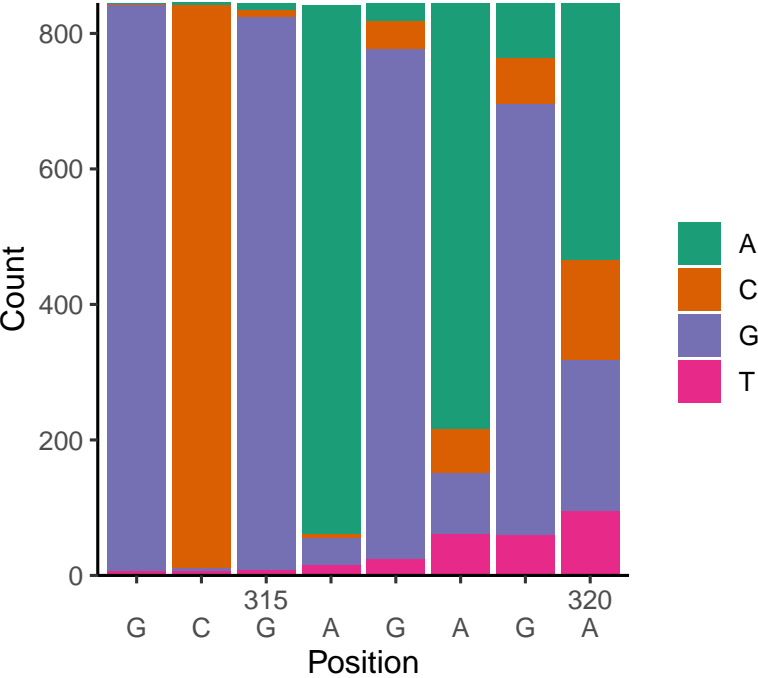
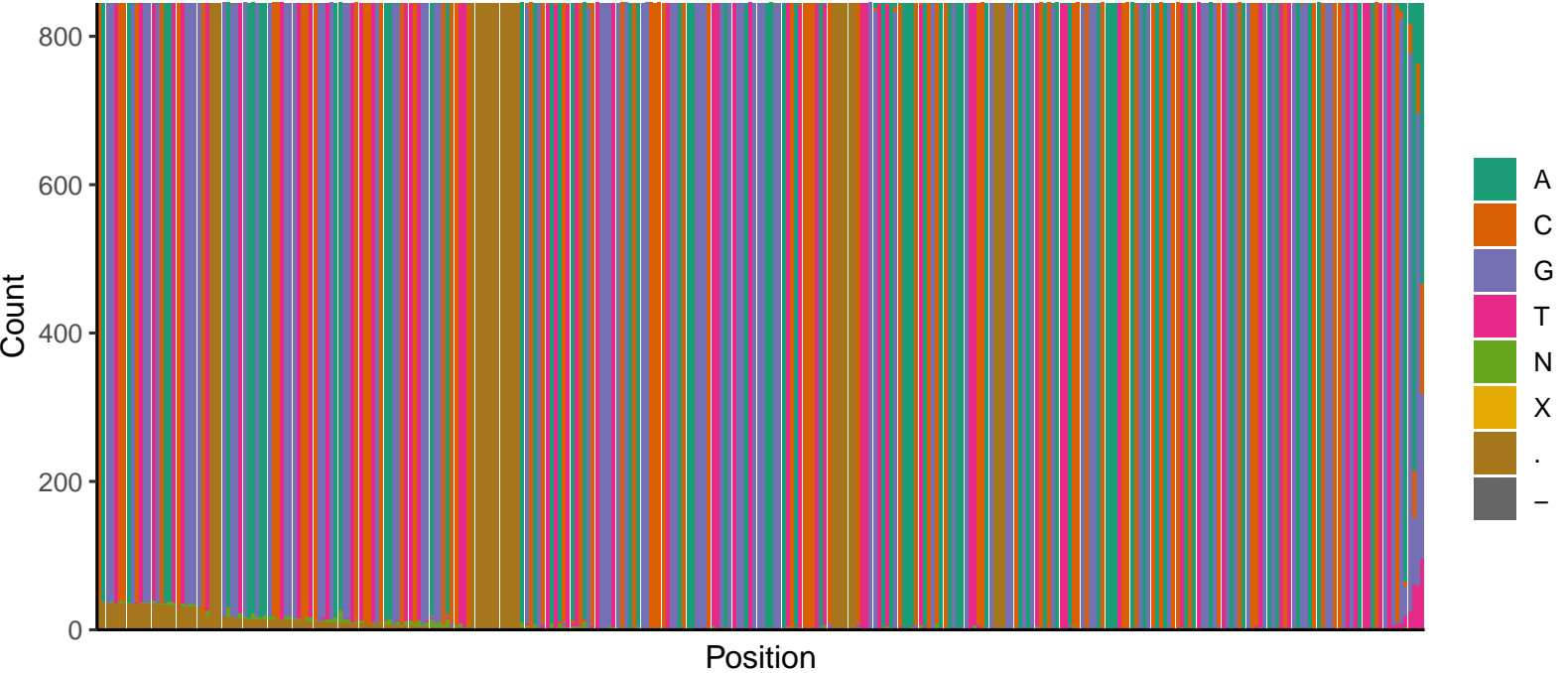


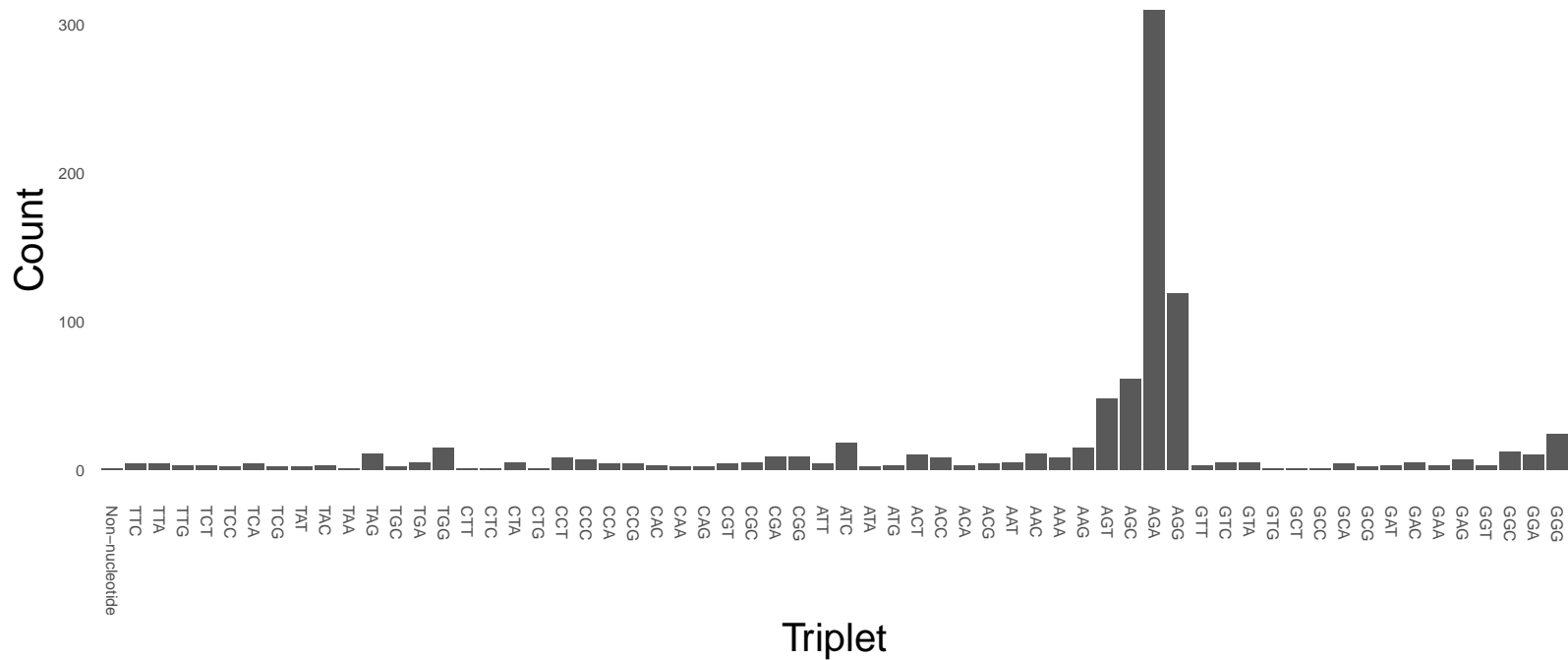
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

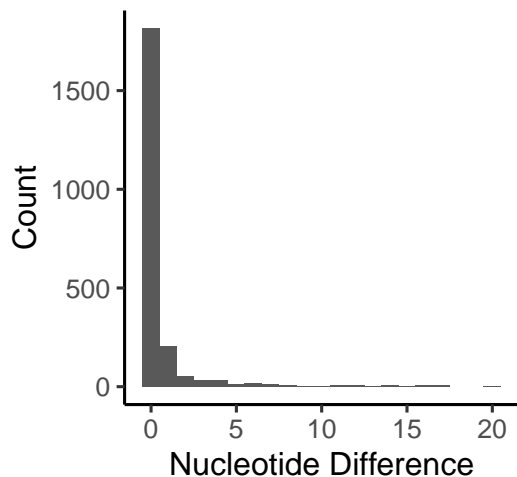


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



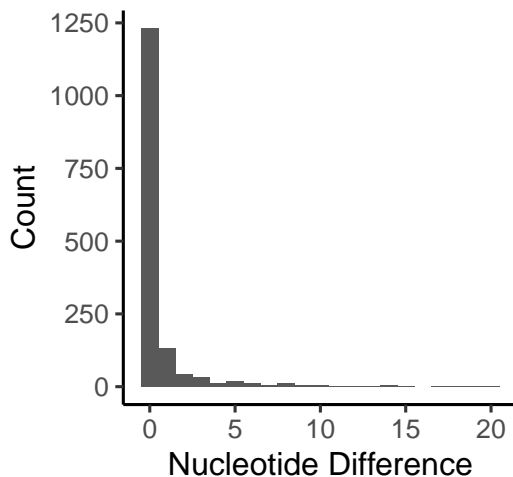
IGHV1-2*02

2268 sequences assigned
1815 (80%) exact matches, in which:
1698 unique CDR3
6 unique J



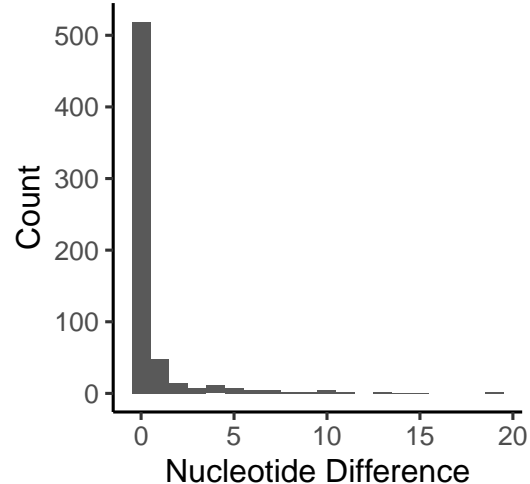
IGHV1-18*01

1533 sequences assigned
1231 (80.3%) exact matches, in which:
1180 unique CDR3
6 unique J



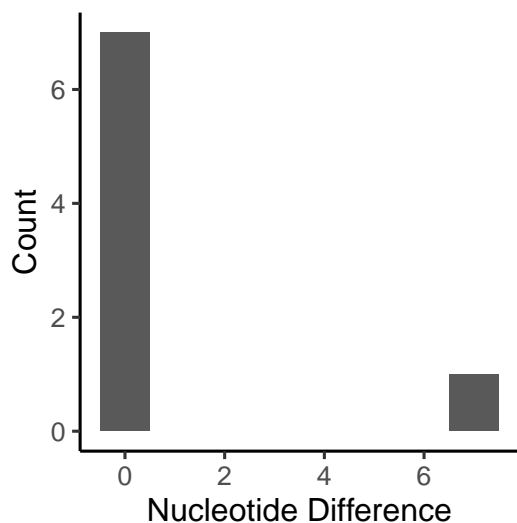
IGHV1-46*03

635 sequences assigned
519 (81.7%) exact matches, in which:
483 unique CDR3
6 unique J



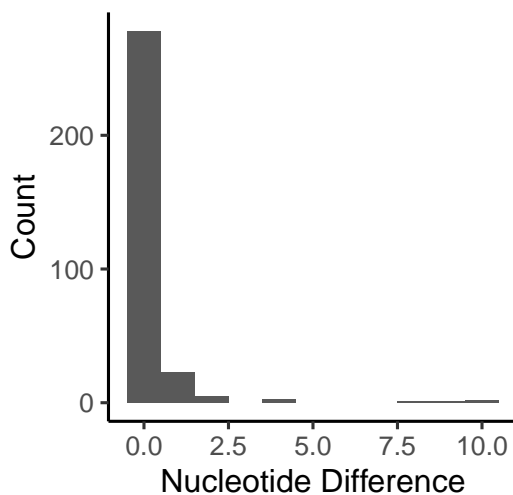
IGHV1-3*02

8 sequences assigned
7 (87.5%) exact matches, in which:
7 unique CDR3
3 unique J



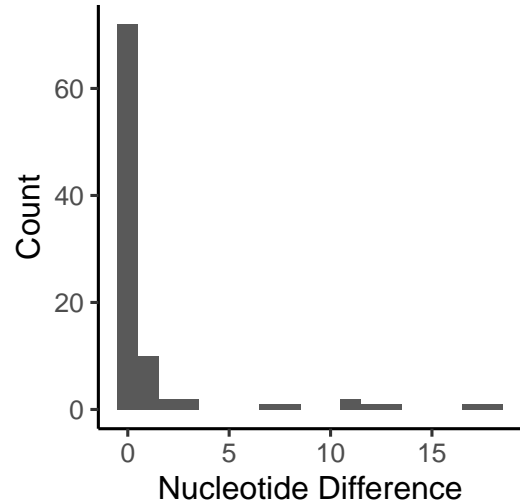
IGHV1-24*01

313 sequences assigned
278 (88.8%) exact matches, in which:
265 unique CDR3
6 unique J



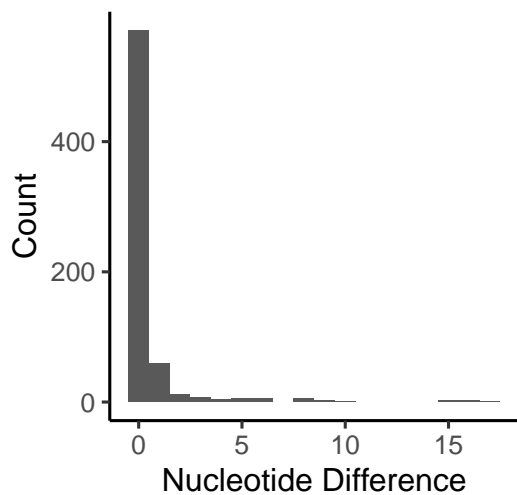
IGHV1-58*02

96 sequences assigned
72 (75%) exact matches, in which:
69 unique CDR3
5 unique J



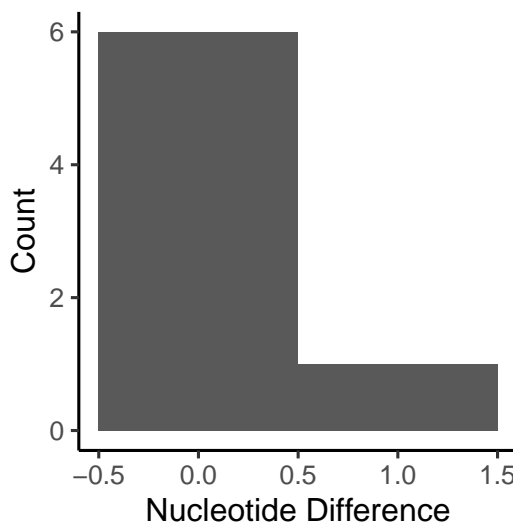
IGHV1-8*01

680 sequences assigned
571 (84%) exact matches, in which:
535 unique CDR3
6 unique J



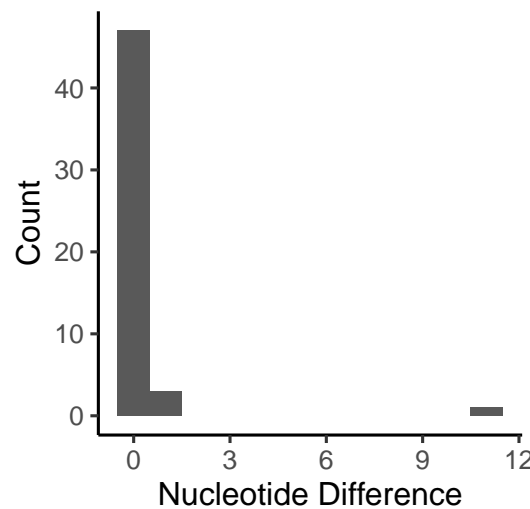
IGHV1-45*02

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



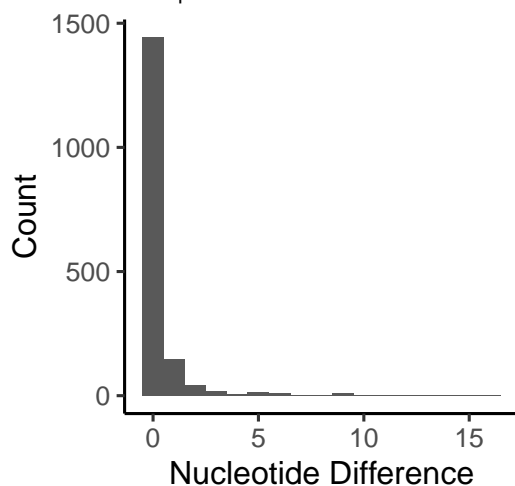
IGHV1-69-2*01

51 sequences assigned
47 (92.2%) exact matches, in which:
47 unique CDR3
5 unique J



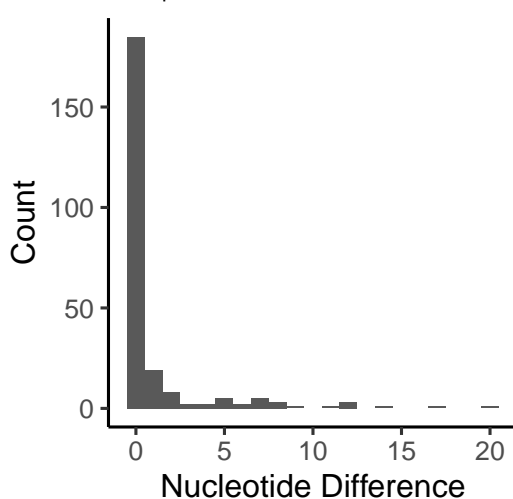
IGHV1-69*01

1713 sequences assigned
1443 (84.2%) exact matches, in which:
1346 unique CDR3
6 unique J



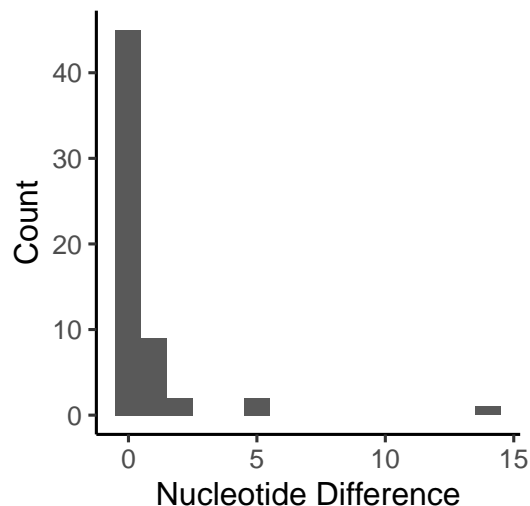
IGHV2-5*01

241 sequences assigned
185 (76.8%) exact matches, in which:
180 unique CDR3
6 unique J



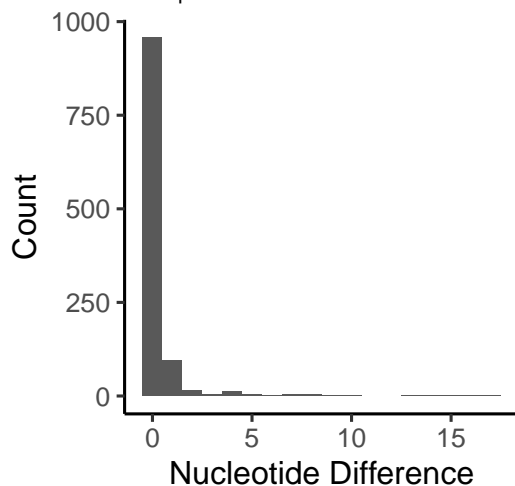
IGHV2-70*01

60 sequences assigned
45 (75%) exact matches, in which:
45 unique CDR3
4 unique J



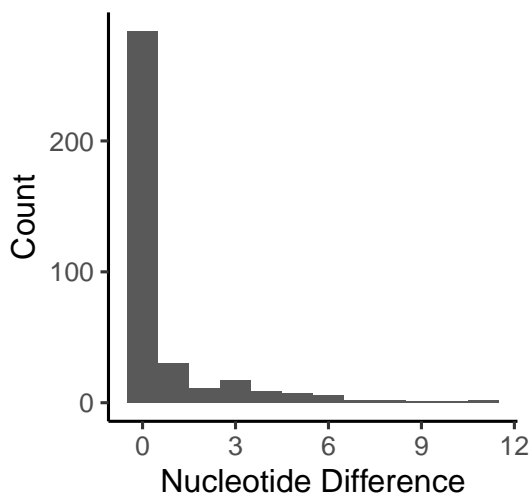
IGHV1-69*09

1110 sequences assigned
957 (86.2%) exact matches, in which:
895 unique CDR3
6 unique J



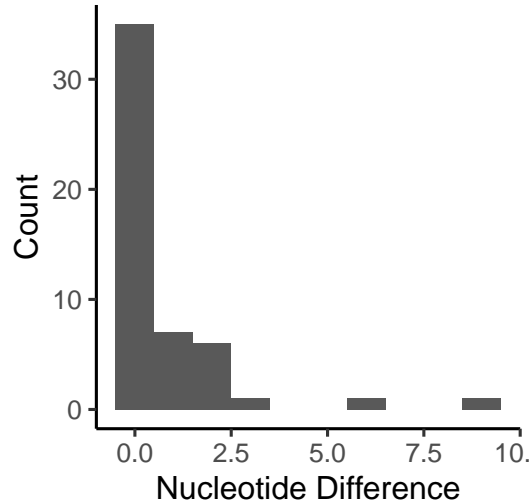
IGHV2-5*02

373 sequences assigned
284 (76.1%) exact matches, in which:
277 unique CDR3
6 unique J



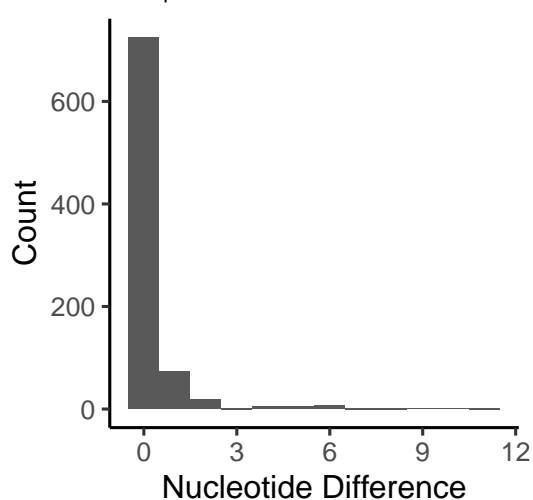
IGHV2-70*04

51 sequences assigned
35 (68.6%) exact matches, in which:
35 unique CDR3
4 unique J



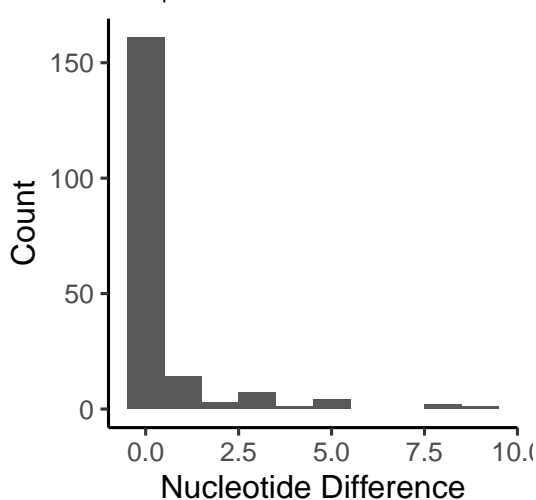
IGHV1-69*08_C191T

845 sequences assigned
725 (85.8%) exact matches, in which:
687 unique CDR3
6 unique J



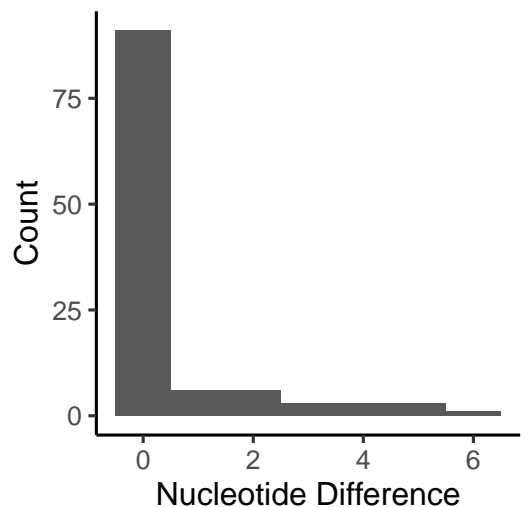
IGHV2-26*01

193 sequences assigned
161 (83.4%) exact matches, in which:
155 unique CDR3
6 unique J



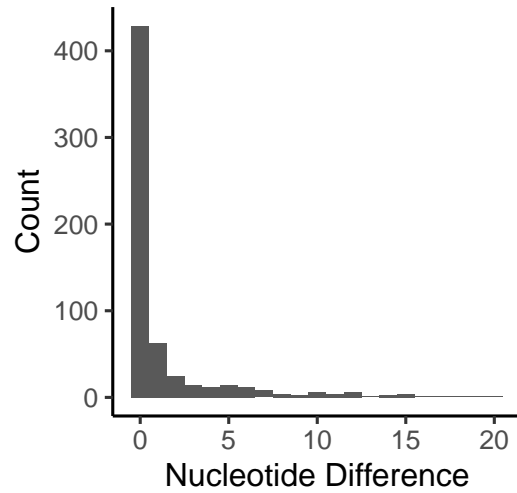
IGHV2-70*15

113 sequences assigned
91 (80.5%) exact matches, in which:
86 unique CDR3
6 unique J



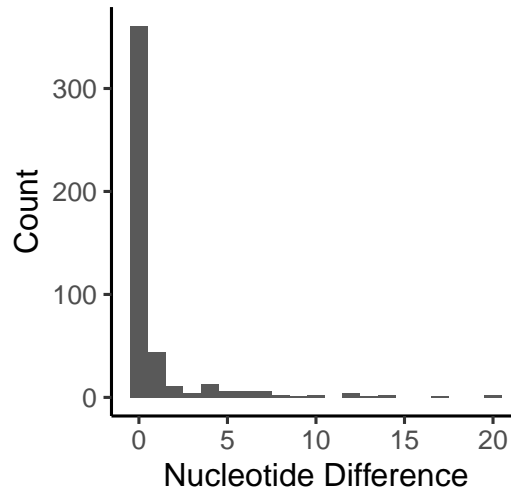
IGHV3-7*01

624 sequences assigned
429 (68.8%) exact matches, in which:
411 unique CDR3
6 unique J



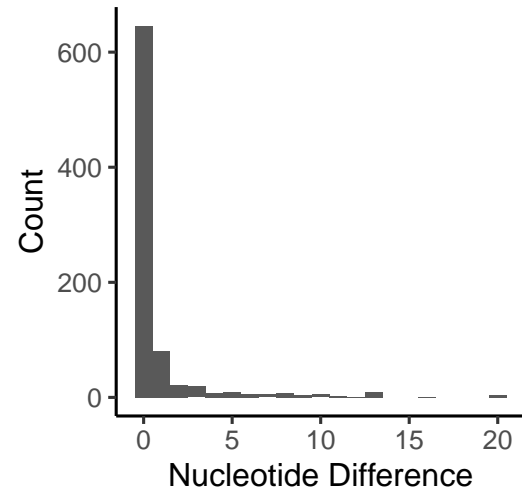
IGHV3-11*05

471 sequences assigned
361 (76.6%) exact matches, in which:
344 unique CDR3
6 unique J



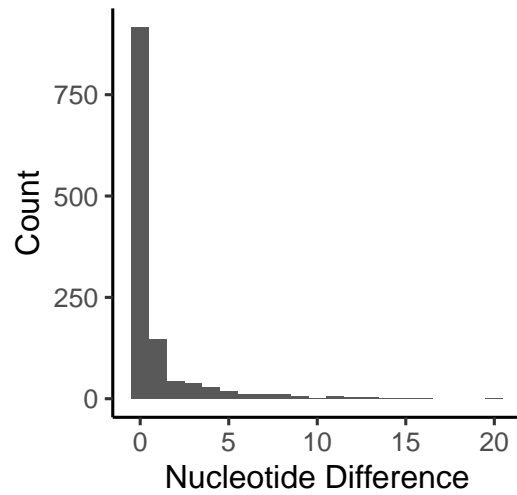
IGHV3-15*01

838 sequences assigned
646 (77.1%) exact matches, in which:
612 unique CDR3
6 unique J



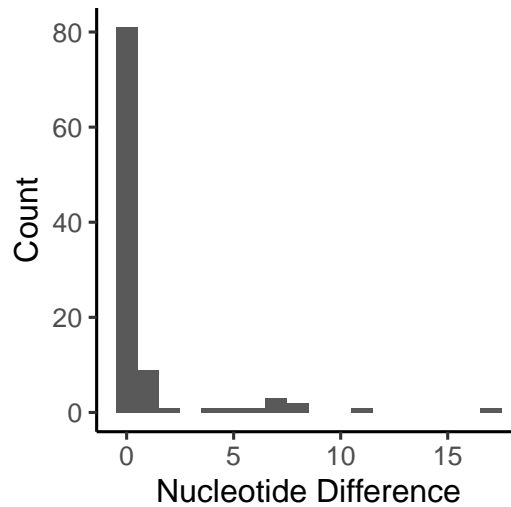
IGHV3-9*01

1249 sequences assigned
917 (73.4%) exact matches, in which:
853 unique CDR3
6 unique J



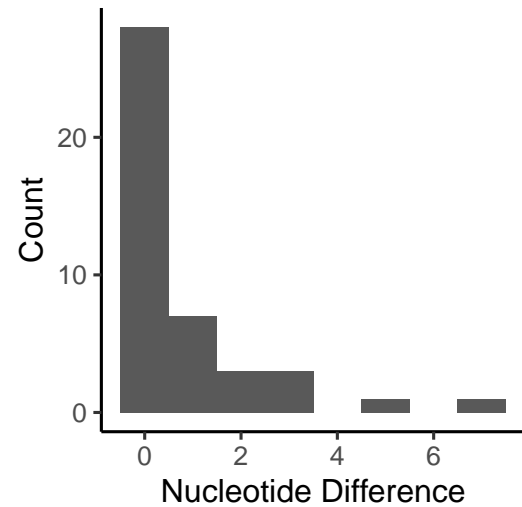
IGHV3-13*01

101 sequences assigned
81 (80.2%) exact matches, in which:
77 unique CDR3
5 unique J



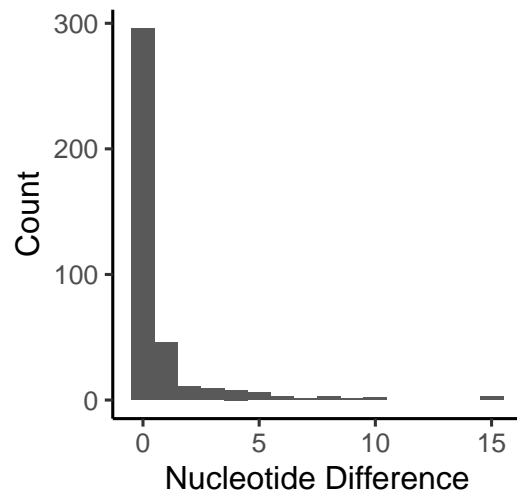
IGHV3-20*01

43 sequences assigned
28 (65.1%) exact matches, in which:
26 unique CDR3
4 unique J



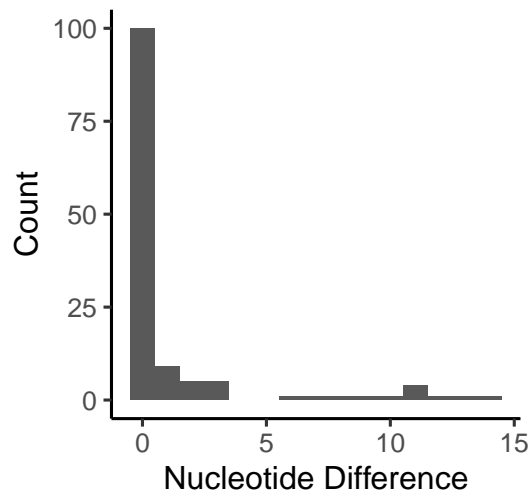
IGHV3-11*01

393 sequences assigned
296 (75.3%) exact matches, in which:
284 unique CDR3
6 unique J



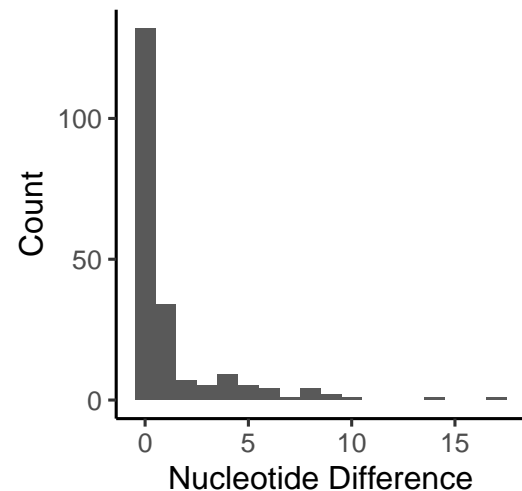
IGHV3-13*04

131 sequences assigned
100 (76.3%) exact matches, in which:
91 unique CDR3
5 unique J



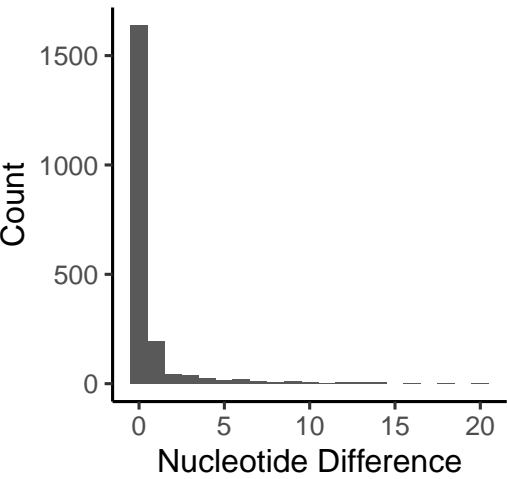
IGHV3-20*04

207 sequences assigned
132 (63.8%) exact matches, in which:
123 unique CDR3
5 unique J



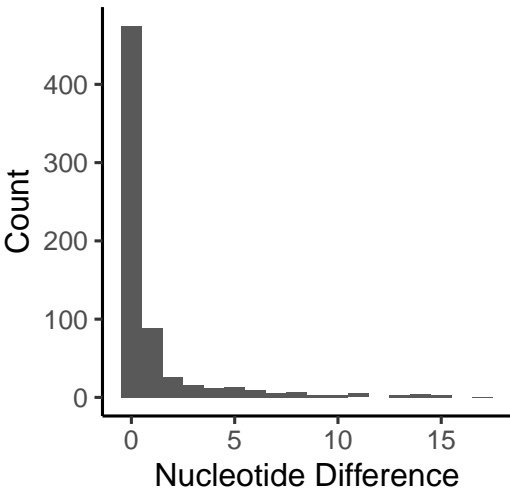
IGHV3-21*01

2045 sequences assigned
1638 (80.1%) exact matches, in which:
1537 unique CDR3
6 unique J



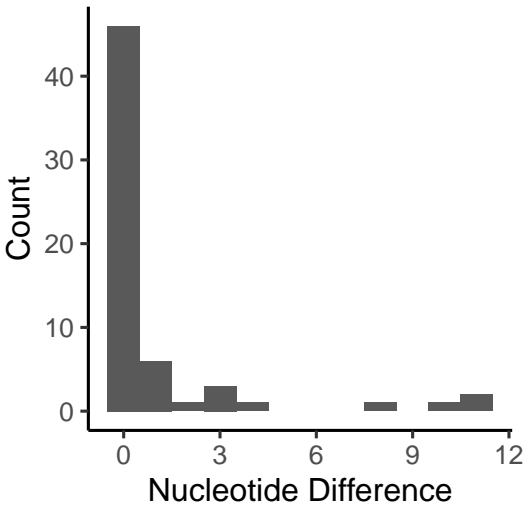
IGHV3-30*18

681 sequences assigned
475 (69.8%) exact matches, in which:
446 unique CDR3
6 unique J



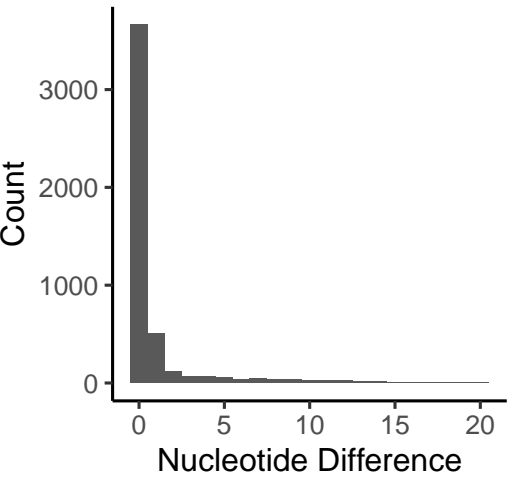
IGHV3-43*01

61 sequences assigned
46 (75.4%) exact matches, in which:
45 unique CDR3
4 unique J



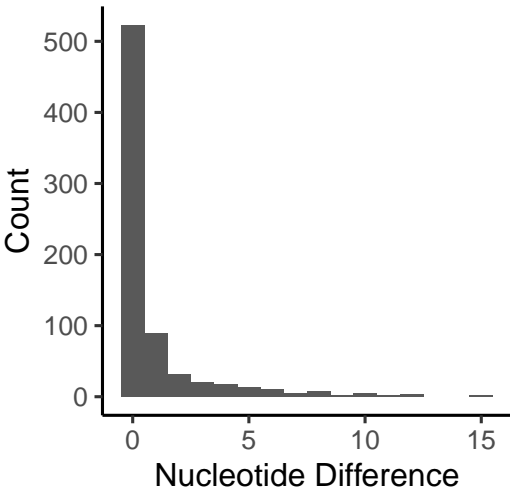
IGHV3-23*01

4835 sequences assigned
3663 (75.8%) exact matches, in which:
3422 unique CDR3
6 unique J



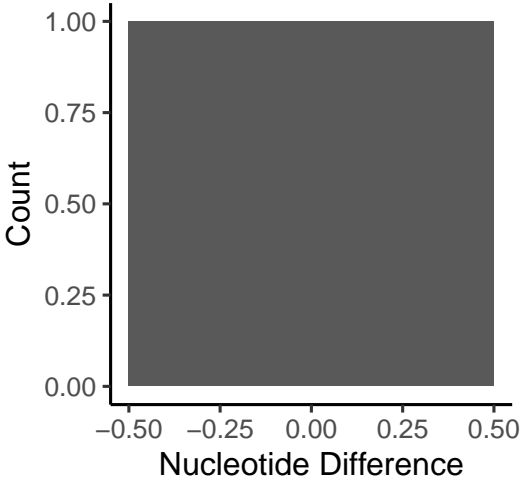
IGHV3-33*01

739 sequences assigned
523 (70.8%) exact matches, in which:
492 unique CDR3
6 unique J



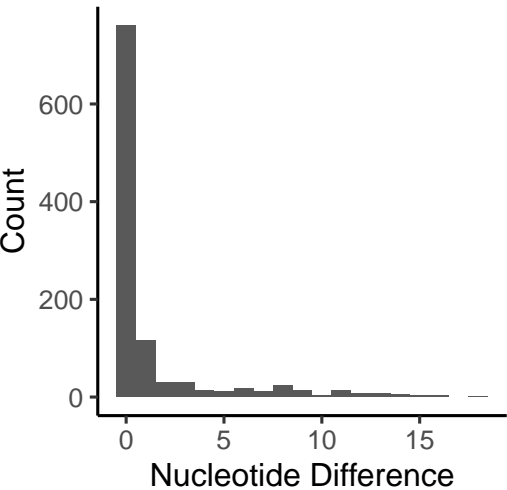
IGHV3-47*02

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



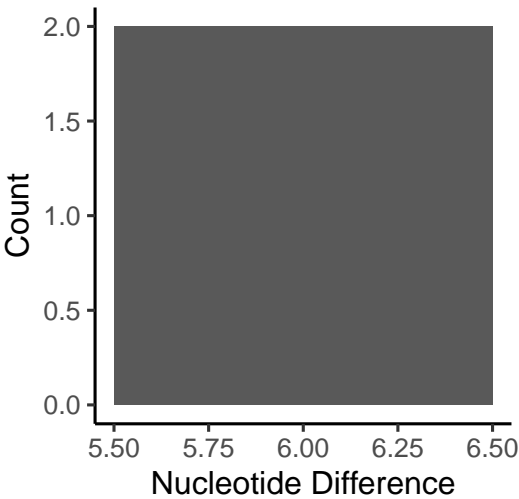
IGHV3-30*02

1083 sequences assigned
761 (70.3%) exact matches, in which:
717 unique CDR3
6 unique J



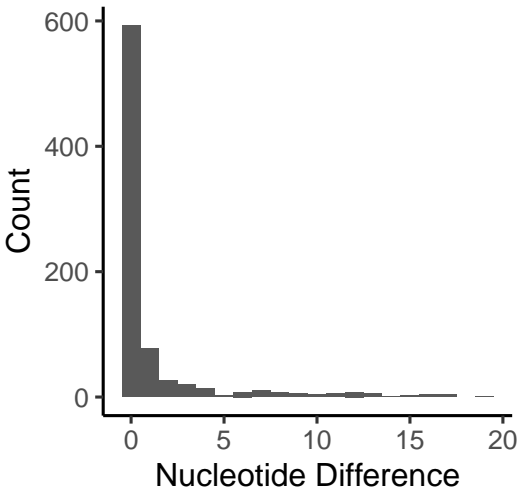
IGHV3-41*02

2 sequences assigned
No exact matches.



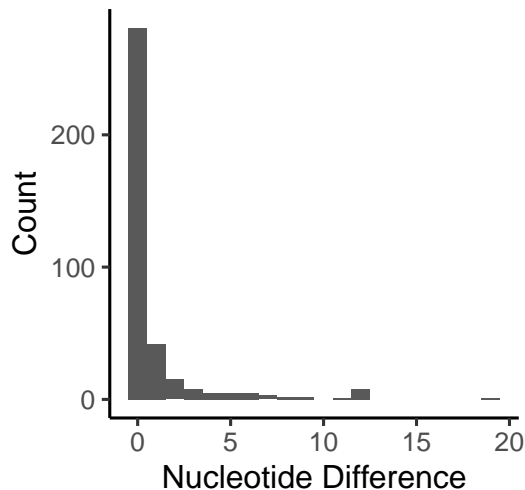
IGHV3-48*01

800 sequences assigned
593 (74.1%) exact matches, in which:
562 unique CDR3
6 unique J



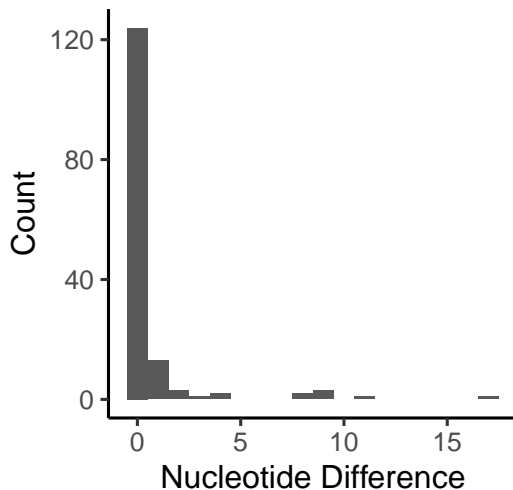
IGHV3–49*03

378 sequences assigned
281 (74.3%) exact matches, in which:
264 unique CDR3
5 unique J



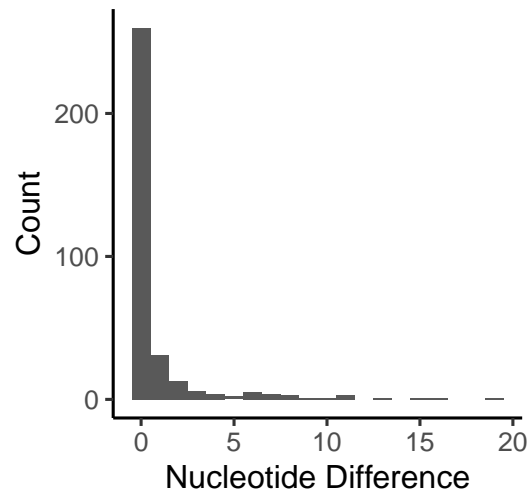
IGHV3–53*04

152 sequences assigned
124 (81.6%) exact matches, in which:
116 unique CDR3
6 unique J



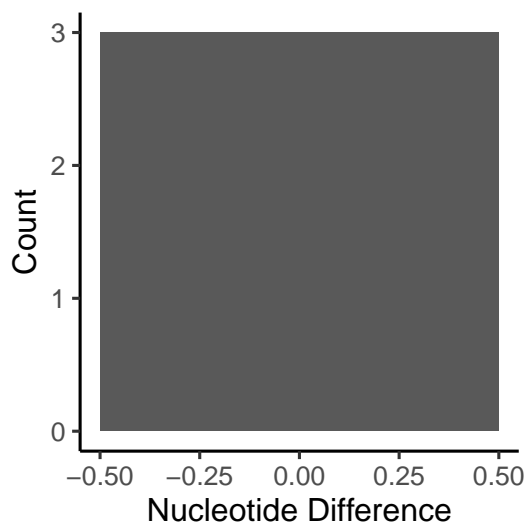
IGHV3–66*02

338 sequences assigned
260 (76.9%) exact matches, in which:
247 unique CDR3
6 unique J



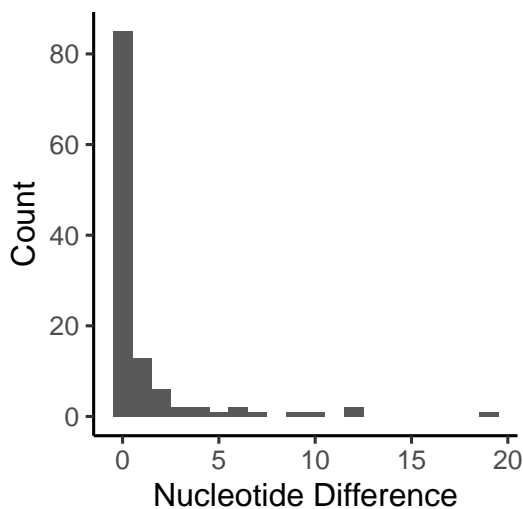
IGHV3–52*01

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



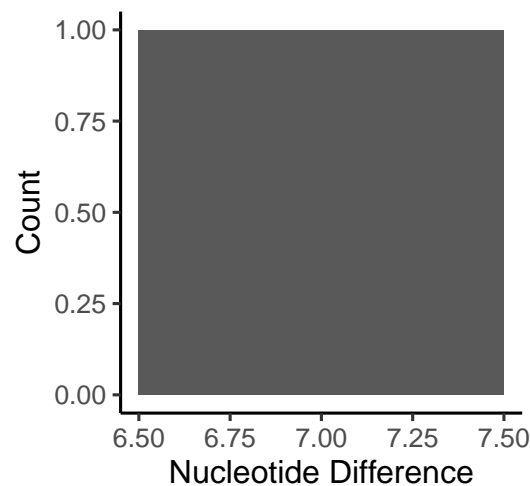
IGHV3–64*01

126 sequences assigned
85 (67.5%) exact matches, in which:
81 unique CDR3
5 unique J



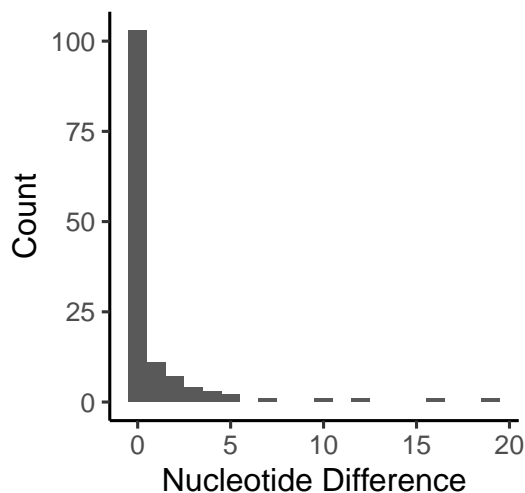
IGHV3–69–1*01

1 sequences assigned
No exact matches.



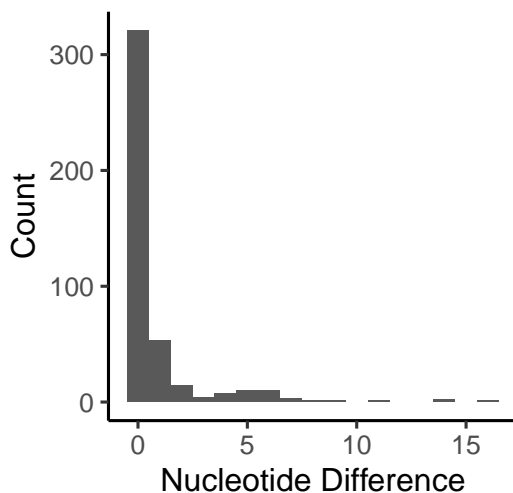
IGHV3–53*02

135 sequences assigned
103 (76.3%) exact matches, in which:
94 unique CDR3
5 unique J



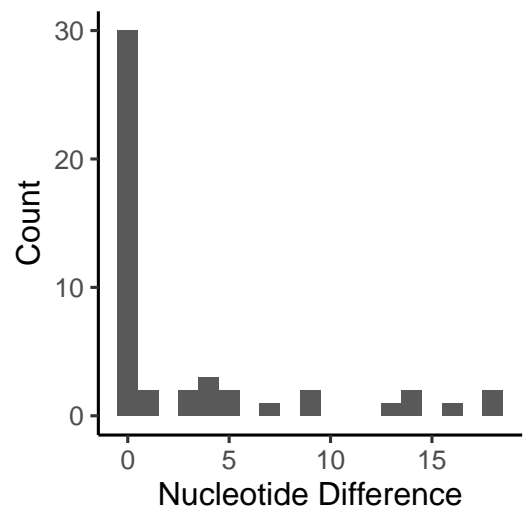
IGHV3–66*01

429 sequences assigned
321 (74.8%) exact matches, in which:
298 unique CDR3
6 unique J



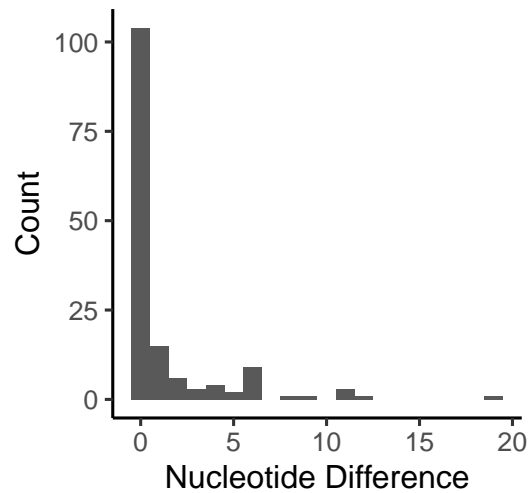
IGHV3–72*01

49 sequences assigned
30 (61.2%) exact matches, in which:
28 unique CDR3
5 unique J



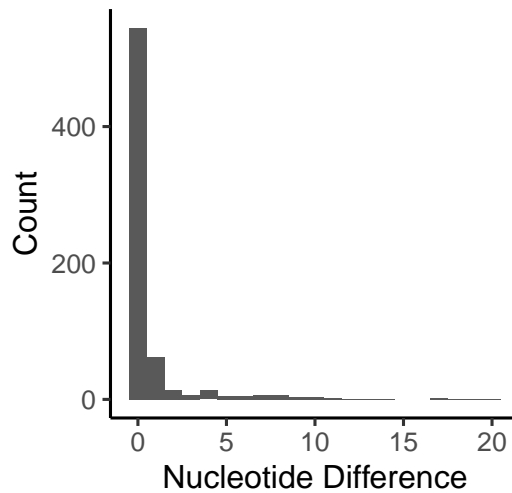
IGHV3-73*01

151 sequences assigned
104 (68.9%) exact matches, in which:
99 unique CDR3
5 unique J



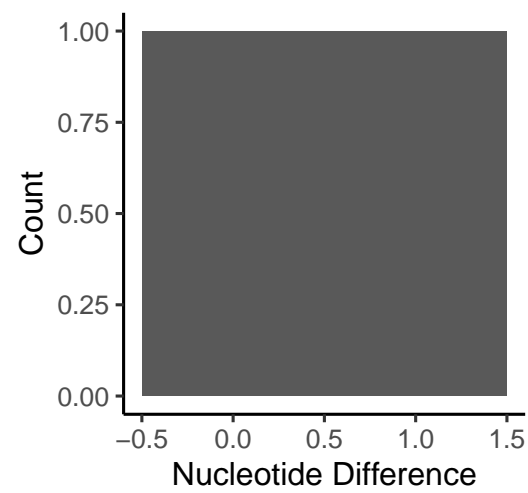
IGHV4-4*07

685 sequences assigned
545 (79.6%) exact matches, in which:
525 unique CDR3
6 unique J



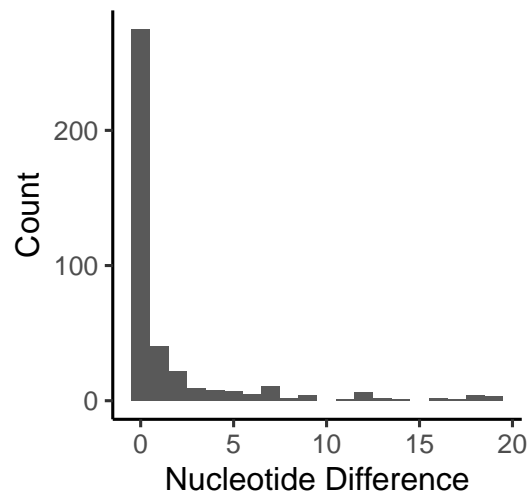
IGHV4-28*04

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



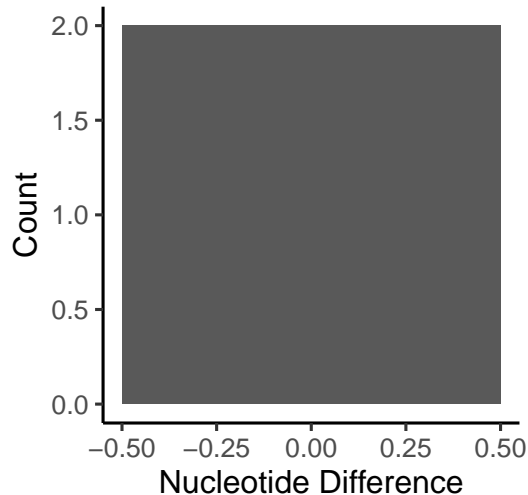
IGHV3-74*01

404 sequences assigned
275 (68.1%) exact matches, in which:
256 unique CDR3
6 unique J



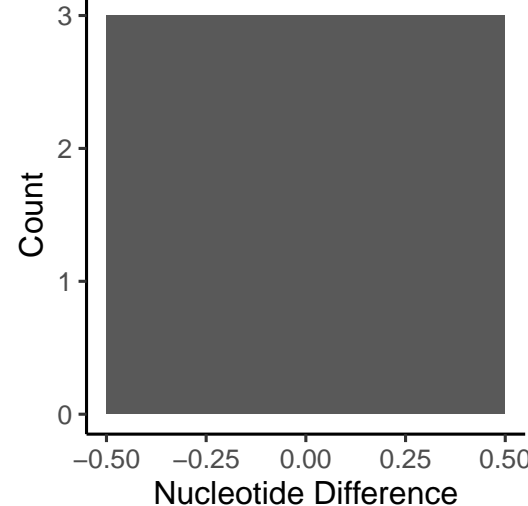
IGHV4-28*01

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



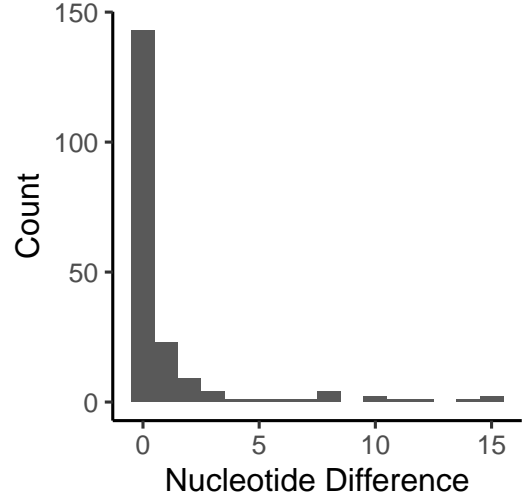
IGHV4-28*07

3 sequences assigned
3 (100%) exact matches, in which:
3 unique CDR3
2 unique J



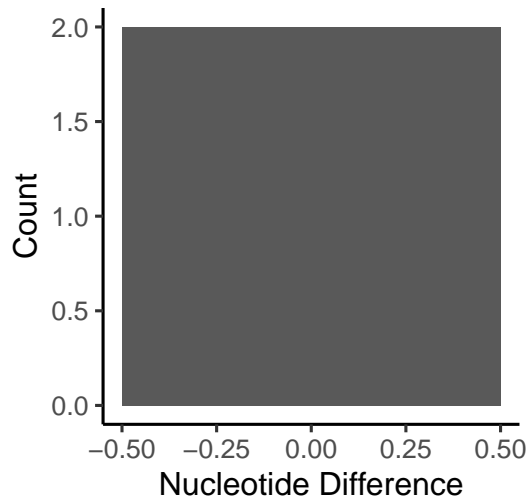
IGHV3-64D*09

195 sequences assigned
143 (73.3%) exact matches, in which:
134 unique CDR3
5 unique J



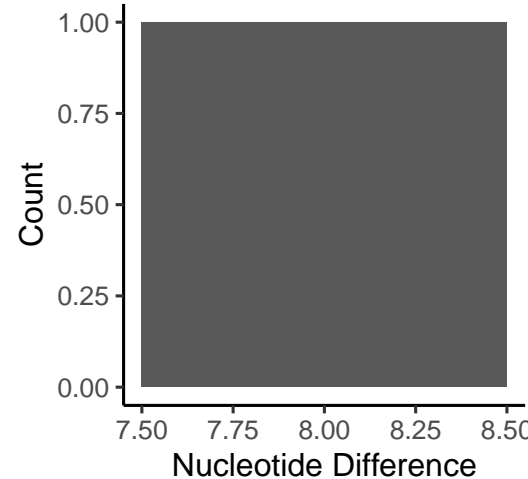
IGHV4-28*03

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



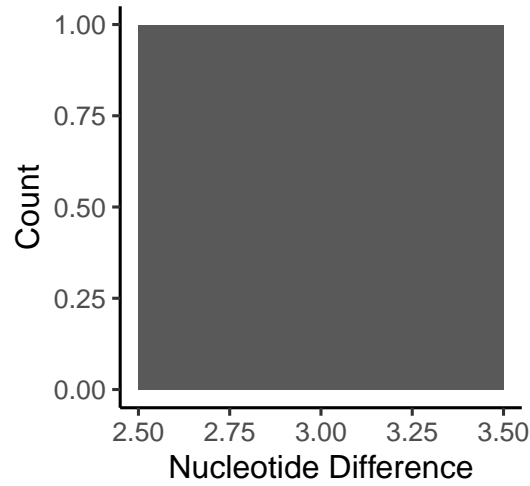
IGHV4-30-4*02

1 sequences assigned
No exact matches.



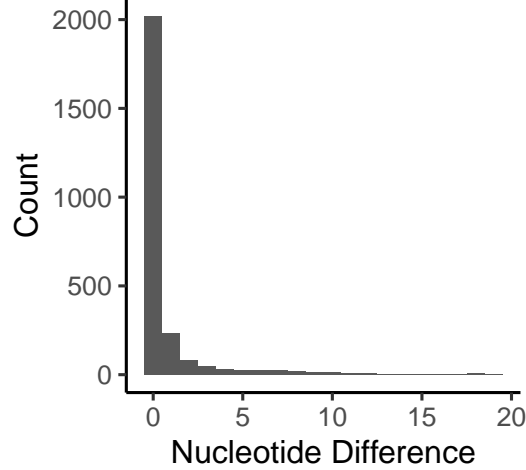
IGHV4-30-2*03

1 sequences assigned
No exact matches.



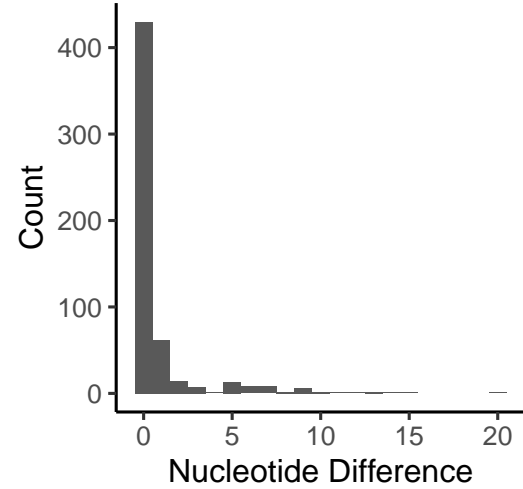
IGHV4-39*01

2574 sequences assigned
2018 (78.4%) exact matches, in which:
1877 unique CDR3
6 unique J



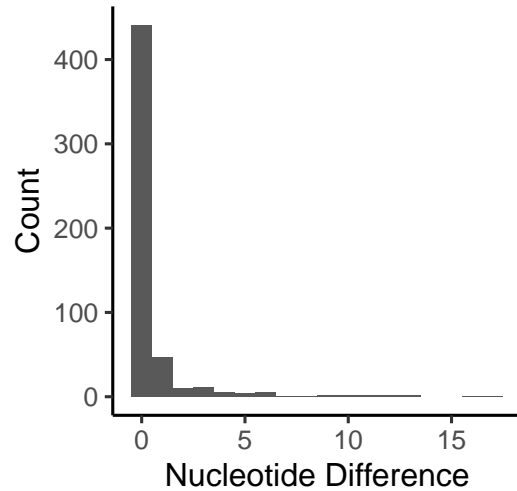
IGHV4-59*08

562 sequences assigned
430 (76.5%) exact matches, in which:
413 unique CDR3
6 unique J



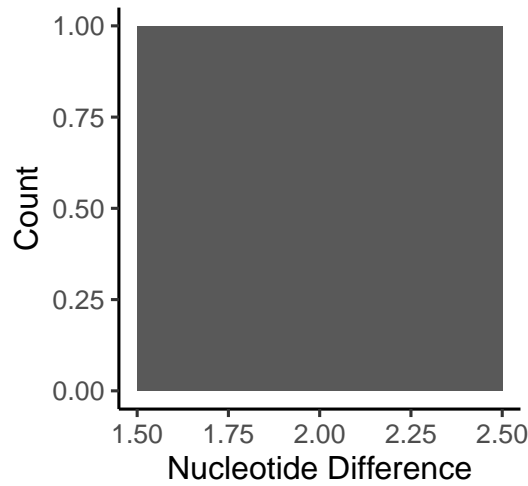
IGHV4-31*03

539 sequences assigned
441 (81.8%) exact matches, in which:
419 unique CDR3
6 unique J



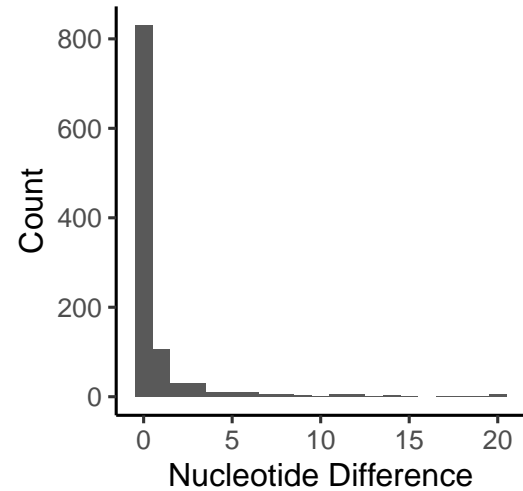
IGHV4-55*08

1 sequences assigned
No exact matches.



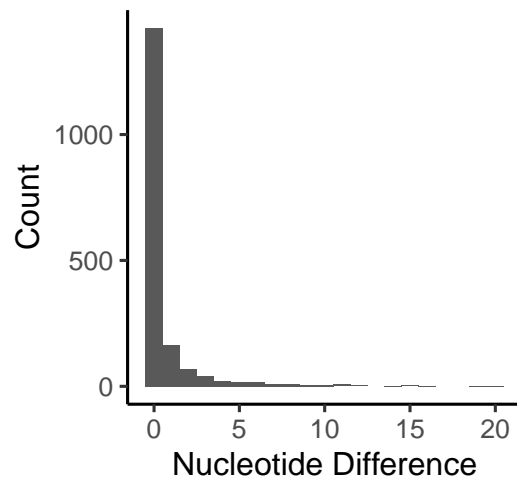
IGHV4-61*02

1082 sequences assigned
831 (76.8%) exact matches, in which:
806 unique CDR3
6 unique J



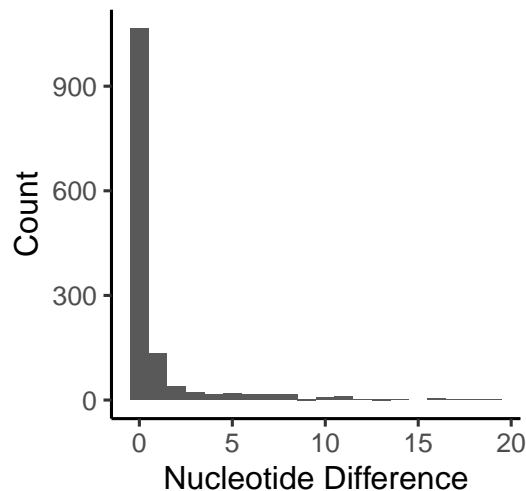
IGHV4-34*01

1807 sequences assigned
1423 (78.7%) exact matches, in which:
1319 unique CDR3
6 unique J



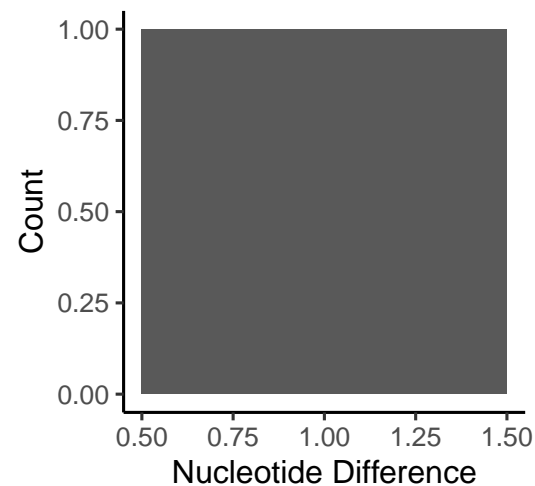
IGHV4-59*01

1380 sequences assigned
1066 (77.2%) exact matches, in which:
1011 unique CDR3
6 unique J



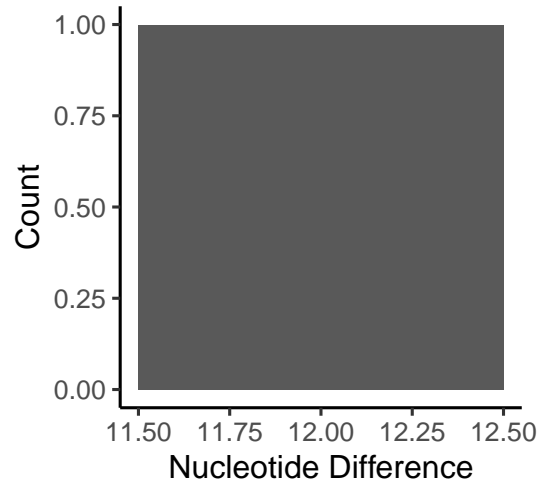
IGHV1/OR15-1*03

1 sequences assigned
No exact matches.



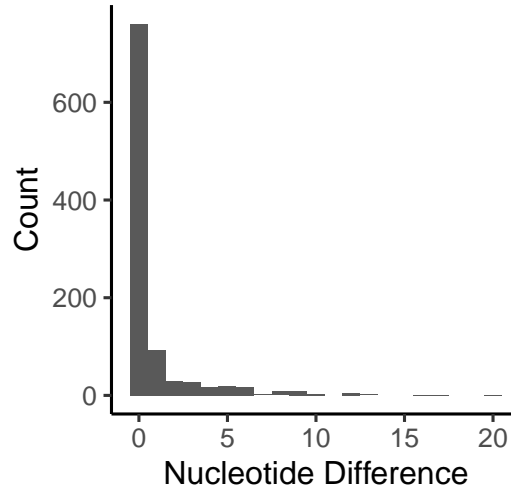
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



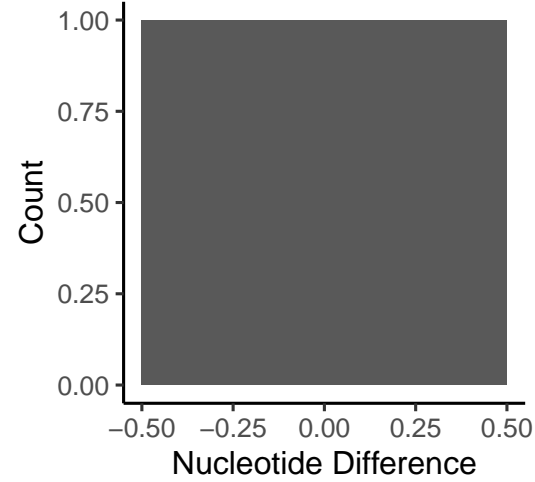
IGHV5–51*03

1006 sequences assigned
761 (75.6%) exact matches, in which:
715 unique CDR3
6 unique J



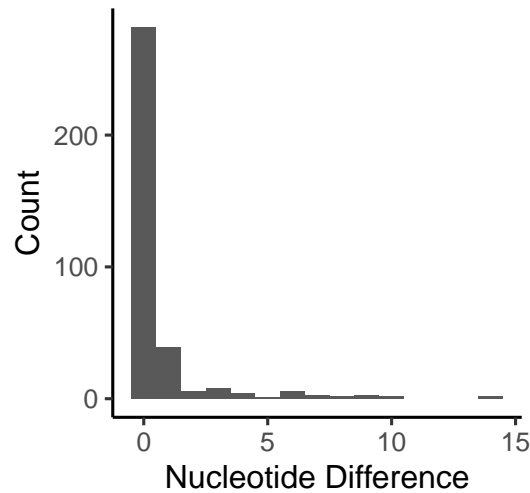
IGHV3/OR16–9*01

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



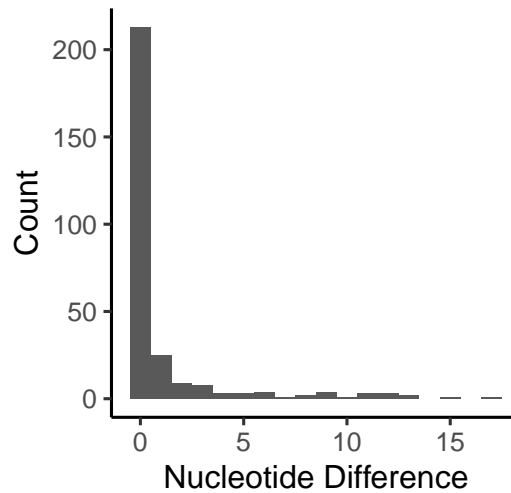
IGHV5–10–1*01

358 sequences assigned
282 (78.8%) exact matches, in which:
266 unique CDR3
5 unique J



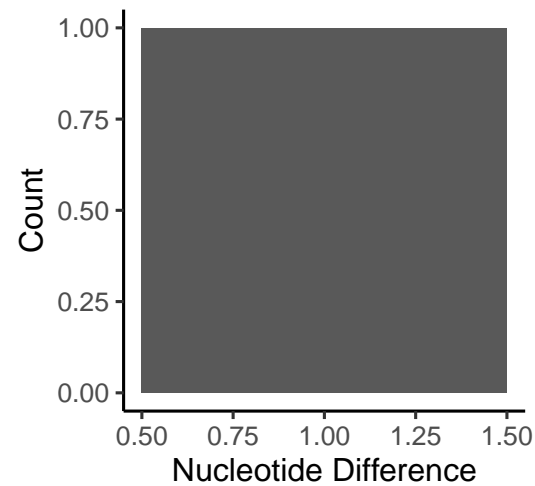
IGHV6–1*01

285 sequences assigned
213 (74.7%) exact matches, in which:
202 unique CDR3
6 unique J



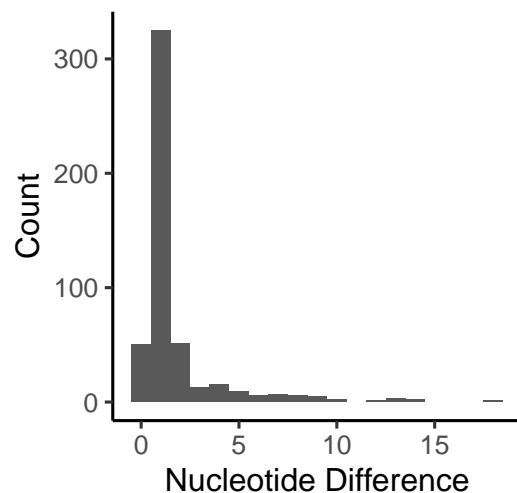
IGHV3/OR16–12*01

1 sequences assigned
No exact matches.



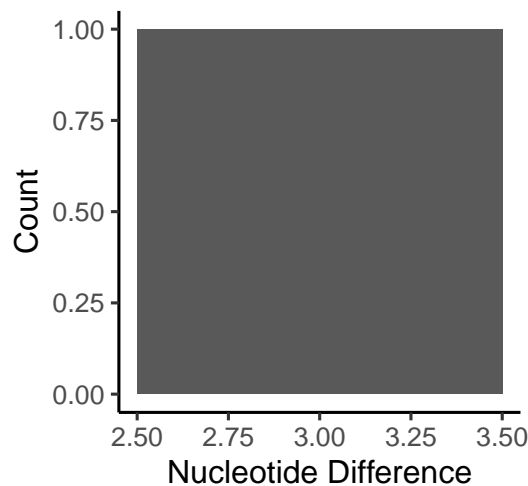
IGHV5–51*01

496 sequences assigned
50 (10.1%) exact matches, in which:
50 unique CDR3
5 unique J



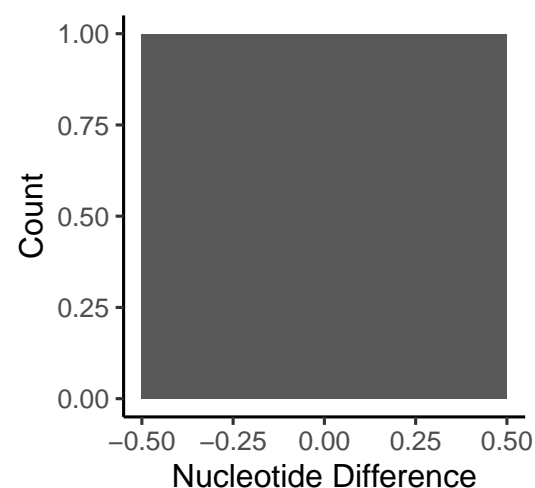
IGHV3/OR16–6*02

1 sequences assigned
No exact matches.



IGHV7–81*01

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



IGHV1-69*08_C191T

