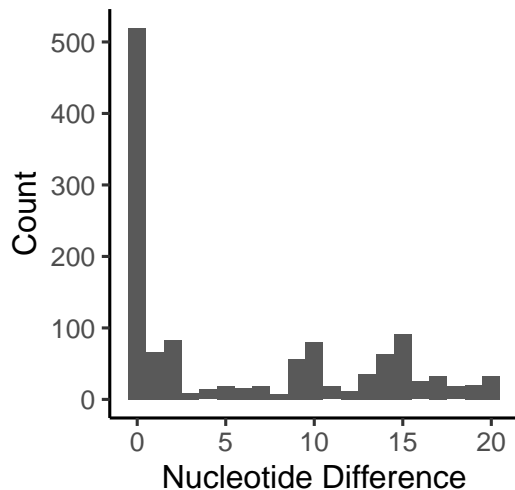


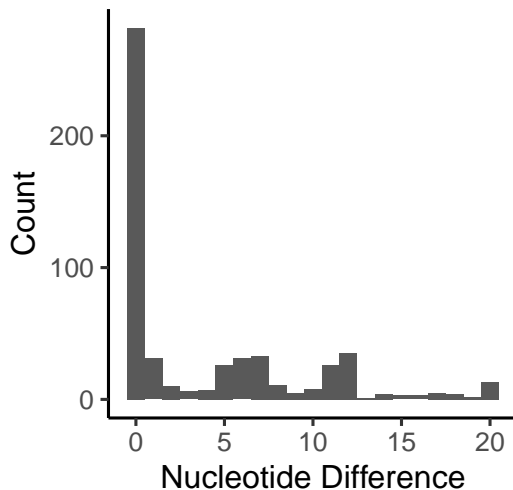
IGHV1-2*02

1511 sequences assigned
520 (34.4%) exact matches, in which:
507 unique CDR3
6 unique J



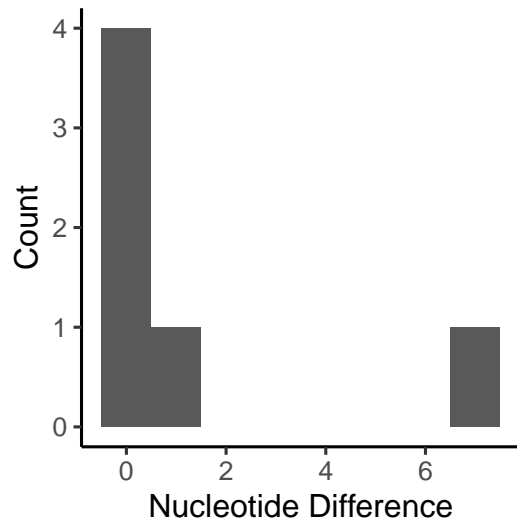
IGHV1-8*01

617 sequences assigned
282 (45.7%) exact matches, in which:
273 unique CDR3
6 unique J



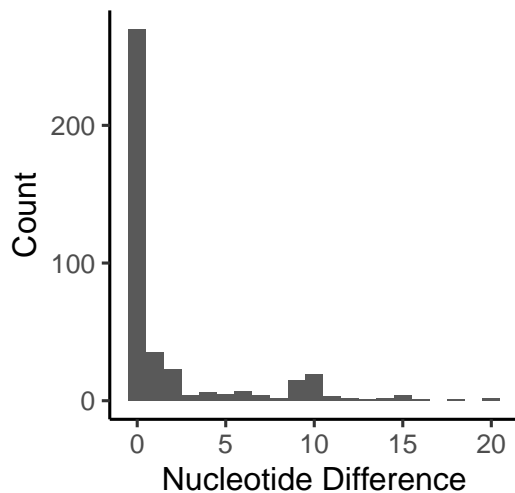
IGHV1-45*02

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



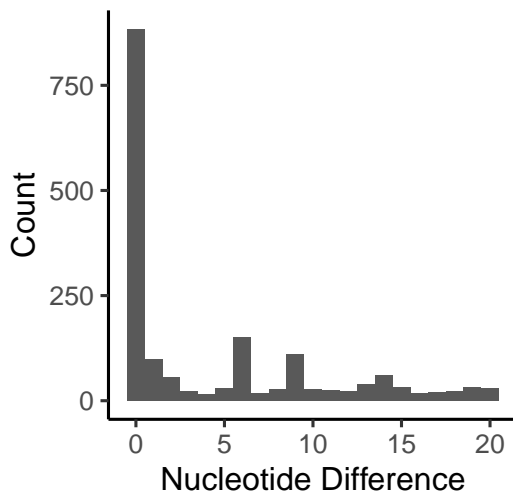
IGHV1-2*04

410 sequences assigned
270 (65.9%) exact matches, in which:
264 unique CDR3
6 unique J



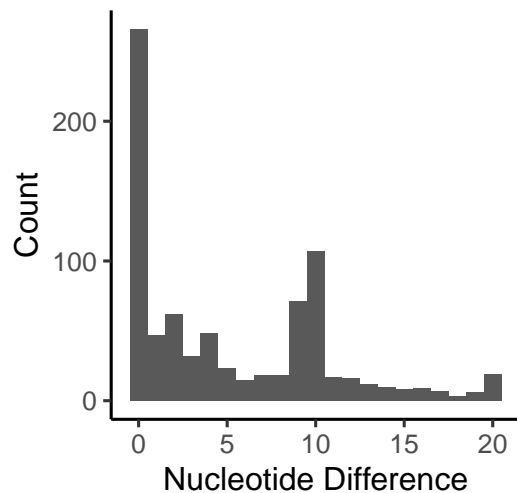
IGHV1-18*01

2320 sequences assigned
884 (38.1%) exact matches, in which:
863 unique CDR3
6 unique J



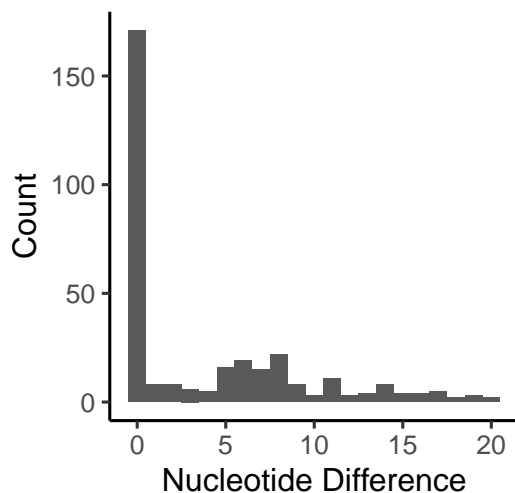
IGHV1-46*01

876 sequences assigned
266 (30.4%) exact matches, in which:
258 unique CDR3
6 unique J



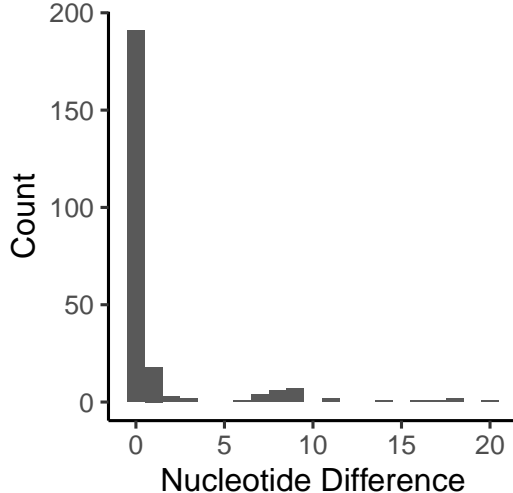
IGHV1-3*01_05

410 sequences assigned
171 (41.7%) exact matches, in which:
162 unique CDR3
6 unique J



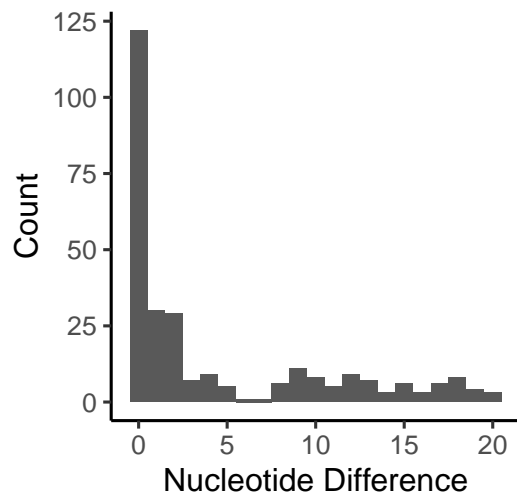
IGHV1-24*01

258 sequences assigned
191 (74%) exact matches, in which:
188 unique CDR3
6 unique J



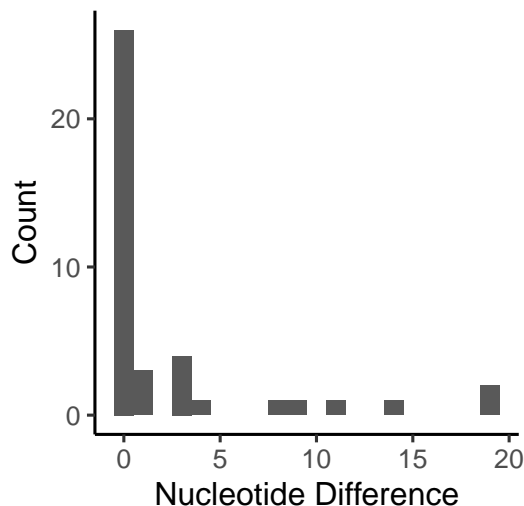
IGHV1-46*03

395 sequences assigned
122 (30.9%) exact matches, in which:
115 unique CDR3
6 unique J



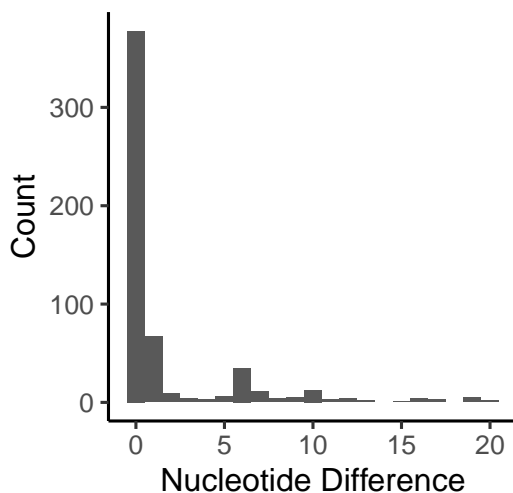
IGHV1-58*02

43 sequences assigned
26 (60.5%) exact matches, in which:
26 unique CDR3
3 unique J



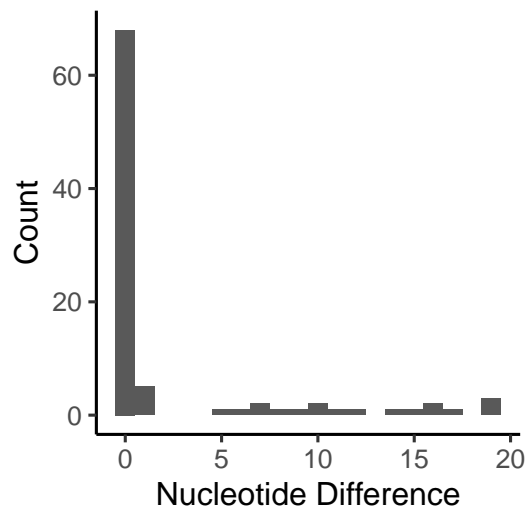
IGHV1-69*04_09

590 sequences assigned
378 (64.1%) exact matches, in which:
370 unique CDR3
6 unique J



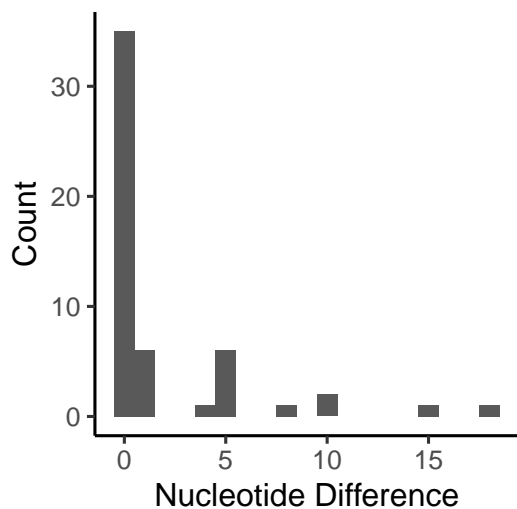
IGHV2-26*01

93 sequences assigned
68 (73.1%) exact matches, in which:
67 unique CDR3
6 unique J



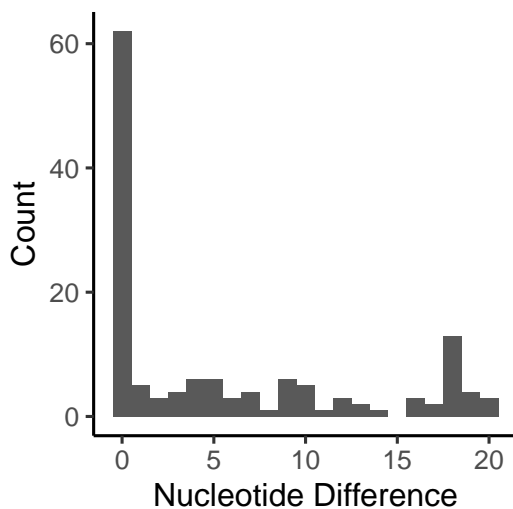
IGHV1-58*01_03

59 sequences assigned
35 (59.3%) exact matches, in which:
34 unique CDR3
5 unique J



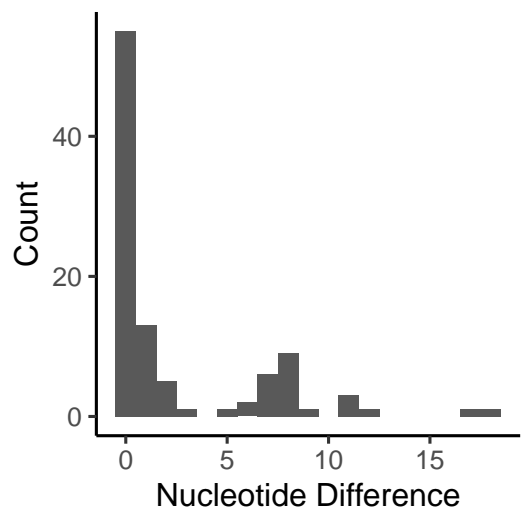
IGHV2-5*01

144 sequences assigned
62 (43.1%) exact matches, in which:
59 unique CDR3
6 unique J



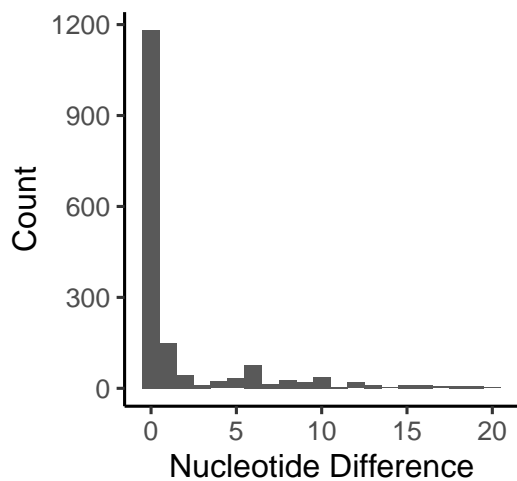
IGHV2-70*01

103 sequences assigned
55 (53.4%) exact matches, in which:
55 unique CDR3
5 unique J



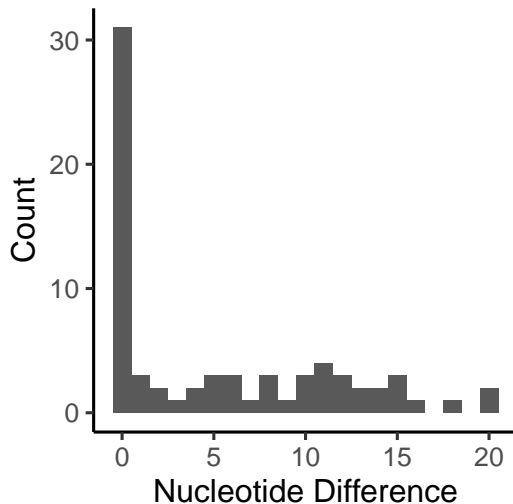
IGHV1-69*01_12_13

1821 sequences assigned
1182 (64.9%) exact matches, in which:
1164 unique CDR3
6 unique J



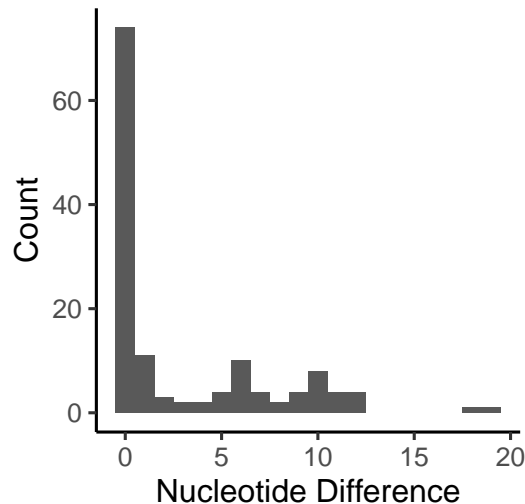
IGHV2-5*02

95 sequences assigned
31 (32.6%) exact matches, in which:
30 unique CDR3
6 unique J



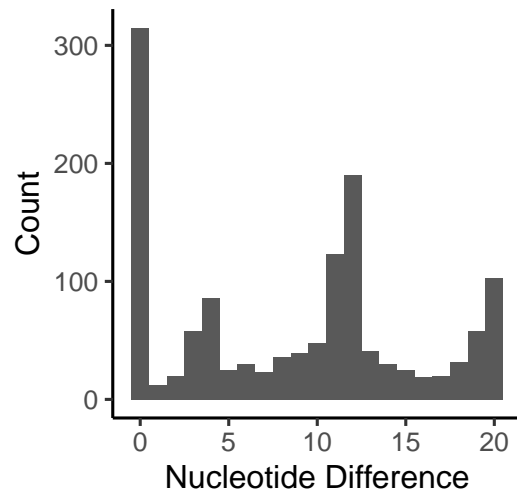
IGHV2-70*11_15

139 sequences assigned
74 (53.2%) exact matches, in which:
71 unique CDR3
6 unique J



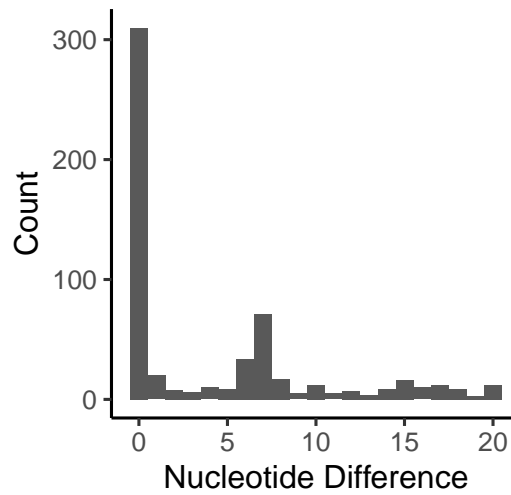
IGHV3-7*01

1606 sequences assigned
315 (19.6%) exact matches, in which:
194 unique CDR3
6 unique J



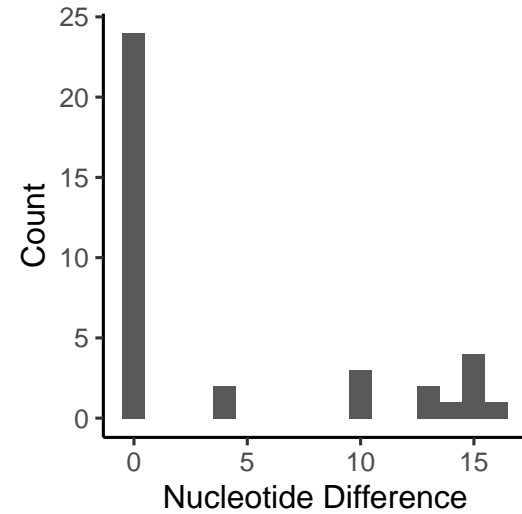
IGHV3-11*01

653 sequences assigned
310 (47.5%) exact matches, in which:
192 unique CDR3
6 unique J



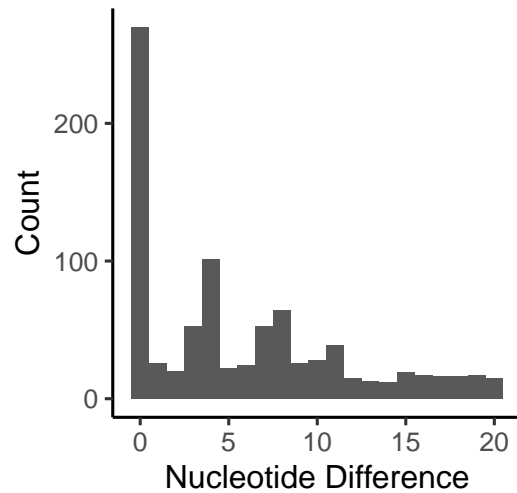
IGHV3-13*05

37 sequences assigned
24 (64.9%) exact matches, in which:
14 unique CDR3
4 unique J



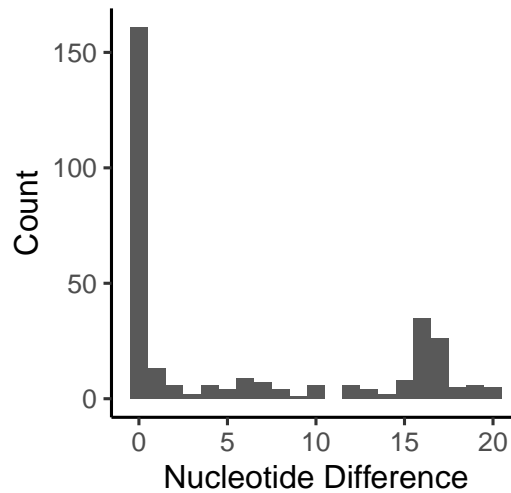
IGHV3-7*03

1084 sequences assigned
270 (24.9%) exact matches, in which:
162 unique CDR3
6 unique J



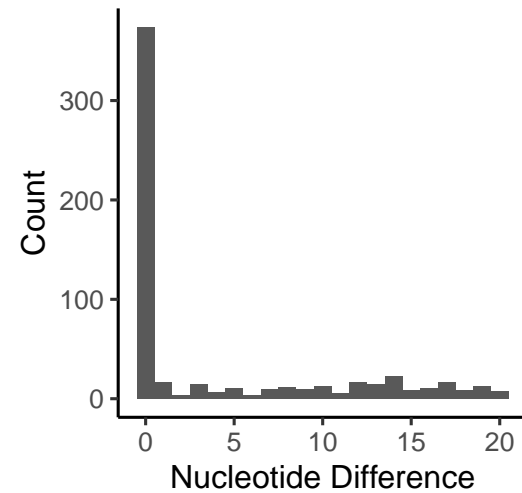
IGHV3-11*06

361 sequences assigned
161 (44.6%) exact matches, in which:
98 unique CDR3
5 unique J



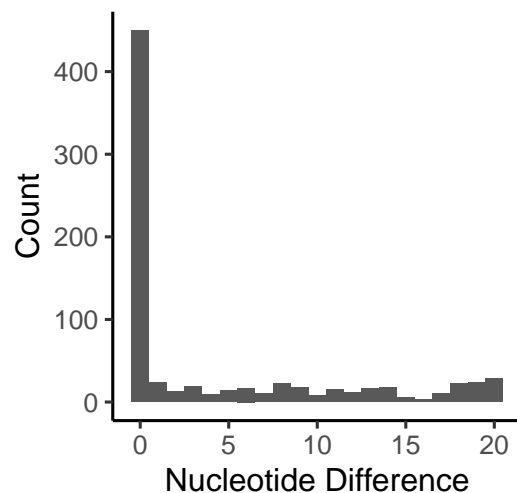
IGHV3-15*01_02

647 sequences assigned
374 (57.8%) exact matches, in which:
242 unique CDR3
6 unique J



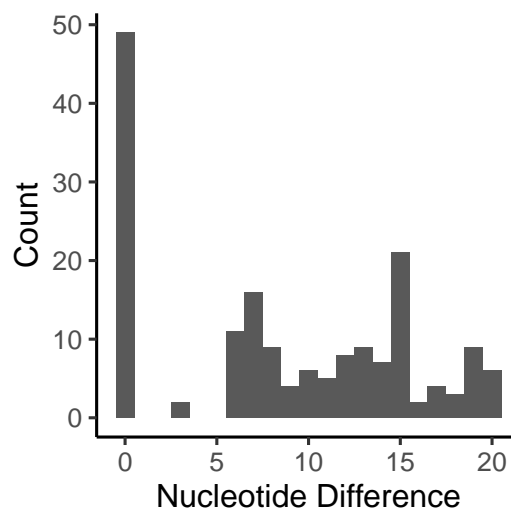
IGHV3-9*01

868 sequences assigned
450 (51.8%) exact matches, in which:
268 unique CDR3
6 unique J



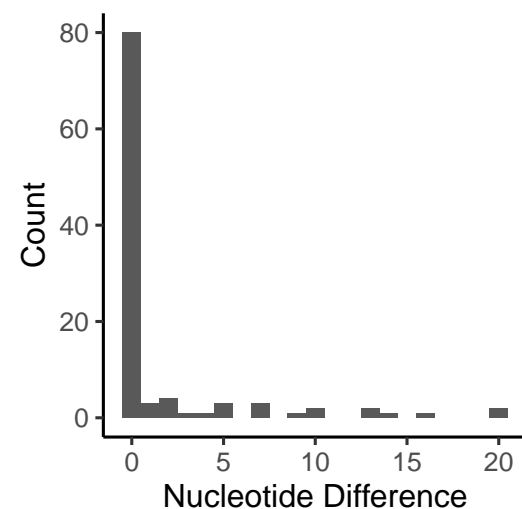
IGHV3-13*01

200 sequences assigned
49 (24.5%) exact matches, in which:
28 unique CDR3
5 unique J



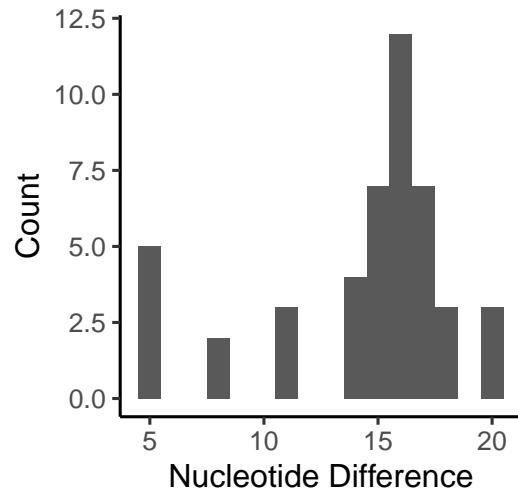
IGHV3-20*01_02

104 sequences assigned
80 (76.9%) exact matches, in which:
50 unique CDR3
5 unique J



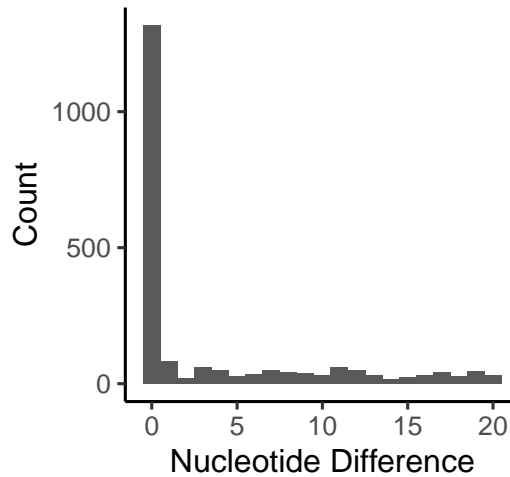
IGHV3-20*03_04

49 sequences assigned
No exact matches.



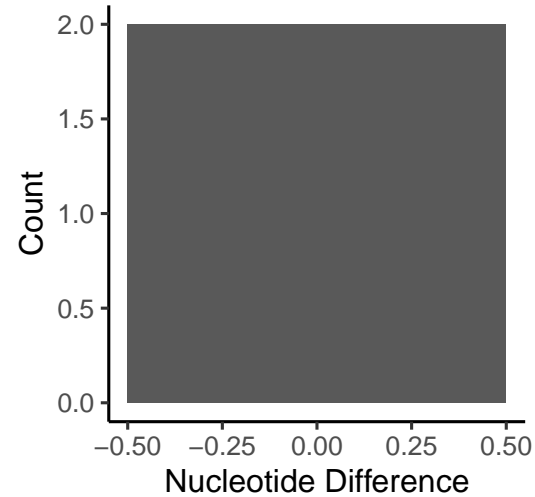
IGHV3-30-3*01

2329 sequences assigned
1317 (56.5%) exact matches, in which:
814 unique CDR3
6 unique J



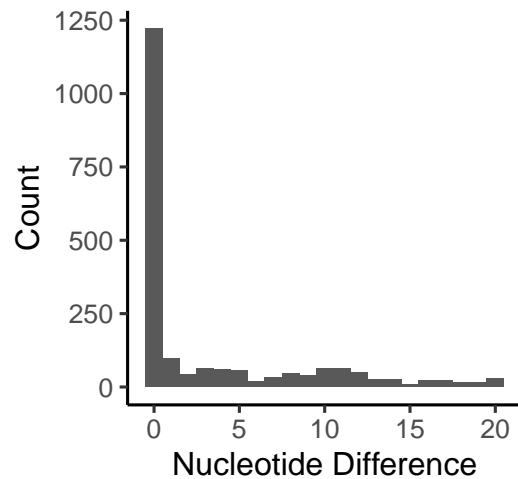
IGHV3-35*01

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



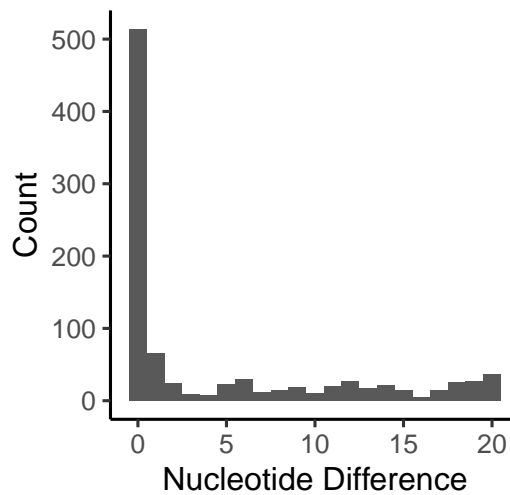
IGHV3-21*01_02

2338 sequences assigned
1221 (52.2%) exact matches, in which:
709 unique CDR3
6 unique J



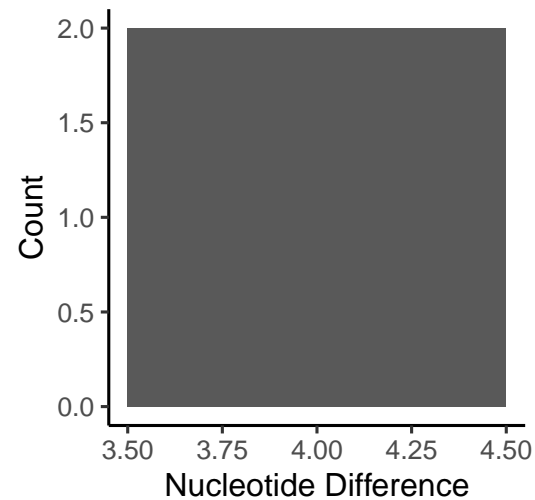
IGHV3-30*03

1105 sequences assigned
514 (46.5%) exact matches, in which:
341 unique CDR3
6 unique J



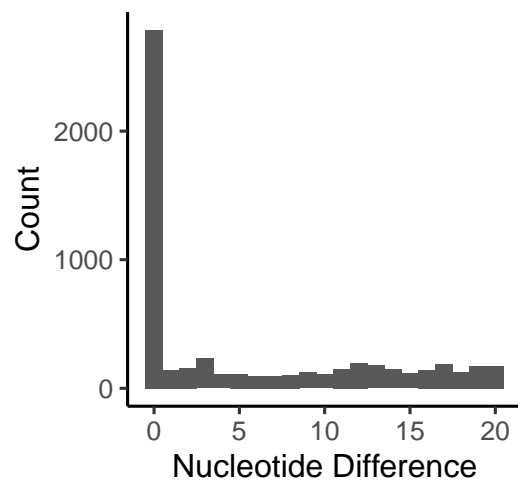
IGHV3-35*02

2 sequences assigned
No exact matches.



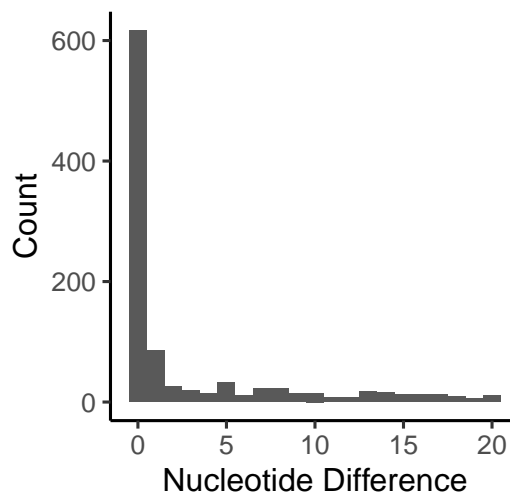
IGHV3-23*01_04

6652 sequences assigned
2786 (41.9%) exact matches, in which:
1640 unique CDR3
6 unique J



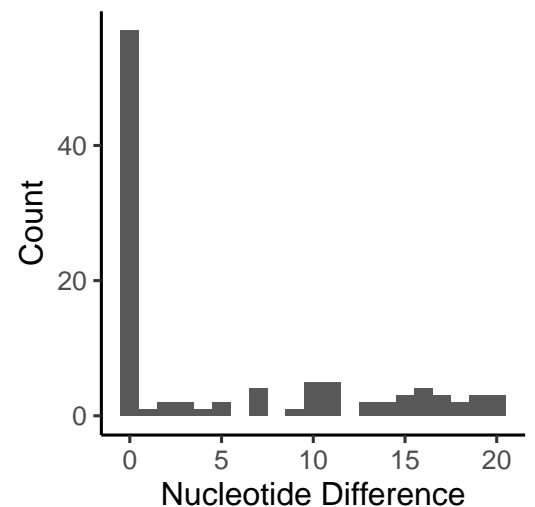
IGHV3-33*01

1070 sequences assigned
617 (57.7%) exact matches, in which:
398 unique CDR3
6 unique J



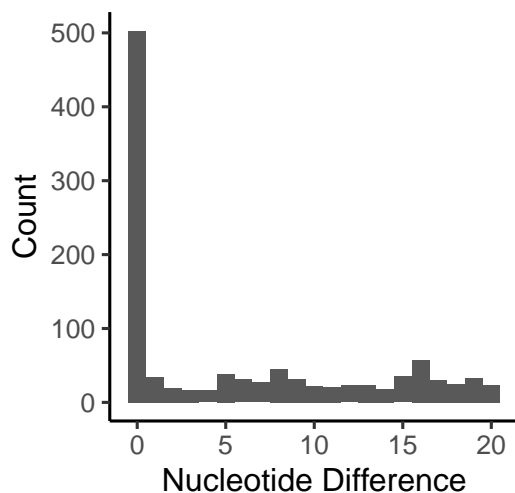
IGHV3-43*01

125 sequences assigned
57 (45.6%) exact matches, in which:
35 unique CDR3
5 unique J



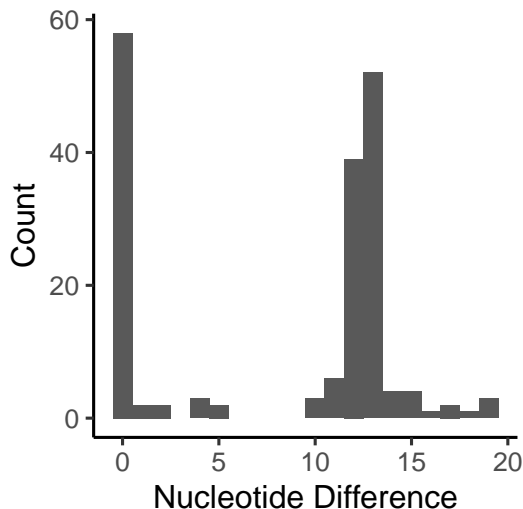
IGHV3-48*02

1206 sequences assigned
503 (41.7%) exact matches, in which:
282 unique CDR3
6 unique J



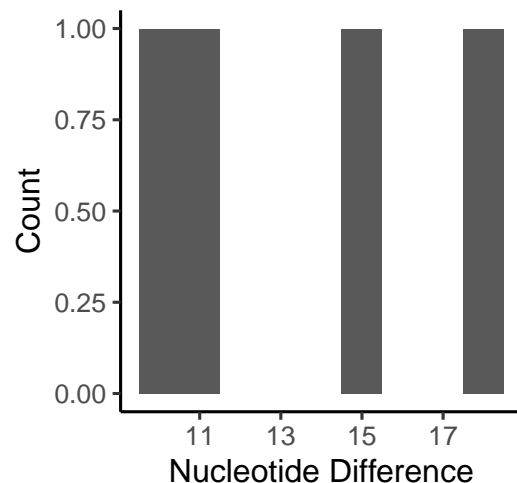
IGHV3-64*01

186 sequences assigned
58 (31.2%) exact matches, in which:
30 unique CDR3
5 unique J



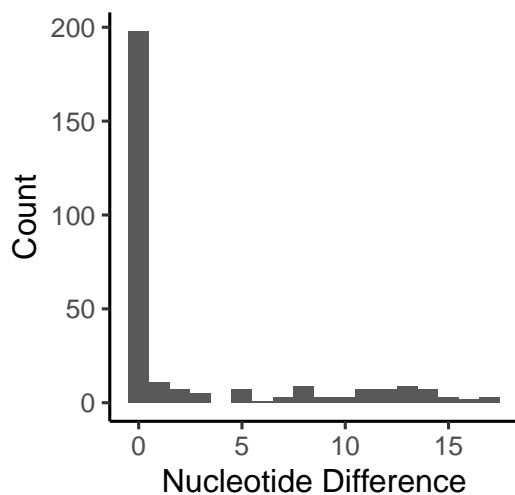
IGHV3-69-1*01

18 sequences assigned
No exact matches.



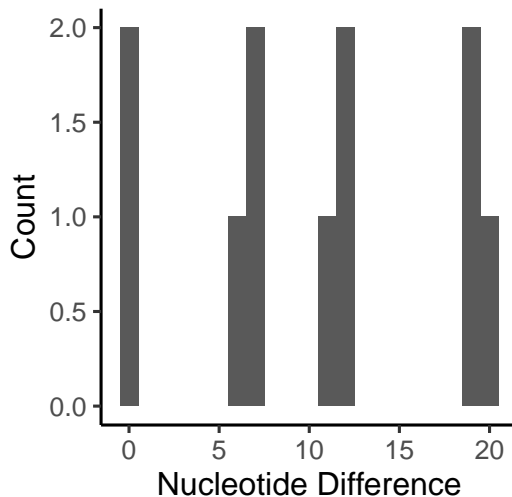
IGHV3-49*03_05

287 sequences assigned
198 (69%) exact matches, in which:
127 unique CDR3
6 unique J



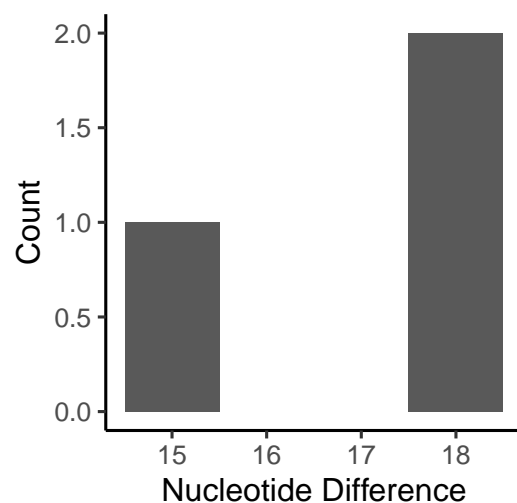
IGHV3-64*02_07

43 sequences assigned
2 (4.7%) exact matches, in which:
1 unique CDR3
1 unique J



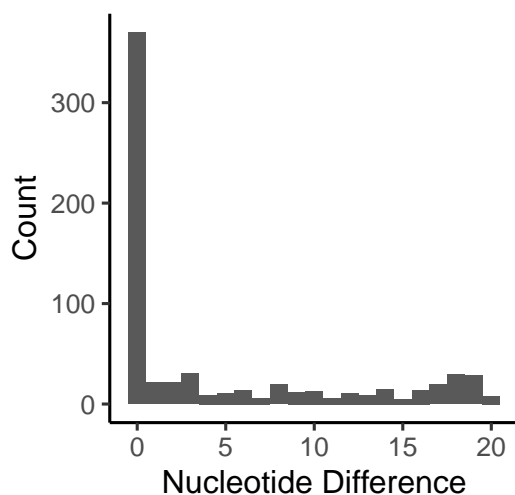
IGHV3-69-1*02

3 sequences assigned
No exact matches.



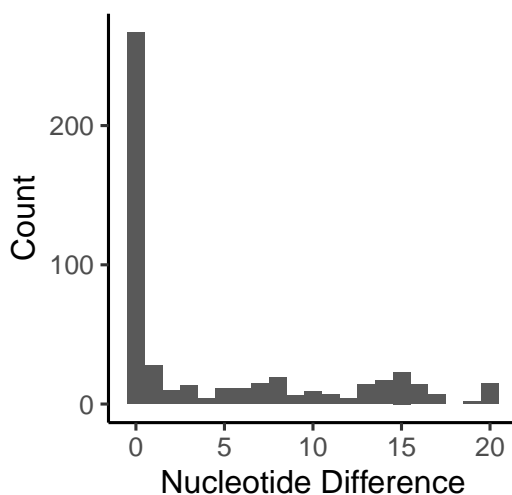
IGHV3-53*01_02

788 sequences assigned
370 (47%) exact matches, in which:
217 unique CDR3
6 unique J



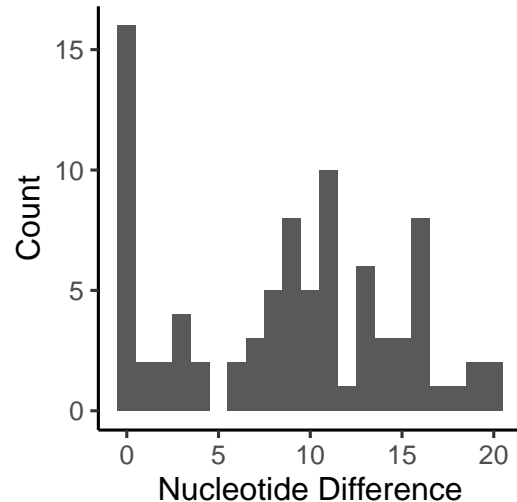
IGHV3-66*01

582 sequences assigned
267 (45.9%) exact matches, in which:
157 unique CDR3
6 unique J



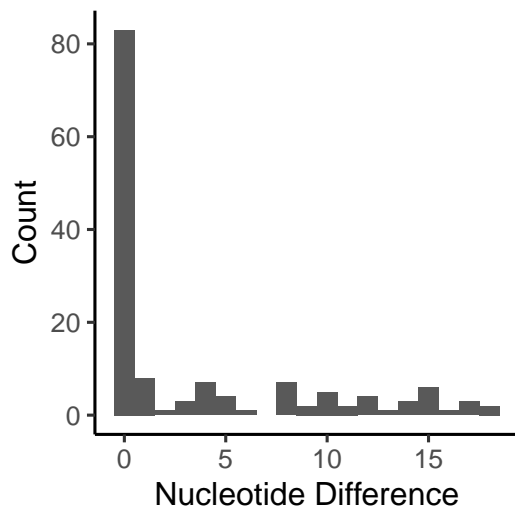
IGHV3-72*01

96 sequences assigned
16 (16.7%) exact matches, in which:
10 unique CDR3
4 unique J



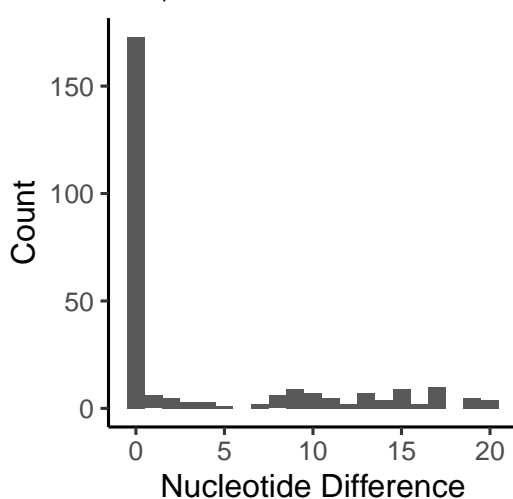
IGHV3-73*01_02

145 sequences assigned
83 (57.2%) exact matches, in which:
50 unique CDR3
5 unique J



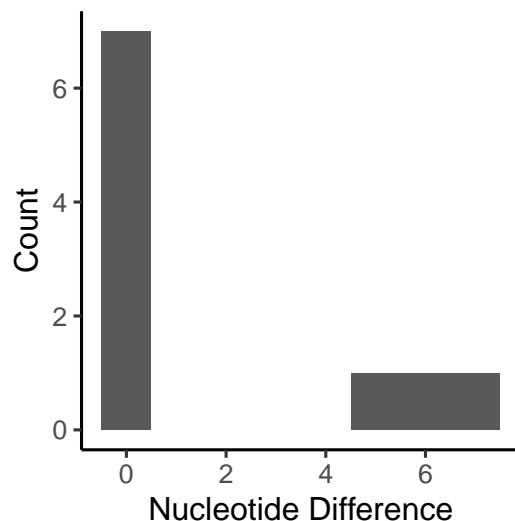
IGHV3-64D*09

367 sequences assigned
173 (47.1%) exact matches, in which:
94 unique CDR3
6 unique J



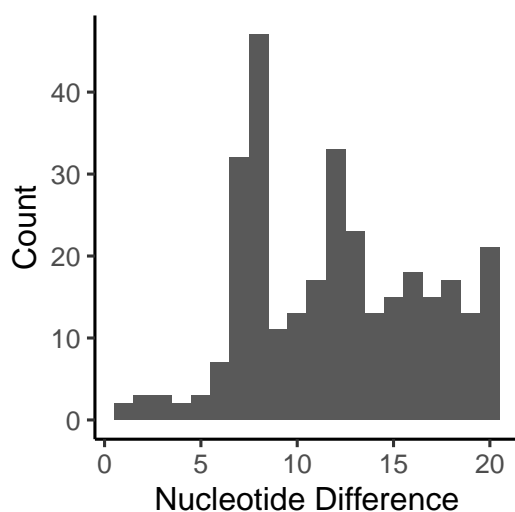
IGHV4-28*01_07

10 sequences assigned
7 (70%) exact matches, in which:
7 unique CDR3
3 unique J



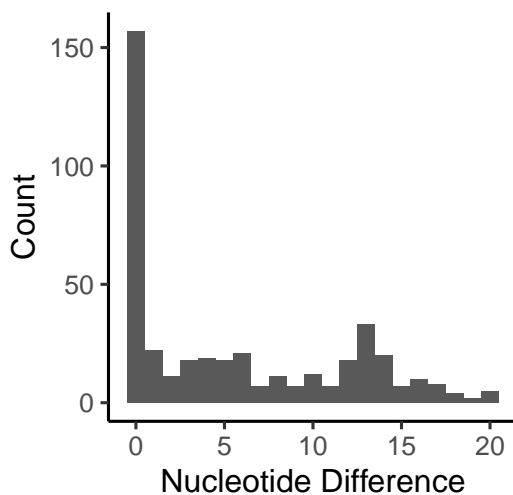
IGHV3-74*03

483 sequences assigned
No exact matches.



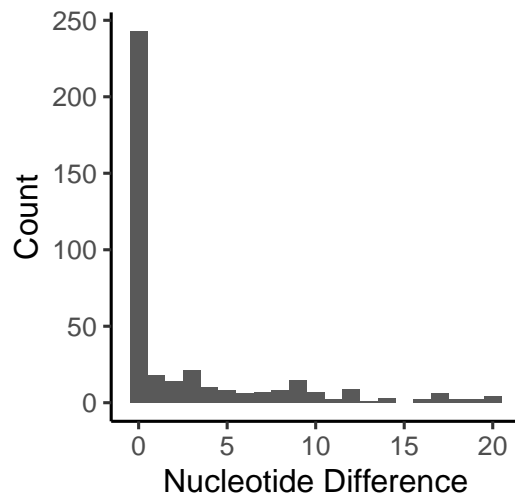
IGHV4-4*07

518 sequences assigned
157 (30.3%) exact matches, in which:
149 unique CDR3
6 unique J



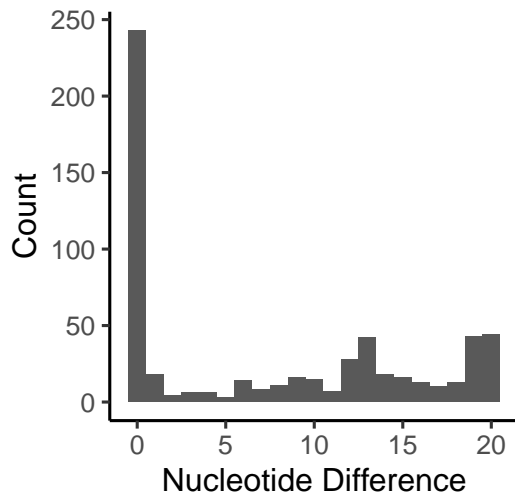
IGHV4-30-4*01

444 sequences assigned
243 (54.7%) exact matches, in which:
228 unique CDR3
6 unique J



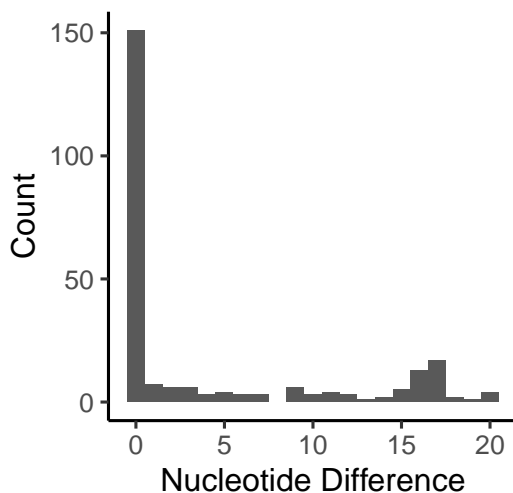
IGHV3-74*01_02

623 sequences assigned
243 (39%) exact matches, in which:
143 unique CDR3
5 unique J



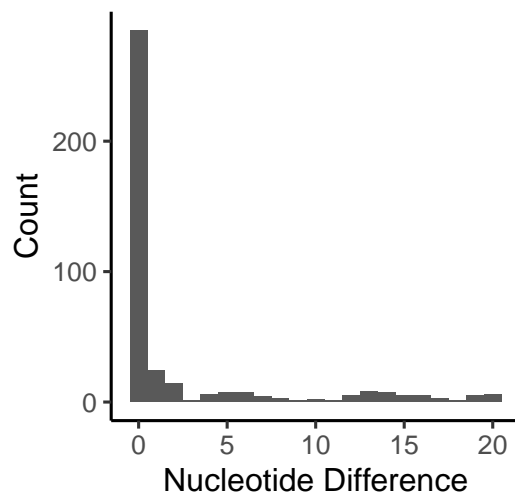
IGHV4-4*02_03

271 sequences assigned
151 (55.7%) exact matches, in which:
143 unique CDR3
6 unique J



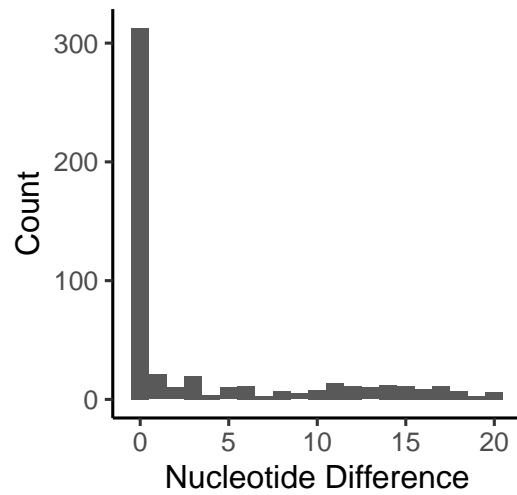
IGHV4-30-2*01

416 sequences assigned
285 (68.5%) exact matches, in which:
254 unique CDR3
6 unique J



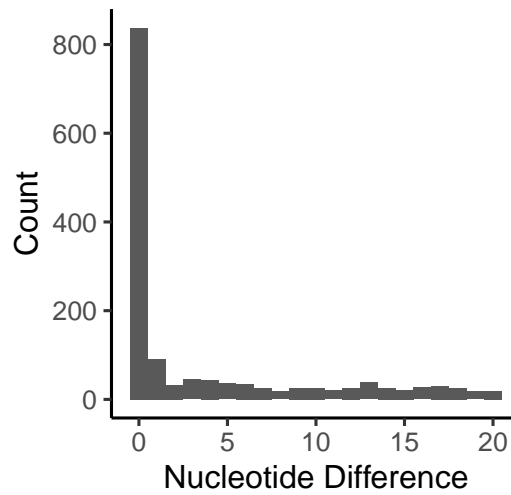
IGHV4–31*02

582 sequences assigned
313 (53.8%) exact matches, in which:
302 unique CDR3
6 unique J



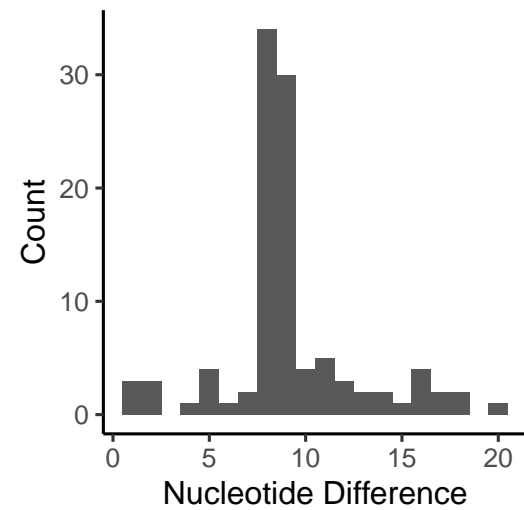
IGHV4–39*02_C258G

1626 sequences assigned
838 (51.5%) exact matches, in which:
802 unique CDR3
6 unique J



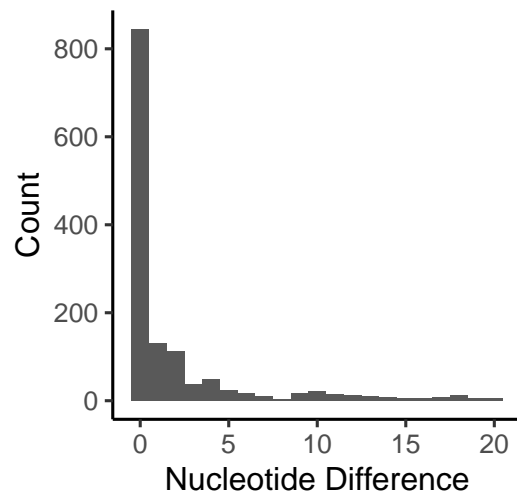
IGHV4–61*08

117 sequences assigned
No exact matches.



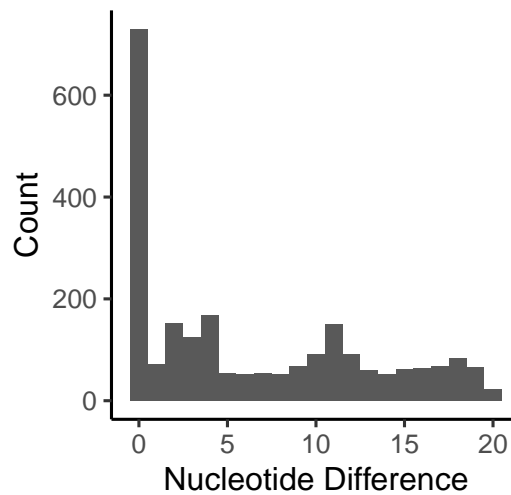
IGHV4–34*01_02

1464 sequences assigned
845 (57.7%) exact matches, in which:
783 unique CDR3
6 unique J



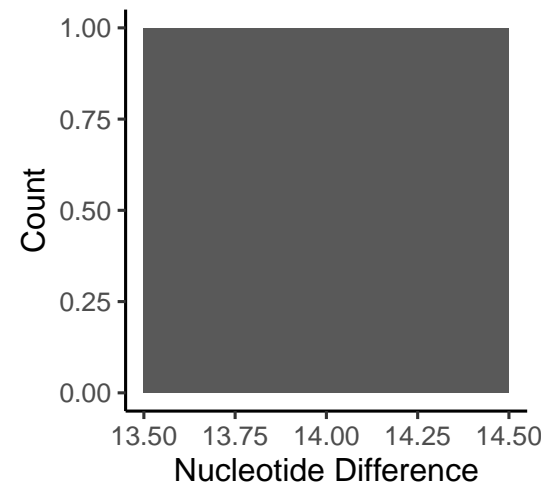
IGHV4–59*02_G88A

2630 sequences assigned
730 (27.8%) exact matches, in which:
707 unique CDR3
6 unique J



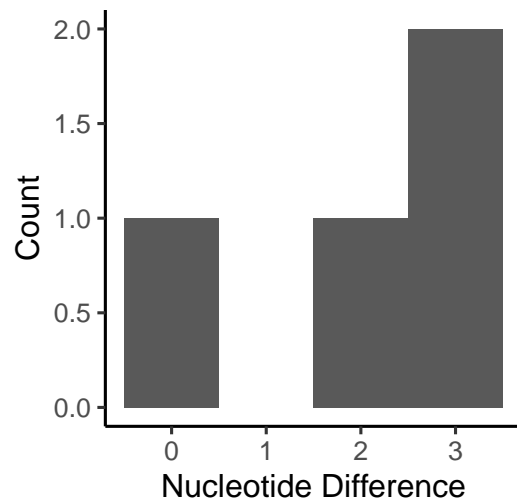
IGHV4/OR15–8*01

7 sequences assigned
No exact matches.



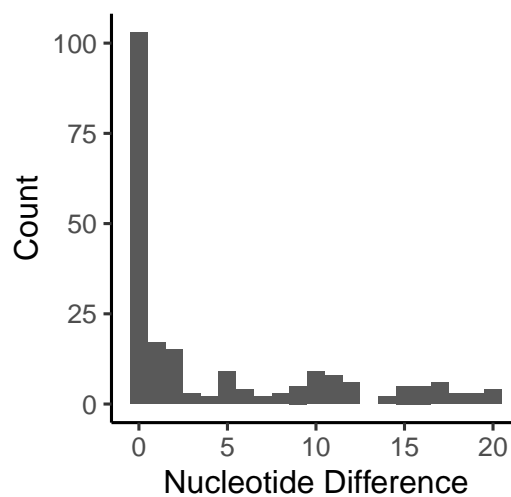
IGHV4–38–2*02

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



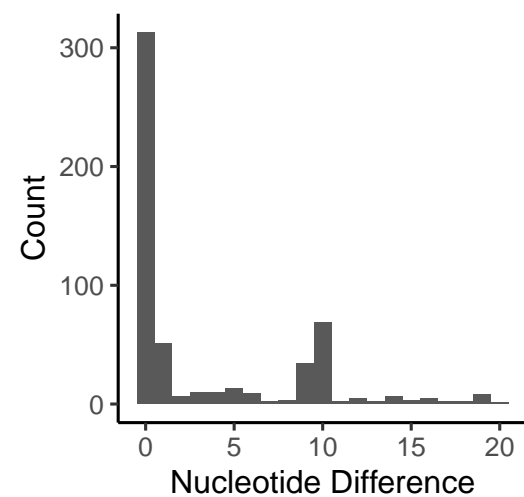
IGHV4–61*01

240 sequences assigned
103 (42.9%) exact matches, in which:
98 unique CDR3
5 unique J



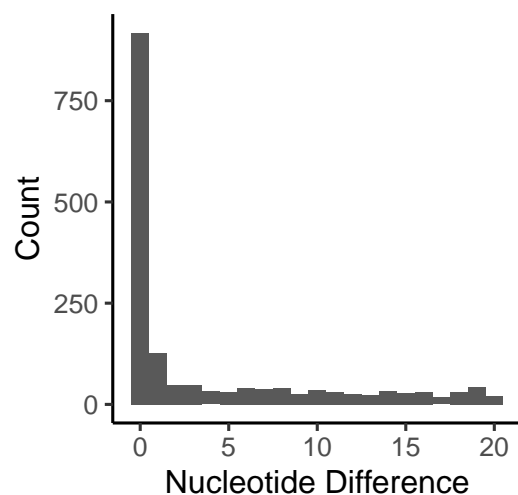
IGHV5–10–1*01_03

569 sequences assigned
313 (55%) exact matches, in which:
211 unique CDR3
5 unique J



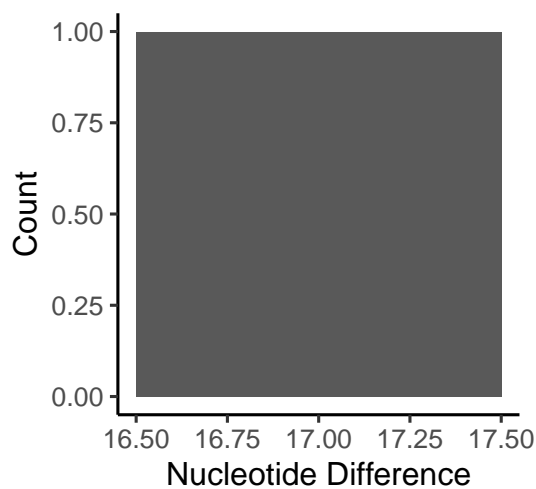
IGHV5–51*07_A128G

1840 sequences assigned
918 (49.9%) exact matches, in which:
614 unique CDR3
6 unique J



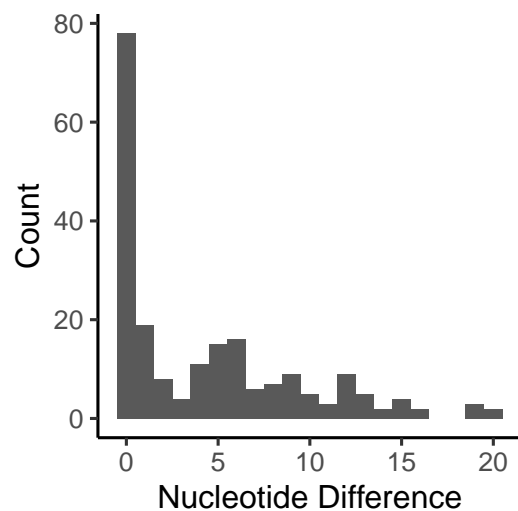
IGHV7–4–1*02

1 sequences assigned
No exact matches.



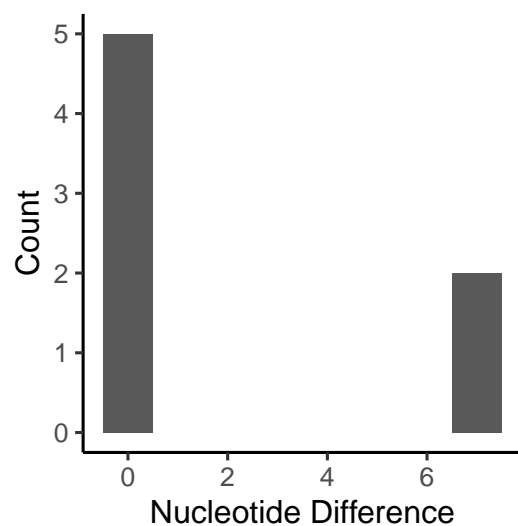
IGHV6–1*01_02

218 sequences assigned
78 (35.8%) exact matches, in which:
78 unique CDR3
6 unique J



IGHV7–4–1*01

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





Warning – no inferred sequences found.