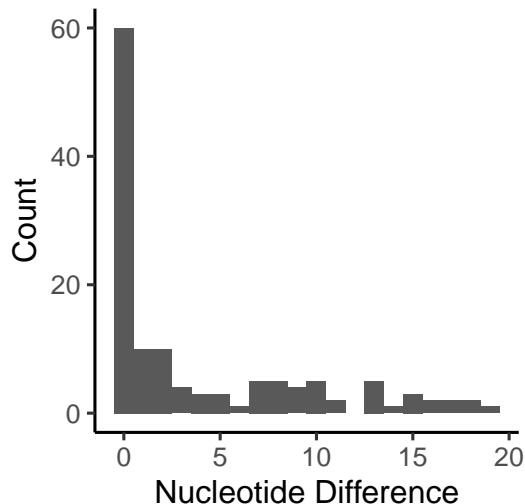


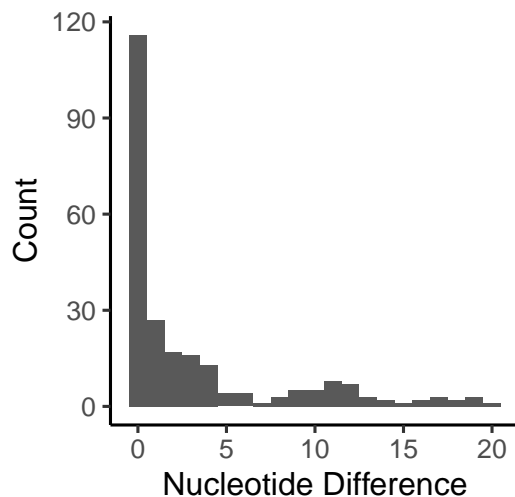
IGHV1-2*02

152 sequences assigned
60 (39.5%) exact matches, in which:
59 unique CDR3
6 unique J



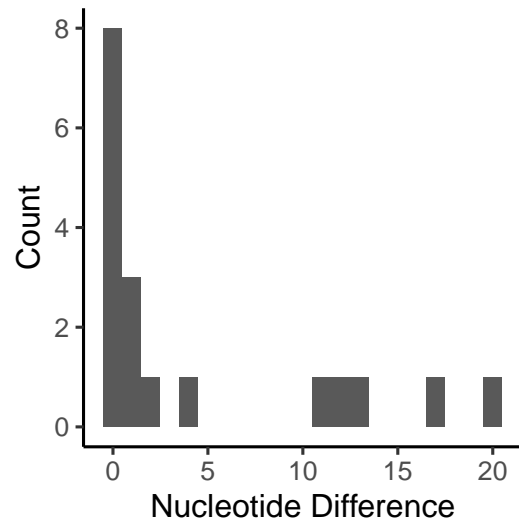
IGHV1-18*01

250 sequences assigned
116 (46.4%) exact matches, in which:
116 unique CDR3
6 unique J



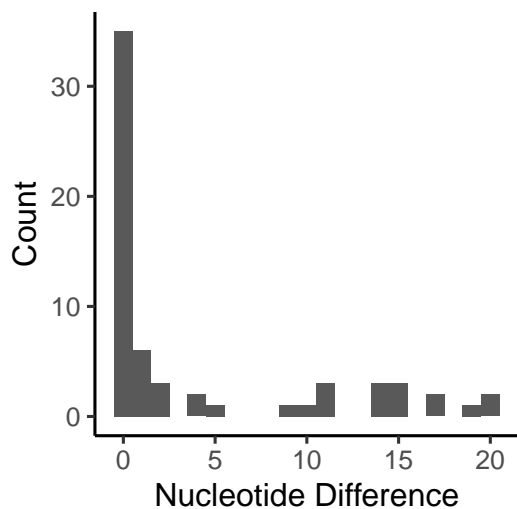
IGHV1-58*01

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



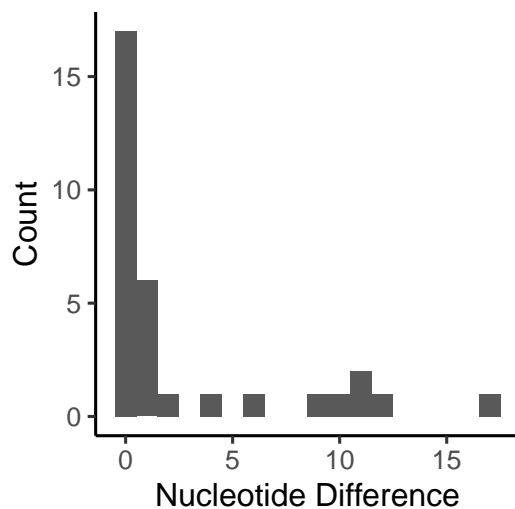
IGHV1-3*01

66 sequences assigned
35 (53%) exact matches, in which:
34 unique CDR3
5 unique J



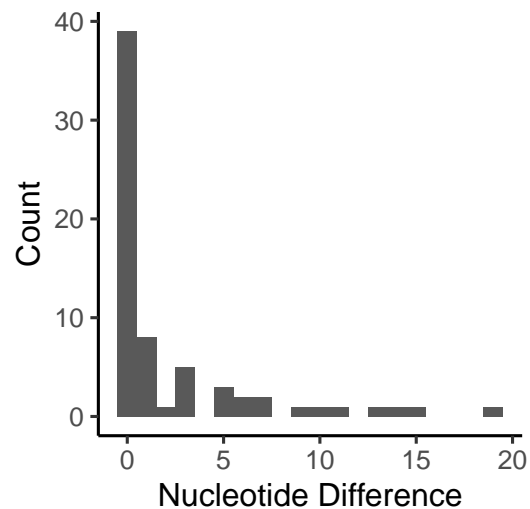
IGHV1-24*01

38 sequences assigned
17 (44.7%) exact matches, in which:
17 unique CDR3
7 unique J



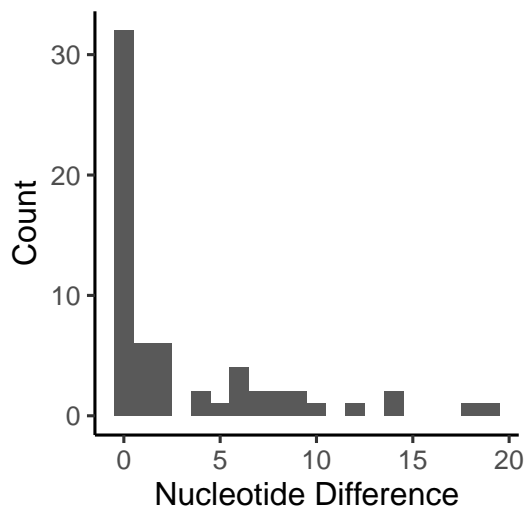
IGHV1-69*04

72 sequences assigned
39 (54.2%) exact matches, in which:
39 unique CDR3
7 unique J



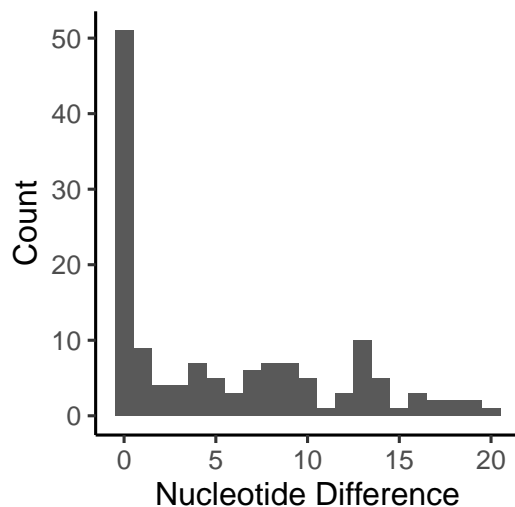
IGHV1-8*01

63 sequences assigned
32 (50.8%) exact matches, in which:
32 unique CDR3
3 unique J



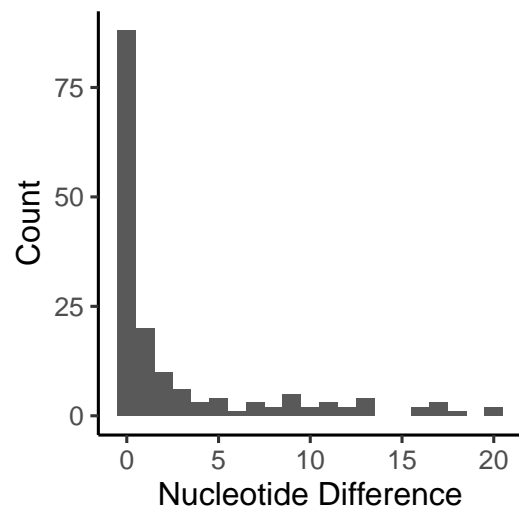
IGHV1-46*01

143 sequences assigned
51 (35.7%) exact matches, in which:
50 unique CDR3
5 unique J



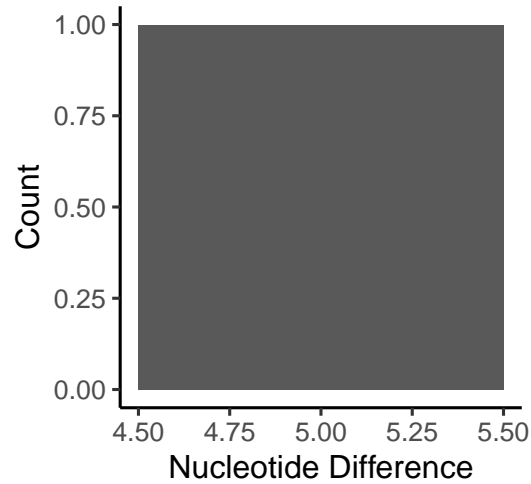
IGHV1-69*06

164 sequences assigned
88 (53.7%) exact matches, in which:
88 unique CDR3
6 unique J



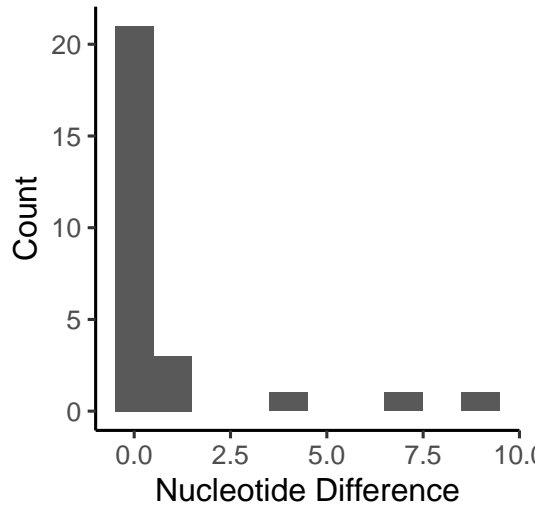
IGHV1-69D*01

1 sequences assigned
No exact matches.



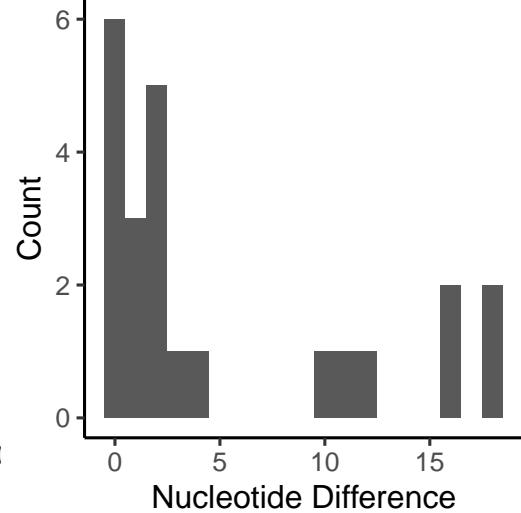
IGHV2-70*01

27 sequences assigned
21 (77.8%) exact matches, in which:
18 unique CDR3
4 unique J



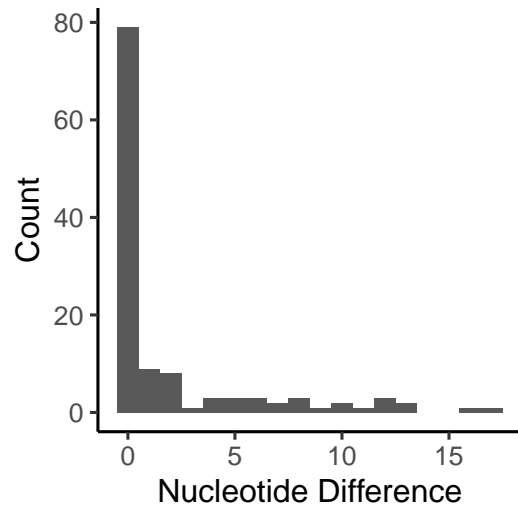
IGHV3-7*05

25 sequences assigned
6 (24%) exact matches, in which:
6 unique CDR3
4 unique J



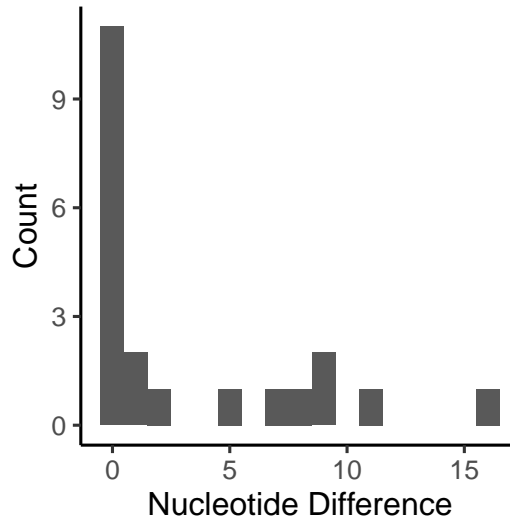
IGHV2-5*02

127 sequences assigned
79 (62.2%) exact matches, in which:
79 unique CDR3
7 unique J



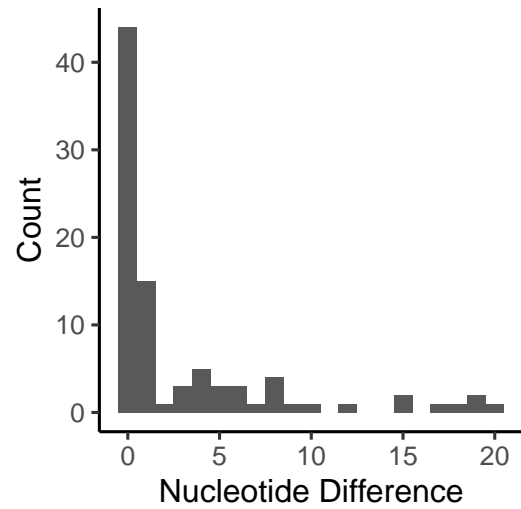
IGHV2-70*15

21 sequences assigned
11 (52.4%) exact matches, in which:
11 unique CDR3
4 unique J



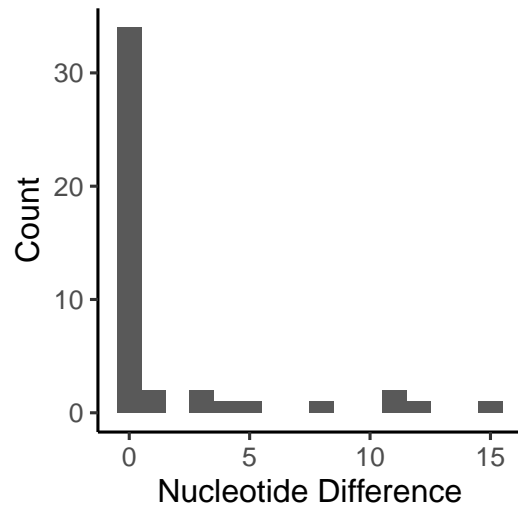
IGHV3-9*01

90 sequences assigned
44 (48.9%) exact matches, in which:
44 unique CDR3
5 unique J



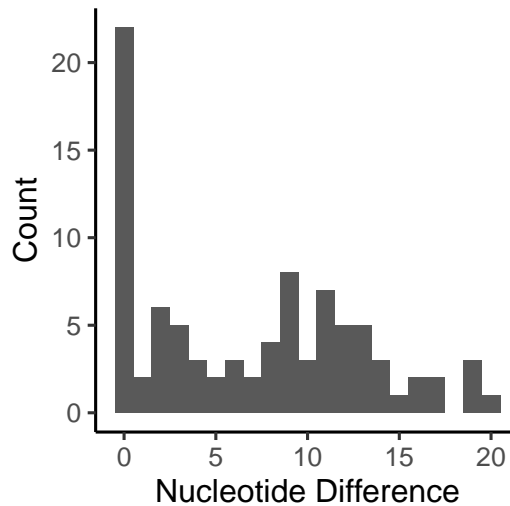
IGHV2-26*01

47 sequences assigned
34 (72.3%) exact matches, in which:
33 unique CDR3
6 unique J



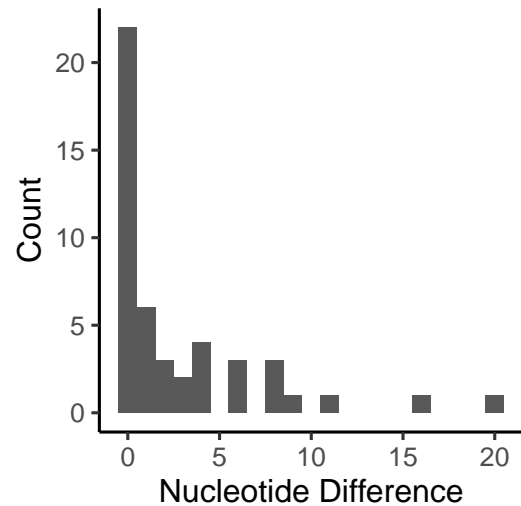
IGHV3-7*01

99 sequences assigned
22 (22.2%) exact matches, in which:
21 unique CDR3
6 unique J



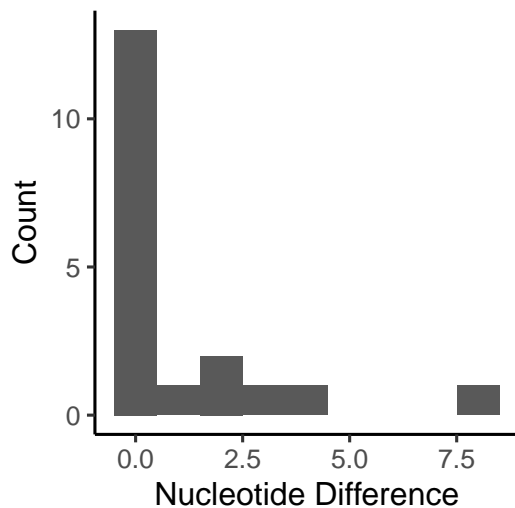
IGHV3-11*01

49 sequences assigned
22 (44.9%) exact matches, in which:
22 unique CDR3
5 unique J



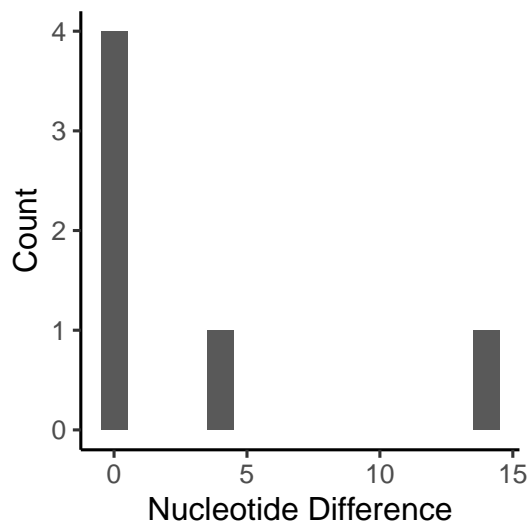
IGHV3-11*05

21 sequences assigned
13 (61.9%) exact matches, in which:
13 unique CDR3
4 unique J



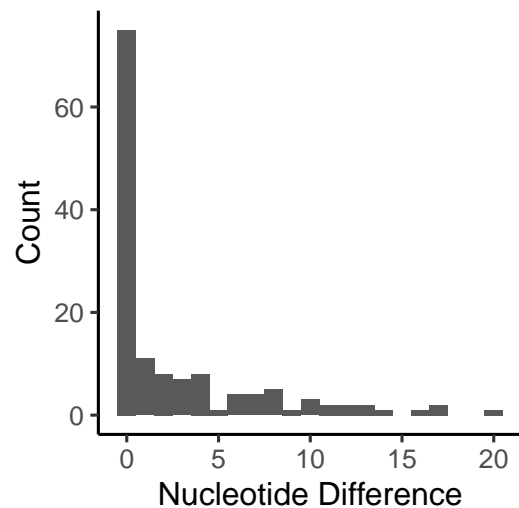
IGHV3-13*04

6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
4 unique J



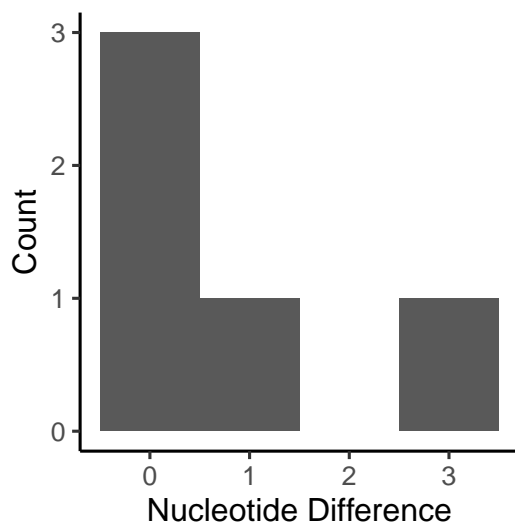
IGHV3-21*01

144 sequences assigned
75 (52.1%) exact matches, in which:
75 unique CDR3
7 unique J



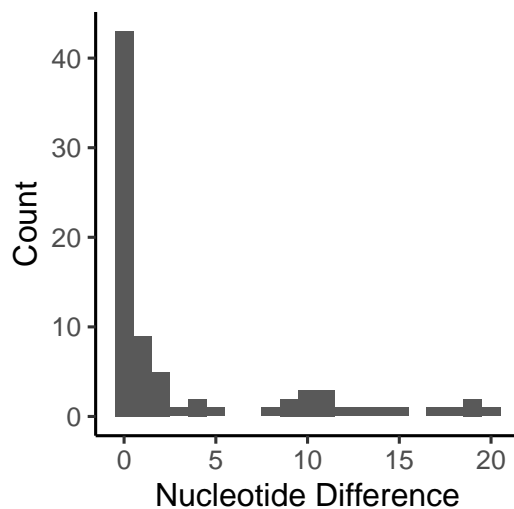
IGHV3-11*06

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



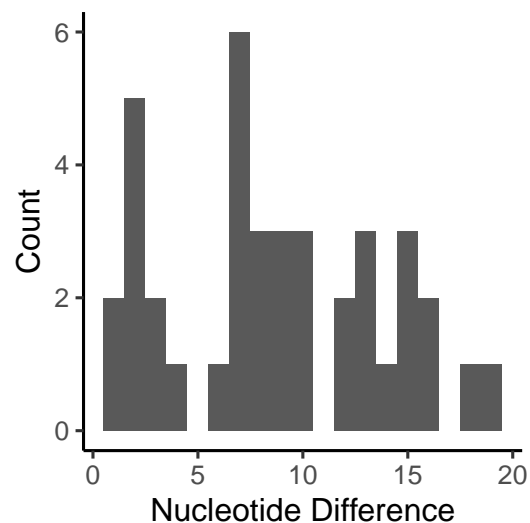
IGHV3-15*01

82 sequences assigned
43 (52.4%) exact matches, in which:
41 unique CDR3
5 unique J



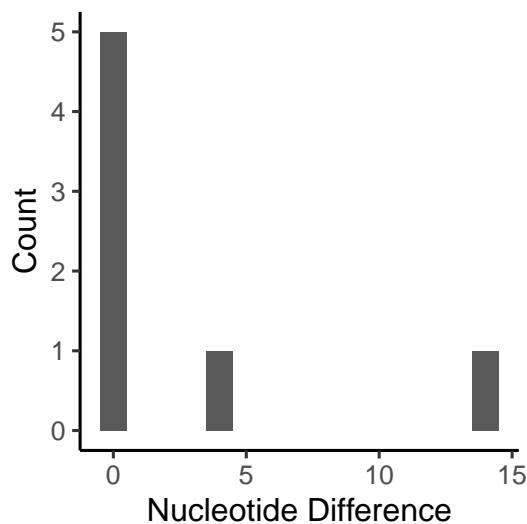
IGHV3-23*04

43 sequences assigned
No exact matches.



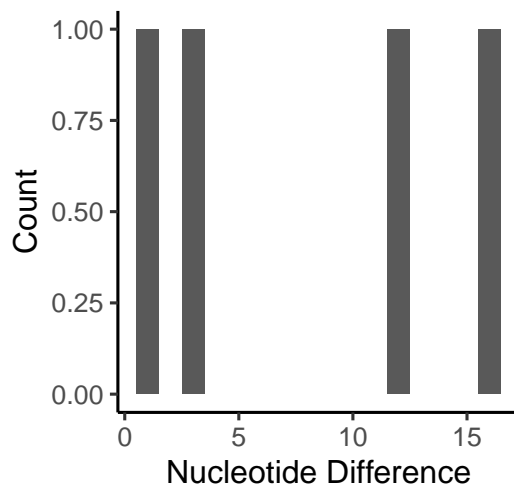
IGHV3-13*01

7 sequences assigned
5 (71.4%) exact matches, in which:
5 unique CDR3
3 unique J



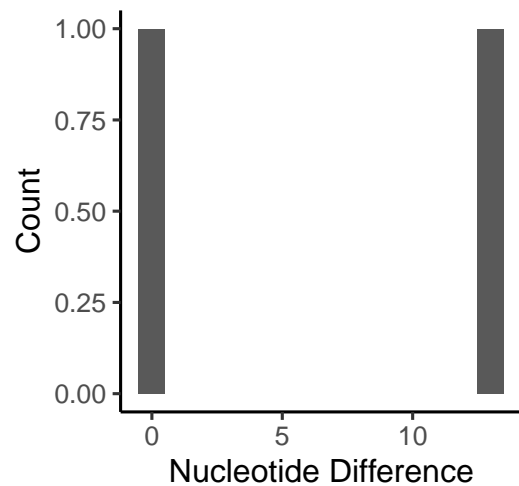
IGHV3-20*01

4 sequences assigned
No exact matches.



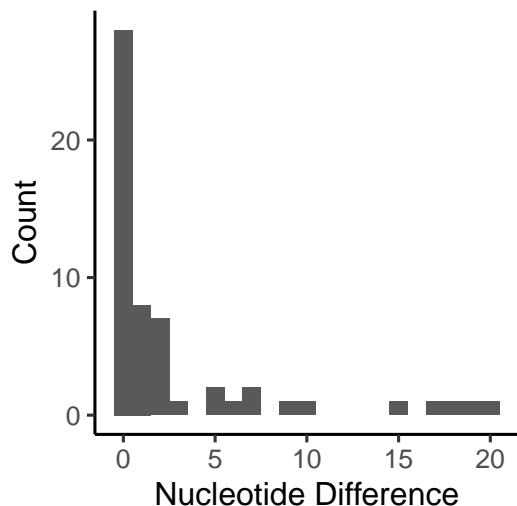
IGHV3-30-3*02

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



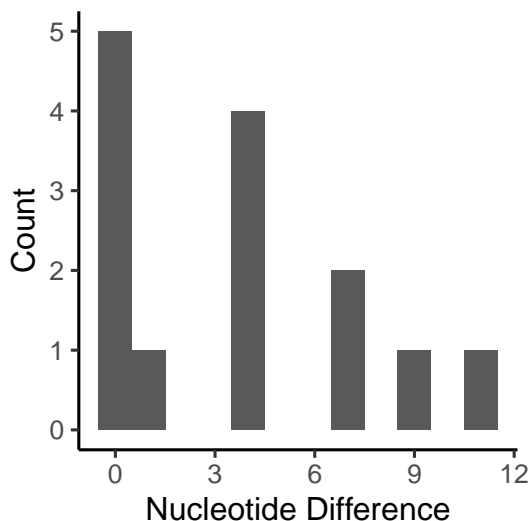
IGHV3-33*01

56 sequences assigned
28 (50%) exact matches, in which:
28 unique CDR3
6 unique J



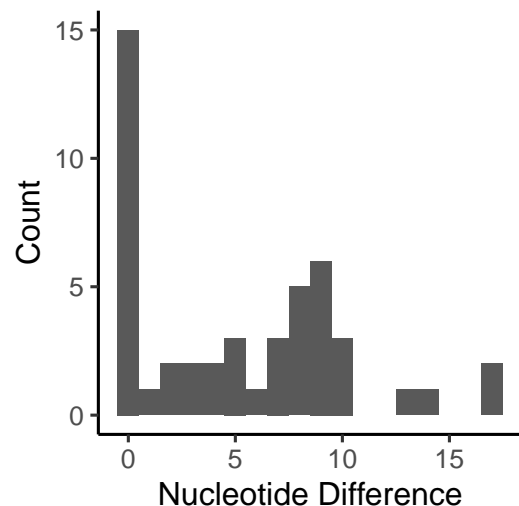
IGHV3-43*01

15 sequences assigned
5 (33.3%) exact matches, in which:
5 unique CDR3
2 unique J



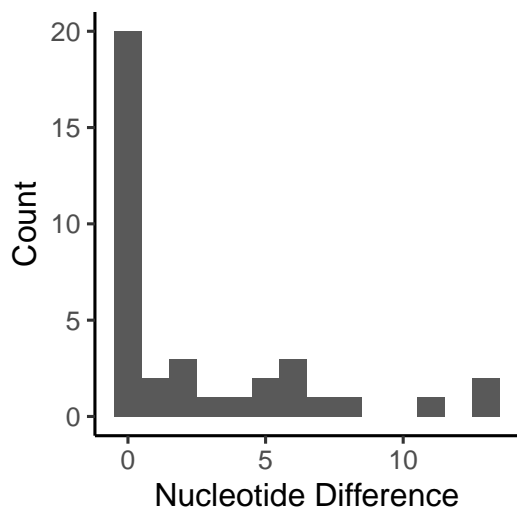
IGHV3-48*04

47 sequences assigned
15 (31.9%) exact matches, in which:
15 unique CDR3
3 unique J



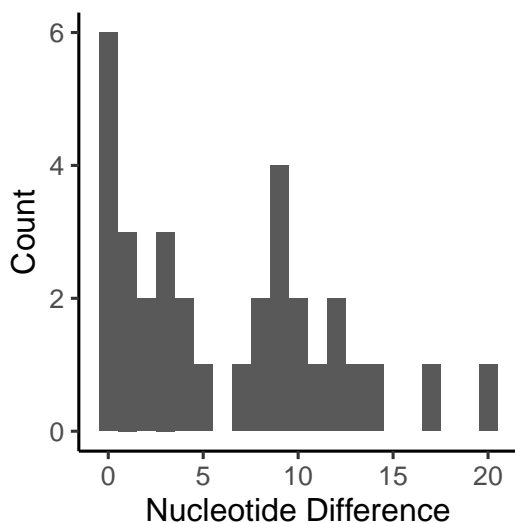
IGHV3-33*06

37 sequences assigned
20 (54.1%) exact matches, in which:
20 unique CDR3
5 unique J



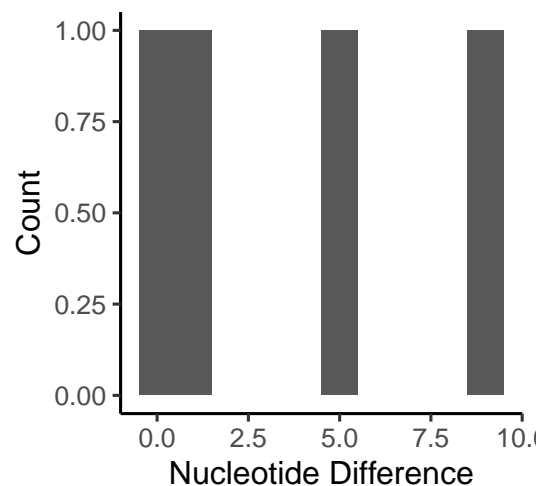
IGHV3-48*01

33 sequences assigned
6 (18.2%) exact matches, in which:
6 unique CDR3
3 unique J



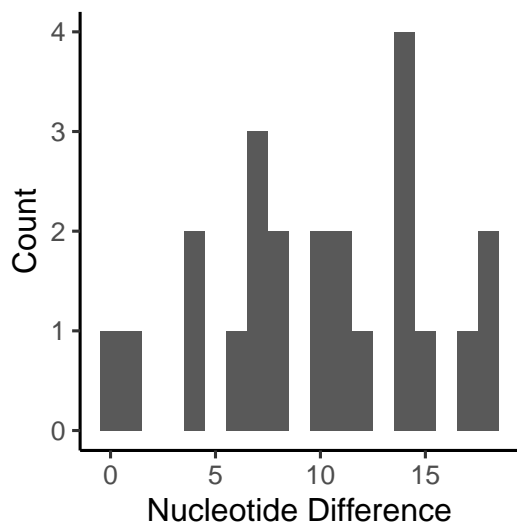
IGHV3-49*03

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



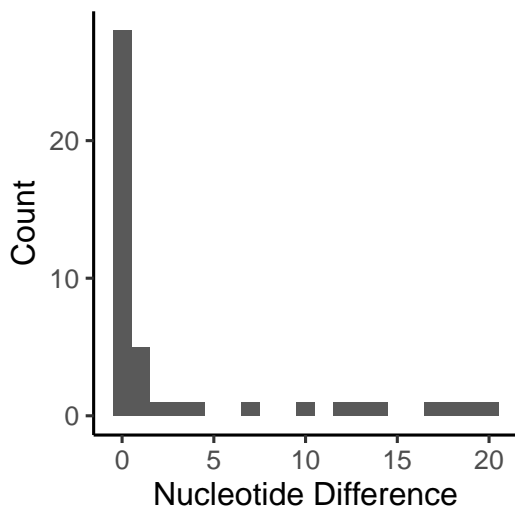
IGHV3-33*08

23 sequences assigned
1 (4.3%) exact matches, in which:
1 unique CDR3
1 unique J



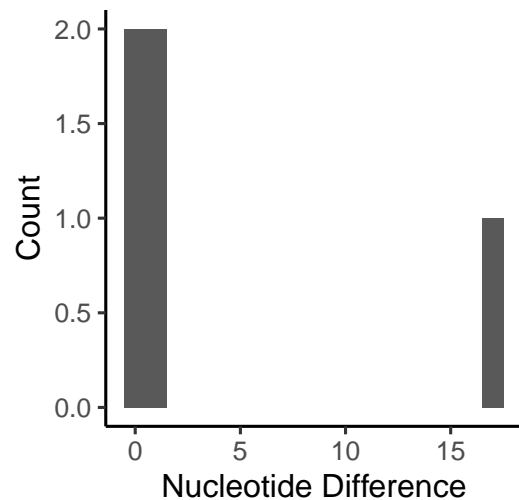
IGHV3-48*02

47 sequences assigned
28 (59.6%) exact matches, in which:
28 unique CDR3
5 unique J



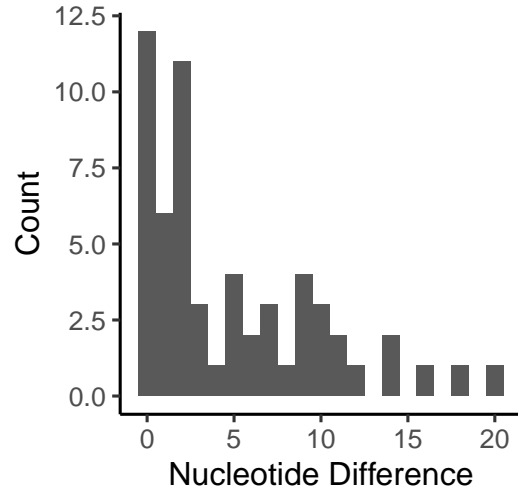
IGHV3-49*05

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



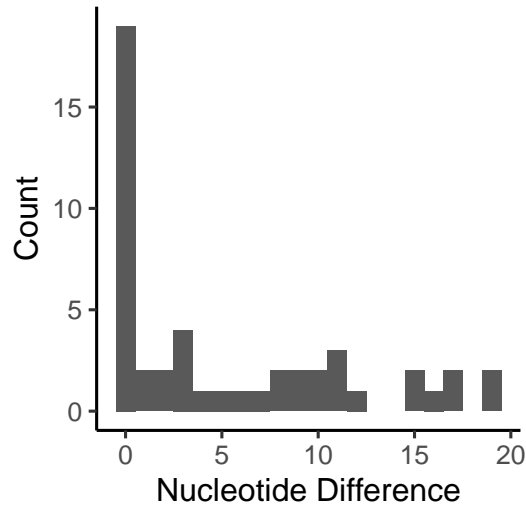
IGHV3-53*01

59 sequences assigned
12 (20.3%) exact matches, in which:
12 unique CDR3
3 unique J



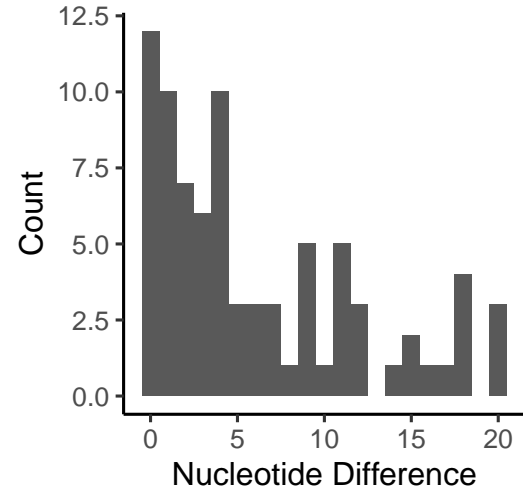
IGHV3-66*01

50 sequences assigned
19 (38%) exact matches, in which:
19 unique CDR3
5 unique J



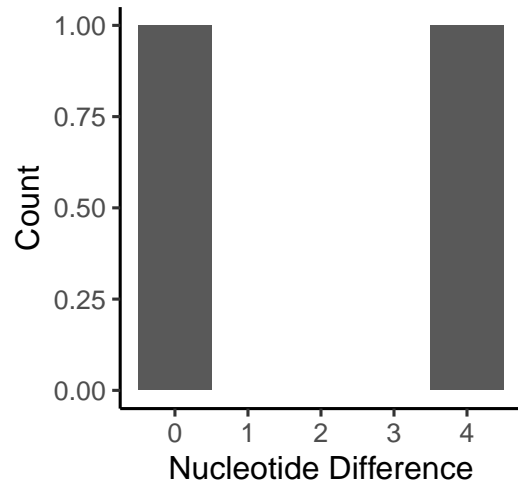
IGHV3-74*01

85 sequences assigned
12 (14.1%) exact matches, in which:
12 unique CDR3
4 unique J



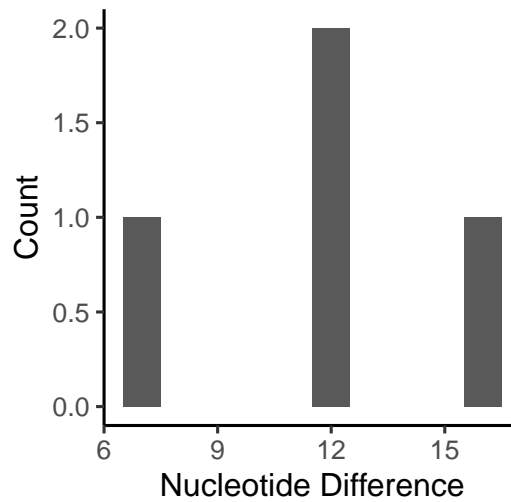
IGHV3-64*01

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



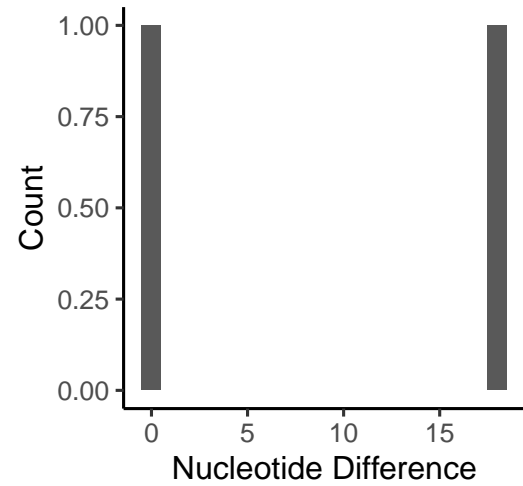
IGHV3-69-1*01

4 sequences assigned
No exact matches.



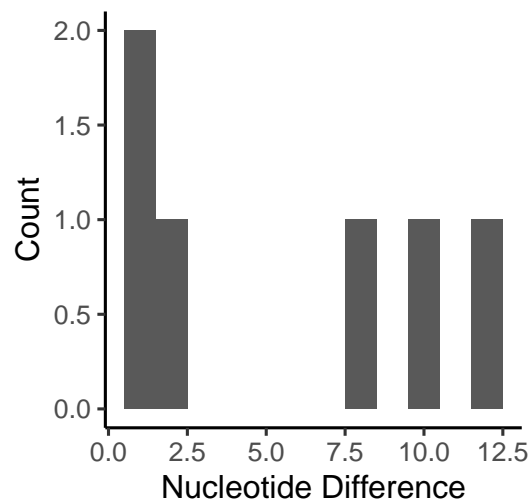
IGHV3-43D*03

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



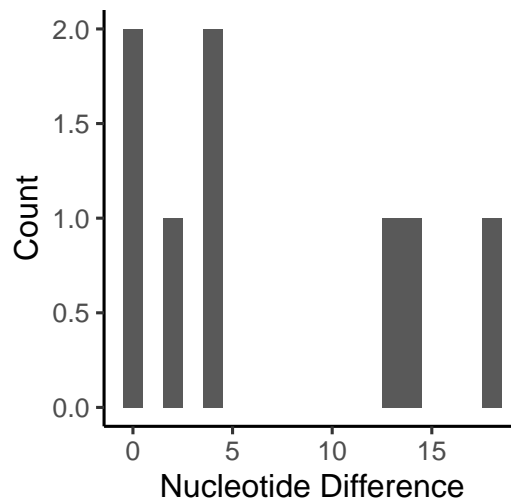
IGHV3-64*04

6 sequences assigned
No exact matches.



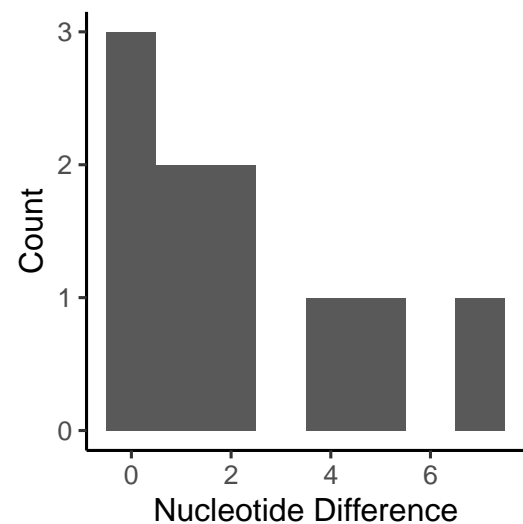
IGHV3-72*01

9 sequences assigned
2 (22.2%) exact matches, in which:
2 unique CDR3
2 unique J



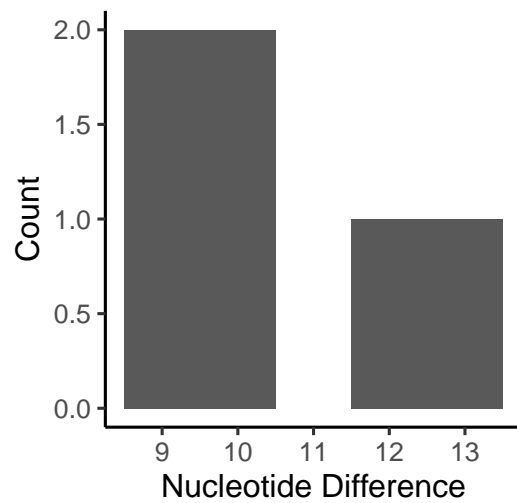
IGHV3-64D*09

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



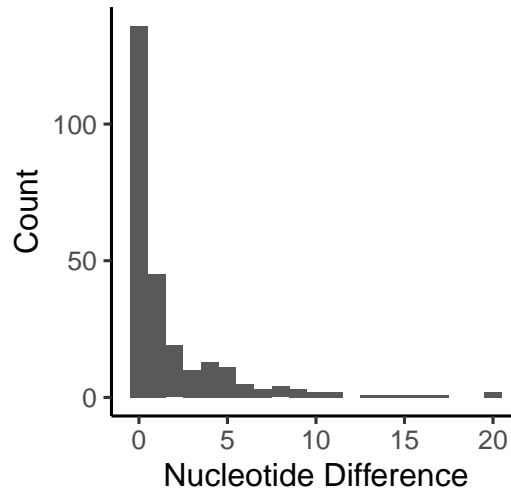
IGHV3–NL1*01

6 sequences assigned
No exact matches.



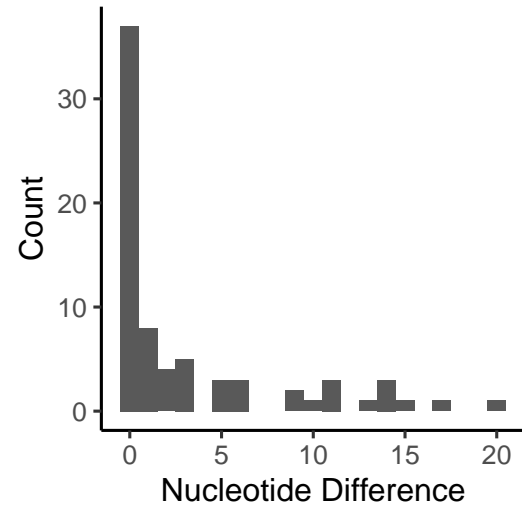
IGHV4–34*01

264 sequences assigned
136 (51.5%) exact matches, in which:
135 unique CDR3
7 unique J



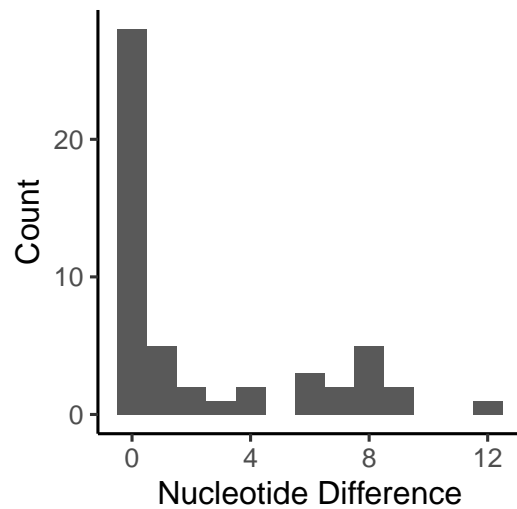
IGHV4–59*01

74 sequences assigned
37 (50%) exact matches, in which:
37 unique CDR3
7 unique J



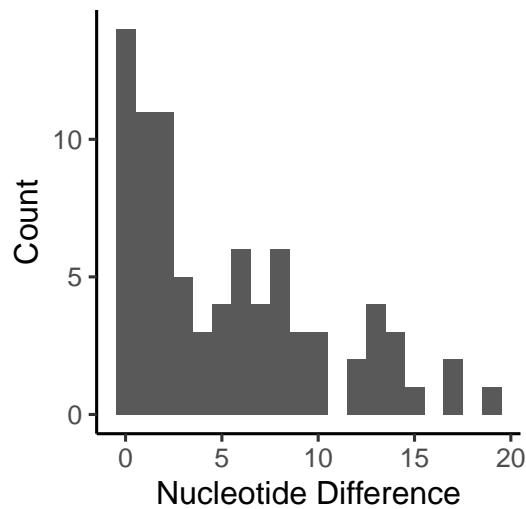
IGHV4–4*07

55 sequences assigned
28 (50.9%) exact matches, in which:
28 unique CDR3
5 unique J



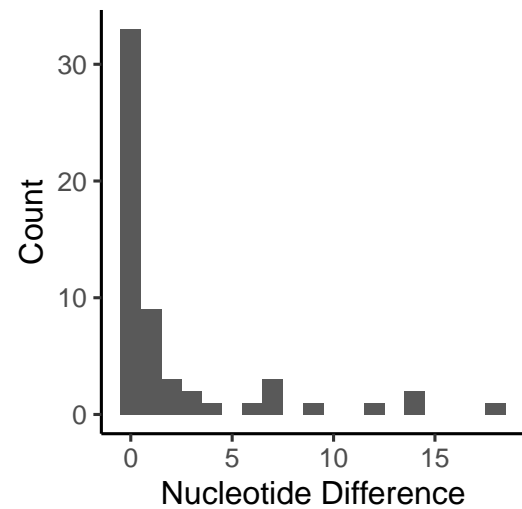
IGHV4–38–2*02

86 sequences assigned
14 (16.3%) exact matches, in which:
14 unique CDR3
4 unique J



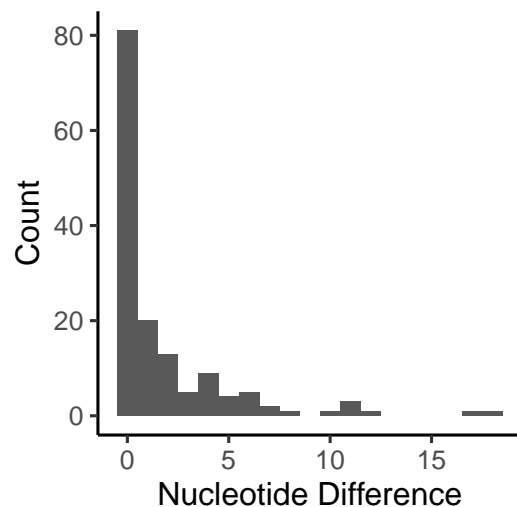
IGHV4–59*08

60 sequences assigned
33 (55%) exact matches, in which:
33 unique CDR3
6 unique J



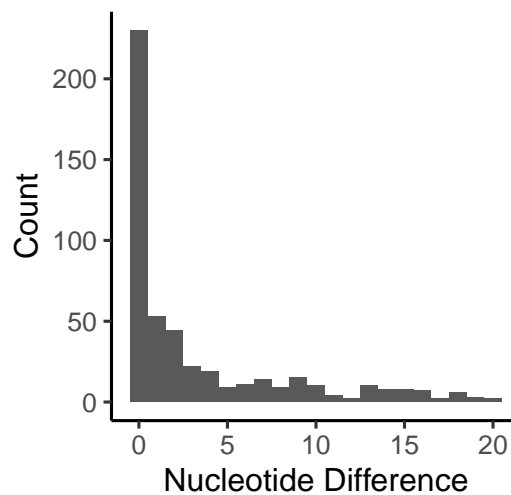
IGHV4–31*03

148 sequences assigned
81 (54.7%) exact matches, in which:
80 unique CDR3
6 unique J



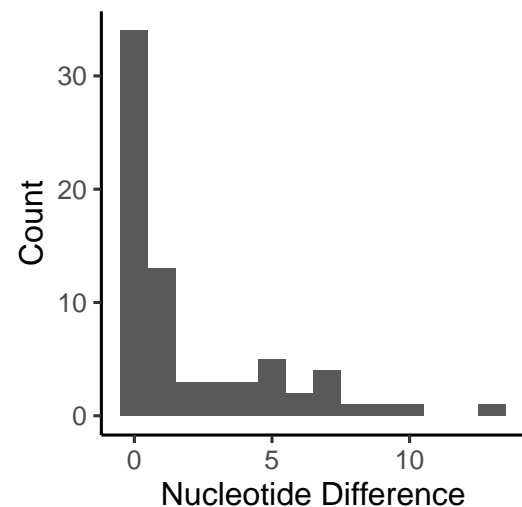
IGHV4–39*07

506 sequences assigned
230 (45.5%) exact matches, in which:
227 unique CDR3
6 unique J



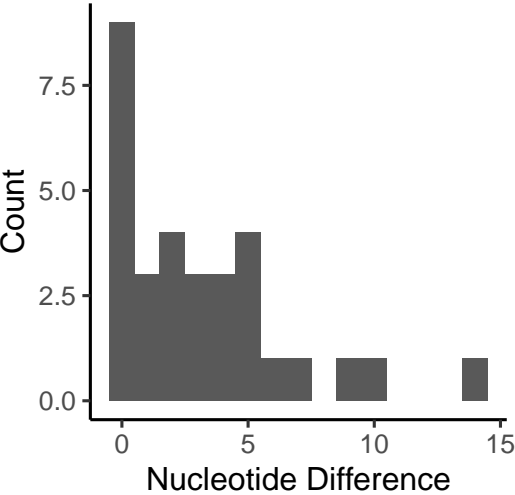
IGHV4–59*12

73 sequences assigned
34 (46.6%) exact matches, in which:
34 unique CDR3
6 unique J



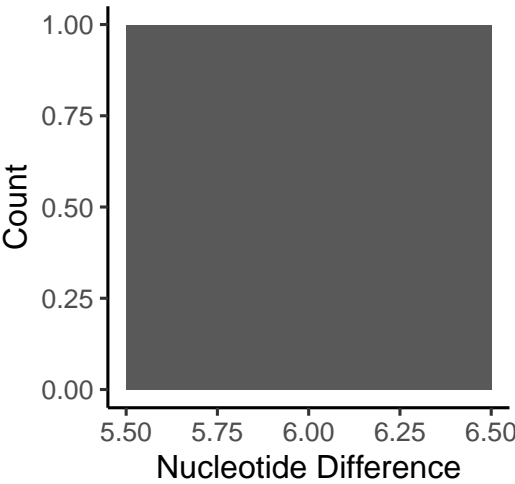
IGHV4-61*01

31 sequences assigned
9 (29%) exact matches, in which:
9 unique CDR3
4 unique J



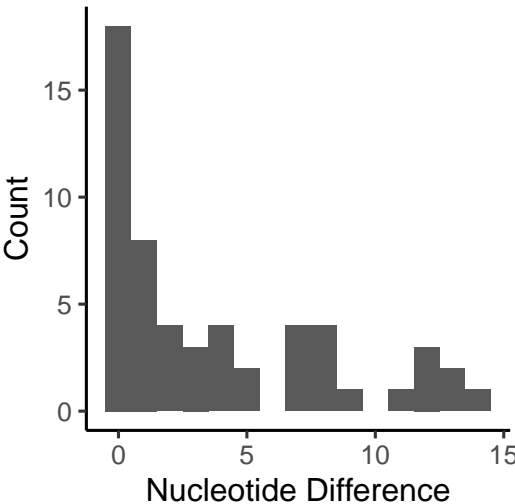
IGHV4/OR15-8*01

1 sequences assigned
No exact matches.



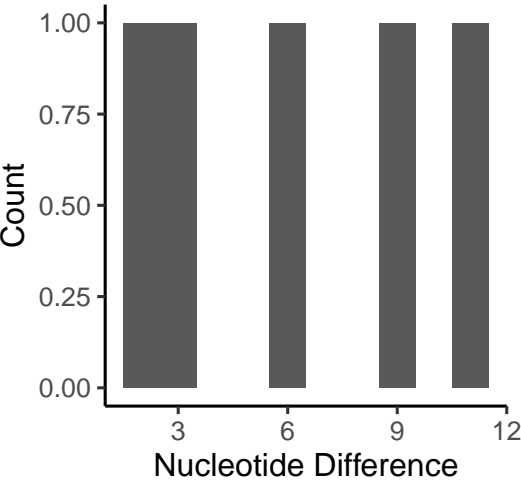
IGHV6-1*01

56 sequences assigned
18 (32.1%) exact matches, in which:
18 unique CDR3
6 unique J



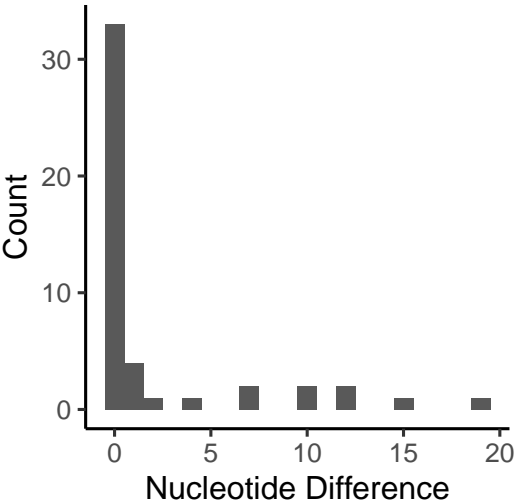
IGHV4-61*02

5 sequences assigned
No exact matches.



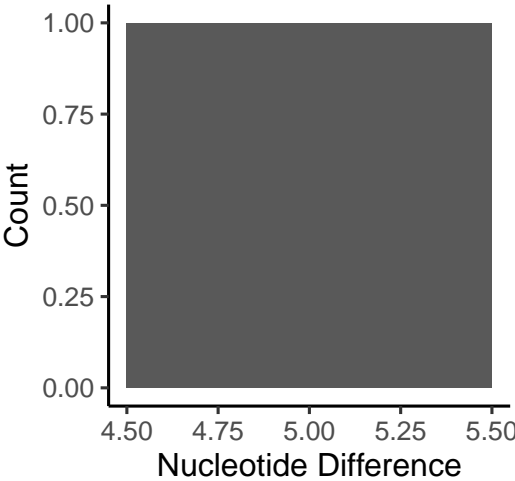
IGHV5-10-1*01

50 sequences assigned
33 (66%) exact matches, in which:
32 unique CDR3
5 unique J



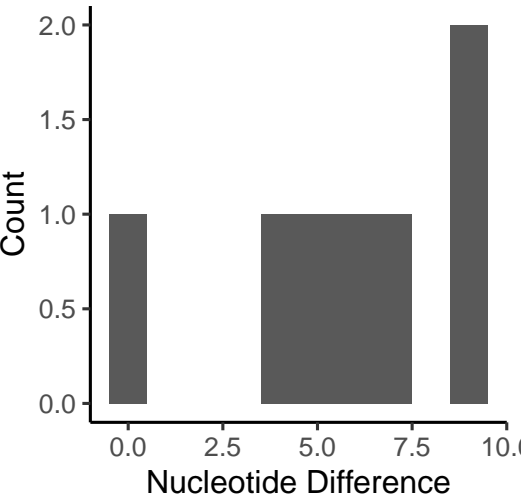
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



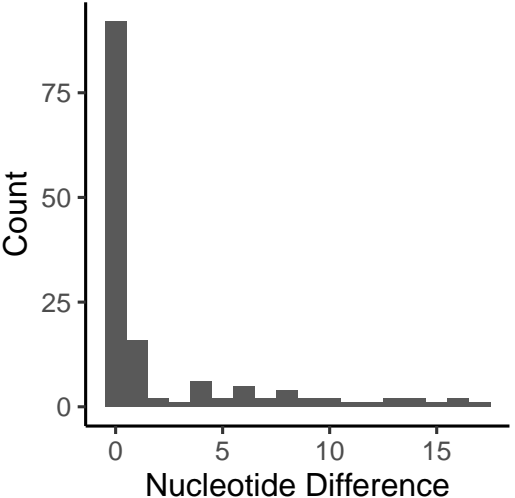
IGHV4-61*08

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



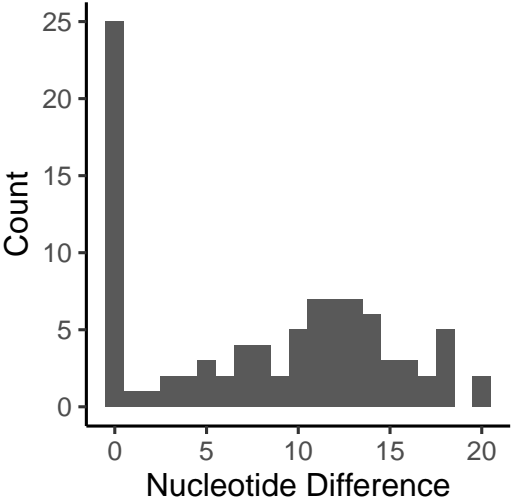
IGHV5-51*01

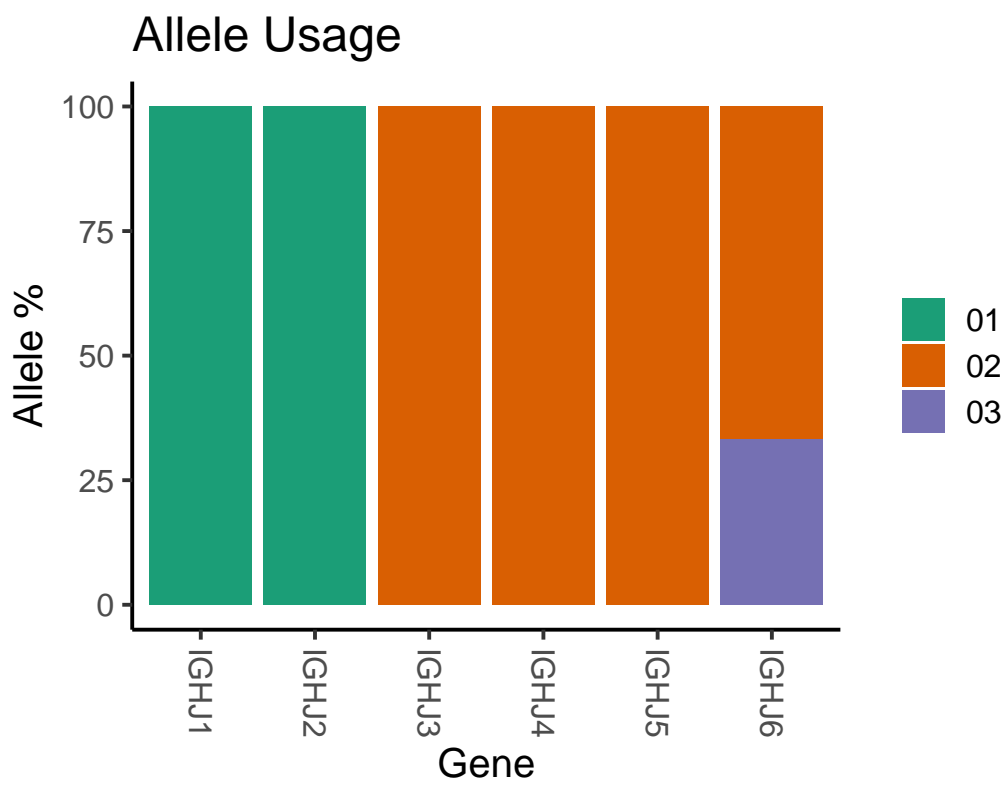
150 sequences assigned
92 (61.3%) exact matches, in which:
91 unique CDR3
7 unique J



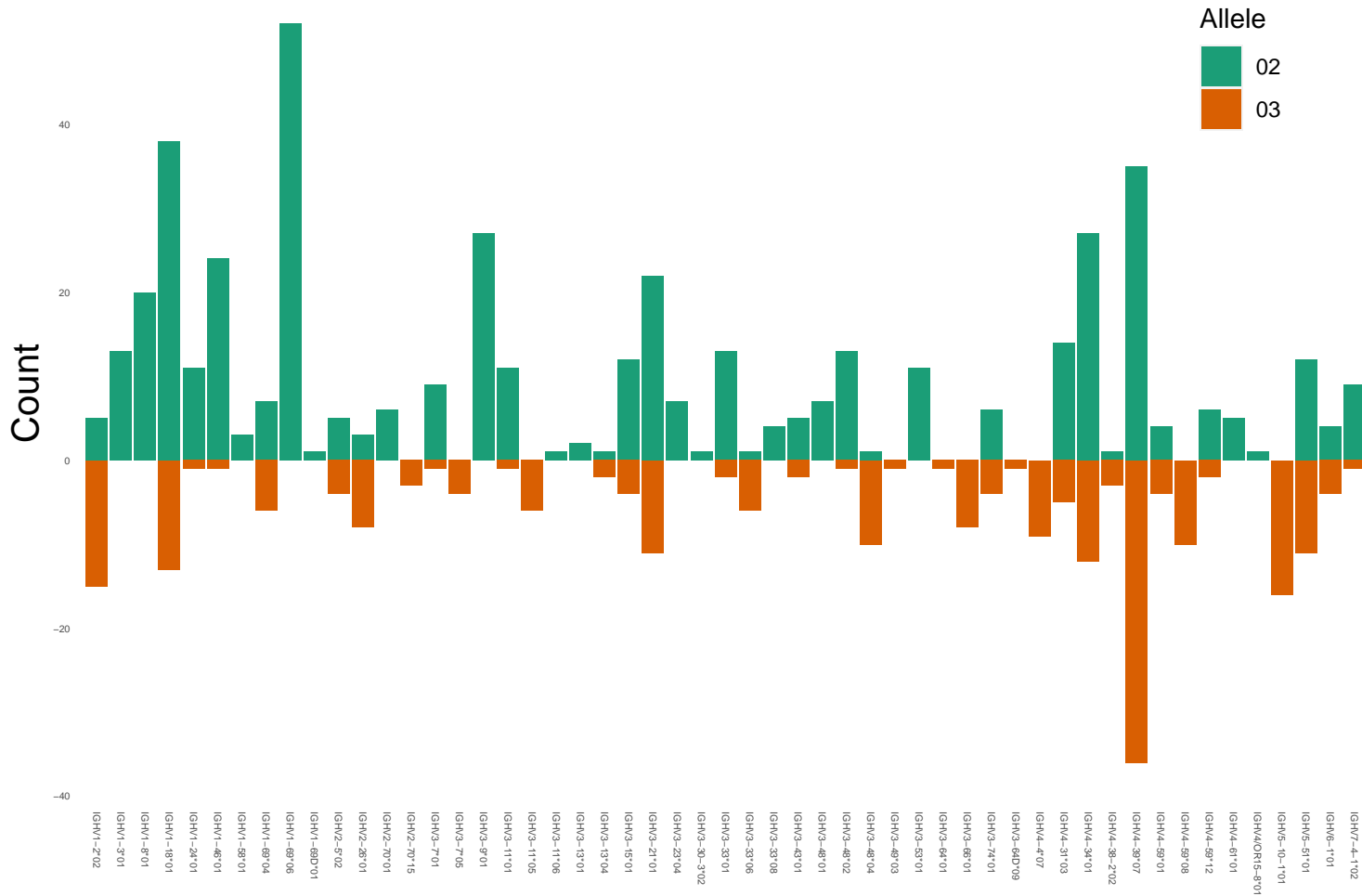
IGHV7-4-1*02

99 sequences assigned
25 (25.3%) exact matches, in which:
24 unique CDR3
6 unique J





Sequence Count by IGHJ6 allele usage



[illegible]