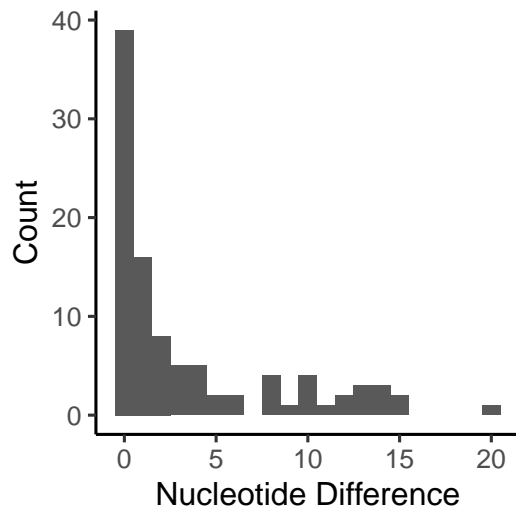


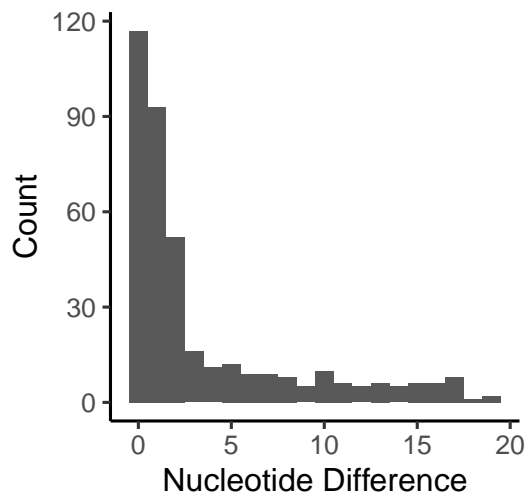
IGHV1-2*04

102 sequences assigned
39 (38.2%) exact matches, in which:
34 unique CDR3
5 unique J



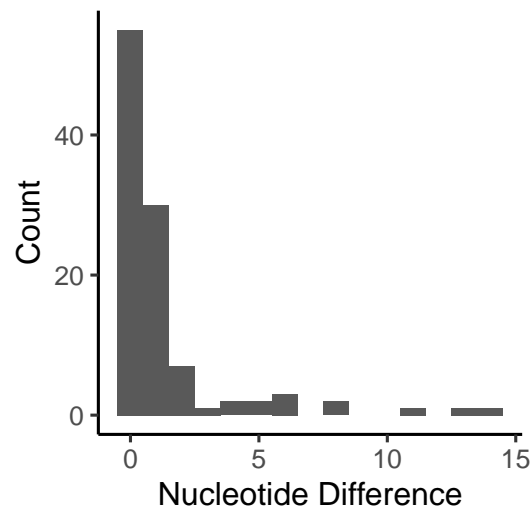
IGHV1-8*01

391 sequences assigned
117 (29.9%) exact matches, in which:
96 unique CDR3
4 unique J



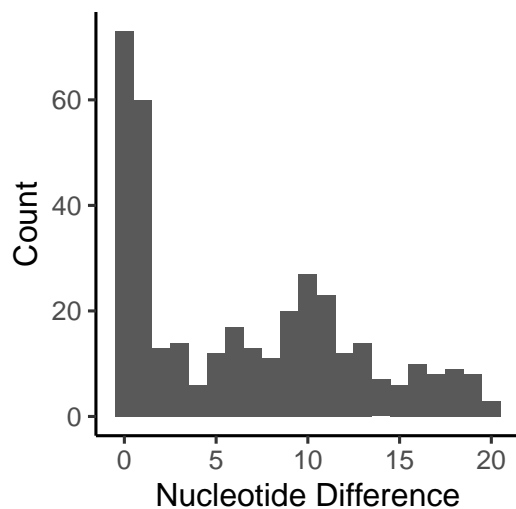
IGHV1-24*01

105 sequences assigned
55 (52.4%) exact matches, in which:
51 unique CDR3
5 unique J



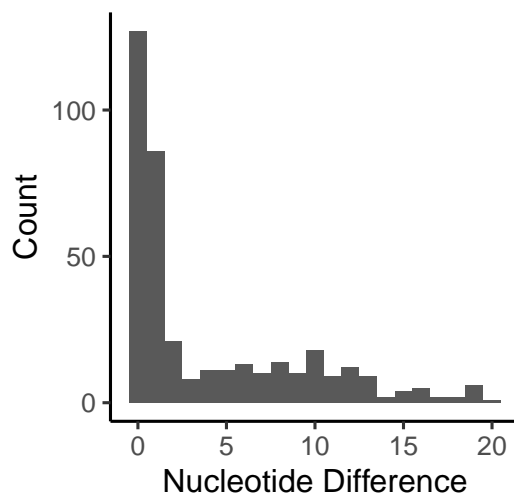
IGHV1-2*06

399 sequences assigned
73 (18.3%) exact matches, in which:
67 unique CDR3
4 unique J



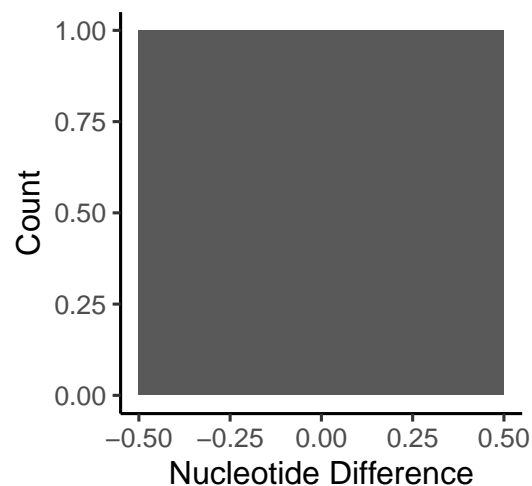
IGHV1-18*01

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



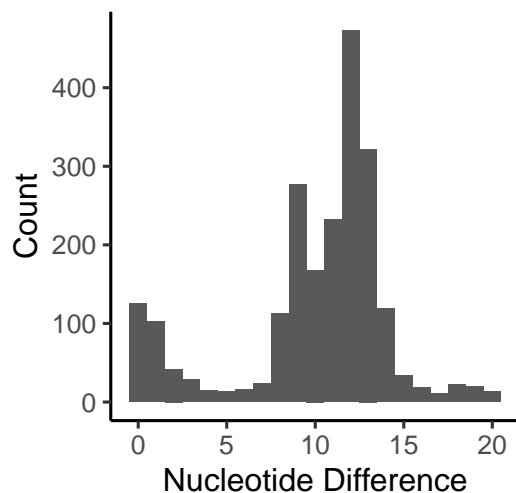
IGHV1-45*02

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



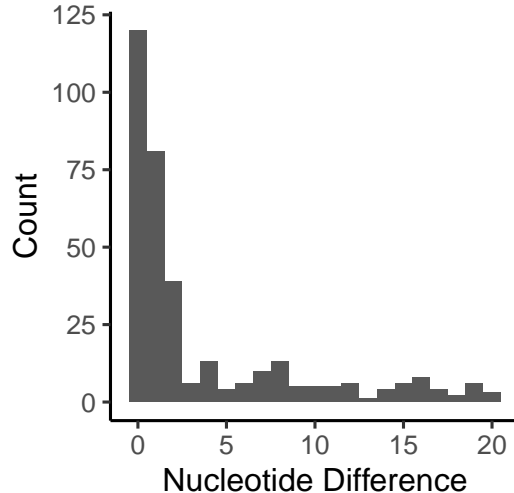
IGHV1-3*01

2251 sequences assigned
125 (5.6%) exact matches, in which:
118 unique CDR3
4 unique J



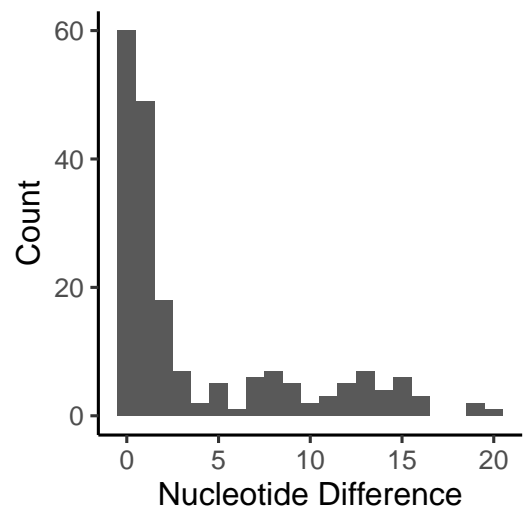
IGHV1-18*04

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



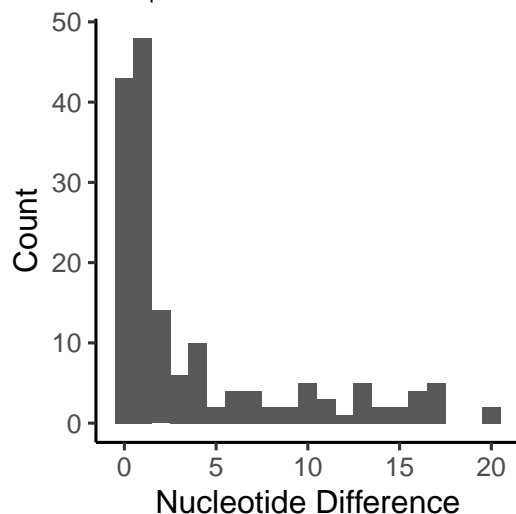
IGHV1-46*01

220 sequences assigned
60 (27.3%) exact matches, in which:
52 unique CDR3
4 unique J



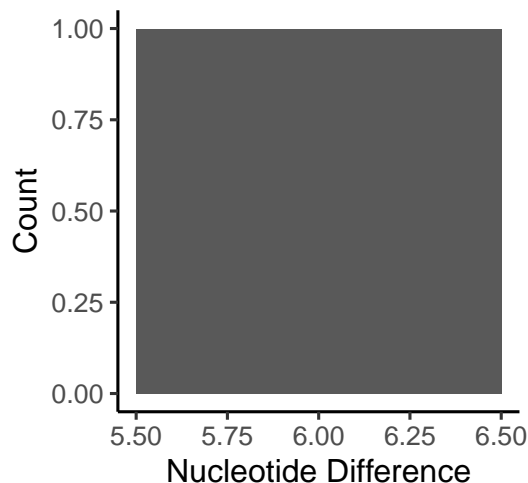
IGHV1-46*03

171 sequences assigned
43 (25.1%) exact matches, in which:
28 unique CDR3
5 unique J



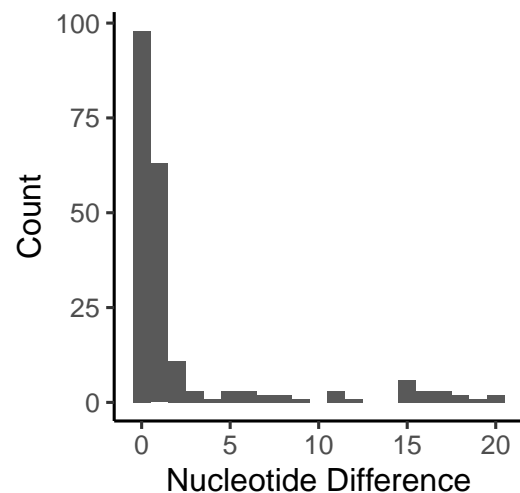
IGHV1-68*02

1 sequences assigned
No exact matches.



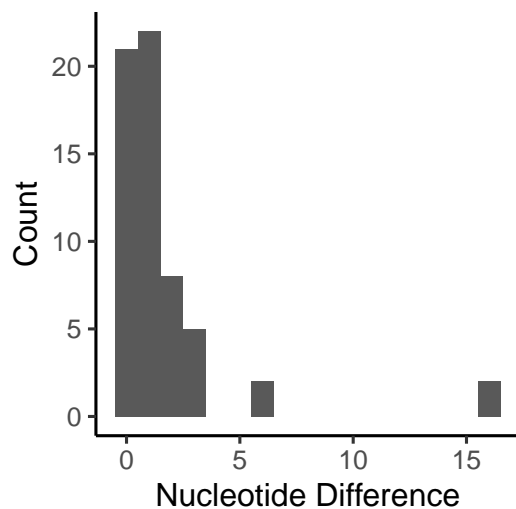
IGHV1-69*06

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



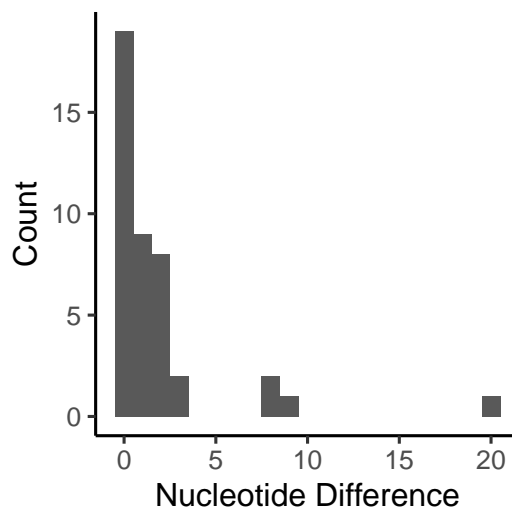
IGHV1-58*01

62 sequences assigned
21 (33.9%) exact matches, in which:
14 unique CDR3
3 unique J



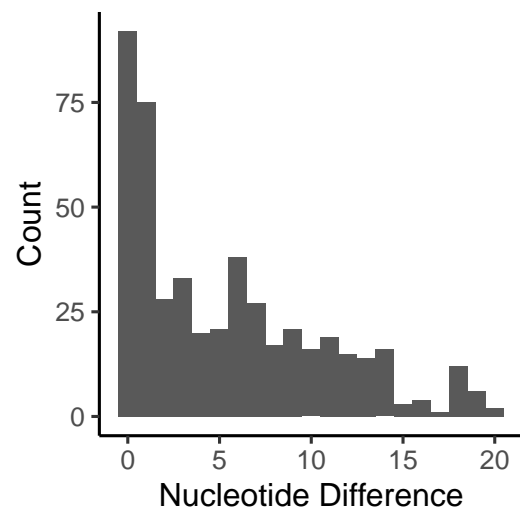
IGHV1-69-2*01

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



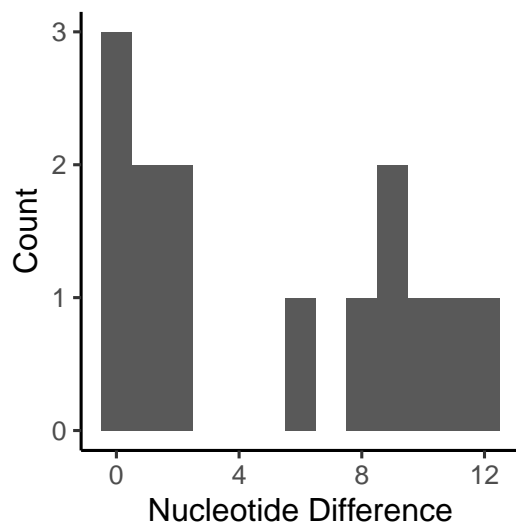
IGHV2-5*02

512 sequences assigned
92 (18%) exact matches, in which:
85 unique CDR3
6 unique J



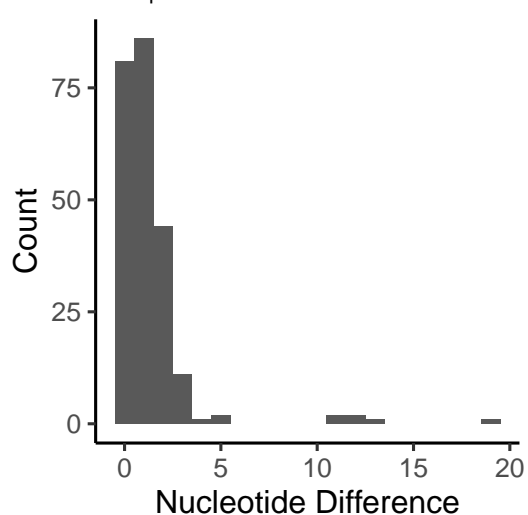
IGHV1-58*02

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



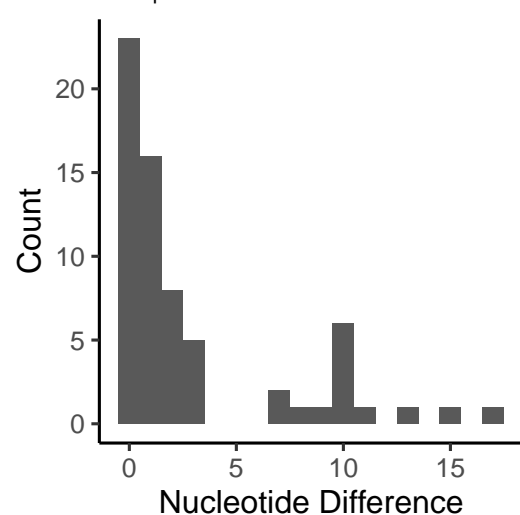
IGHV1-69*02

234 sequences assigned
81 (34.6%) exact matches, in which:
69 unique CDR3
6 unique J



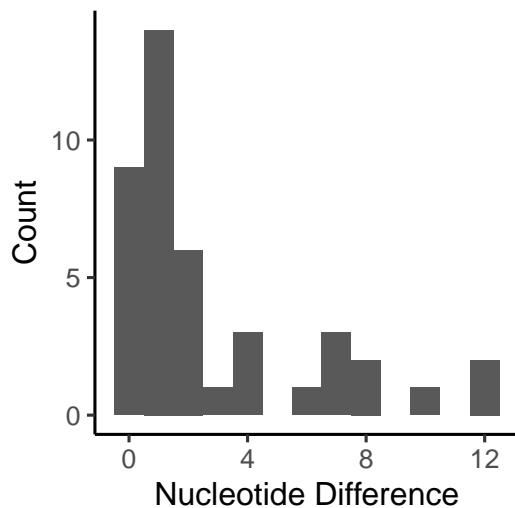
IGHV2-26*01

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



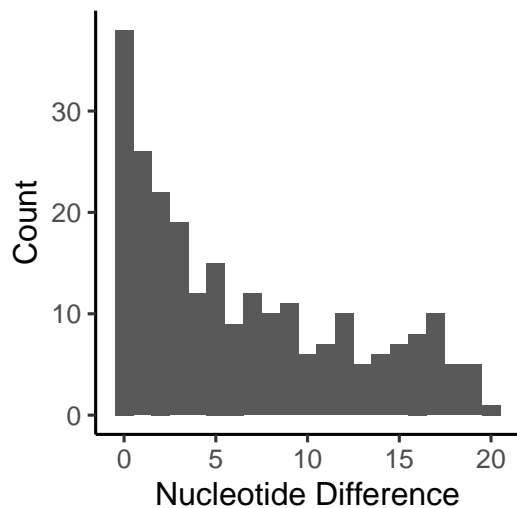
IGHV2-70*01

42 sequences assigned
9 (21.4%) exact matches, in which:
8 unique CDR3
4 unique J



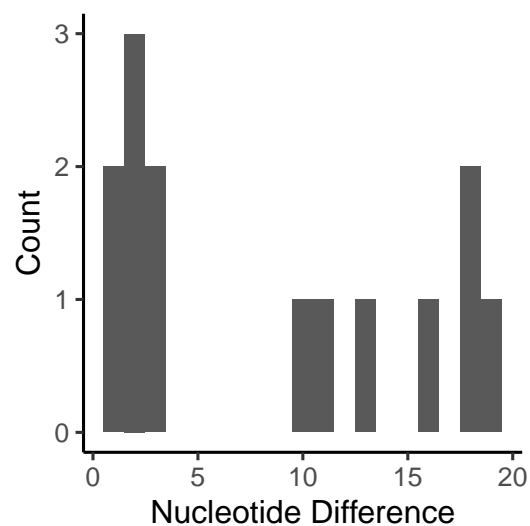
IGHV3-9*01

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



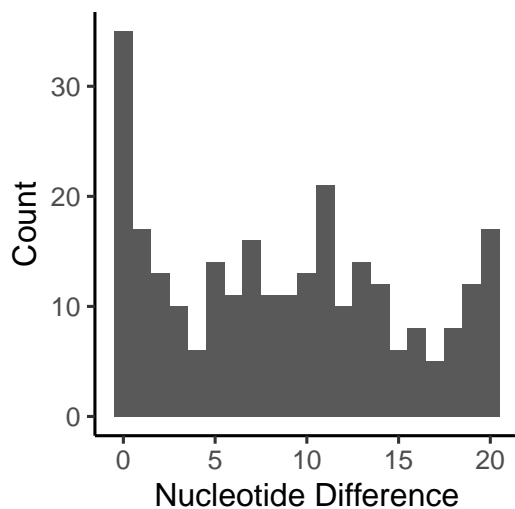
IGHV3-13*01

21 sequences assigned
No exact matches.



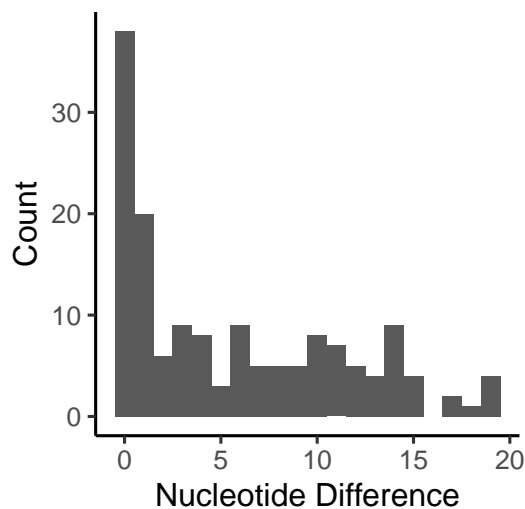
IGHV3-7*01

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



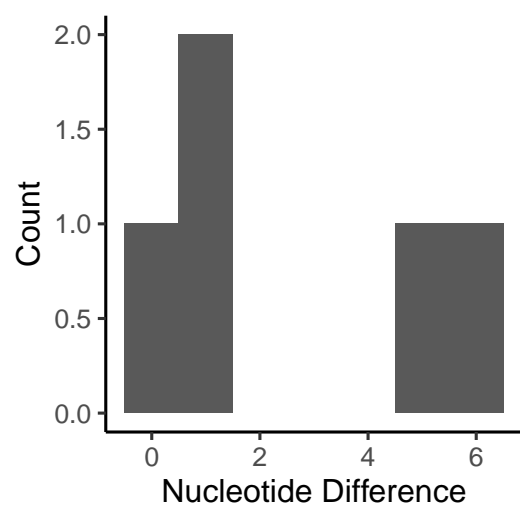
IGHV3-11*01

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



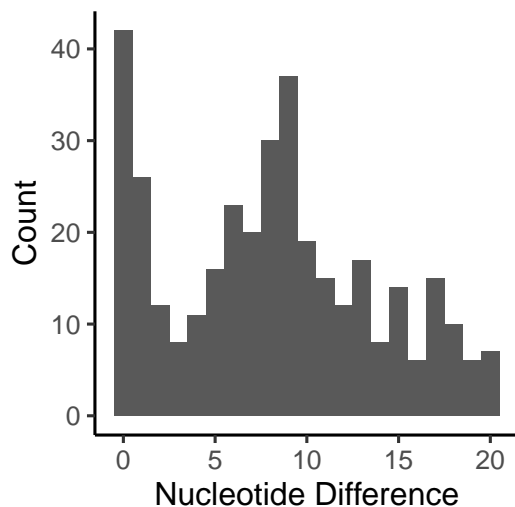
IGHV3-13*05

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



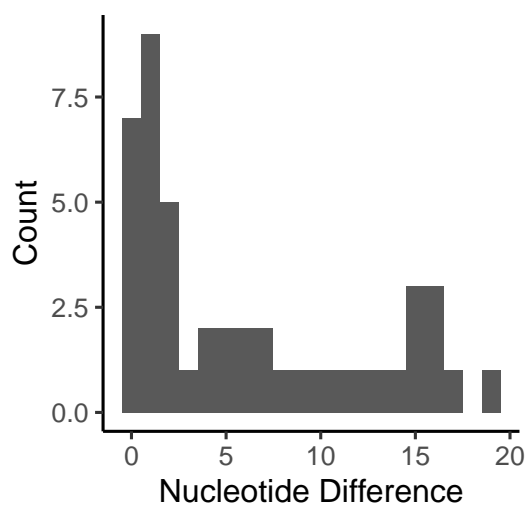
IGHV3-7*03

375 sequences assigned
42 (11.2%) exact matches, in which:
41 unique CDR3
5 unique J



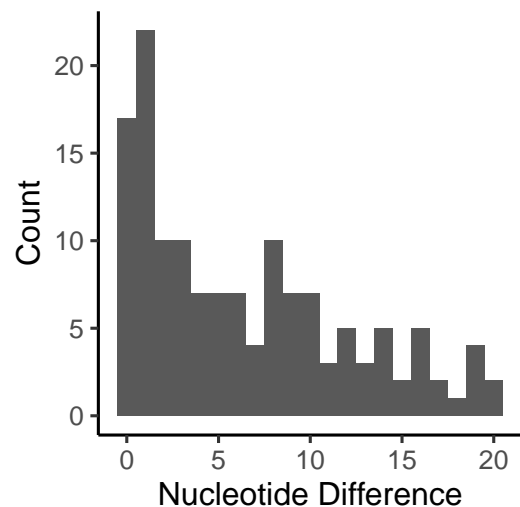
IGHV3-11*06

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



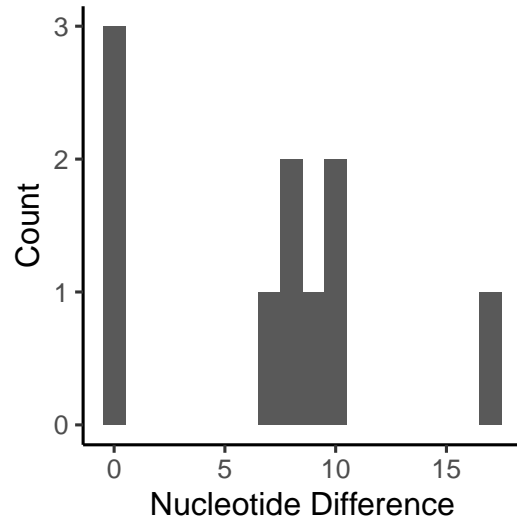
IGHV3-15*01

150 sequences assigned
17 (11.3%) exact matches, in which:
16 unique CDR3
5 unique J



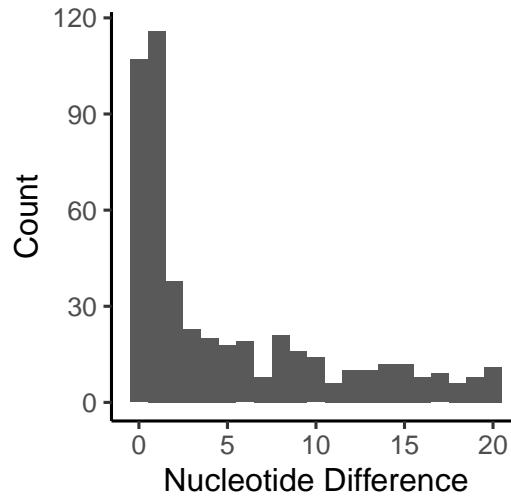
IGHV3-20*01

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



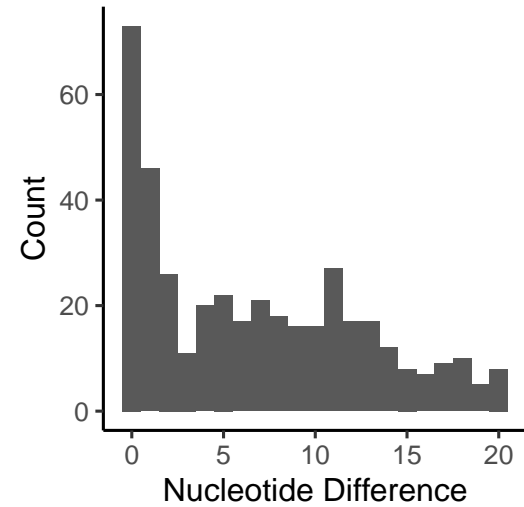
IGHV3-33*01

513 sequences assigned
107 (20.9%) exact matches, in which:
92 unique CDR3
5 unique J



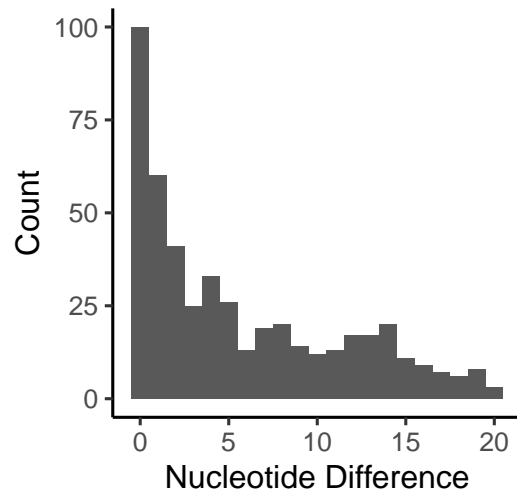
IGHV3-48*03

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



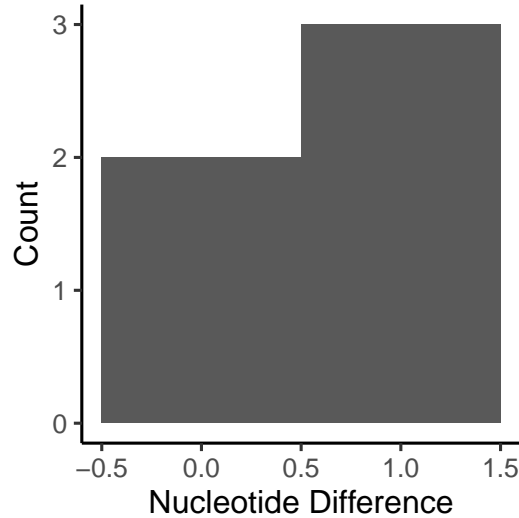
IGHV3-21*01

501 sequences assigned
100 (20%) exact matches, in which:
93 unique CDR3
6 unique J



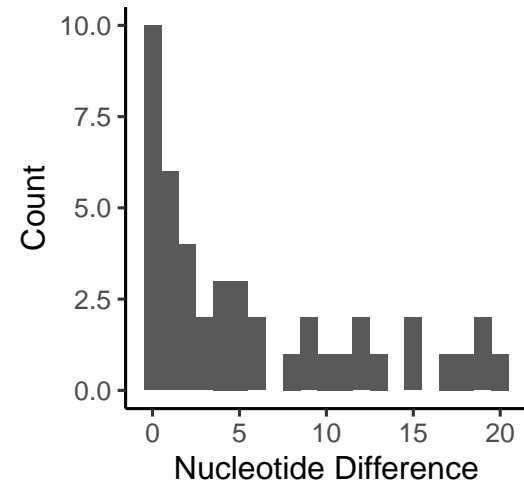
IGHV3-43*01

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



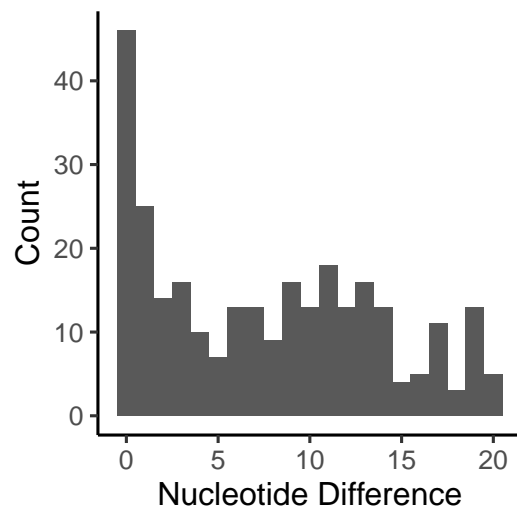
IGHV3-49*03

45 sequences assigned
10 (22.2%) exact matches, in which:
10 unique CDR3
4 unique J



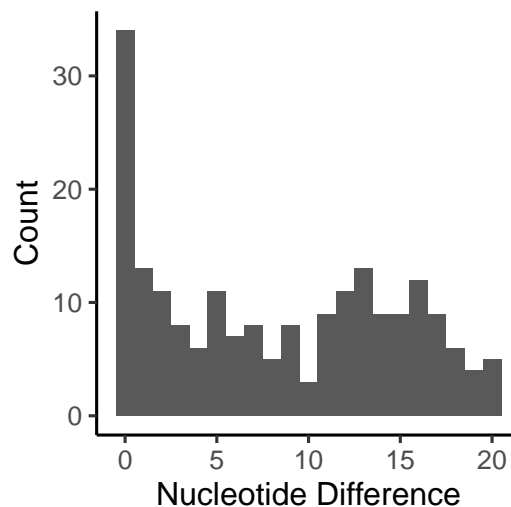
IGHV3-23*04

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



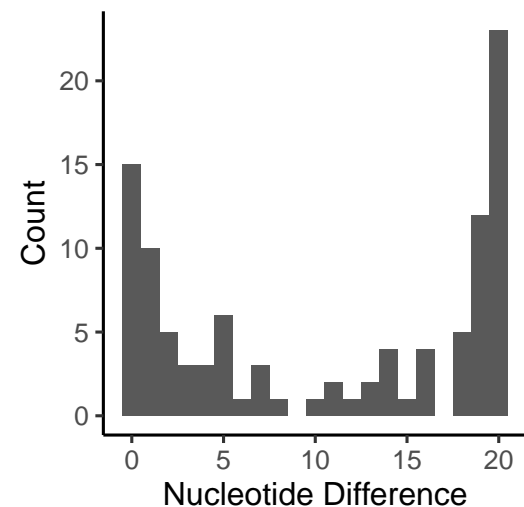
IGHV3-48*01

230 sequences assigned
34 (14.8%) exact matches, in which:
33 unique CDR3
4 unique J



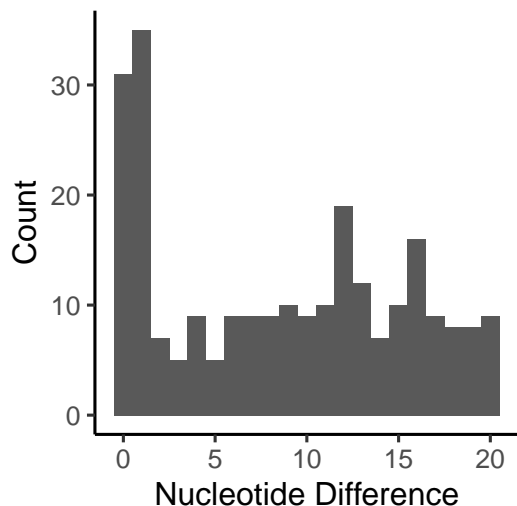
IGHV3-49*04

125 sequences assigned
15 (12%) exact matches, in which:
15 unique CDR3
2 unique J



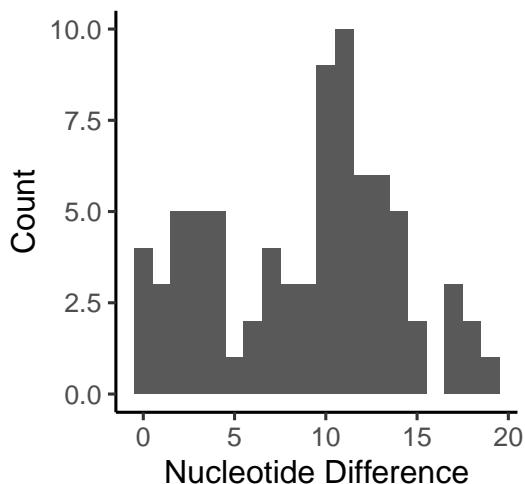
IGHV3-53*02

286 sequences assigned
31 (10.8%) exact matches, in which:
30 unique CDR3
4 unique J



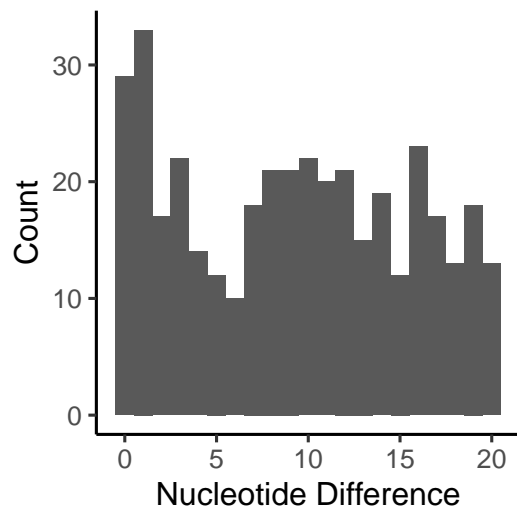
IGHV3-72*01

92 sequences assigned
4 (4.3%) exact matches, in which:
4 unique CDR3
3 unique J



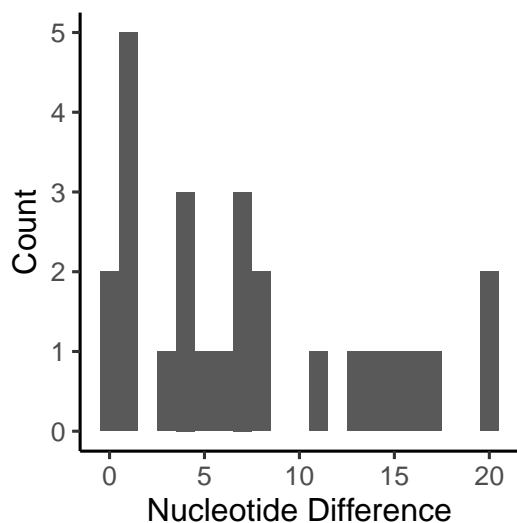
IGHV3-74*01

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



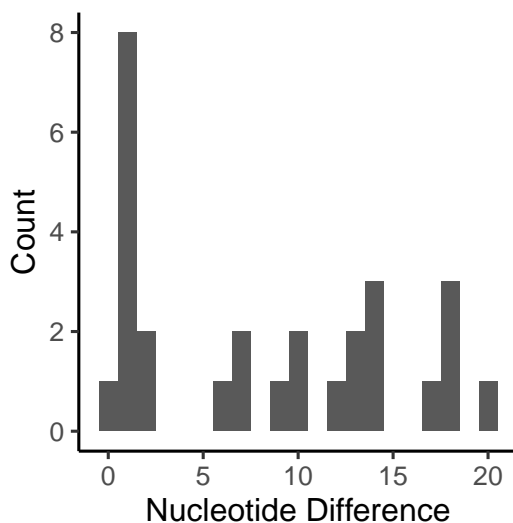
IGHV3-64*01

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



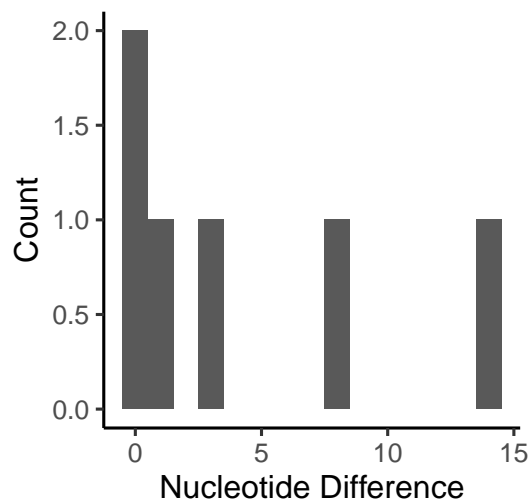
IGHV3-73*01

36 sequences assigned
1 (2.8%) exact matches, in which:
1 unique CDR3
1 unique J



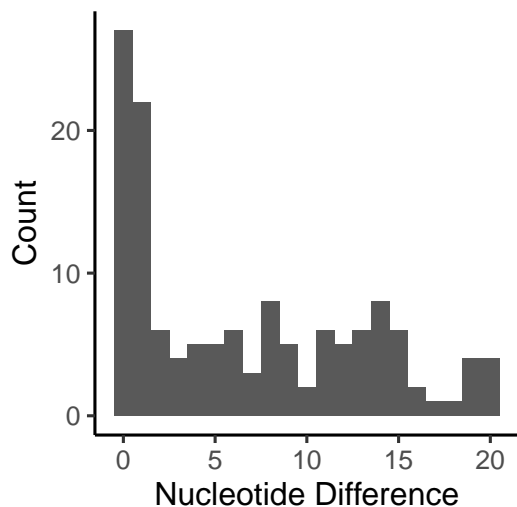
IGHV3-43D*04

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



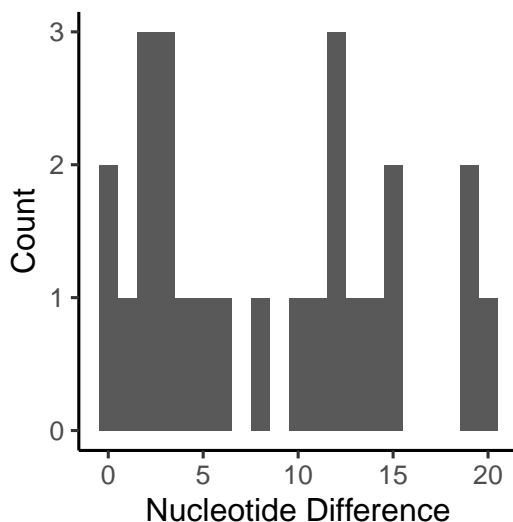
IGHV3-66*02

161 sequences assigned
27 (16.8%) exact matches, in which:
25 unique CDR3
4 unique J



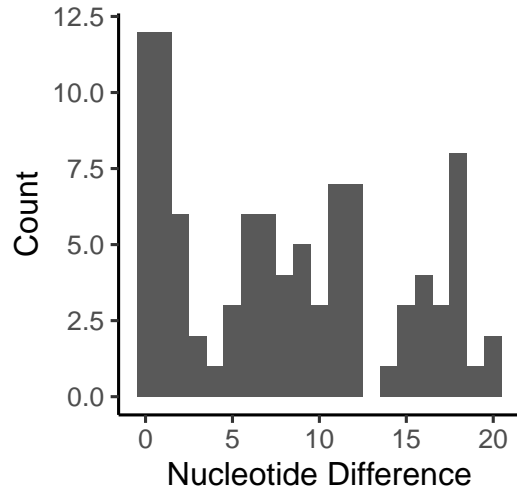
IGHV3-73*02

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



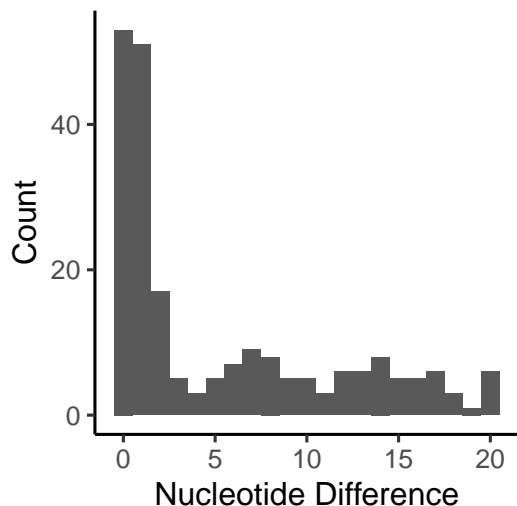
IGHV3-64D*06

115 sequences assigned
12 (10.4%) exact matches, in which:
12 unique CDR3
2 unique J



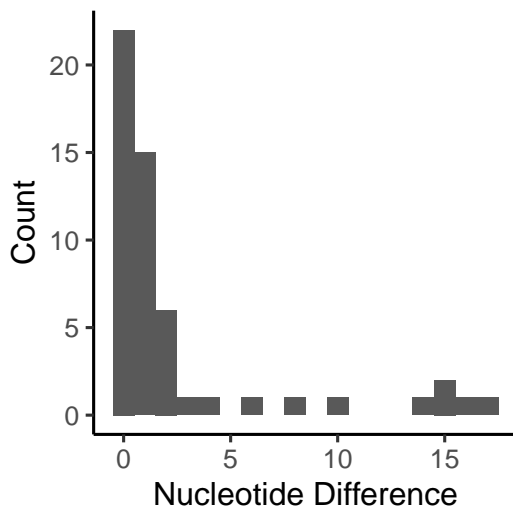
IGHV4-4*02

240 sequences assigned
53 (22.1%) exact matches, in which:
47 unique CDR3
4 unique J



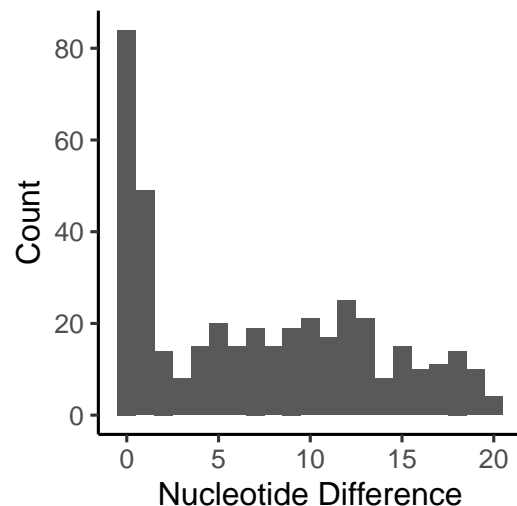
IGHV4-30-2*01

54 sequences assigned
22 (40.7%) exact matches, in which:
21 unique CDR3
4 unique J



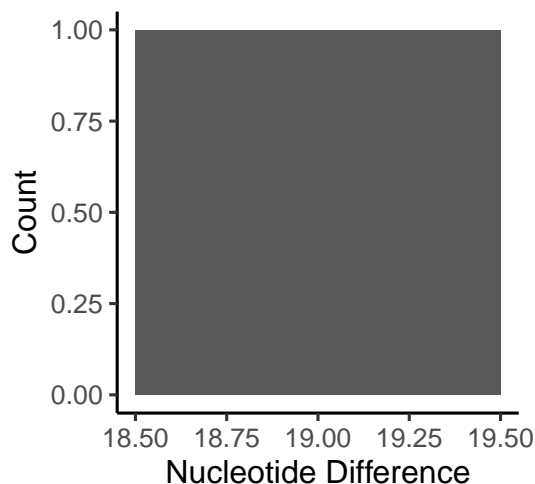
IGHV4-38-2*02_A70G

456 sequences assigned
84 (18.4%) exact matches, in which:
72 unique CDR3
5 unique J



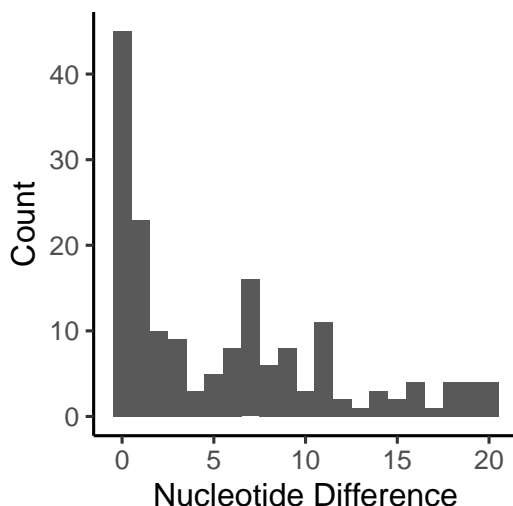
IGHV4-28*03

1 sequences assigned
No exact matches.



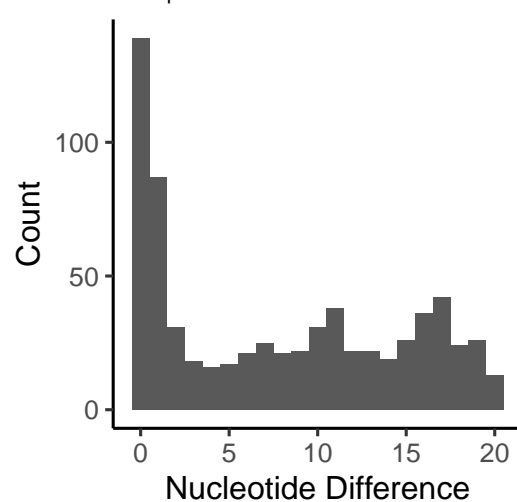
IGHV4-31*03

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



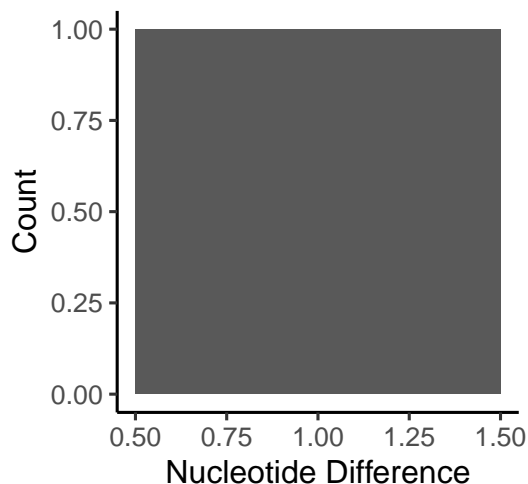
IGHV4-39*01

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



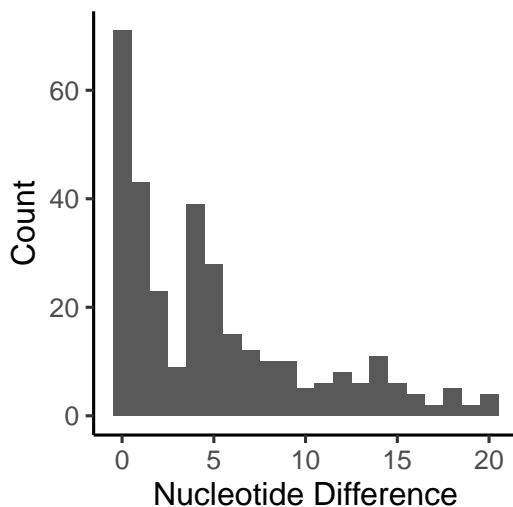
IGHV4-28*07

6 sequences assigned
No exact matches.



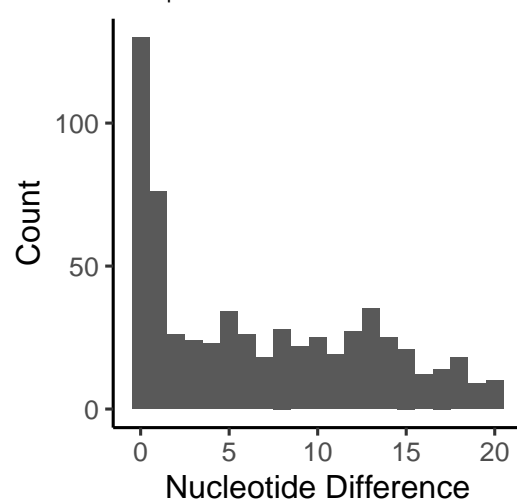
IGHV4-34*01

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



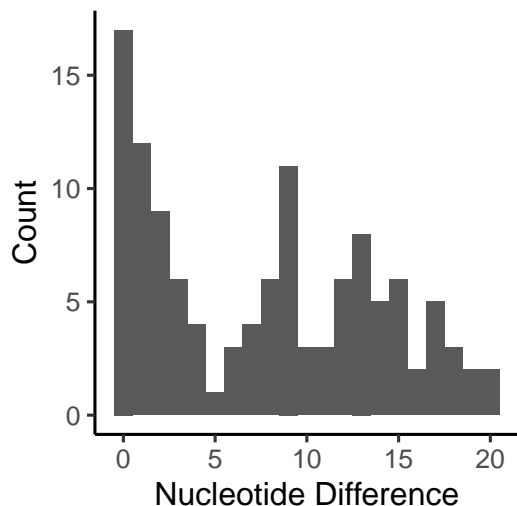
IGHV4-59*01

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



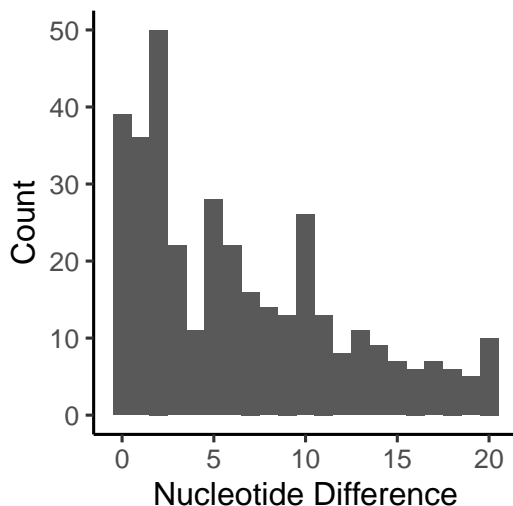
IGHV4-61*01

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



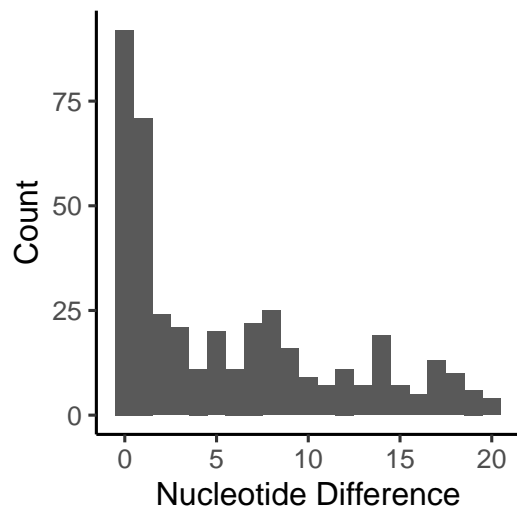
IGHV5-51*01

381 sequences assigned
39 (10.2%) exact matches, in which:
37 unique CDR3
5 unique J



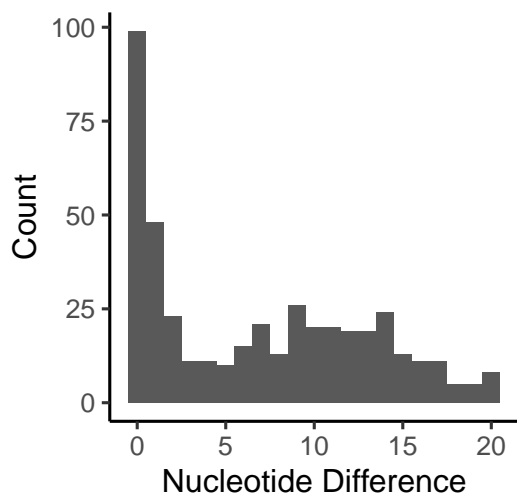
IGHV7-4-1*02

430 sequences assigned
92 (21.4%) exact matches, in which:
80 unique CDR3
5 unique J



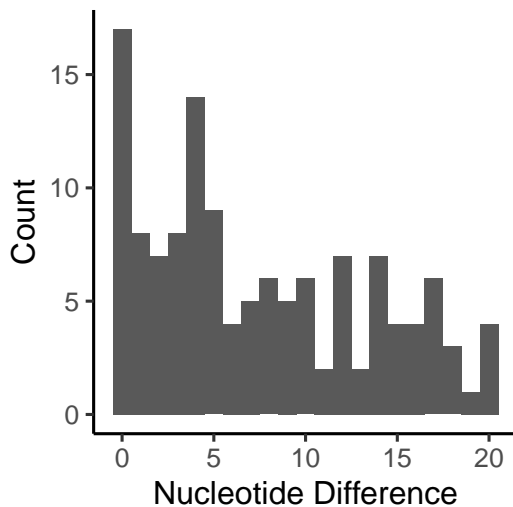
IGHV4-61*02

458 sequences assigned
99 (21.6%) exact matches, in which:
89 unique CDR3
6 unique J



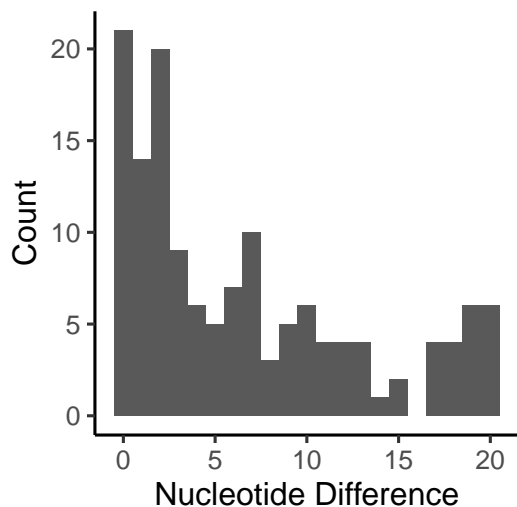
IGHV5-51*03

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



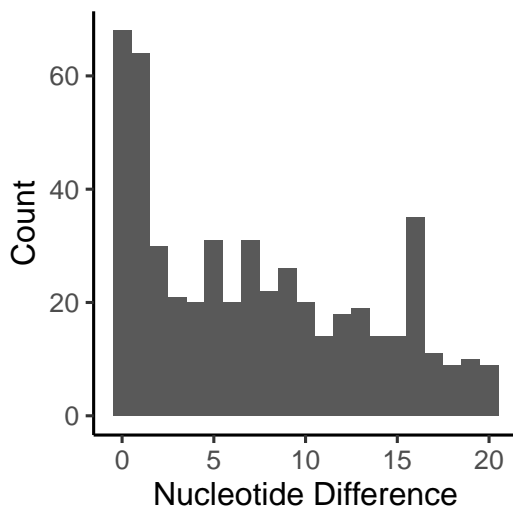
IGHV5-10-1*03

148 sequences assigned
21 (14.2%) exact matches, in which:
21 unique CDR3
3 unique J



IGHV6-1*01

527 sequences assigned
68 (12.9%) exact matches, in which:
57 unique CDR3
6 unique J





Warning – no inferred sequences found.