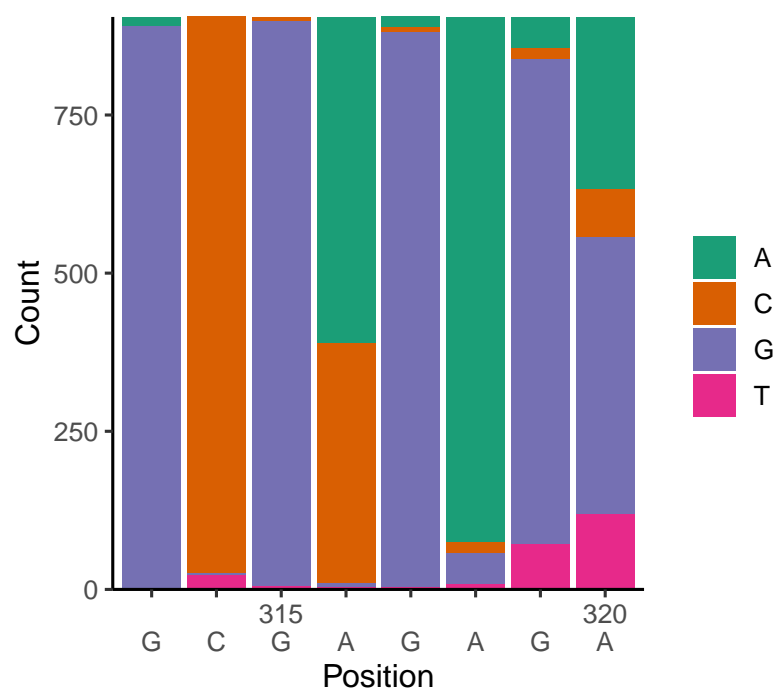
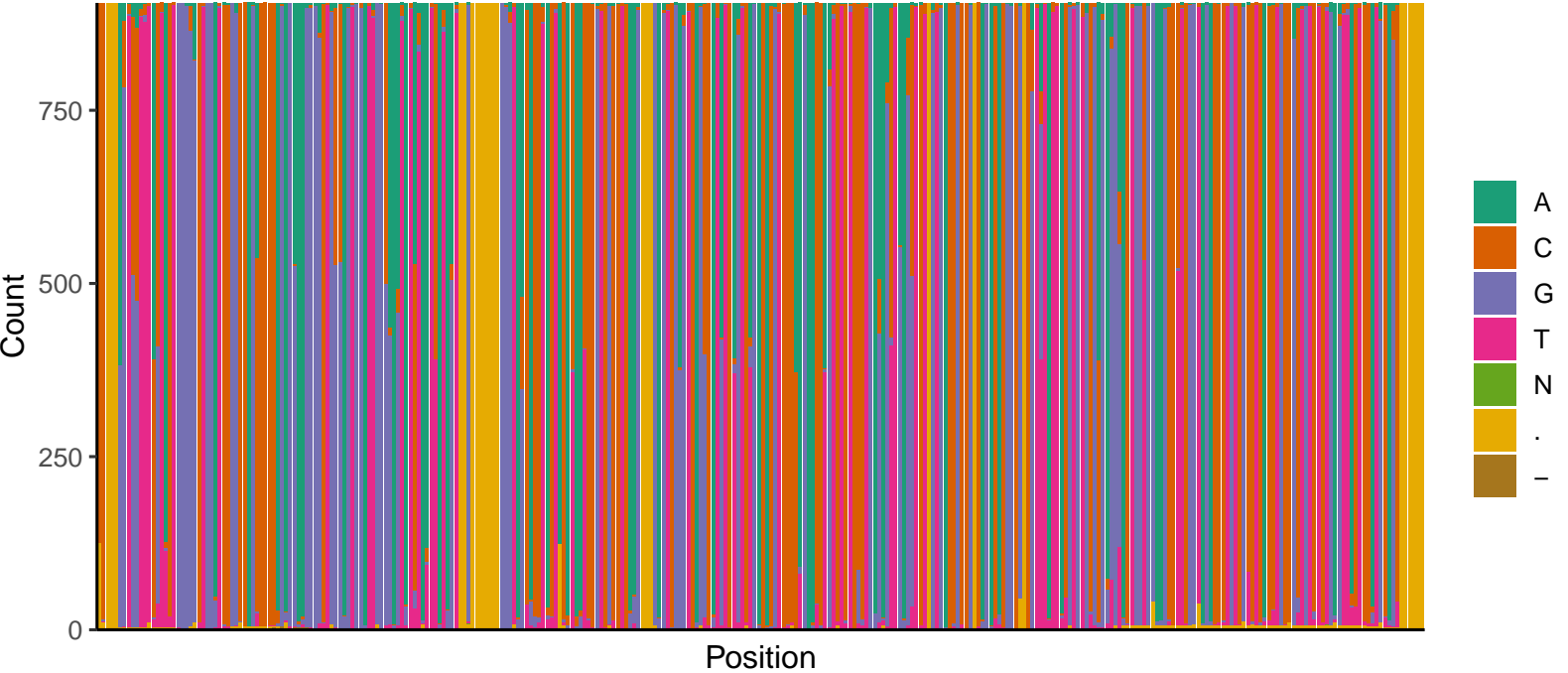


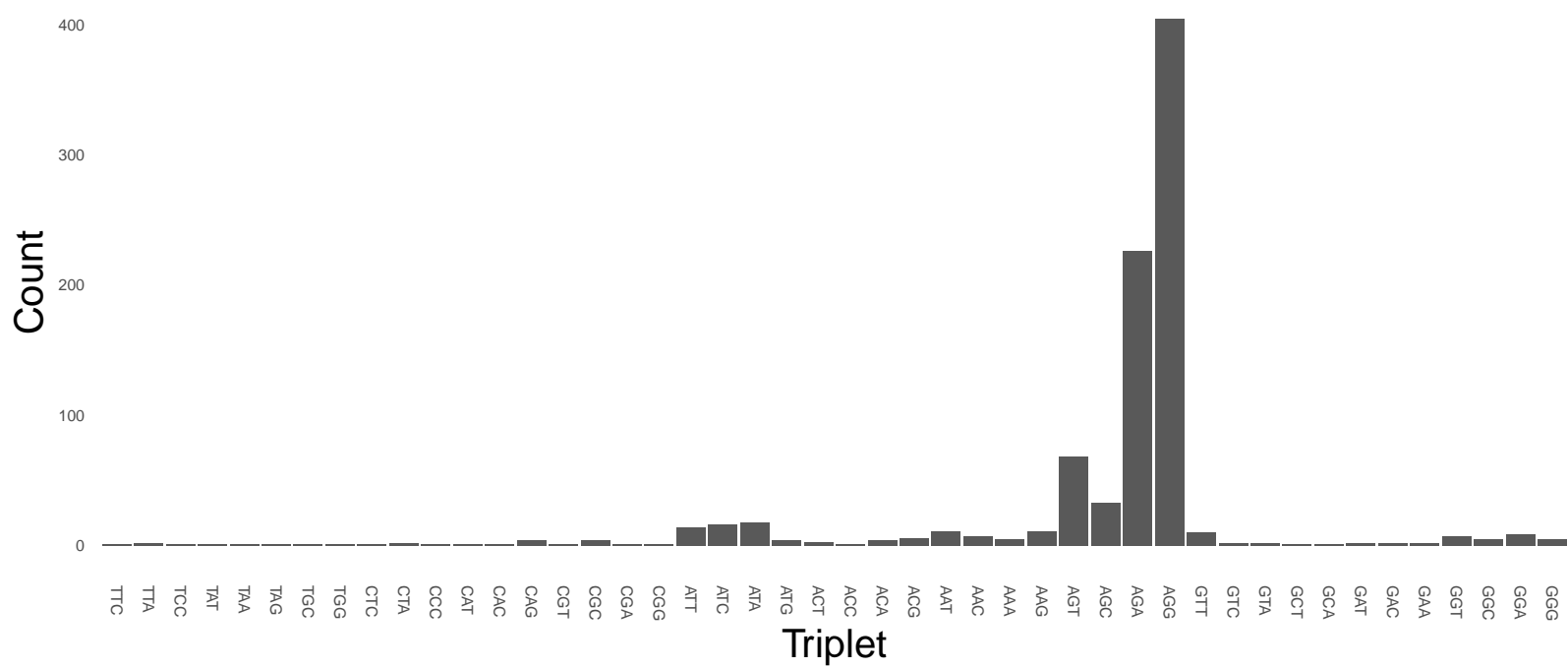
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

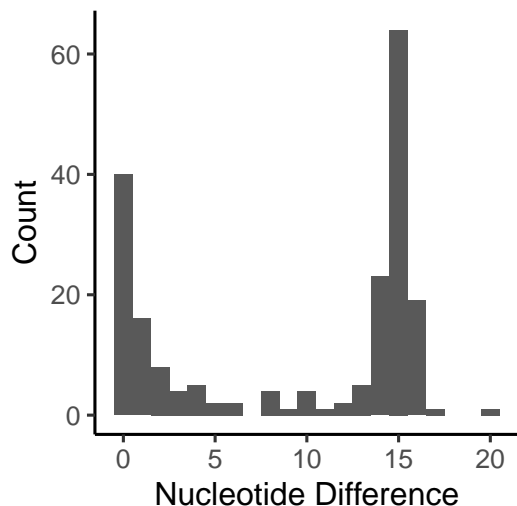


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



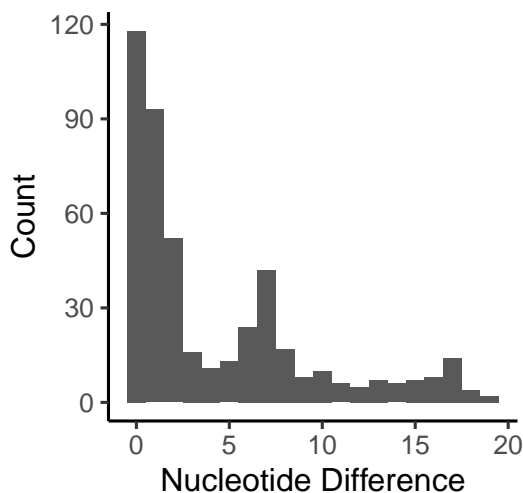
IGHV1-2*04

211 sequences assigned
40 (19%) exact matches, in which:
35 unique CDR3
5 unique J



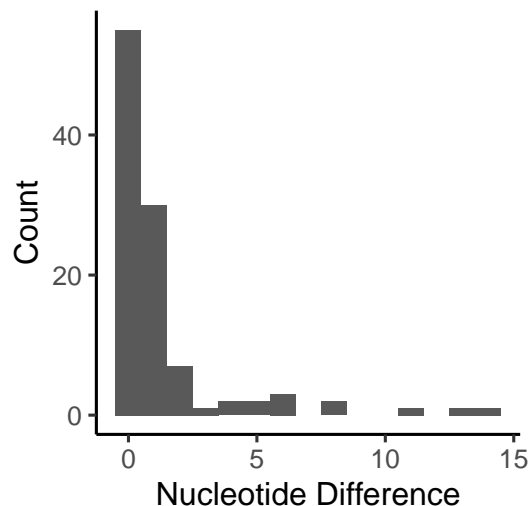
IGHV1-8*01

467 sequences assigned
118 (25.3%) exact matches, in which:
96 unique CDR3
4 unique J



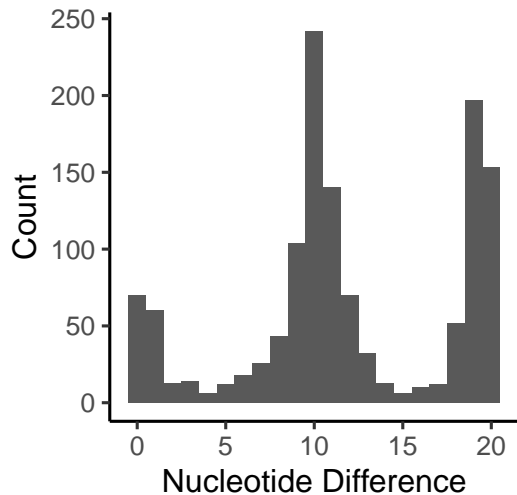
IGHV1-24*01

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



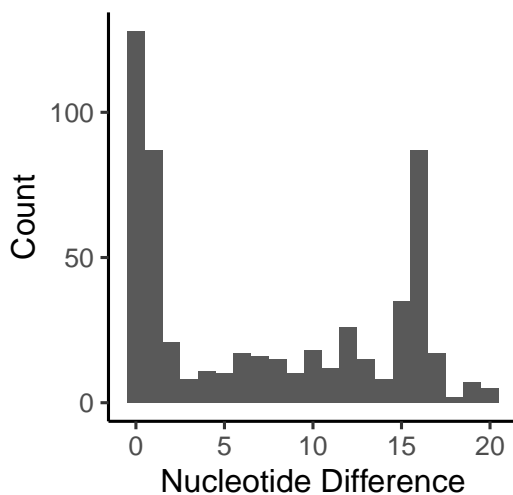
IGHV1-2*06

1366 sequences assigned
70 (5.1%) exact matches, in which:
64 unique CDR3
4 unique J



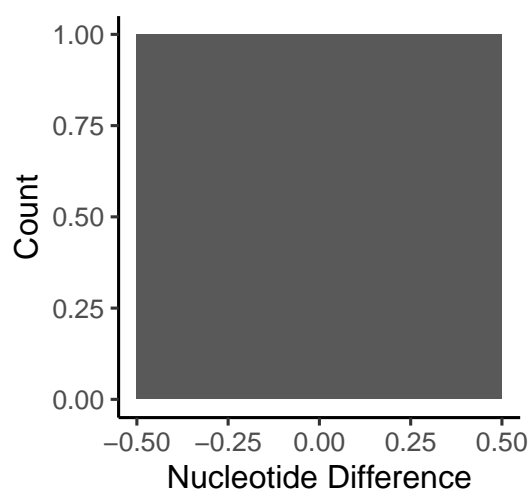
IGHV1-18*01

614 sequences assigned
128 (20.8%) exact matches, in which:
119 unique CDR3
4 unique J



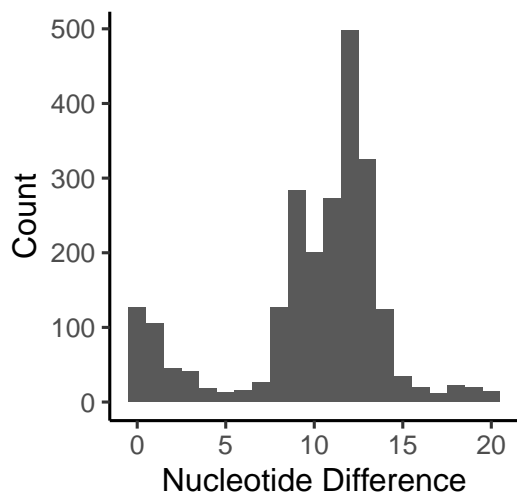
IGHV1-45*02

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



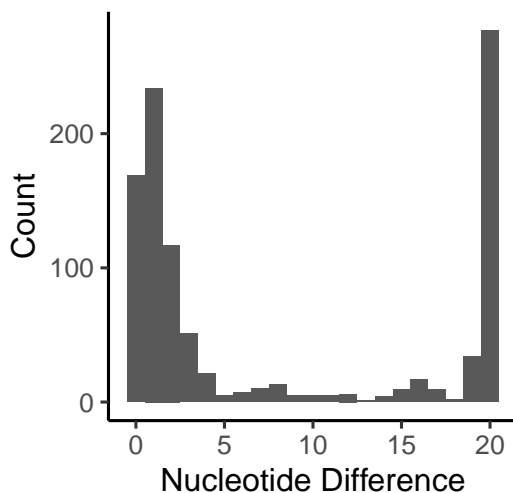
IGHV1-3*01

2404 sequences assigned
127 (5.3%) exact matches, in which:
120 unique CDR3
4 unique J



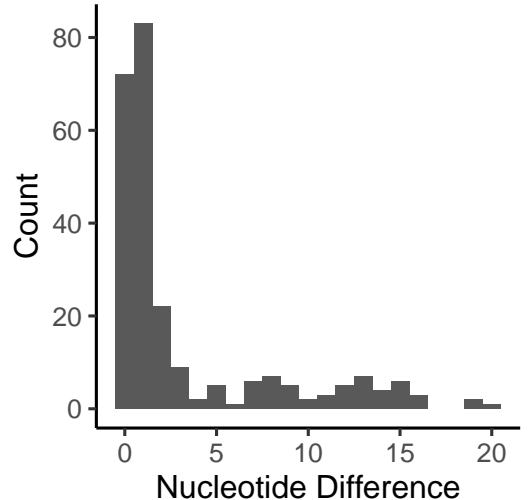
IGHV1-18*04

2532 sequences assigned
169 (6.7%) exact matches, in which:
129 unique CDR3
6 unique J



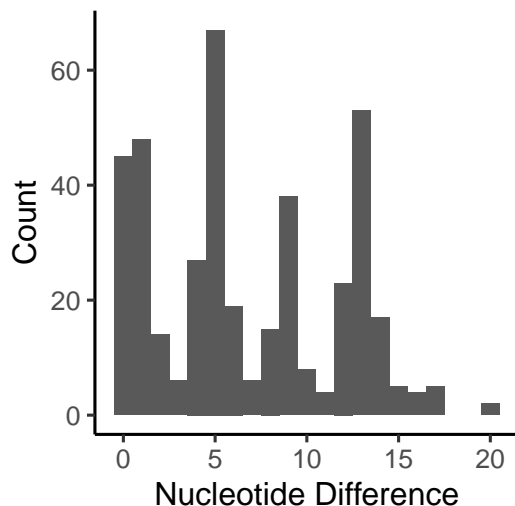
IGHV1-46*01

486 sequences assigned
72 (14.8%) exact matches, in which:
62 unique CDR3
4 unique J



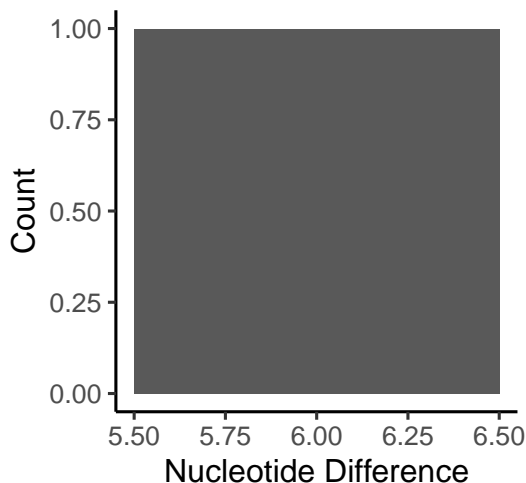
IGHV1-46*03

413 sequences assigned
45 (10.9%) exact matches, in which:
29 unique CDR3
5 unique J



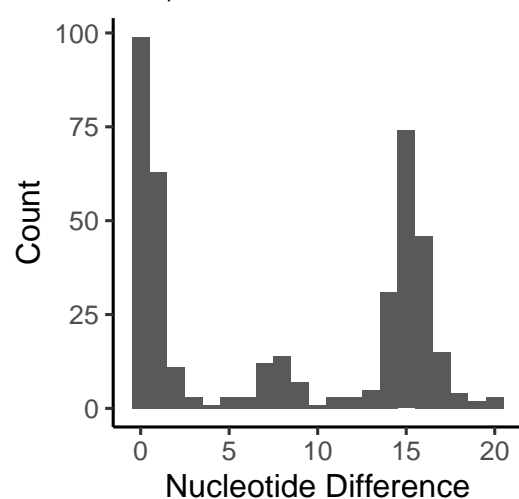
IGHV1-68*02

1 sequences assigned
No exact matches.



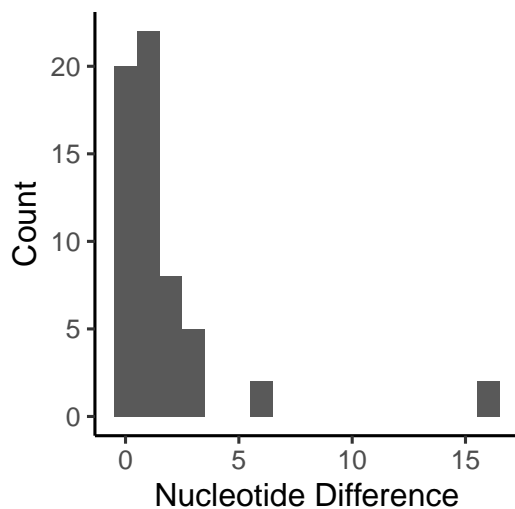
IGHV1-69*06

409 sequences assigned
99 (24.2%) exact matches, in which:
92 unique CDR3
4 unique J



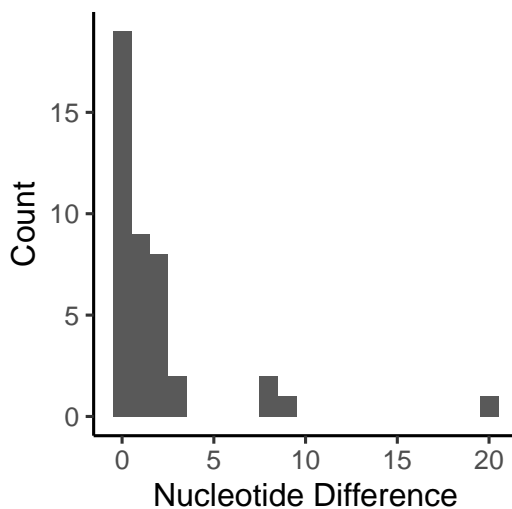
IGHV1-58*01

61 sequences assigned
20 (32.8%) exact matches, in which:
14 unique CDR3
3 unique J



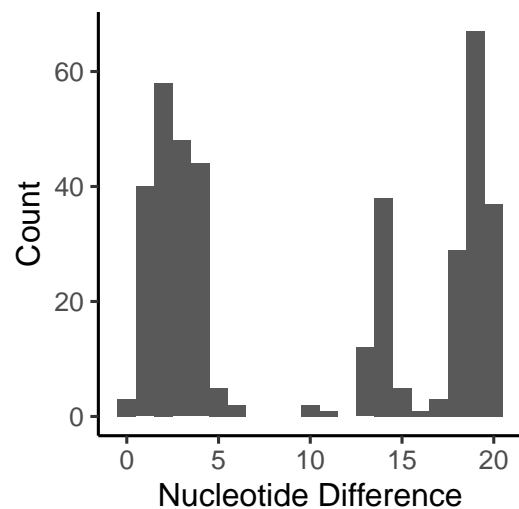
IGHV1-69-2*01

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



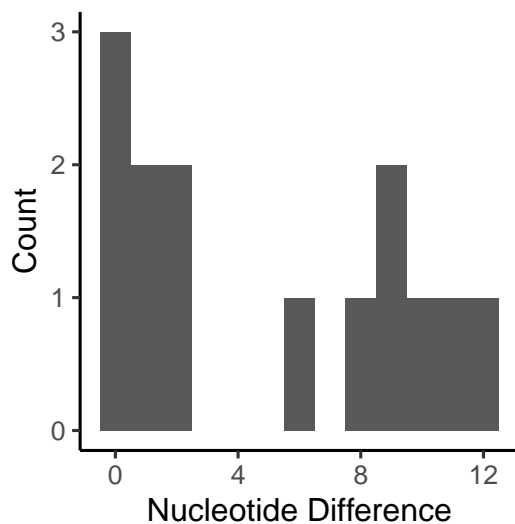
IGHV1-69*08

396 sequences assigned
3 (0.8%) exact matches, in which:
2 unique CDR3
1 unique J



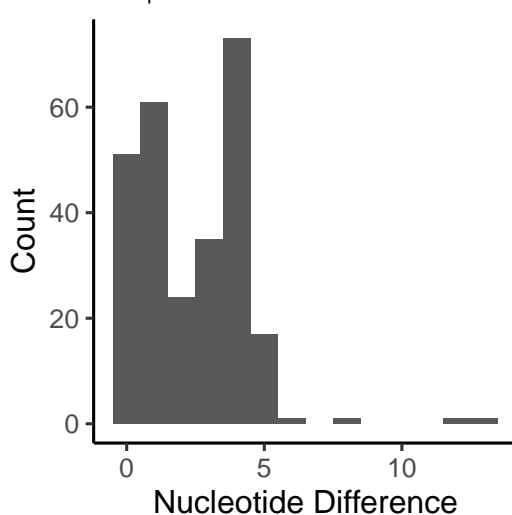
IGHV1-58*02

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



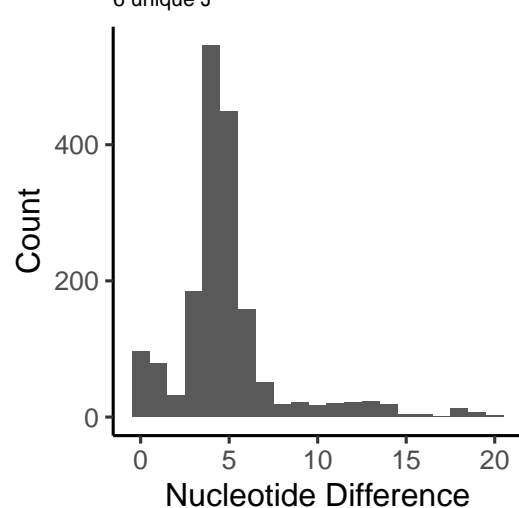
IGHV1-69*02

268 sequences assigned
51 (19%) exact matches, in which:
42 unique CDR3
6 unique J



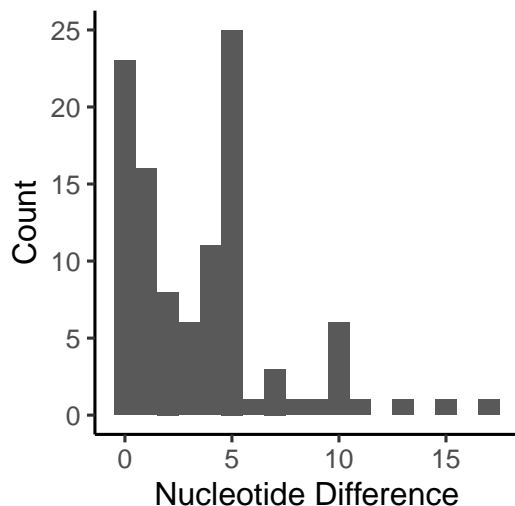
IGHV2-5*02

2031 sequences assigned
96 (4.7%) exact matches, in which:
87 unique CDR3
6 unique J



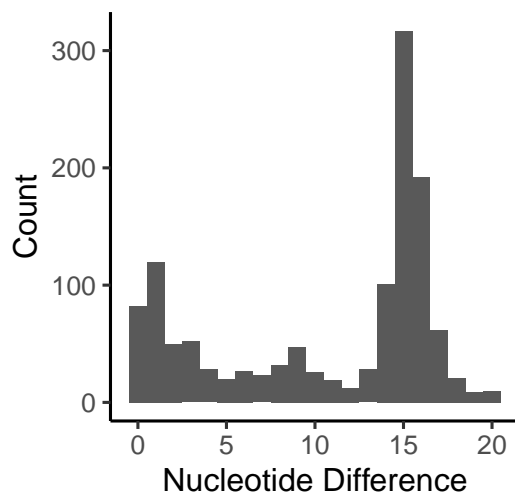
IGHV2-26*01

105 sequences assigned
23 (21.9%) exact matches, in which:
20 unique CDR3
4 unique J



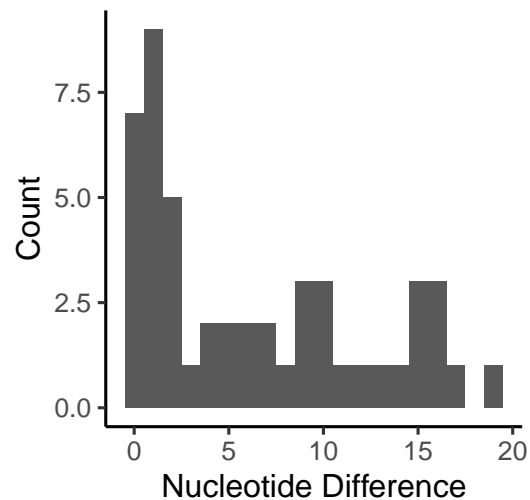
IGHV3-7*03

1314 sequences assigned
82 (6.2%) exact matches, in which:
67 unique CDR3
5 unique J



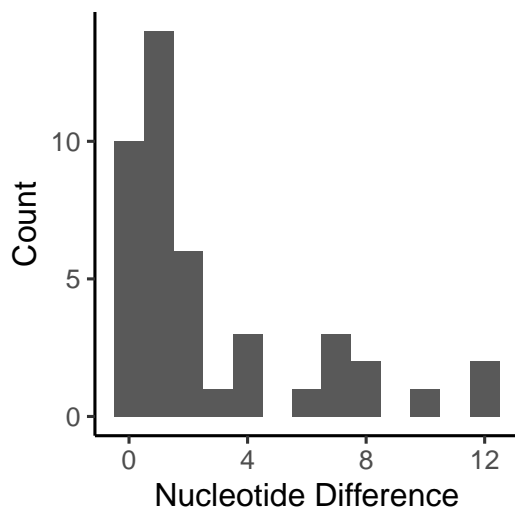
IGHV3-11*06

50 sequences assigned
7 (14%) exact matches, in which:
7 unique CDR3
3 unique J



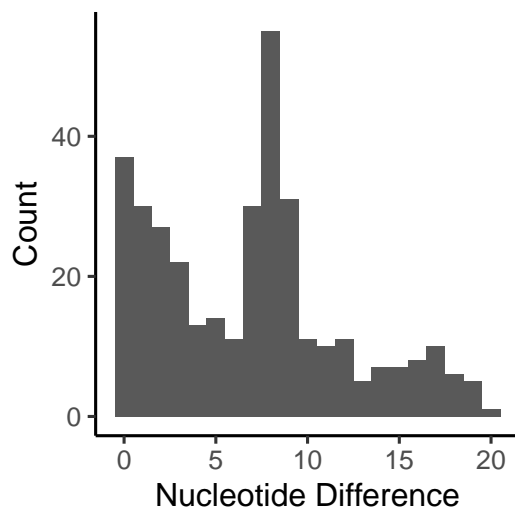
IGHV2-70*01

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



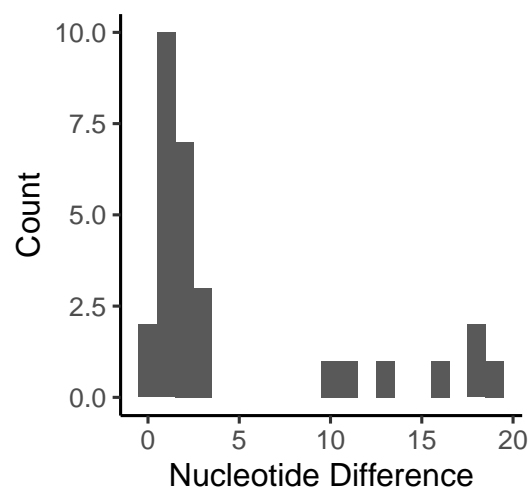
IGHV3-9*01

402 sequences assigned
37 (9.2%) exact matches, in which:
36 unique CDR3
5 unique J



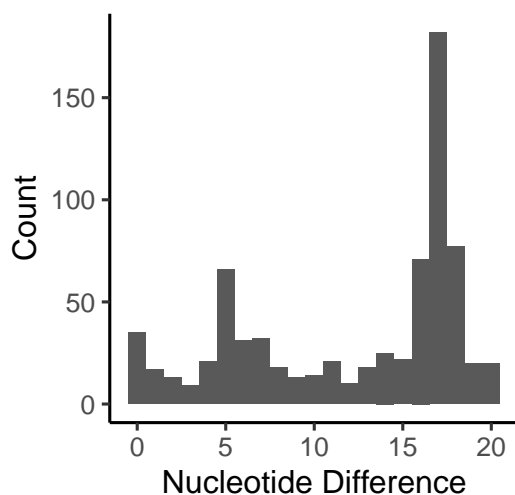
IGHV3-13*01

320 sequences assigned
2 (0.6%) exact matches, in which:
2 unique CDR3
1 unique J



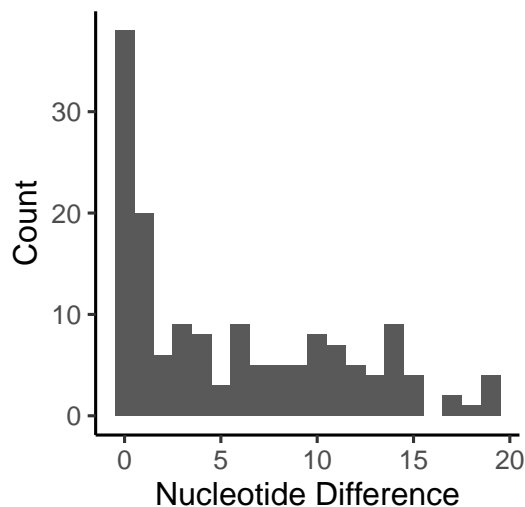
IGHV3-7*01

809 sequences assigned
35 (4.3%) exact matches, in which:
35 unique CDR3
4 unique J



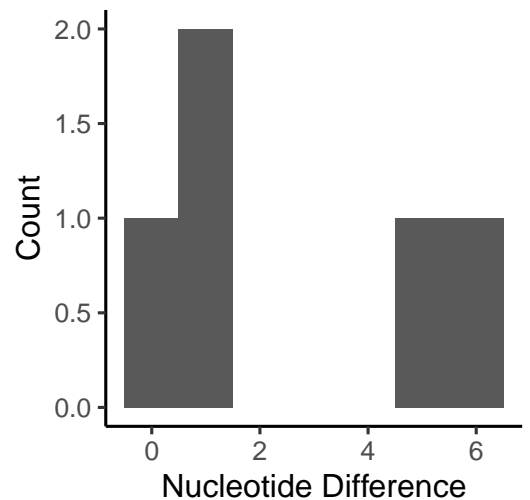
IGHV3-11*01

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



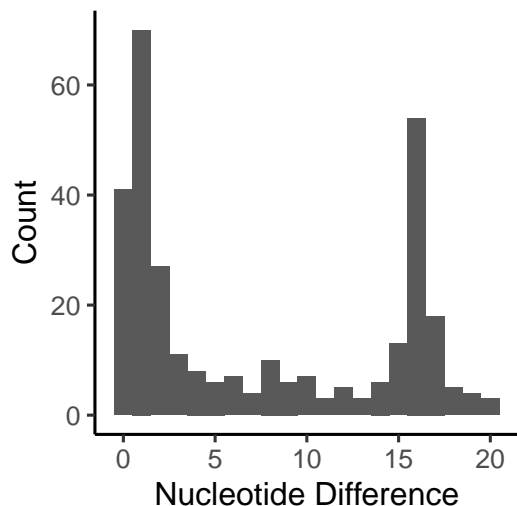
IGHV3-13*05

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



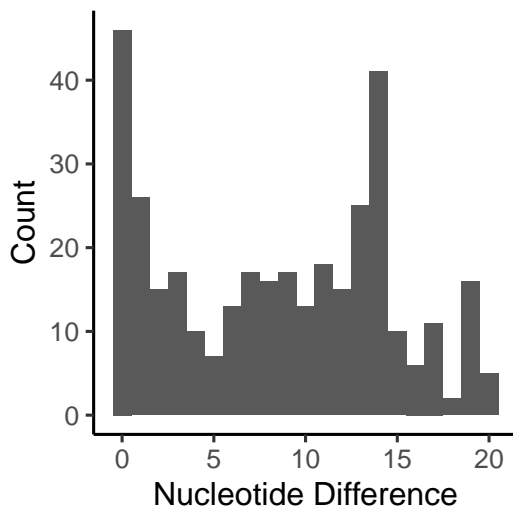
IGHV3-15*01

849 sequences assigned
41 (4.8%) exact matches, in which:
37 unique CDR3
5 unique J



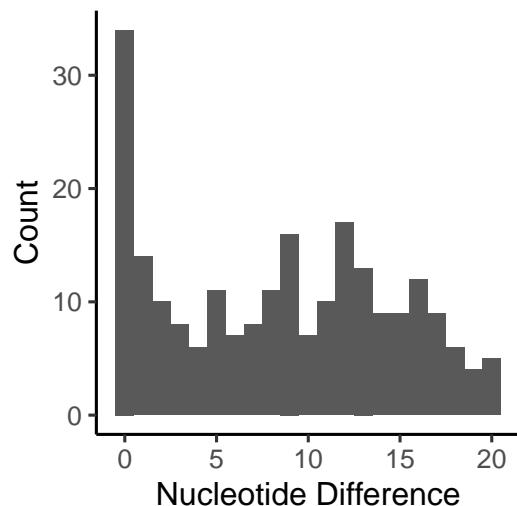
IGHV3-23*04

659 sequences assigned
46 (7%) exact matches, in which:
44 unique CDR3
5 unique J



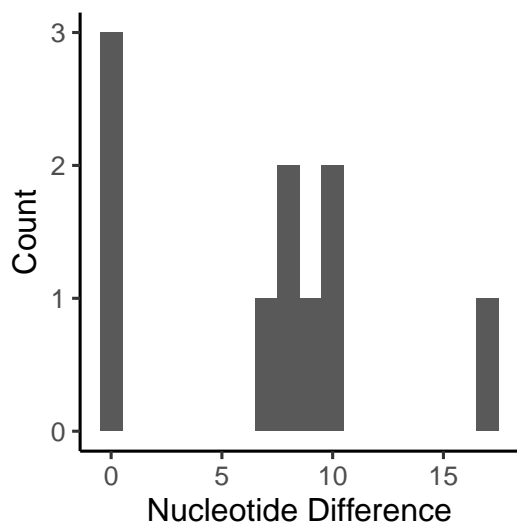
IGHV3-48*01

255 sequences assigned
34 (13.3%) exact matches, in which:
33 unique CDR3
4 unique J



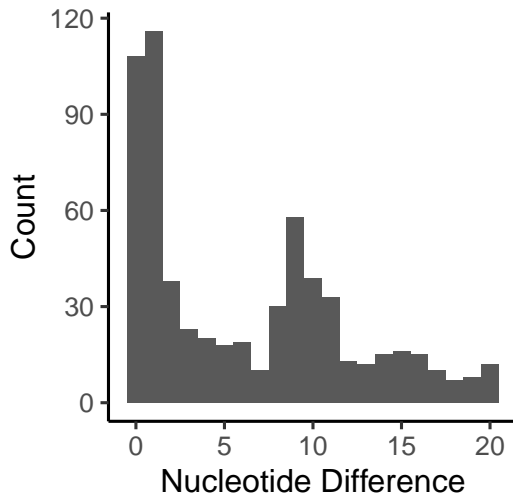
IGHV3-20*01

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



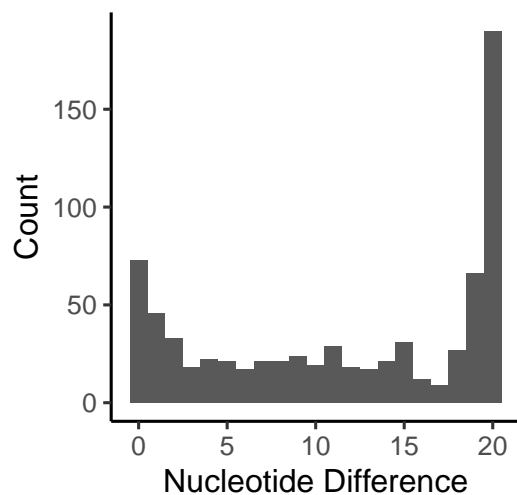
IGHV3-33*01

659 sequences assigned
108 (16.4%) exact matches, in which:
92 unique CDR3
5 unique J



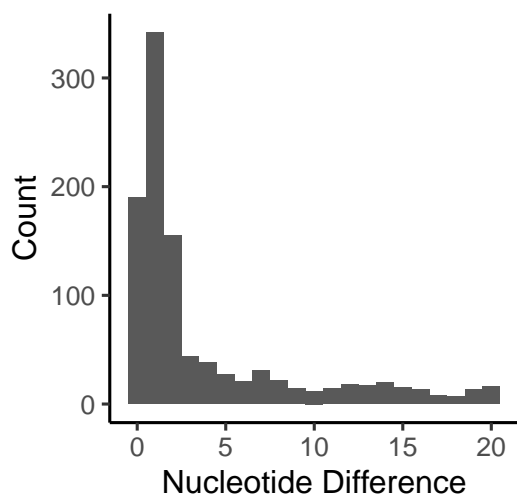
IGHV3-48*03

1017 sequences assigned
73 (7.2%) exact matches, in which:
73 unique CDR3
6 unique J



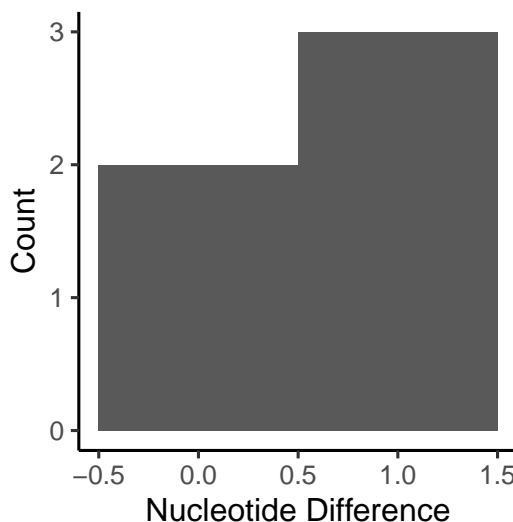
IGHV3-21*01

1521 sequences assigned
190 (12.5%) exact matches, in which:
129 unique CDR3
6 unique J



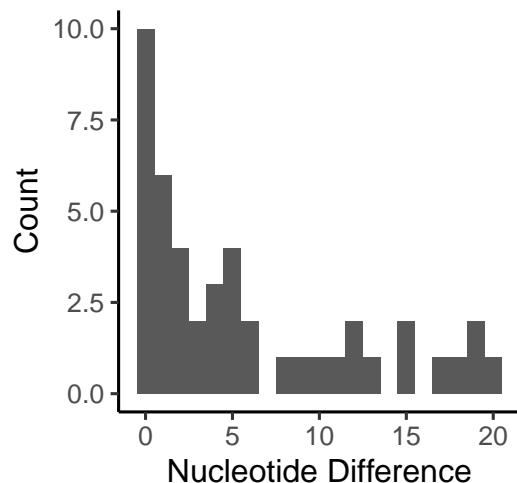
IGHV3-43*01

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



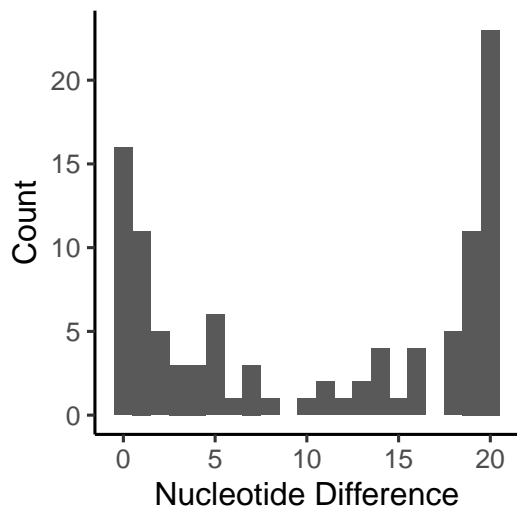
IGHV3-49*03

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



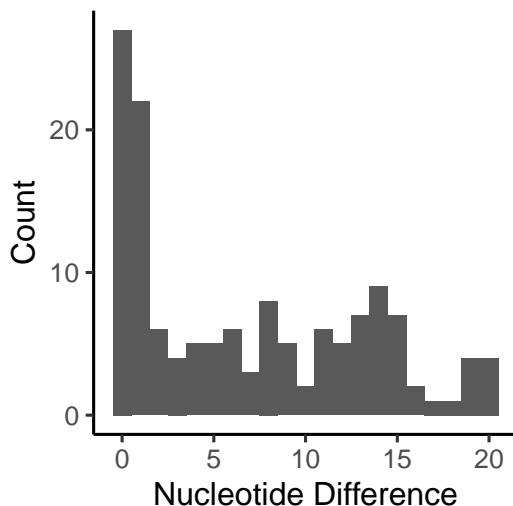
IGHV3-49*04

147 sequences assigned
16 (10.9%) exact matches, in which:
16 unique CDR3
2 unique J



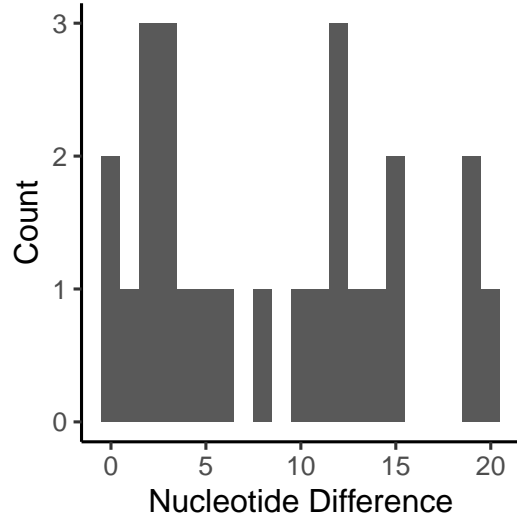
IGHV3-66*02

185 sequences assigned
27 (14.6%) exact matches, in which:
24 unique CDR3
4 unique J



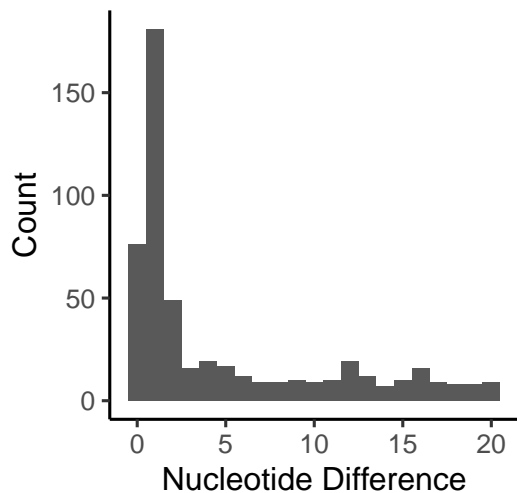
IGHV3-73*02

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



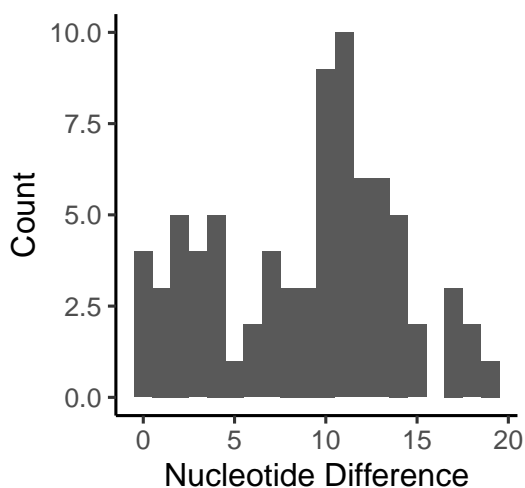
IGHV3-53*02

569 sequences assigned
76 (13.4%) exact matches, in which:
56 unique CDR3
4 unique J



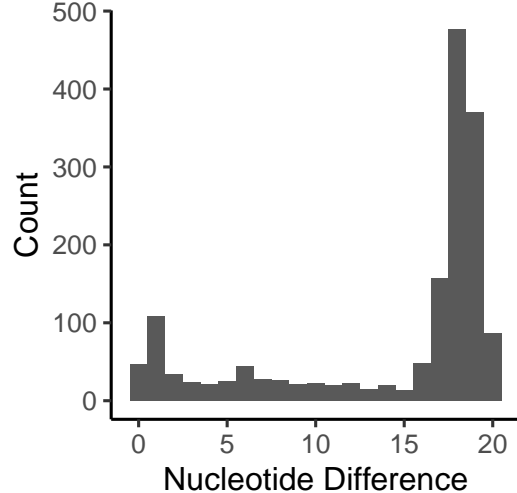
IGHV3-72*01

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



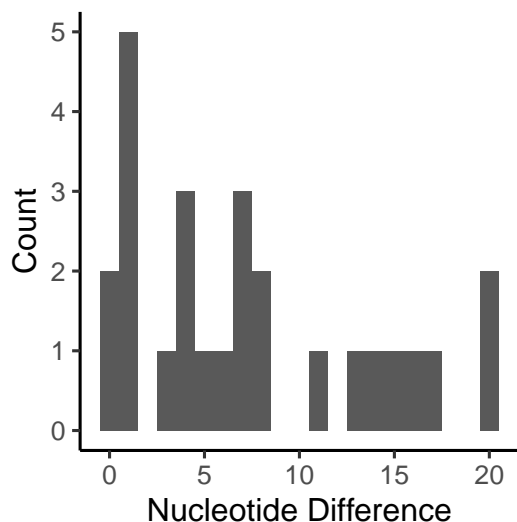
IGHV3-74*01

1941 sequences assigned
47 (2.4%) exact matches, in which:
37 unique CDR3
5 unique J



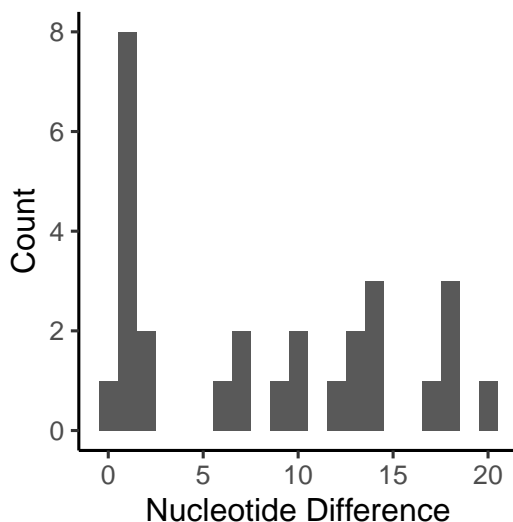
IGHV3-64*01

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



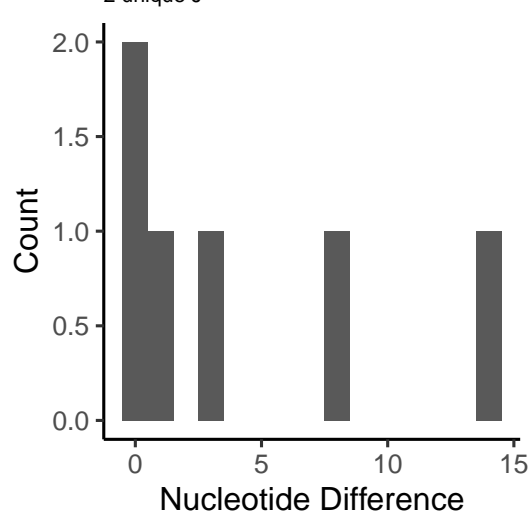
IGHV3-73*01

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



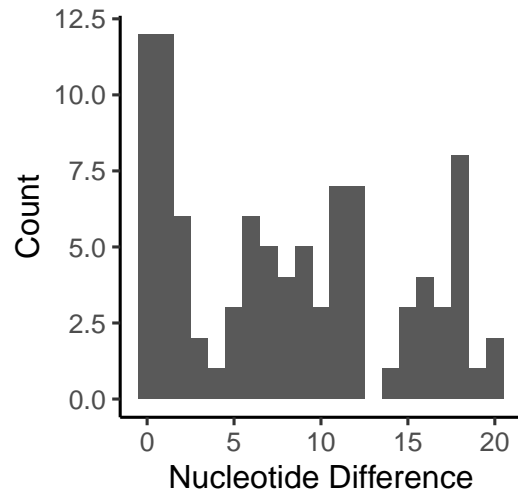
IGHV3-43D*04

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



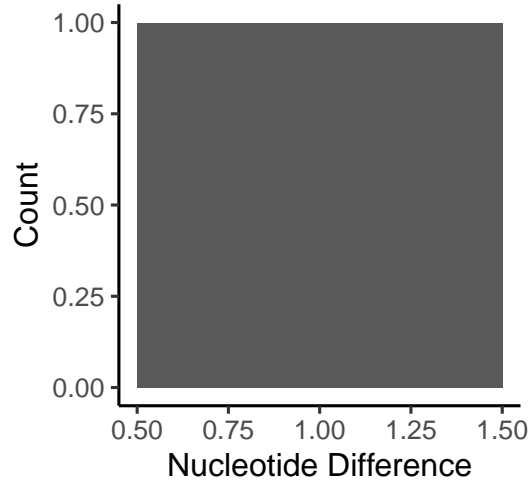
IGHV3-64D*06

114 sequences assigned
12 (10.5%) exact matches, in which:
12 unique CDR3
2 unique J



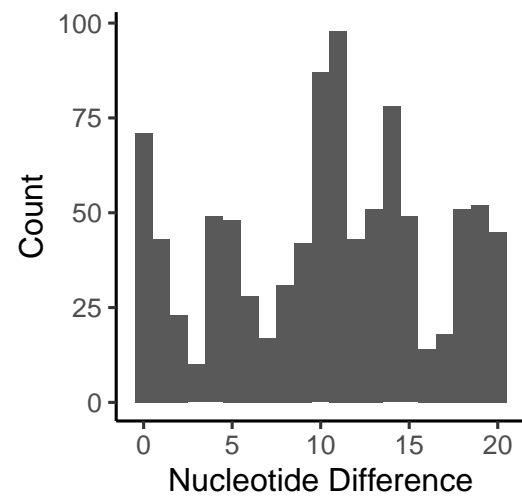
IGHV4-28*07

6 sequences assigned
No exact matches.



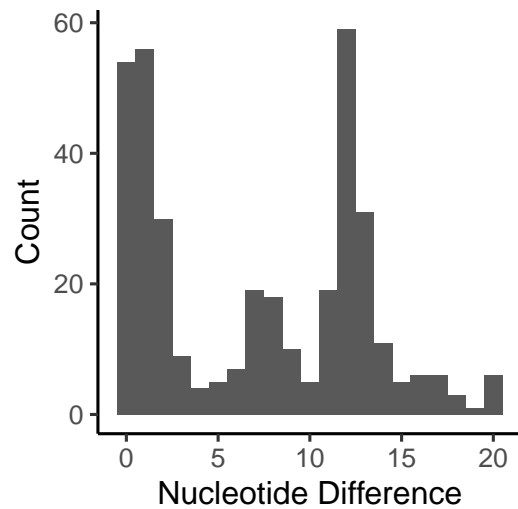
IGHV4-34*01

1322 sequences assigned
71 (5.4%) exact matches, in which:
71 unique CDR3
5 unique J



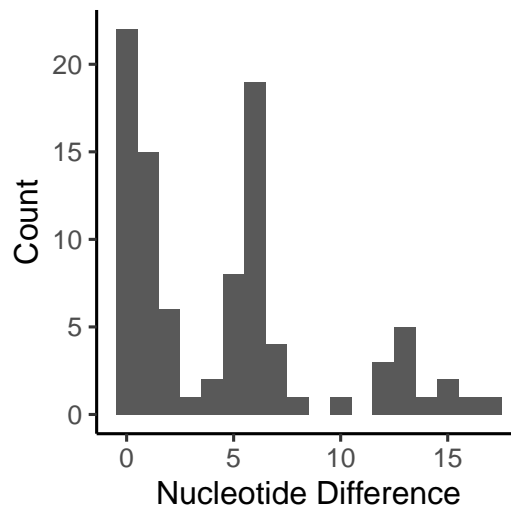
IGHV4-4*02

494 sequences assigned
54 (10.9%) exact matches, in which:
48 unique CDR3
4 unique J



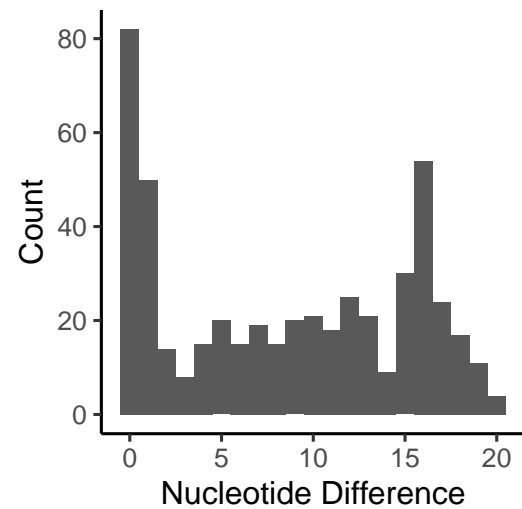
IGHV4-30-2*01

93 sequences assigned
22 (23.7%) exact matches, in which:
21 unique CDR3
4 unique J



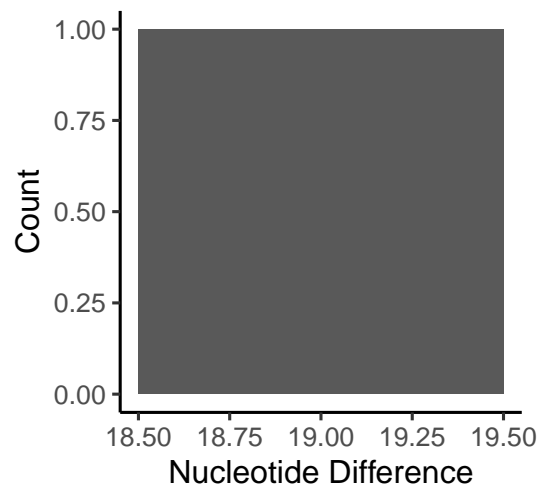
IGHV4-38-2*02_A70G

905 sequences assigned
82 (9.1%) exact matches, in which:
71 unique CDR3
5 unique J



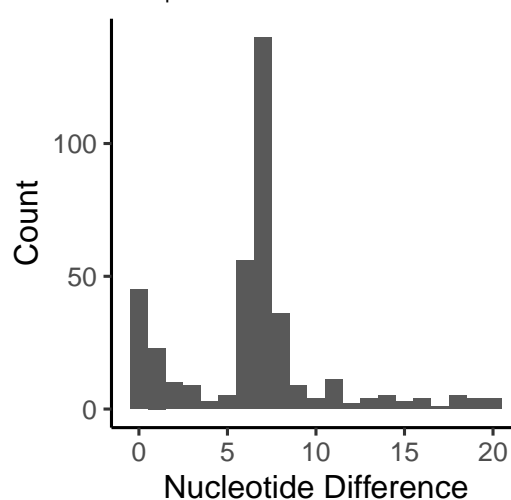
IGHV4-28*03

1 sequences assigned
No exact matches.



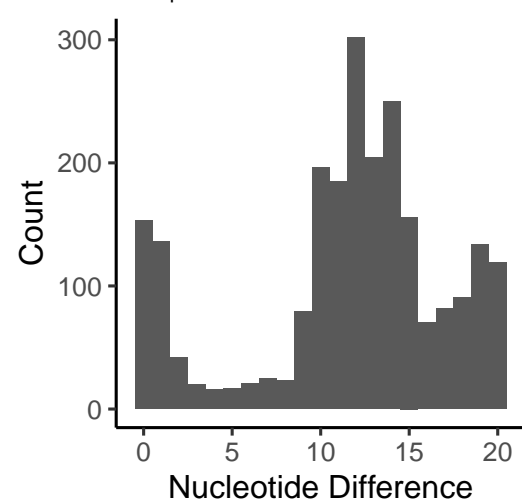
IGHV4-31*03

864 sequences assigned
45 (5.2%) exact matches, in which:
42 unique CDR3
5 unique J



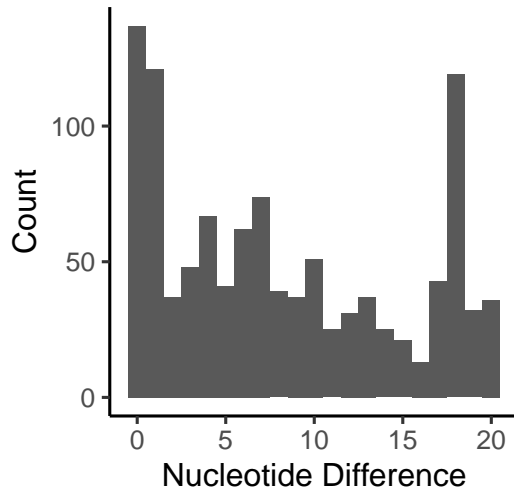
IGHV4-39*01

2546 sequences assigned
153 (6%) exact matches, in which:
139 unique CDR3
6 unique J



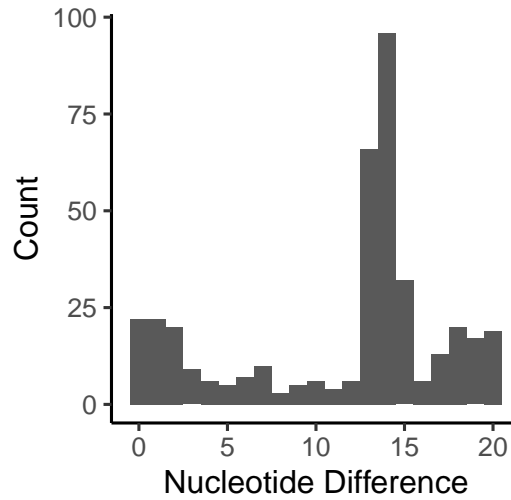
IGHV4–59*01

1436 sequences assigned
137 (9.5%) exact matches, in which:
118 unique CDR3
6 unique J



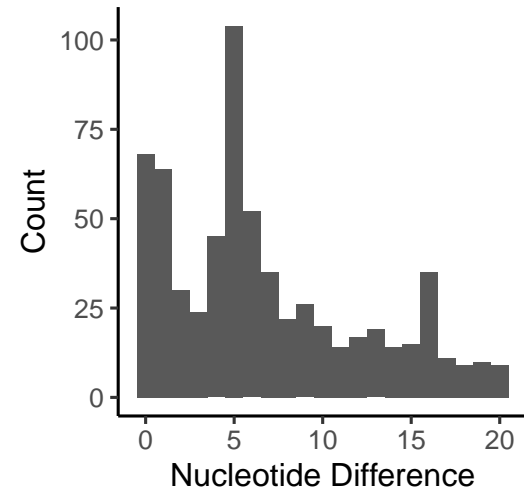
IGHV5–10–1*03

448 sequences assigned
22 (4.9%) exact matches, in which:
22 unique CDR3
3 unique J



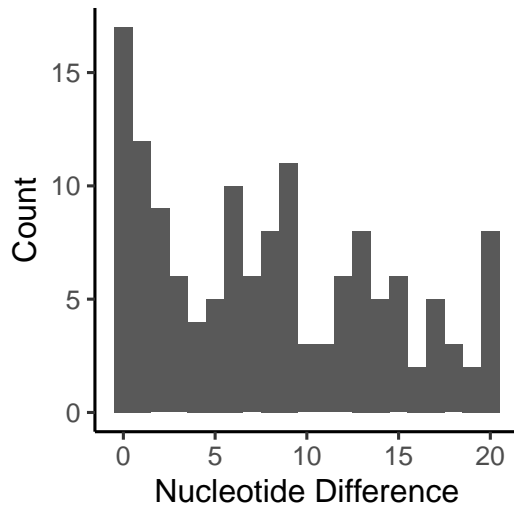
IGHV6–1*01

664 sequences assigned
68 (10.2%) exact matches, in which:
58 unique CDR3
6 unique J



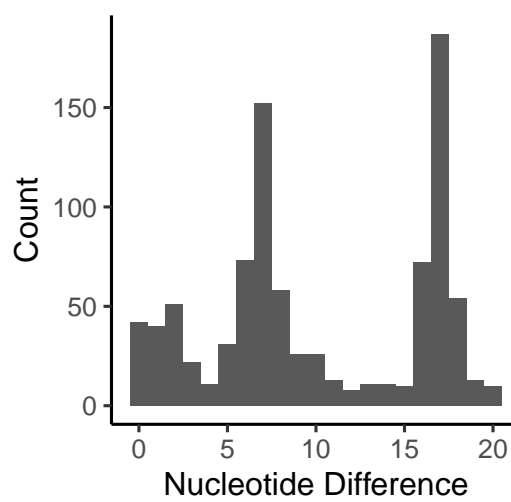
IGHV4–61*01

291 sequences assigned
17 (5.8%) exact matches, in which:
16 unique CDR3
4 unique J



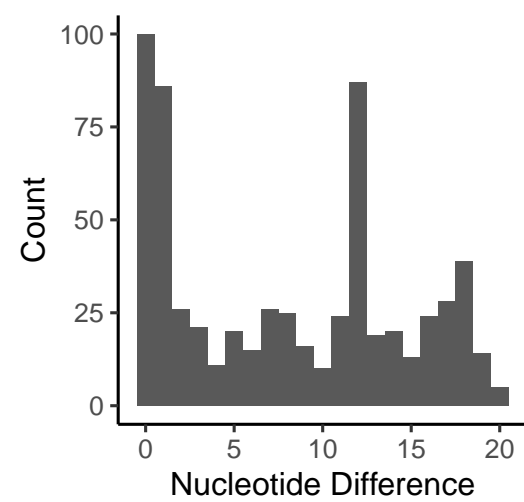
IGHV5–51*01

991 sequences assigned
42 (4.2%) exact matches, in which:
39 unique CDR3
5 unique J



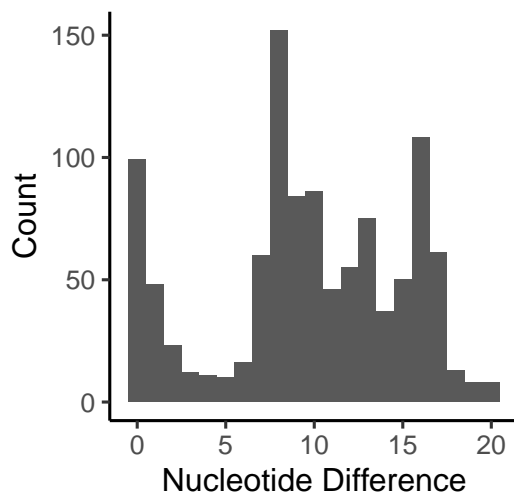
IGHV7–4–1*02

660 sequences assigned
100 (15.2%) exact matches, in which:
87 unique CDR3
6 unique J



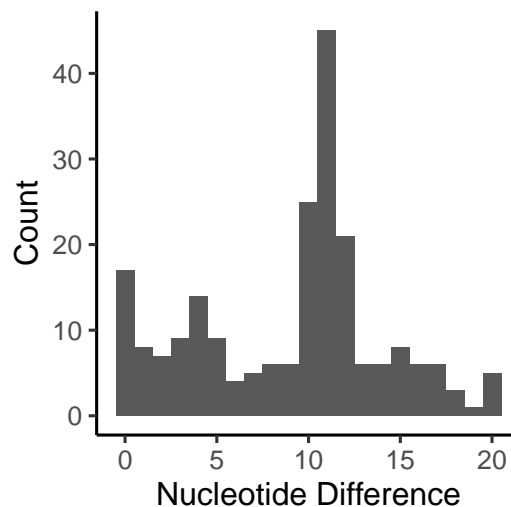
IGHV4–61*02

1395 sequences assigned
99 (7.1%) exact matches, in which:
89 unique CDR3
6 unique J

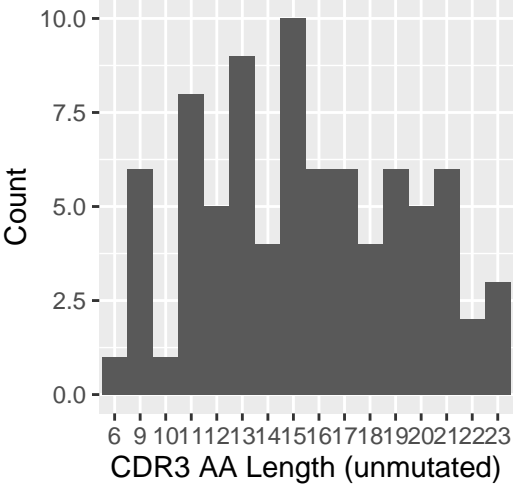


IGHV5–51*03

280 sequences assigned
17 (6.1%) exact matches, in which:
17 unique CDR3
4 unique J



IGHV4-38-2*02_A70G





[illegible]