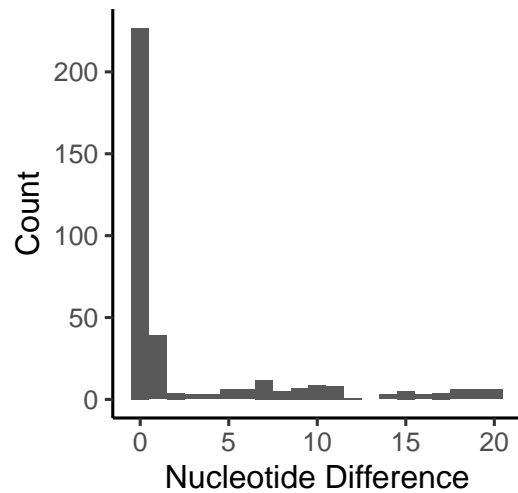


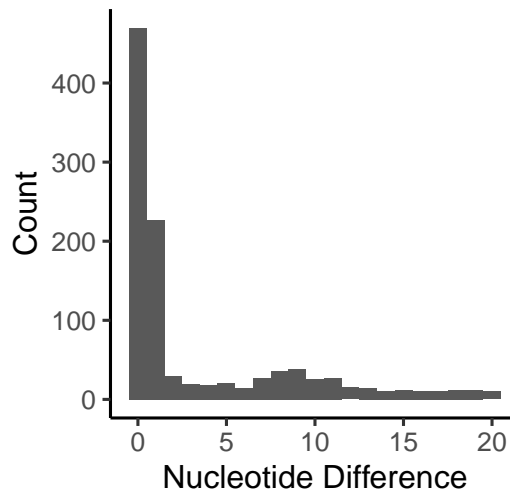
IGHV1–2*04

387 sequences assigned
227 (58.7%) exact matches, in which:
222 unique CDR3
6 unique J



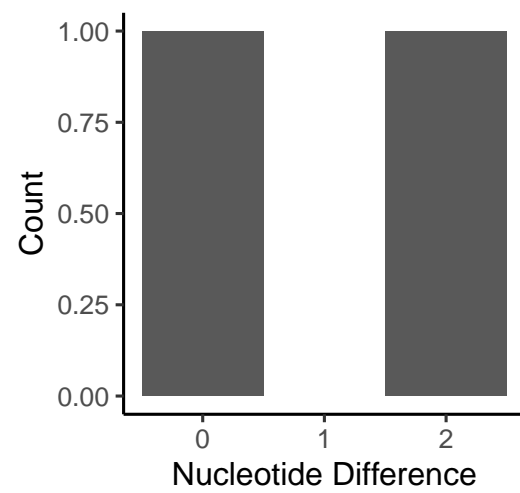
IGHV1–18*01

1127 sequences assigned
470 (41.7%) exact matches, in which:
403 unique CDR3
6 unique J



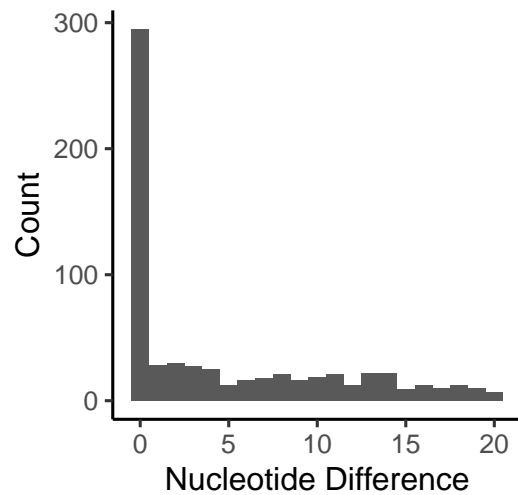
IGHV1–45*02

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



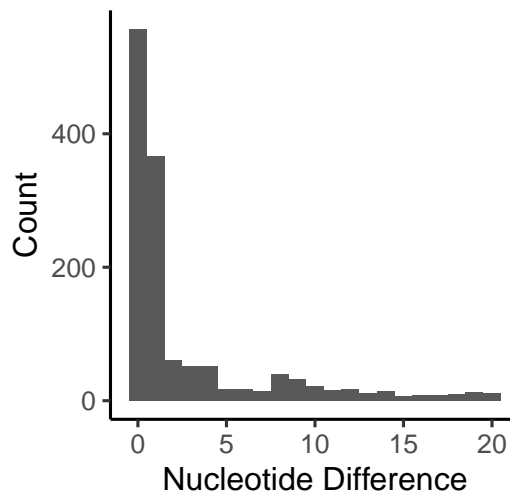
IGHV1–3*01_05

683 sequences assigned
295 (43.2%) exact matches, in which:
287 unique CDR3
6 unique J



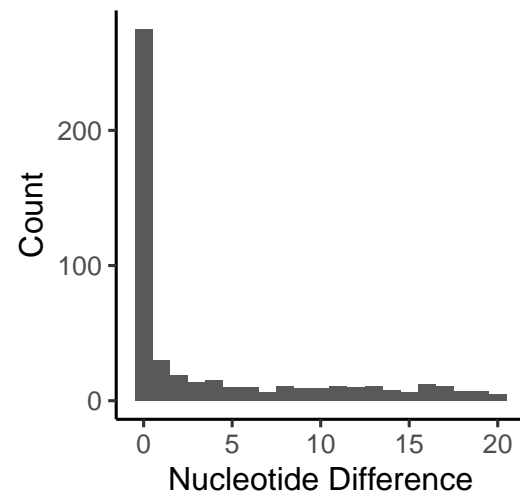
IGHV1–18*04

1416 sequences assigned
557 (39.3%) exact matches, in which:
486 unique CDR3
6 unique J



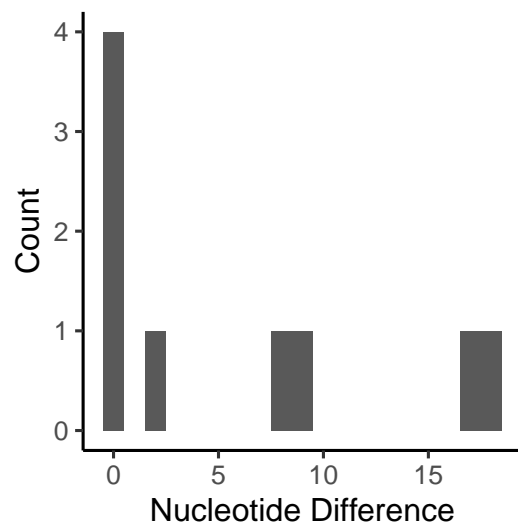
IGHV1–46*01

524 sequences assigned
275 (52.5%) exact matches, in which:
267 unique CDR3
6 unique J



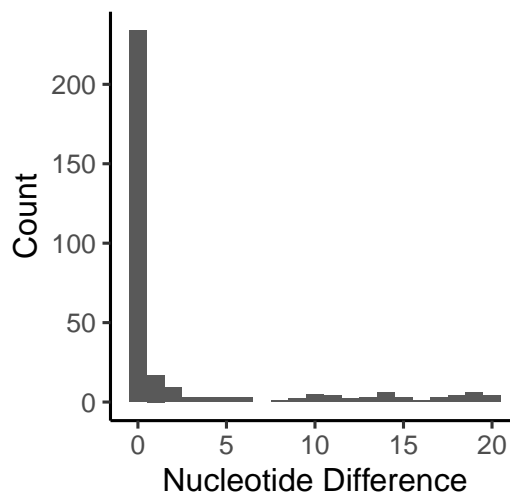
IGHV1–8*01

9 sequences assigned
4 (44.4%) exact matches, in which:
4 unique CDR3
2 unique J



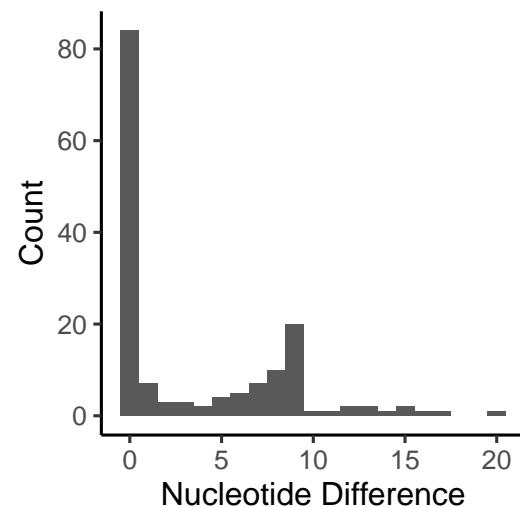
IGHV1–24*01

323 sequences assigned
234 (72.4%) exact matches, in which:
227 unique CDR3
6 unique J



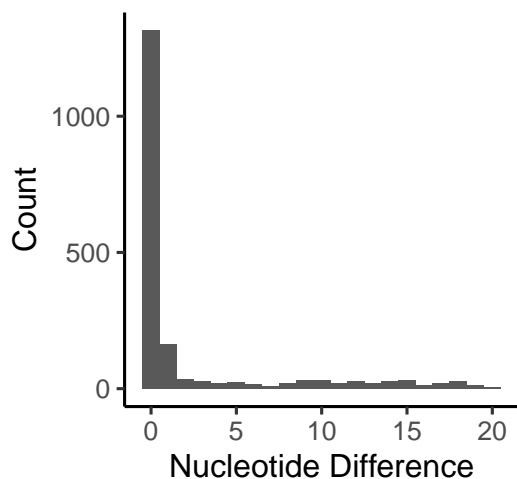
IGHV1–58*01_03

167 sequences assigned
84 (50.3%) exact matches, in which:
83 unique CDR3
6 unique J



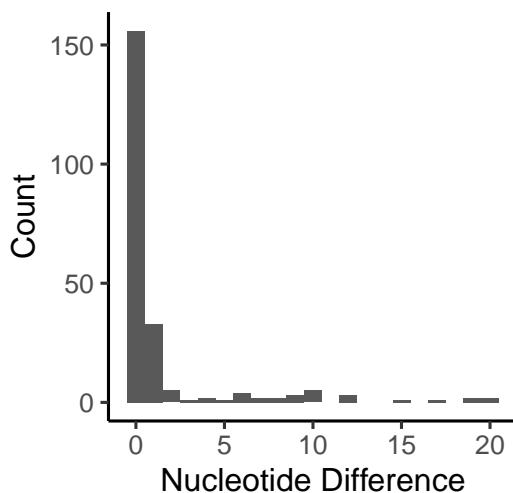
IGHV1-69*01_12_13

2006 sequences assigned
1315 (65.6%) exact matches, in which:
1286 unique CDR3
6 unique J



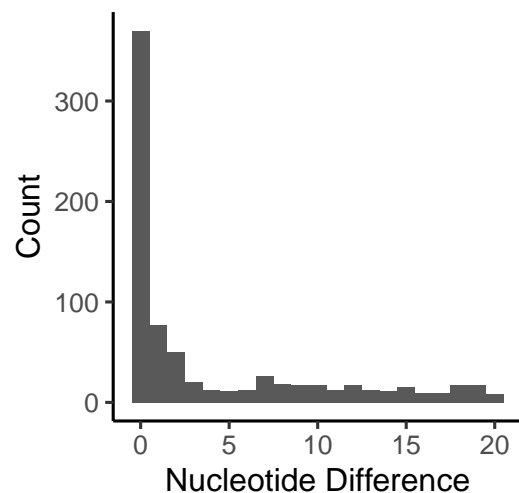
IGHV2-70*01

227 sequences assigned
156 (68.7%) exact matches, in which:
129 unique CDR3
5 unique J



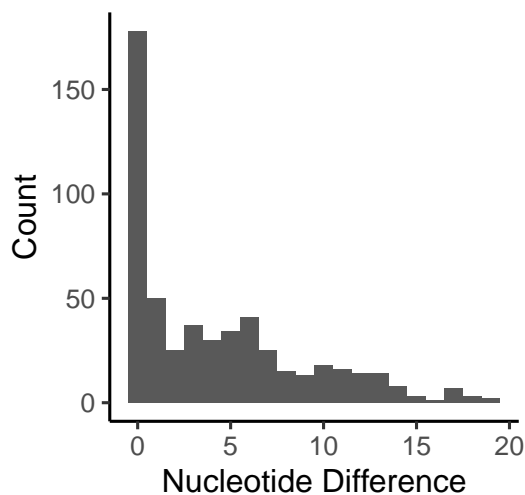
IGHV3-11*06

799 sequences assigned
370 (46.3%) exact matches, in which:
266 unique CDR3
6 unique J



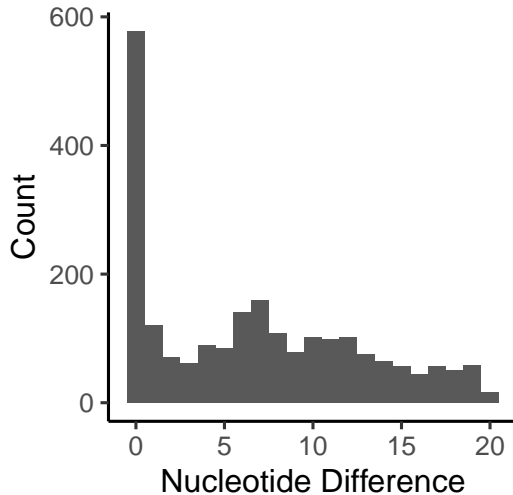
IGHV2-5*02

552 sequences assigned
178 (32.2%) exact matches, in which:
168 unique CDR3
5 unique J



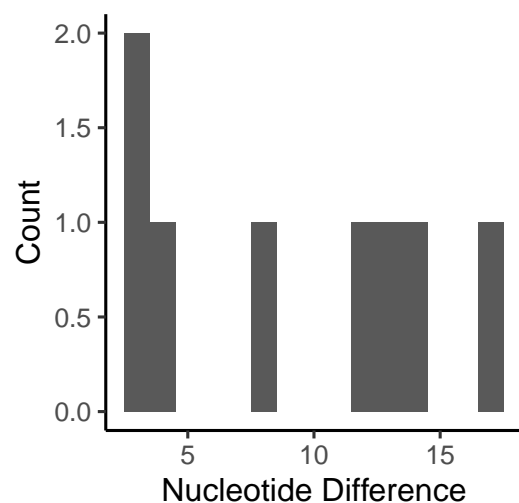
IGHV3-7*03

2388 sequences assigned
578 (24.2%) exact matches, in which:
452 unique CDR3
6 unique J



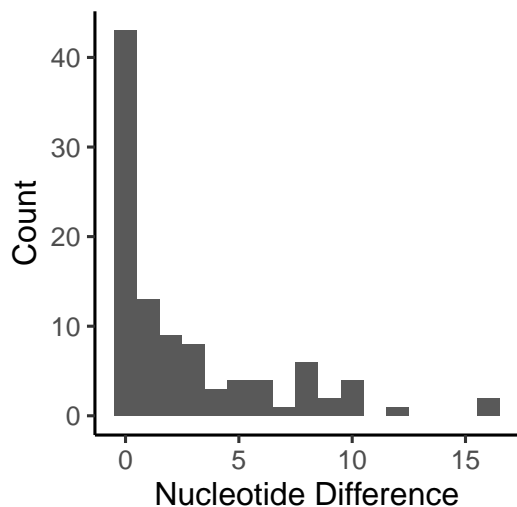
IGHV3-13*01

10 sequences assigned
No exact matches.



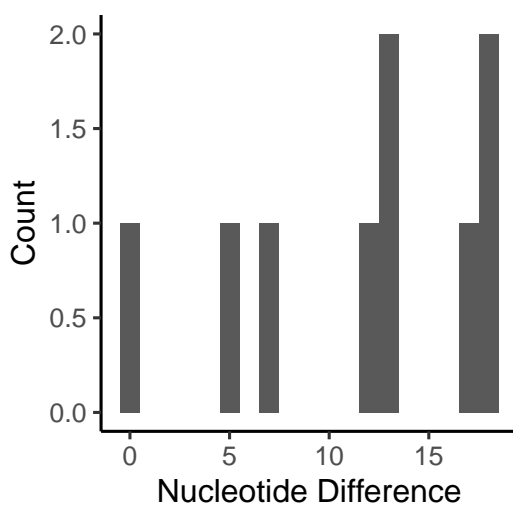
IGHV2-26*01

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



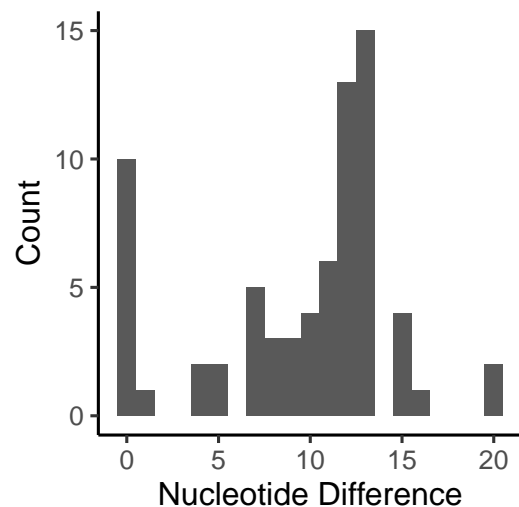
IGHV3-9*01

10 sequences assigned
1 (10%) exact matches, in which:
1 unique CDR3
1 unique J



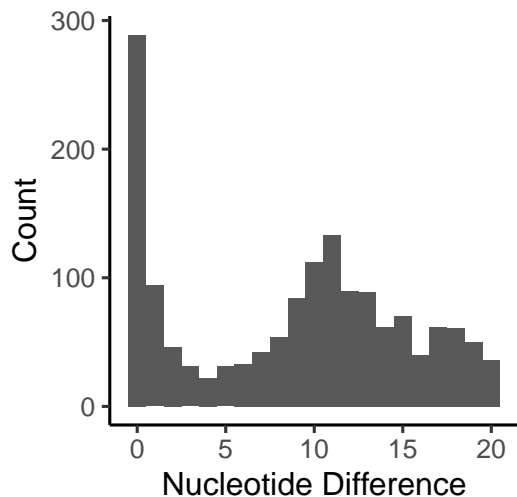
IGHV3-13*05

83 sequences assigned
10 (12%) exact matches, in which:
10 unique CDR3
3 unique J



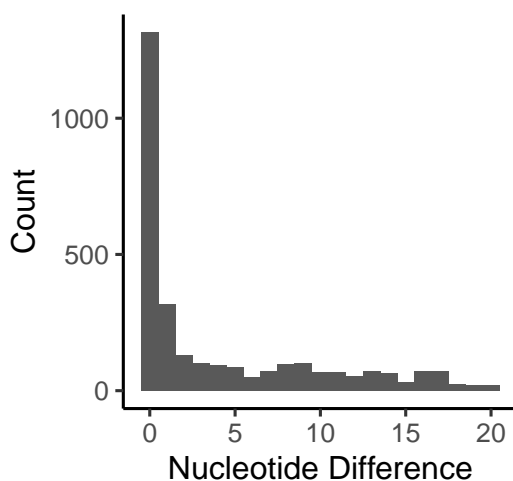
IGHV3-15*01_02

1704 sequences assigned
289 (17%) exact matches, in which:
175 unique CDR3
5 unique J



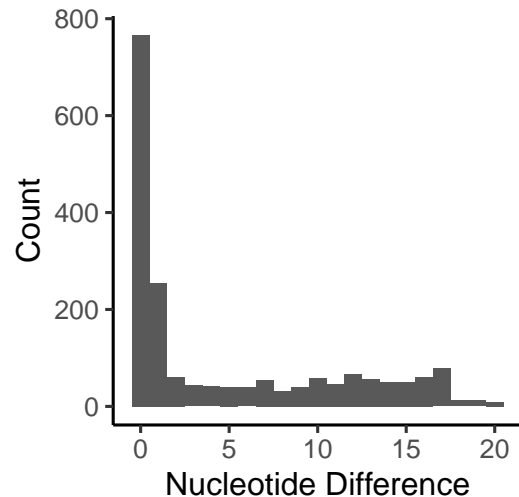
IGHV3-21*01_02

3003 sequences assigned
1315 (43.8%) exact matches, in which:
918 unique CDR3
6 unique J



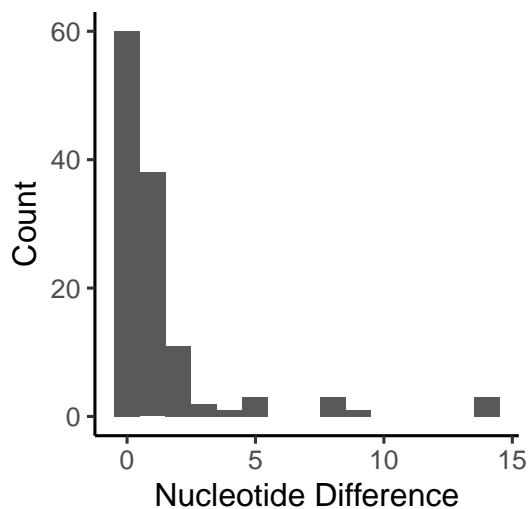
IGHV3-30*18

1975 sequences assigned
767 (38.8%) exact matches, in which:
491 unique CDR3
6 unique J



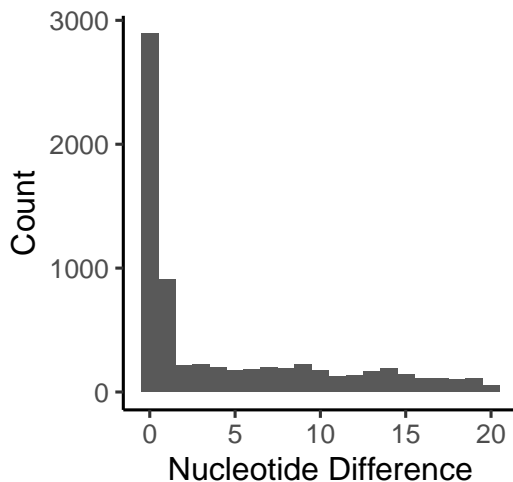
IGHV3-20*01_02

122 sequences assigned
60 (49.2%) exact matches, in which:
30 unique CDR3
5 unique J



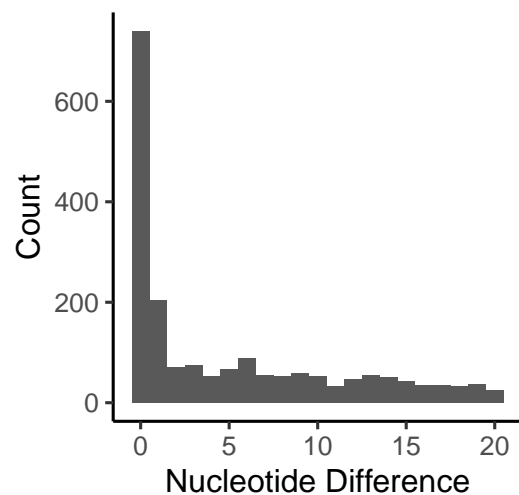
IGHV3-23*01_04

7282 sequences assigned
2892 (39.7%) exact matches, in which:
2217 unique CDR3
6 unique J



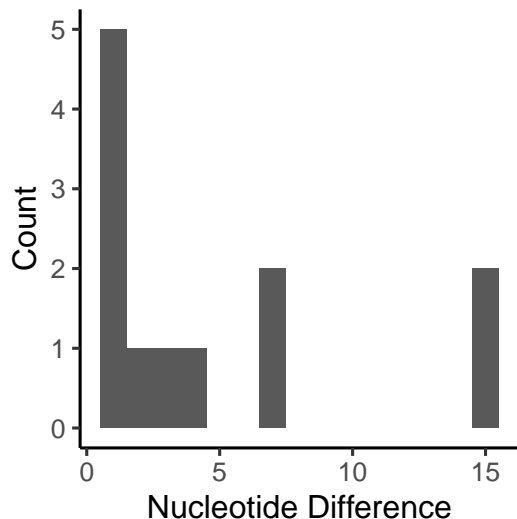
IGHV3-33*01

2060 sequences assigned
740 (35.9%) exact matches, in which:
502 unique CDR3
6 unique J



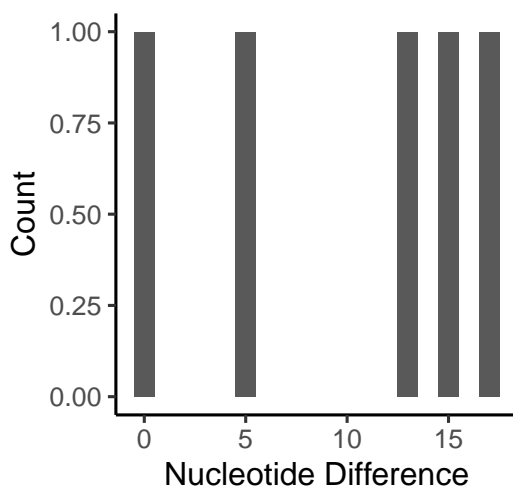
IGHV3-20*03_04

12 sequences assigned
No exact matches.



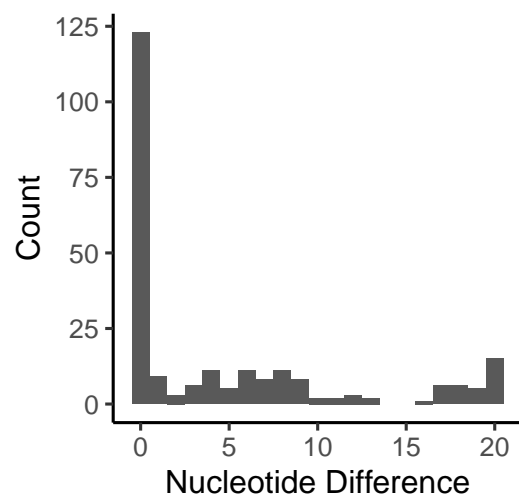
IGHV3-30-3*01

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



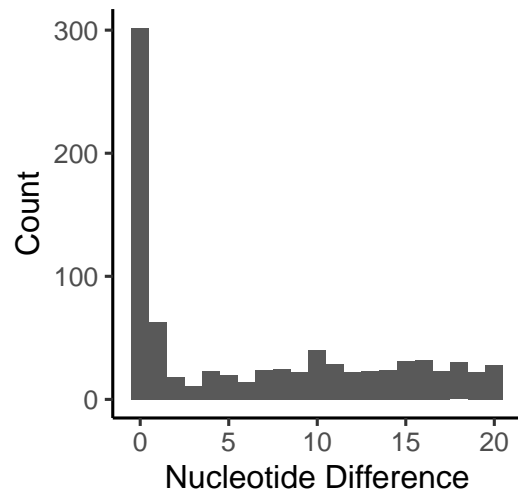
IGHV3-43*01

252 sequences assigned
123 (48.8%) exact matches, in which:
80 unique CDR3
5 unique J



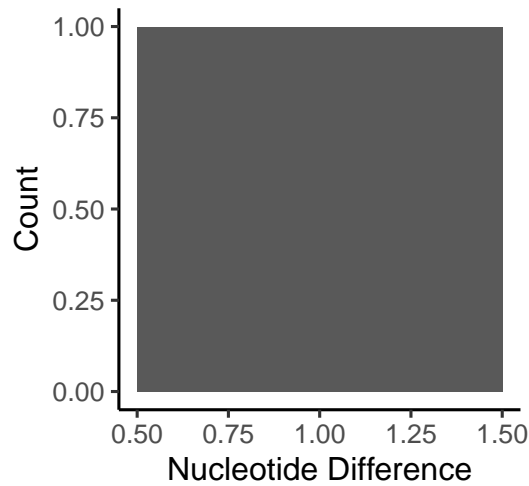
IGHV3-48*02

993 sequences assigned
302 (30.4%) exact matches, in which:
188 unique CDR3
6 unique J



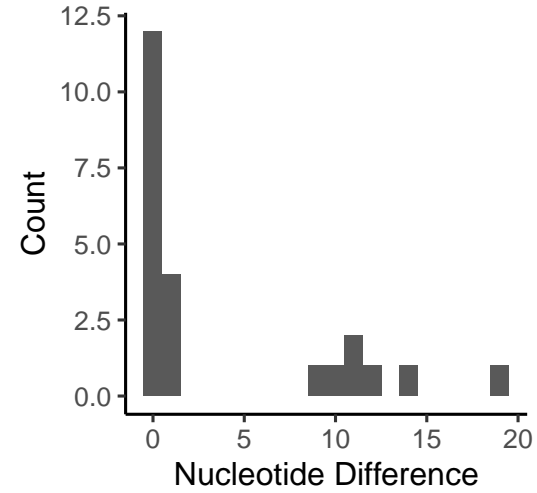
IGHV3-52*01_03

1 sequences assigned
No exact matches.



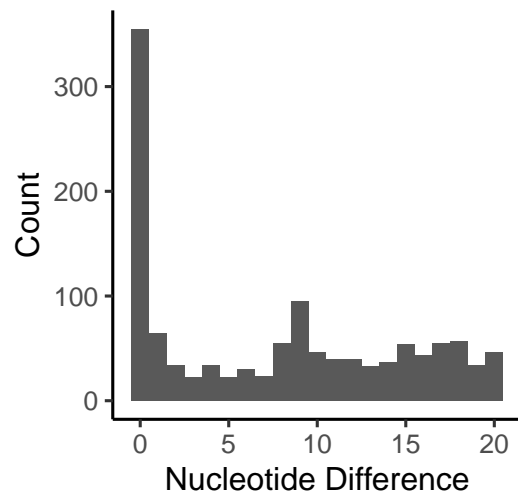
IGHV3-64*02_07

23 sequences assigned
12 (52.2%) exact matches, in which:
7 unique CDR3
2 unique J



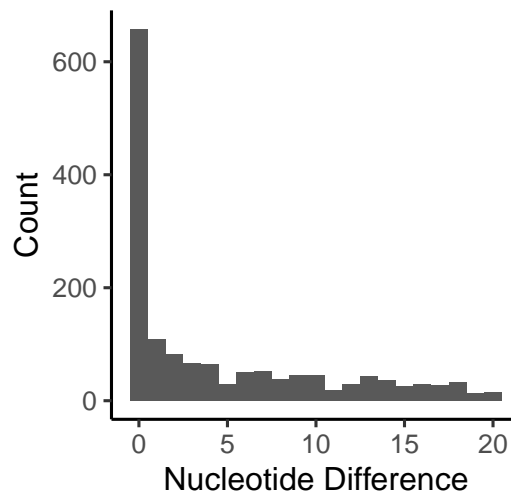
IGHV3-48*04

1470 sequences assigned
355 (24.1%) exact matches, in which:
262 unique CDR3
5 unique J



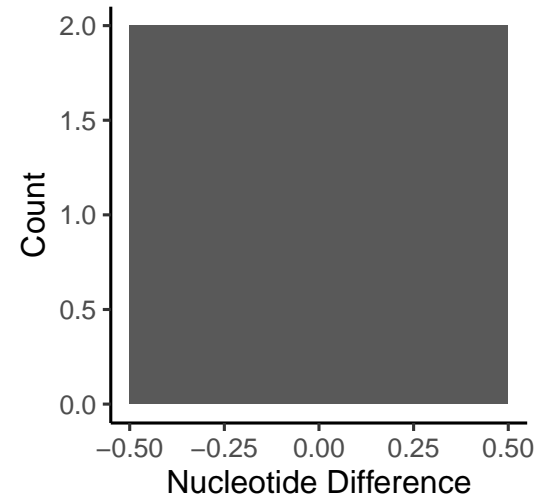
IGHV3-53*01_02

1599 sequences assigned
658 (41.2%) exact matches, in which:
530 unique CDR3
6 unique J



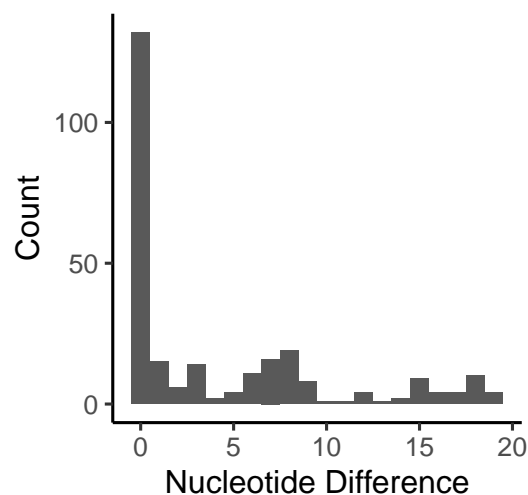
IGHV3-66*03

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
2 unique J



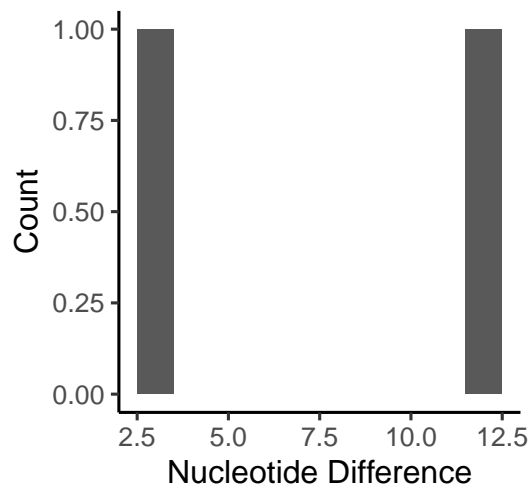
IGHV3-49*03_05

283 sequences assigned
132 (46.6%) exact matches, in which:
107 unique CDR3
5 unique J



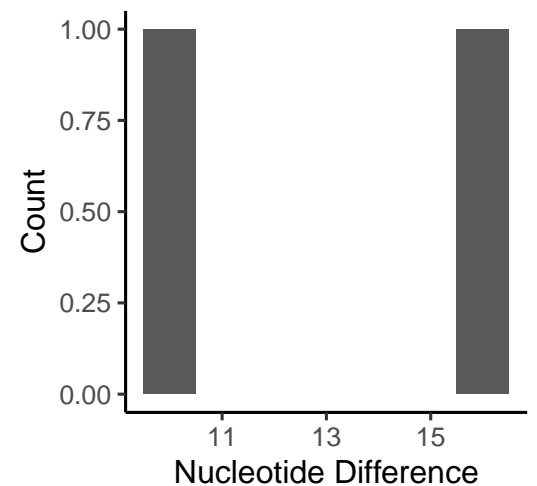
IGHV3-64*04

2 sequences assigned
No exact matches.



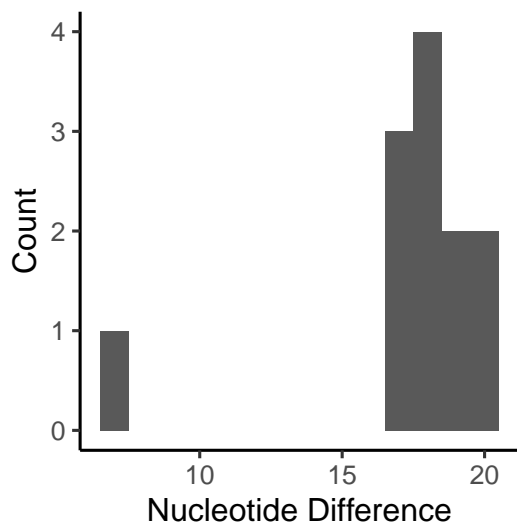
IGHV3-66*04

3 sequences assigned
No exact matches.



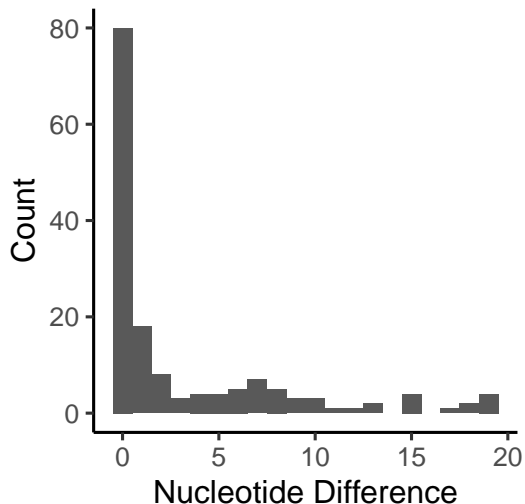
IGHV3-69-1*01

22 sequences assigned
No exact matches.



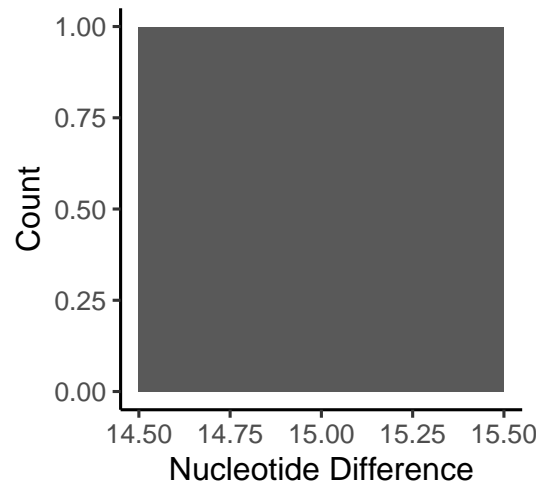
IGHV3-73*01_02

160 sequences assigned
80 (50%) exact matches, in which:
50 unique CDR3
4 unique J



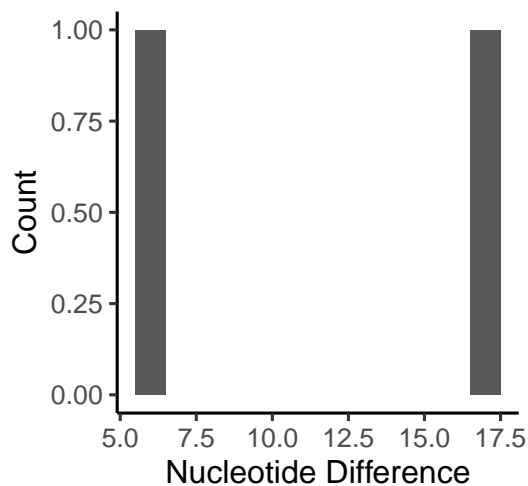
IGHV3-43D*03

1 sequences assigned
No exact matches.



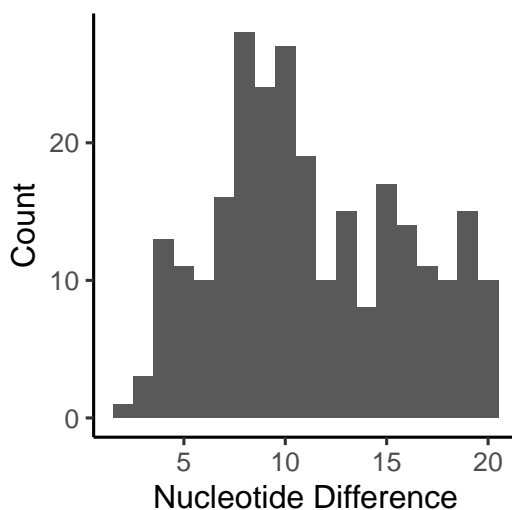
IGHV3-69-1*02

7 sequences assigned
No exact matches.



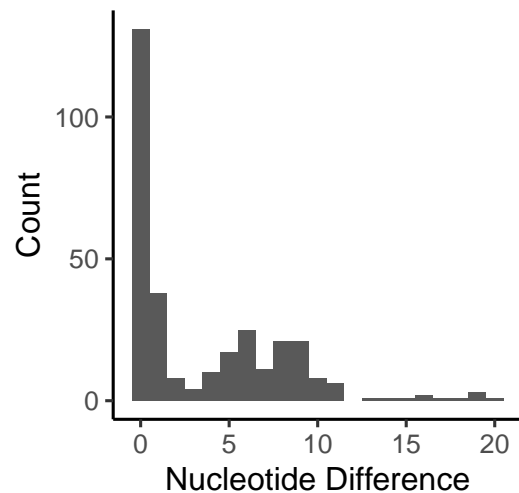
IGHV3-74*03

316 sequences assigned
No exact matches.



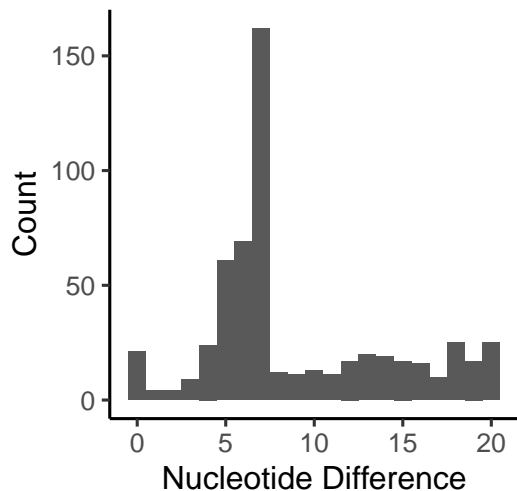
IGHV3-64D*06

323 sequences assigned
131 (40.6%) exact matches, in which:
99 unique CDR3
5 unique J



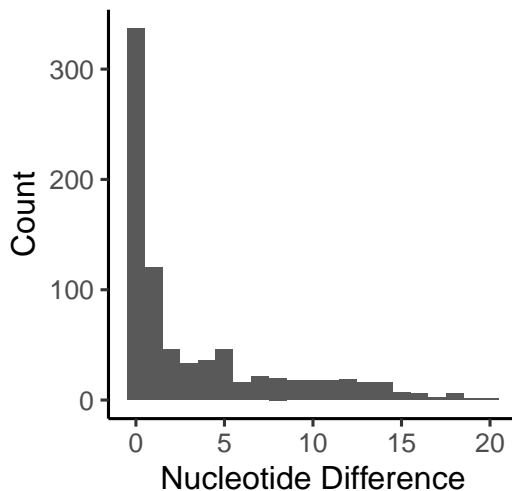
IGHV3-72*01

599 sequences assigned
21 (3.5%) exact matches, in which:
17 unique CDR3
4 unique J



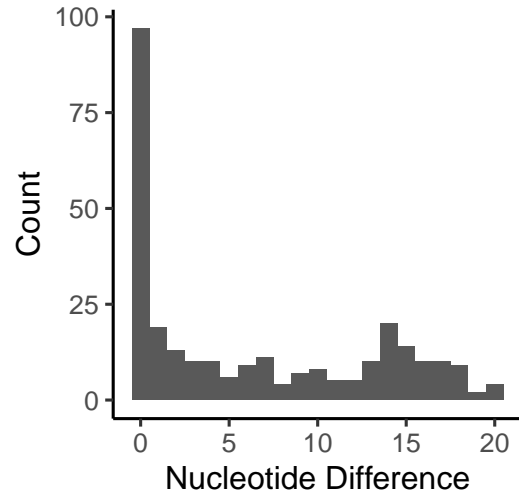
IGHV3-74*01_02

826 sequences assigned
337 (40.8%) exact matches, in which:
226 unique CDR3
6 unique J



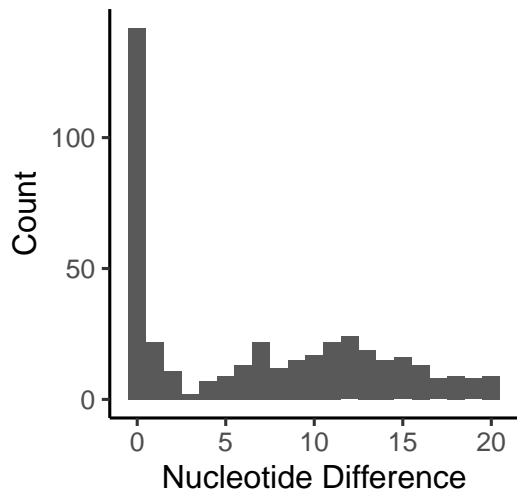
IGHV3-64D*08

296 sequences assigned
97 (32.8%) exact matches, in which:
74 unique CDR3
6 unique J



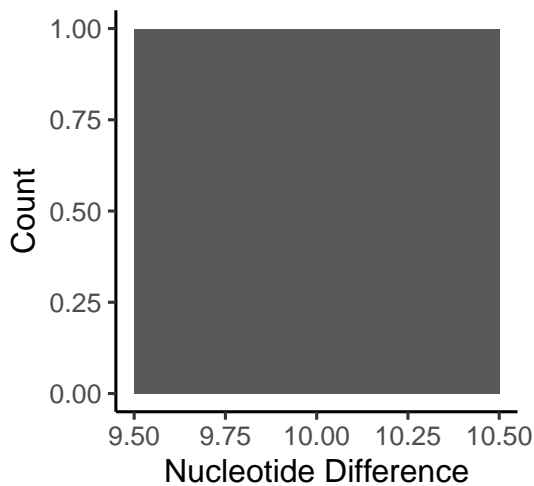
IGHV4-4*02_03

473 sequences assigned
142 (30%) exact matches, in which:
112 unique CDR3
5 unique J



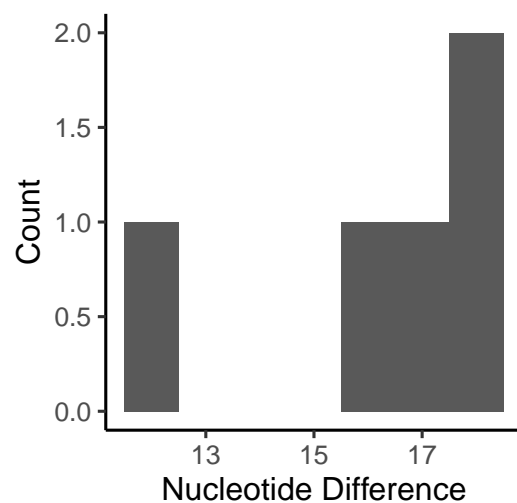
IGHV4-30-4*08

2 sequences assigned
No exact matches.



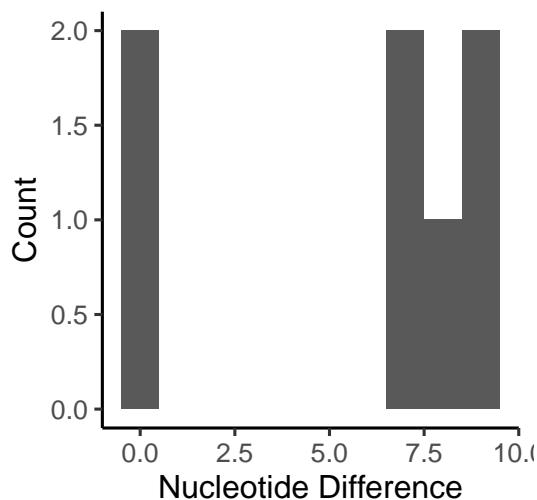
IGHV4-38-2*02

5 sequences assigned
No exact matches.



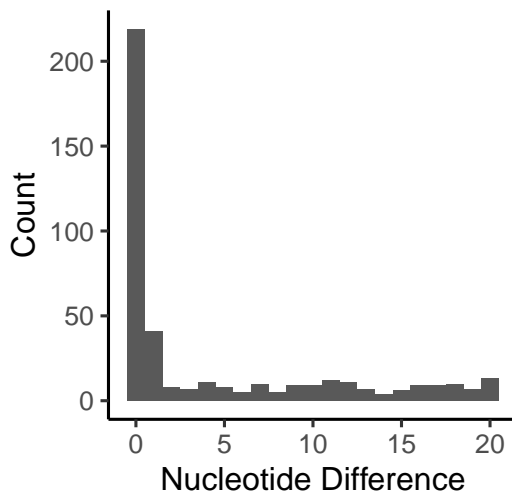
IGHV4-28*01_07

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



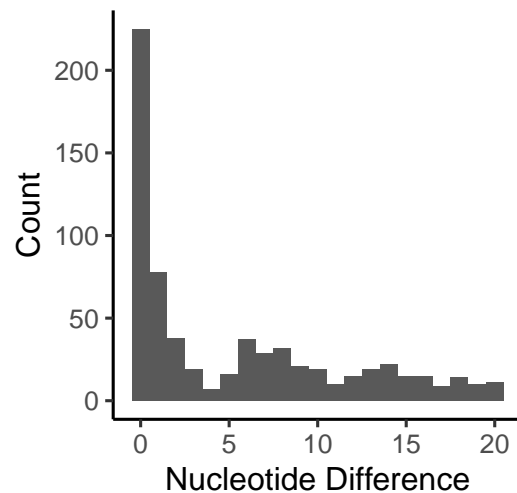
IGHV4-31*02

541 sequences assigned
219 (40.5%) exact matches, in which:
185 unique CDR3
6 unique J



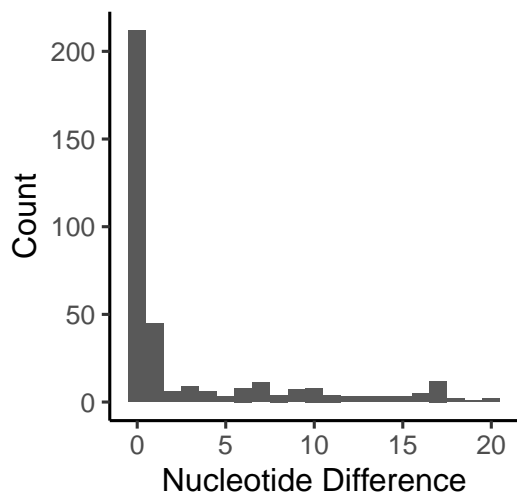
IGHV4-39*07

746 sequences assigned
225 (30.2%) exact matches, in which:
188 unique CDR3
6 unique J



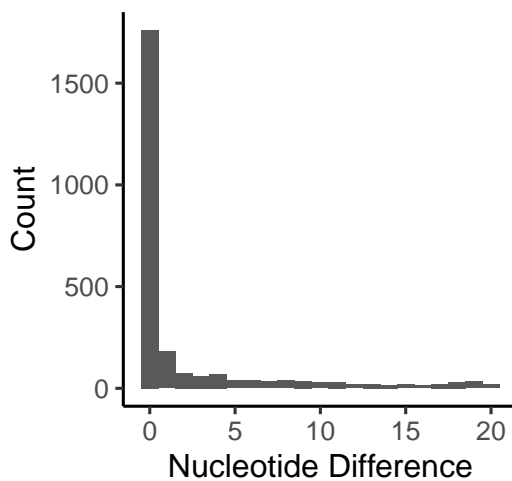
IGHV4-30-2*01

364 sequences assigned
212 (58.2%) exact matches, in which:
172 unique CDR3
6 unique J



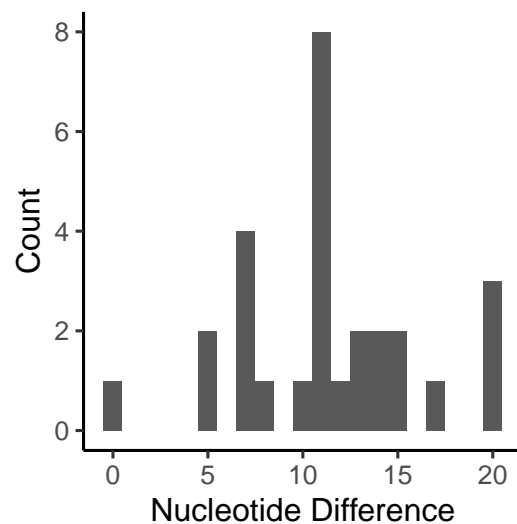
IGHV4-34*01_02

2796 sequences assigned
1761 (63%) exact matches, in which:
1566 unique CDR3
6 unique J



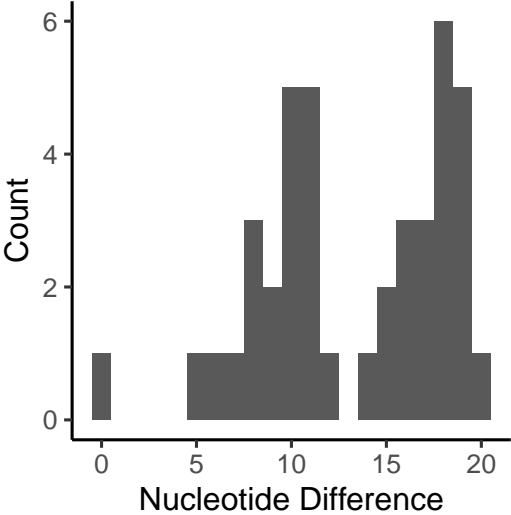
IGHV4-59*02

52 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



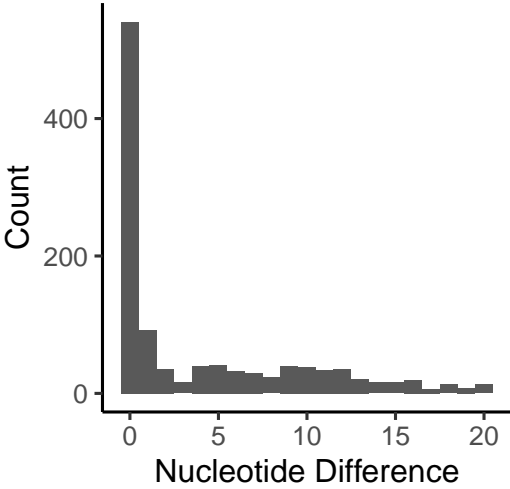
IGHV4-59*11

62 sequences assigned
1 (1.6%) exact matches, in which:
1 unique CDR3
1 unique J



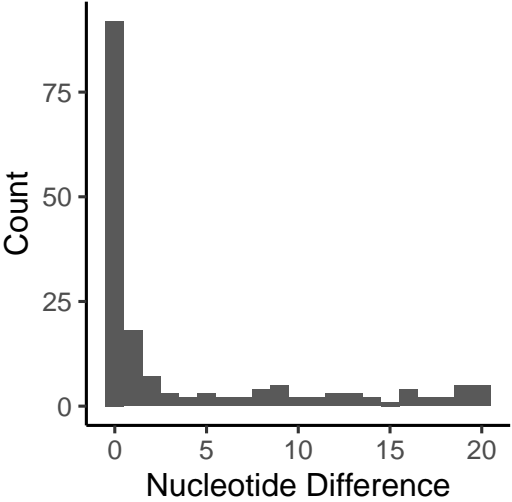
IGHV4-61*01

1211 sequences assigned
541 (44.7%) exact matches, in which:
480 unique CDR3
6 unique J



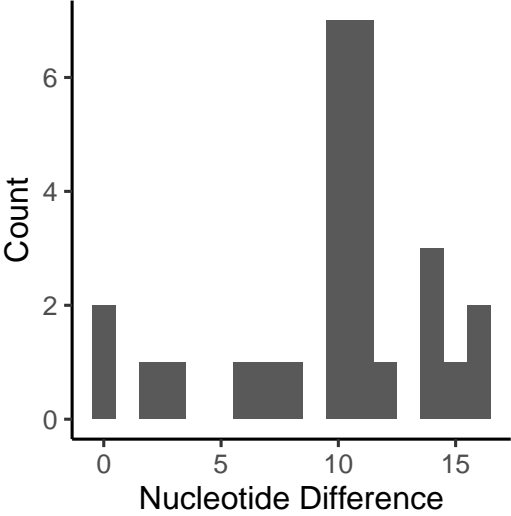
IGHV5-10-1*01_03

183 sequences assigned
92 (50.3%) exact matches, in which:
91 unique CDR3
6 unique J



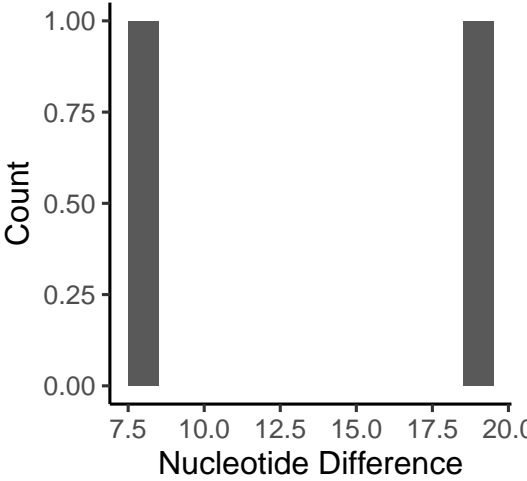
IGHV4-59*12

33 sequences assigned
2 (6.1%) exact matches, in which:
2 unique CDR3
1 unique J



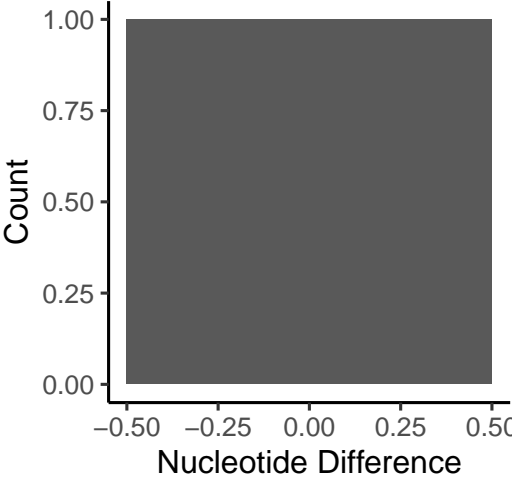
IGHV4/OR15-8*01

5 sequences assigned
No exact matches.



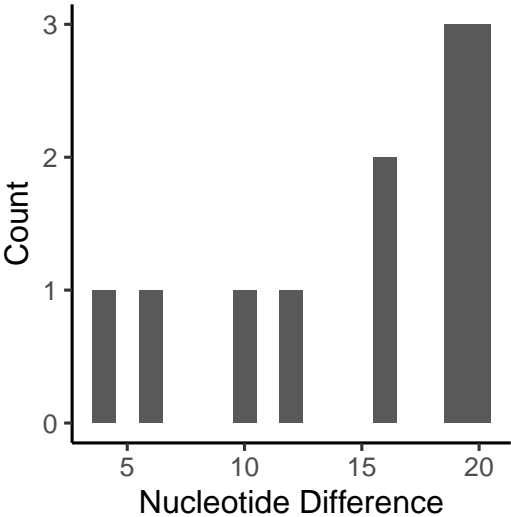
IGHV5-51*04

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



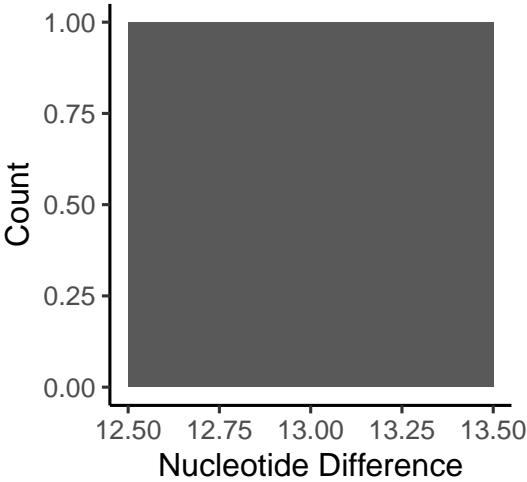
IGHV4-59*13

17 sequences assigned
No exact matches.



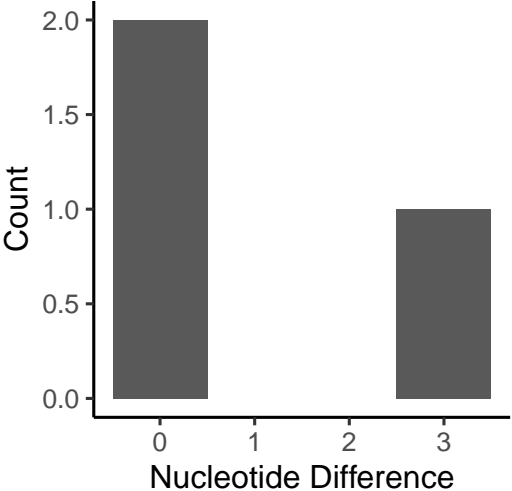
IGHV1/OR15-9*01

1 sequences assigned
No exact matches.



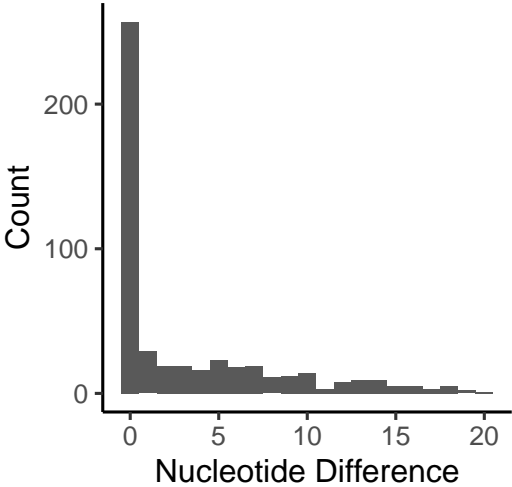
IGHV5-51*07

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



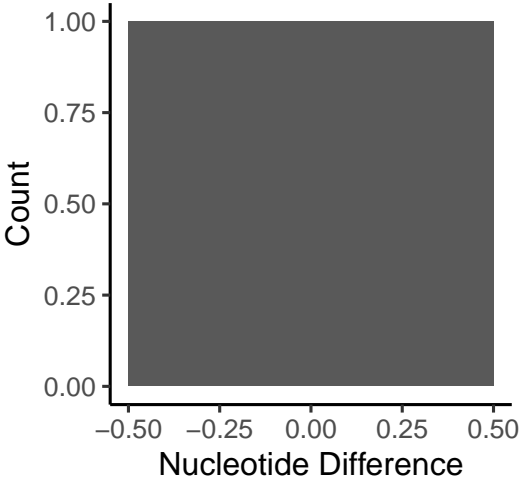
IGHV6-1*01_02

500 sequences assigned
257 (51.4%) exact matches, in which:
248 unique CDR3
6 unique J



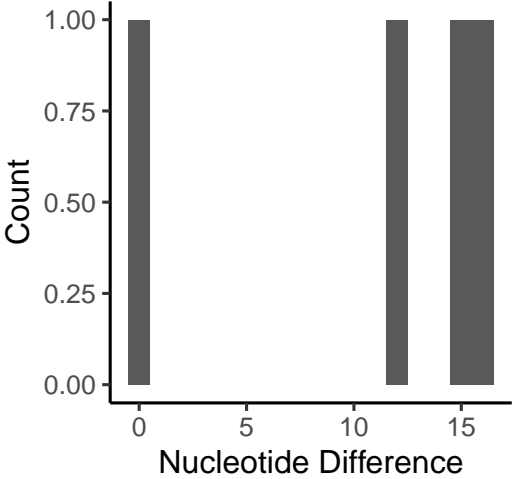
IGHV7-4-1*01

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



IGHV7-4-1*02

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





Warning – no inferred sequences found.