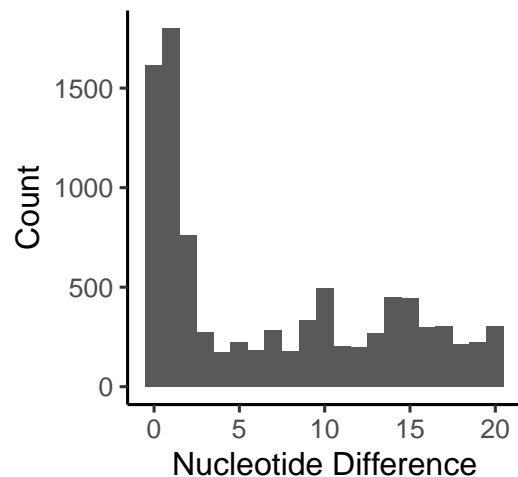


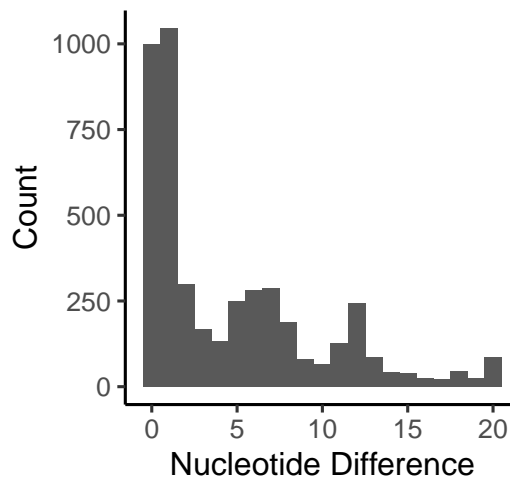
IGHV1-2*02

11986 sequences assigned
1613 (13.5%) exact matches, in which:
1339 unique CDR3
6 unique J



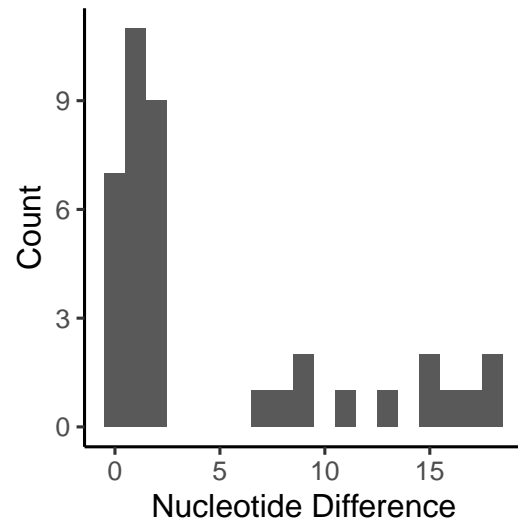
IGHV1-8*01

5249 sequences assigned
1000 (19.1%) exact matches, in which:
829 unique CDR3
6 unique J



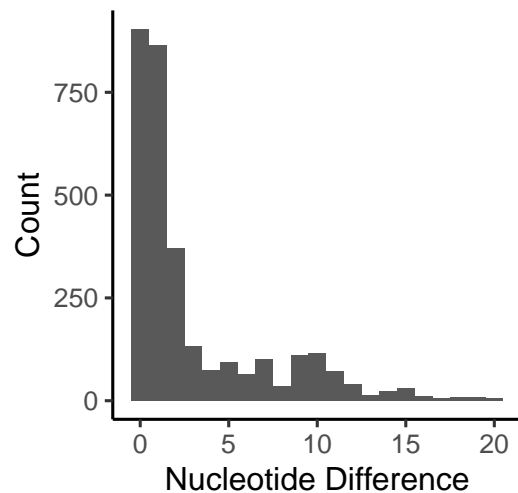
IGHV1-45*02

43 sequences assigned
7 (16.3%) exact matches, in which:
6 unique CDR3
2 unique J



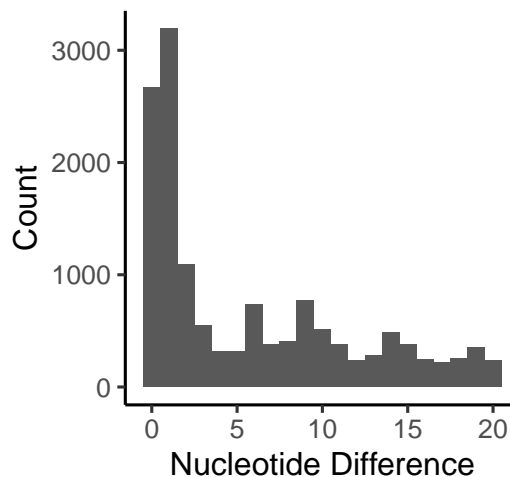
IGHV1-2*04

3126 sequences assigned
904 (28.9%) exact matches, in which:
762 unique CDR3
6 unique J



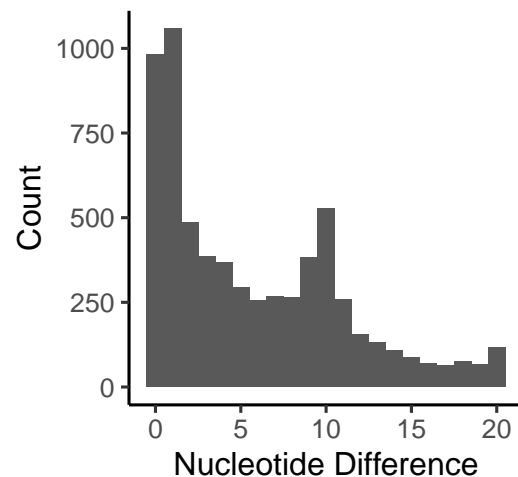
IGHV1-18*01

17698 sequences assigned
2672 (15.1%) exact matches, in which:
2145 unique CDR3
6 unique J



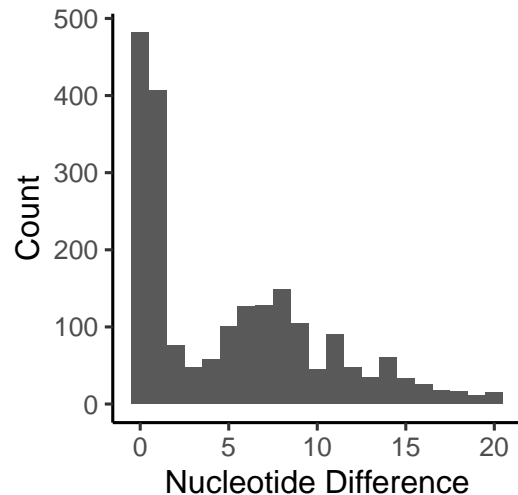
IGHV1-46*01

7022 sequences assigned
983 (14%) exact matches, in which:
838 unique CDR3
6 unique J



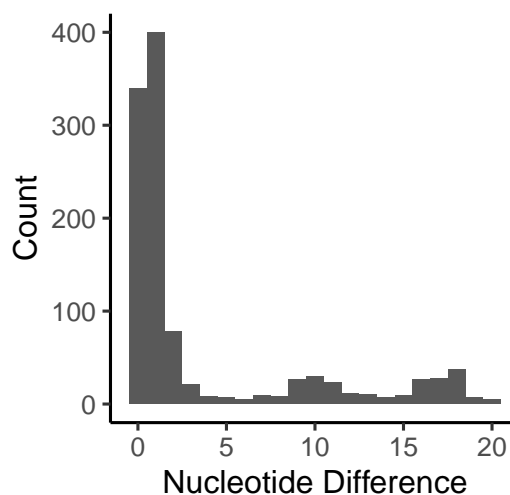
IGHV1-3*01_05

2807 sequences assigned
482 (17.2%) exact matches, in which:
400 unique CDR3
6 unique J



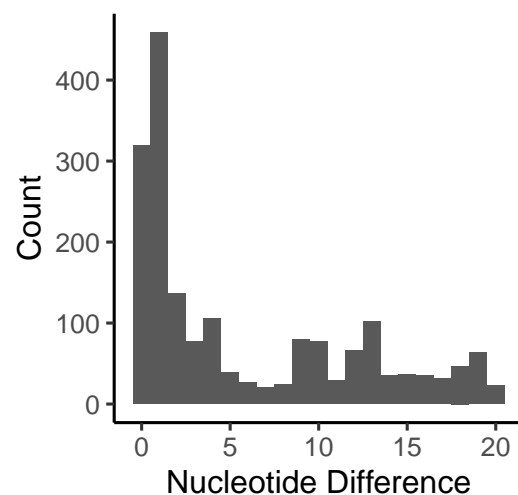
IGHV1-24*01

1251 sequences assigned
340 (27.2%) exact matches, in which:
253 unique CDR3
6 unique J



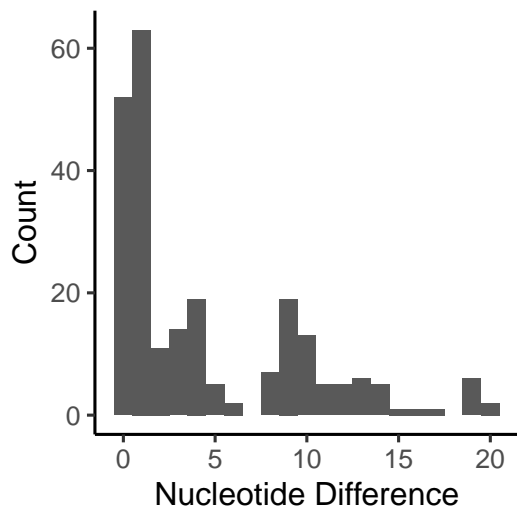
IGHV1-46*03

2617 sequences assigned
319 (12.2%) exact matches, in which:
238 unique CDR3
6 unique J



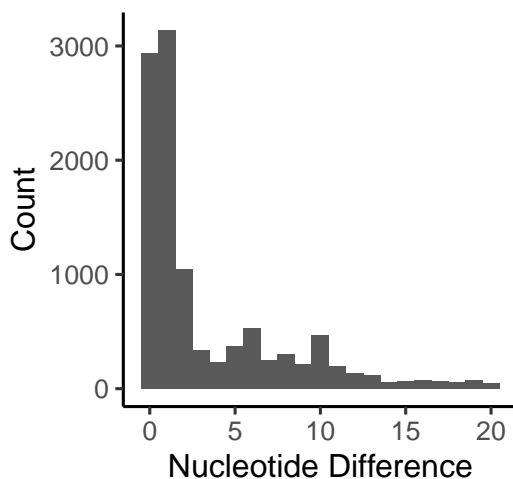
IGHV1-58*02

256 sequences assigned
52 (20.3%) exact matches, in which:
46 unique CDR3
4 unique J



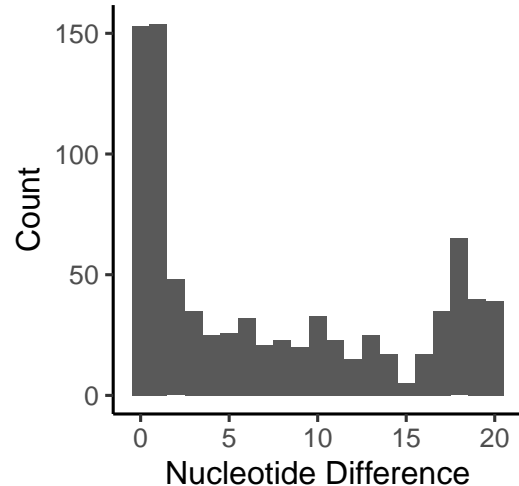
IGHV1-69*01_12_13

11791 sequences assigned
2935 (24.9%) exact matches, in which:
2497 unique CDR3
6 unique J



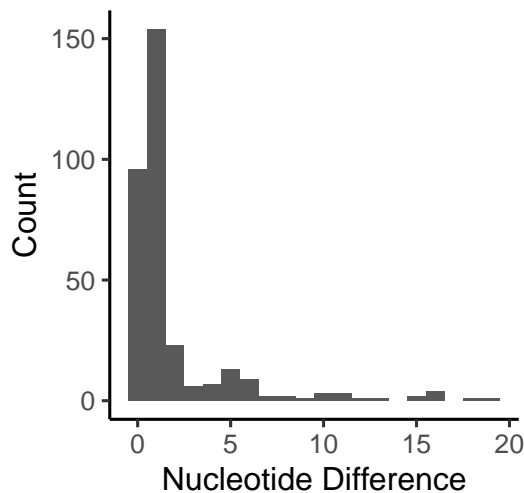
IGHV2-5*01

921 sequences assigned
153 (16.6%) exact matches, in which:
129 unique CDR3
6 unique J



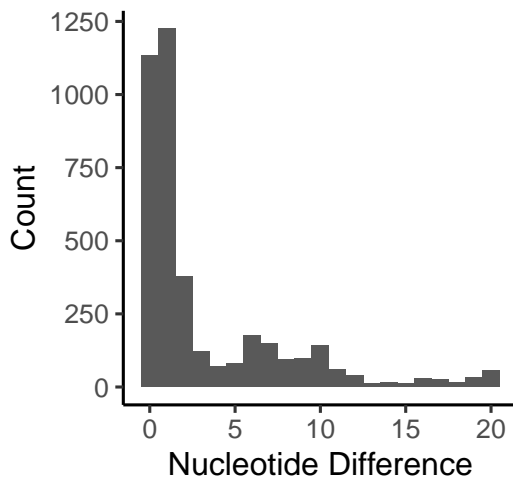
IGHV1-58*01_03

376 sequences assigned
96 (25.5%) exact matches, in which:
73 unique CDR3
5 unique J



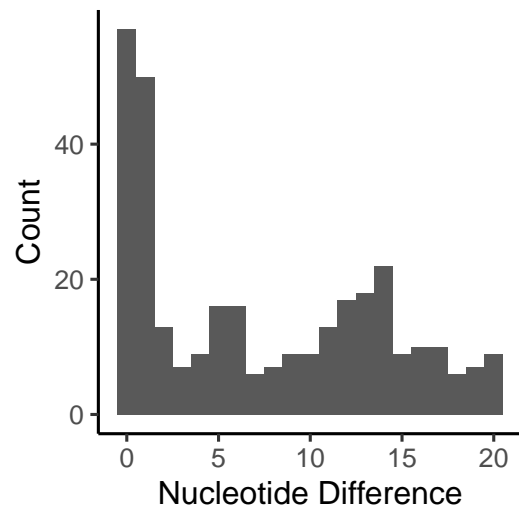
IGHV1-69*04_09

4240 sequences assigned
1134 (26.7%) exact matches, in which:
977 unique CDR3
6 unique J



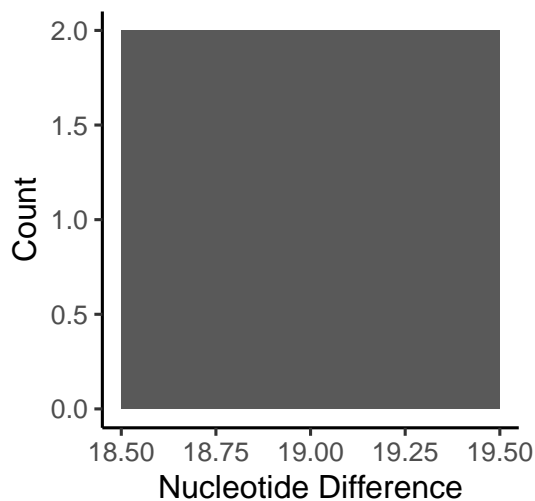
IGHV2-5*02

546 sequences assigned
57 (10.4%) exact matches, in which:
51 unique CDR3
6 unique J



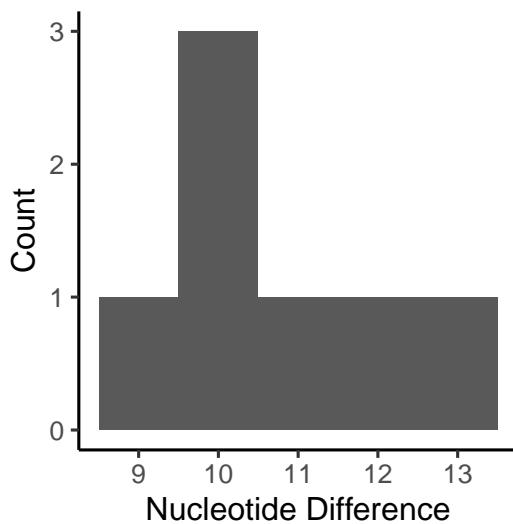
IGHV1-69-2*01

2 sequences assigned
No exact matches.



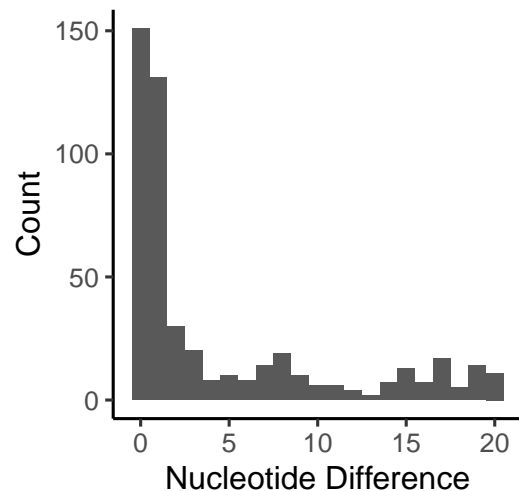
IGHV1-NL1*01

7 sequences assigned
No exact matches.



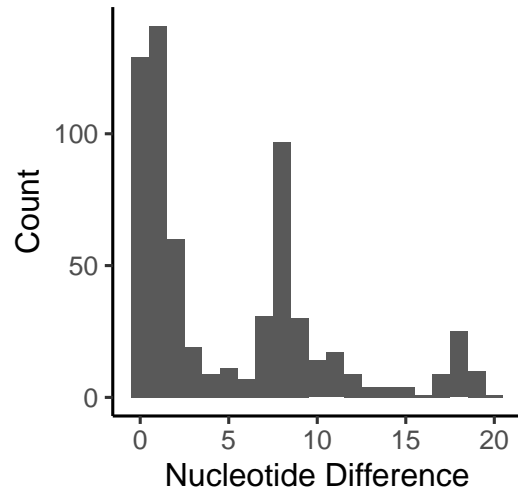
IGHV2-26*01

504 sequences assigned
151 (30%) exact matches, in which:
125 unique CDR3
6 unique J



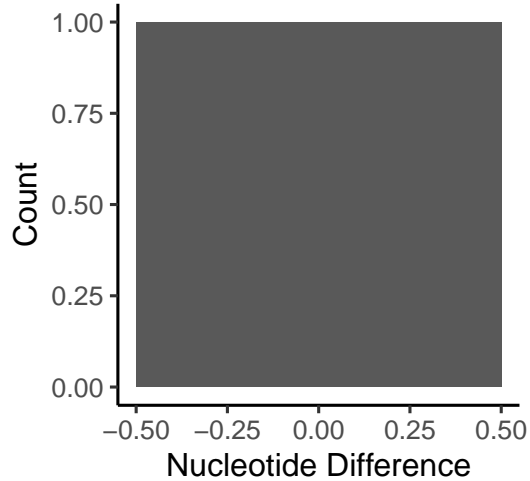
IGHV2-70*01

675 sequences assigned
129 (19.1%) exact matches, in which:
104 unique CDR3
5 unique J



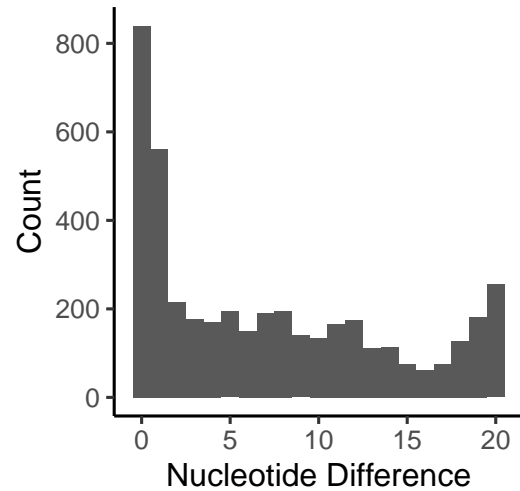
IGHV2-70D*14

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



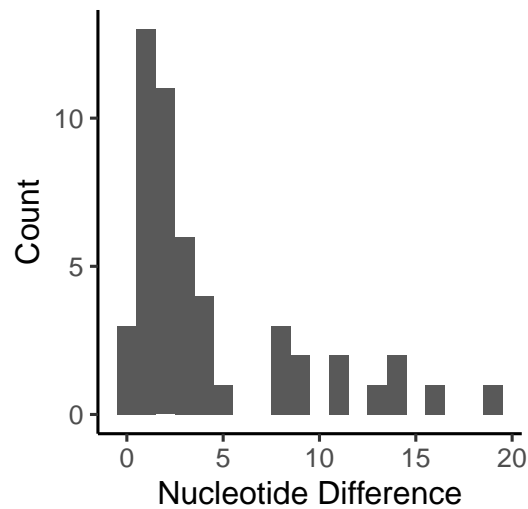
IGHV3-9*01

5582 sequences assigned
840 (15%) exact matches, in which:
494 unique CDR3
6 unique J



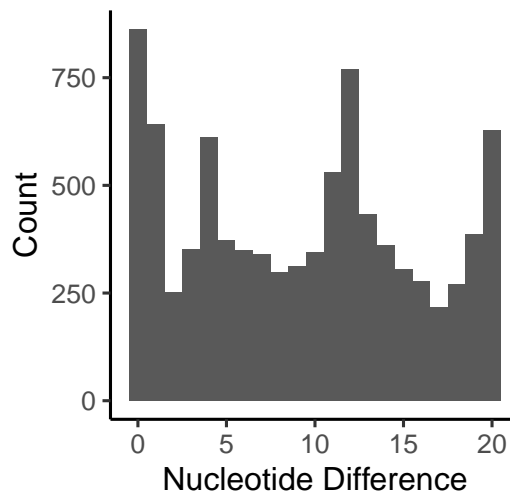
IGHV2-70*12

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



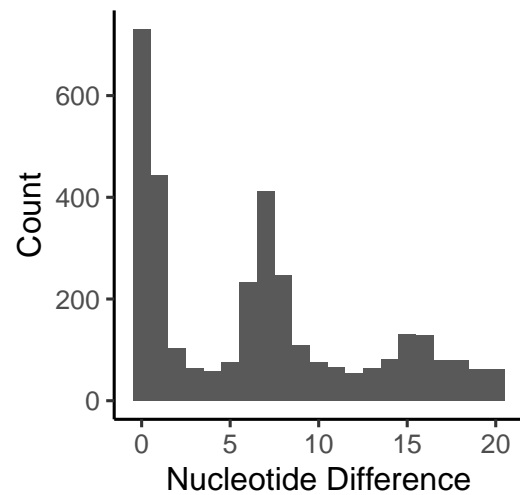
IGHV3-7*01

11602 sequences assigned
863 (7.4%) exact matches, in which:
614 unique CDR3
6 unique J



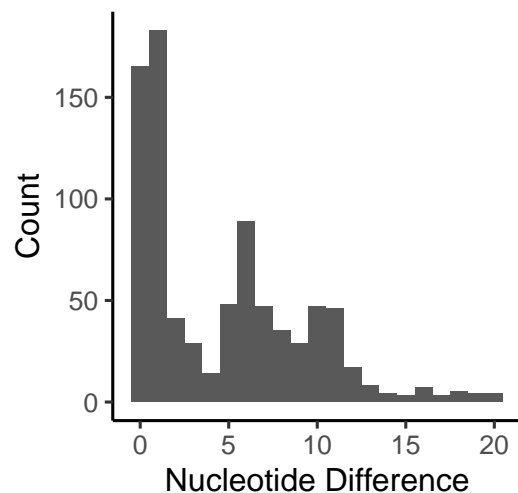
IGHV3-11*01

4096 sequences assigned
731 (17.8%) exact matches, in which:
489 unique CDR3
6 unique J



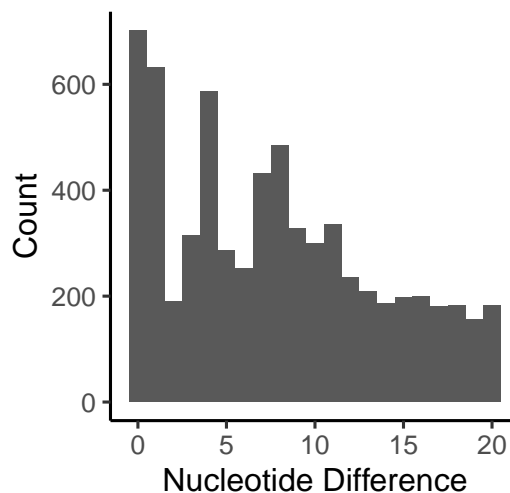
IGHV2-70*11_15

901 sequences assigned
165 (18.3%) exact matches, in which:
132 unique CDR3
6 unique J



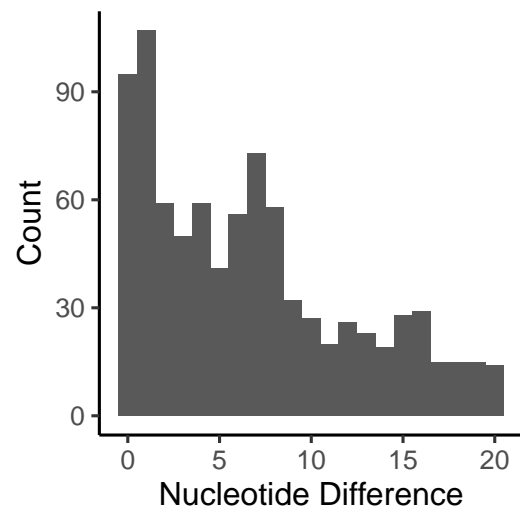
IGHV3-7*03

8137 sequences assigned
702 (8.6%) exact matches, in which:
470 unique CDR3
6 unique J



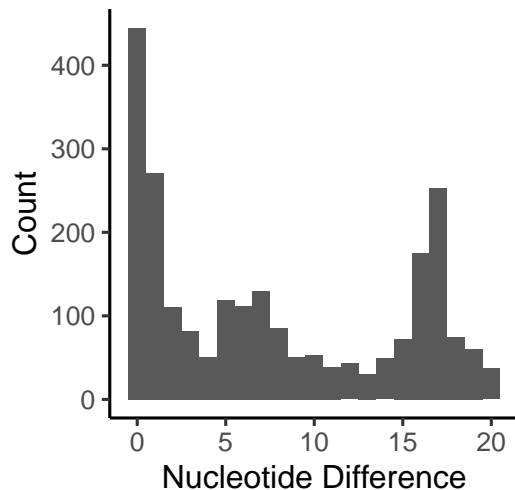
IGHV3-11*04

954 sequences assigned
95 (10%) exact matches, in which:
92 unique CDR3
6 unique J



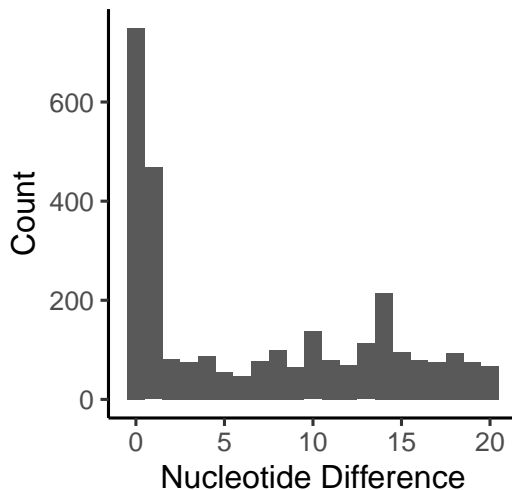
IGHV3-11*06

2905 sequences assigned
445 (15.3%) exact matches, in which:
314 unique CDR3
6 unique J



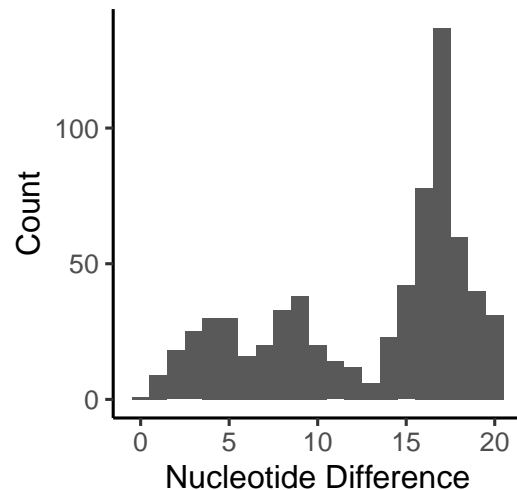
IGHV3-15*01_02

3338 sequences assigned
750 (22.5%) exact matches, in which:
468 unique CDR3
6 unique J



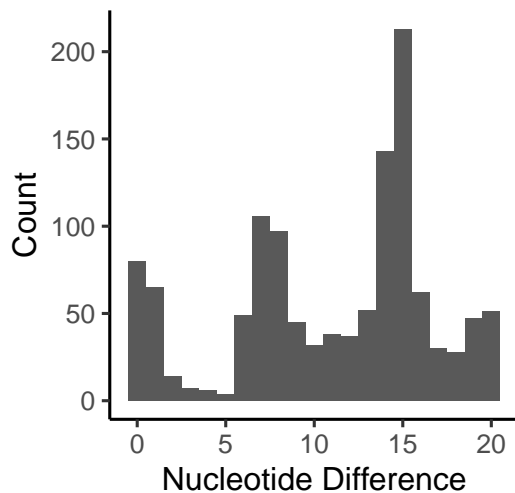
IGHV3-20*03_04

786 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



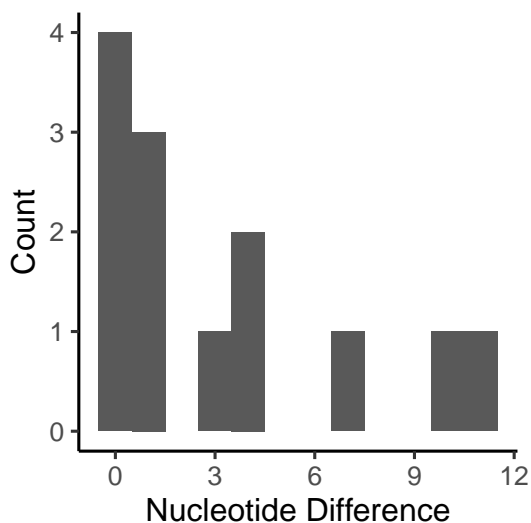
IGHV3-13*01

1491 sequences assigned
80 (5.4%) exact matches, in which:
47 unique CDR3
5 unique J



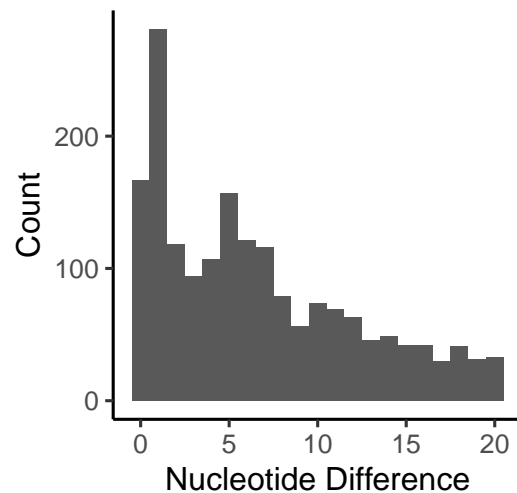
IGHV3-19*01

13 sequences assigned
4 (30.8%) exact matches, in which:
4 unique CDR3
2 unique J



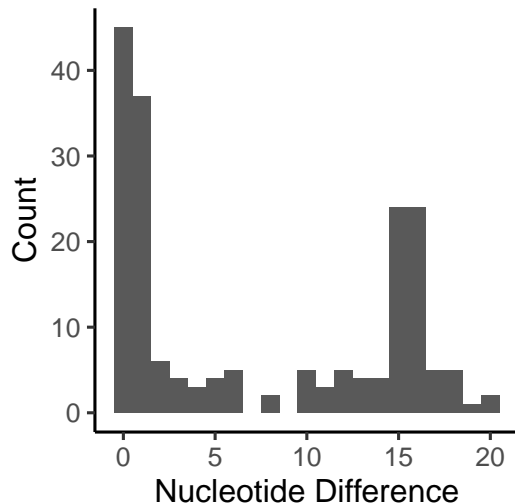
IGHV3-21*04

2129 sequences assigned
167 (7.8%) exact matches, in which:
155 unique CDR3
6 unique J



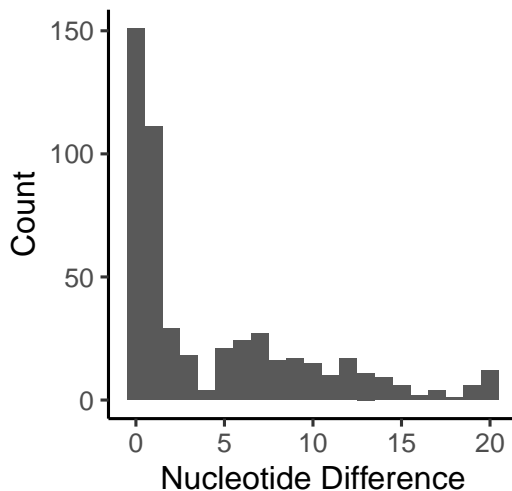
IGHV3-13*05

194 sequences assigned
45 (23.2%) exact matches, in which:
22 unique CDR3
5 unique J



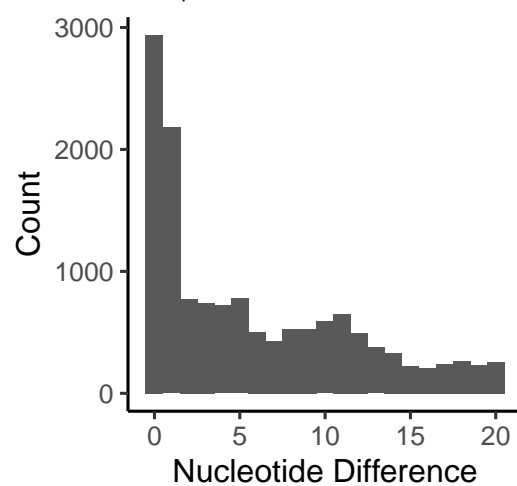
IGHV3-20*01_02

526 sequences assigned
151 (28.7%) exact matches, in which:
87 unique CDR3
5 unique J



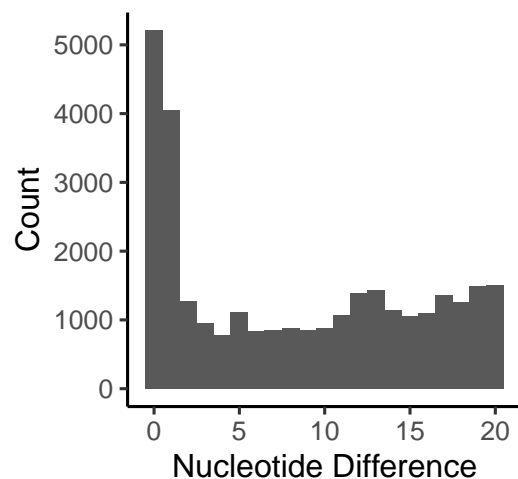
IGHV3-21*01_02

17675 sequences assigned
2938 (16.6%) exact matches, in which:
1837 unique CDR3
6 unique J



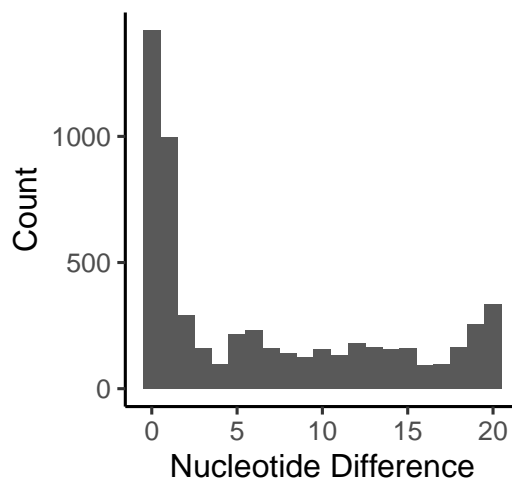
IGHV3-23*01_04

41427 sequences assigned
5210 (12.6%) exact matches, in which:
3002 unique CDR3
6 unique J



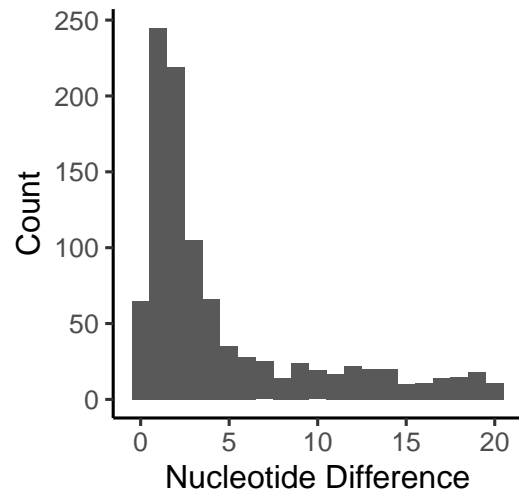
IGHV3-30*03

7520 sequences assigned
1420 (18.9%) exact matches, in which:
1005 unique CDR3
6 unique J



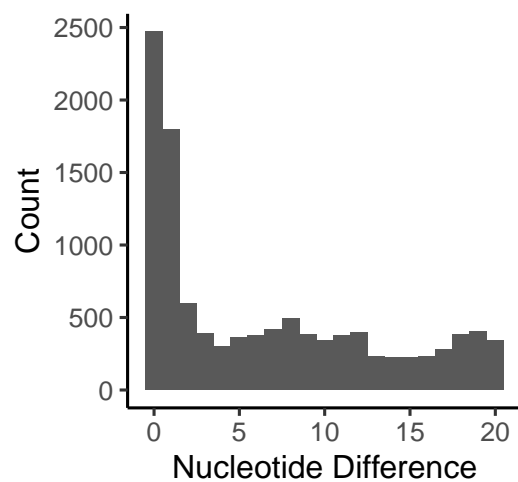
IGHV3-33*06

1085 sequences assigned
65 (6%) exact matches, in which:
62 unique CDR3
6 unique J



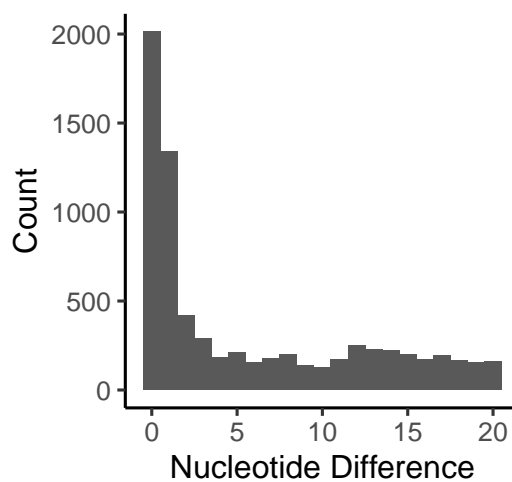
IGHV3-30-3*01

13470 sequences assigned
2471 (18.3%) exact matches, in which:
1570 unique CDR3
6 unique J



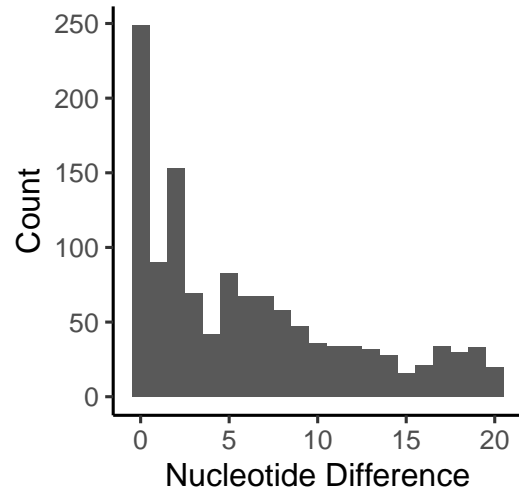
IGHV3-30*18

8729 sequences assigned
2013 (23.1%) exact matches, in which:
1243 unique CDR3
6 unique J



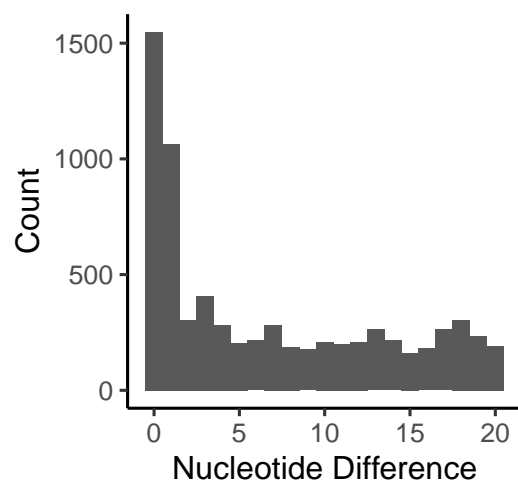
IGHV3-33*08

1575 sequences assigned
249 (15.8%) exact matches, in which:
205 unique CDR3
6 unique J



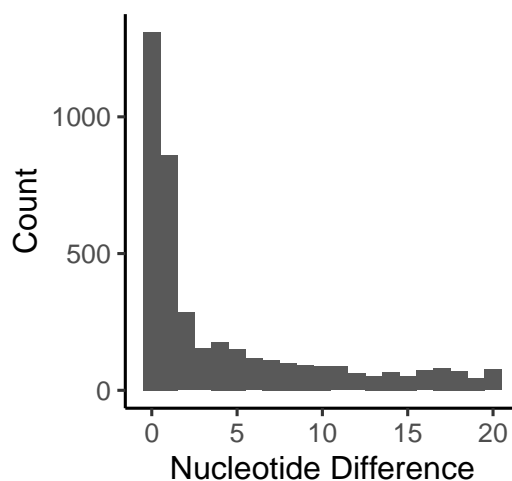
IGHV3-30*02

11853 sequences assigned
1548 (13.1%) exact matches, in which:
1096 unique CDR3
6 unique J



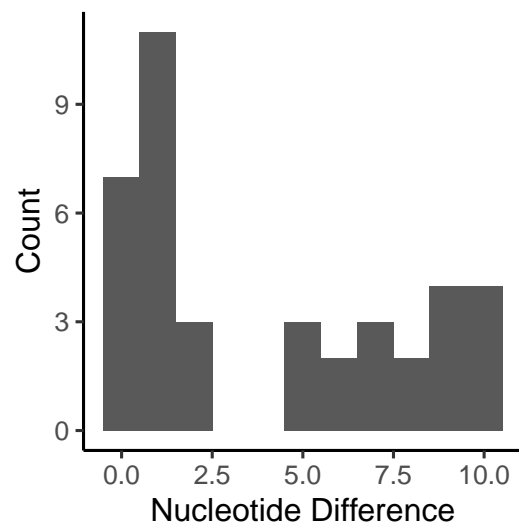
IGHV3-33*01

4738 sequences assigned
1310 (27.6%) exact matches, in which:
867 unique CDR3
6 unique J



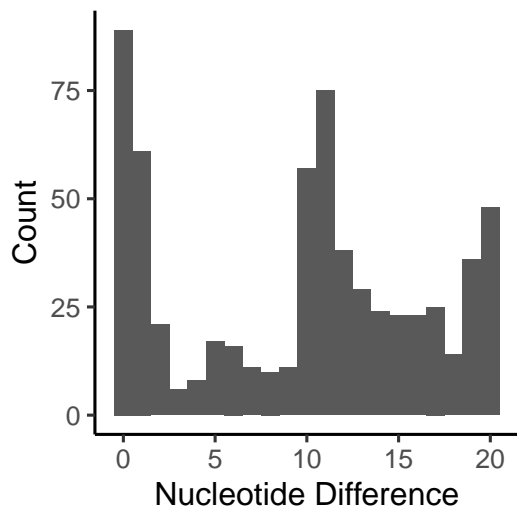
IGHV3-35*01

39 sequences assigned
7 (17.9%) exact matches, in which:
4 unique CDR3
2 unique J



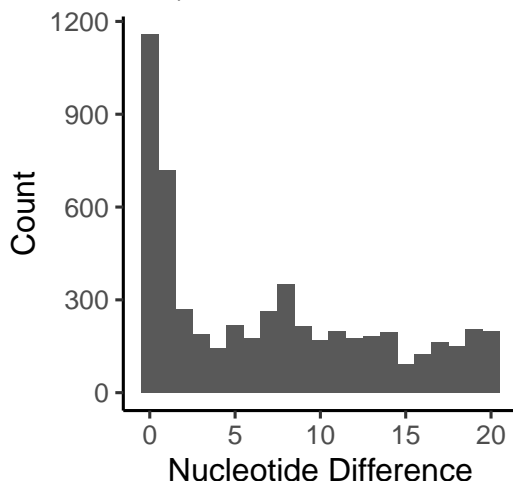
IGHV3-43*01

1001 sequences assigned
89 (8.9%) exact matches, in which:
52 unique CDR3
6 unique J



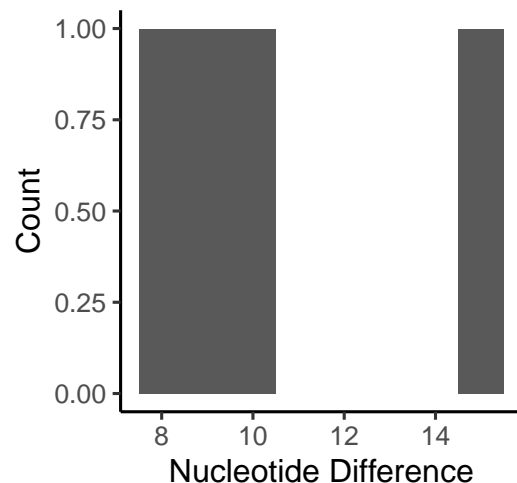
IGHV3-48*02

6220 sequences assigned
1158 (18.6%) exact matches, in which:
704 unique CDR3
6 unique J



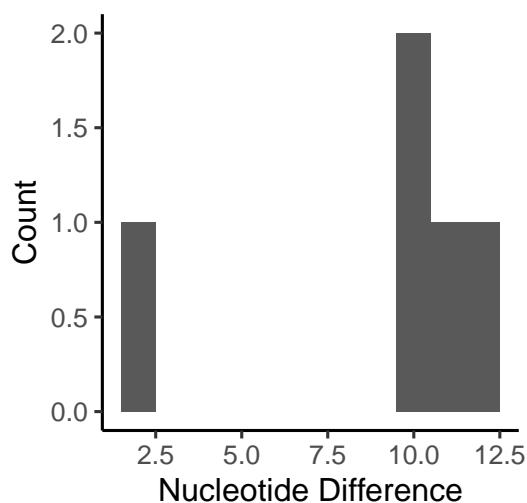
IGHV3-52*01_03

4 sequences assigned
No exact matches.



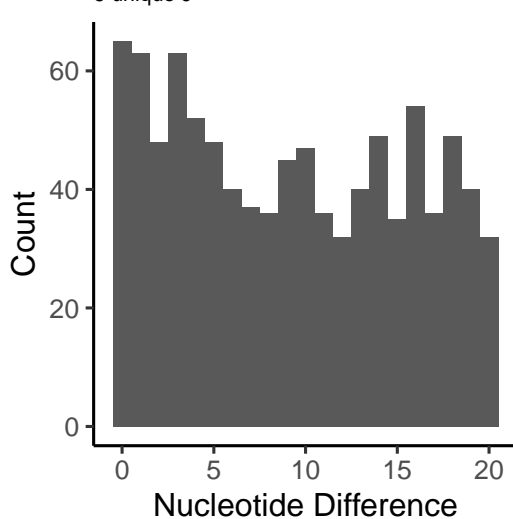
IGHV3-47*02

5 sequences assigned
No exact matches.



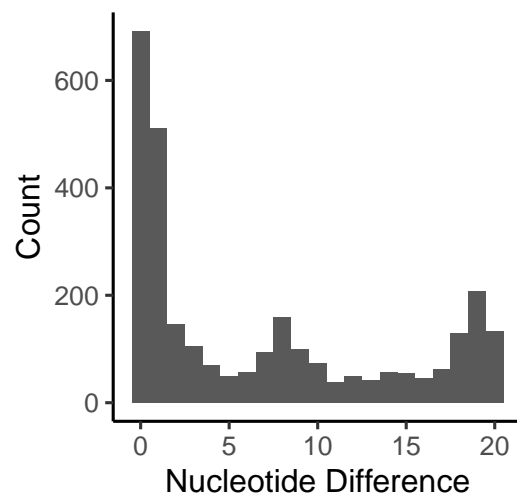
IGHV3-48*04

1383 sequences assigned
65 (4.7%) exact matches, in which:
63 unique CDR3
6 unique J



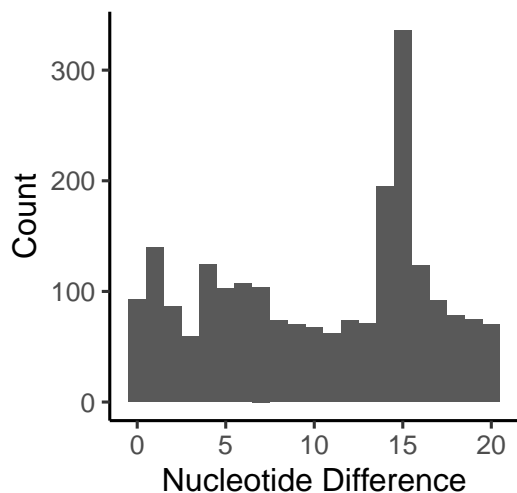
IGHV3-53*01_02

3554 sequences assigned
692 (19.5%) exact matches, in which:
409 unique CDR3
6 unique J



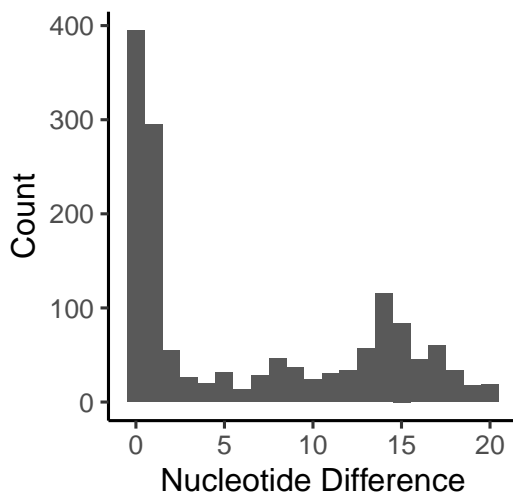
IGHV3-48*01

2407 sequences assigned
93 (3.9%) exact matches, in which:
89 unique CDR3
6 unique J



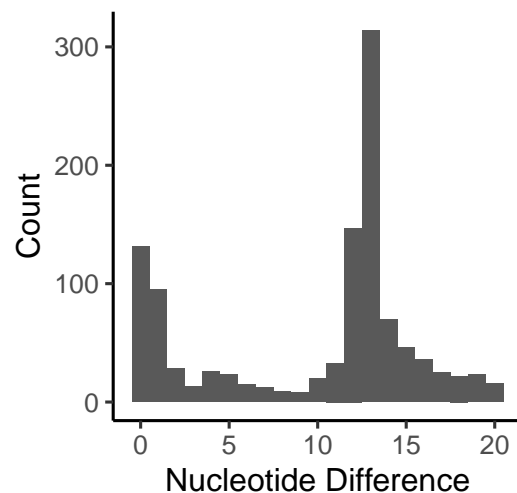
IGHV3-49*03_05

1536 sequences assigned
395 (25.7%) exact matches, in which:
231 unique CDR3
6 unique J



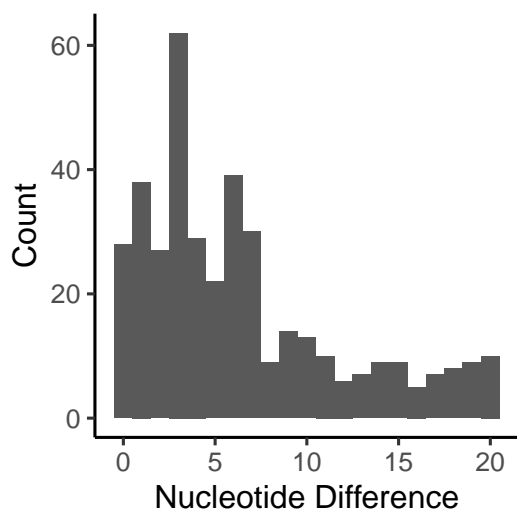
IGHV3-64*01

1185 sequences assigned
131 (11.1%) exact matches, in which:
80 unique CDR3
5 unique J



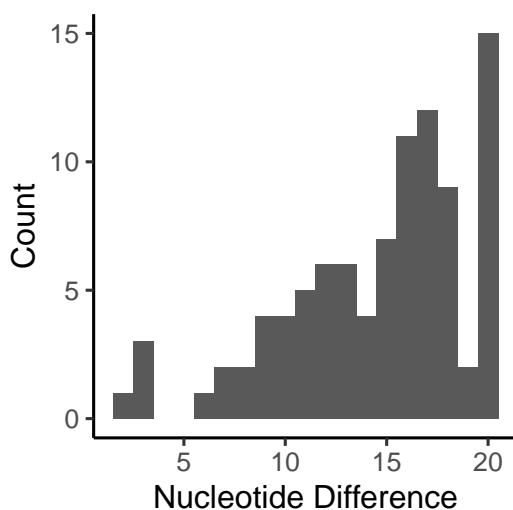
IGHV3-64*04

559 sequences assigned
28 (5%) exact matches, in which:
27 unique CDR3
5 unique J



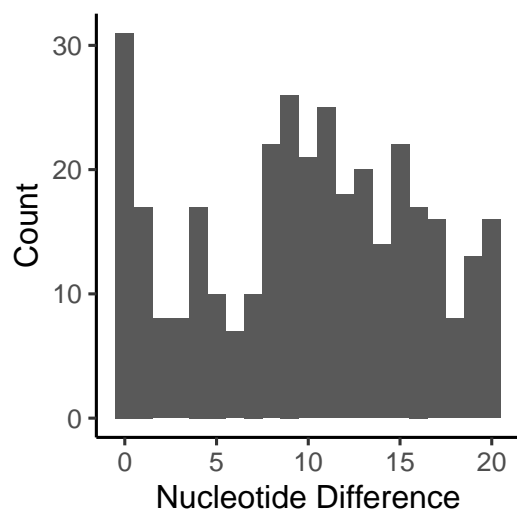
IGHV3-69-1*01

244 sequences assigned
No exact matches.



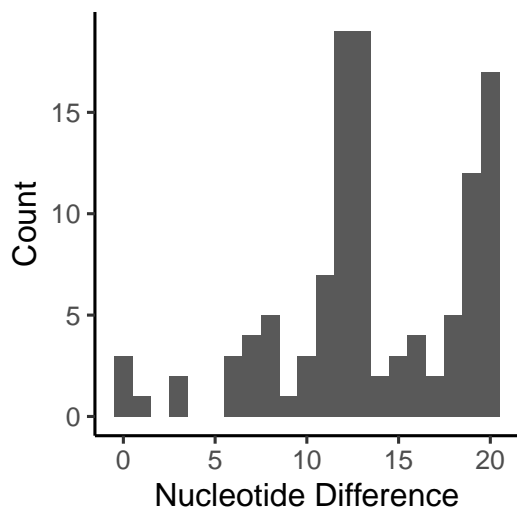
IGHV3-72*01

482 sequences assigned
31 (6.4%) exact matches, in which:
20 unique CDR3
4 unique J



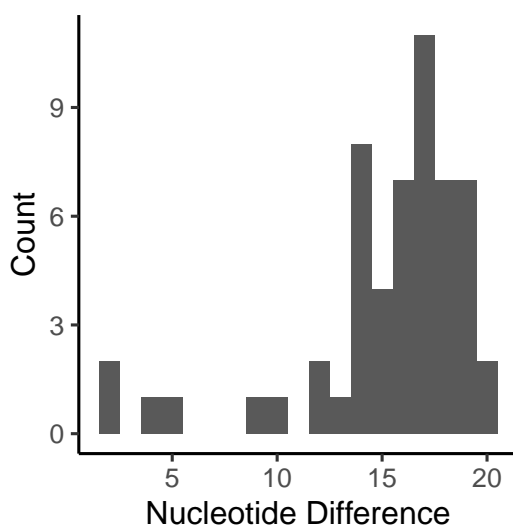
IGHV3-64*02_07

670 sequences assigned
3 (0.4%) exact matches, in which:
2 unique CDR3
1 unique J



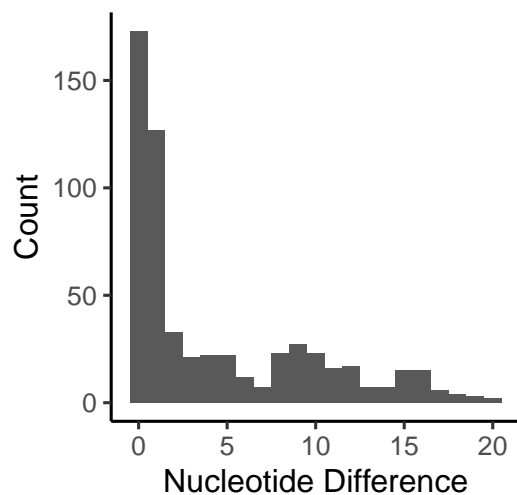
IGHV3-69-1*02

69 sequences assigned
No exact matches.



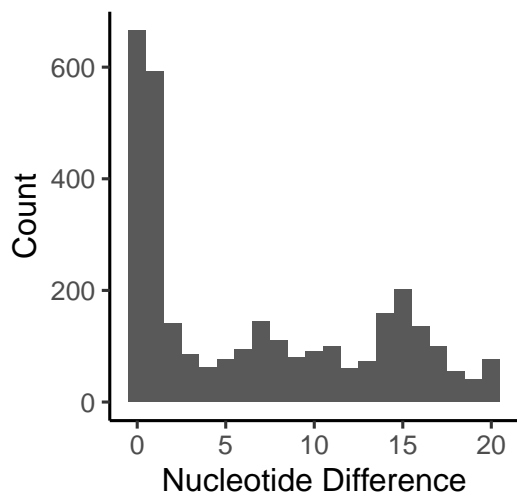
IGHV3-73*01_02

601 sequences assigned
173 (28.8%) exact matches, in which:
106 unique CDR3
5 unique J



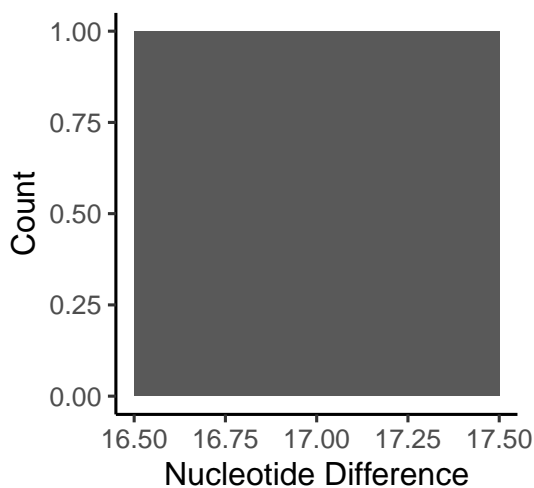
IGHV3-66*01

4004 sequences assigned
666 (16.6%) exact matches, in which:
443 unique CDR3
6 unique J



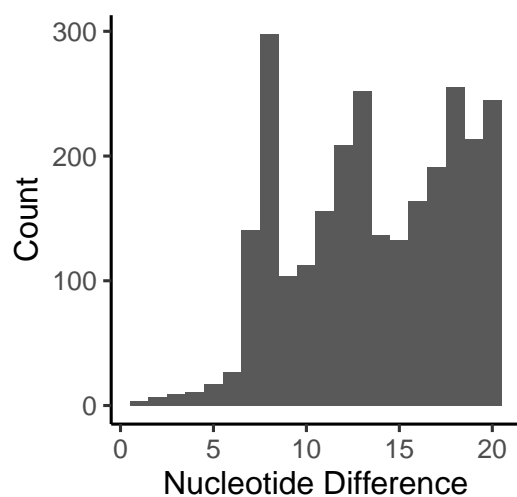
IGHV3-71*01_04

1 sequences assigned
No exact matches.



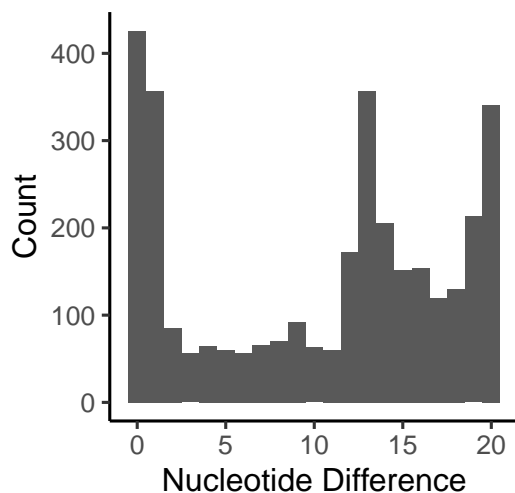
IGHV3-74*03

4904 sequences assigned
No exact matches.



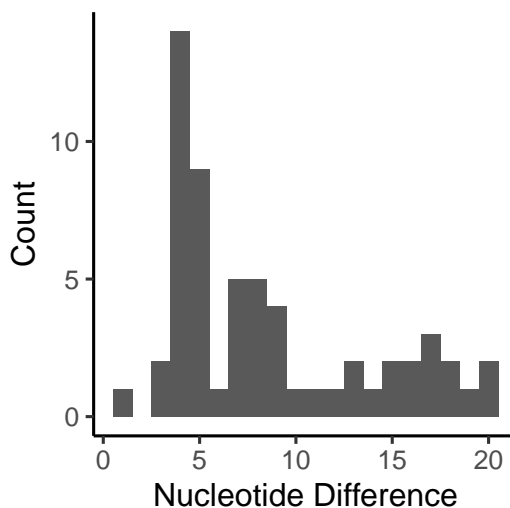
IGHV3–74*01_02

3920 sequences assigned
426 (10.9%) exact matches, in which:
246 unique CDR3
5 unique J



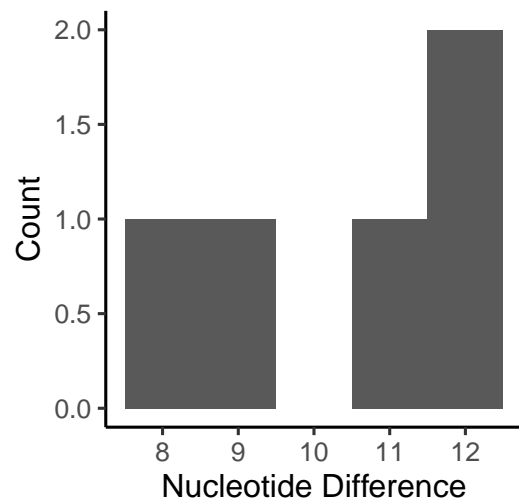
IGHV3–NL1*01

131 sequences assigned
No exact matches.



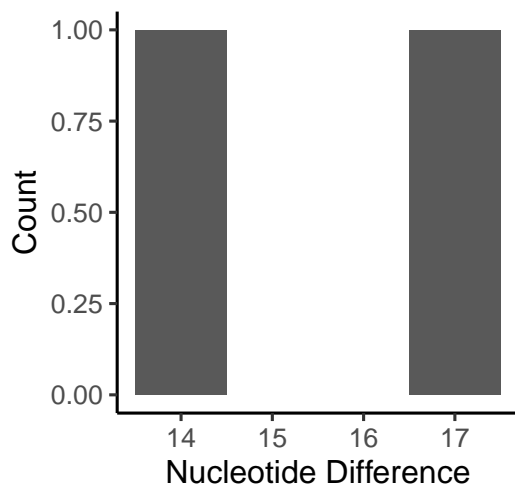
IGHV4–28*03

6 sequences assigned
No exact matches.



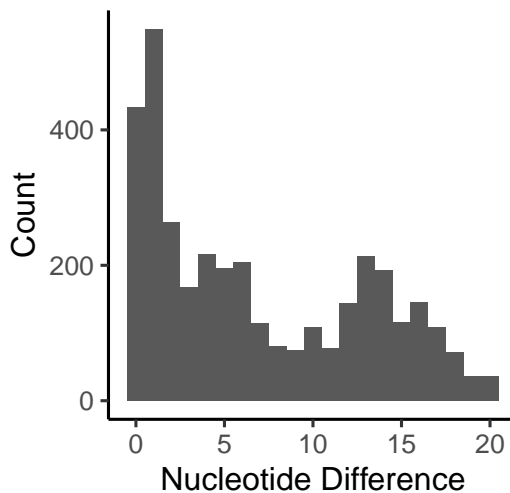
IGHV3–43D*04

3 sequences assigned
No exact matches.



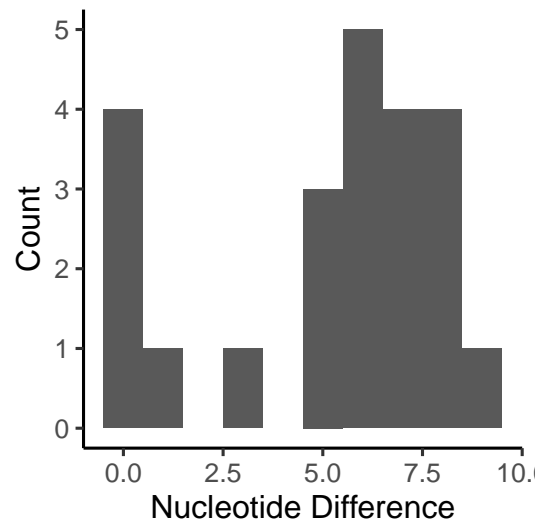
IGHV4–4*07

4541 sequences assigned
434 (9.6%) exact matches, in which:
376 unique CDR3
6 unique J



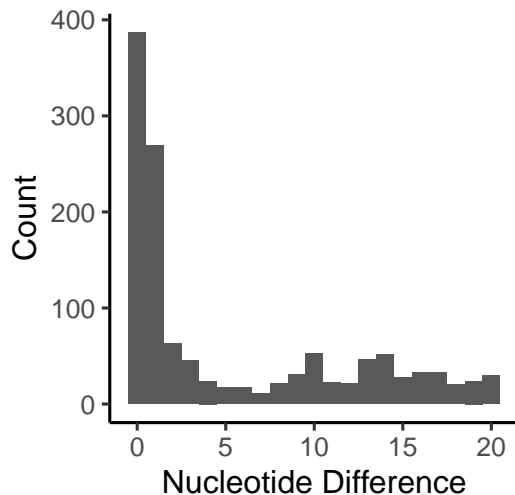
IGHV4–28*01_07

24 sequences assigned
4 (16.7%) exact matches, in which:
3 unique CDR3
1 unique J



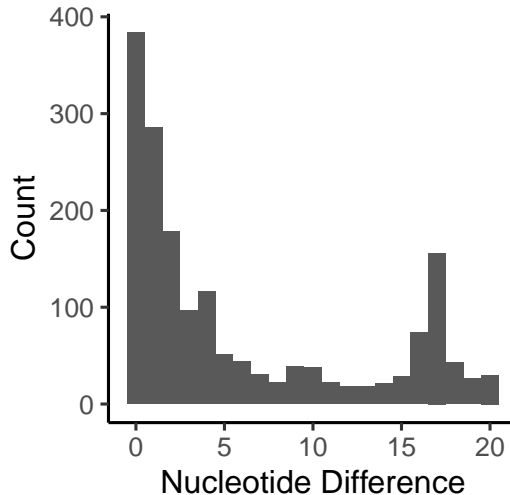
IGHV3–64D*09

2183 sequences assigned
387 (17.7%) exact matches, in which:
229 unique CDR3
6 unique J



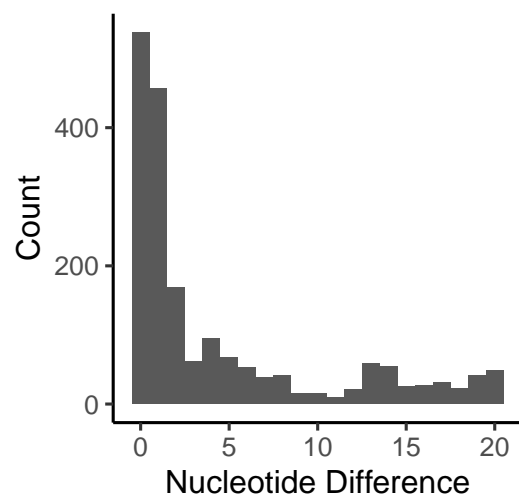
IGHV4–4*02_03

1940 sequences assigned
384 (19.8%) exact matches, in which:
325 unique CDR3
6 unique J



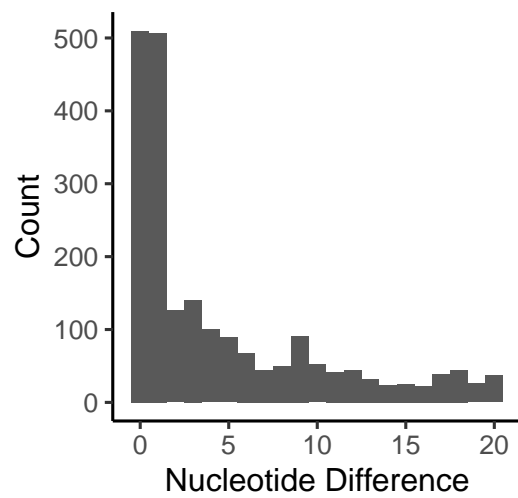
IGHV4–30–2*01

2044 sequences assigned
538 (26.3%) exact matches, in which:
383 unique CDR3
6 unique J



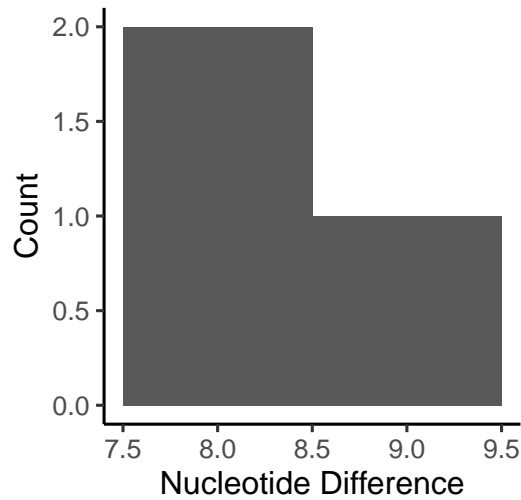
IGHV4-30-4*01

2702 sequences assigned
510 (18.9%) exact matches, in which:
412 unique CDR3
6 unique J



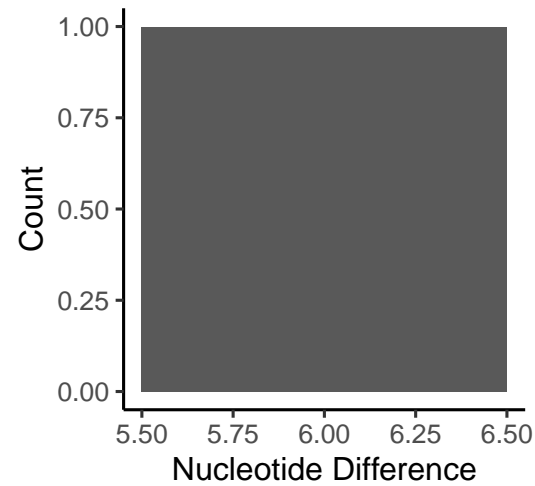
IGHV4-38-2*01

4 sequences assigned
No exact matches.



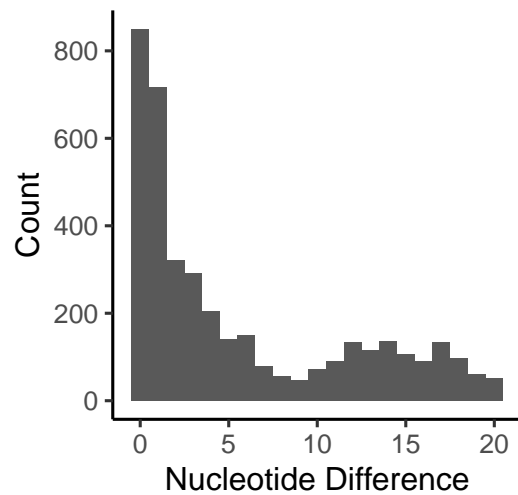
IGHV4-55*09

1 sequences assigned
No exact matches.



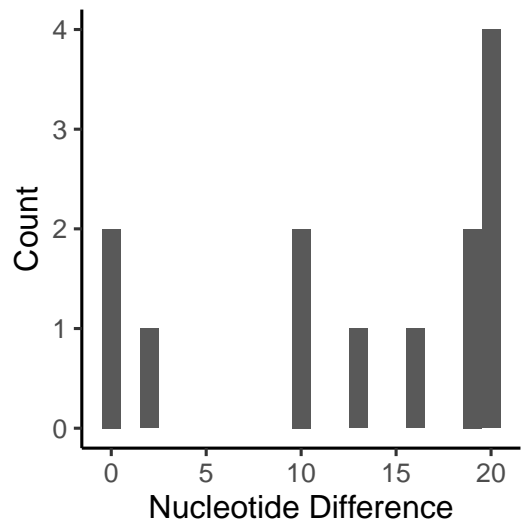
IGHV4-31*02

4777 sequences assigned
850 (17.8%) exact matches, in which:
725 unique CDR3
6 unique J



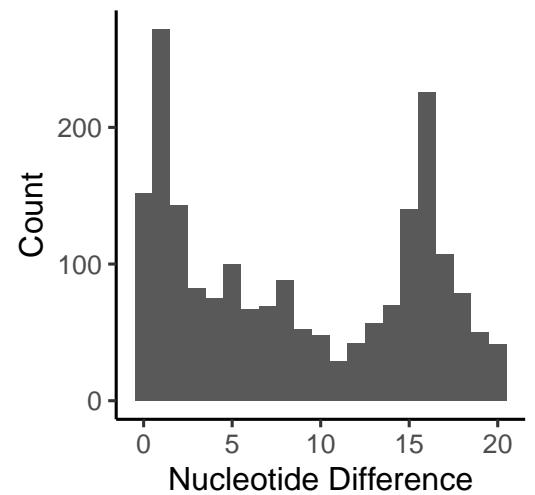
IGHV4-38-2*02

143 sequences assigned
2 (1.4%) exact matches, in which:
2 unique CDR3
2 unique J



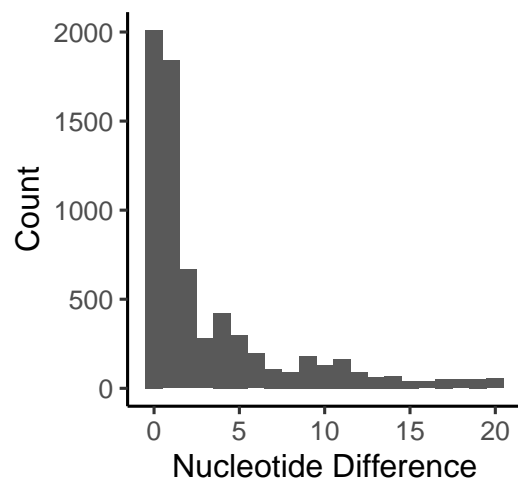
IGHV4-59*08

2593 sequences assigned
152 (5.9%) exact matches, in which:
129 unique CDR3
6 unique J



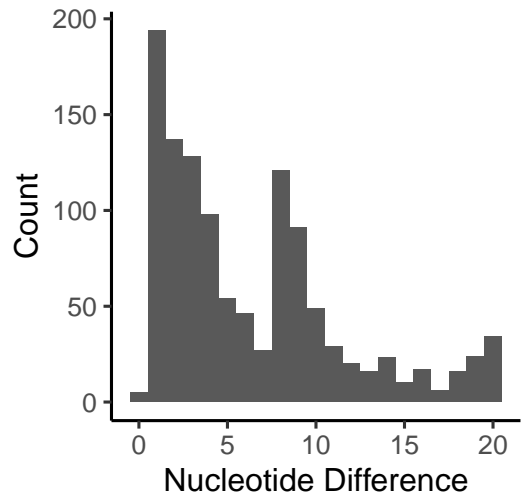
IGHV4-34*01_02

7847 sequences assigned
2011 (25.6%) exact matches, in which:
1605 unique CDR3
6 unique J



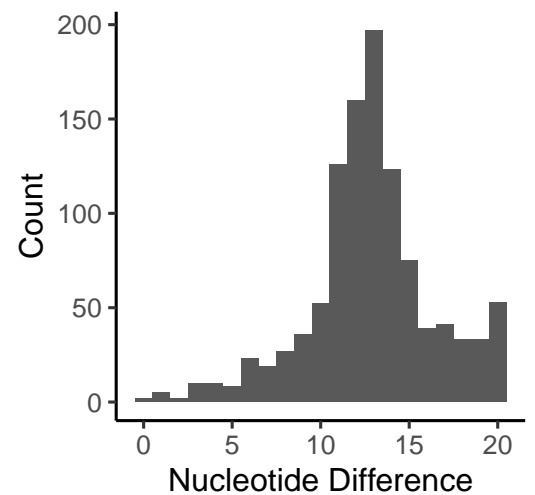
IGHV4-39*07

1496 sequences assigned
5 (0.3%) exact matches, in which:
5 unique CDR3
4 unique J



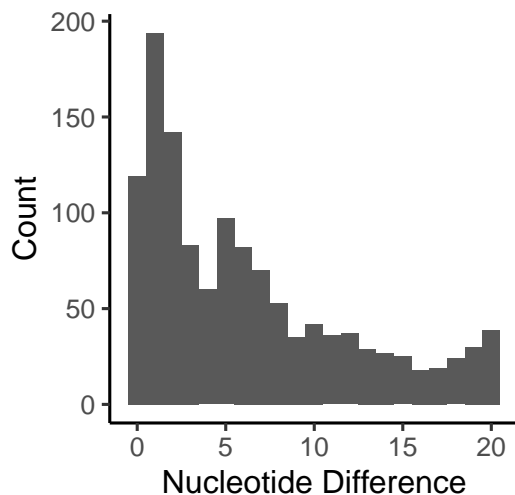
IGHV4-59*11

1204 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
2 unique J



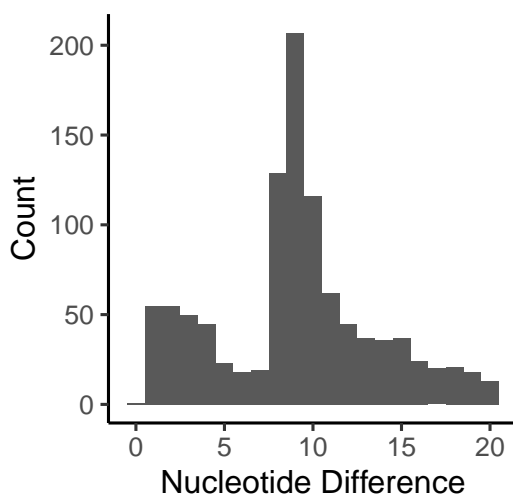
IGHV4–59*12

1674 sequences assigned
119 (7.1%) exact matches, in which:
116 unique CDR3
5 unique J



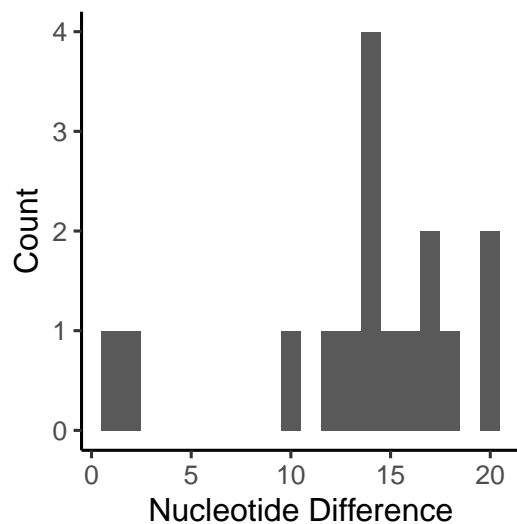
IGHV4–61*08

1169 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



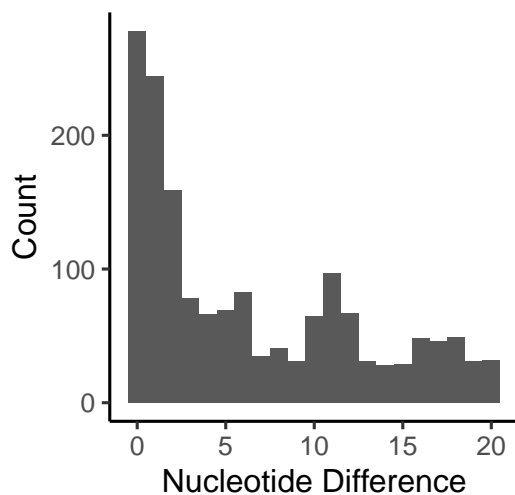
IGHV4/OR15–8*01

101 sequences assigned
No exact matches.



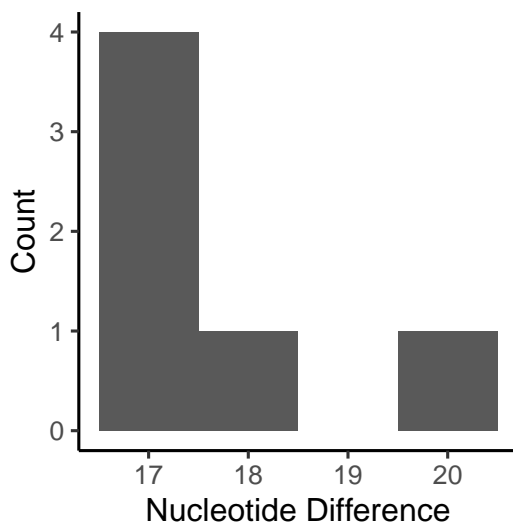
IGHV4–61*01

1906 sequences assigned
278 (14.6%) exact matches, in which:
259 unique CDR3
5 unique J



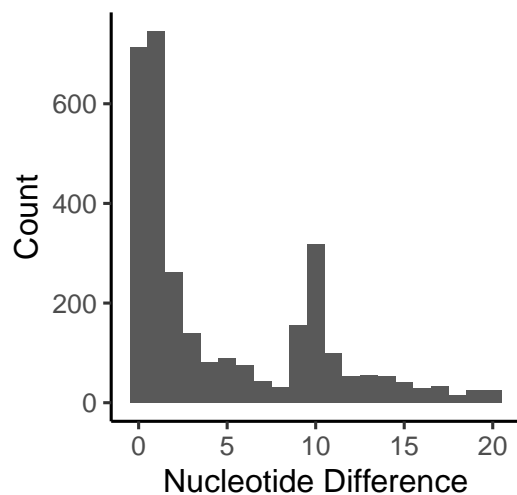
IGHV1/OR15–2*02_03

8 sequences assigned
No exact matches.



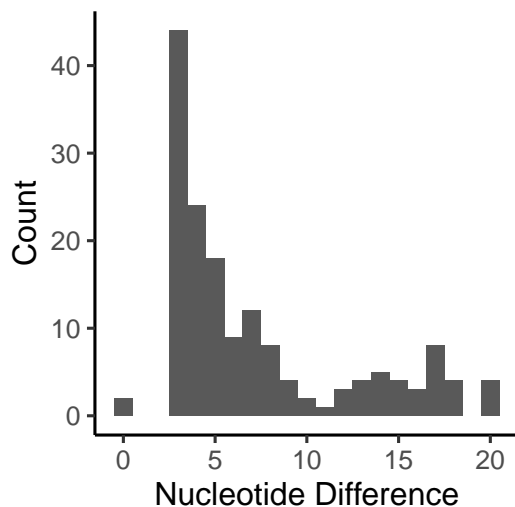
IGHV5–10–1*01_03

3178 sequences assigned
713 (22.4%) exact matches, in which:
452 unique CDR3
6 unique J



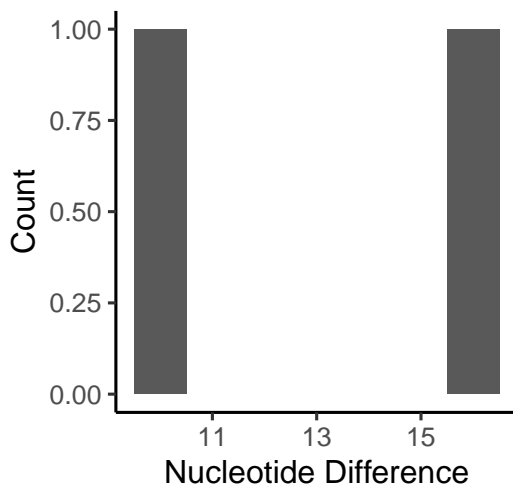
IGHV4–61*02

187 sequences assigned
2 (1.1%) exact matches, in which:
2 unique CDR3
2 unique J



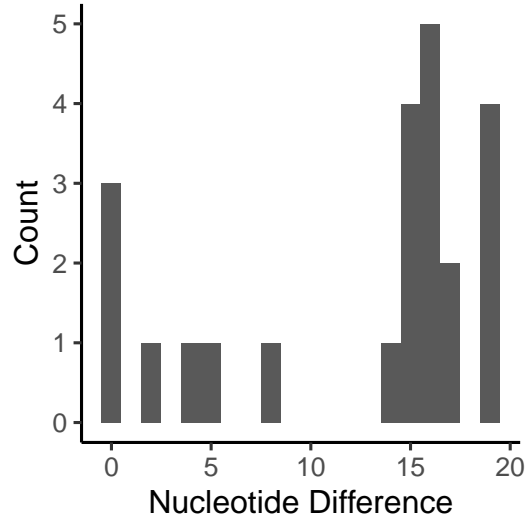
IGHV1/OR15–3*02

3 sequences assigned
No exact matches.



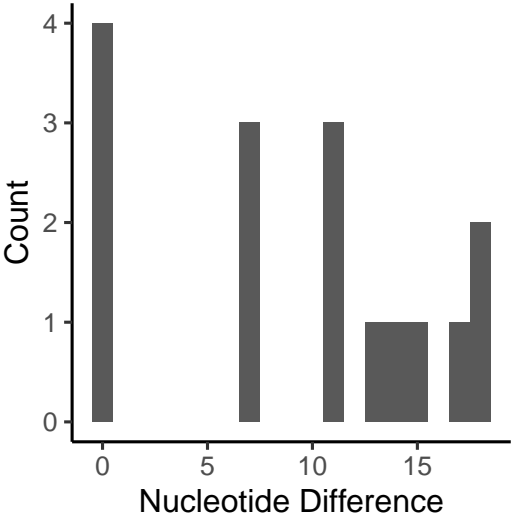
IGHV5–51*04

46 sequences assigned
3 (6.5%) exact matches, in which:
3 unique CDR3
2 unique J



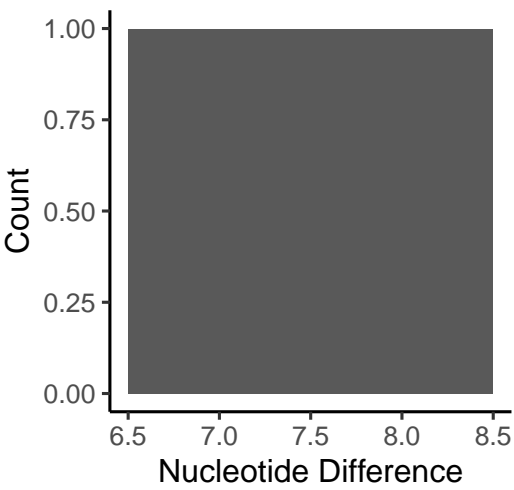
IGHV5–51*06

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



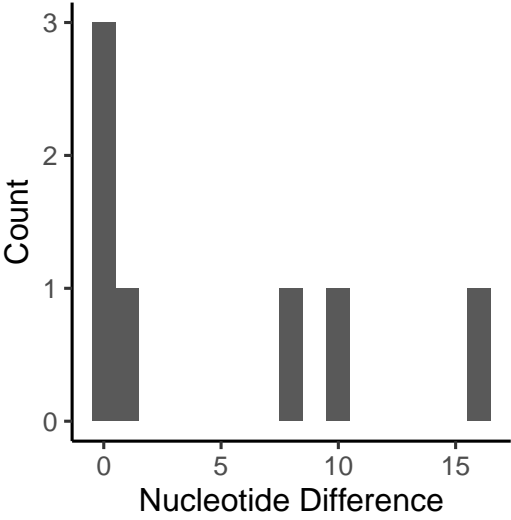
IGHV3/OR16–9*01

2 sequences assigned
No exact matches.



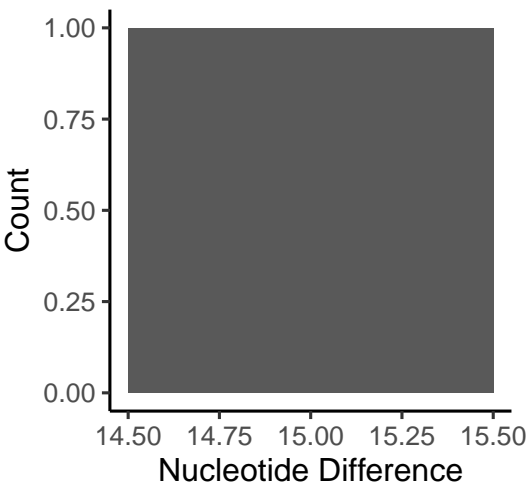
IGHV5–51*07

15 sequences assigned
3 (20%) exact matches, in which:
3 unique CDR3
2 unique J



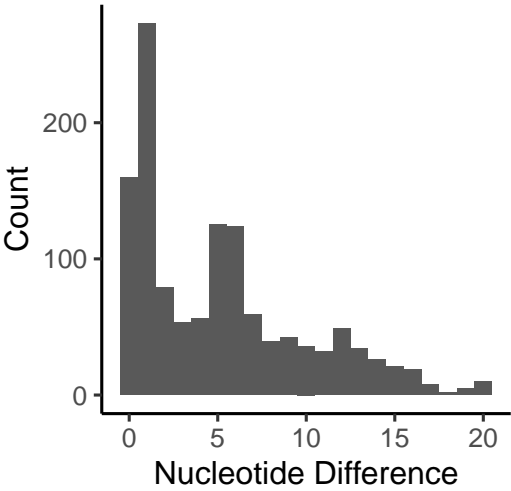
IGHV3/OR16–13*01

5 sequences assigned
No exact matches.



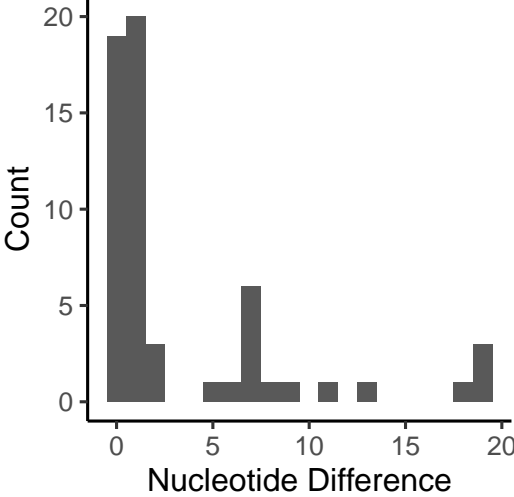
IGHV6–1*01_02

1309 sequences assigned
160 (12.2%) exact matches, in which:
142 unique CDR3
6 unique J



IGHV7–4–1*01

58 sequences assigned
19 (32.8%) exact matches, in which:
11 unique CDR3
4 unique J





Warning – no inferred sequences found.