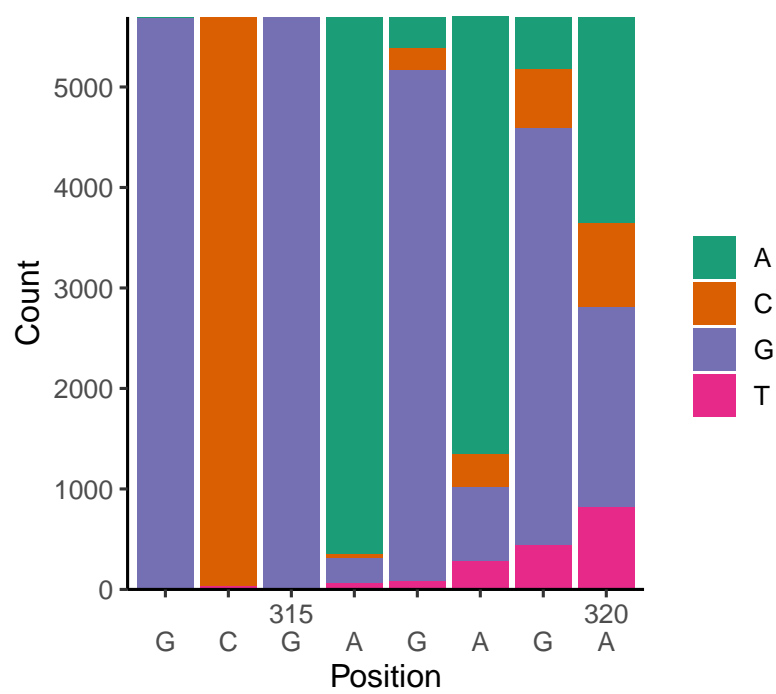
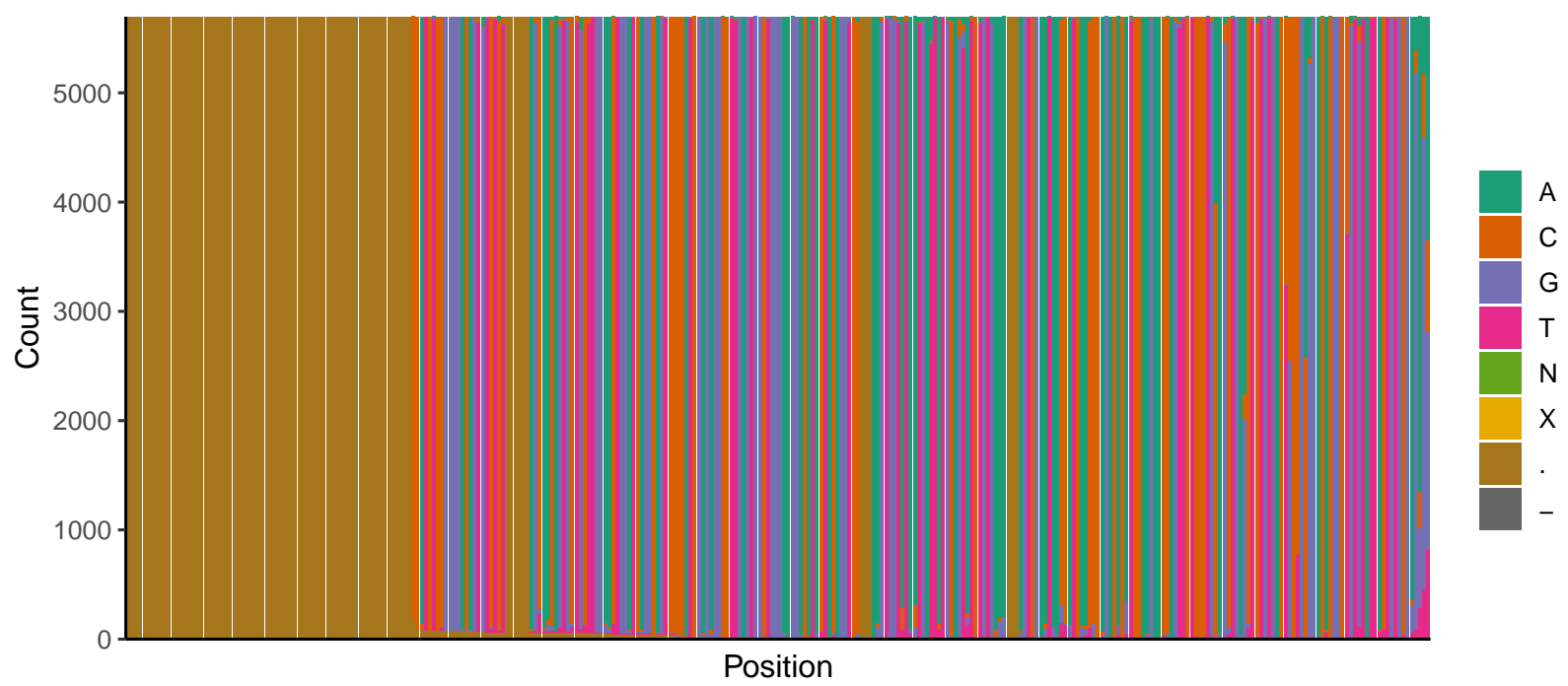


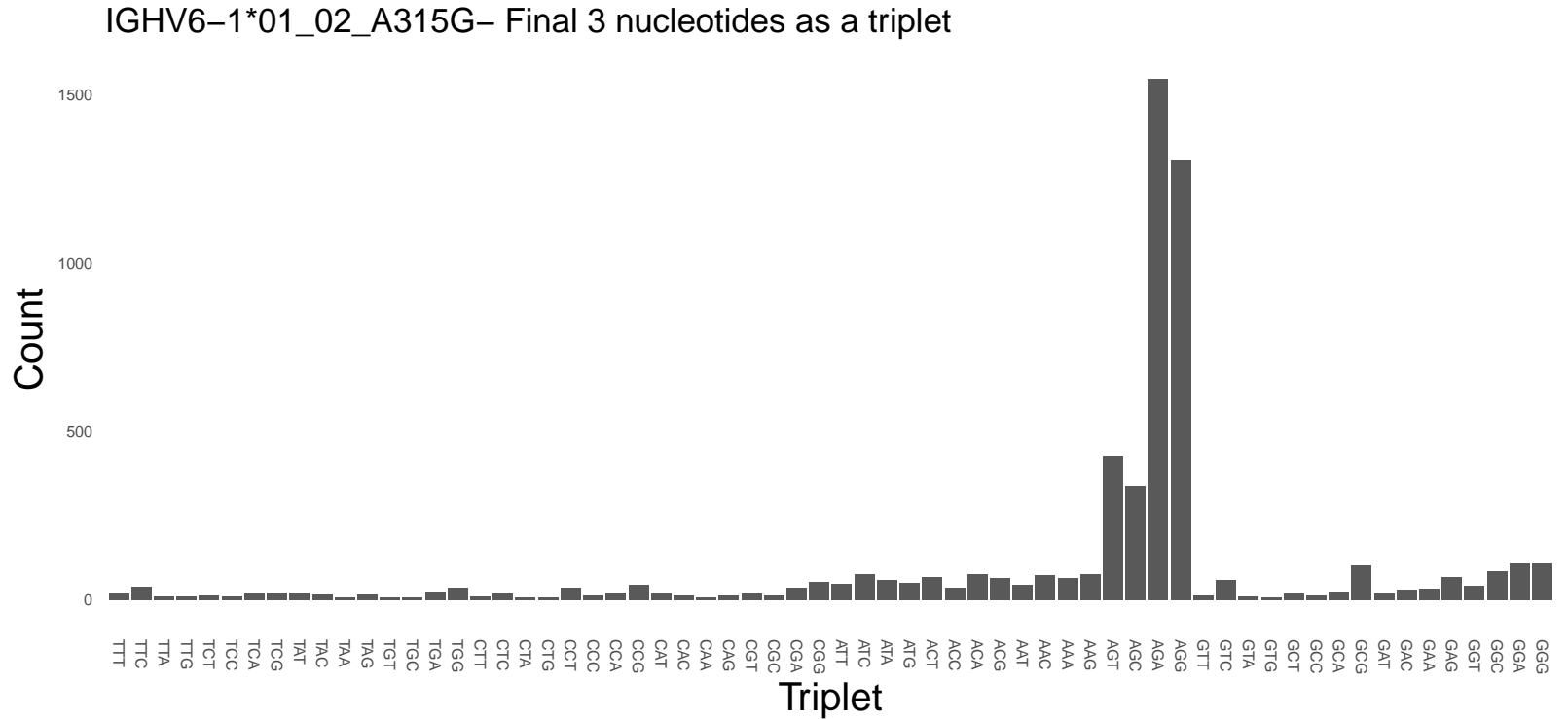
# Gene IGHV6-1\*01\_02\_A315G



Gene IGHV6-1\*01\_02\_A315G

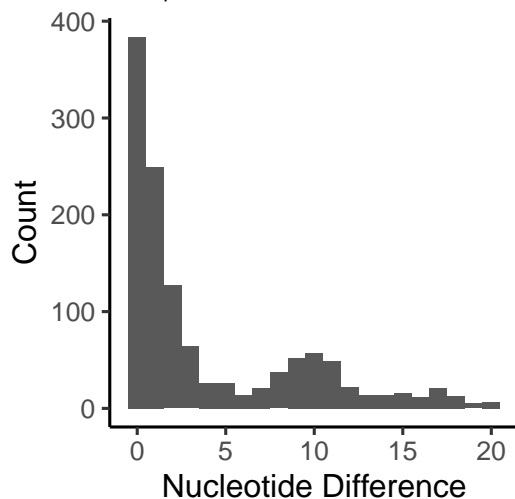


IGHV6-1\*01\_02\_A315G- Final 3 nucleotides as a triplet



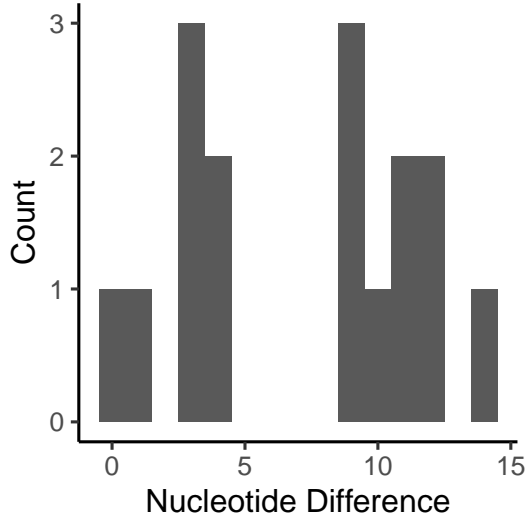
### IGHV1-2\*04

1251 sequences assigned  
384 (30.7%) exact matches, in which:  
326 unique CDR3  
7 unique J



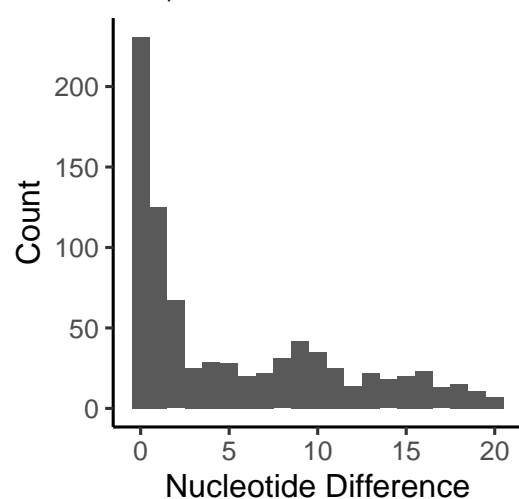
### IGHV1-8\*01

18 sequences assigned  
1 (5.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



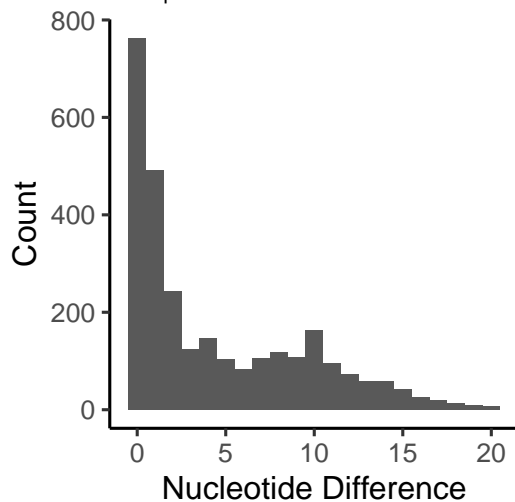
### IGHV1-24\*01

847 sequences assigned  
231 (27.3%) exact matches, in which:  
218 unique CDR3  
7 unique J



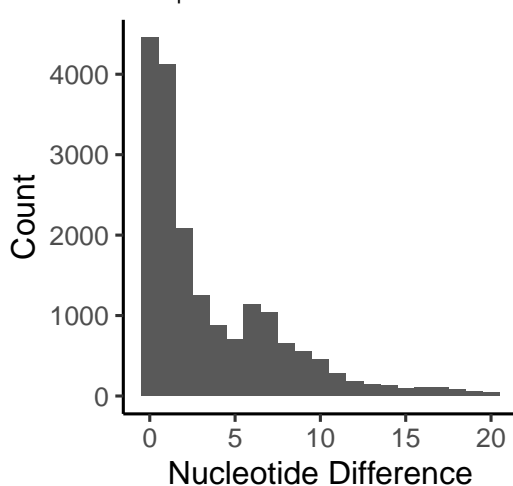
### IGHV1-2\*06

2890 sequences assigned  
763 (26.4%) exact matches, in which:  
659 unique CDR3  
7 unique J



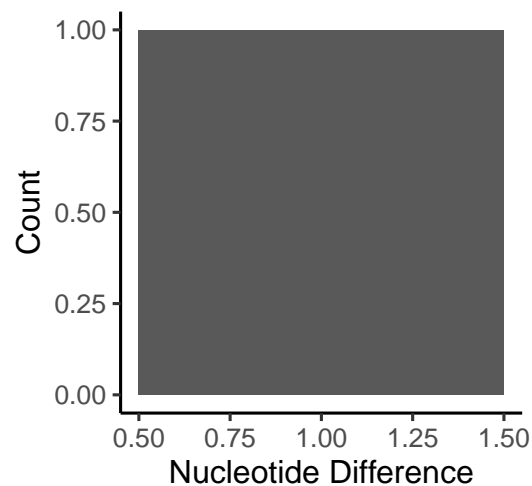
### IGHV1-18\*01

18815 sequences assigned  
4454 (23.7%) exact matches, in which:  
3661 unique CDR3  
7 unique J



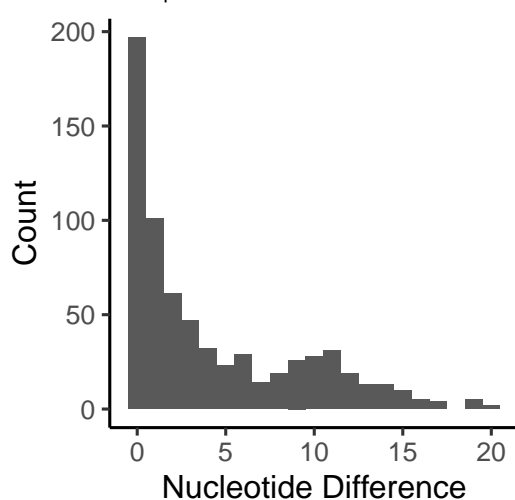
### IGHV1-38-4\*01

1 sequences assigned  
No exact matches.



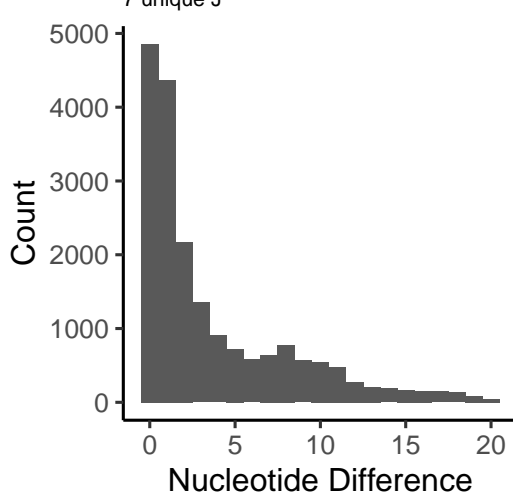
### IGHV1-3\*01\_05

691 sequences assigned  
197 (28.5%) exact matches, in which:  
190 unique CDR3  
7 unique J



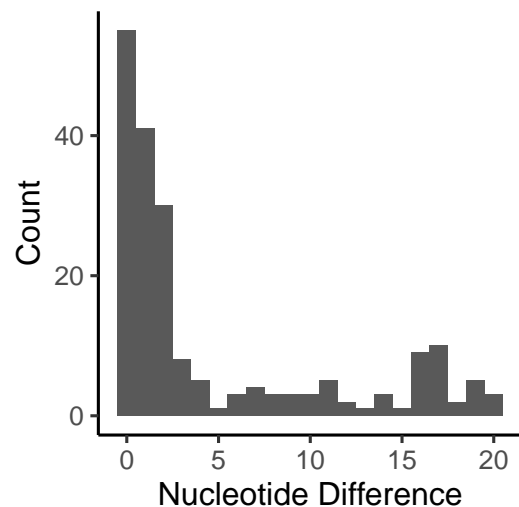
### IGHV1-18\*04

19639 sequences assigned  
4856 (24.7%) exact matches, in which:  
3968 unique CDR3  
7 unique J



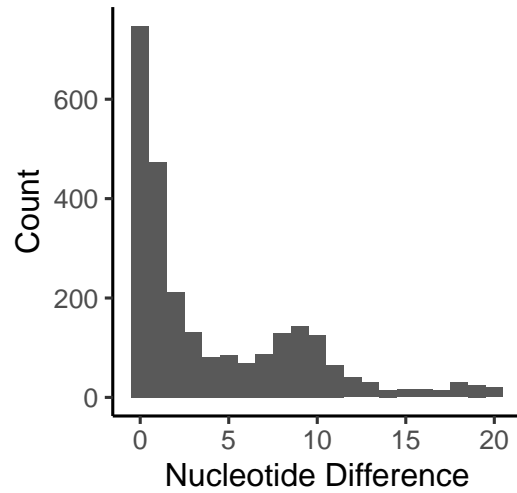
### IGHV1-45\*02

210 sequences assigned  
55 (26.2%) exact matches, in which:  
46 unique CDR3  
5 unique J



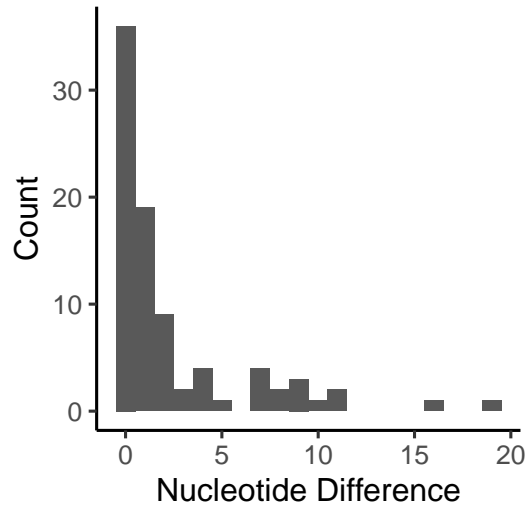
### IGHV1-46\*01

2639 sequences assigned  
748 (28.3%) exact matches, in which:  
662 unique CDR3  
7 unique J



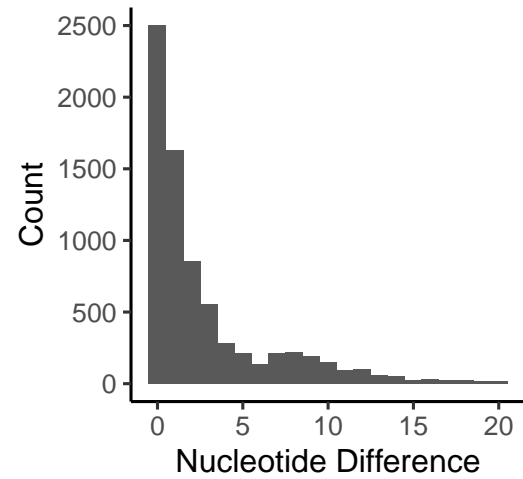
### IGHV1-58\*01\_03

85 sequences assigned  
36 (42.4%) exact matches, in which:  
35 unique CDR3  
6 unique J



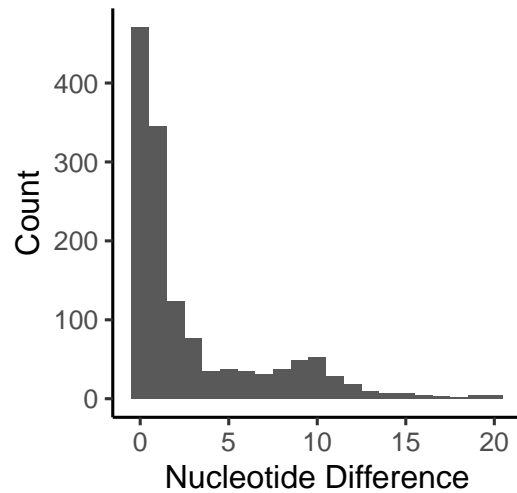
### IGHV1-69\*06\_14

7488 sequences assigned  
2501 (33.4%) exact matches, in which:  
2193 unique CDR3  
7 unique J



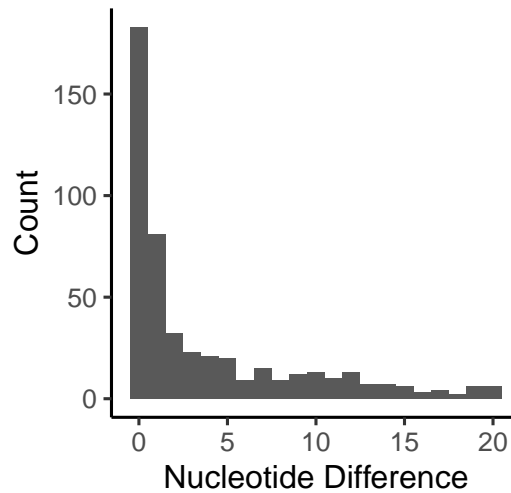
### IGHV1-46\*03

1399 sequences assigned  
471 (33.7%) exact matches, in which:  
372 unique CDR3  
6 unique J



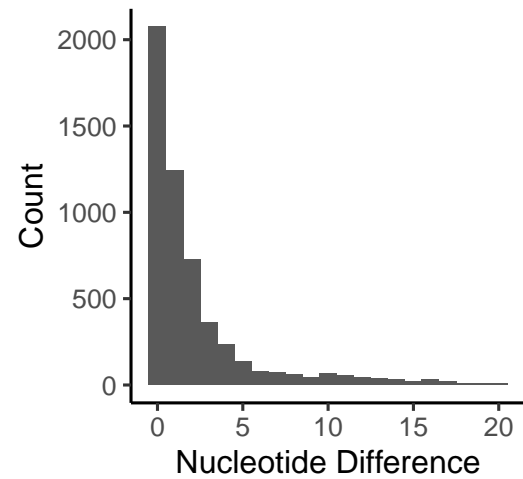
### IGHV1-69-2\*01

487 sequences assigned  
183 (37.6%) exact matches, in which:  
172 unique CDR3  
7 unique J



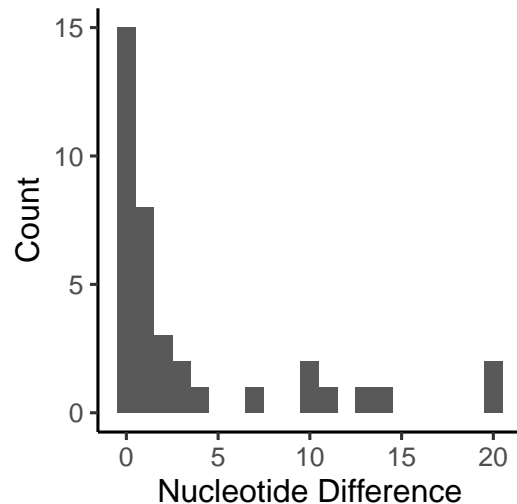
### IGHV1-69\*15\_18

5391 sequences assigned  
2075 (38.5%) exact matches, in which:  
1853 unique CDR3  
7 unique J



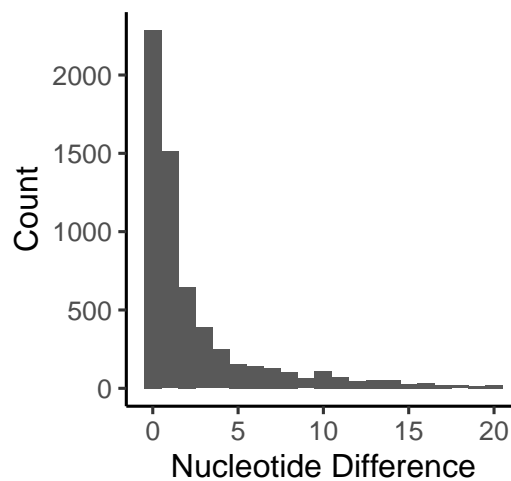
### IGHV1-58\*02

37 sequences assigned  
15 (40.5%) exact matches, in which:  
14 unique CDR3  
3 unique J



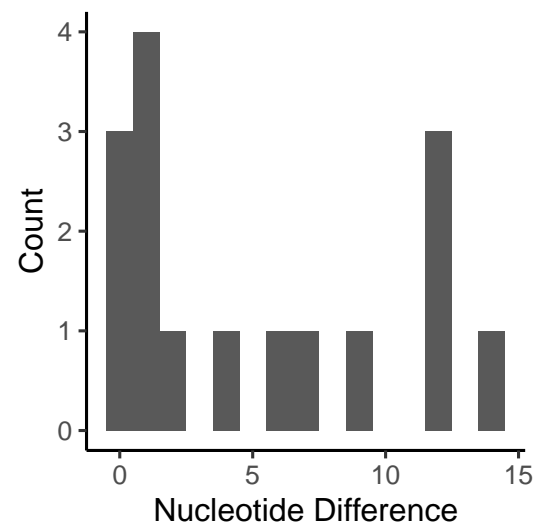
### IGHV1-69\*01\_12\_13

6266 sequences assigned  
2287 (36.5%) exact matches, in which:  
2045 unique CDR3  
7 unique J



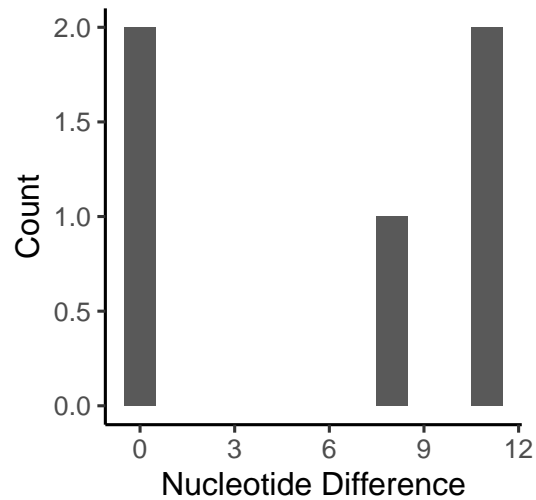
### IGHV2-5\*02

17 sequences assigned  
3 (17.6%) exact matches, in which:  
3 unique CDR3  
1 unique J



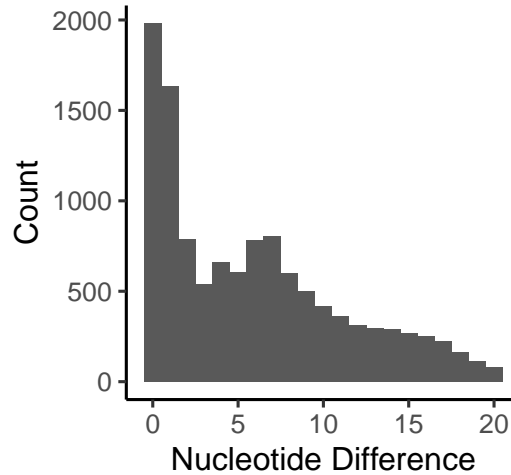
### IGHV2-70\*01

5 sequences assigned  
2 (40%) exact matches, in which:  
2 unique CDR3  
2 unique J



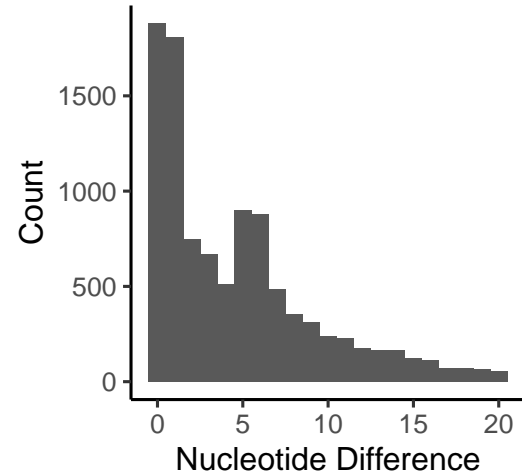
### IGHV3-7\*03

12029 sequences assigned  
1981 (16.5%) exact matches, in which:  
1651 unique CDR3  
7 unique J



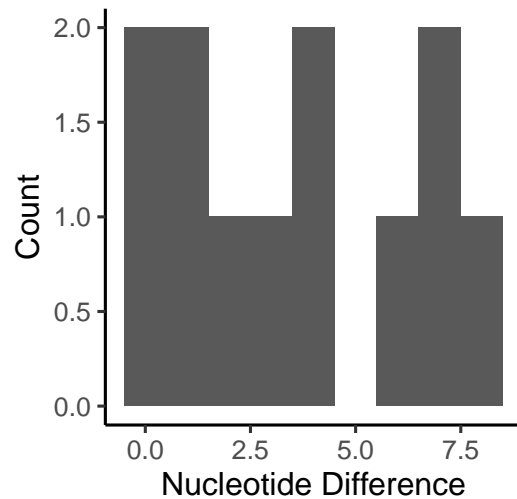
### IGHV3-11\*06

10185 sequences assigned  
1880 (18.5%) exact matches, in which:  
1619 unique CDR3  
7 unique J



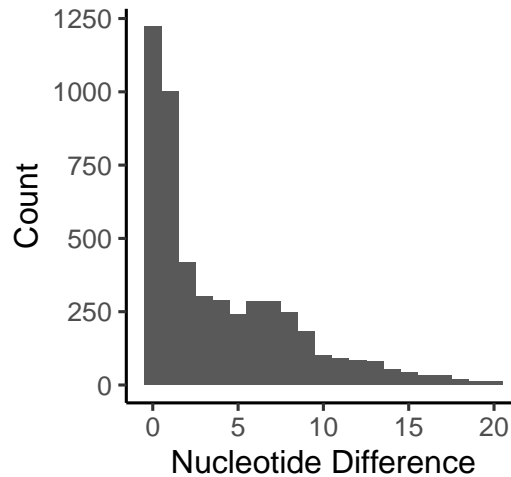
### IGHV2-70\*04

12 sequences assigned  
2 (16.7%) exact matches, in which:  
2 unique CDR3  
2 unique J



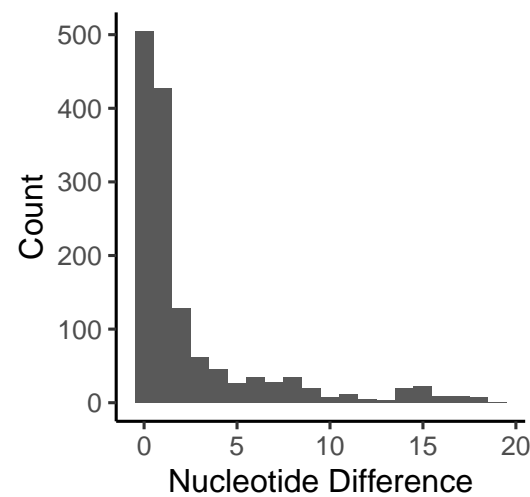
### IGHV3-7\*05

5089 sequences assigned  
1222 (24%) exact matches, in which:  
1042 unique CDR3  
7 unique J



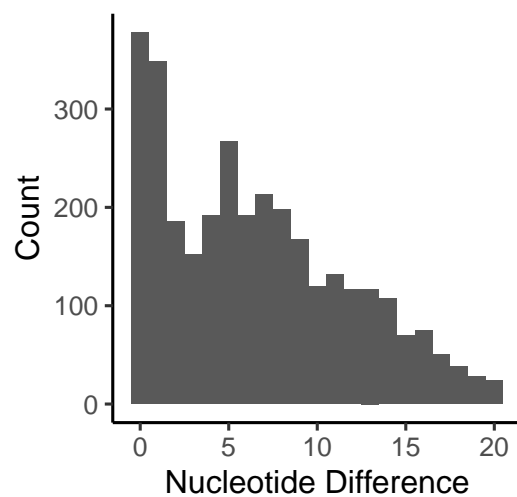
### IGHV3-13\*04

1417 sequences assigned  
505 (35.6%) exact matches, in which:  
371 unique CDR3  
6 unique J



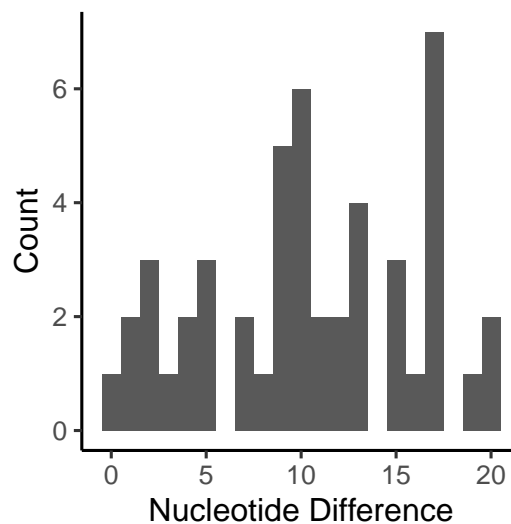
### IGHV3-7\*01

3222 sequences assigned  
378 (11.7%) exact matches, in which:  
373 unique CDR3  
7 unique J



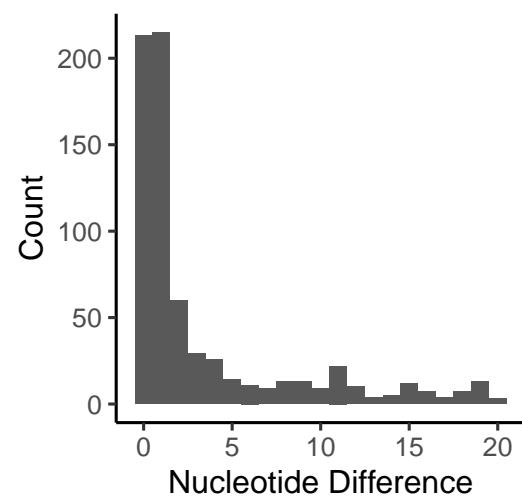
### IGHV3-9\*01

59 sequences assigned  
1 (1.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



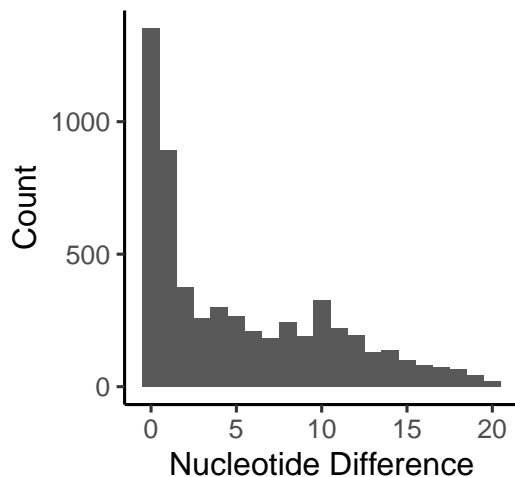
### IGHV3-13\*05

711 sequences assigned  
213 (30%) exact matches, in which:  
149 unique CDR3  
6 unique J



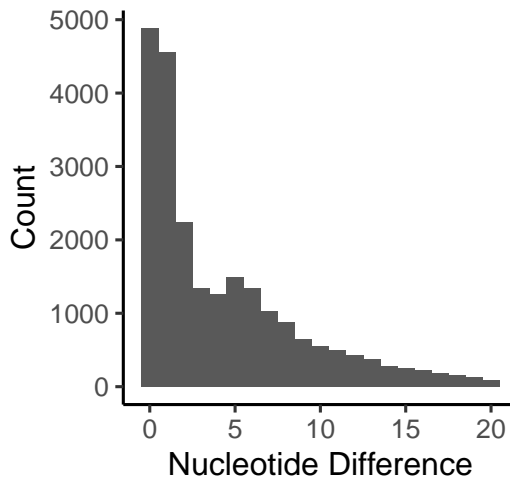
### IGHV3-15\*01\_02

5845 sequences assigned  
1352 (23.1%) exact matches, in which:  
1114 unique CDR3  
7 unique J



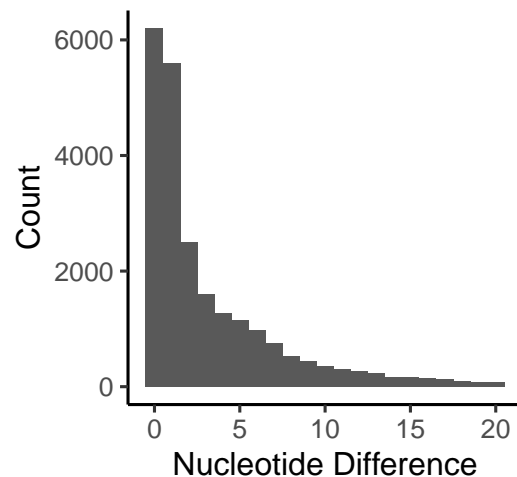
### IGHV3-21\*01\_02

23173 sequences assigned  
4881 (21.1%) exact matches, in which:  
3951 unique CDR3  
7 unique J



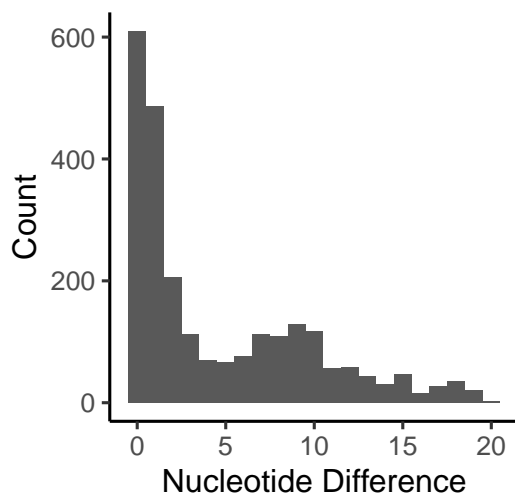
### IGHV3-30-3\*01

23234 sequences assigned  
6199 (26.7%) exact matches, in which:  
4946 unique CDR3  
7 unique J



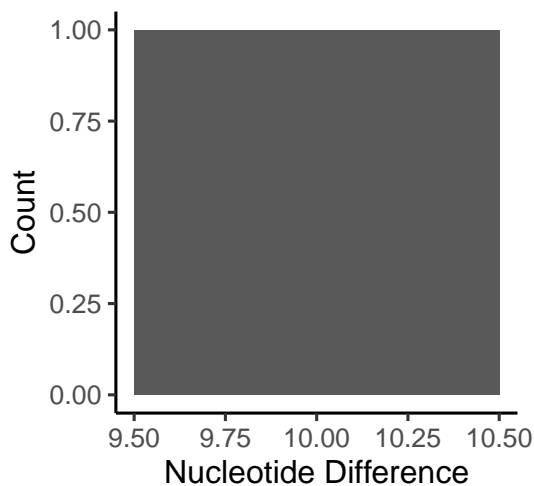
### IGHV3-20\*03\_04

2455 sequences assigned  
610 (24.8%) exact matches, in which:  
484 unique CDR3  
7 unique J



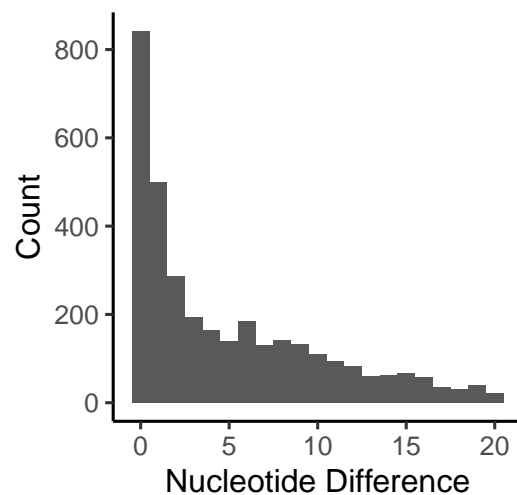
### IGHV3-22\*01\_02

1 sequences assigned  
No exact matches.



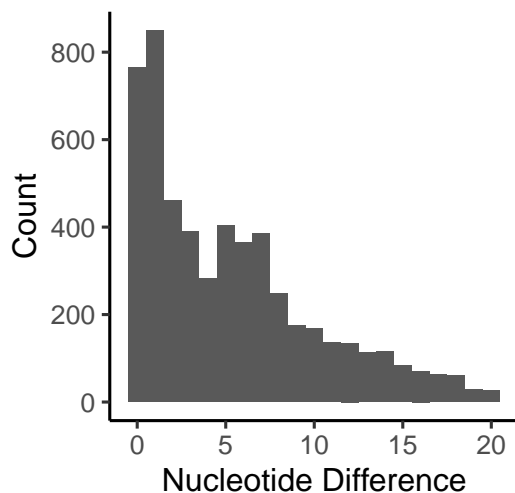
### IGHV3-30\*03

3444 sequences assigned  
842 (24.4%) exact matches, in which:  
829 unique CDR3  
7 unique J



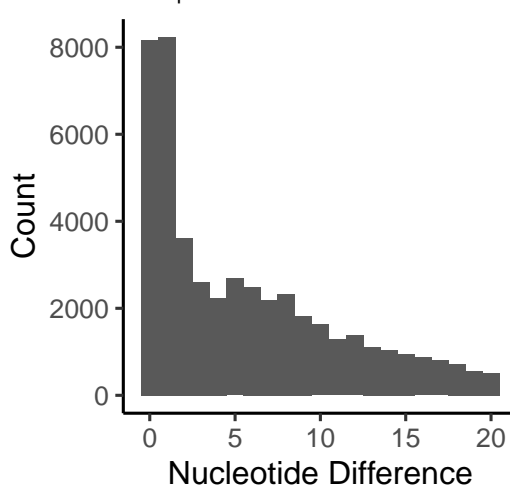
### IGHV3-21\*04

5420 sequences assigned  
764 (14.1%) exact matches, in which:  
735 unique CDR3  
7 unique J



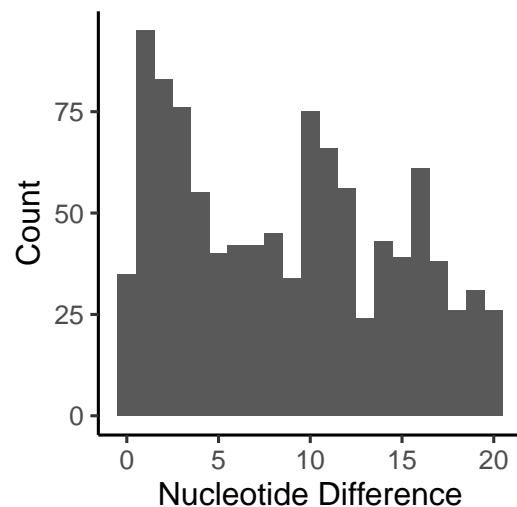
### IGHV3-23\*01\_04

49404 sequences assigned  
8172 (16.5%) exact matches, in which:  
6190 unique CDR3  
7 unique J



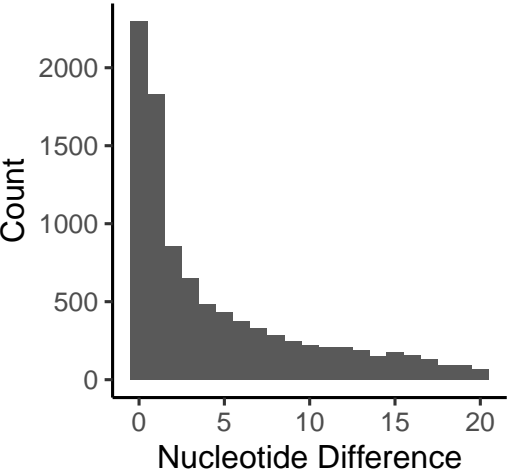
### IGHV3-30\*04

1129 sequences assigned  
35 (3.1%) exact matches, in which:  
35 unique CDR3  
7 unique J



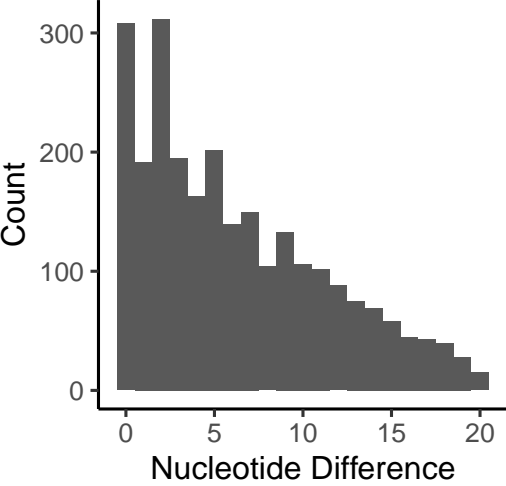
IGHV3-30\*18

9822 sequences assigned  
2297 (23.4%) exact matches, in which:  
1907 unique CDR3  
7 unique J



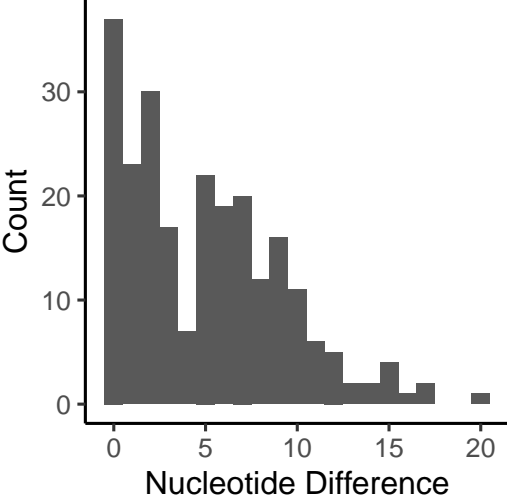
IGHV3-33\*08

2661 sequences assigned  
308 (11.6%) exact matches, in which:  
291 unique CDR3  
7 unique J



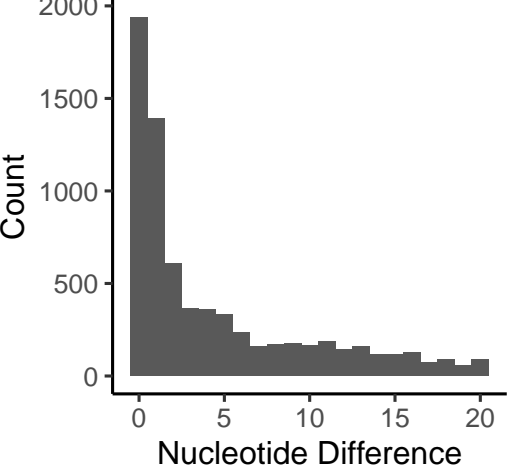
IGHV3-38-3\*01

237 sequences assigned  
37 (15.6%) exact matches, in which:  
37 unique CDR3  
5 unique J



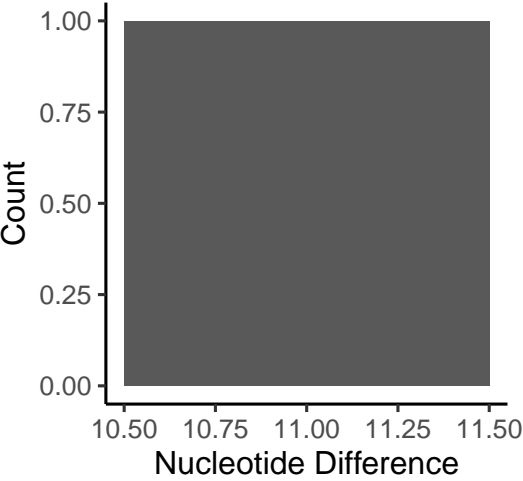
IGHV3-33\*01

7342 sequences assigned  
1936 (26.4%) exact matches, in which:  
1497 unique CDR3  
7 unique J



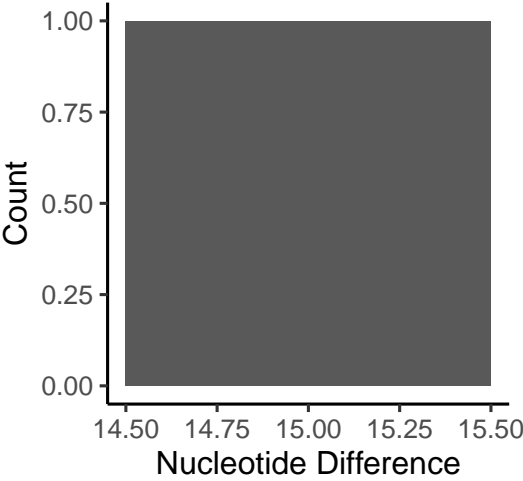
IGHV3-35\*01

1 sequences assigned  
No exact matches.



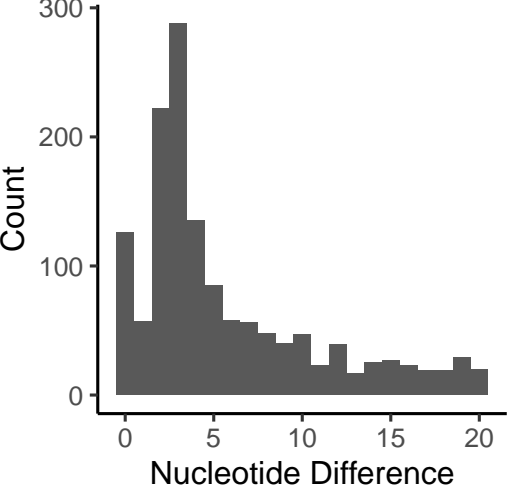
IGHV3-38\*02

3 sequences assigned  
No exact matches.



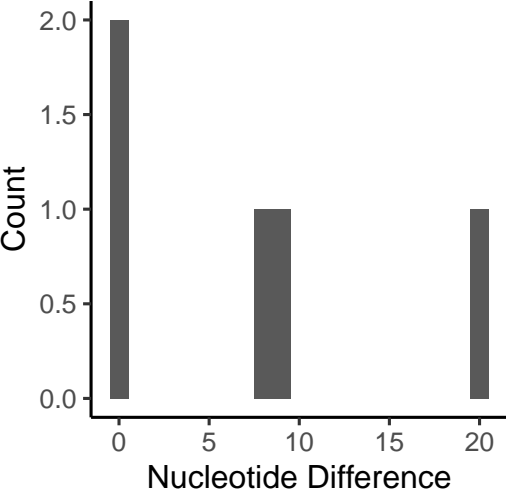
IGHV3-33\*06

1503 sequences assigned  
126 (8.4%) exact matches, in which:  
125 unique CDR3  
7 unique J



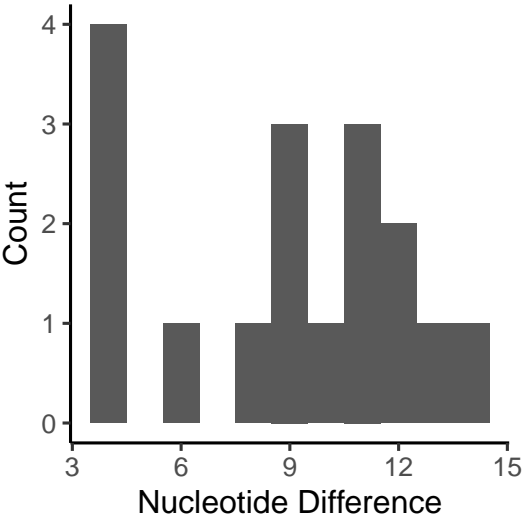
IGHV3-35\*02

5 sequences assigned  
2 (40%) exact matches, in which:  
1 unique CDR3  
1 unique J



IGHV3-38\*03

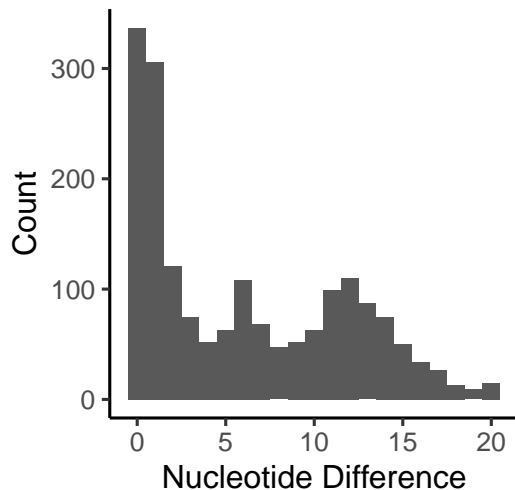
17 sequences assigned  
No exact matches.





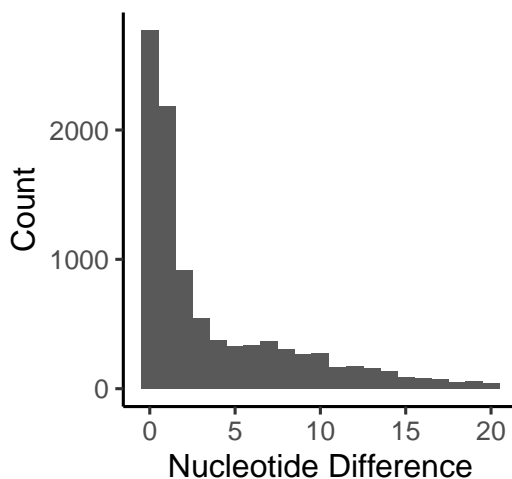
### IGHV3-43\*01

1839 sequences assigned  
337 (18.3%) exact matches, in which:  
264 unique CDR3  
7 unique J



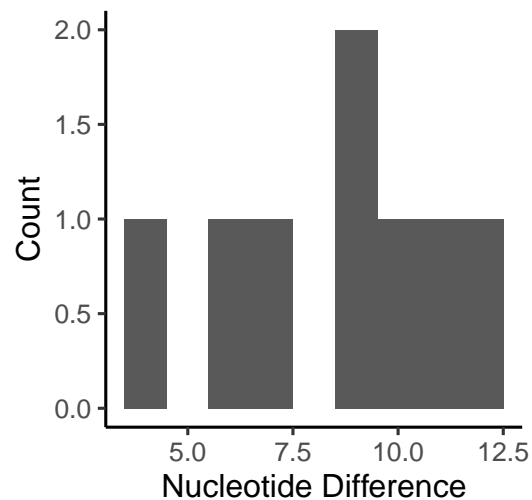
### IGHV3-48\*03

9953 sequences assigned  
2770 (27.8%) exact matches, in which:  
2149 unique CDR3  
7 unique J



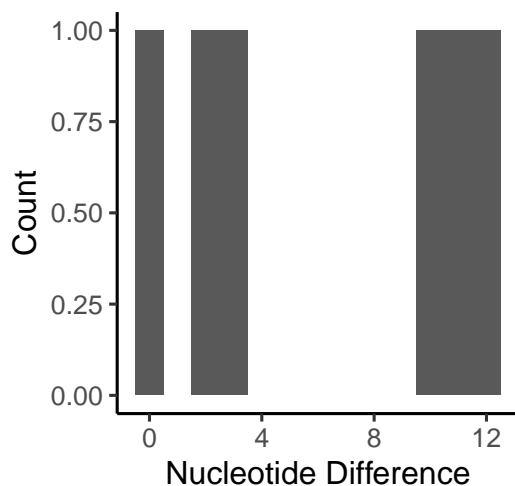
### IGHV3-52\*02

8 sequences assigned  
No exact matches.



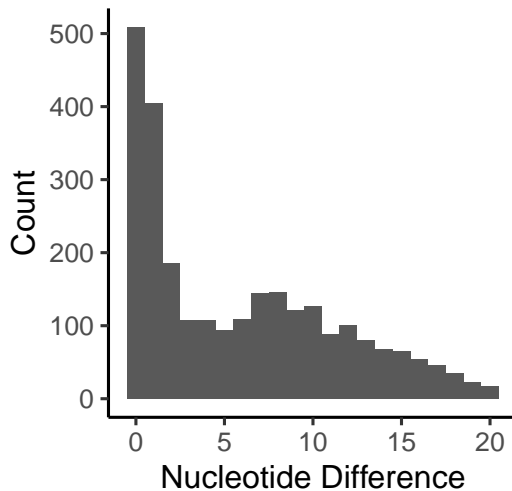
### IGHV3-47\*02

6 sequences assigned  
1 (16.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



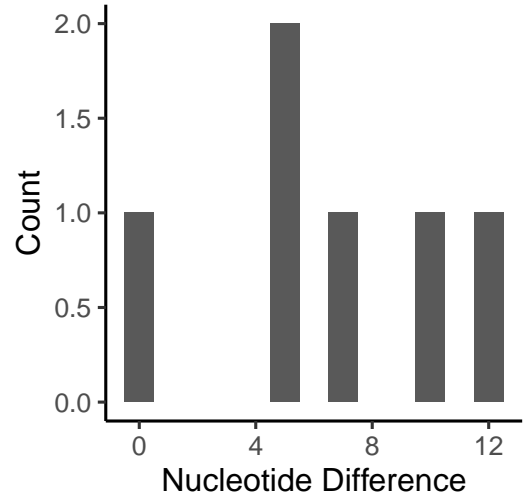
### IGHV3-49\*04

2775 sequences assigned  
509 (18.3%) exact matches, in which:  
404 unique CDR3  
7 unique J



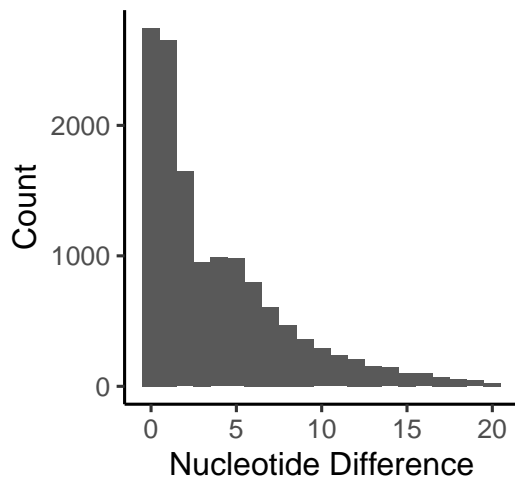
### IGHV3-52\*01\_03

6 sequences assigned  
1 (16.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



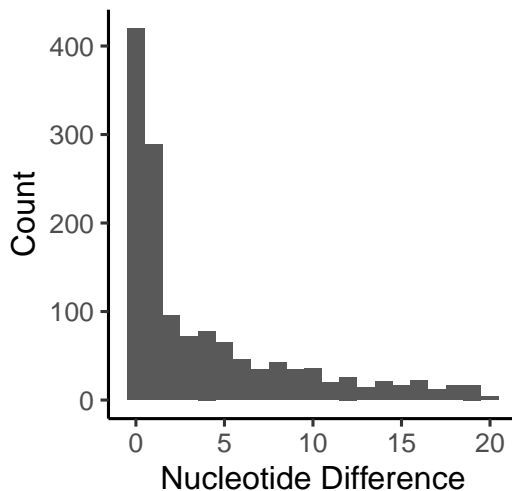
### IGHV3-48\*01

13834 sequences assigned  
2746 (19.8%) exact matches, in which:  
2208 unique CDR3  
7 unique J



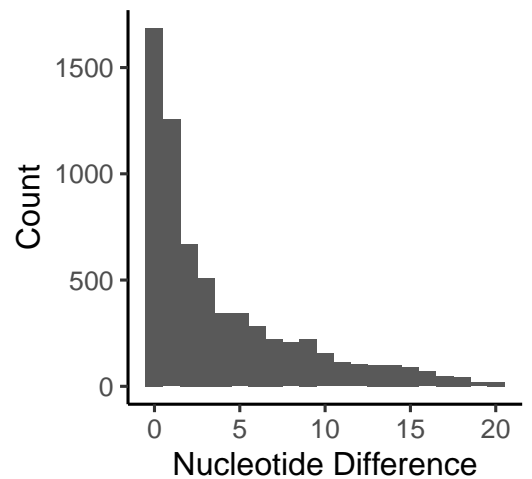
### IGHV3-49\*03\_05

1400 sequences assigned  
420 (30%) exact matches, in which:  
350 unique CDR3  
7 unique J



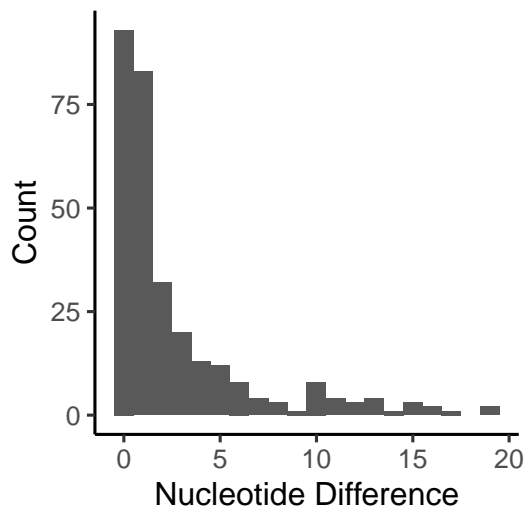
### IGHV3-53\*01\_02

6694 sequences assigned  
1686 (25.2%) exact matches, in which:  
1394 unique CDR3  
7 unique J



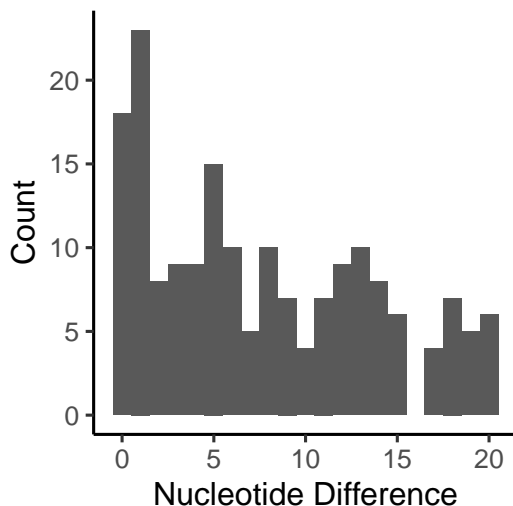
### IGHV3-64\*04

297 sequences assigned  
93 (31.3%) exact matches, in which:  
93 unique CDR3  
7 unique J



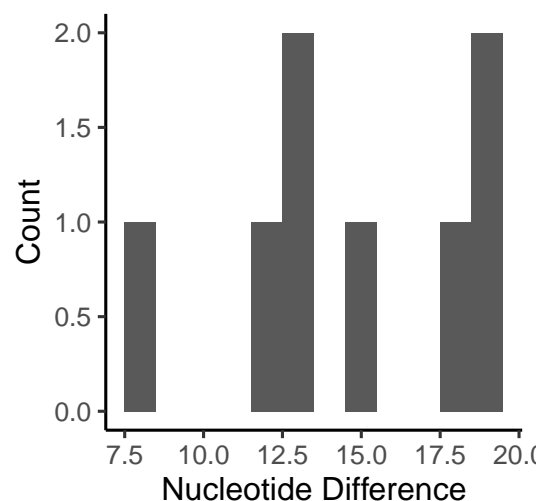
### IGHV3-69-1\*01

191 sequences assigned  
18 (9.4%) exact matches, in which:  
18 unique CDR3  
6 unique J



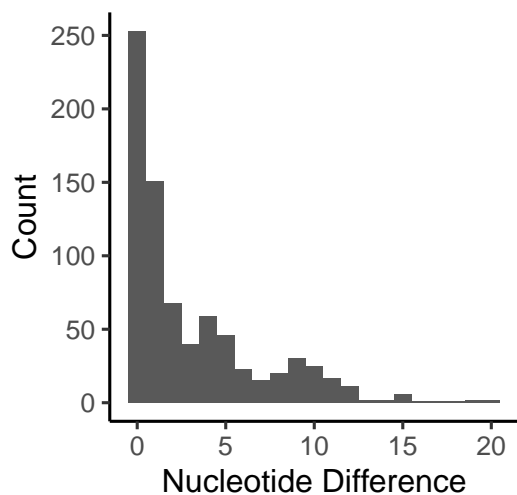
### IGHV3-71\*01\_04

11 sequences assigned  
No exact matches.



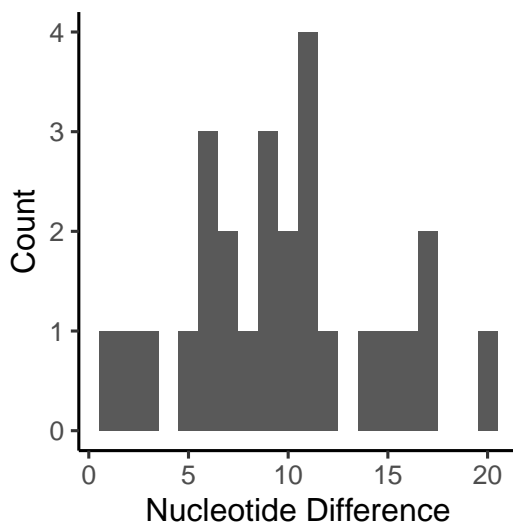
### IGHV3-64\*02\_07

786 sequences assigned  
253 (32.2%) exact matches, in which:  
194 unique CDR3  
7 unique J



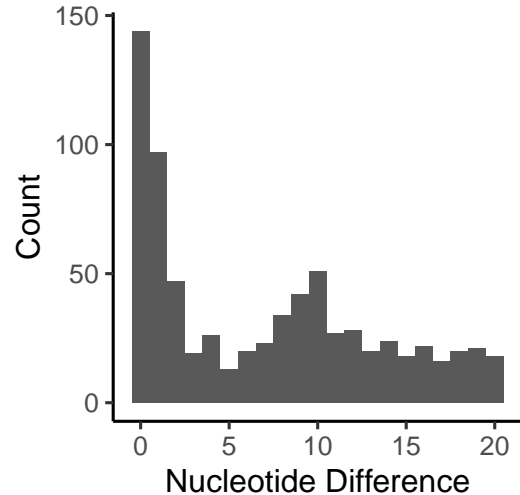
### IGHV3-69-1\*02

30 sequences assigned  
No exact matches.



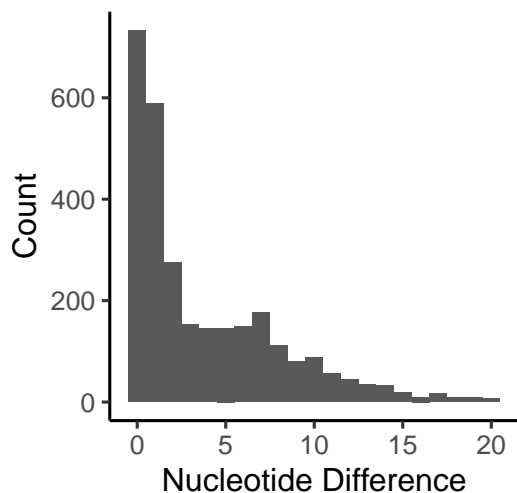
### IGHV3-72\*01

782 sequences assigned  
144 (18.4%) exact matches, in which:  
124 unique CDR3  
7 unique J



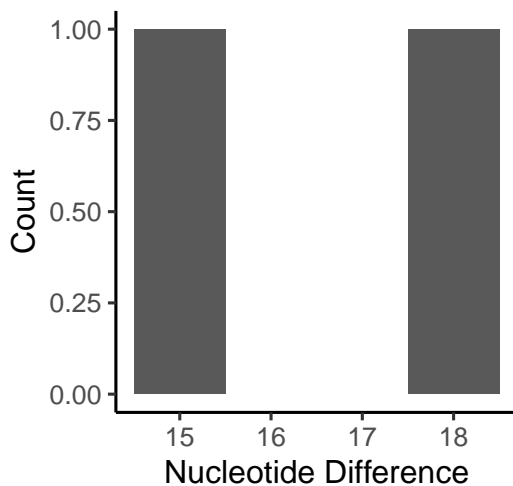
### IGHV3-66\*02

2903 sequences assigned  
733 (25.2%) exact matches, in which:  
593 unique CDR3  
7 unique J



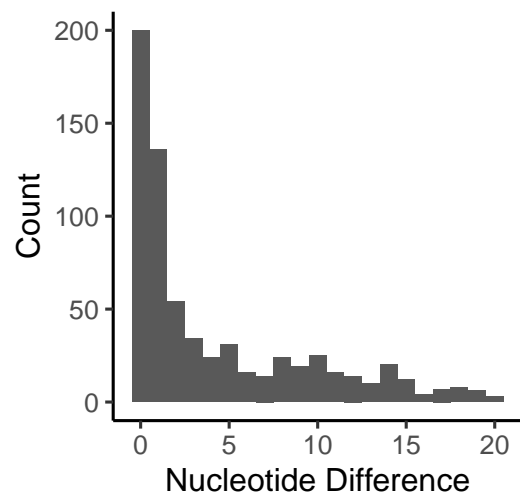
### IGHV3-71\*03

8 sequences assigned  
No exact matches.



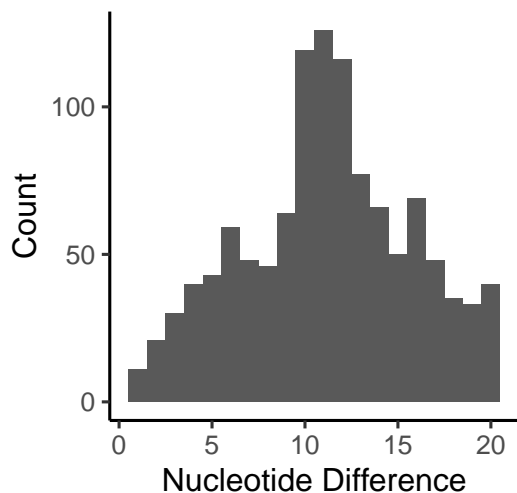
### IGHV3-73\*01\_02

694 sequences assigned  
200 (28.8%) exact matches, in which:  
167 unique CDR3  
7 unique J



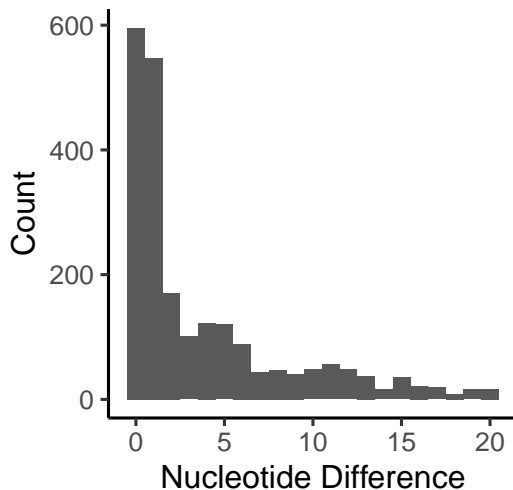
### IGHV3-74\*03

1393 sequences assigned  
No exact matches.



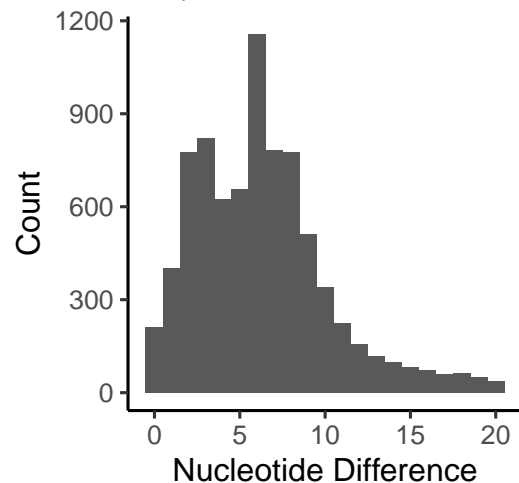
### IGHV3-64D\*06

2353 sequences assigned  
596 (25.3%) exact matches, in which:  
351 unique CDR3  
7 unique J



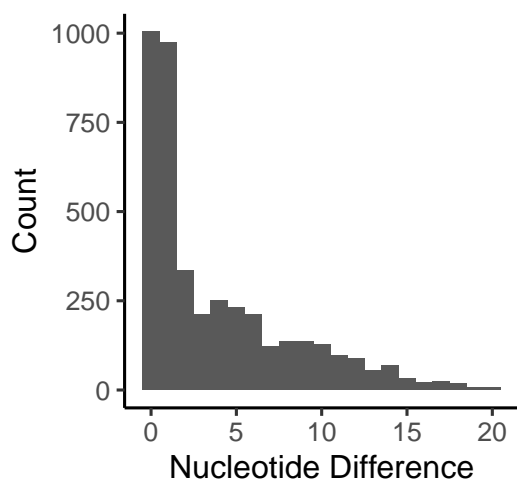
### IGHV4-4\*09

8104 sequences assigned  
213 (2.6%) exact matches, in which:  
206 unique CDR3  
7 unique J



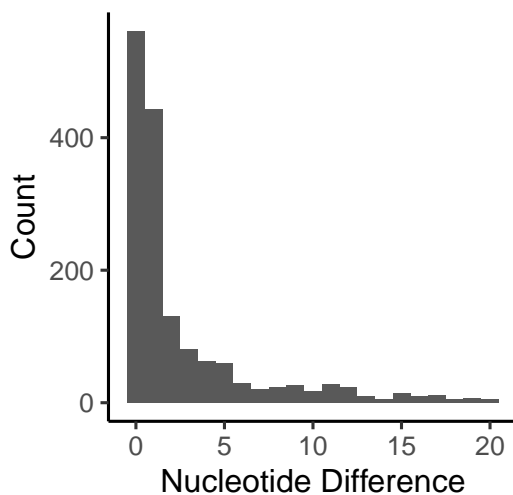
### IGHV3-74\*01\_02

4178 sequences assigned  
1004 (24%) exact matches, in which:  
710 unique CDR3  
7 unique J



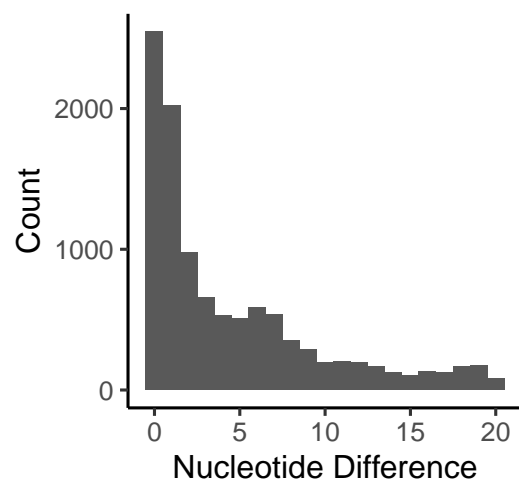
### IGHV3-64D\*09

1595 sequences assigned  
561 (35.2%) exact matches, in which:  
344 unique CDR3  
7 unique J



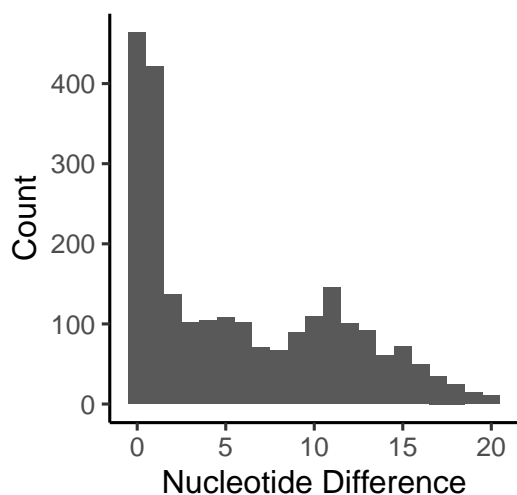
### IGHV4-4\*02\_03

11123 sequences assigned  
2546 (22.9%) exact matches, in which:  
1981 unique CDR3  
7 unique J



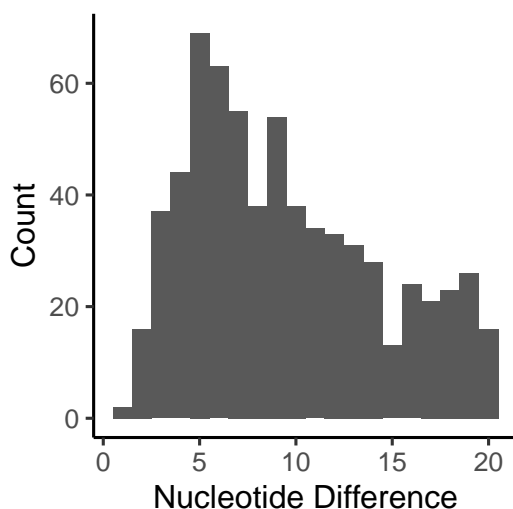
### IGHV3-43D\*04

2425 sequences assigned  
464 (19.1%) exact matches, in which:  
377 unique CDR3  
7 unique J



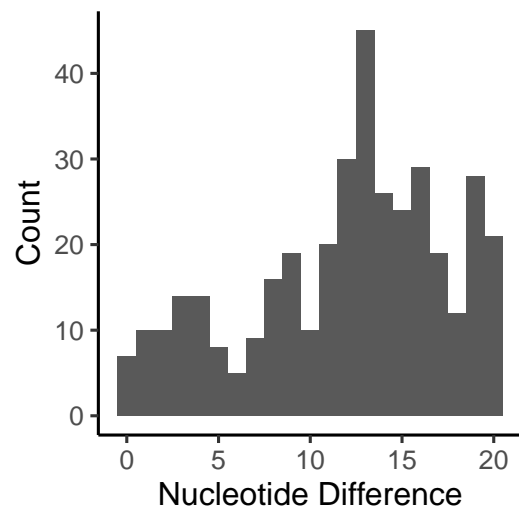
### IGHV3-NL1\*01

708 sequences assigned  
No exact matches.



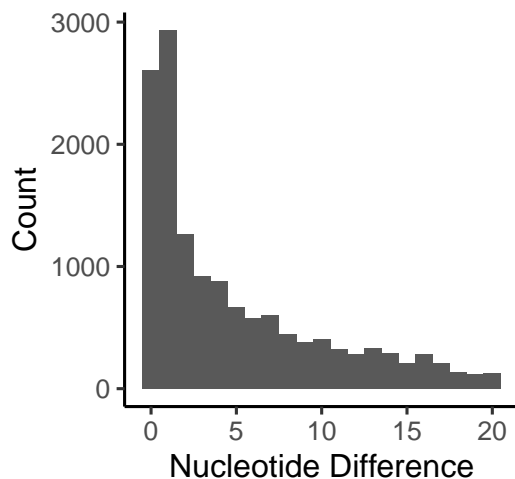
### IGHV4-28\*03

470 sequences assigned  
7 (1.5%) exact matches, in which:  
7 unique CDR3  
2 unique J



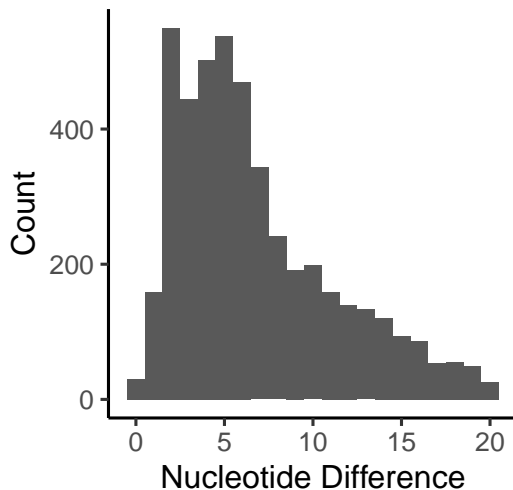
### IGHV4-30-4\*01

14589 sequences assigned  
2607 (17.9%) exact matches, in which:  
1502 unique CDR3  
7 unique J



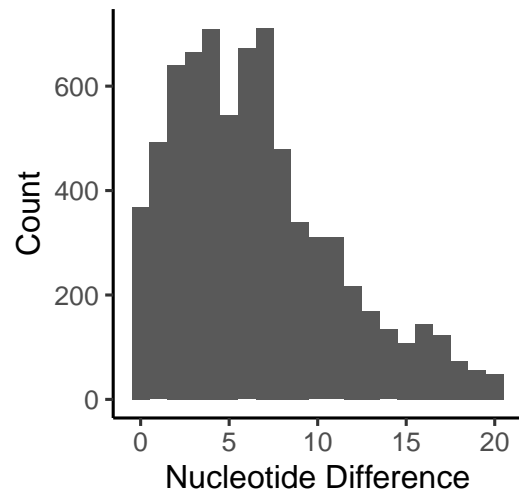
### IGHV4-30-4\*08

4743 sequences assigned  
30 (0.6%) exact matches, in which:  
28 unique CDR3  
5 unique J



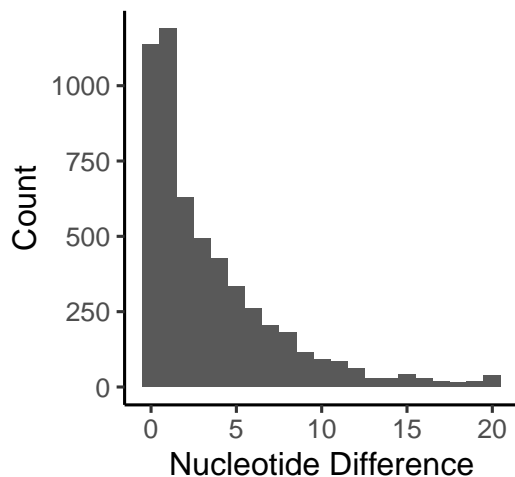
### IGHV4-38-2\*02

7423 sequences assigned  
369 (5%) exact matches, in which:  
331 unique CDR3  
7 unique J



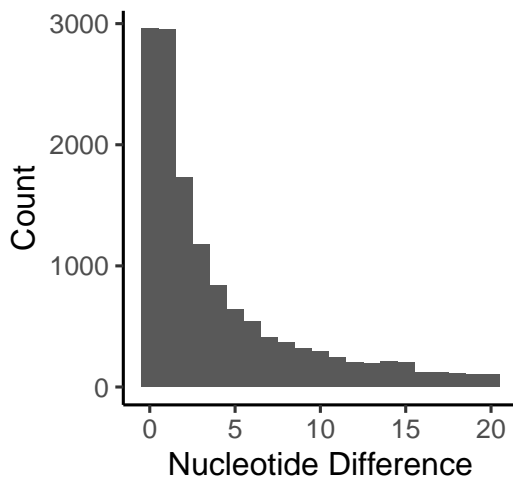
### IGHV4-30-2\*01

5529 sequences assigned  
1137 (20.6%) exact matches, in which:  
606 unique CDR3  
7 unique J



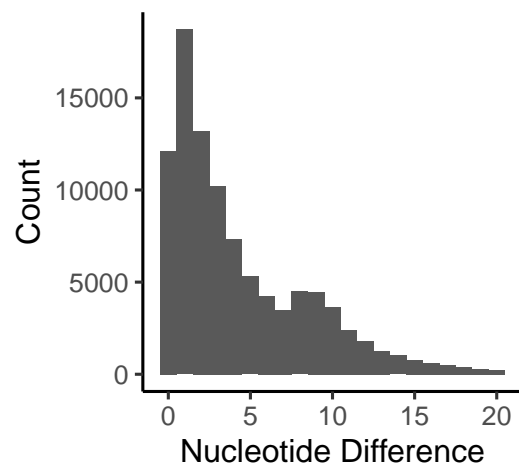
### IGHV4-31\*02

14568 sequences assigned  
2958 (20.3%) exact matches, in which:  
2194 unique CDR3  
7 unique J



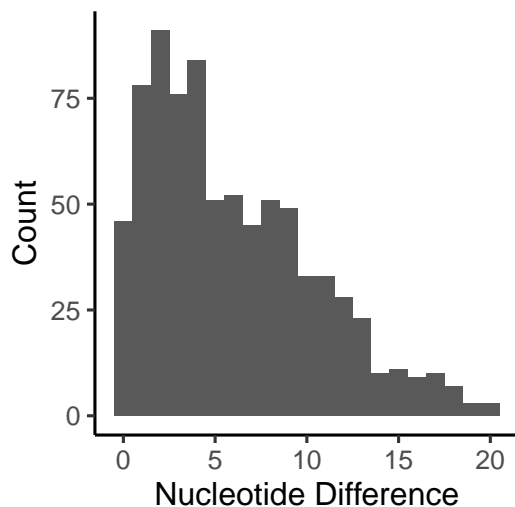
### IGHV4-39\*07

97476 sequences assigned  
12115 (12.4%) exact matches, in which:  
8019 unique CDR3  
7 unique J



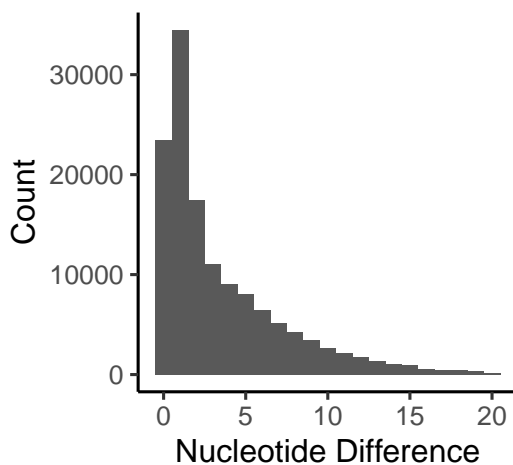
### IGHV4-30-2\*05

808 sequences assigned  
46 (5.7%) exact matches, in which:  
46 unique CDR3  
6 unique J



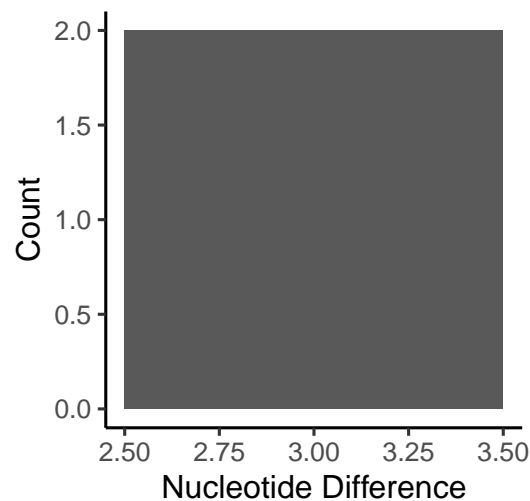
### IGHV4-34\*01\_02

136156 sequences assigned  
23491 (17.3%) exact matches, in which:  
14501 unique CDR3  
7 unique J



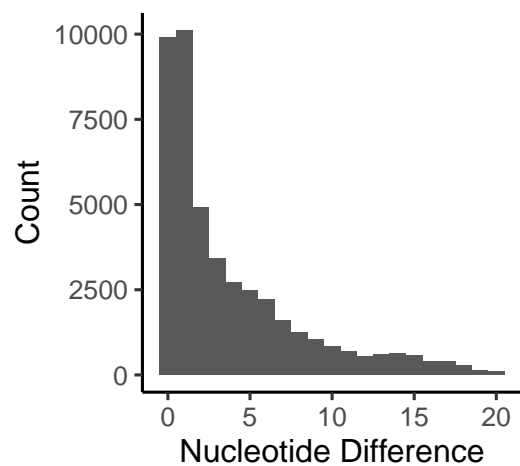
### IGHV4-55\*09

2 sequences assigned  
No exact matches.



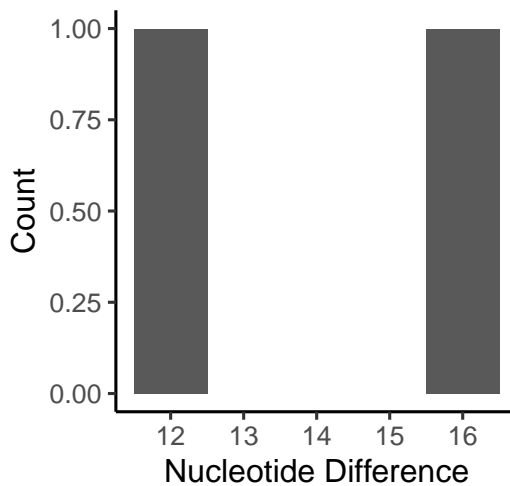
### IGHV4-59\*11

45157 sequences assigned  
9913 (22%) exact matches, in which:  
6911 unique CDR3  
7 unique J



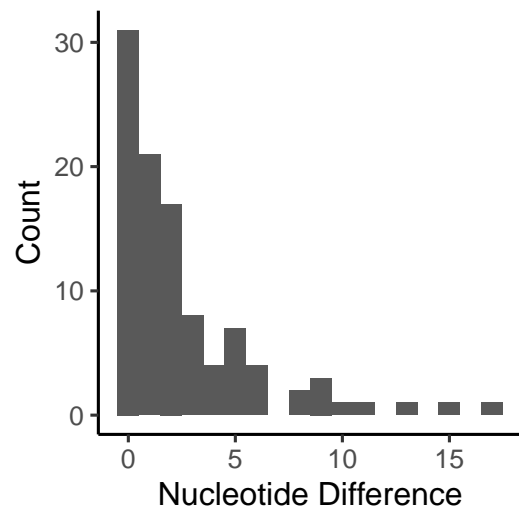
### IGHV1/OR15-2\*02\_03

2 sequences assigned  
No exact matches.



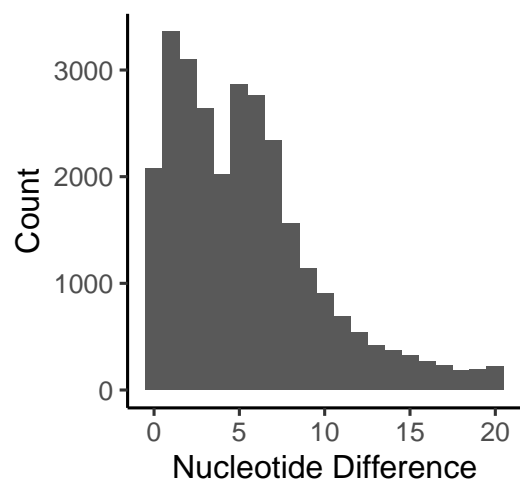
### IGHV5-51\*04

104 sequences assigned  
31 (29.8%) exact matches, in which:  
30 unique CDR3  
4 unique J



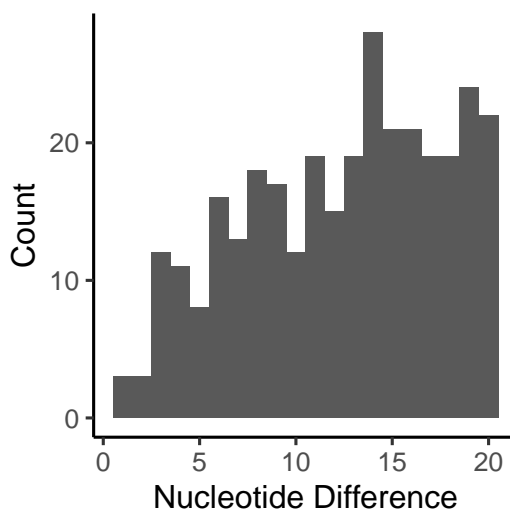
### IGHV4-59\*12

28919 sequences assigned  
2074 (7.2%) exact matches, in which:  
1858 unique CDR3  
7 unique J



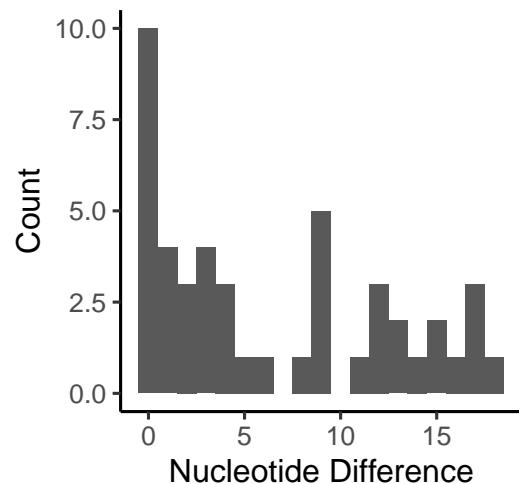
### IGHV4/OR15-8\*01

384 sequences assigned  
No exact matches.



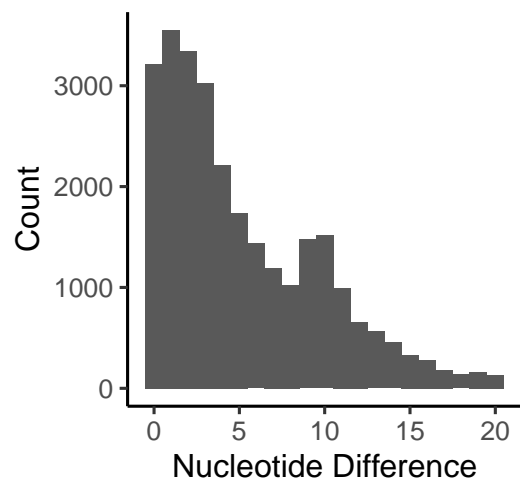
### IGHV5-51\*06

46 sequences assigned  
10 (21.7%) exact matches, in which:  
10 unique CDR3  
2 unique J



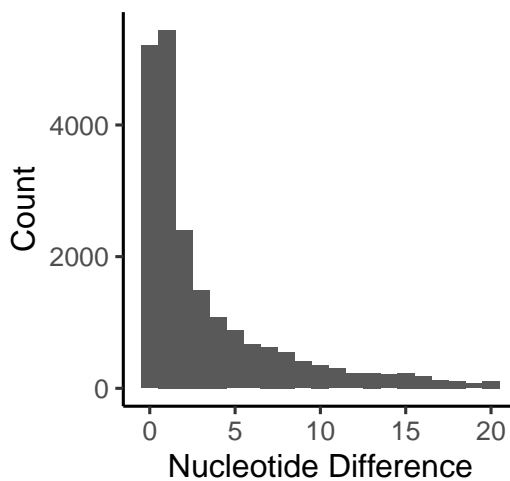
### IGHV4-61\*01

28067 sequences assigned  
3217 (11.5%) exact matches, in which:  
2559 unique CDR3  
7 unique J



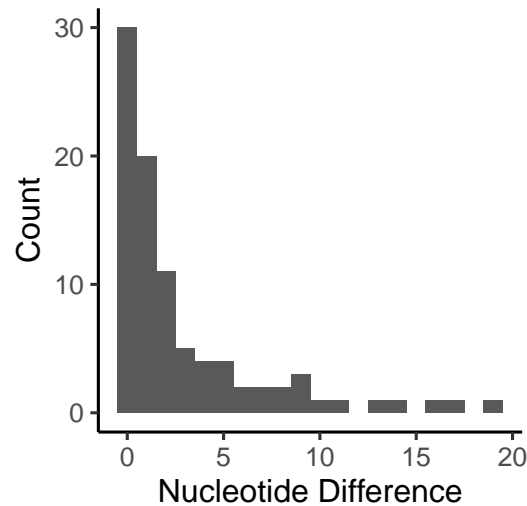
### IGHV5-10-1\*01\_03

21236 sequences assigned  
5206 (24.5%) exact matches, in which:  
4092 unique CDR3  
7 unique J



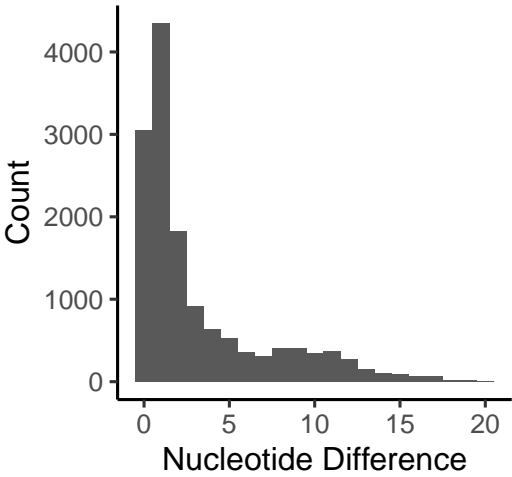
### IGHV5-51\*07

91 sequences assigned  
30 (33%) exact matches, in which:  
30 unique CDR3  
6 unique J



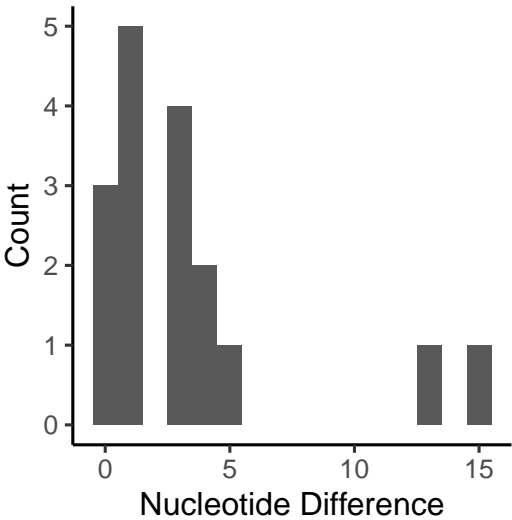
### IGHV6-1\*01\_02

14332 sequences assigned  
3056 (21.3%) exact matches, in which:  
1847 unique CDR3  
7 unique J



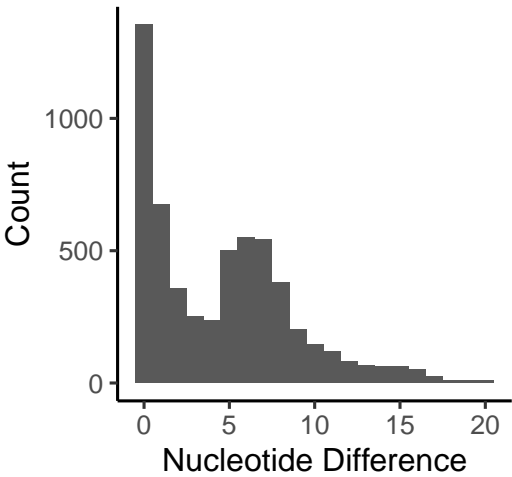
### IGHV7-4-1\*01

17 sequences assigned  
3 (17.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



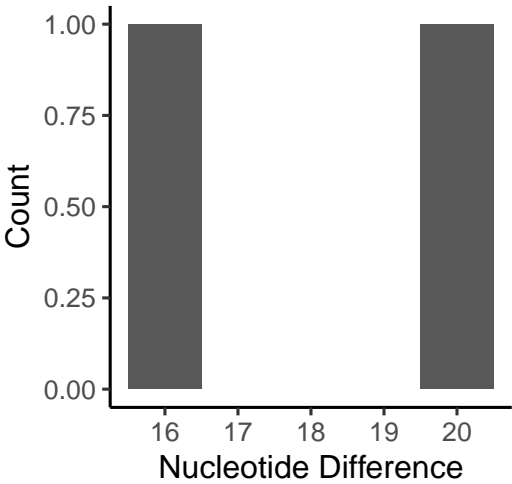
### IGHV6-1\*01\_02\_A315G

5697 sequences assigned  
1354 (23.8%) exact matches, in which:  
1319 unique CDR3  
7 unique J

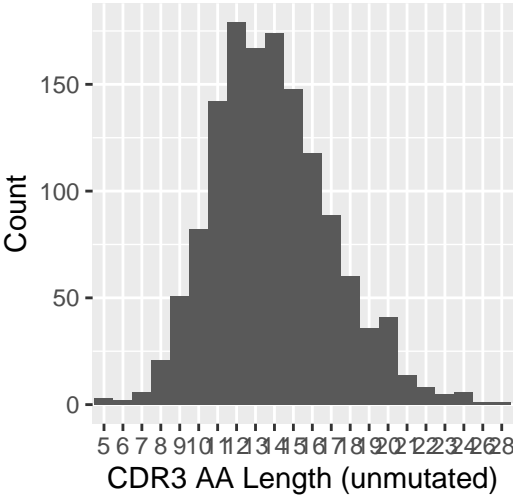


### IGHV3/OR16-10\*01\_03

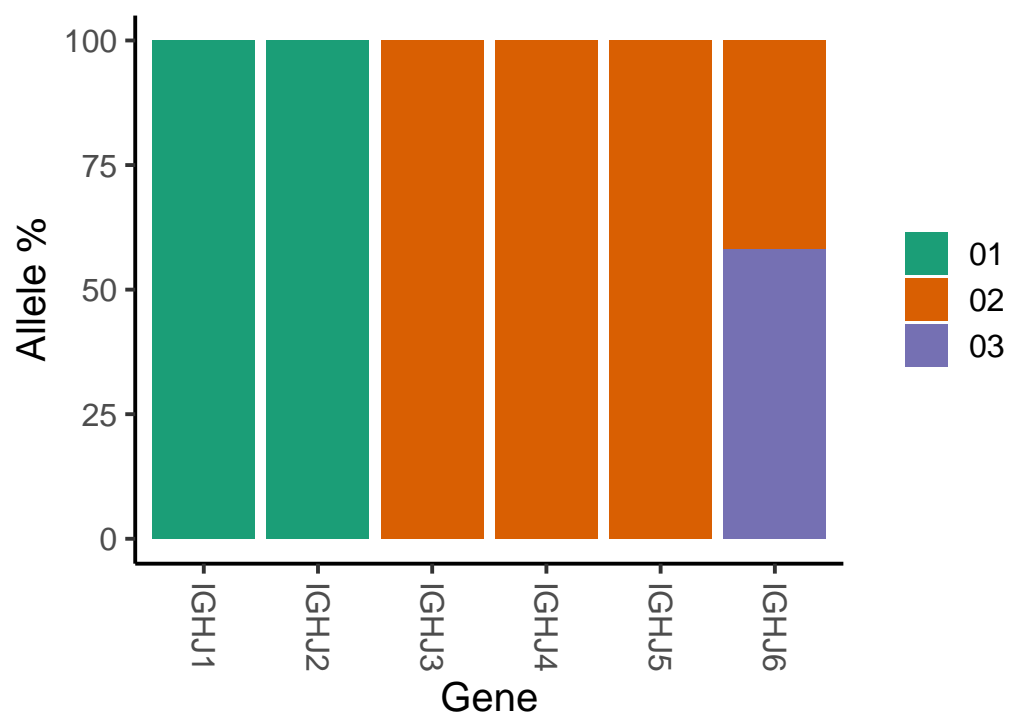
2 sequences assigned  
No exact matches.



IGHV6-1\*01\_02\_A315G



Allele Usage





# Sequence Count by IGHJ6 allele usage

