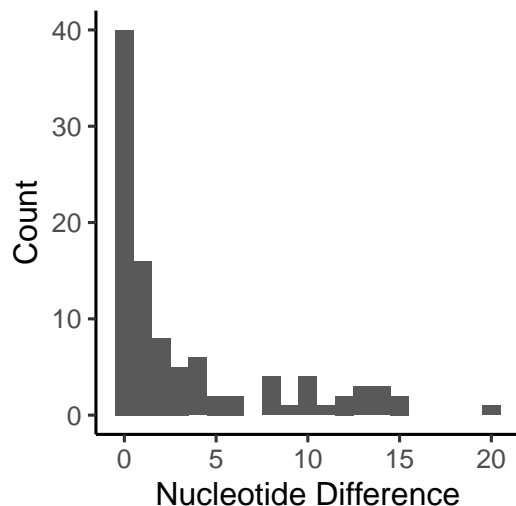


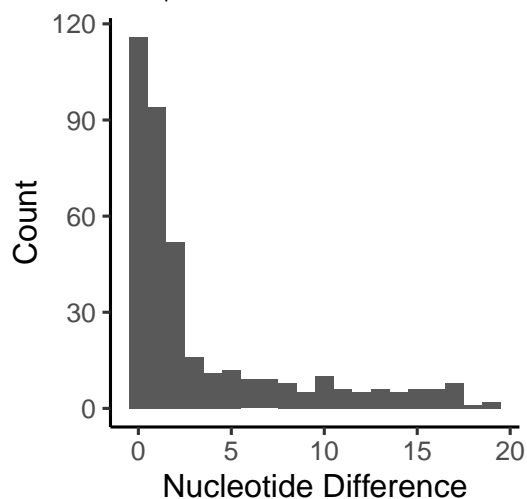
IGHV1-2*04

104 sequences assigned
40 (38.5%) exact matches, in which:
35 unique CDR3
5 unique J



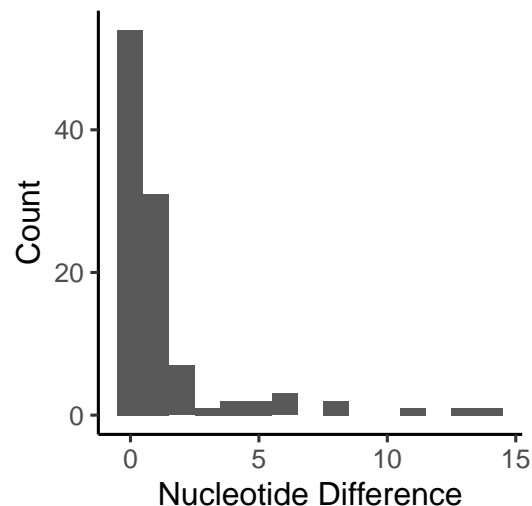
IGHV1-8*01

391 sequences assigned
116 (29.7%) exact matches, in which:
95 unique CDR3
4 unique J



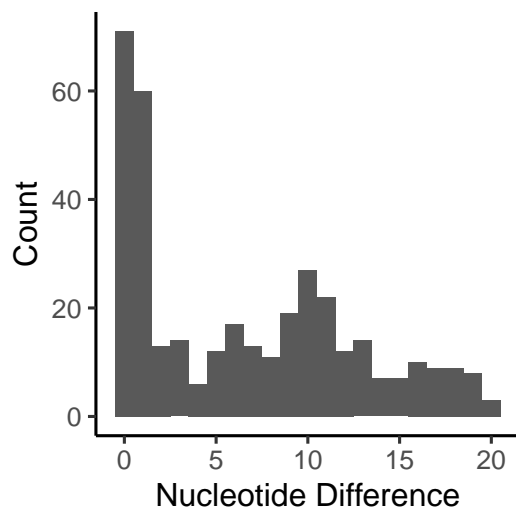
IGHV1-24*01

105 sequences assigned
54 (51.4%) exact matches, in which:
51 unique CDR3
5 unique J



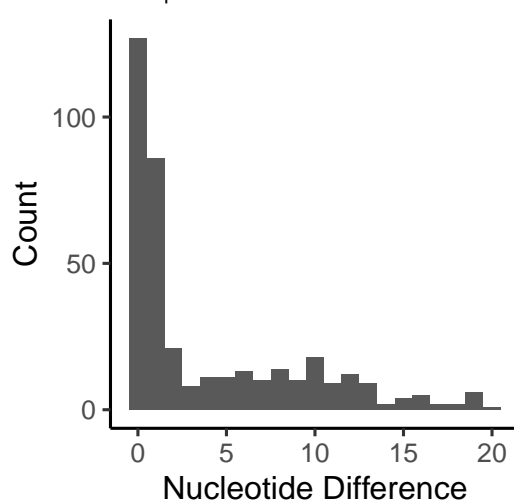
IGHV1-2*06

397 sequences assigned
71 (17.9%) exact matches, in which:
65 unique CDR3
4 unique J



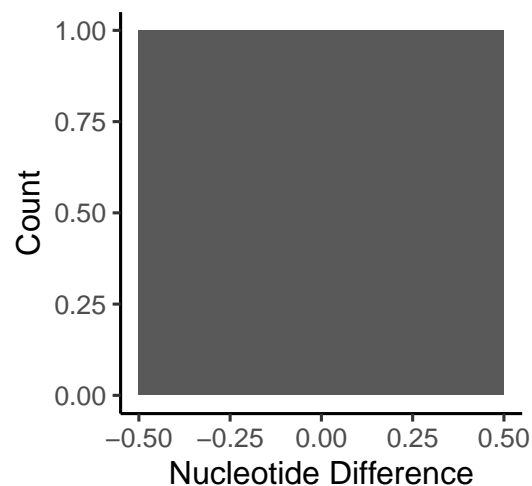
IGHV1-18*01

407 sequences assigned
127 (31.2%) exact matches, in which:
118 unique CDR3
4 unique J



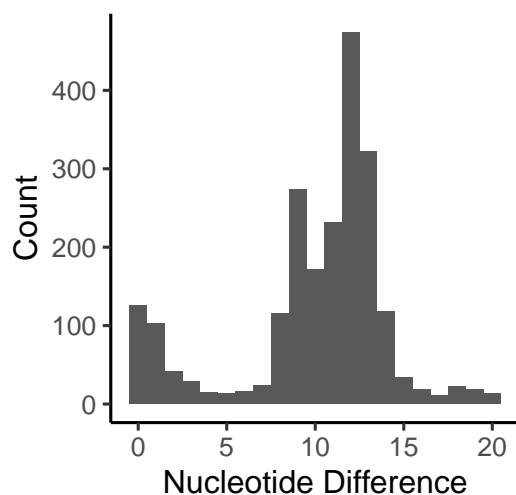
IGHV1-45*02

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



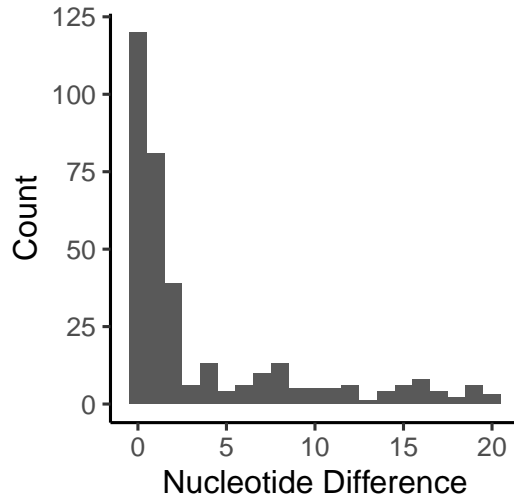
IGHV1-3*01

2253 sequences assigned
126 (5.6%) exact matches, in which:
119 unique CDR3
4 unique J



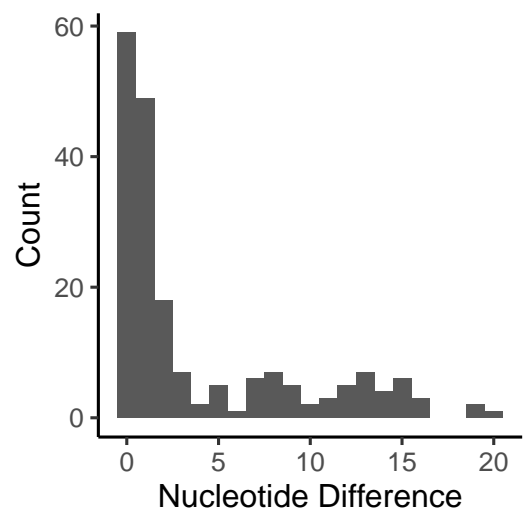
IGHV1-18*04

370 sequences assigned
120 (32.4%) exact matches, in which:
108 unique CDR3
6 unique J



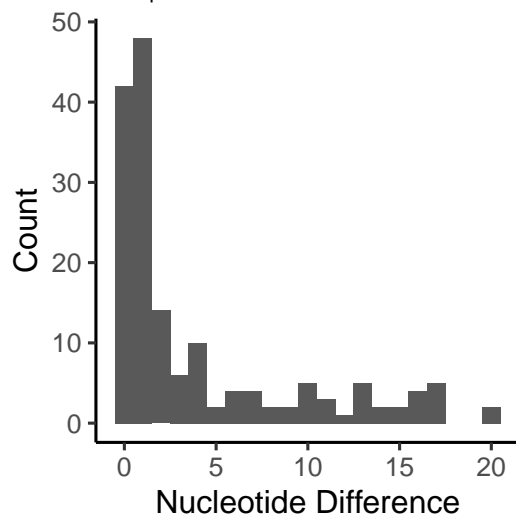
IGHV1-46*01

219 sequences assigned
59 (26.9%) exact matches, in which:
51 unique CDR3
4 unique J



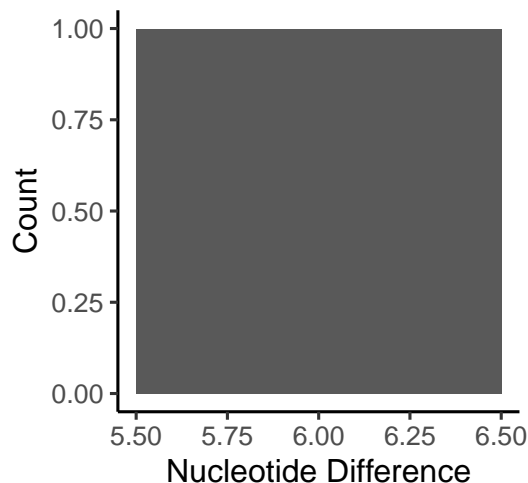
IGHV1-46*03

170 sequences assigned
42 (24.7%) exact matches, in which:
28 unique CDR3
5 unique J



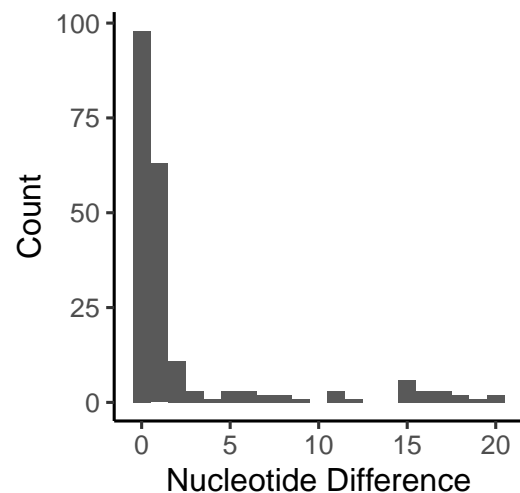
IGHV1-68*02

1 sequences assigned
No exact matches.



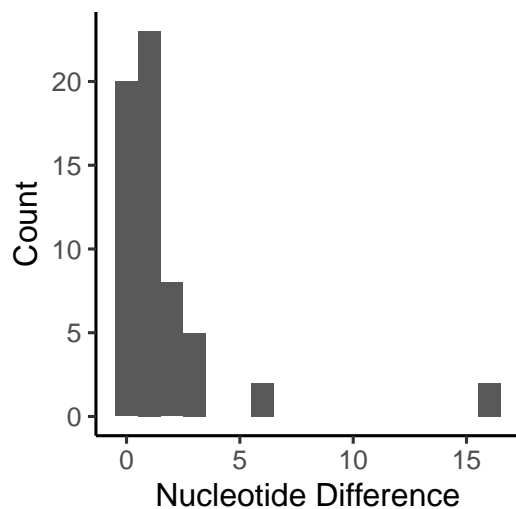
IGHV1-69*06

213 sequences assigned
98 (46%) exact matches, in which:
91 unique CDR3
4 unique J



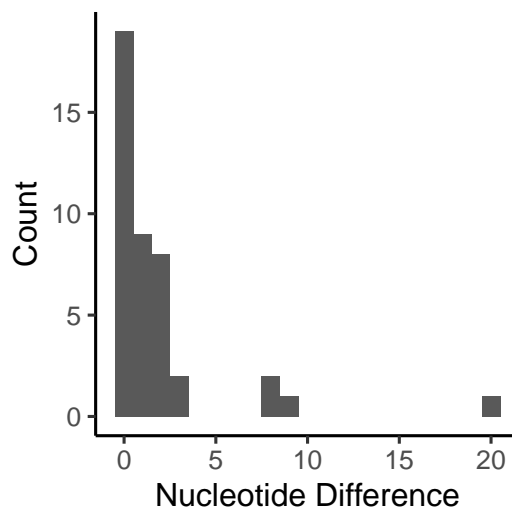
IGHV1-58*01

62 sequences assigned
20 (32.3%) exact matches, in which:
14 unique CDR3
3 unique J



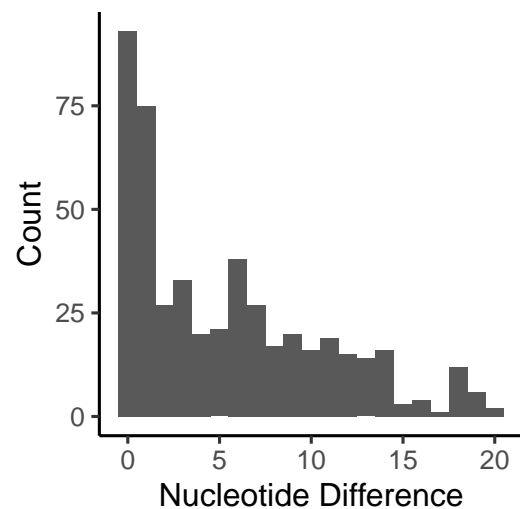
IGHV1-69-2*01

43 sequences assigned
19 (44.2%) exact matches, in which:
19 unique CDR3
4 unique J



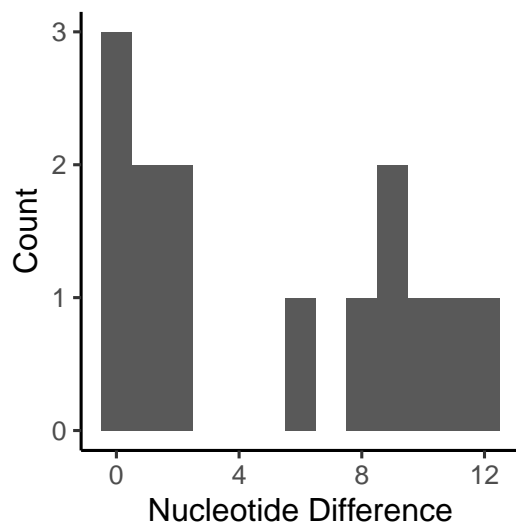
IGHV2-5*02

512 sequences assigned
93 (18.2%) exact matches, in which:
86 unique CDR3
6 unique J



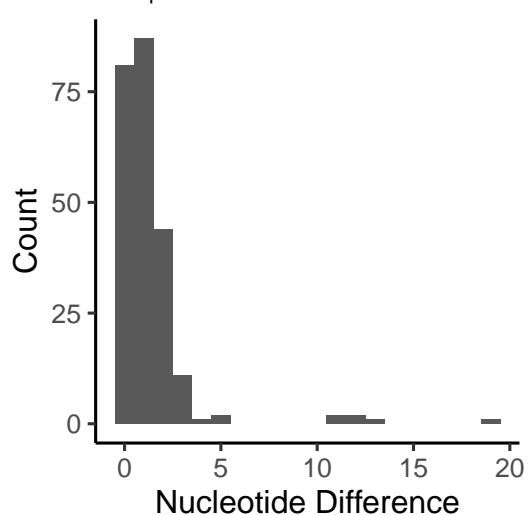
IGHV1-58*02

14 sequences assigned
3 (21.4%) exact matches, in which:
2 unique CDR3
2 unique J



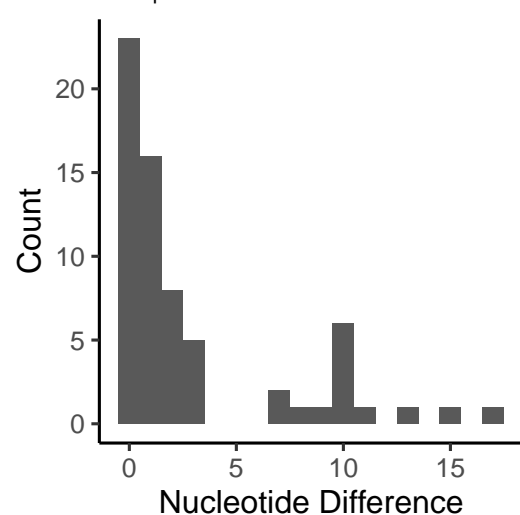
IGHV1-69*02

235 sequences assigned
81 (34.5%) exact matches, in which:
68 unique CDR3
6 unique J



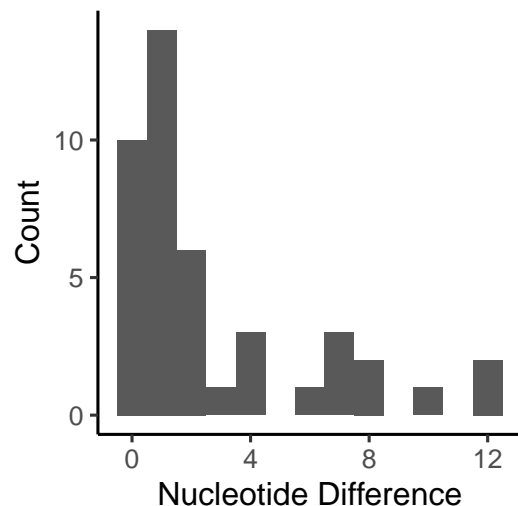
IGHV2-26*01

66 sequences assigned
23 (34.8%) exact matches, in which:
20 unique CDR3
4 unique J



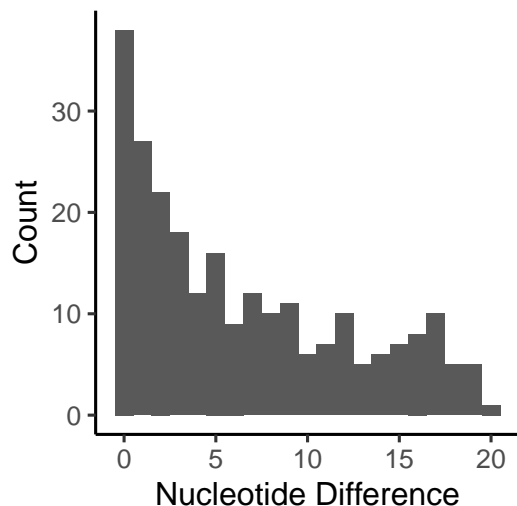
IGHV2-70*01

43 sequences assigned
10 (23.3%) exact matches, in which:
9 unique CDR3
4 unique J



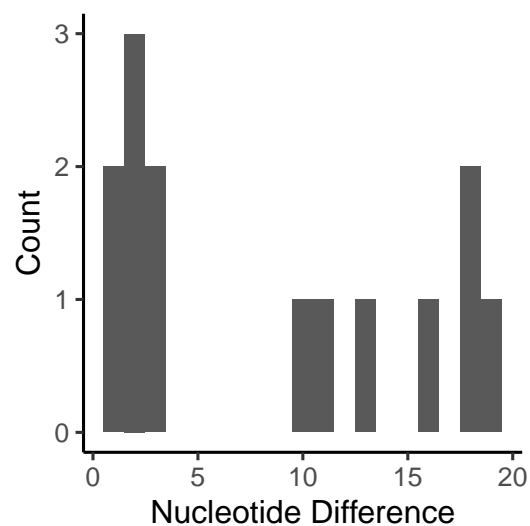
IGHV3-9*01

257 sequences assigned
38 (14.8%) exact matches, in which:
37 unique CDR3
5 unique J



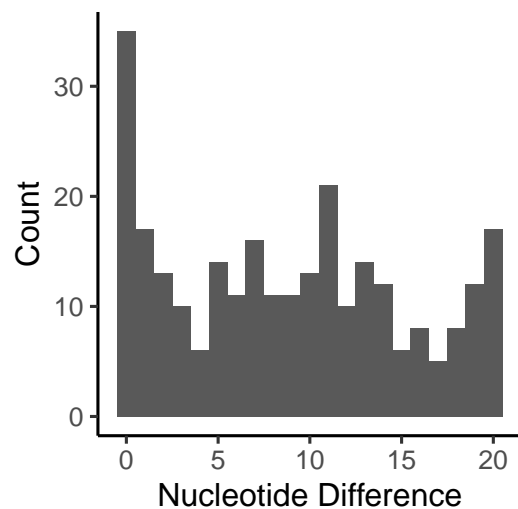
IGHV3-13*01

21 sequences assigned
No exact matches.



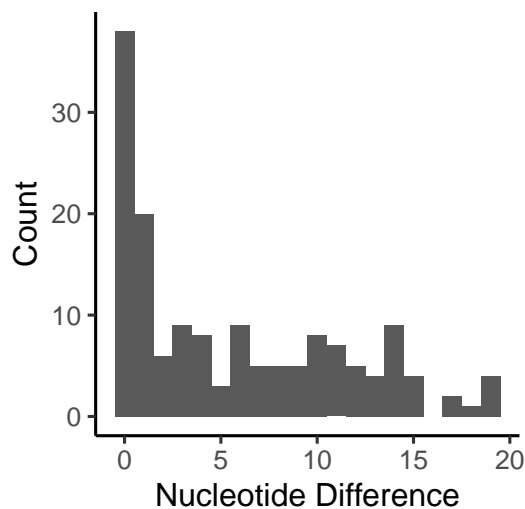
IGHV3-7*01

342 sequences assigned
35 (10.2%) exact matches, in which:
35 unique CDR3
4 unique J



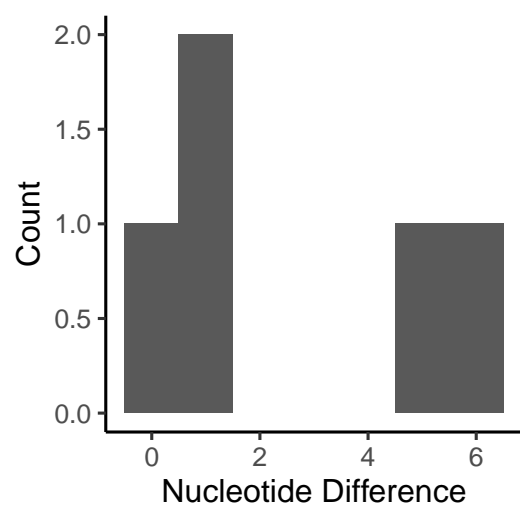
IGHV3-11*01

168 sequences assigned
38 (22.6%) exact matches, in which:
37 unique CDR3
5 unique J



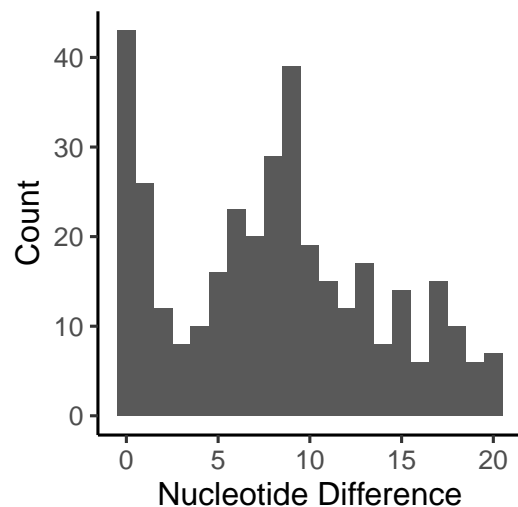
IGHV3-13*05

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



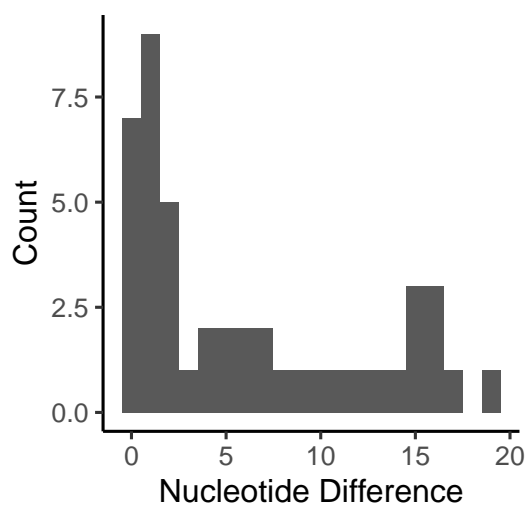
IGHV3-7*03

375 sequences assigned
43 (11.5%) exact matches, in which:
42 unique CDR3
5 unique J



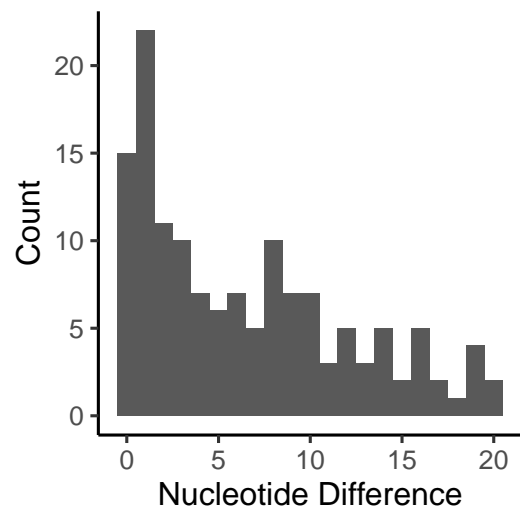
IGHV3-11*06

46 sequences assigned
7 (15.2%) exact matches, in which:
7 unique CDR3
3 unique J



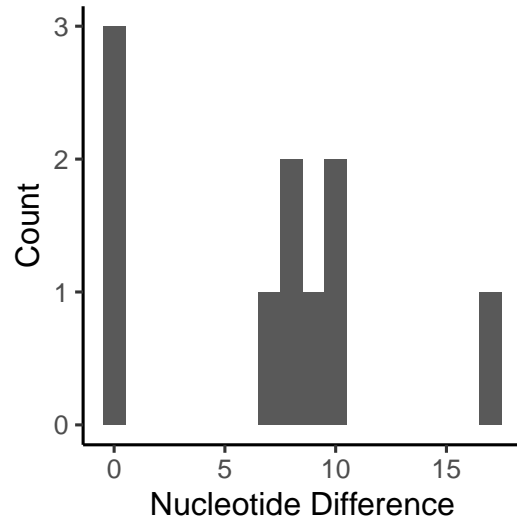
IGHV3-15*01

149 sequences assigned
15 (10.1%) exact matches, in which:
15 unique CDR3
5 unique J



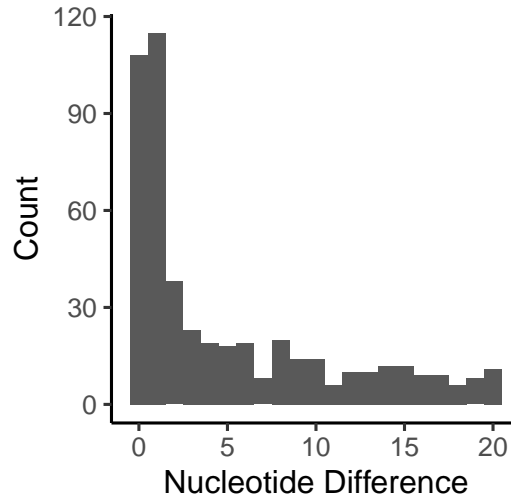
IGHV3-20*01

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



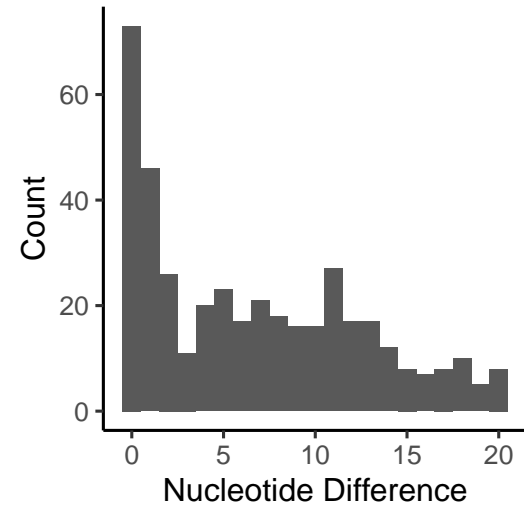
IGHV3-33*01

509 sequences assigned
108 (21.2%) exact matches, in which:
93 unique CDR3
5 unique J



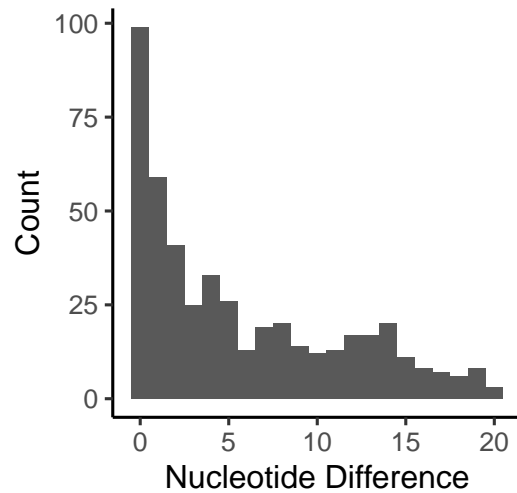
IGHV3-48*03

450 sequences assigned
73 (16.2%) exact matches, in which:
73 unique CDR3
6 unique J



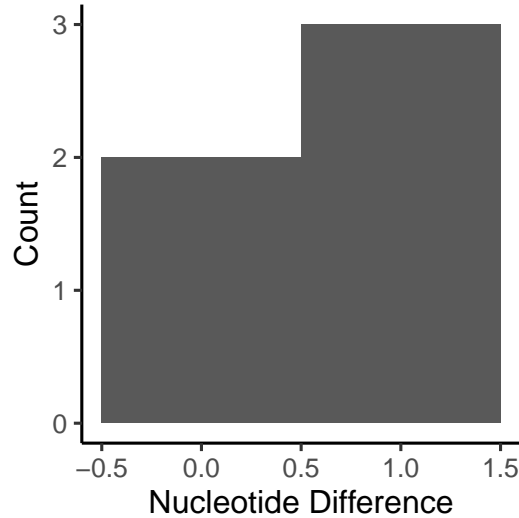
IGHV3-21*01

498 sequences assigned
99 (19.9%) exact matches, in which:
93 unique CDR3
6 unique J



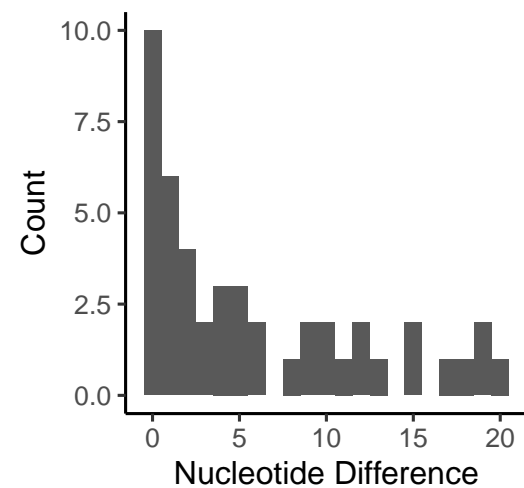
IGHV3-43*01

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



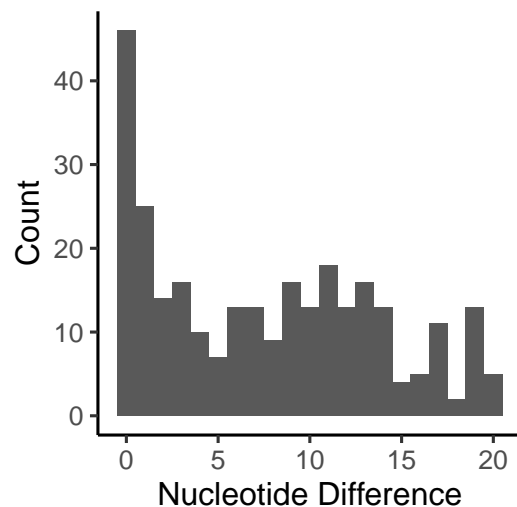
IGHV3-49*03

46 sequences assigned
10 (21.7%) exact matches, in which:
10 unique CDR3
4 unique J



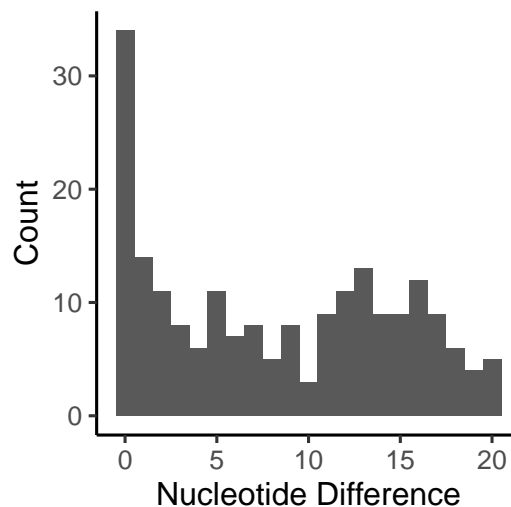
IGHV3-23*04

378 sequences assigned
46 (12.2%) exact matches, in which:
44 unique CDR3
5 unique J



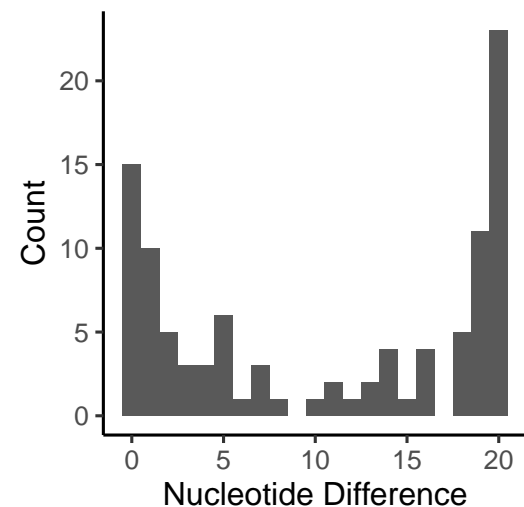
IGHV3-48*01

231 sequences assigned
34 (14.7%) exact matches, in which:
33 unique CDR3
4 unique J



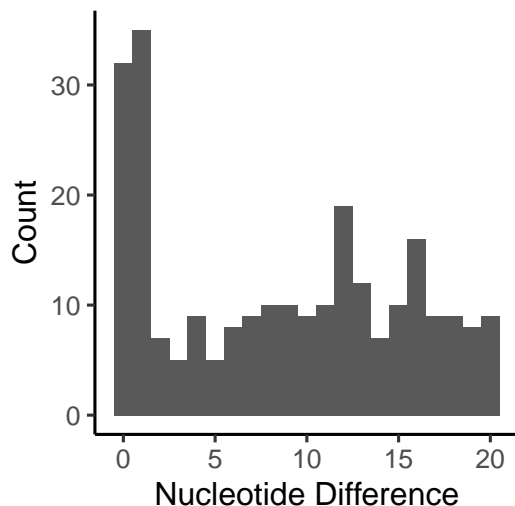
IGHV3-49*04

124 sequences assigned
15 (12.1%) exact matches, in which:
15 unique CDR3
2 unique J



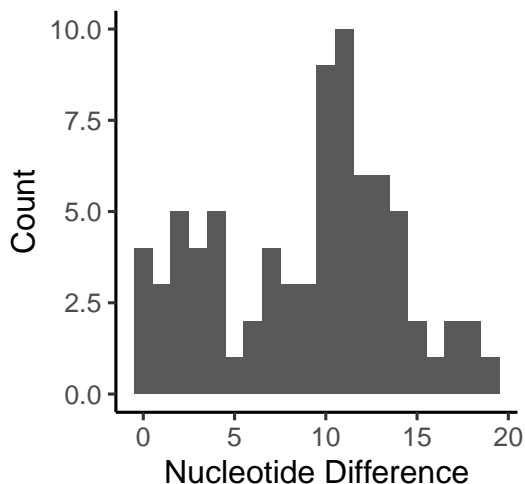
IGHV3-53*02

288 sequences assigned
32 (11.1%) exact matches, in which:
31 unique CDR3
4 unique J



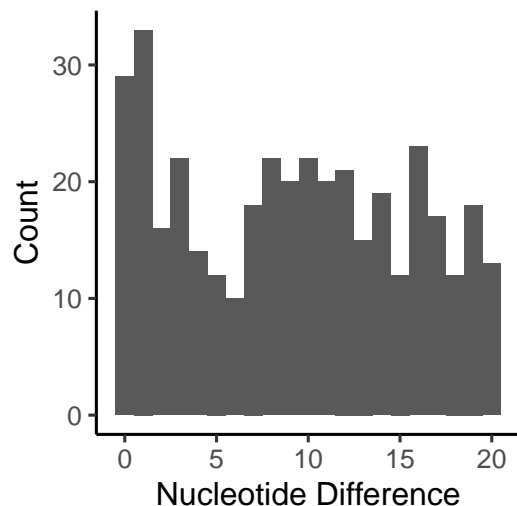
IGHV3-72*01

91 sequences assigned
4 (4.4%) exact matches, in which:
4 unique CDR3
3 unique J



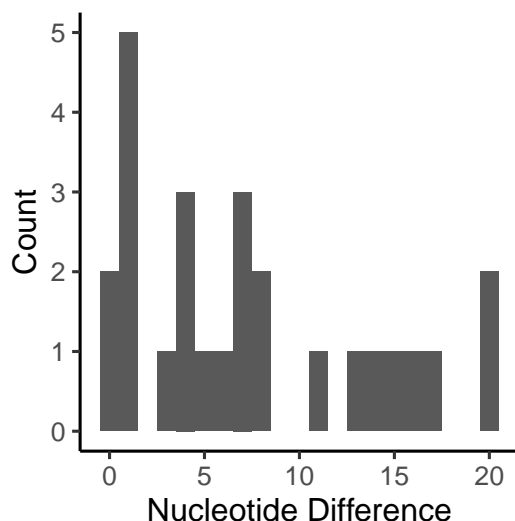
IGHV3-74*01

446 sequences assigned
29 (6.5%) exact matches, in which:
29 unique CDR3
5 unique J



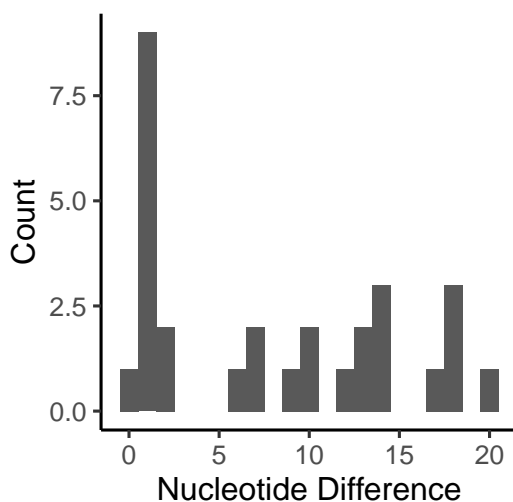
IGHV3-64*01

32 sequences assigned
2 (6.2%) exact matches, in which:
2 unique CDR3
2 unique J



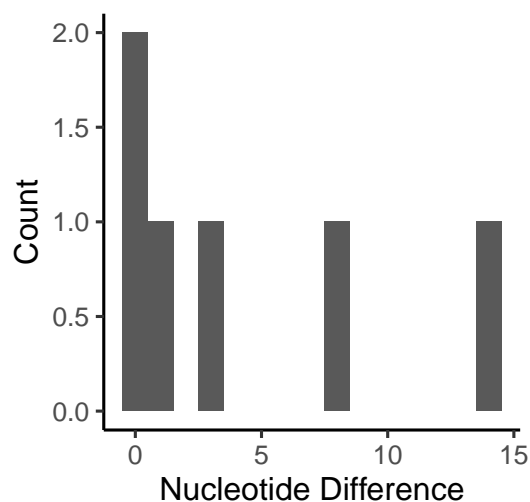
IGHV3-73*01

37 sequences assigned
1 (2.7%) exact matches, in which:
1 unique CDR3
1 unique J



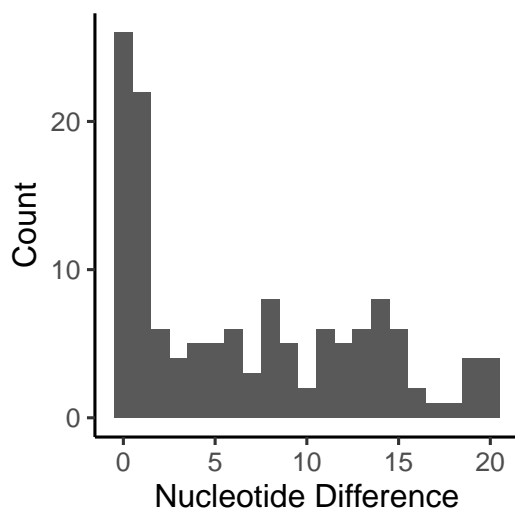
IGHV3-43D*04

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



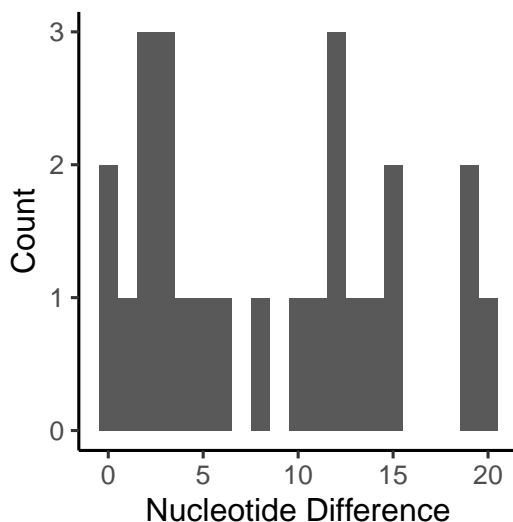
IGHV3-66*02

160 sequences assigned
26 (16.2%) exact matches, in which:
24 unique CDR3
4 unique J



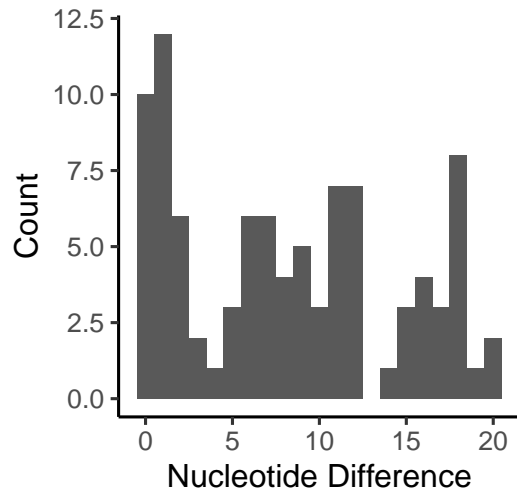
IGHV3-73*02

28 sequences assigned
2 (7.1%) exact matches, in which:
2 unique CDR3
1 unique J



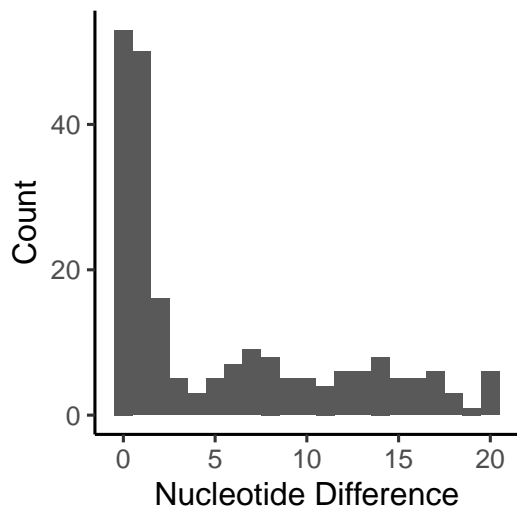
IGHV3-64D*06

113 sequences assigned
10 (8.8%) exact matches, in which:
10 unique CDR3
2 unique J



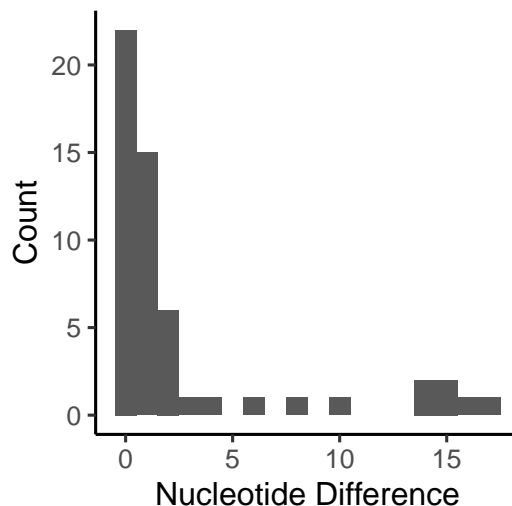
IGHV4-4*02

239 sequences assigned
53 (22.2%) exact matches, in which:
47 unique CDR3
4 unique J



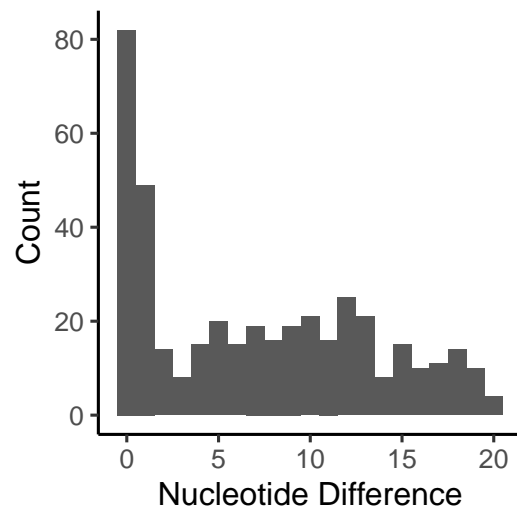
IGHV4-30-2*01

55 sequences assigned
22 (40%) exact matches, in which:
21 unique CDR3
4 unique J



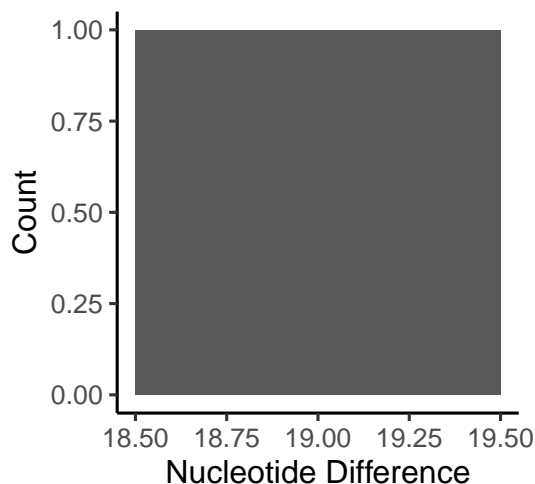
IGHV4-38-2*02_A70G

454 sequences assigned
82 (18.1%) exact matches, in which:
71 unique CDR3
5 unique J



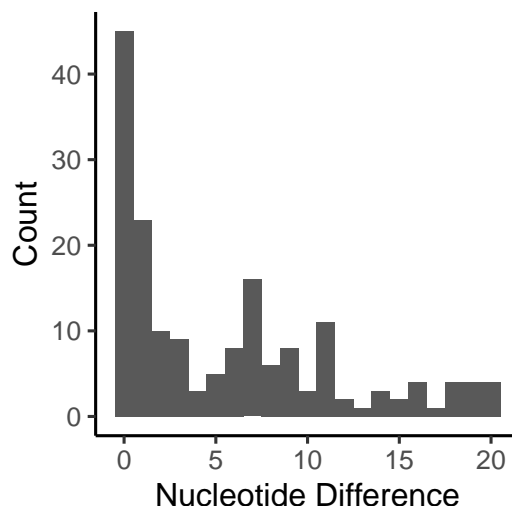
IGHV4-28*03

1 sequences assigned
No exact matches.



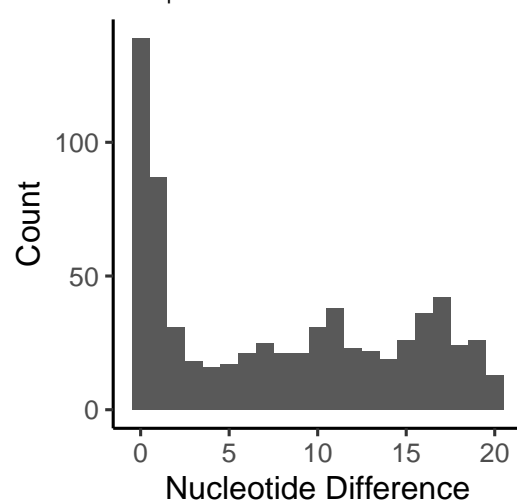
IGHV4-31*03

212 sequences assigned
45 (21.2%) exact matches, in which:
42 unique CDR3
5 unique J



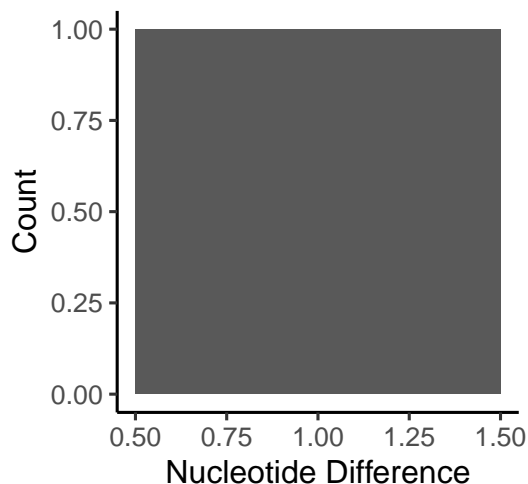
IGHV4-39*01

756 sequences assigned
139 (18.4%) exact matches, in which:
133 unique CDR3
6 unique J



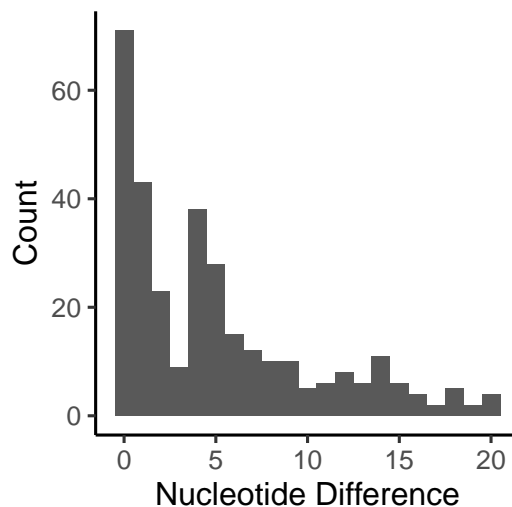
IGHV4-28*07

6 sequences assigned
No exact matches.



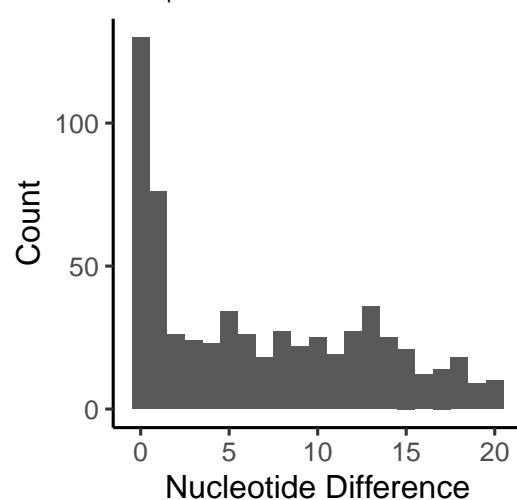
IGHV4-34*01

336 sequences assigned
71 (21.1%) exact matches, in which:
71 unique CDR3
5 unique J



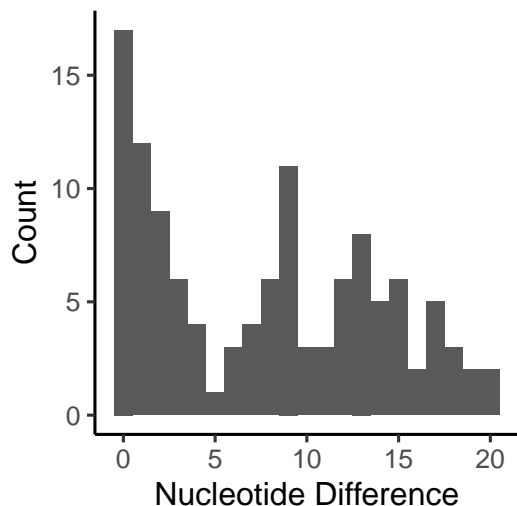
IGHV4-59*01

690 sequences assigned
130 (18.8%) exact matches, in which:
114 unique CDR3
6 unique J



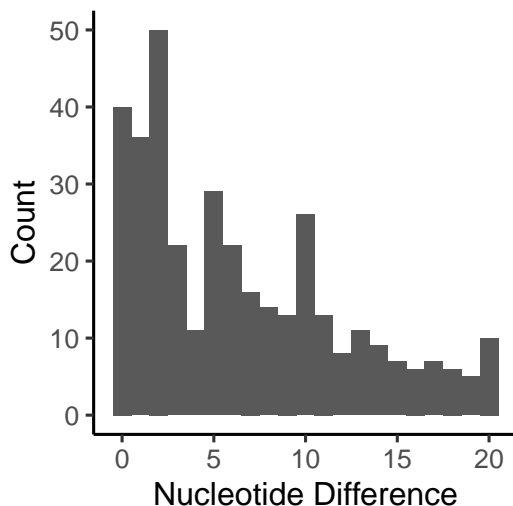
IGHV4-61*01

134 sequences assigned
17 (12.7%) exact matches, in which:
16 unique CDR3
4 unique J



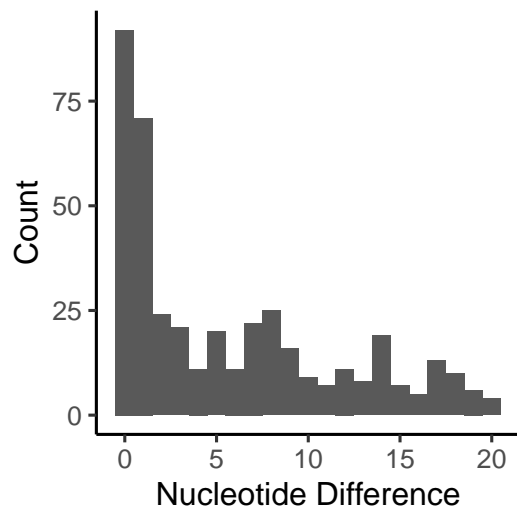
IGHV5-51*01

382 sequences assigned
40 (10.5%) exact matches, in which:
37 unique CDR3
5 unique J



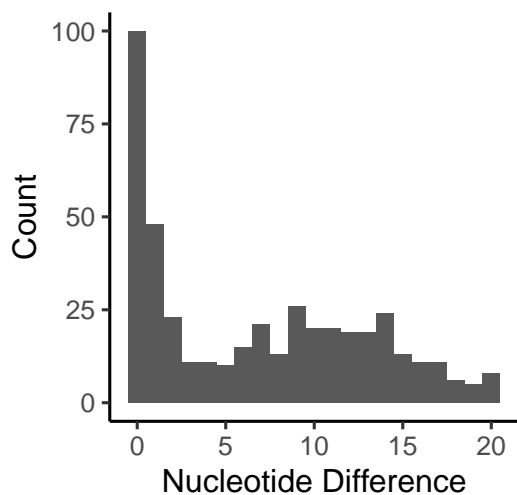
IGHV7-4-1*02

431 sequences assigned
92 (21.3%) exact matches, in which:
80 unique CDR3
5 unique J



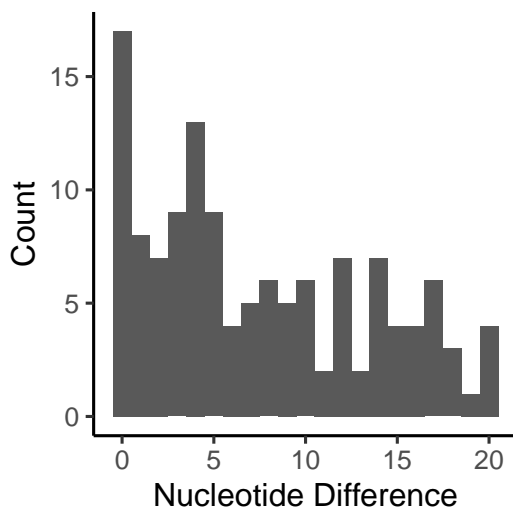
IGHV4-61*02

460 sequences assigned
100 (21.7%) exact matches, in which:
89 unique CDR3
6 unique J



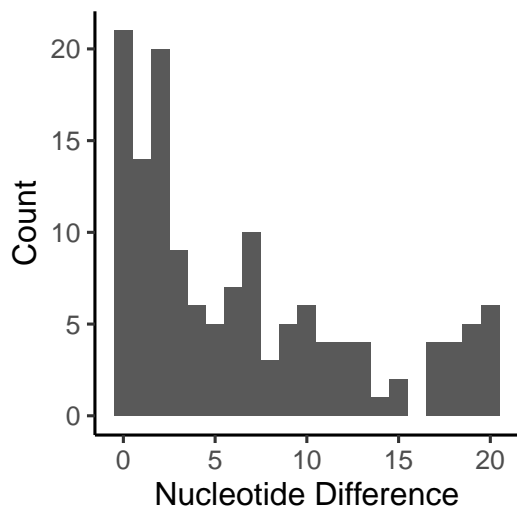
IGHV5-51*03

136 sequences assigned
17 (12.5%) exact matches, in which:
17 unique CDR3
4 unique J



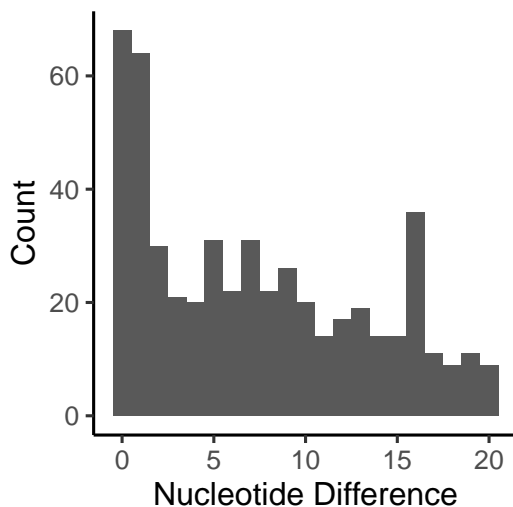
IGHV5-10-1*03

147 sequences assigned
21 (14.3%) exact matches, in which:
21 unique CDR3
3 unique J



IGHV6-1*01

530 sequences assigned
68 (12.8%) exact matches, in which:
56 unique CDR3
6 unique J





Warning – no inferred sequences found.