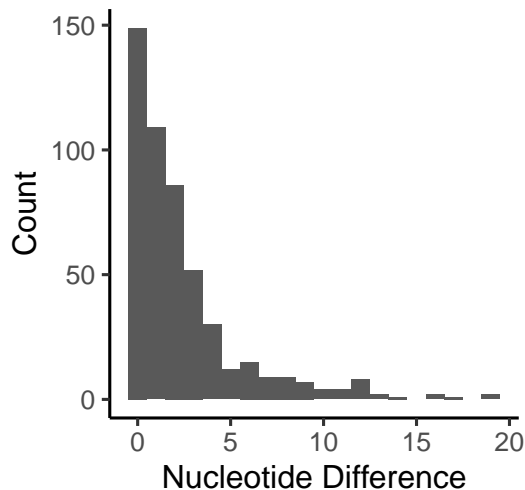


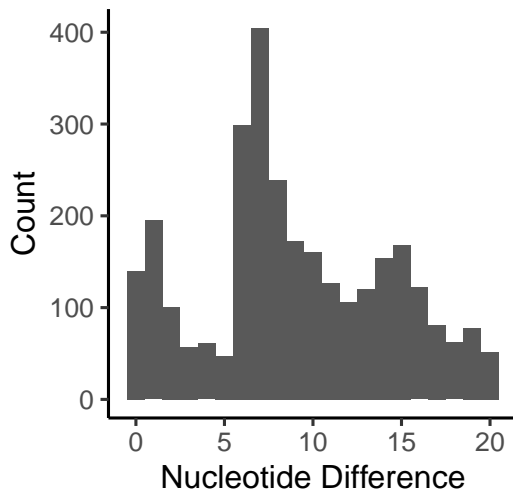
### IGHV1S10\*01\_G167T

505 sequences assigned  
149 (29.5%) exact matches, in which:  
144 unique CDR3  
6 unique J



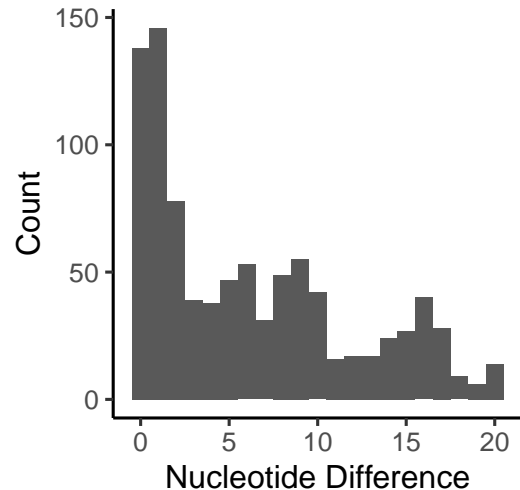
### IGHV2S1\*01\_A156G\_T16

3369 sequences assigned  
140 (4.2%) exact matches, in which:  
132 unique CDR3  
6 unique J



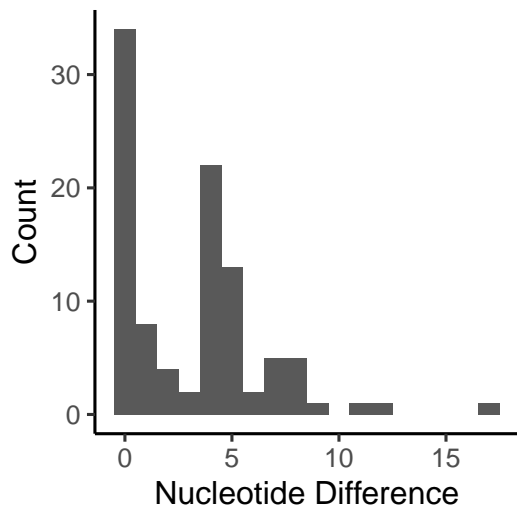
### IGHV2S2\*01\_C6G\_G115

946 sequences assigned  
138 (14.6%) exact matches, in which:  
132 unique CDR3  
6 unique J



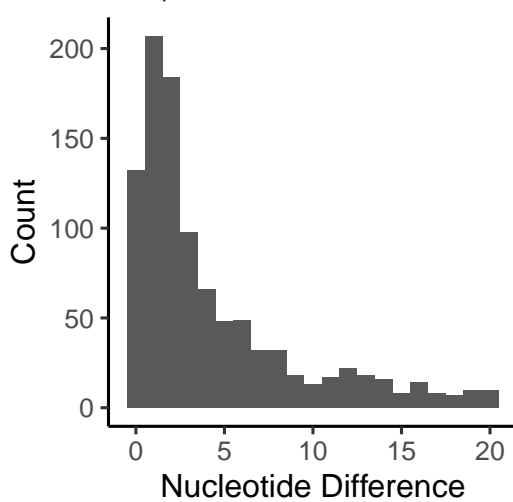
### IGHV1S10\*01\_G61C\_T63

177 sequences assigned  
34 (19.2%) exact matches, in which:  
32 unique CDR3  
5 unique J



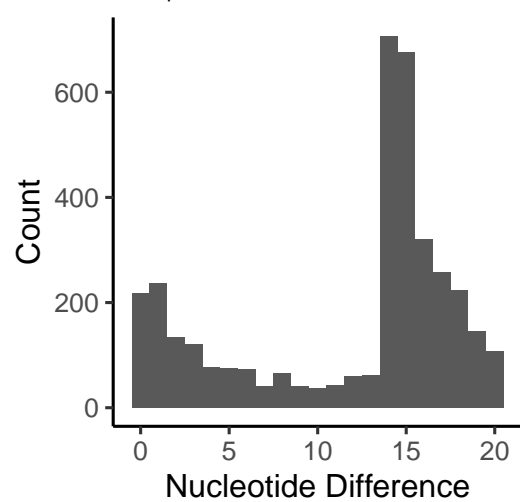
### IGHV2S1\*01\_G6C\_G36C

1096 sequences assigned  
132 (12%) exact matches, in which:  
126 unique CDR3  
6 unique J



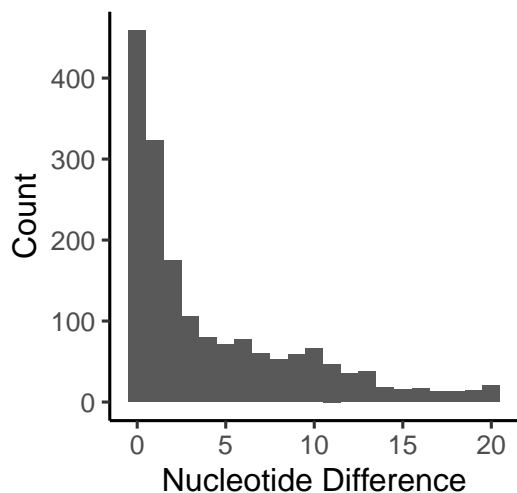
### IGHV3S11\*01\_T51A\_C78

5398 sequences assigned  
218 (4%) exact matches, in which:  
198 unique CDR3  
6 unique J



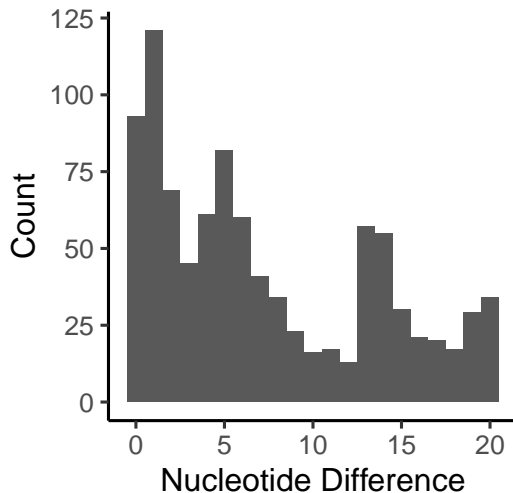
### IGHV1S9\*01\_G18A\_G49

1798 sequences assigned  
459 (25.5%) exact matches, in which:  
440 unique CDR3  
6 unique J



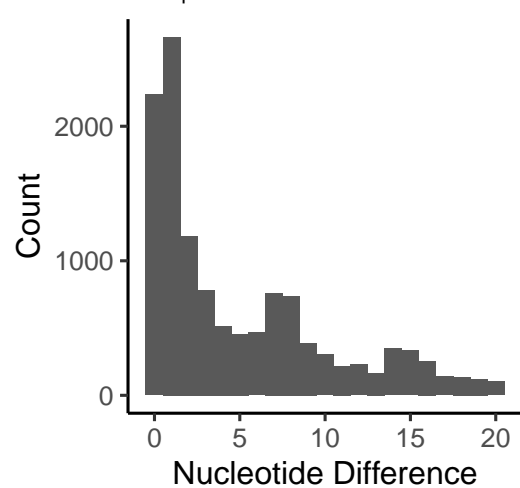
### IGHV2S2\*01\_C6G\_G115

1154 sequences assigned  
93 (8.1%) exact matches, in which:  
87 unique CDR3  
6 unique J



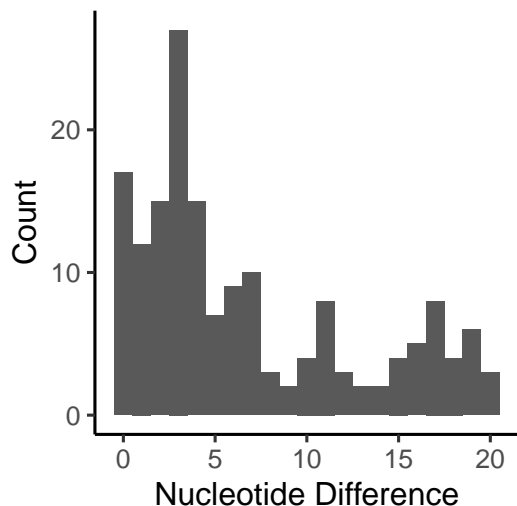
### IGHV3S16\*01\_G24A\_A1

13083 sequences assigned  
2236 (17.1%) exact matches, in which:  
2091 unique CDR3  
6 unique J



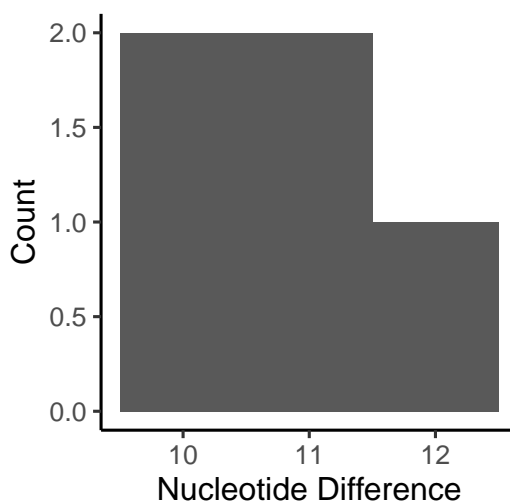
### IGHV3S17\*01\_G63C

226 sequences assigned  
17 (7.5%) exact matches, in which:  
17 unique CDR3  
4 unique J



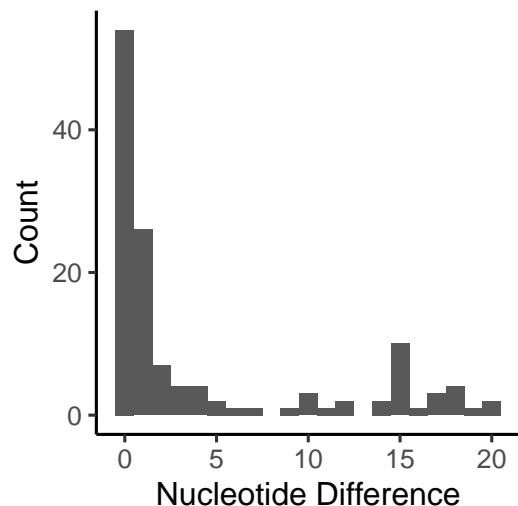
### IGHV3S21\*01

5 sequences assigned  
No exact matches.



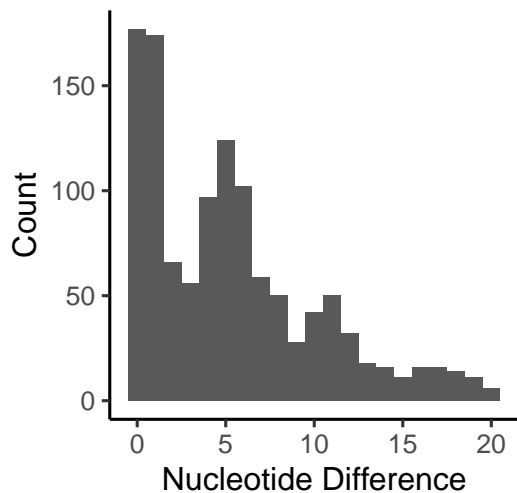
### IGHV3S26\*01\_C3G\_T114

214 sequences assigned  
54 (25.2%) exact matches, in which:  
53 unique CDR3  
6 unique J



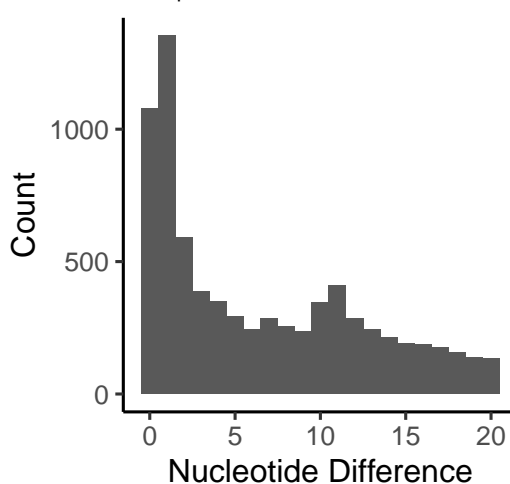
### IGHV3S18\*01\_T69C\_T78C

1474 sequences assigned  
177 (12%) exact matches, in which:  
165 unique CDR3  
6 unique J



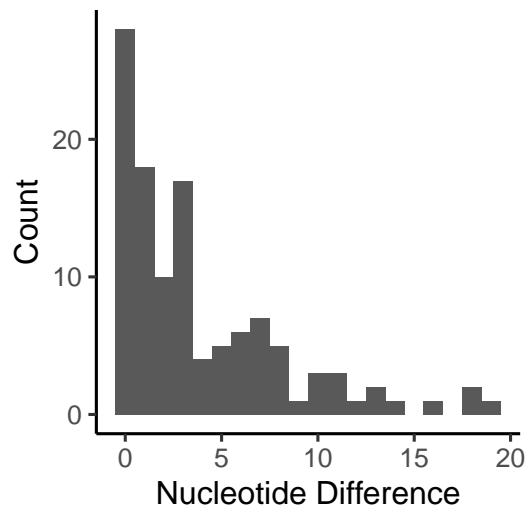
### IGHV3S25\*01\_T78C\_G1

8577 sequences assigned  
1079 (12.6%) exact matches, in which:  
1003 unique CDR3  
6 unique J



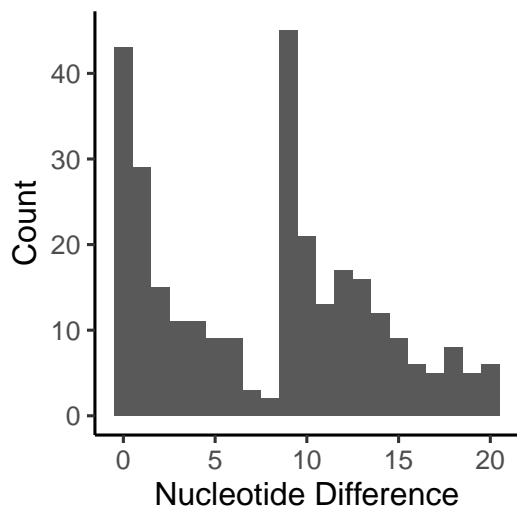
### IGHV3S30\*01\_A307T

2765 sequences assigned  
28 (1%) exact matches, in which:  
25 unique CDR3  
6 unique J



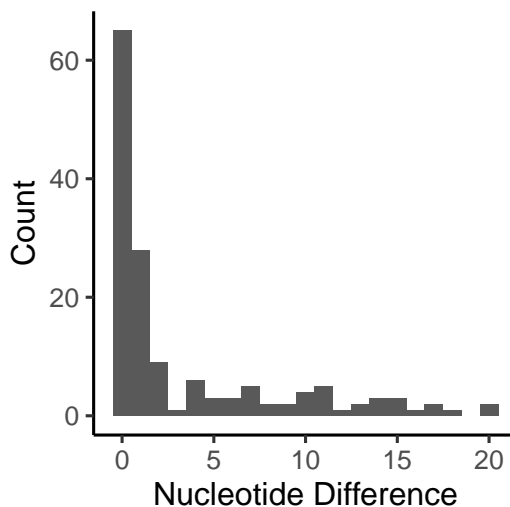
### IGHV3S20\*01\_C34T\_A27G

326 sequences assigned  
43 (13.2%) exact matches, in which:  
41 unique CDR3  
5 unique J



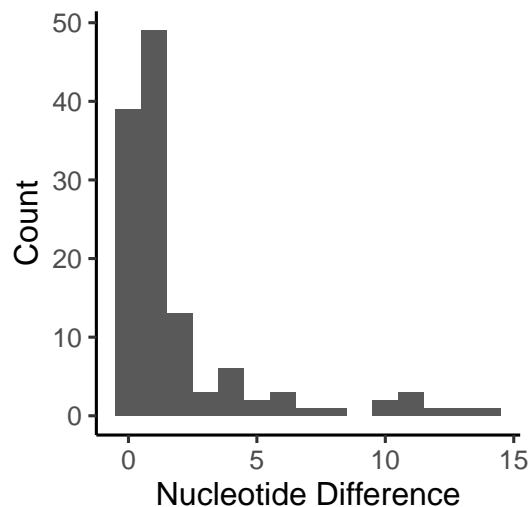
### IGHV3S26\*01\_C3A\_C54T

161 sequences assigned  
65 (40.4%) exact matches, in which:  
61 unique CDR3  
6 unique J



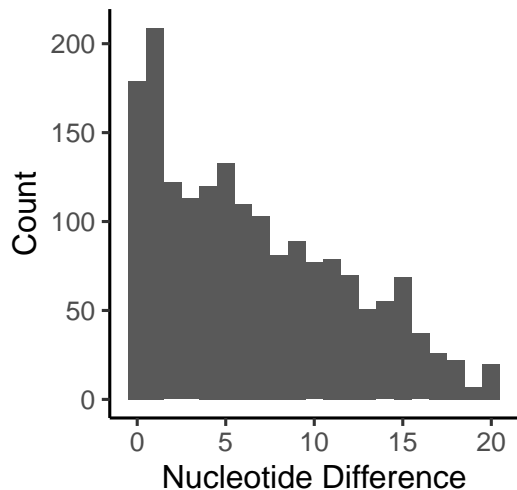
### IGHV3S30\*01\_C74A\_A307T

126 sequences assigned  
39 (31%) exact matches, in which:  
38 unique CDR3  
5 unique J



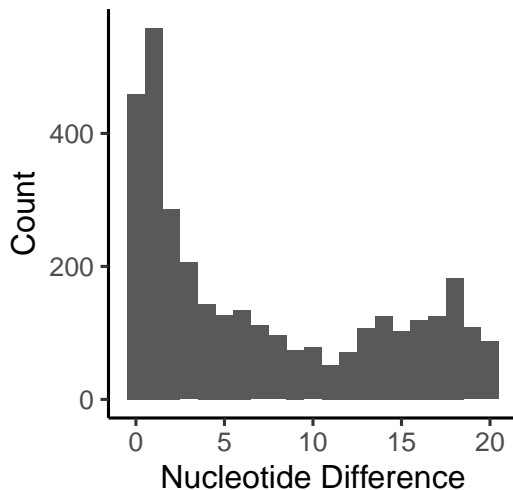
### IGHV3S40\*01\_A27C\_C3'

2003 sequences assigned  
179 (8.9%) exact matches, in which:  
172 unique CDR3  
6 unique J



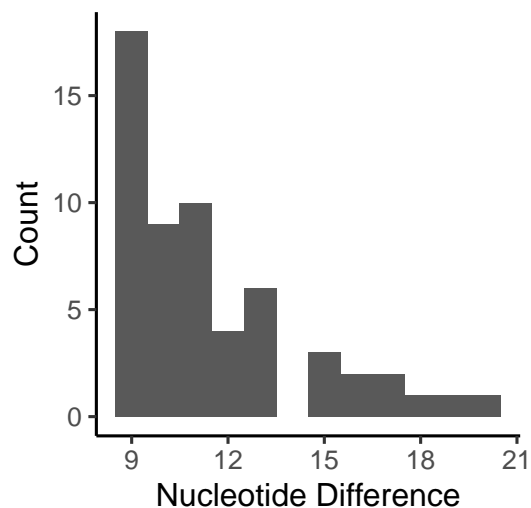
### IGHV3S45\*01\_G26C\_G1

3685 sequences assigned  
459 (12.5%) exact matches, in which:  
421 unique CDR3  
6 unique J



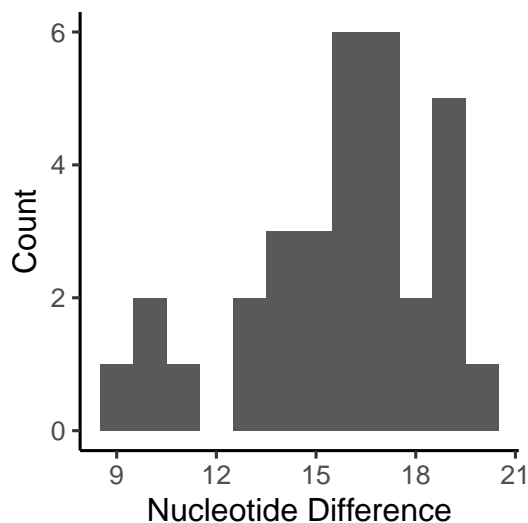
### IGHV3S7\*01

94 sequences assigned  
No exact matches.



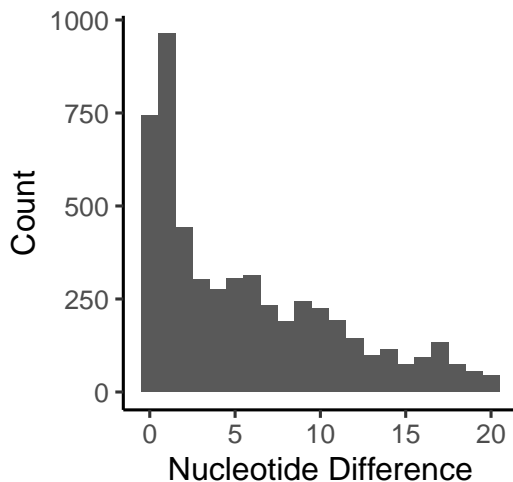
### IGHV3S42\*01

60 sequences assigned  
No exact matches.



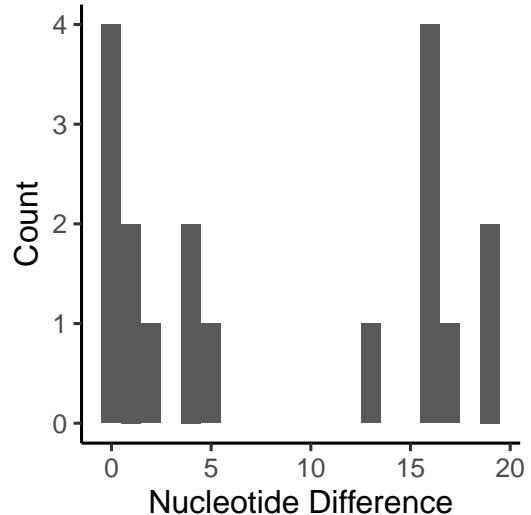
### IGHV3S45\*01\_G26C\_G'

5997 sequences assigned  
743 (12.4%) exact matches, in which:  
698 unique CDR3  
6 unique J



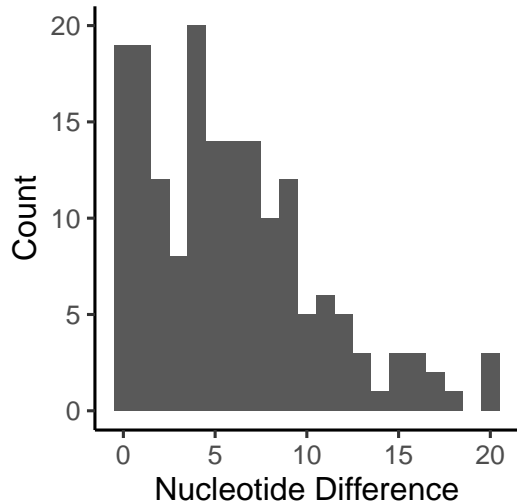
### IGHV4S10\*01\_C90T\_G109

62 sequences assigned  
4 (6.5%) exact matches, in which:  
4 unique CDR3  
2 unique J



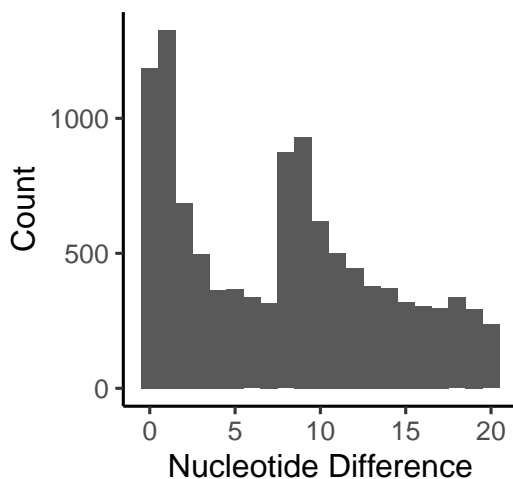
### IGHV3S43\*01\_A7C\_A15G

236 sequences assigned  
19 (8.1%) exact matches, in which:  
19 unique CDR3  
5 unique J



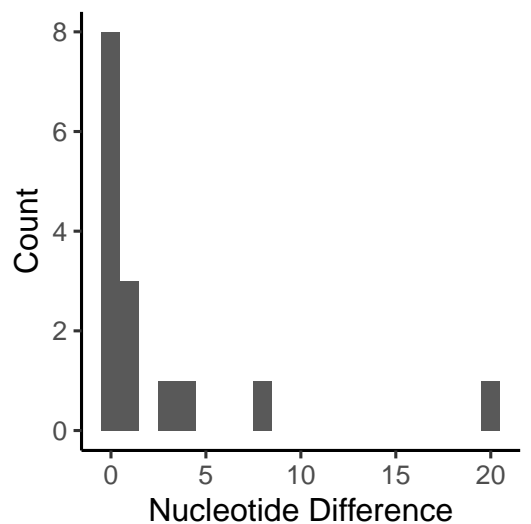
### IGHV3S5\*01\_G160A\_G'

12933 sequences assigned  
1187 (9.2%) exact matches, in which:  
1111 unique CDR3  
6 unique J



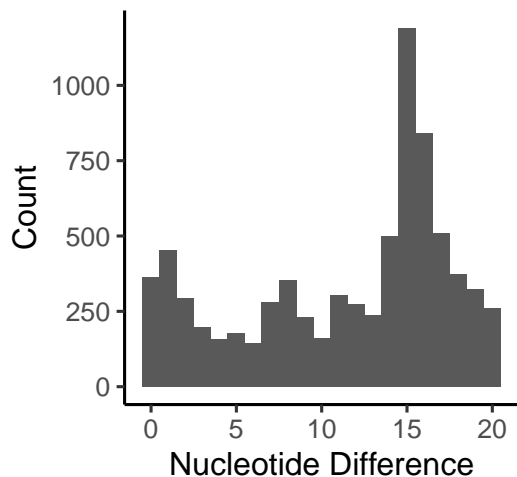
### IGHV4S10\*01\_C90T\_G109

27 sequences assigned  
8 (29.6%) exact matches, in which:  
8 unique CDR3  
3 unique J



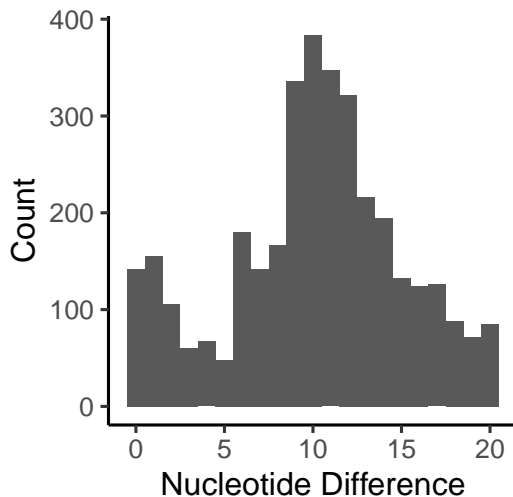
### IGHV4S11\*01\_T90C\_G1

9307 sequences assigned  
362 (3.9%) exact matches, in which:  
350 unique CDR3  
6 unique J



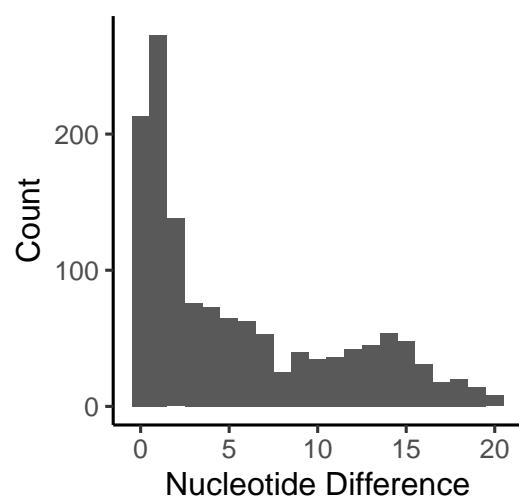
### IGHV4S14\*01\_G85T\_G8I

4015 sequences assigned  
142 (3.5%) exact matches, in which:  
138 unique CDR3  
6 unique J



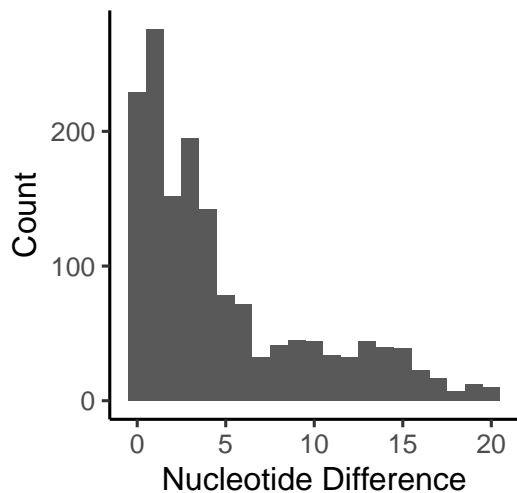
### IGHV4S19\*01\_A166T\_T1

1555 sequences assigned  
213 (13.7%) exact matches, in which:  
211 unique CDR3  
6 unique J



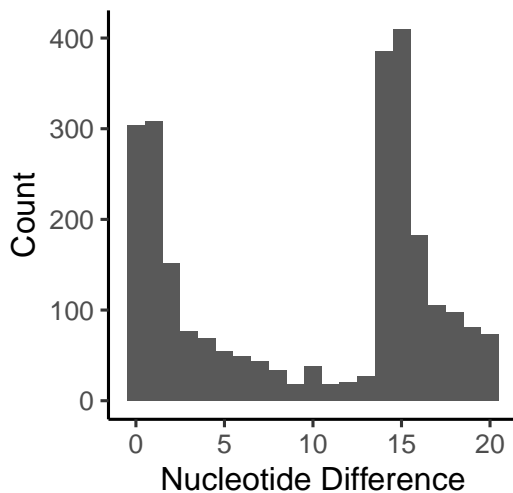
### IGHV4S12\*01\_A199T\_A2

1662 sequences assigned  
229 (13.8%) exact matches, in which:  
225 unique CDR3  
6 unique J



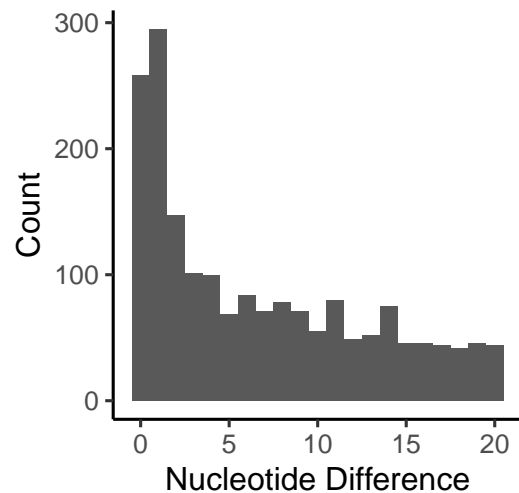
### IGHV4S17\*01\_A166T\_A1

2936 sequences assigned  
304 (10.4%) exact matches, in which:  
297 unique CDR3  
6 unique J



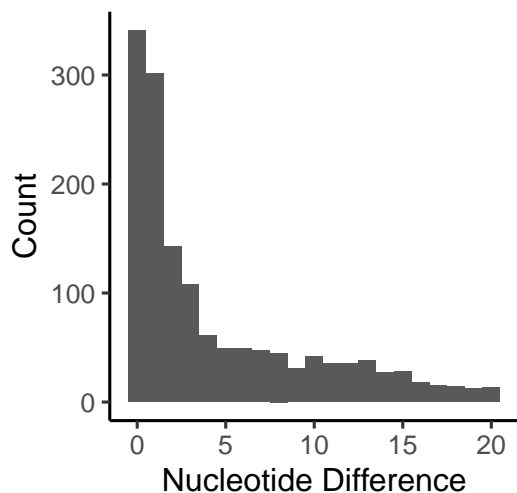
### IGHV4S19\*01\_C66A

2081 sequences assigned  
258 (12.4%) exact matches, in which:  
254 unique CDR3  
6 unique J



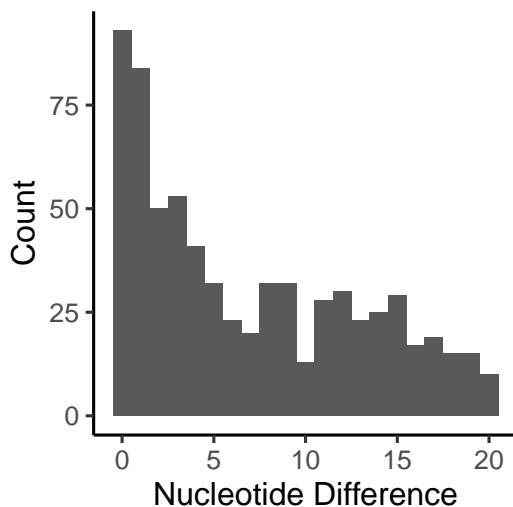
### IGHV4S12\*01\_G34C\_C9I

1503 sequences assigned  
341 (22.7%) exact matches, in which:  
334 unique CDR3  
6 unique J



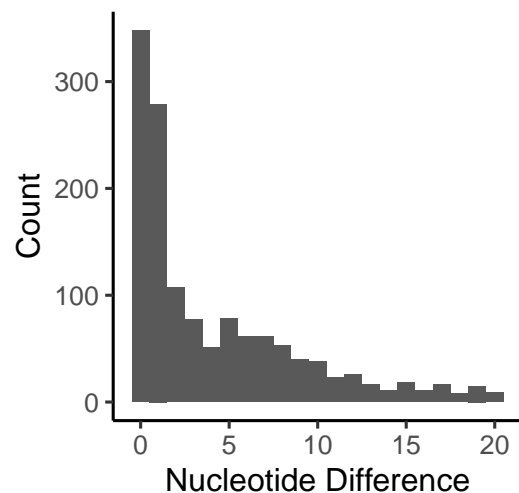
### IGHV4S18\*01\_C34G\_G48

757 sequences assigned  
93 (12.3%) exact matches, in which:  
92 unique CDR3  
5 unique J



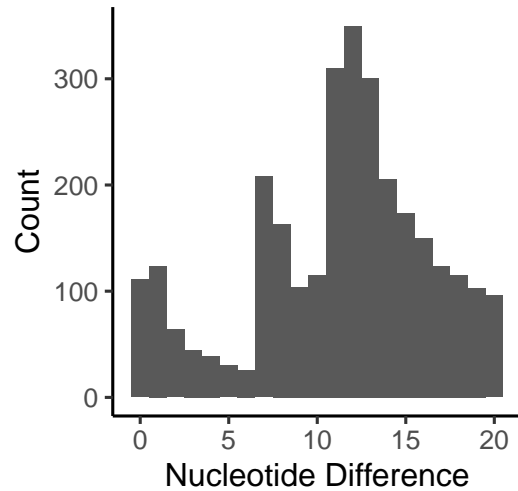
### IGHV4S6\*01\_A70G

1457 sequences assigned  
348 (23.9%) exact matches, in which:  
334 unique CDR3  
6 unique J



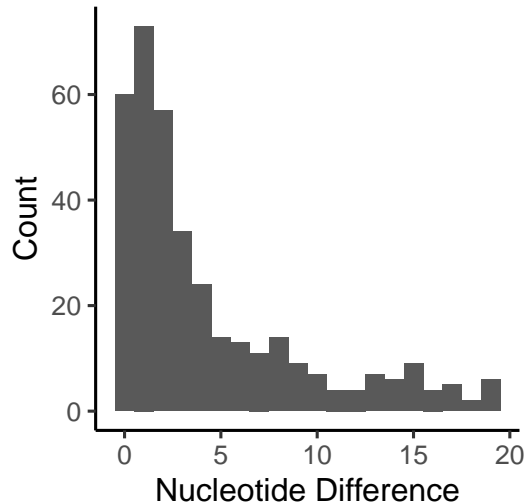
### IGHV4S7\*01\_A106G\_G1

3555 sequences assigned  
111 (3.1%) exact matches, in which:  
107 unique CDR3  
6 unique J



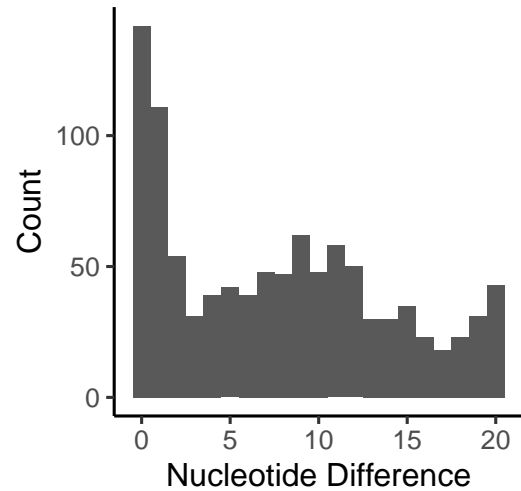
### IGHV3-7\*01\_A196G

382 sequences assigned  
60 (15.7%) exact matches, in which:  
58 unique CDR3  
6 unique J



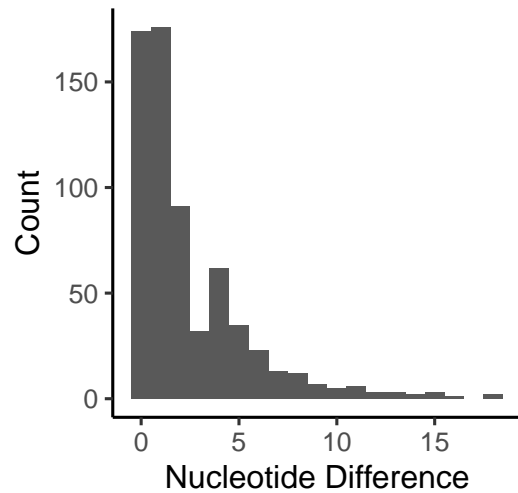
### IGHV3-14\*01\_G110A\_C

1141 sequences assigned  
142 (12.4%) exact matches, in which:  
129 unique CDR3  
6 unique J



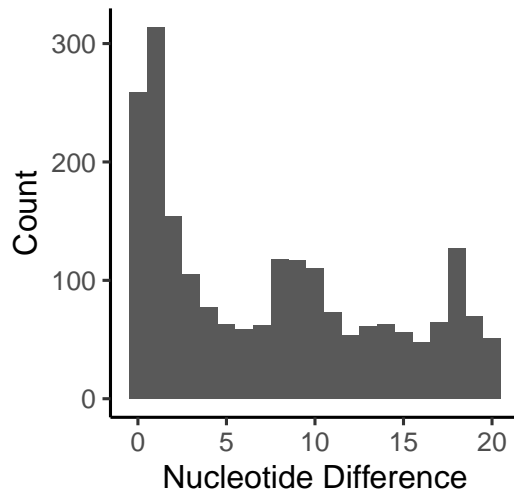
### IGHV5S1\*01\_G51A\_A84

652 sequences assigned  
174 (26.7%) exact matches, in which:  
150 unique CDR3  
6 unique J



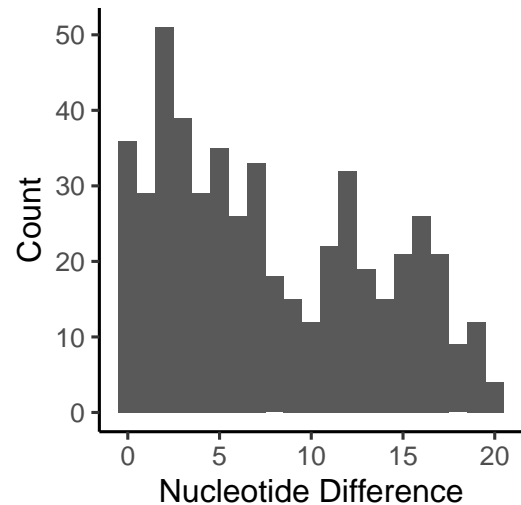
### IGHV3-9\*01\_C262T

2432 sequences assigned  
259 (10.6%) exact matches, in which:  
242 unique CDR3  
6 unique J



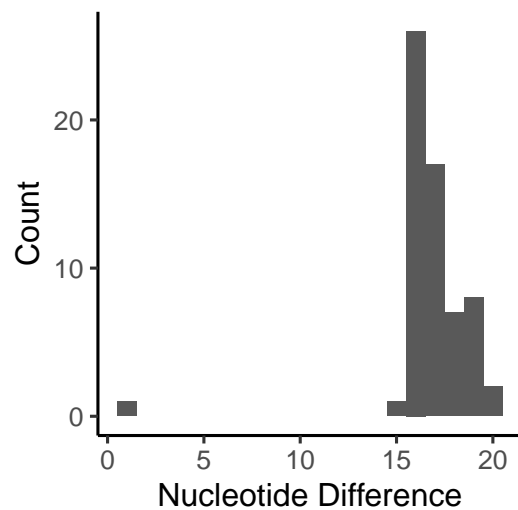
### IGHV3-20\*01\_A169G\_G1

539 sequences assigned  
36 (6.7%) exact matches, in which:  
35 unique CDR3  
6 unique J



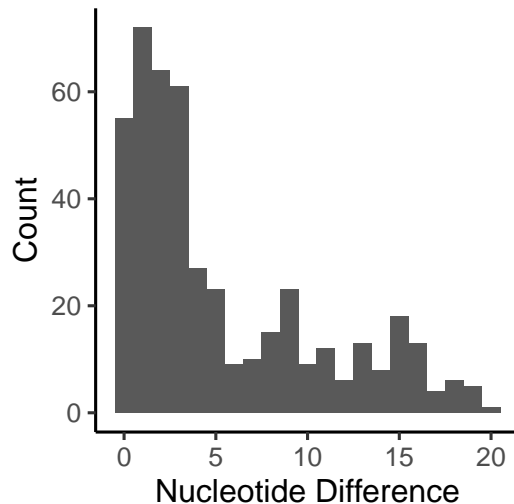
### IGHV7S3\*01

946 sequences assigned  
No exact matches.



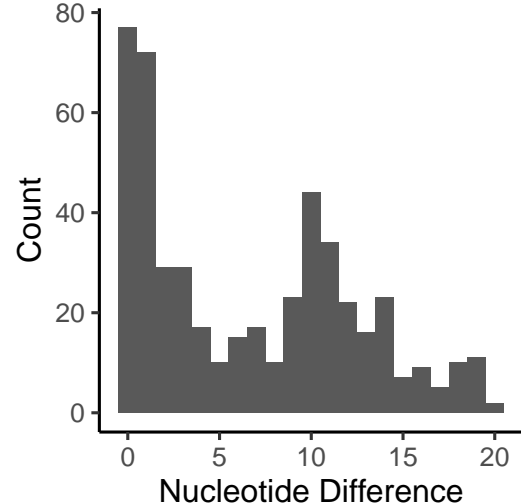
### IGHV3-11\*01\_G48A\_A91

463 sequences assigned  
55 (11.9%) exact matches, in which:  
50 unique CDR3  
4 unique J



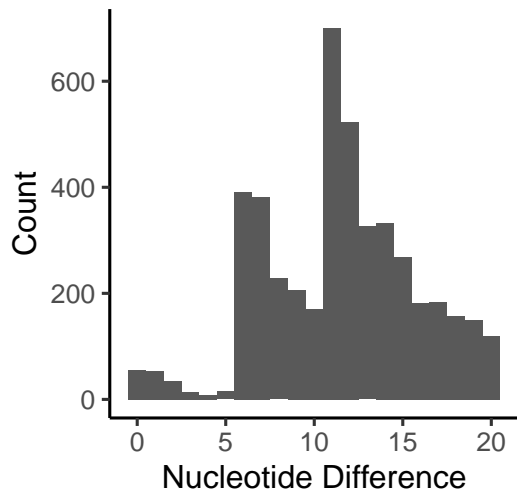
### IGHV3-22\*01\_A39C\_G48

521 sequences assigned  
77 (14.8%) exact matches, in which:  
67 unique CDR3  
5 unique J



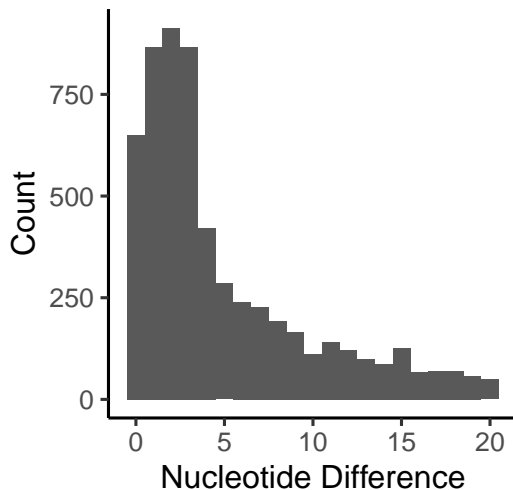
### IGHV4-2\*01\_C4G\_C173,

5453 sequences assigned  
55 (1%) exact matches, in which:  
55 unique CDR3  
6 unique J



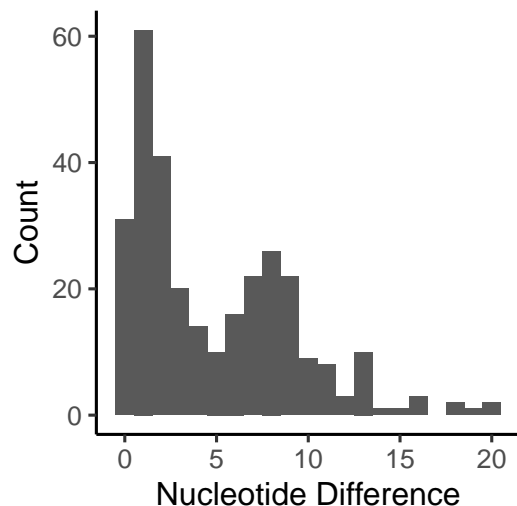
### IGHV5-2\*01\_C45T\_A73C

5963 sequences assigned  
650 (10.9%) exact matches, in which:  
594 unique CDR3  
6 unique J



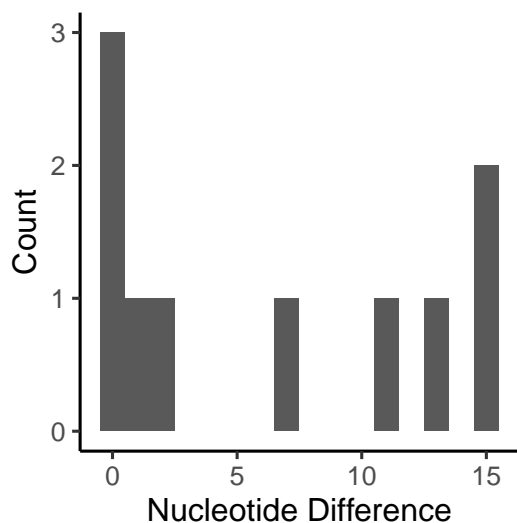
### IGHV6-1\*01\_G283T

360 sequences assigned  
31 (8.6%) exact matches, in which:  
29 unique CDR3  
5 unique J



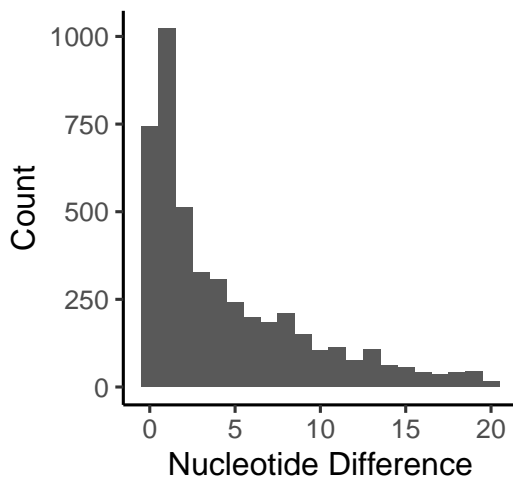
### IGHV4-2\*01\_C4G\_C90T\_/\_

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



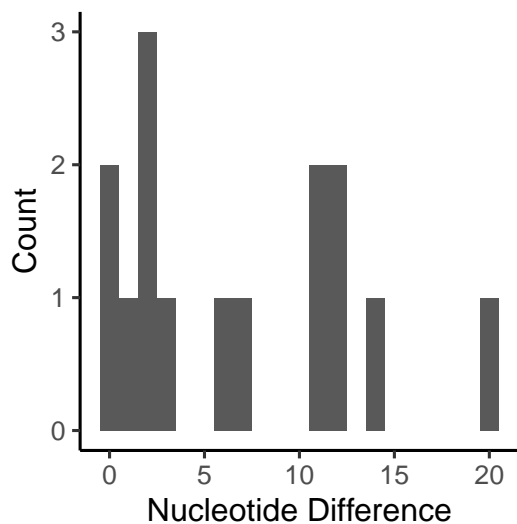
### IGHV5-2\*01\_G51A\_A59G\_G166A\_C167T\_G167A\_C173A\_C201A\_/\_

4666 sequences assigned  
744 (15.9%) exact matches, in which:  
674 unique CDR3  
7 unique J



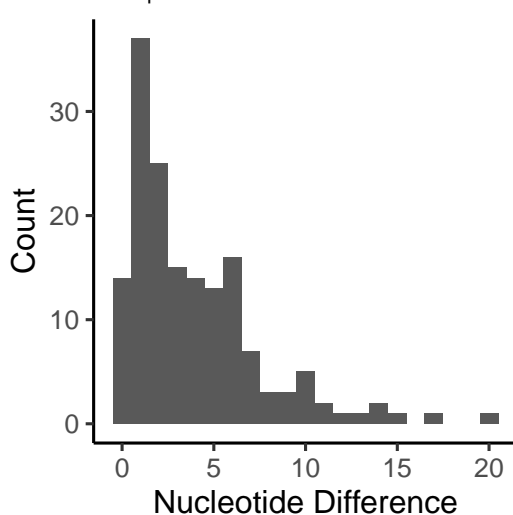
### IGHV4-2\*01\_C4G\_C90T\_/\_

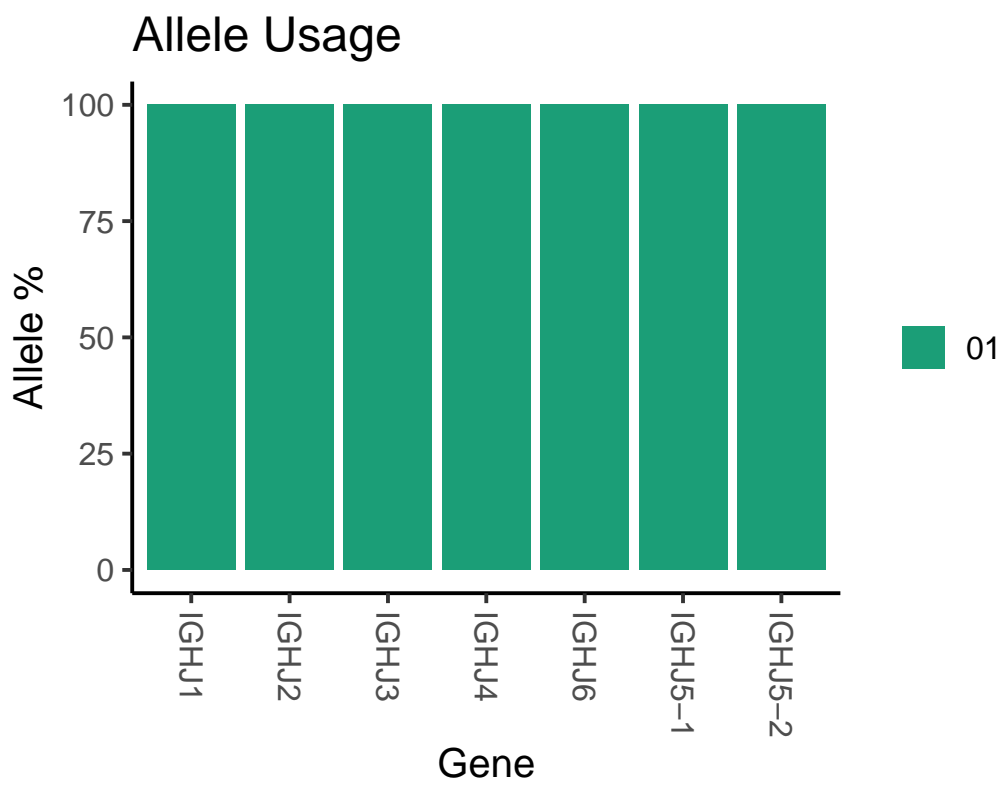
15 sequences assigned  
2 (13.3%) exact matches, in which:  
2 unique CDR3  
2 unique J



### IGHV6-1\*01\_G227A\_G283T\_G166T\_G167A\_C173A\_C201A\_/\_

162 sequences assigned  
14 (8.6%) exact matches, in which:  
14 unique CDR3  
5 unique J





Warning – no inferred sequences found.