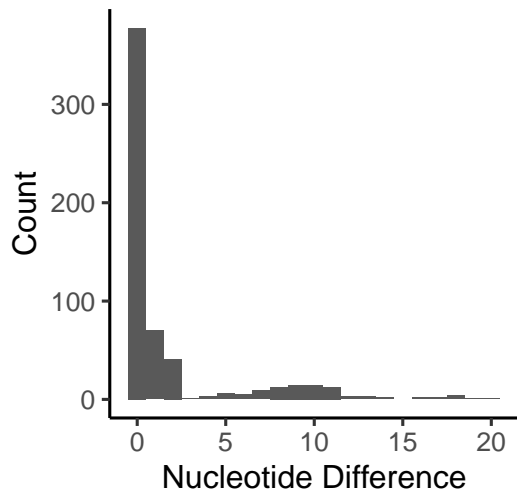


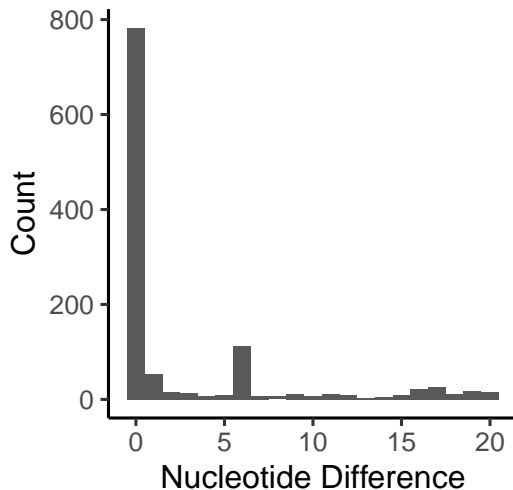
IGHV1–2*04

646 sequences assigned
378 (58.5%) exact matches, in which:
363 unique CDR3
6 unique J



IGHV1–18*01

3139 sequences assigned
783 (24.9%) exact matches, in which:
768 unique CDR3
6 unique J



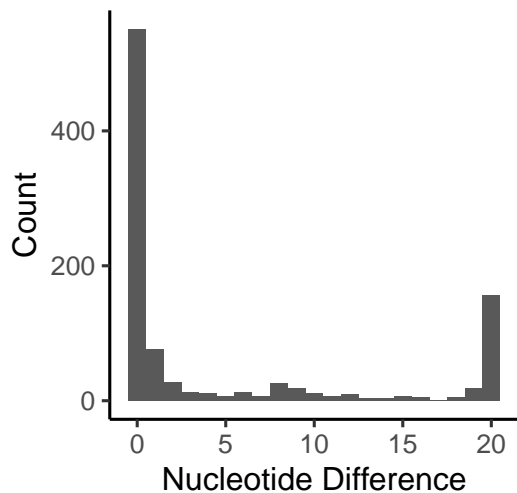
IGHV1–45*02

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



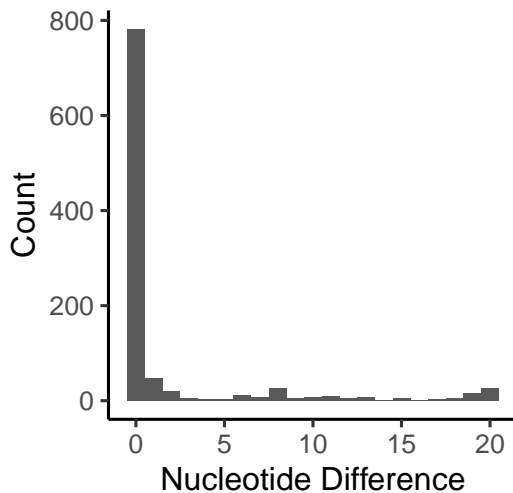
IGHV1–3*01_05

1389 sequences assigned
551 (39.7%) exact matches, in which:
531 unique CDR3
6 unique J



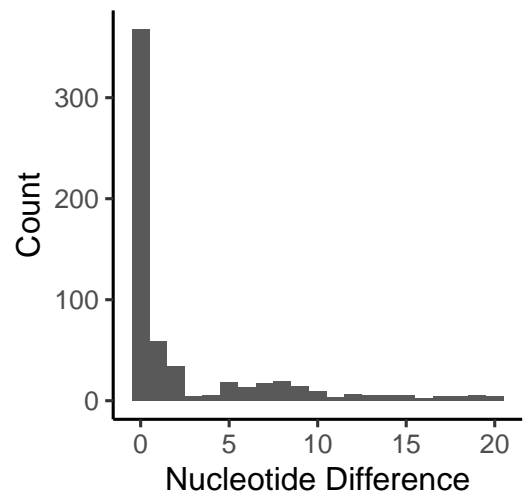
IGHV1–18*04

1100 sequences assigned
782 (71.1%) exact matches, in which:
764 unique CDR3
6 unique J



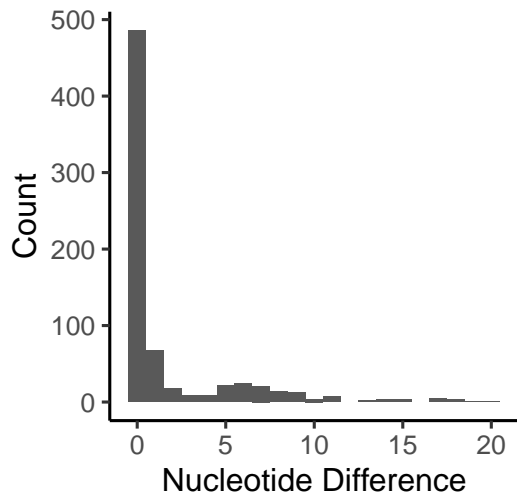
IGHV1–46*01

686 sequences assigned
368 (53.6%) exact matches, in which:
360 unique CDR3
6 unique J



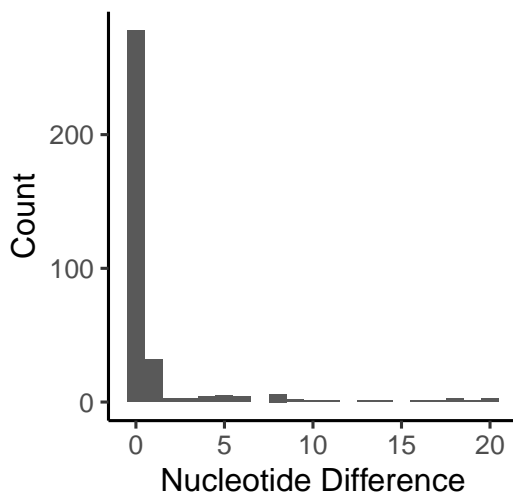
IGHV1–8*01

725 sequences assigned
486 (67%) exact matches, in which:
471 unique CDR3
6 unique J



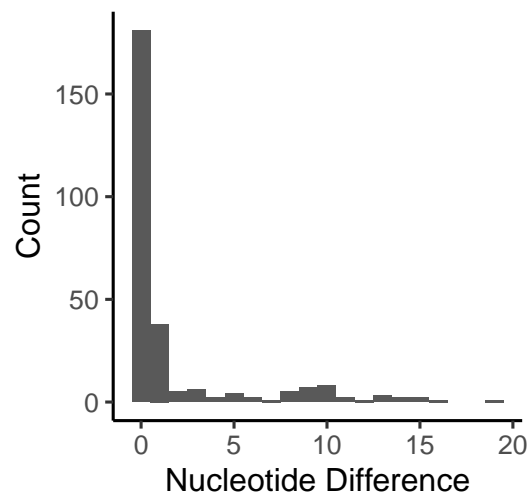
IGHV1–24*01

443 sequences assigned
278 (62.8%) exact matches, in which:
270 unique CDR3
6 unique J



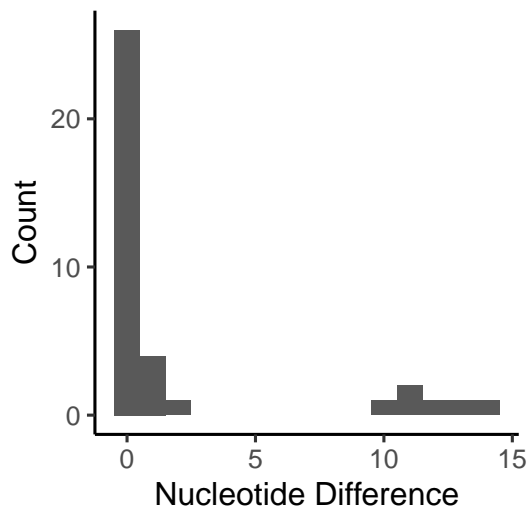
IGHV1–46*03

276 sequences assigned
181 (65.6%) exact matches, in which:
177 unique CDR3
5 unique J



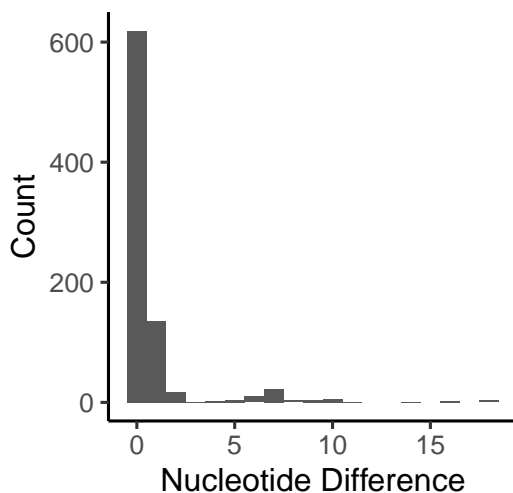
IGHV1-58*02

37 sequences assigned
26 (70.3%) exact matches, in which:
25 unique CDR3
5 unique J



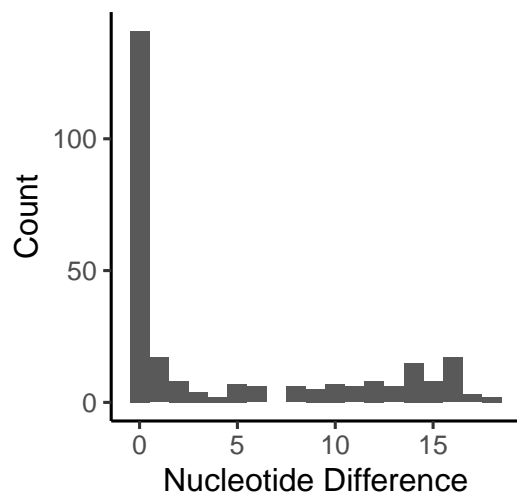
IGHV1-69*04_09

861 sequences assigned
619 (71.9%) exact matches, in which:
610 unique CDR3
6 unique J



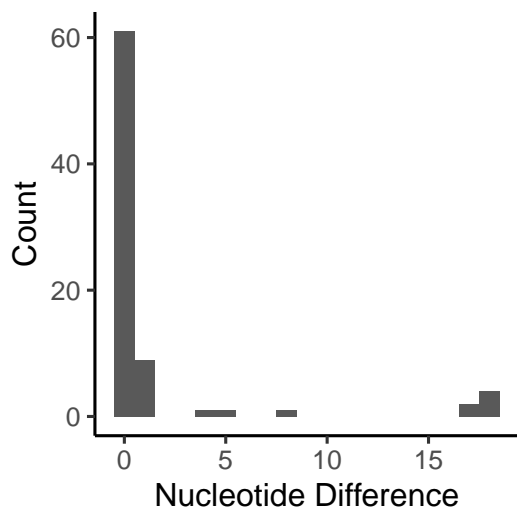
IGHV2-5*02

354 sequences assigned
141 (39.8%) exact matches, in which:
137 unique CDR3
6 unique J



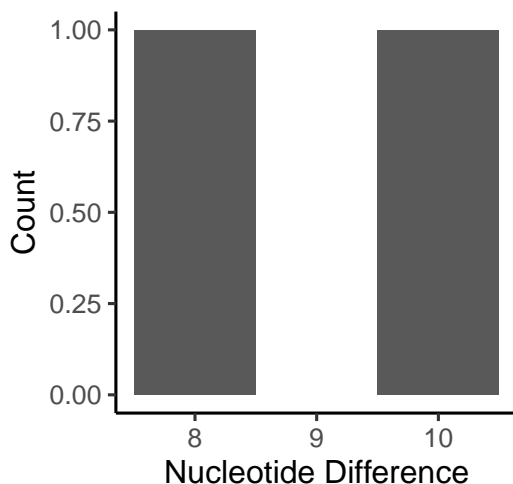
IGHV1-58*01_03

83 sequences assigned
61 (73.5%) exact matches, in which:
60 unique CDR3
6 unique J



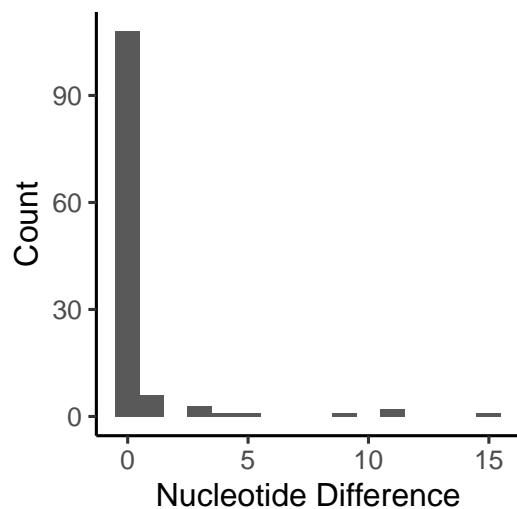
IGHV1-NL1*01

2 sequences assigned
No exact matches.



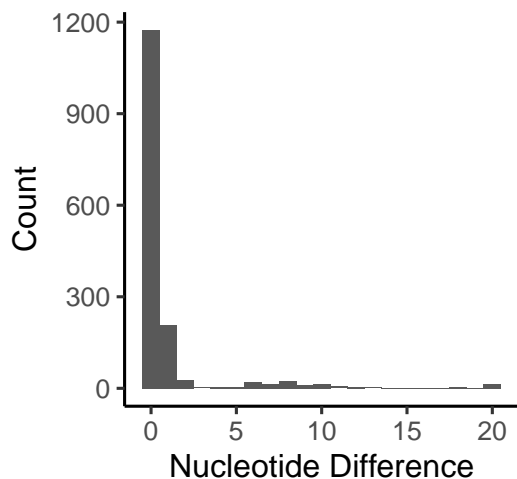
IGHV2-26*01

147 sequences assigned
108 (73.5%) exact matches, in which:
105 unique CDR3
5 unique J



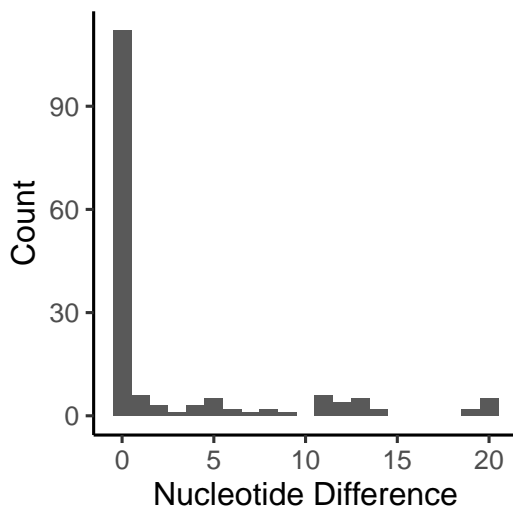
IGHV1-69*01_12_13

1963 sequences assigned
1174 (59.8%) exact matches, in which:
1154 unique CDR3
6 unique J



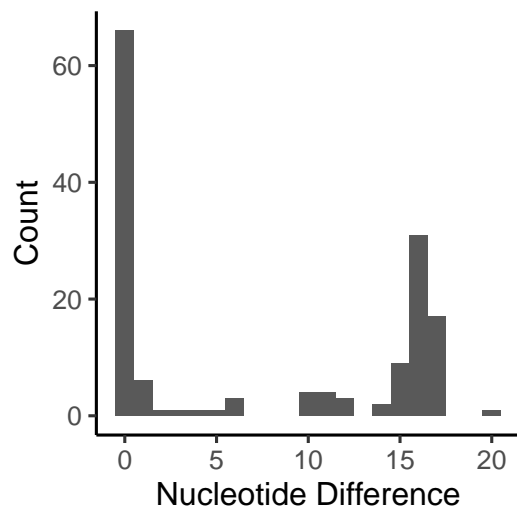
IGHV2-5*01

177 sequences assigned
112 (63.3%) exact matches, in which:
112 unique CDR3
5 unique J



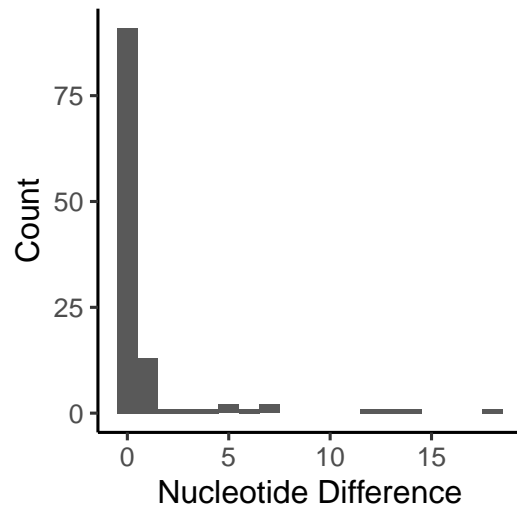
IGHV2-70*01

154 sequences assigned
66 (42.9%) exact matches, in which:
64 unique CDR3
5 unique J



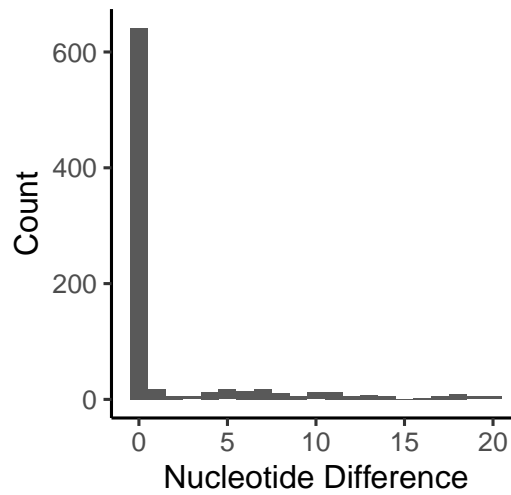
IGHV2-70*11_15

116 sequences assigned
91 (78.4%) exact matches, in which:
88 unique CDR3
5 unique J



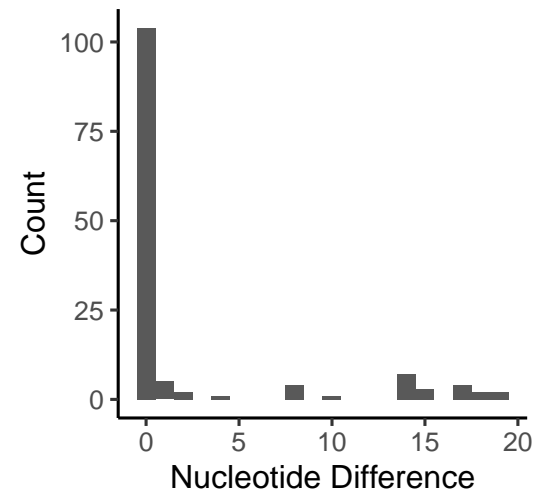
IGHV3-9*01

862 sequences assigned
642 (74.5%) exact matches, in which:
379 unique CDR3
6 unique J



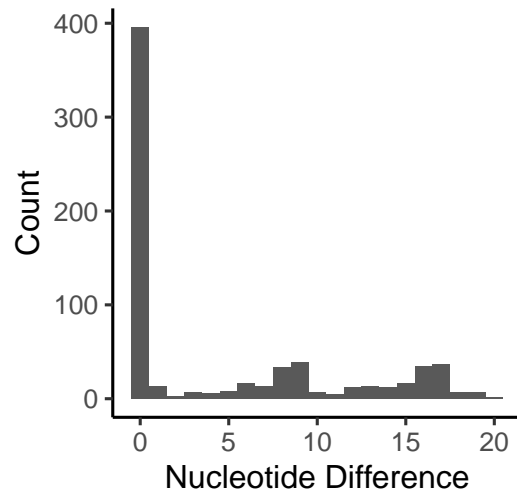
IGHV3-13*01

145 sequences assigned
104 (71.7%) exact matches, in which:
58 unique CDR3
5 unique J



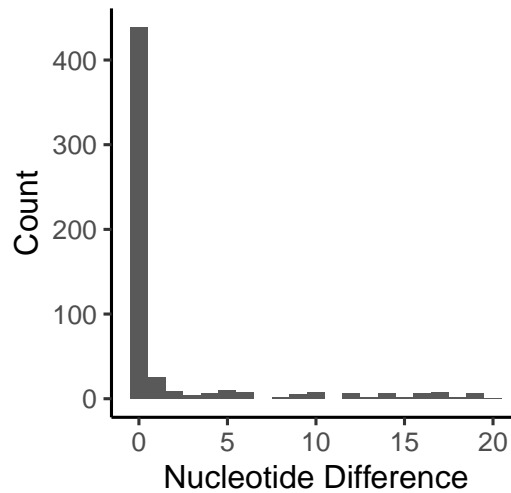
IGHV3-7*01

815 sequences assigned
396 (48.6%) exact matches, in which:
245 unique CDR3
6 unique J



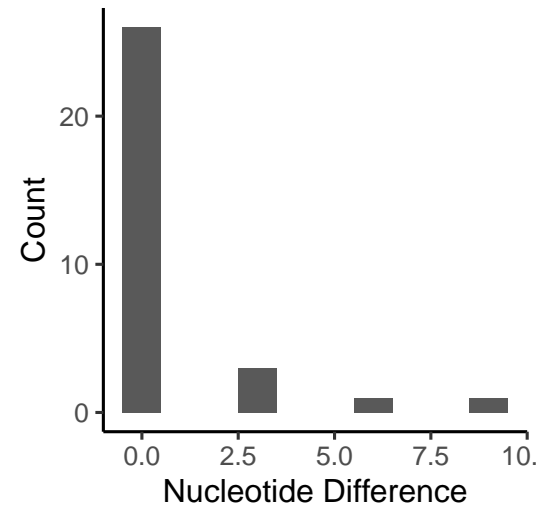
IGHV3-11*01

689 sequences assigned
439 (63.7%) exact matches, in which:
250 unique CDR3
6 unique J



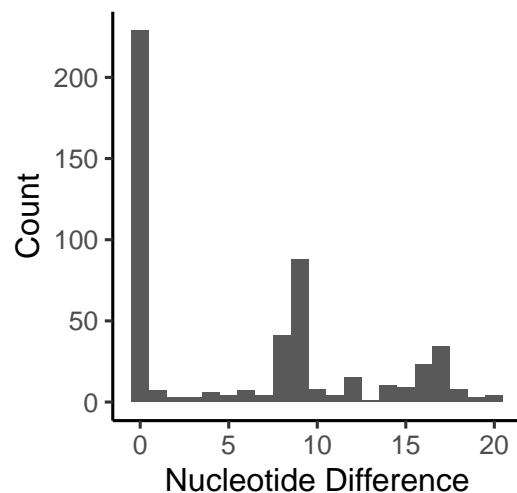
IGHV3-13*05

31 sequences assigned
26 (83.9%) exact matches, in which:
16 unique CDR3
4 unique J



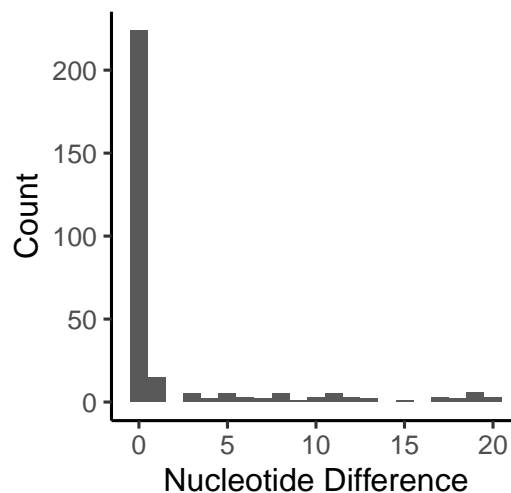
IGHV3-7*05

541 sequences assigned
229 (42.3%) exact matches, in which:
134 unique CDR3
6 unique J



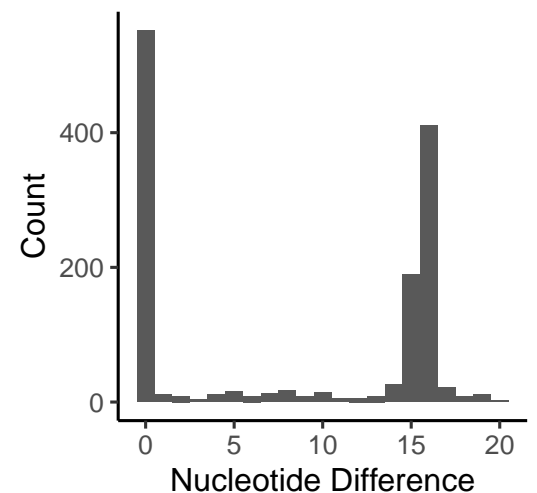
IGHV3-11*06

300 sequences assigned
224 (74.7%) exact matches, in which:
140 unique CDR3
6 unique J



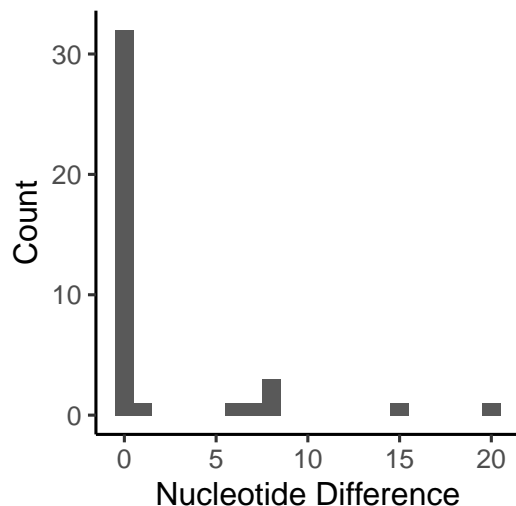
IGHV3-15*01_02

1451 sequences assigned
552 (38%) exact matches, in which:
361 unique CDR3
6 unique J



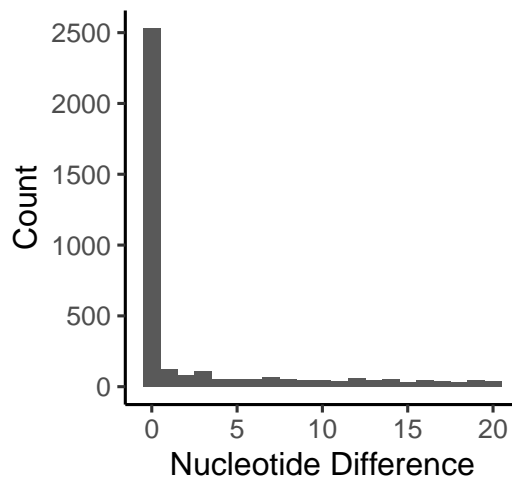
IGHV3-20*01_02

41 sequences assigned
32 (78%) exact matches, in which:
18 unique CDR3
5 unique J



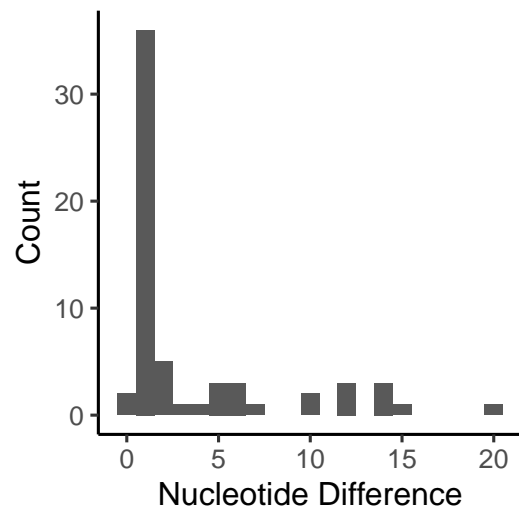
IGHV3-23*01_04

5238 sequences assigned
2530 (48.3%) exact matches, in which:
1466 unique CDR3
6 unique J



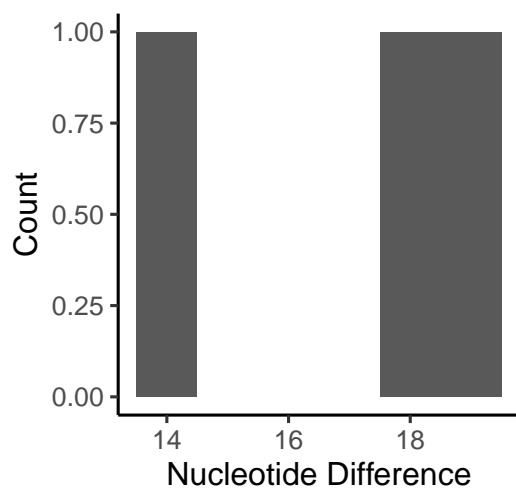
IGHV3-33*05

68 sequences assigned
2 (2.9%) exact matches, in which:
2 unique CDR3
1 unique J



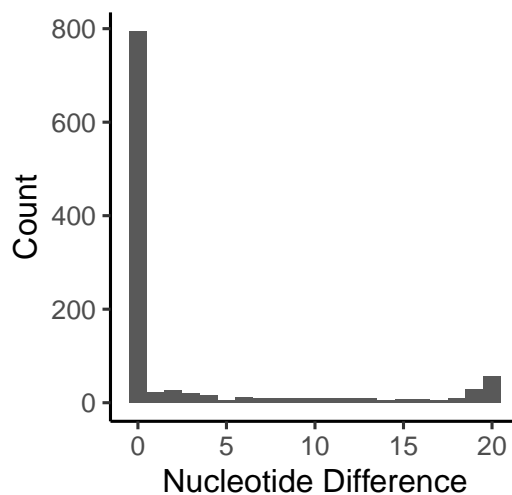
IGHV3-20*03_04

22 sequences assigned
No exact matches.



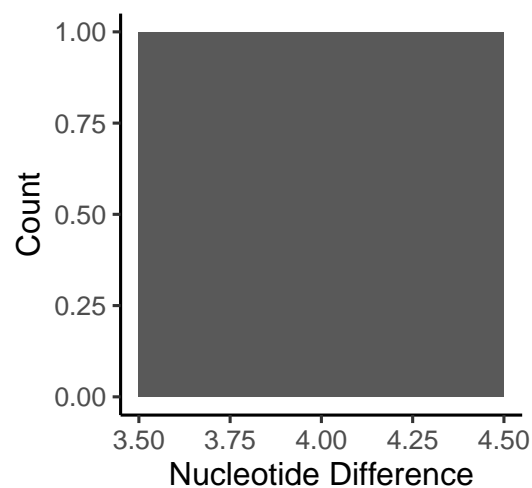
IGHV3-30-3*01

1234 sequences assigned
795 (64.4%) exact matches, in which:
489 unique CDR3
6 unique J



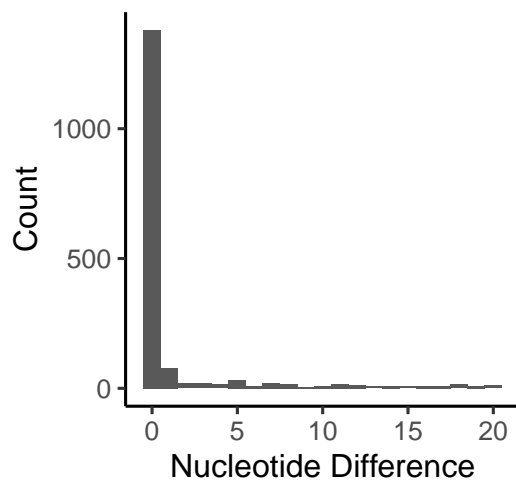
IGHV3-38*03

1 sequences assigned
No exact matches.



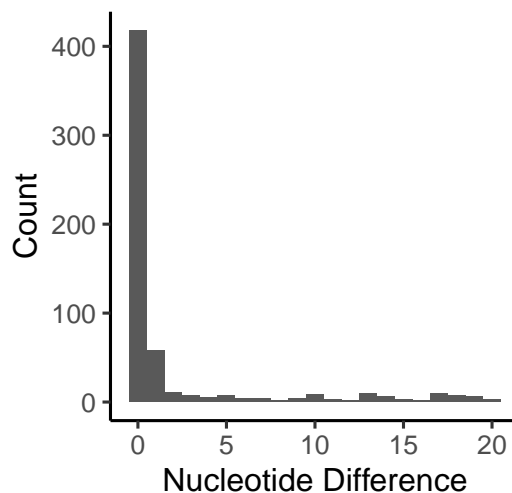
IGHV3-21*01_02

2186 sequences assigned
1380 (63.1%) exact matches, in which:
820 unique CDR3
6 unique J



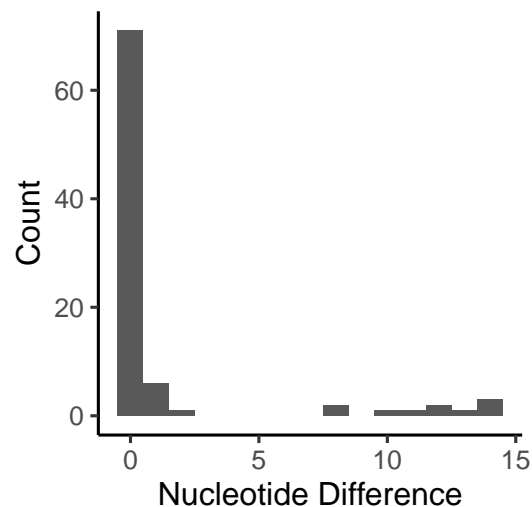
IGHV3-33*01

735 sequences assigned
418 (56.9%) exact matches, in which:
253 unique CDR3
6 unique J



IGHV3-43*01

284 sequences assigned
71 (25%) exact matches, in which:
45 unique CDR3
5 unique J



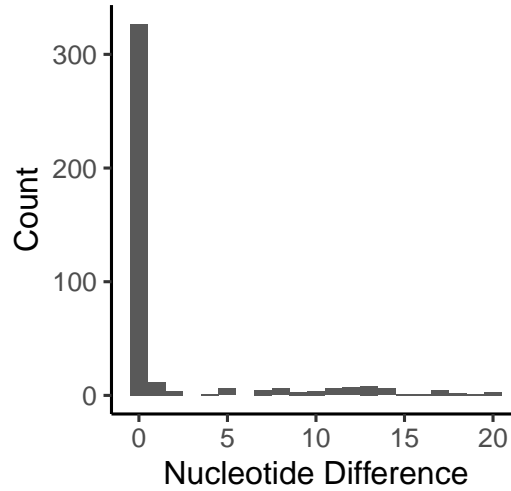
IGHV3-47*01

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



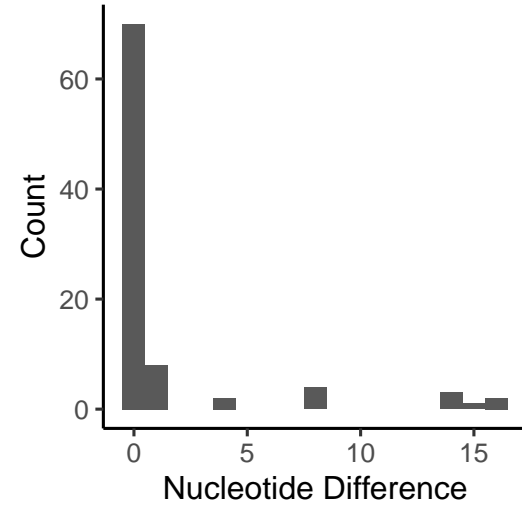
IGHV3-49*03_05

532 sequences assigned
327 (61.5%) exact matches, in which:
202 unique CDR3
6 unique J



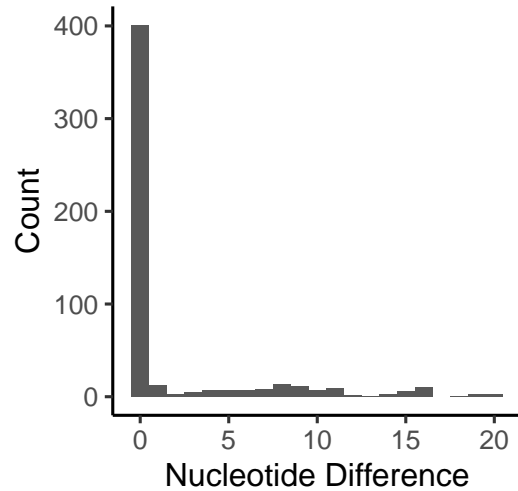
IGHV3-64*01

101 sequences assigned
70 (69.3%) exact matches, in which:
41 unique CDR3
5 unique J



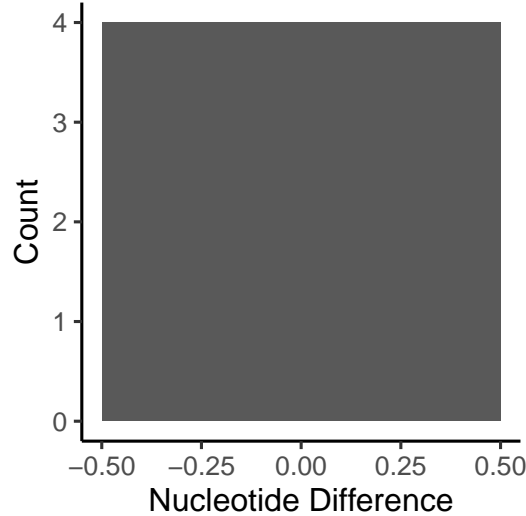
IGHV3-48*01

716 sequences assigned
401 (56%) exact matches, in which:
233 unique CDR3
6 unique J



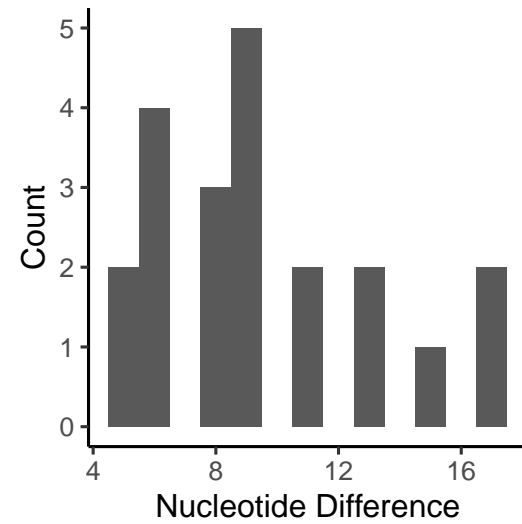
IGHV3-52*02

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



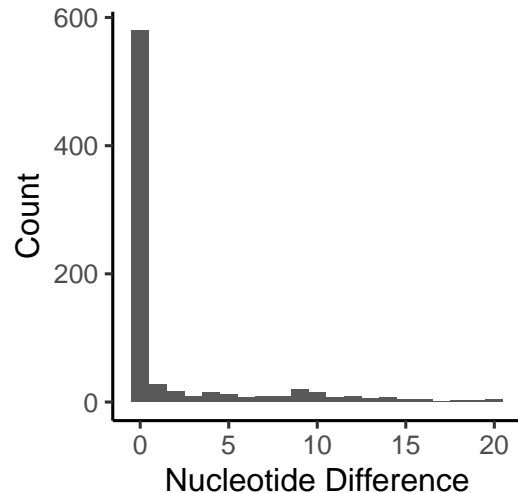
IGHV3-64*04

22 sequences assigned
No exact matches.



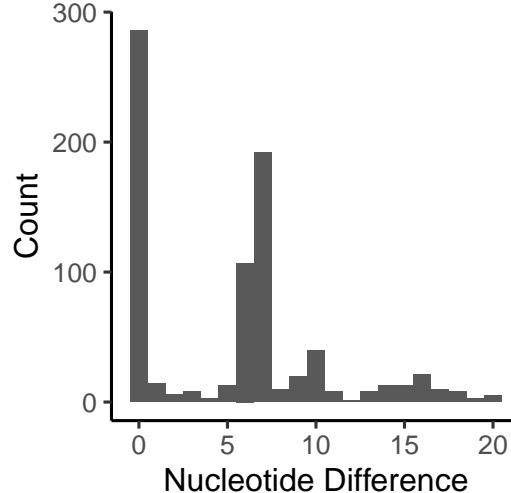
IGHV3-48*04

865 sequences assigned
580 (67.1%) exact matches, in which:
356 unique CDR3
6 unique J



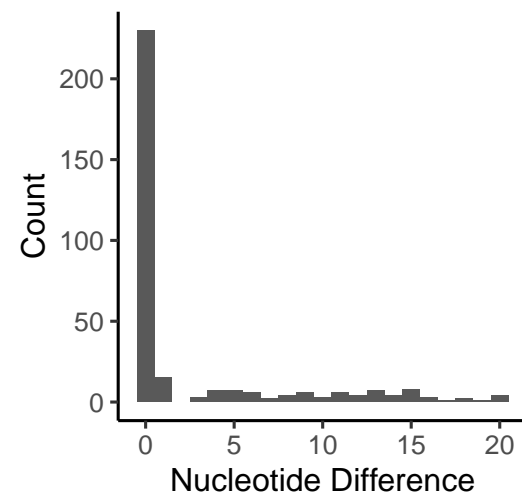
IGHV3-53*01_02

1075 sequences assigned
286 (26.6%) exact matches, in which:
168 unique CDR3
6 unique J



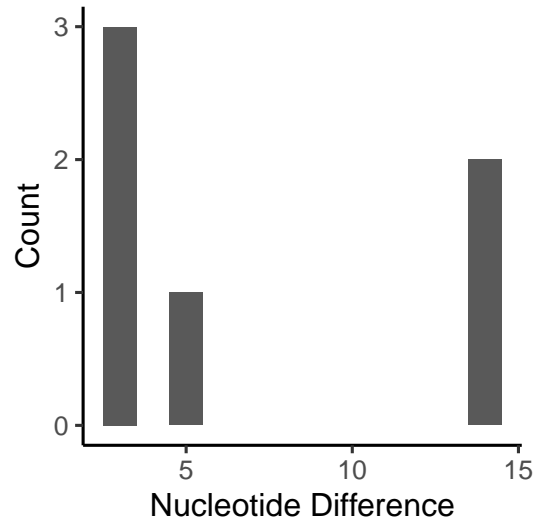
IGHV3-66*01

356 sequences assigned
230 (64.6%) exact matches, in which:
139 unique CDR3
6 unique J



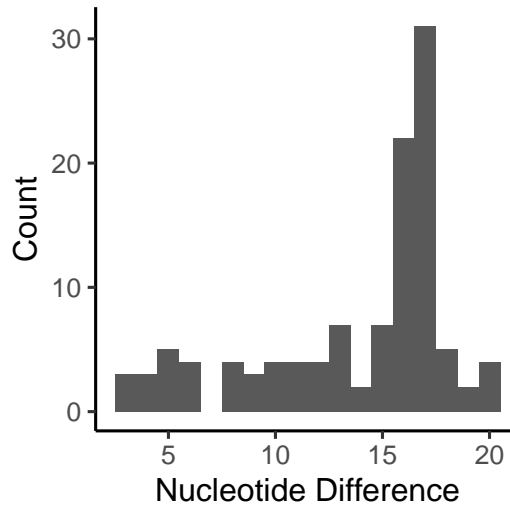
IGHV3-69-1*01

6 sequences assigned
No exact matches.



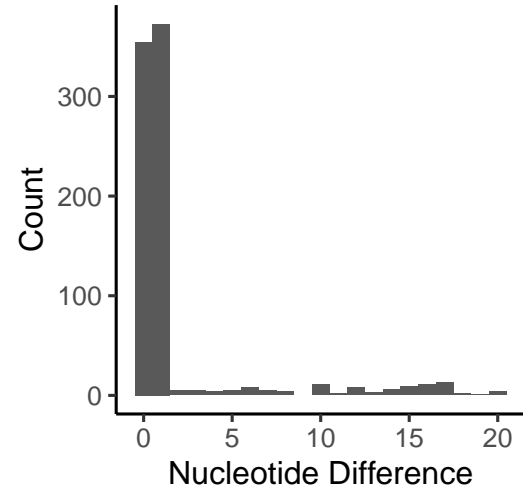
IGHV3-74*03

168 sequences assigned
No exact matches.



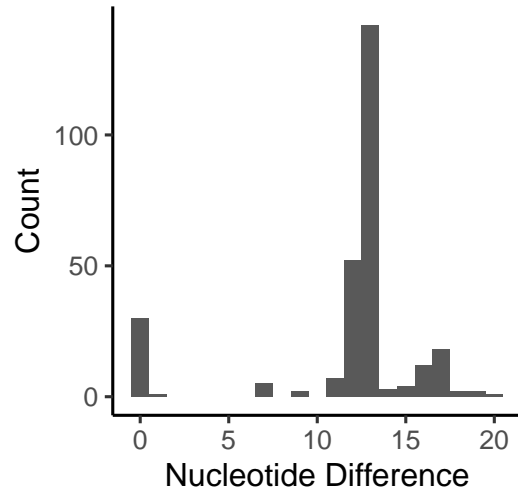
IGHV3-64D*08

860 sequences assigned
355 (41.3%) exact matches, in which:
158 unique CDR3
6 unique J



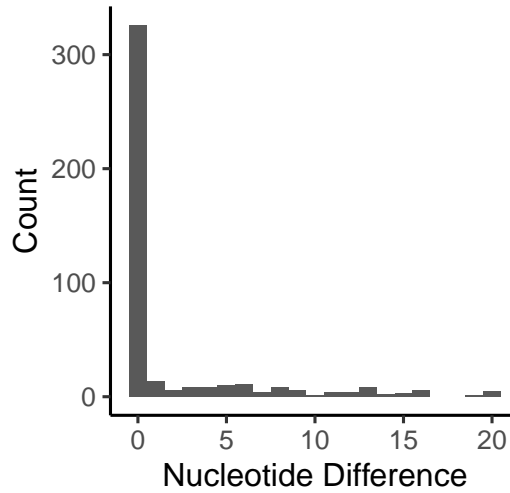
IGHV3-72*01

319 sequences assigned
30 (9.4%) exact matches, in which:
20 unique CDR3
4 unique J



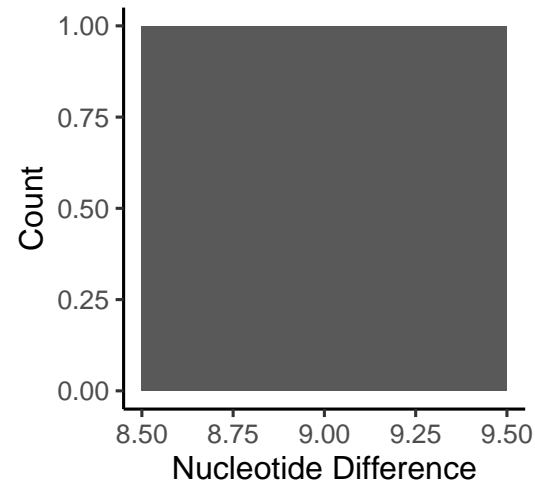
IGHV3-74*01_02

457 sequences assigned
326 (71.3%) exact matches, in which:
192 unique CDR3
6 unique J



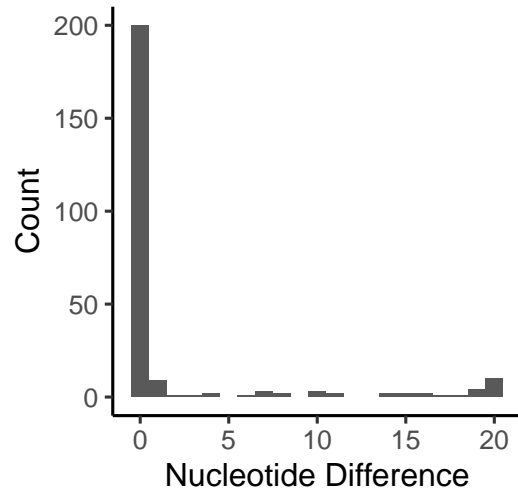
IGHV3-NL1*01

1 sequences assigned
No exact matches.



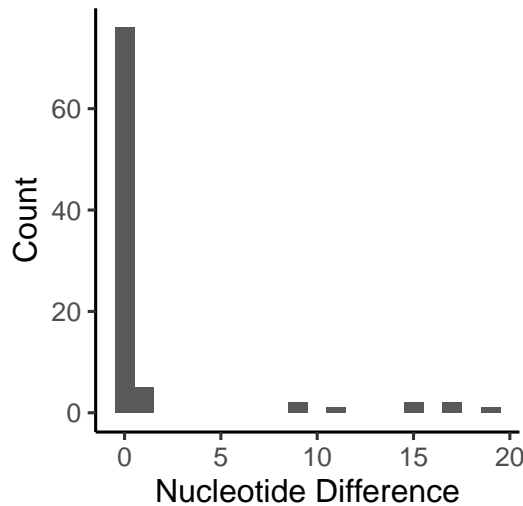
IGHV3-73*01_02

365 sequences assigned
200 (54.8%) exact matches, in which:
120 unique CDR3
6 unique J



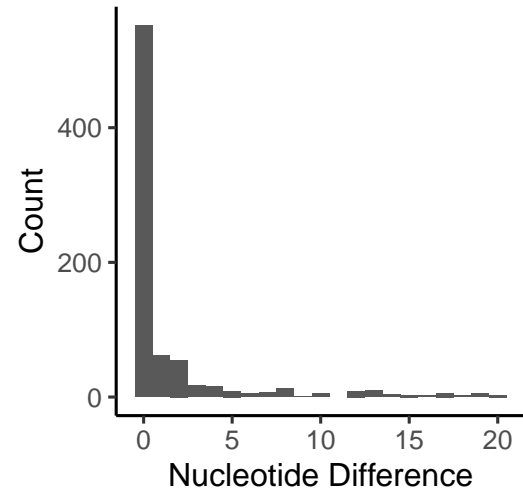
IGHV3-43D*03

175 sequences assigned
76 (43.4%) exact matches, in which:
47 unique CDR3
4 unique J



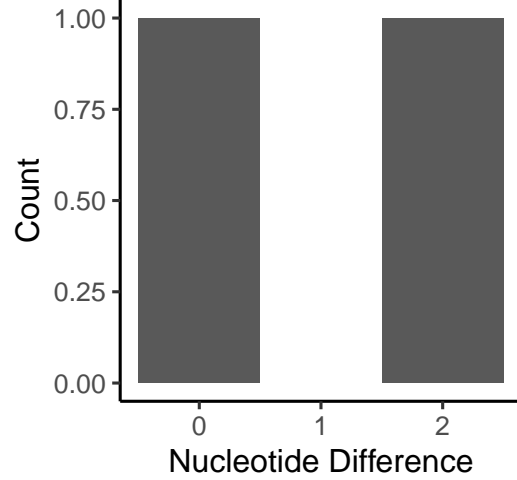
IGHV4-4*02_03

874 sequences assigned
552 (63.2%) exact matches, in which:
512 unique CDR3
6 unique J



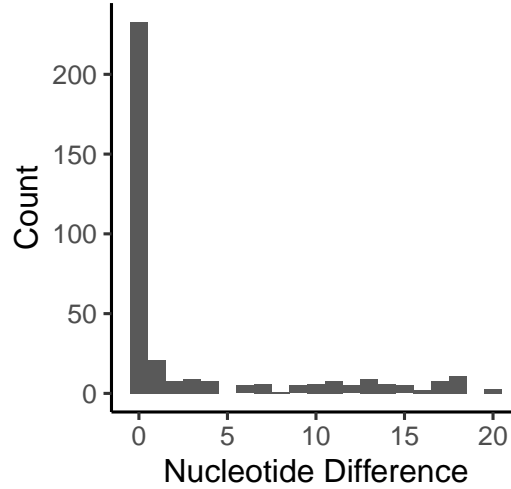
IGHV4-28*01_07

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



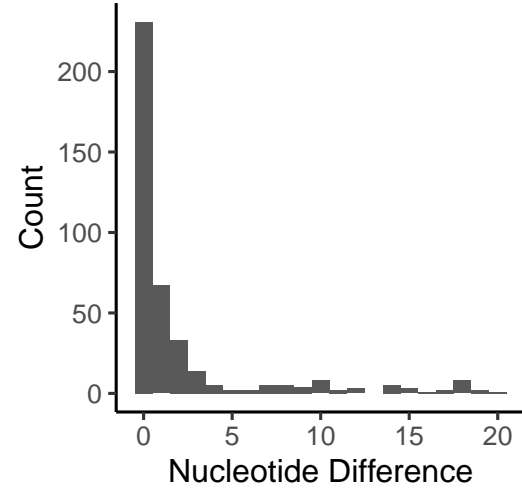
IGHV4-31*02

525 sequences assigned
233 (44.4%) exact matches, in which:
223 unique CDR3
6 unique J



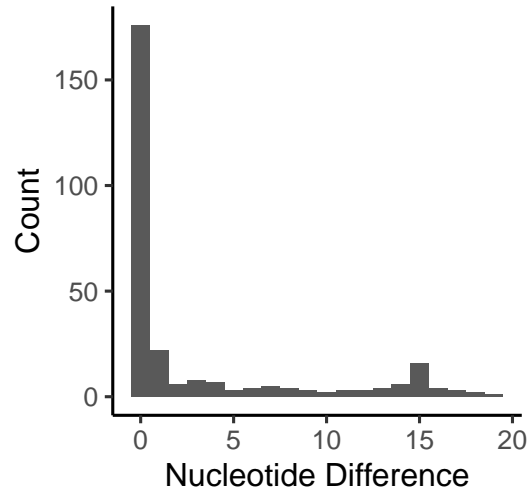
IGHV4-38-2*02

498 sequences assigned
231 (46.4%) exact matches, in which:
227 unique CDR3
6 unique J



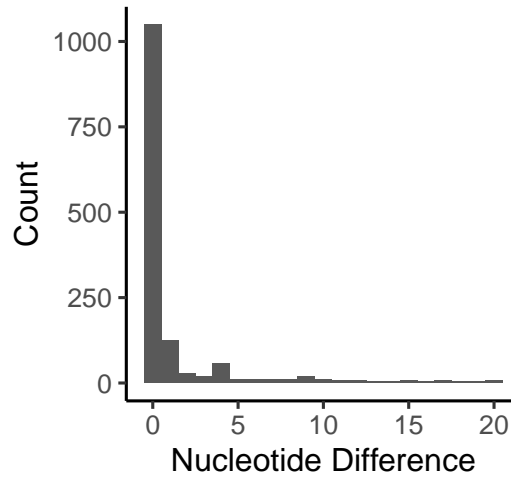
IGHV4-30-4*01

1676 sequences assigned
176 (10.5%) exact matches, in which:
172 unique CDR3
5 unique J



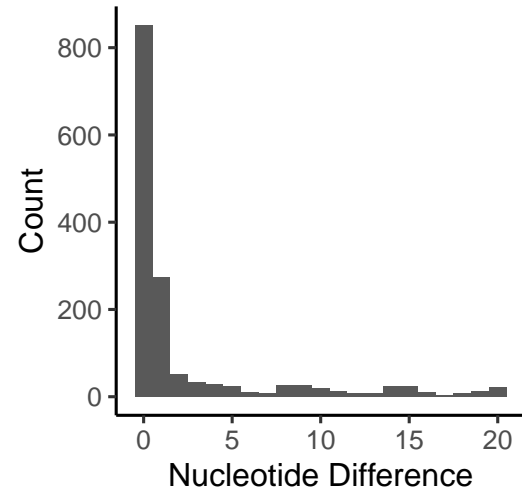
IGHV4-34*01_02

2023 sequences assigned
1049 (51.9%) exact matches, in which:
975 unique CDR3
6 unique J



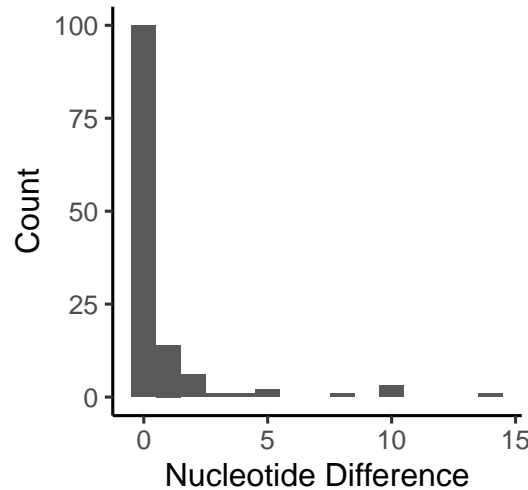
IGHV4-39*07

1765 sequences assigned
852 (48.3%) exact matches, in which:
821 unique CDR3
6 unique J



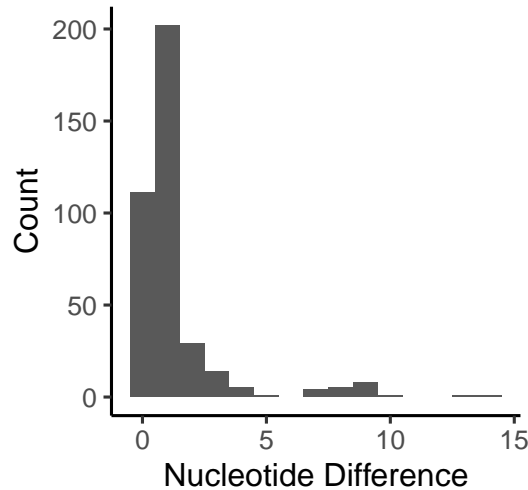
IGHV4-30-2*01

238 sequences assigned
100 (42%) exact matches, in which:
87 unique CDR3
6 unique J



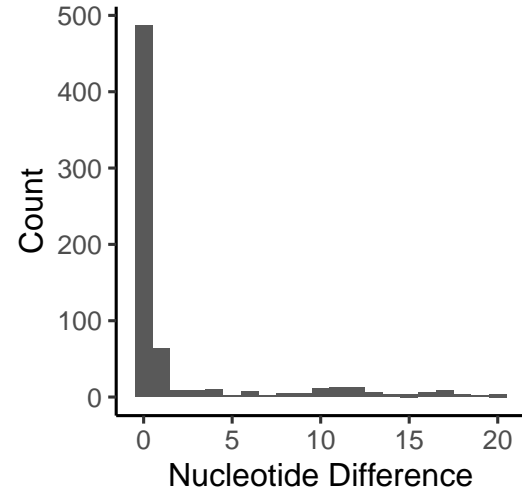
IGHV4-34*01_02_T300C

391 sequences assigned
111 (28.4%) exact matches, in which:
111 unique CDR3
6 unique J



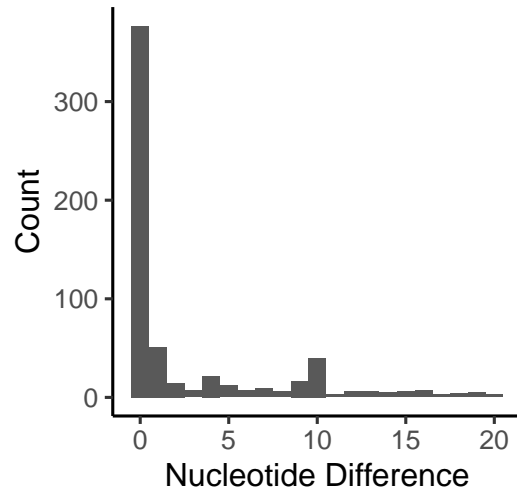
IGHV4-39*02_C258G

1127 sequences assigned
487 (43.2%) exact matches, in which:
460 unique CDR3
6 unique J



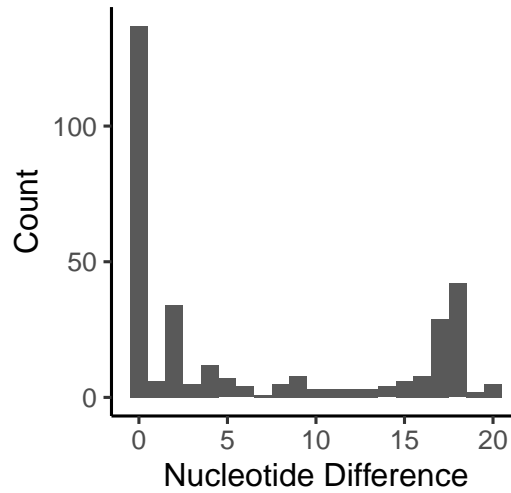
IGHV4–59*08

684 sequences assigned
377 (55.1%) exact matches, in which:
367 unique CDR3
6 unique J



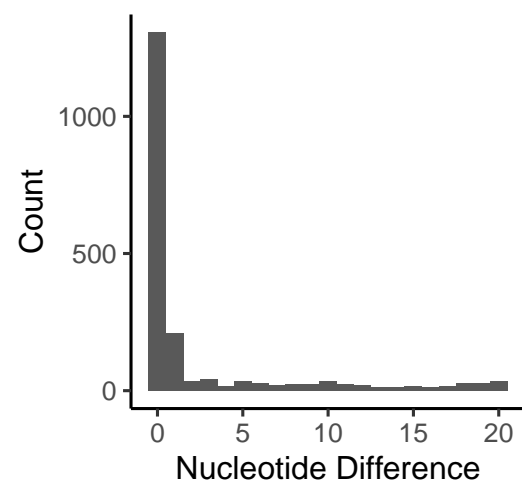
IGHV4–61*01

775 sequences assigned
137 (17.7%) exact matches, in which:
135 unique CDR3
5 unique J



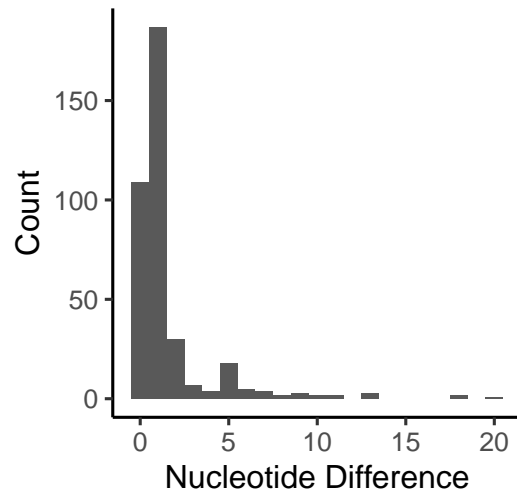
IGHV5–51*07_A128G

2311 sequences assigned
1306 (56.5%) exact matches, in which:
1040 unique CDR3
6 unique J



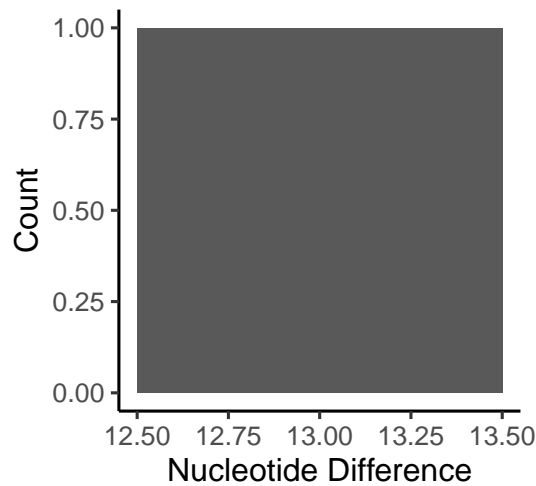
IGHV4–59*12

389 sequences assigned
109 (28%) exact matches, in which:
109 unique CDR3
6 unique J



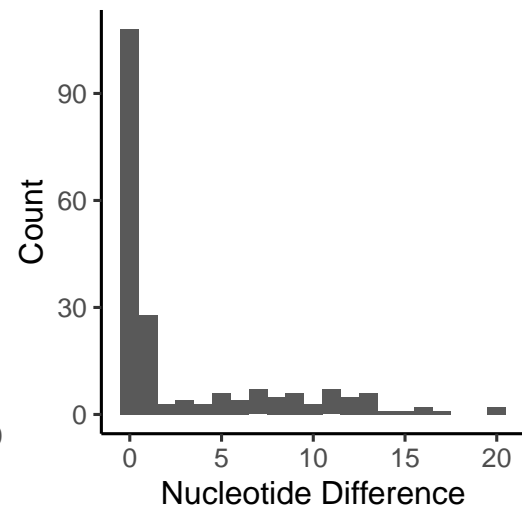
IGHV1/OR15–1*04

1 sequences assigned
No exact matches.



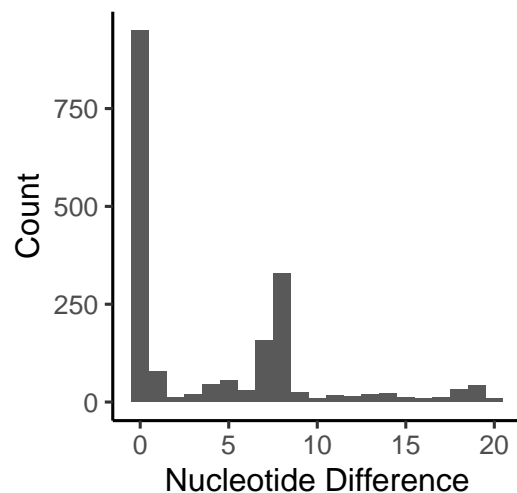
IGHV6–1*01_02

276 sequences assigned
108 (39.1%) exact matches, in which:
107 unique CDR3
5 unique J



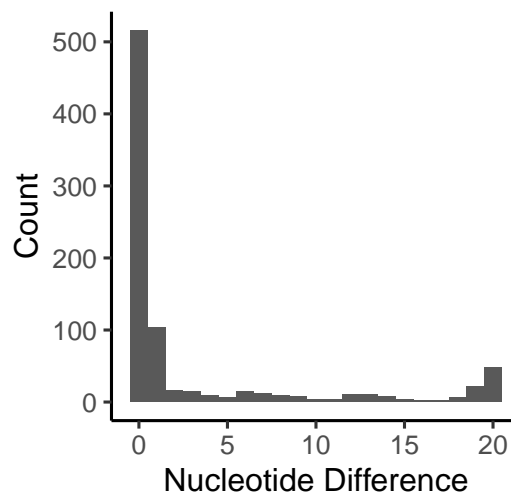
IGHV4–59*02_G88A

2270 sequences assigned
950 (41.9%) exact matches, in which:
923 unique CDR3
6 unique J



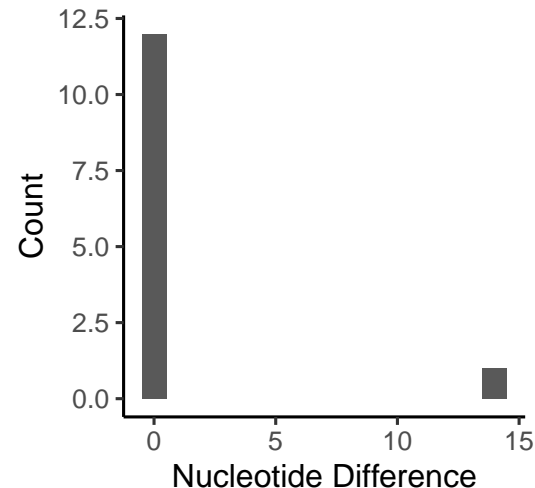
IGHV5–10–1*01_03

1379 sequences assigned
516 (37.4%) exact matches, in which:
433 unique CDR3
6 unique J



IGHV7–4–1*01

13 sequences assigned
12 (92.3%) exact matches, in which:
12 unique CDR3
3 unique J





Warning – no inferred sequences found.