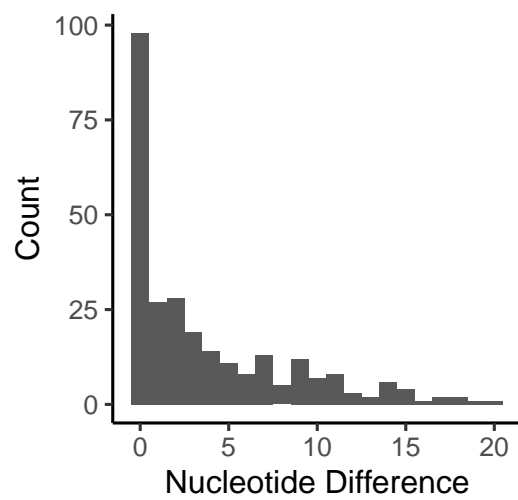


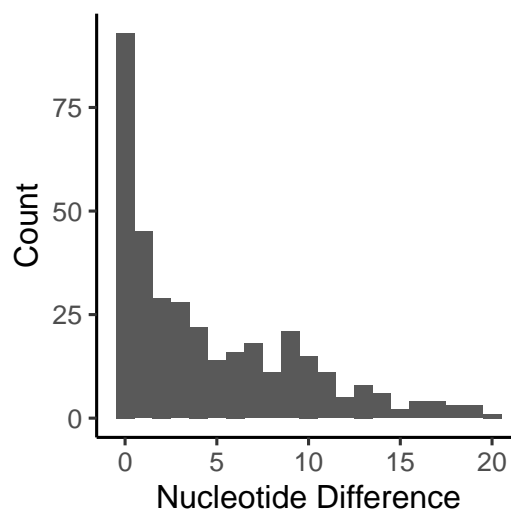
IGHV1-2*02

283 sequences assigned
98 (34.6%) exact matches, in which:
98 unique CDR3
7 unique J



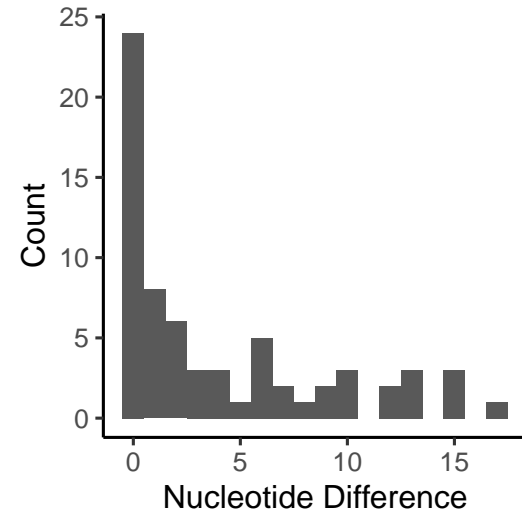
IGHV1-18*01

382 sequences assigned
93 (24.3%) exact matches, in which:
93 unique CDR3
7 unique J



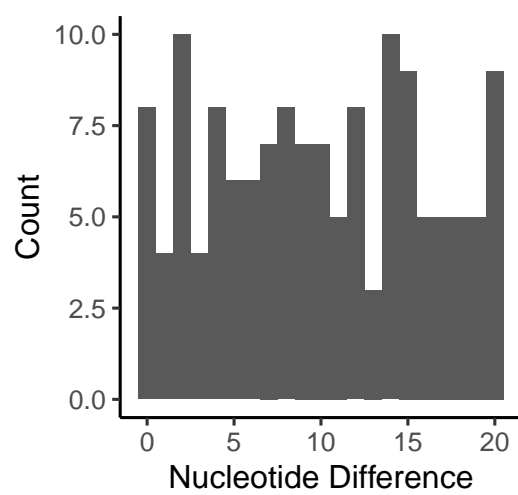
IGHV1-46*01

73 sequences assigned
24 (32.9%) exact matches, in which:
24 unique CDR3
5 unique J



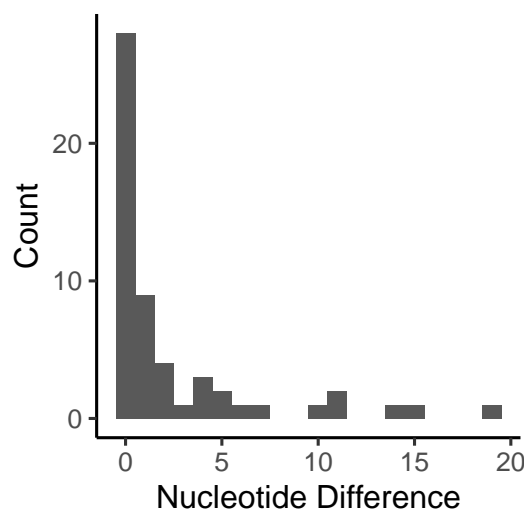
IGHV1-8*01

170 sequences assigned
8 (4.7%) exact matches, in which:
8 unique CDR3
3 unique J



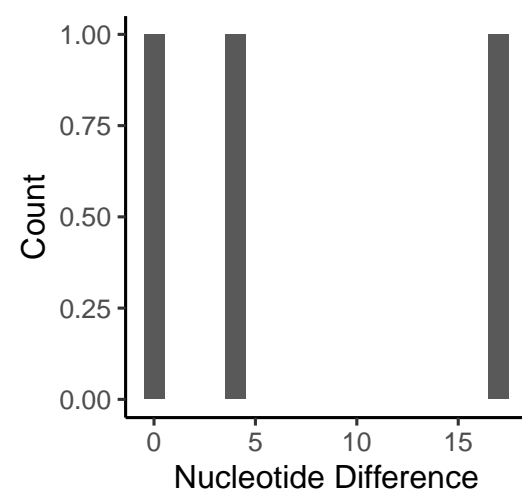
IGHV1-24*01

62 sequences assigned
28 (45.2%) exact matches, in which:
26 unique CDR3
6 unique J



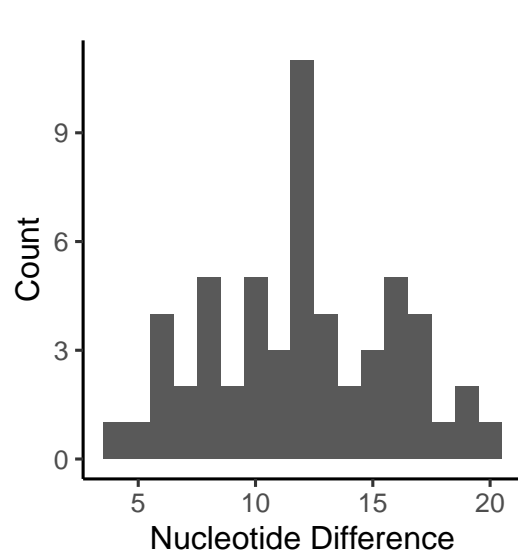
IGHV1-58*01

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



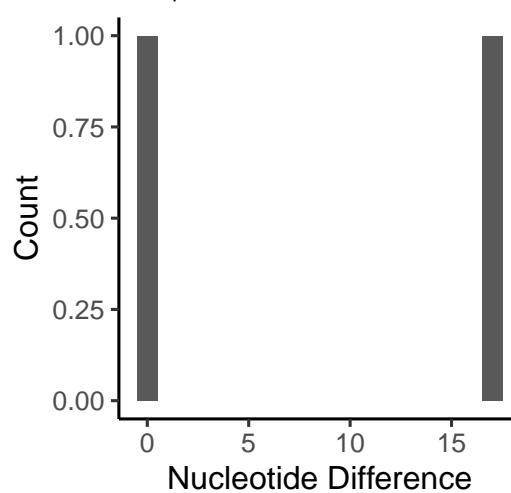
IGHV1-8*02

60 sequences assigned
No exact matches.



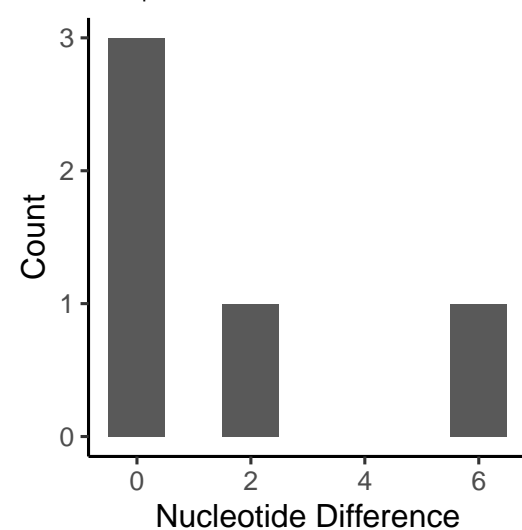
IGHV1-45*02

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



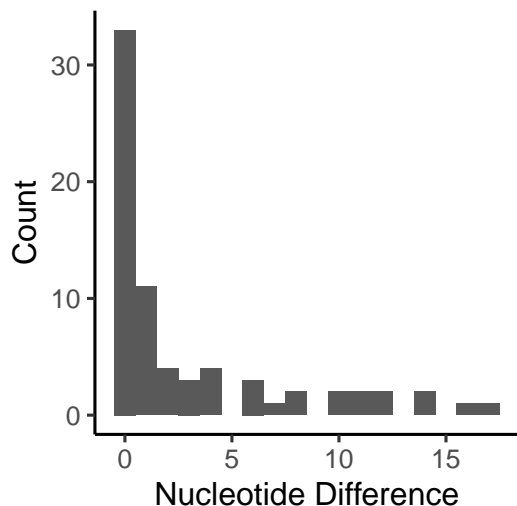
IGHV1-58*02

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



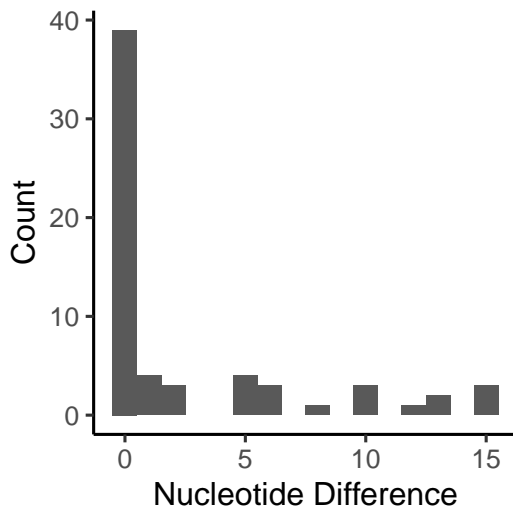
IGHV1-69*04

73 sequences assigned
33 (45.2%) exact matches, in which:
33 unique CDR3
5 unique J



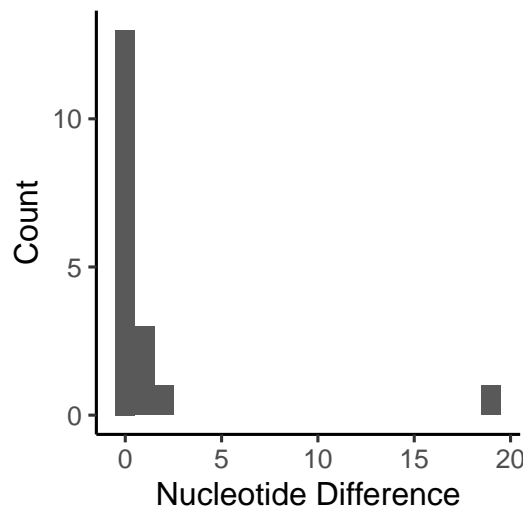
IGHV2-5*01

64 sequences assigned
39 (60.9%) exact matches, in which:
39 unique CDR3
6 unique J



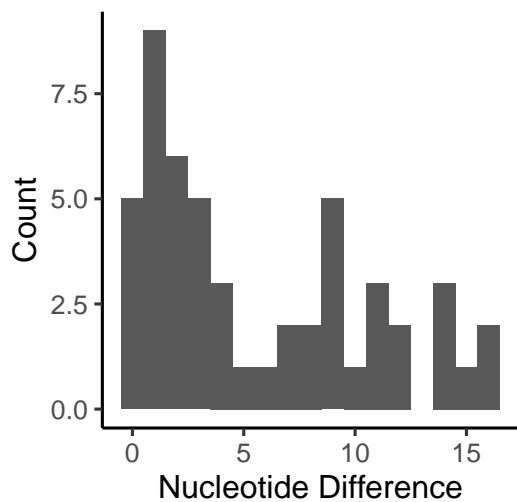
IGHV2-70*01

18 sequences assigned
13 (72.2%) exact matches, in which:
13 unique CDR3
4 unique J



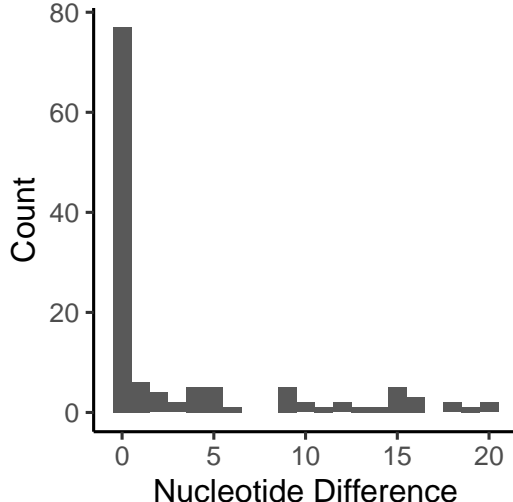
IGHV1-69*06

54 sequences assigned
5 (9.3%) exact matches, in which:
5 unique CDR3
4 unique J



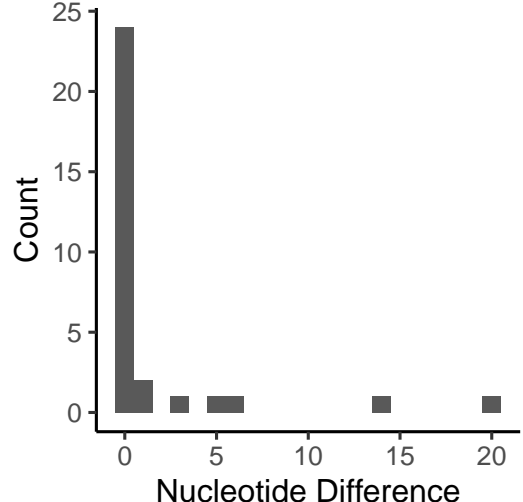
IGHV2-5*02

135 sequences assigned
77 (57%) exact matches, in which:
76 unique CDR3
6 unique J



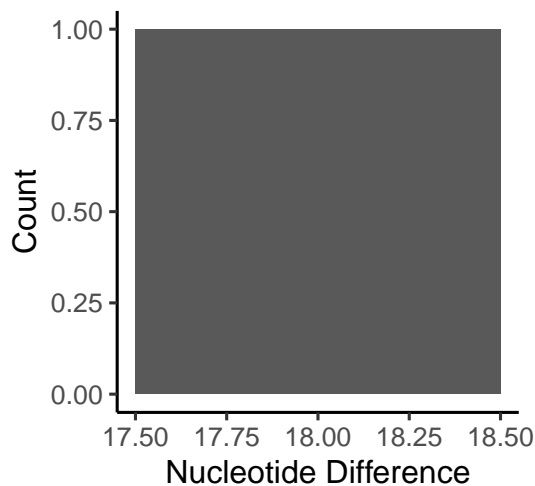
IGHV2-70*15

31 sequences assigned
24 (77.4%) exact matches, in which:
24 unique CDR3
4 unique J



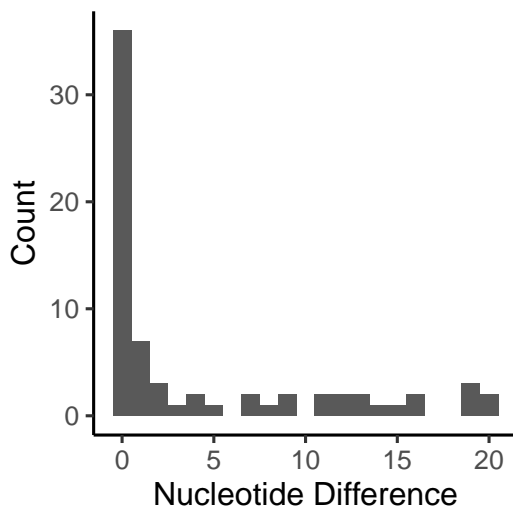
IGHV1-NL1*01

1 sequences assigned
No exact matches.



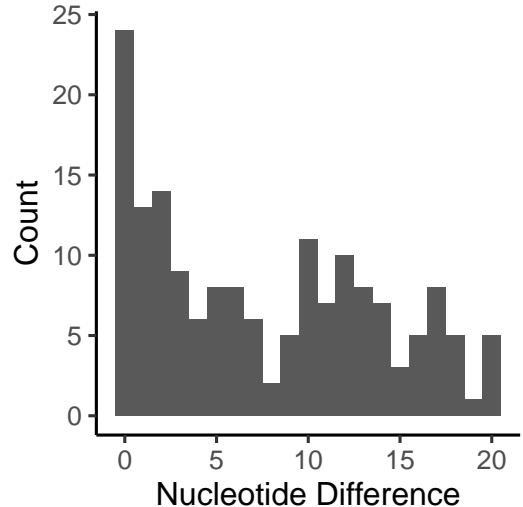
IGHV2-26*01

78 sequences assigned
36 (46.2%) exact matches, in which:
35 unique CDR3
6 unique J



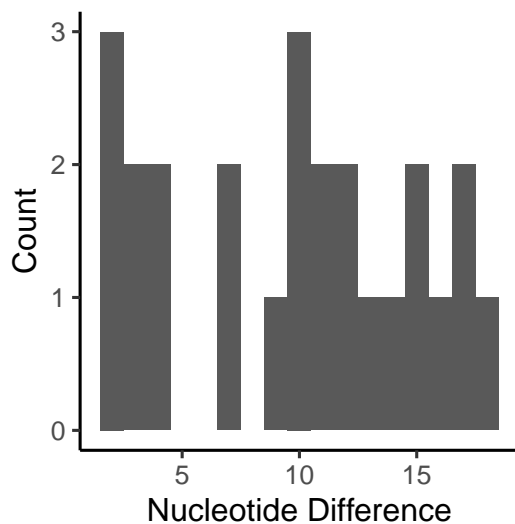
IGHV3-7*01

178 sequences assigned
24 (13.5%) exact matches, in which:
23 unique CDR3
4 unique J



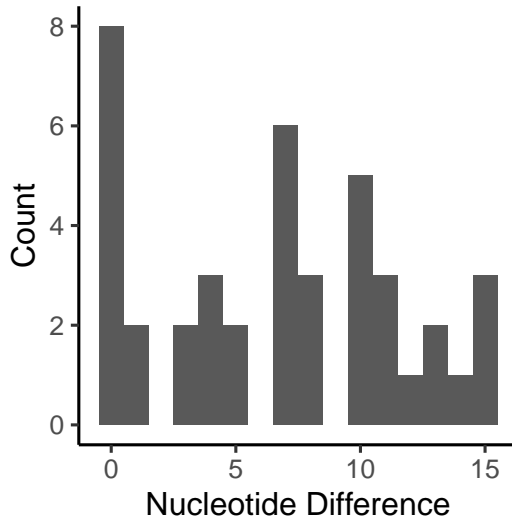
IGHV3-7*03

30 sequences assigned
No exact matches.



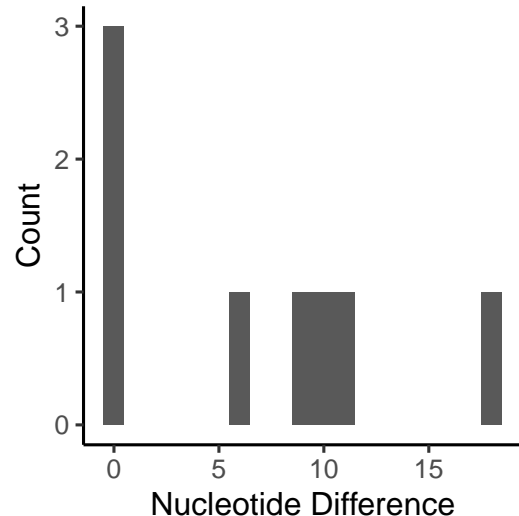
IGHV3-11*01

42 sequences assigned
8 (19%) exact matches, in which:
8 unique CDR3
4 unique J



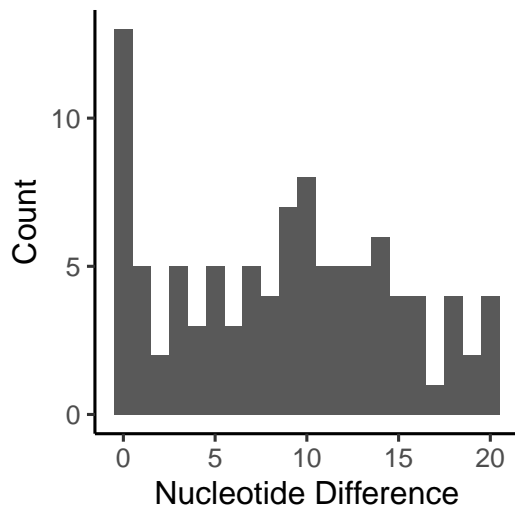
IGHV3-11*06

11 sequences assigned
3 (27.3%) exact matches, in which:
3 unique CDR3
3 unique J



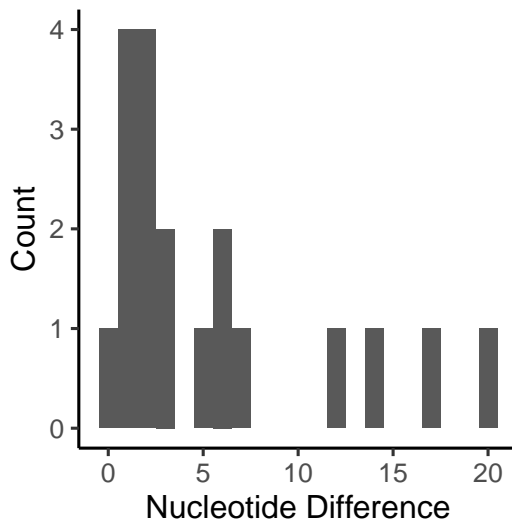
IGHV3-7*04

115 sequences assigned
13 (11.3%) exact matches, in which:
13 unique CDR3
3 unique J



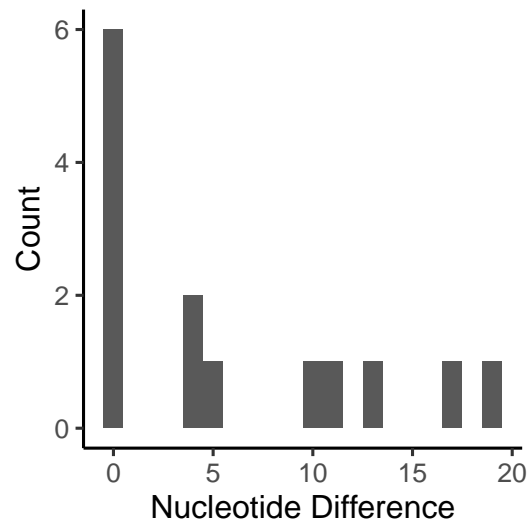
IGHV3-11*04

20 sequences assigned
1 (5%) exact matches, in which:
1 unique CDR3
1 unique J



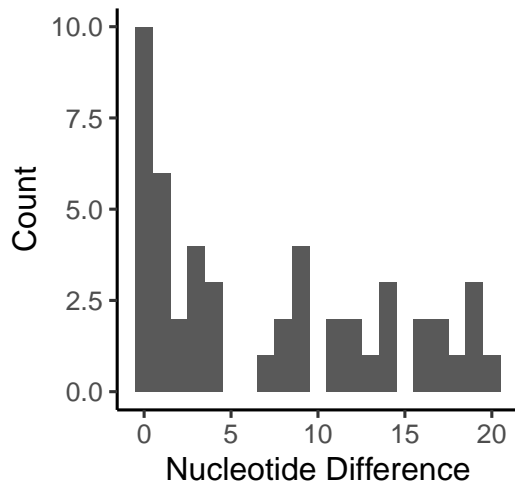
IGHV3-13*01

14 sequences assigned
6 (42.9%) exact matches, in which:
6 unique CDR3
3 unique J



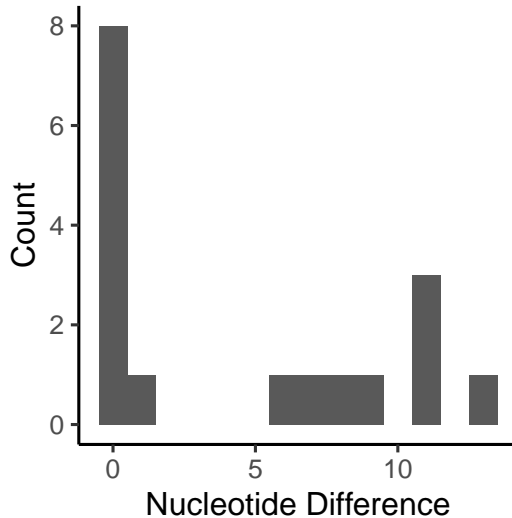
IGHV3-9*01

49 sequences assigned
10 (20.4%) exact matches, in which:
9 unique CDR3
3 unique J



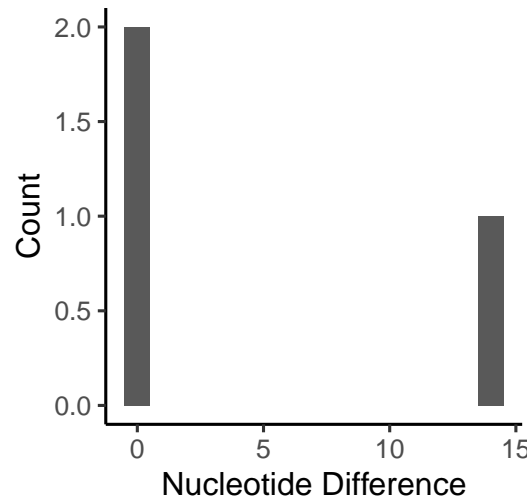
IGHV3-11*05

18 sequences assigned
8 (44.4%) exact matches, in which:
8 unique CDR3
3 unique J



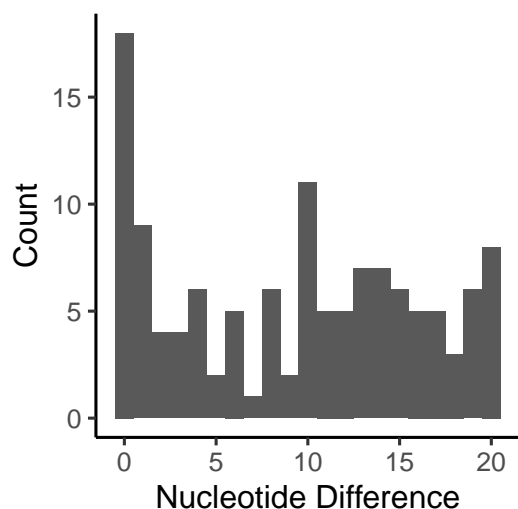
IGHV3-13*04

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



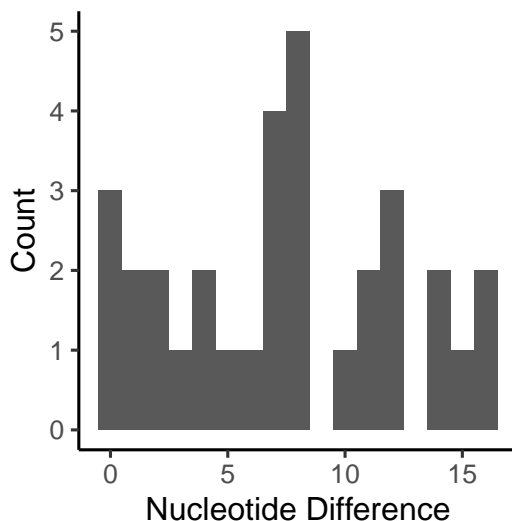
IGHV3-15*01

152 sequences assigned
18 (11.8%) exact matches, in which:
18 unique CDR3
6 unique J



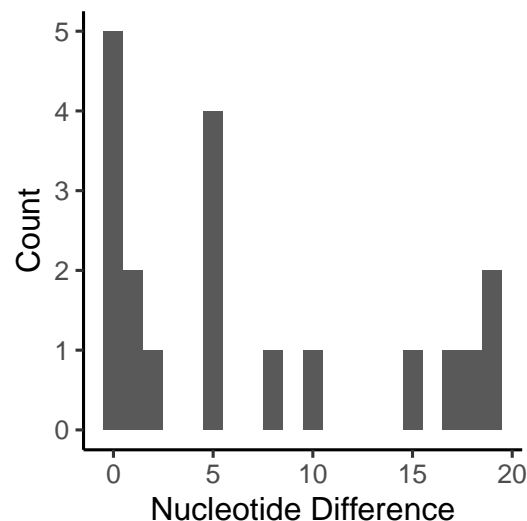
IGHV3-21*04

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



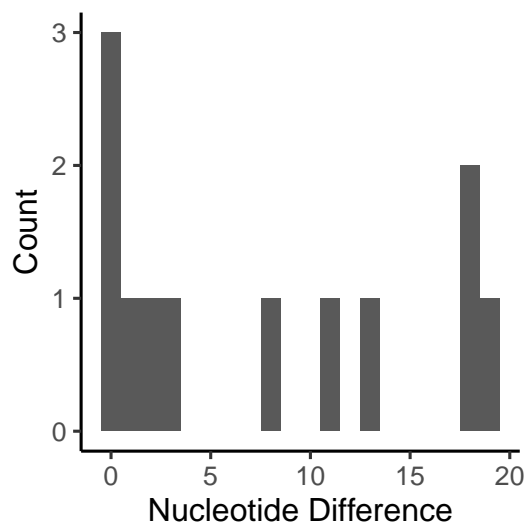
IGHV3-30*03

19 sequences assigned
5 (26.3%) exact matches, in which:
5 unique CDR3
2 unique J



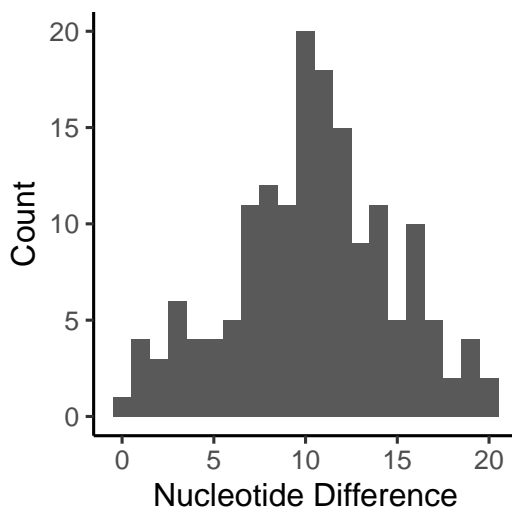
IGHV3-20*04

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



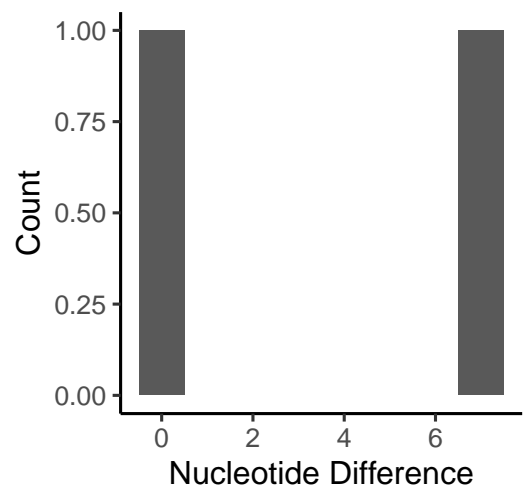
IGHV3-23*04

172 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



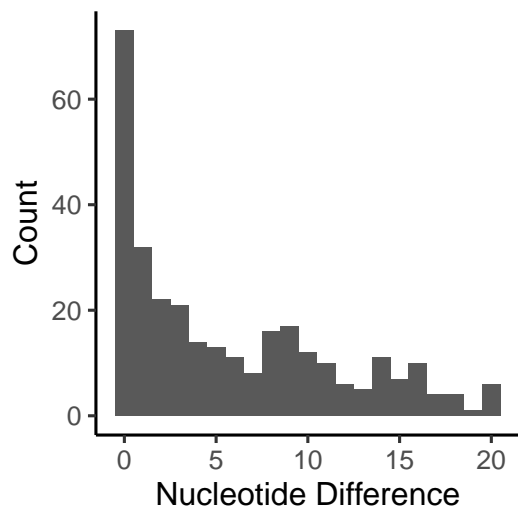
IGHV3-30-3*03

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



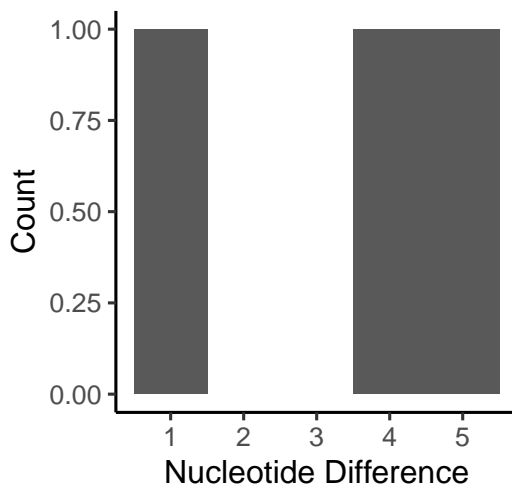
IGHV3-21*01

339 sequences assigned
73 (21.5%) exact matches, in which:
69 unique CDR3
6 unique J



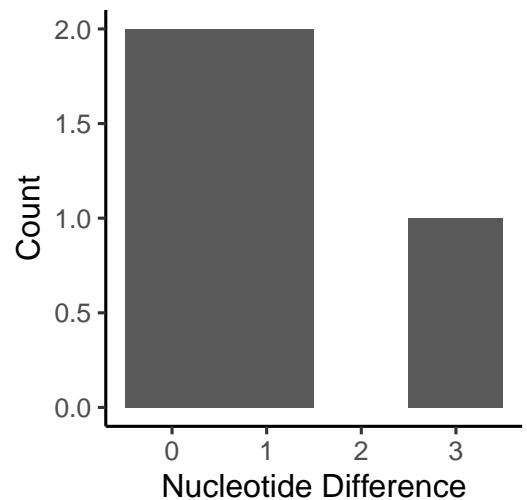
IGHV3-30-3*02

3 sequences assigned
No exact matches.



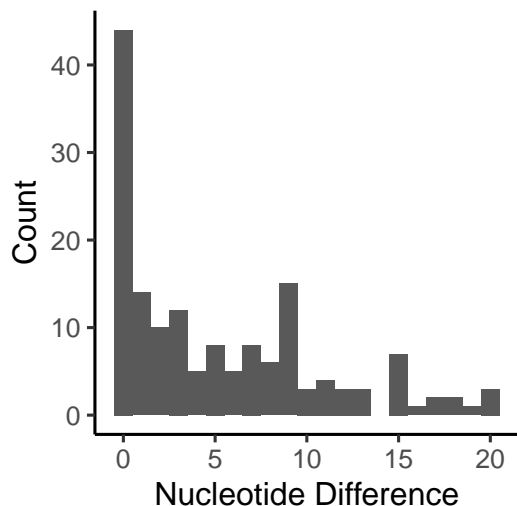
IGHV3-30*07

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



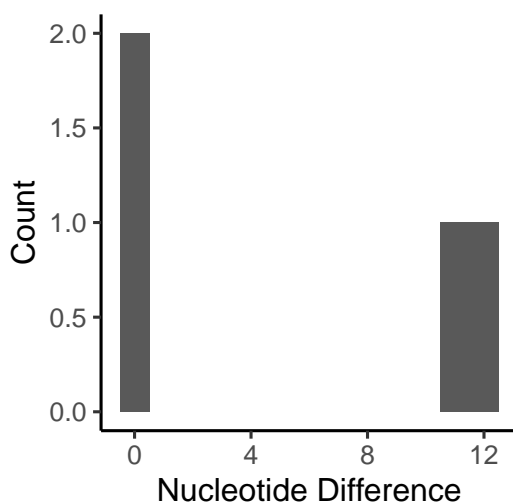
IGHV3-33*01

161 sequences assigned
44 (27.3%) exact matches, in which:
44 unique CDR3
5 unique J



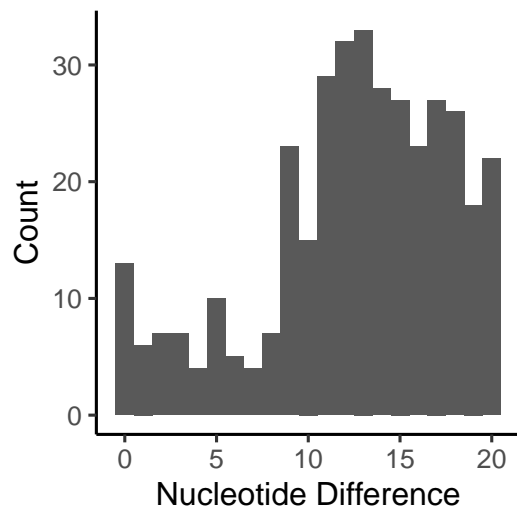
IGHV3-43*01

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



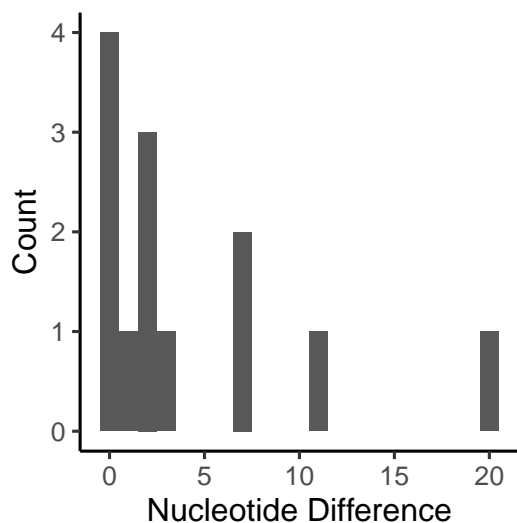
IGHV3-48*04

517 sequences assigned
13 (2.5%) exact matches, in which:
13 unique CDR3
5 unique J



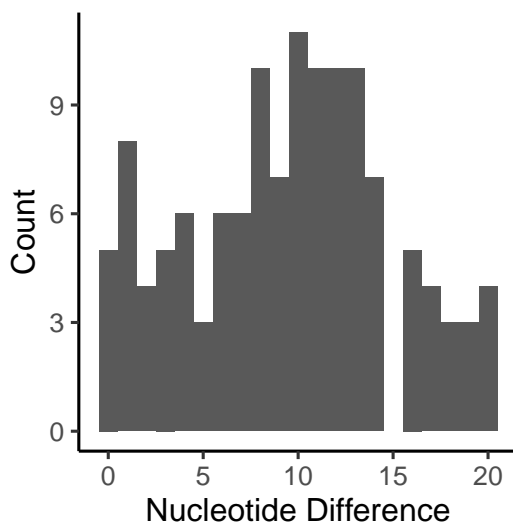
IGHV3-33*05

13 sequences assigned
4 (30.8%) exact matches, in which:
4 unique CDR3
4 unique J



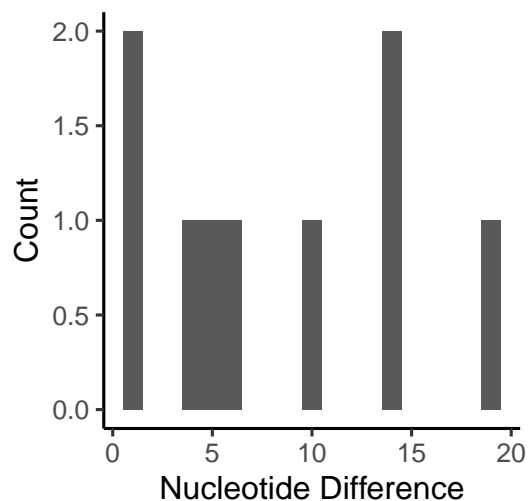
IGHV3-48*01

144 sequences assigned
5 (3.5%) exact matches, in which:
5 unique CDR3
2 unique J



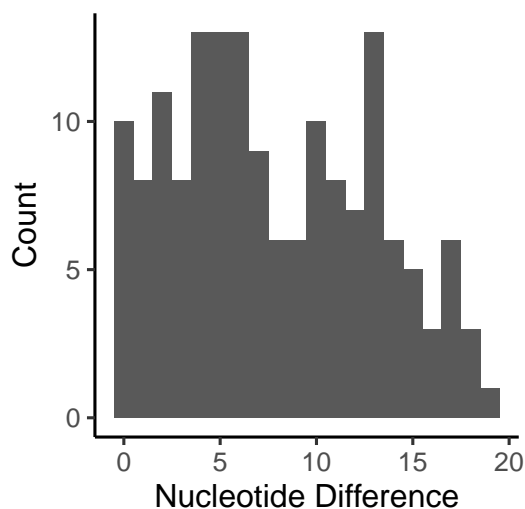
IGHV3-49*03

12 sequences assigned
No exact matches.



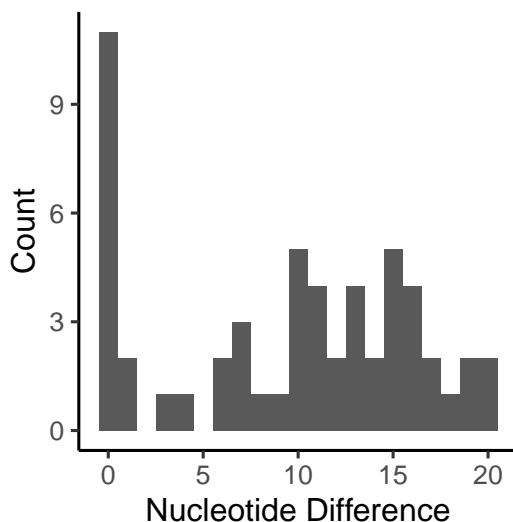
IGHV3-33*08

164 sequences assigned
10 (6.1%) exact matches, in which:
10 unique CDR3
4 unique J



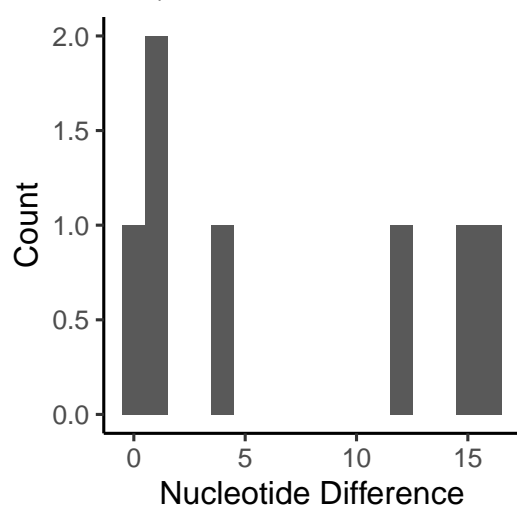
IGHV3-48*02

60 sequences assigned
11 (18.3%) exact matches, in which:
11 unique CDR3
4 unique J



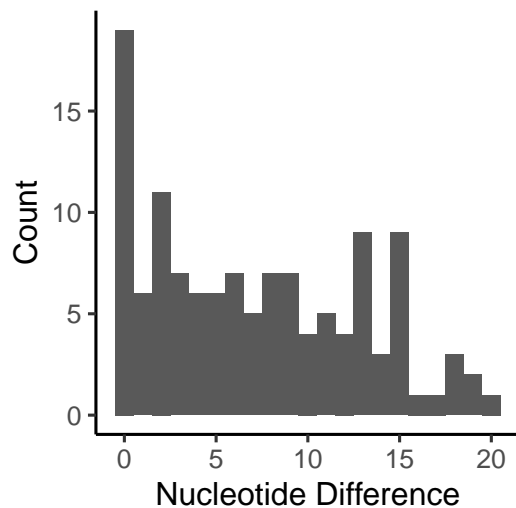
IGHV3-49*05

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



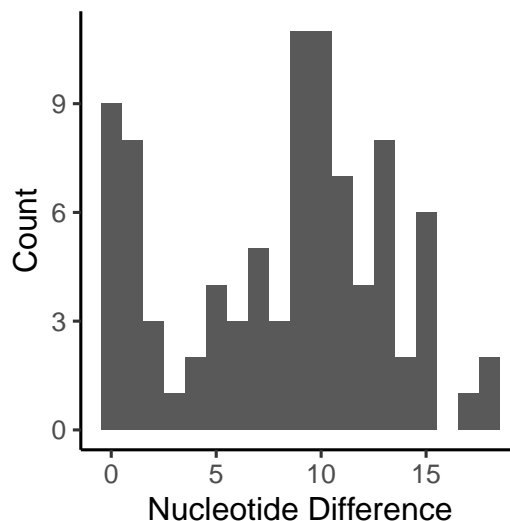
IGHV3-53*01

131 sequences assigned
19 (14.5%) exact matches, in which:
18 unique CDR3
6 unique J



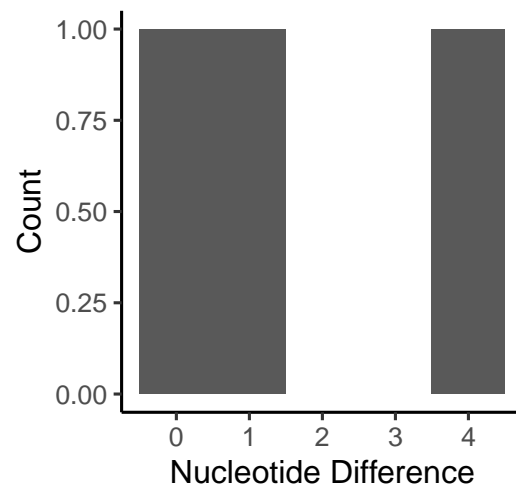
IGHV3-66*01

97 sequences assigned
9 (9.3%) exact matches, in which:
9 unique CDR3
4 unique J



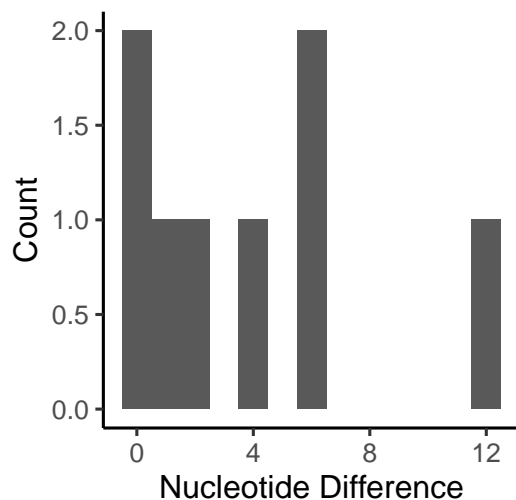
IGHV3-73*01

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



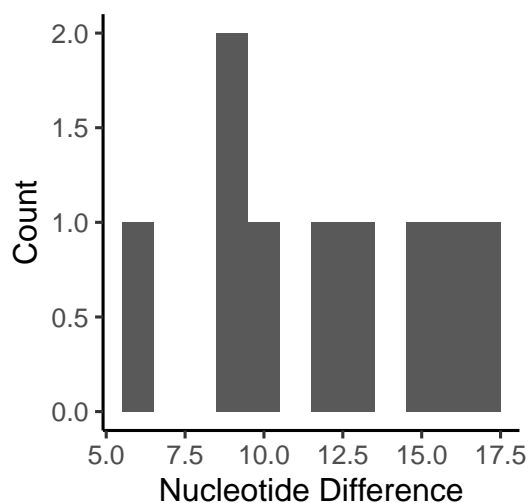
IGHV3-64*01

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



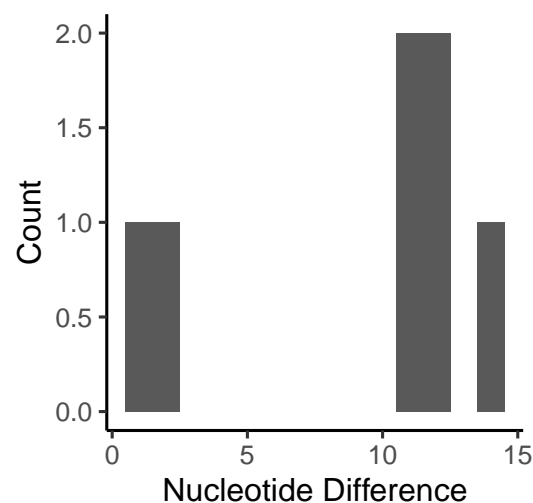
IGHV3-69-1*01

15 sequences assigned
No exact matches.



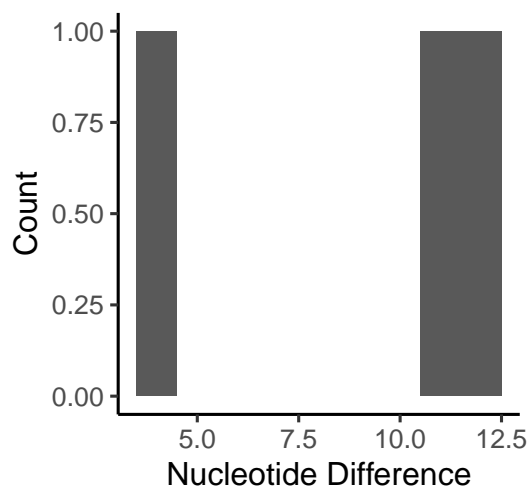
IGHV3-73*02

8 sequences assigned
No exact matches.



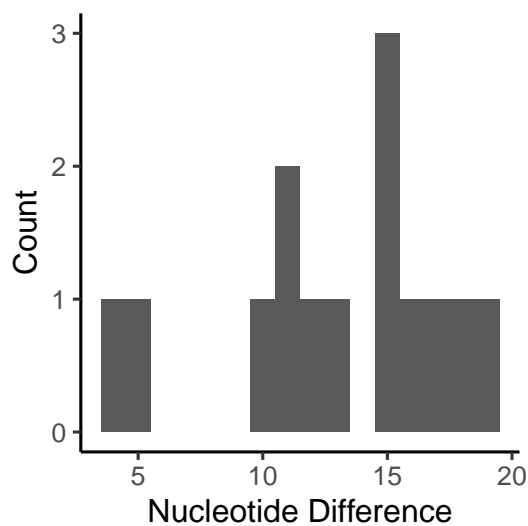
IGHV3-64*04

3 sequences assigned
No exact matches.



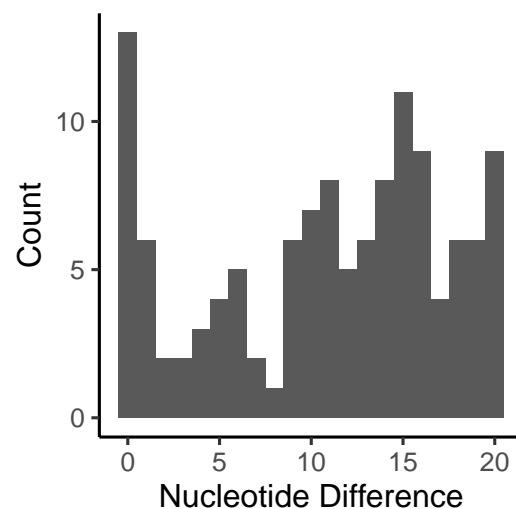
IGHV3-72*01

14 sequences assigned
No exact matches.



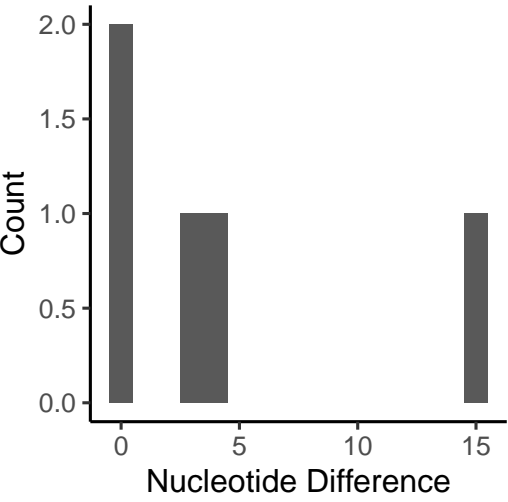
IGHV3-74*01

137 sequences assigned
13 (9.5%) exact matches, in which:
12 unique CDR3
5 unique J



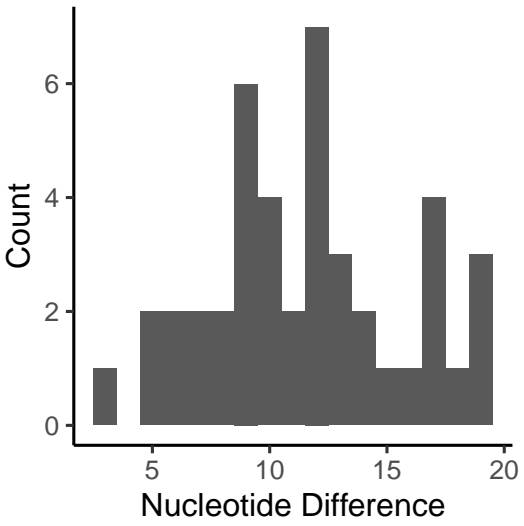
IGHV3-43D*03

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



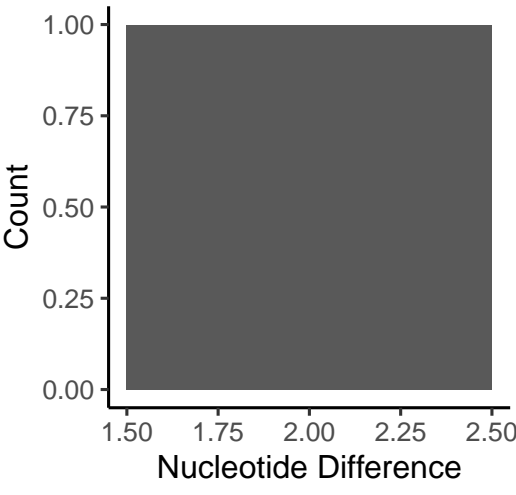
IGHV3-NL1*01

44 sequences assigned
No exact matches.



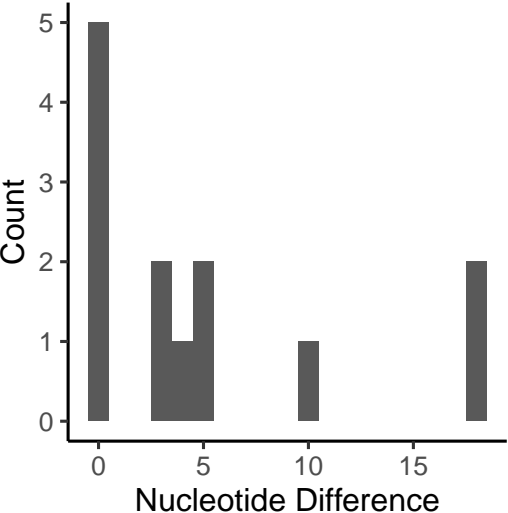
IGHV4-28*03

1 sequences assigned
No exact matches.



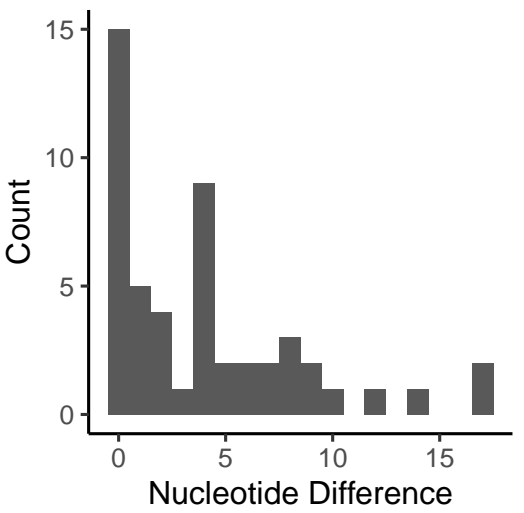
IGHV3-64D*06

14 sequences assigned
5 (35.7%) exact matches, in which:
5 unique CDR3
3 unique J



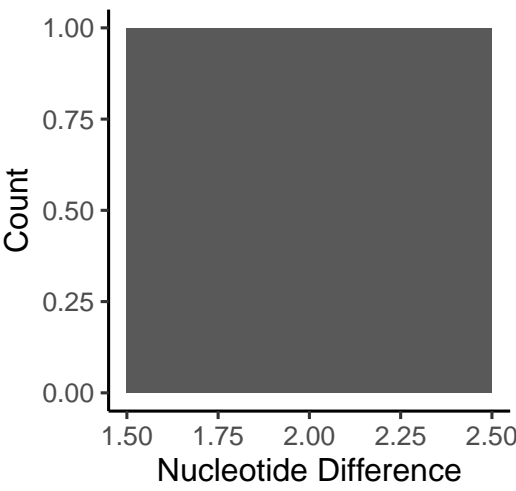
IGHV4-4*02

52 sequences assigned
15 (28.8%) exact matches, in which:
15 unique CDR3
3 unique J



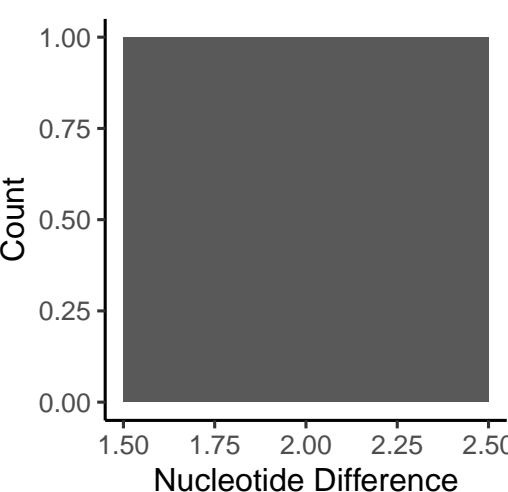
IGHV4-30-2*04

1 sequences assigned
No exact matches.



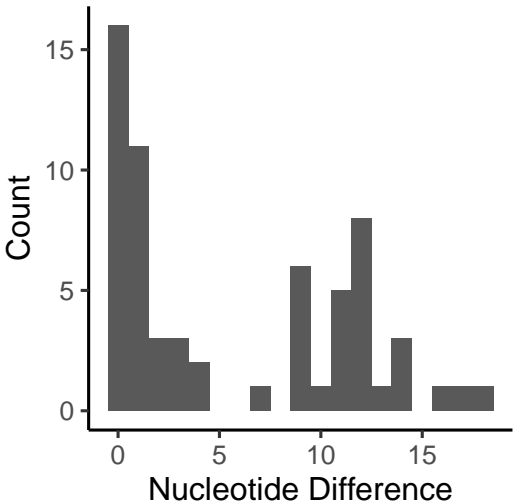
IGHV3-64D*08

1 sequences assigned
No exact matches.



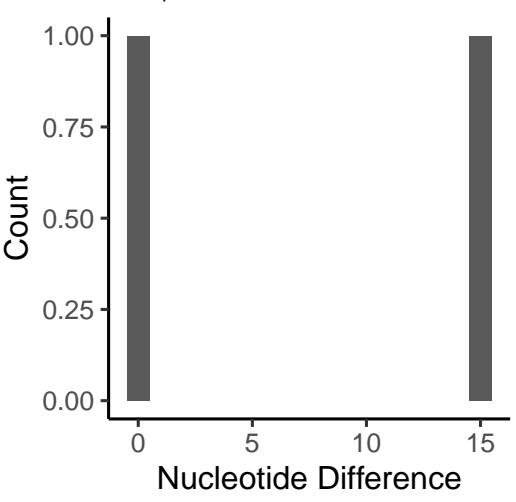
IGHV4-4*07

65 sequences assigned
16 (24.6%) exact matches, in which:
16 unique CDR3
4 unique J



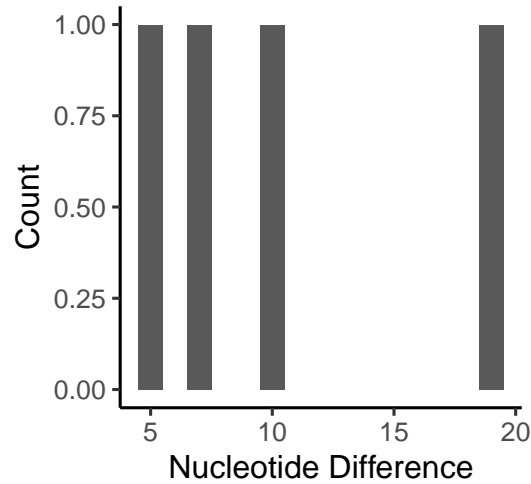
IGHV4-30-4*07

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



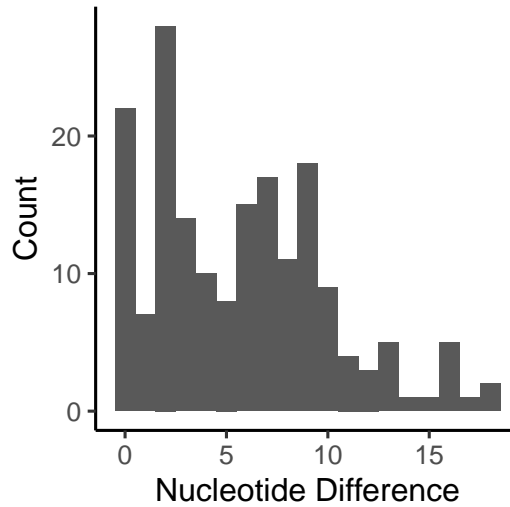
IGHV4-30-4*08

4 sequences assigned
No exact matches.



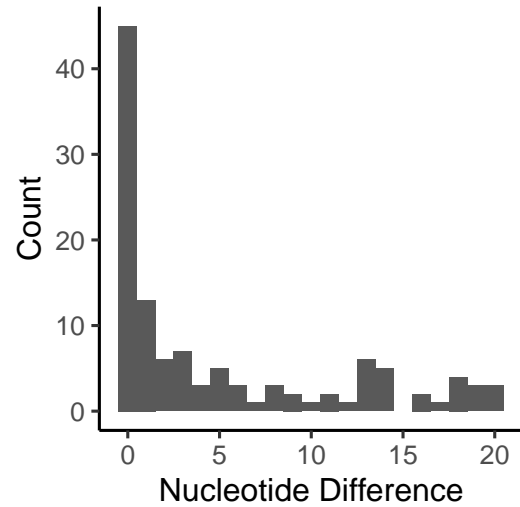
IGHV4-38-2*02

194 sequences assigned
22 (11.3%) exact matches, in which:
22 unique CDR3
5 unique J



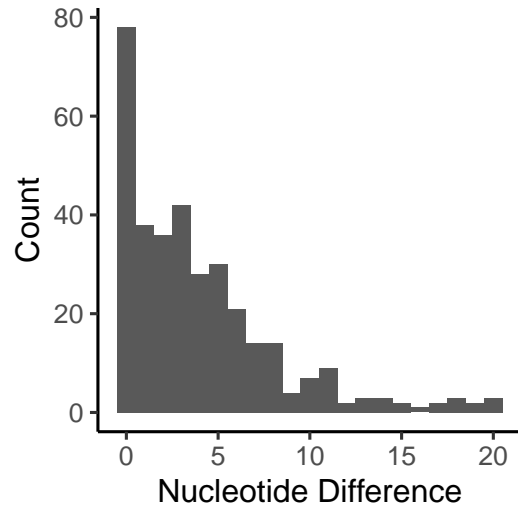
IGHV4-59*01

126 sequences assigned
45 (35.7%) exact matches, in which:
44 unique CDR3
7 unique J



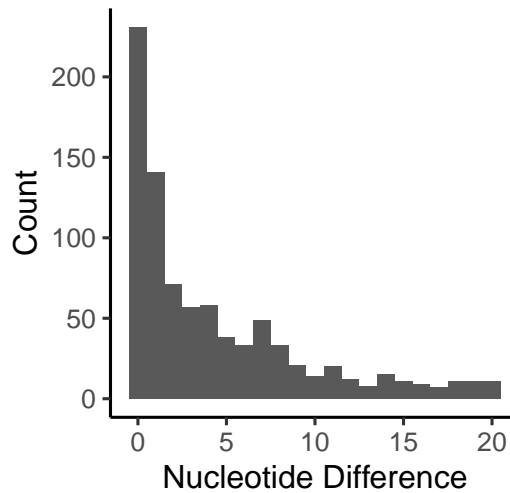
IGHV4-31*03

351 sequences assigned
78 (22.2%) exact matches, in which:
78 unique CDR3
5 unique J



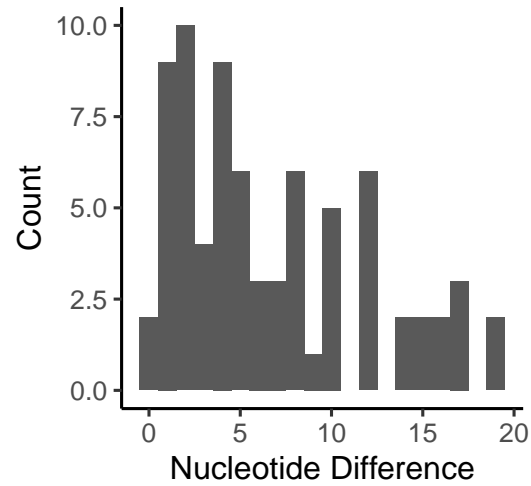
IGHV4-39*01

904 sequences assigned
231 (25.6%) exact matches, in which:
228 unique CDR3
7 unique J



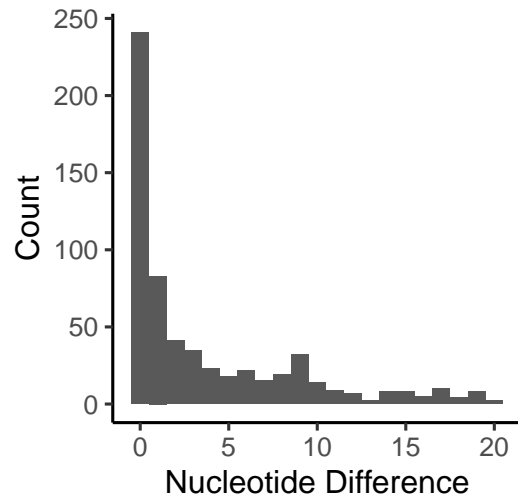
IGHV4-59*08

80 sequences assigned
2 (2.5%) exact matches, in which:
2 unique CDR3
2 unique J



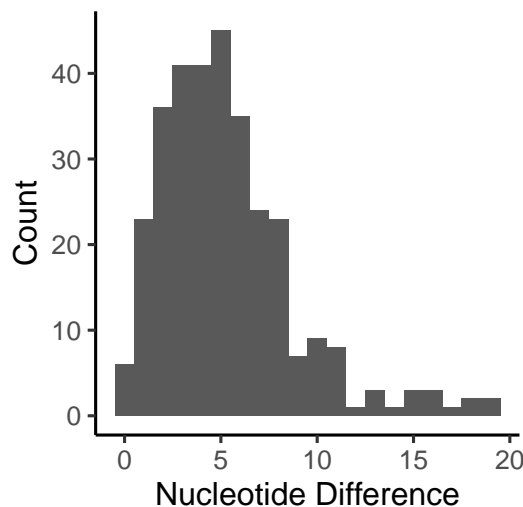
IGHV4-34*01

657 sequences assigned
241 (36.7%) exact matches, in which:
238 unique CDR3
6 unique J



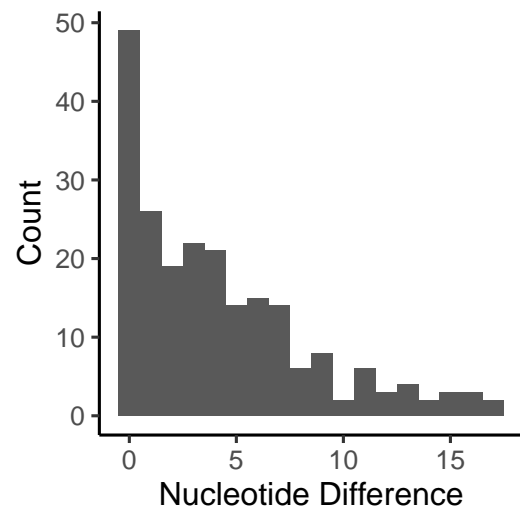
IGHV4-39*07

316 sequences assigned
6 (1.9%) exact matches, in which:
6 unique CDR3
1 unique J



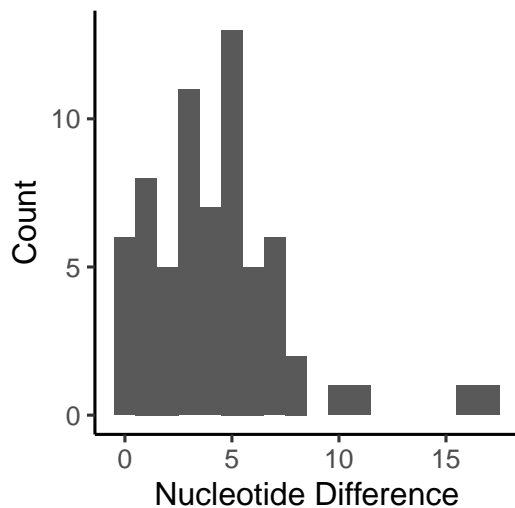
IGHV4-59*12

227 sequences assigned
49 (21.6%) exact matches, in which:
49 unique CDR3
6 unique J



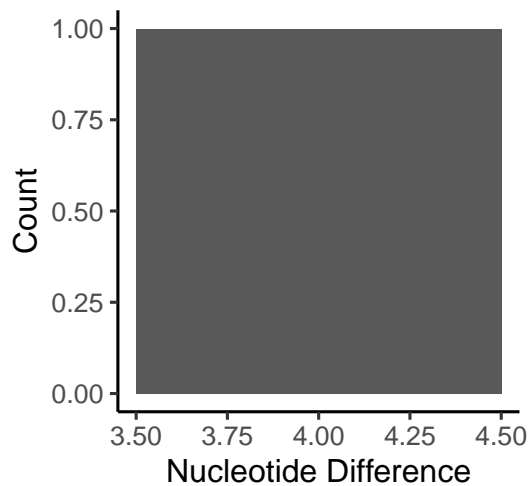
IGHV4-61*01

69 sequences assigned
6 (8.7%) exact matches, in which:
6 unique CDR3
2 unique J



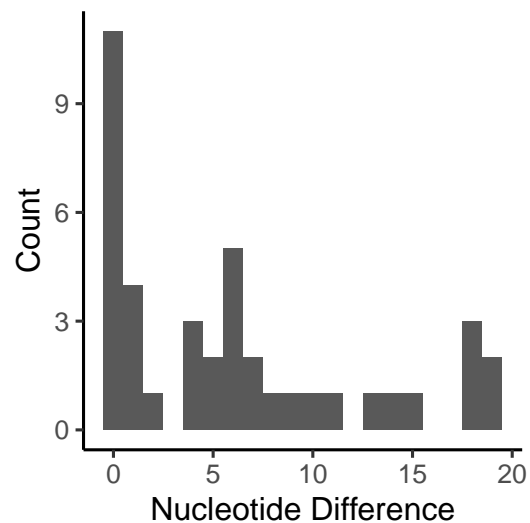
IGHV1/OR15-4*01

1 sequences assigned
No exact matches.



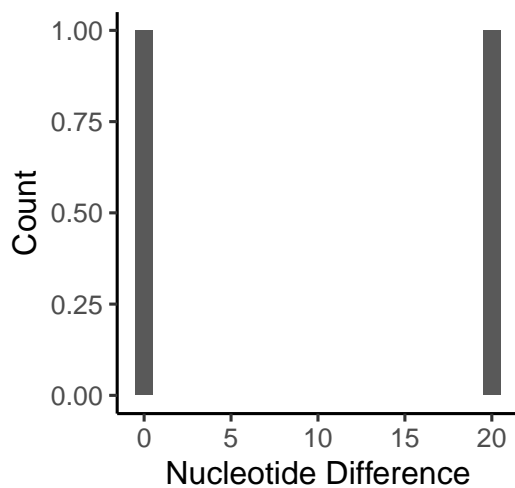
IGHV6-1*01

42 sequences assigned
11 (26.2%) exact matches, in which:
11 unique CDR3
5 unique J



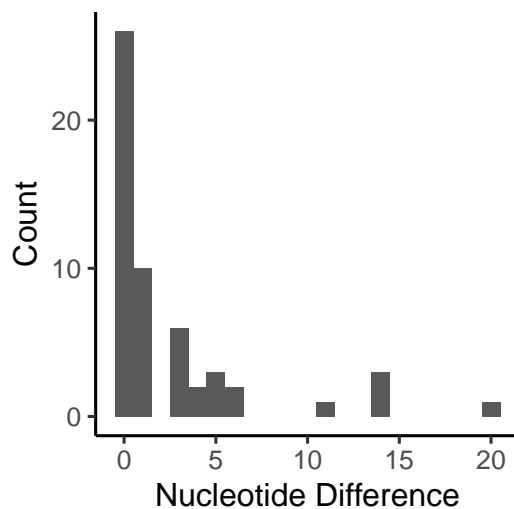
IGHV4-61*07

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



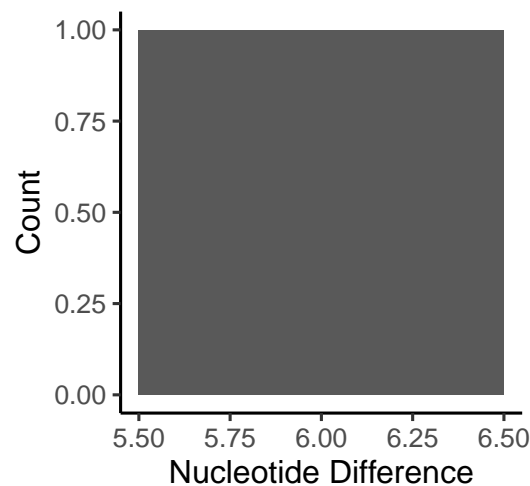
IGHV5-10-1*01

55 sequences assigned
26 (47.3%) exact matches, in which:
26 unique CDR3
7 unique J



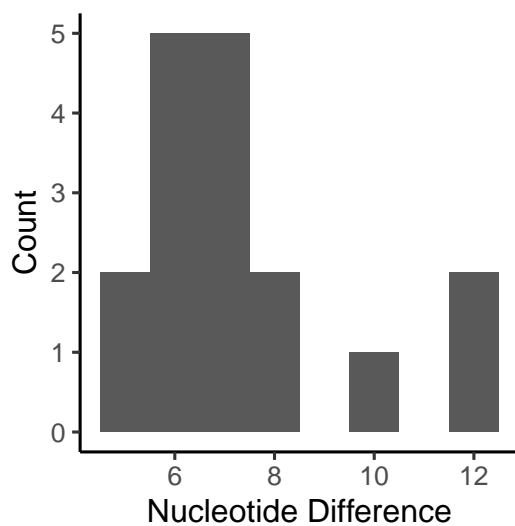
IGHV7-40*03

1 sequences assigned
No exact matches.



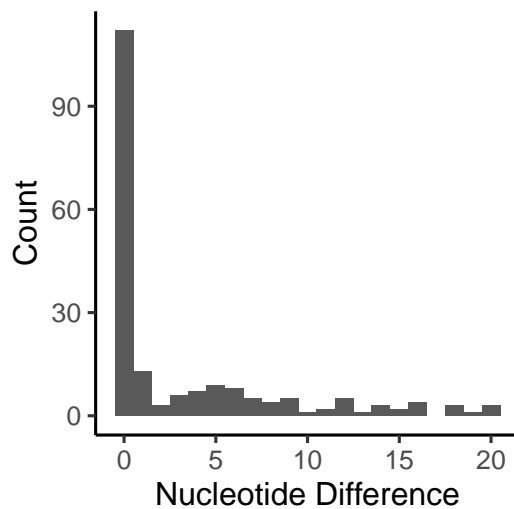
IGHV4-61*08

19 sequences assigned
No exact matches.

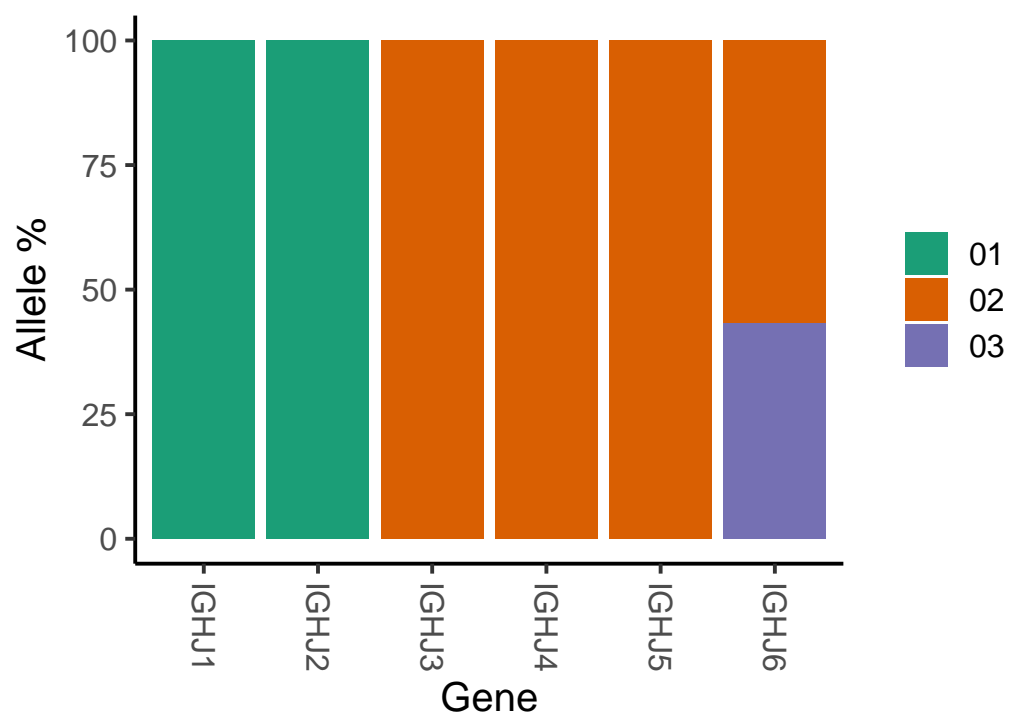


IGHV5-51*01

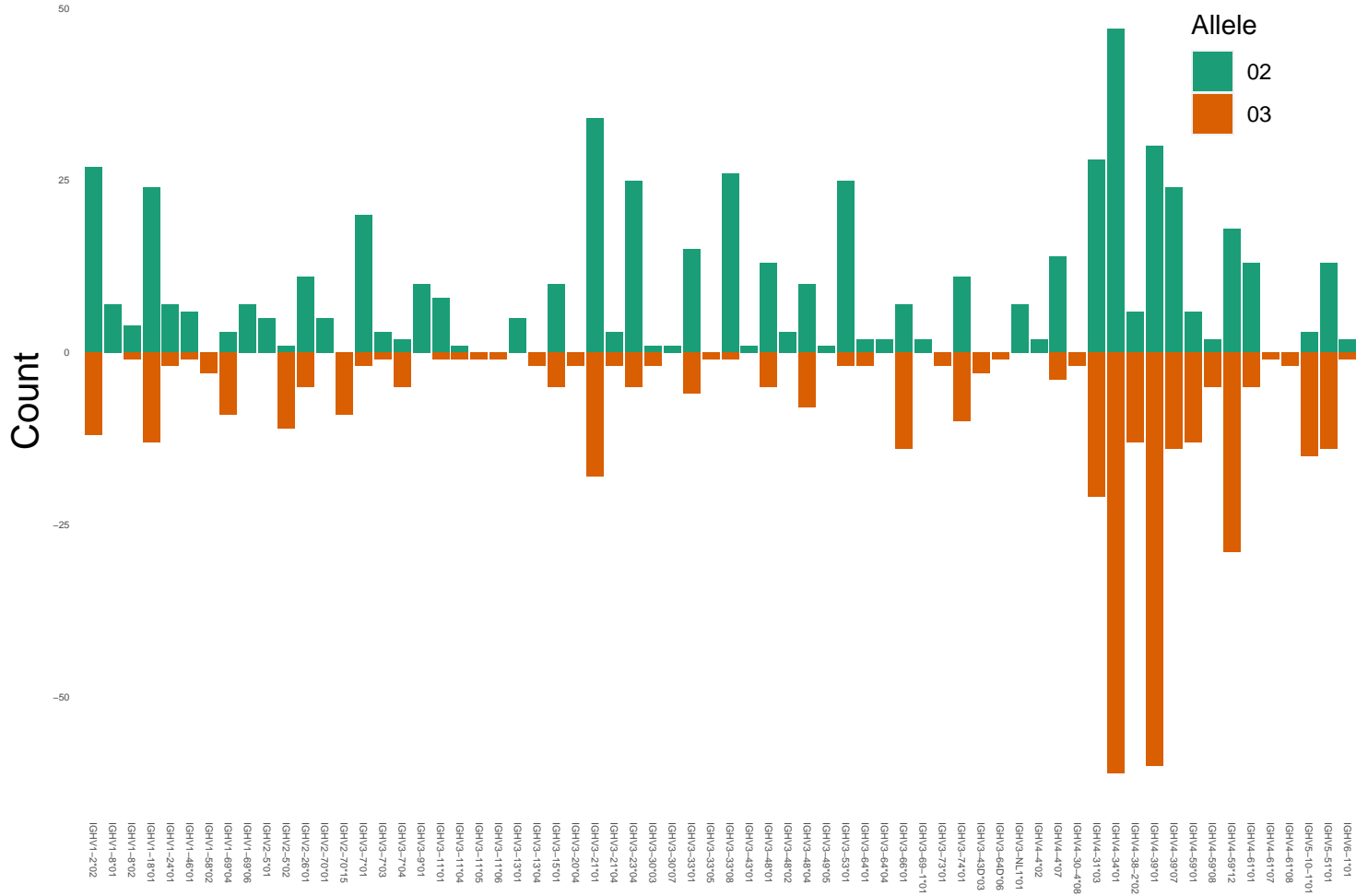
199 sequences assigned
112 (56.3%) exact matches, in which:
107 unique CDR3
7 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



[illegible]