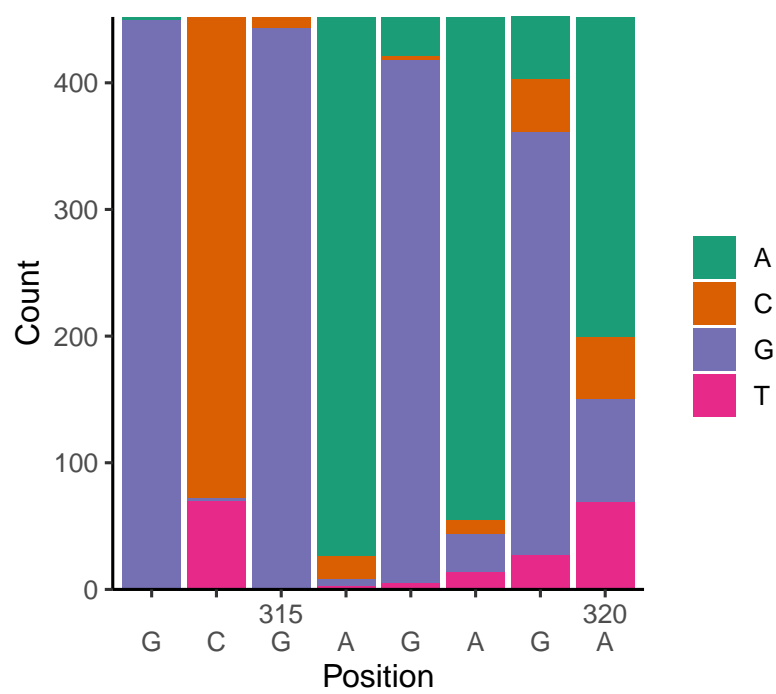
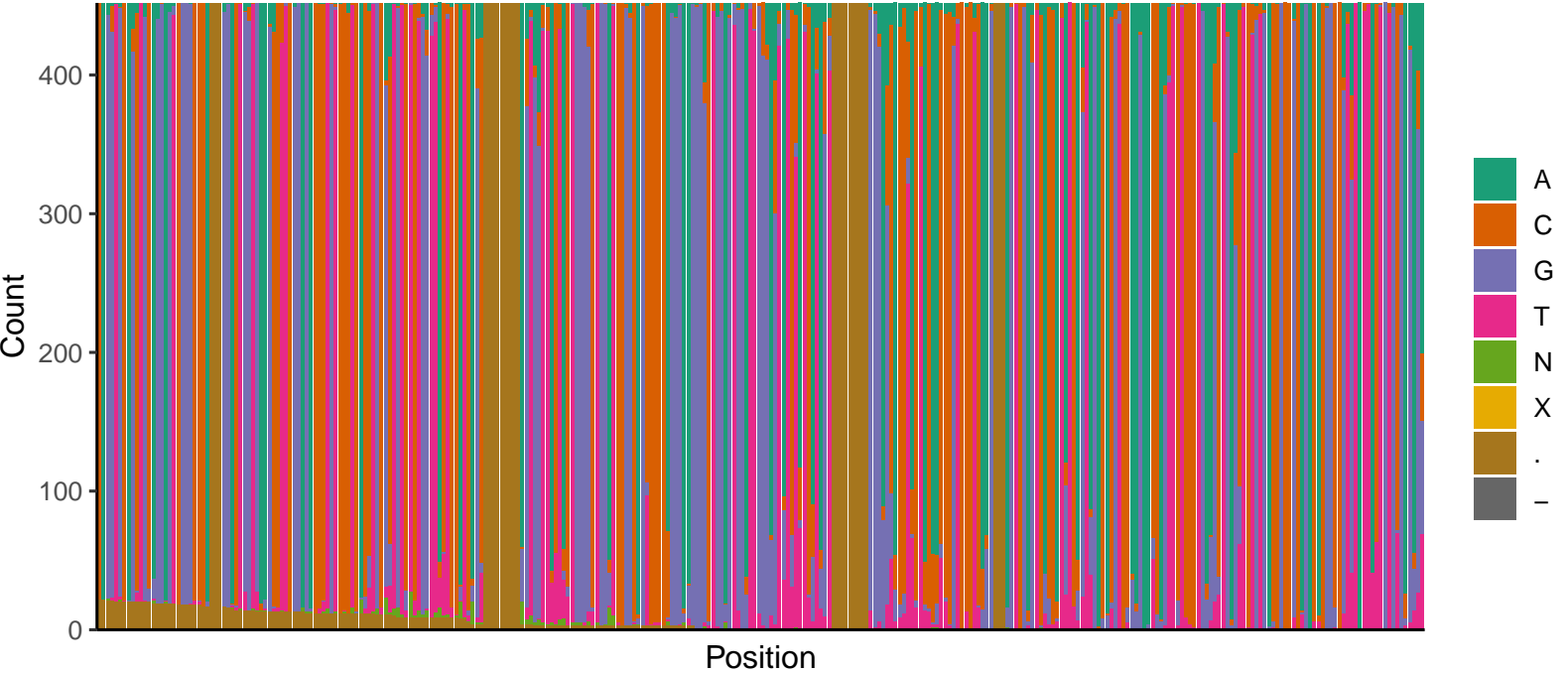


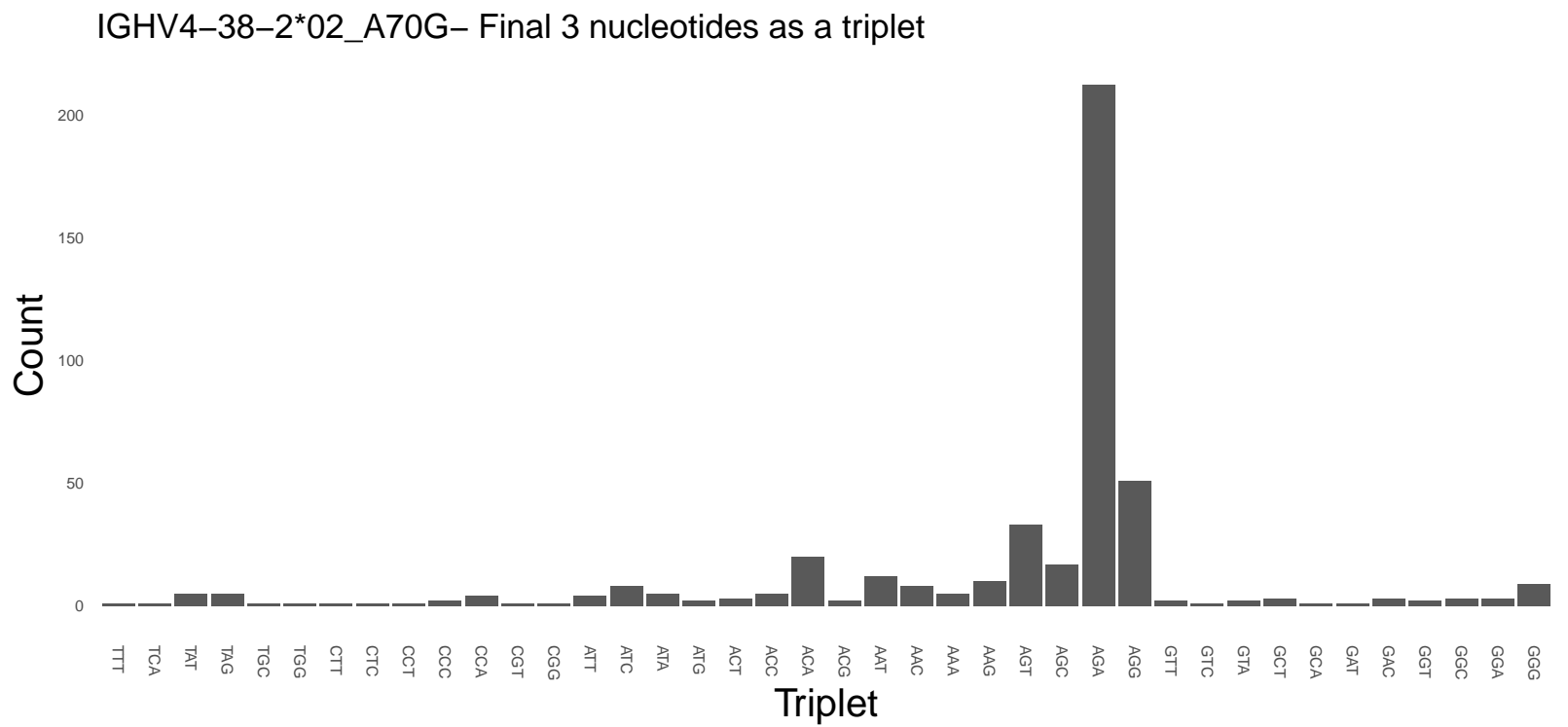
# Gene IGHV4-38-2\*02\_A70G



Gene IGHV4-38-2\*02\_A70G

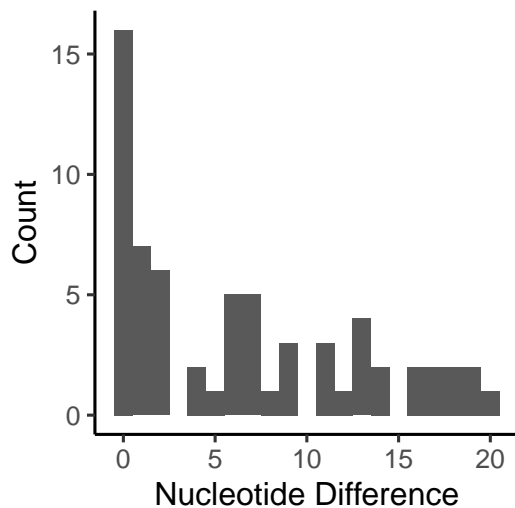


IGHV4-38-2\*02\_A70G- Final 3 nucleotides as a triplet



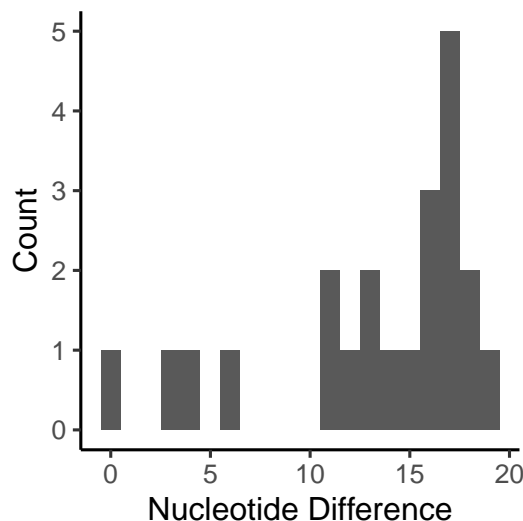
### IGHV1-2\*04

111 sequences assigned  
16 (14.4%) exact matches, in which:  
16 unique CDR3  
4 unique J



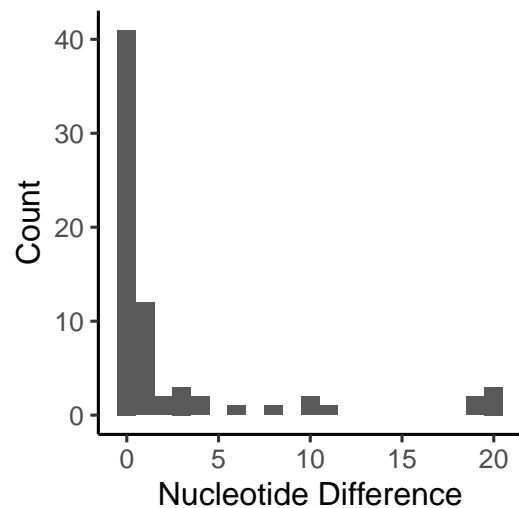
### IGHV1-3\*04

45 sequences assigned  
1 (2.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



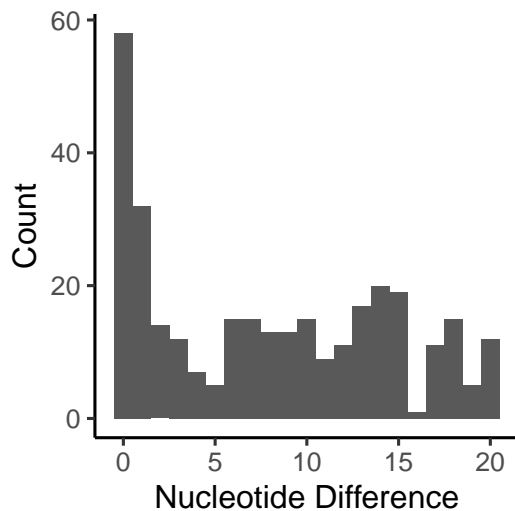
### IGHV1-24\*01

96 sequences assigned  
41 (42.7%) exact matches, in which:  
40 unique CDR3  
5 unique J



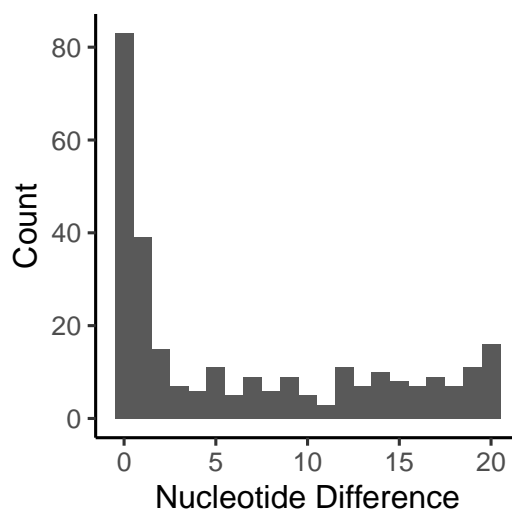
### IGHV1-2\*06

492 sequences assigned  
58 (11.8%) exact matches, in which:  
58 unique CDR3  
6 unique J



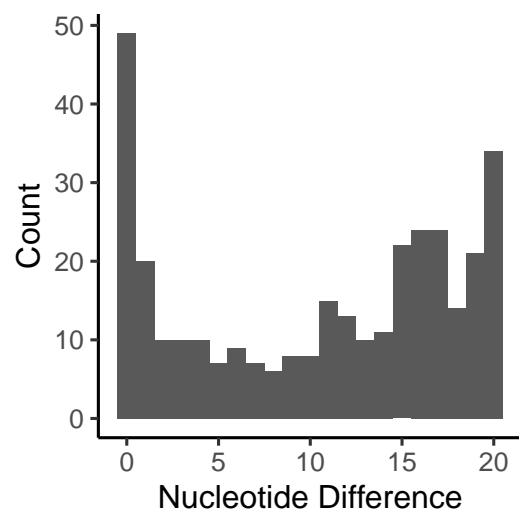
### IGHV1-8\*01

339 sequences assigned  
83 (24.5%) exact matches, in which:  
83 unique CDR3  
4 unique J



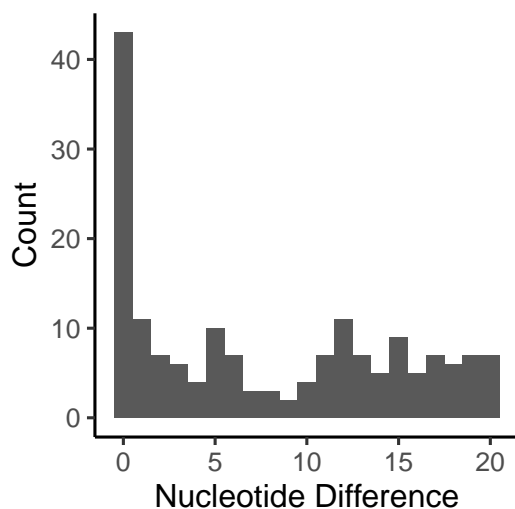
### IGHV1-46\*01

954 sequences assigned  
49 (5.1%) exact matches, in which:  
47 unique CDR3  
5 unique J



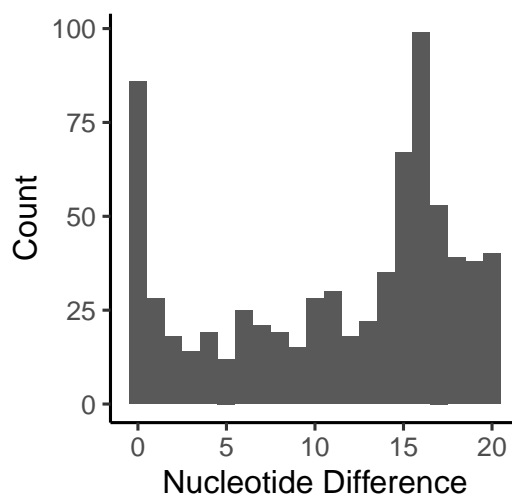
### IGHV1-3\*01

265 sequences assigned  
43 (16.2%) exact matches, in which:  
42 unique CDR3  
4 unique J



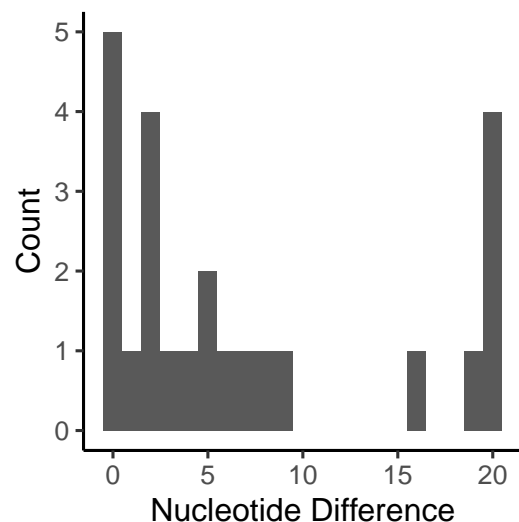
### IGHV1-18\*01

913 sequences assigned  
86 (9.4%) exact matches, in which:  
85 unique CDR3  
6 unique J



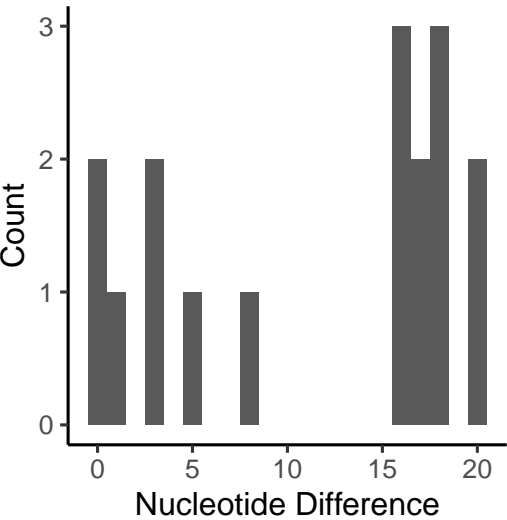
### IGHV1-58\*01

44 sequences assigned  
5 (11.4%) exact matches, in which:  
5 unique CDR3  
3 unique J



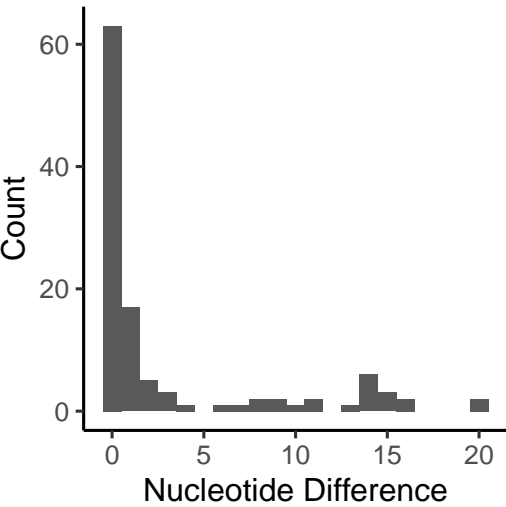
IGHV1-58\*02

19 sequences assigned  
2 (10.5%) exact matches, in which:  
2 unique CDR3  
2 unique J



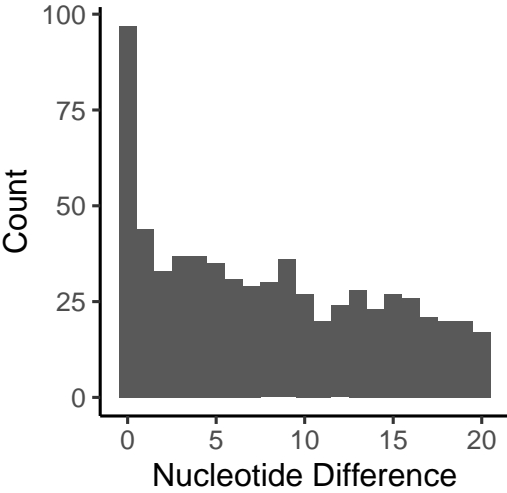
IGHV1-69\*04

186 sequences assigned  
63 (33.9%) exact matches, in which:  
62 unique CDR3  
5 unique J



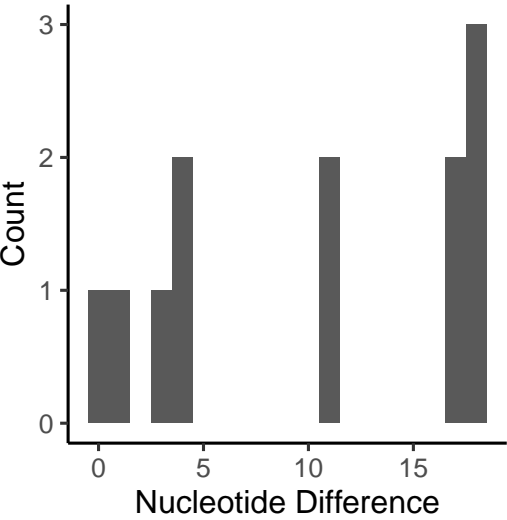
IGHV2-5\*02

785 sequences assigned  
97 (12.4%) exact matches, in which:  
96 unique CDR3  
6 unique J



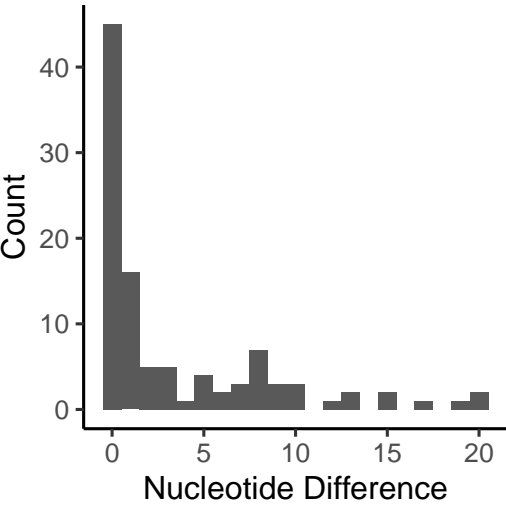
IGHV1-69-2\*01

13 sequences assigned  
1 (7.7%) exact matches, in which:  
1 unique CDR3  
1 unique J



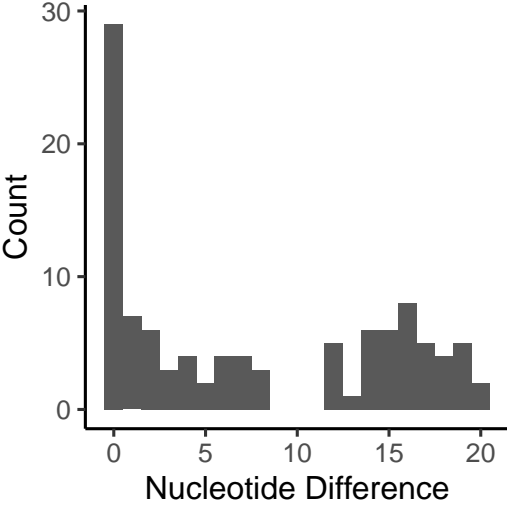
IGHV1-69\*06

173 sequences assigned  
45 (26%) exact matches, in which:  
45 unique CDR3  
5 unique J



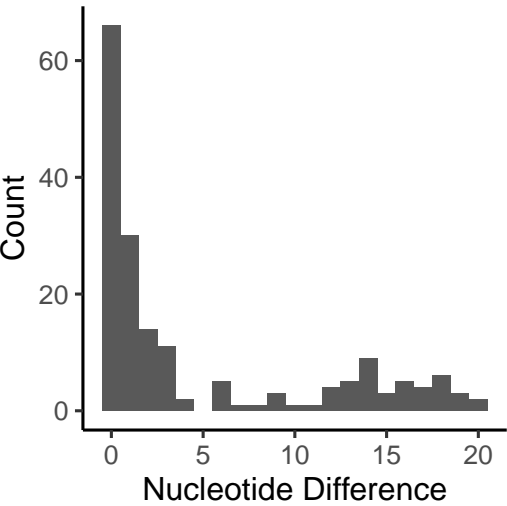
IGHV2-26\*01

116 sequences assigned  
29 (25%) exact matches, in which:  
28 unique CDR3  
5 unique J



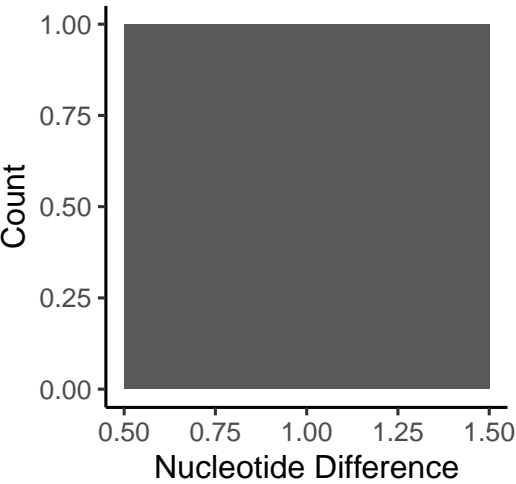
IGHV1-69\*01

229 sequences assigned  
66 (28.8%) exact matches, in which:  
66 unique CDR3  
5 unique J



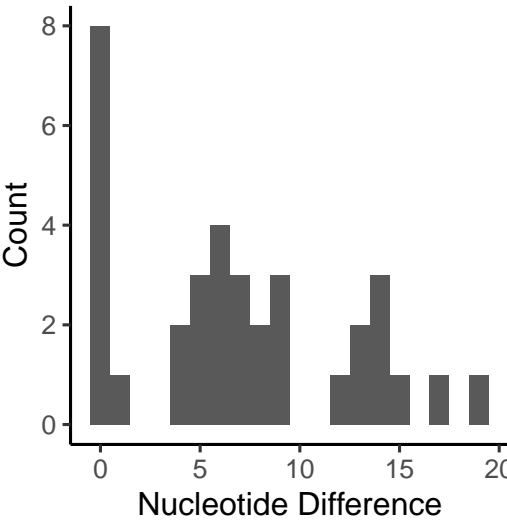
IGHV1-NL1\*01

1 sequences assigned  
No exact matches.



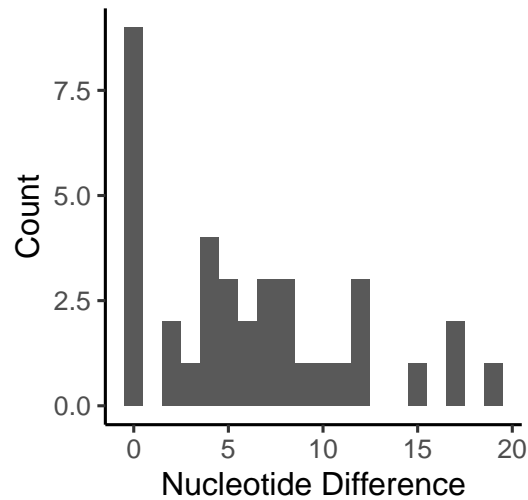
IGHV2-70\*01

35 sequences assigned  
8 (22.9%) exact matches, in which:  
8 unique CDR3  
4 unique J



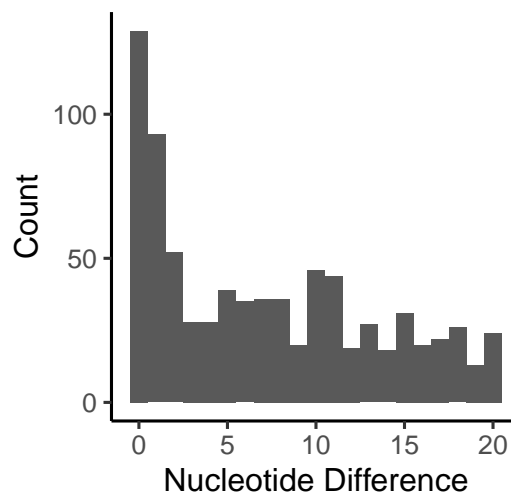
### IGHV2-70\*04

43 sequences assigned  
9 (20.9%) exact matches, in which:  
9 unique CDR3  
4 unique J



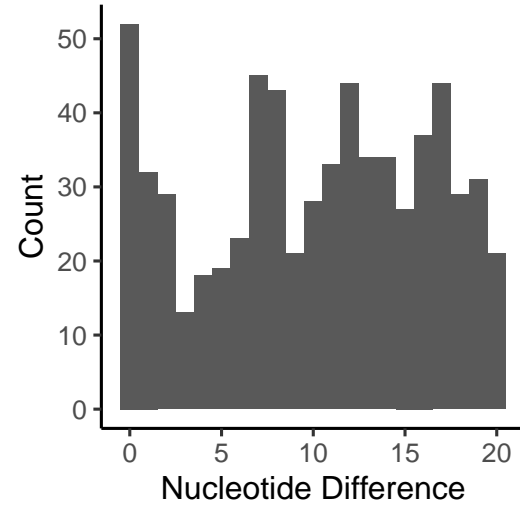
### IGHV3-9\*01

1005 sequences assigned  
129 (12.8%) exact matches, in which:  
127 unique CDR3  
6 unique J



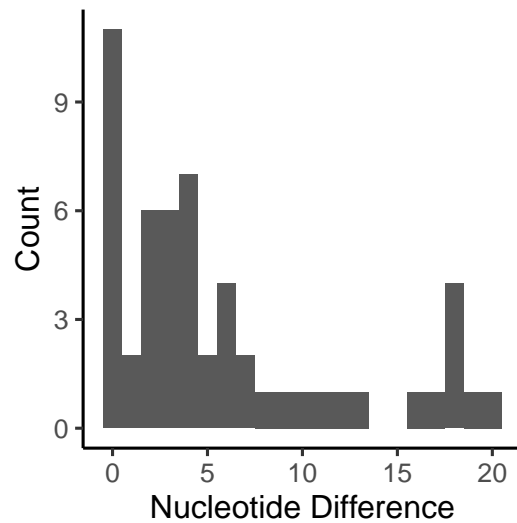
### IGHV3-15\*01

890 sequences assigned  
52 (5.8%) exact matches, in which:  
50 unique CDR3  
5 unique J



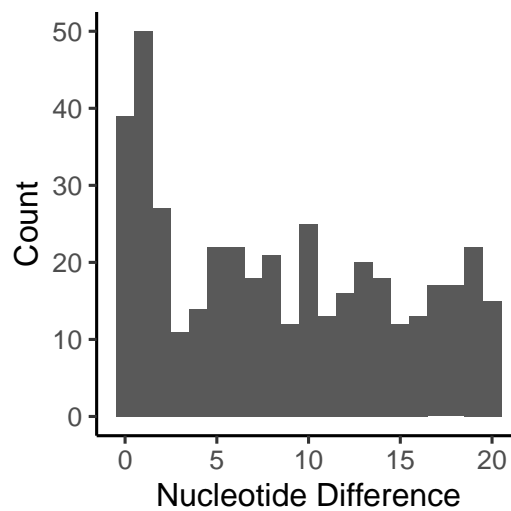
### IGHV2-70\*15

69 sequences assigned  
11 (15.9%) exact matches, in which:  
11 unique CDR3  
3 unique J



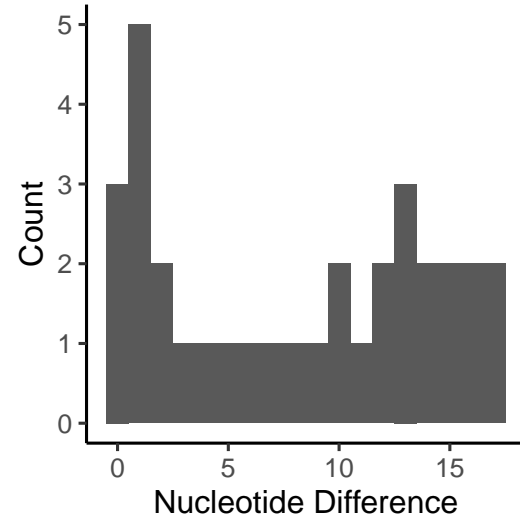
### IGHV3-11\*01

577 sequences assigned  
39 (6.8%) exact matches, in which:  
37 unique CDR3  
5 unique J



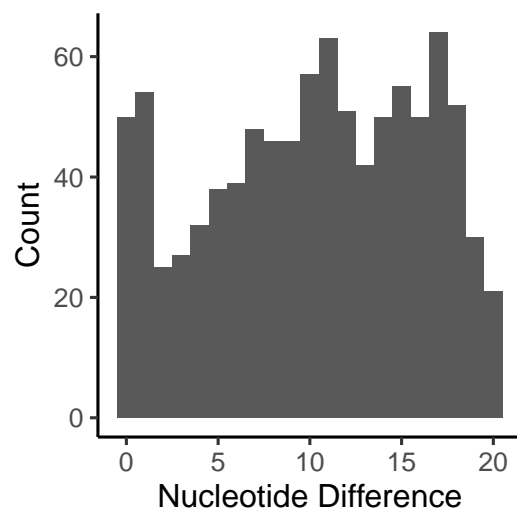
### IGHV3-20\*01

39 sequences assigned  
3 (7.7%) exact matches, in which:  
3 unique CDR3  
3 unique J



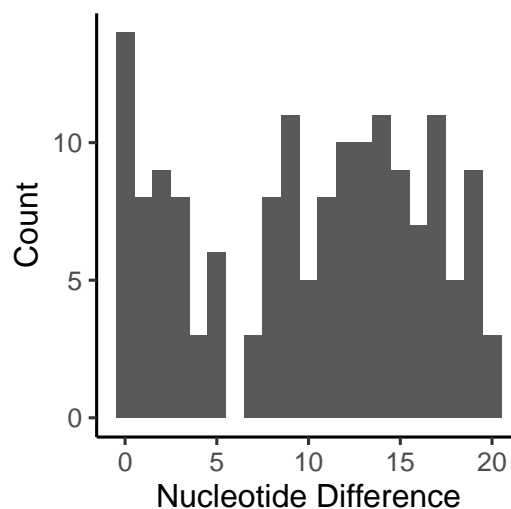
### IGHV3-7\*01

1144 sequences assigned  
50 (4.4%) exact matches, in which:  
50 unique CDR3  
5 unique J



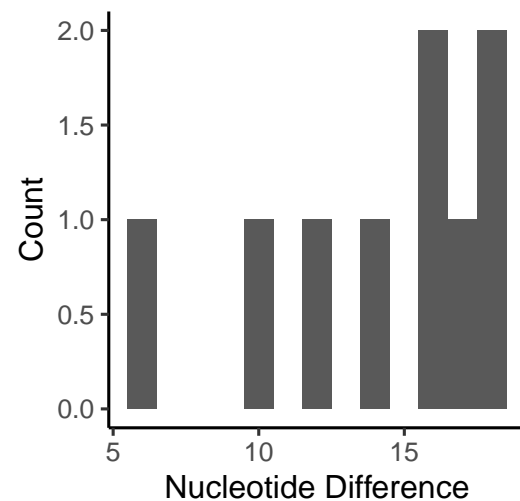
### IGHV3-13\*01

195 sequences assigned  
14 (7.2%) exact matches, in which:  
14 unique CDR3  
5 unique J



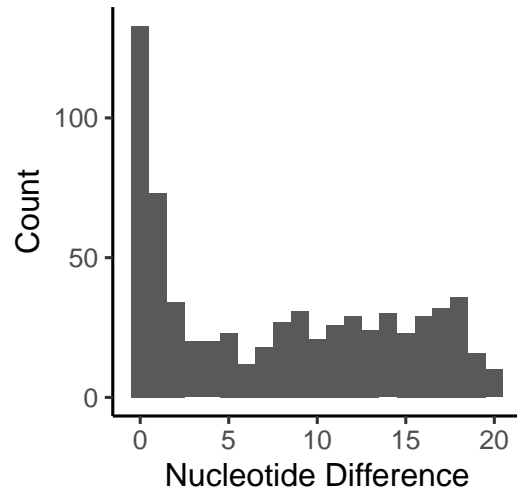
### IGHV3-20\*04

22 sequences assigned  
No exact matches.



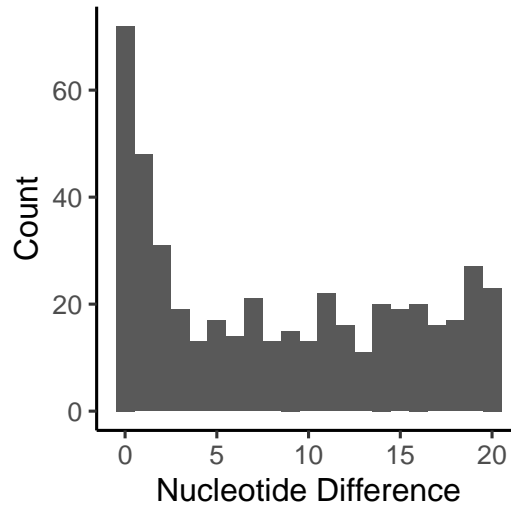
### IGHV3-21\*01

825 sequences assigned  
133 (16.1%) exact matches, in which:  
127 unique CDR3  
6 unique J



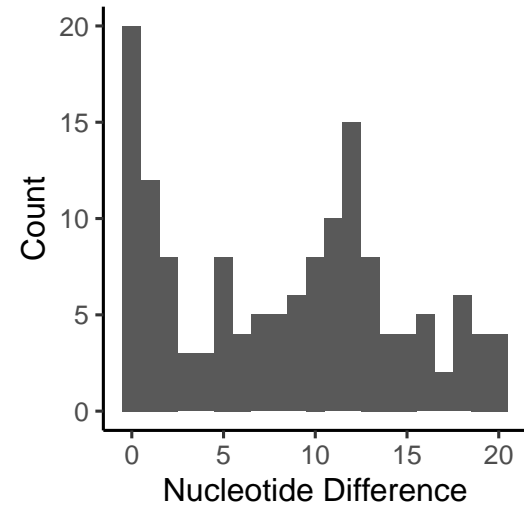
### IGHV3-30\*04

658 sequences assigned  
72 (10.9%) exact matches, in which:  
72 unique CDR3  
6 unique J



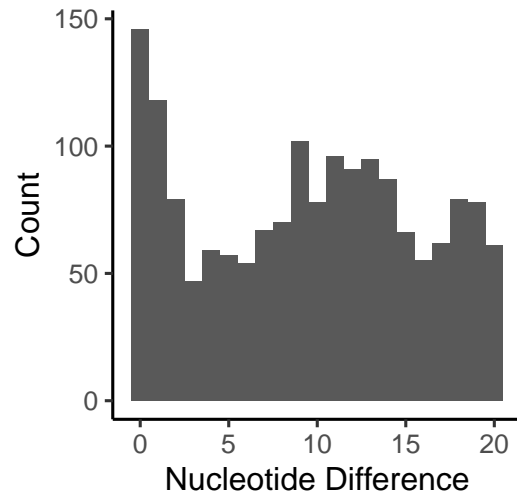
### IGHV3-43\*02

192 sequences assigned  
20 (10.4%) exact matches, in which:  
20 unique CDR3  
4 unique J



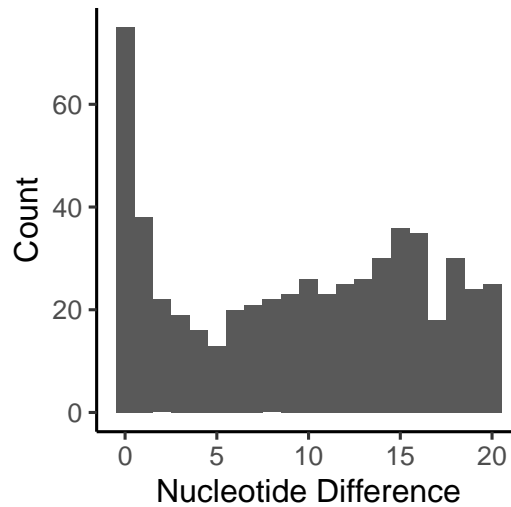
### IGHV3-23\*01

2517 sequences assigned  
146 (5.8%) exact matches, in which:  
144 unique CDR3  
6 unique J



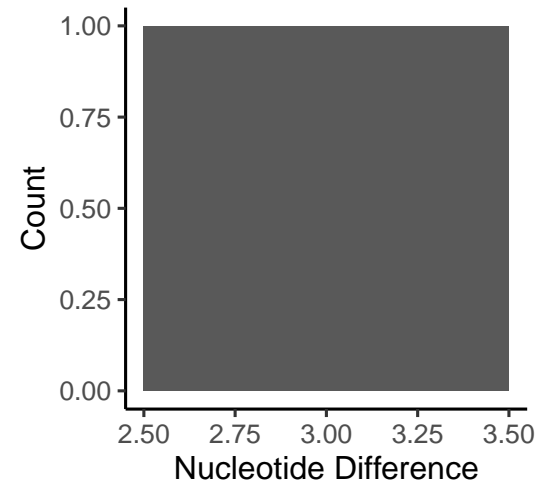
### IGHV3-30\*18

823 sequences assigned  
75 (9.1%) exact matches, in which:  
75 unique CDR3  
4 unique J



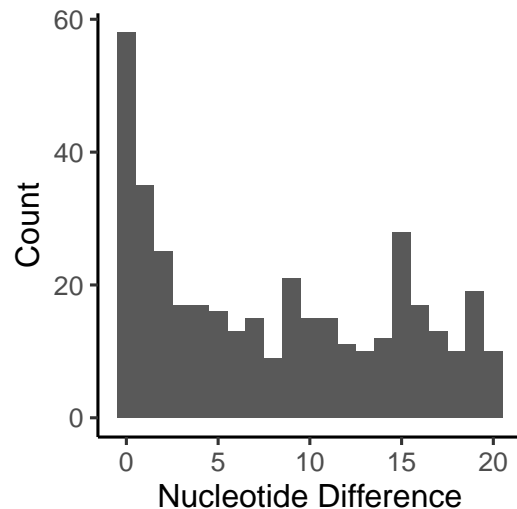
### IGHV3-47\*02

1 sequences assigned  
No exact matches.



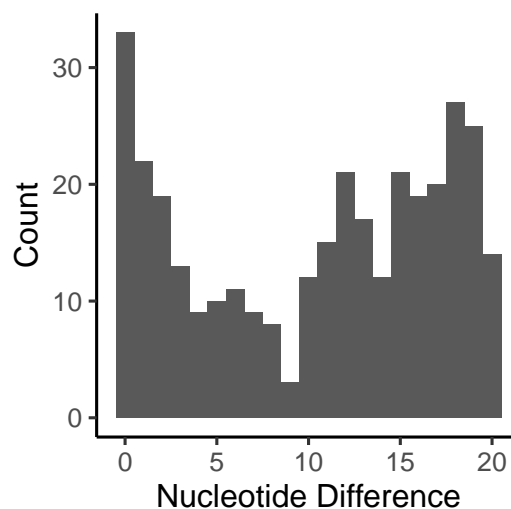
### IGHV3-30-3\*01

476 sequences assigned  
58 (12.2%) exact matches, in which:  
58 unique CDR3  
5 unique J



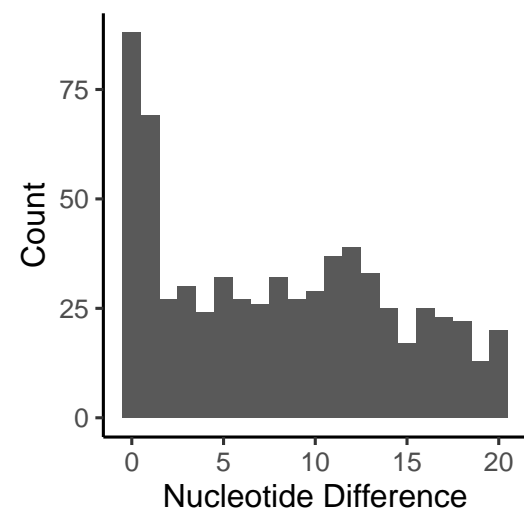
### IGHV3-33\*01

431 sequences assigned  
33 (7.7%) exact matches, in which:  
32 unique CDR3  
5 unique J



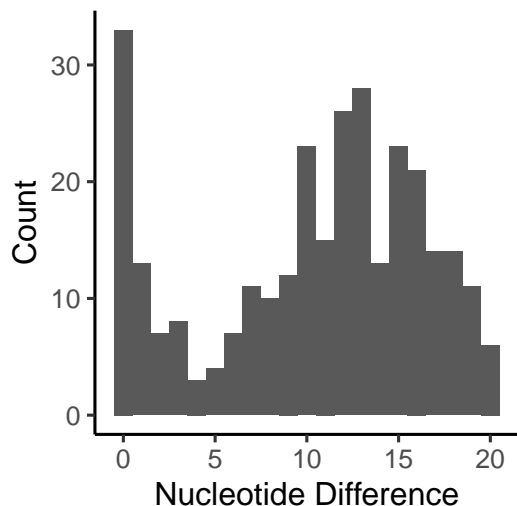
### IGHV3-48\*03

850 sequences assigned  
88 (10.4%) exact matches, in which:  
86 unique CDR3  
5 unique J



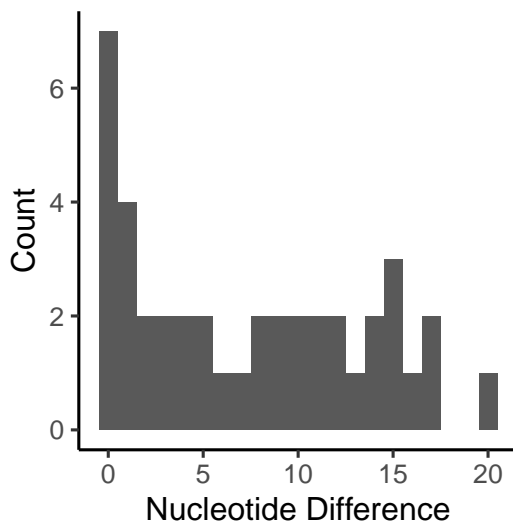
### IGHV3-49\*04

438 sequences assigned  
33 (7.5%) exact matches, in which:  
33 unique CDR3  
4 unique J



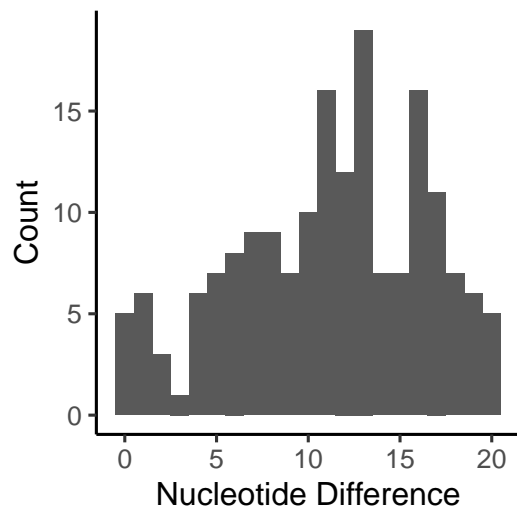
### IGHV3-64\*01

54 sequences assigned  
7 (13%) exact matches, in which:  
7 unique CDR3  
4 unique J



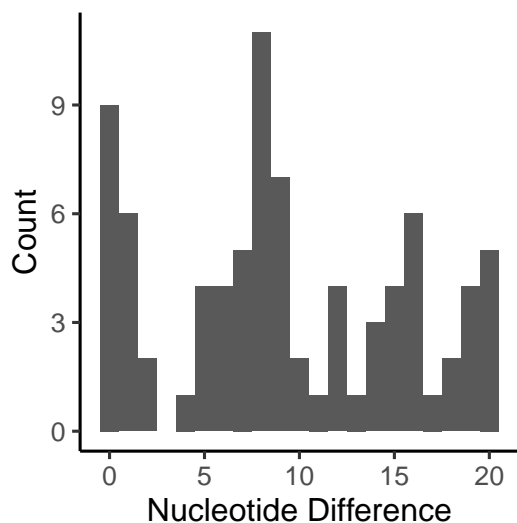
### IGHV3-72\*01

207 sequences assigned  
5 (2.4%) exact matches, in which:  
5 unique CDR3  
3 unique J



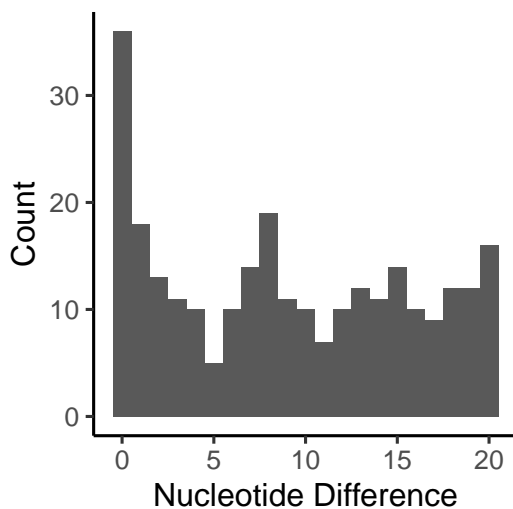
### IGHV3-53\*02

114 sequences assigned  
9 (7.9%) exact matches, in which:  
9 unique CDR3  
3 unique J



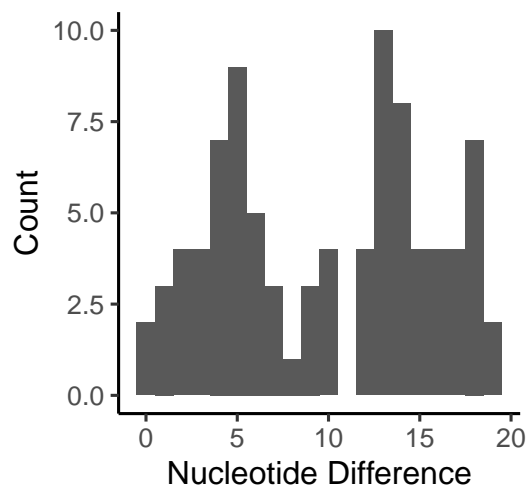
### IGHV3-66\*01

347 sequences assigned  
36 (10.4%) exact matches, in which:  
35 unique CDR3  
4 unique J



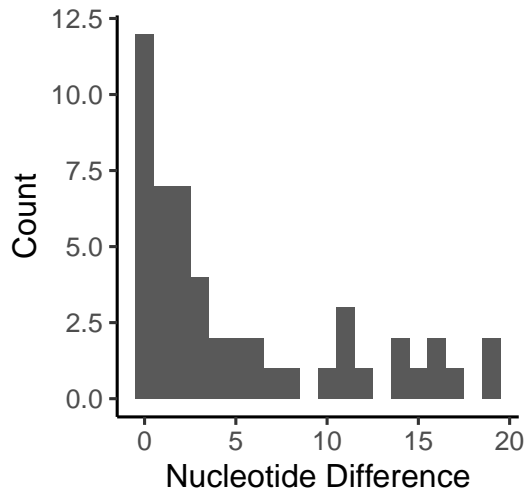
### IGHV3-73\*01

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



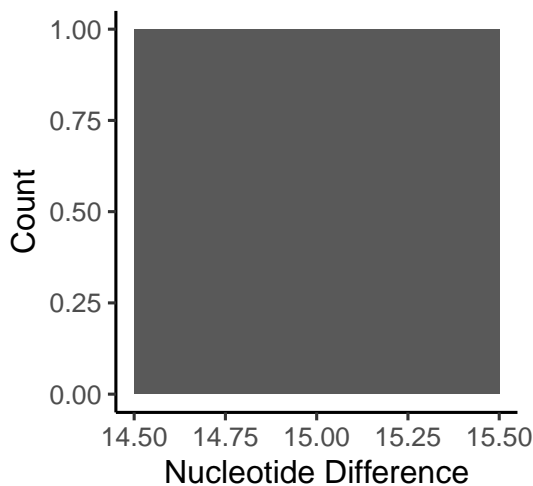
### IGHV3-53\*04

62 sequences assigned  
12 (19.4%) exact matches, in which:  
12 unique CDR3  
5 unique J



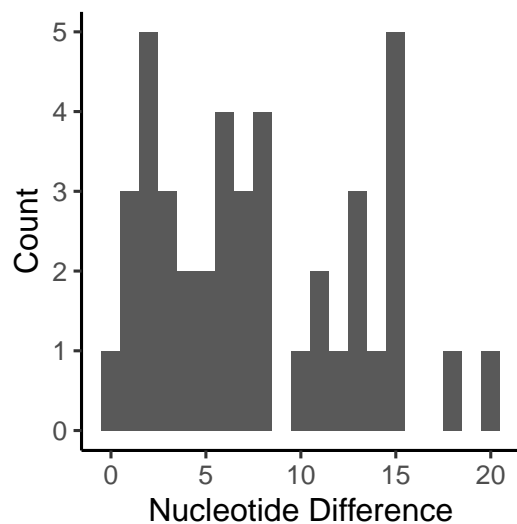
### IGHV3-69-1\*01

1 sequences assigned  
No exact matches.



### IGHV3-73\*02

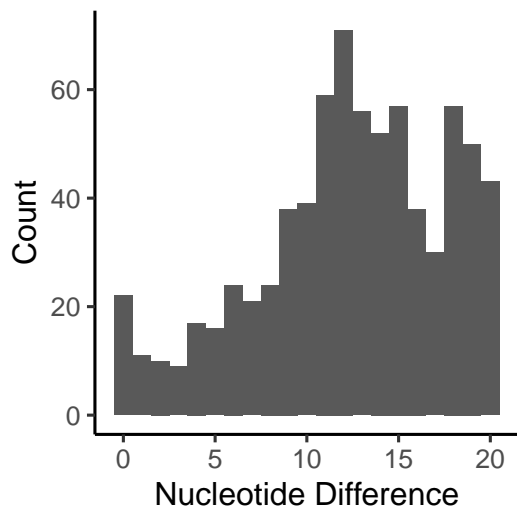
57 sequences assigned  
1 (1.8%) exact matches, in which:  
1 unique CDR3  
1 unique J





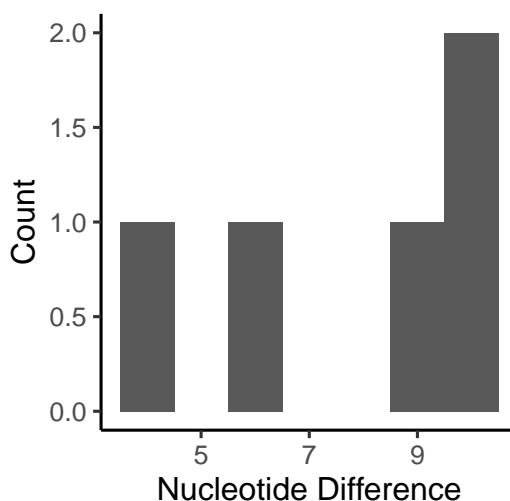
### IGHV3-74\*01

1012 sequences assigned  
22 (2.2%) exact matches, in which:  
22 unique CDR3  
5 unique J



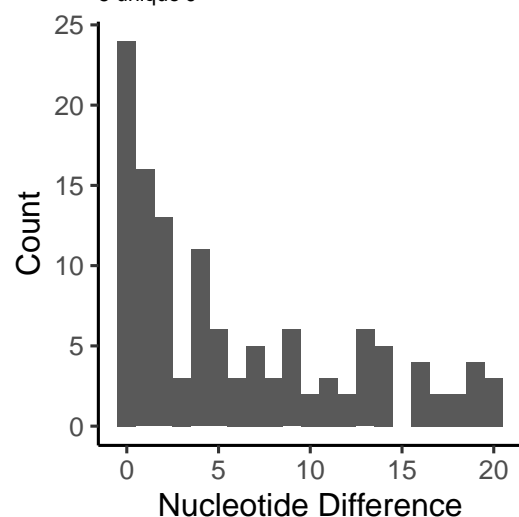
### IGHV4-28\*01

5 sequences assigned  
No exact matches.



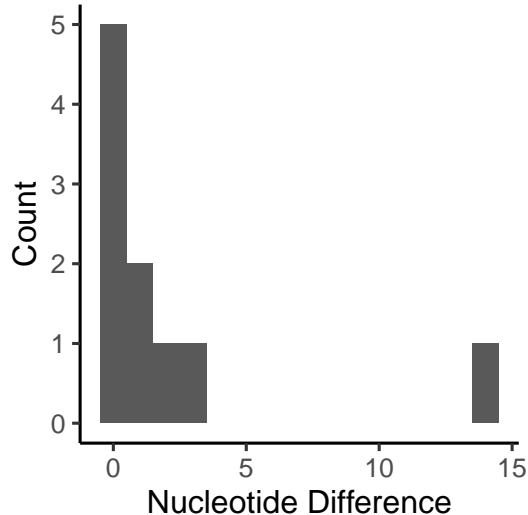
### IGHV4-31\*03

150 sequences assigned  
24 (16%) exact matches, in which:  
24 unique CDR3  
5 unique J



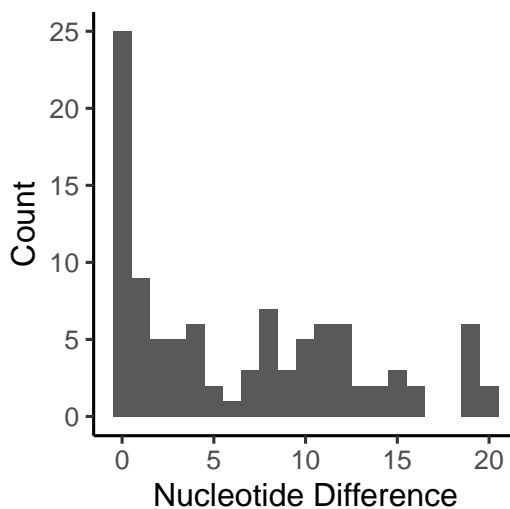
### IGHV3-43D\*04

13 sequences assigned  
5 (38.5%) exact matches, in which:  
5 unique CDR3  
2 unique J



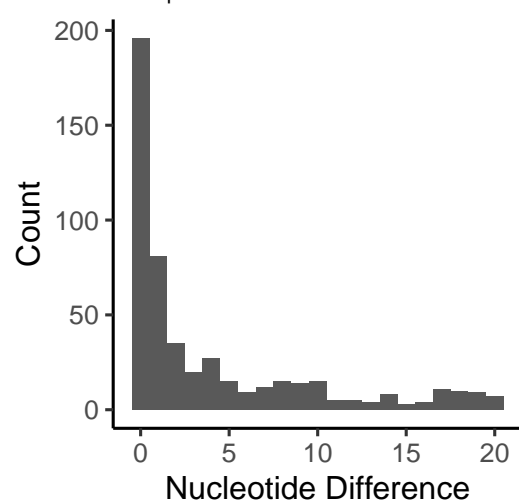
### IGHV4-30-4\*01

127 sequences assigned  
25 (19.7%) exact matches, in which:  
24 unique CDR3  
5 unique J



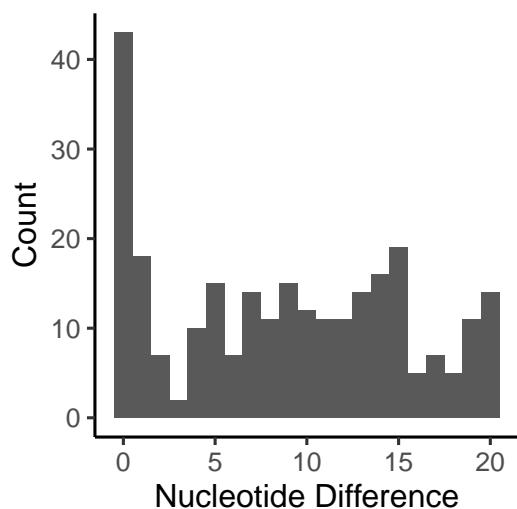
### IGHV4-34\*01

589 sequences assigned  
196 (33.3%) exact matches, in which:  
195 unique CDR3  
6 unique J



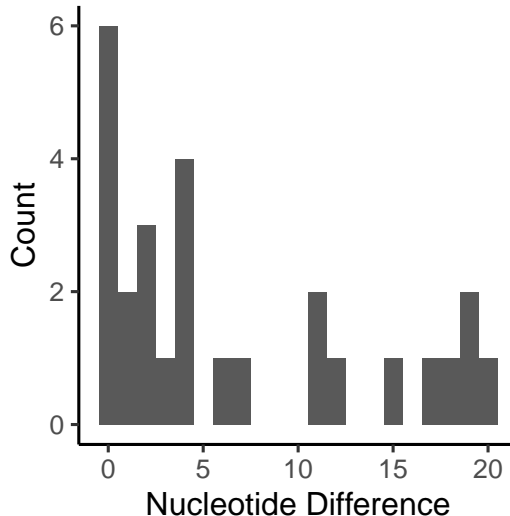
### IGHV4-4\*02

387 sequences assigned  
43 (11.1%) exact matches, in which:  
43 unique CDR3  
6 unique J



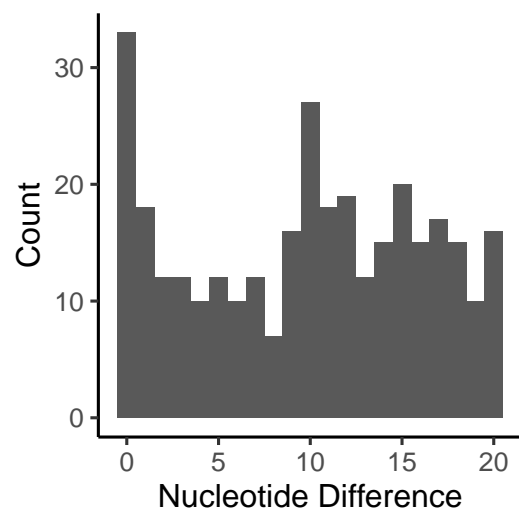
### IGHV4-30-2\*01

36 sequences assigned  
6 (16.7%) exact matches, in which:  
6 unique CDR3  
3 unique J



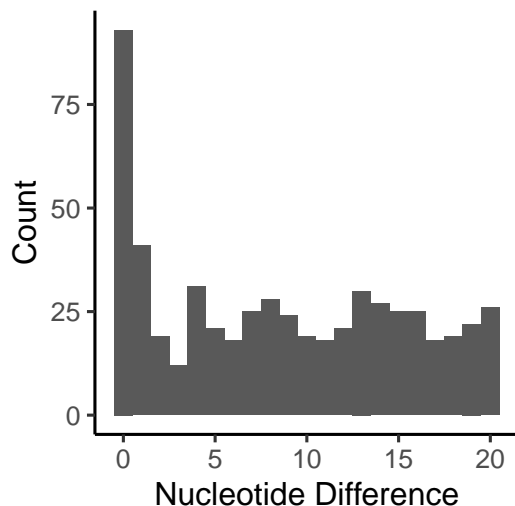
### IGHV4-38-2\*02\_A70G

452 sequences assigned  
33 (7.3%) exact matches, in which:  
32 unique CDR3  
6 unique J



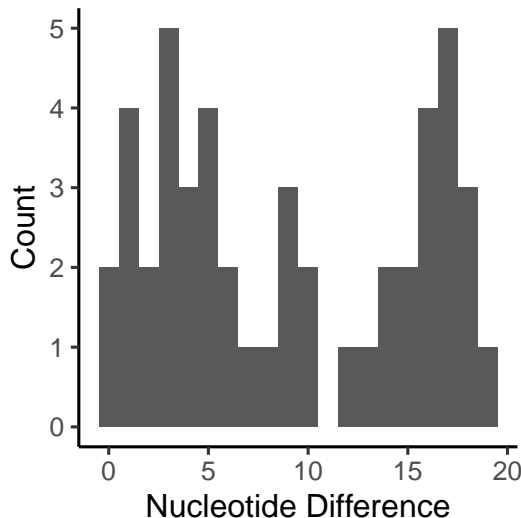
## IGHV4-39\*01

825 sequences assigned  
93 (11.3%) exact matches, in which:  
91 unique CDR3  
6 unique J



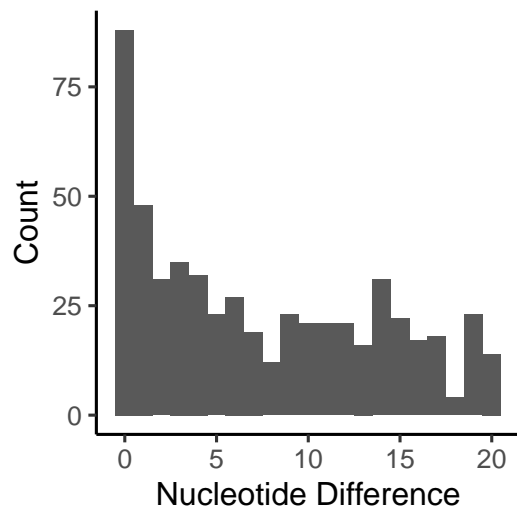
## IGHV4-61\*01

70 sequences assigned  
2 (2.9%) exact matches, in which:  
2 unique CDR3  
1 unique J



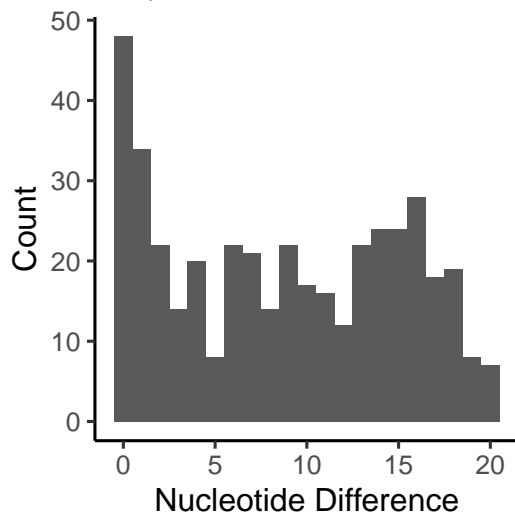
## IGHV5-51\*01

680 sequences assigned  
88 (12.9%) exact matches, in which:  
87 unique CDR3  
5 unique J



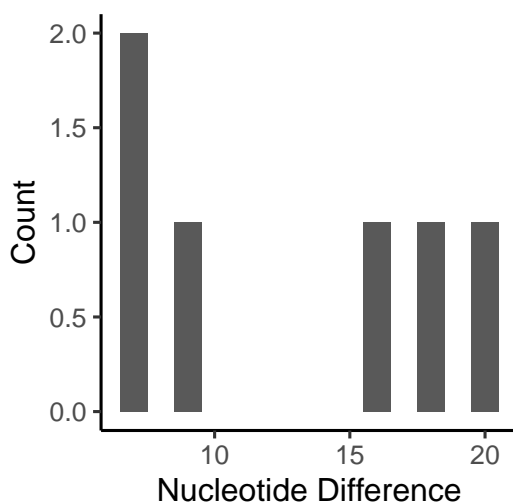
## IGHV4-59\*01

526 sequences assigned  
48 (9.1%) exact matches, in which:  
47 unique CDR3  
5 unique J



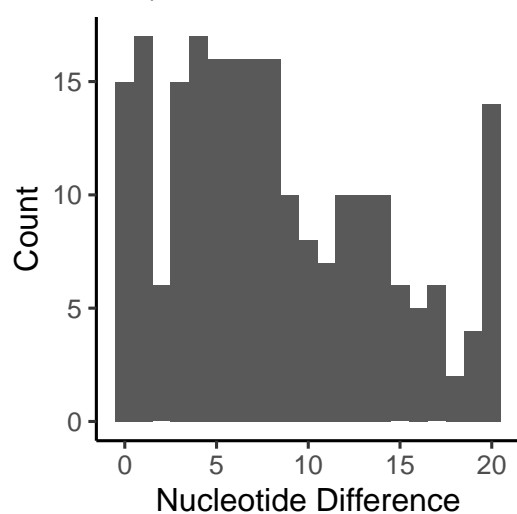
## IGHV4-61\*08

22 sequences assigned  
No exact matches.



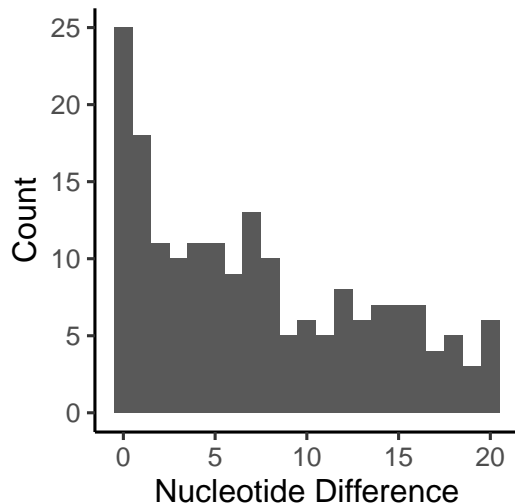
## IGHV6-1\*01

277 sequences assigned  
15 (5.4%) exact matches, in which:  
15 unique CDR3  
5 unique J



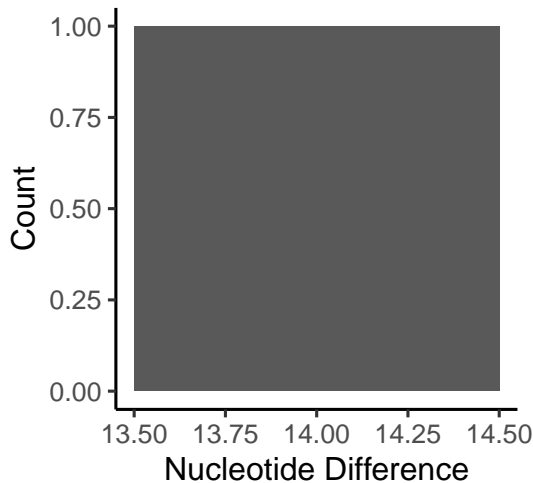
## IGHV4-59\*08

264 sequences assigned  
25 (9.5%) exact matches, in which:  
24 unique CDR3  
5 unique J



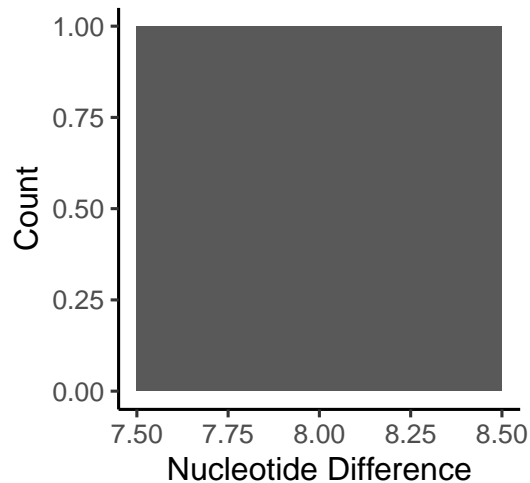
## IGHV4/OR15-8\*01

1 sequences assigned  
No exact matches.



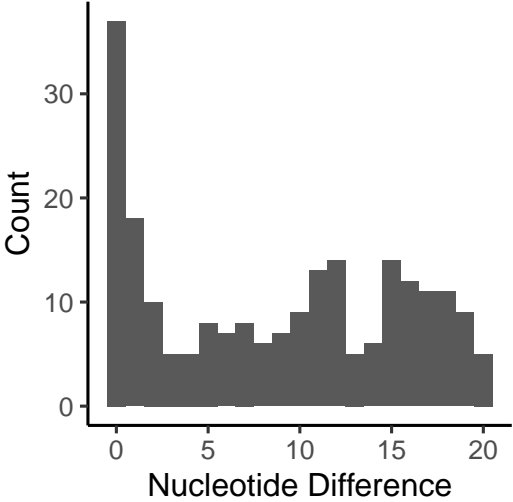
## IGHV3/OR16-9\*01

1 sequences assigned  
No exact matches.



# IGHV7-4-1\*02

284 sequences assigned  
37 (13%) exact matches, in which:  
37 unique CDR3  
6 unique J



IGHV4-38-2\*02\_A70G

