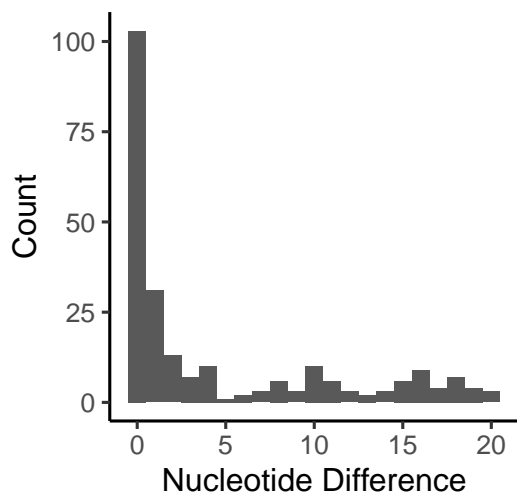


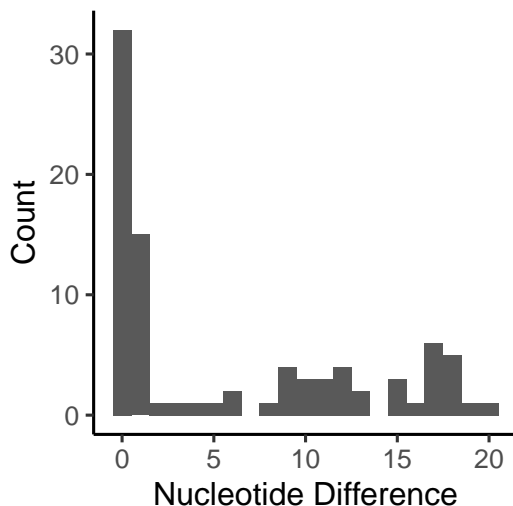
IGHV1-2*04

298 sequences assigned
103 (34.6%) exact matches, in which:
102 unique CDR3
5 unique J



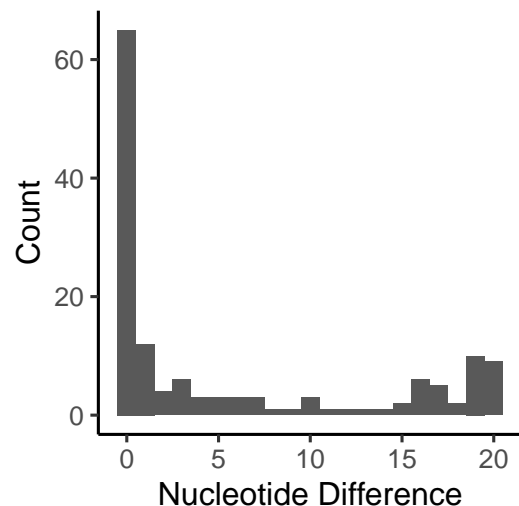
IGHV1-24*01

112 sequences assigned
32 (28.6%) exact matches, in which:
32 unique CDR3
5 unique J



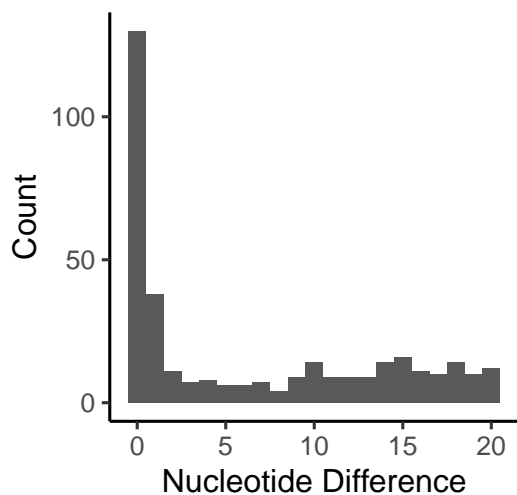
IGHV1-46*03

194 sequences assigned
65 (33.5%) exact matches, in which:
64 unique CDR3
5 unique J



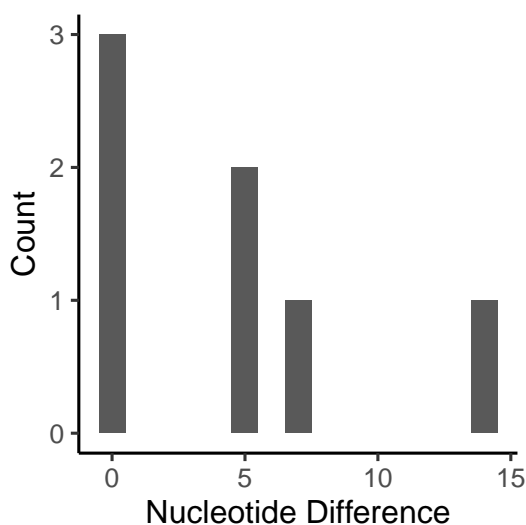
IGHV1-3*01

549 sequences assigned
130 (23.7%) exact matches, in which:
129 unique CDR3
6 unique J



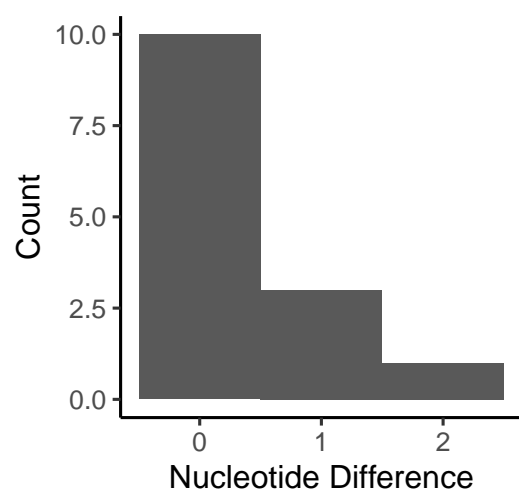
IGHV1-45*02

8 sequences assigned
3 (37.5%) exact matches, in which:
3 unique CDR3
1 unique J



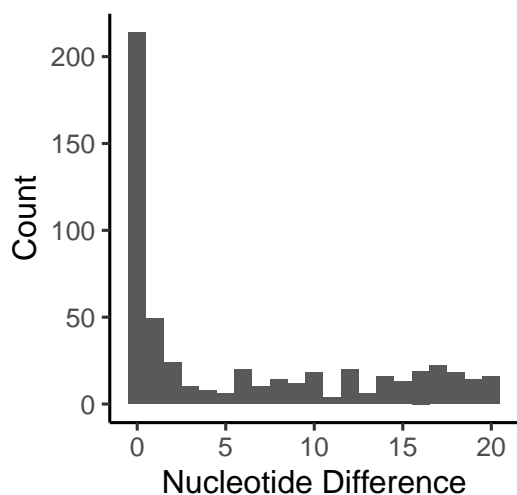
IGHV1-58*01

25 sequences assigned
10 (40%) exact matches, in which:
10 unique CDR3
3 unique J



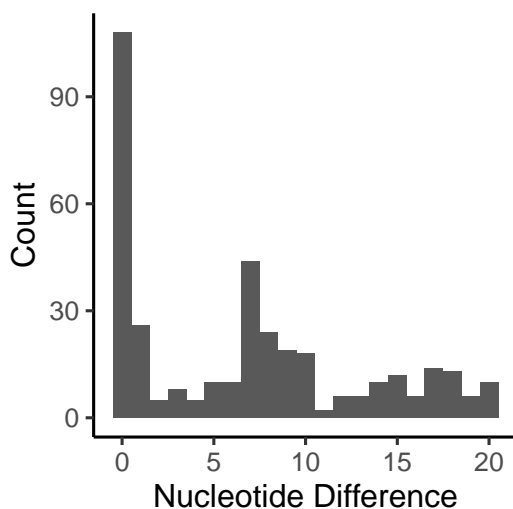
IGHV1-18*04

742 sequences assigned
214 (28.8%) exact matches, in which:
213 unique CDR3
5 unique J



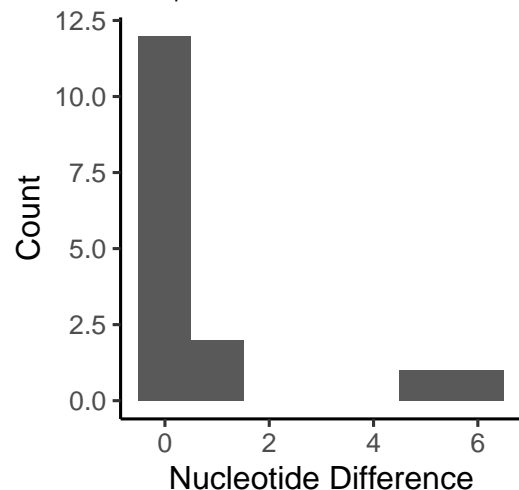
IGHV1-46*01

470 sequences assigned
108 (23%) exact matches, in which:
108 unique CDR3
5 unique J



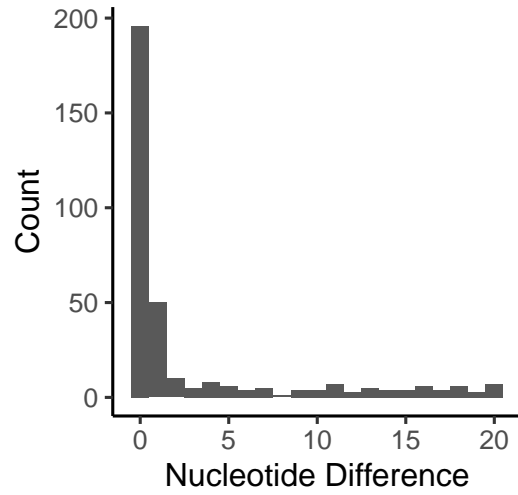
IGHV1-58*02

18 sequences assigned
12 (66.7%) exact matches, in which:
12 unique CDR3
5 unique J



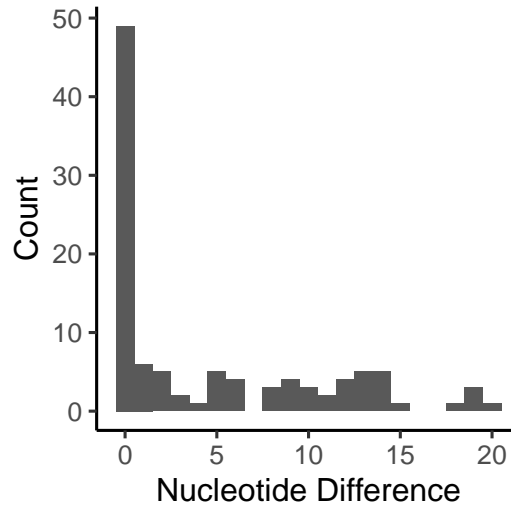
IGHV1–69*04

409 sequences assigned
196 (47.9%) exact matches, in which:
196 unique CDR3
6 unique J



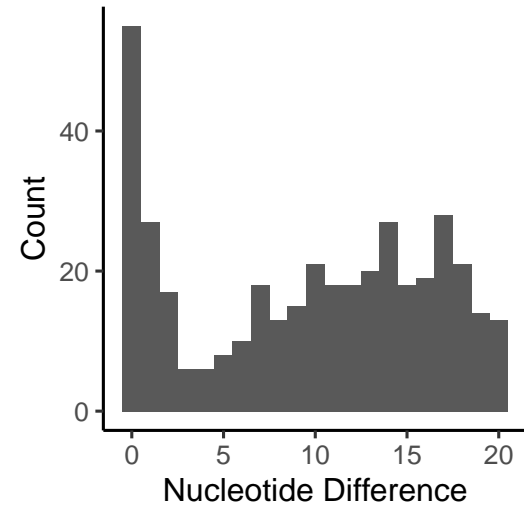
IGHV2–26*01

109 sequences assigned
49 (45%) exact matches, in which:
49 unique CDR3
5 unique J



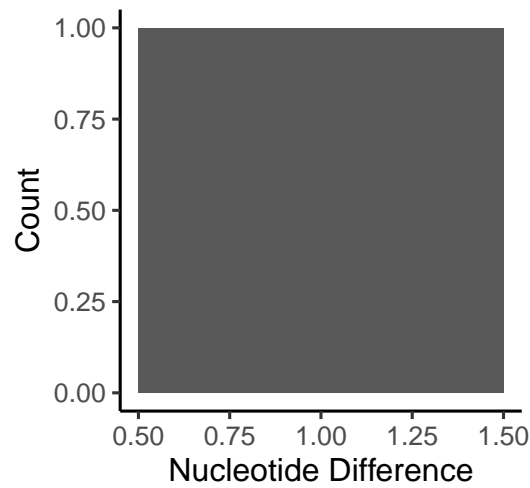
IGHV3–7*03

477 sequences assigned
55 (11.5%) exact matches, in which:
55 unique CDR3
4 unique J



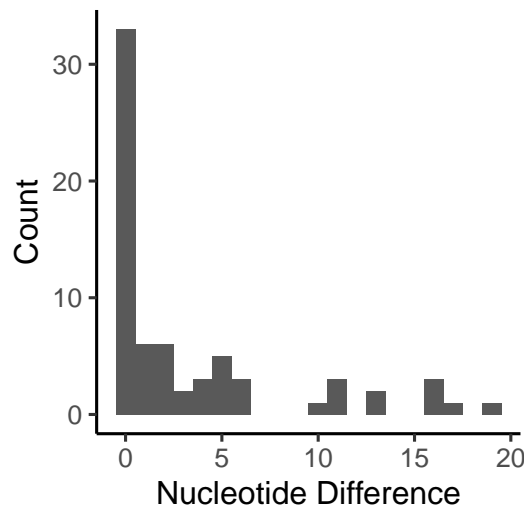
IGHV1–NL1*01

1 sequences assigned
No exact matches.



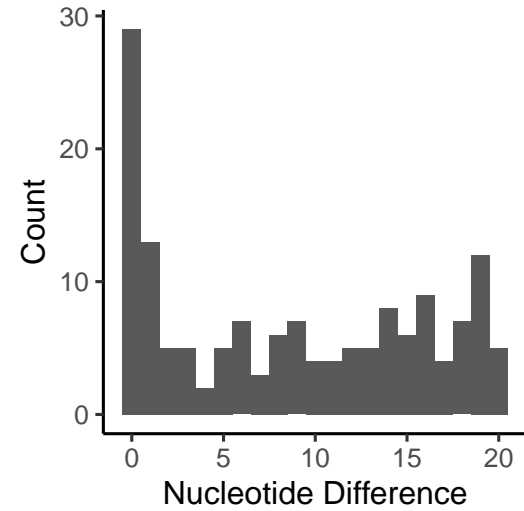
IGHV2–70*01

85 sequences assigned
33 (38.8%) exact matches, in which:
33 unique CDR3
4 unique J



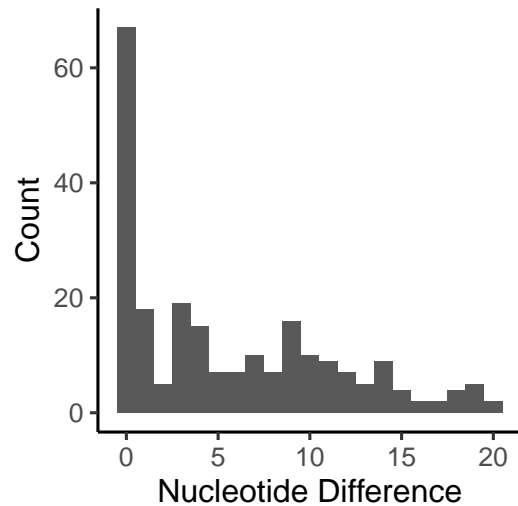
IGHV3–7*05

186 sequences assigned
29 (15.6%) exact matches, in which:
29 unique CDR3
4 unique J



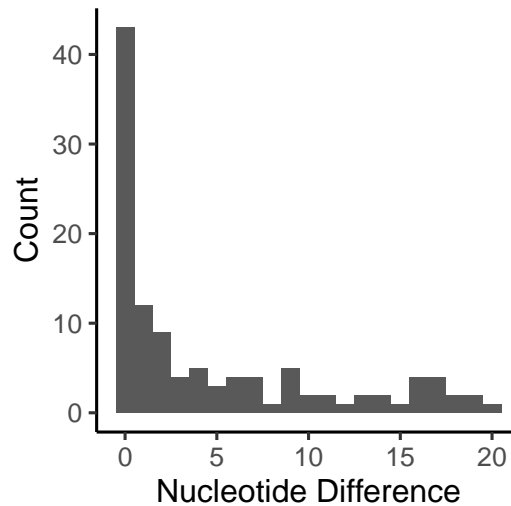
IGHV2–5*01

262 sequences assigned
67 (25.6%) exact matches, in which:
67 unique CDR3
5 unique J



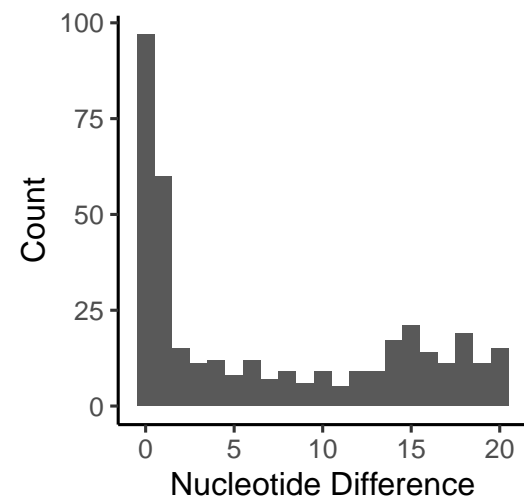
IGHV2–70*15

119 sequences assigned
43 (36.1%) exact matches, in which:
43 unique CDR3
4 unique J



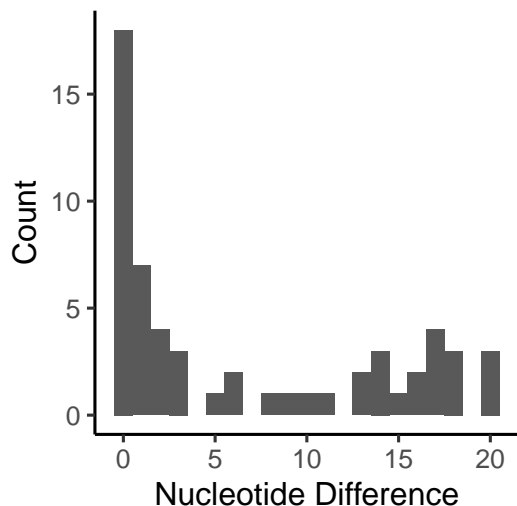
IGHV3–11*06

483 sequences assigned
97 (20.1%) exact matches, in which:
96 unique CDR3
5 unique J



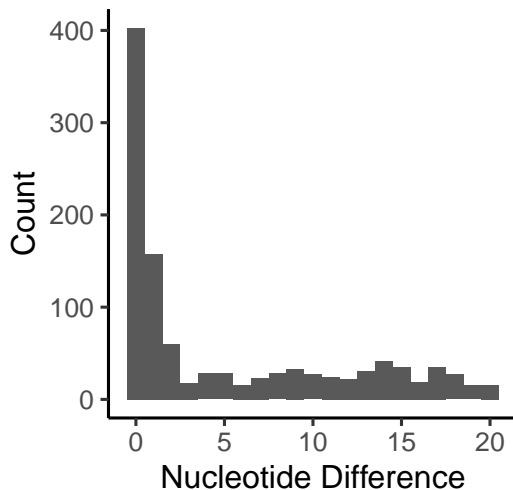
IGHV3-13*05

64 sequences assigned
18 (28.1%) exact matches, in which:
18 unique CDR3
5 unique J



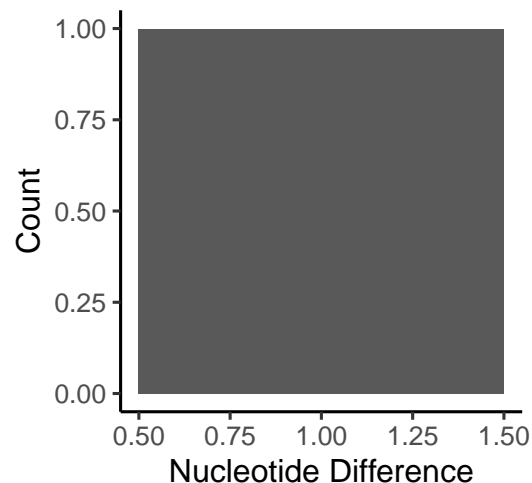
IGHV3-21*01

1354 sequences assigned
403 (29.8%) exact matches, in which:
400 unique CDR3
6 unique J



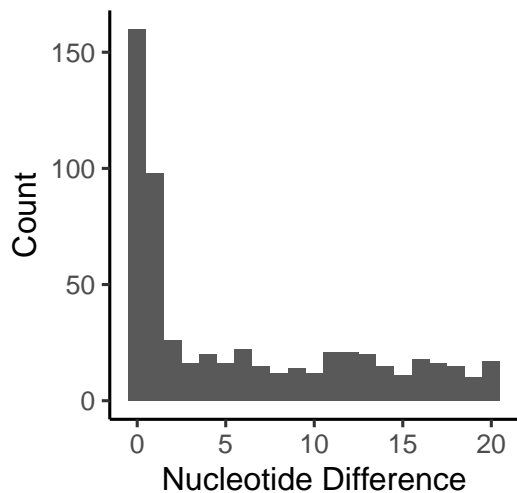
IGHV3-35*01

1 sequences assigned
No exact matches.



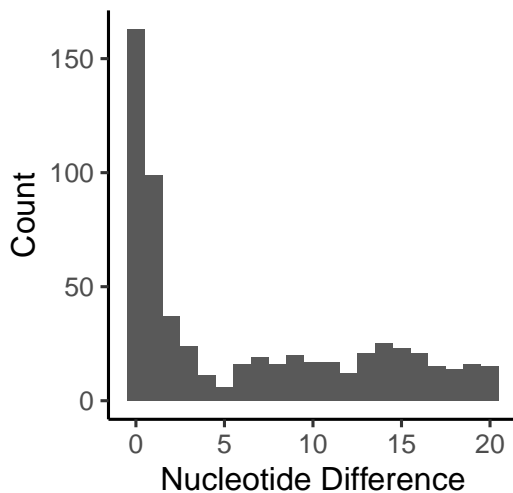
IGHV3-15*01

799 sequences assigned
160 (20%) exact matches, in which:
159 unique CDR3
5 unique J



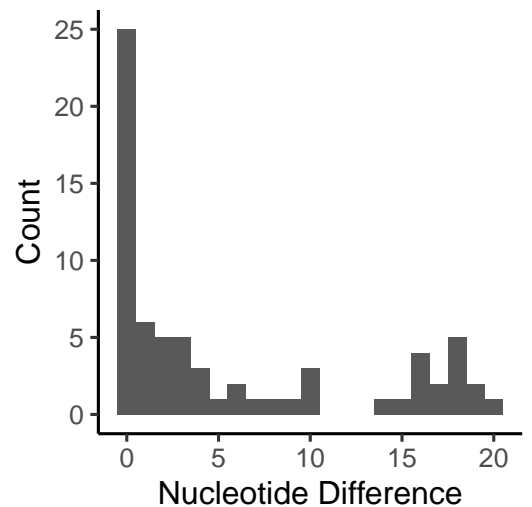
IGHV3-30-3*01

817 sequences assigned
163 (20%) exact matches, in which:
163 unique CDR3
6 unique J



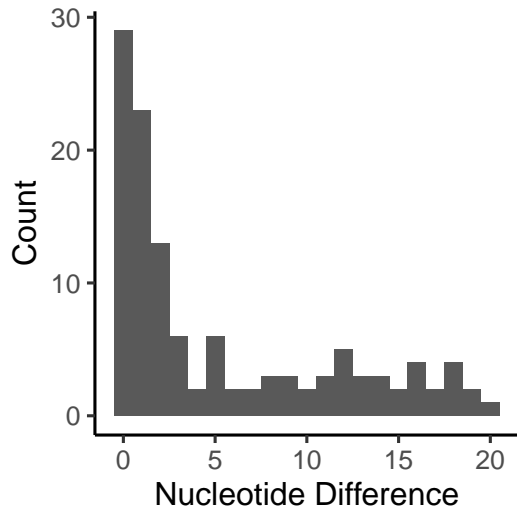
IGHV3-43*01

103 sequences assigned
25 (24.3%) exact matches, in which:
25 unique CDR3
4 unique J



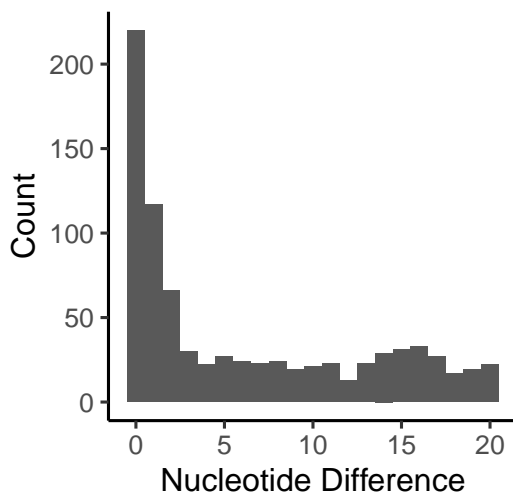
IGHV3-20*04

146 sequences assigned
29 (19.9%) exact matches, in which:
28 unique CDR3
4 unique J



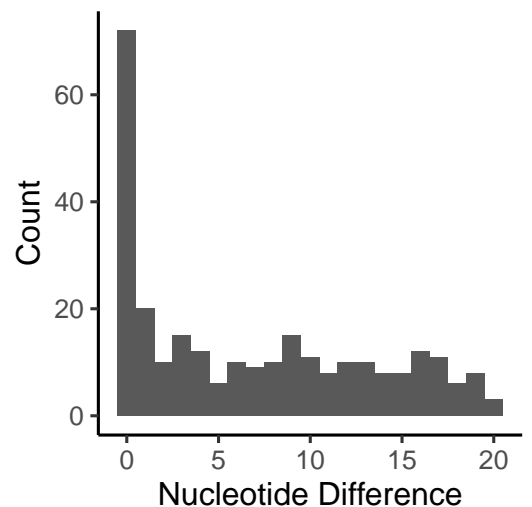
IGHV3-33*01

1139 sequences assigned
220 (19.3%) exact matches, in which:
219 unique CDR3
6 unique J



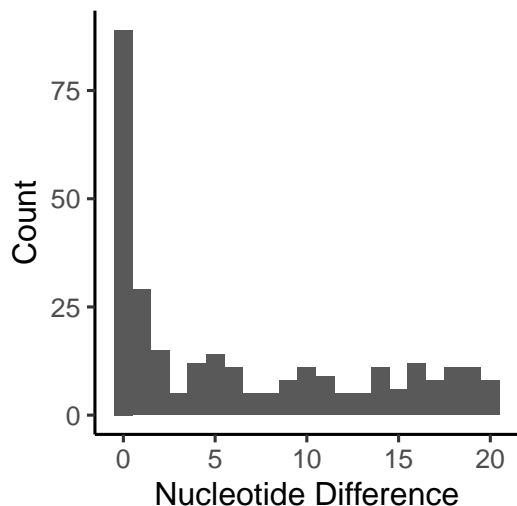
IGHV3-48*01

334 sequences assigned
72 (21.6%) exact matches, in which:
72 unique CDR3
6 unique J



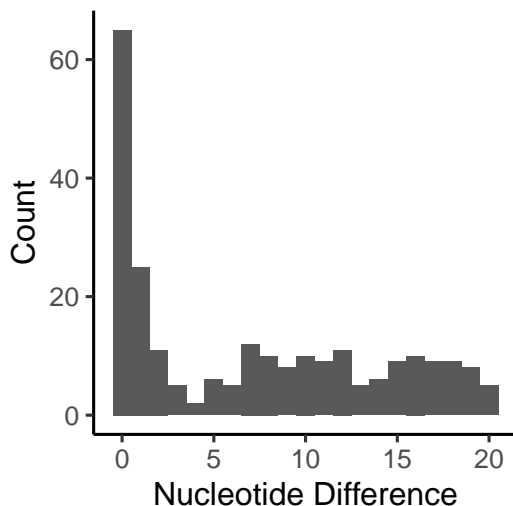
IGHV3-48*02

390 sequences assigned
89 (22.8%) exact matches, in which:
86 unique CDR3
5 unique J



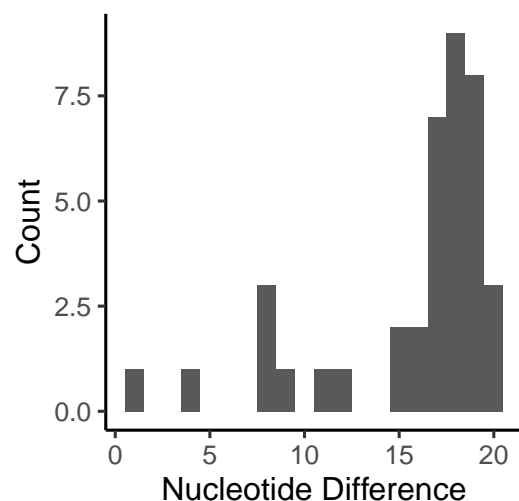
IGHV3-53*01

297 sequences assigned
65 (21.9%) exact matches, in which:
64 unique CDR3
5 unique J



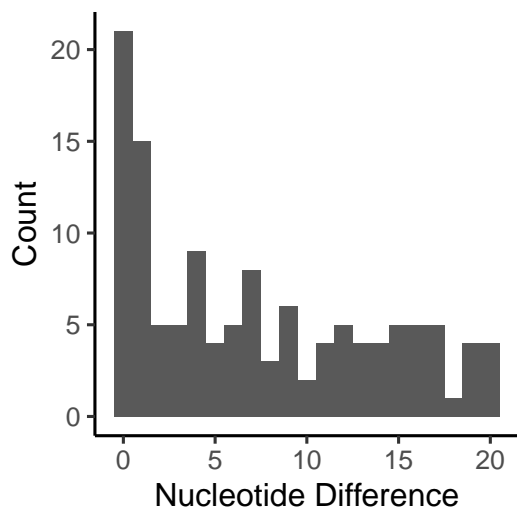
IGHV3-64*07

43 sequences assigned
No exact matches.



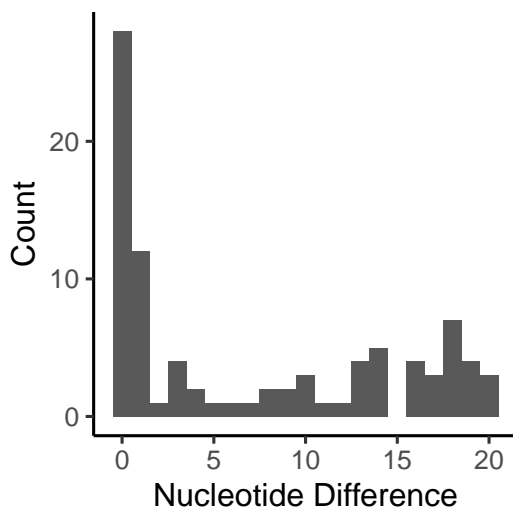
IGHV3-49*03

158 sequences assigned
21 (13.3%) exact matches, in which:
21 unique CDR3
5 unique J



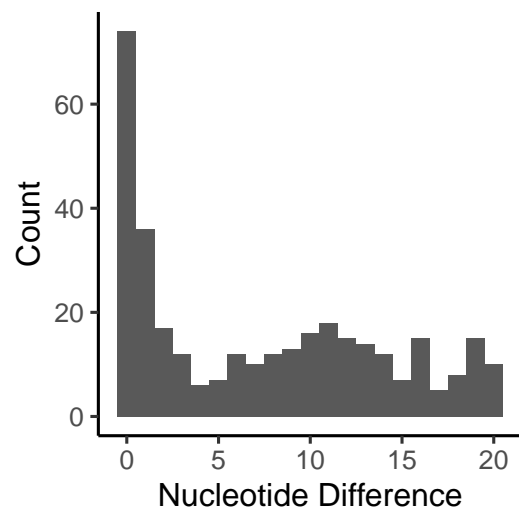
IGHV3-53*02

103 sequences assigned
28 (27.2%) exact matches, in which:
28 unique CDR3
3 unique J



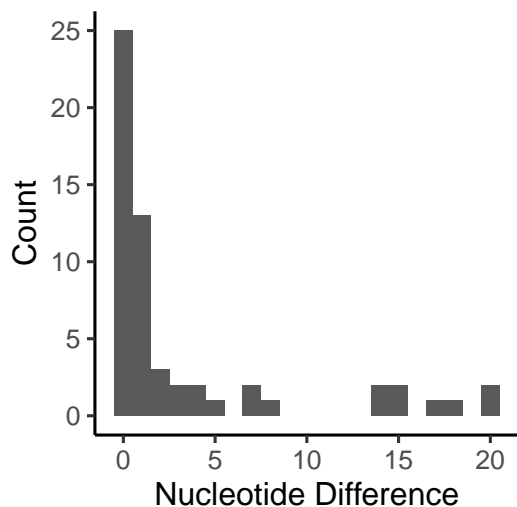
IGHV3-66*01

430 sequences assigned
74 (17.2%) exact matches, in which:
73 unique CDR3
5 unique J



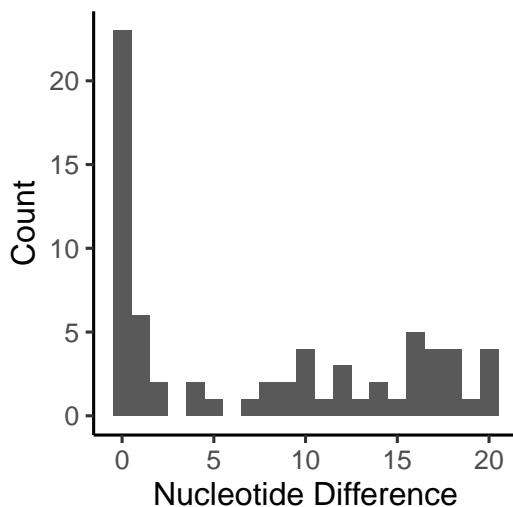
IGHV3-49*05

68 sequences assigned
25 (36.8%) exact matches, in which:
25 unique CDR3
5 unique J



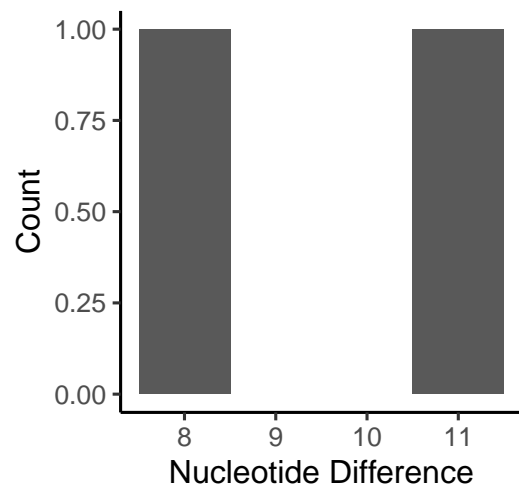
IGHV3-64*01

93 sequences assigned
23 (24.7%) exact matches, in which:
23 unique CDR3
5 unique J



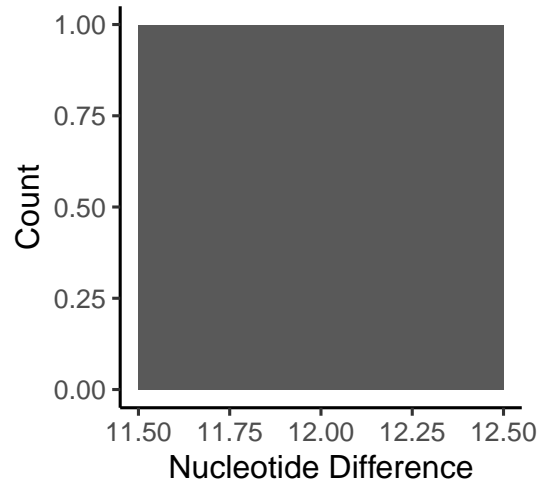
IGHV3-69-1*02

2 sequences assigned
No exact matches.



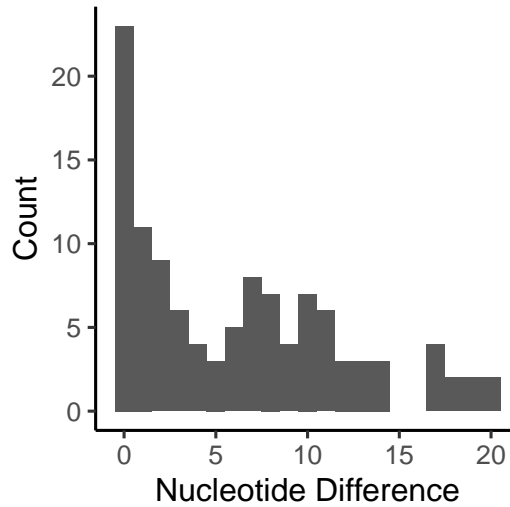
IGHV3-71*03

1 sequences assigned
No exact matches.



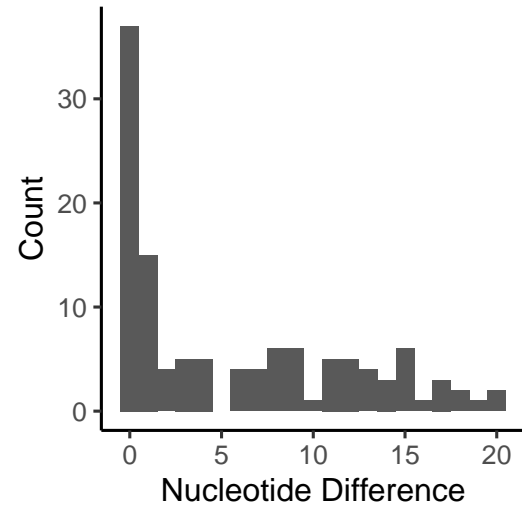
IGHV3-73*02

120 sequences assigned
23 (19.2%) exact matches, in which:
23 unique CDR3
4 unique J



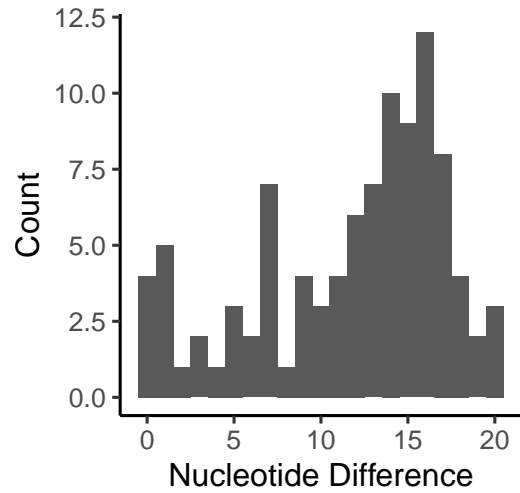
IGHV3-64D*09

146 sequences assigned
37 (25.3%) exact matches, in which:
37 unique CDR3
5 unique J



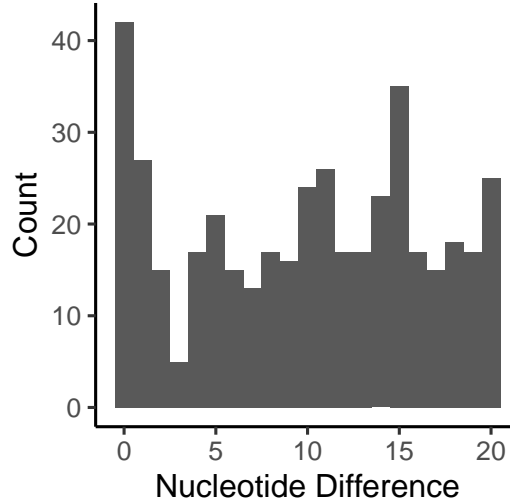
IGHV3-72*01

136 sequences assigned
4 (2.9%) exact matches, in which:
4 unique CDR3
3 unique J



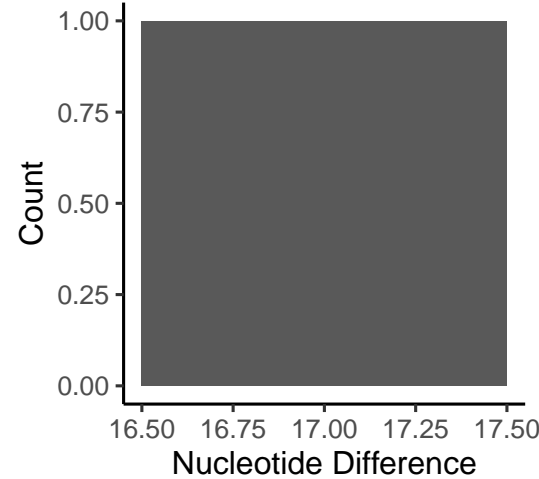
IGHV3-74*01

570 sequences assigned
42 (7.4%) exact matches, in which:
41 unique CDR3
6 unique J



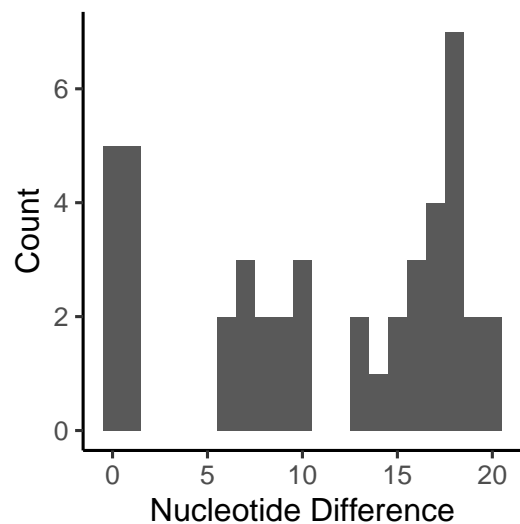
IGHV3-NL1*01

1 sequences assigned
No exact matches.



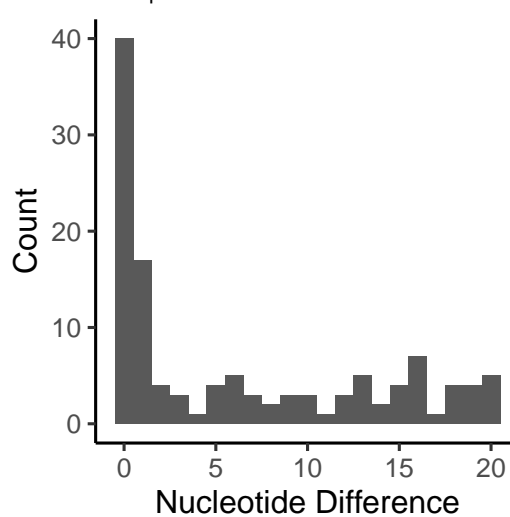
IGHV3-73*01

66 sequences assigned
5 (7.6%) exact matches, in which:
5 unique CDR3
2 unique J



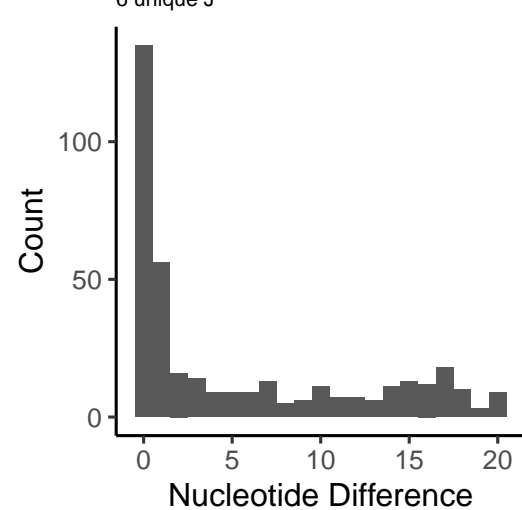
IGHV3-64D*08

154 sequences assigned
40 (26%) exact matches, in which:
39 unique CDR3
5 unique J



IGHV4-4*02

475 sequences assigned
135 (28.4%) exact matches, in which:
133 unique CDR3
6 unique J



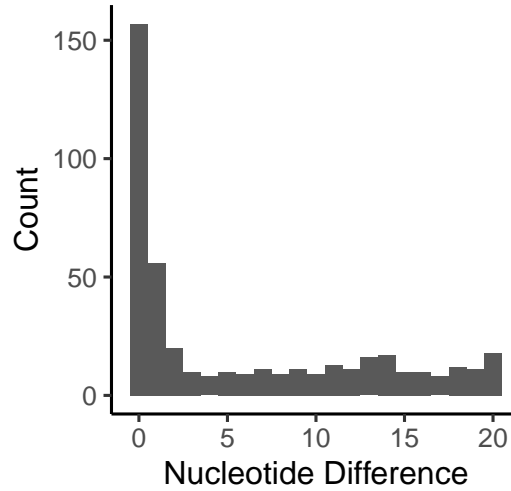
IGHV4-28*01

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



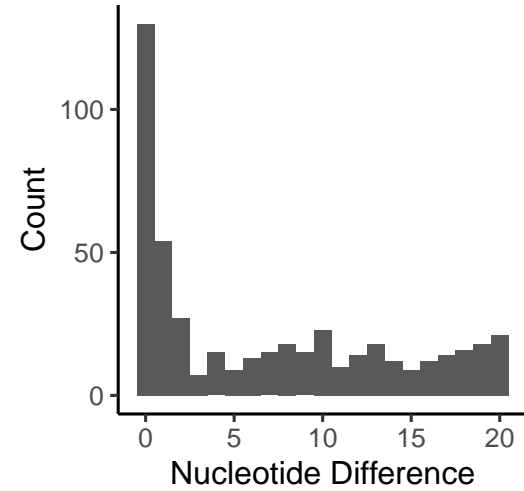
IGHV4-31*03

565 sequences assigned
157 (27.8%) exact matches, in which:
157 unique CDR3
6 unique J



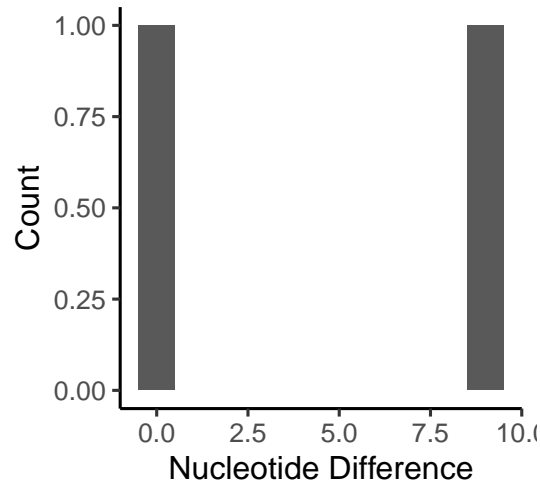
IGHV4-59*01

598 sequences assigned
130 (21.7%) exact matches, in which:
129 unique CDR3
5 unique J



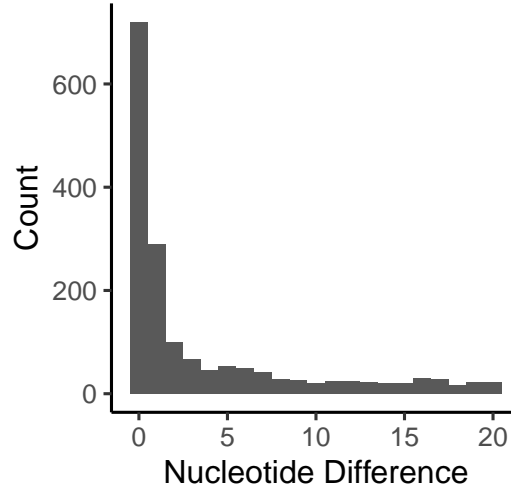
IGHV4-28*03

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



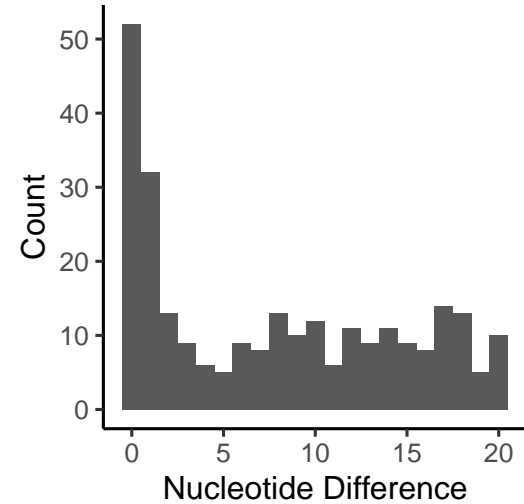
IGHV4-34*01

1914 sequences assigned
720 (37.6%) exact matches, in which:
691 unique CDR3
6 unique J



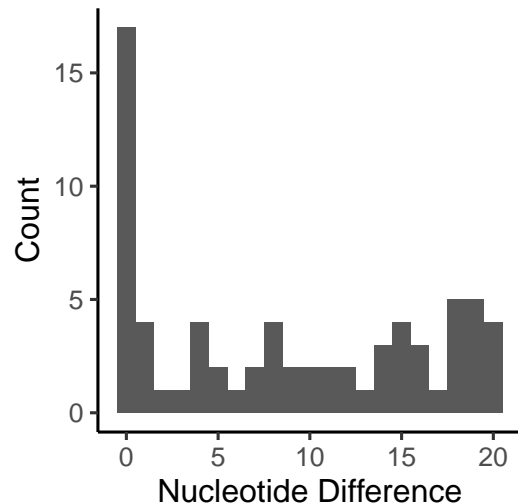
IGHV4-59*08

354 sequences assigned
52 (14.7%) exact matches, in which:
52 unique CDR3
6 unique J



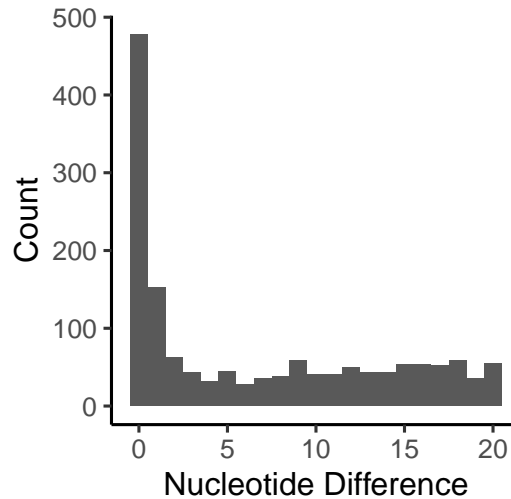
IGHV4-30-2*01

159 sequences assigned
17 (10.7%) exact matches, in which:
17 unique CDR3
4 unique J



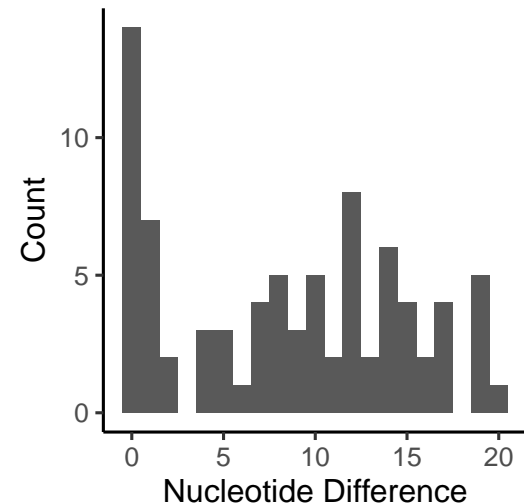
IGHV4-39*01

2083 sequences assigned
478 (22.9%) exact matches, in which:
471 unique CDR3
6 unique J



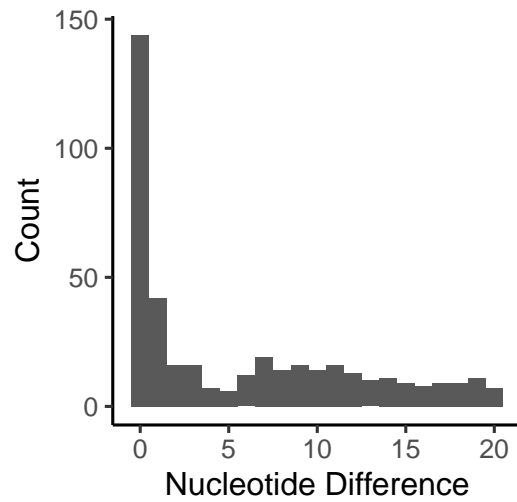
IGHV4-61*01

117 sequences assigned
14 (12%) exact matches, in which:
14 unique CDR3
4 unique J



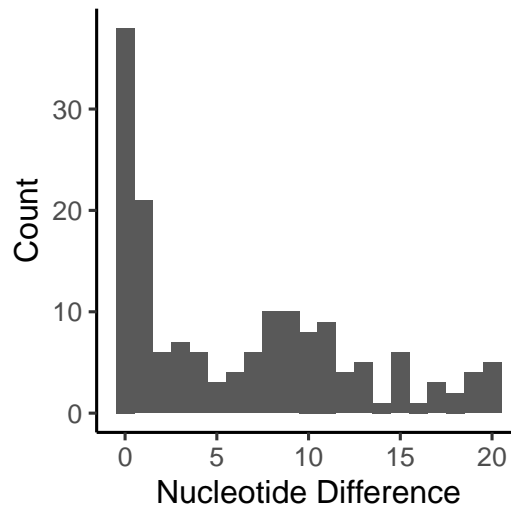
IGHV5-10-1*03

482 sequences assigned
144 (29.9%) exact matches, in which:
144 unique CDR3
5 unique J



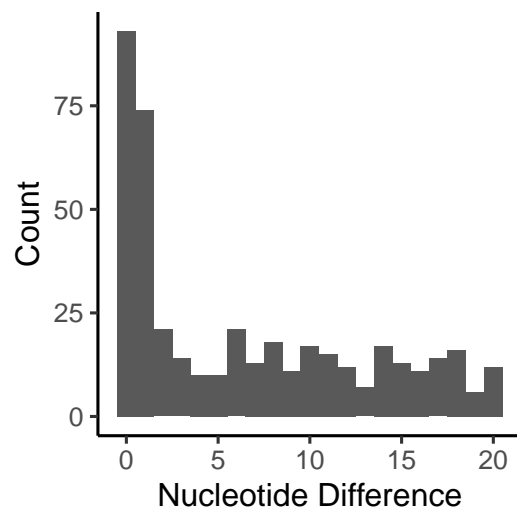
IGHV6-1*01

174 sequences assigned
38 (21.8%) exact matches, in which:
37 unique CDR3
4 unique J



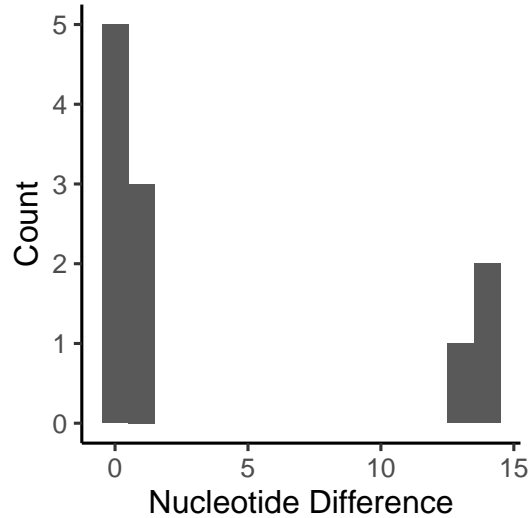
IGHV5-51*01

500 sequences assigned
93 (18.6%) exact matches, in which:
90 unique CDR3
5 unique J



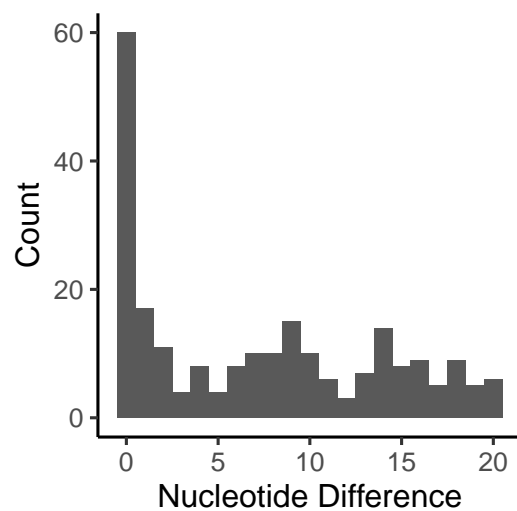
IGHV7-4-1*01

18 sequences assigned
5 (27.8%) exact matches, in which:
5 unique CDR3
3 unique J



IGHV5-51*03

260 sequences assigned
60 (23.1%) exact matches, in which:
60 unique CDR3
5 unique J





[illegible]