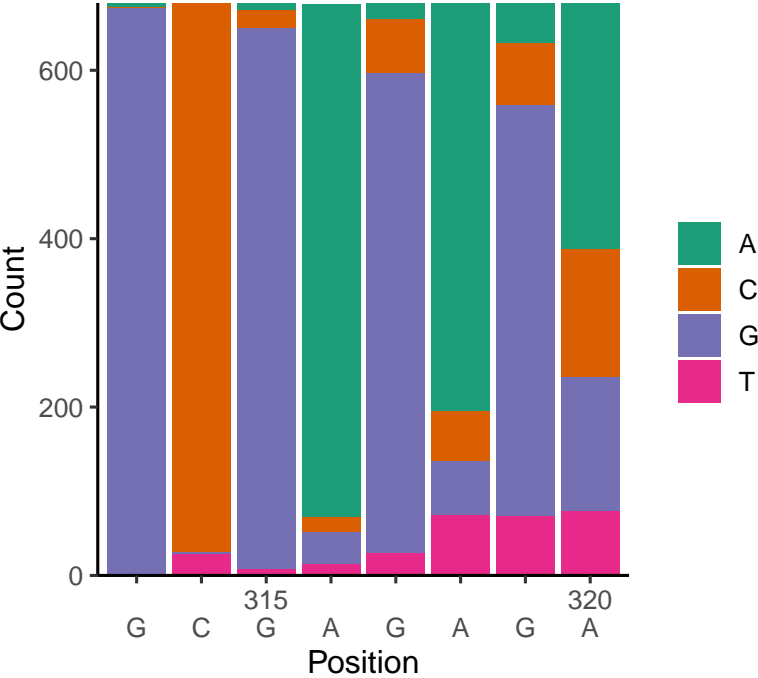


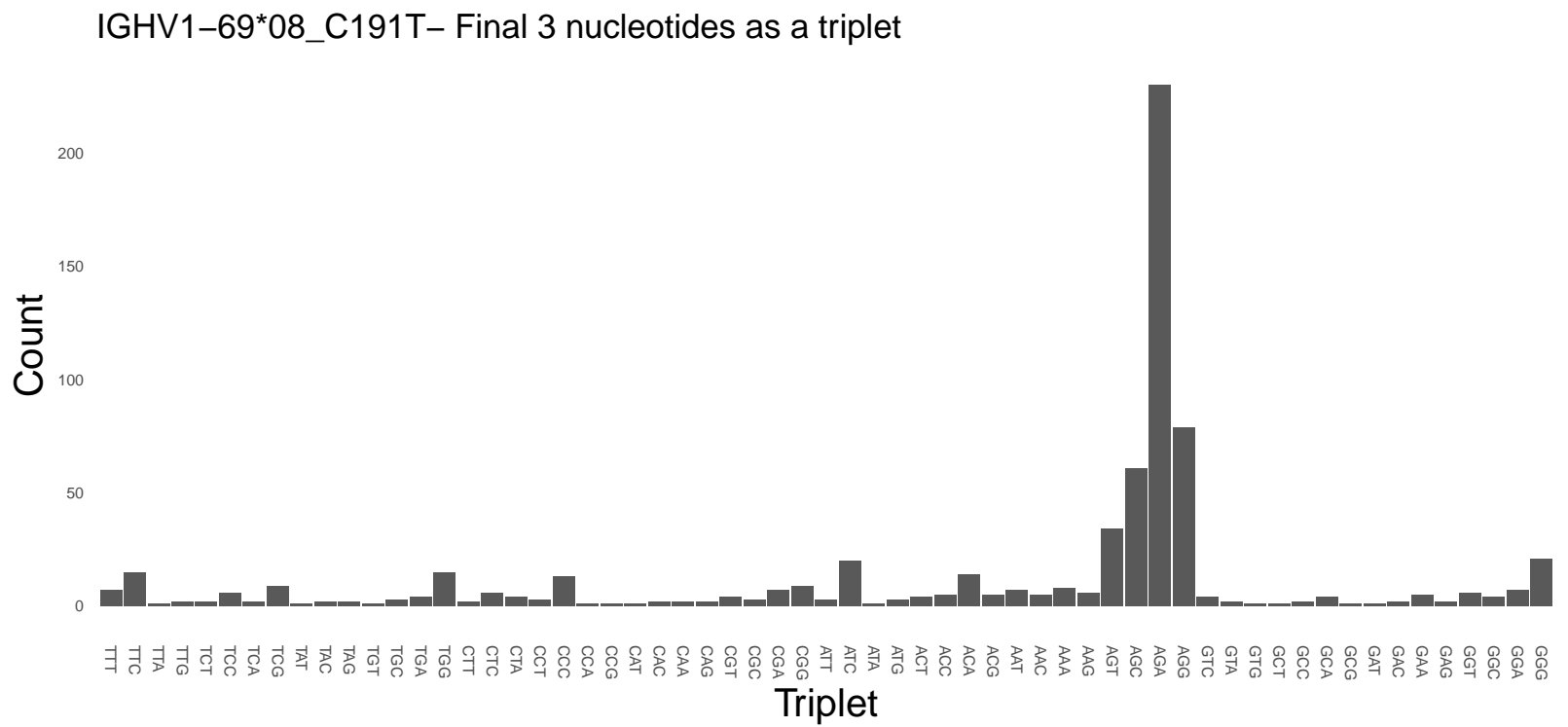
Gene IGHV1-69\*08\_C191T



Gene IGHV1-69\*08\_C191T

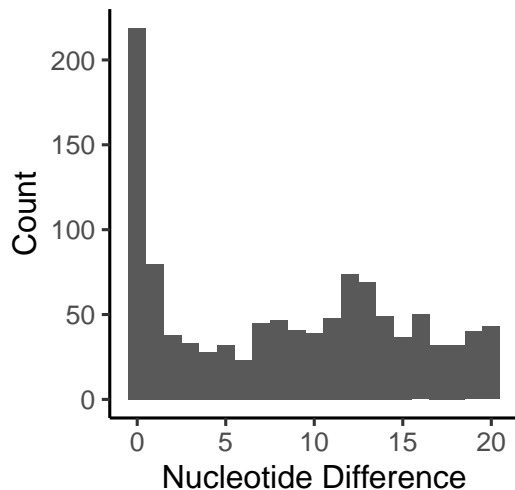


IGHV1-69\*08\_C191T- Final 3 nucleotides as a triplet



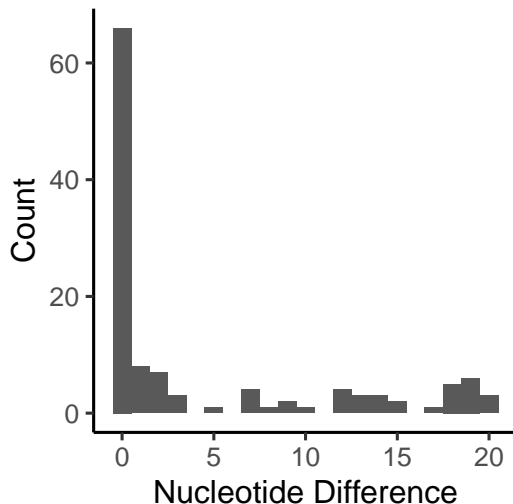
### IGHV1-2\*02

1458 sequences assigned  
219 (15%) exact matches, in which:  
211 unique CDR3  
6 unique J



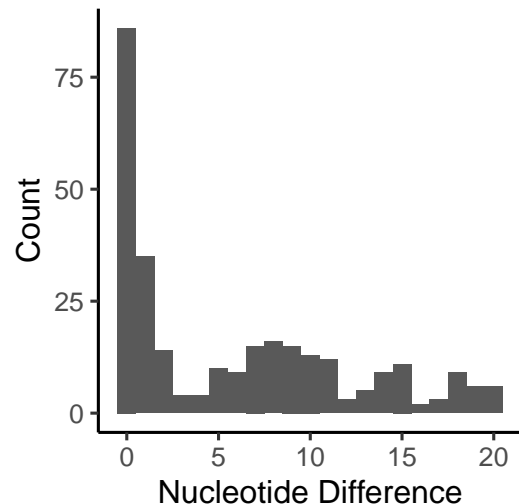
### IGHV1-24\*01

154 sequences assigned  
66 (42.9%) exact matches, in which:  
65 unique CDR3  
6 unique J



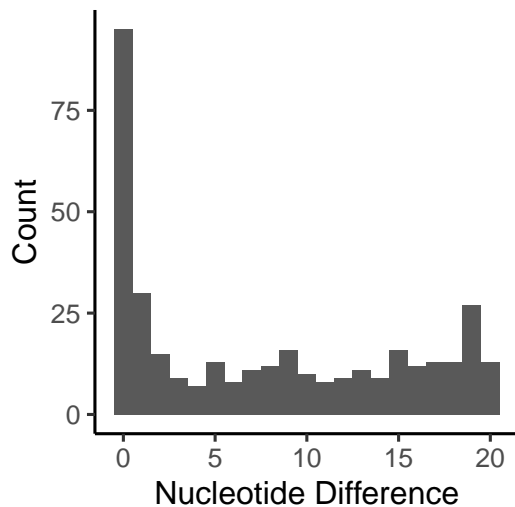
### IGHV1-46\*03

392 sequences assigned  
86 (21.9%) exact matches, in which:  
83 unique CDR3  
5 unique J



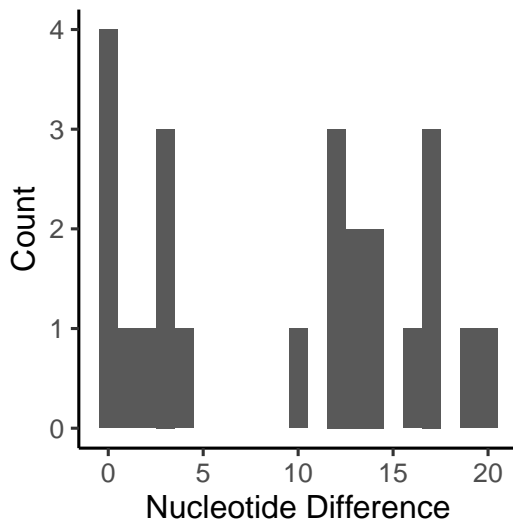
### IGHV1-3\*01

575 sequences assigned  
95 (16.5%) exact matches, in which:  
93 unique CDR3  
6 unique J



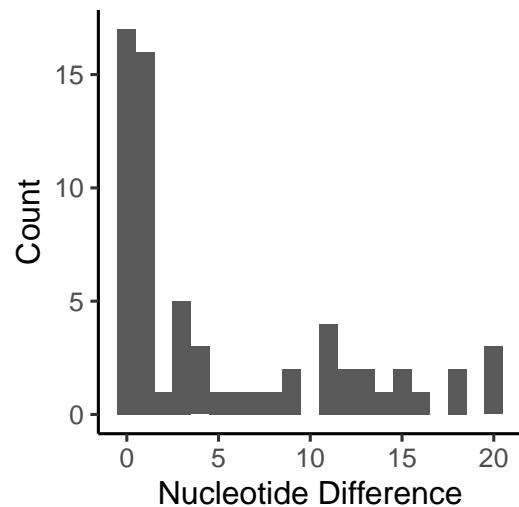
### IGHV1-45\*02

46 sequences assigned  
4 (8.7%) exact matches, in which:  
4 unique CDR3  
3 unique J



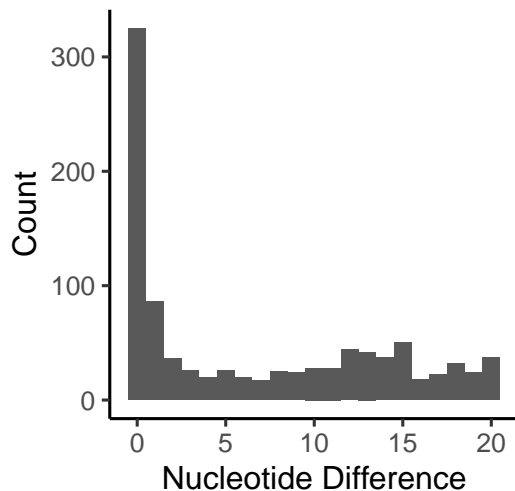
### IGHV1-58\*01

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



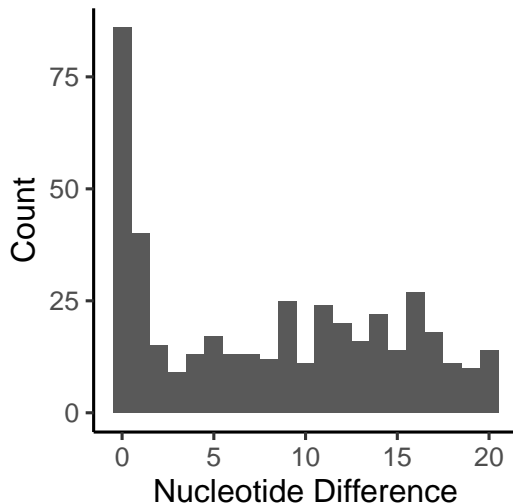
### IGHV1-18\*04

1480 sequences assigned  
325 (22%) exact matches, in which:  
315 unique CDR3  
6 unique J



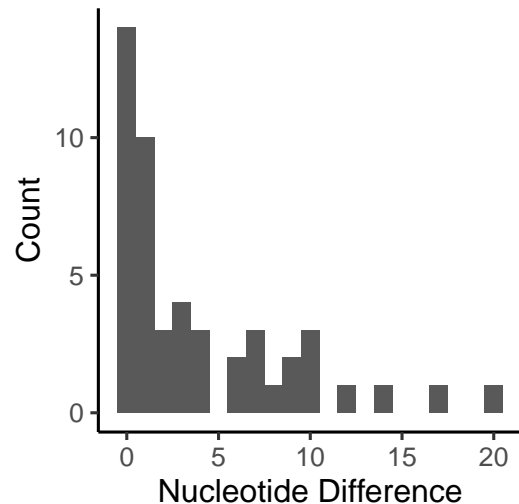
### IGHV1-46\*01

619 sequences assigned  
86 (13.9%) exact matches, in which:  
85 unique CDR3  
4 unique J



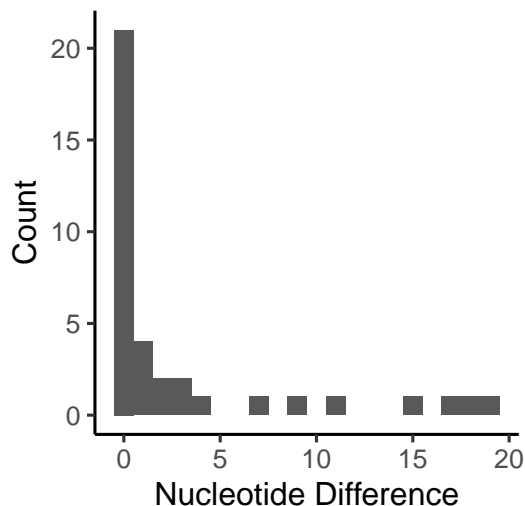
### IGHV1-58\*02

52 sequences assigned  
14 (26.9%) exact matches, in which:  
14 unique CDR3  
3 unique J



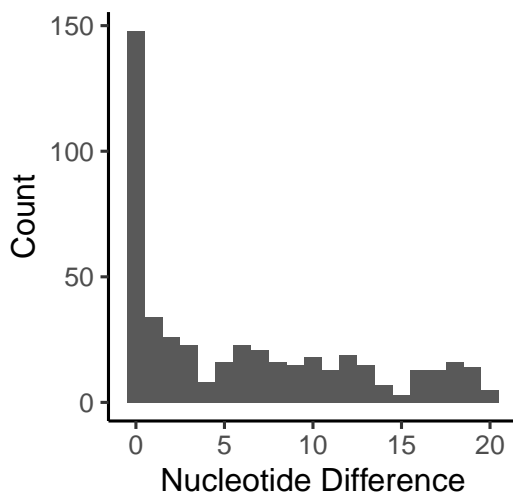
## IGHV1-69-2\*01

72 sequences assigned  
21 (29.2%) exact matches, in which:  
21 unique CDR3  
5 unique J



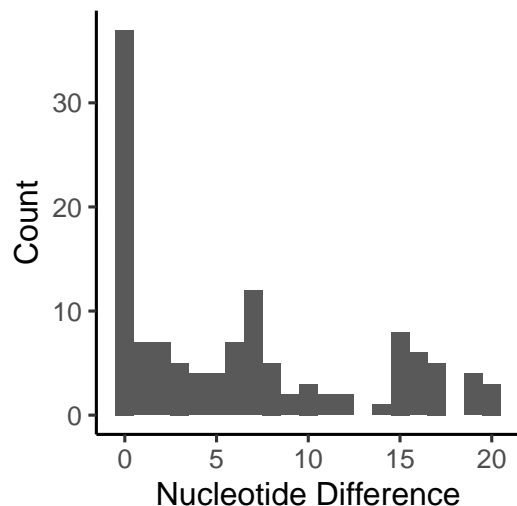
## IGHV2-5\*01

533 sequences assigned  
148 (27.8%) exact matches, in which:  
143 unique CDR3  
6 unique J



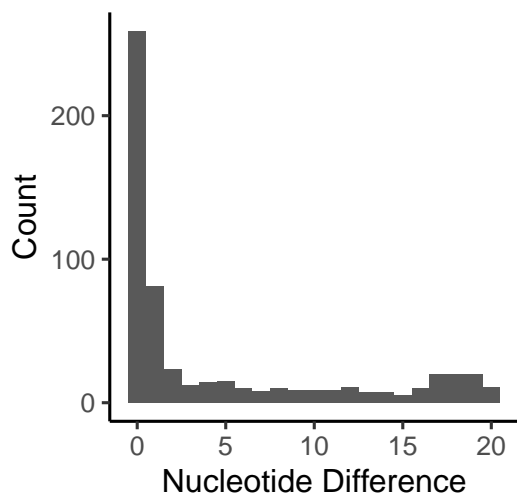
## IGHV2-70\*01

172 sequences assigned  
37 (21.5%) exact matches, in which:  
37 unique CDR3  
6 unique J



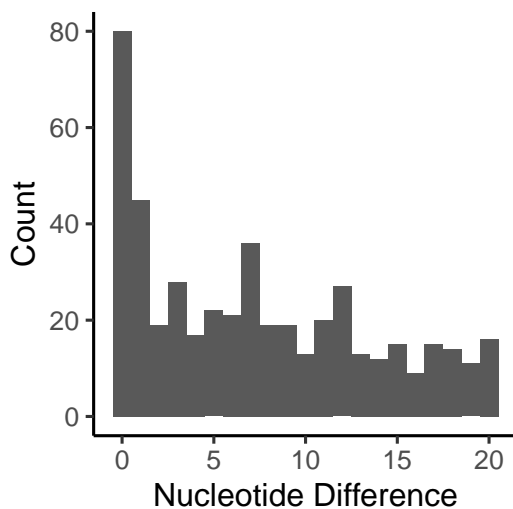
## IGHV1-69\*06

740 sequences assigned  
259 (35%) exact matches, in which:  
252 unique CDR3  
5 unique J



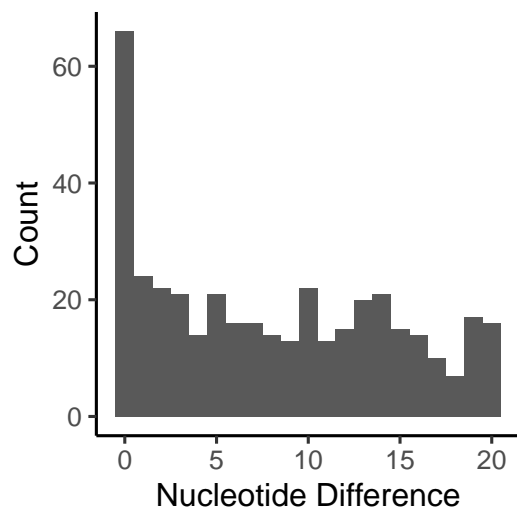
## IGHV2-5\*02

555 sequences assigned  
80 (14.4%) exact matches, in which:  
77 unique CDR3  
6 unique J



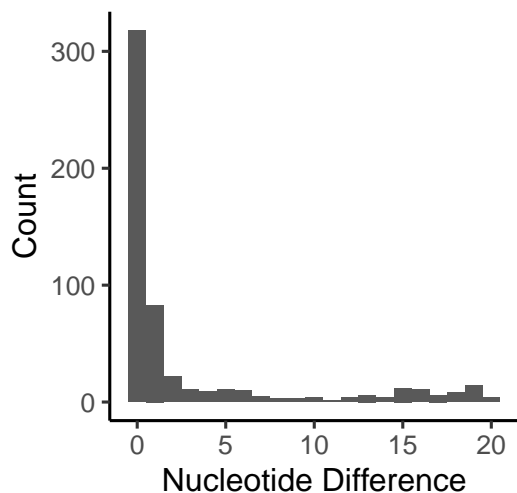
## IGHV2-70\*15

479 sequences assigned  
66 (13.8%) exact matches, in which:  
66 unique CDR3  
6 unique J



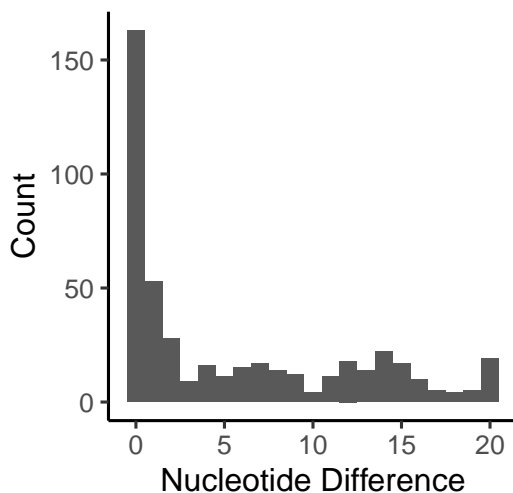
## IGHV1-69\*08\_C191T

680 sequences assigned  
318 (46.8%) exact matches, in which:  
308 unique CDR3  
6 unique J



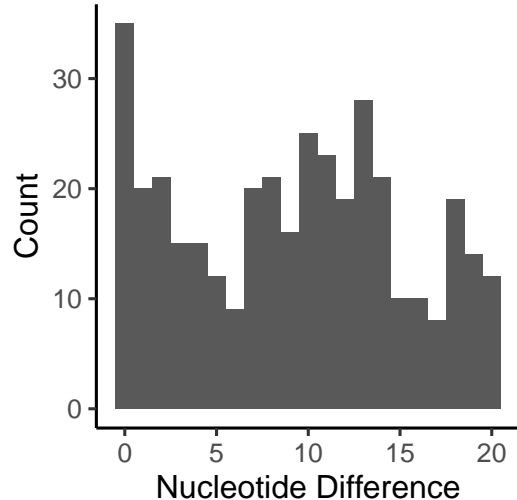
## IGHV2-26\*01

515 sequences assigned  
163 (31.7%) exact matches, in which:  
160 unique CDR3  
5 unique J



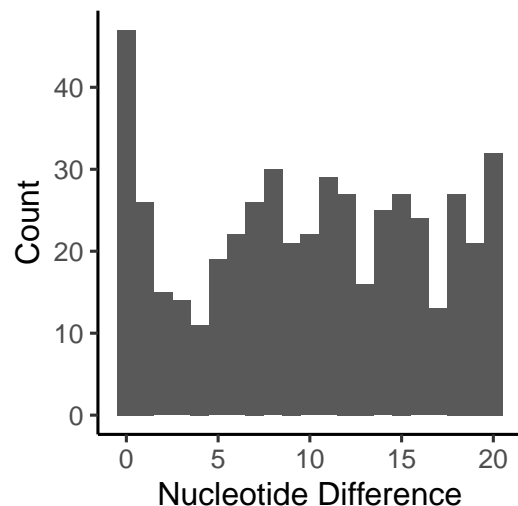
## IGHV3-7\*01

491 sequences assigned  
35 (7.1%) exact matches, in which:  
34 unique CDR3  
6 unique J



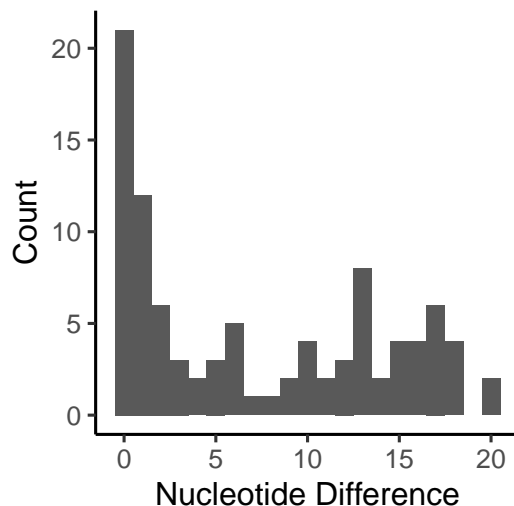
### IGHV3-7\*03

782 sequences assigned  
47 (6%) exact matches, in which:  
46 unique CDR3  
5 unique J



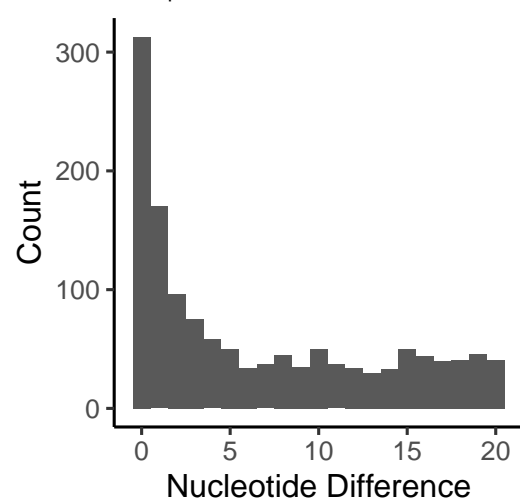
### IGHV3-13\*04

110 sequences assigned  
21 (19.1%) exact matches, in which:  
21 unique CDR3  
5 unique J



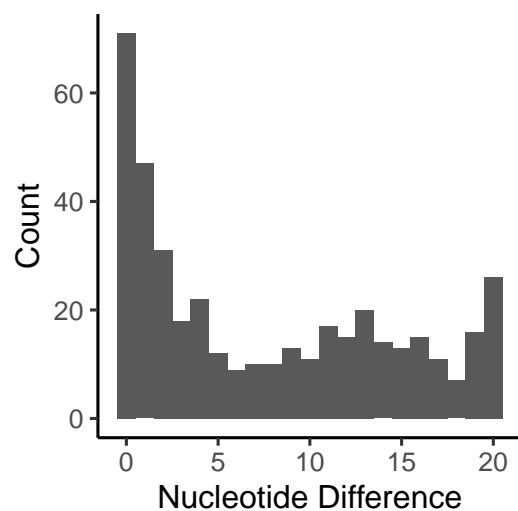
### IGHV3-21\*01

1865 sequences assigned  
313 (16.8%) exact matches, in which:  
298 unique CDR3  
6 unique J



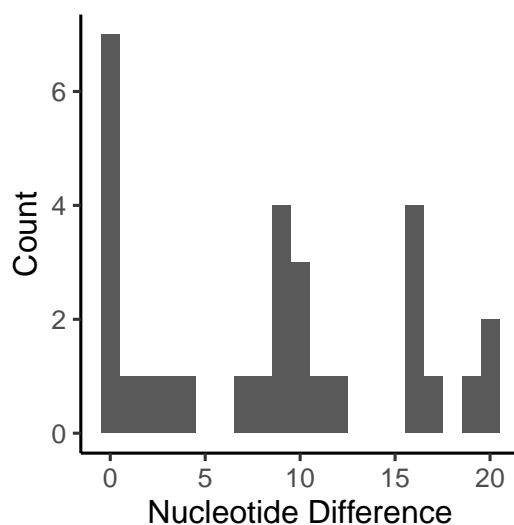
### IGHV3-11\*05

517 sequences assigned  
71 (13.7%) exact matches, in which:  
62 unique CDR3  
5 unique J



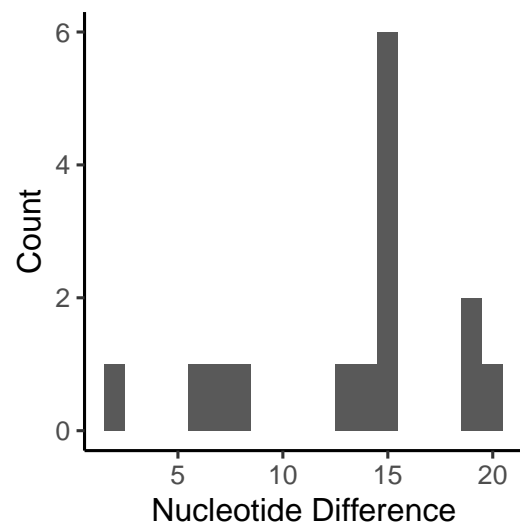
### IGHV3-13\*05

56 sequences assigned  
7 (12.5%) exact matches, in which:  
7 unique CDR3  
2 unique J



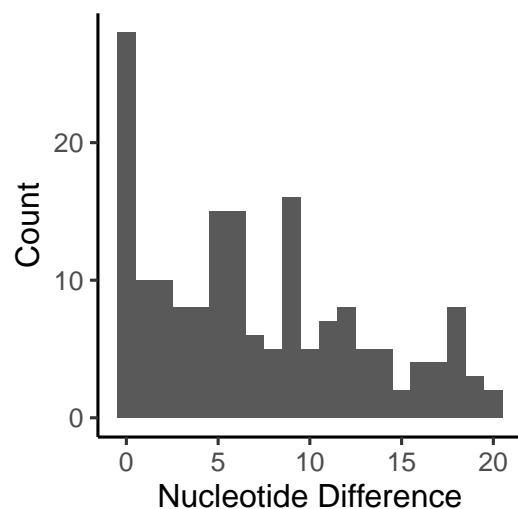
### IGHV3-30-3\*03

35 sequences assigned  
No exact matches.



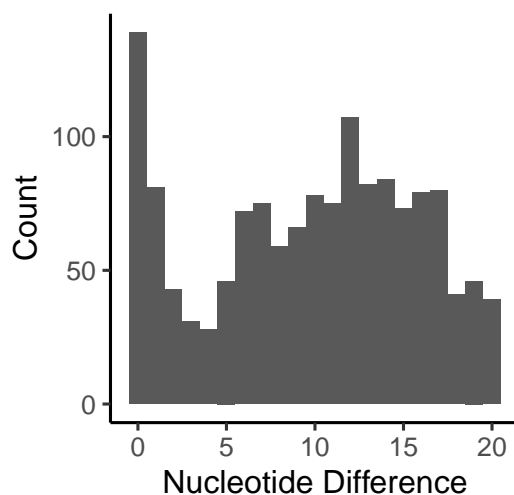
### IGHV3-11\*06

287 sequences assigned  
28 (9.8%) exact matches, in which:  
28 unique CDR3  
4 unique J



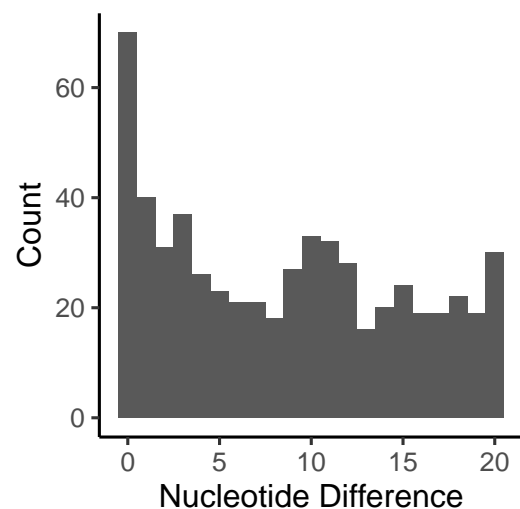
### IGHV3-15\*01

1724 sequences assigned  
139 (8.1%) exact matches, in which:  
135 unique CDR3  
6 unique J



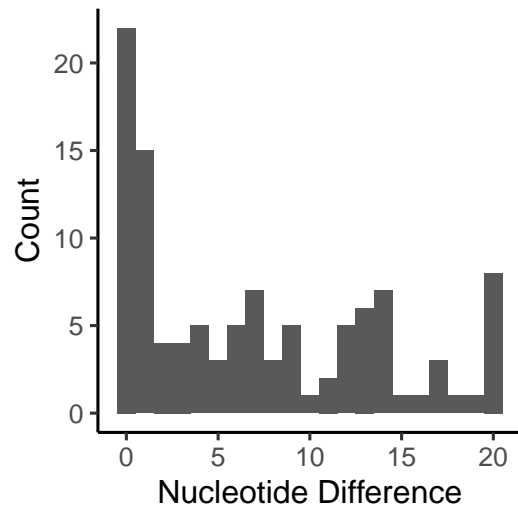
### IGHV3-33\*01

768 sequences assigned  
70 (9.1%) exact matches, in which:  
70 unique CDR3  
6 unique J



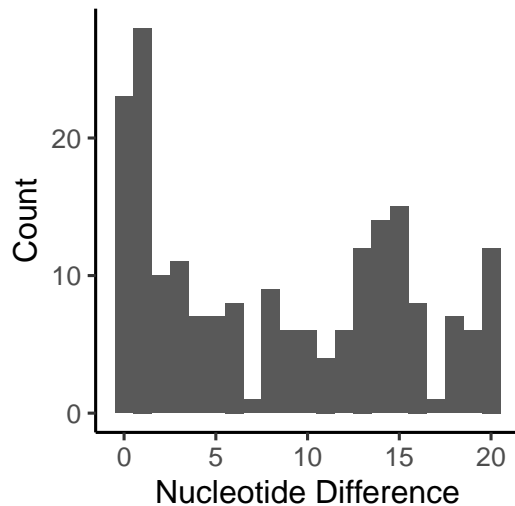
### IGHV3-43\*01

201 sequences assigned  
22 (10.9%) exact matches, in which:  
22 unique CDR3  
5 unique J



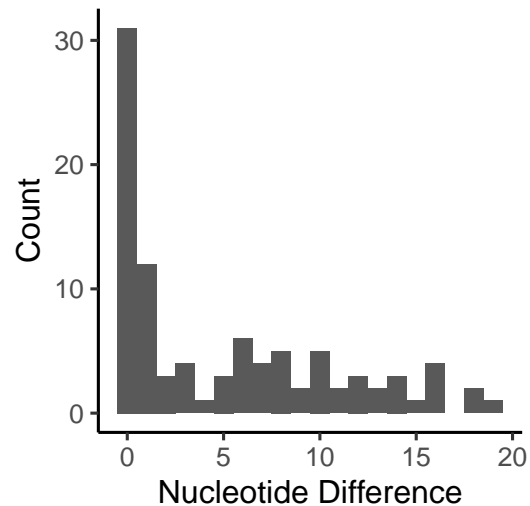
### IGHV3-49\*03

256 sequences assigned  
23 (9%) exact matches, in which:  
23 unique CDR3  
3 unique J



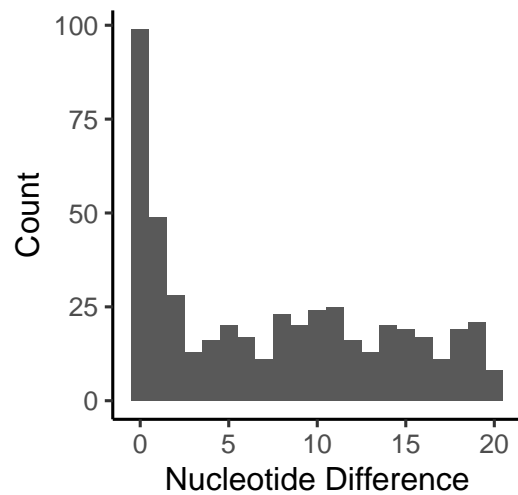
### IGHV3-53\*04

132 sequences assigned  
31 (23.5%) exact matches, in which:  
31 unique CDR3  
5 unique J



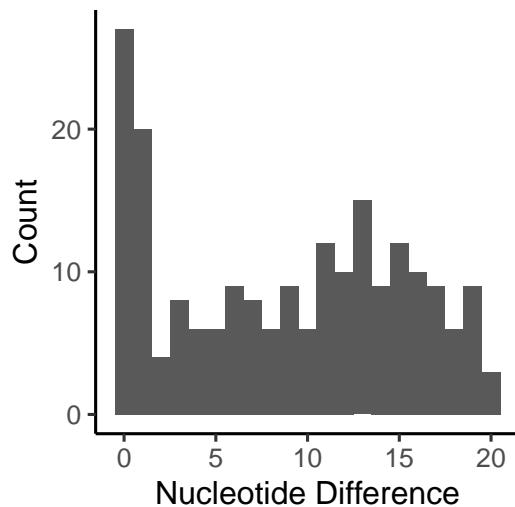
### IGHV3-48\*01

611 sequences assigned  
99 (16.2%) exact matches, in which:  
96 unique CDR3  
5 unique J



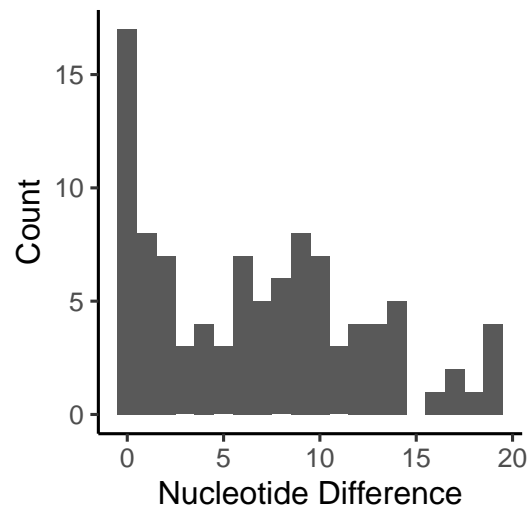
### IGHV3-49\*04

299 sequences assigned  
27 (9%) exact matches, in which:  
27 unique CDR3  
4 unique J



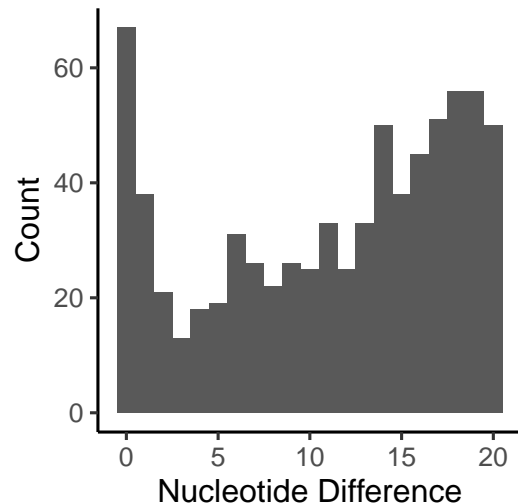
### IGHV3-64\*01

148 sequences assigned  
17 (11.5%) exact matches, in which:  
16 unique CDR3  
4 unique J



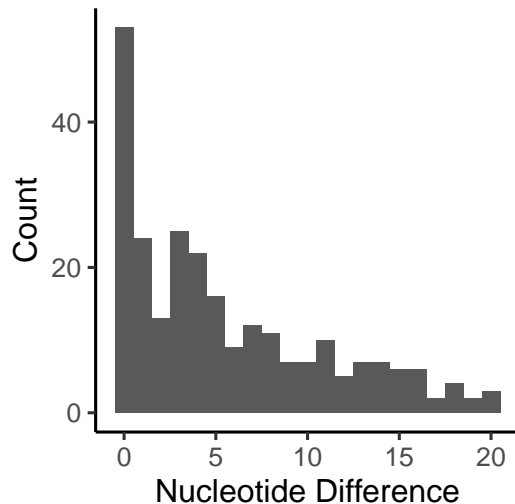
### IGHV3-48\*02

987 sequences assigned  
67 (6.8%) exact matches, in which:  
66 unique CDR3  
5 unique J



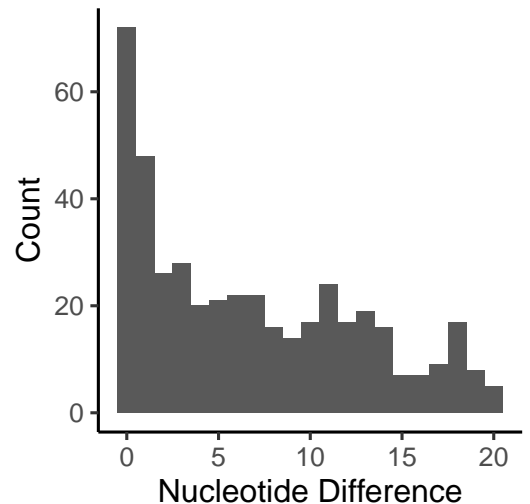
### IGHV3-53\*01

322 sequences assigned  
53 (16.5%) exact matches, in which:  
52 unique CDR3  
5 unique J



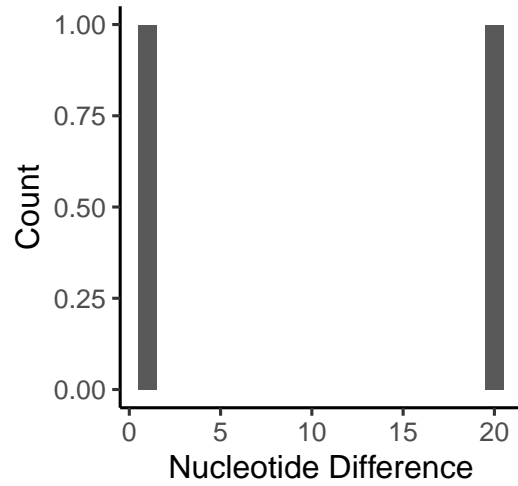
### IGHV3-66\*01

613 sequences assigned  
72 (11.7%) exact matches, in which:  
70 unique CDR3  
5 unique J



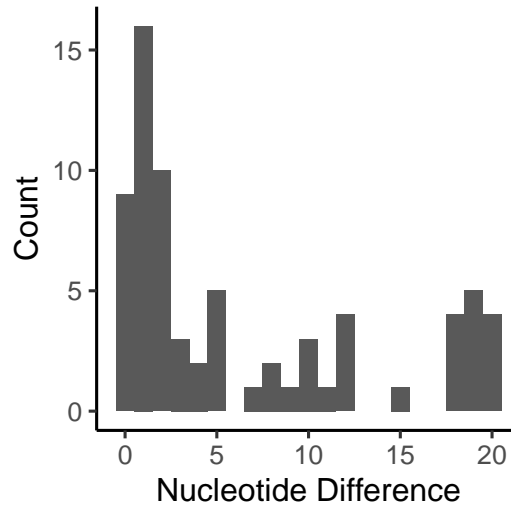
### IGHV3-69-1\*02

4 sequences assigned  
No exact matches.



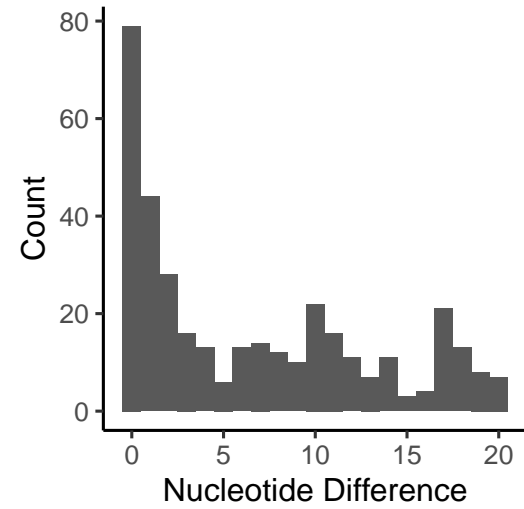
### IGHV3-73\*02

107 sequences assigned  
9 (8.4%) exact matches, in which:  
9 unique CDR3  
3 unique J



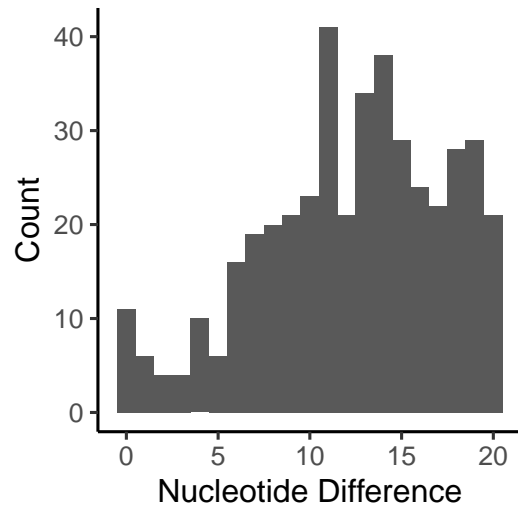
### IGHV3-64D\*09

455 sequences assigned  
79 (17.4%) exact matches, in which:  
74 unique CDR3  
6 unique J



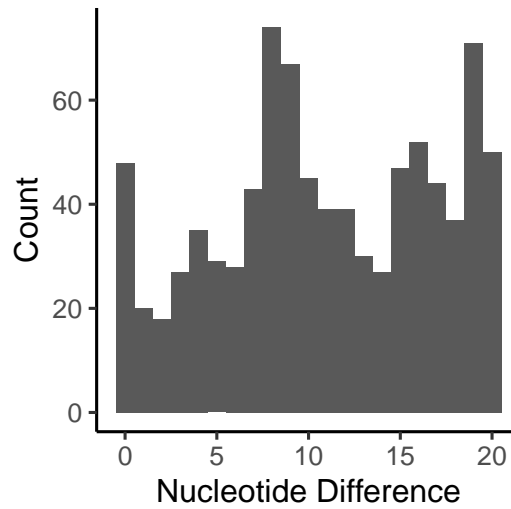
### IGHV3-72\*01

495 sequences assigned  
11 (2.2%) exact matches, in which:  
9 unique CDR3  
3 unique J



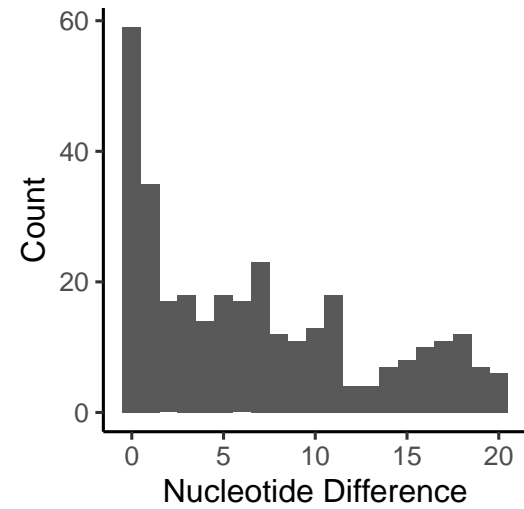
### IGHV3-74\*01

1245 sequences assigned  
48 (3.9%) exact matches, in which:  
46 unique CDR3  
6 unique J



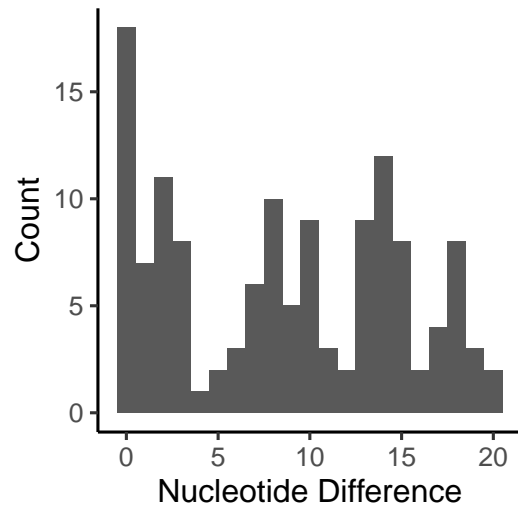
### IGHV4-4\*07

443 sequences assigned  
59 (13.3%) exact matches, in which:  
56 unique CDR3  
5 unique J



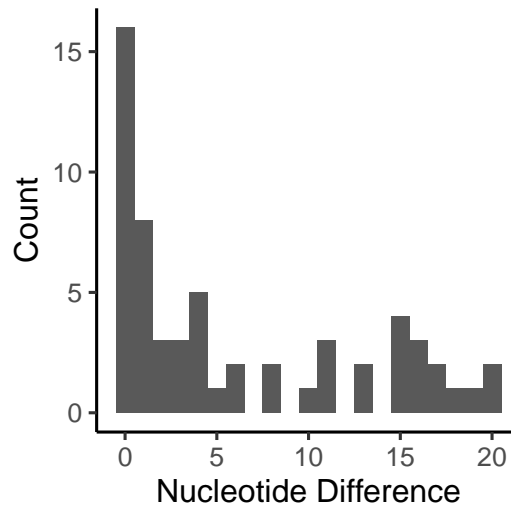
### IGHV3-73\*01

172 sequences assigned  
18 (10.5%) exact matches, in which:  
17 unique CDR3  
4 unique J



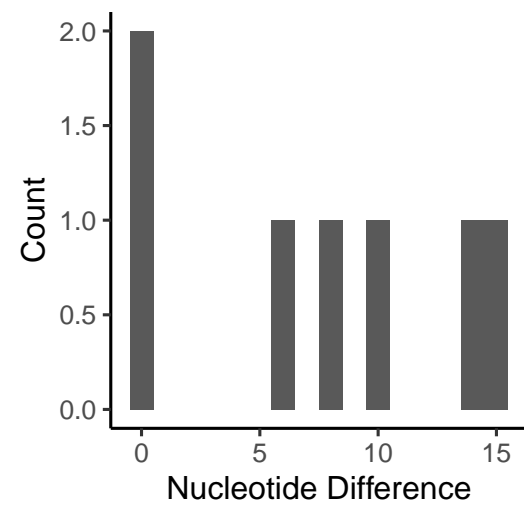
### IGHV3-43D\*03

78 sequences assigned  
16 (20.5%) exact matches, in which:  
16 unique CDR3  
5 unique J



### IGHV4-28\*01

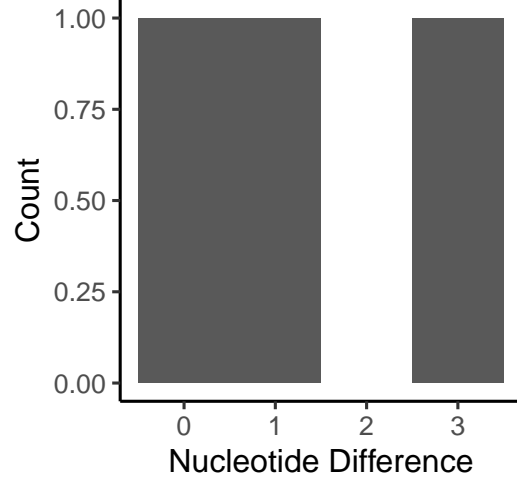
8 sequences assigned  
2 (25%) exact matches, in which:  
2 unique CDR3  
2 unique J





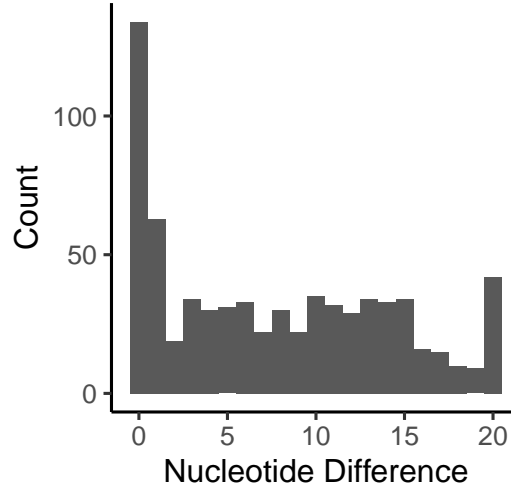
### IGHV4-28\*03

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



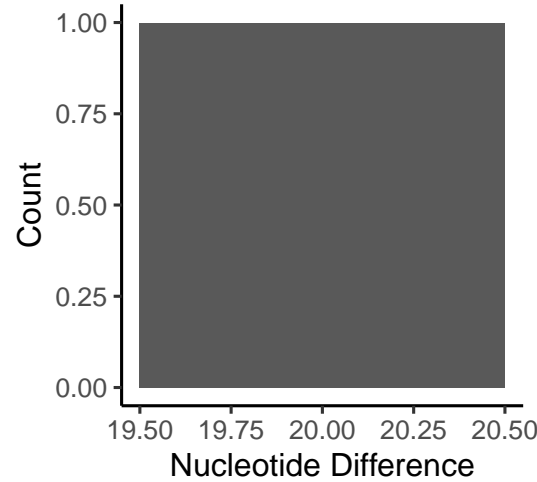
### IGHV4-38-2\*02

917 sequences assigned  
134 (14.6%) exact matches, in which:  
132 unique CDR3  
6 unique J



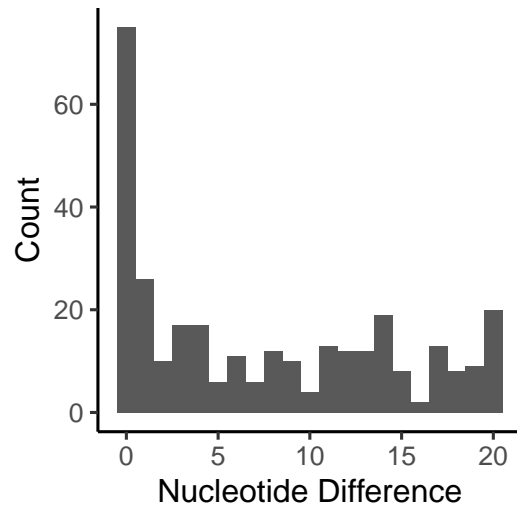
### IGHV4-55\*01

1 sequences assigned  
No exact matches.



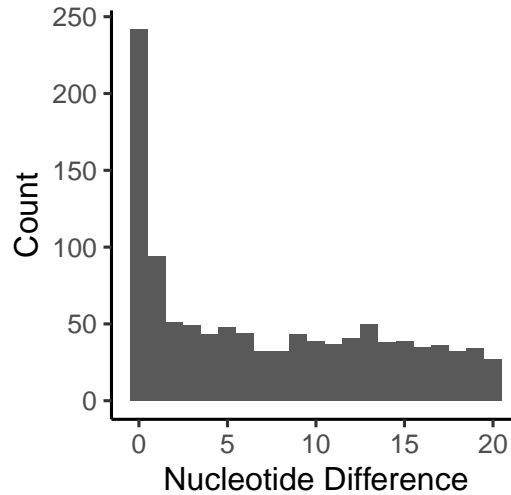
### IGHV4-31\*03

527 sequences assigned  
75 (14.2%) exact matches, in which:  
73 unique CDR3  
5 unique J



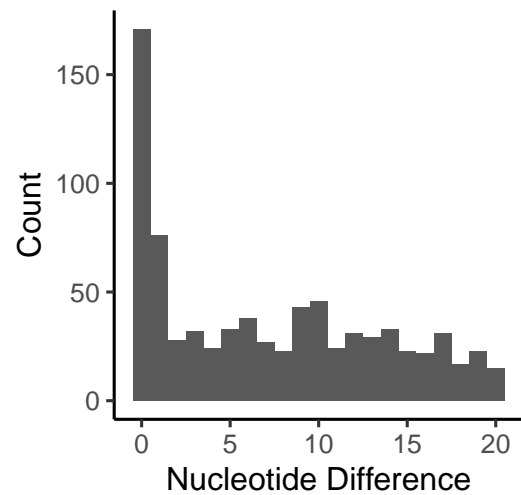
### IGHV4-39\*01

1507 sequences assigned  
242 (16.1%) exact matches, in which:  
239 unique CDR3  
6 unique J



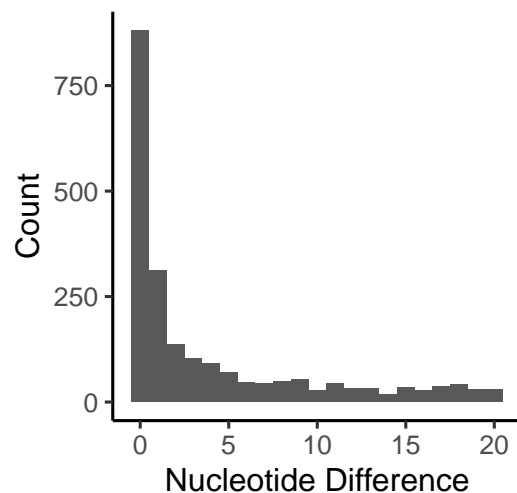
### IGHV4-59\*01

1144 sequences assigned  
171 (14.9%) exact matches, in which:  
170 unique CDR3  
6 unique J



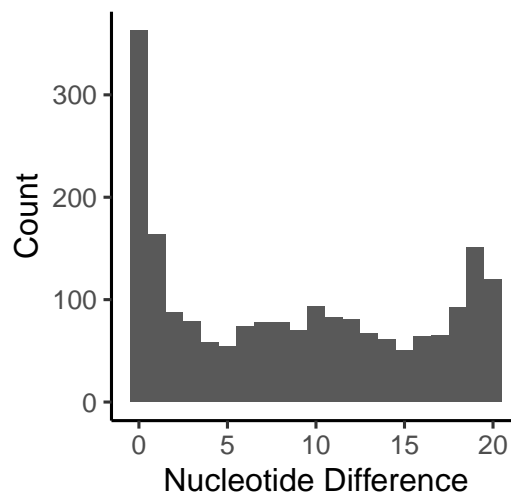
### IGHV4-34\*01

2576 sequences assigned  
881 (34.2%) exact matches, in which:  
829 unique CDR3  
6 unique J



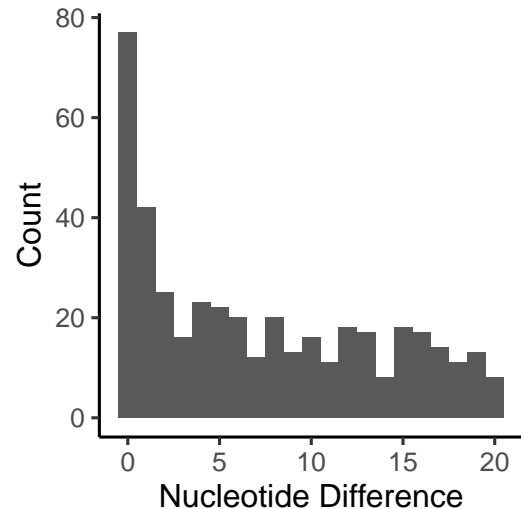
### IGHV4-39\*07

3170 sequences assigned  
363 (11.5%) exact matches, in which:  
354 unique CDR3  
6 unique J



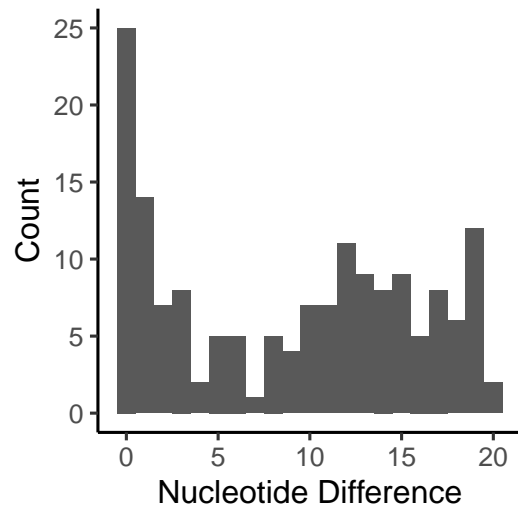
### IGHV4-59\*08

569 sequences assigned  
77 (13.5%) exact matches, in which:  
76 unique CDR3  
6 unique J



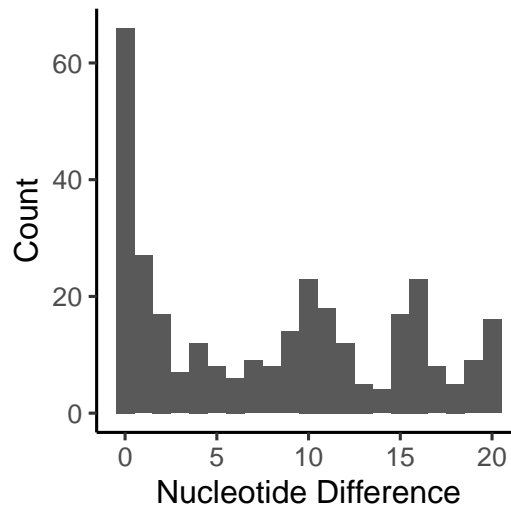
### IGHV4-61\*01

258 sequences assigned  
25 (9.7%) exact matches, in which:  
25 unique CDR3  
5 unique J



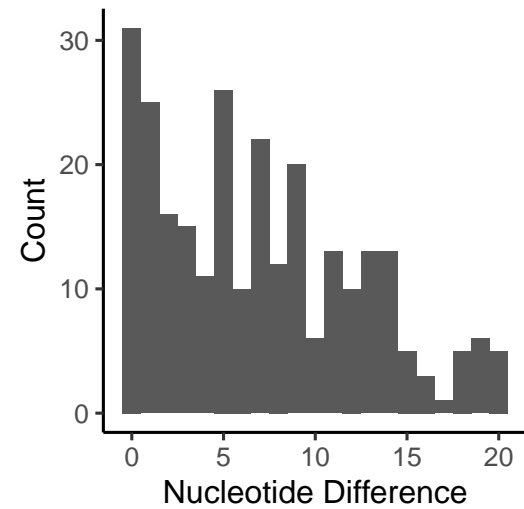
### IGHV5-10-1\*03

481 sequences assigned  
66 (13.7%) exact matches, in which:  
63 unique CDR3  
6 unique J



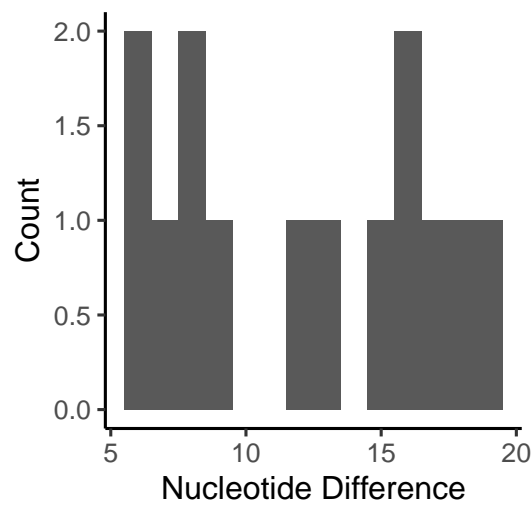
### IGHV6-1\*01

279 sequences assigned  
31 (11.1%) exact matches, in which:  
29 unique CDR3  
5 unique J



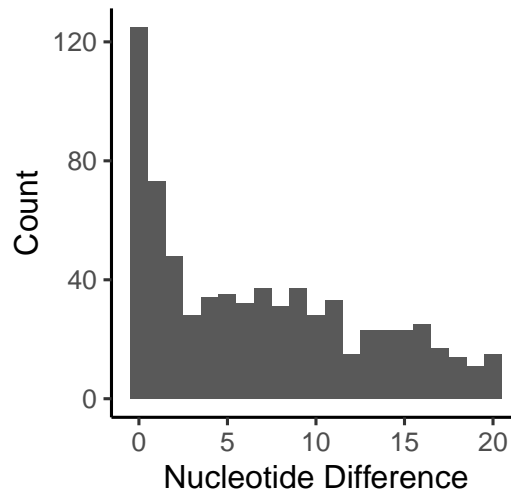
### IGHV4/OR15-8\*01

15 sequences assigned  
No exact matches.



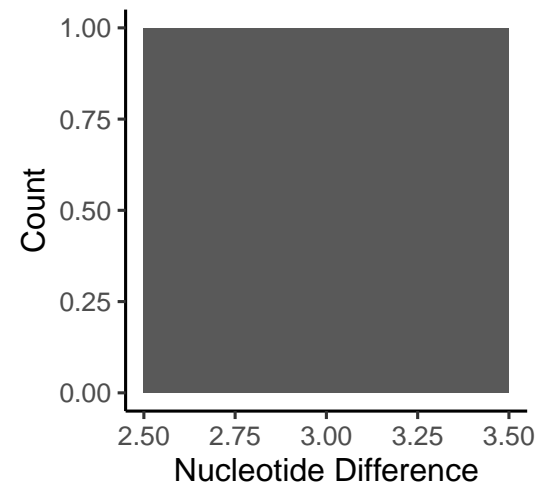
### IGHV5-51\*01

916 sequences assigned  
125 (13.6%) exact matches, in which:  
125 unique CDR3  
6 unique J



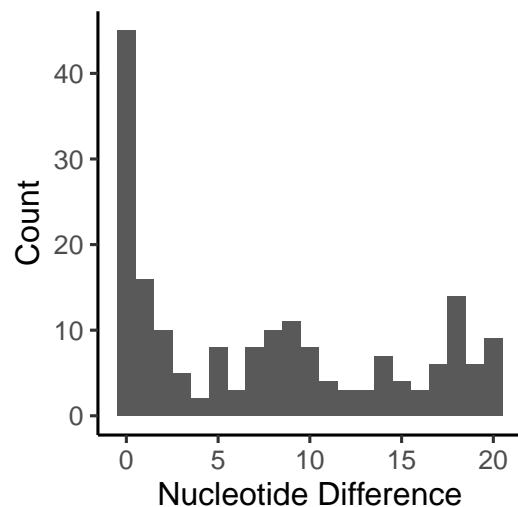
### IGHV3/OR16-6\*02

1 sequences assigned  
No exact matches.



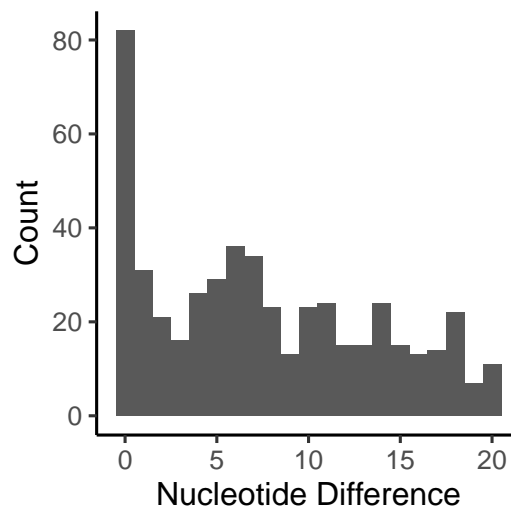
### IGHV5-10-1\*01

241 sequences assigned  
45 (18.7%) exact matches, in which:  
45 unique CDR3  
6 unique J



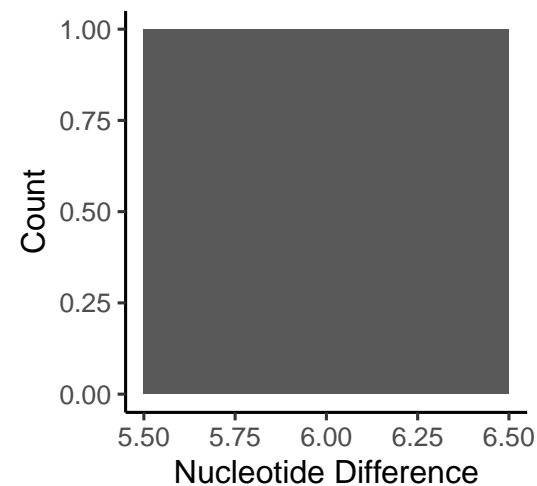
### IGHV5-51\*03

671 sequences assigned  
82 (12.2%) exact matches, in which:  
79 unique CDR3  
6 unique J



### IGHV3/OR16-9\*01

1 sequences assigned  
No exact matches.



IGHV1-69\*08\_C191T

