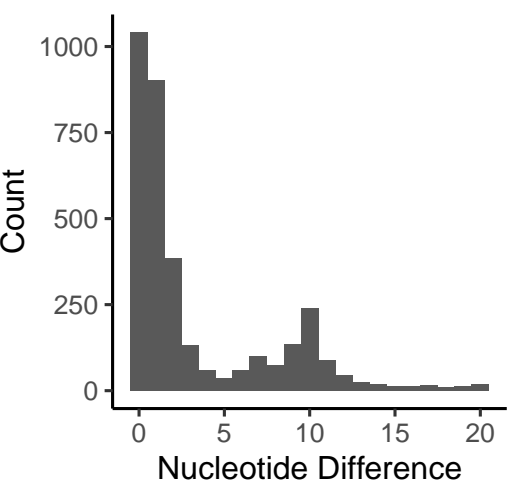


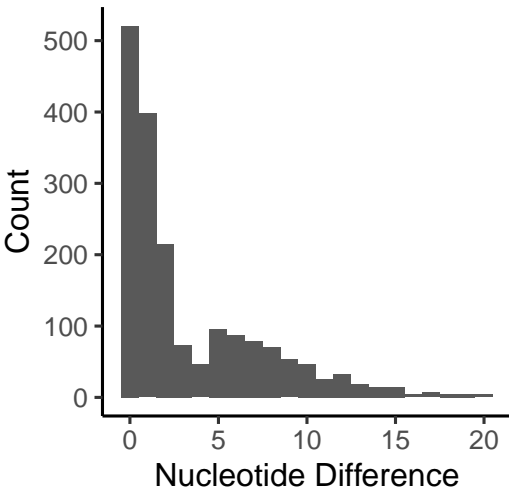
IGHV1-2*02

3817 sequences assigned
1041 (27.3%) exact matches, in which:
984 unique CDR3
6 unique J



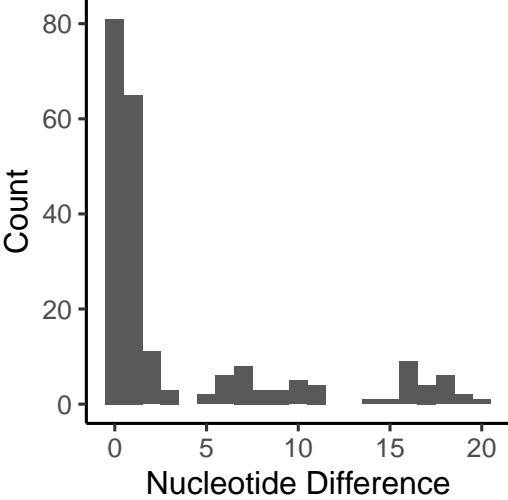
IGHV1-8*01

1856 sequences assigned
521 (28.1%) exact matches, in which:
503 unique CDR3
6 unique J



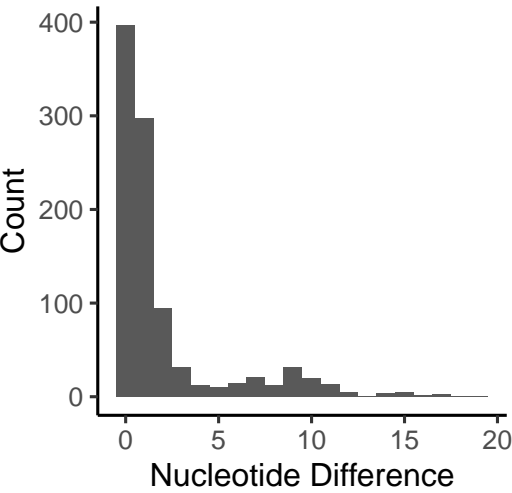
IGHV1-24*01

217 sequences assigned
81 (37.3%) exact matches, in which:
77 unique CDR3
4 unique J



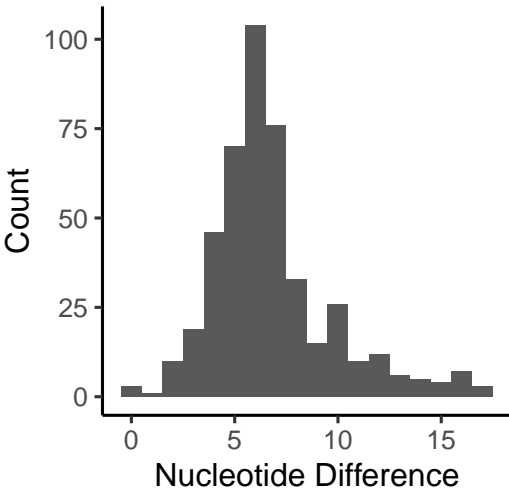
IGHV1-2*04

980 sequences assigned
397 (40.5%) exact matches, in which:
376 unique CDR3
6 unique J



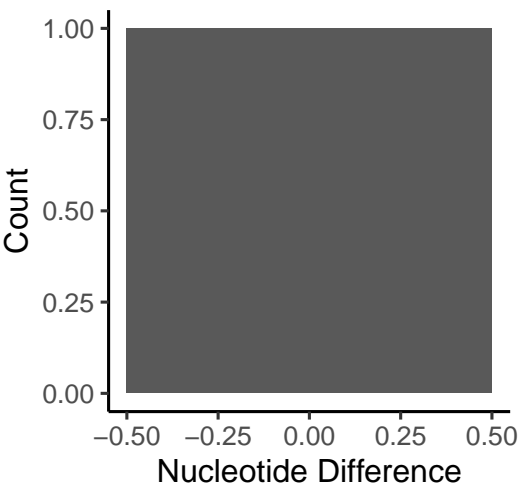
IGHV1-8*02

454 sequences assigned
3 (0.7%) exact matches, in which:
3 unique CDR3
3 unique J



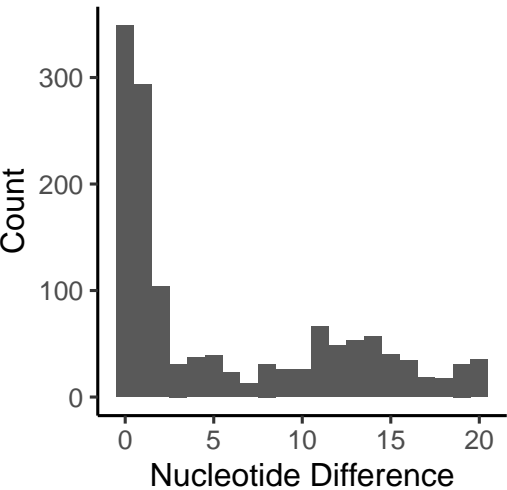
IGHV1-38-4*01

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



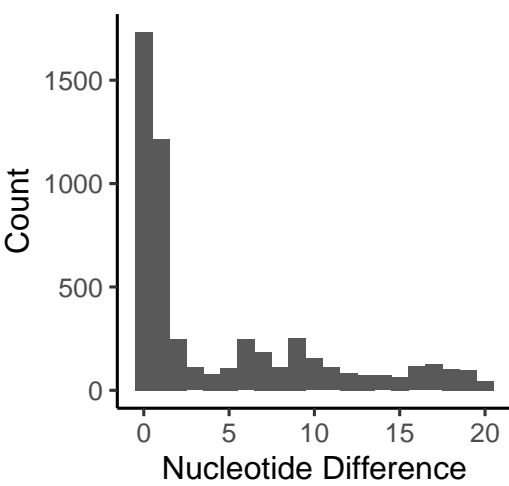
IGHV1-3*01_05

1505 sequences assigned
349 (23.2%) exact matches, in which:
328 unique CDR3
6 unique J



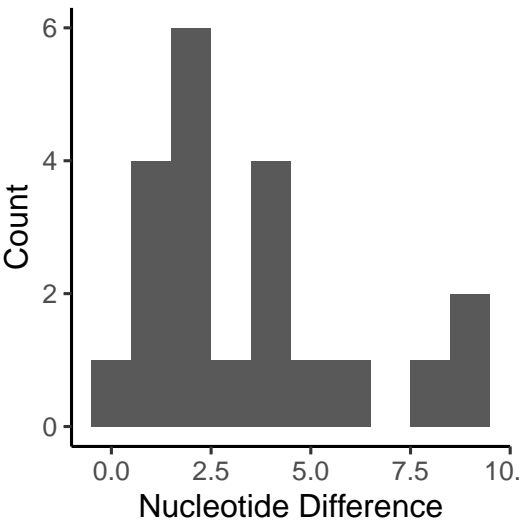
IGHV1-18*01

5640 sequences assigned
1733 (30.7%) exact matches, in which:
1624 unique CDR3
6 unique J



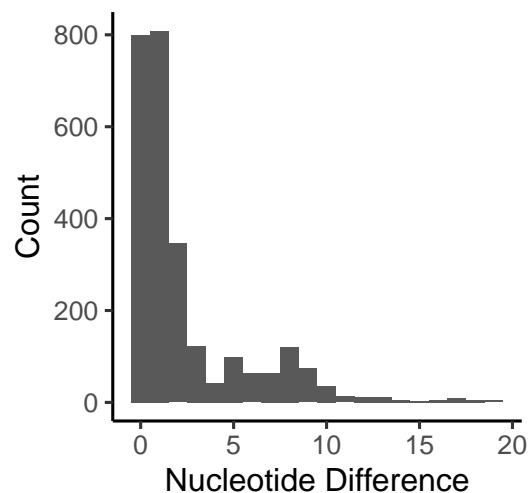
IGHV1-45*02

23 sequences assigned
1 (4.3%) exact matches, in which:
1 unique CDR3
1 unique J



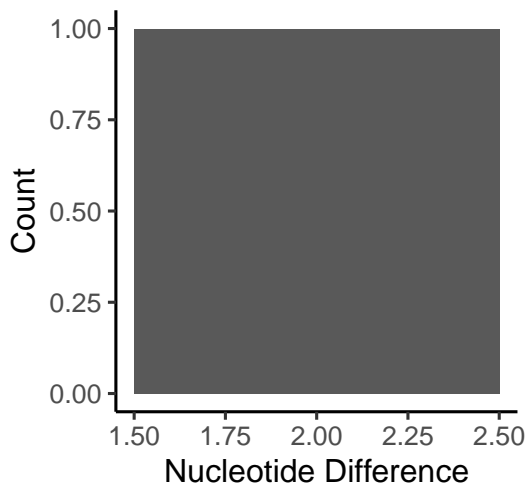
IGHV1-46*01

2654 sequences assigned
799 (30.1%) exact matches, in which:
765 unique CDR3
6 unique J



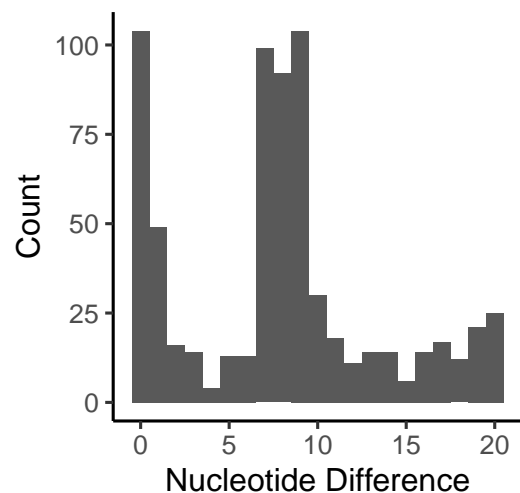
IGHV1-68*01

2 sequences assigned
No exact matches.



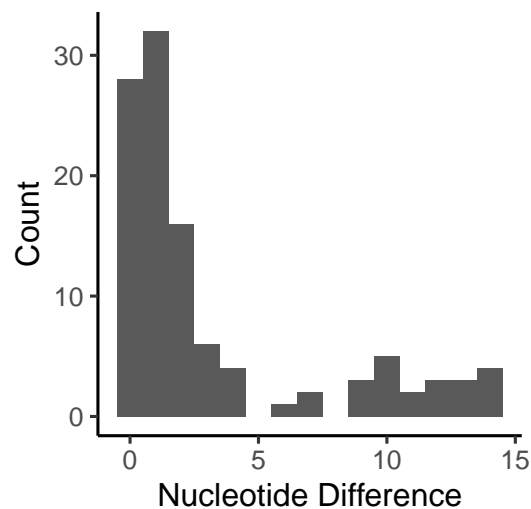
IGHV1-69*06_14

732 sequences assigned
104 (14.2%) exact matches, in which:
103 unique CDR3
5 unique J



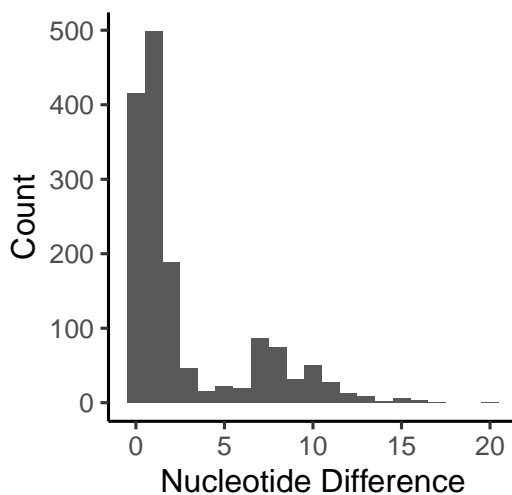
IGHV1-58*02

110 sequences assigned
28 (25.5%) exact matches, in which:
28 unique CDR3
4 unique J



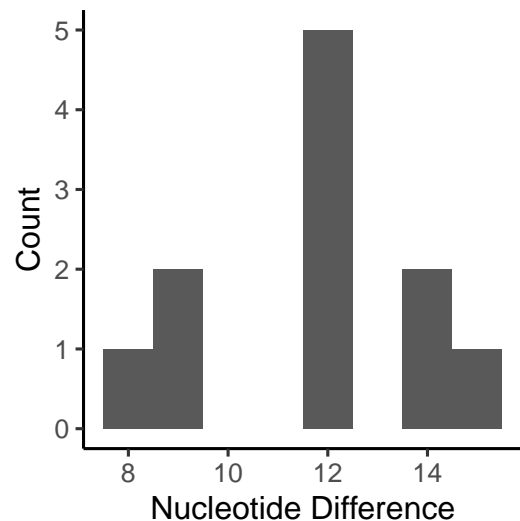
IGHV1-69*02

1517 sequences assigned
415 (27.4%) exact matches, in which:
398 unique CDR3
6 unique J



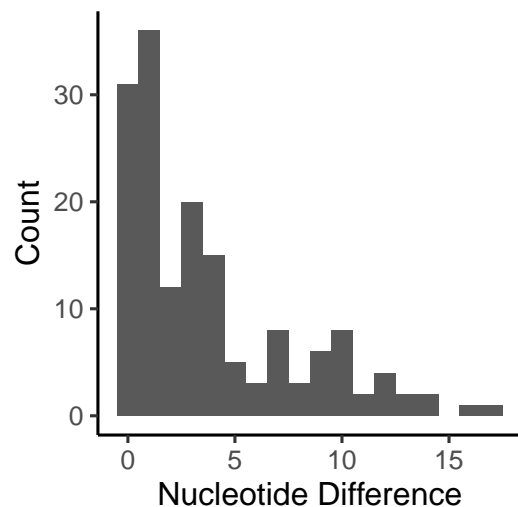
IGHV1-NL1*01

11 sequences assigned
No exact matches.



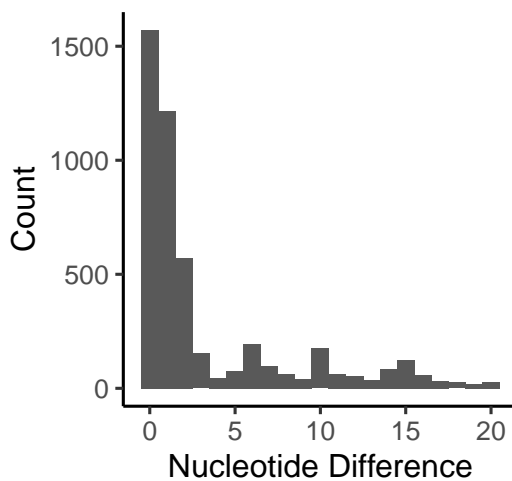
IGHV1-58*01_03

159 sequences assigned
31 (19.5%) exact matches, in which:
31 unique CDR3
4 unique J



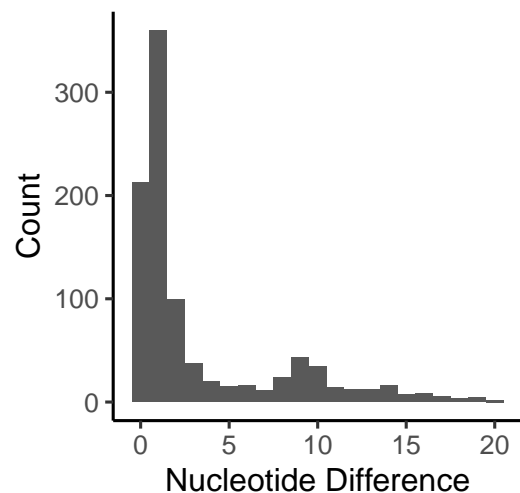
IGHV1-69*01_12_13

4842 sequences assigned
1571 (32.4%) exact matches, in which:
1488 unique CDR3
6 unique J



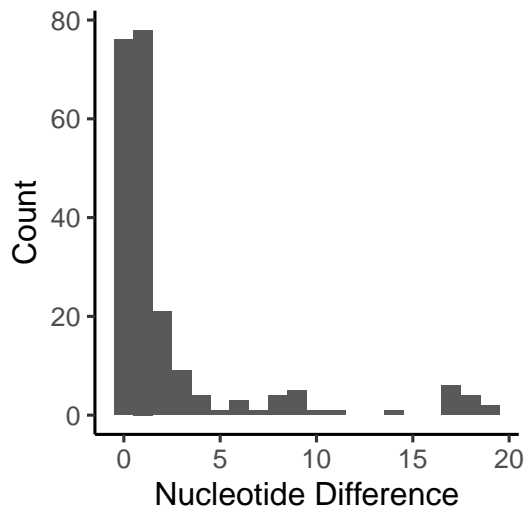
IGHV2-5*02

987 sequences assigned
213 (21.6%) exact matches, in which:
185 unique CDR3
6 unique J



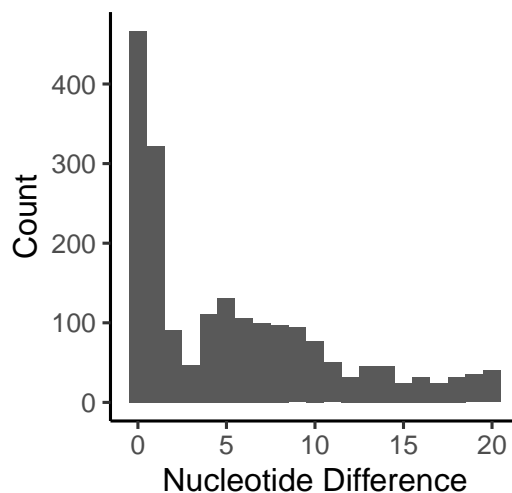
IGHV2-26*01

219 sequences assigned
76 (34.7%) exact matches, in which:
63 unique CDR3
5 unique J



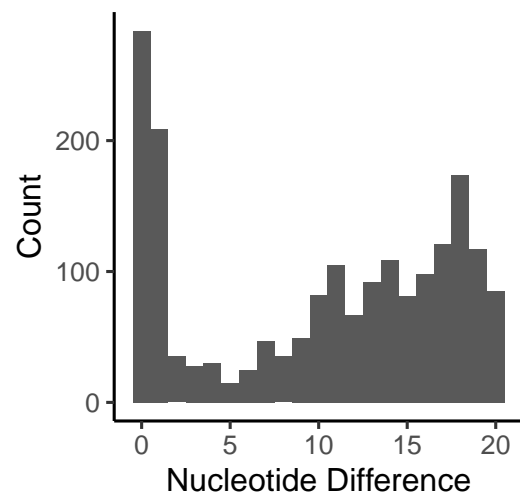
IGHV3-7*01

2148 sequences assigned
467 (21.7%) exact matches, in which:
387 unique CDR3
6 unique J



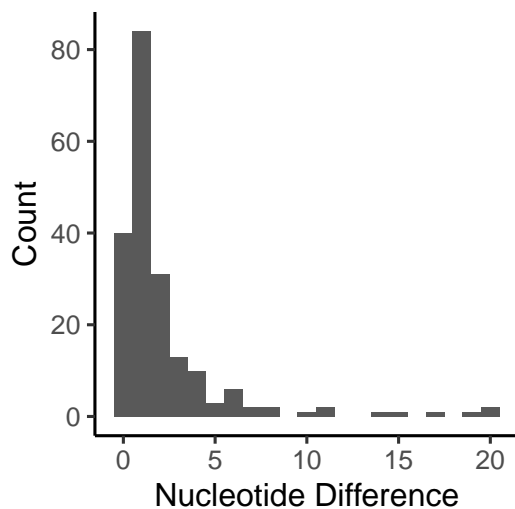
IGHV3-9*01

2448 sequences assigned
284 (11.6%) exact matches, in which:
216 unique CDR3
6 unique J



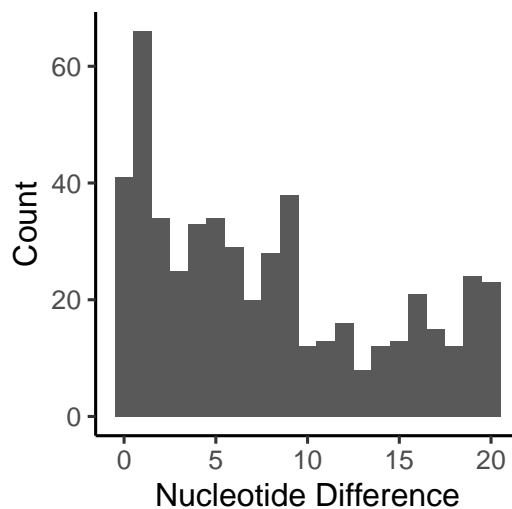
IGHV2-70*01

200 sequences assigned
40 (20%) exact matches, in which:
33 unique CDR3
4 unique J



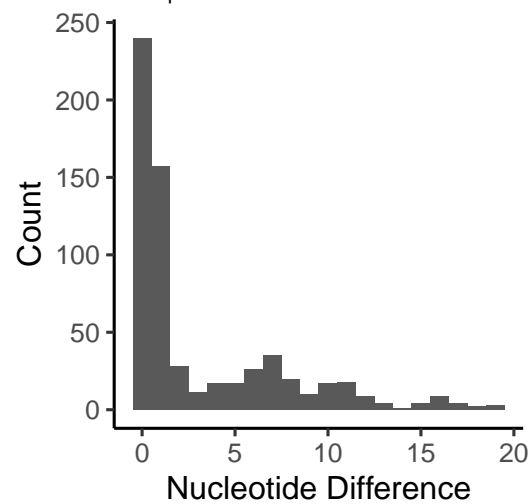
IGHV3-7*03

775 sequences assigned
41 (5.3%) exact matches, in which:
34 unique CDR3
4 unique J



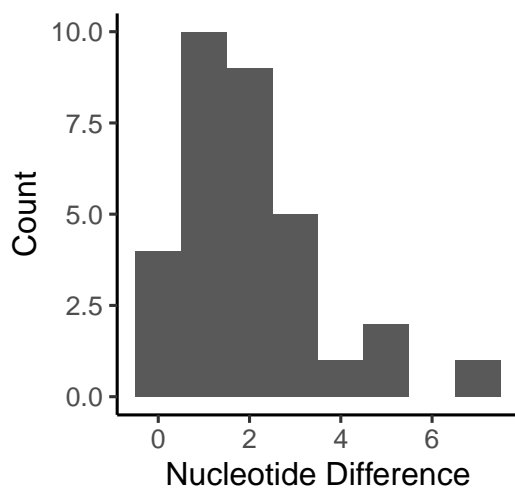
IGHV3-11*01

643 sequences assigned
240 (37.3%) exact matches, in which:
190 unique CDR3
6 unique J



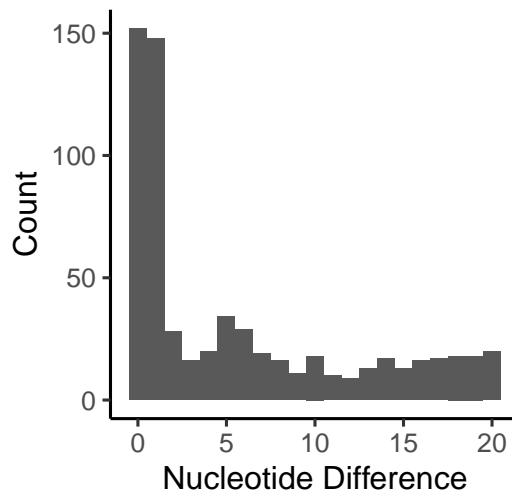
IGHV2-70*12

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



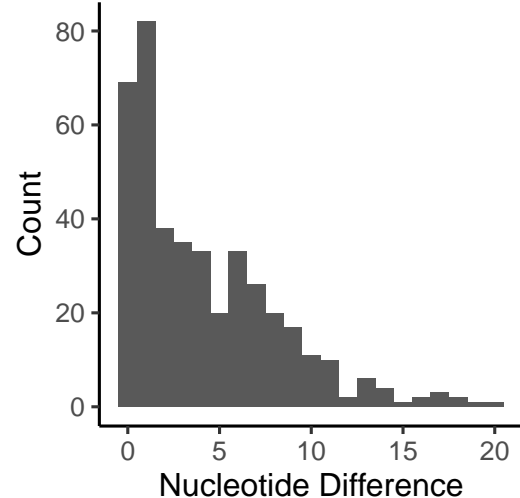
IGHV3-7*04

790 sequences assigned
152 (19.2%) exact matches, in which:
112 unique CDR3
6 unique J



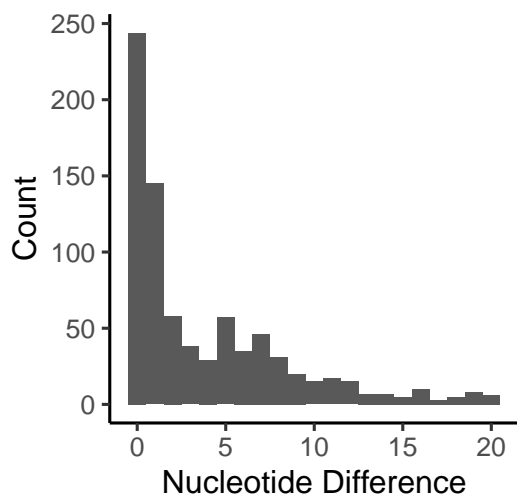
IGHV3-11*04

424 sequences assigned
69 (16.3%) exact matches, in which:
67 unique CDR3
4 unique J



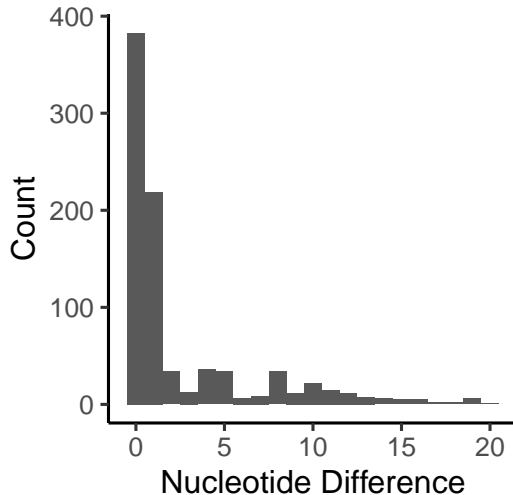
IGHV3-11*06

894 sequences assigned
244 (27.3%) exact matches, in which:
204 unique CDR3
6 unique J



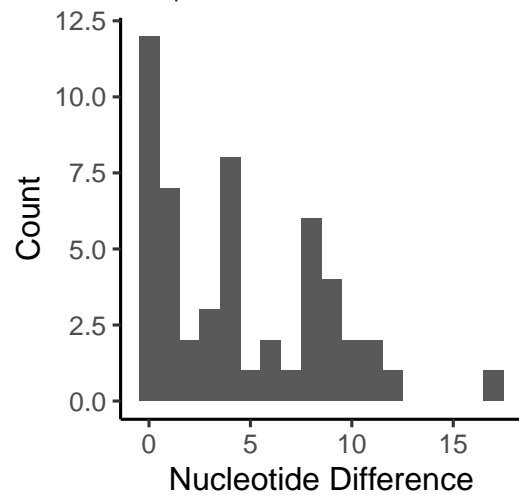
IGHV3-15*07

891 sequences assigned
383 (43%) exact matches, in which:
262 unique CDR3
6 unique J



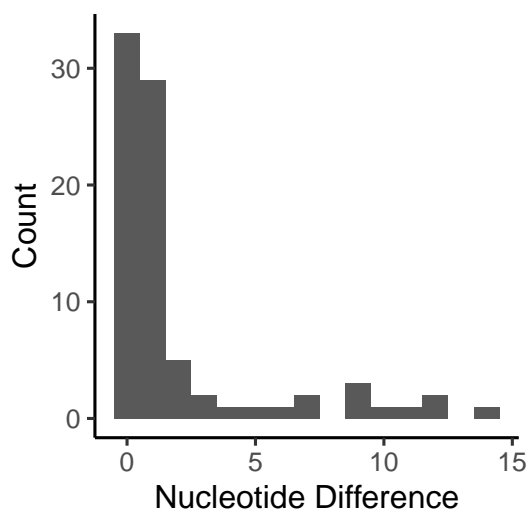
IGHV3-20*03_04

57 sequences assigned
12 (21.1%) exact matches, in which:
10 unique CDR3
2 unique J



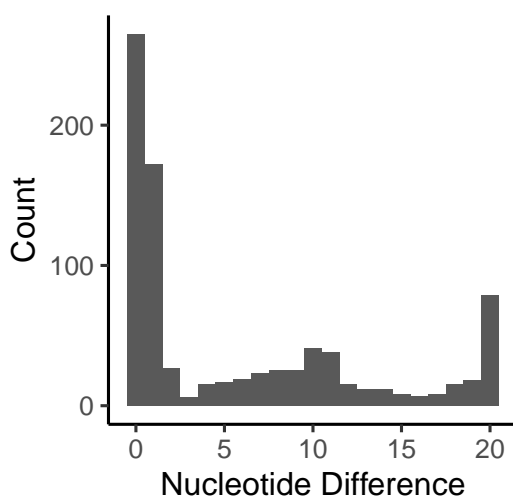
IGHV3-13*01

87 sequences assigned
33 (37.9%) exact matches, in which:
25 unique CDR3
5 unique J



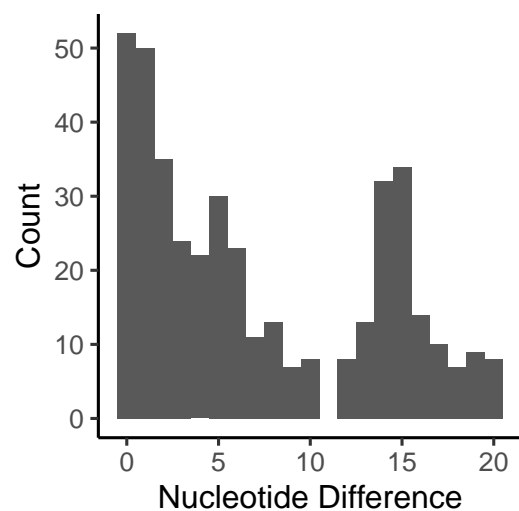
IGHV3-15*01_02

1522 sequences assigned
265 (17.4%) exact matches, in which:
197 unique CDR3
5 unique J



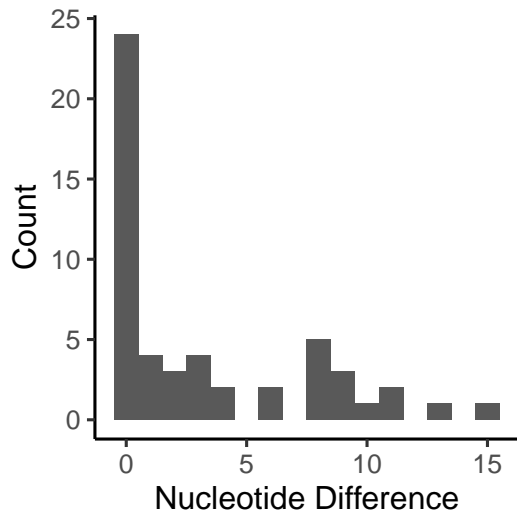
IGHV3-21*04

448 sequences assigned
52 (11.6%) exact matches, in which:
50 unique CDR3
5 unique J



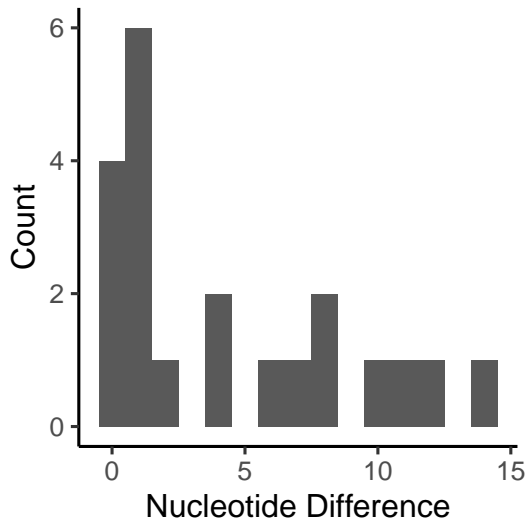
IGHV3-13*05

52 sequences assigned
24 (46.2%) exact matches, in which:
22 unique CDR3
4 unique J



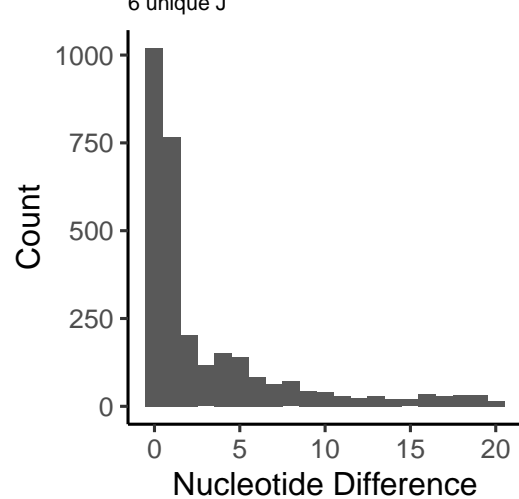
IGHV3-19*01

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



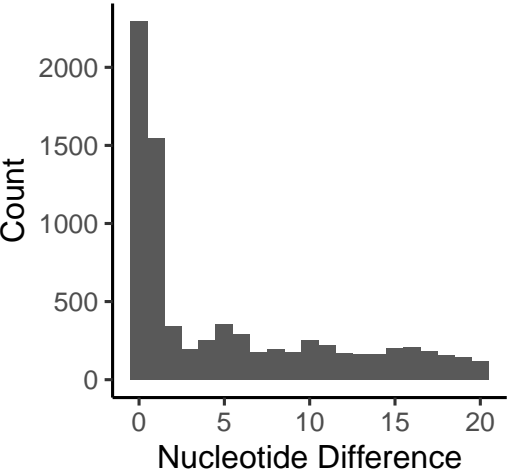
IGHV3-21*01_02

3197 sequences assigned
1020 (31.9%) exact matches, in which:
803 unique CDR3
6 unique J



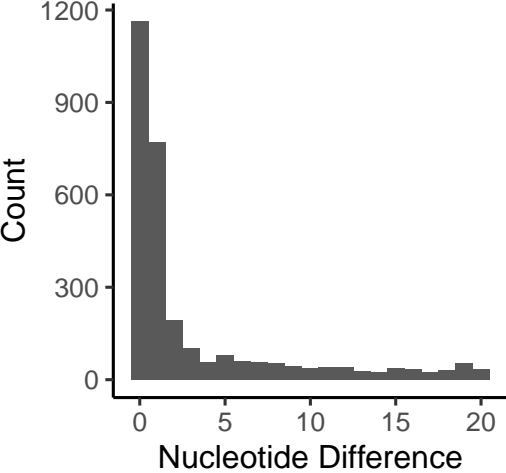
IGHV3-23*01_04

8858 sequences assigned
2294 (25.9%) exact matches, in which:
1790 unique CDR3
6 unique J



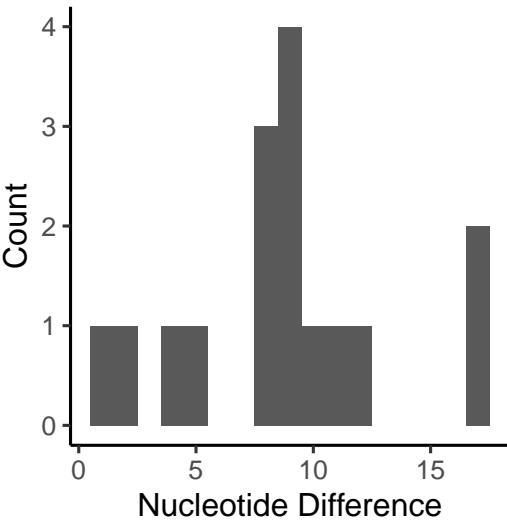
IGHV3-30*18

3329 sequences assigned
1163 (34.9%) exact matches, in which:
864 unique CDR3
6 unique J



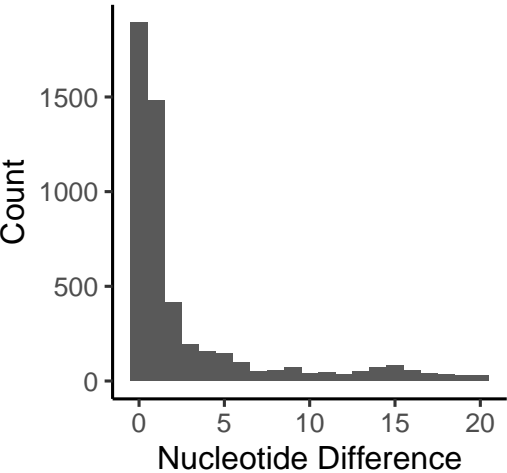
IGHV3-35*01

16 sequences assigned
No exact matches.



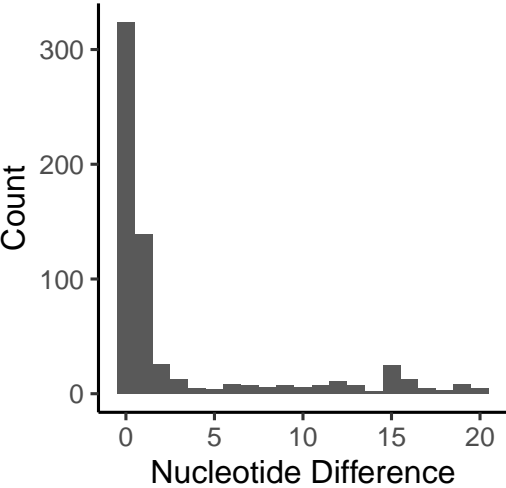
IGHV3-30-3*01

5293 sequences assigned
1892 (35.7%) exact matches, in which:
1486 unique CDR3
6 unique J



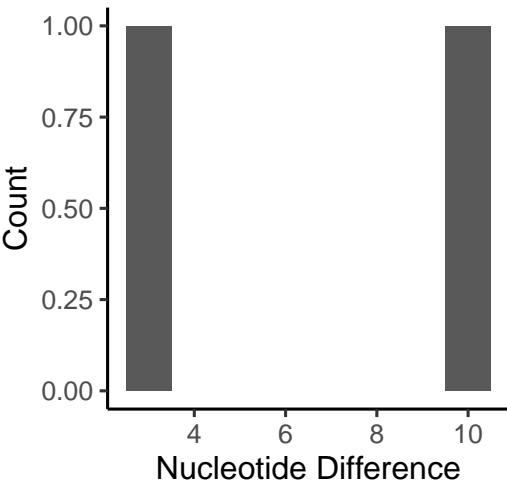
IGHV3-33*01

643 sequences assigned
324 (50.4%) exact matches, in which:
266 unique CDR3
6 unique J



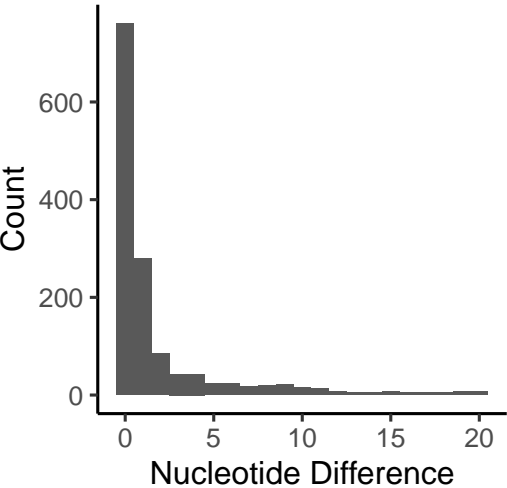
IGHV3-38*03

2 sequences assigned
No exact matches.



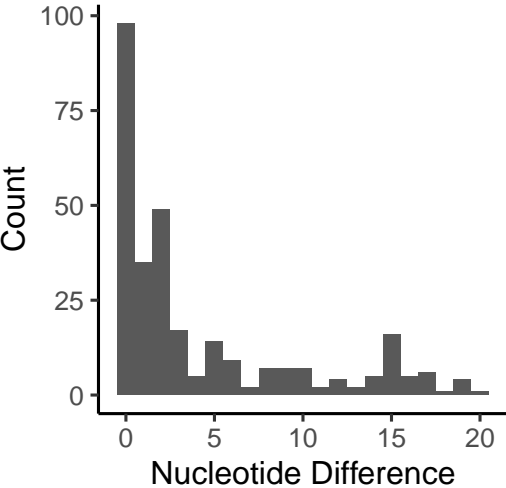
IGHV3-30*03

1509 sequences assigned
761 (50.4%) exact matches, in which:
661 unique CDR3
6 unique J



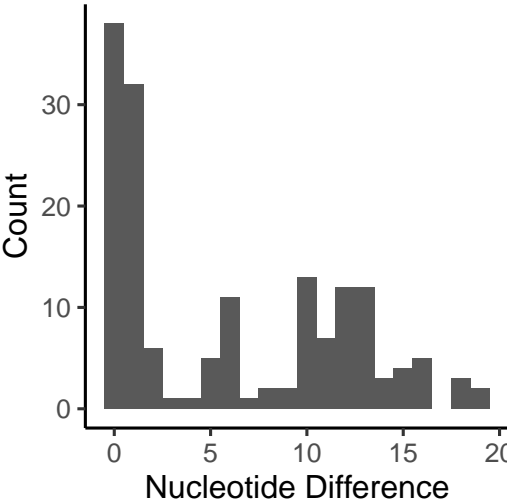
IGHV3-33*08

309 sequences assigned
98 (31.7%) exact matches, in which:
80 unique CDR3
5 unique J



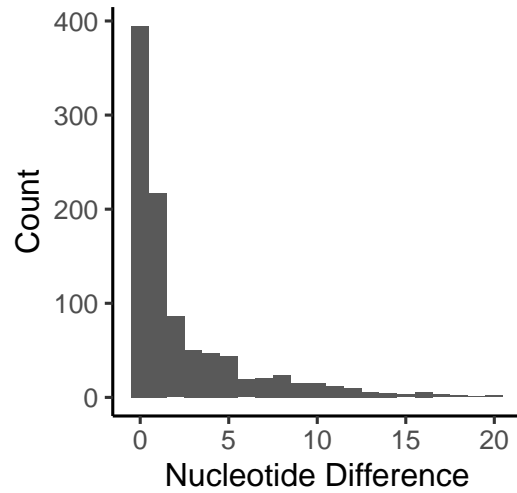
IGHV3-43*01

194 sequences assigned
38 (19.6%) exact matches, in which:
27 unique CDR3
3 unique J



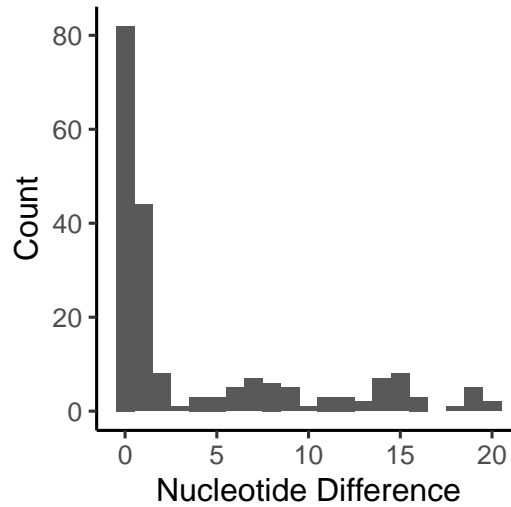
IGHV3-48*01

1022 sequences assigned
395 (38.6%) exact matches, in which:
315 unique CDR3
6 unique J



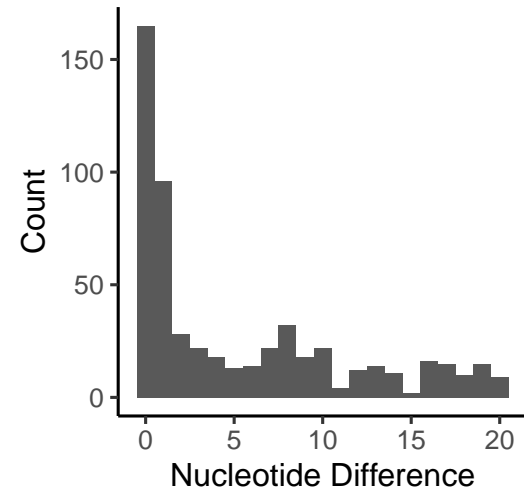
IGHV3-49*03_05

210 sequences assigned
82 (39%) exact matches, in which:
59 unique CDR3
5 unique J



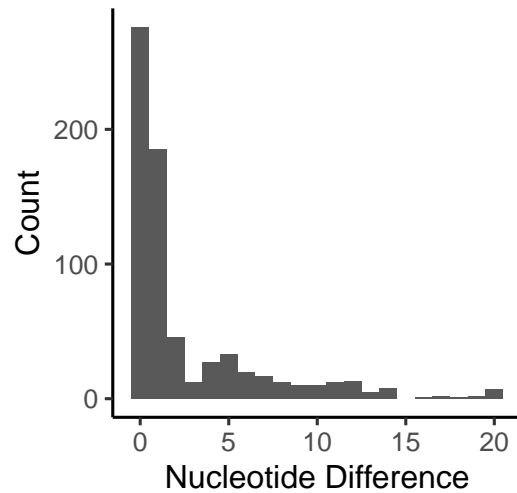
IGHV3-53*01_02

588 sequences assigned
165 (28.1%) exact matches, in which:
136 unique CDR3
5 unique J



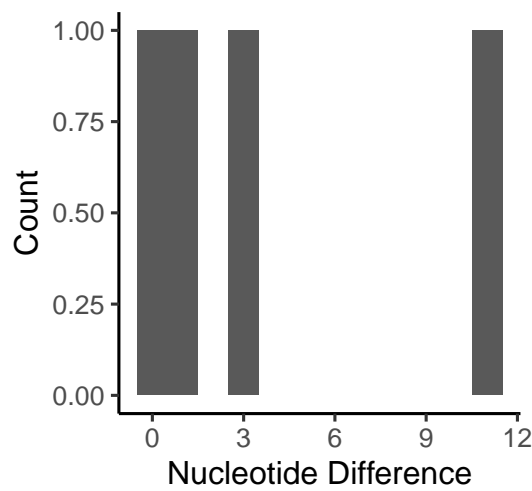
IGHV3-48*02

819 sequences assigned
276 (33.7%) exact matches, in which:
212 unique CDR3
6 unique J



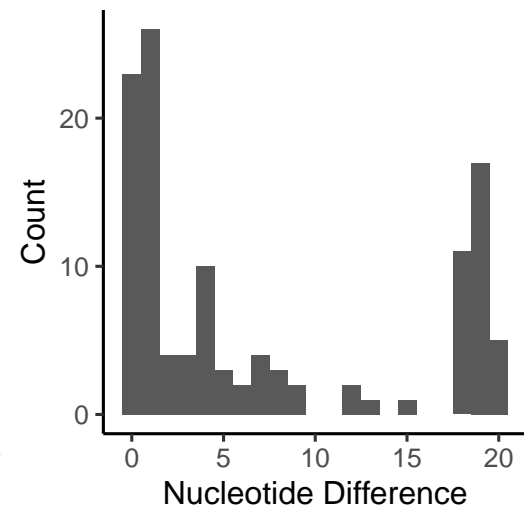
IGHV3-52*02

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



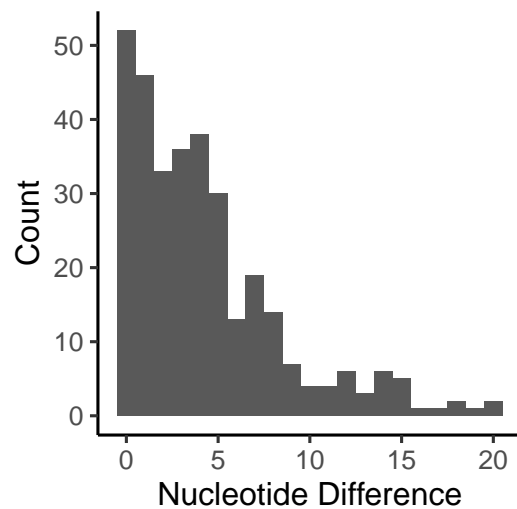
IGHV3-64*01

140 sequences assigned
23 (16.4%) exact matches, in which:
19 unique CDR3
4 unique J



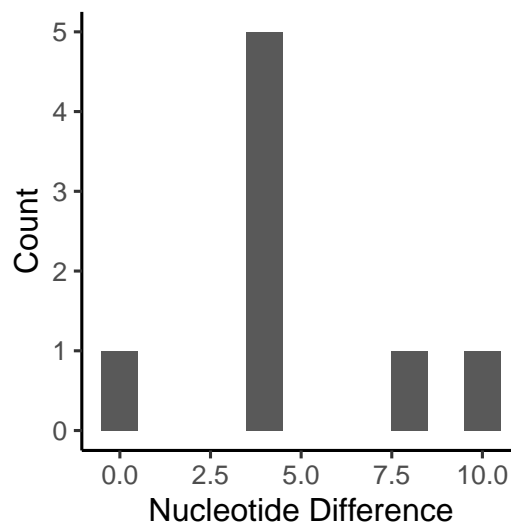
IGHV3-48*04

333 sequences assigned
52 (15.6%) exact matches, in which:
52 unique CDR3
5 unique J



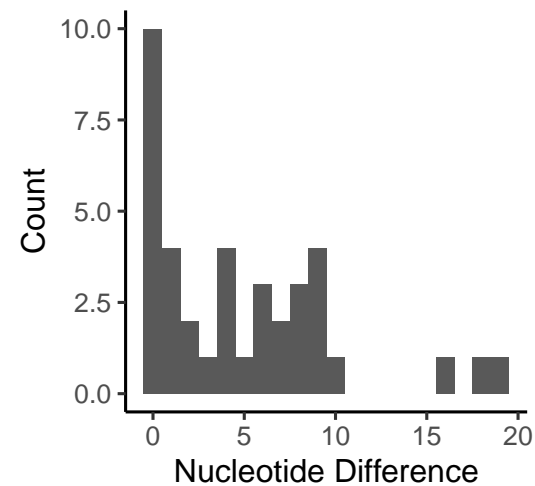
IGHV3-52*01_03

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



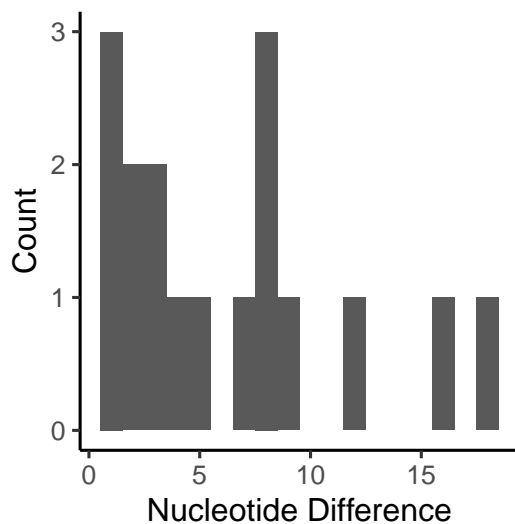
IGHV3-64*02_07

48 sequences assigned
10 (20.8%) exact matches, in which:
10 unique CDR3
3 unique J



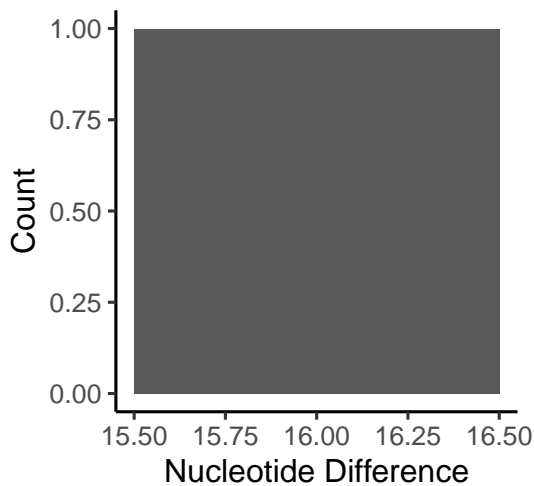
IGHV3-66*01

27 sequences assigned
No exact matches.



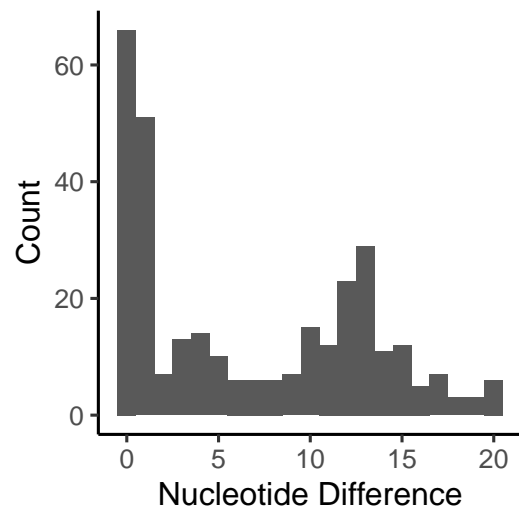
IGHV3-71*03

1 sequences assigned
No exact matches.



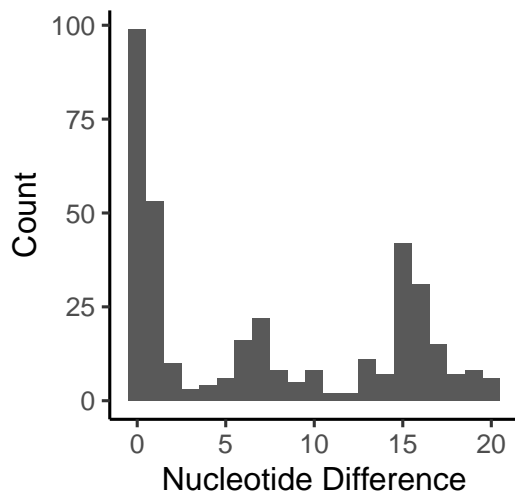
IGHV3-73*01_02

334 sequences assigned
66 (19.8%) exact matches, in which:
53 unique CDR3
4 unique J



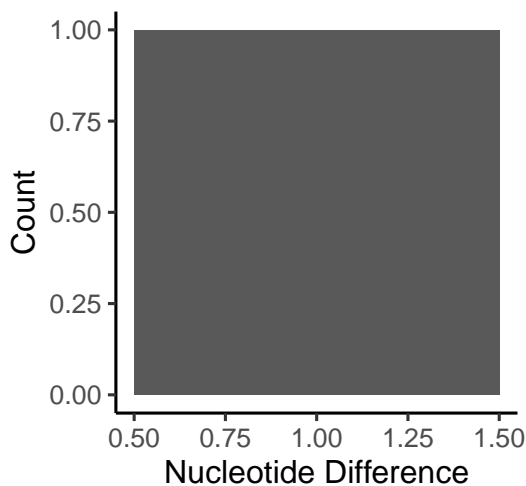
IGHV3-66*02

413 sequences assigned
99 (24%) exact matches, in which:
88 unique CDR3
6 unique J



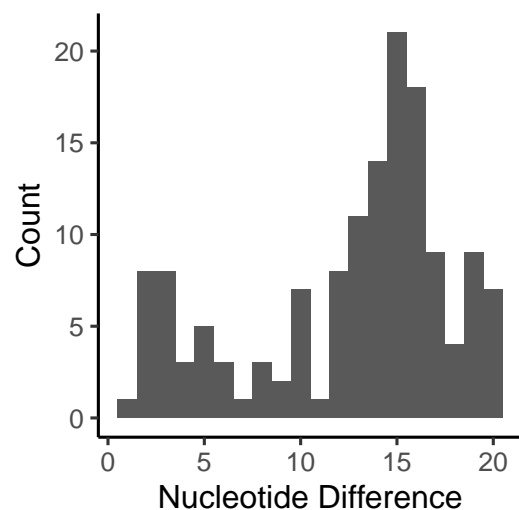
IGHV3-71*01_04

2 sequences assigned
No exact matches.



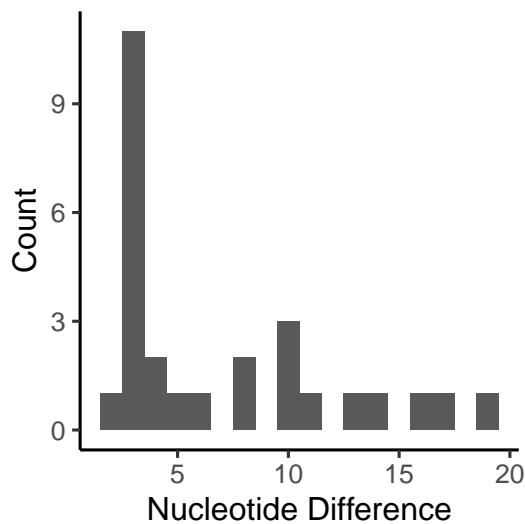
IGHV3-74*03

197 sequences assigned
No exact matches.



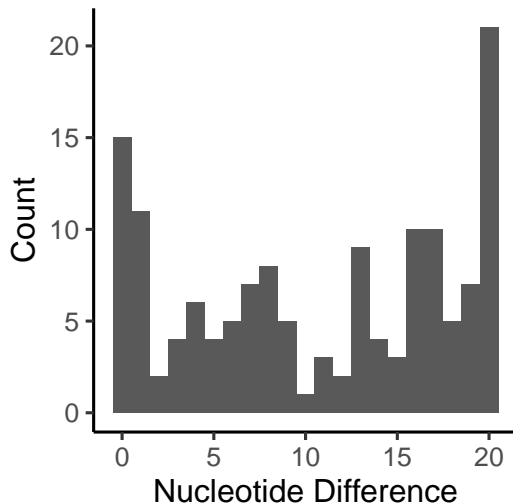
IGHV3-69-1*01

33 sequences assigned
No exact matches.



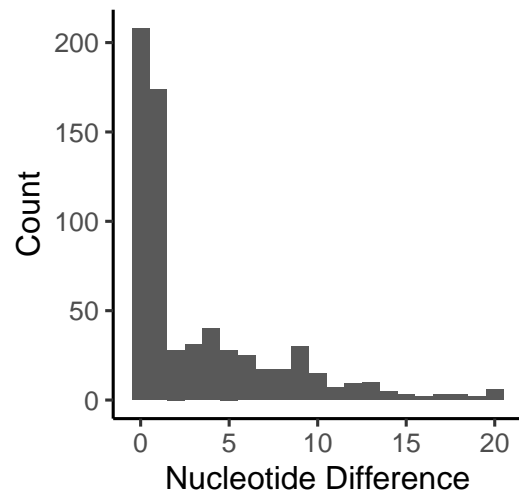
IGHV3-72*01

172 sequences assigned
15 (8.7%) exact matches, in which:
12 unique CDR3
3 unique J



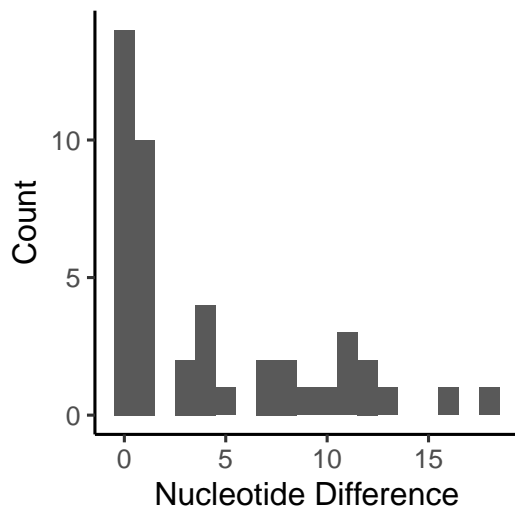
IGHV3-74*01_02

754 sequences assigned
208 (27.6%) exact matches, in which:
135 unique CDR3
4 unique J



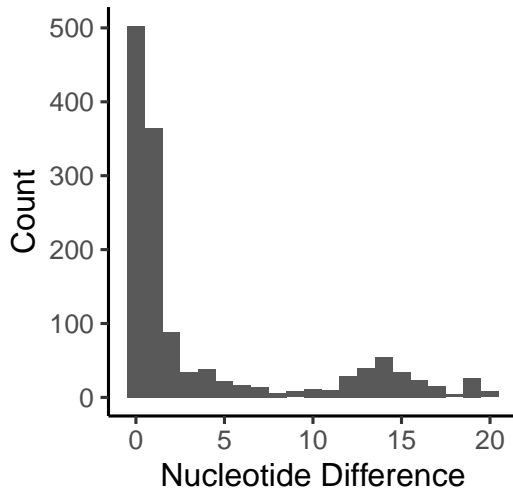
IGHV3-43D*03

49 sequences assigned
14 (28.6%) exact matches, in which:
12 unique CDR3
2 unique J



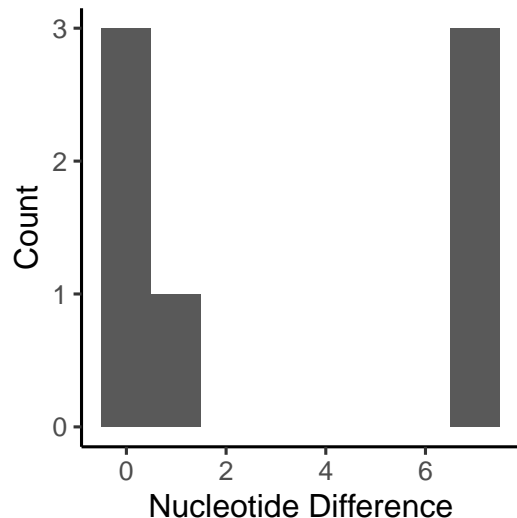
IGHV4-4*07

1524 sequences assigned
503 (33%) exact matches, in which:
466 unique CDR3
6 unique J



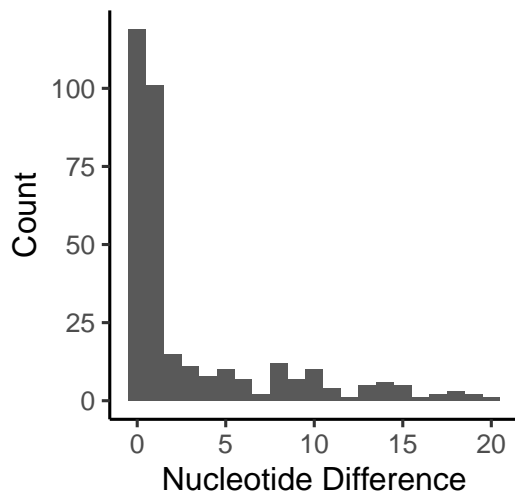
IGHV4-28*01_07

7 sequences assigned
3 (42.9%) exact matches, in which:
2 unique CDR3
1 unique J



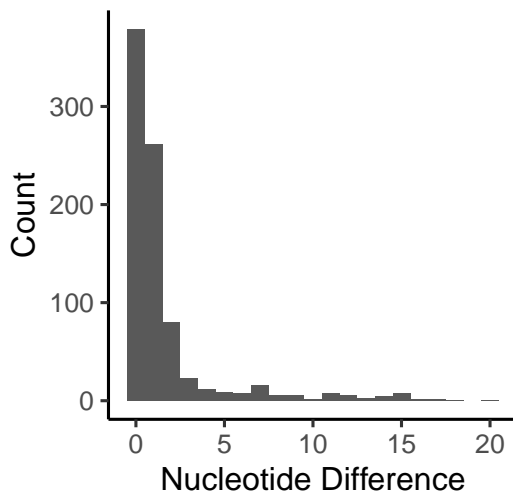
IGHV3-64D*06

380 sequences assigned
119 (31.3%) exact matches, in which:
78 unique CDR3
5 unique J



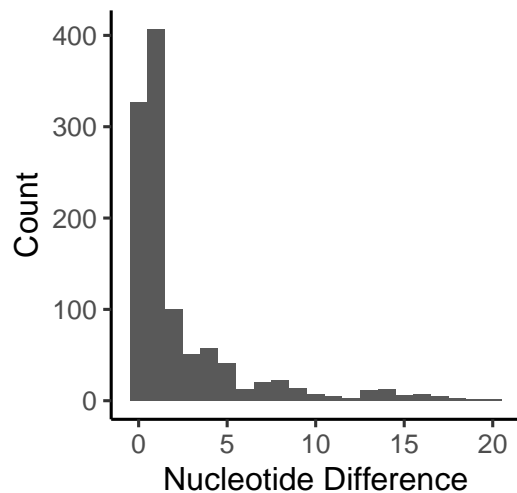
IGHV4-4*02_03

866 sequences assigned
379 (43.8%) exact matches, in which:
327 unique CDR3
6 unique J



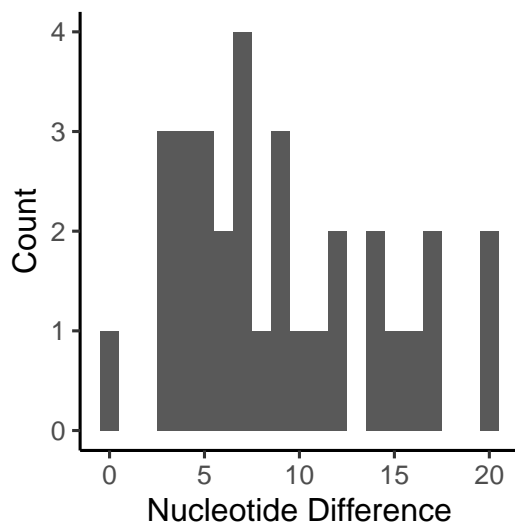
IGHV4-30-4*01

1152 sequences assigned
327 (28.4%) exact matches, in which:
269 unique CDR3
5 unique J



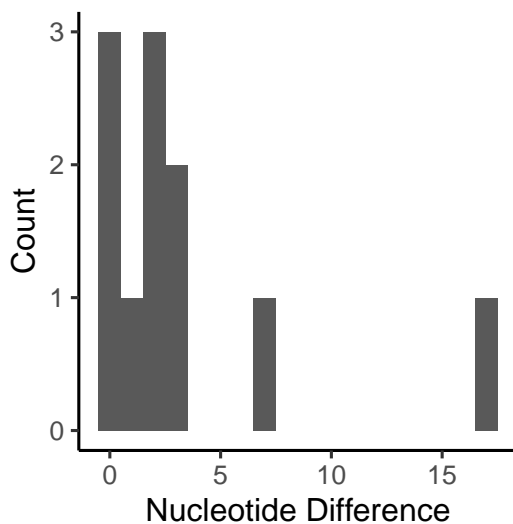
IGHV3-NL1*01

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



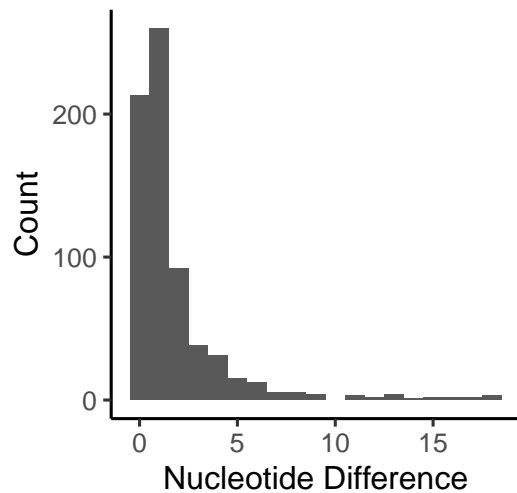
IGHV4-28*03

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



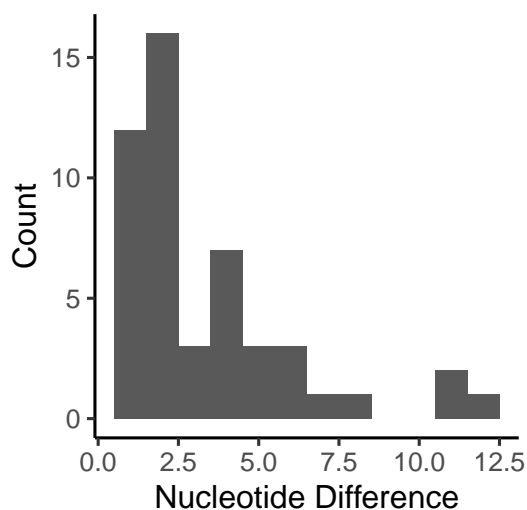
IGHV4-30-2*01

707 sequences assigned
213 (30.1%) exact matches, in which:
149 unique CDR3
5 unique J



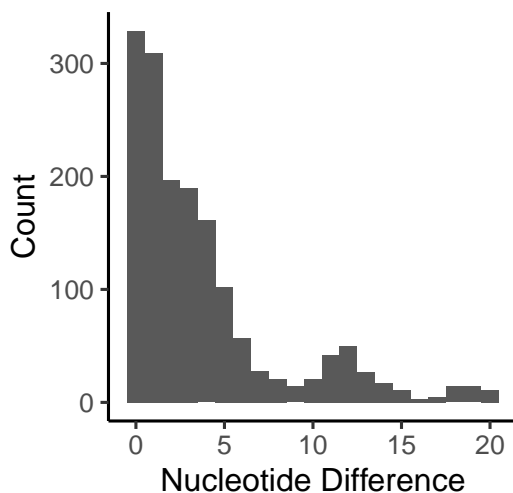
IGHV4-30-2*03

50 sequences assigned
No exact matches.



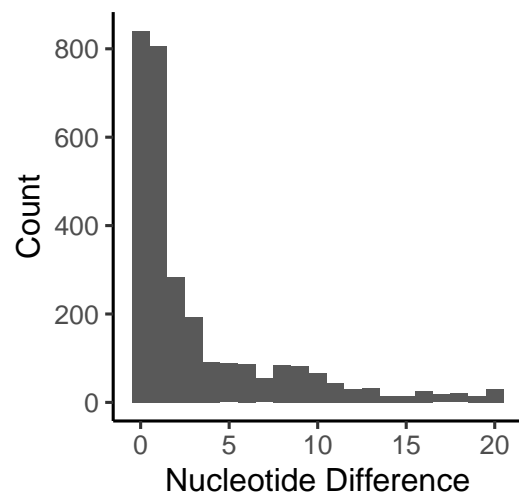
IGHV4-31*02

1750 sequences assigned
329 (18.8%) exact matches, in which:
291 unique CDR3
6 unique J



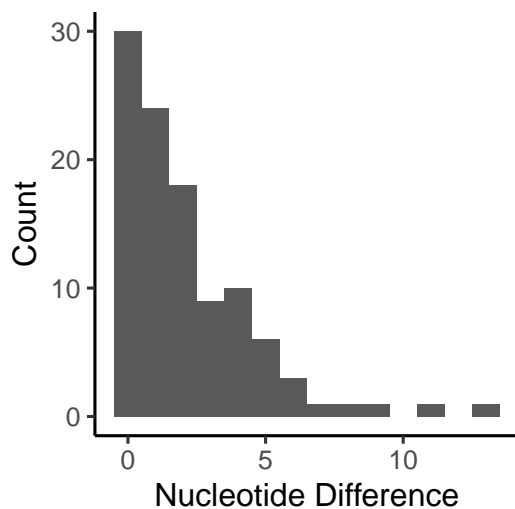
IGHV4-39*07

3132 sequences assigned
841 (26.9%) exact matches, in which:
749 unique CDR3
6 unique J



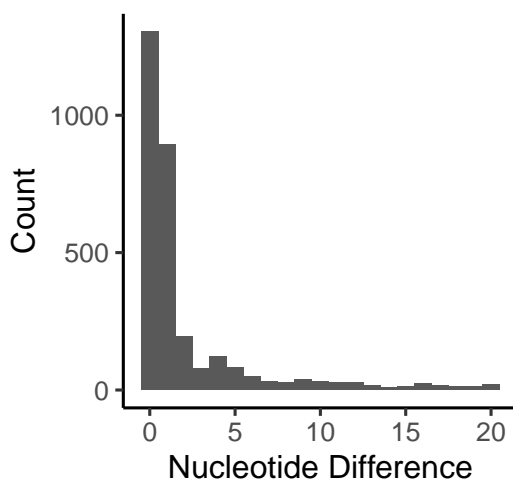
IGHV4-30-2*05

106 sequences assigned
30 (28.3%) exact matches, in which:
30 unique CDR3
5 unique J



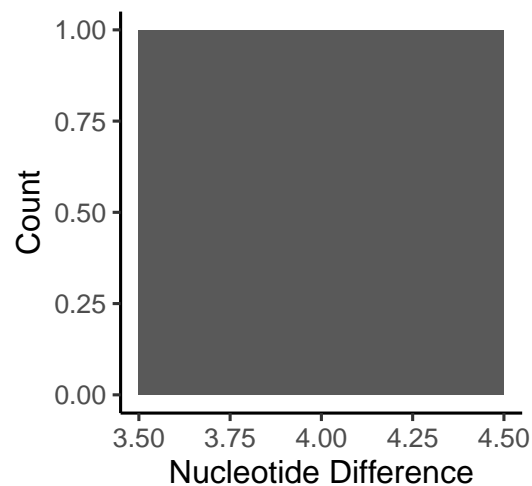
IGHV4-34*01_02

3097 sequences assigned
1304 (42.1%) exact matches, in which:
1097 unique CDR3
6 unique J



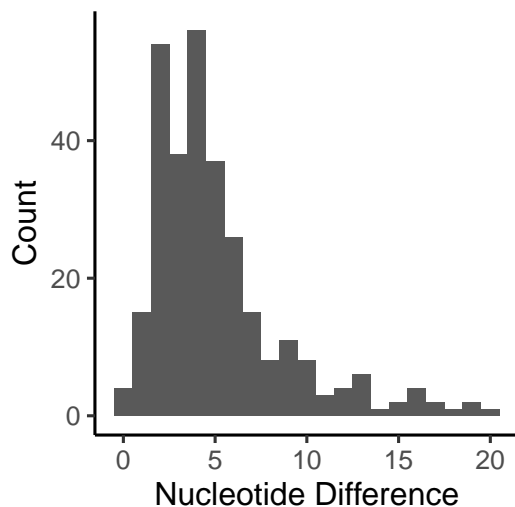
IGHV4-55*09

1 sequences assigned
No exact matches.



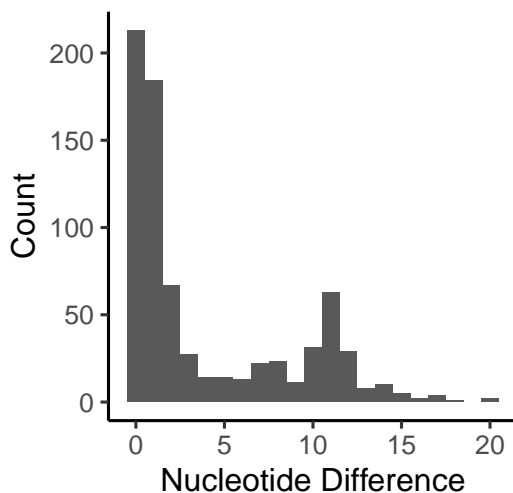
IGHV4-30-4*08

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



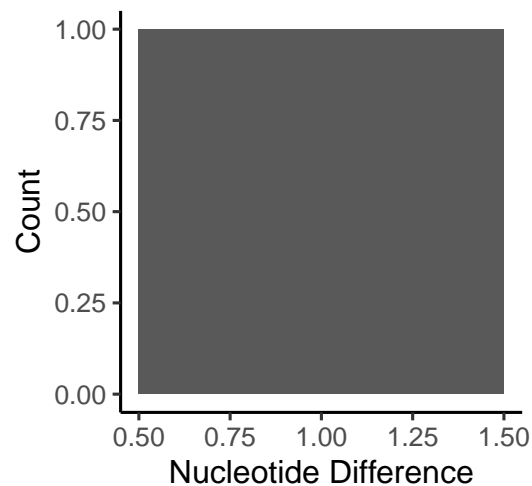
IGHV4-38-2*02

772 sequences assigned
213 (27.6%) exact matches, in which:
199 unique CDR3
6 unique J



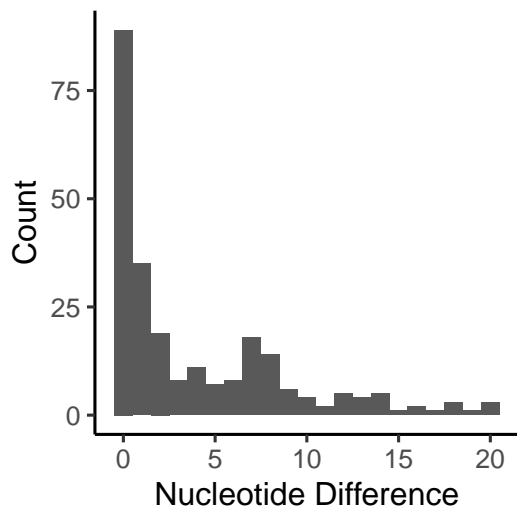
IGHV4-55*01_05

1 sequences assigned
No exact matches.



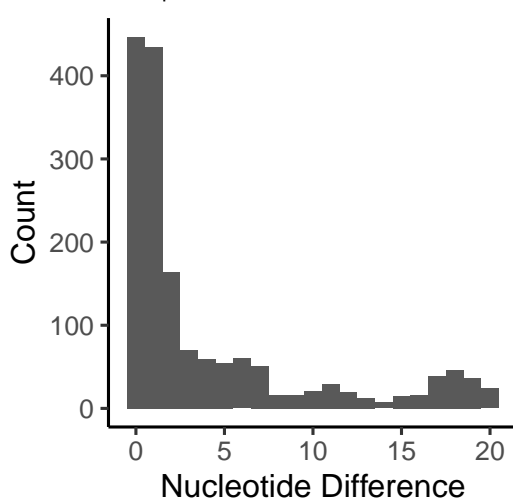
IGHV4–59*08

254 sequences assigned
89 (35%) exact matches, in which:
87 unique CDR3
6 unique J



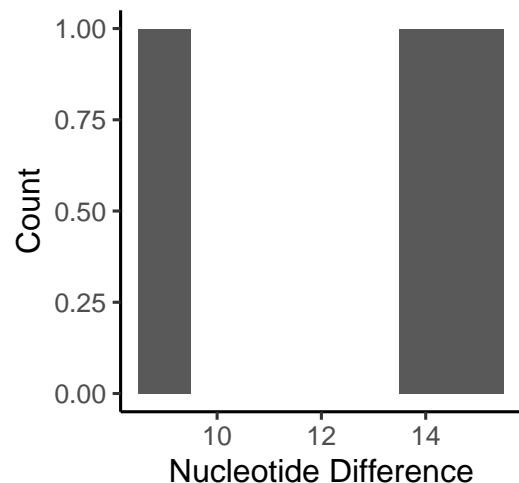
IGHV4–61*02

1788 sequences assigned
447 (25%) exact matches, in which:
415 unique CDR3
6 unique J



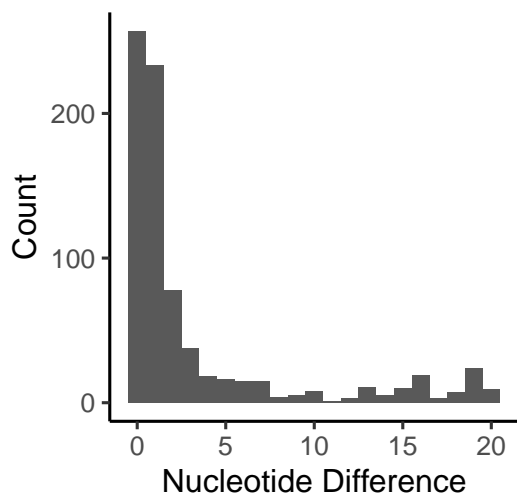
IGHV4/OR15–8*01

7 sequences assigned
No exact matches.



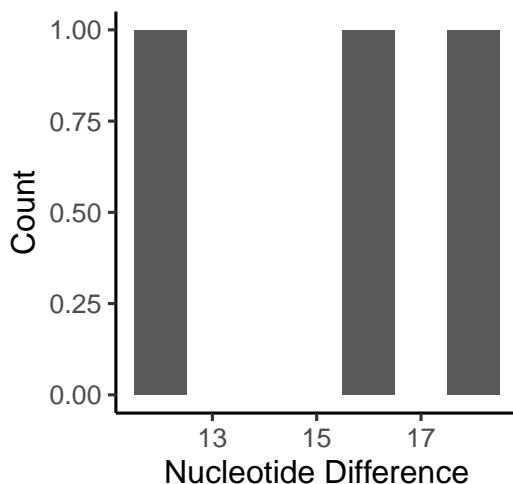
IGHV4–59*12

1086 sequences assigned
257 (23.7%) exact matches, in which:
250 unique CDR3
6 unique J



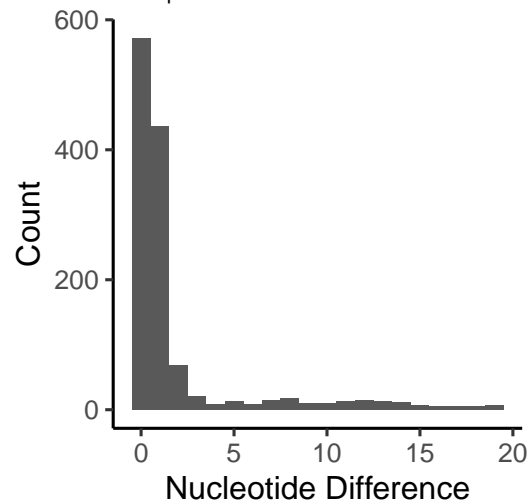
IGHV1/OR15–2*02_03

4 sequences assigned
No exact matches.



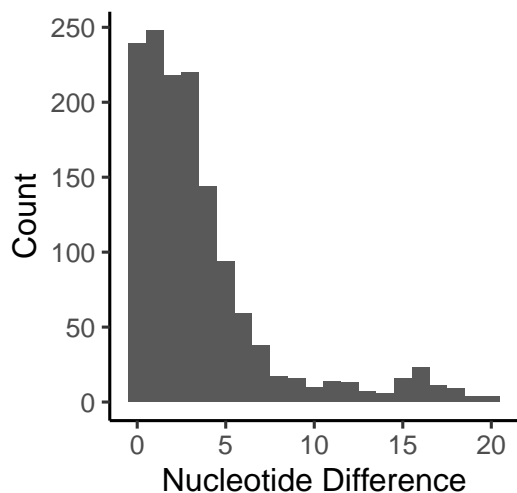
IGHV5–10–1*01_03

1271 sequences assigned
572 (45%) exact matches, in which:
476 unique CDR3
6 unique J



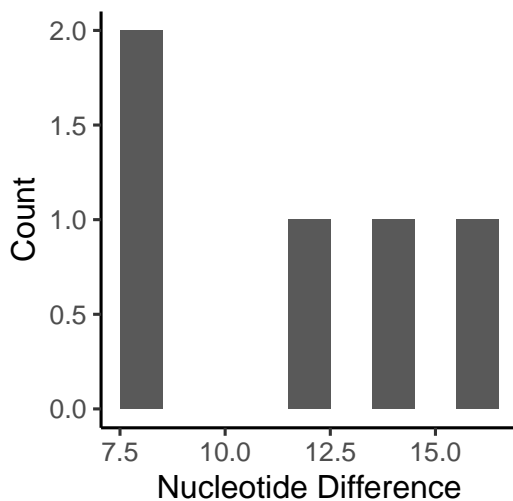
IGHV4–61*01

1432 sequences assigned
239 (16.7%) exact matches, in which:
226 unique CDR3
6 unique J



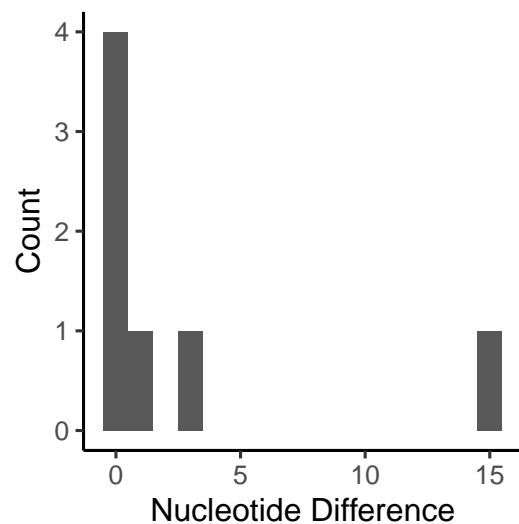
IGHV1/OR15–3*02

6 sequences assigned
No exact matches.



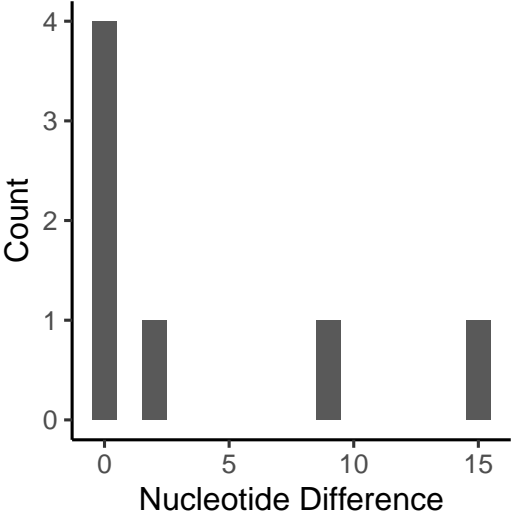
IGHV5–51*04

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
3 unique J



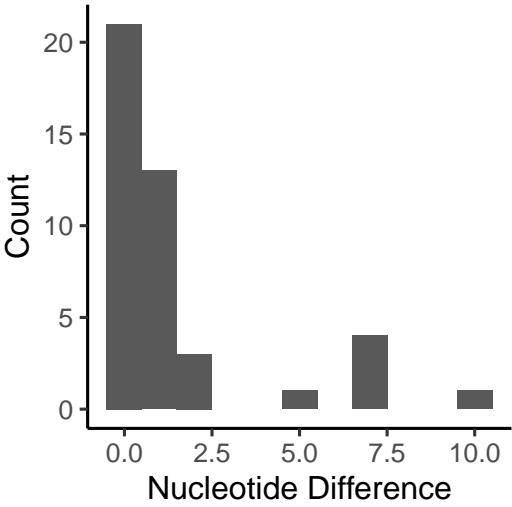
IGHV5-51*06

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
1 unique J



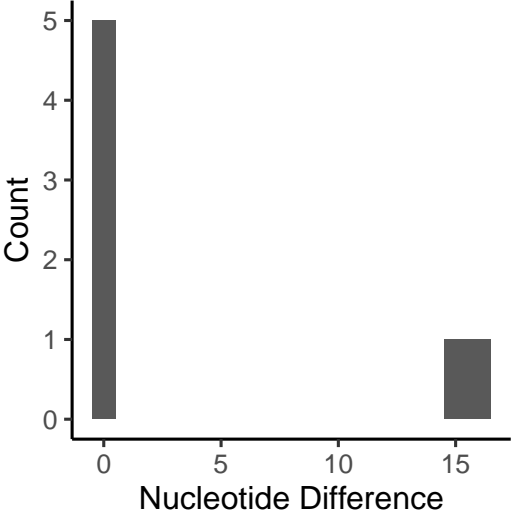
IGHV7-4-1*01

44 sequences assigned
21 (47.7%) exact matches, in which:
18 unique CDR3
3 unique J



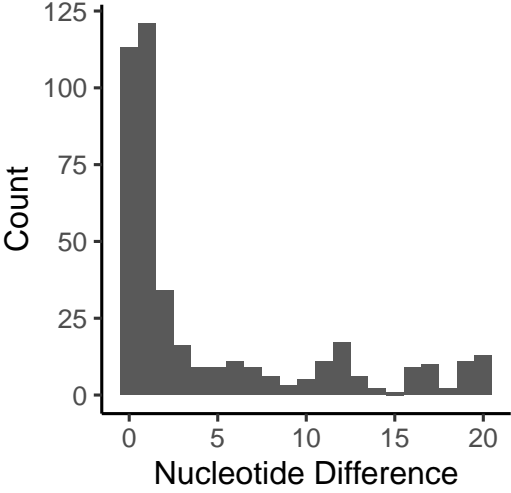
IGHV5-51*07

7 sequences assigned
5 (71.4%) exact matches, in which:
5 unique CDR3
3 unique J



IGHV6-1*01_02

432 sequences assigned
113 (26.2%) exact matches, in which:
99 unique CDR3
6 unique J





Warning – no inferred sequences found.