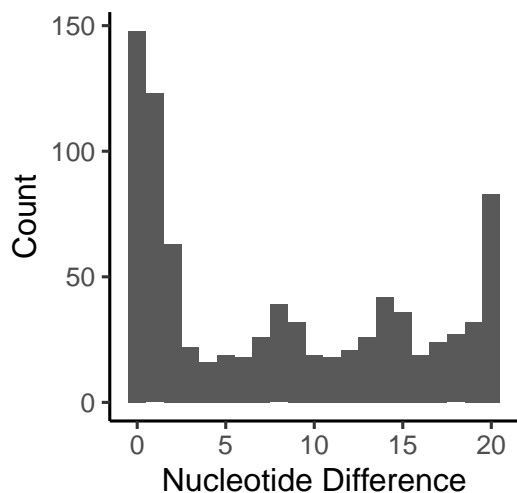


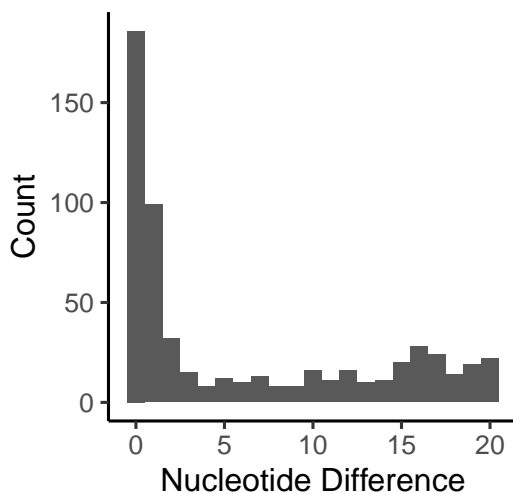
IGHV1-2*02

1411 sequences assigned
148 (10.5%) exact matches, in which:
141 unique CDR3
6 unique J



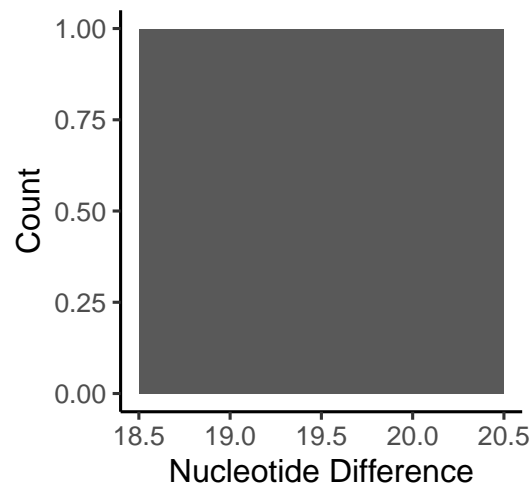
IGHV1-18*01

876 sequences assigned
186 (21.2%) exact matches, in which:
170 unique CDR3
5 unique J



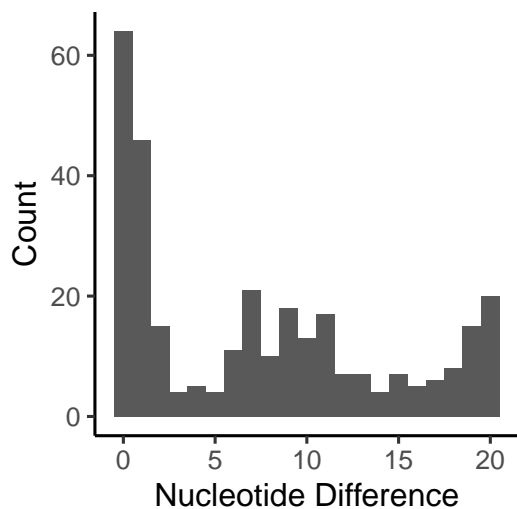
IGHV1-45*02

2 sequences assigned
No exact matches.



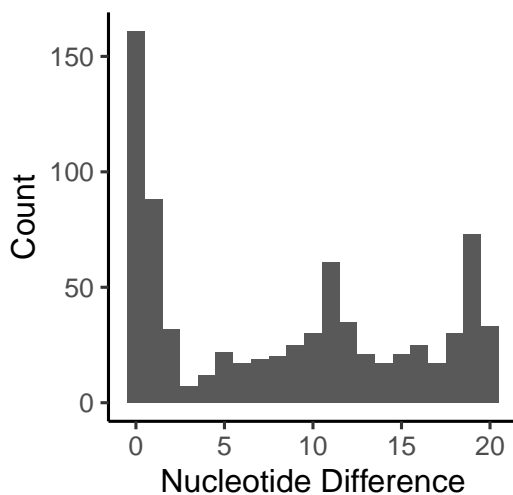
IGHV1-3*01

481 sequences assigned
64 (13.3%) exact matches, in which:
63 unique CDR3
4 unique J



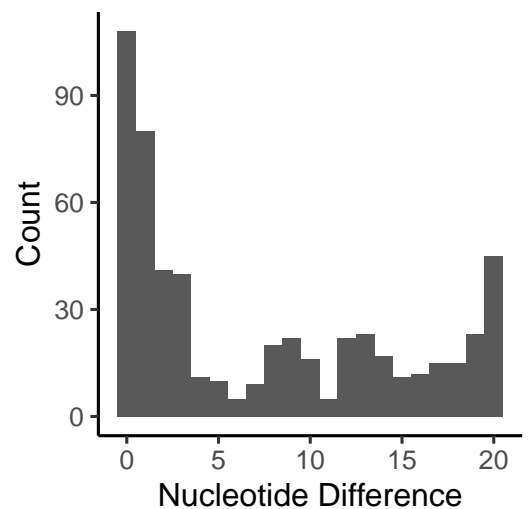
IGHV1-18*04

897 sequences assigned
161 (17.9%) exact matches, in which:
151 unique CDR3
5 unique J



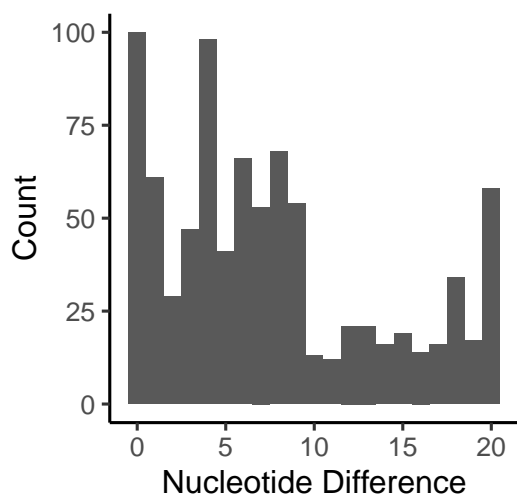
IGHV1-46*01

864 sequences assigned
108 (12.5%) exact matches, in which:
94 unique CDR3
5 unique J



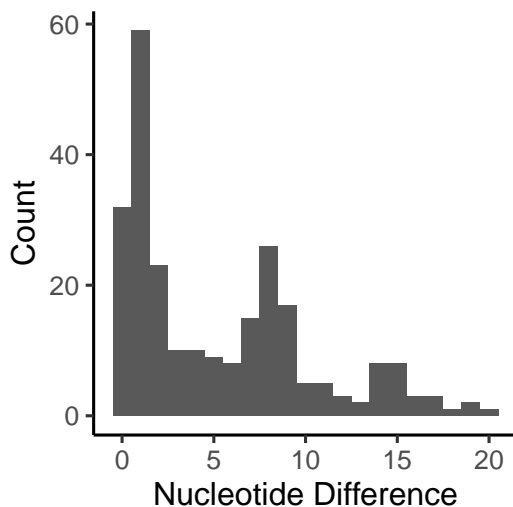
IGHV1-8*01

980 sequences assigned
100 (10.2%) exact matches, in which:
97 unique CDR3
5 unique J



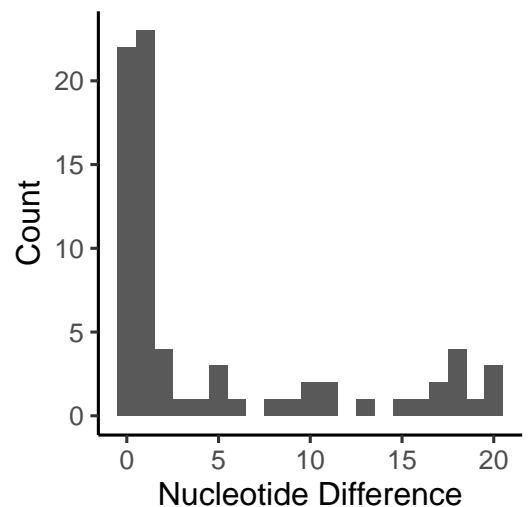
IGHV1-24*01

310 sequences assigned
32 (10.3%) exact matches, in which:
26 unique CDR3
4 unique J



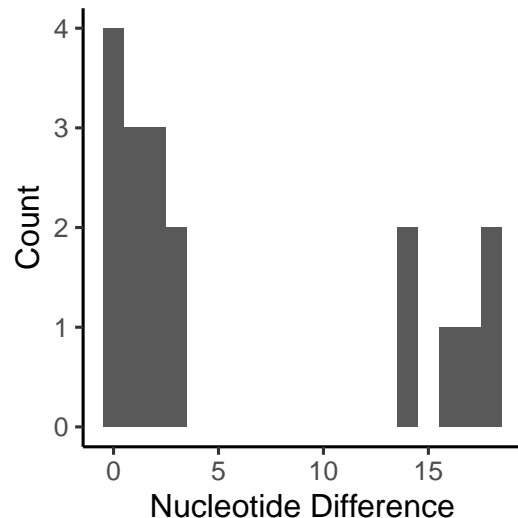
IGHV1-58*01

97 sequences assigned
22 (22.7%) exact matches, in which:
20 unique CDR3
6 unique J



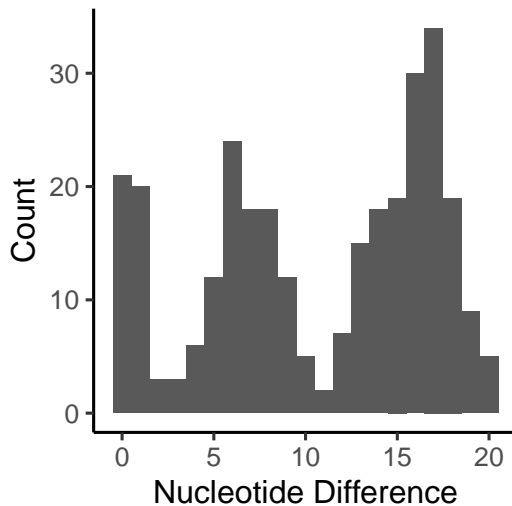
IGHV1-69-2*01

27 sequences assigned
4 (14.8%) exact matches, in which:
4 unique CDR3
1 unique J



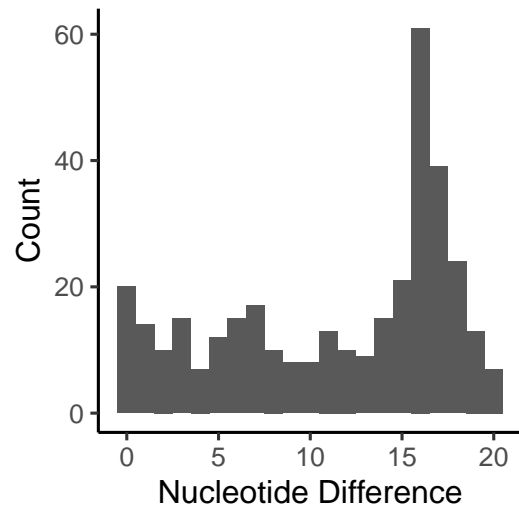
IGHV2-5*02

547 sequences assigned
21 (3.8%) exact matches, in which:
19 unique CDR3
5 unique J



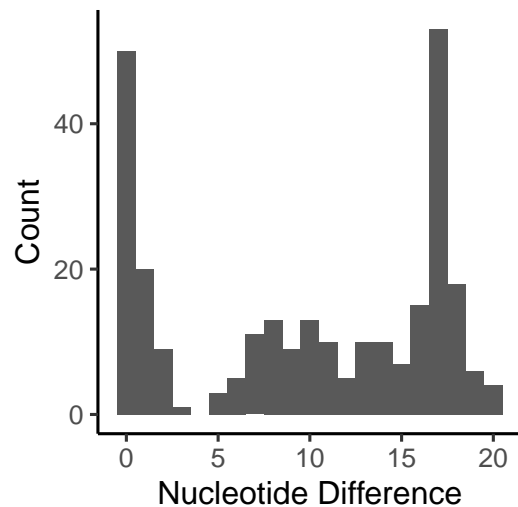
IGHV3-7*01

548 sequences assigned
20 (3.6%) exact matches, in which:
19 unique CDR3
5 unique J



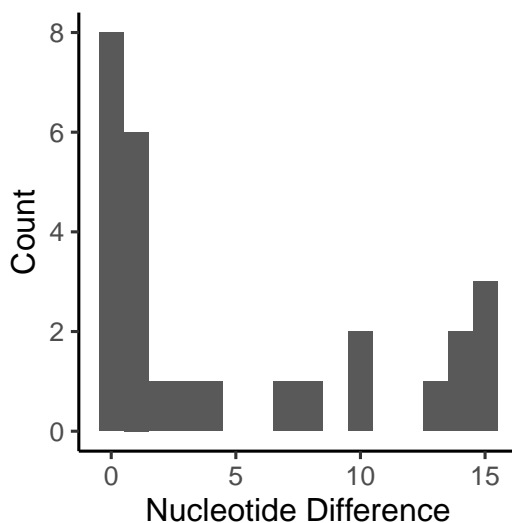
IGHV1-69*06

627 sequences assigned
50 (8%) exact matches, in which:
50 unique CDR3
5 unique J



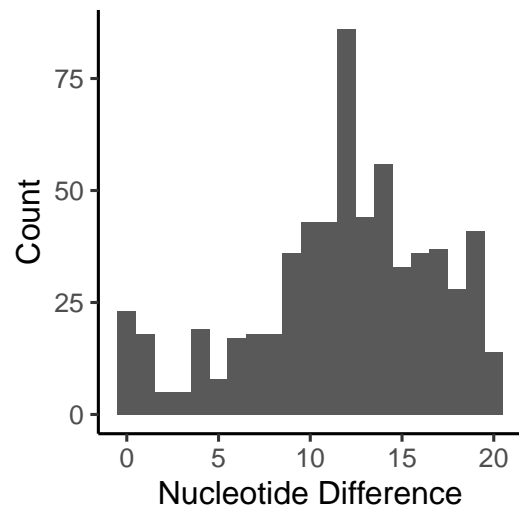
IGHV2-26*01

31 sequences assigned
8 (25.8%) exact matches, in which:
8 unique CDR3
3 unique J



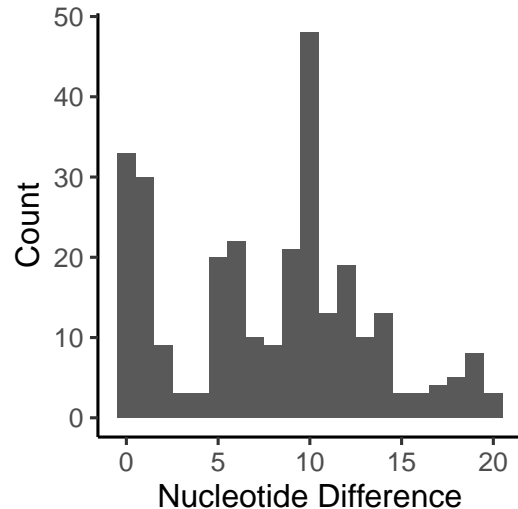
IGHV3-7*03

1037 sequences assigned
23 (2.2%) exact matches, in which:
23 unique CDR3
5 unique J



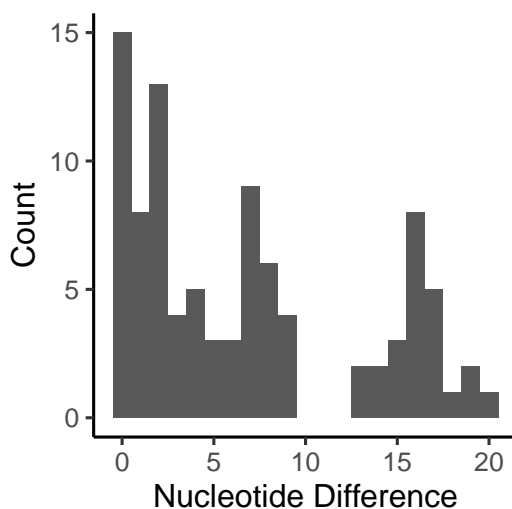
IGHV2-5*01

532 sequences assigned
33 (6.2%) exact matches, in which:
32 unique CDR3
5 unique J



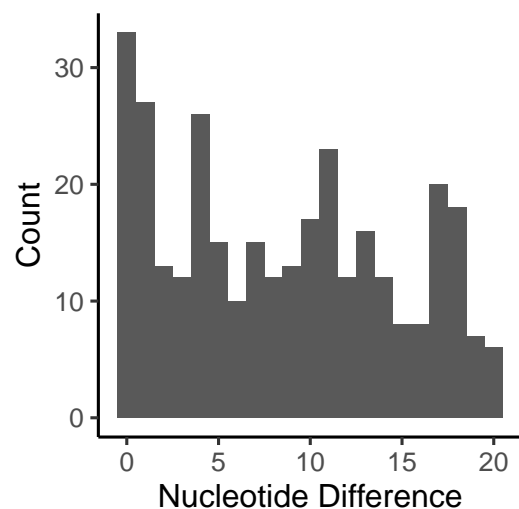
IGHV2-70*01

117 sequences assigned
15 (12.8%) exact matches, in which:
14 unique CDR3
5 unique J



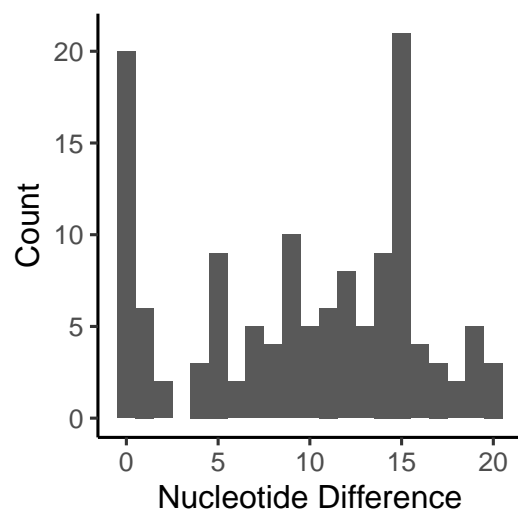
IGHV3-9*01

433 sequences assigned
33 (7.6%) exact matches, in which:
32 unique CDR3
3 unique J



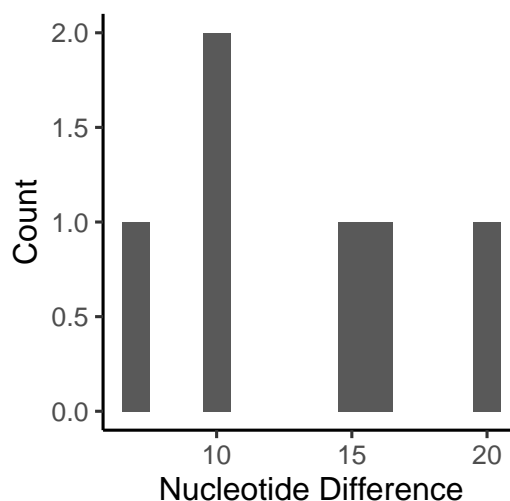
IGHV3-11*01

294 sequences assigned
20 (6.8%) exact matches, in which:
19 unique CDR3
4 unique J



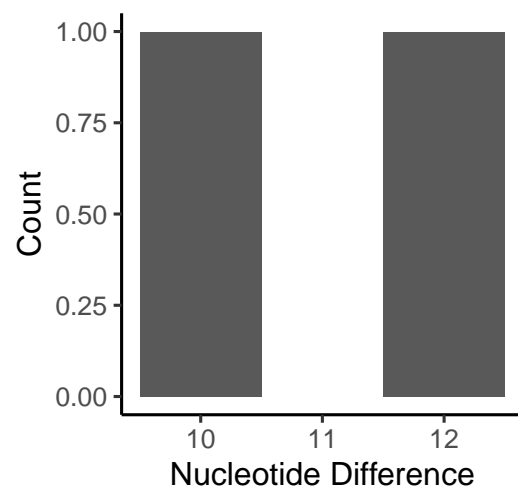
IGHV3-13*05

11 sequences assigned
No exact matches.



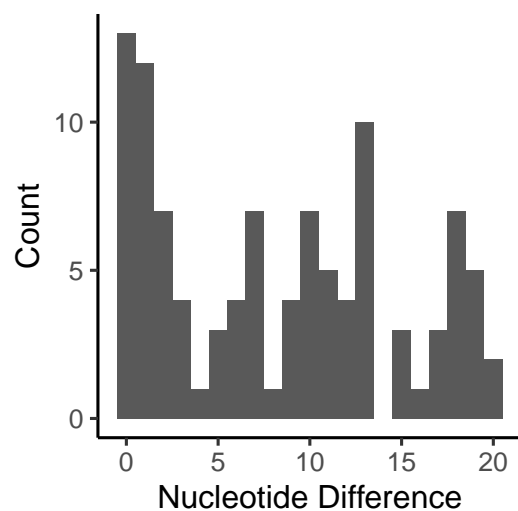
IGHV3-20*04

3 sequences assigned
No exact matches.



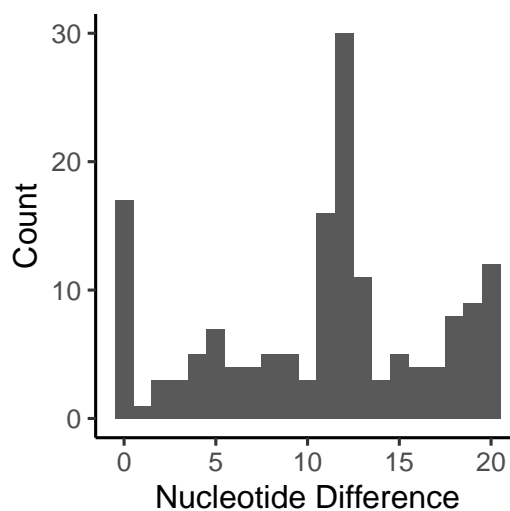
IGHV3-11*06

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



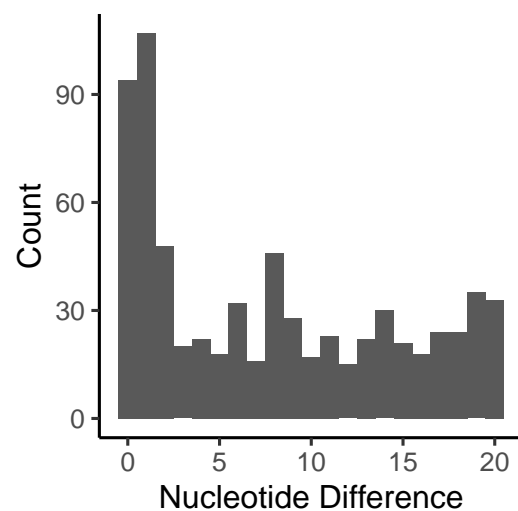
IGHV3-15*01

396 sequences assigned
17 (4.3%) exact matches, in which:
17 unique CDR3
3 unique J



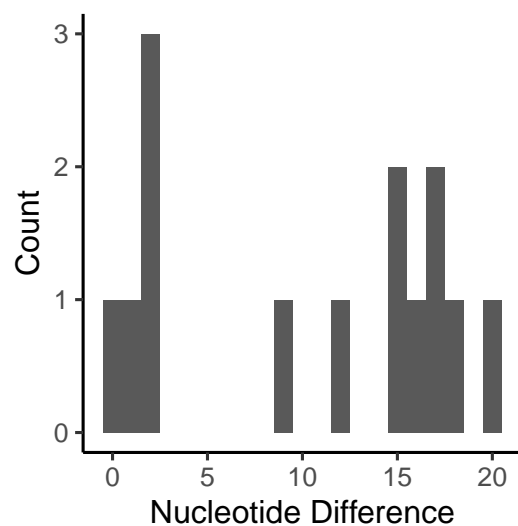
IGHV3-21*01

959 sequences assigned
94 (9.8%) exact matches, in which:
81 unique CDR3
6 unique J



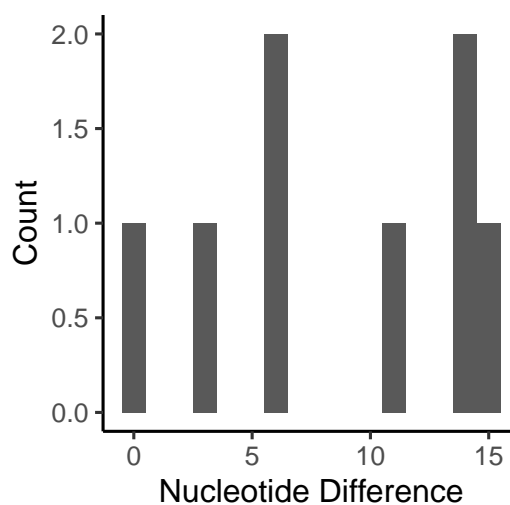
IGHV3-13*01

87 sequences assigned
1 (1.1%) exact matches, in which:
1 unique CDR3
1 unique J



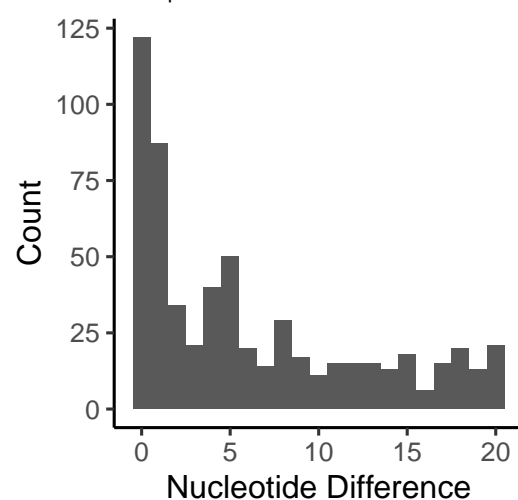
IGHV3-20*01

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



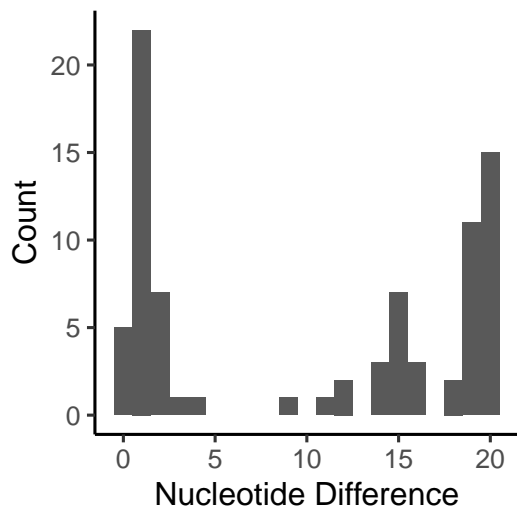
IGHV3-30-3*01

942 sequences assigned
122 (13%) exact matches, in which:
118 unique CDR3
5 unique J



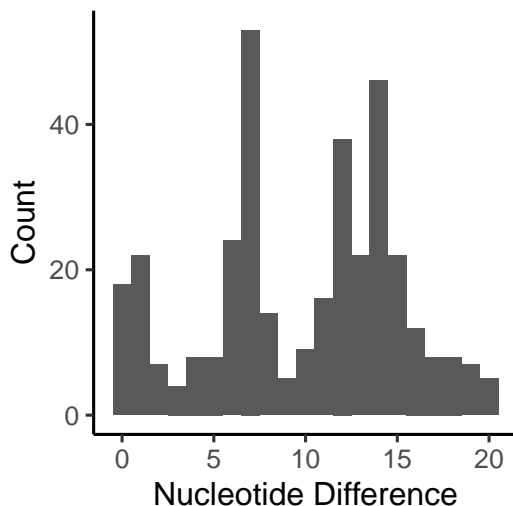
IGHV3-30*04

370 sequences assigned
5 (1.4%) exact matches, in which:
1 unique CDR3
1 unique J



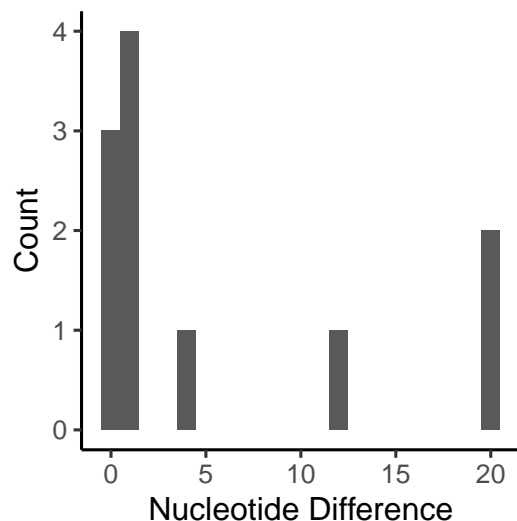
IGHV3-48*02

549 sequences assigned
18 (3.3%) exact matches, in which:
16 unique CDR3
4 unique J



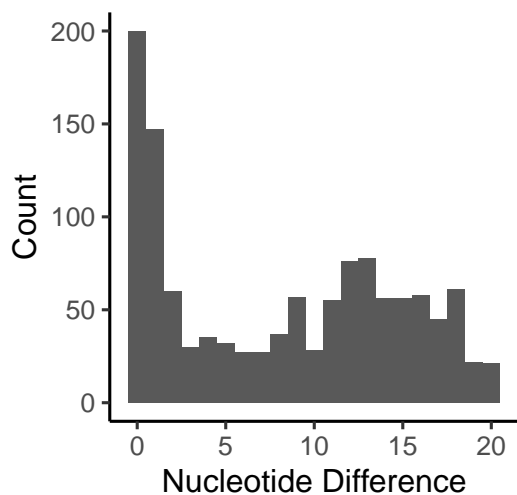
IGHV3-49*05

47 sequences assigned
3 (6.4%) exact matches, in which:
3 unique CDR3
2 unique J



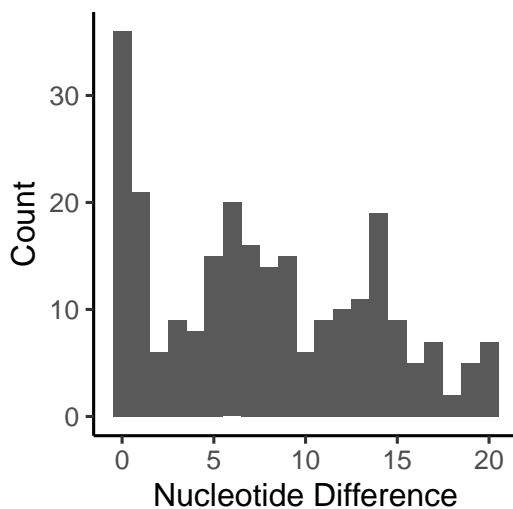
IGHV3-33*01

1636 sequences assigned
200 (12.2%) exact matches, in which:
187 unique CDR3
6 unique J



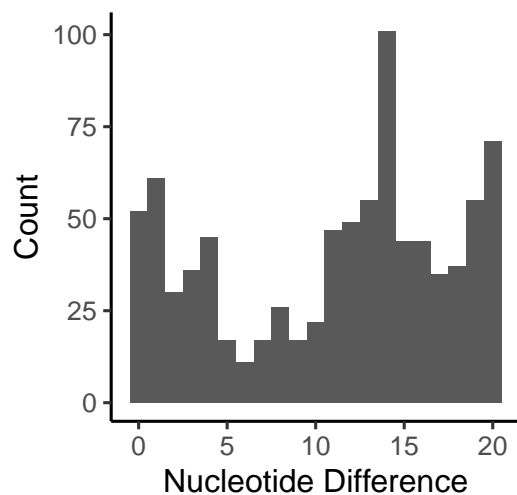
IGHV3-48*03

336 sequences assigned
36 (10.7%) exact matches, in which:
36 unique CDR3
5 unique J



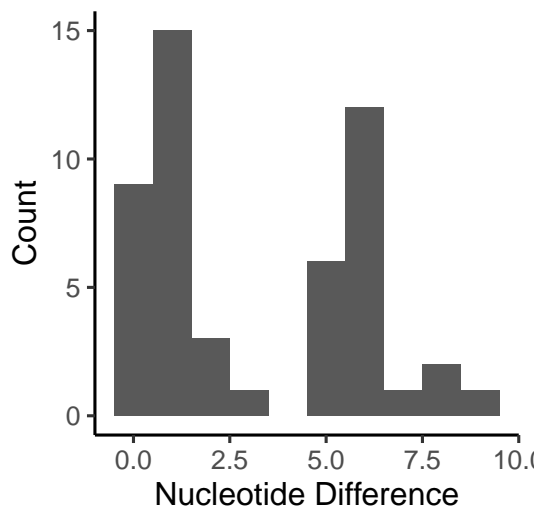
IGHV3-53*01

1190 sequences assigned
52 (4.4%) exact matches, in which:
48 unique CDR3
5 unique J



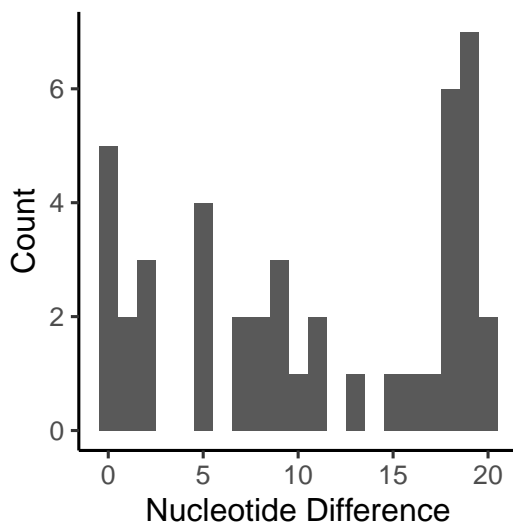
IGHV3-43*01

71 sequences assigned
9 (12.7%) exact matches, in which:
4 unique CDR3
2 unique J



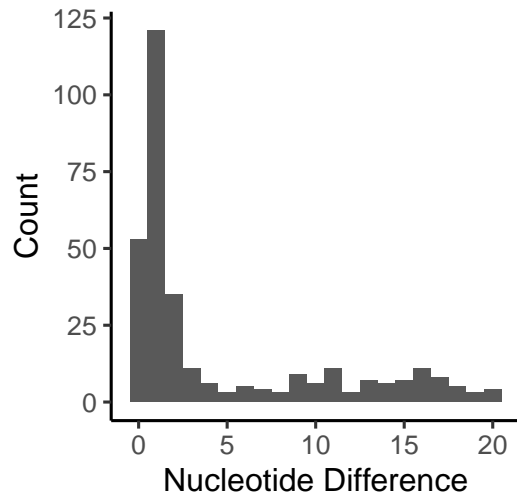
IGHV3-49*04

53 sequences assigned
5 (9.4%) exact matches, in which:
5 unique CDR3
3 unique J



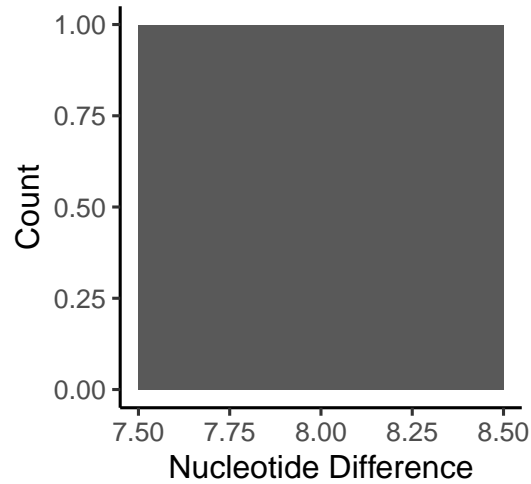
IGHV3-53*02

436 sequences assigned
53 (12.2%) exact matches, in which:
36 unique CDR3
5 unique J



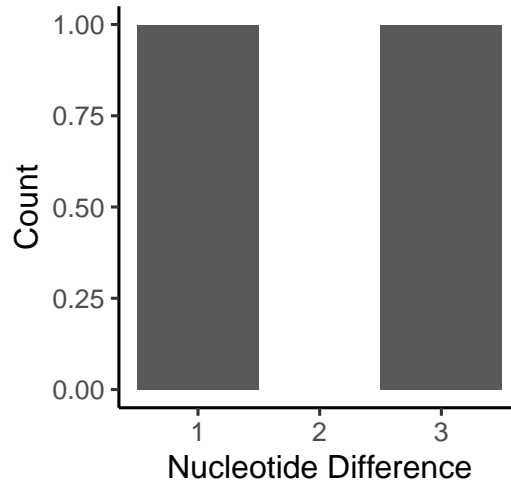
IGHV3-64*02

2 sequences assigned
No exact matches.



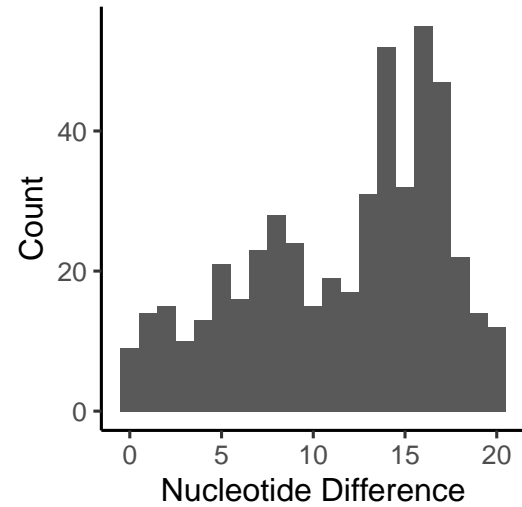
IGHV3-69-1*01

2 sequences assigned
No exact matches.



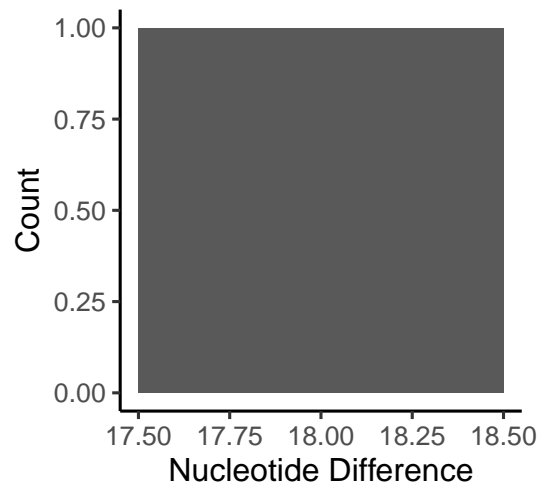
IGHV3-74*01

703 sequences assigned
9 (1.3%) exact matches, in which:
8 unique CDR3
3 unique J



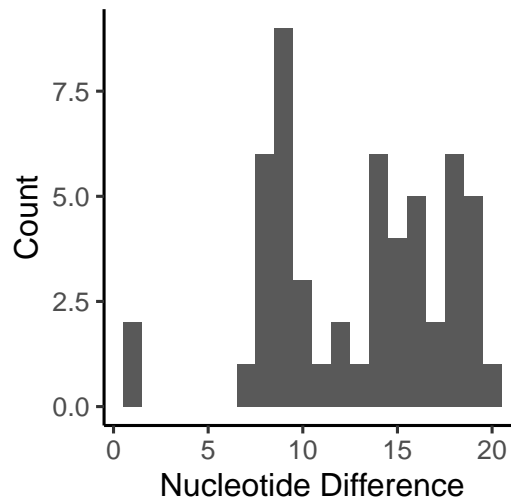
IGHV3-66*01

3 sequences assigned
No exact matches.



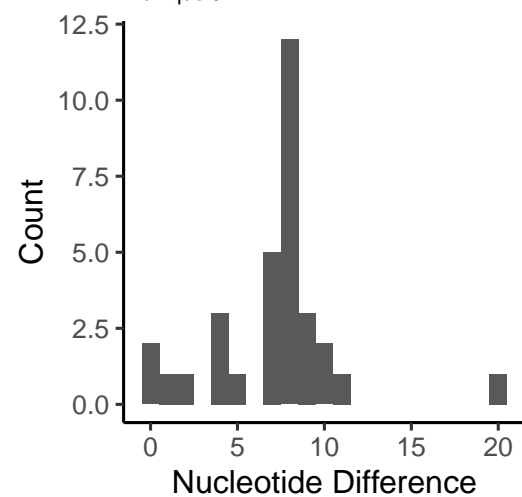
IGHV3-72*01

92 sequences assigned
No exact matches.



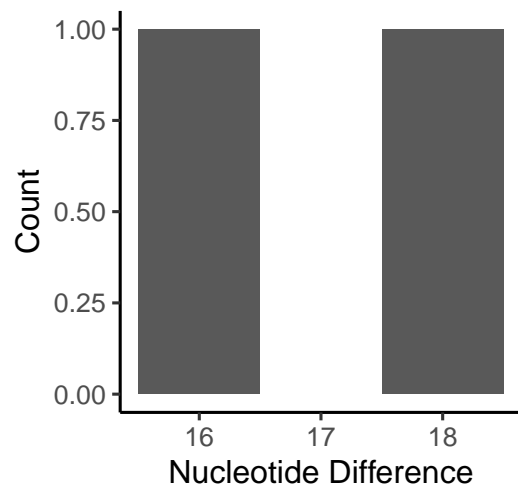
IGHV3-43D*04

35 sequences assigned
2 (5.7%) exact matches, in which:
2 unique CDR3
2 unique J



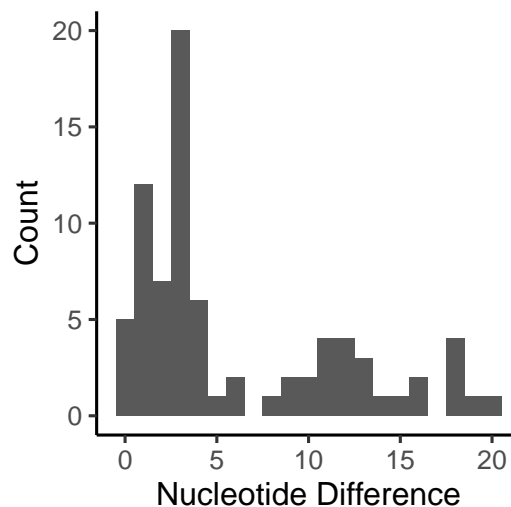
IGHV3-66*04

2 sequences assigned
No exact matches.



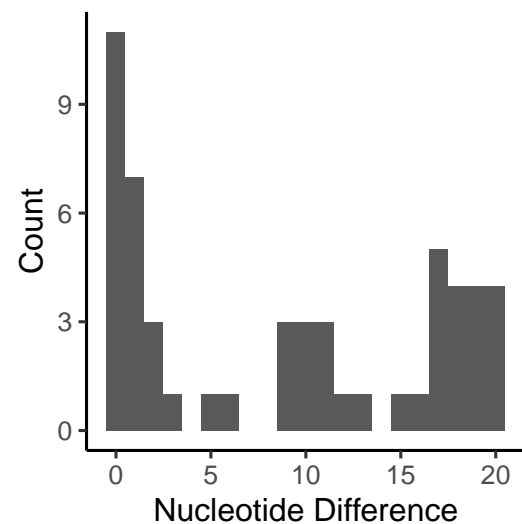
IGHV3-73*02

90 sequences assigned
5 (5.6%) exact matches, in which:
5 unique CDR3
4 unique J



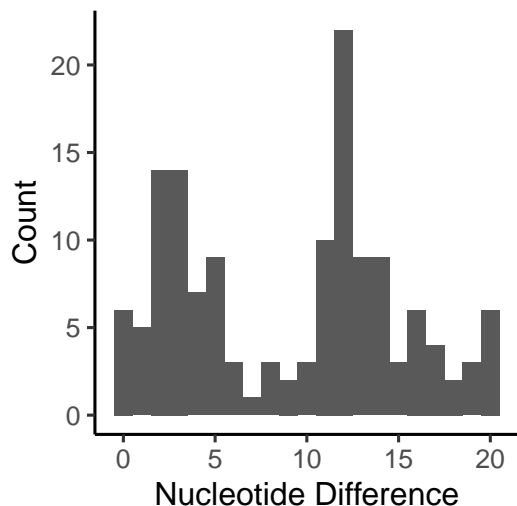
IGHV3-64D*06

128 sequences assigned
11 (8.6%) exact matches, in which:
11 unique CDR3
4 unique J



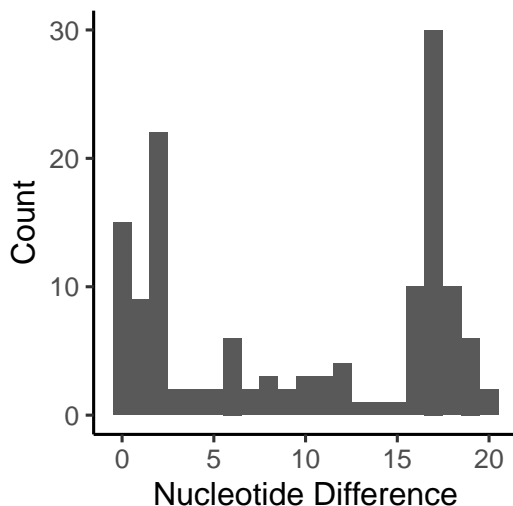
IGHV4-4*02

237 sequences assigned
6 (2.5%) exact matches, in which:
6 unique CDR3
3 unique J



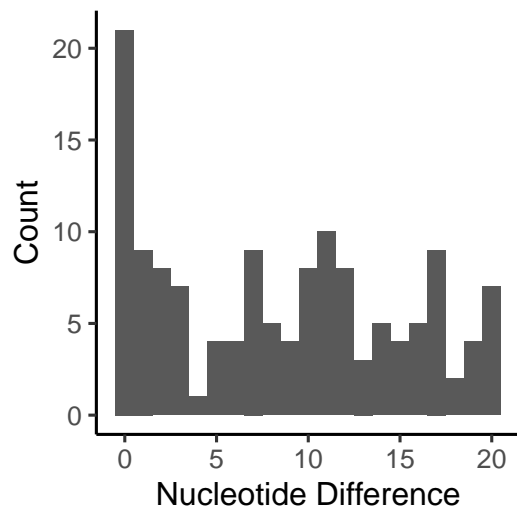
IGHV4-30-2*01

268 sequences assigned
15 (5.6%) exact matches, in which:
15 unique CDR3
4 unique J



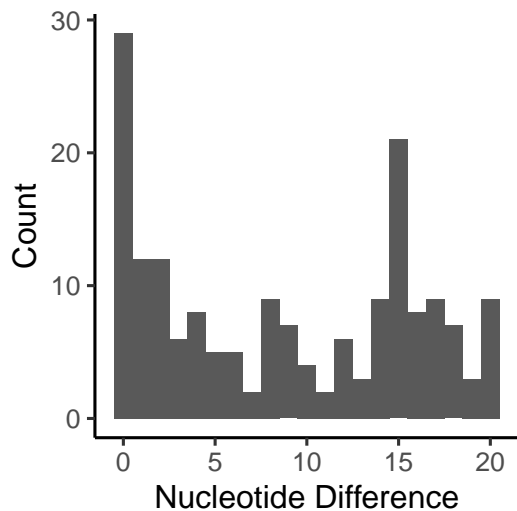
IGHV4-38-2*01

314 sequences assigned
21 (6.7%) exact matches, in which:
21 unique CDR3
4 unique J



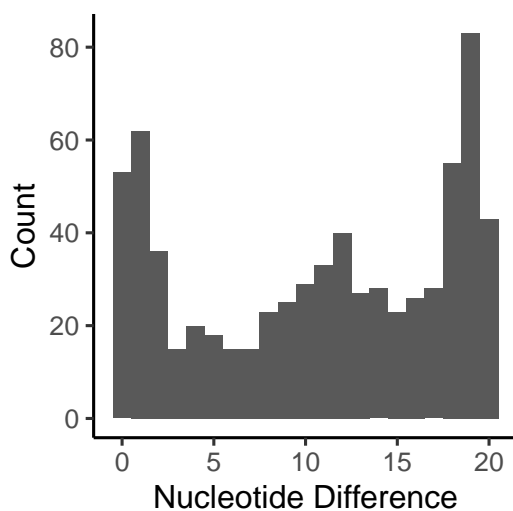
IGHV4-4*07

377 sequences assigned
29 (7.7%) exact matches, in which:
28 unique CDR3
5 unique J



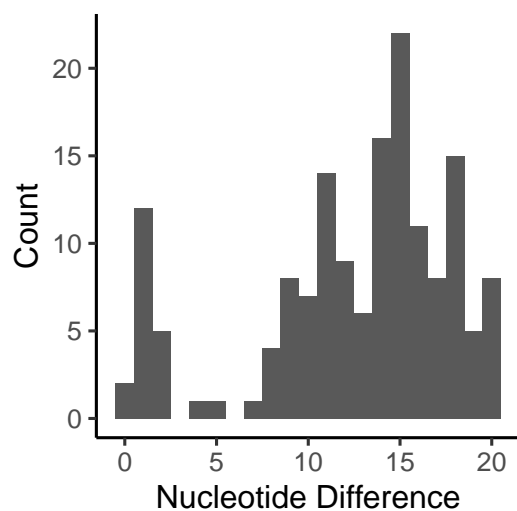
IGHV4-31*03

889 sequences assigned
53 (6%) exact matches, in which:
46 unique CDR3
5 unique J



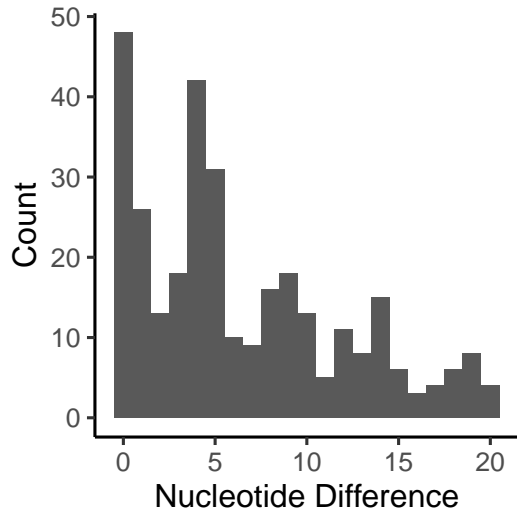
IGHV4-38-2*02

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



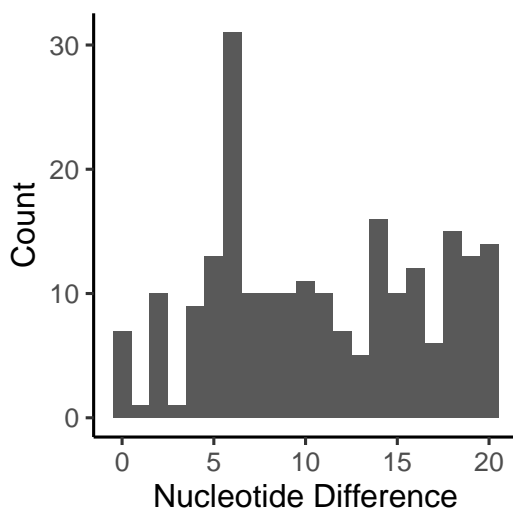
IGHV4-30-4*01

421 sequences assigned
48 (11.4%) exact matches, in which:
39 unique CDR3
4 unique J



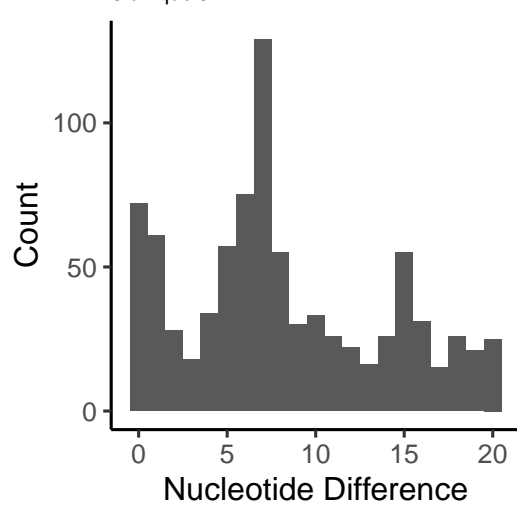
IGHV4-34*01

453 sequences assigned
7 (1.5%) exact matches, in which:
7 unique CDR3
3 unique J



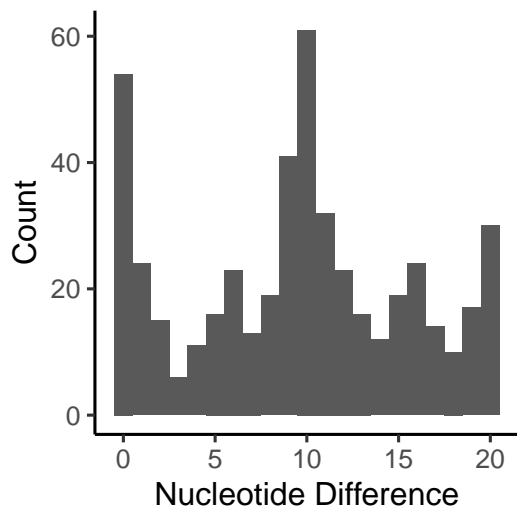
IGHV4-39*01

1169 sequences assigned
72 (6.2%) exact matches, in which:
71 unique CDR3
6 unique J



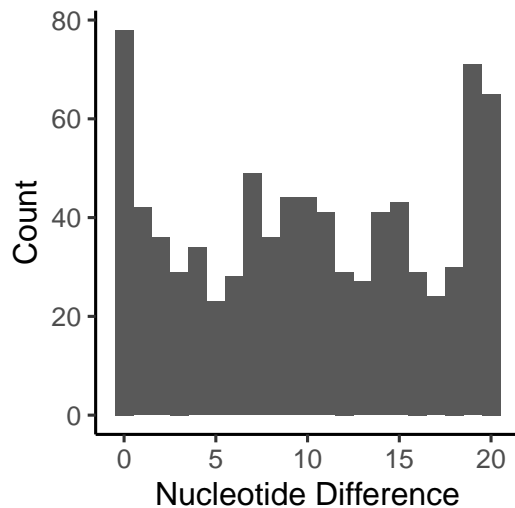
IGHV4–59*01

881 sequences assigned
54 (6.1%) exact matches, in which:
52 unique CDR3
5 unique J



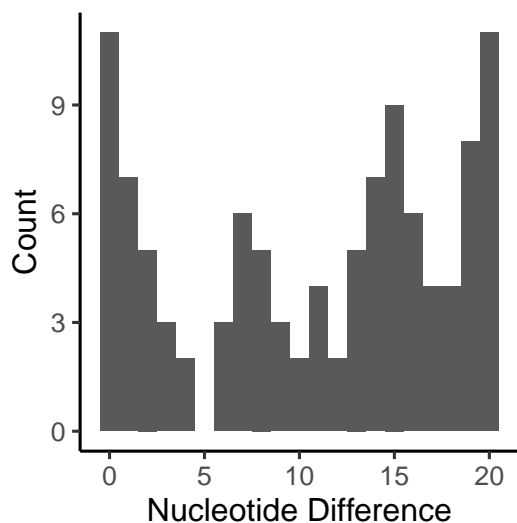
IGHV5–51*01

1088 sequences assigned
78 (7.2%) exact matches, in which:
76 unique CDR3
4 unique J



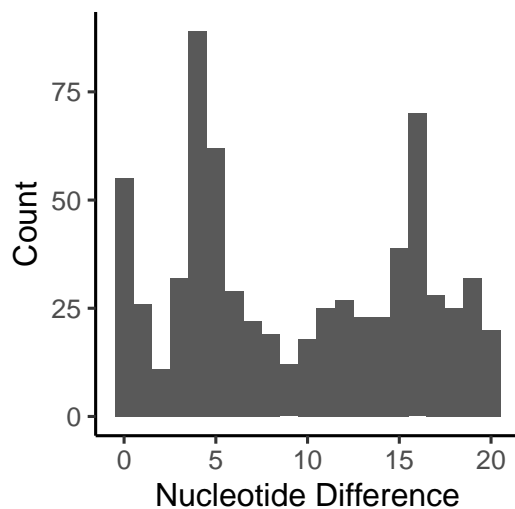
IGHV4–61*01

160 sequences assigned
11 (6.9%) exact matches, in which:
11 unique CDR3
4 unique J



IGHV6–1*01

839 sequences assigned
55 (6.6%) exact matches, in which:
54 unique CDR3
5 unique J



IGHV5–10–1*03

413 sequences assigned
19 (4.6%) exact matches, in which:
19 unique CDR3
4 unique J

