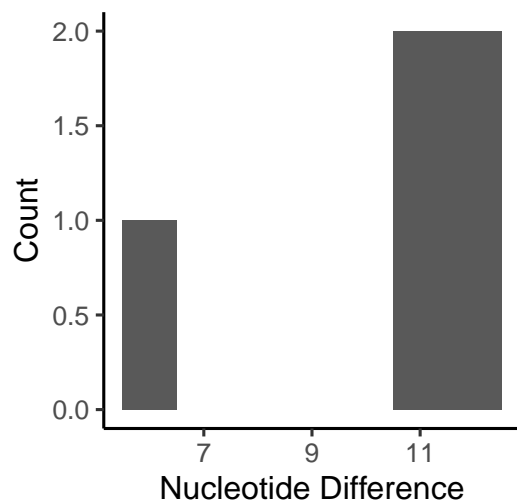
### IGHV1-18\*01

21324 sequences assigned  
3097 (14.5%) exact matches, in which:  
2374 unique CDR3  
7 unique J



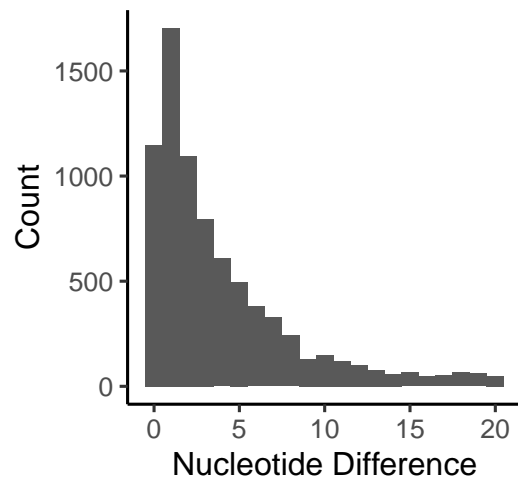
### IGHV1-45\*03

5 sequences assigned  
No exact matches.



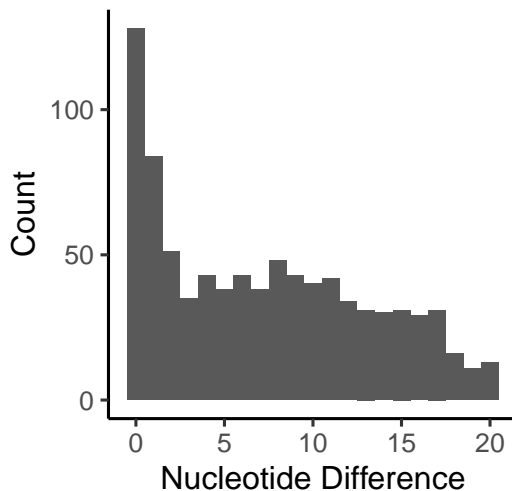
### IGHV1-8\*01

7889 sequences assigned  
1148 (14.6%) exact matches, in which:  
911 unique CDR3  
7 unique J



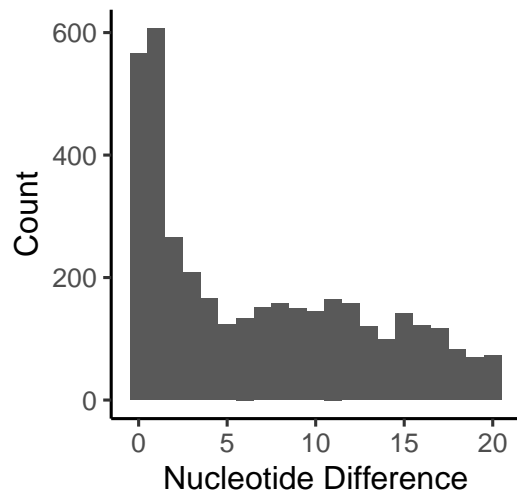
### IGHV1-24\*01

917 sequences assigned  
128 (14%) exact matches, in which:  
117 unique CDR3  
7 unique J



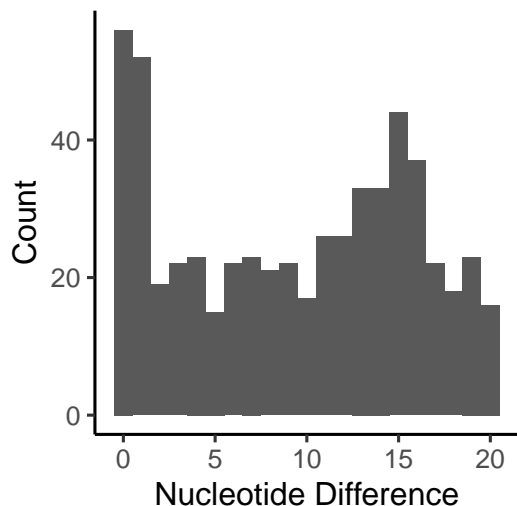
### IGHV1-46\*01

4108 sequences assigned  
566 (13.8%) exact matches, in which:  
435 unique CDR3  
7 unique J



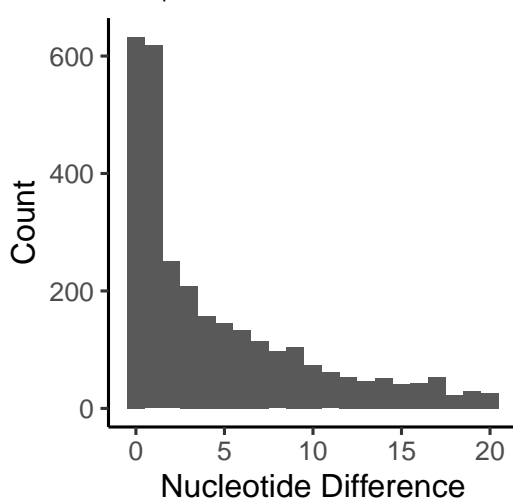
### IGHV1-58\*02

648 sequences assigned  
56 (8.6%) exact matches, in which:  
51 unique CDR3  
7 unique J



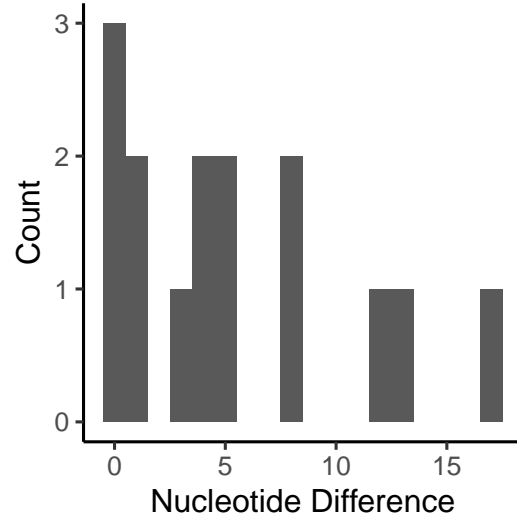
### IGHV1-69\*01\_12\_13

3117 sequences assigned  
633 (20.3%) exact matches, in which:  
539 unique CDR3  
7 unique J



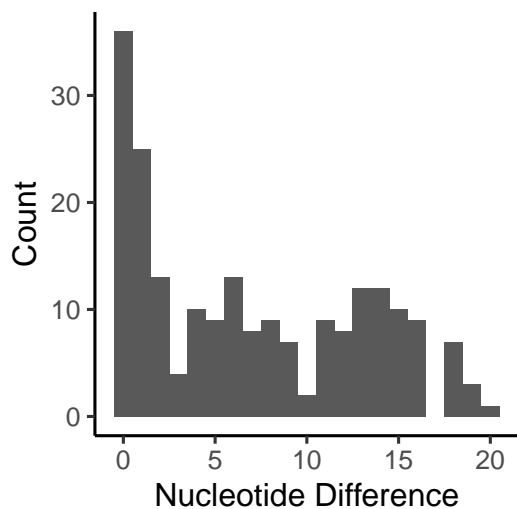
### IGHV2-5\*02

15 sequences assigned  
3 (20%) exact matches, in which:  
3 unique CDR3  
2 unique J



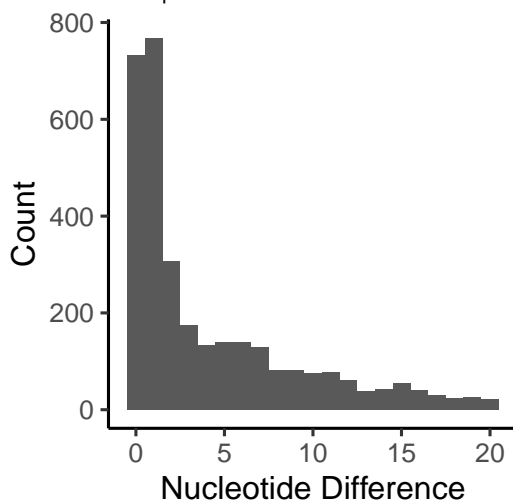
### IGHV1-69-2\*01

221 sequences assigned  
36 (16.3%) exact matches, in which:  
34 unique CDR3  
6 unique J



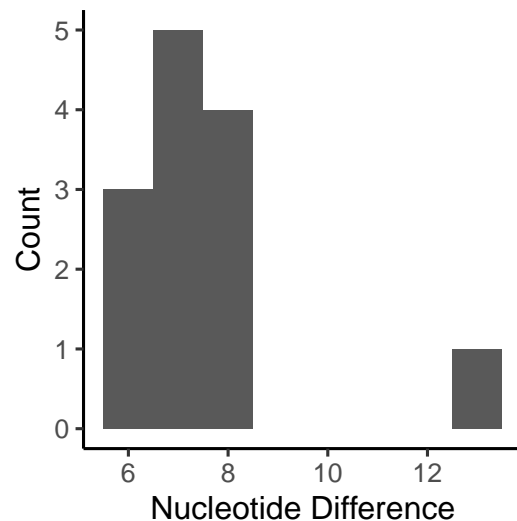
### IGHV1-69\*04\_09

3299 sequences assigned  
733 (22.2%) exact matches, in which:  
623 unique CDR3  
7 unique J



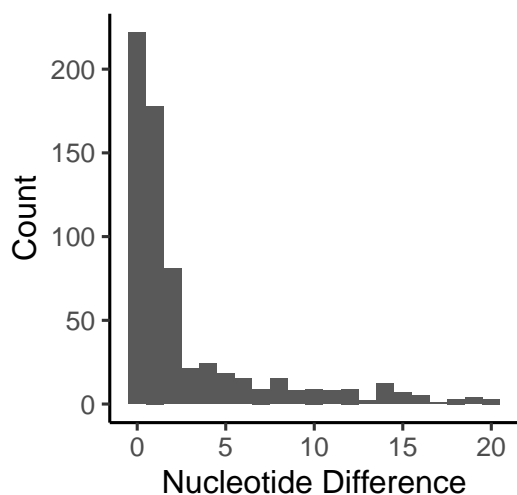
### IGHV2-70\*11\_15

13 sequences assigned  
No exact matches.



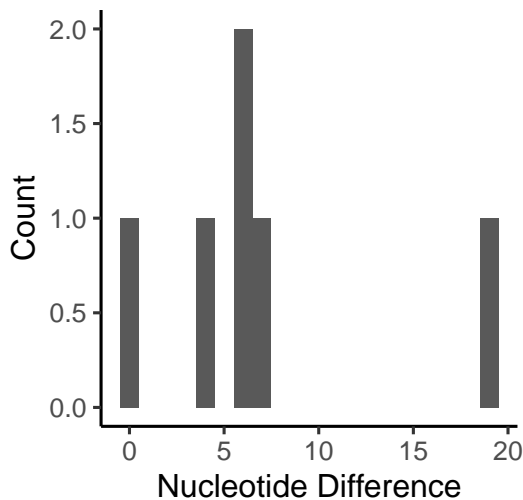
### IGHV1-69\*02

680 sequences assigned  
222 (32.6%) exact matches, in which:  
182 unique CDR3  
7 unique J



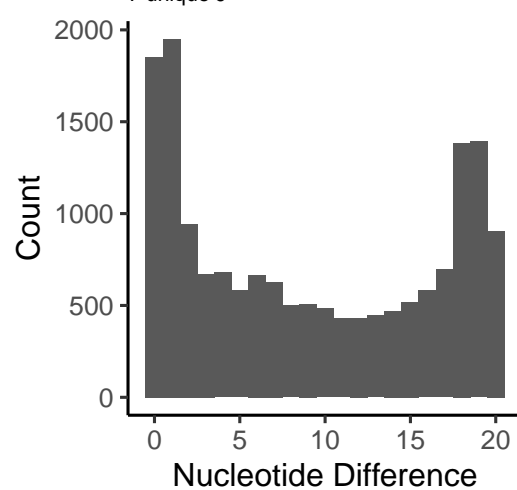
### IGHV2-5\*01

7 sequences assigned  
1 (14.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



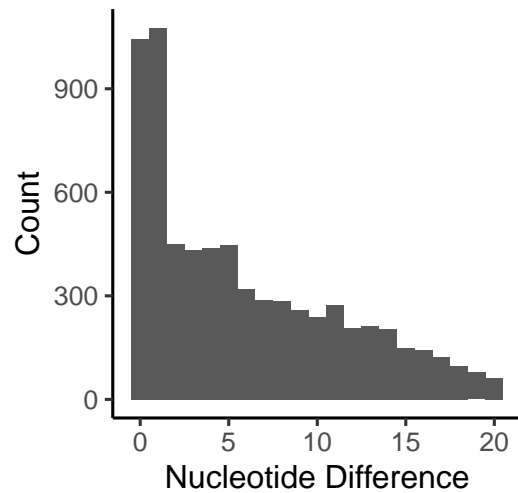
### IGHV3-7\*01

18874 sequences assigned  
1851 (9.8%) exact matches, in which:  
1471 unique CDR3  
7 unique J



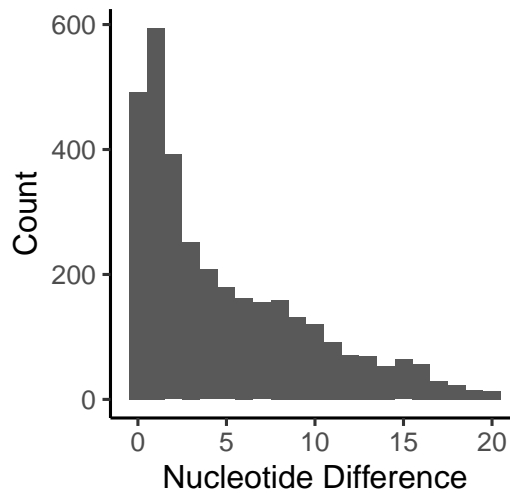
### IGHV3-9\*01

7063 sequences assigned  
1044 (14.8%) exact matches, in which:  
804 unique CDR3  
7 unique J



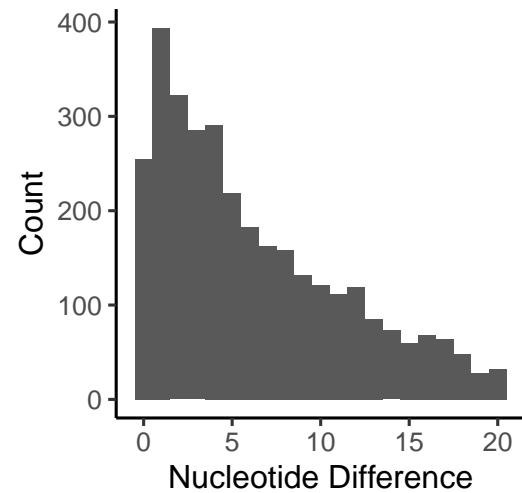
### IGHV3-11\*04

3381 sequences assigned  
492 (14.6%) exact matches, in which:  
399 unique CDR3  
7 unique J



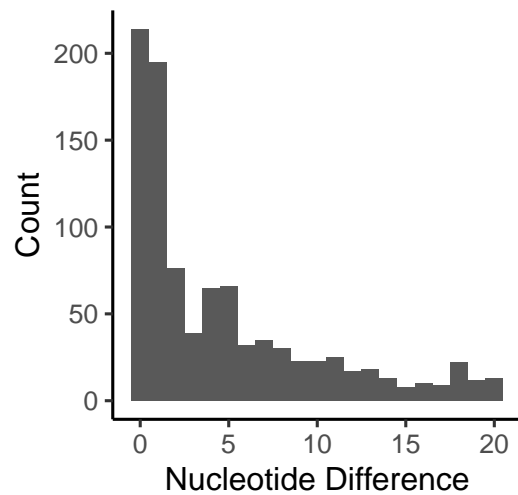
### IGHV3-20\*03\_04

3312 sequences assigned  
255 (7.7%) exact matches, in which:  
203 unique CDR3  
7 unique J



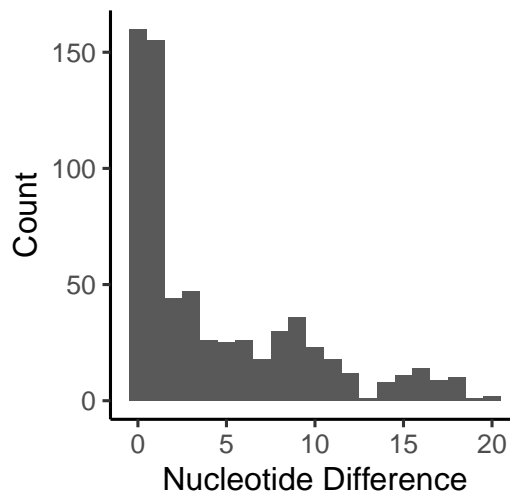
### IGHV3-9\*03

959 sequences assigned  
214 (22.3%) exact matches, in which:  
168 unique CDR3  
7 unique J



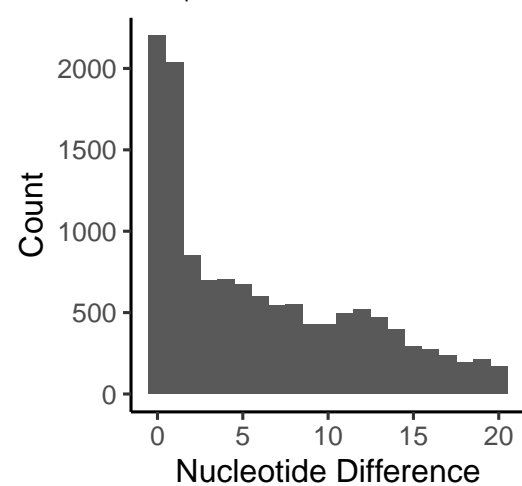
### IGHV3-13\*01

695 sequences assigned  
160 (23%) exact matches, in which:  
121 unique CDR3  
6 unique J



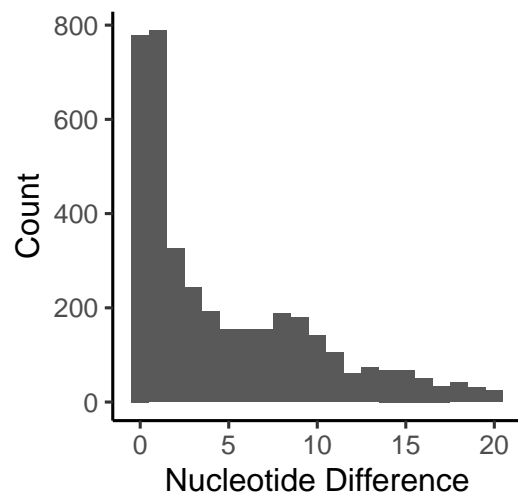
### IGHV3-21\*01\_02

13538 sequences assigned  
2201 (16.3%) exact matches, in which:  
1695 unique CDR3  
7 unique J



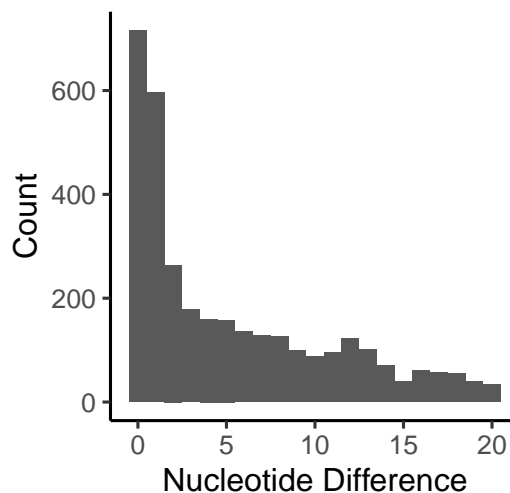
### IGHV3-11\*01

3951 sequences assigned  
779 (19.7%) exact matches, in which:  
625 unique CDR3  
7 unique J



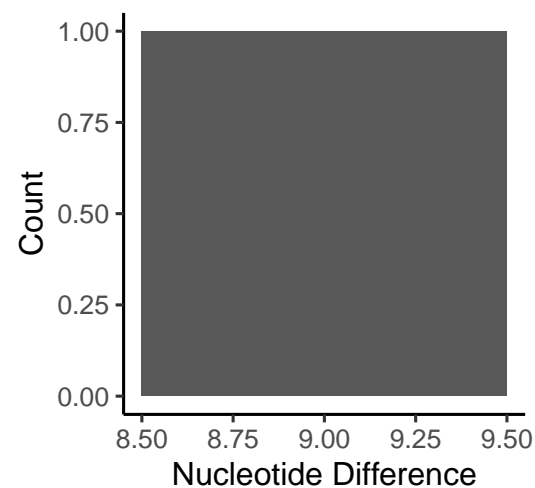
### IGHV3-15\*01\_02

3457 sequences assigned  
716 (20.7%) exact matches, in which:  
626 unique CDR3  
7 unique J



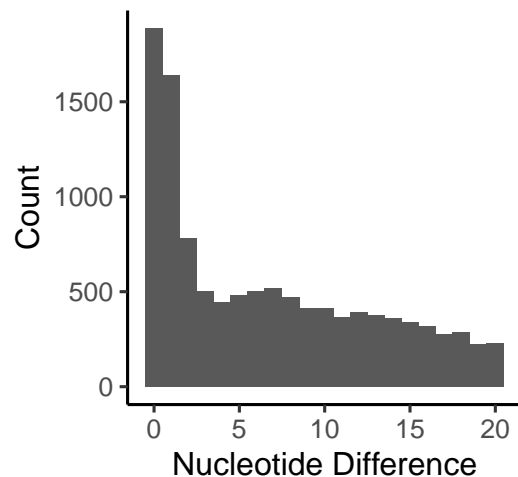
### IGHV3-22\*01\_02

1 sequences assigned  
No exact matches.



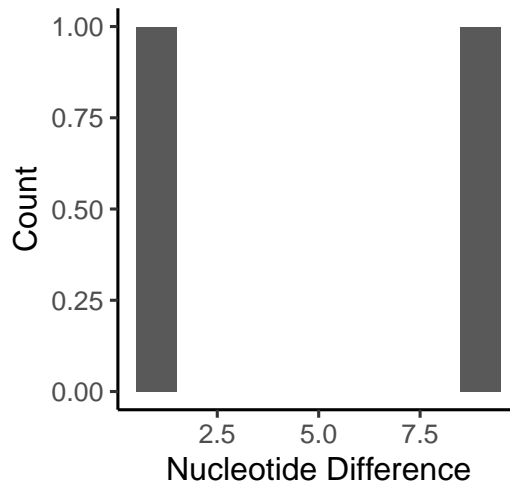
### IGHV3-23\*01\_04

12387 sequences assigned  
1886 (15.2%) exact matches, in which:  
1544 unique CDR3  
7 unique J



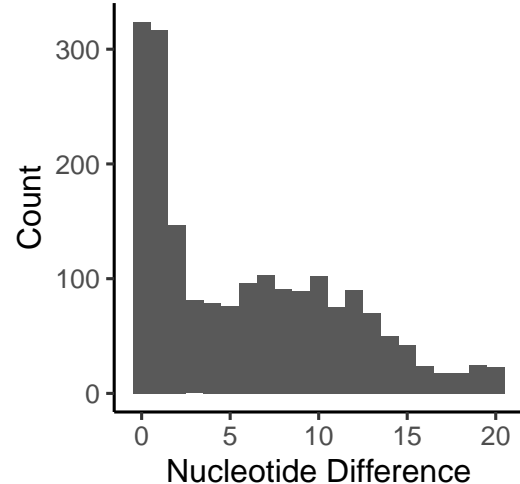
### IGHV3-38-3\*01

2 sequences assigned  
No exact matches.



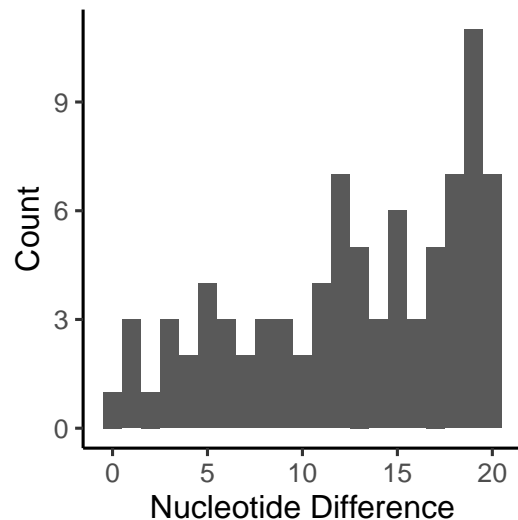
### IGHV3-49\*04

2039 sequences assigned  
324 (15.9%) exact matches, in which:  
257 unique CDR3  
7 unique J



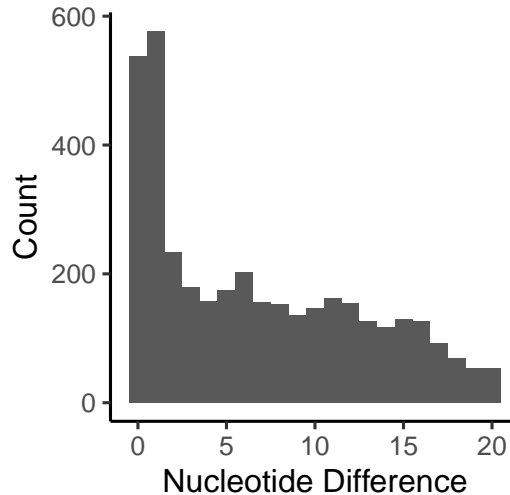
### IGHV3-30-5\*01

121 sequences assigned  
1 (0.8%) exact matches, in which:  
1 unique CDR3  
1 unique J



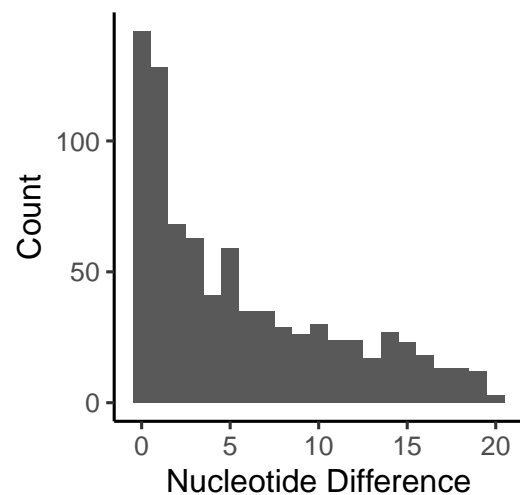
### IGHV3-43\*02

3930 sequences assigned  
538 (13.7%) exact matches, in which:  
421 unique CDR3  
6 unique J



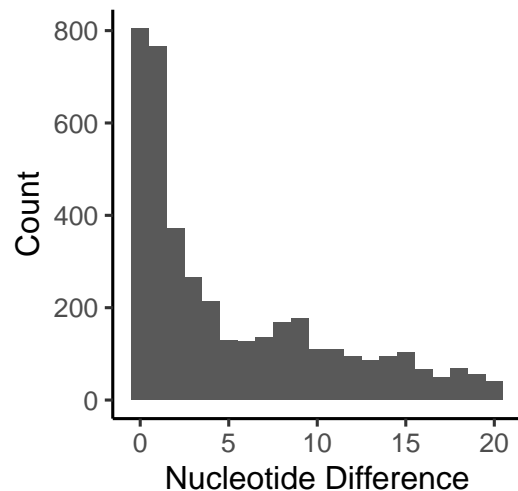
### IGHV3-49\*03\_05

854 sequences assigned  
142 (16.6%) exact matches, in which:  
113 unique CDR3  
7 unique J



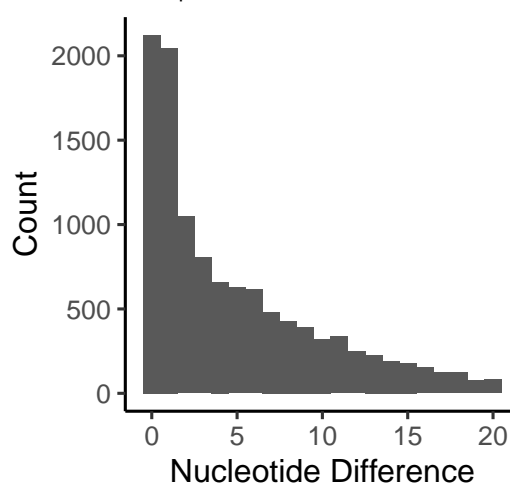
### IGHV3-33\*01

4135 sequences assigned  
805 (19.5%) exact matches, in which:  
557 unique CDR3  
7 unique J



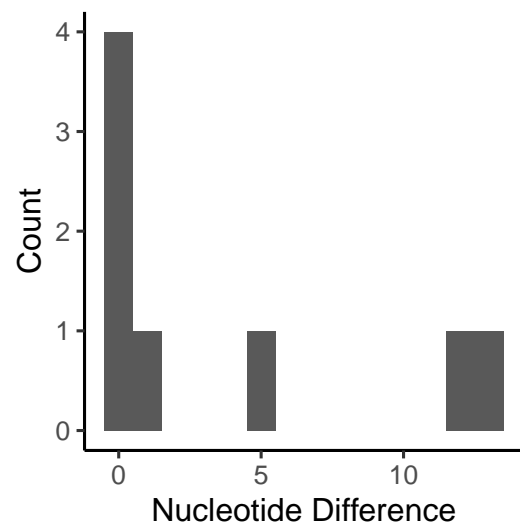
### IGHV3-48\*03

11560 sequences assigned  
2123 (18.4%) exact matches, in which:  
1728 unique CDR3  
7 unique J



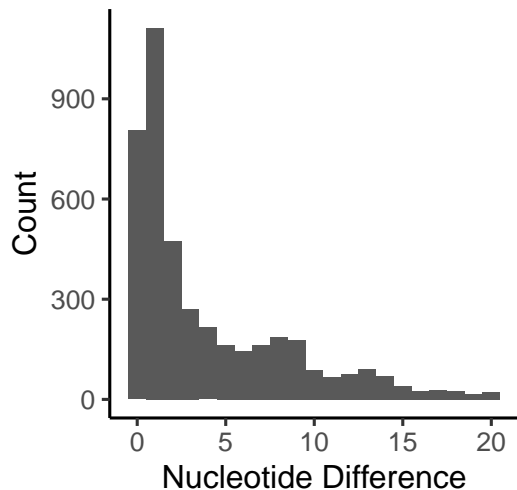
### IGHV3-52\*01\_03

8 sequences assigned  
4 (50%) exact matches, in which:  
4 unique CDR3  
3 unique J



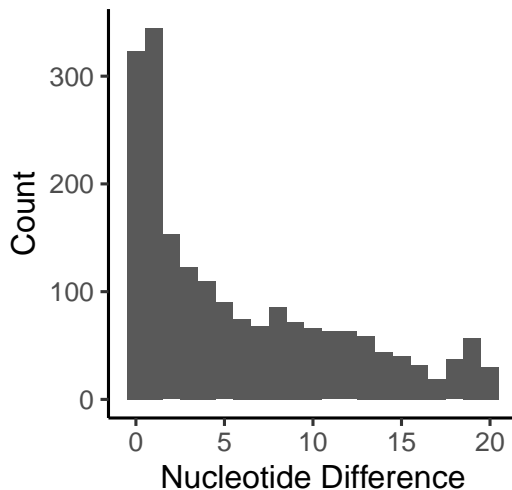
### IGHV3-53\*04

4382 sequences assigned  
805 (18.4%) exact matches, in which:  
575 unique CDR3  
7 unique J



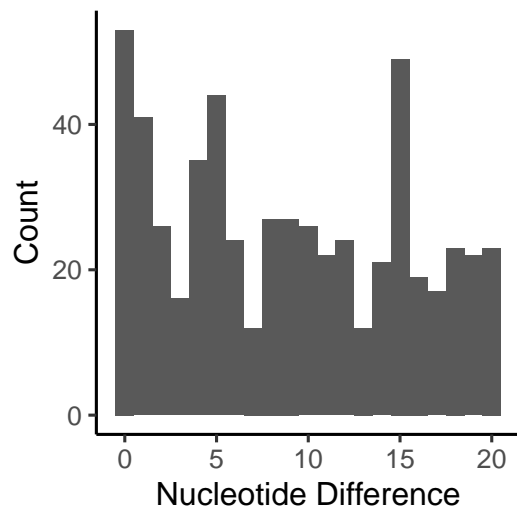
### IGHV3-66\*02

2063 sequences assigned  
323 (15.7%) exact matches, in which:  
251 unique CDR3  
7 unique J



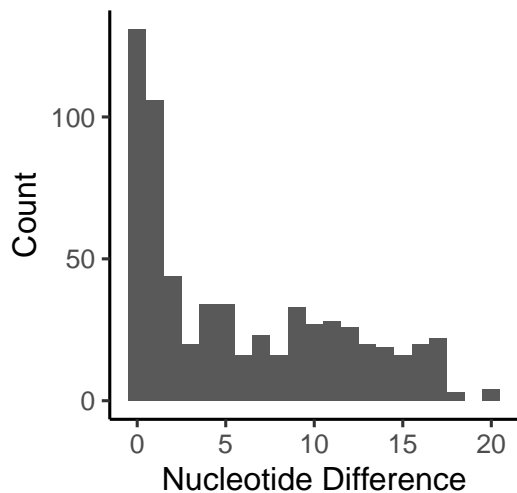
### IGHV3-72\*01

671 sequences assigned  
53 (7.9%) exact matches, in which:  
48 unique CDR3  
5 unique J



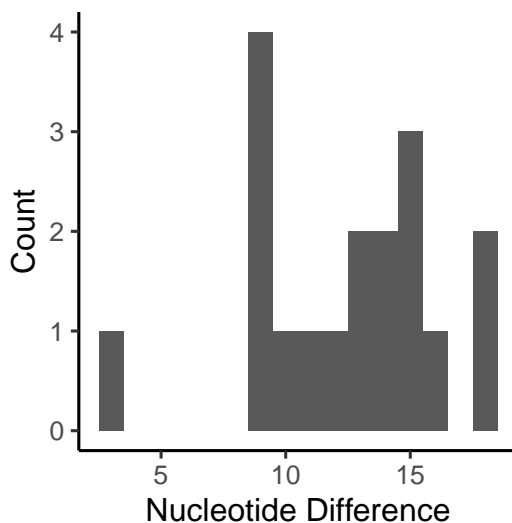
### IGHV3-64\*01

693 sequences assigned  
131 (18.9%) exact matches, in which:  
104 unique CDR3  
7 unique J



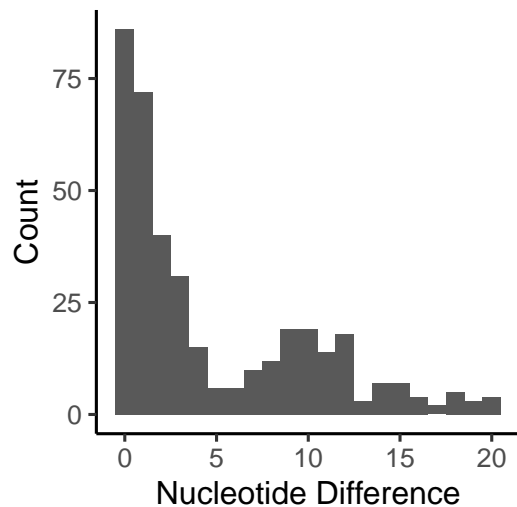
### IGHV3-69-1\*01

33 sequences assigned  
No exact matches.



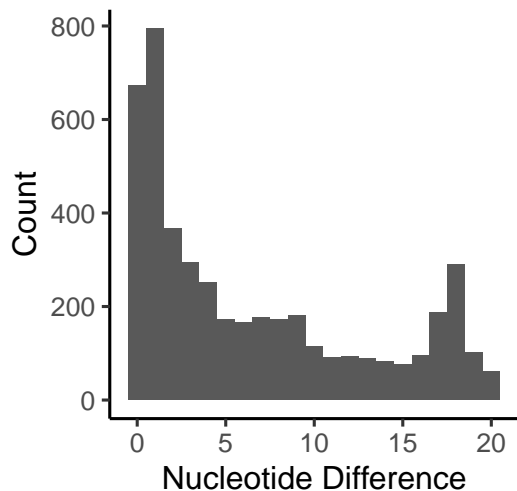
### IGHV3-73\*01\_02

408 sequences assigned  
86 (21.1%) exact matches, in which:  
71 unique CDR3  
7 unique J



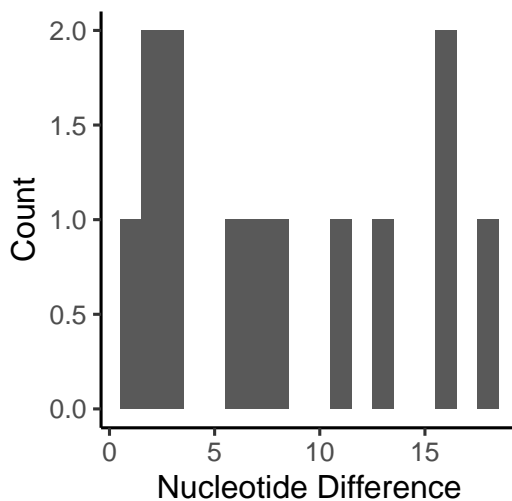
### IGHV3-66\*01

4754 sequences assigned  
672 (14.1%) exact matches, in which:  
517 unique CDR3  
7 unique J



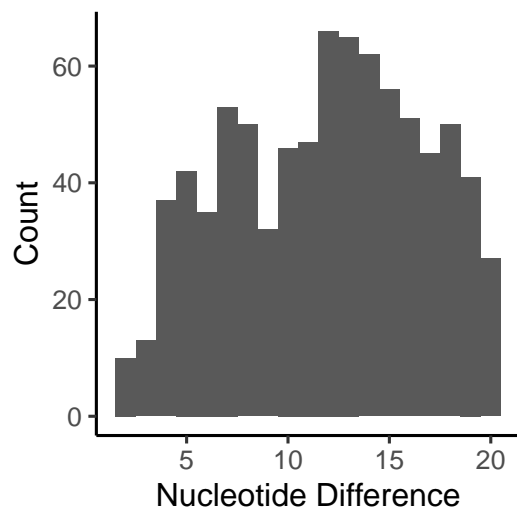
### IGHV3-69-1\*02

22 sequences assigned  
No exact matches.



### IGHV3-74\*03

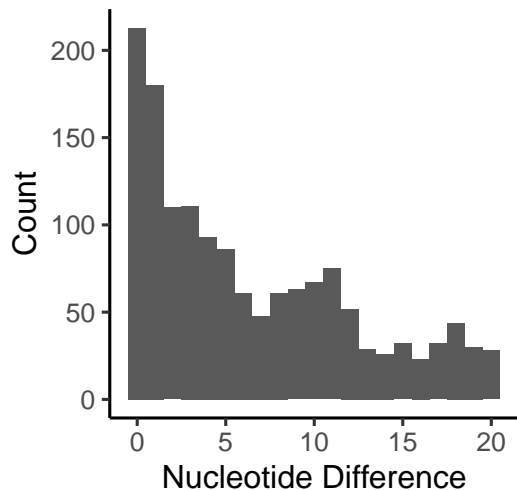
928 sequences assigned  
No exact matches.





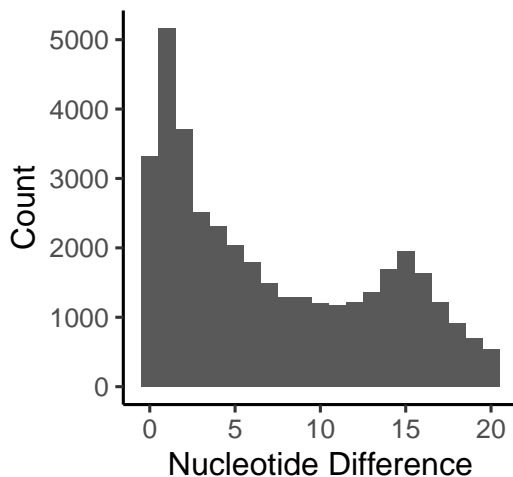
### IGHV3-74\*01\_02

1551 sequences assigned  
213 (13.7%) exact matches, in which:  
170 unique CDR3  
7 unique J



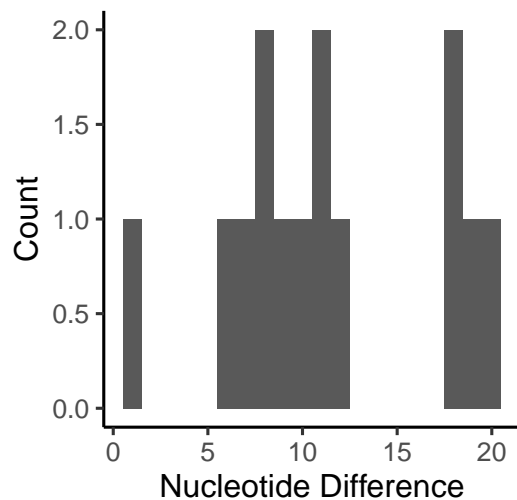
### IGHV4-4\*07

39836 sequences assigned  
3315 (8.3%) exact matches, in which:  
2233 unique CDR3  
7 unique J



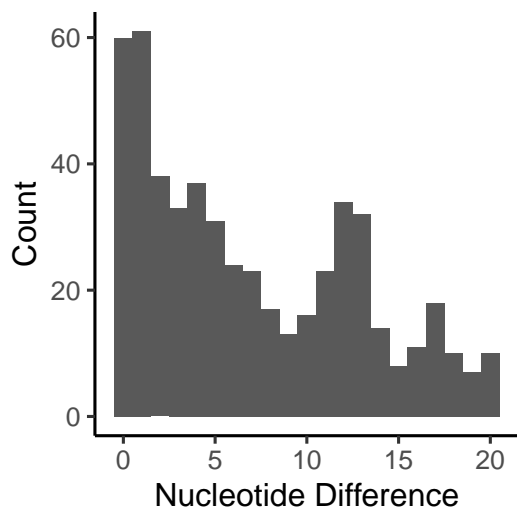
### IGHV4-30-4\*01

16 sequences assigned  
No exact matches.



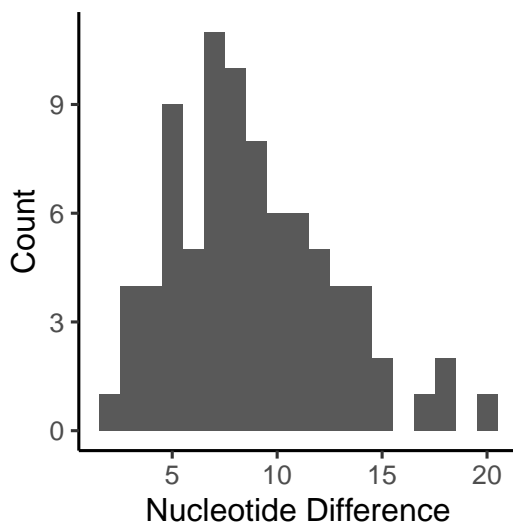
### IGHV3-43D\*04

533 sequences assigned  
60 (11.3%) exact matches, in which:  
47 unique CDR3  
6 unique J



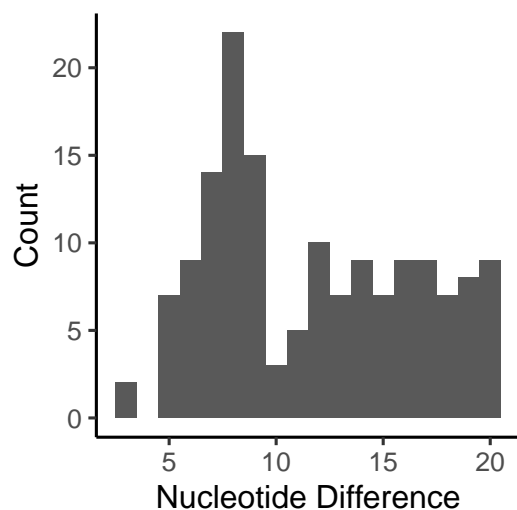
### IGHV4-28\*03

90 sequences assigned  
No exact matches.



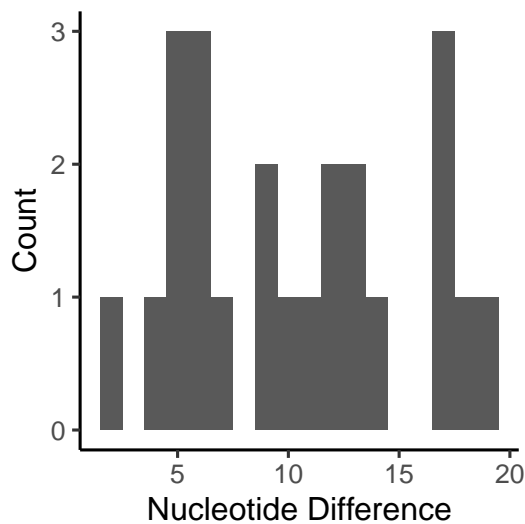
### IGHV4-30-2\*03

198 sequences assigned  
No exact matches.



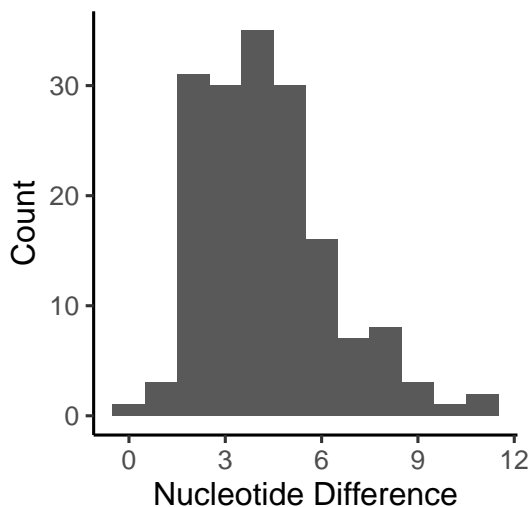
### IGHV3-NL1\*01

27 sequences assigned  
No exact matches.



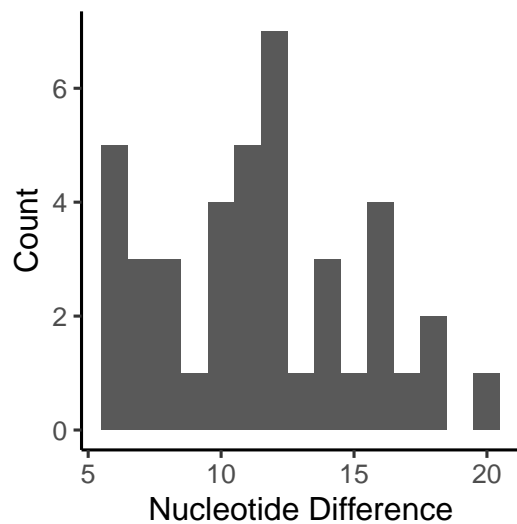
### IGHV4-28\*02\_05

167 sequences assigned  
1 (0.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



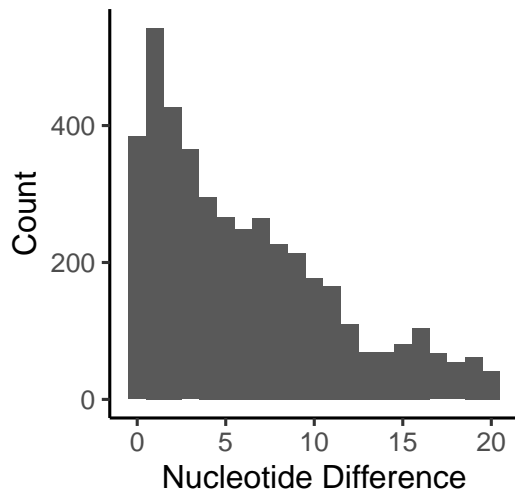
### IGHV4-30-4\*08

42 sequences assigned  
No exact matches.



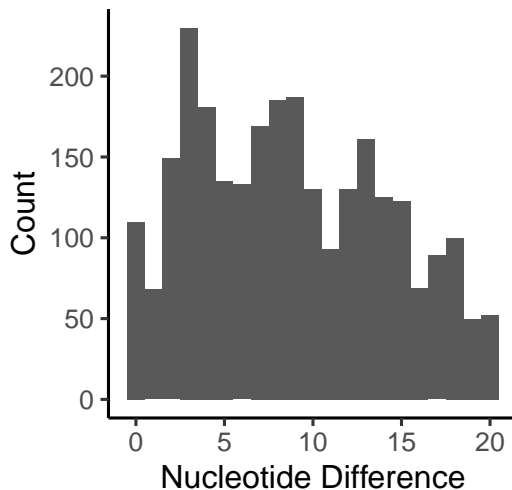
### IGHV4-31\*02\_C198T

4443 sequences assigned  
384 (8.6%) exact matches, in which:  
275 unique CDR3  
7 unique J



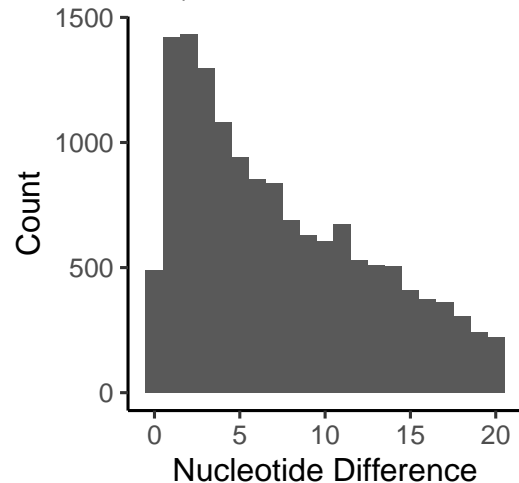
### IGHV4-38-2\*02

2976 sequences assigned  
110 (3.7%) exact matches, in which:  
103 unique CDR3  
7 unique J



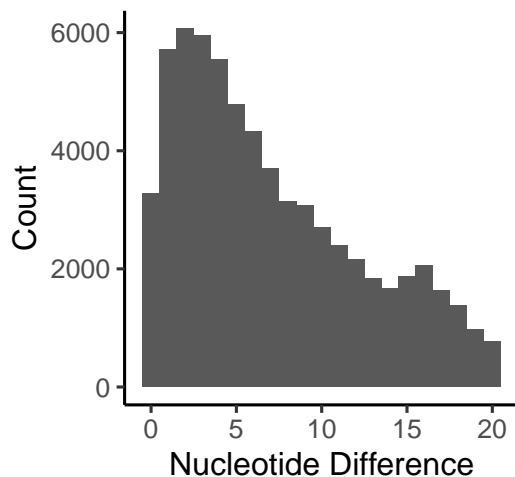
### IGHV4-59\*12

15358 sequences assigned  
490 (3.2%) exact matches, in which:  
446 unique CDR3  
7 unique J



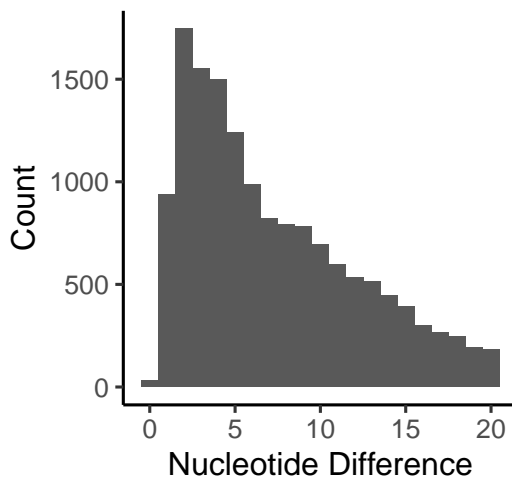
### IGHV4-34\*01\_02

66829 sequences assigned  
3273 (4.9%) exact matches, in which:  
2201 unique CDR3  
7 unique J



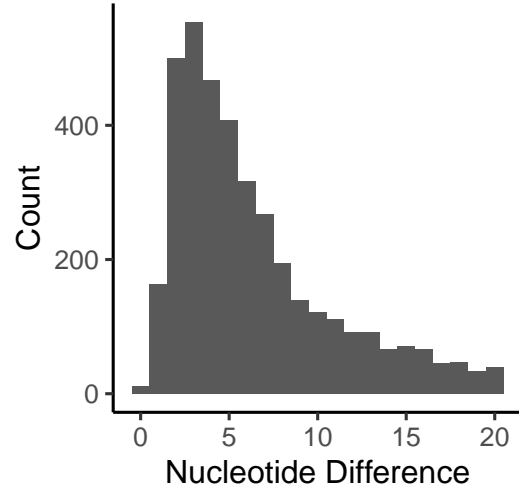
### IGHV4-39\*07

15593 sequences assigned  
32 (0.2%) exact matches, in which:  
30 unique CDR3  
6 unique J



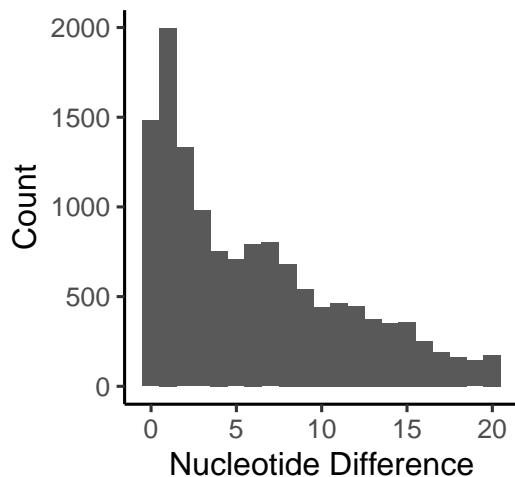
### IGHV4-61\*01

3893 sequences assigned  
11 (0.3%) exact matches, in which:  
11 unique CDR3  
4 unique J



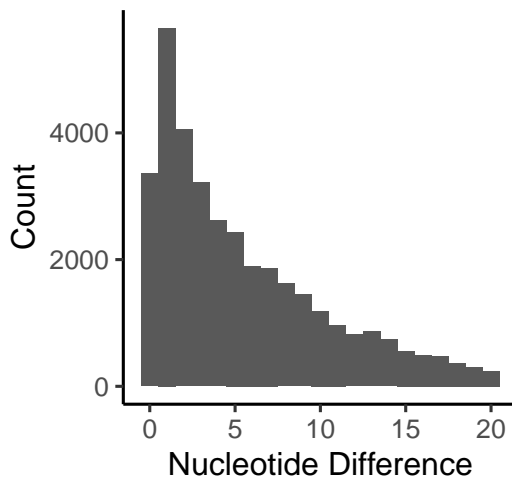
### IGHV4-38-2\*01

14091 sequences assigned  
1481 (10.5%) exact matches, in which:  
1073 unique CDR3  
7 unique J



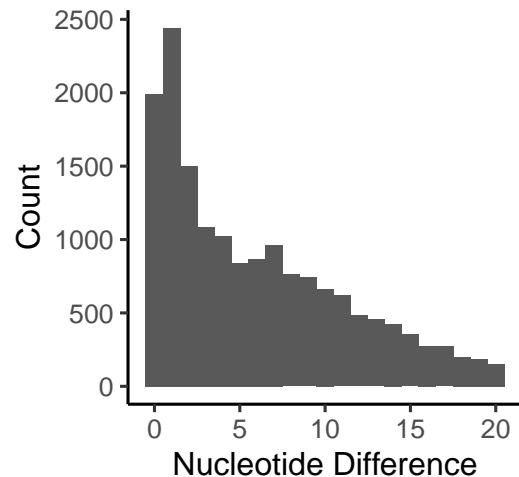
### IGHV4-59\*08

36199 sequences assigned  
3361 (9.3%) exact matches, in which:  
2303 unique CDR3  
7 unique J



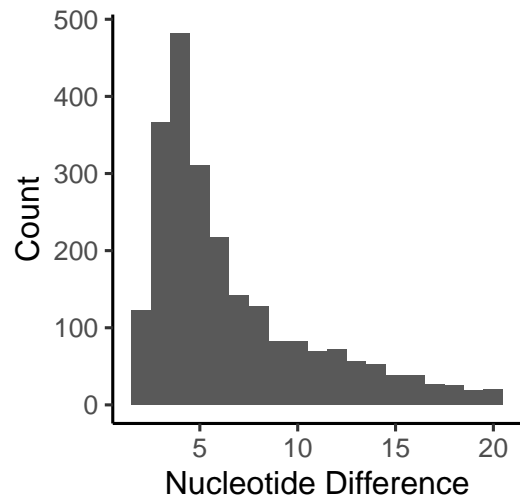
### IGHV4-61\*02

16908 sequences assigned  
1991 (11.8%) exact matches, in which:  
1466 unique CDR3  
7 unique J



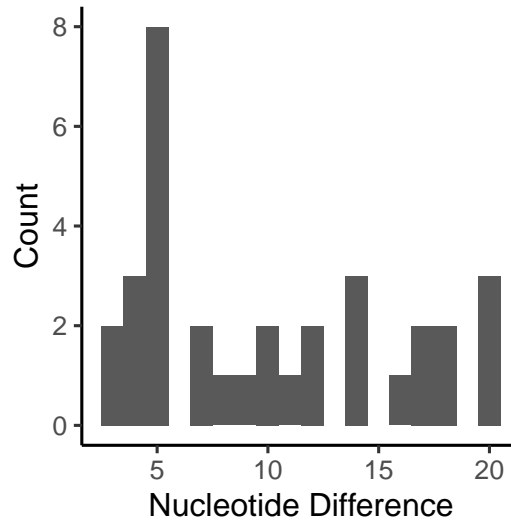
### IGHV4–61\*05

2407 sequences assigned  
No exact matches.



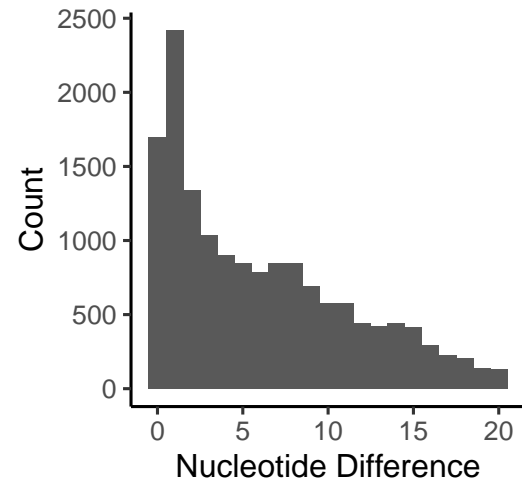
### IGHV4/OR15–8\*01

50 sequences assigned  
No exact matches.



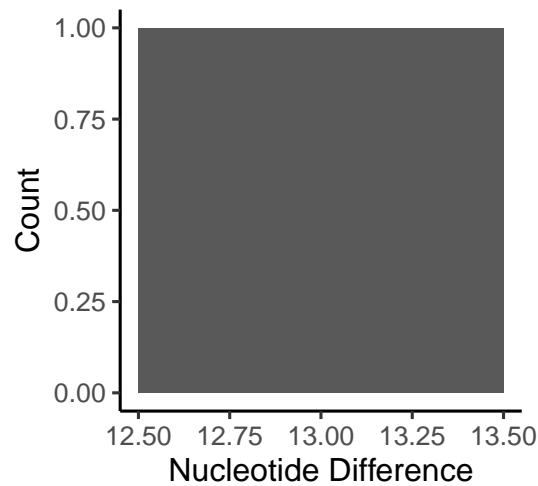
### IGHV5–51\*01\_03

16040 sequences assigned  
1700 (10.6%) exact matches, in which:  
1235 unique CDR3  
7 unique J



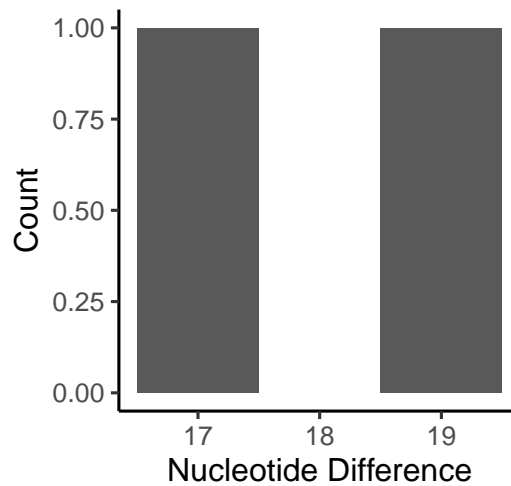
### IGHV1/OR15–2\*01

1 sequences assigned  
No exact matches.



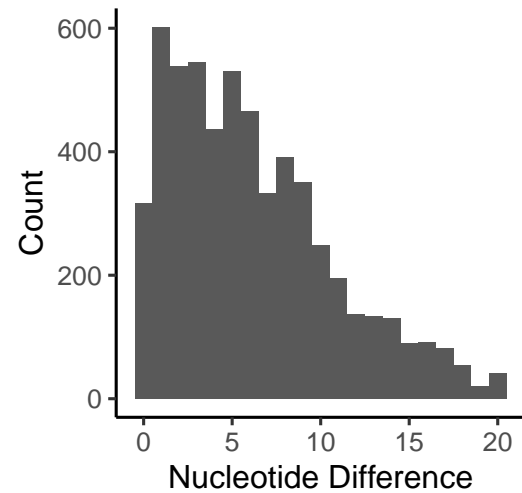
### IGHV4/OR15–8\*02

3 sequences assigned  
No exact matches.



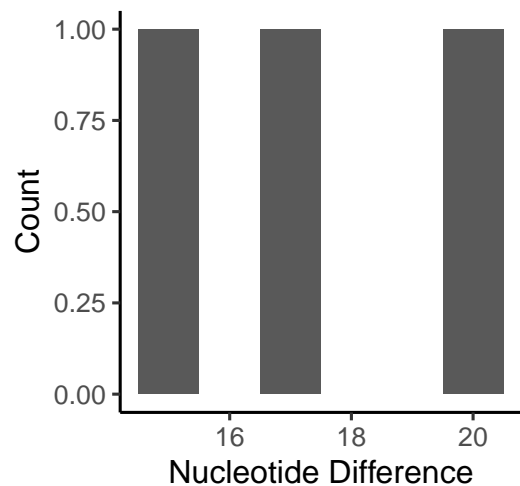
### IGHV6–1\*01\_02

5950 sequences assigned  
316 (5.3%) exact matches, in which:  
234 unique CDR3  
7 unique J



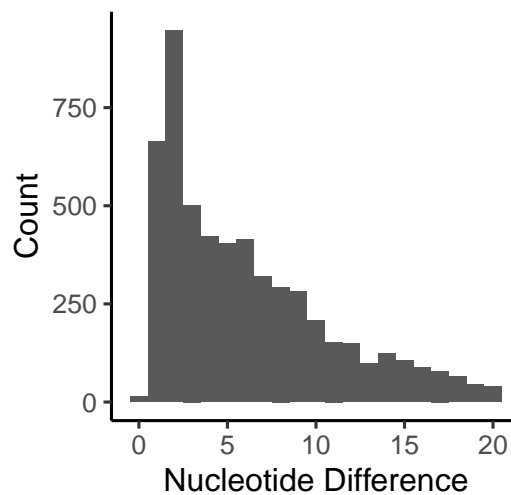
### IGHV1/OR15–2\*02\_03

4 sequences assigned  
No exact matches.

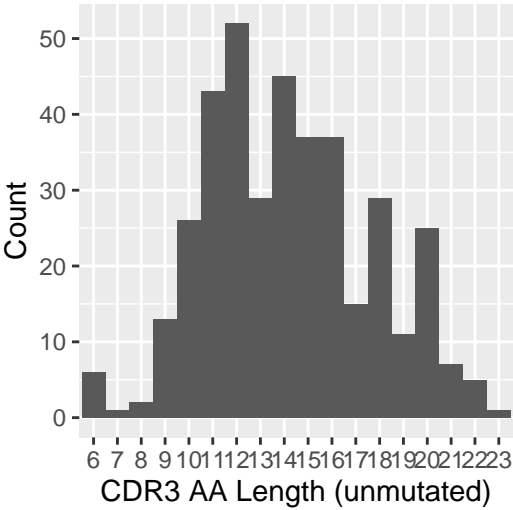


### IGHV5–51\*07

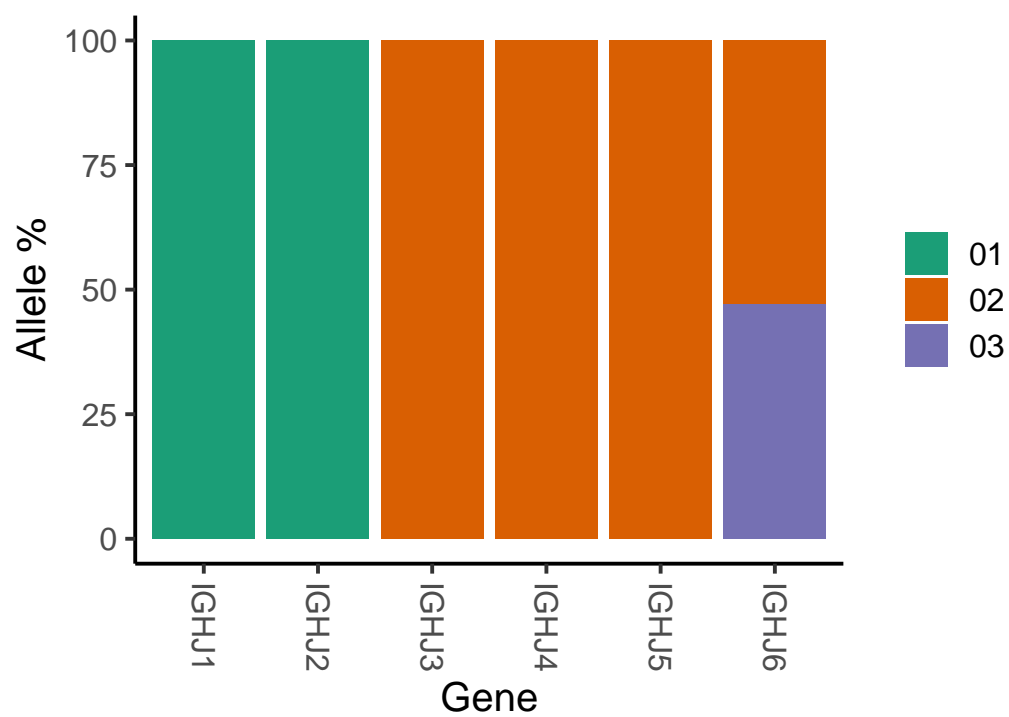
5578 sequences assigned  
14 (0.3%) exact matches, in which:  
14 unique CDR3  
4 unique J



IGHV4-31\*02\_C198T



Allele Usage



Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.