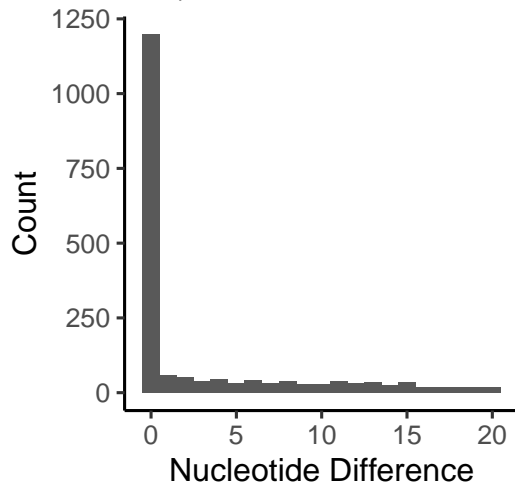


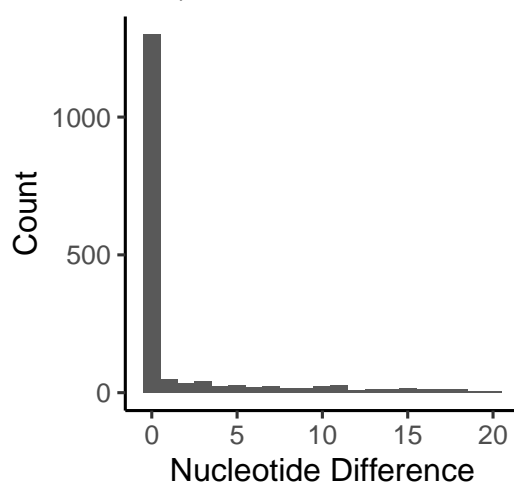
IGHV1-2*02

1962 sequences assigned
1198 (61.1%) exact matches, in which:
1188 unique CDR3
6 unique J



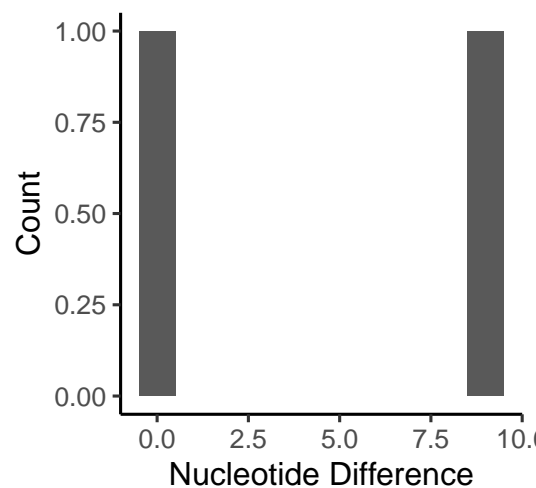
IGHV1-8*01

1741 sequences assigned
1300 (74.7%) exact matches, in which:
1298 unique CDR3
6 unique J



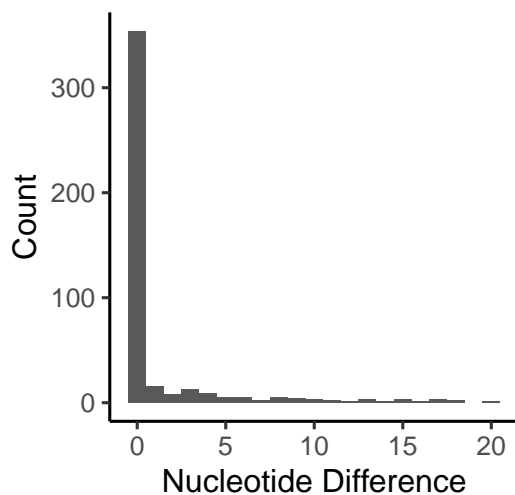
IGHV1-45*02

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



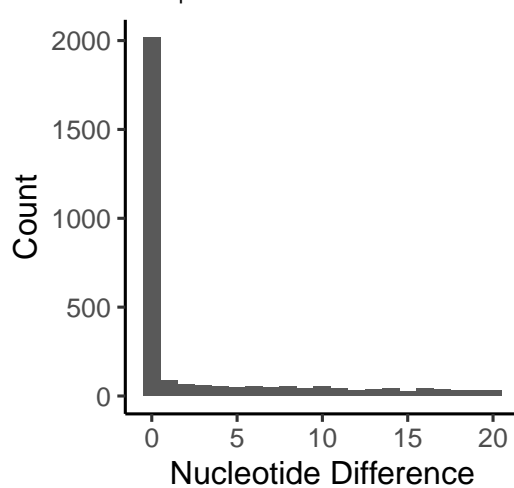
IGHV1-2*04

444 sequences assigned
354 (79.7%) exact matches, in which:
354 unique CDR3
6 unique J



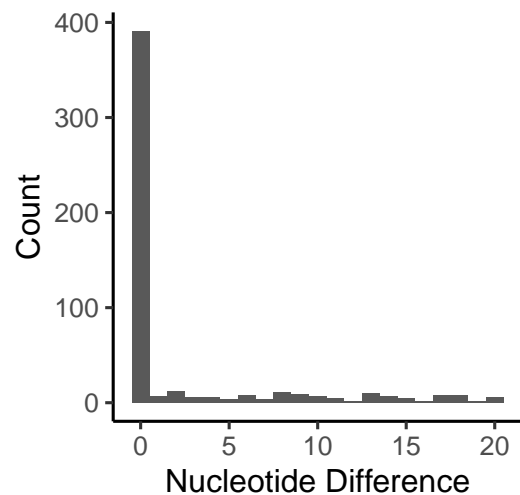
IGHV1-18*01

3125 sequences assigned
2016 (64.5%) exact matches, in which:
2008 unique CDR3
6 unique J



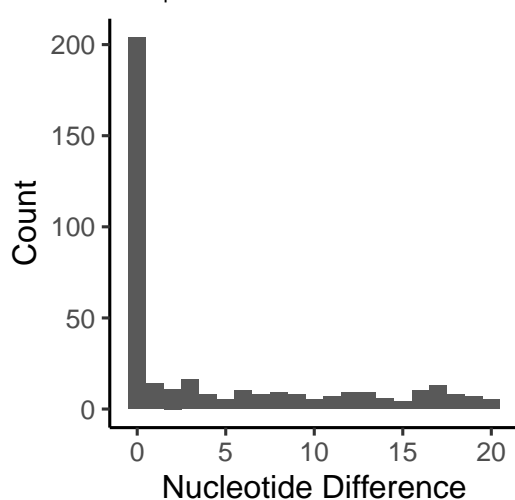
IGHV1-46*01

554 sequences assigned
391 (70.6%) exact matches, in which:
390 unique CDR3
6 unique J



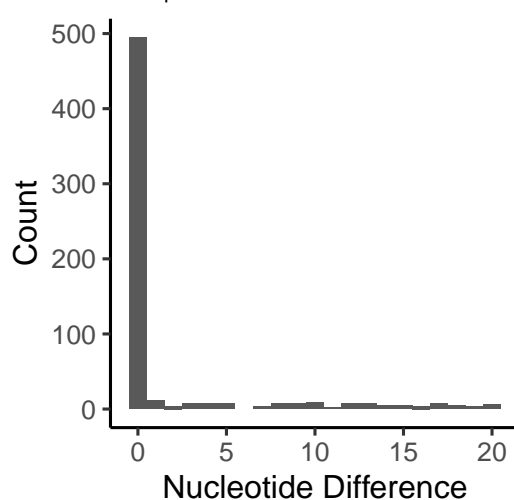
IGHV1-3*01_05

423 sequences assigned
204 (48.2%) exact matches, in which:
204 unique CDR3
6 unique J



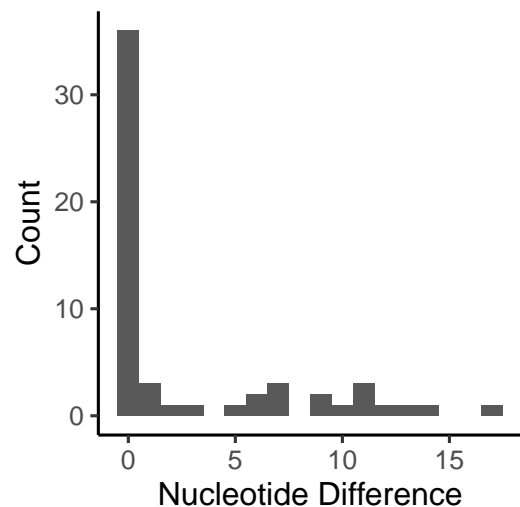
IGHV1-24*01

642 sequences assigned
495 (77.1%) exact matches, in which:
493 unique CDR3
6 unique J



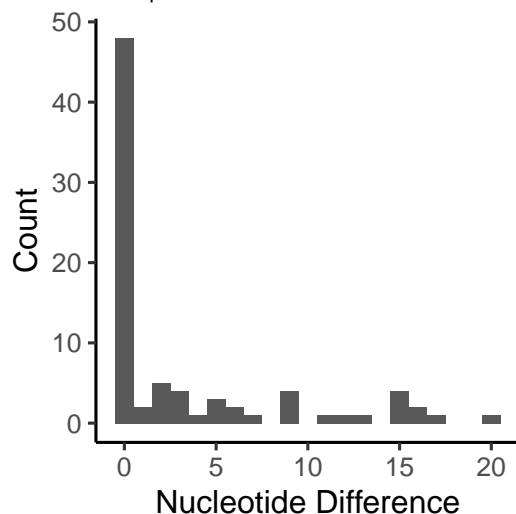
IGHV1-58*02

60 sequences assigned
36 (60%) exact matches, in which:
36 unique CDR3
5 unique J



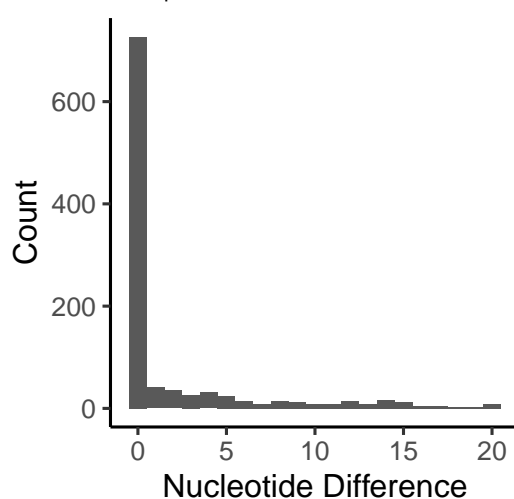
IGHV1–58*01_03

91 sequences assigned
48 (52.7%) exact matches, in which:
48 unique CDR3
5 unique J



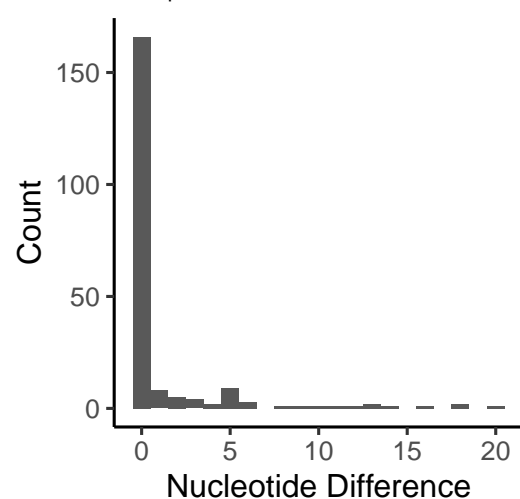
IGHV2–5*01

1049 sequences assigned
727 (69.3%) exact matches, in which:
724 unique CDR3
6 unique J



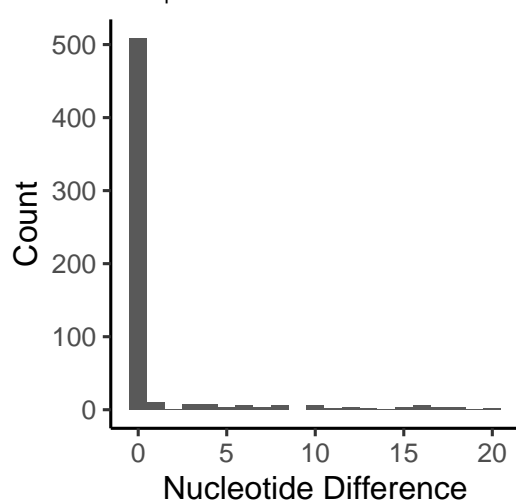
IGHV2–70*01

214 sequences assigned
166 (77.6%) exact matches, in which:
165 unique CDR3
6 unique J



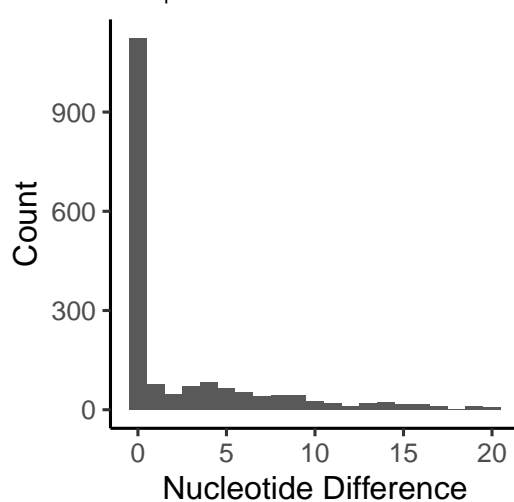
IGHV1–69*01_12_13

631 sequences assigned
509 (80.7%) exact matches, in which:
509 unique CDR3
6 unique J



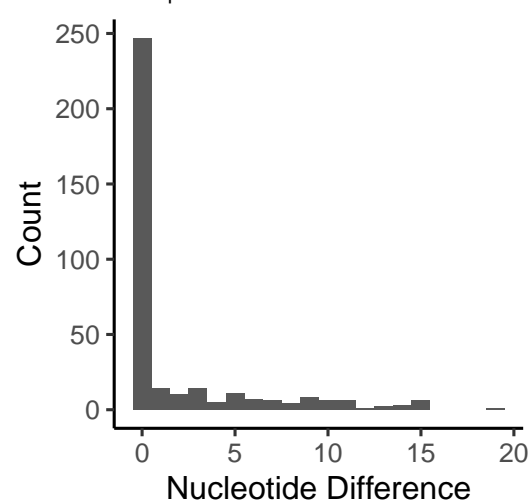
IGHV2–5*02

1859 sequences assigned
1124 (60.5%) exact matches, in which:
1117 unique CDR3
6 unique J



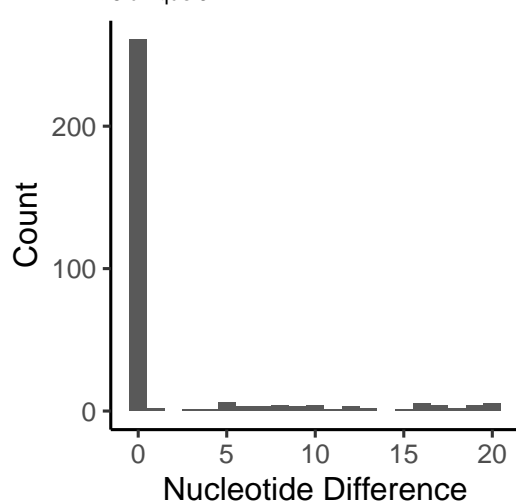
IGHV2–70*11_15

356 sequences assigned
247 (69.4%) exact matches, in which:
246 unique CDR3
5 unique J



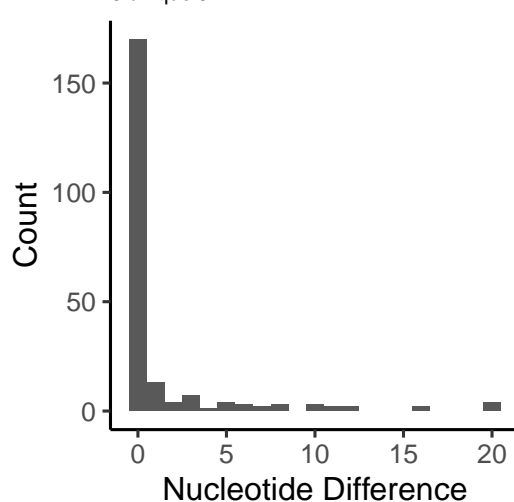
IGHV1–69*04_09

343 sequences assigned
261 (76.1%) exact matches, in which:
261 unique CDR3
6 unique J



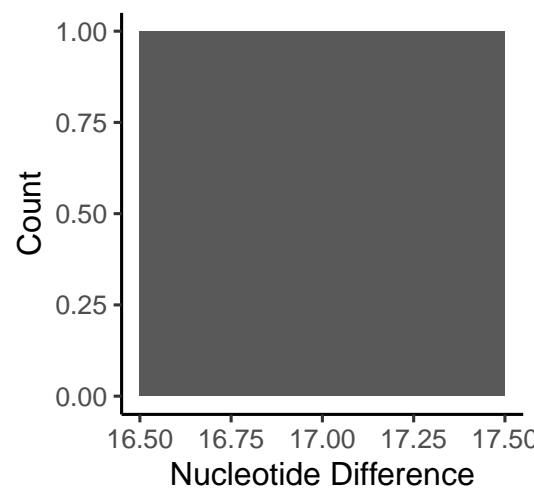
IGHV2–26*01

226 sequences assigned
170 (75.2%) exact matches, in which:
170 unique CDR3
6 unique J



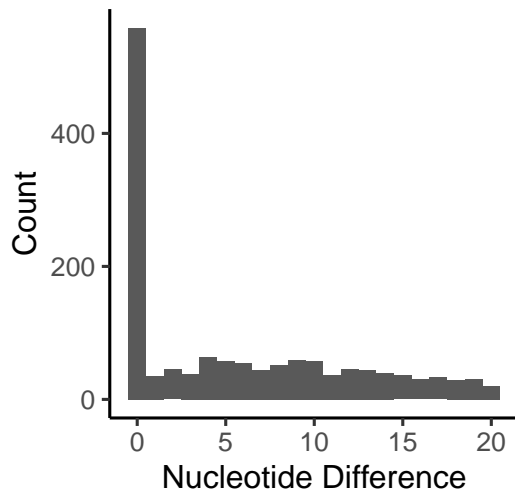
IGHV2–70D*04

1 sequences assigned
No exact matches.



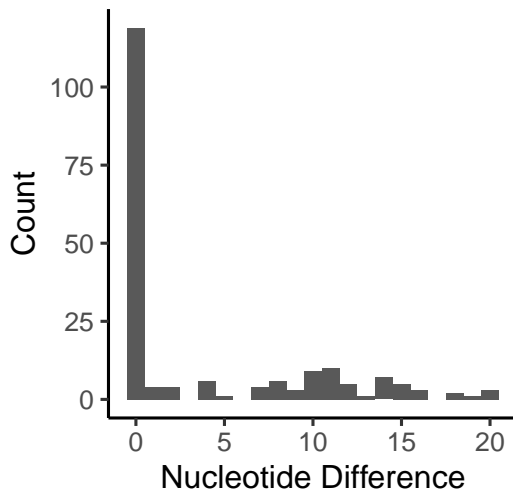
IGHV3-7*01

1540 sequences assigned
559 (36.3%) exact matches, in which:
556 unique CDR3
6 unique J



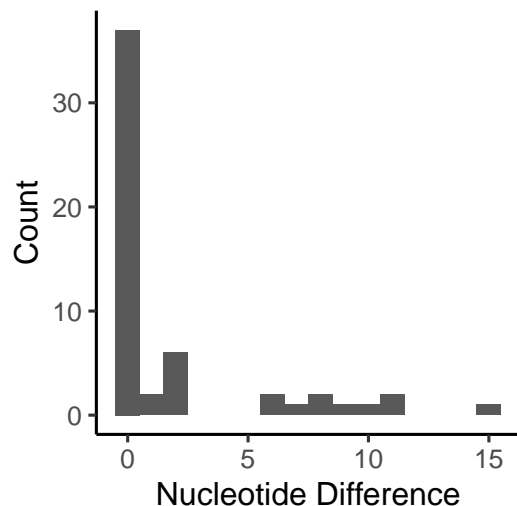
IGHV3-13*01

211 sequences assigned
119 (56.4%) exact matches, in which:
119 unique CDR3
5 unique J



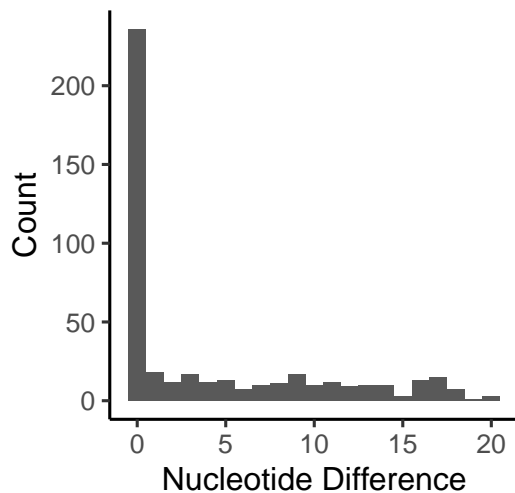
IGHV3-20*01_02

57 sequences assigned
37 (64.9%) exact matches, in which:
37 unique CDR3
5 unique J



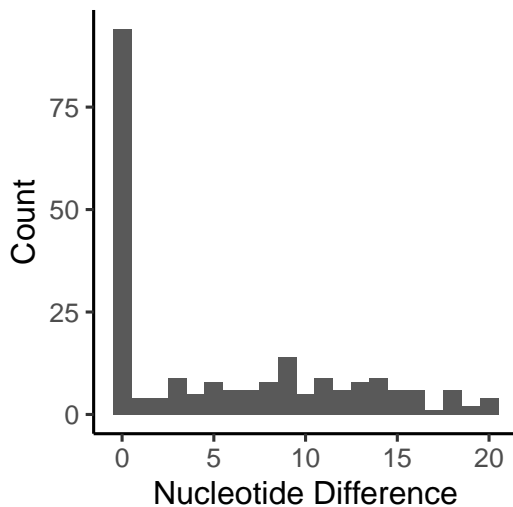
IGHV3-9*01

482 sequences assigned
236 (49%) exact matches, in which:
235 unique CDR3
6 unique J



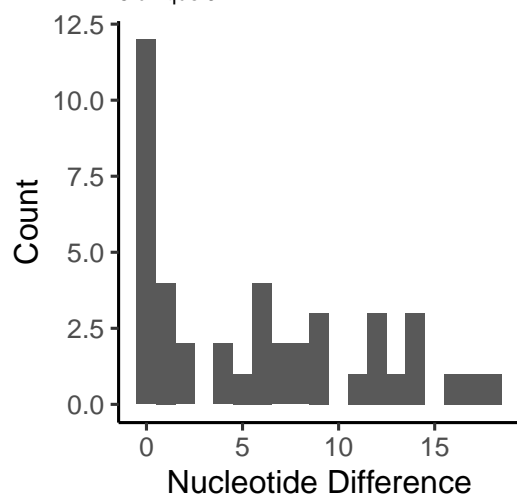
IGHV3-15*07

254 sequences assigned
94 (37%) exact matches, in which:
94 unique CDR3
5 unique J



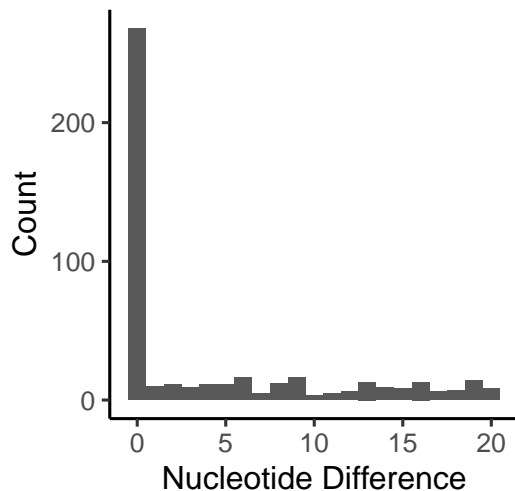
IGHV3-20*03_04

45 sequences assigned
12 (26.7%) exact matches, in which:
12 unique CDR3
5 unique J



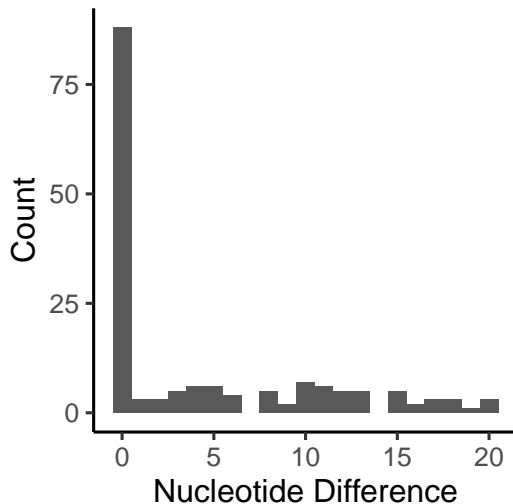
IGHV3-11*01

512 sequences assigned
268 (52.3%) exact matches, in which:
268 unique CDR3
6 unique J



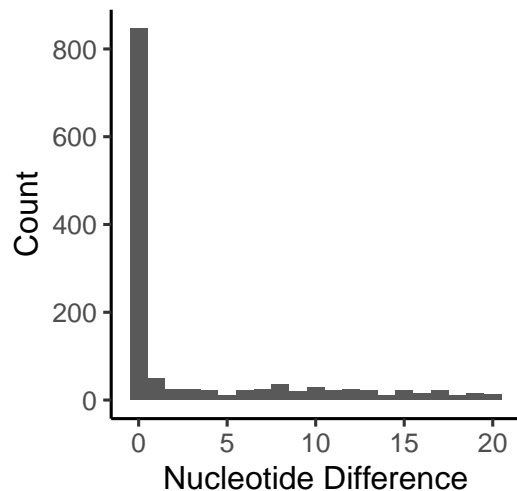
IGHV3-15*01_02

183 sequences assigned
88 (48.1%) exact matches, in which:
88 unique CDR3
5 unique J



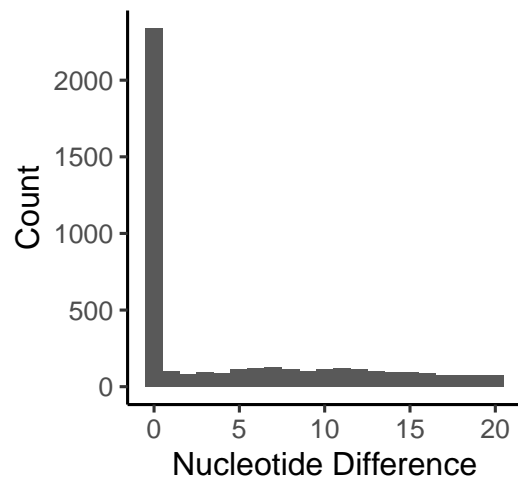
IGHV3-21*01_02

1363 sequences assigned
847 (62.1%) exact matches, in which:
845 unique CDR3
6 unique J



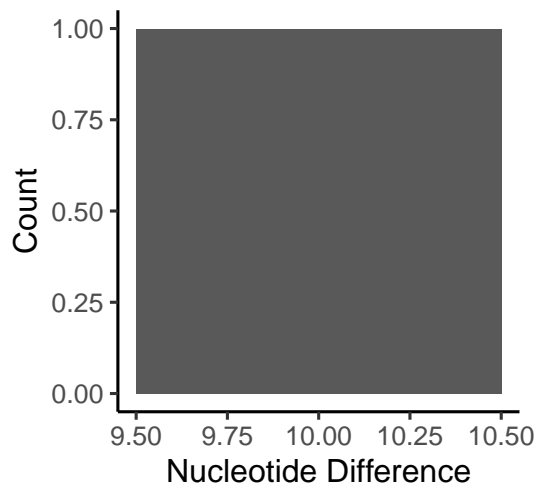
IGHV3-23*01_04

4744 sequences assigned
2338 (49.3%) exact matches, in which:
2318 unique CDR3
6 unique J



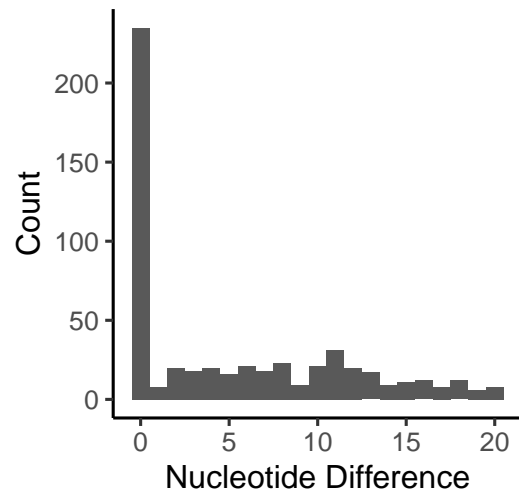
IGHV3-35*01

1 sequences assigned
No exact matches.



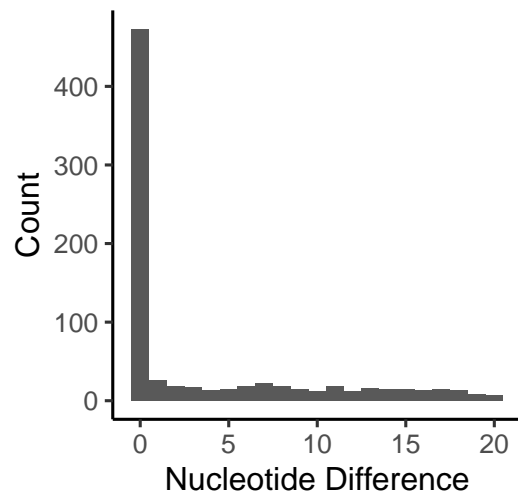
IGHV3-48*02

600 sequences assigned
235 (39.2%) exact matches, in which:
233 unique CDR3
6 unique J



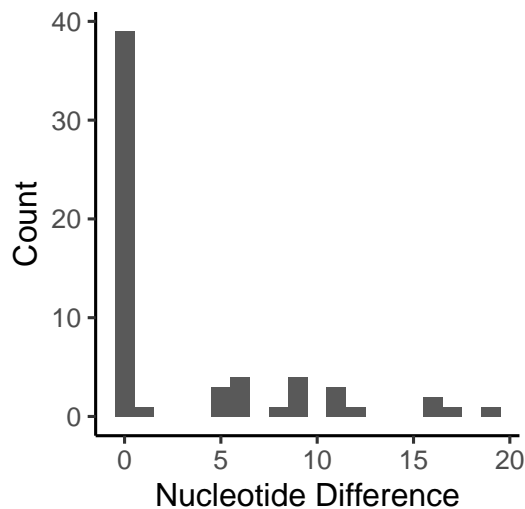
IGHV3-30-3*01

851 sequences assigned
473 (55.6%) exact matches, in which:
472 unique CDR3
6 unique J



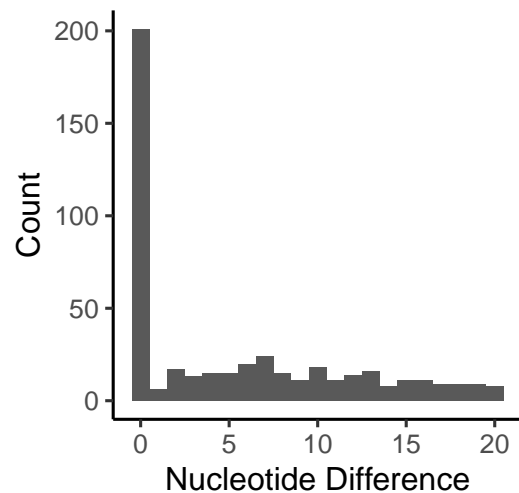
IGHV3-43*01

65 sequences assigned
39 (60%) exact matches, in which:
39 unique CDR3
5 unique J



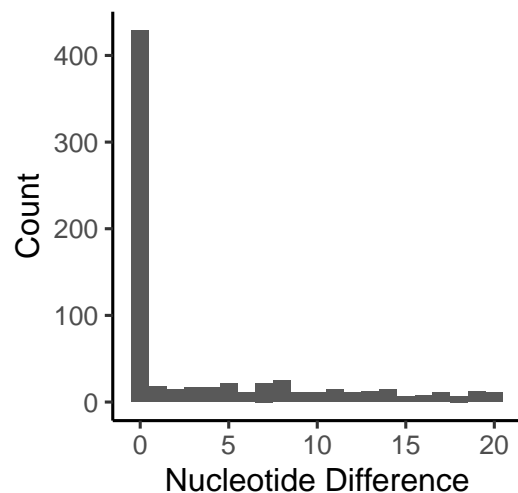
IGHV3-48*03

500 sequences assigned
201 (40.2%) exact matches, in which:
201 unique CDR3
6 unique J



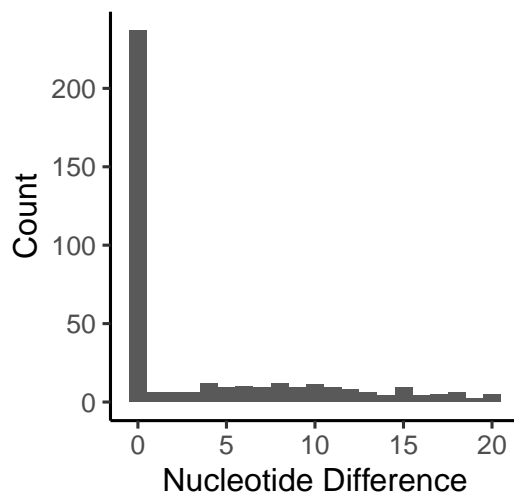
IGHV3-33*01

766 sequences assigned
429 (56%) exact matches, in which:
427 unique CDR3
6 unique J



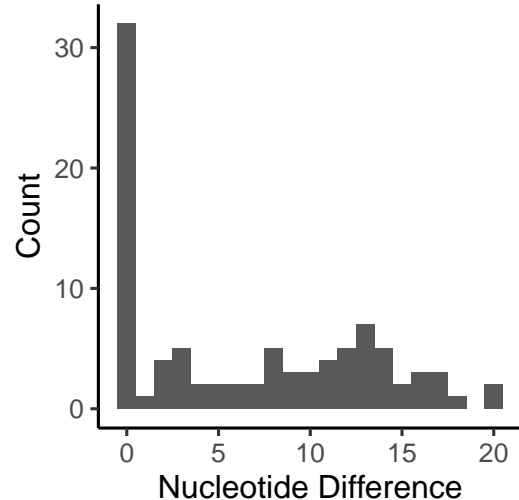
IGHV3-43*02

406 sequences assigned
237 (58.4%) exact matches, in which:
236 unique CDR3
6 unique J



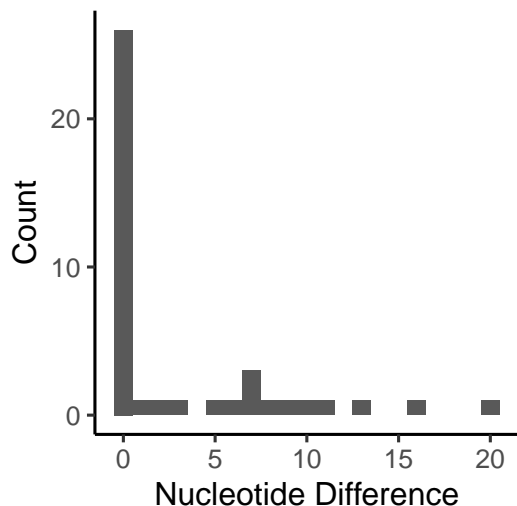
IGHV3-49*04

109 sequences assigned
32 (29.4%) exact matches, in which:
32 unique CDR3
4 unique J



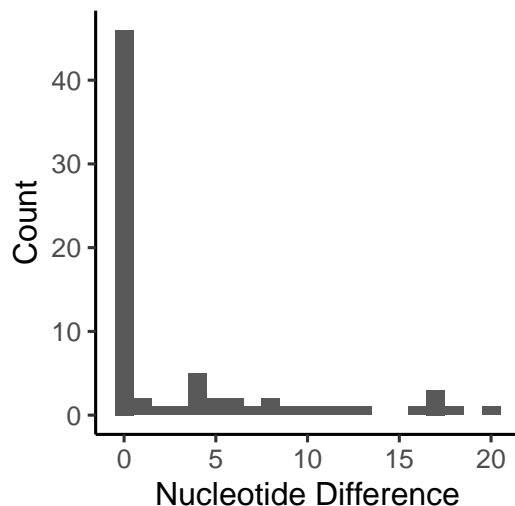
IGHV3-49*03_05

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



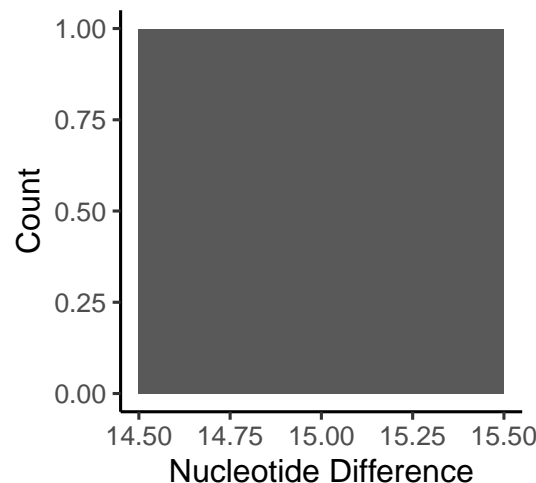
IGHV3-64*01

83 sequences assigned
46 (55.4%) exact matches, in which:
46 unique CDR3
5 unique J



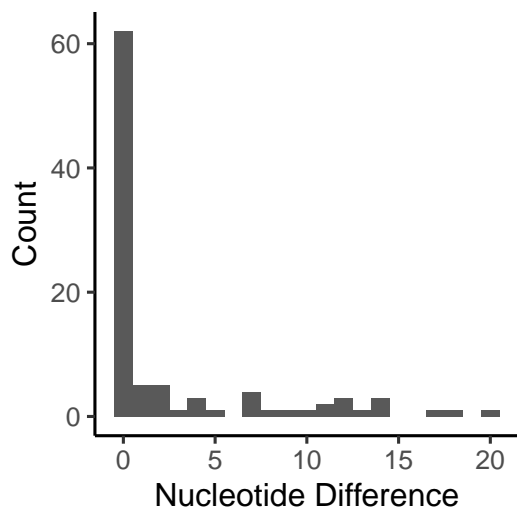
IGHV3-69-1*01

4 sequences assigned
No exact matches.



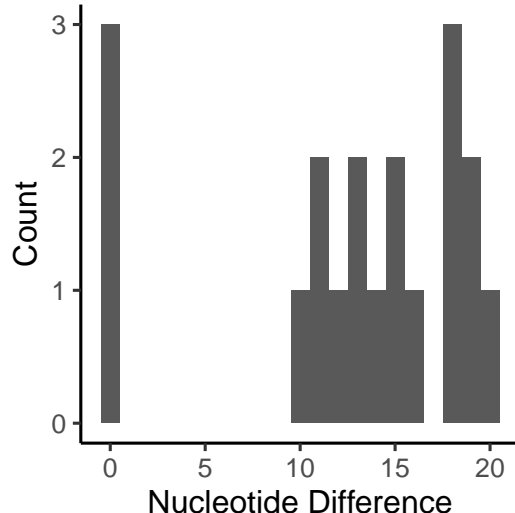
IGHV3-53*04

104 sequences assigned
62 (59.6%) exact matches, in which:
62 unique CDR3
5 unique J



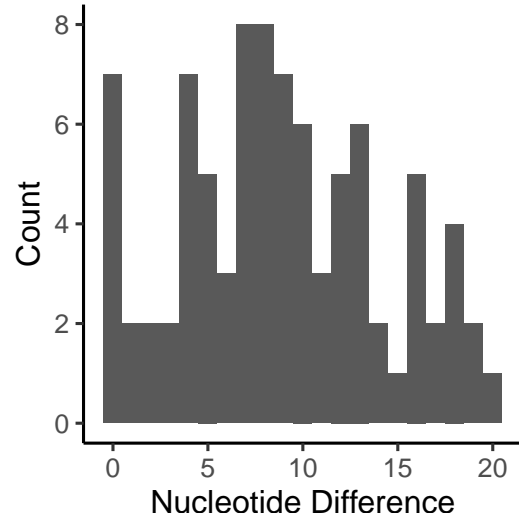
IGHV3-64*02_07

26 sequences assigned
3 (11.5%) exact matches, in which:
3 unique CDR3
2 unique J



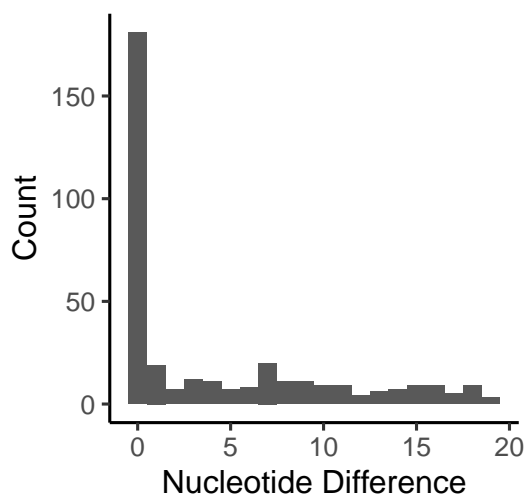
IGHV3-72*01

98 sequences assigned
7 (7.1%) exact matches, in which:
7 unique CDR3
3 unique J



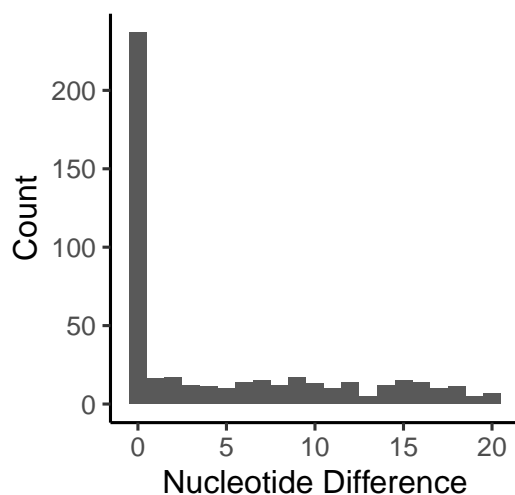
IGHV3-53*01_02

380 sequences assigned
181 (47.6%) exact matches, in which:
179 unique CDR3
5 unique J



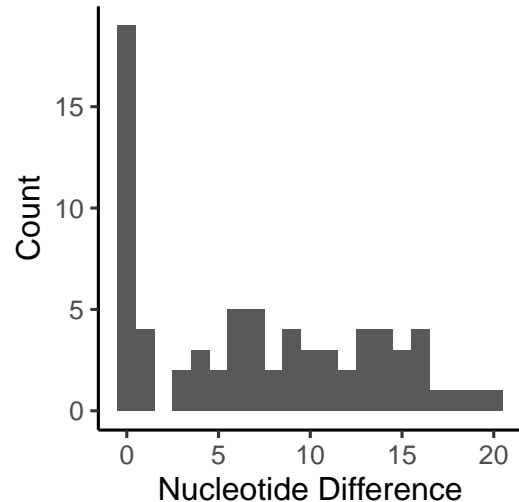
IGHV3-66*01

509 sequences assigned
237 (46.6%) exact matches, in which:
234 unique CDR3
6 unique J



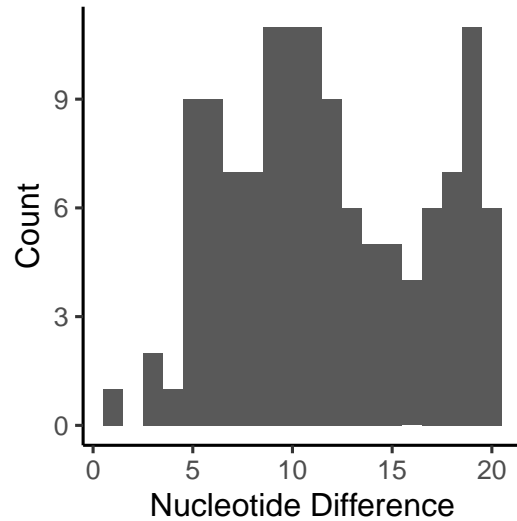
IGHV3-73*01_02

88 sequences assigned
19 (21.6%) exact matches, in which:
18 unique CDR3
4 unique J



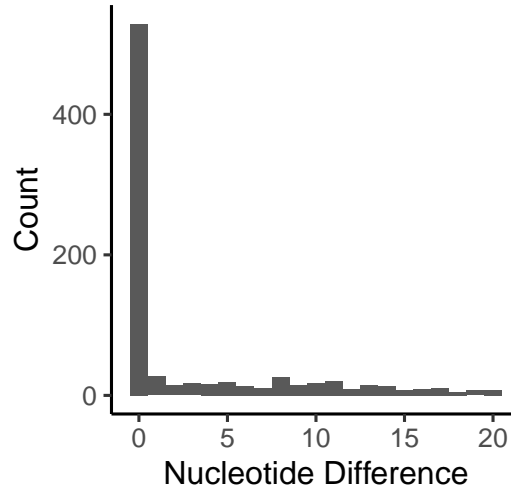
IGHV3-74*03

162 sequences assigned
No exact matches.



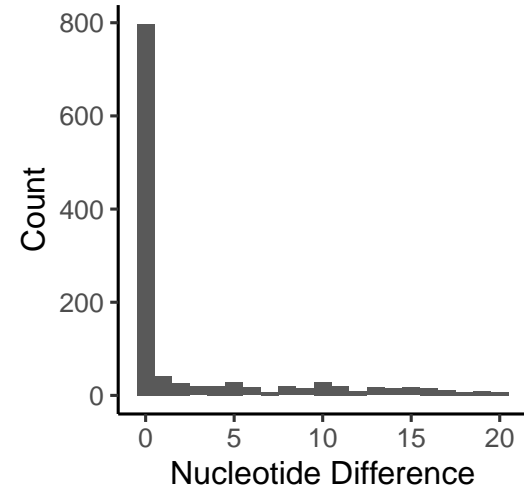
IGHV4-4*02_03

865 sequences assigned
529 (61.2%) exact matches, in which:
526 unique CDR3
6 unique J



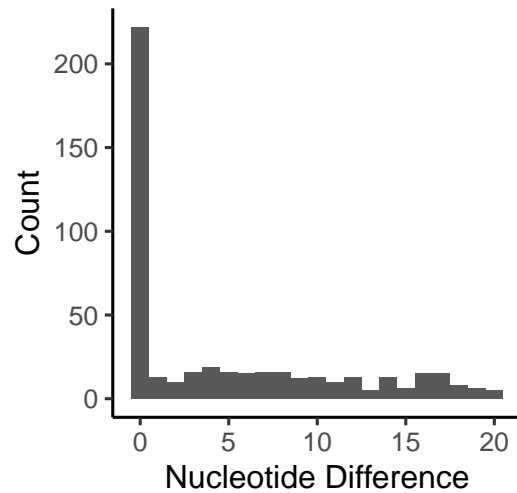
IGHV4-30-4*01

1224 sequences assigned
798 (65.2%) exact matches, in which:
789 unique CDR3
6 unique J



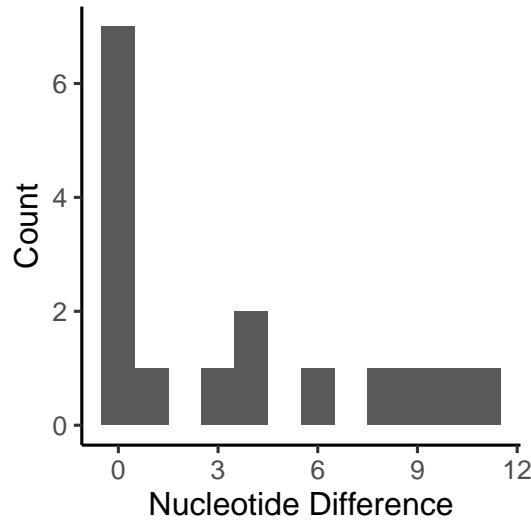
IGHV3-74*01_02

487 sequences assigned
222 (45.6%) exact matches, in which:
217 unique CDR3
5 unique J



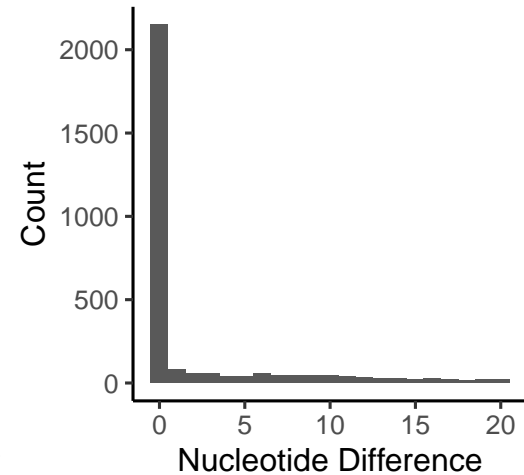
IGHV4-28*01_07

20 sequences assigned
7 (35%) exact matches, in which:
7 unique CDR3
5 unique J



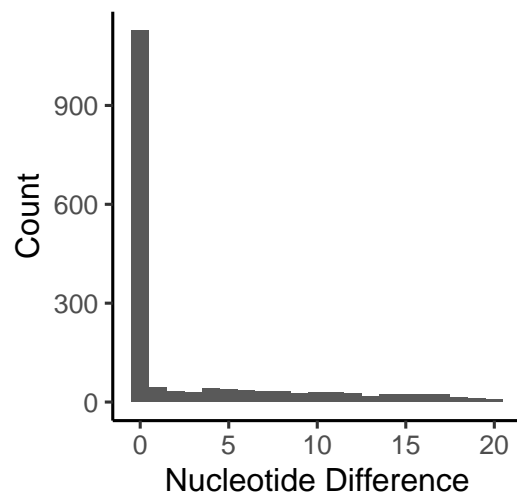
IGHV4-31*02

3035 sequences assigned
2150 (70.8%) exact matches, in which:
2128 unique CDR3
6 unique J



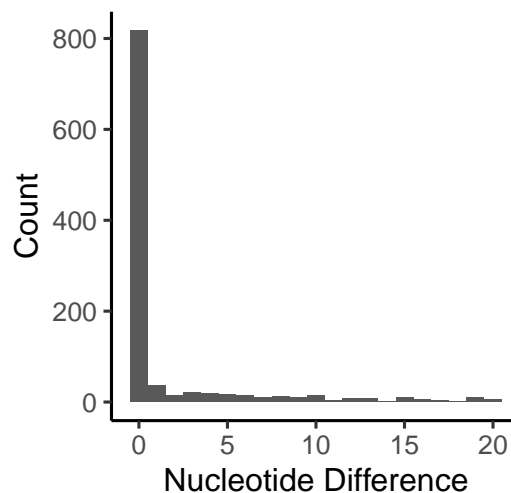
IGHV4-4*07

1719 sequences assigned
1128 (65.6%) exact matches, in which:
1110 unique CDR3
6 unique J



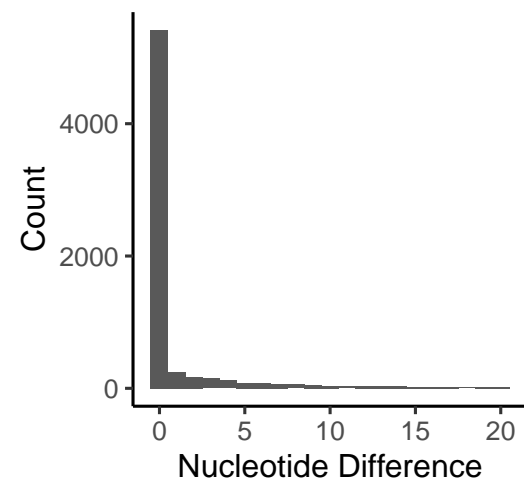
IGHV4-30-2*01

1077 sequences assigned
818 (76%) exact matches, in which:
785 unique CDR3
6 unique J



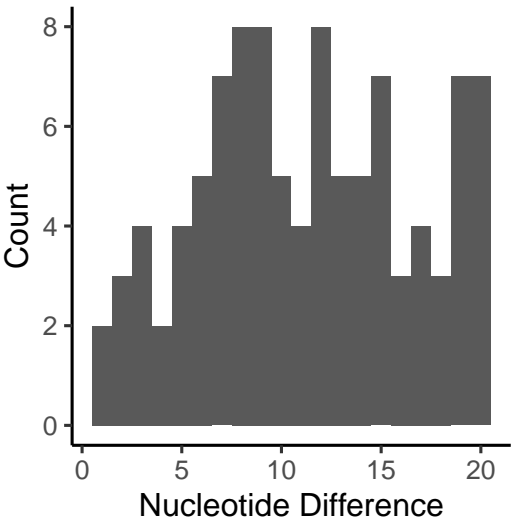
IGHV4-34*01_02

6841 sequences assigned
5416 (79.2%) exact matches, in which:
5299 unique CDR3
6 unique J



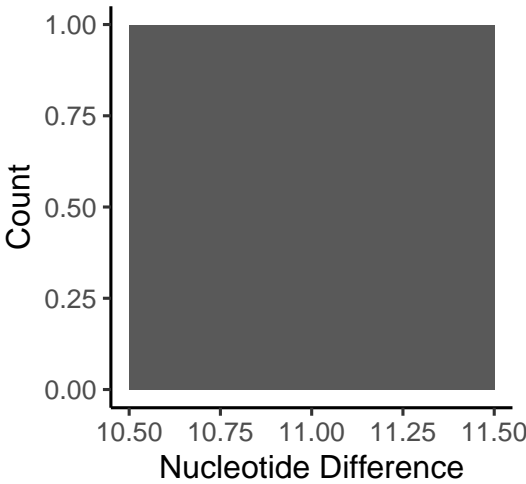
IGHV4–39*02

142 sequences assigned
No exact matches.



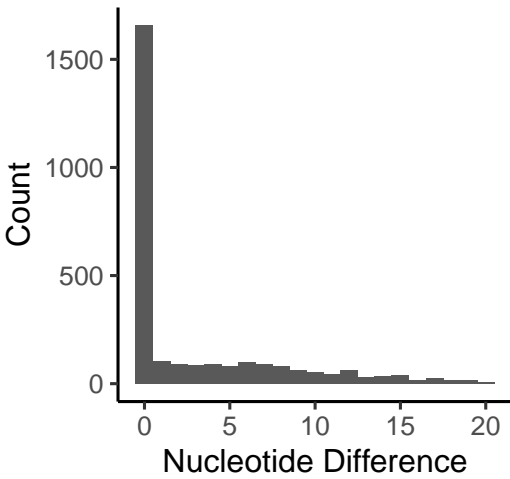
IGHV4/OR15–8*01

2 sequences assigned
No exact matches.



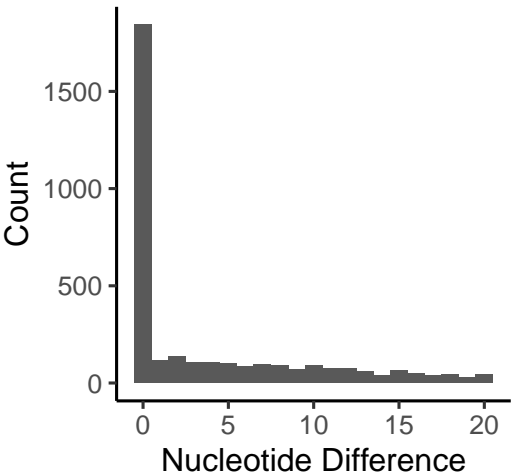
IGHV6–1*01_02

2857 sequences assigned
1657 (58%) exact matches, in which:
1631 unique CDR3
6 unique J



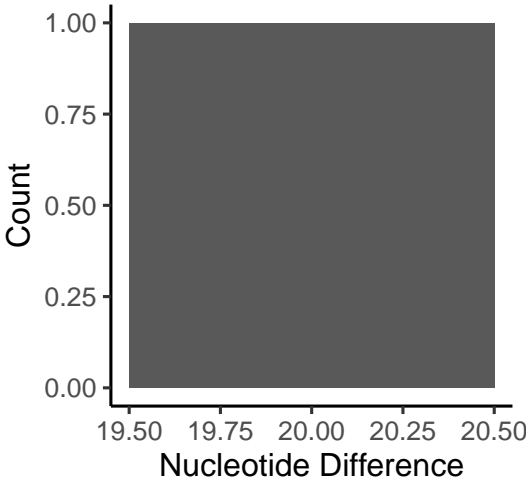
IGHV4–59*08

3593 sequences assigned
1843 (51.3%) exact matches, in which:
1806 unique CDR3
6 unique J



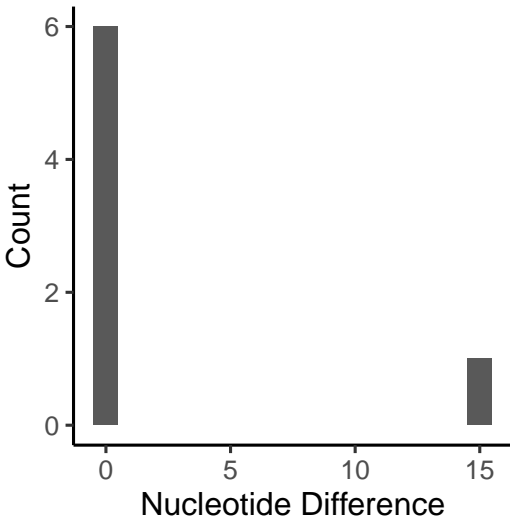
IGHV4/OR15–8*02

3 sequences assigned
No exact matches.



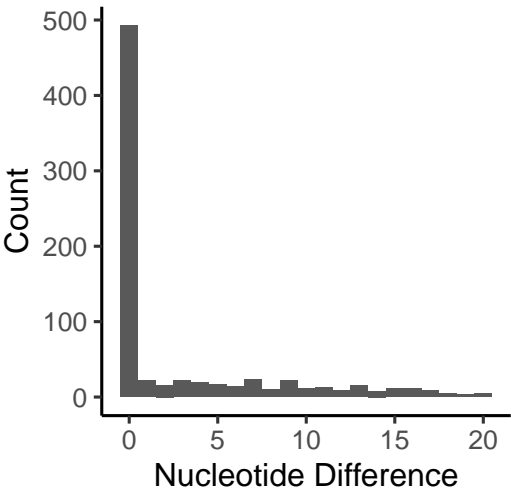
IGHV7–4–1*01

7 sequences assigned
6 (85.7%) exact matches, in which:
6 unique CDR3
2 unique J



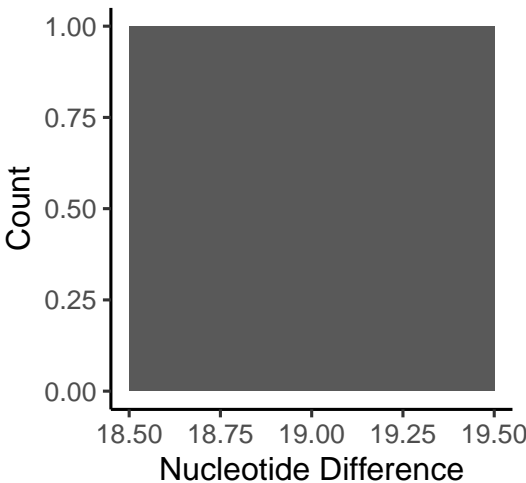
IGHV4–61*01

800 sequences assigned
493 (61.6%) exact matches, in which:
484 unique CDR3
6 unique J



IGHV5–51*04

1 sequences assigned
No exact matches.





Warning – no inferred sequences found.