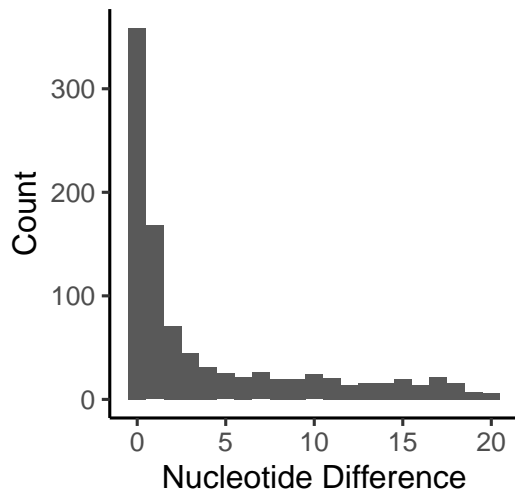


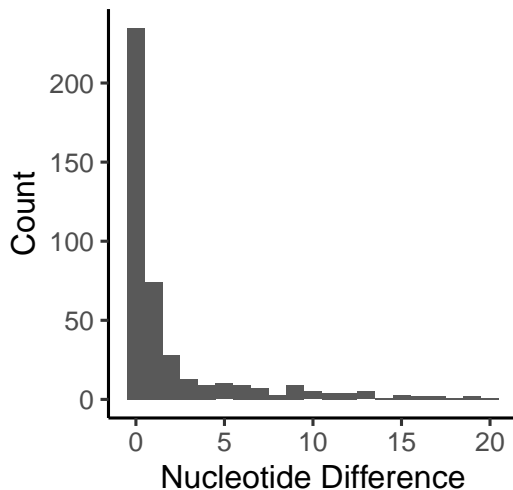
IGHV1-2*02

1172 sequences assigned
359 (30.6%) exact matches, in which:
359 unique CDR3
6 unique J



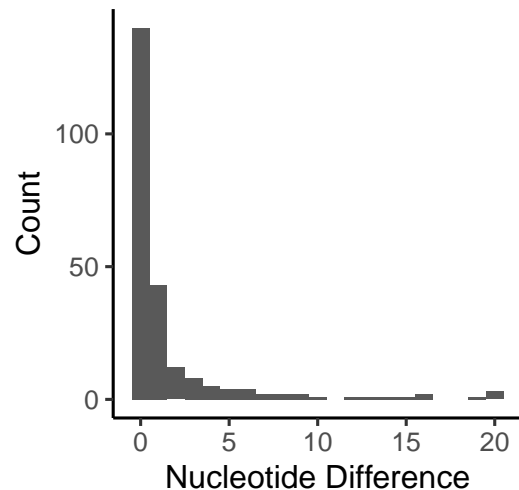
IGHV1-8*01

498 sequences assigned
235 (47.2%) exact matches, in which:
233 unique CDR3
5 unique J



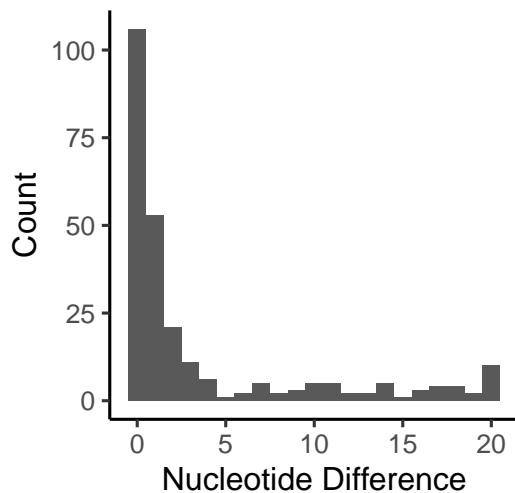
IGHV1-24*01

279 sequences assigned
140 (50.2%) exact matches, in which:
136 unique CDR3
6 unique J



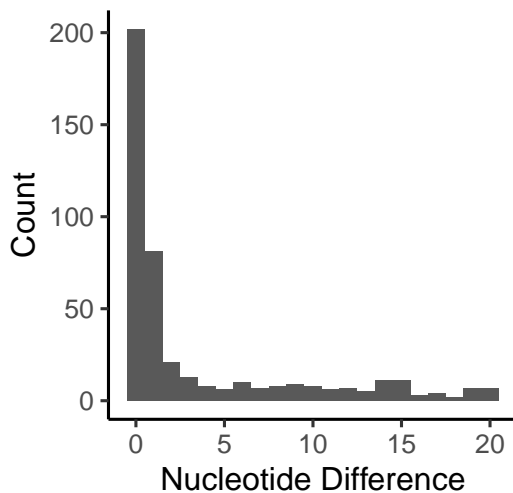
IGHV1-2*04

266 sequences assigned
106 (39.8%) exact matches, in which:
105 unique CDR3
4 unique J



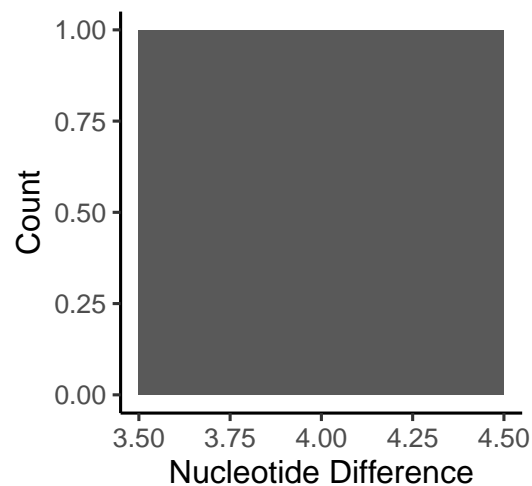
IGHV1-18*01

565 sequences assigned
202 (35.8%) exact matches, in which:
202 unique CDR3
6 unique J



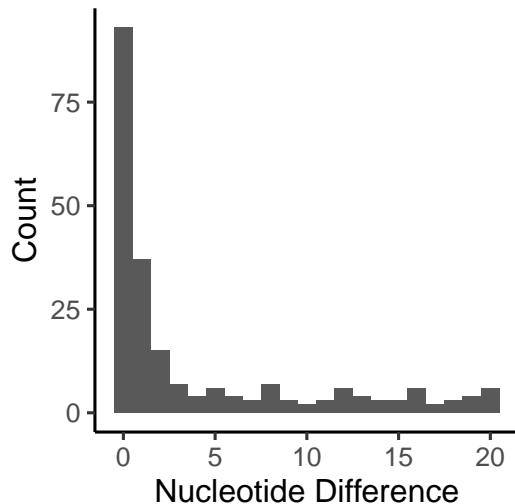
IGHV1-38-4*01

1 sequences assigned
No exact matches.



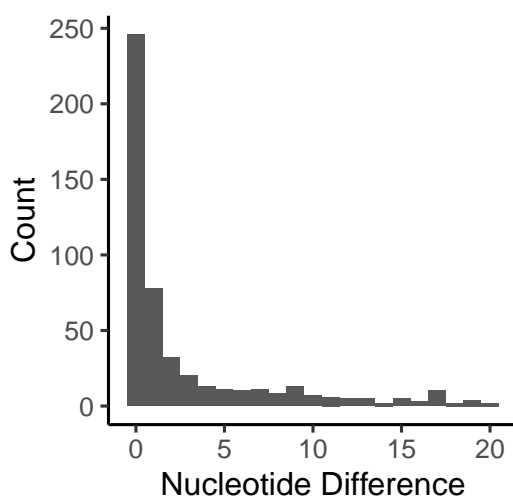
IGHV1-3*01

297 sequences assigned
93 (31.3%) exact matches, in which:
93 unique CDR3
4 unique J



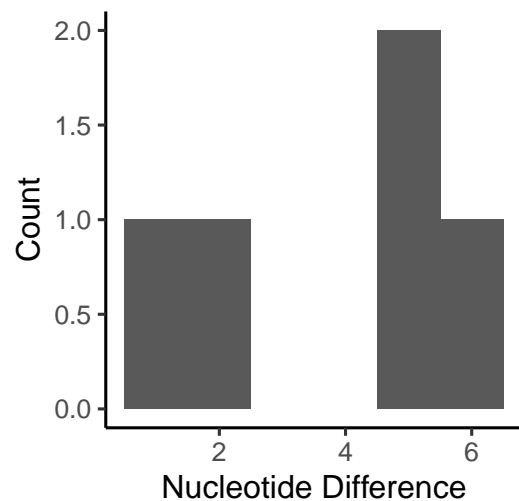
IGHV1-18*04

597 sequences assigned
246 (41.2%) exact matches, in which:
246 unique CDR3
6 unique J



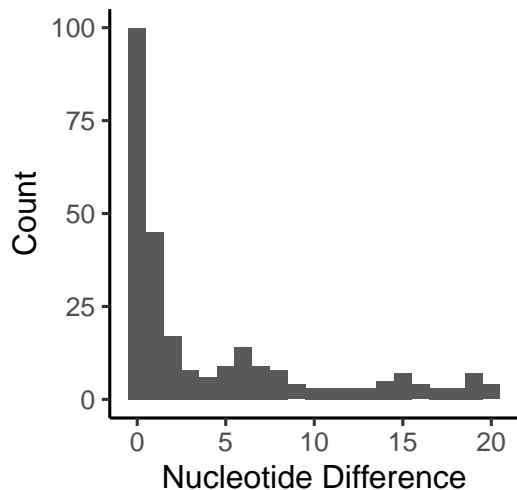
IGHV1-45*02

17 sequences assigned
No exact matches.



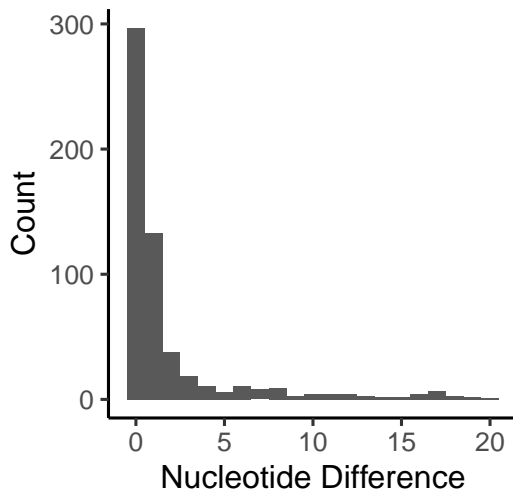
IGHV1-46*01

316 sequences assigned
100 (31.6%) exact matches, in which:
100 unique CDR3
6 unique J



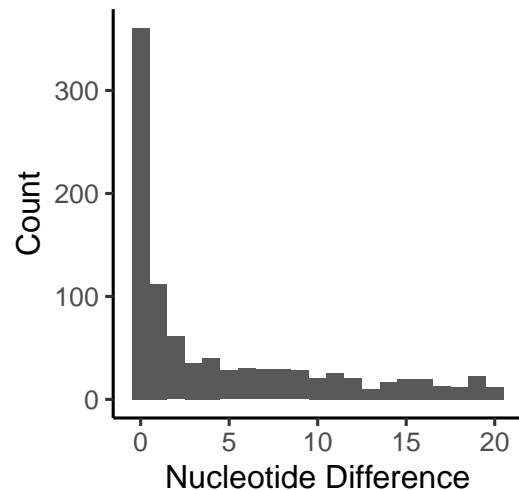
IGHV1-69*04

692 sequences assigned
297 (42.9%) exact matches, in which:
297 unique CDR3
6 unique J



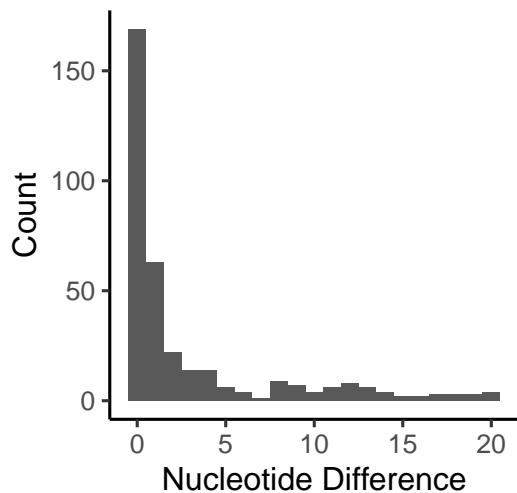
IGHV2-5*02

1119 sequences assigned
361 (32.3%) exact matches, in which:
359 unique CDR3
6 unique J



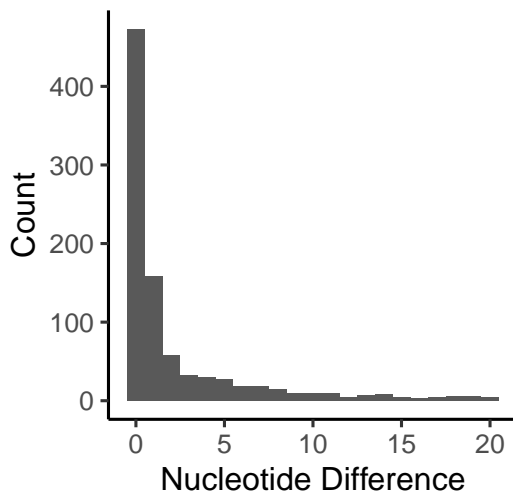
IGHV1-46*03

415 sequences assigned
169 (40.7%) exact matches, in which:
169 unique CDR3
6 unique J



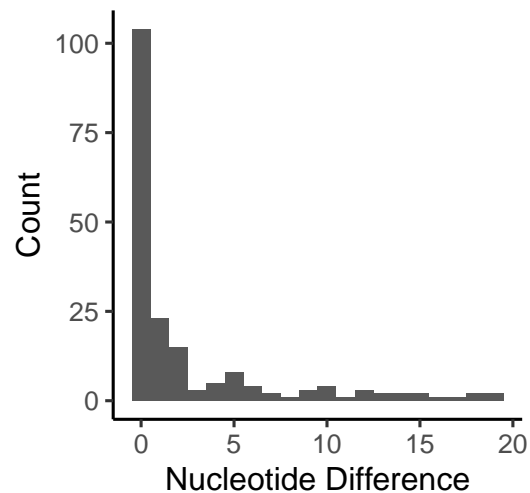
IGHV1-69*05_G54A

1052 sequences assigned
473 (45%) exact matches, in which:
472 unique CDR3
6 unique J



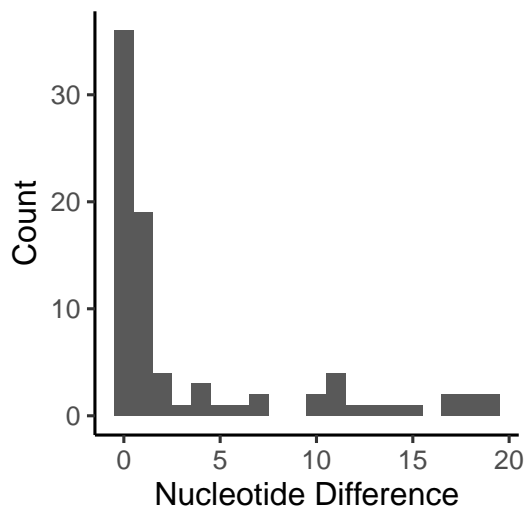
IGHV2-26*01

215 sequences assigned
104 (48.4%) exact matches, in which:
103 unique CDR3
5 unique J



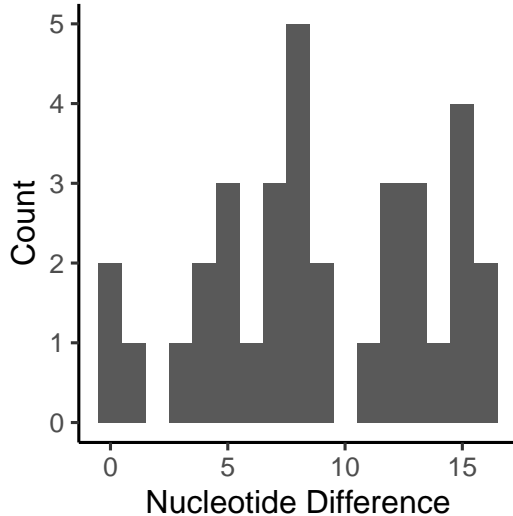
IGHV1-58*02

102 sequences assigned
36 (35.3%) exact matches, in which:
35 unique CDR3
5 unique J



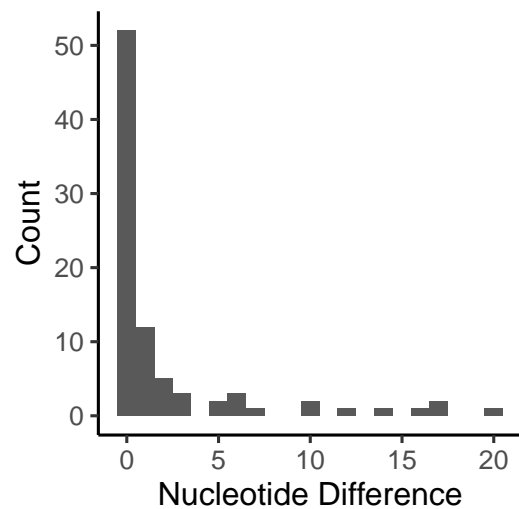
IGHV1-69D*01

40 sequences assigned
2 (5%) exact matches, in which:
2 unique CDR3
2 unique J



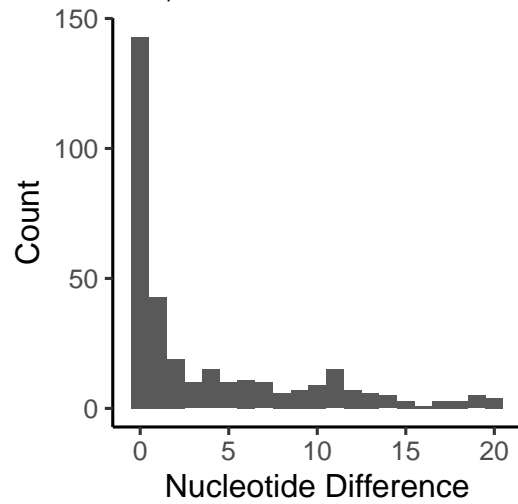
IGHV2-26*02

101 sequences assigned
52 (51.5%) exact matches, in which:
52 unique CDR3
5 unique J



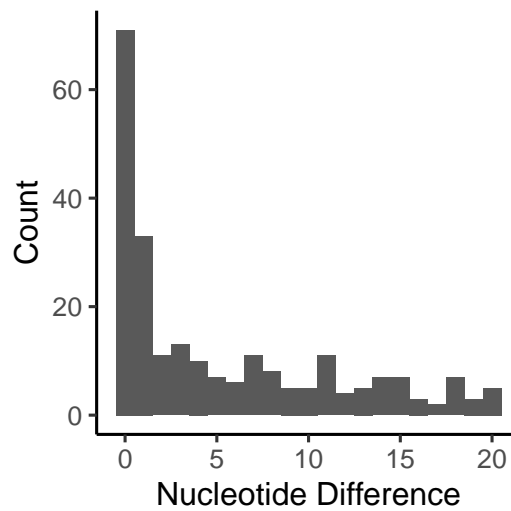
IGHV2-70*15

399 sequences assigned
143 (35.8%) exact matches, in which:
143 unique CDR3
5 unique J



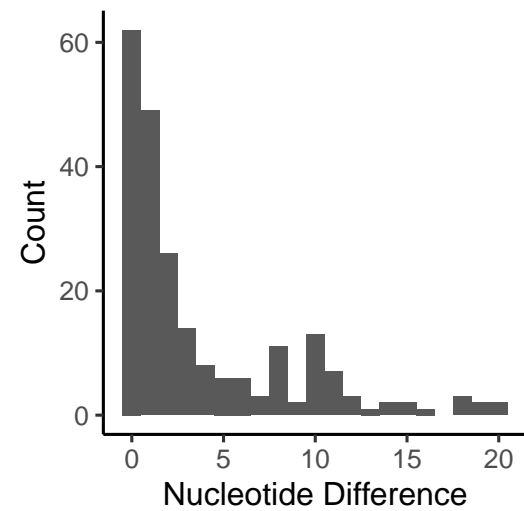
IGHV3-7*04

285 sequences assigned
71 (24.9%) exact matches, in which:
71 unique CDR3
5 unique J



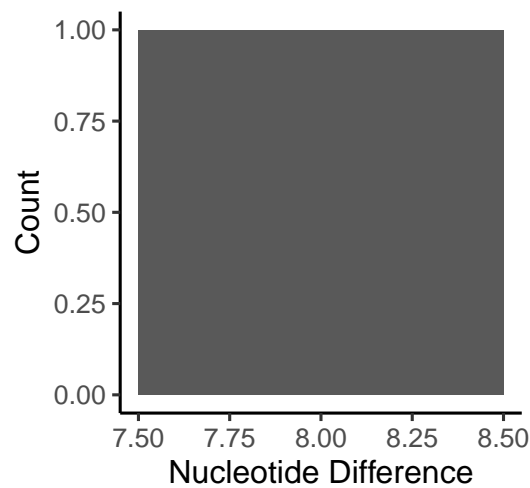
IGHV3-11*06

261 sequences assigned
62 (23.8%) exact matches, in which:
62 unique CDR3
6 unique J



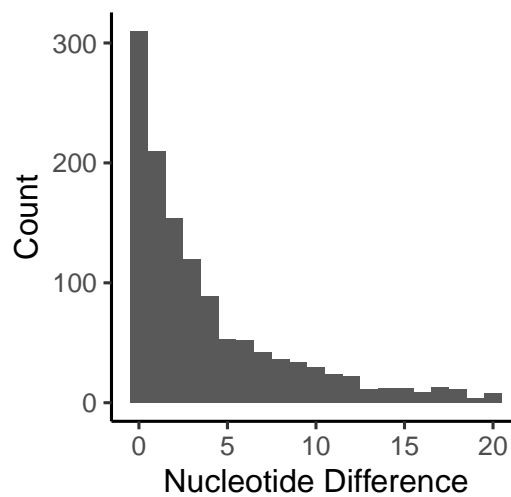
IGHV2-70D*04

12 sequences assigned
No exact matches.



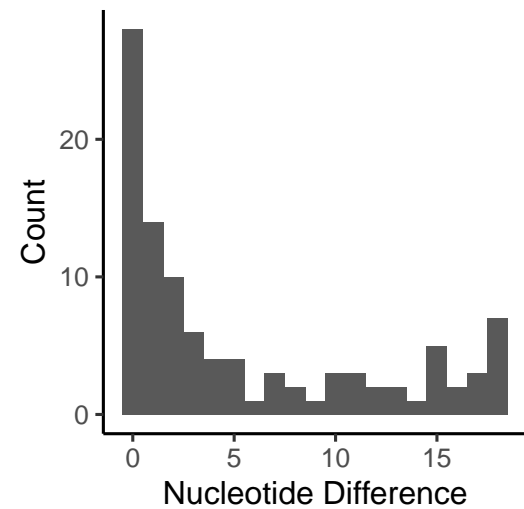
IGHV3-9*01

1430 sequences assigned
310 (21.7%) exact matches, in which:
307 unique CDR3
6 unique J



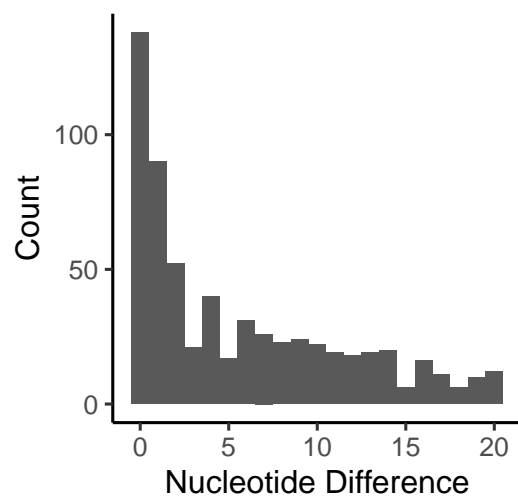
IGHV3-13*01

107 sequences assigned
28 (26.2%) exact matches, in which:
28 unique CDR3
4 unique J



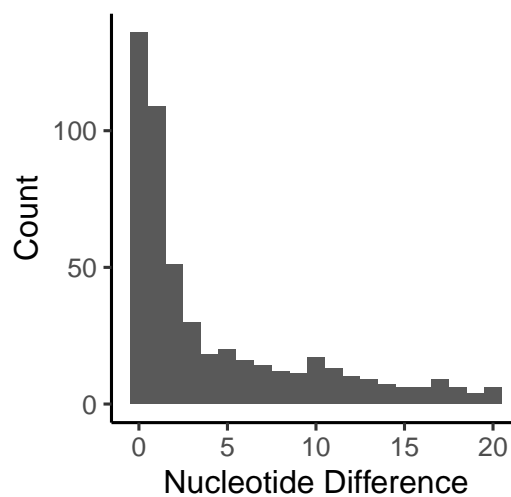
IGHV3-7*01

686 sequences assigned
138 (20.1%) exact matches, in which:
138 unique CDR3
6 unique J



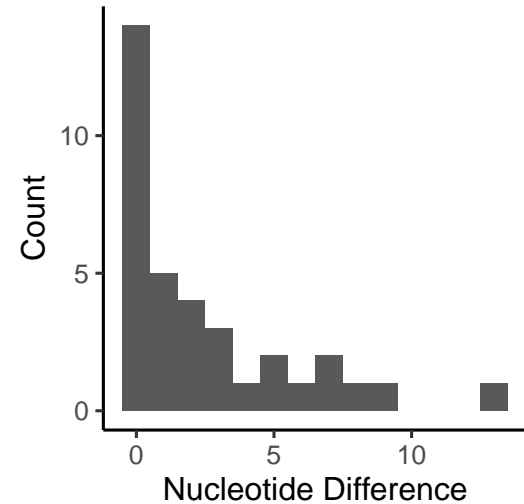
IGHV3-11*01

642 sequences assigned
136 (21.2%) exact matches, in which:
136 unique CDR3
6 unique J



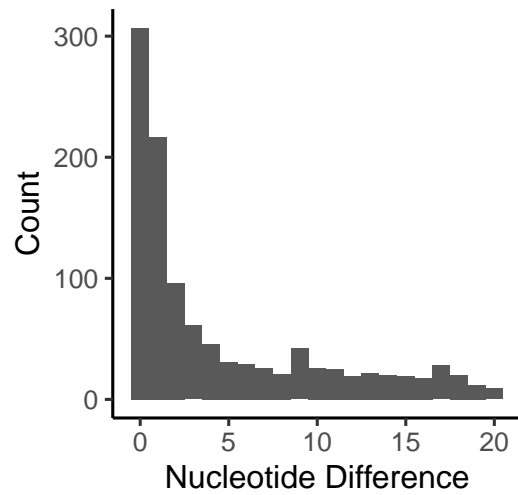
IGHV3-13*05

35 sequences assigned
14 (40%) exact matches, in which:
14 unique CDR3
4 unique J



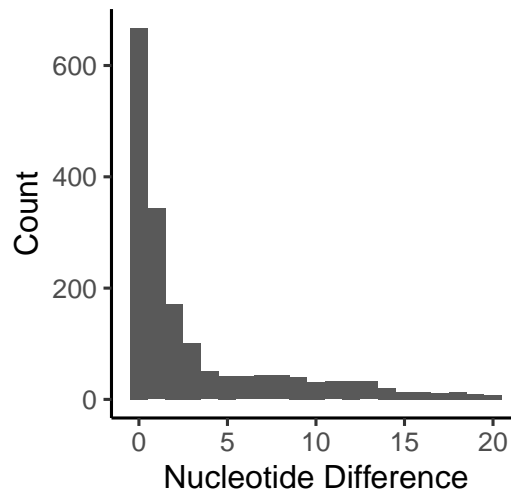
IGHV3-15*01

1248 sequences assigned
307 (24.6%) exact matches, in which:
306 unique CDR3
6 unique J



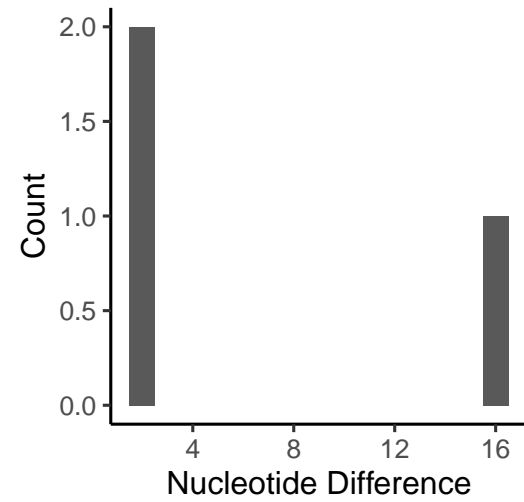
IGHV3-21*01

1985 sequences assigned
668 (33.7%) exact matches, in which:
665 unique CDR3
6 unique J



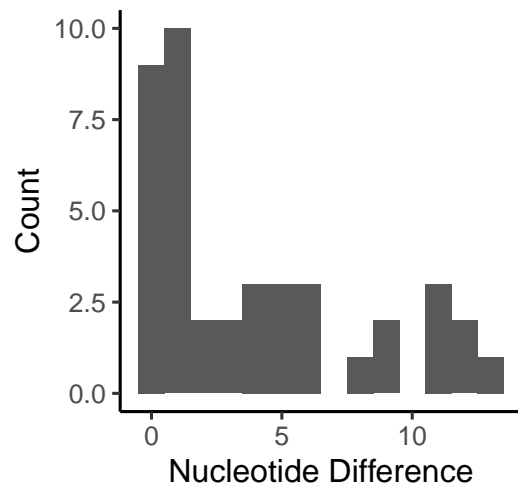
IGHV3-30-3*02

8 sequences assigned
No exact matches.



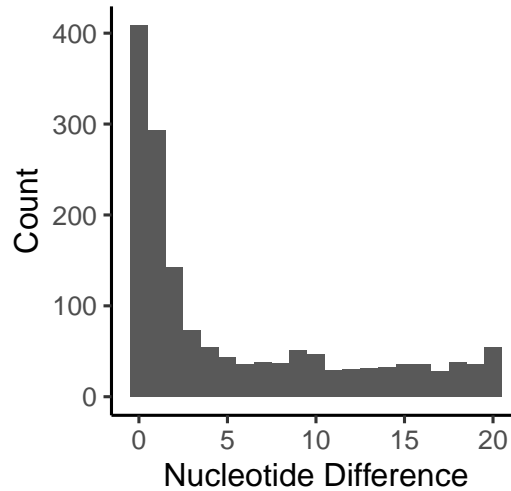
IGHV3-20*01

41 sequences assigned
9 (22%) exact matches, in which:
9 unique CDR3
4 unique J



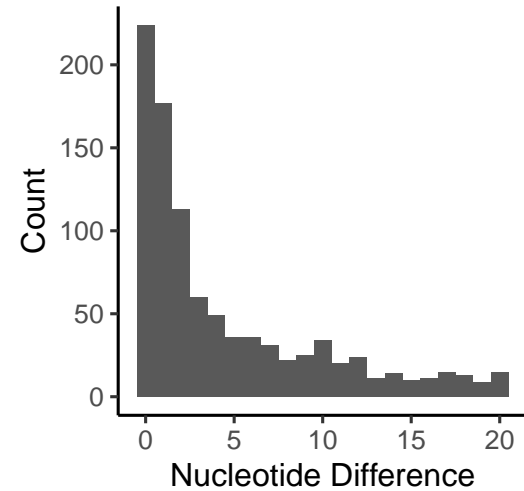
IGHV3-23*04

1995 sequences assigned
409 (20.5%) exact matches, in which:
409 unique CDR3
6 unique J



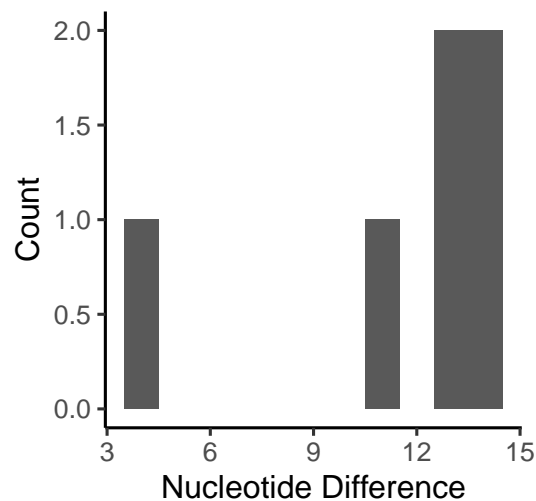
IGHV3-33*01

1166 sequences assigned
224 (19.2%) exact matches, in which:
223 unique CDR3
6 unique J



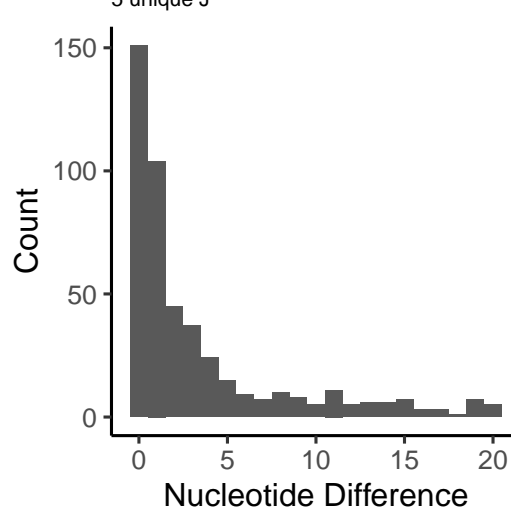
IGHV3-20*04

17 sequences assigned
No exact matches.



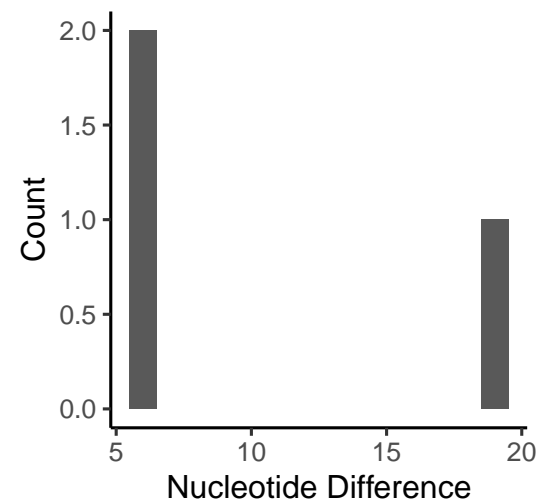
IGHV3-30-3*01

522 sequences assigned
151 (28.9%) exact matches, in which:
151 unique CDR3
5 unique J



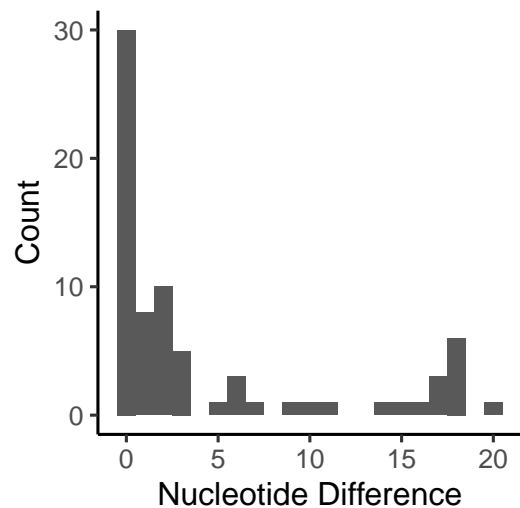
IGHV3-41*02

3 sequences assigned
No exact matches.



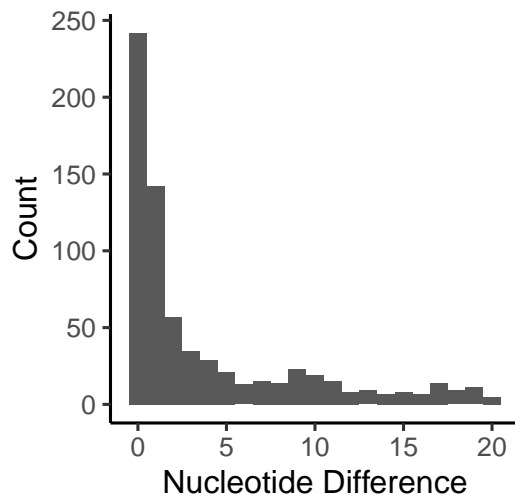
IGHV3-43*01

90 sequences assigned
30 (33.3%) exact matches, in which:
30 unique CDR3
4 unique J



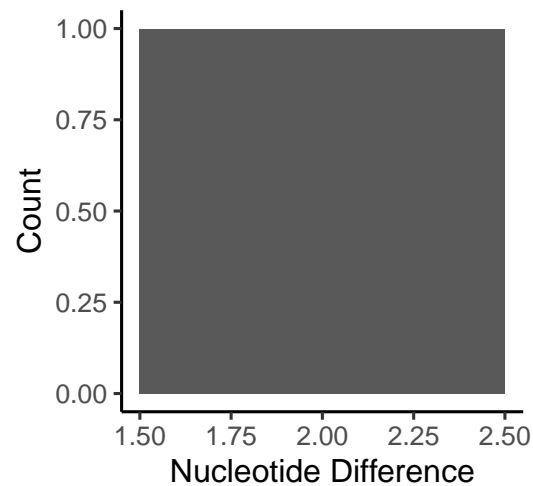
IGHV3-48*03

795 sequences assigned
242 (30.4%) exact matches, in which:
240 unique CDR3
6 unique J



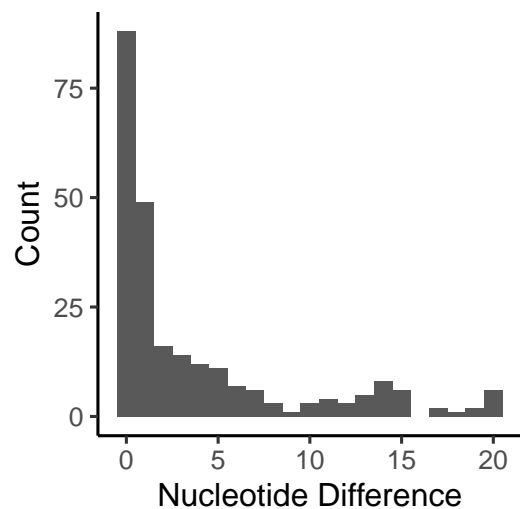
IGHV3-52*01

1 sequences assigned
No exact matches.



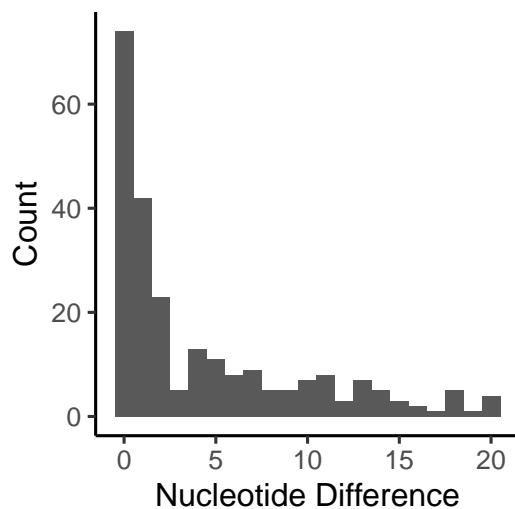
IGHV3-43*02

279 sequences assigned
88 (31.5%) exact matches, in which:
86 unique CDR3
6 unique J



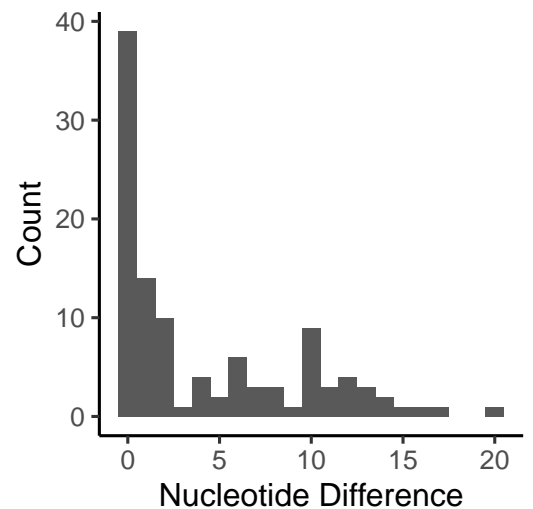
IGHV3-49*03

276 sequences assigned
74 (26.8%) exact matches, in which:
74 unique CDR3
5 unique J



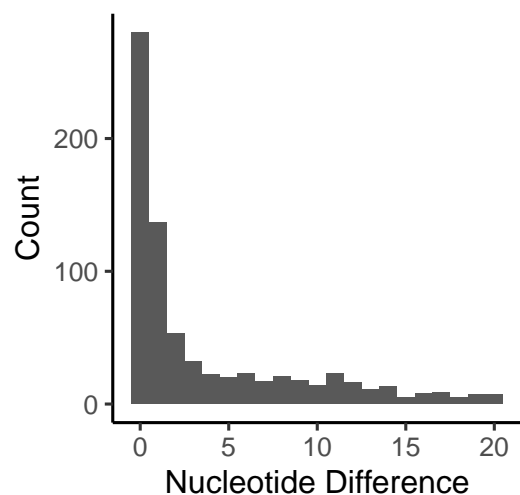
IGHV3-53*02

142 sequences assigned
39 (27.5%) exact matches, in which:
39 unique CDR3
5 unique J



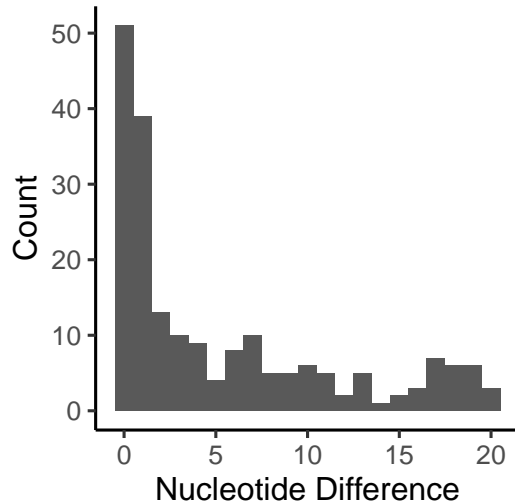
IGHV3-48*01

846 sequences assigned
280 (33.1%) exact matches, in which:
272 unique CDR3
6 unique J



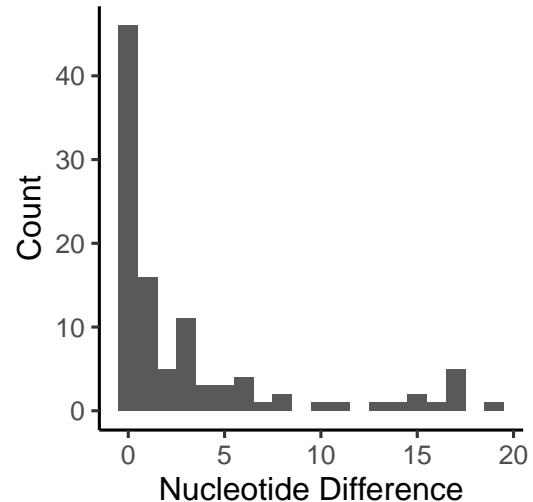
IGHV3-49*04

261 sequences assigned
51 (19.5%) exact matches, in which:
51 unique CDR3
5 unique J



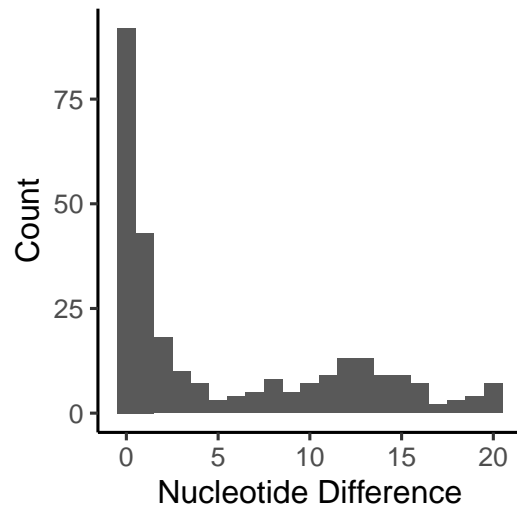
IGHV3-53*04

119 sequences assigned
46 (38.7%) exact matches, in which:
46 unique CDR3
5 unique J



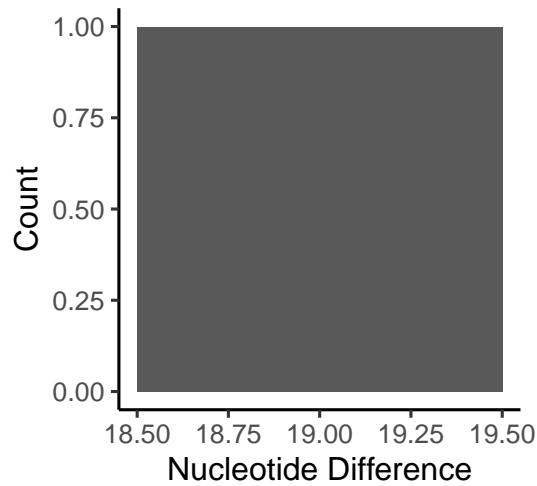
IGHV3-64*01

296 sequences assigned
92 (31.1%) exact matches, in which:
91 unique CDR3
5 unique J



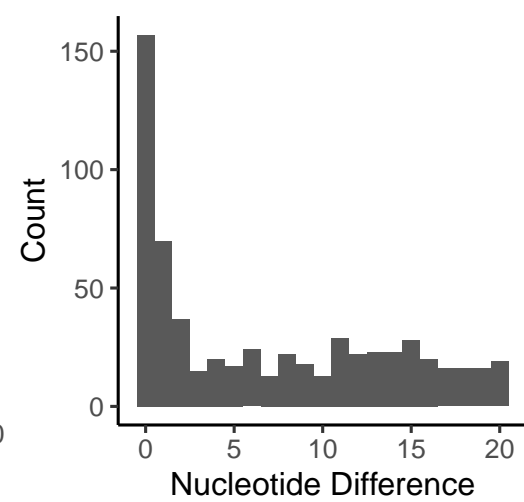
IGHV3-69-1*01

1 sequences assigned
No exact matches.



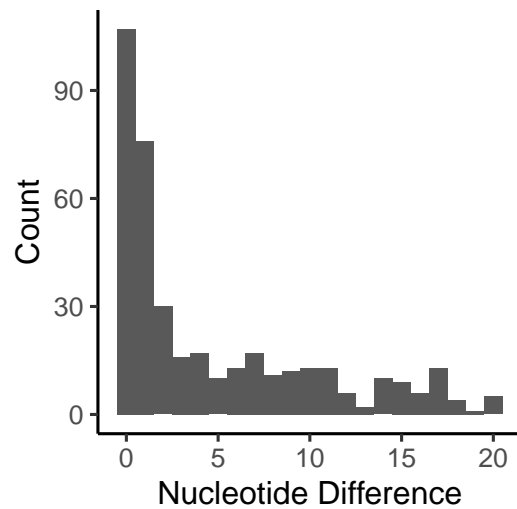
IGHV3-74*01

746 sequences assigned
157 (21%) exact matches, in which:
157 unique CDR3
6 unique J



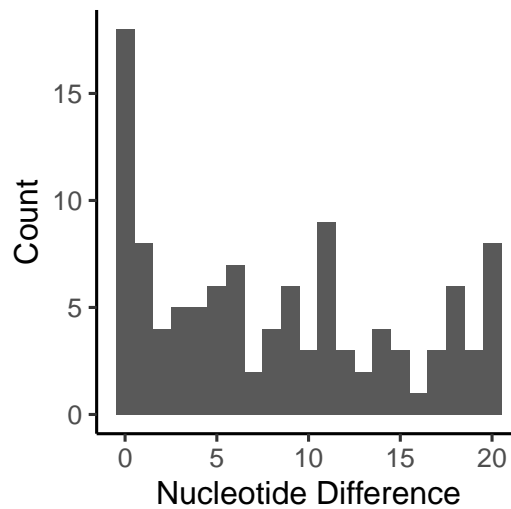
IGHV3-66*01

476 sequences assigned
107 (22.5%) exact matches, in which:
107 unique CDR3
5 unique J



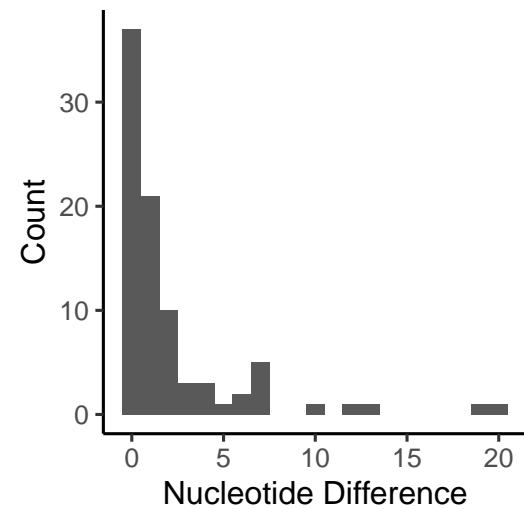
IGHV3-72*01

138 sequences assigned
18 (13%) exact matches, in which:
18 unique CDR3
4 unique J



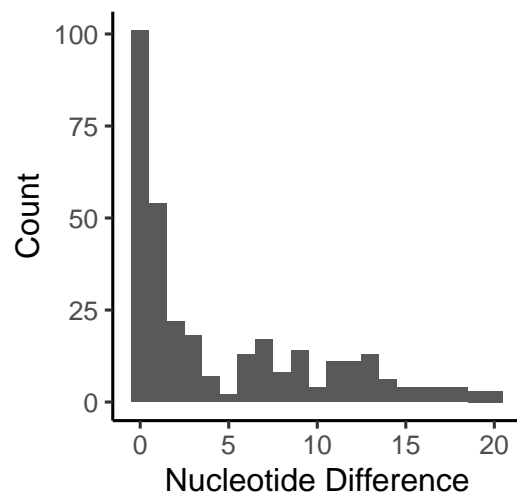
IGHV3-43D*04

119 sequences assigned
37 (31.1%) exact matches, in which:
37 unique CDR3
3 unique J



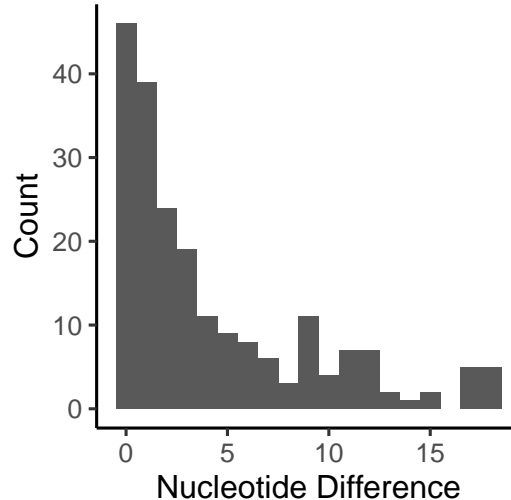
IGHV3-66*01_A193G

359 sequences assigned
101 (28.1%) exact matches, in which:
101 unique CDR3
5 unique J



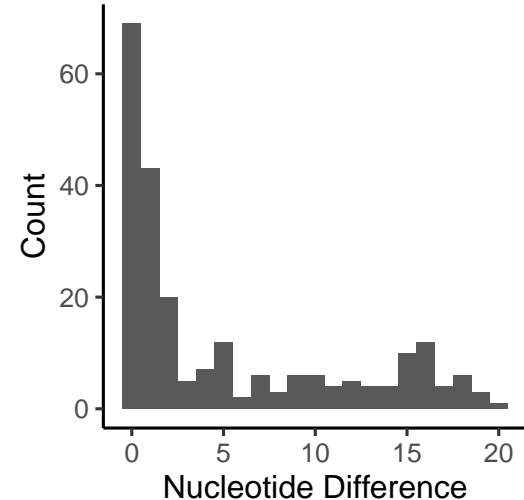
IGHV3-73*01

234 sequences assigned
46 (19.7%) exact matches, in which:
46 unique CDR3
5 unique J



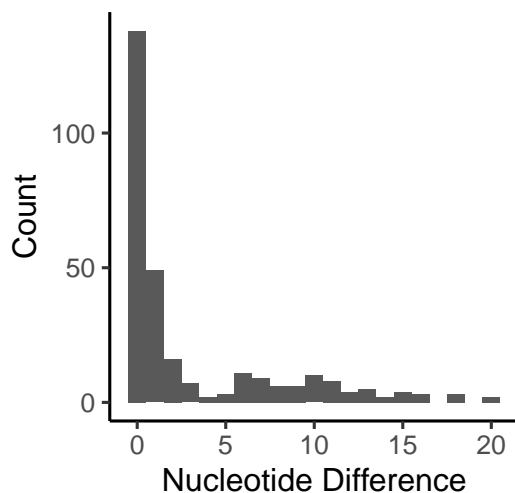
IGHV3-64D*06

304 sequences assigned
69 (22.7%) exact matches, in which:
69 unique CDR3
5 unique J



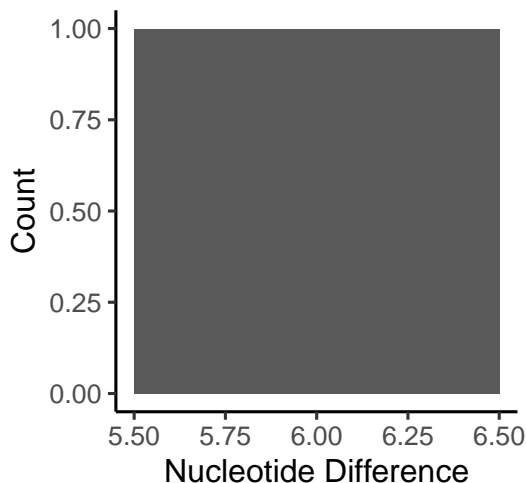
IGHV4-4*02

326 sequences assigned
138 (42.3%) exact matches, in which:
136 unique CDR3
6 unique J



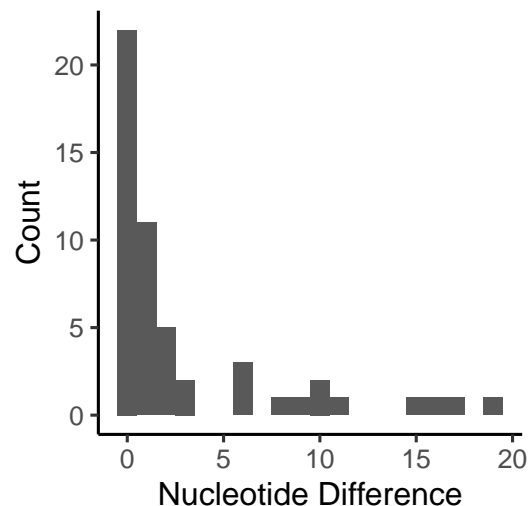
IGHV4-28*03

1 sequences assigned
No exact matches.



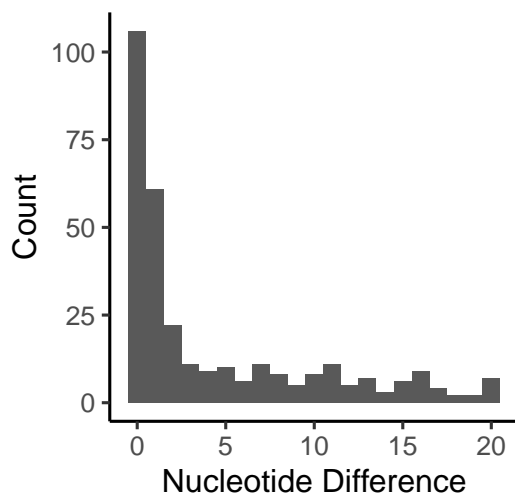
IGHV4-30-2*01

71 sequences assigned
22 (31%) exact matches, in which:
22 unique CDR3
4 unique J



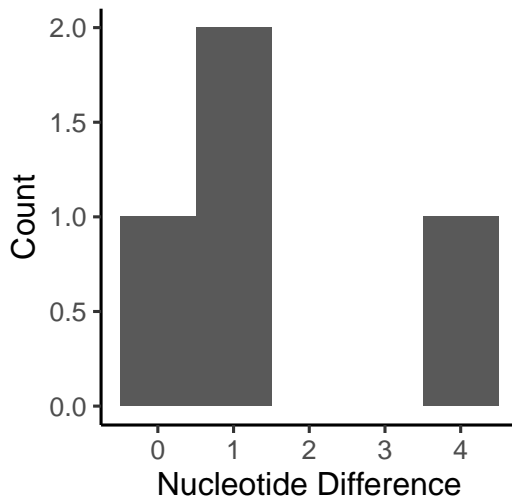
IGHV4-4*07

433 sequences assigned
106 (24.5%) exact matches, in which:
106 unique CDR3
5 unique J



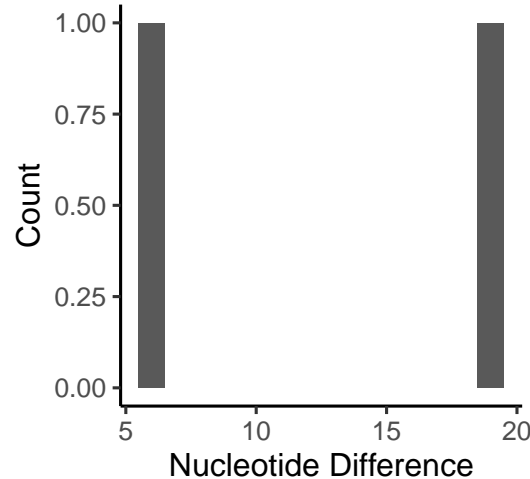
IGHV4-28*06

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



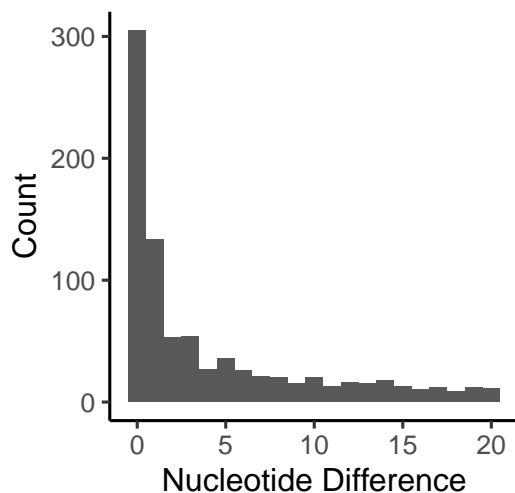
IGHV4-30-2*03

3 sequences assigned
No exact matches.



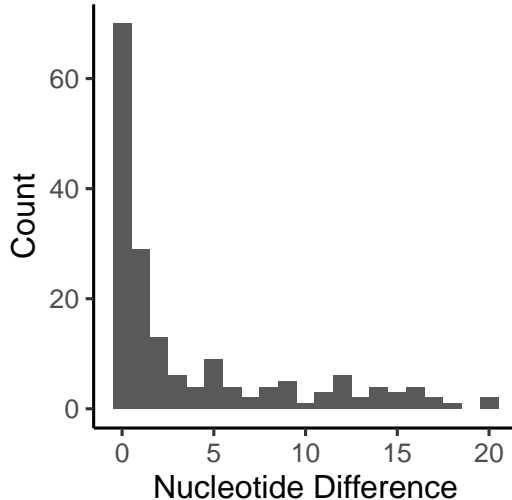
IGHV4-4*09

987 sequences assigned
305 (30.9%) exact matches, in which:
303 unique CDR3
6 unique J



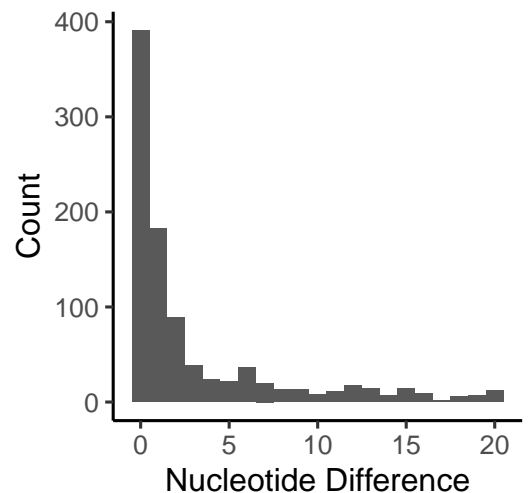
IGHV4-30-4*01

221 sequences assigned
70 (31.7%) exact matches, in which:
70 unique CDR3
5 unique J



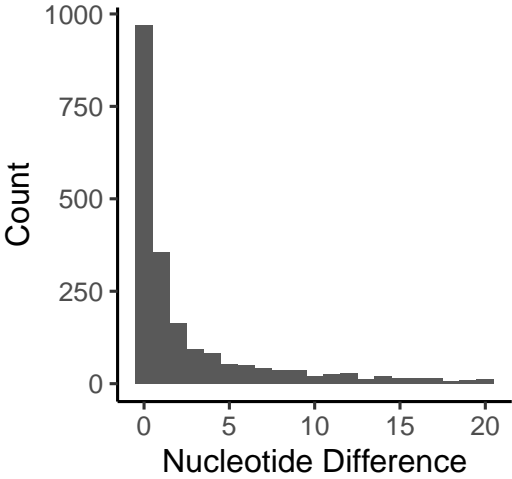
IGHV4-31*03

1134 sequences assigned
391 (34.5%) exact matches, in which:
390 unique CDR3
6 unique J



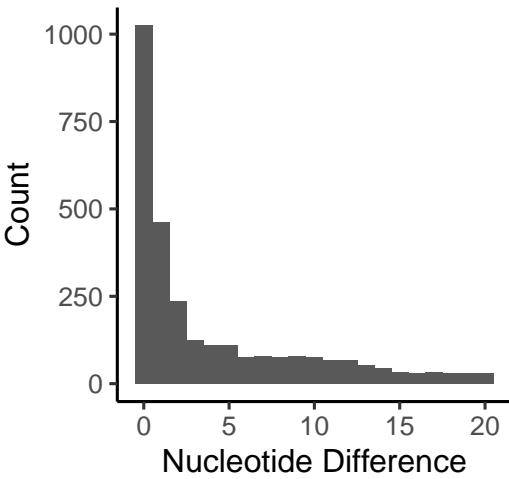
IGHV4-34*01

2334 sequences assigned
969 (41.5%) exact matches, in which:
960 unique CDR3
6 unique J



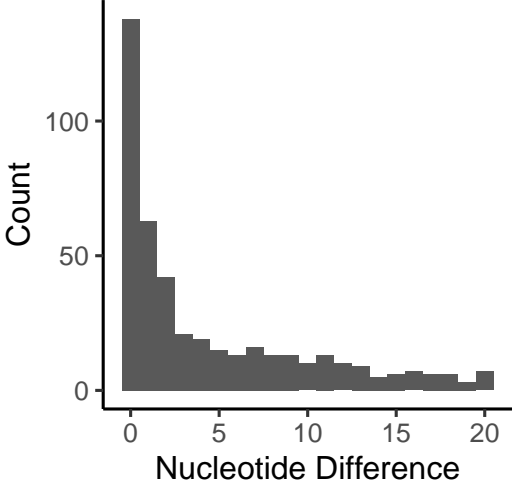
IGHV4-39*01

3714 sequences assigned
1025 (27.6%) exact matches, in which:
1018 unique CDR3
6 unique J



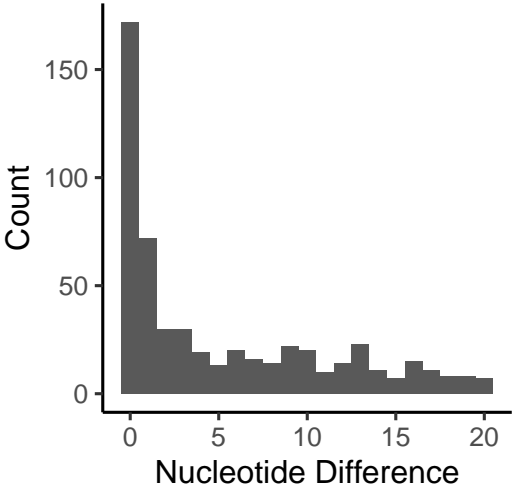
IGHV4-59*08

540 sequences assigned
138 (25.6%) exact matches, in which:
138 unique CDR3
6 unique J



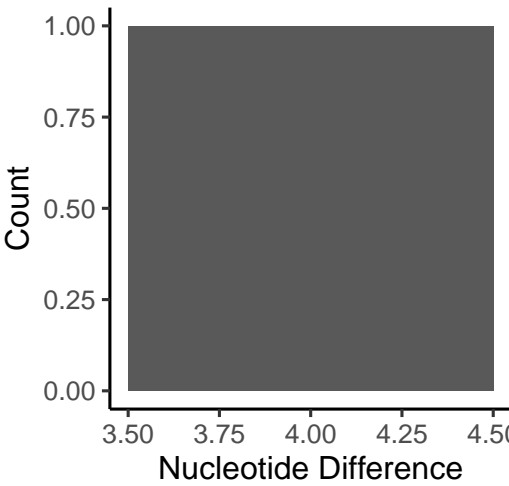
IGHV4-38-2*01

617 sequences assigned
172 (27.9%) exact matches, in which:
172 unique CDR3
6 unique J



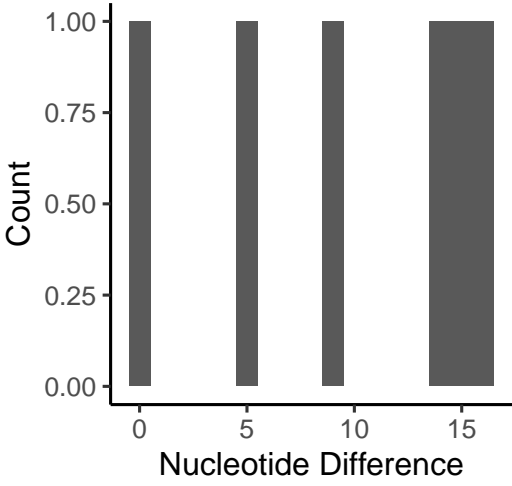
IGHV4-55*08

2 sequences assigned
No exact matches.



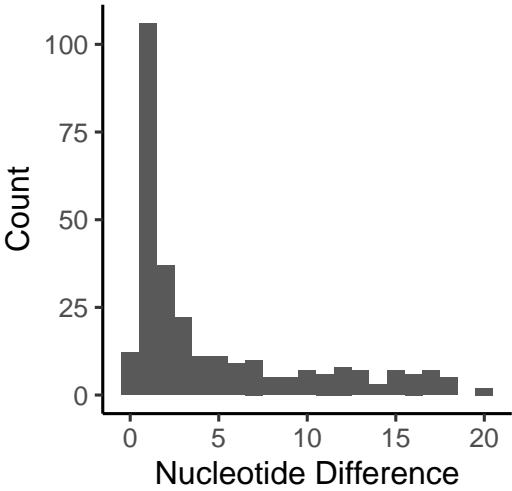
IGHV4-61*02

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



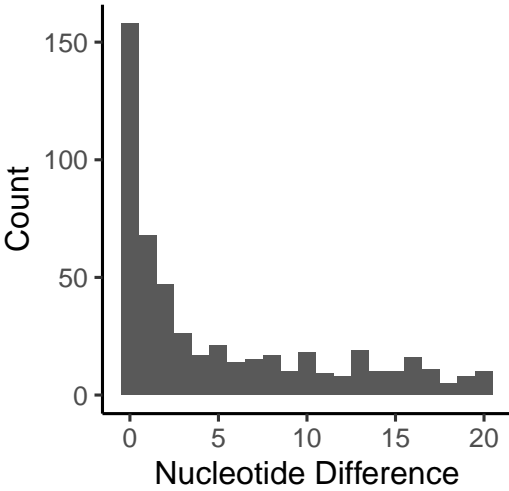
IGHV4-38-2*02

332 sequences assigned
12 (3.6%) exact matches, in which:
12 unique CDR3
4 unique J



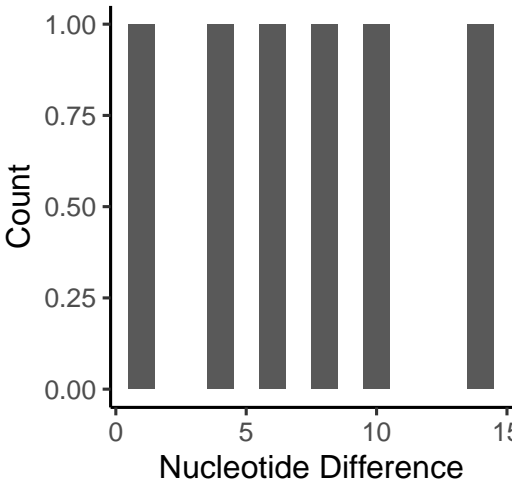
IGHV4-59*01

637 sequences assigned
158 (24.8%) exact matches, in which:
158 unique CDR3
6 unique J



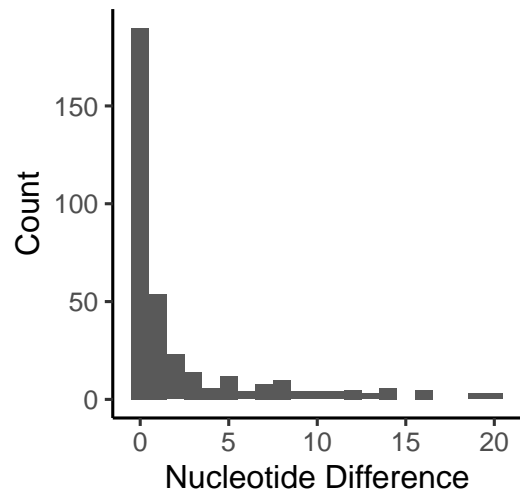
IGHV4-61*07

6 sequences assigned
No exact matches.



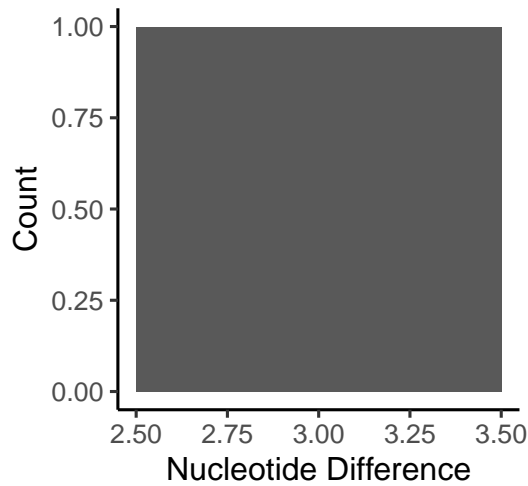
IGHV5–10–1*03

459 sequences assigned
190 (41.4%) exact matches, in which:
186 unique CDR3
6 unique J



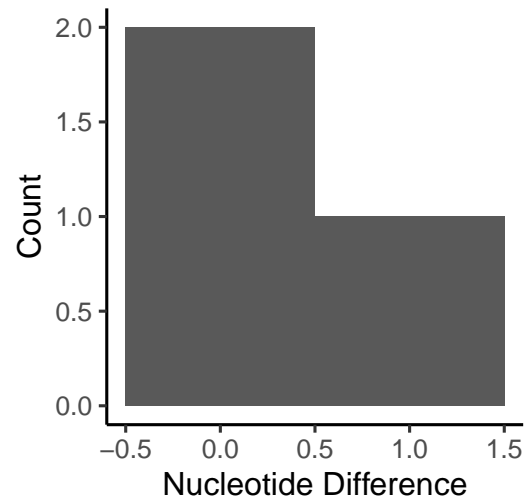
IGHV5–78*01

1 sequences assigned
No exact matches.



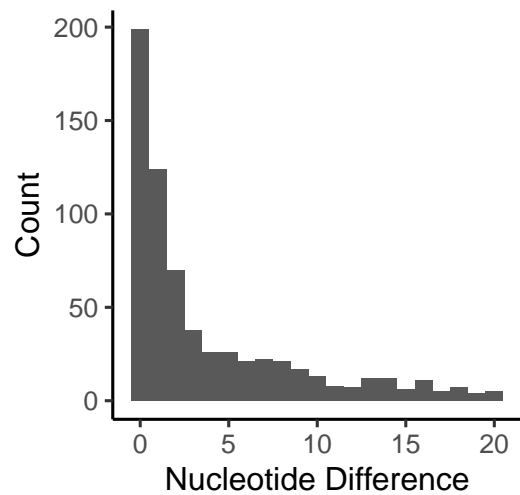
IGHV7–4–1*01

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



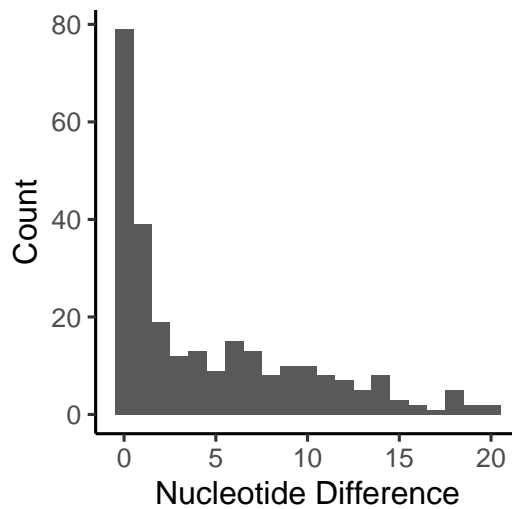
IGHV5–51*01

842 sequences assigned
199 (23.6%) exact matches, in which:
198 unique CDR3
6 unique J



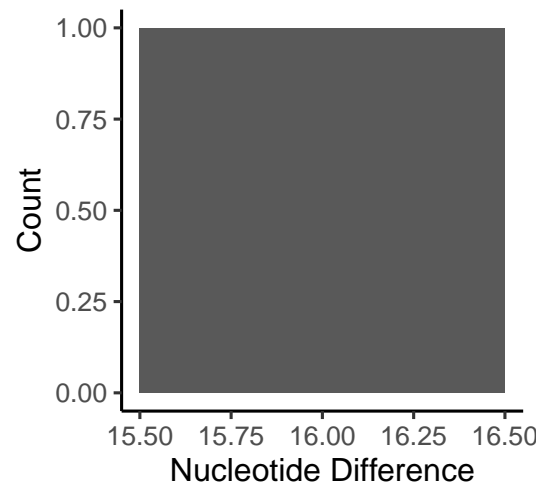
IGHV6–1*01

296 sequences assigned
79 (26.7%) exact matches, in which:
79 unique CDR3
6 unique J



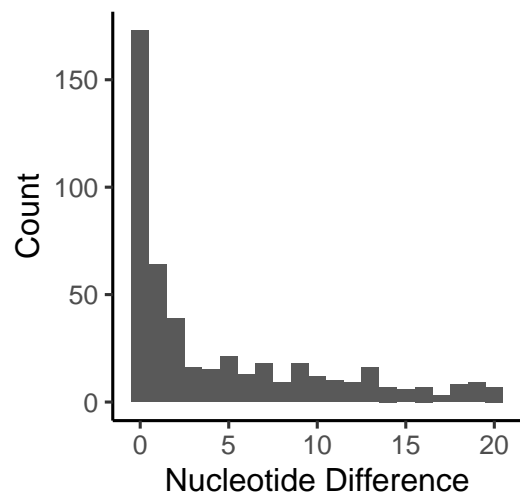
IGHV7–4–1*02

1 sequences assigned
No exact matches.



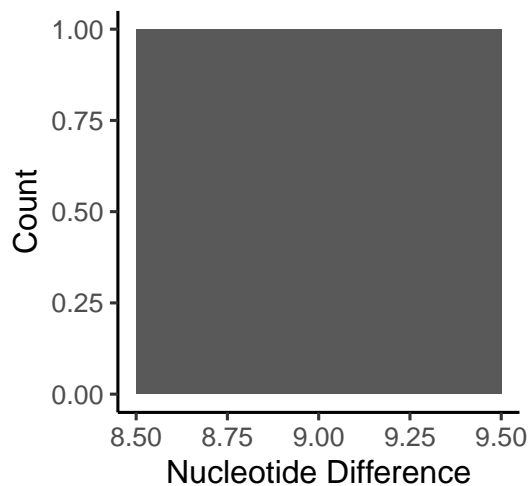
IGHV5–51*03

539 sequences assigned
173 (32.1%) exact matches, in which:
173 unique CDR3
6 unique J



IGHV3/OR16–9*01

1 sequences assigned
No exact matches.





Warning – no inferred sequences found.