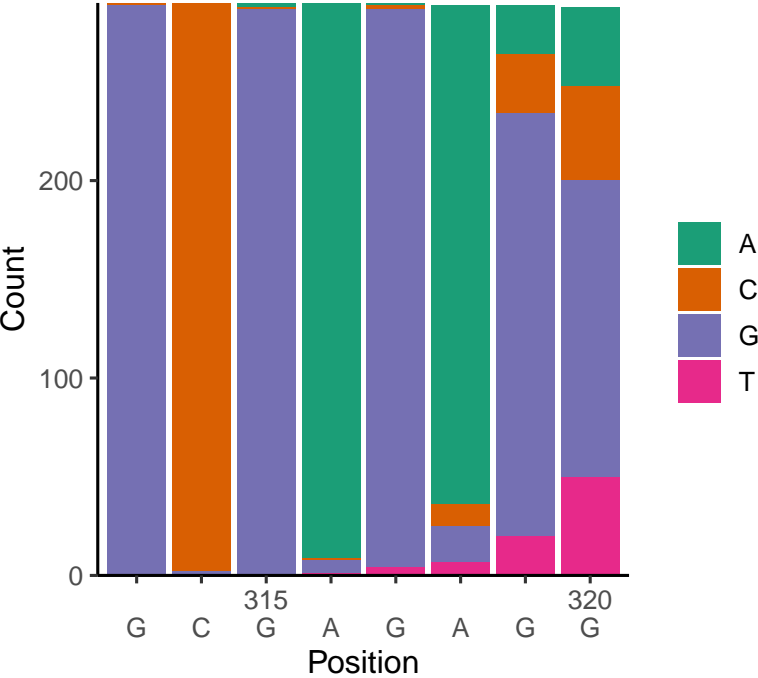
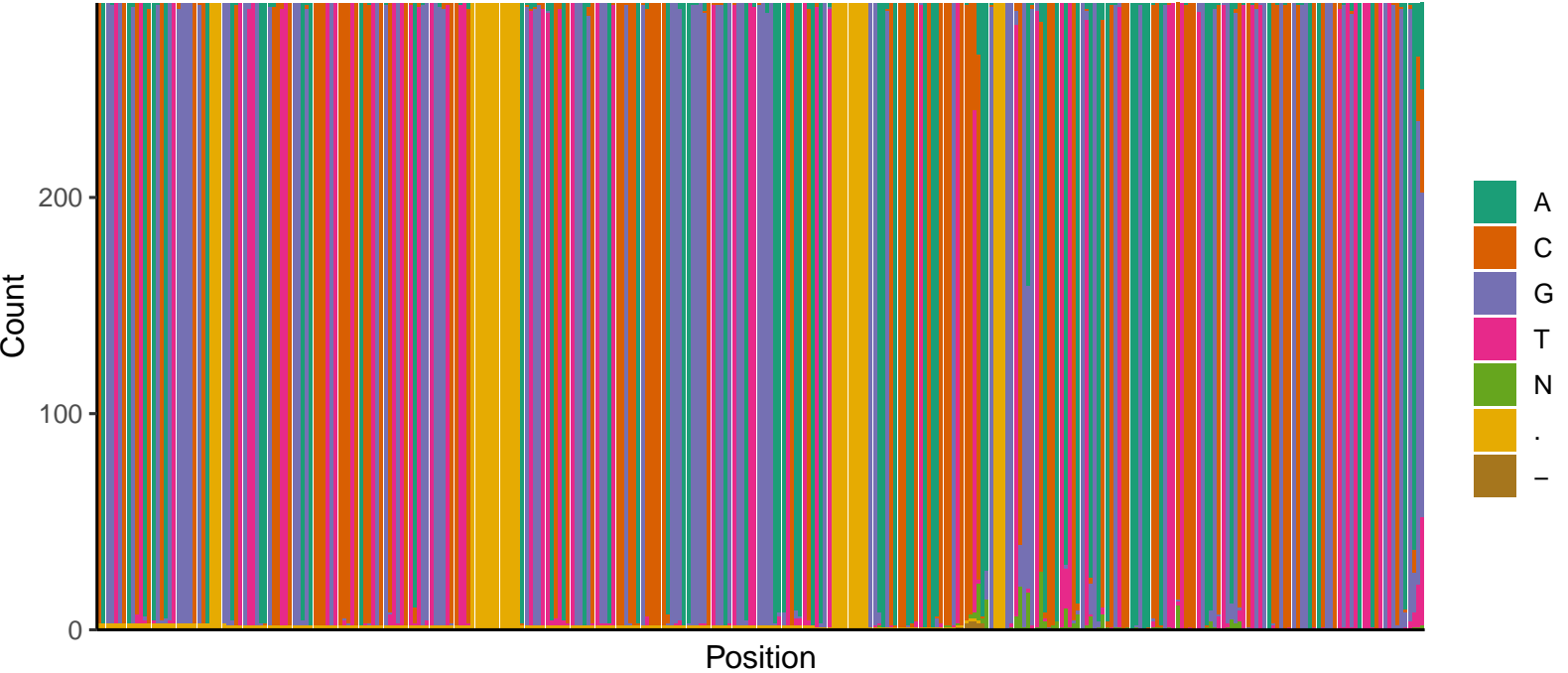


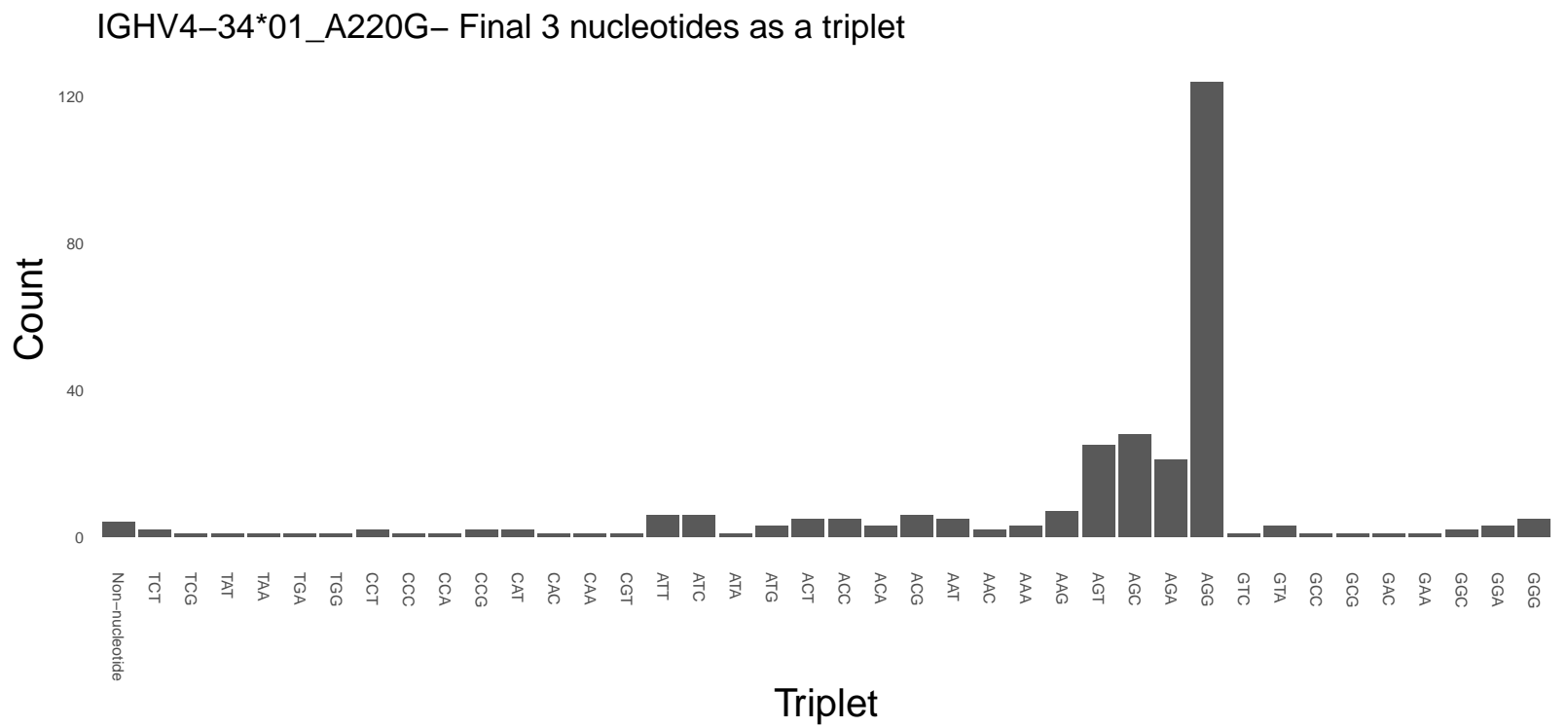
Gene IGHV4-34\*01\_A220G



Gene IGHV4-34\*01\_A220G

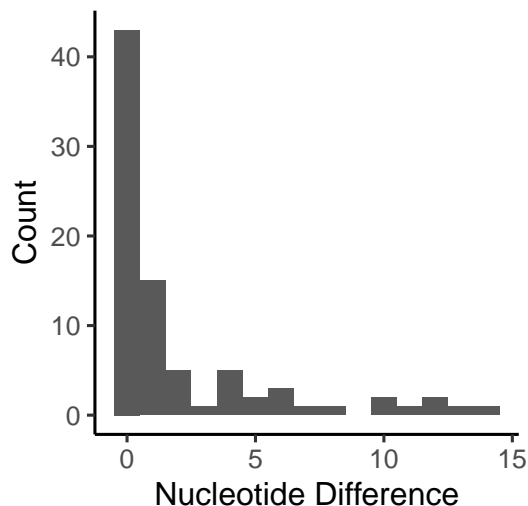


IGHV4-34\*01\_A220G- Final 3 nucleotides as a triplet



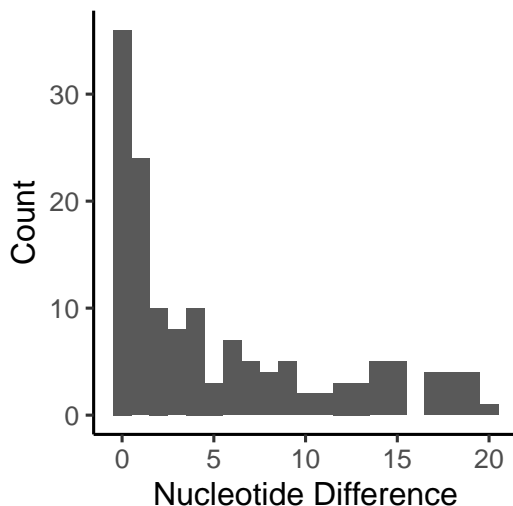
### IGHV1-2\*04

83 sequences assigned  
43 (51.8%) exact matches, in which:  
43 unique CDR3  
5 unique J



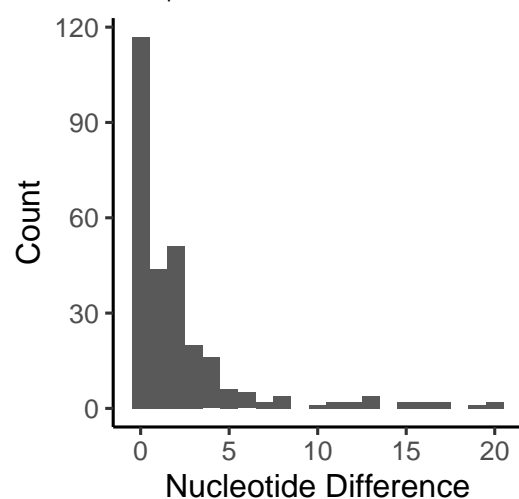
### IGHV1-8\*01

150 sequences assigned  
36 (24%) exact matches, in which:  
36 unique CDR3  
4 unique J



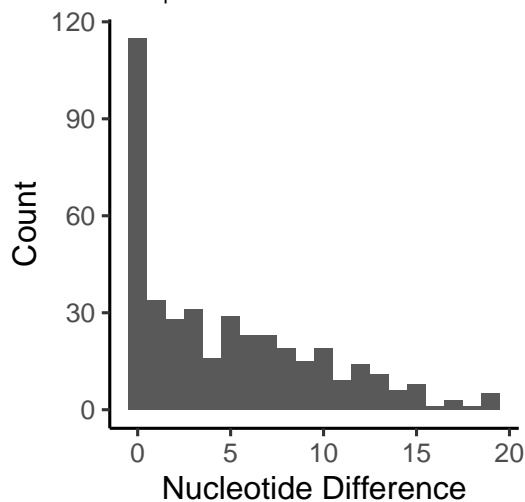
### IGHV1-24\*01

286 sequences assigned  
117 (40.9%) exact matches, in which:  
116 unique CDR3  
5 unique J



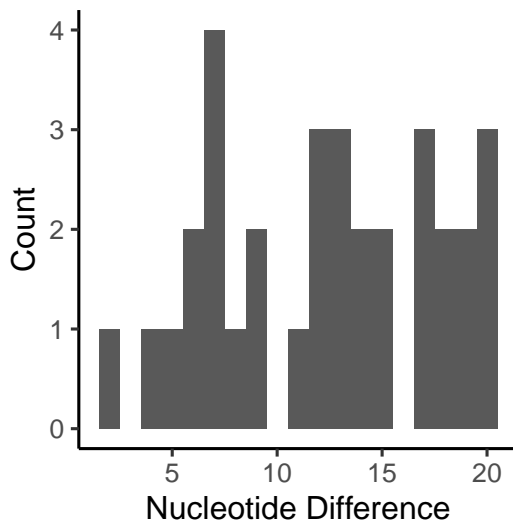
### IGHV1-2\*06

419 sequences assigned  
115 (27.4%) exact matches, in which:  
113 unique CDR3  
5 unique J



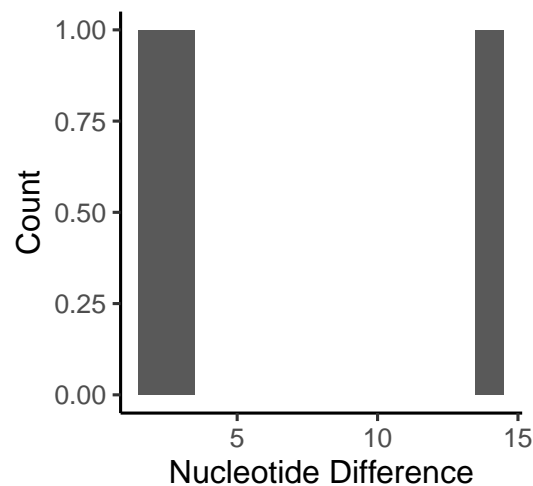
### IGHV1-8\*02

37 sequences assigned  
No exact matches.



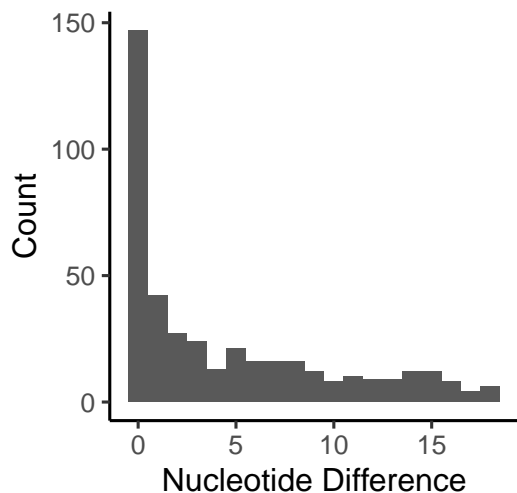
### IGHV1-45\*02

3 sequences assigned  
No exact matches.



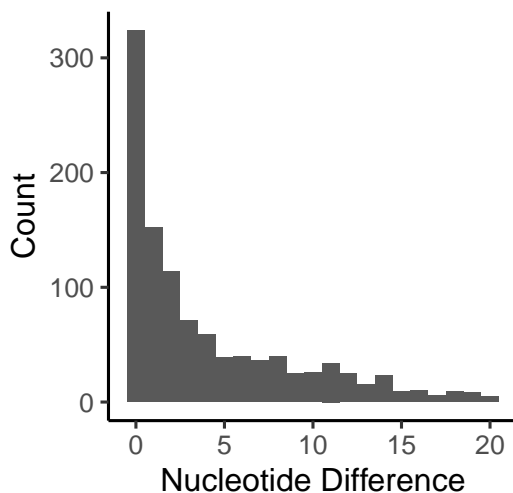
### IGHV1-3\*01

425 sequences assigned  
147 (34.6%) exact matches, in which:  
142 unique CDR3  
6 unique J



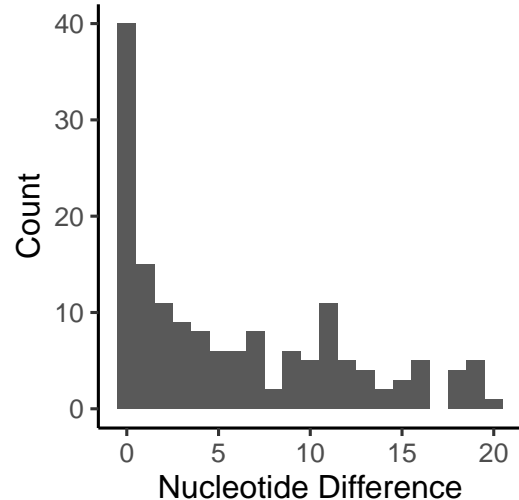
### IGHV1-18\*01

1096 sequences assigned  
324 (29.6%) exact matches, in which:  
319 unique CDR3  
6 unique J



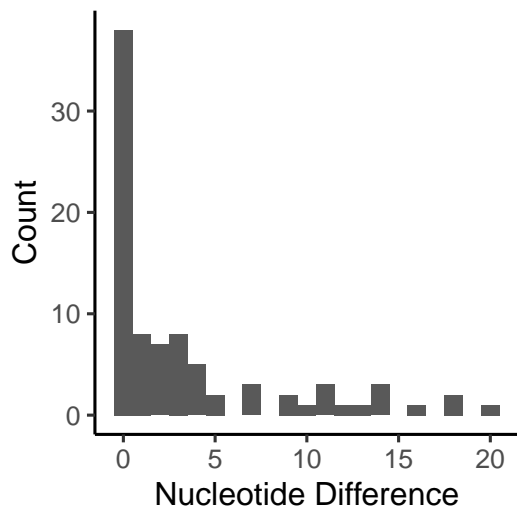
### IGHV1-46\*01

172 sequences assigned  
40 (23.3%) exact matches, in which:  
40 unique CDR3  
5 unique J



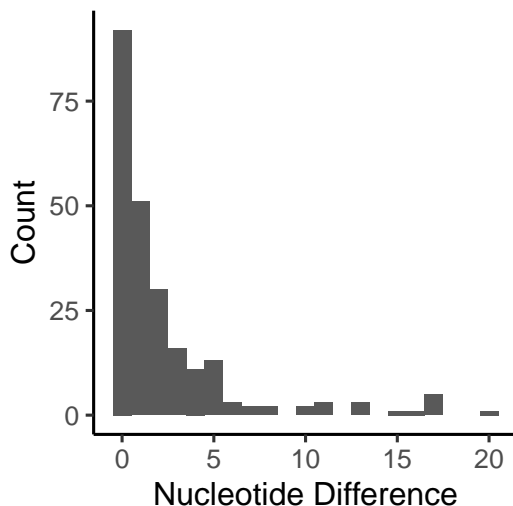
### IGHV1-46\*03

88 sequences assigned  
38 (43.2%) exact matches, in which:  
37 unique CDR3  
4 unique J



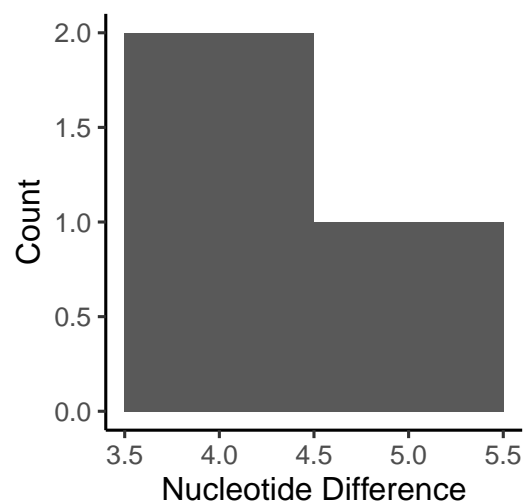
### IGHV1-69\*04

241 sequences assigned  
92 (38.2%) exact matches, in which:  
92 unique CDR3  
6 unique J



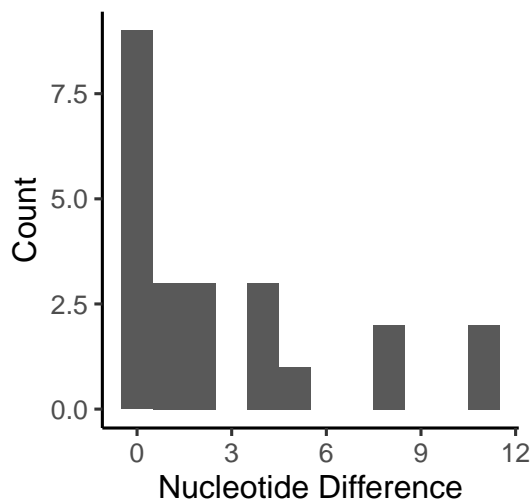
### IGHV1-NL1\*01

3 sequences assigned  
No exact matches.



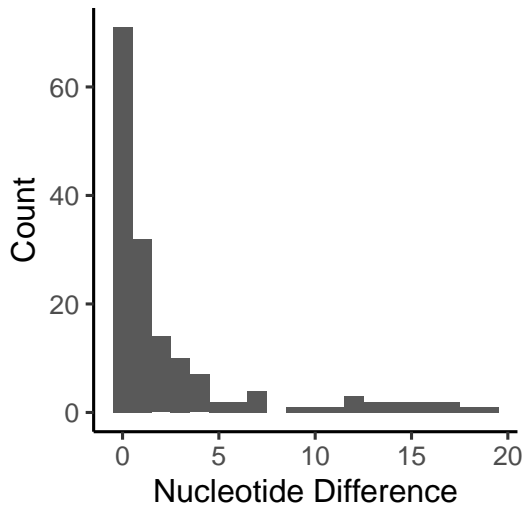
### IGHV1-58\*02

33 sequences assigned  
9 (27.3%) exact matches, in which:  
9 unique CDR3  
2 unique J



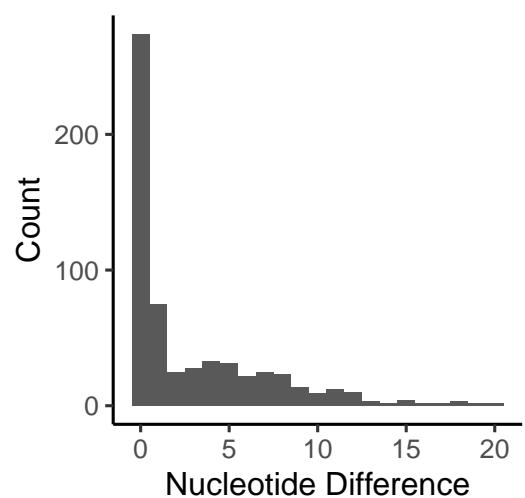
### IGHV1-69\*10

170 sequences assigned  
71 (41.8%) exact matches, in which:  
70 unique CDR3  
6 unique J



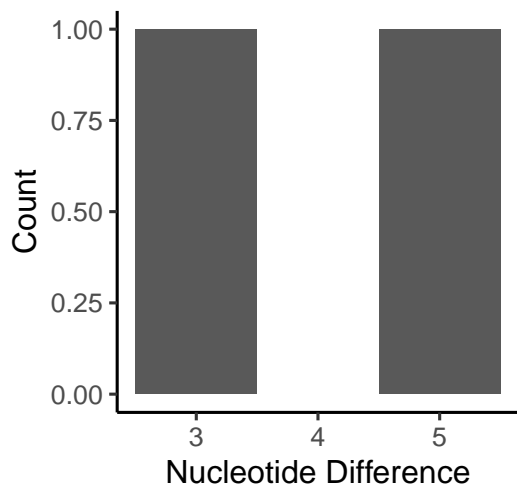
### IGHV2-5\*02

613 sequences assigned  
274 (44.7%) exact matches, in which:  
270 unique CDR3  
6 unique J



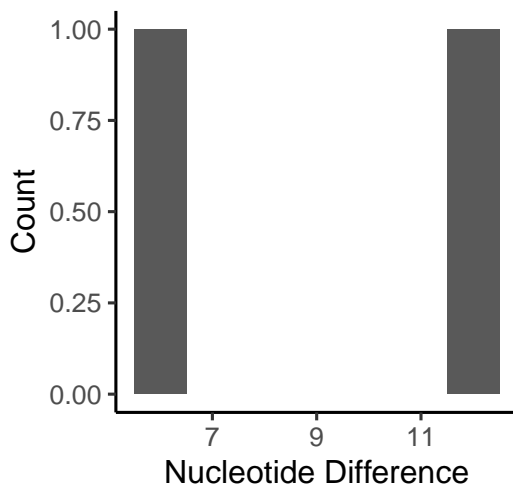
### IGHV1-68\*02

2 sequences assigned  
No exact matches.



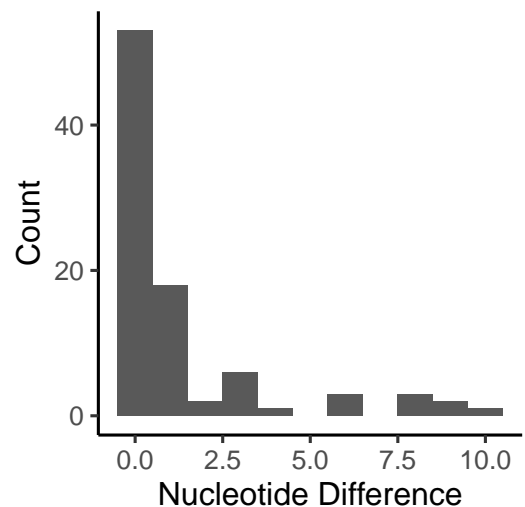
### IGHV1-69D\*01

2 sequences assigned  
No exact matches.



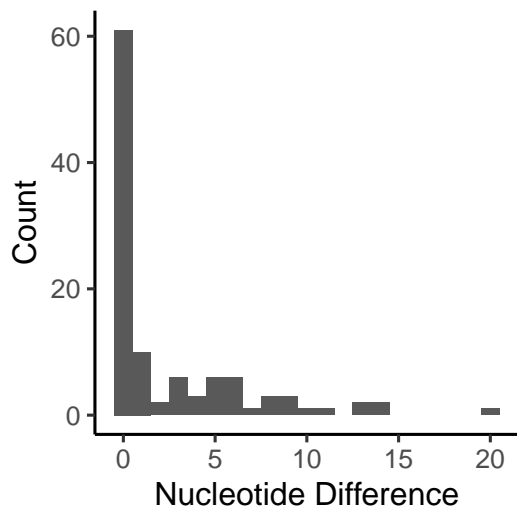
### IGHV2-26\*01

90 sequences assigned  
53 (58.9%) exact matches, in which:  
52 unique CDR3  
6 unique J



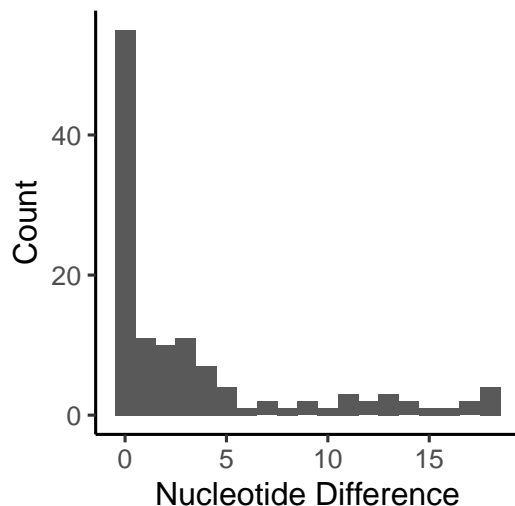
## IGHV2-70\*15

110 sequences assigned  
61 (55.5%) exact matches, in which:  
61 unique CDR3  
4 unique J



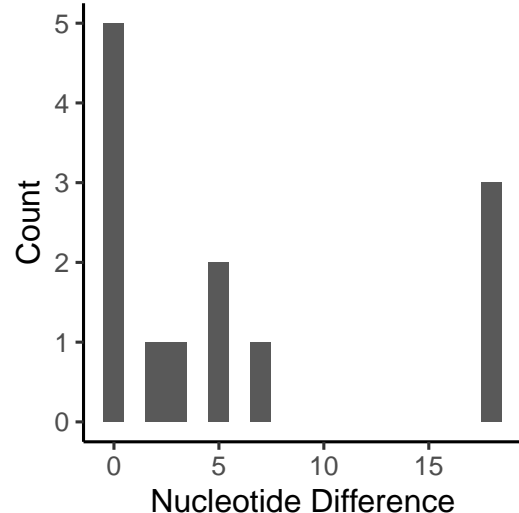
## IGHV3-9\*01

125 sequences assigned  
55 (44%) exact matches, in which:  
55 unique CDR3  
6 unique J



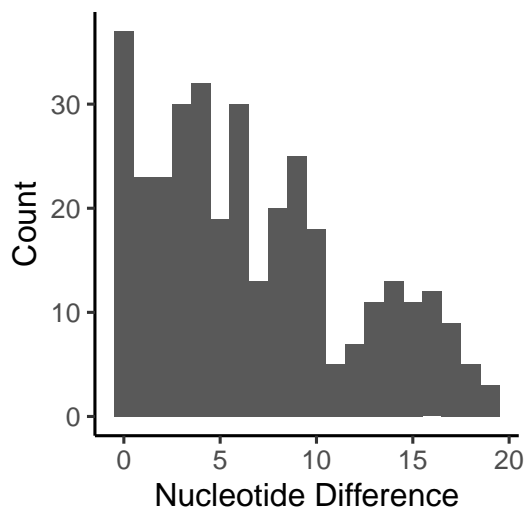
## IGHV3-11\*06

19 sequences assigned  
5 (26.3%) exact matches, in which:  
5 unique CDR3  
3 unique J



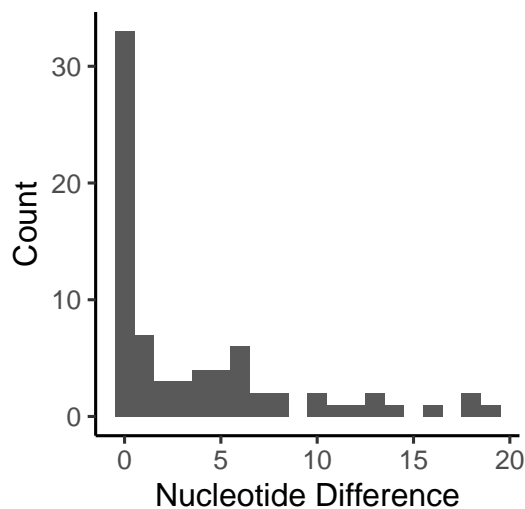
## IGHV3-7\*01

368 sequences assigned  
37 (10.1%) exact matches, in which:  
37 unique CDR3  
4 unique J



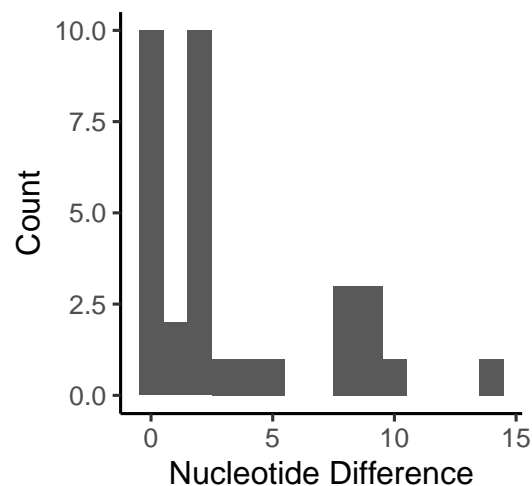
## IGHV3-11\*01

78 sequences assigned  
33 (42.3%) exact matches, in which:  
33 unique CDR3  
5 unique J



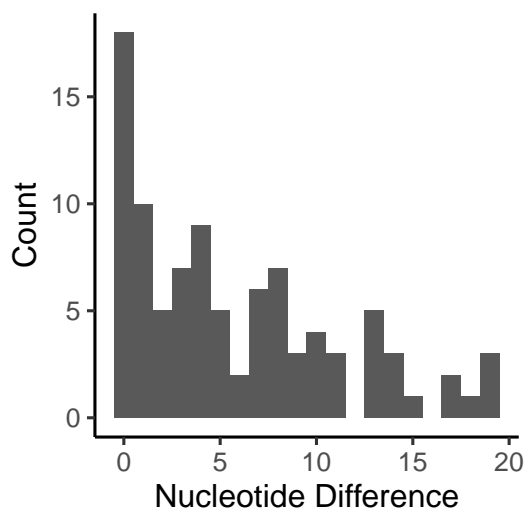
## IGHV3-13\*01

34 sequences assigned  
10 (29.4%) exact matches, in which:  
10 unique CDR3  
4 unique J



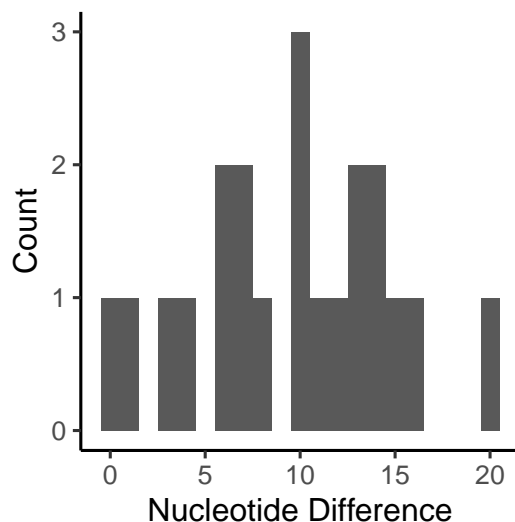
## IGHV3-7\*04

103 sequences assigned  
18 (17.5%) exact matches, in which:  
17 unique CDR3  
5 unique J



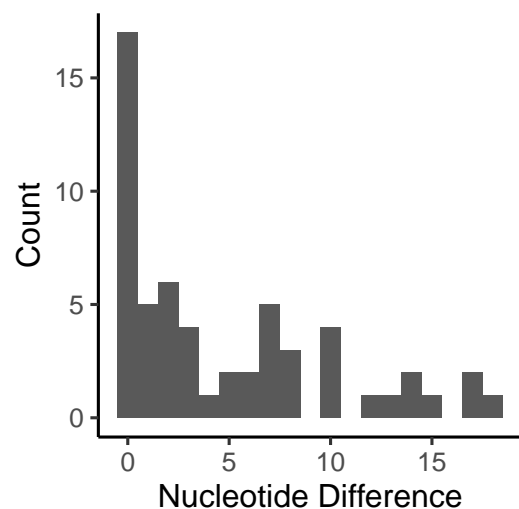
## IGHV3-11\*04

24 sequences assigned  
1 (4.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



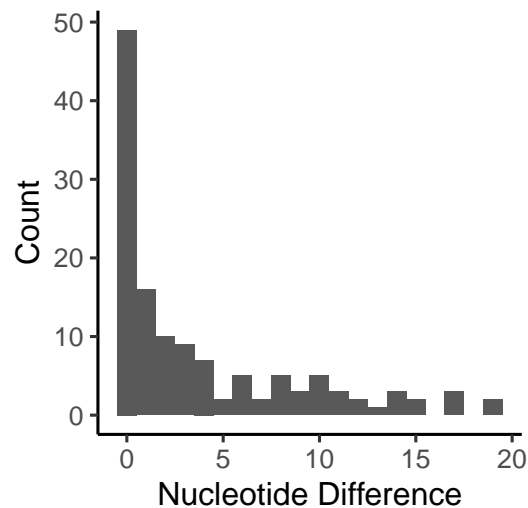
## IGHV3-15\*01

63 sequences assigned  
17 (27%) exact matches, in which:  
16 unique CDR3  
4 unique J



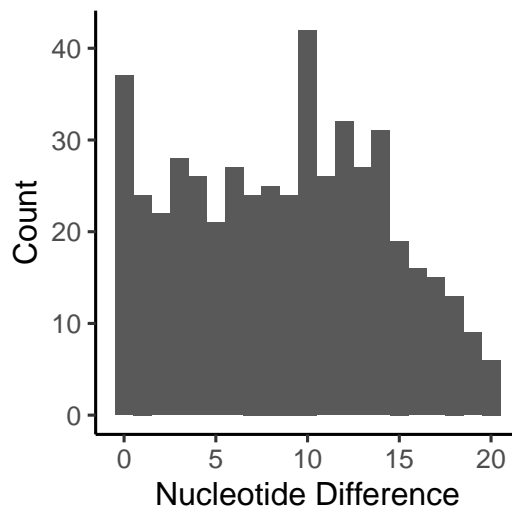
### IGHV3-15\*07

138 sequences assigned  
49 (35.5%) exact matches, in which:  
49 unique CDR3  
5 unique J



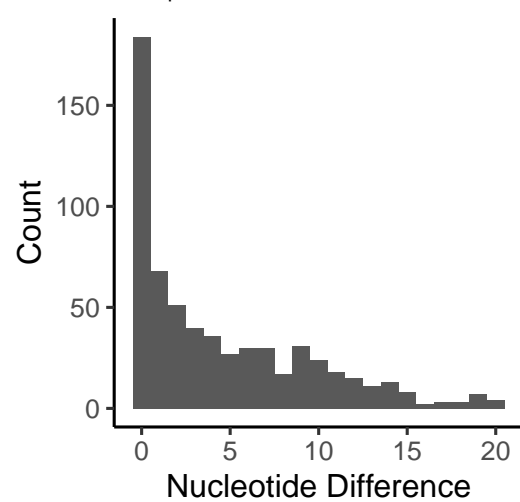
### IGHV3-23\*04

509 sequences assigned  
37 (7.3%) exact matches, in which:  
37 unique CDR3  
4 unique J



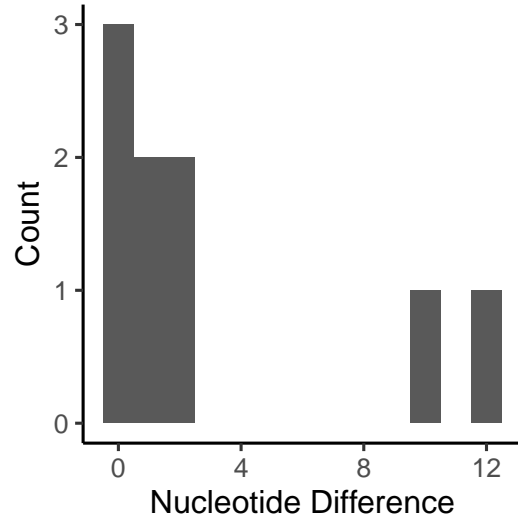
### IGHV3-33\*01

630 sequences assigned  
184 (29.2%) exact matches, in which:  
181 unique CDR3  
5 unique J



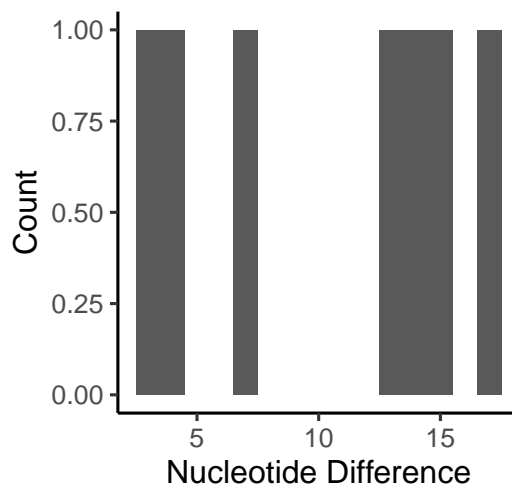
### IGHV3-20\*04

10 sequences assigned  
3 (30%) exact matches, in which:  
3 unique CDR3  
3 unique J



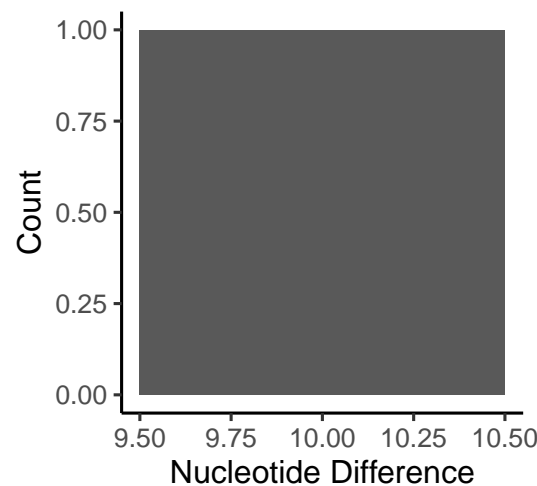
### IGHV3-30-5\*01

7 sequences assigned  
No exact matches.



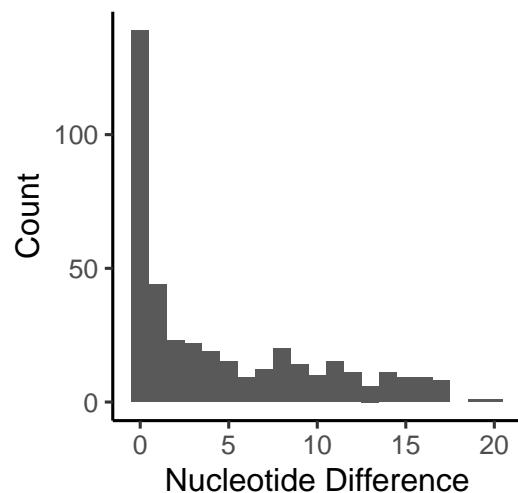
### IGHV3-38-3\*01

1 sequences assigned  
No exact matches.



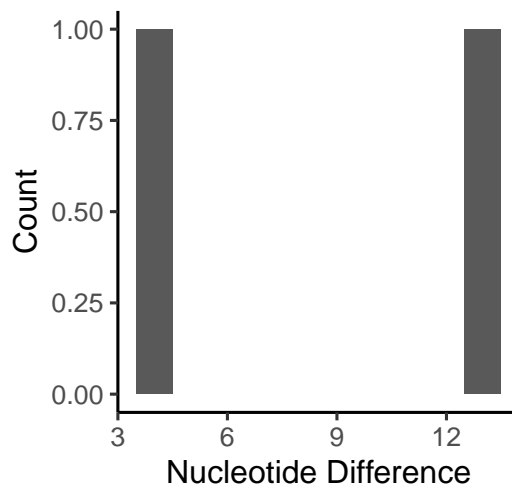
### IGHV3-21\*01

414 sequences assigned  
139 (33.6%) exact matches, in which:  
135 unique CDR3  
6 unique J



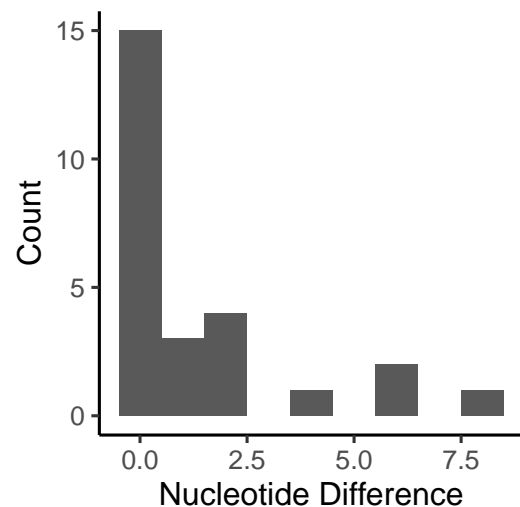
### IGHV3-30-5\*02

3 sequences assigned  
No exact matches.



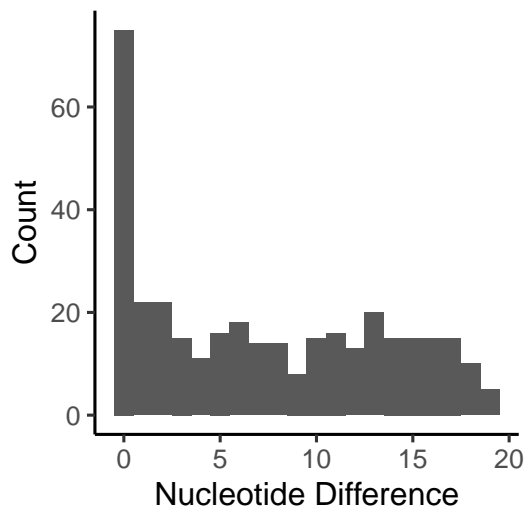
### IGHV3-43\*01

26 sequences assigned  
15 (57.7%) exact matches, in which:  
15 unique CDR3  
3 unique J



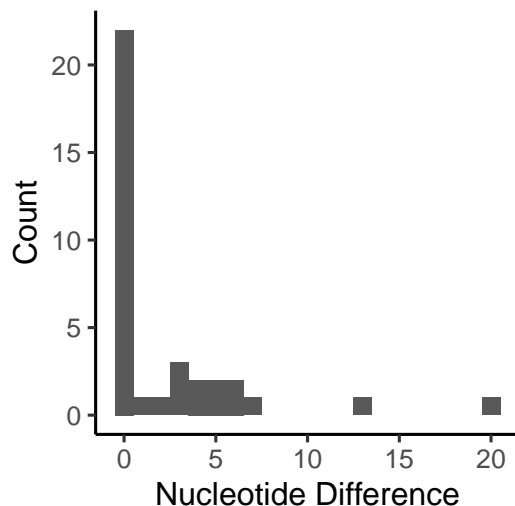
### IGHV3-48\*01

365 sequences assigned  
75 (20.5%) exact matches, in which:  
75 unique CDR3  
6 unique J



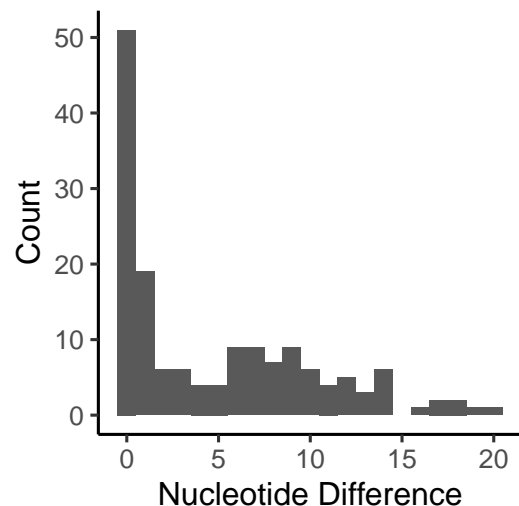
### IGHV3-53\*04

36 sequences assigned  
22 (61.1%) exact matches, in which:  
21 unique CDR3  
4 unique J



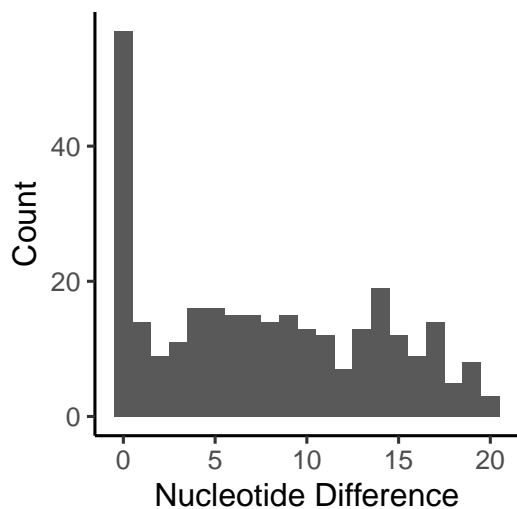
### IGHV3-66\*01

159 sequences assigned  
51 (32.1%) exact matches, in which:  
48 unique CDR3  
6 unique J



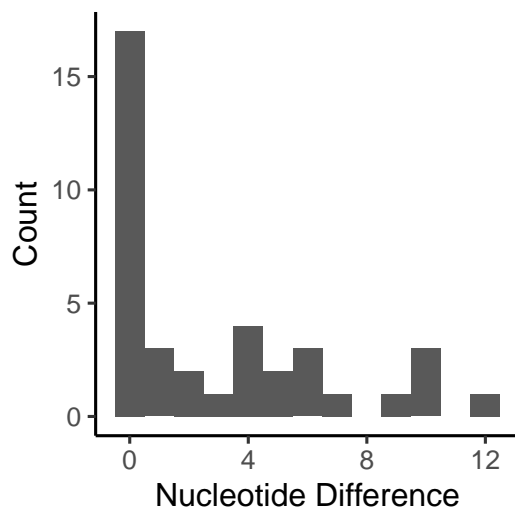
### IGHV3-48\*04

318 sequences assigned  
57 (17.9%) exact matches, in which:  
55 unique CDR3  
5 unique J



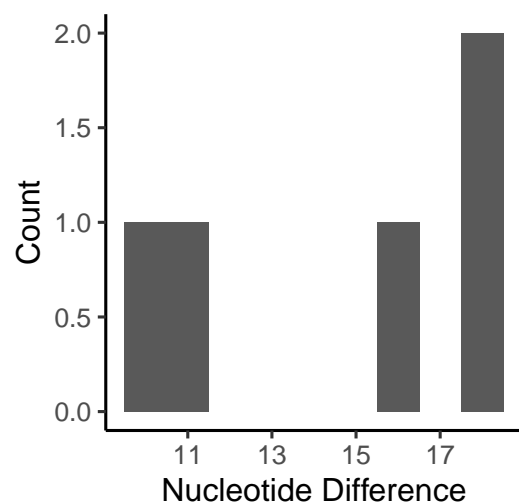
### IGHV3-64\*01

39 sequences assigned  
17 (43.6%) exact matches, in which:  
17 unique CDR3  
5 unique J



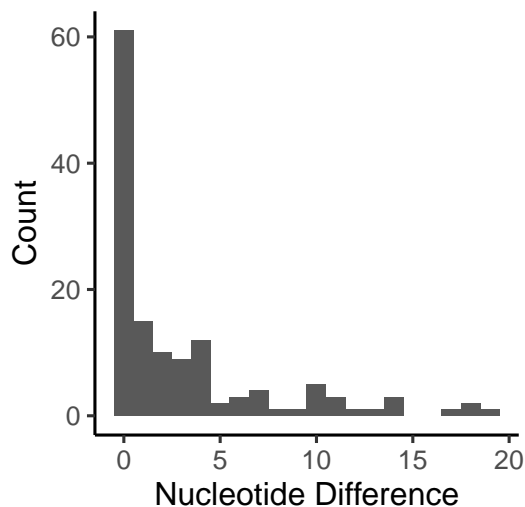
### IGHV3-69-1\*01

7 sequences assigned  
No exact matches.



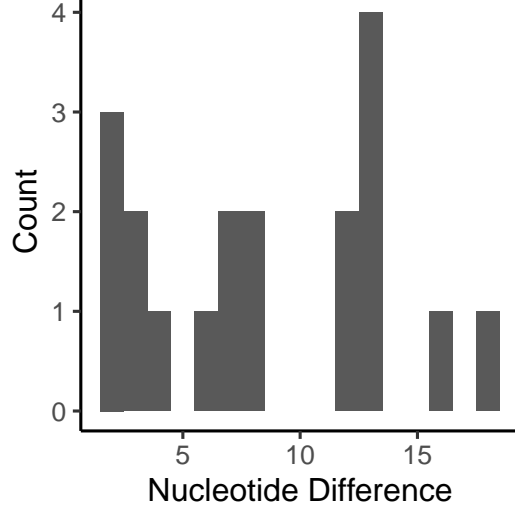
### IGHV3-49\*03

137 sequences assigned  
61 (44.5%) exact matches, in which:  
59 unique CDR3  
5 unique J



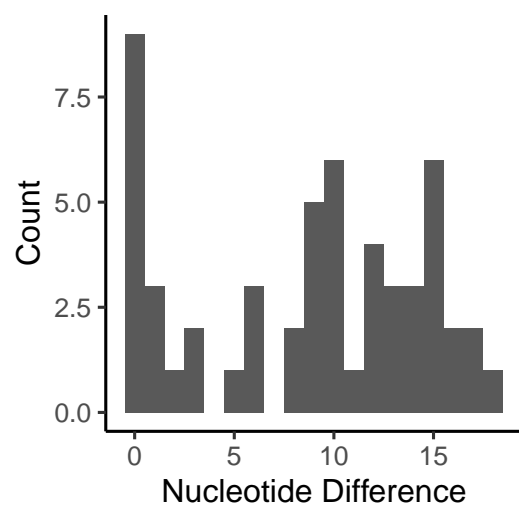
### IGHV3-64\*04

19 sequences assigned  
No exact matches.



### IGHV3-72\*01

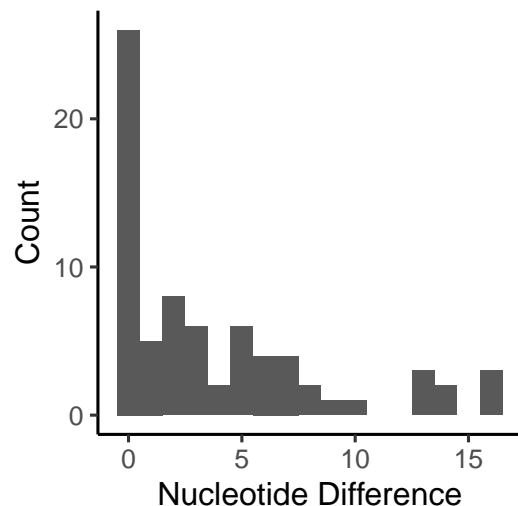
59 sequences assigned  
9 (15.3%) exact matches, in which:  
9 unique CDR3  
2 unique J





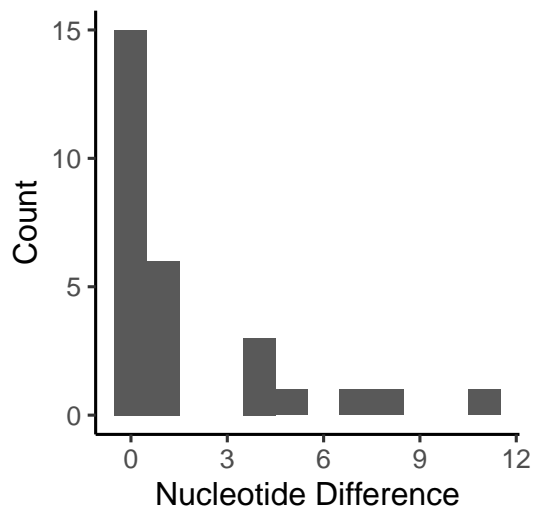
### IGHV3-73\*01

75 sequences assigned  
26 (34.7%) exact matches, in which:  
24 unique CDR3  
4 unique J



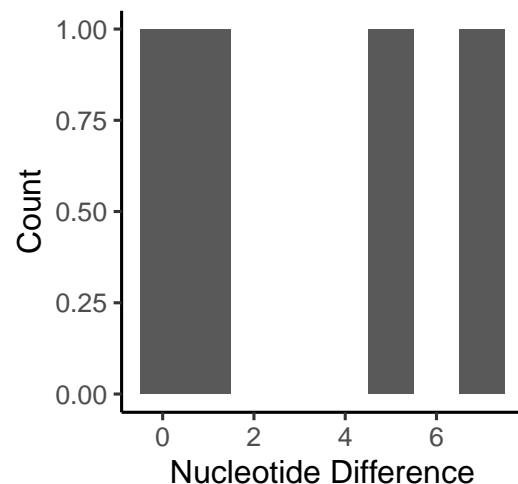
### IGHV3-64D\*06

31 sequences assigned  
15 (48.4%) exact matches, in which:  
15 unique CDR3  
4 unique J



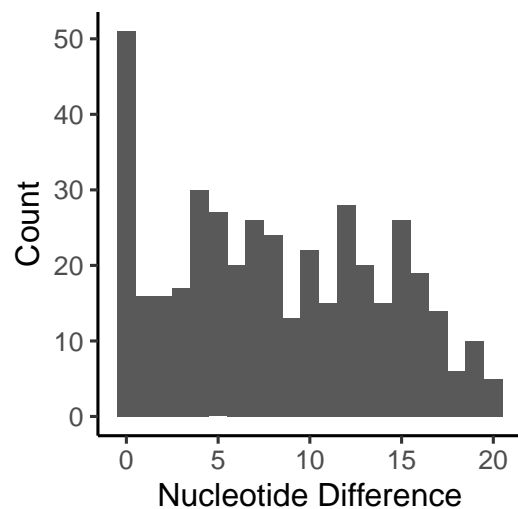
### IGHV4-28\*03

4 sequences assigned  
1 (25%) exact matches, in which:  
1 unique CDR3  
1 unique J



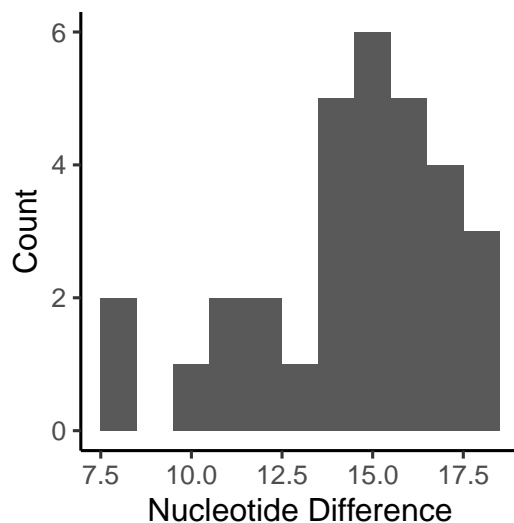
### IGHV3-74\*01

450 sequences assigned  
51 (11.3%) exact matches, in which:  
50 unique CDR3  
6 unique J



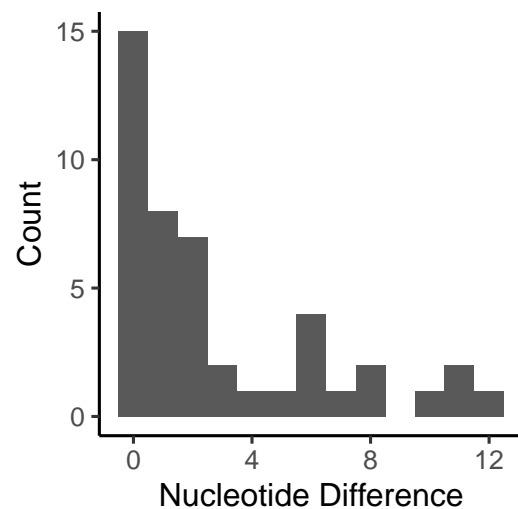
### IGHV3-NL1\*01

32 sequences assigned  
No exact matches.



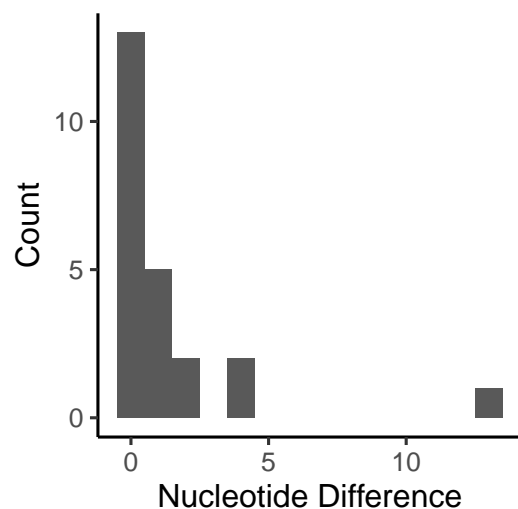
### IGHV4-30-2\*01

46 sequences assigned  
15 (32.6%) exact matches, in which:  
15 unique CDR3  
5 unique J



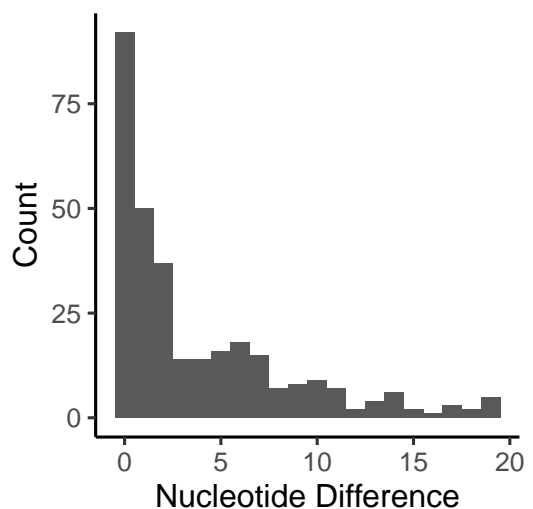
### IGHV3-43D\*03

23 sequences assigned  
13 (56.5%) exact matches, in which:  
13 unique CDR3  
3 unique J



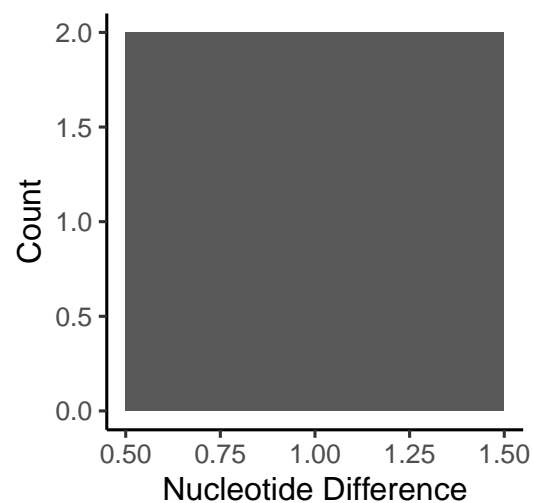
### IGHV4-4\*02

319 sequences assigned  
92 (28.8%) exact matches, in which:  
90 unique CDR3  
6 unique J



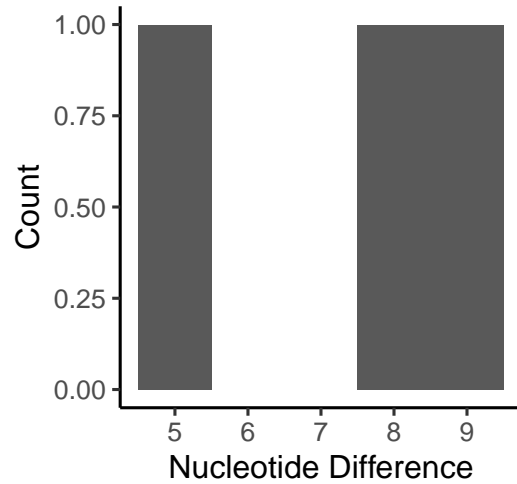
### IGHV4-30-4\*07

2 sequences assigned  
No exact matches.



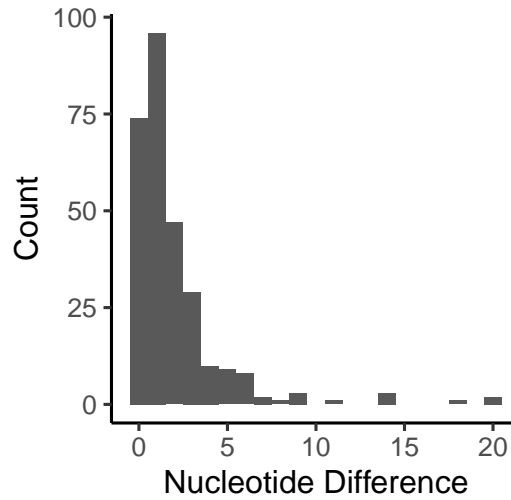
### IGHV4-30-4\*08

3 sequences assigned  
No exact matches.



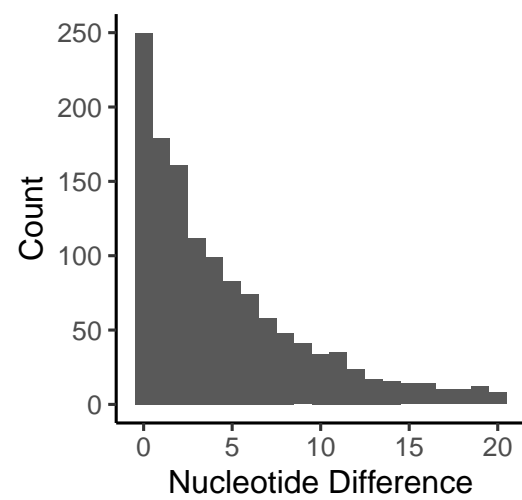
### IGHV4-34\*01\_A220G

290 sequences assigned  
74 (25.5%) exact matches, in which:  
74 unique CDR3  
5 unique J



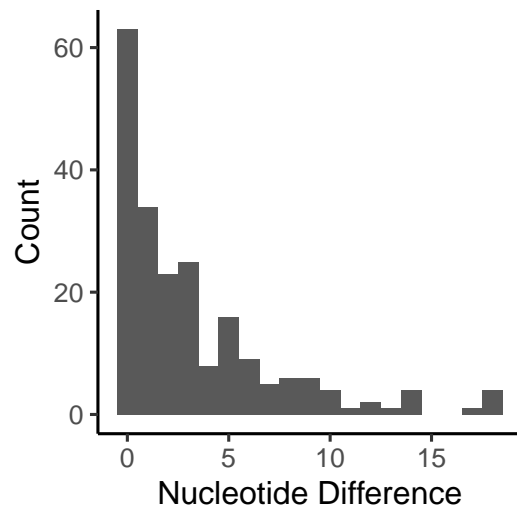
### IGHV4-39\*07

1352 sequences assigned  
250 (18.5%) exact matches, in which:  
250 unique CDR3  
6 unique J



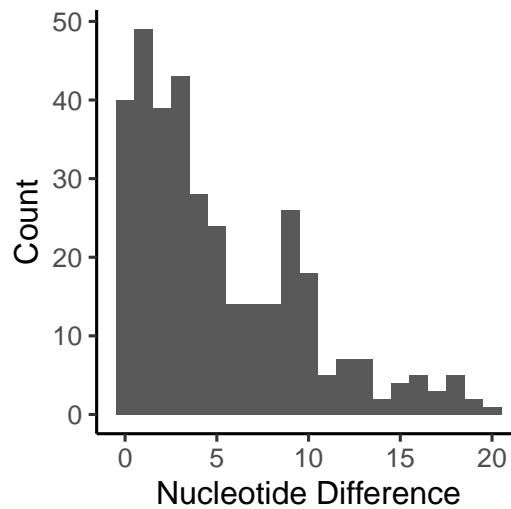
### IGHV4-31\*03

214 sequences assigned  
63 (29.4%) exact matches, in which:  
62 unique CDR3  
4 unique J



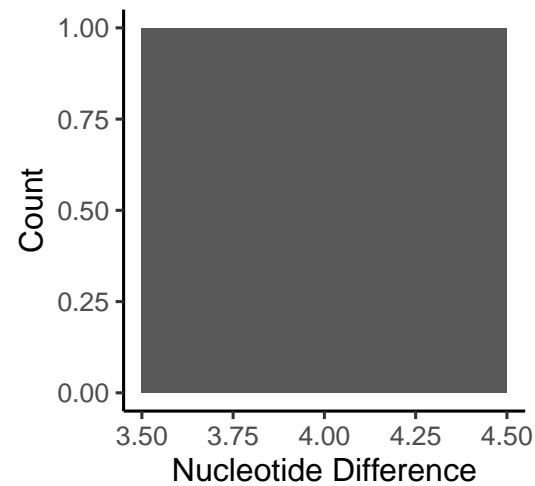
### IGHV4-38-2\*02

360 sequences assigned  
40 (11.1%) exact matches, in which:  
40 unique CDR3  
4 unique J



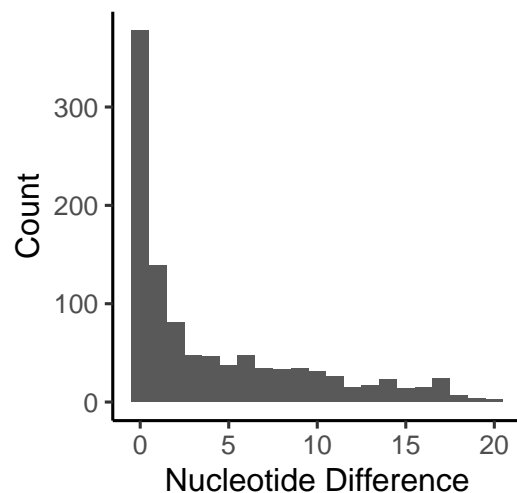
### IGHV4-55\*08

1 sequences assigned  
No exact matches.



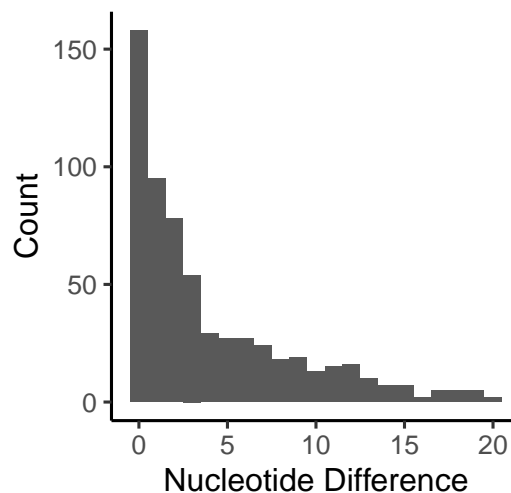
### IGHV4-34\*01

1099 sequences assigned  
378 (34.4%) exact matches, in which:  
376 unique CDR3  
6 unique J



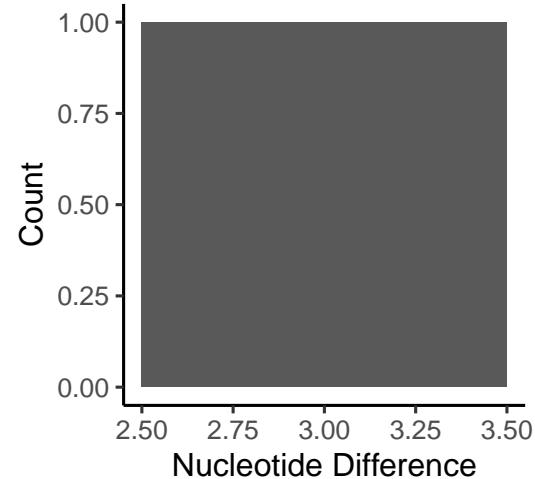
### IGHV4-39\*01

645 sequences assigned  
158 (24.5%) exact matches, in which:  
152 unique CDR3  
6 unique J



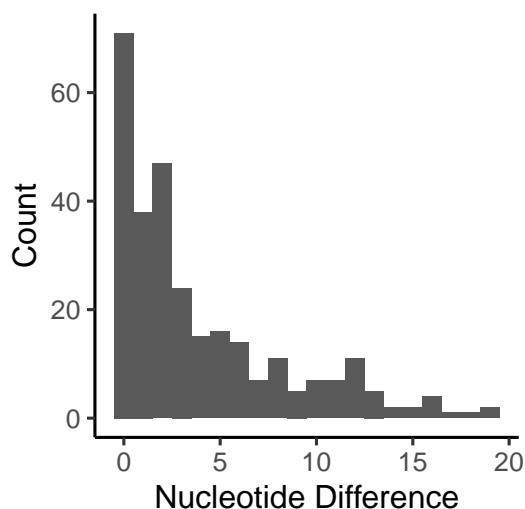
### IGHV4-55\*09

1 sequences assigned  
No exact matches.



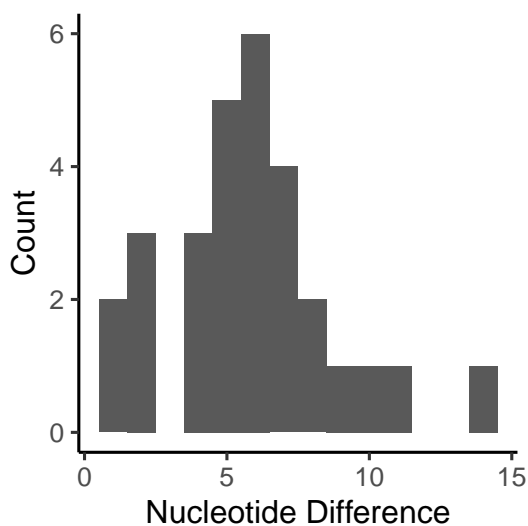
### IGHV4-59\*01

297 sequences assigned  
71 (23.9%) exact matches, in which:  
71 unique CDR3  
5 unique J



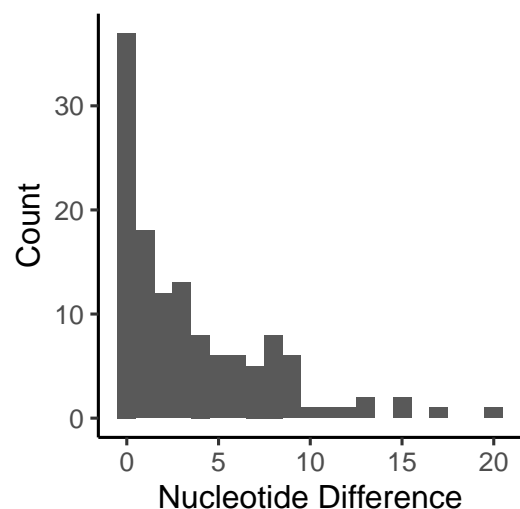
### IGHV4-61\*01

29 sequences assigned  
No exact matches.



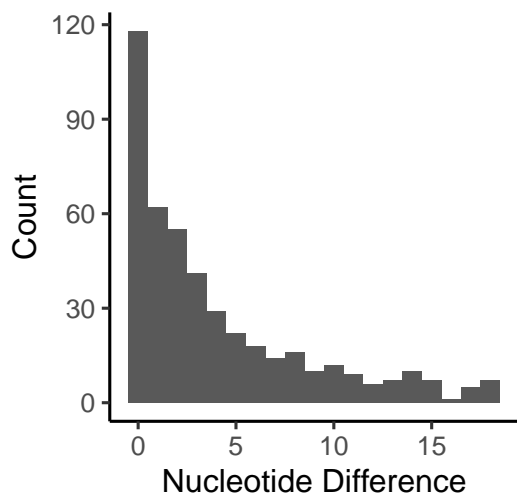
### IGHV5-51\*01

135 sequences assigned  
37 (27.4%) exact matches, in which:  
36 unique CDR3  
5 unique J



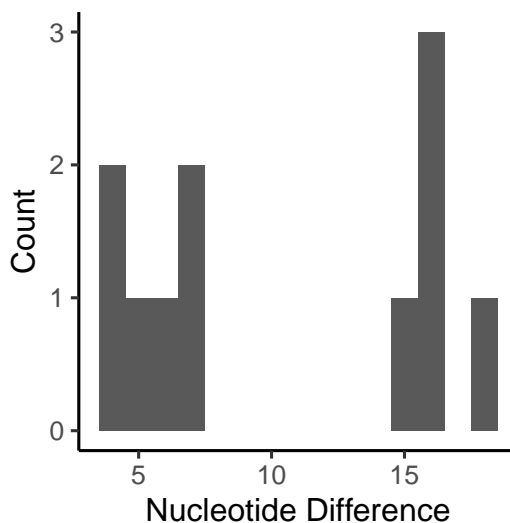
### IGHV4-59\*08

457 sequences assigned  
118 (25.8%) exact matches, in which:  
114 unique CDR3  
5 unique J



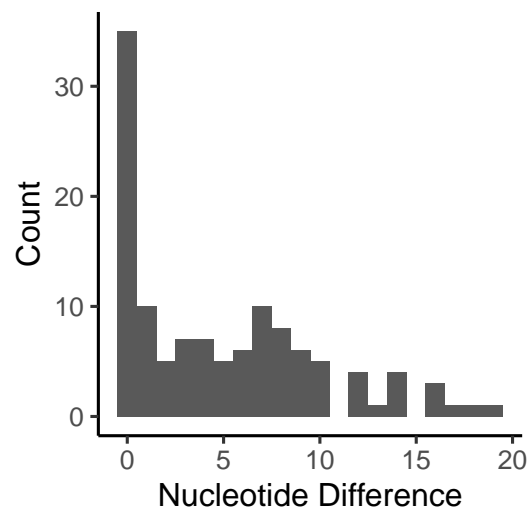
### IGHV4-61\*08

12 sequences assigned  
No exact matches.



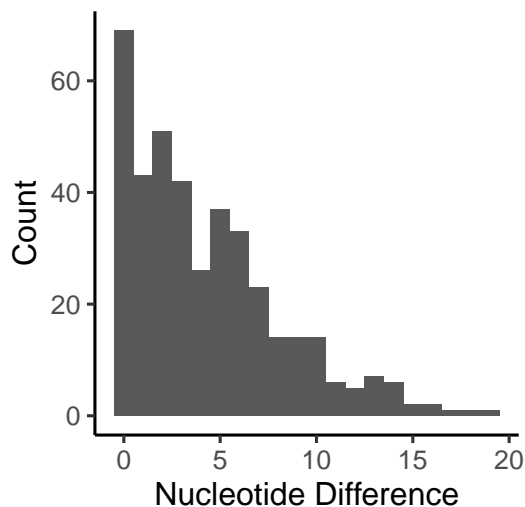
### IGHV5-51\*03

121 sequences assigned  
35 (28.9%) exact matches, in which:  
35 unique CDR3  
6 unique J



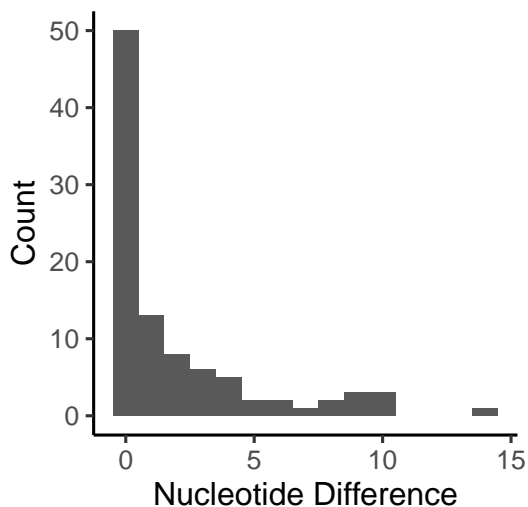
### IGHV4-59\*12

400 sequences assigned  
69 (17.2%) exact matches, in which:  
69 unique CDR3  
5 unique J



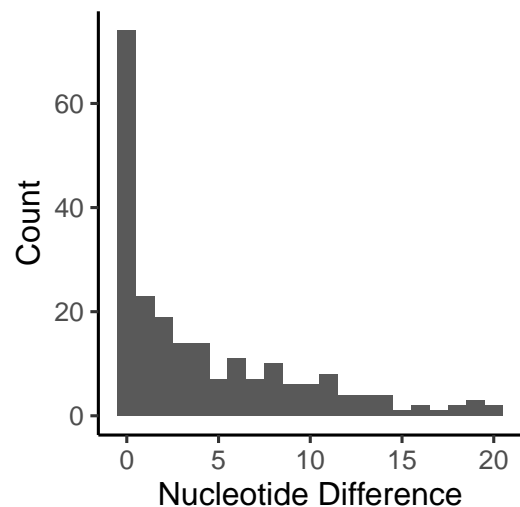
### IGHV5-10-1\*03

96 sequences assigned  
50 (52.1%) exact matches, in which:  
44 unique CDR3  
4 unique J



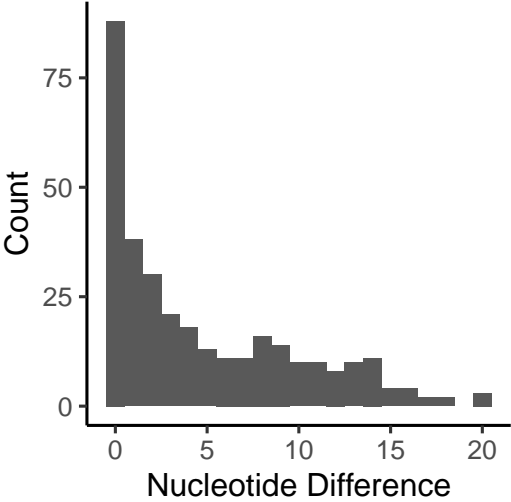
### IGHV6-1\*01

224 sequences assigned  
74 (33%) exact matches, in which:  
73 unique CDR3  
5 unique J



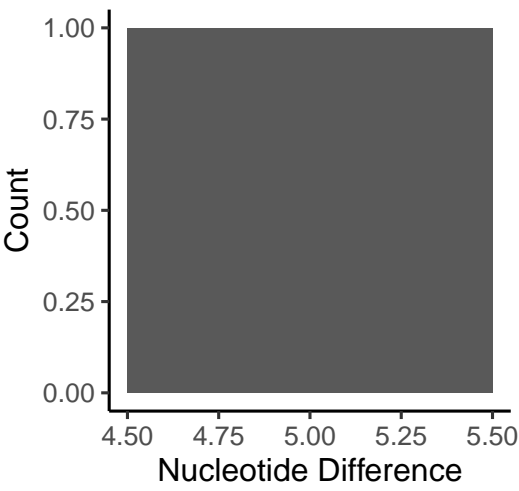
IGHV7-4-1\*02

337 sequences assigned  
88 (26.1%) exact matches, in which:  
84 unique CDR3  
5 unique J



IGHV7-40\*03

1 sequences assigned  
No exact matches.





Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–39\*07\_C288A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.