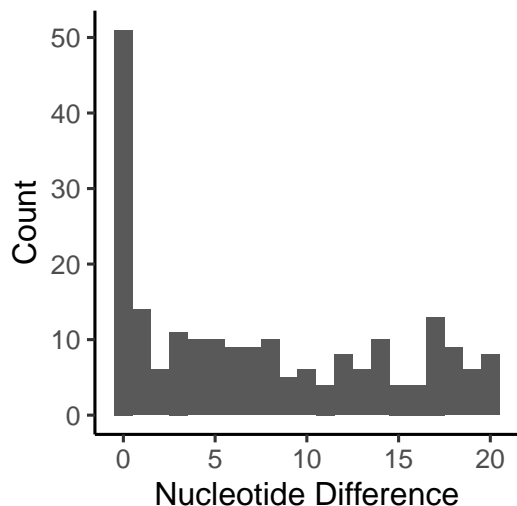


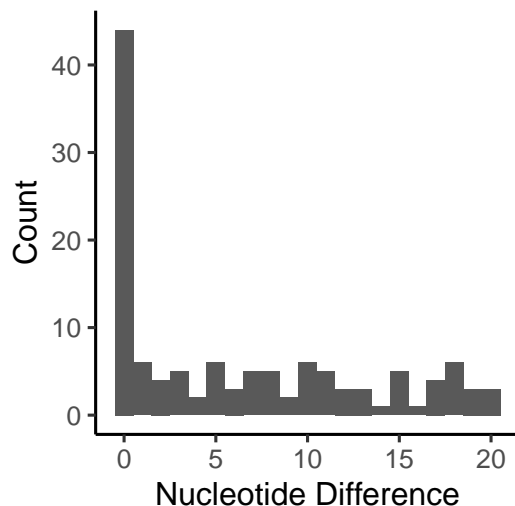
IGHV1-2*02

259 sequences assigned
51 (19.7%) exact matches, in which:
49 unique CDR3
6 unique J



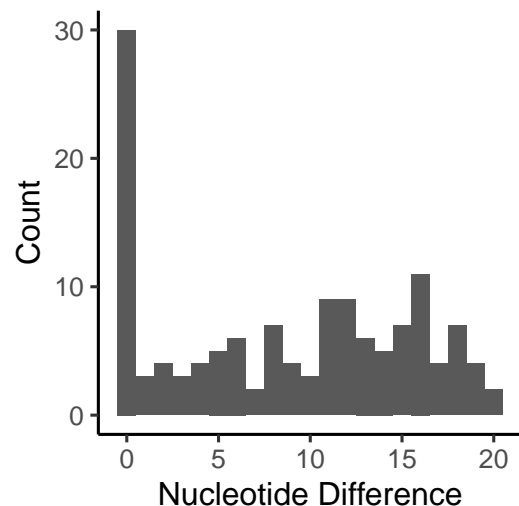
IGHV1-8*01

131 sequences assigned
44 (33.6%) exact matches, in which:
44 unique CDR3
6 unique J



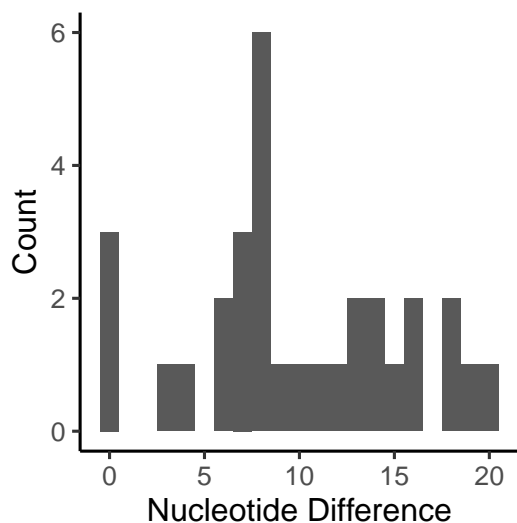
IGHV1-46*01

161 sequences assigned
30 (18.6%) exact matches, in which:
30 unique CDR3
6 unique J



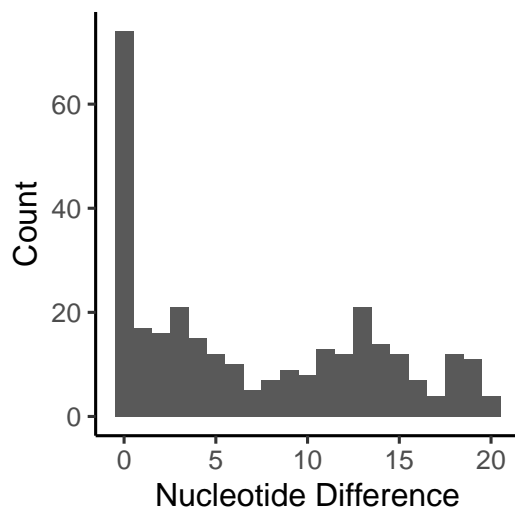
IGHV1-3*03

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



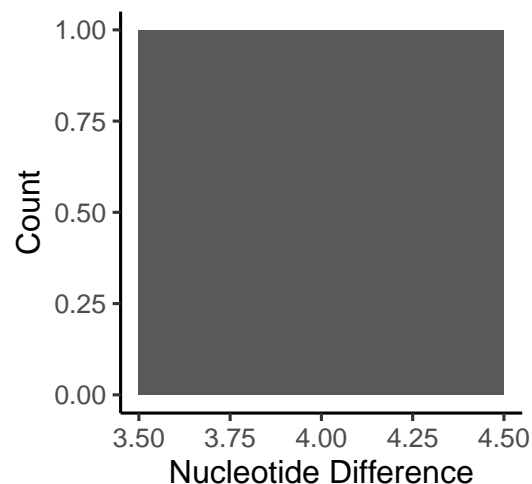
IGHV1-18*01

345 sequences assigned
74 (21.4%) exact matches, in which:
74 unique CDR3
7 unique J



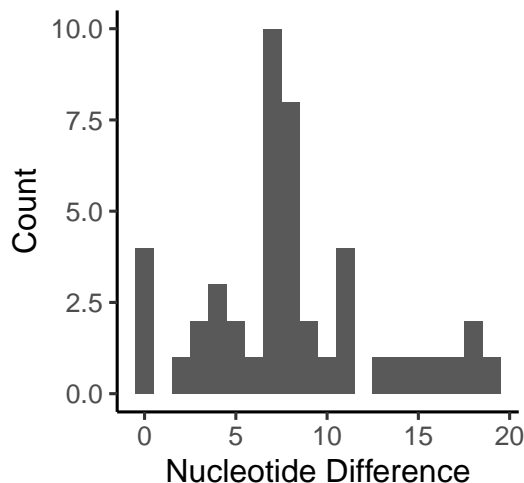
IGHV1-58*02

1 sequences assigned
No exact matches.



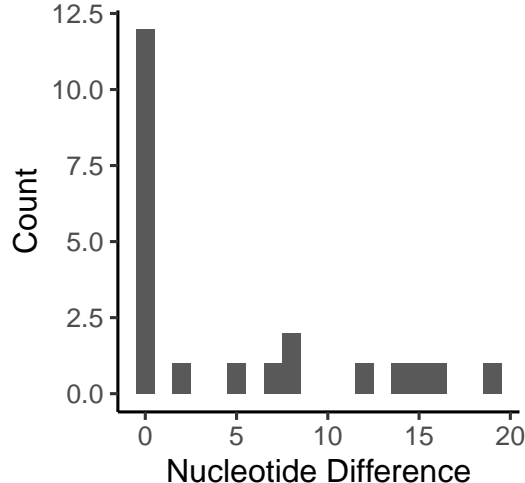
IGHV1-3*01_05

52 sequences assigned
4 (7.7%) exact matches, in which:
4 unique CDR3
3 unique J



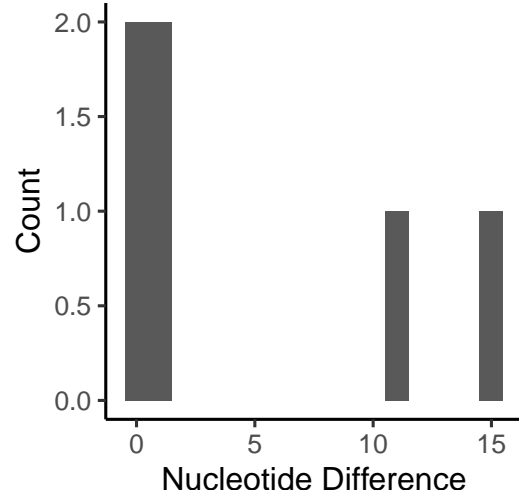
IGHV1-24*01

28 sequences assigned
12 (42.9%) exact matches, in which:
12 unique CDR3
4 unique J



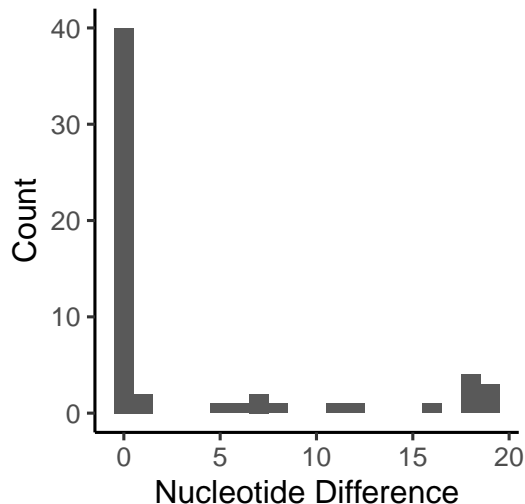
IGHV1-69-2*01

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
1 unique J



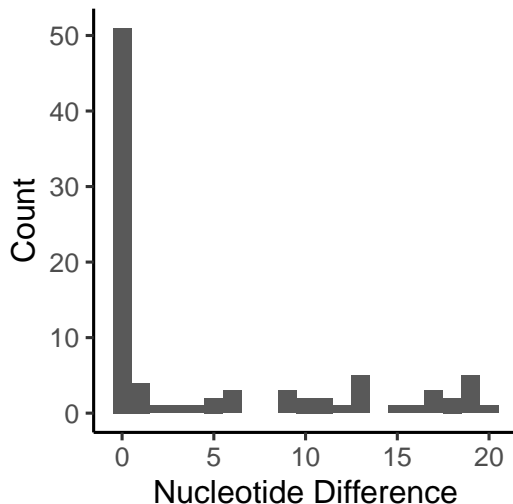
IGHV1-69*02

68 sequences assigned
40 (58.8%) exact matches, in which:
40 unique CDR3
6 unique J



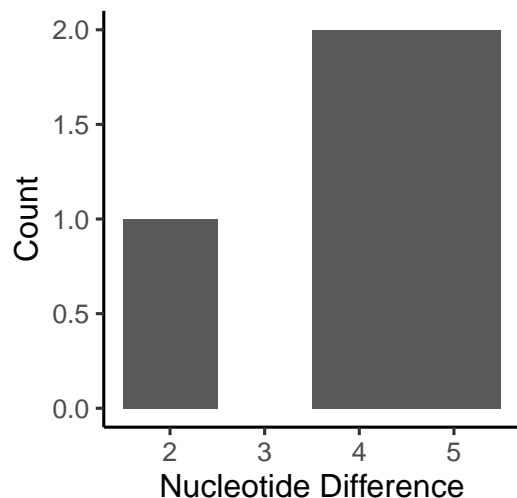
IGHV1-69*15_18

112 sequences assigned
51 (45.5%) exact matches, in which:
51 unique CDR3
6 unique J



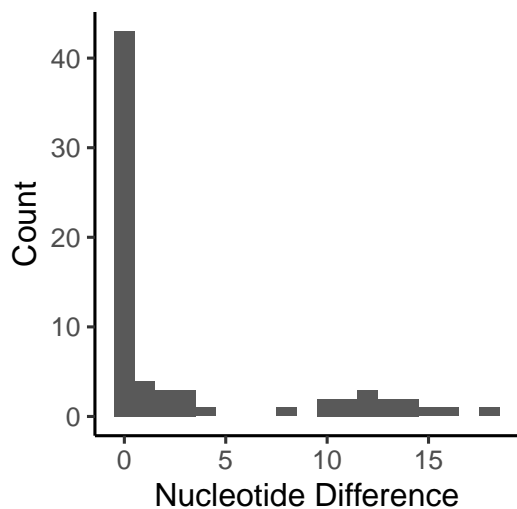
IGHV2-26*01

5 sequences assigned
No exact matches.



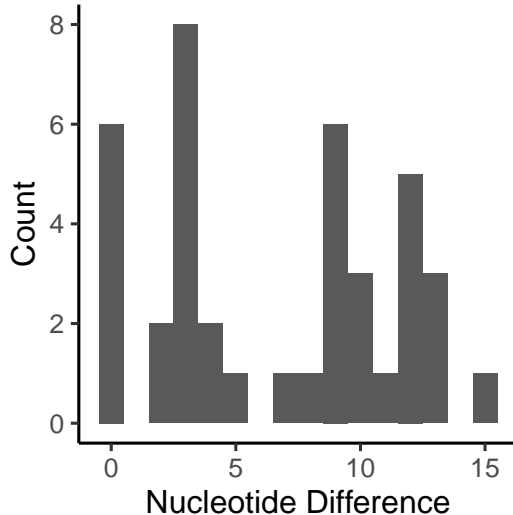
IGHV1-69*05

77 sequences assigned
43 (55.8%) exact matches, in which:
43 unique CDR3
5 unique J



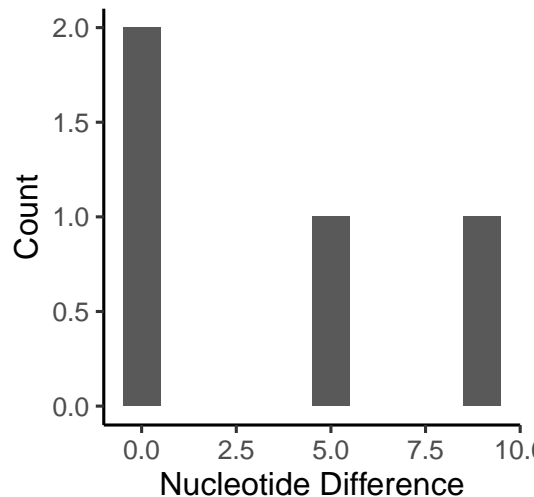
IGHV2-5*01

40 sequences assigned
6 (15%) exact matches, in which:
6 unique CDR3
4 unique J



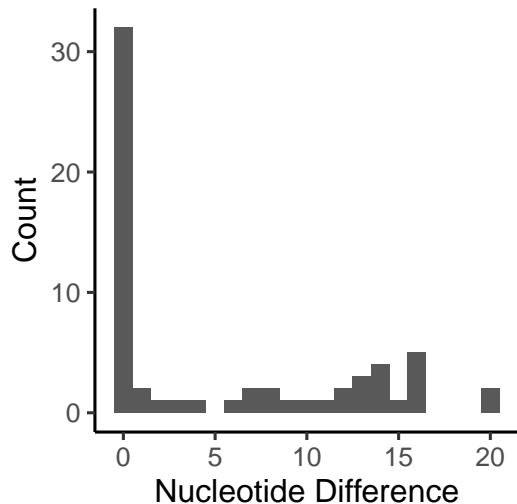
IGHV2-70*20

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



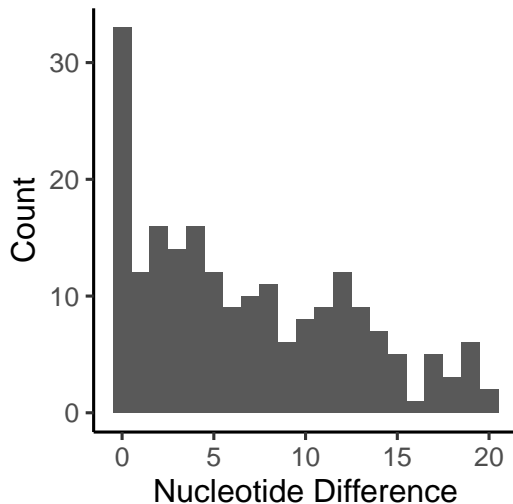
IGHV1-69*01_12_13

77 sequences assigned
32 (41.6%) exact matches, in which:
32 unique CDR3
5 unique J



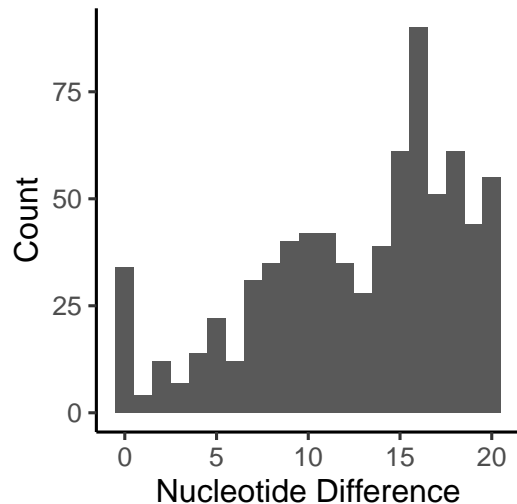
IGHV2-5*02

214 sequences assigned
33 (15.4%) exact matches, in which:
32 unique CDR3
4 unique J



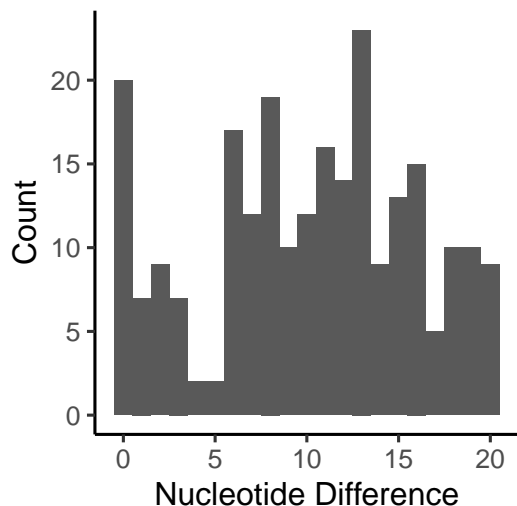
IGHV3-7*01

845 sequences assigned
34 (4%) exact matches, in which:
32 unique CDR3
4 unique J



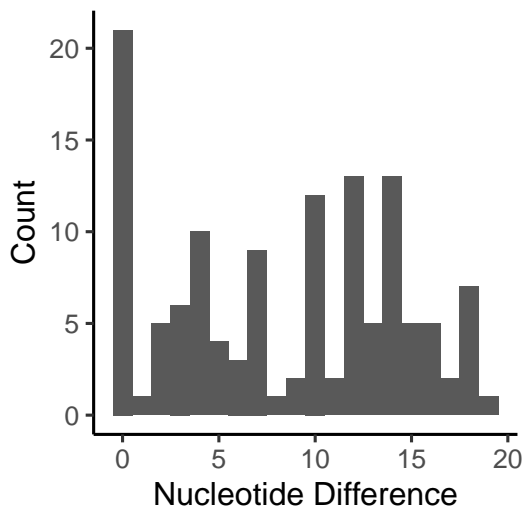
IGHV3-7*03

359 sequences assigned
20 (5.6%) exact matches, in which:
16 unique CDR3
3 unique J



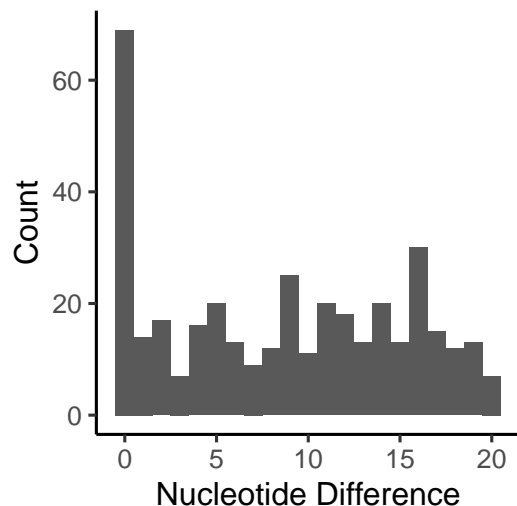
IGHV3-11*04

135 sequences assigned
21 (15.6%) exact matches, in which:
19 unique CDR3
4 unique J



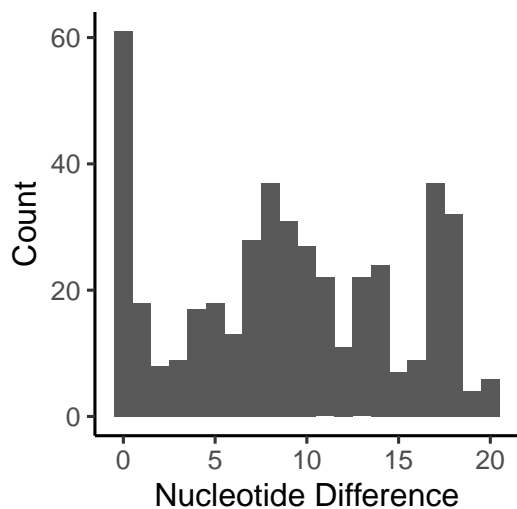
IGHV3-21*03

411 sequences assigned
69 (16.8%) exact matches, in which:
62 unique CDR3
6 unique J



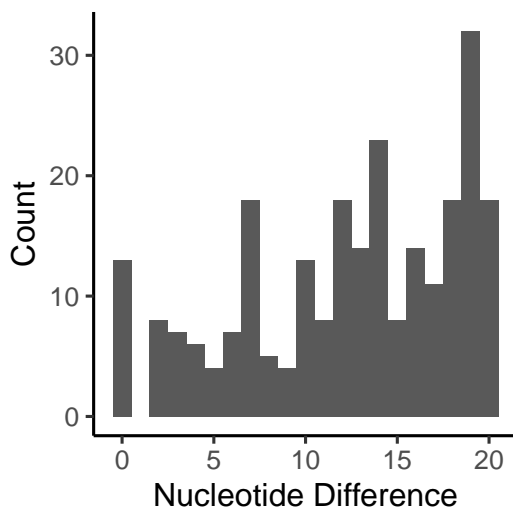
IGHV3-9*01

461 sequences assigned
61 (13.2%) exact matches, in which:
53 unique CDR3
6 unique J



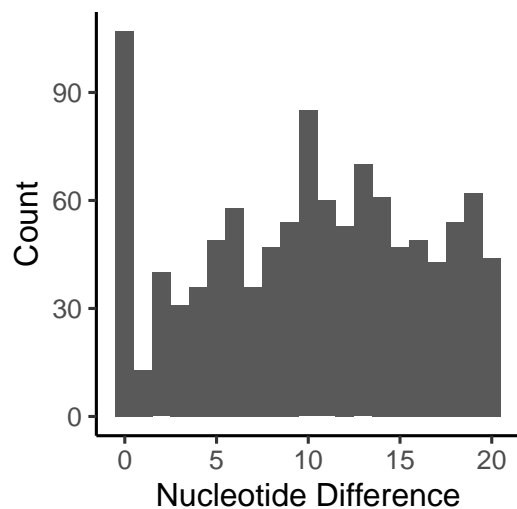
IGHV3-15*01_02

293 sequences assigned
13 (4.4%) exact matches, in which:
12 unique CDR3
4 unique J



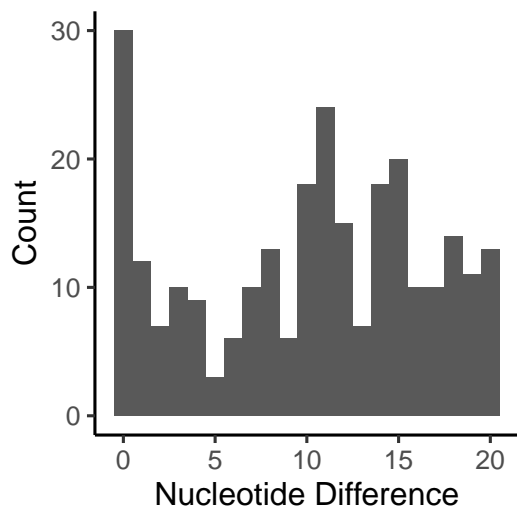
IGHV3-23*01_04

1327 sequences assigned
107 (8.1%) exact matches, in which:
95 unique CDR3
7 unique J



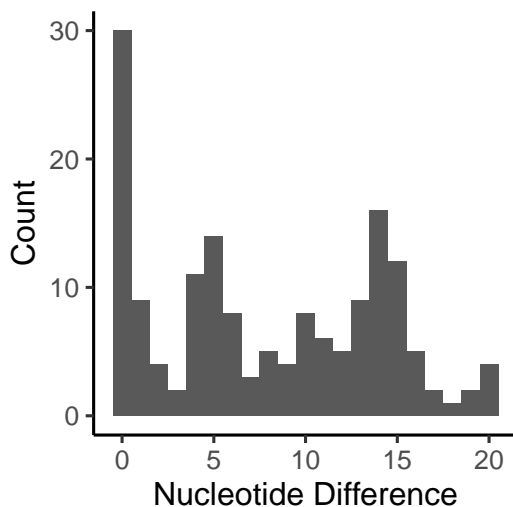
IGHV3-11*01

293 sequences assigned
30 (10.2%) exact matches, in which:
27 unique CDR3
5 unique J



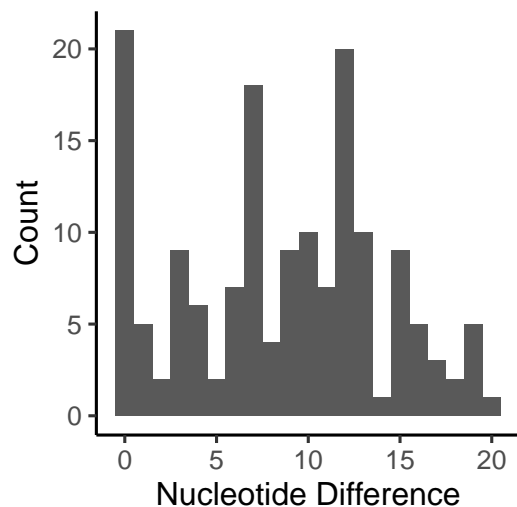
IGHV3-20*03_04

172 sequences assigned
30 (17.4%) exact matches, in which:
28 unique CDR3
6 unique J



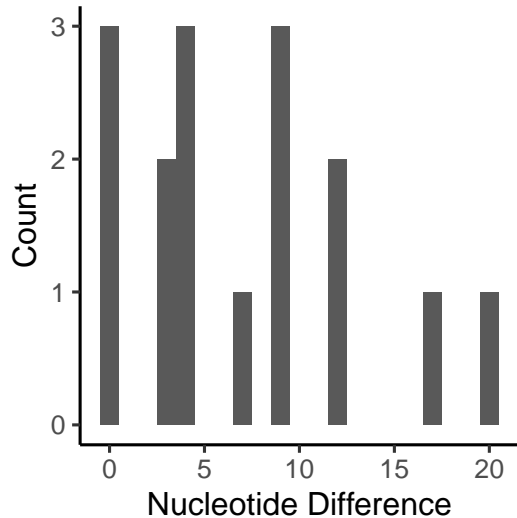
IGHV3-33*01

176 sequences assigned
21 (11.9%) exact matches, in which:
20 unique CDR3
3 unique J



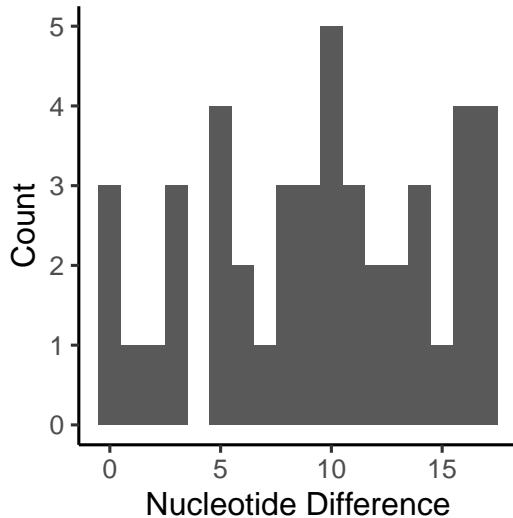
IGHV3-43*01

26 sequences assigned
3 (11.5%) exact matches, in which:
3 unique CDR3
3 unique J



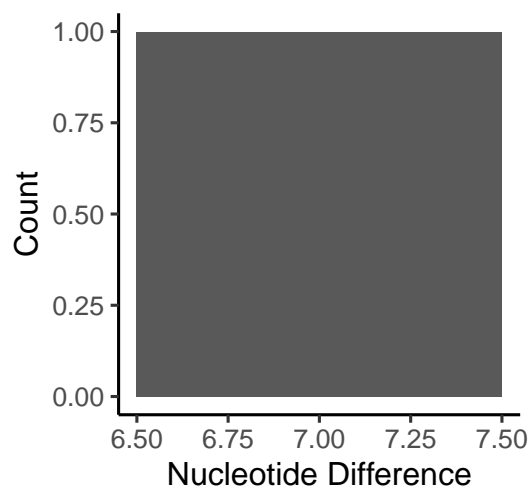
IGHV3-49*04

56 sequences assigned
3 (5.4%) exact matches, in which:
3 unique CDR3
2 unique J



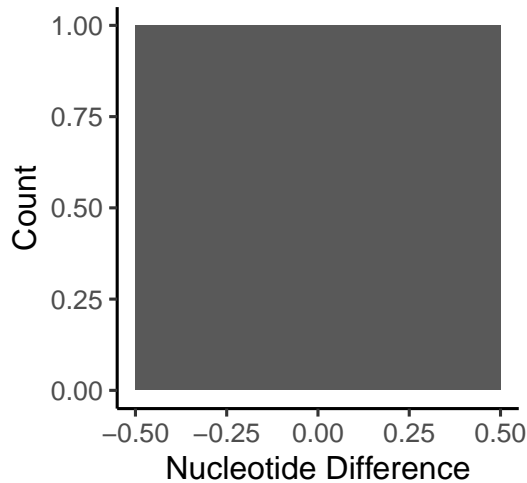
IGHV3-53*05

9 sequences assigned
No exact matches.



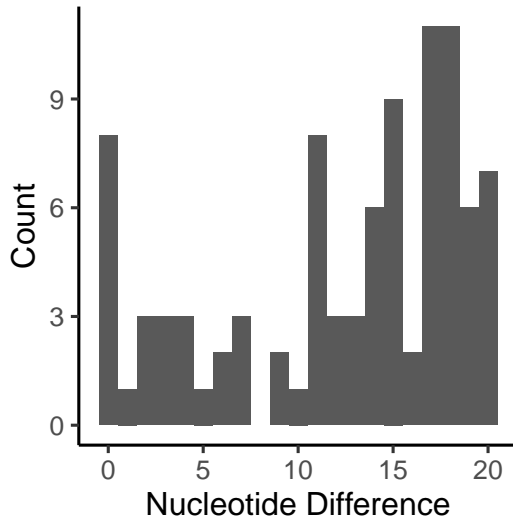
IGHV3-47*02

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



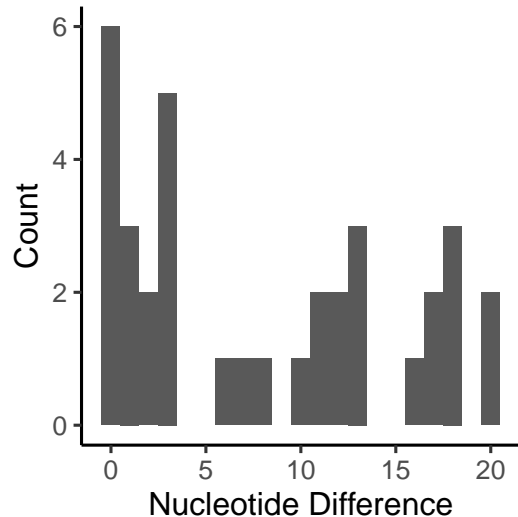
IGHV3-49*03_05

118 sequences assigned
8 (6.8%) exact matches, in which:
5 unique CDR3
4 unique J



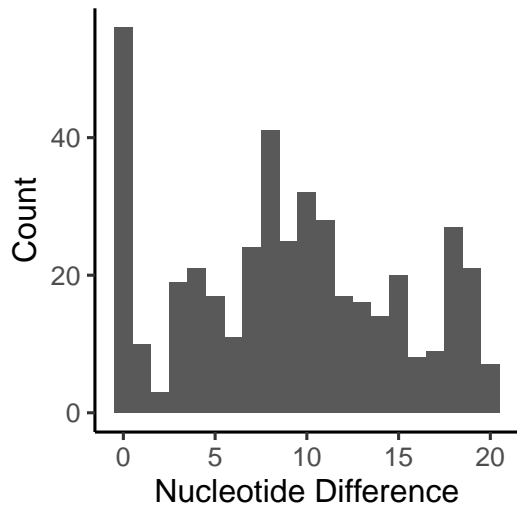
IGHV3-53*01_02

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



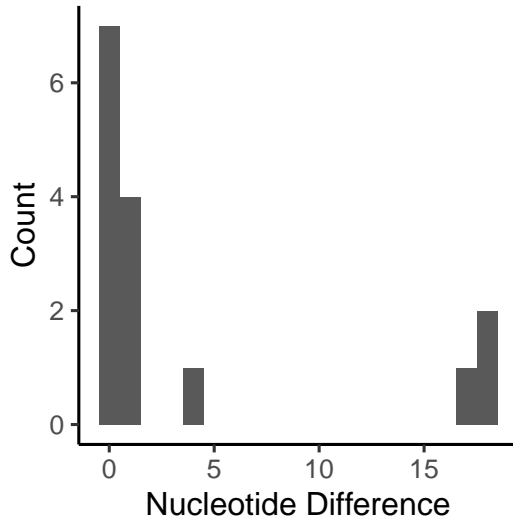
IGHV3-48*04

519 sequences assigned
56 (10.8%) exact matches, in which:
48 unique CDR3
5 unique J



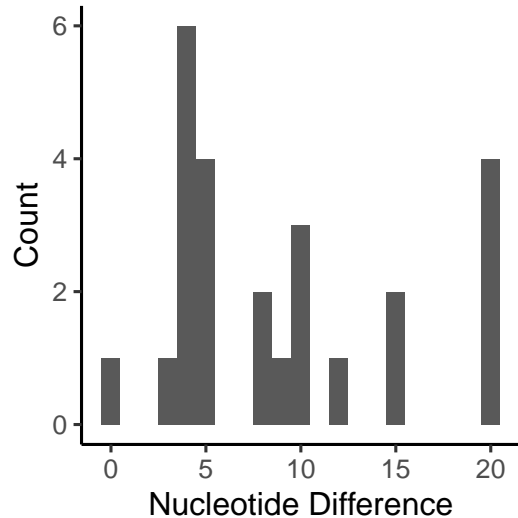
IGHV3-53*04

15 sequences assigned
7 (46.7%) exact matches, in which:
7 unique CDR3
2 unique J



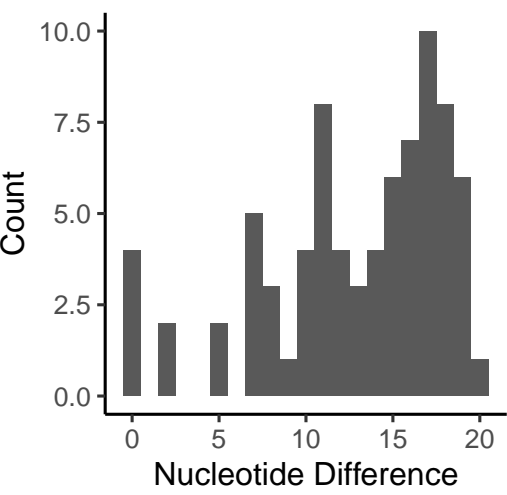
IGHV3-64*01

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



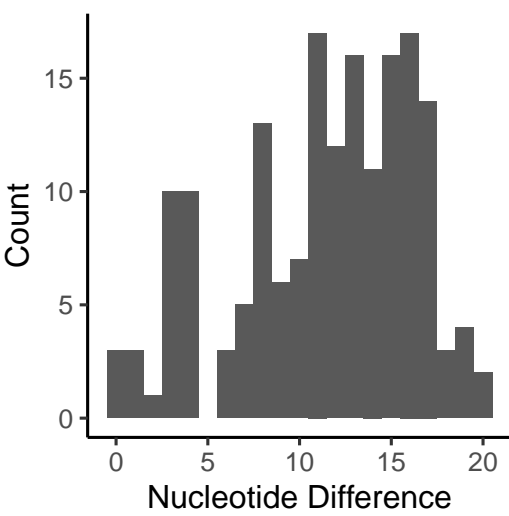
IGHV3-64*02_07

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



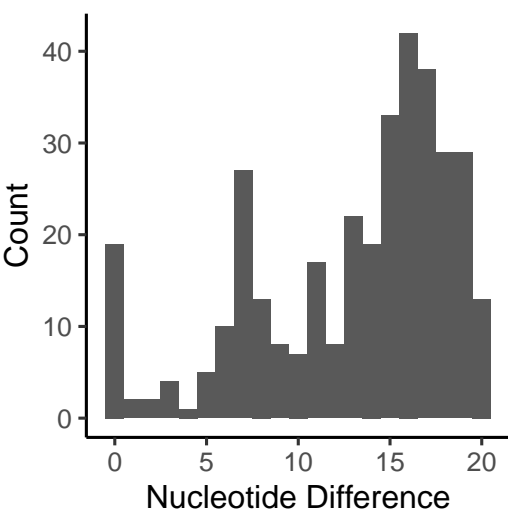
IGHV3-72*01

202 sequences assigned
3 (1.5%) exact matches, in which:
3 unique CDR3
2 unique J



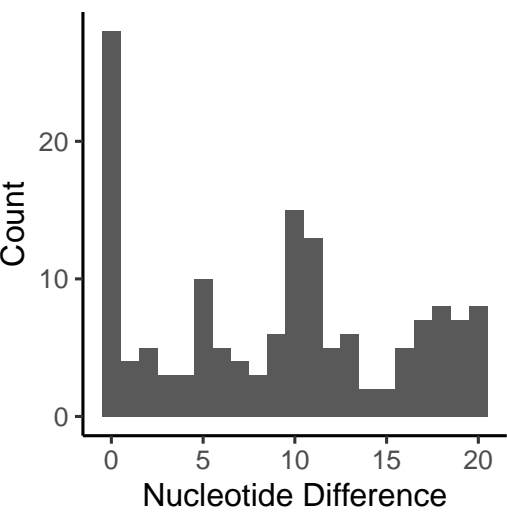
IGHV3-74*01_02

369 sequences assigned
19 (5.1%) exact matches, in which:
15 unique CDR3
5 unique J



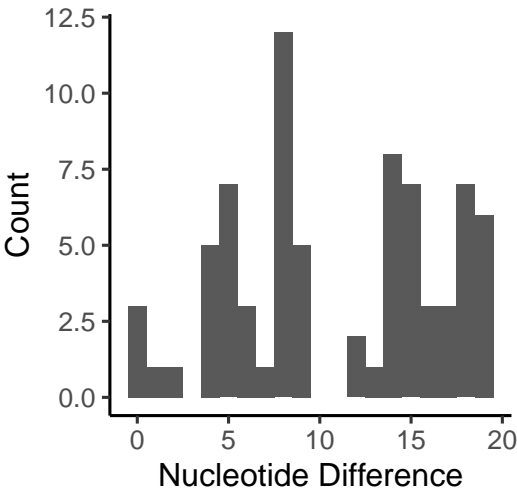
IGHV3-66*02

190 sequences assigned
28 (14.7%) exact matches, in which:
27 unique CDR3
6 unique J



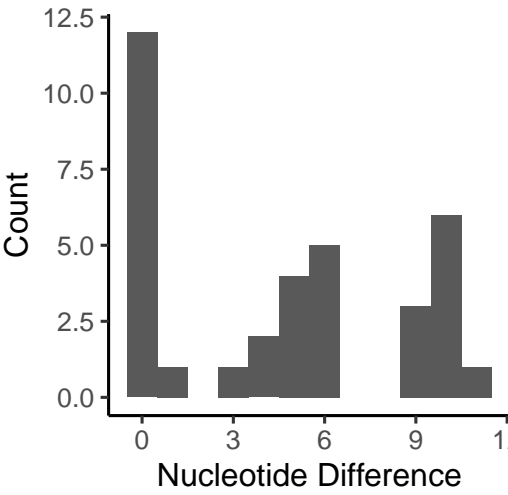
IGHV3-73*01_02

80 sequences assigned
3 (3.8%) exact matches, in which:
3 unique CDR3
3 unique J



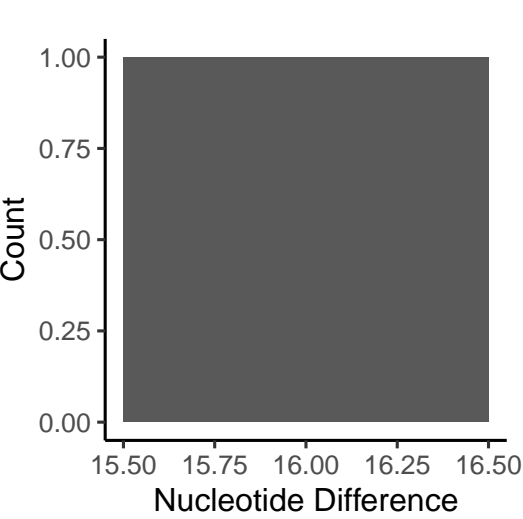
IGHV3-43D*03

37 sequences assigned
12 (32.4%) exact matches, in which:
8 unique CDR3
4 unique J



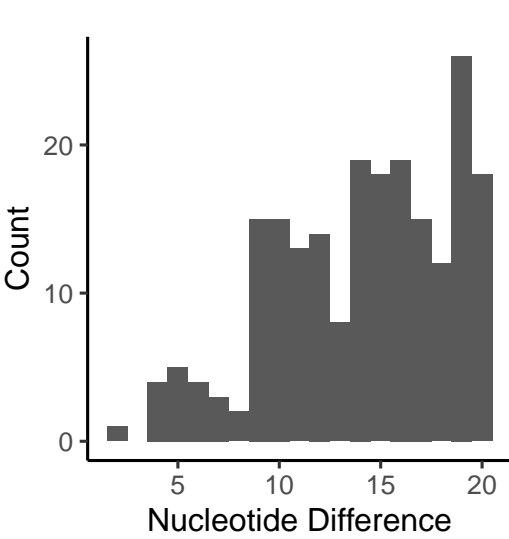
IGHV3-69-1*01

4 sequences assigned
No exact matches.



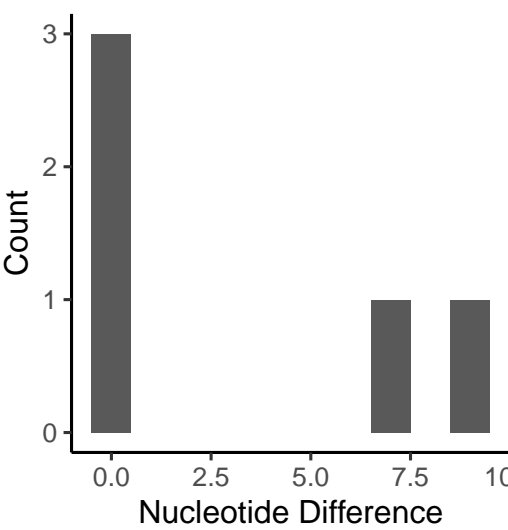
IGHV3-74*03

283 sequences assigned
No exact matches.



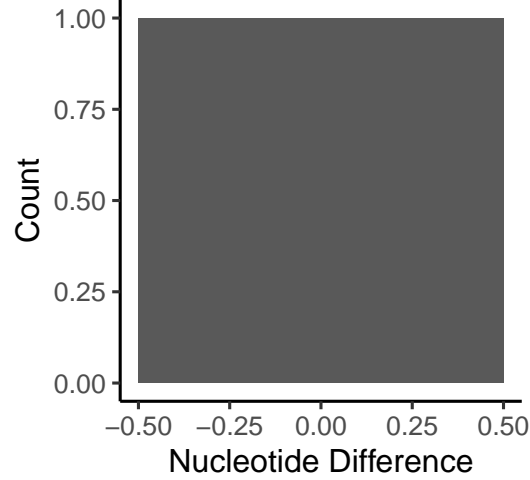
IGHV3-43D*04

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



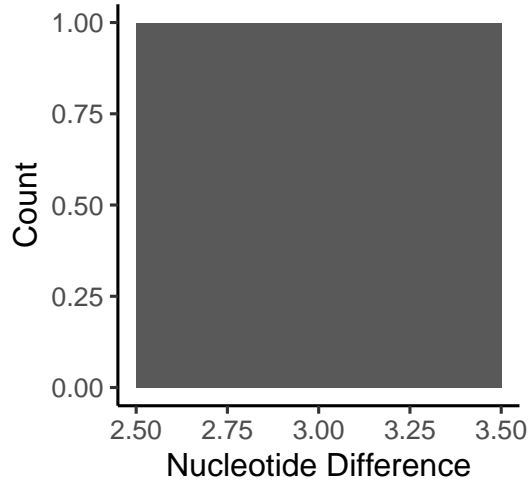
IGHV3-64D*09

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



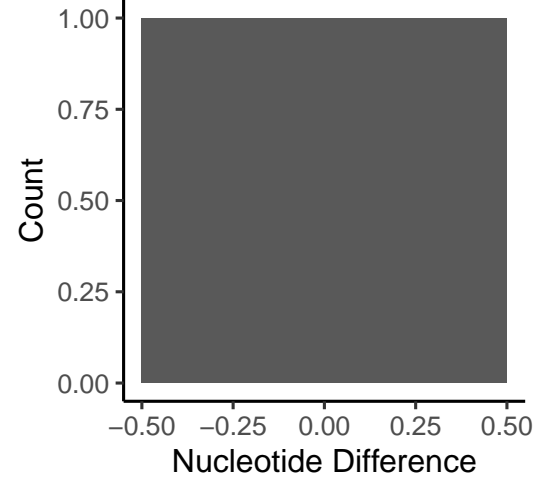
IGHV4-28*03

1 sequences assigned
No exact matches.



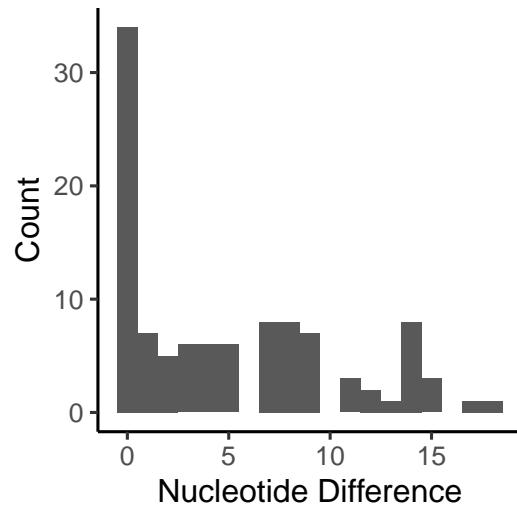
IGHV4-30-2*01

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



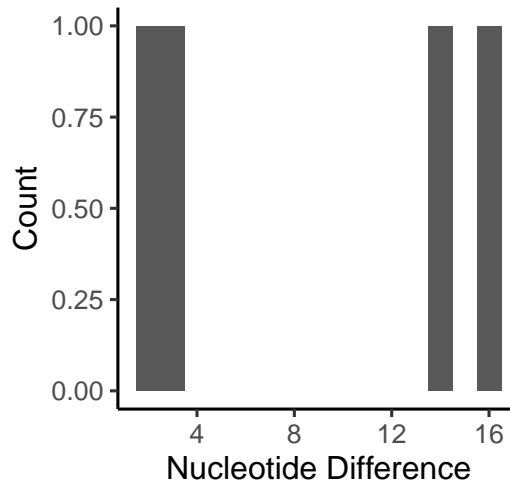
IGHV4-4*09

114 sequences assigned
34 (29.8%) exact matches, in which:
29 unique CDR3
6 unique J



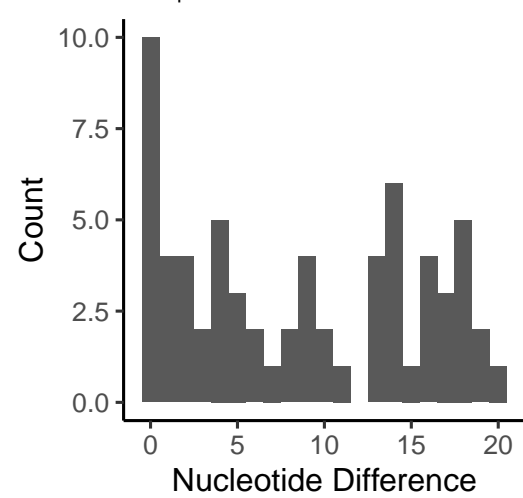
IGHV4-28*01_07

17 sequences assigned
No exact matches.



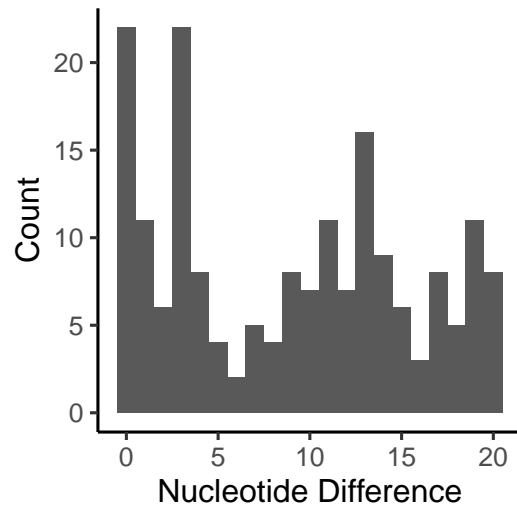
IGHV4-30-4*08

82 sequences assigned
10 (12.2%) exact matches, in which:
9 unique CDR3
4 unique J



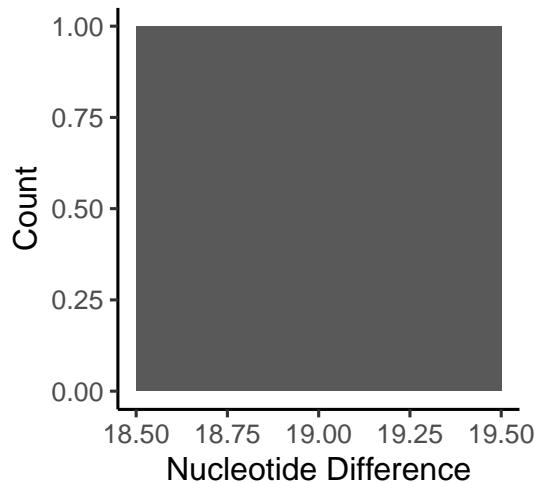
IGHV4-4*02_03

213 sequences assigned
22 (10.3%) exact matches, in which:
19 unique CDR3
6 unique J



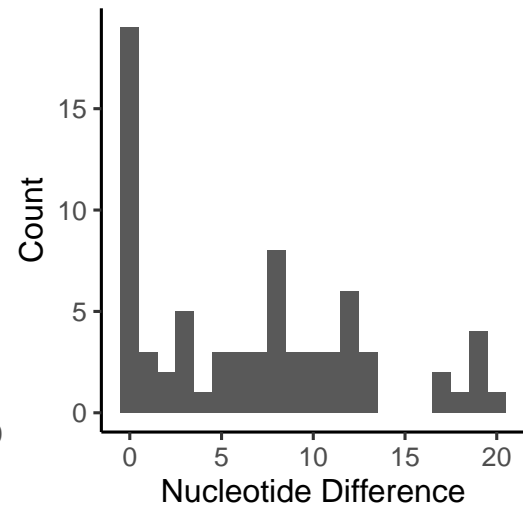
IGHV4-28*02_05

1 sequences assigned
No exact matches.



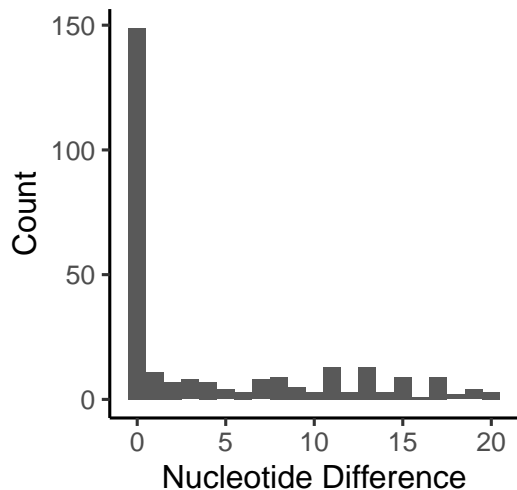
IGHV4-31*02

84 sequences assigned
19 (22.6%) exact matches, in which:
18 unique CDR3
4 unique J



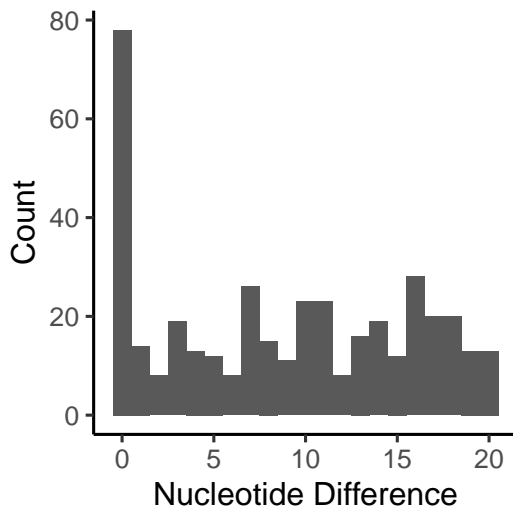
IGHV4-34*01_02

303 sequences assigned
149 (49.2%) exact matches, in which:
142 unique CDR3
7 unique J



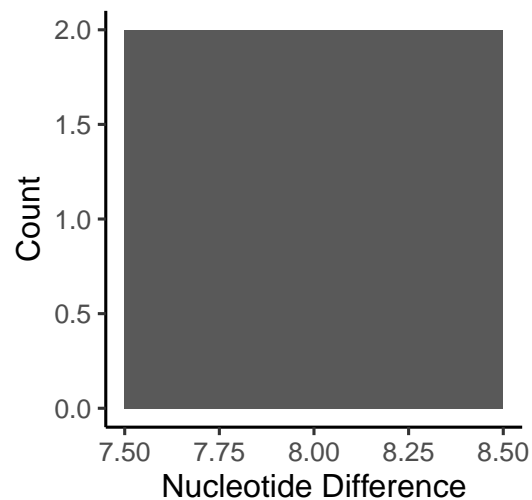
IGHV4-39*07

557 sequences assigned
78 (14%) exact matches, in which:
71 unique CDR3
5 unique J



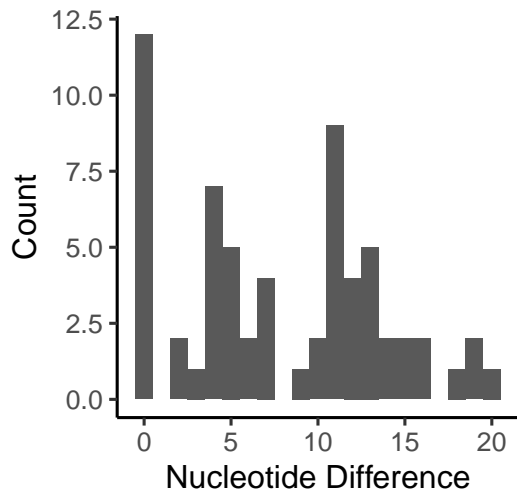
IGHV4-61*03

2 sequences assigned
No exact matches.



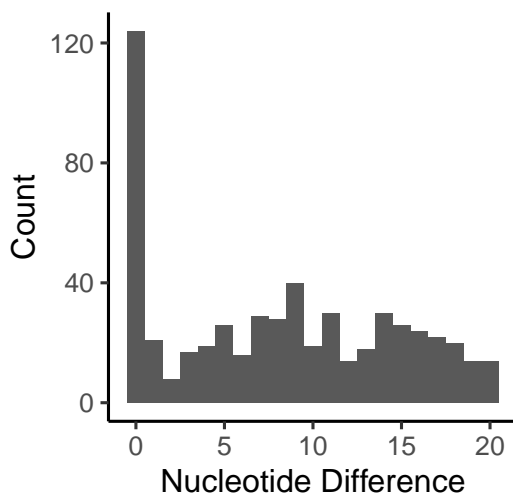
IGHV4-38-2*01

73 sequences assigned
12 (16.4%) exact matches, in which:
12 unique CDR3
3 unique J



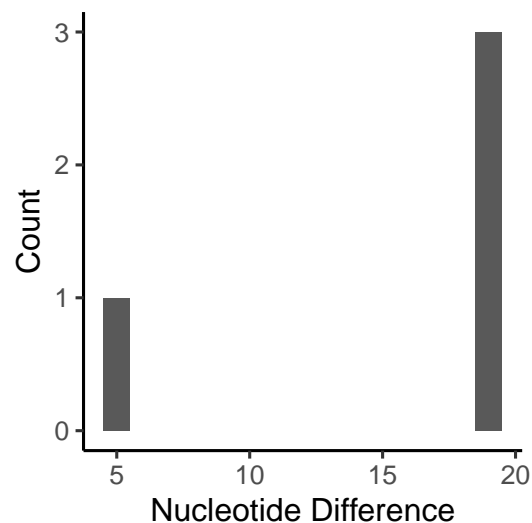
IGHV4-59*11

621 sequences assigned
124 (20%) exact matches, in which:
118 unique CDR3
7 unique J



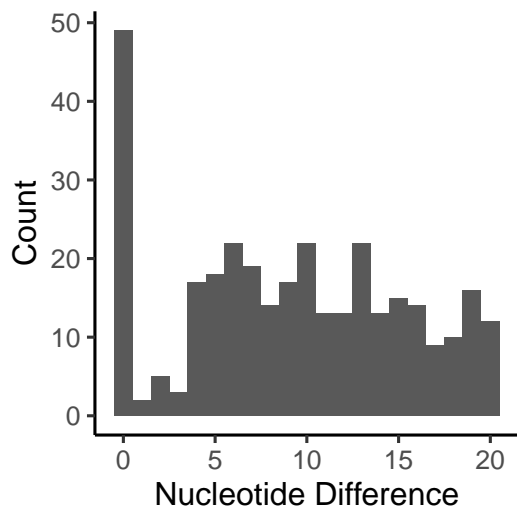
IGHV4-61*09

4 sequences assigned
No exact matches.



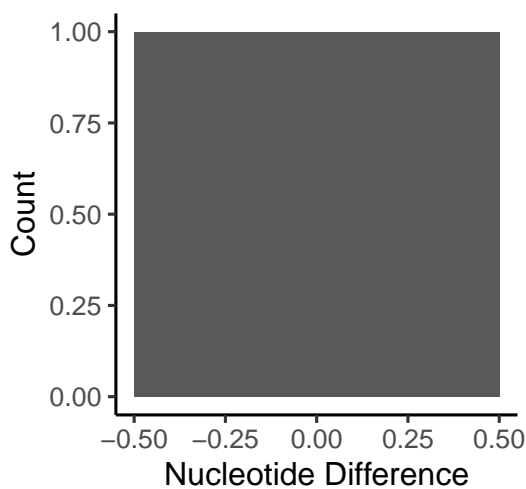
IGHV4-38-2*02

356 sequences assigned
49 (13.8%) exact matches, in which:
45 unique CDR3
6 unique J



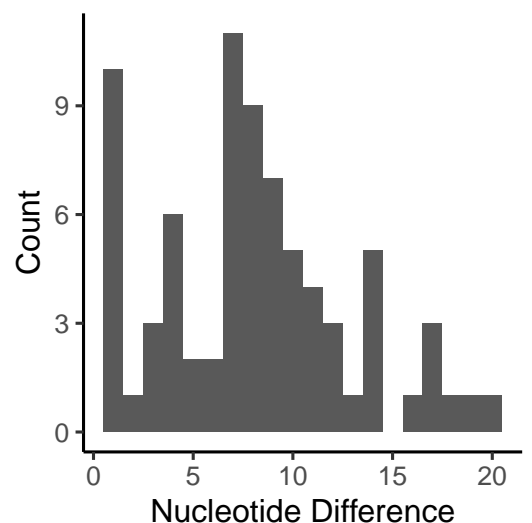
IGHV4-61*01

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



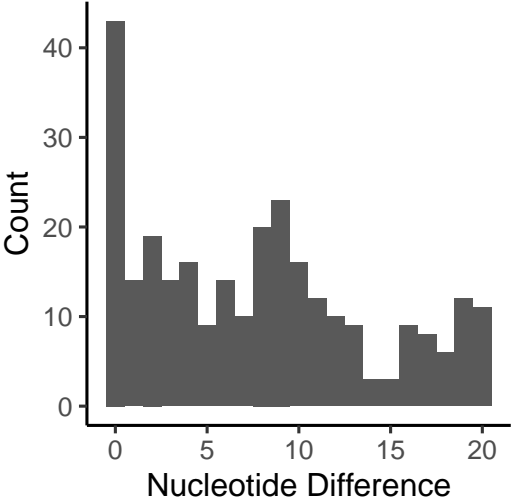
IGHV5-51*07

78 sequences assigned
No exact matches.



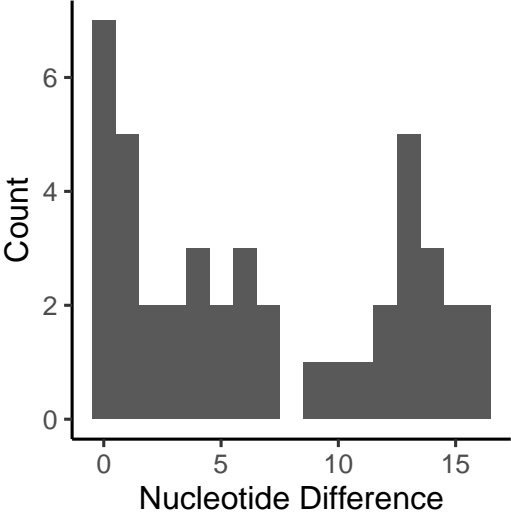
IGHV5-51*01_03

332 sequences assigned
43 (13%) exact matches, in which:
42 unique CDR3
6 unique J



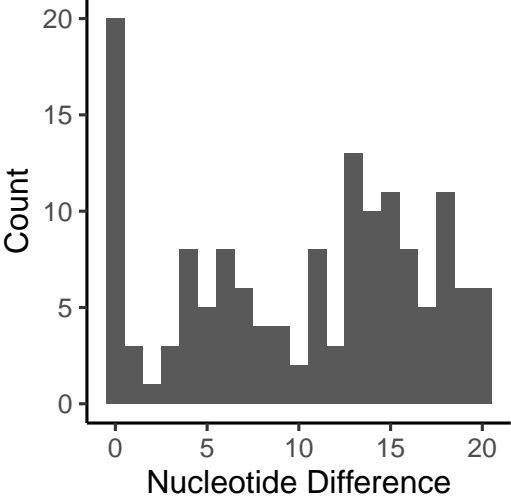
IGHV6-1*01_02

45 sequences assigned
7 (15.6%) exact matches, in which:
7 unique CDR3
4 unique J

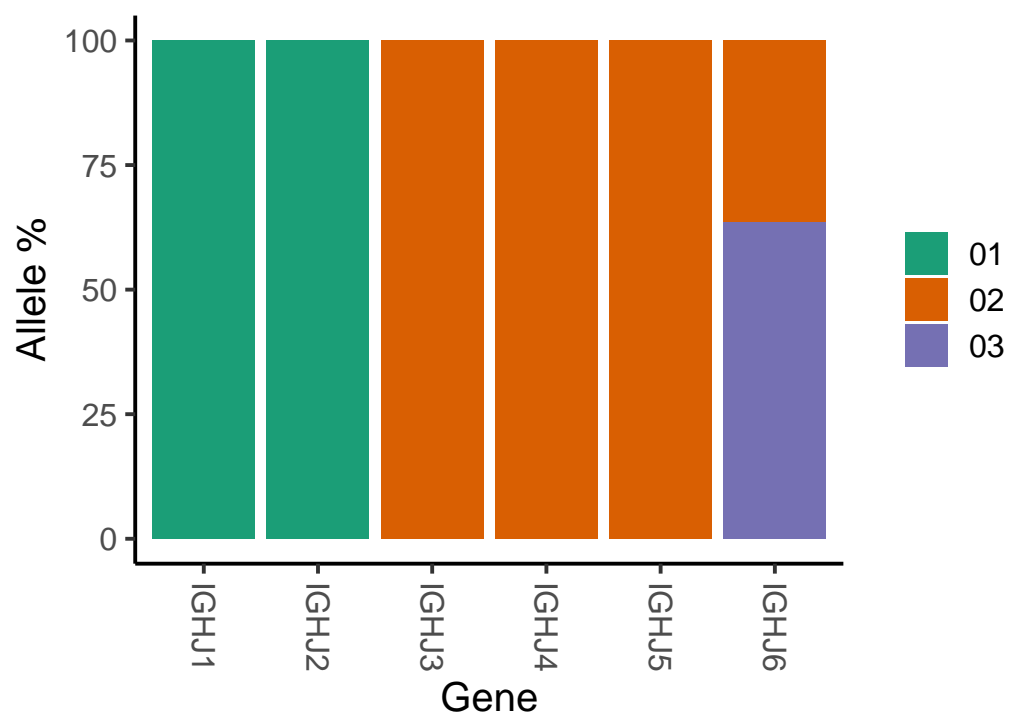


IGHV7-4-1*02

173 sequences assigned
20 (11.6%) exact matches, in which:
20 unique CDR3
4 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage

