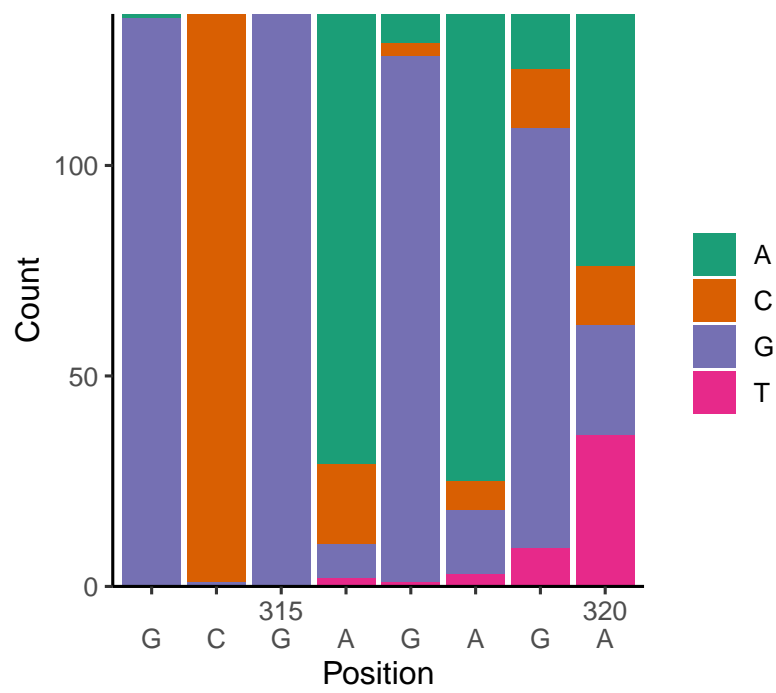
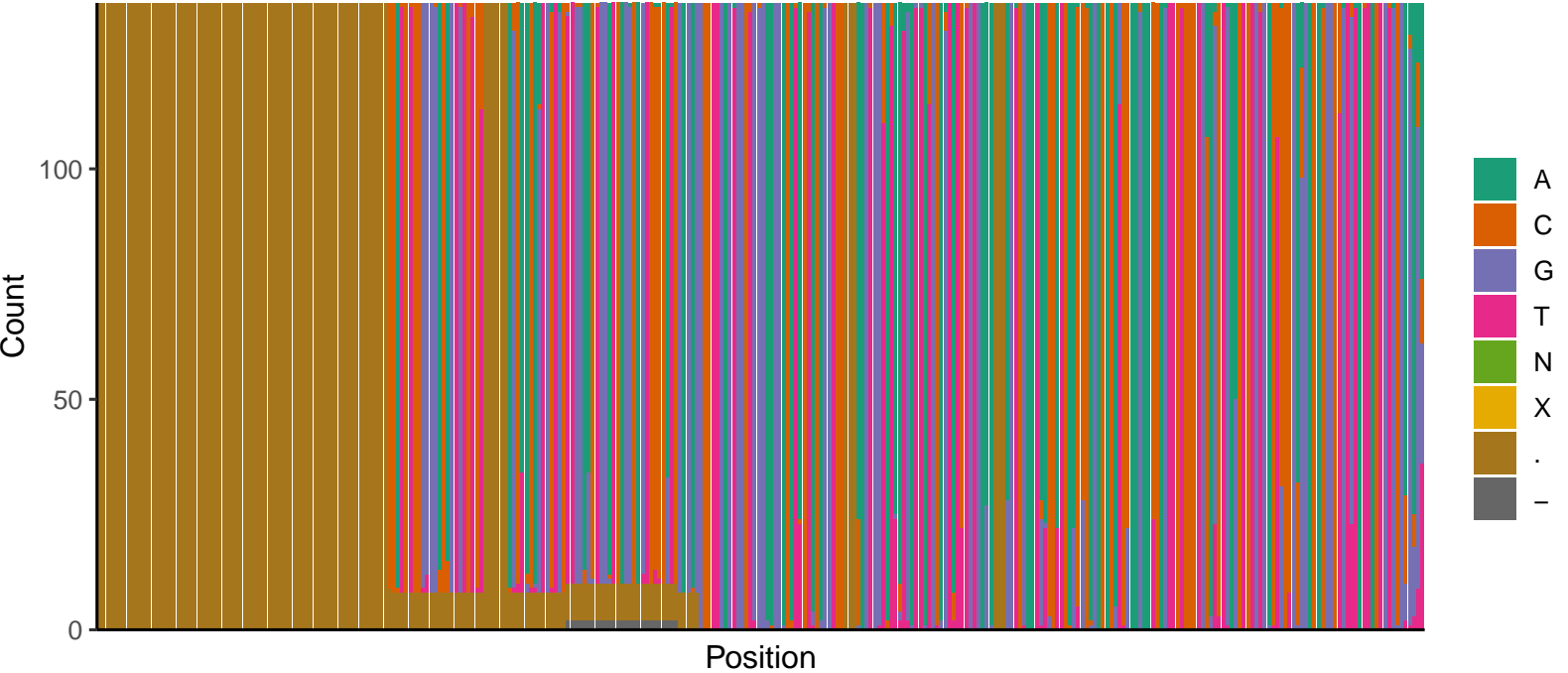


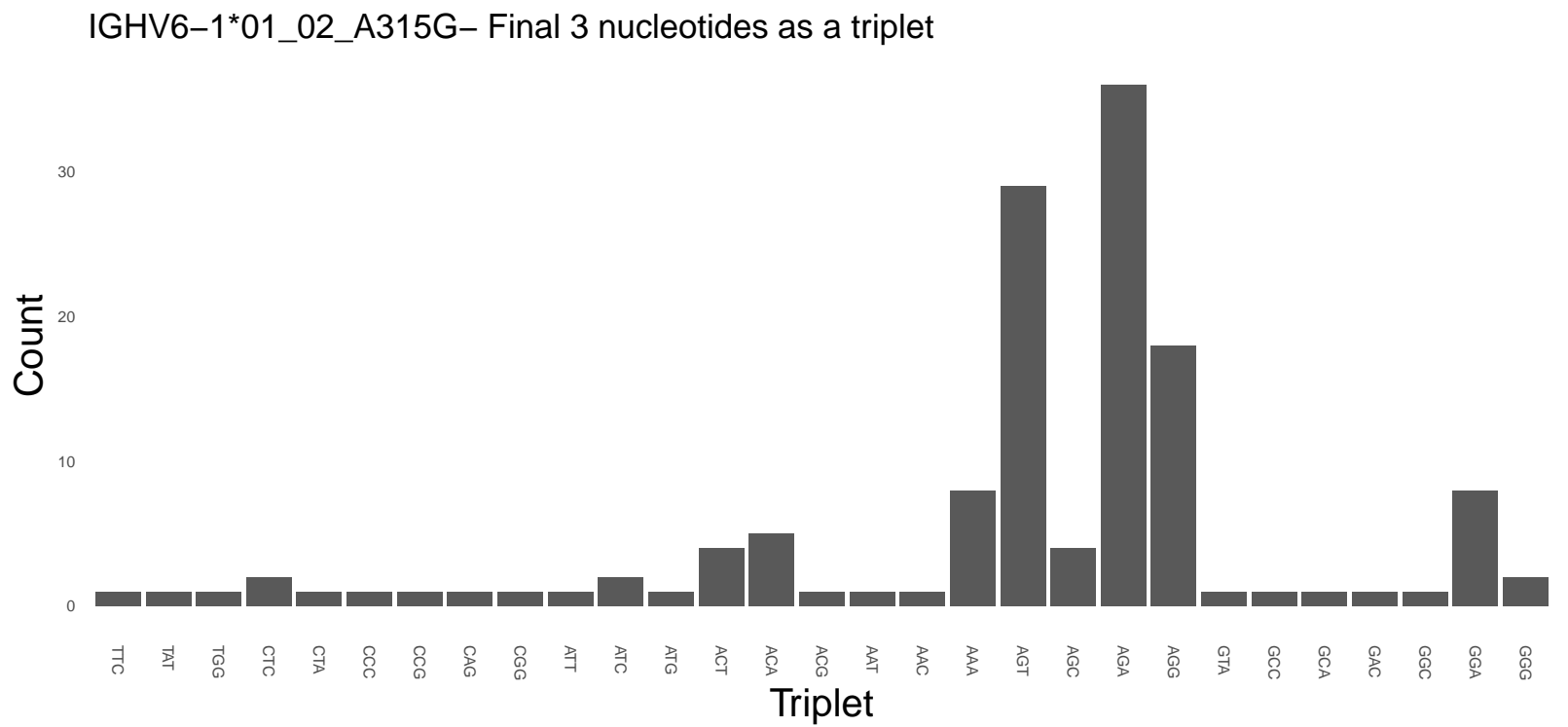
# Gene IGHV6-1\*01\_02\_A315G



Gene IGHV6-1\*01\_02\_A315G

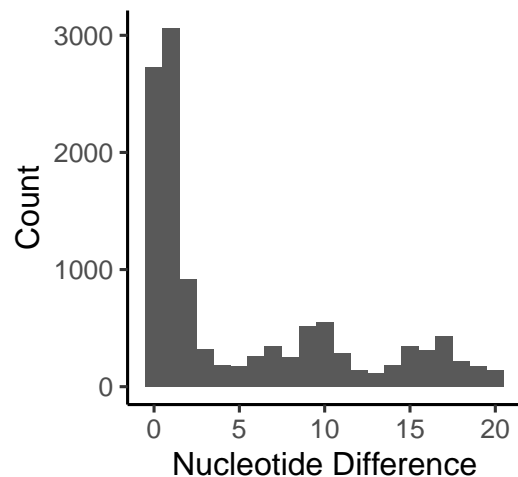


IGHV6-1\*01\_02\_A315G- Final 3 nucleotides as a triplet



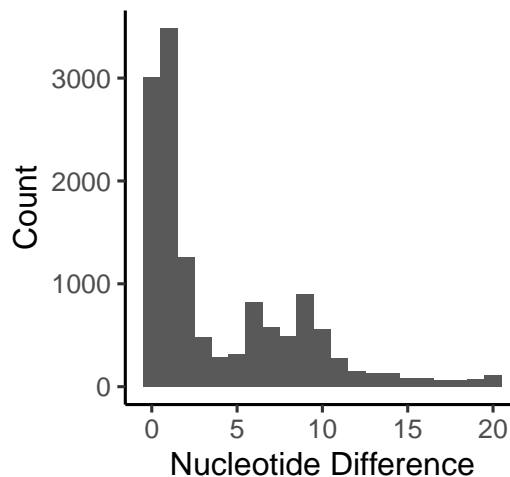
### IGHV1-2\*02

12320 sequences assigned  
2726 (22.1%) exact matches, in which:  
2241 unique CDR3  
6 unique J



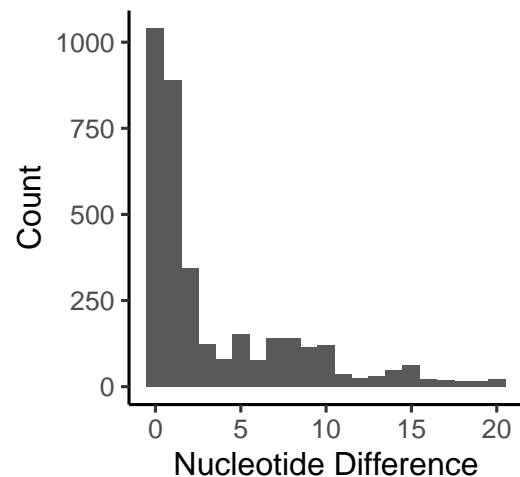
### IGHV1-18\*01

13861 sequences assigned  
3009 (21.7%) exact matches, in which:  
2458 unique CDR3  
6 unique J



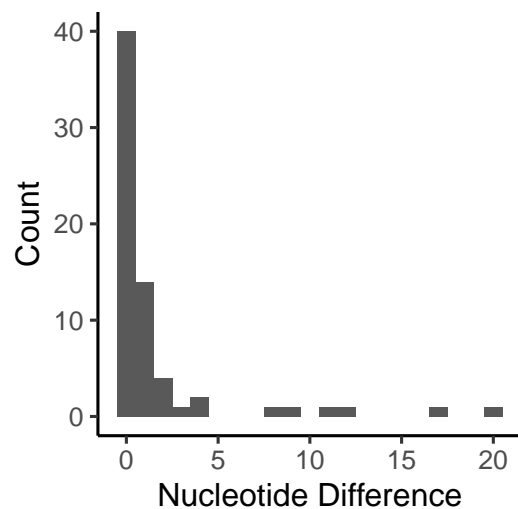
### IGHV1-46\*01

3633 sequences assigned  
1040 (28.6%) exact matches, in which:  
932 unique CDR3  
6 unique J



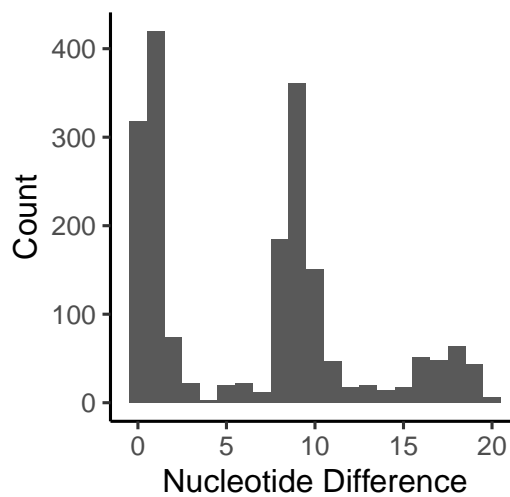
### IGHV1-3\*02

67 sequences assigned  
40 (59.7%) exact matches, in which:  
40 unique CDR3  
5 unique J



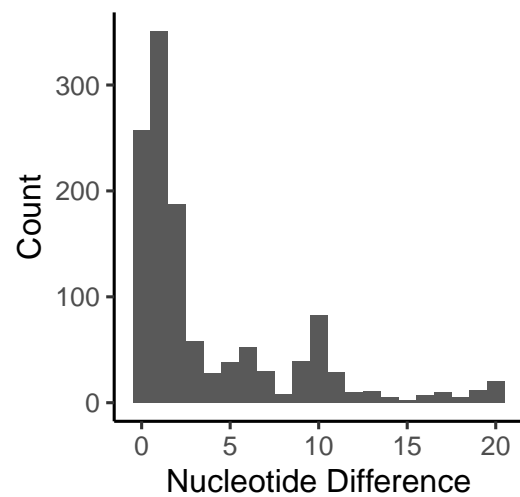
### IGHV1-24\*01

1938 sequences assigned  
318 (16.4%) exact matches, in which:  
239 unique CDR3  
6 unique J



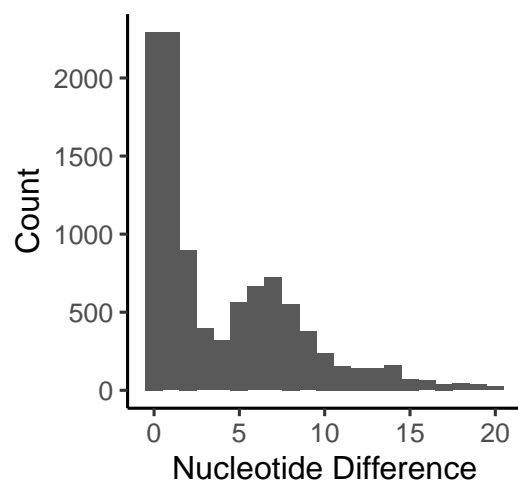
### IGHV1-46\*03

1799 sequences assigned  
257 (14.3%) exact matches, in which:  
194 unique CDR3  
6 unique J



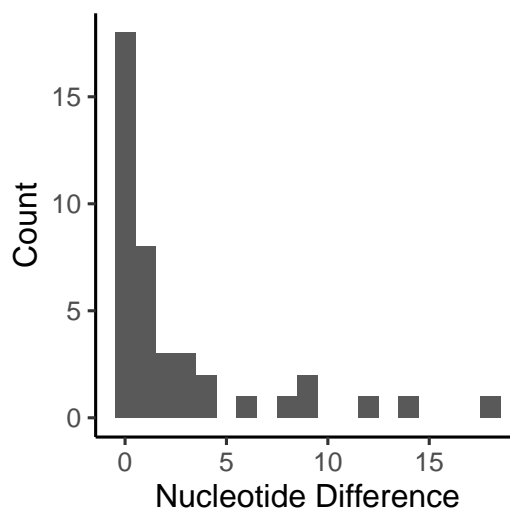
### IGHV1-8\*01

10984 sequences assigned  
2294 (20.9%) exact matches, in which:  
1956 unique CDR3  
6 unique J



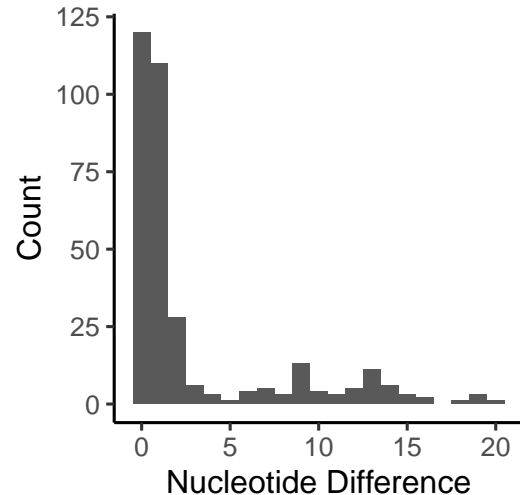
### IGHV1-45\*02

52 sequences assigned  
18 (34.6%) exact matches, in which:  
15 unique CDR3  
4 unique J



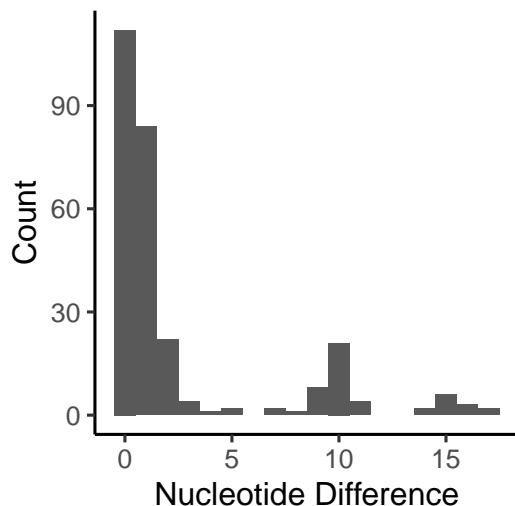
### IGHV1-58\*02

344 sequences assigned  
120 (34.9%) exact matches, in which:  
104 unique CDR3  
5 unique J



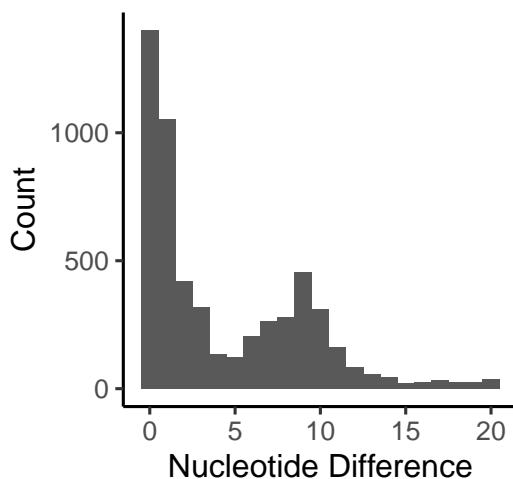
### IGHV1-58\*01\_03

288 sequences assigned  
112 (38.9%) exact matches, in which:  
106 unique CDR3  
5 unique J



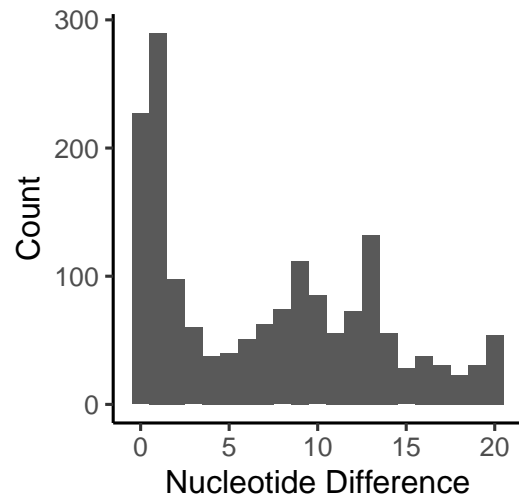
### IGHV1-69\*06\_14

5594 sequences assigned  
1400 (25%) exact matches, in which:  
1268 unique CDR3  
6 unique J



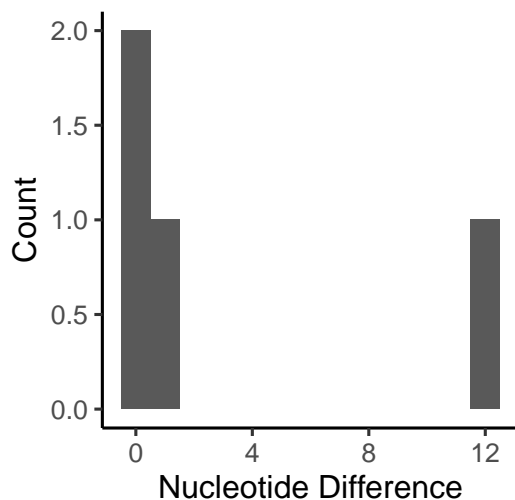
### IGHV2-5\*02

2831 sequences assigned  
227 (8%) exact matches, in which:  
174 unique CDR3  
5 unique J



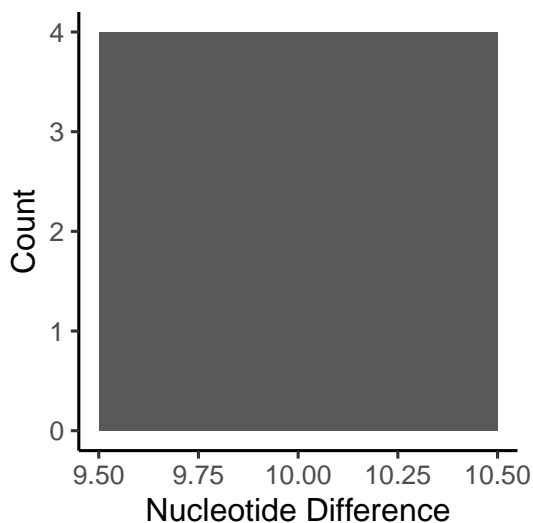
### IGHV1-69-2\*01

4 sequences assigned  
2 (50%) exact matches, in which:  
2 unique CDR3  
2 unique J



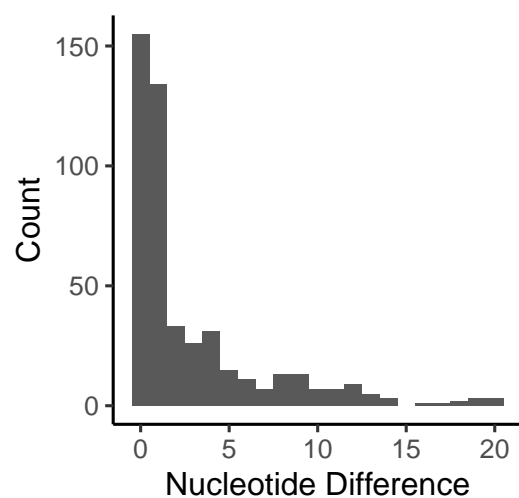
### IGHV1-NL1\*01

4 sequences assigned  
No exact matches.



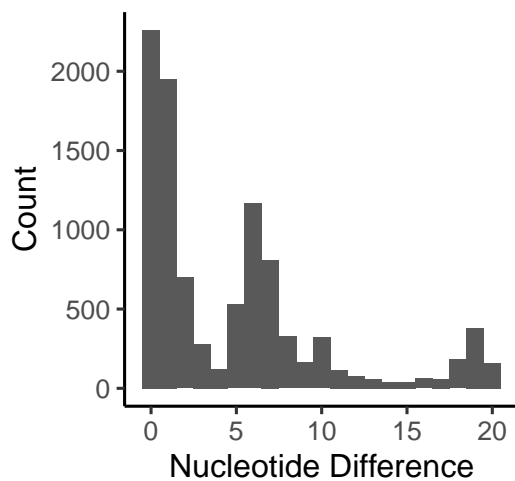
### IGHV2-26\*01

492 sequences assigned  
155 (31.5%) exact matches, in which:  
121 unique CDR3  
6 unique J



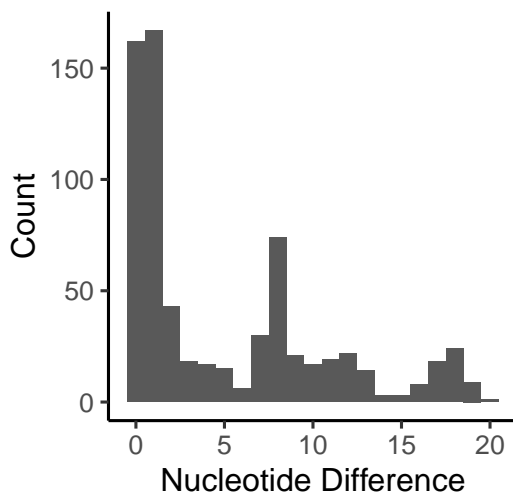
### IGHV1-69\*01\_12\_13

10046 sequences assigned  
2260 (22.5%) exact matches, in which:  
2021 unique CDR3  
6 unique J



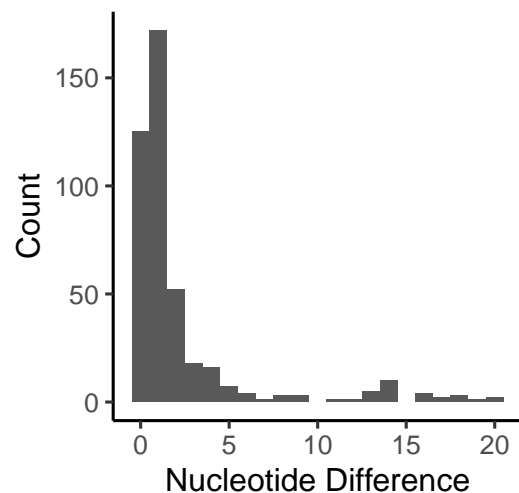
### IGHV2-5\*01

729 sequences assigned  
162 (22.2%) exact matches, in which:  
137 unique CDR3  
5 unique J



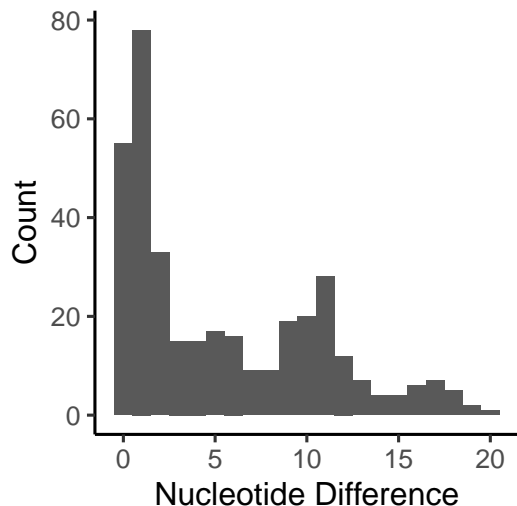
### IGHV2-70\*01

436 sequences assigned  
125 (28.7%) exact matches, in which:  
100 unique CDR3  
5 unique J



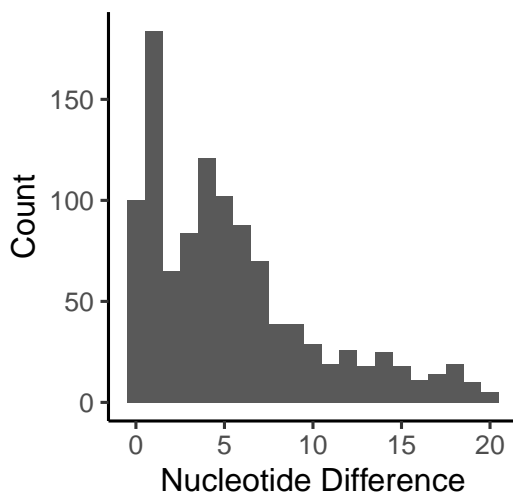
## IGHV2-70\*04

371 sequences assigned  
55 (14.8%) exact matches, in which:  
46 unique CDR3  
6 unique J



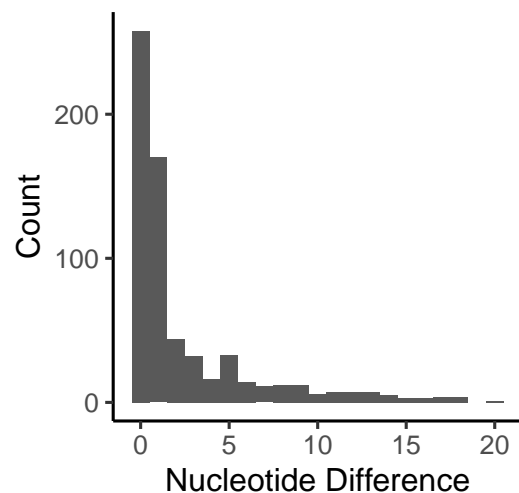
## IGHV3-7\*03

1159 sequences assigned  
100 (8.6%) exact matches, in which:  
97 unique CDR3  
6 unique J



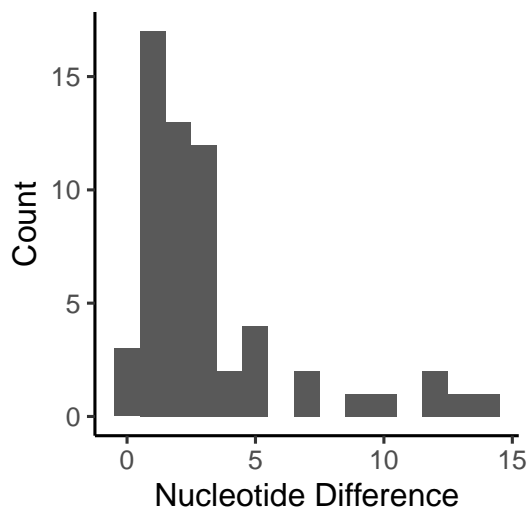
## IGHV3-11\*04

682 sequences assigned  
258 (37.8%) exact matches, in which:  
243 unique CDR3  
6 unique J



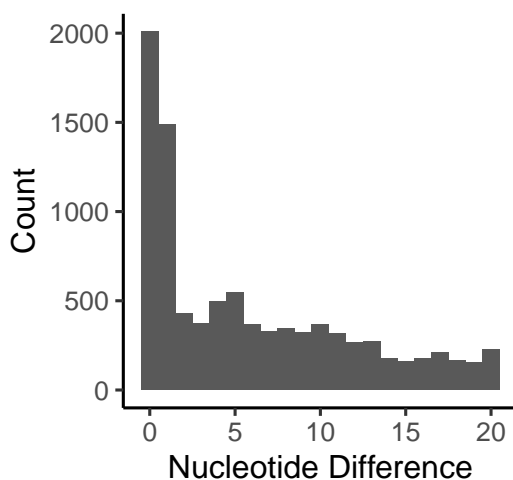
## IGHV2-70\*12

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



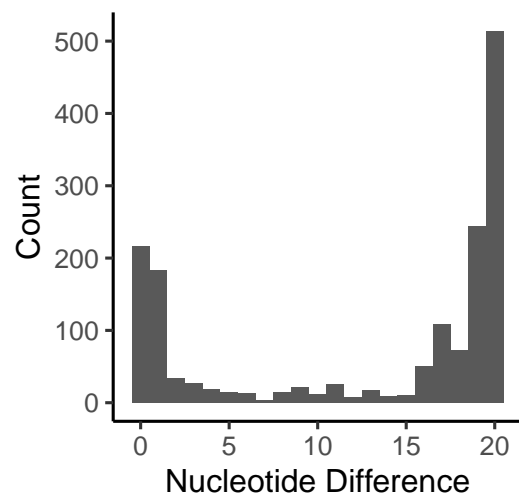
## IGHV3-9\*01

11153 sequences assigned  
2008 (18%) exact matches, in which:  
1170 unique CDR3  
6 unique J



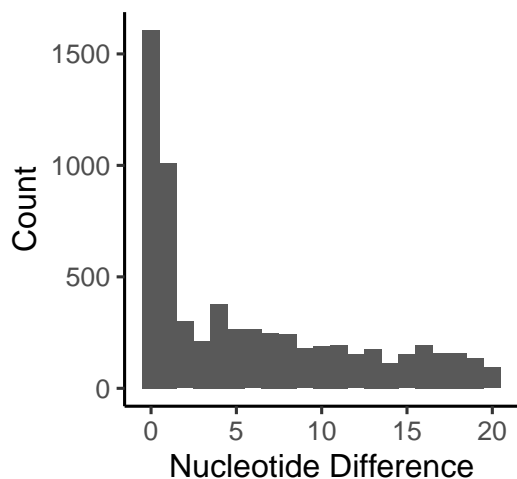
## IGHV3-13\*01

2065 sequences assigned  
216 (10.5%) exact matches, in which:  
122 unique CDR3  
5 unique J



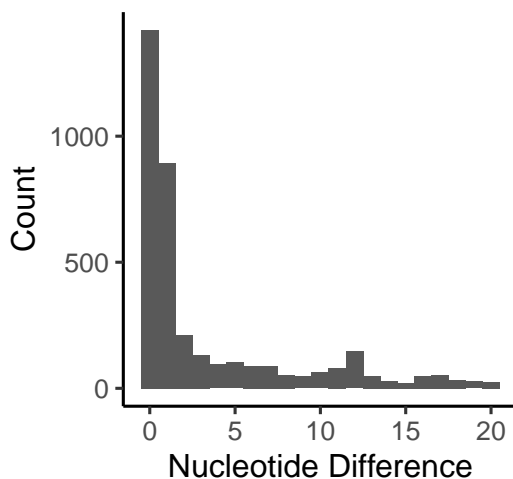
## IGHV3-7\*01

6875 sequences assigned  
1607 (23.4%) exact matches, in which:  
1122 unique CDR3  
6 unique J



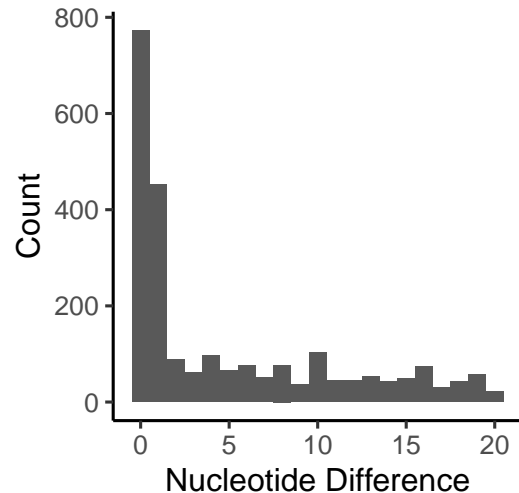
## IGHV3-11\*01

4600 sequences assigned  
1421 (30.9%) exact matches, in which:  
953 unique CDR3  
6 unique J



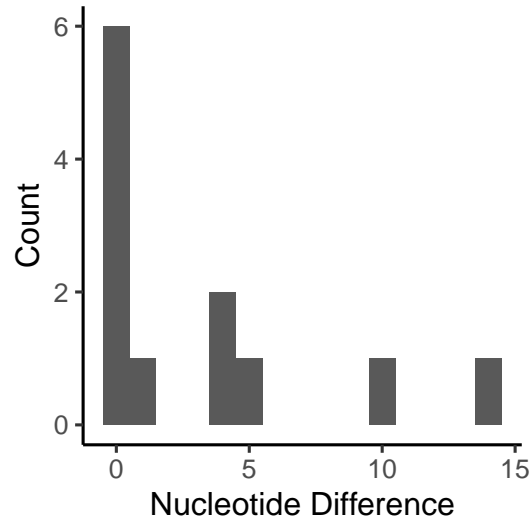
## IGHV3-15\*01\_02

3696 sequences assigned  
773 (20.9%) exact matches, in which:  
457 unique CDR3  
6 unique J



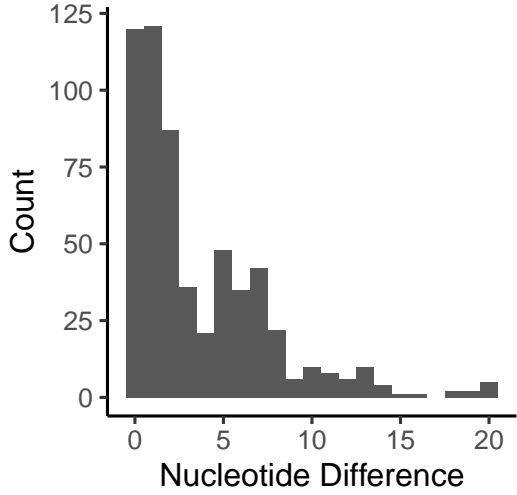
### IGHV3-19\*01

12 sequences assigned  
6 (50%) exact matches, in which:  
6 unique CDR3  
3 unique J



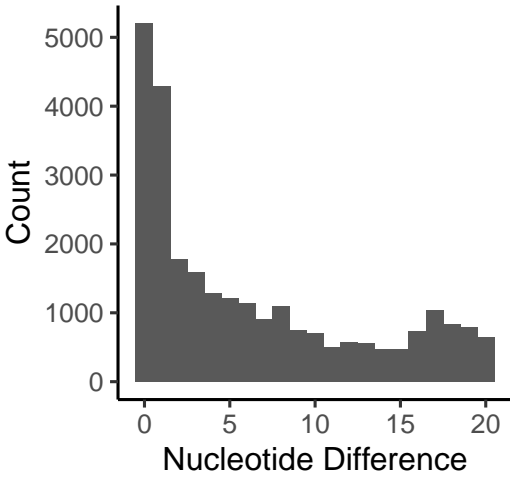
### IGHV3-21\*04

632 sequences assigned  
120 (19%) exact matches, in which:  
110 unique CDR3  
5 unique J



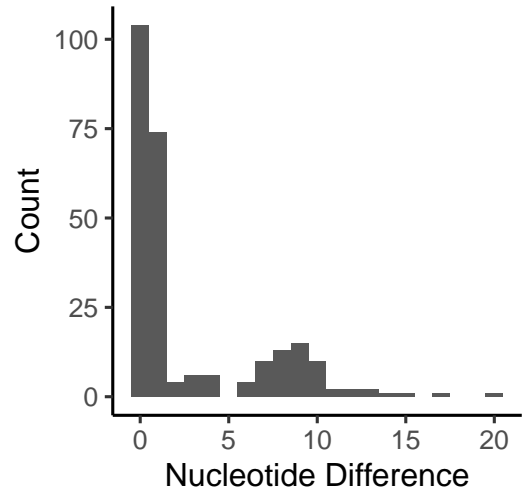
### IGHV3-23\*01\_04

34329 sequences assigned  
5202 (15.2%) exact matches, in which:  
2961 unique CDR3  
6 unique J



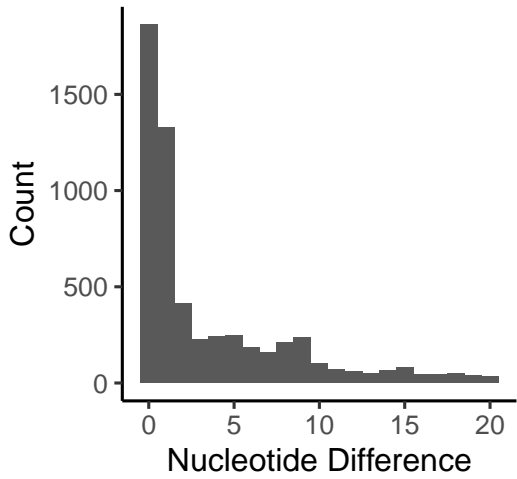
### IGHV3-20\*01\_02

256 sequences assigned  
104 (40.6%) exact matches, in which:  
64 unique CDR3  
5 unique J



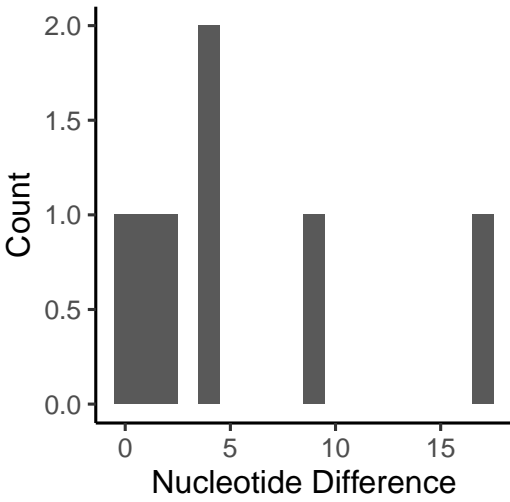
### IGHV3-21\*01\_02

6320 sequences assigned  
1862 (29.5%) exact matches, in which:  
1154 unique CDR3  
6 unique J



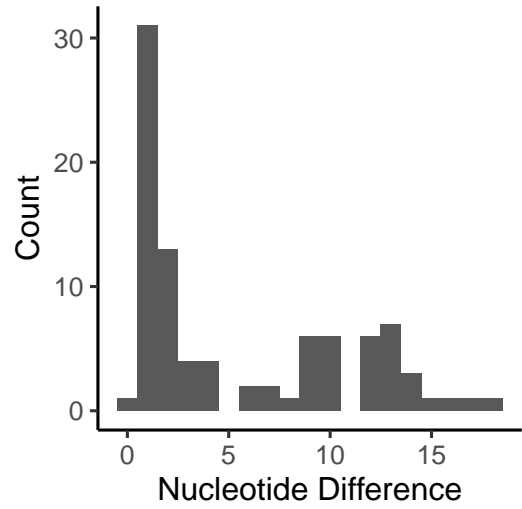
### IGHV3-30-3\*01

35 sequences assigned  
1 (2.9%) exact matches, in which:  
1 unique CDR3  
1 unique J



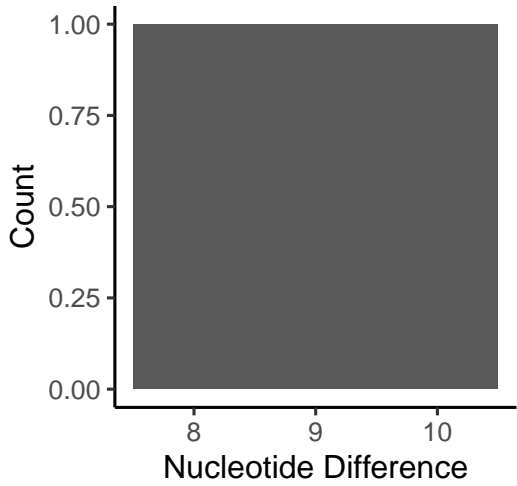
### IGHV3-20\*03\_04

233 sequences assigned  
1 (0.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



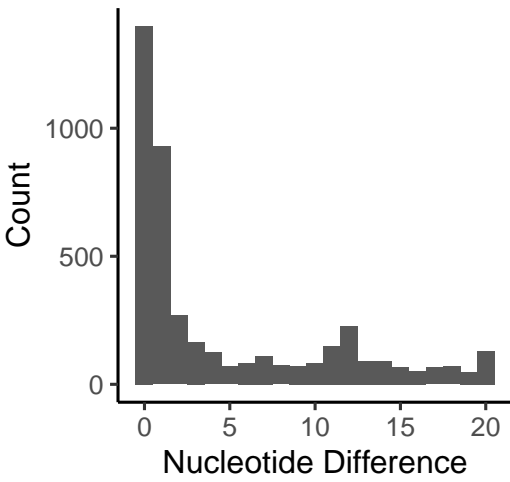
### IGHV3-22\*01\_02

3 sequences assigned  
No exact matches.



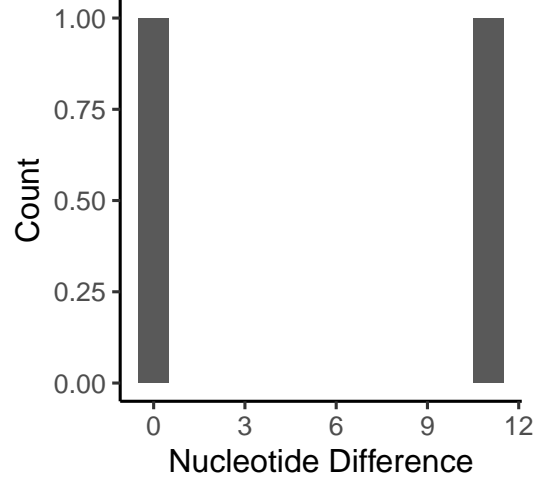
### IGHV3-30\*02

4980 sequences assigned  
1399 (28.1%) exact matches, in which:  
977 unique CDR3  
6 unique J



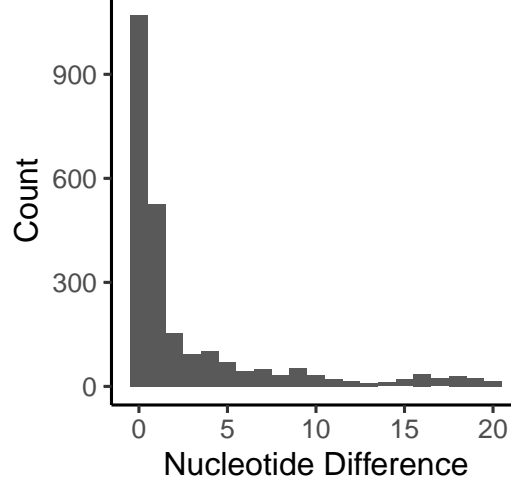
### IGHV3-30-3\*02

3 sequences assigned  
1 (33.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



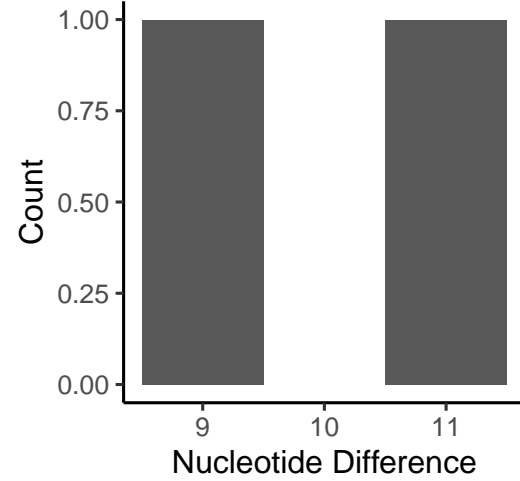
### IGHV3-33\*01

2542 sequences assigned  
1072 (42.2%) exact matches, in which:  
720 unique CDR3  
6 unique J



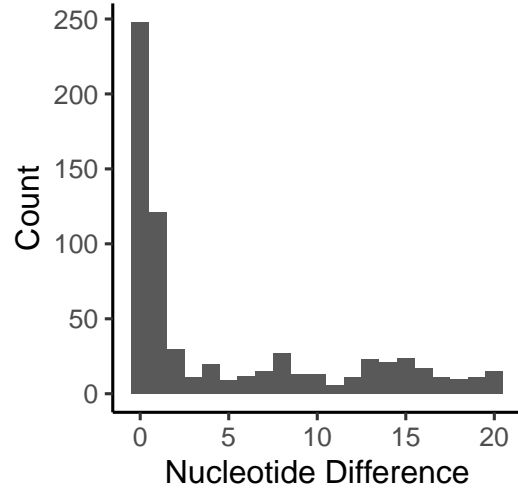
### IGHV3-35\*01

2 sequences assigned  
No exact matches.



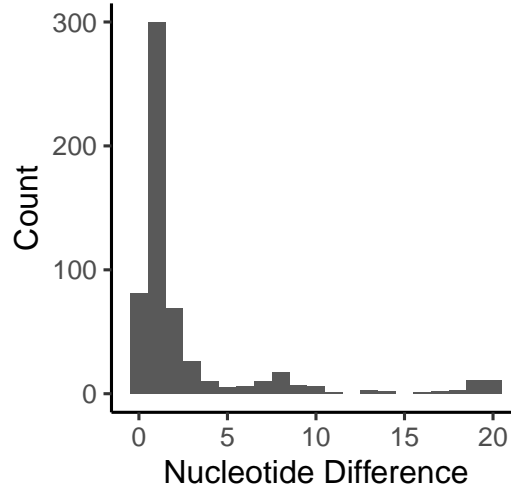
### IGHV3-30\*03

686 sequences assigned  
248 (36.2%) exact matches, in which:  
232 unique CDR3  
5 unique J



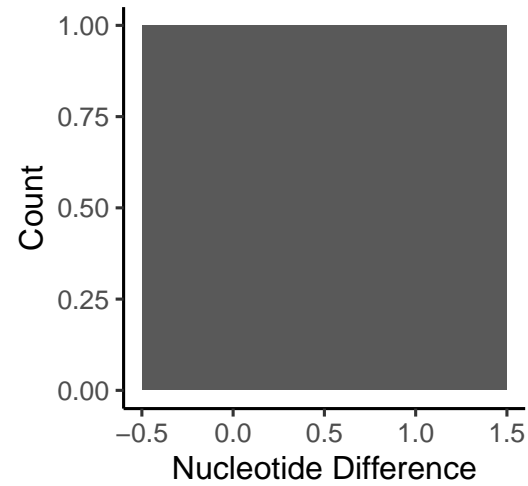
### IGHV3-33\*06

577 sequences assigned  
81 (14%) exact matches, in which:  
78 unique CDR3  
6 unique J



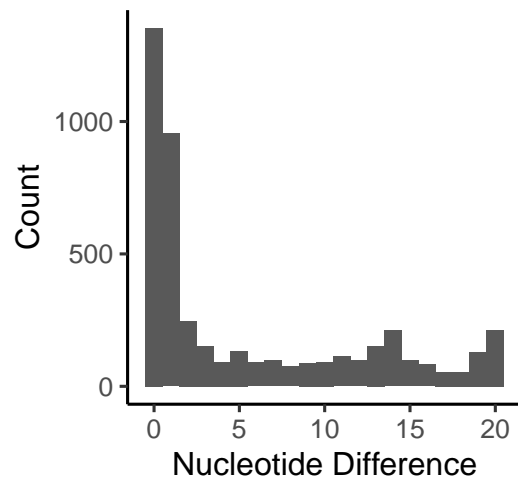
### IGHV3-35\*02

2 sequences assigned  
1 (50%) exact matches, in which:  
1 unique CDR3  
1 unique J



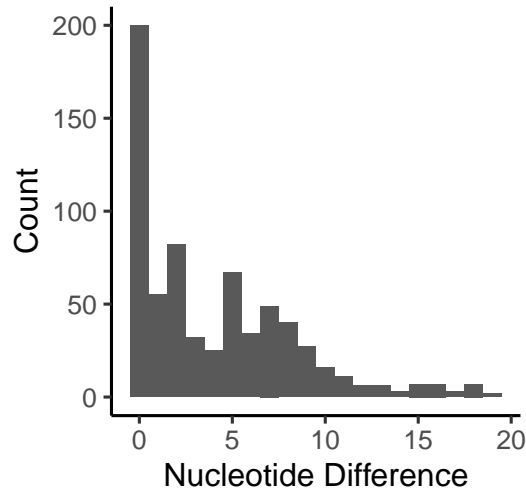
### IGHV3-30\*18

5226 sequences assigned  
1353 (25.9%) exact matches, in which:  
842 unique CDR3  
6 unique J



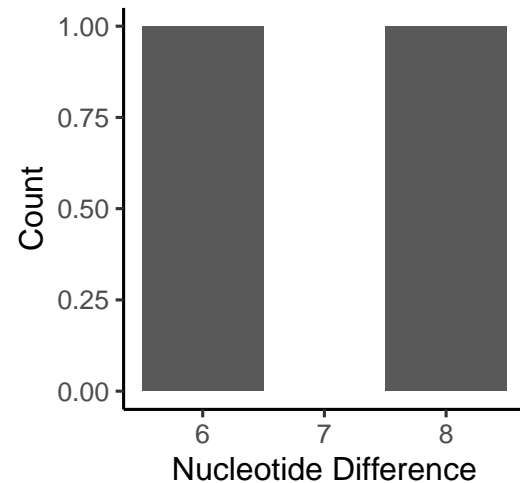
### IGHV3-33\*08

713 sequences assigned  
200 (28.1%) exact matches, in which:  
174 unique CDR3  
6 unique J



### IGHV3-38-3\*01

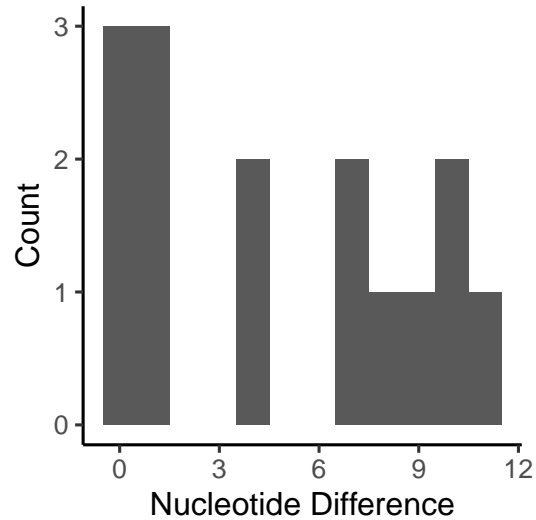
2 sequences assigned  
No exact matches.





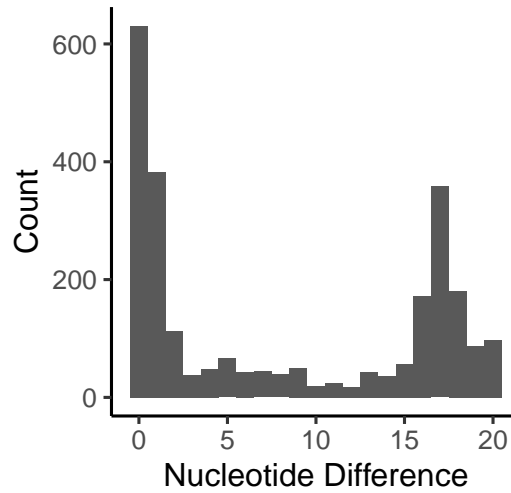
### IGHV3-38\*02

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



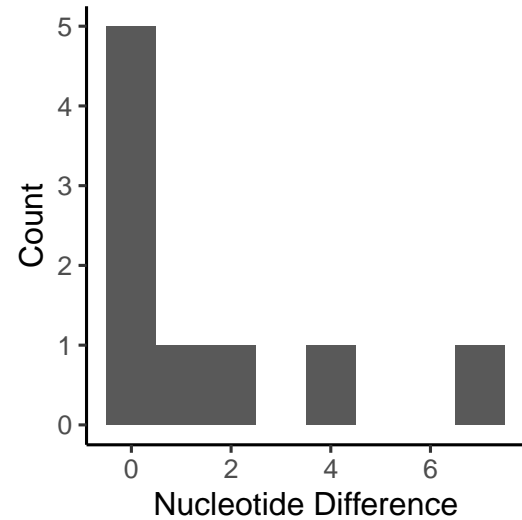
### IGHV3-48\*02

3193 sequences assigned  
631 (19.8%) exact matches, in which:  
418 unique CDR3  
6 unique J



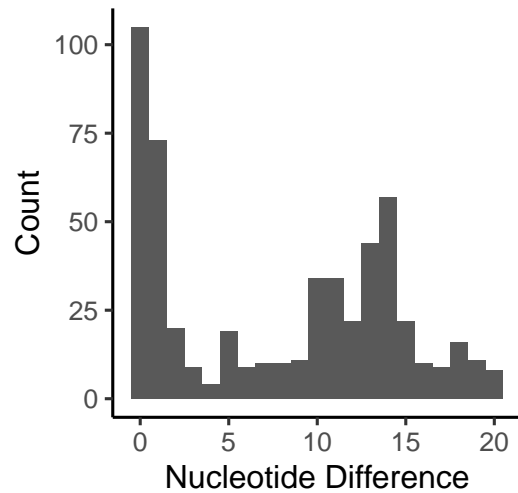
### IGHV3-52\*02

9 sequences assigned  
5 (55.6%) exact matches, in which:  
4 unique CDR3  
2 unique J



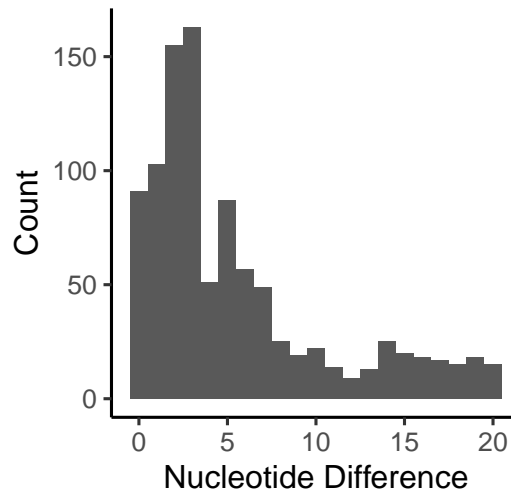
### IGHV3-43\*01

618 sequences assigned  
105 (17%) exact matches, in which:  
62 unique CDR3  
4 unique J



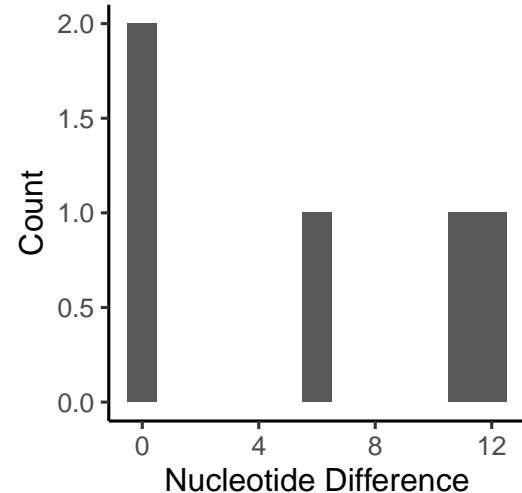
### IGHV3-48\*04

1236 sequences assigned  
91 (7.4%) exact matches, in which:  
85 unique CDR3  
5 unique J



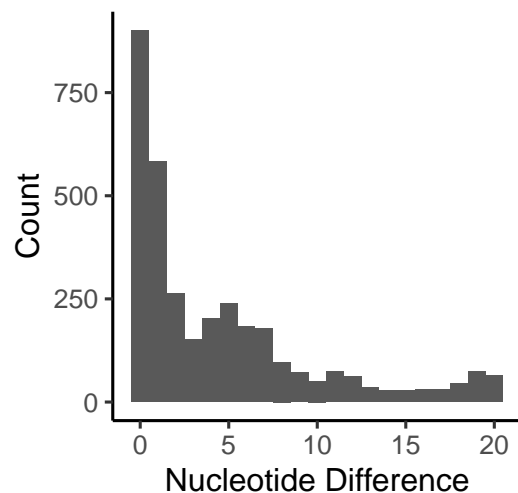
### IGHV3-52\*01\_03

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



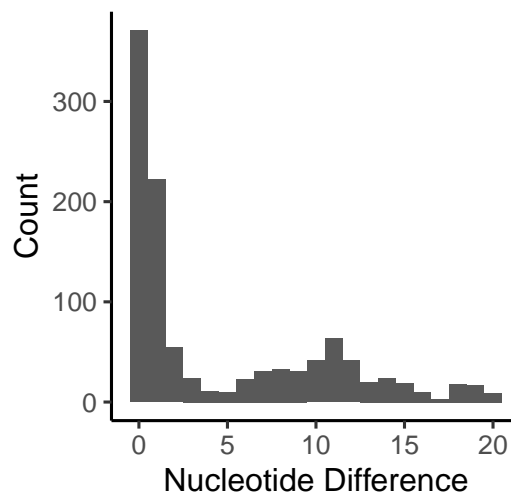
### IGHV3-48\*01

3588 sequences assigned  
901 (25.1%) exact matches, in which:  
621 unique CDR3  
6 unique J



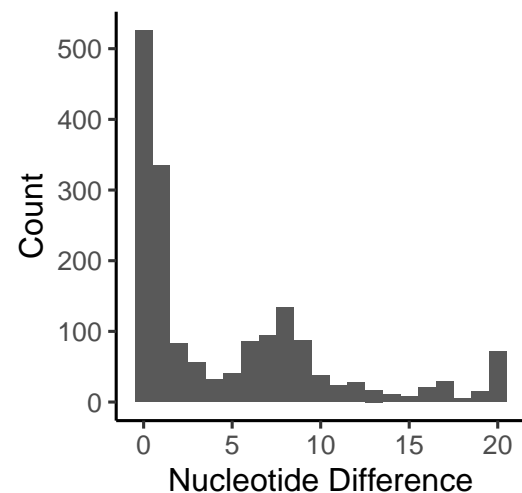
### IGHV3-49\*03\_05

2442 sequences assigned  
371 (15.2%) exact matches, in which:  
229 unique CDR3  
6 unique J



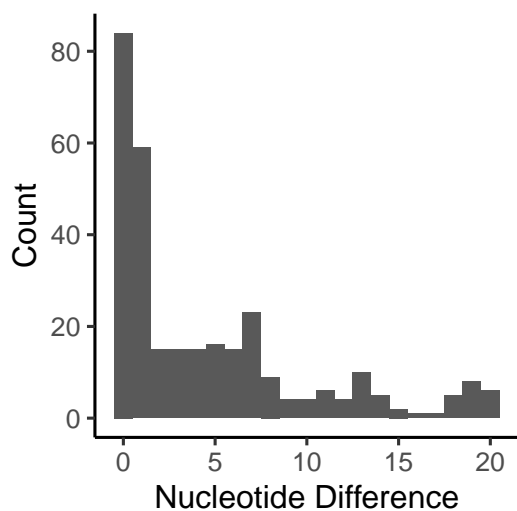
### IGHV3-53\*01\_02

2401 sequences assigned  
526 (21.9%) exact matches, in which:  
336 unique CDR3  
6 unique J



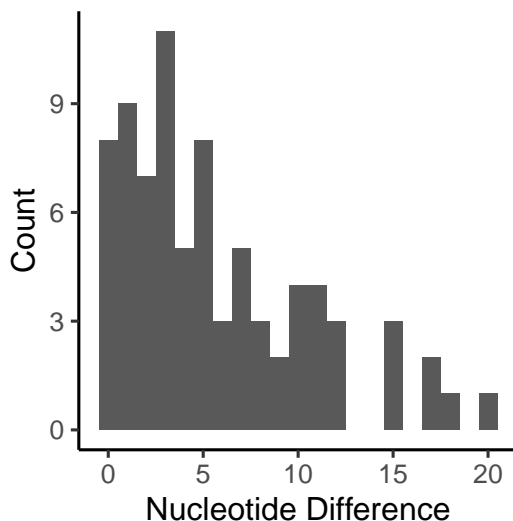
### IGHV3-64\*01

316 sequences assigned  
84 (26.6%) exact matches, in which:  
59 unique CDR3  
6 unique J



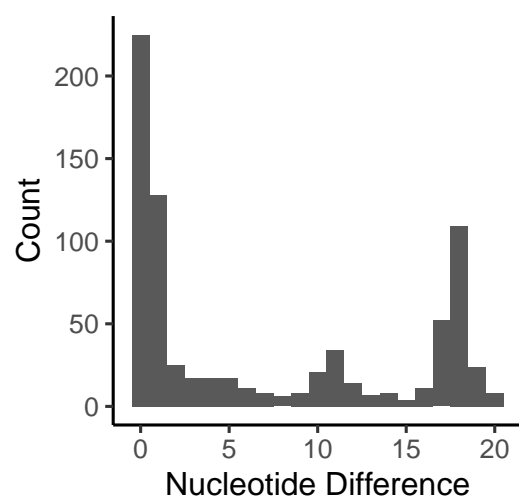
### IGHV3-69-1\*01

89 sequences assigned  
8 (9%) exact matches, in which:  
8 unique CDR3  
5 unique J



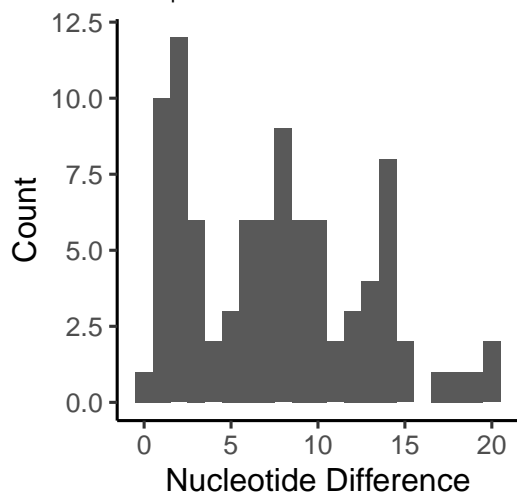
### IGHV3-73\*01\_02

781 sequences assigned  
225 (28.8%) exact matches, in which:  
139 unique CDR3  
6 unique J



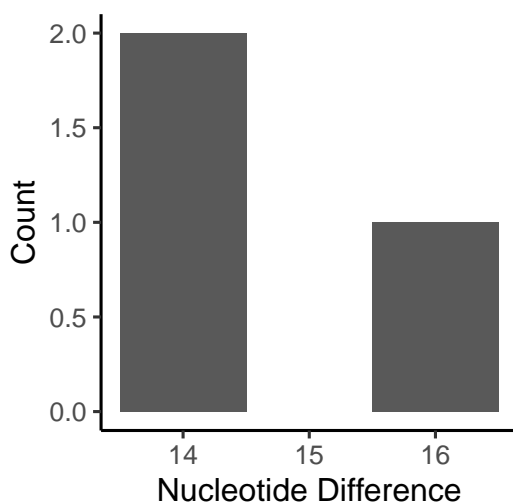
### IGHV3-66\*01

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



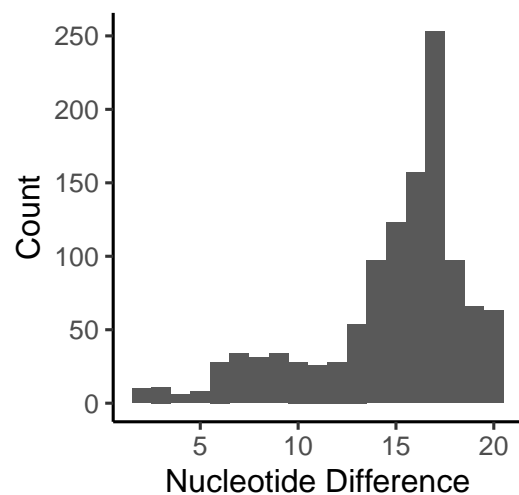
### IGHV3-71\*01\_04

4 sequences assigned  
No exact matches.



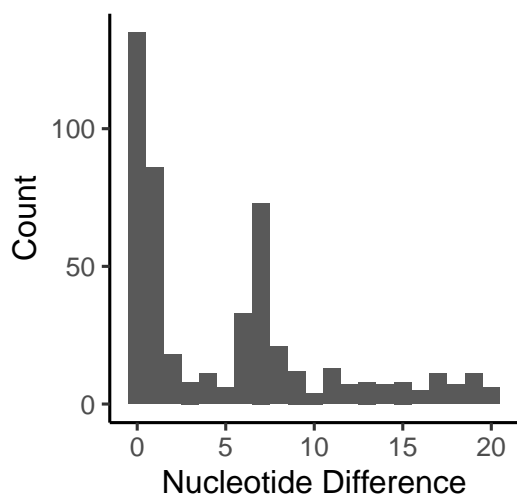
### IGHV3-74\*03

2005 sequences assigned  
No exact matches.



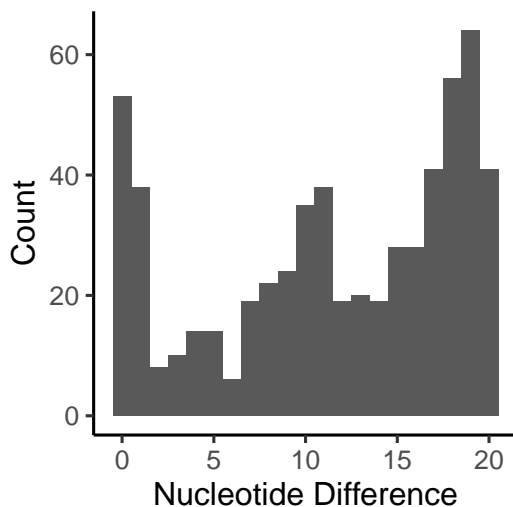
### IGHV3-66\*02

558 sequences assigned  
135 (24.2%) exact matches, in which:  
93 unique CDR3  
5 unique J



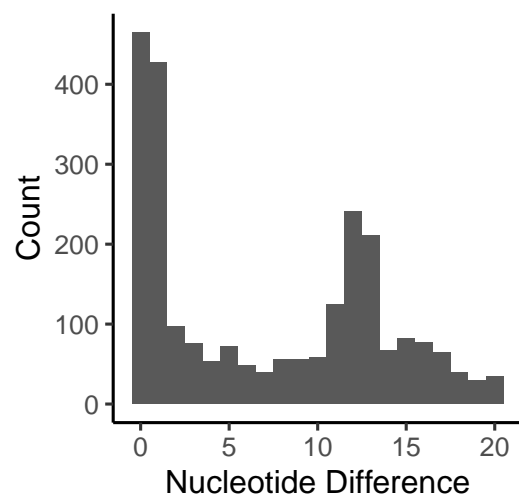
### IGHV3-72\*01

677 sequences assigned  
53 (7.8%) exact matches, in which:  
35 unique CDR3  
6 unique J



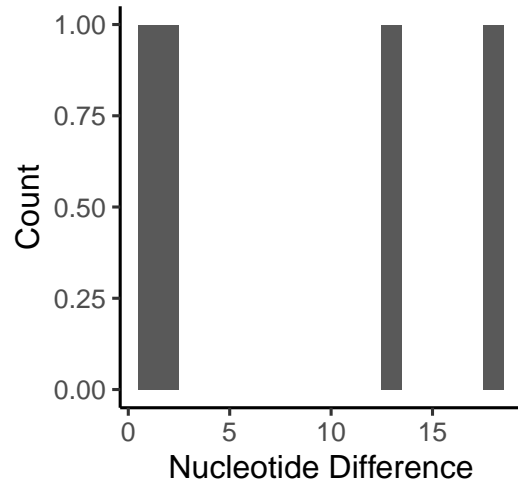
### IGHV3-74\*01\_02

3033 sequences assigned  
465 (15.3%) exact matches, in which:  
264 unique CDR3  
6 unique J



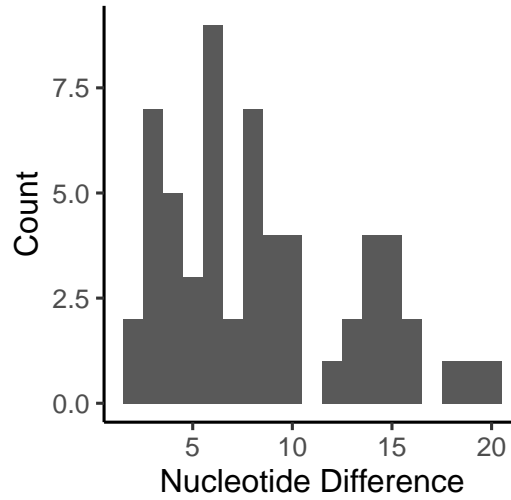
### IGHV3-43D\*04

6 sequences assigned  
No exact matches.



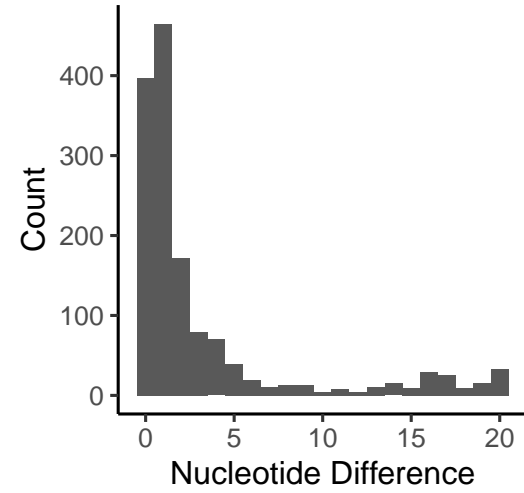
### IGHV3-NL1\*01

64 sequences assigned  
No exact matches.



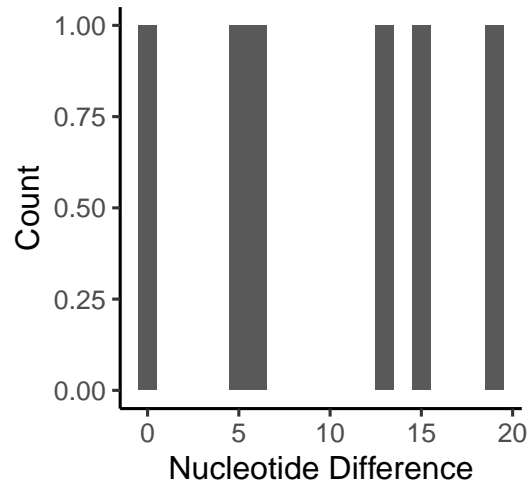
### IGHV4-30-2\*01

1501 sequences assigned  
397 (26.4%) exact matches, in which:  
243 unique CDR3  
6 unique J



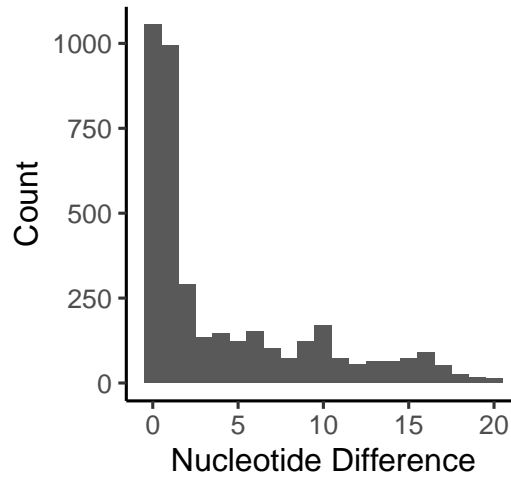
### IGHV3-64D\*06

15 sequences assigned  
1 (6.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



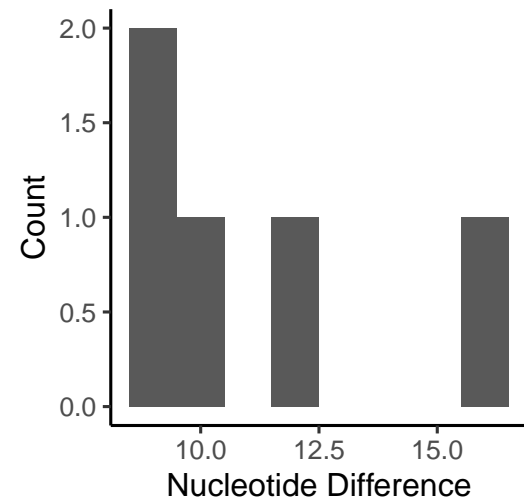
### IGHV4-4\*07

4350 sequences assigned  
1055 (24.3%) exact matches, in which:  
882 unique CDR3  
6 unique J



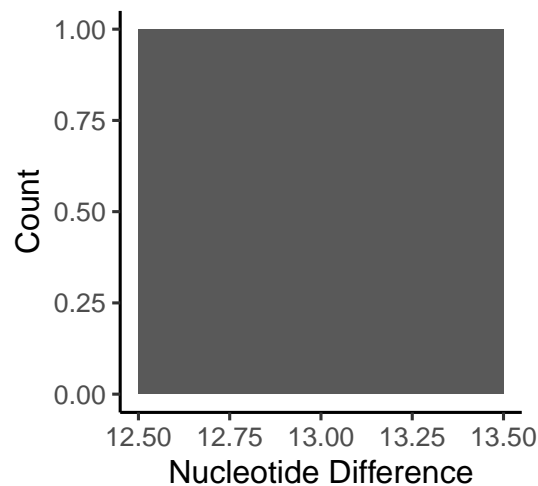
### IGHV4-30-4\*01

7 sequences assigned  
No exact matches.



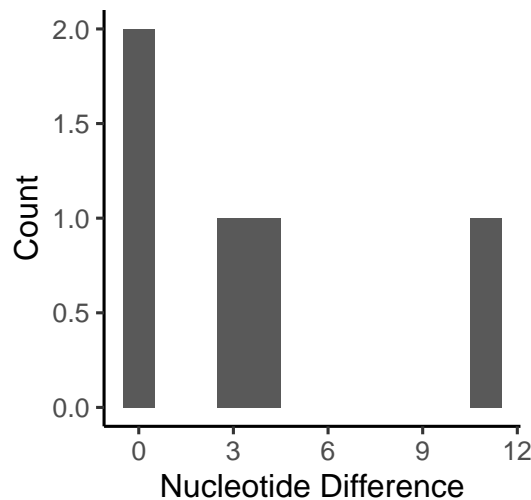
### IGHV3-64D\*09

1 sequences assigned  
No exact matches.



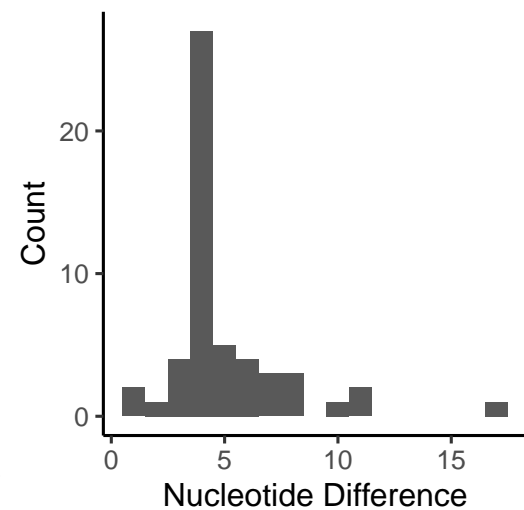
### IGHV4-28\*03

6 sequences assigned  
2 (33.3%) exact matches, in which:  
2 unique CDR3  
2 unique J



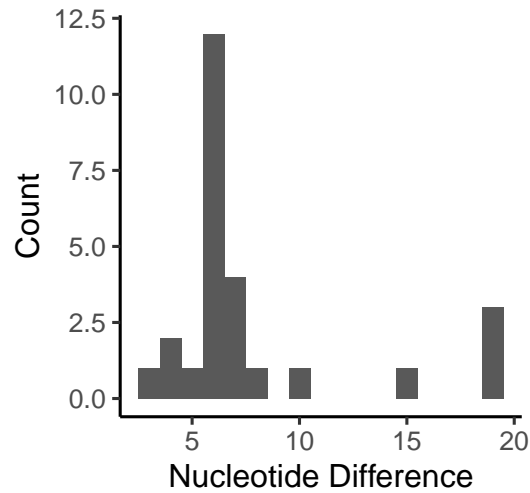
### IGHV4-30-4\*07

56 sequences assigned  
No exact matches.



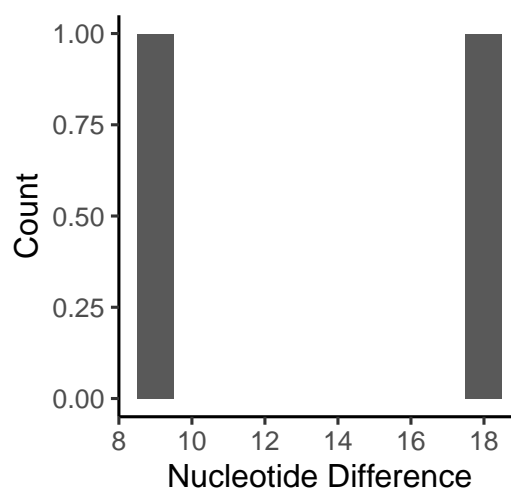
### IGHV4-30-4\*08

28 sequences assigned  
No exact matches.



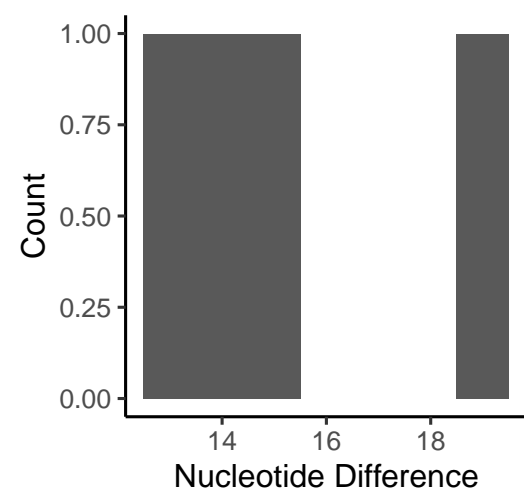
### IGHV4-38-2\*01

4 sequences assigned  
No exact matches.



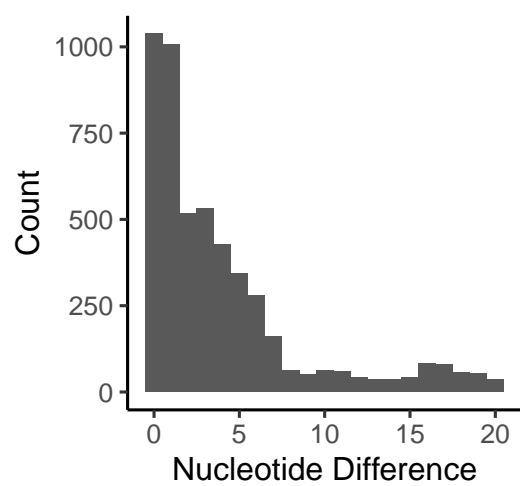
### IGHV4-55\*09

4 sequences assigned  
No exact matches.



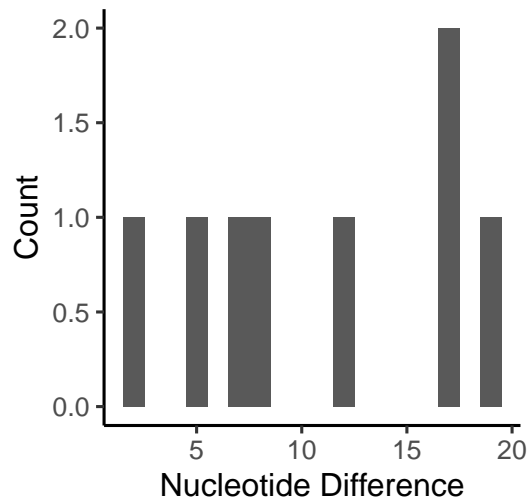
### IGHV4-31\*02

5524 sequences assigned  
1038 (18.8%) exact matches, in which:  
867 unique CDR3  
6 unique J



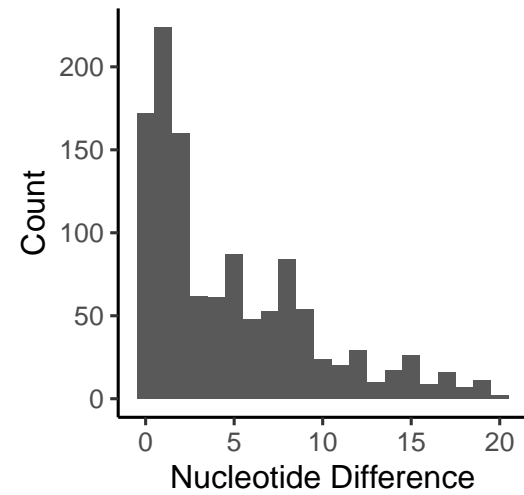
### IGHV4-38-2\*02

10 sequences assigned  
No exact matches.



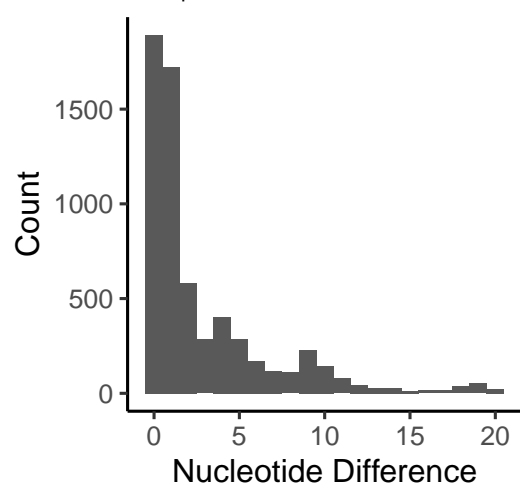
### IGHV4-59\*08

1221 sequences assigned  
172 (14.1%) exact matches, in which:  
161 unique CDR3  
5 unique J



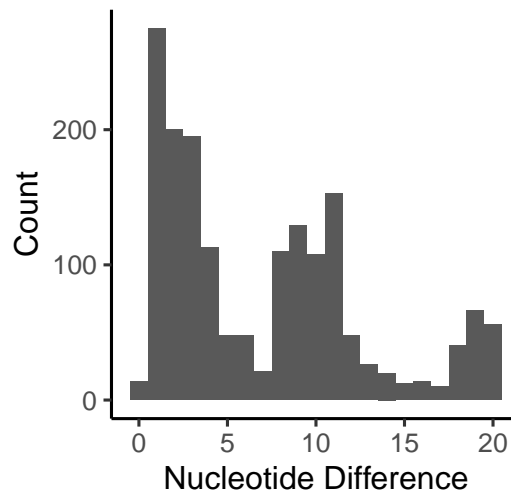
### IGHV4-34\*01\_02

6452 sequences assigned  
1891 (29.3%) exact matches, in which:  
1411 unique CDR3  
6 unique J



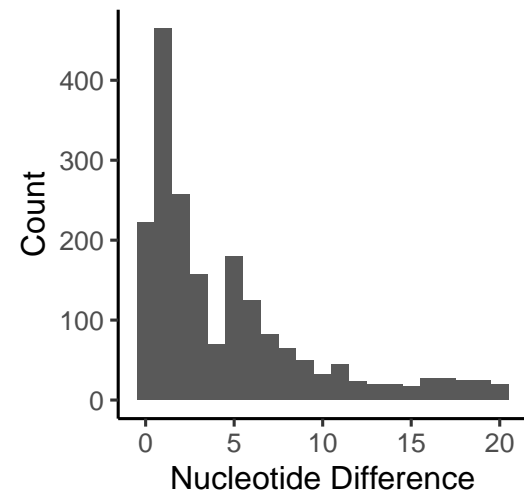
### IGHV4-39\*07

1858 sequences assigned  
14 (0.8%) exact matches, in which:  
14 unique CDR3  
5 unique J



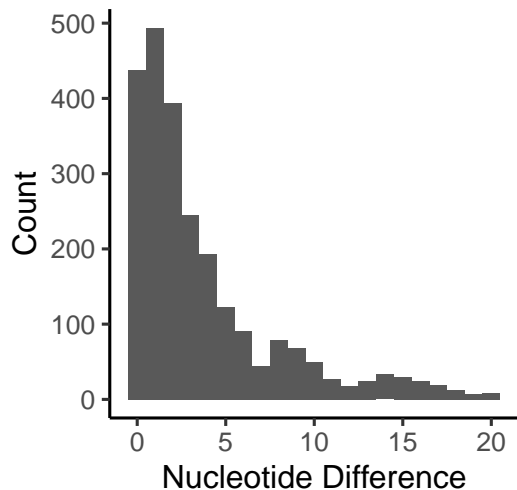
### IGHV4-59\*12

2724 sequences assigned  
222 (8.1%) exact matches, in which:  
211 unique CDR3  
5 unique J



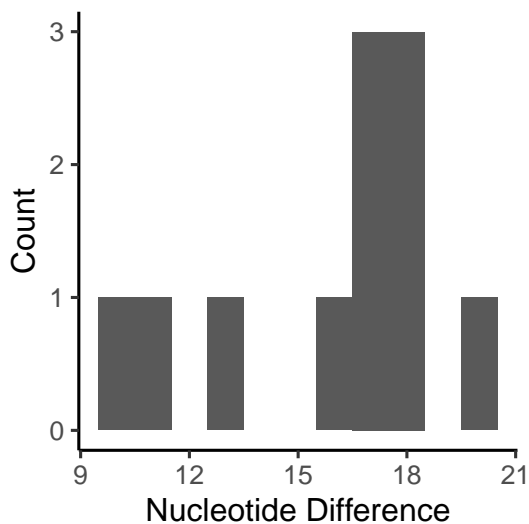
### IGHV4-61\*01

2510 sequences assigned  
438 (17.5%) exact matches, in which:  
403 unique CDR3  
6 unique J



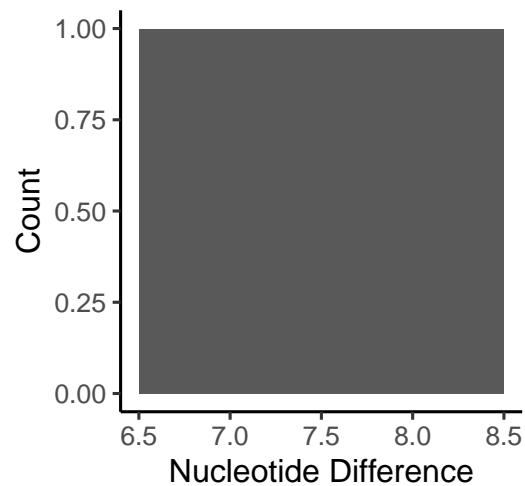
### IGHV1/OR15-2\*02\_03

12 sequences assigned  
No exact matches.



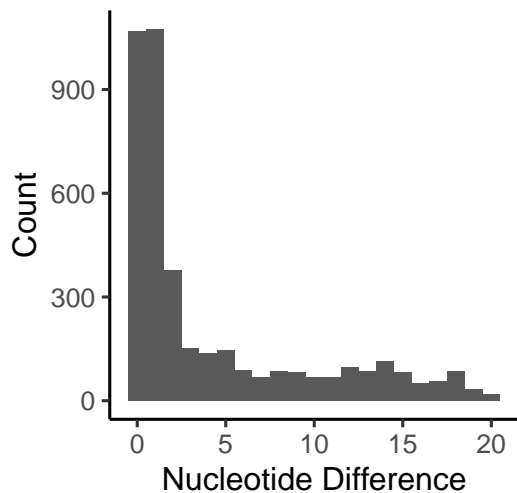
### IGHV5-10-1\*01\_03

2 sequences assigned  
No exact matches.



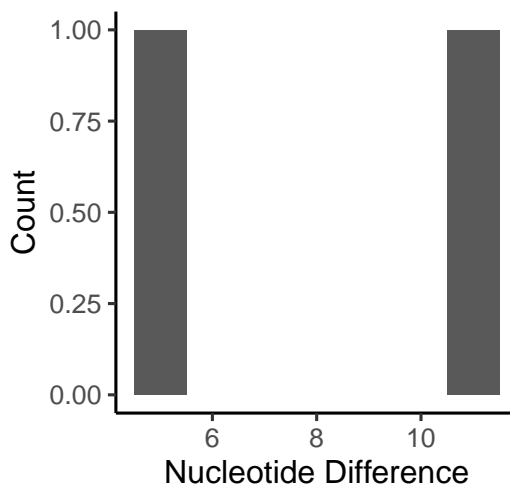
### IGHV4-61\*02

5880 sequences assigned  
1069 (18.2%) exact matches, in which:  
905 unique CDR3  
6 unique J



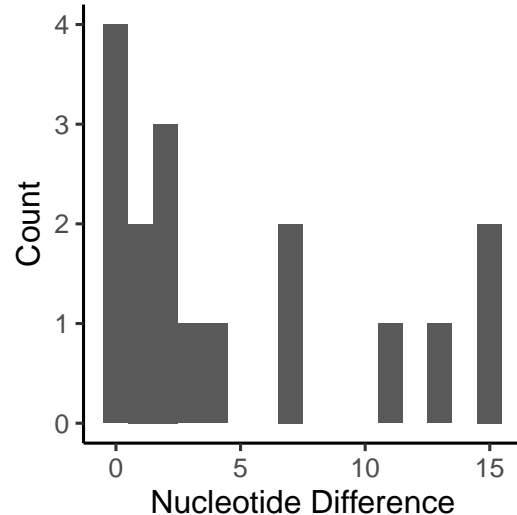
### IGHV4/OR15-8\*01

4 sequences assigned  
No exact matches.



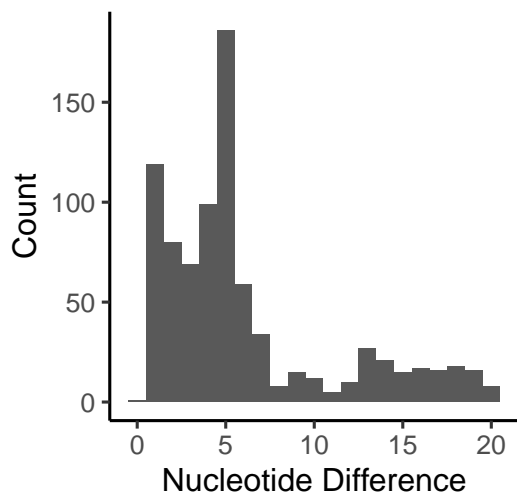
### IGHV5-51\*04

20 sequences assigned  
4 (20%) exact matches, in which:  
4 unique CDR3  
3 unique J



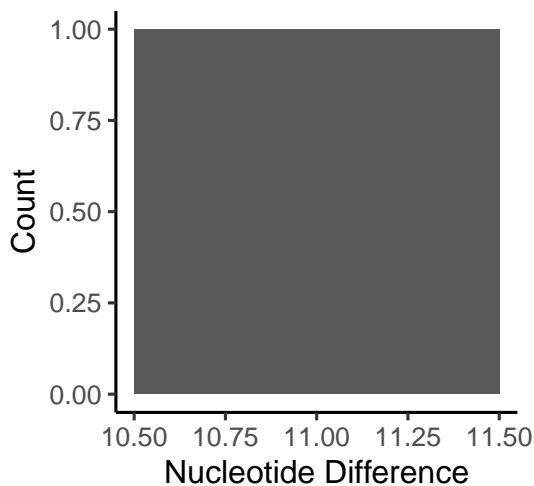
### IGHV4-61\*08

882 sequences assigned  
1 (0.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



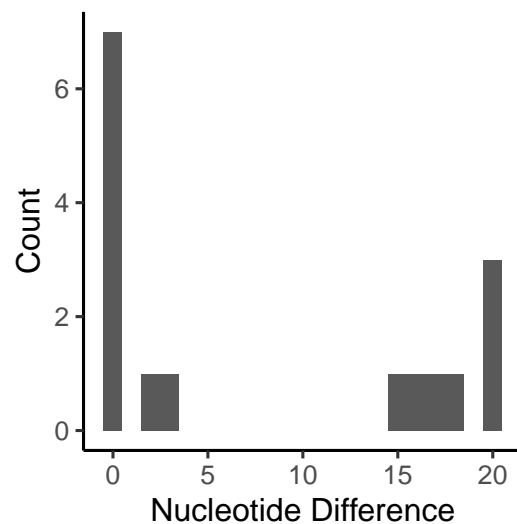
### IGHV1/OR15-9\*01

1 sequences assigned  
No exact matches.



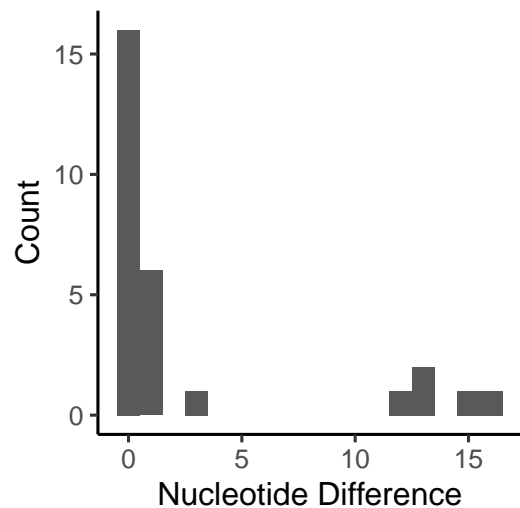
### IGHV5-51\*06

96 sequences assigned  
7 (7.3%) exact matches, in which:  
7 unique CDR3  
3 unique J



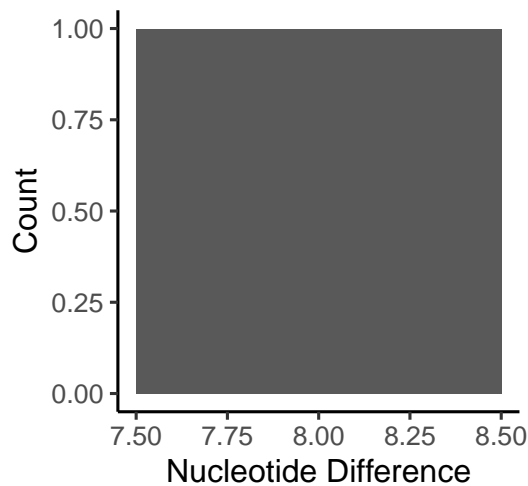
## IGHV5-51\*07

28 sequences assigned  
16 (57.1%) exact matches, in which:  
14 unique CDR3  
5 unique J



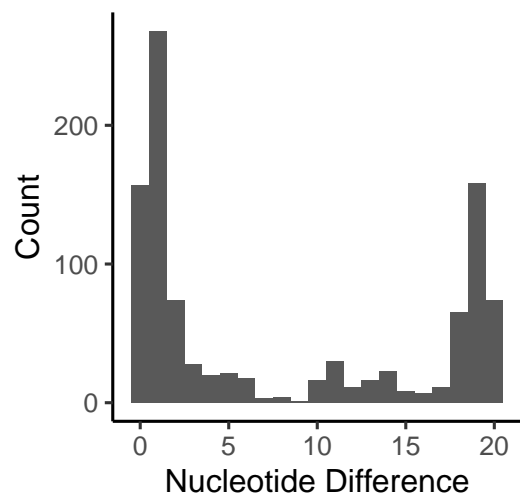
## IGHV3/OR16-6\*02

2 sequences assigned  
No exact matches.



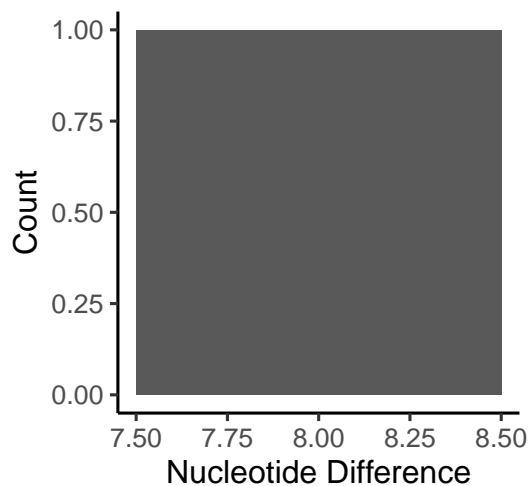
## IGHV6-1\*01\_02

1086 sequences assigned  
157 (14.5%) exact matches, in which:  
120 unique CDR3  
6 unique J



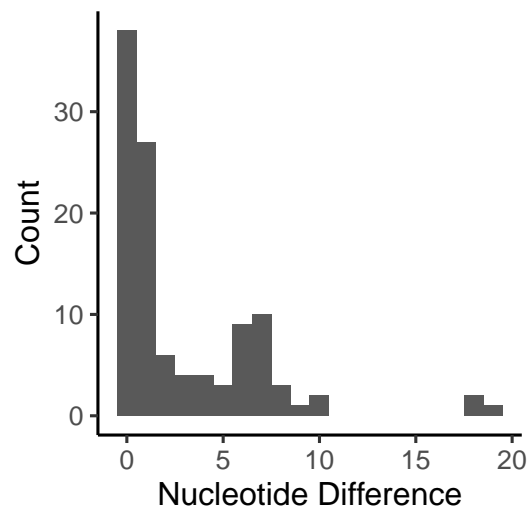
## IGHV3/OR16-10\*01\_03

1 sequences assigned  
No exact matches.



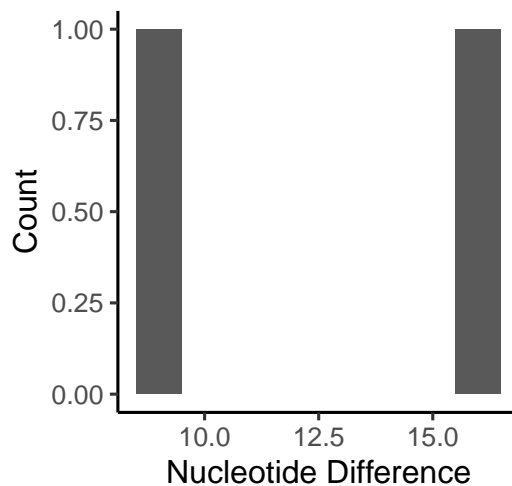
## IGHV6-1\*01\_02\_A315G

136 sequences assigned  
38 (27.9%) exact matches, in which:  
37 unique CDR3  
4 unique J



## IGHV7-4-1\*02

2 sequences assigned  
No exact matches.



IGHV6-1\*01\_02\_A315G

