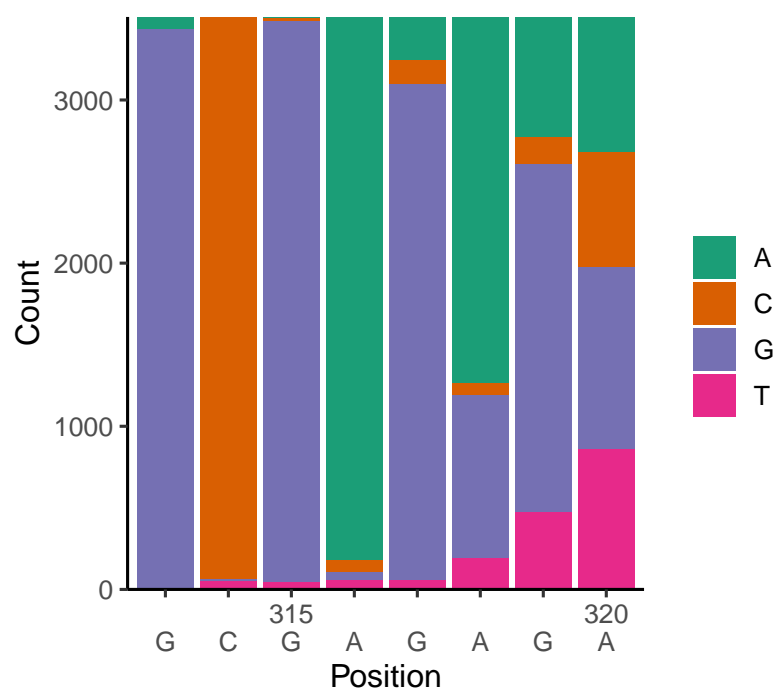


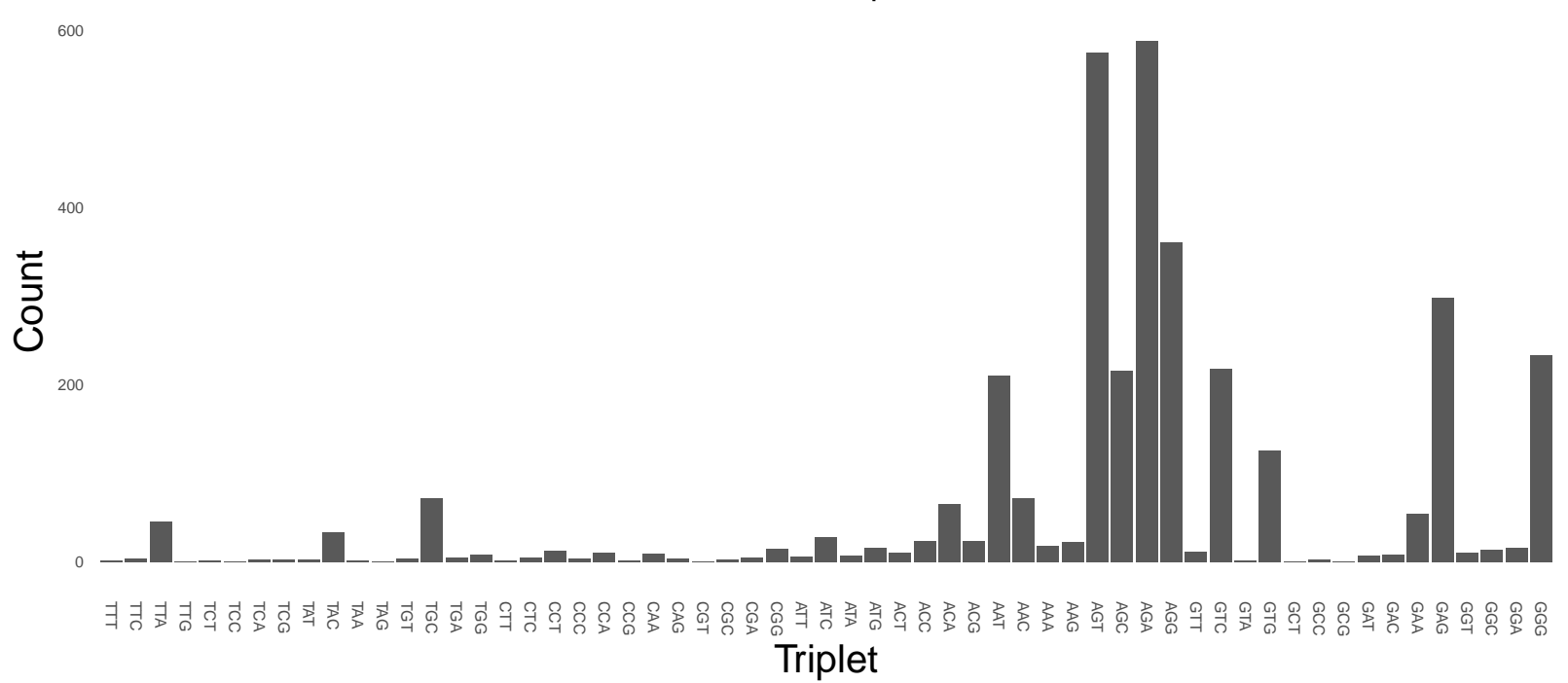
# Gene IGHV4-38-2\*02\_A70G



# Gene IGHV4-38-2\*02\_A70G

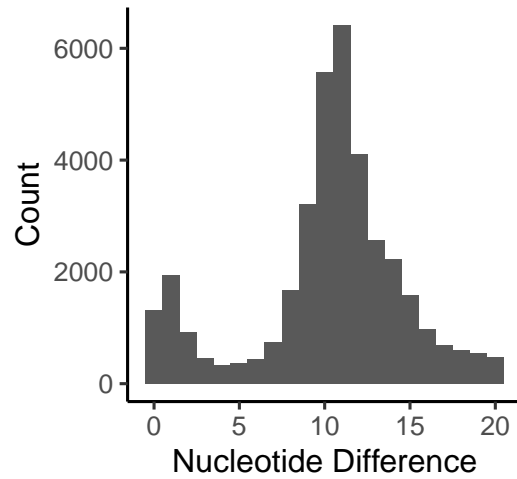


IGHV4-38-2\*02\_A70G- Final 3 nucleotides as a triplet



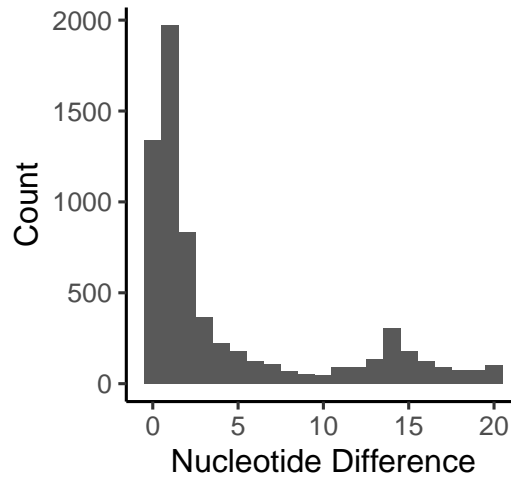
### IGHV1-2\*02

40749 sequences assigned  
1307 (3.2%) exact matches, in which:  
1136 unique CDR3  
6 unique J



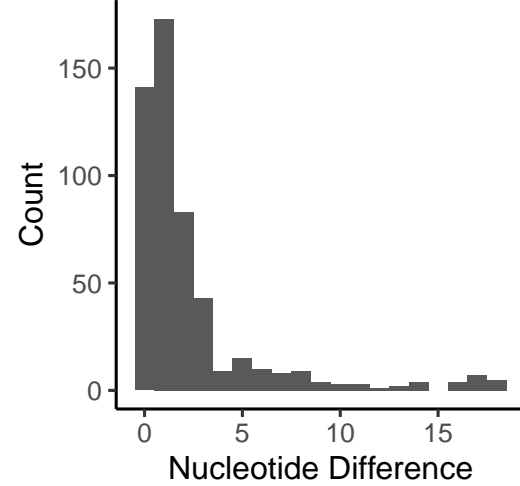
### IGHV1-8\*01

6848 sequences assigned  
1337 (19.5%) exact matches, in which:  
1153 unique CDR3  
6 unique J



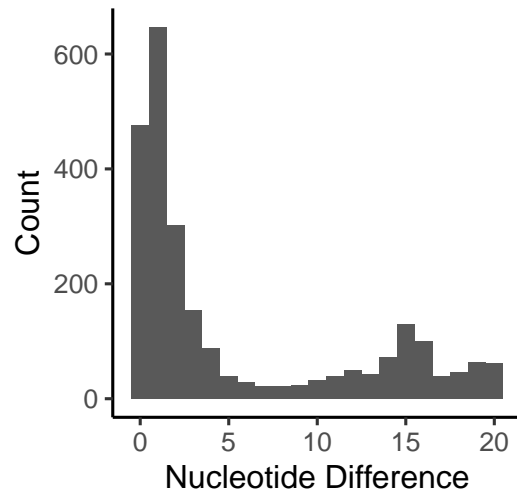
### IGHV1-24\*01

527 sequences assigned  
141 (26.8%) exact matches, in which:  
131 unique CDR3  
5 unique J



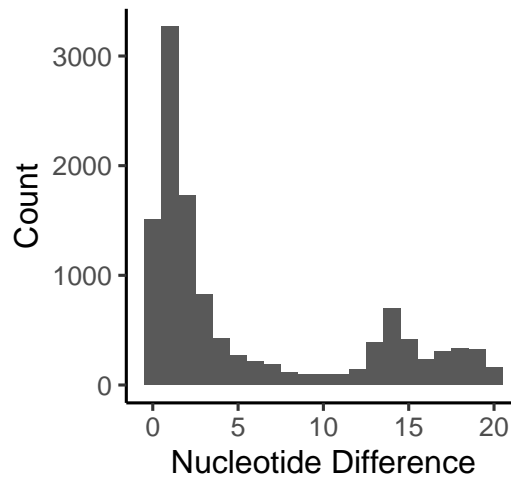
### IGHV1-2\*04

3589 sequences assigned  
476 (13.3%) exact matches, in which:  
420 unique CDR3  
6 unique J



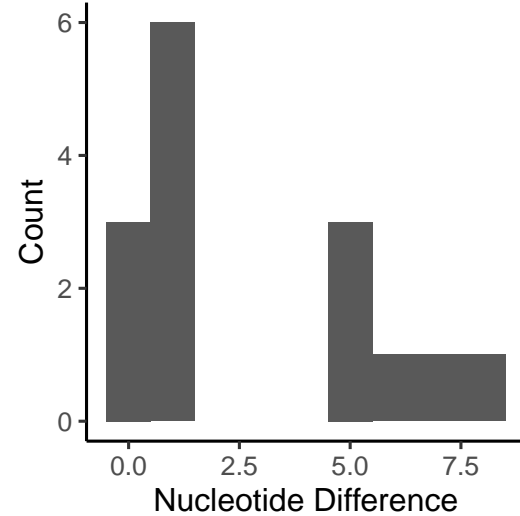
### IGHV1-18\*01

25925 sequences assigned  
1505 (5.8%) exact matches, in which:  
1239 unique CDR3  
6 unique J



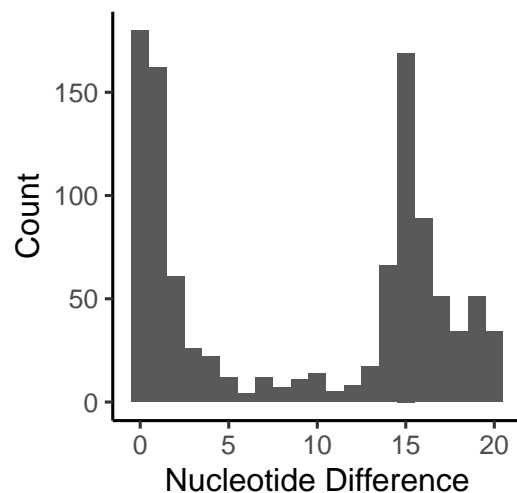
### IGHV1-45\*02

69 sequences assigned  
3 (4.3%) exact matches, in which:  
3 unique CDR3  
3 unique J



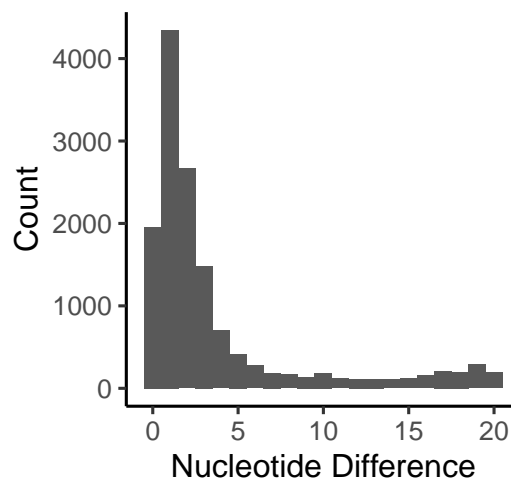
### IGHV1-3\*01\_05

1299 sequences assigned  
180 (13.9%) exact matches, in which:  
164 unique CDR3  
6 unique J



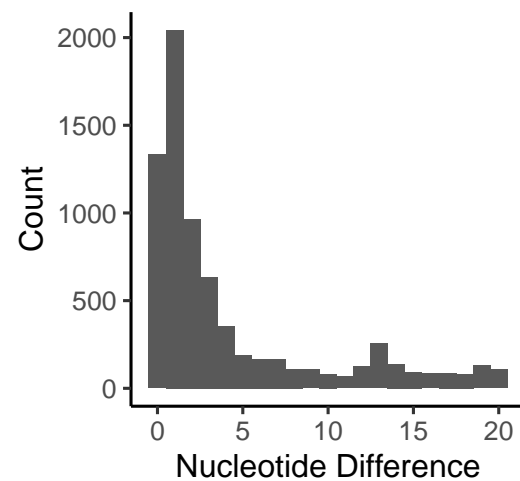
### IGHV1-18\*04

14998 sequences assigned  
1957 (13%) exact matches, in which:  
1634 unique CDR3  
6 unique J



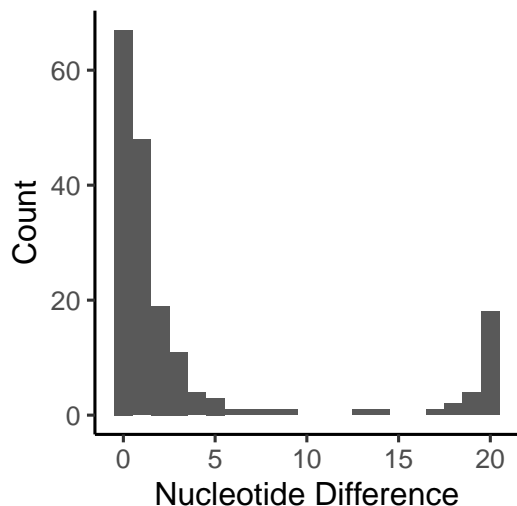
### IGHV1-46\*01

10109 sequences assigned  
1333 (13.2%) exact matches, in which:  
1160 unique CDR3  
6 unique J



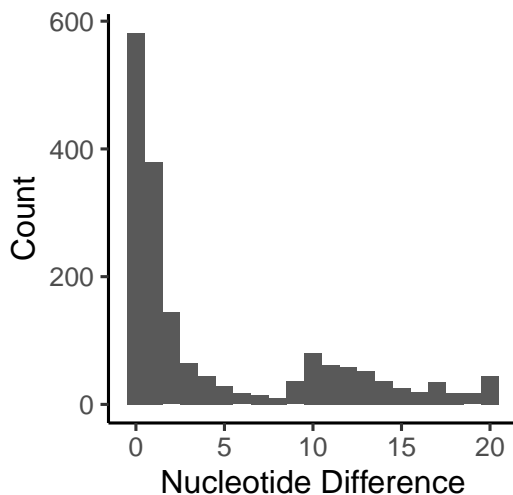
### IGHV1-58\*01\_03

213 sequences assigned  
67 (31.5%) exact matches, in which:  
64 unique CDR3  
5 unique J



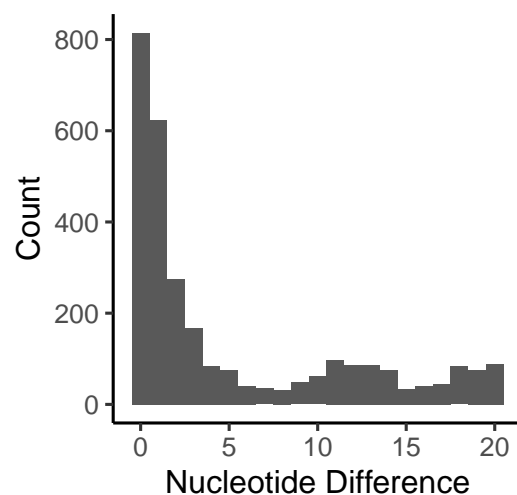
### IGHV2-5\*01

2254 sequences assigned  
582 (25.8%) exact matches, in which:  
520 unique CDR3  
6 unique J



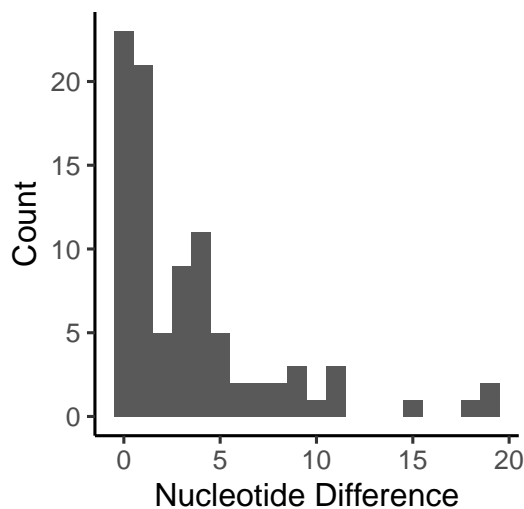
### IGHV3-7\*01

3656 sequences assigned  
815 (22.3%) exact matches, in which:  
686 unique CDR3  
6 unique J



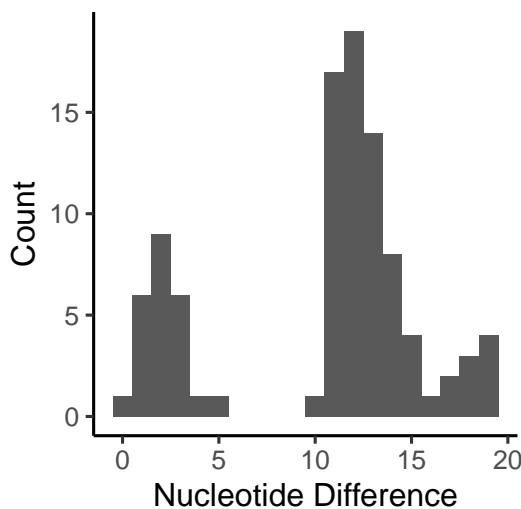
### IGHV1-69-2\*01

93 sequences assigned  
23 (24.7%) exact matches, in which:  
22 unique CDR3  
4 unique J



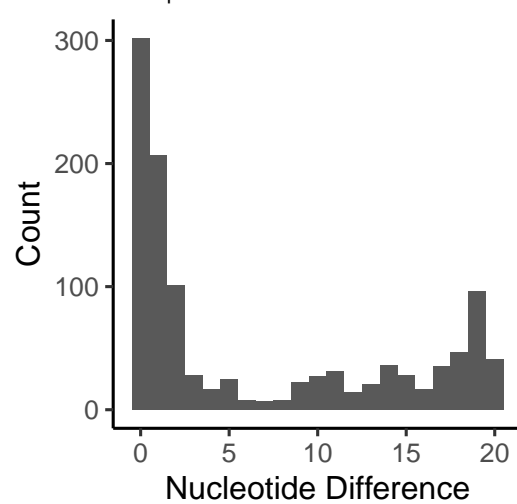
### IGHV2-26\*01

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



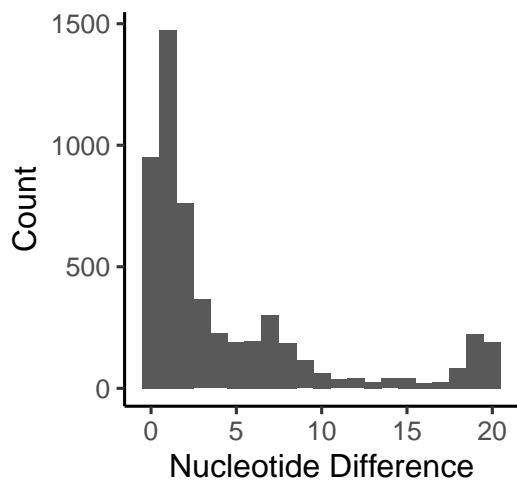
### IGHV3-7\*05

1276 sequences assigned  
302 (23.7%) exact matches, in which:  
274 unique CDR3  
6 unique J



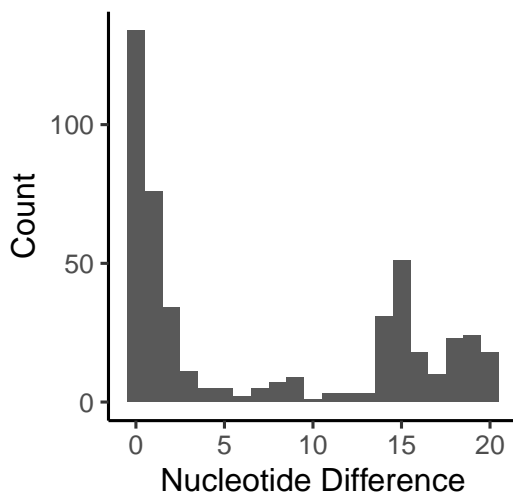
### IGHV1-69\*06\_14

7749 sequences assigned  
952 (12.3%) exact matches, in which:  
844 unique CDR3  
6 unique J



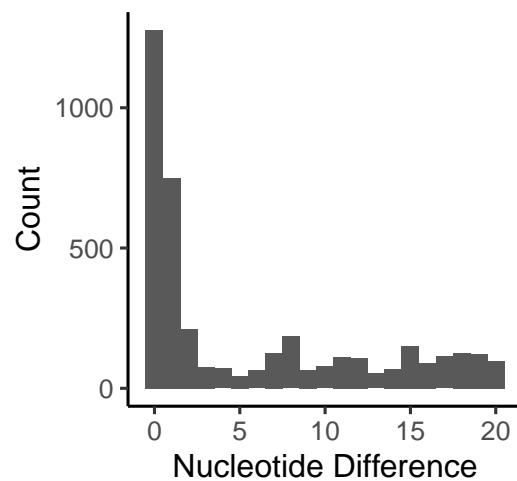
### IGHV2-70\*01

519 sequences assigned  
134 (25.8%) exact matches, in which:  
121 unique CDR3  
5 unique J



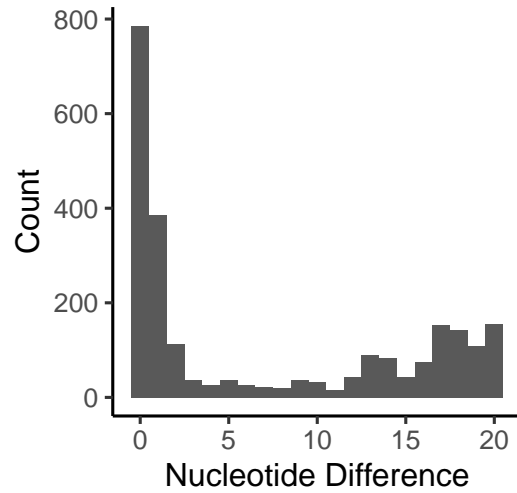
### IGHV3-9\*01

5374 sequences assigned  
1277 (23.8%) exact matches, in which:  
1138 unique CDR3  
6 unique J



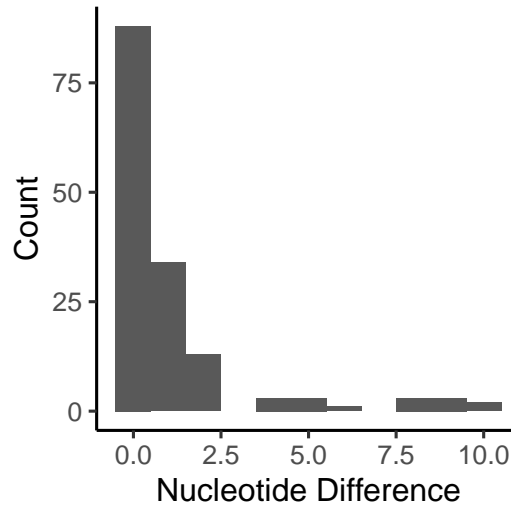
### IGHV3-11\*01

3755 sequences assigned  
786 (20.9%) exact matches, in which:  
699 unique CDR3  
6 unique J



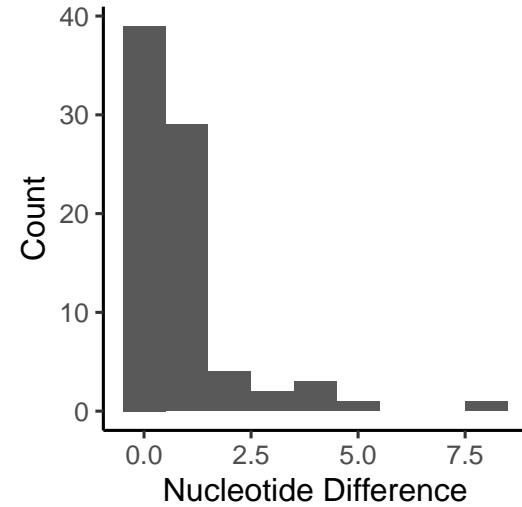
### IGHV3-13\*05

239 sequences assigned  
88 (36.8%) exact matches, in which:  
77 unique CDR3  
5 unique J



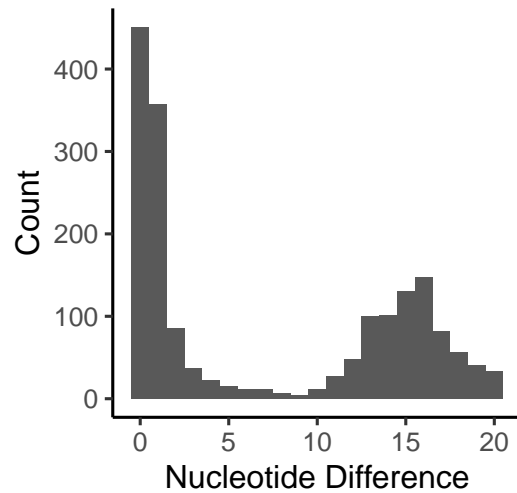
### IGHV3-20\*03\_04

88 sequences assigned  
39 (44.3%) exact matches, in which:  
36 unique CDR3  
5 unique J



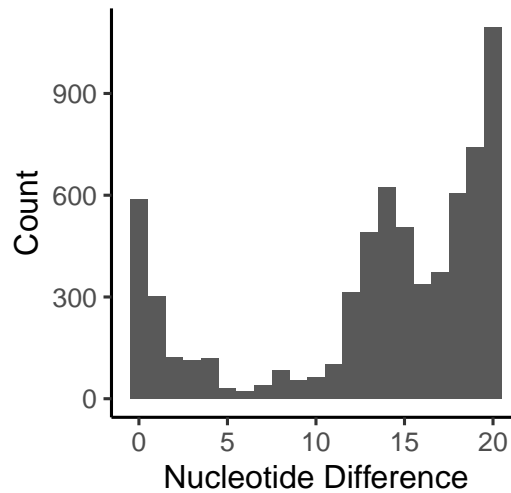
### IGHV3-11\*06

3075 sequences assigned  
451 (14.7%) exact matches, in which:  
382 unique CDR3  
6 unique J



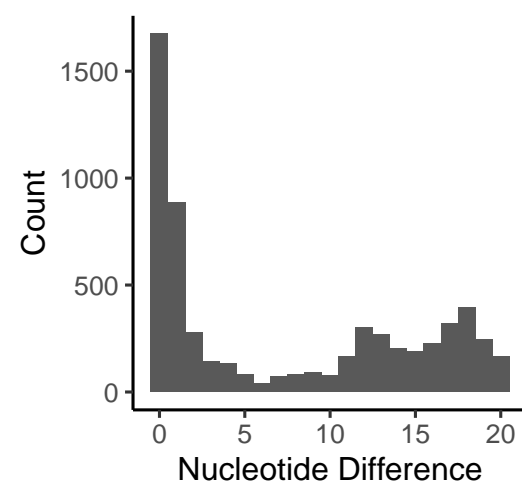
### IGHV3-15\*07

33272 sequences assigned  
588 (1.8%) exact matches, in which:  
555 unique CDR3  
6 unique J



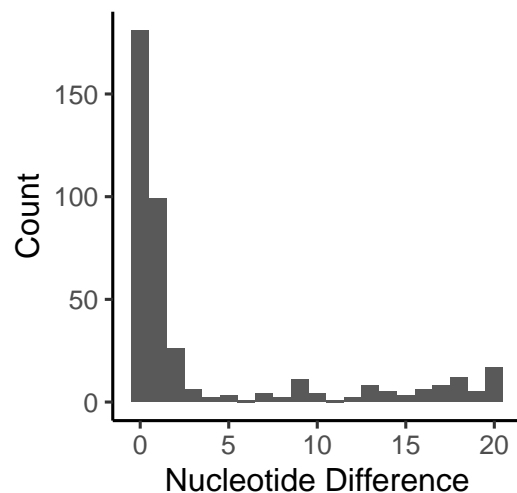
### IGHV3-21\*01\_02

8527 sequences assigned  
1675 (19.6%) exact matches, in which:  
1499 unique CDR3  
6 unique J



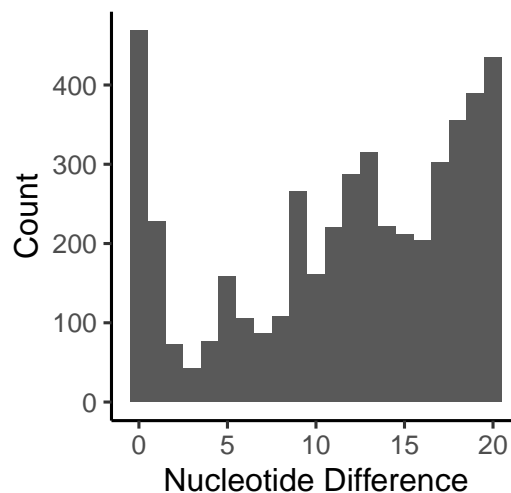
### IGHV3-13\*01

453 sequences assigned  
181 (40%) exact matches, in which:  
149 unique CDR3  
5 unique J



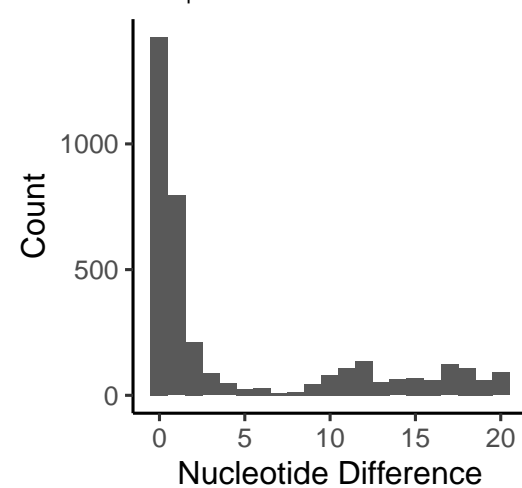
### IGHV3-15\*01\_02

7727 sequences assigned  
469 (6.1%) exact matches, in which:  
434 unique CDR3  
6 unique J



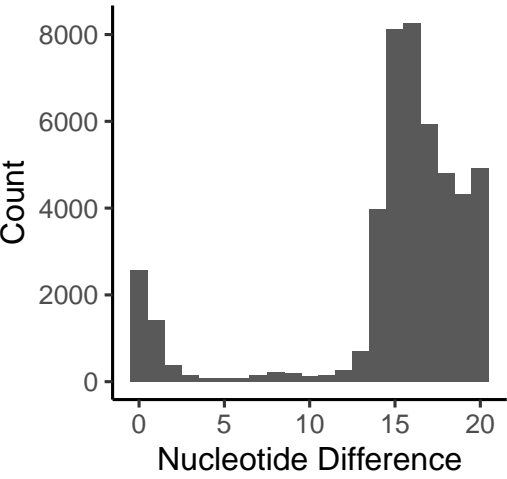
### IGHV3-30-3\*01

4663 sequences assigned  
1425 (30.6%) exact matches, in which:  
1298 unique CDR3  
6 unique J



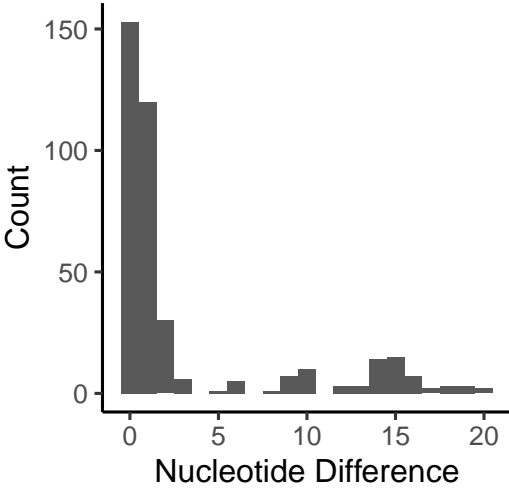
IGHV3-33\*01

59876 sequences assigned  
2565 (4.3%) exact matches, in which:  
1888 unique CDR3  
6 unique J



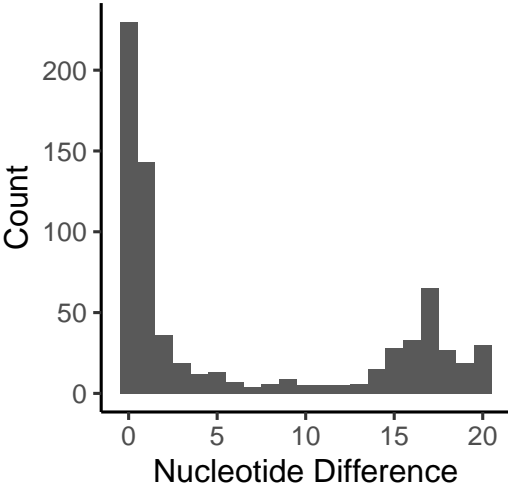
IGHV3-43\*01

479 sequences assigned  
153 (31.9%) exact matches, in which:  
133 unique CDR3  
6 unique J



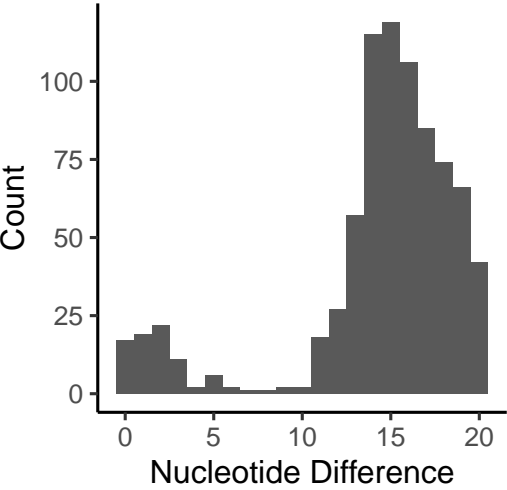
IGHV3-49\*04

912 sequences assigned  
230 (25.2%) exact matches, in which:  
210 unique CDR3  
6 unique J



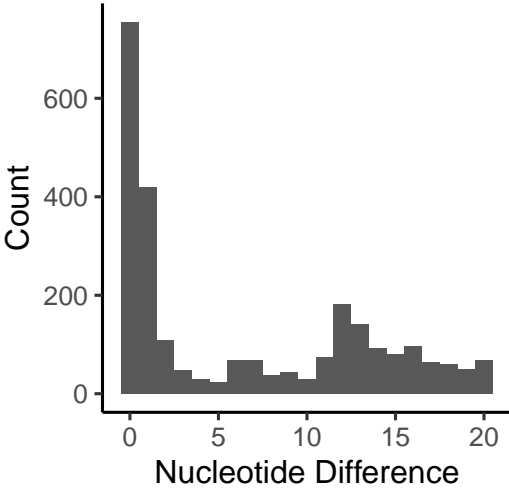
IGHV3-33\*06

1086 sequences assigned  
17 (1.6%) exact matches, in which:  
15 unique CDR3  
3 unique J



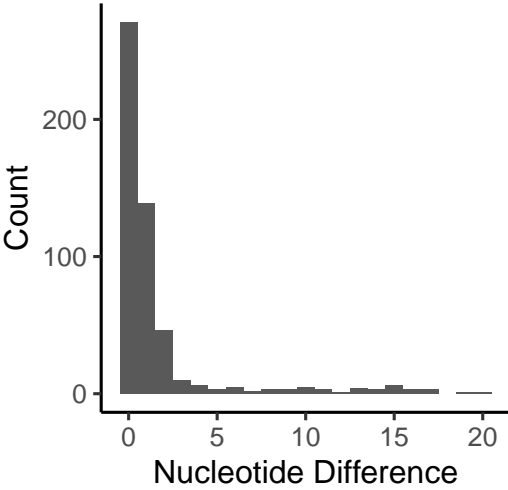
IGHV3-48\*02

3233 sequences assigned  
755 (23.4%) exact matches, in which:  
664 unique CDR3  
6 unique J



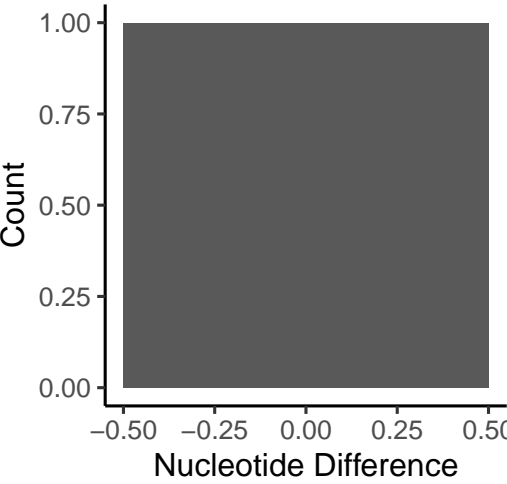
IGHV3-49\*03\_05

548 sequences assigned  
271 (49.5%) exact matches, in which:  
254 unique CDR3  
6 unique J



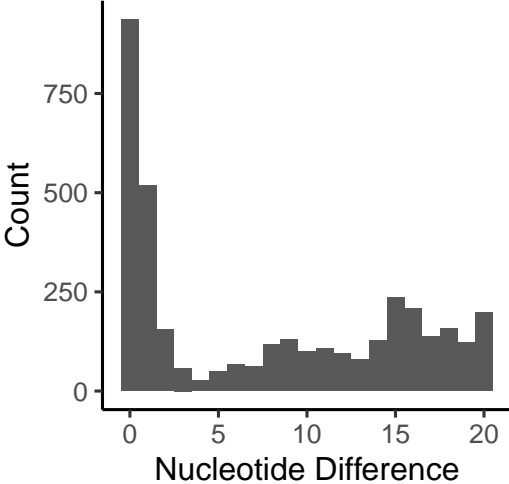
IGHV3-35\*01

1 sequences assigned  
1 (100%) exact matches, in which:  
1 unique CDR3  
1 unique J



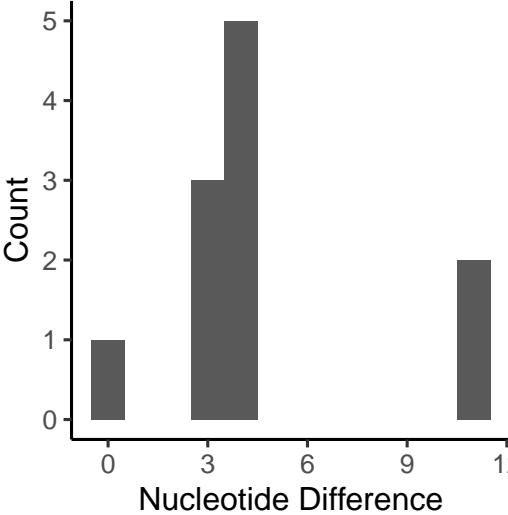
IGHV3-48\*03

4941 sequences assigned  
937 (19%) exact matches, in which:  
828 unique CDR3  
6 unique J



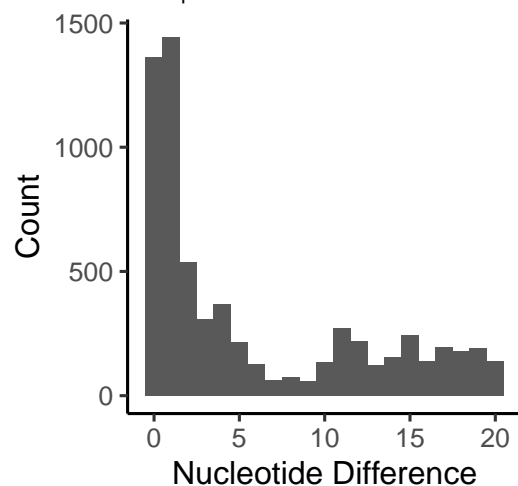
IGHV3-52\*01\_03

11 sequences assigned  
1 (9.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



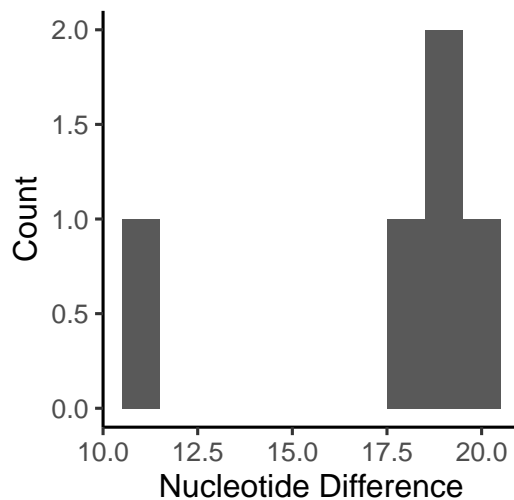
### IGHV3-53\*01\_02

8155 sequences assigned  
1364 (16.7%) exact matches, in which:  
1131 unique CDR3  
6 unique J



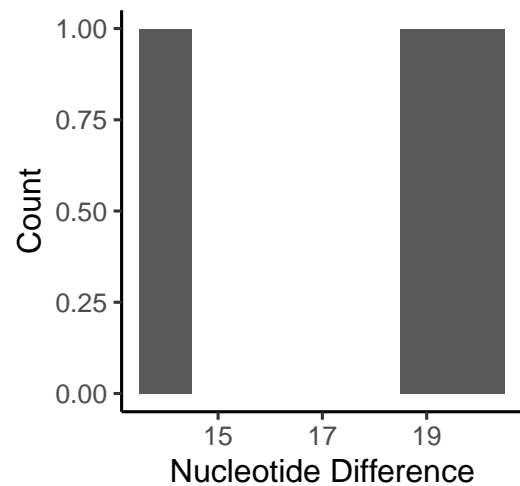
### IGHV3-66\*02

12 sequences assigned  
No exact matches.



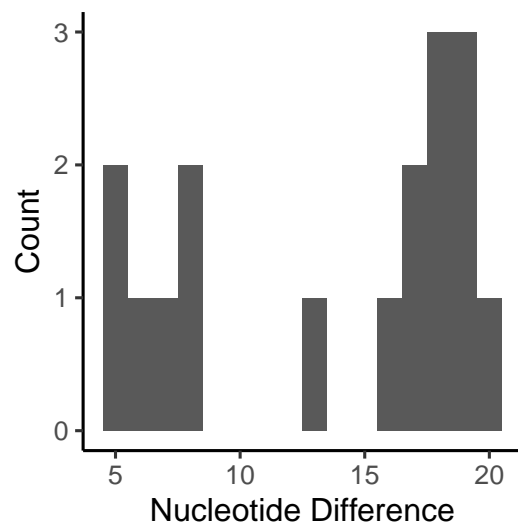
### IGHV3-69-1\*02

7 sequences assigned  
No exact matches.



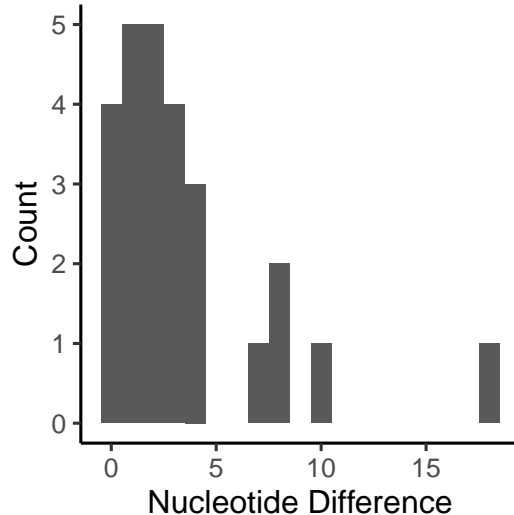
### IGHV3-64\*04

31 sequences assigned  
No exact matches.



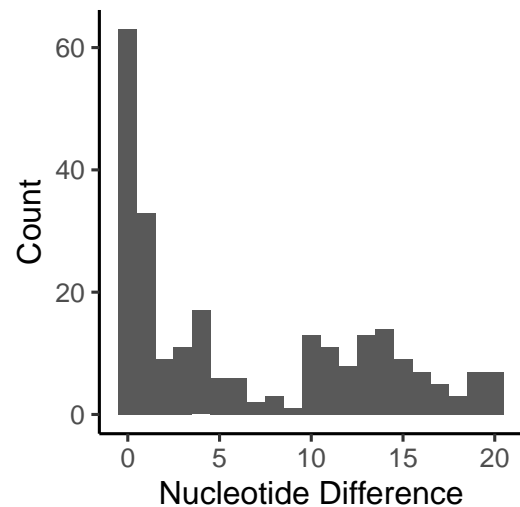
### IGHV3-66\*03

28 sequences assigned  
4 (14.3%) exact matches, in which:  
4 unique CDR3  
2 unique J



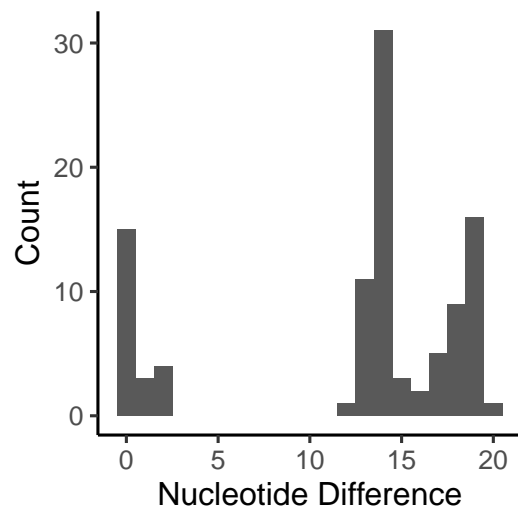
### IGHV3-72\*01

368 sequences assigned  
63 (17.1%) exact matches, in which:  
57 unique CDR3  
5 unique J



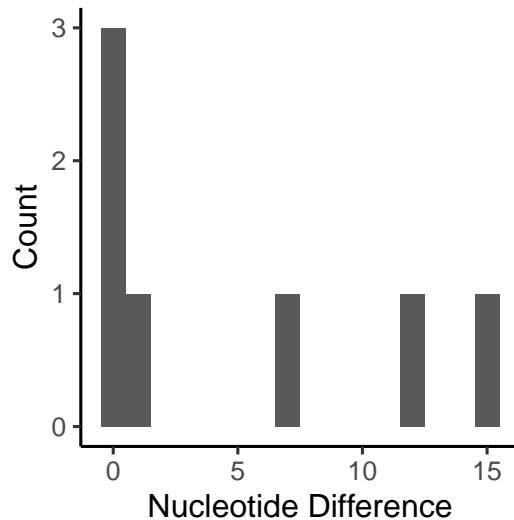
### IGHV3-64\*02\_07

108 sequences assigned  
15 (13.9%) exact matches, in which:  
15 unique CDR3  
5 unique J



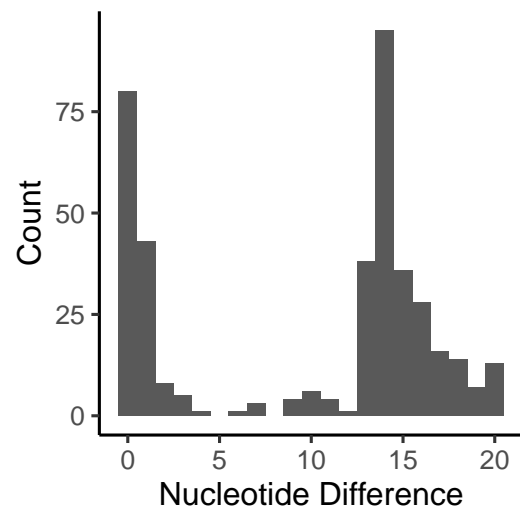
### IGHV3-69-1\*01

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



### IGHV3-73\*01\_02

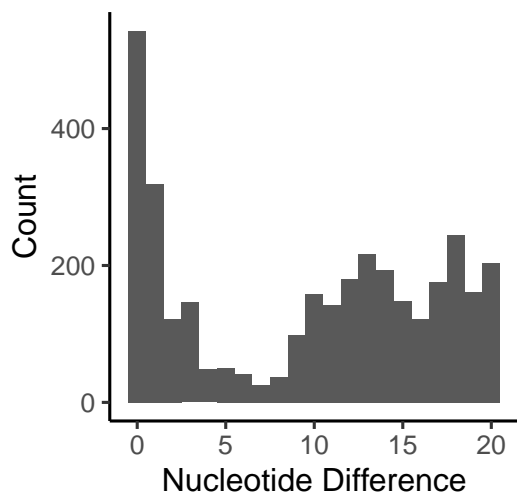
712 sequences assigned  
80 (11.2%) exact matches, in which:  
77 unique CDR3  
6 unique J





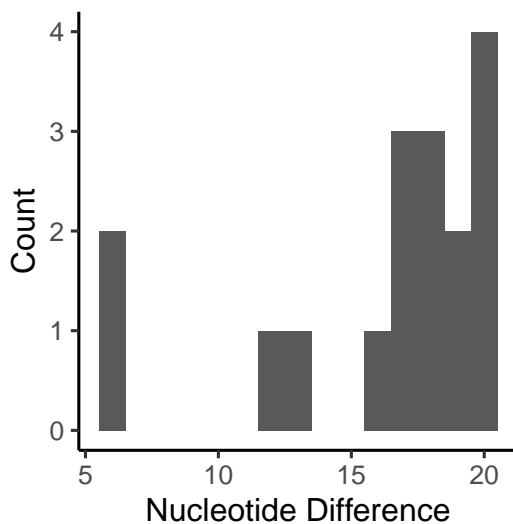
### IGHV3-74\*01\_02

5094 sequences assigned  
543 (10.7%) exact matches, in which:  
492 unique CDR3  
6 unique J



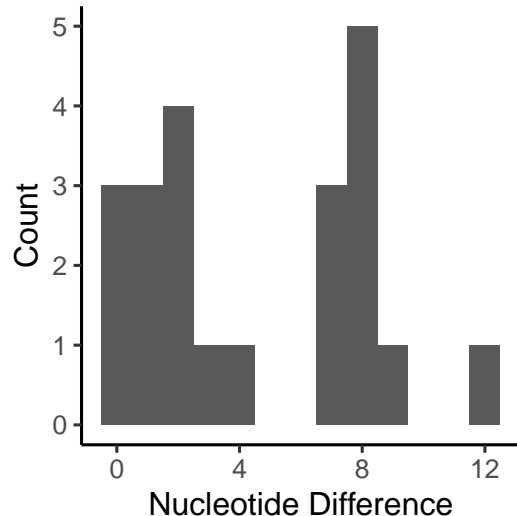
### IGHV3-NL1\*01

33 sequences assigned  
No exact matches.



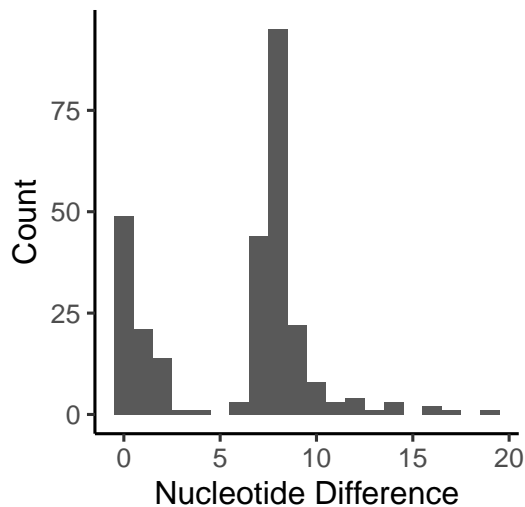
### IGHV4-28\*01\_07

22 sequences assigned  
3 (13.6%) exact matches, in which:  
3 unique CDR3  
2 unique J



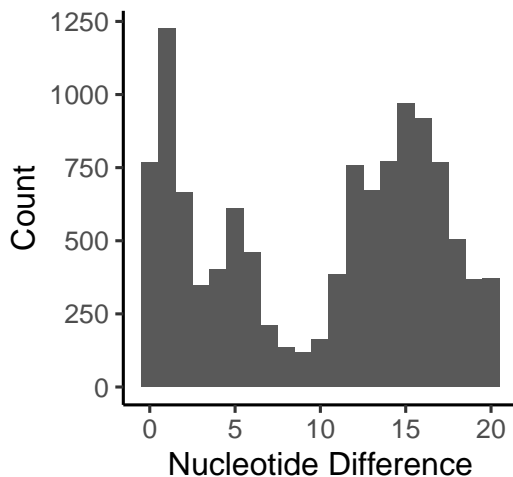
### IGHV3-43D\*04

280 sequences assigned  
49 (17.5%) exact matches, in which:  
46 unique CDR3  
5 unique J



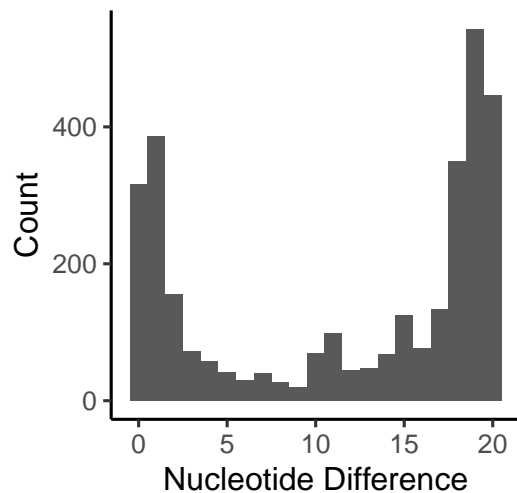
### IGHV4-4\*07

15978 sequences assigned  
769 (4.8%) exact matches, in which:  
649 unique CDR3  
6 unique J



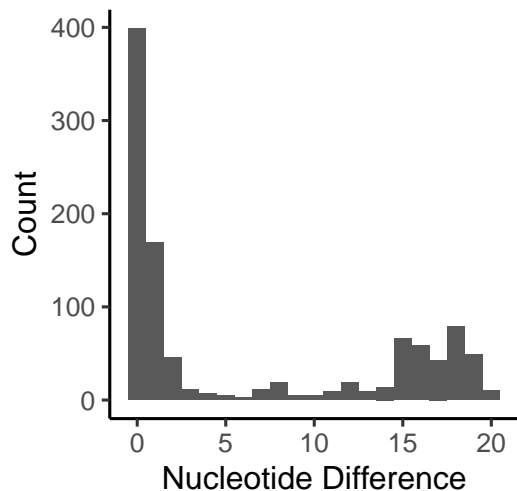
### IGHV4-30-2\*01

5025 sequences assigned  
316 (6.3%) exact matches, in which:  
258 unique CDR3  
6 unique J



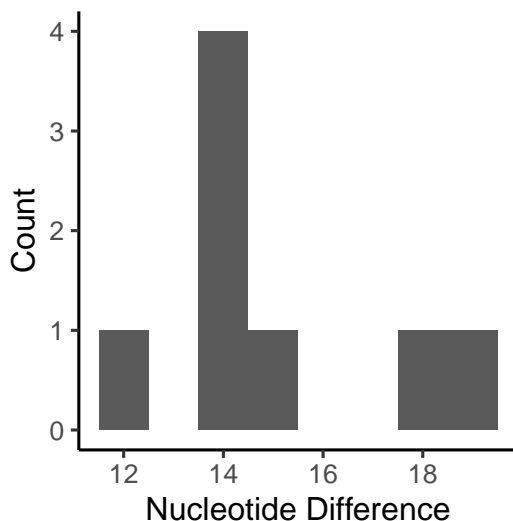
### IGHV3-64D\*08

1115 sequences assigned  
399 (35.8%) exact matches, in which:  
358 unique CDR3  
6 unique J



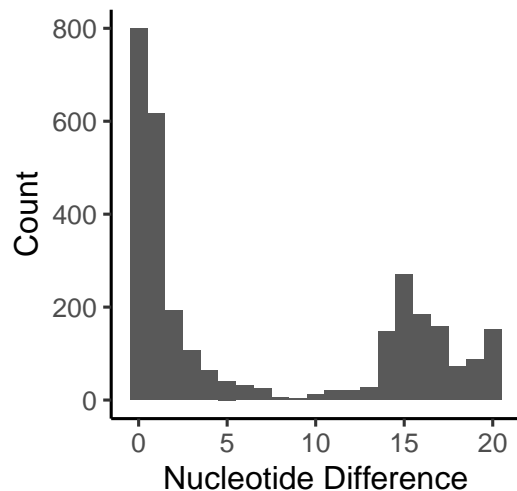
### IGHV4-28\*03

10 sequences assigned  
No exact matches.



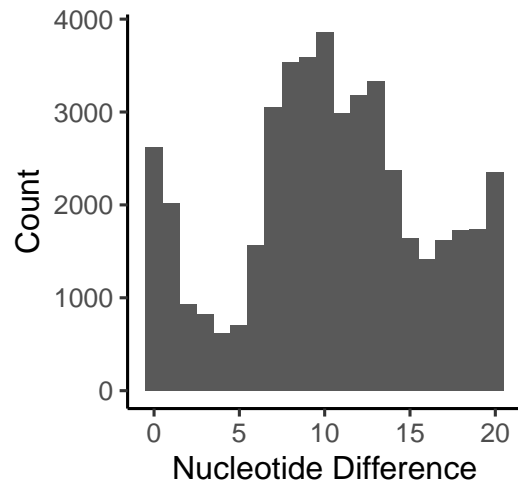
### IGHV4-30-4\*01

4905 sequences assigned  
800 (16.3%) exact matches, in which:  
638 unique CDR3  
6 unique J



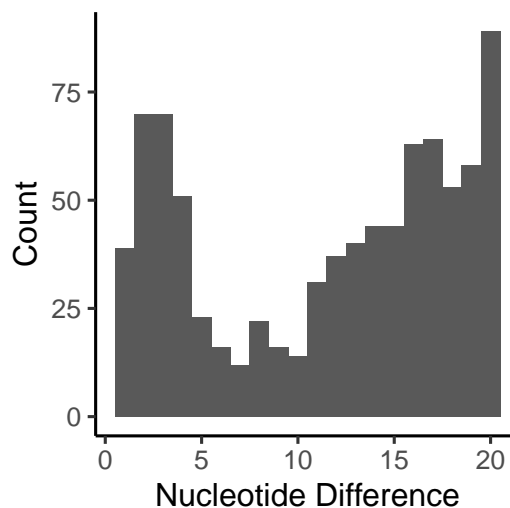
### IGHV4-31\*03\_04

54338 sequences assigned  
2618 (4.8%) exact matches, in which:  
2069 unique CDR3  
6 unique J



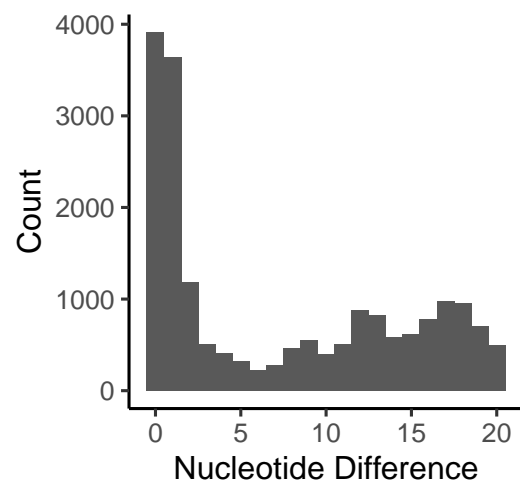
### IGHV4-39\*07

1734 sequences assigned  
No exact matches.



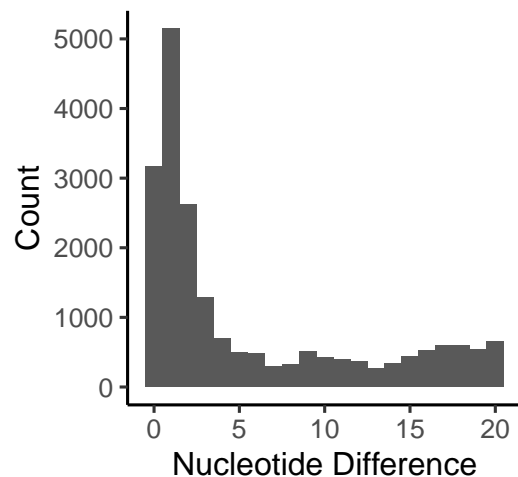
### IGHV4-59\*01\_07

27458 sequences assigned  
3911 (14.2%) exact matches, in which:  
2963 unique CDR3  
6 unique J



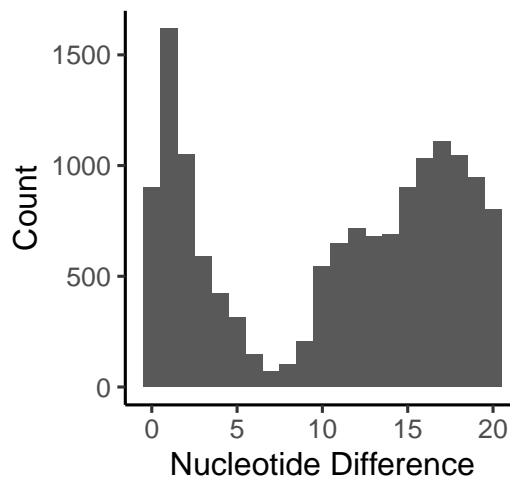
### IGHV4-34\*01\_02

28481 sequences assigned  
3161 (11.1%) exact matches, in which:  
2626 unique CDR3  
6 unique J



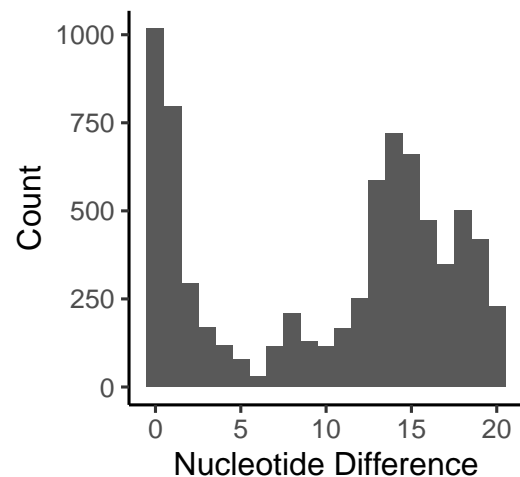
### IGHV4-39\*01\_05

37973 sequences assigned  
899 (2.4%) exact matches, in which:  
827 unique CDR3  
6 unique J



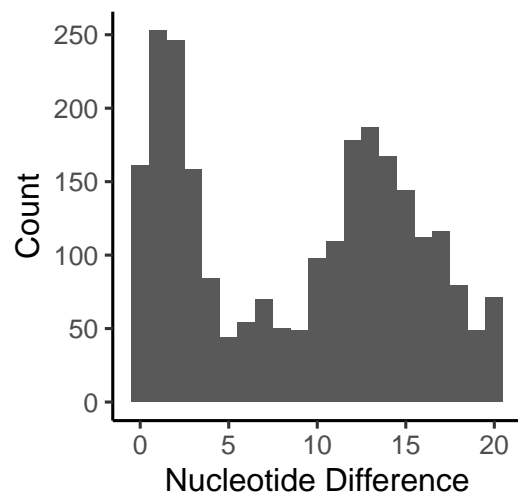
### IGHV4-61\*01

10776 sequences assigned  
1017 (9.4%) exact matches, in which:  
815 unique CDR3  
6 unique J



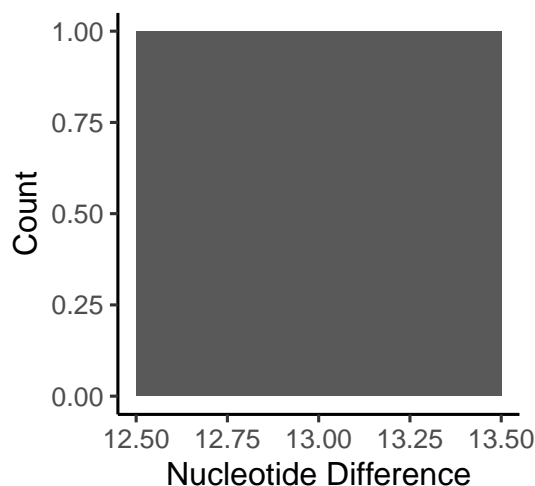
### IGHV4-38-2\*02\_A70G

3509 sequences assigned  
161 (4.6%) exact matches, in which:  
153 unique CDR3  
6 unique J



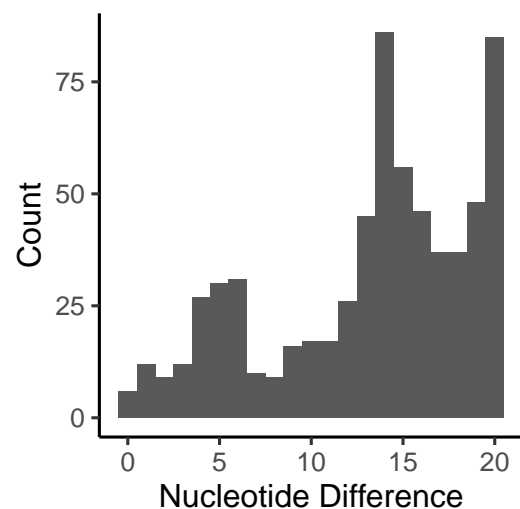
### IGHV4-55\*09

1 sequences assigned  
No exact matches.



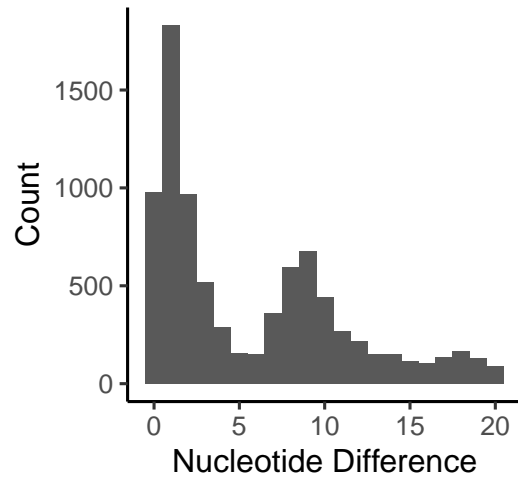
### IGHV4-61\*08

1149 sequences assigned  
6 (0.5%) exact matches, in which:  
6 unique CDR3  
2 unique J



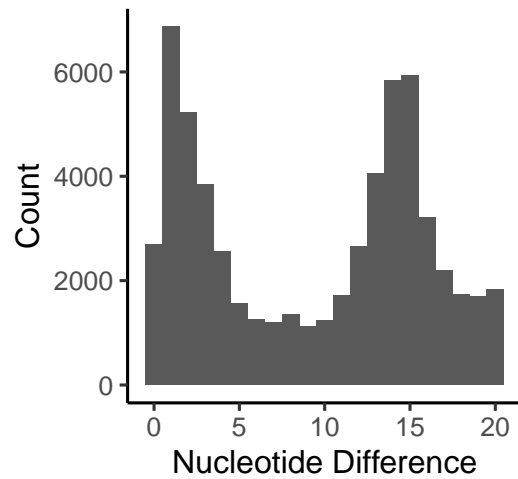
## IGHV5-10-1\*01\_03

9388 sequences assigned  
980 (10.4%) exact matches, in which:  
856 unique CDR3  
6 unique J



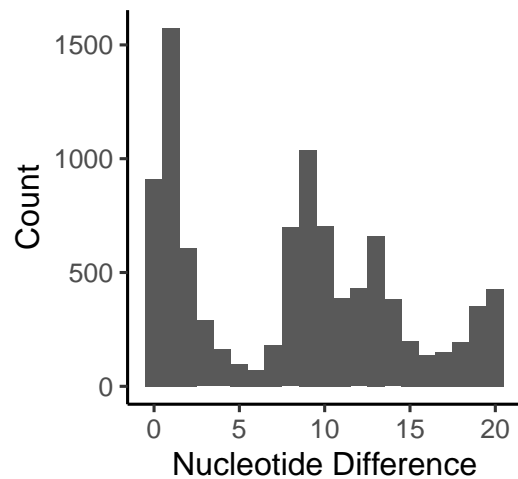
## IGHV5-51\*01\_03

77250 sequences assigned  
2702 (3.5%) exact matches, in which:  
2328 unique CDR3  
6 unique J



## IGHV6-1\*01\_02

11826 sequences assigned  
911 (7.7%) exact matches, in which:  
726 unique CDR3  
6 unique J





Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59\*02\_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.