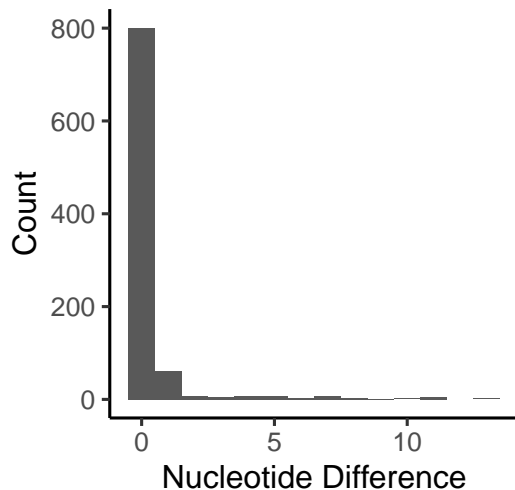


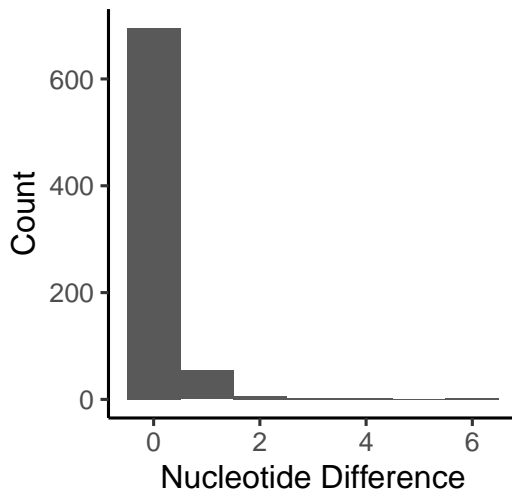
IGHV1-2*02

914 sequences assigned
801 (87.6%) exact matches, in which:
780 unique CDR3
6 unique J



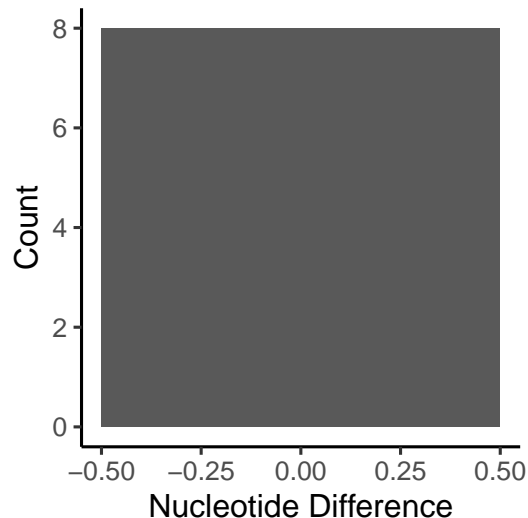
IGHV1-8*01

767 sequences assigned
696 (90.7%) exact matches, in which:
664 unique CDR3
6 unique J



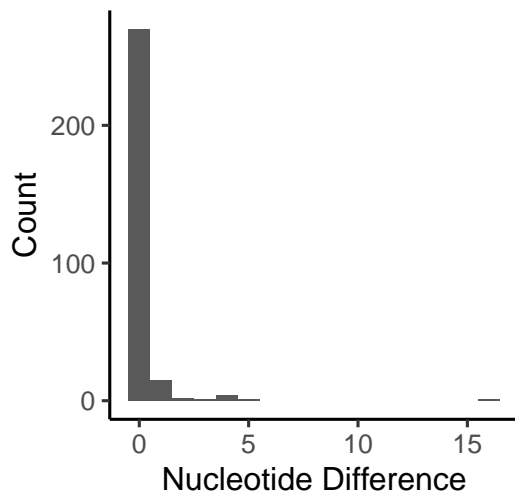
IGHV1-45*02

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
2 unique J



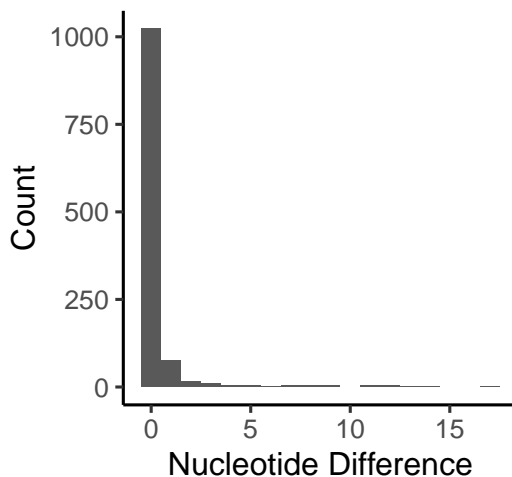
IGHV1-2*04

294 sequences assigned
270 (91.8%) exact matches, in which:
256 unique CDR3
5 unique J



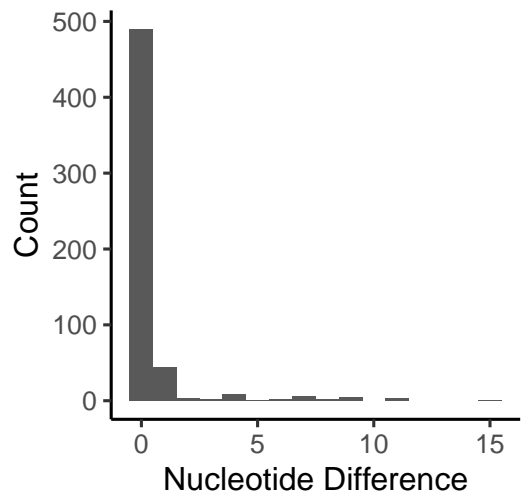
IGHV1-18*01

1154 sequences assigned
1023 (88.6%) exact matches, in which:
1002 unique CDR3
6 unique J



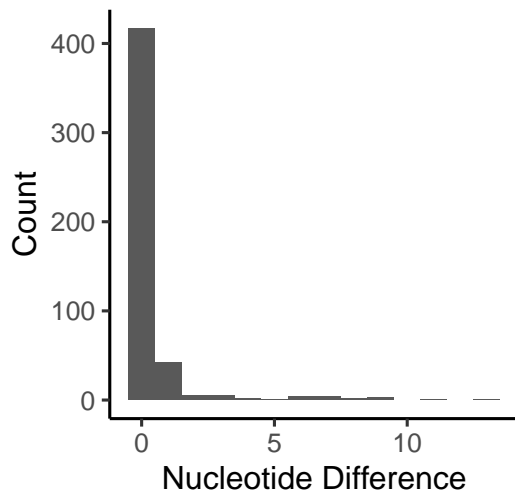
IGHV1-46*03

566 sequences assigned
490 (86.6%) exact matches, in which:
472 unique CDR3
6 unique J



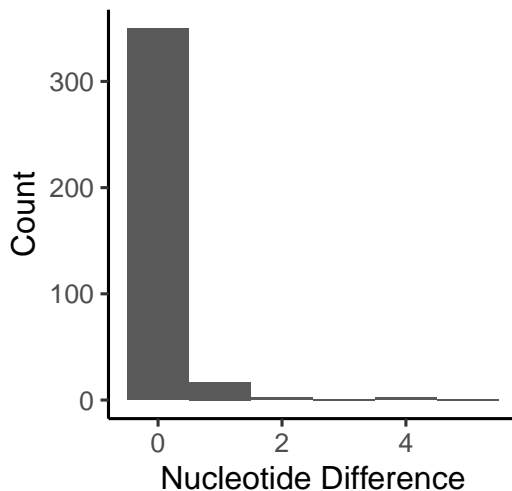
IGHV1-3*01

488 sequences assigned
417 (85.5%) exact matches, in which:
406 unique CDR3
6 unique J



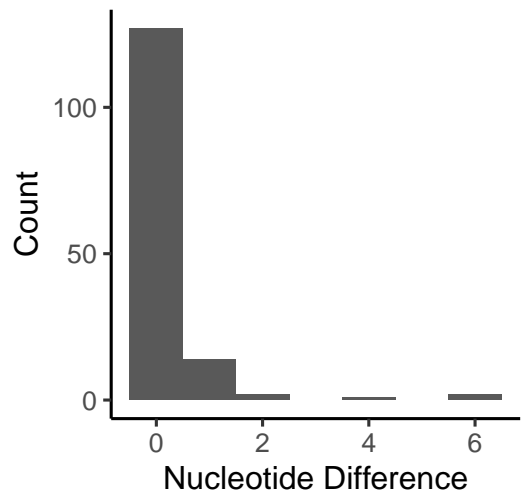
IGHV1-24*01

373 sequences assigned
350 (93.8%) exact matches, in which:
341 unique CDR3
6 unique J



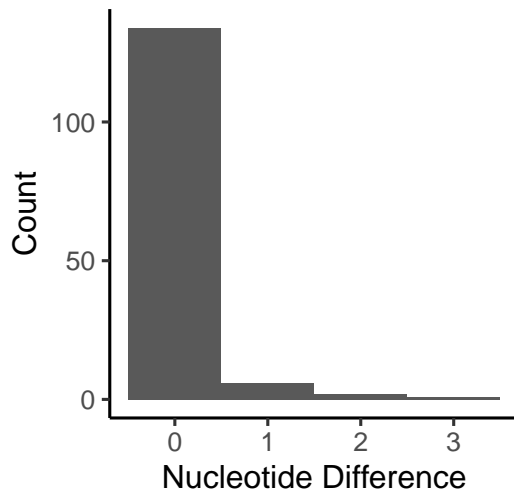
IGHV1-58*01

146 sequences assigned
127 (87%) exact matches, in which:
124 unique CDR3
6 unique J



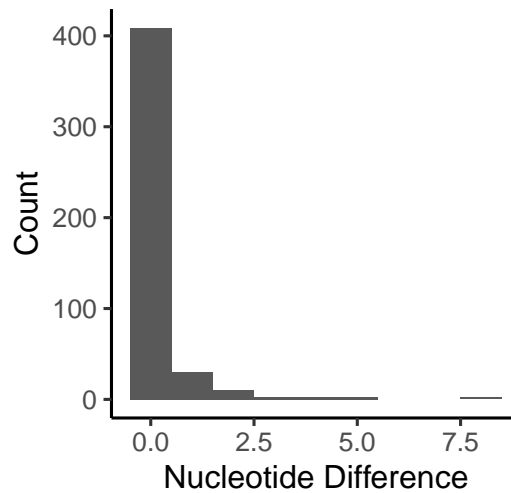
IGHV1-69-2*01

144 sequences assigned
134 (93.1%) exact matches, in which:
131 unique CDR3
5 unique J



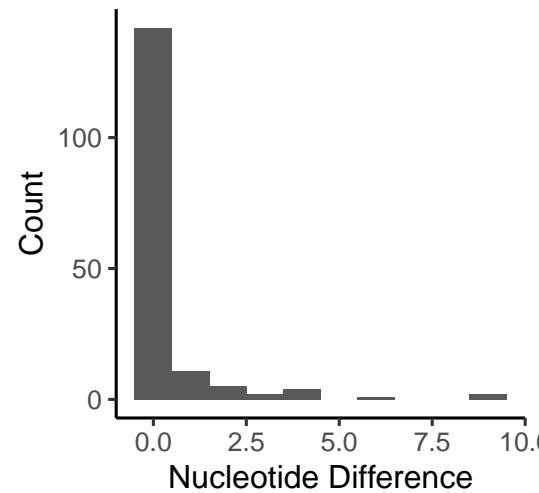
IGHV2-26*01

460 sequences assigned
409 (88.9%) exact matches, in which:
402 unique CDR3
6 unique J



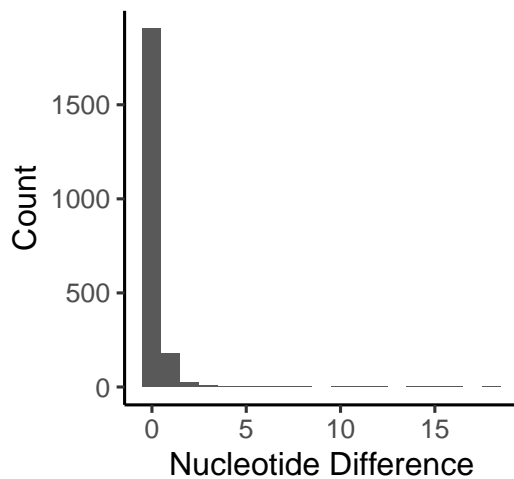
IGHV3-7*05

167 sequences assigned
142 (85%) exact matches, in which:
137 unique CDR3
5 unique J



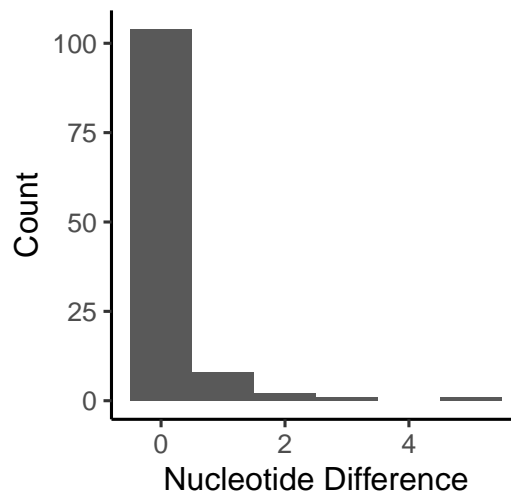
IGHV1-69*06

2140 sequences assigned
1904 (89%) exact matches, in which:
1810 unique CDR3
6 unique J



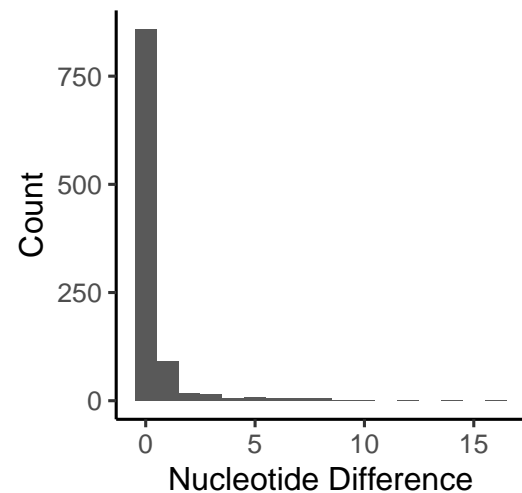
IGHV2-70*01

116 sequences assigned
104 (89.7%) exact matches, in which:
103 unique CDR3
6 unique J



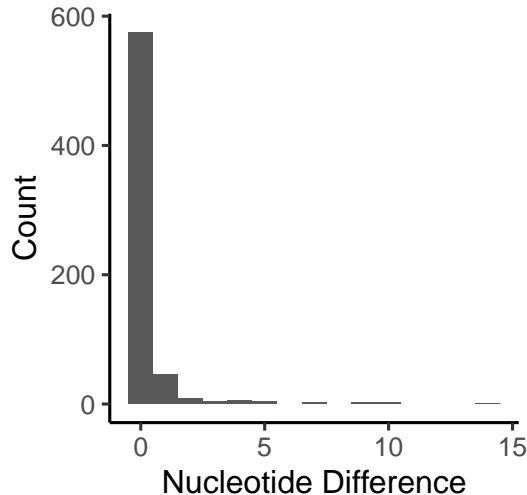
IGHV3-9*01

1020 sequences assigned
859 (84.2%) exact matches, in which:
824 unique CDR3
6 unique J



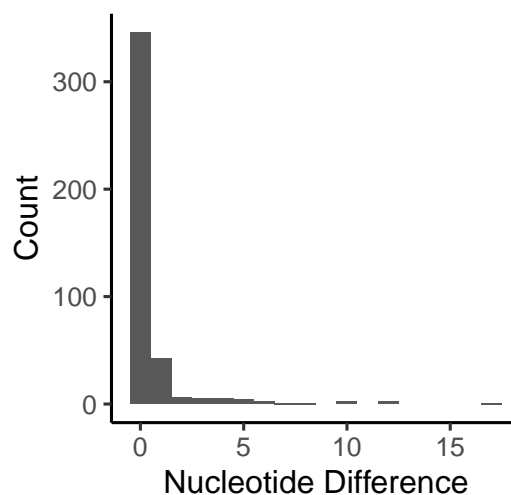
IGHV2-5*01

652 sequences assigned
575 (88.2%) exact matches, in which:
561 unique CDR3
6 unique J



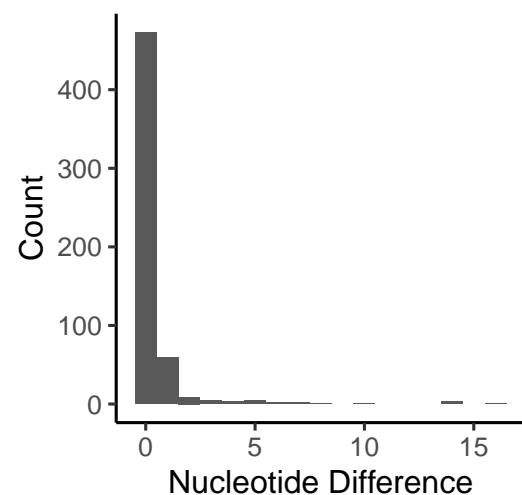
IGHV3-7*01

417 sequences assigned
346 (83%) exact matches, in which:
334 unique CDR3
6 unique J



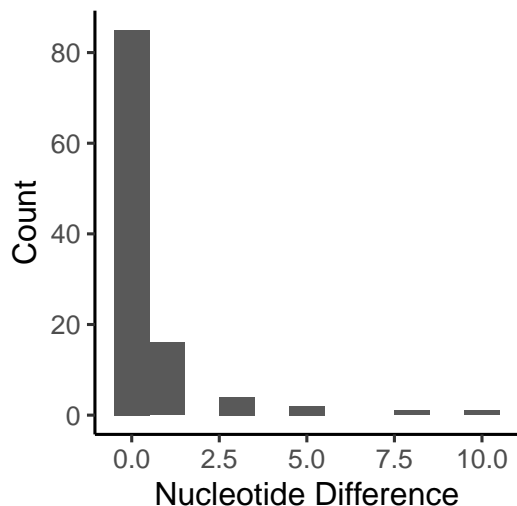
IGHV3-11*01

563 sequences assigned
473 (84%) exact matches, in which:
459 unique CDR3
6 unique J



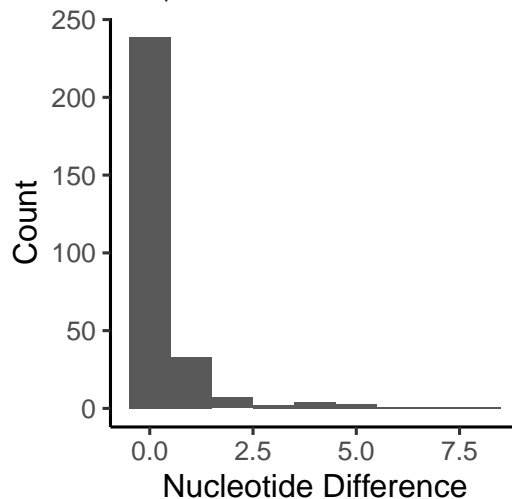
IGHV3-11*06

109 sequences assigned
85 (78%) exact matches, in which:
84 unique CDR3
6 unique J



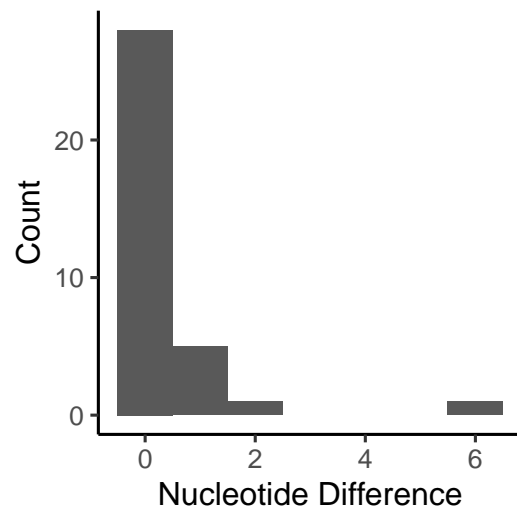
IGHV3-15*01

291 sequences assigned
239 (82.1%) exact matches, in which:
236 unique CDR3
6 unique J



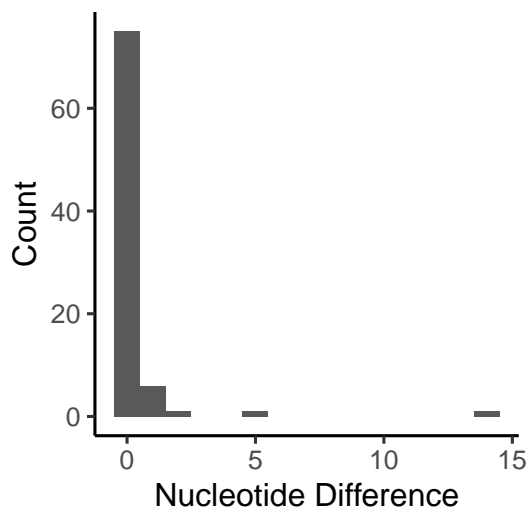
IGHV3-20*04

35 sequences assigned
28 (80%) exact matches, in which:
28 unique CDR3
4 unique J



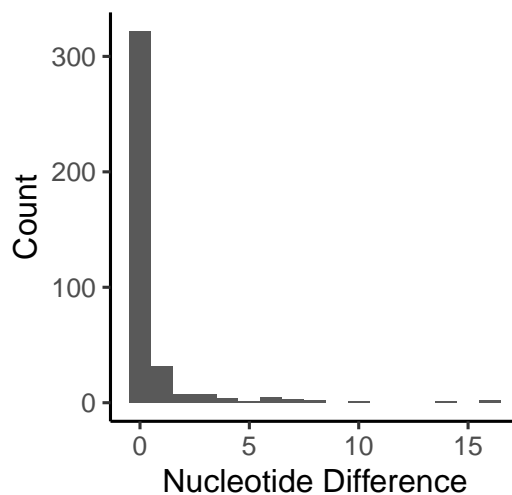
IGHV3-13*01

84 sequences assigned
75 (89.3%) exact matches, in which:
73 unique CDR3
5 unique J



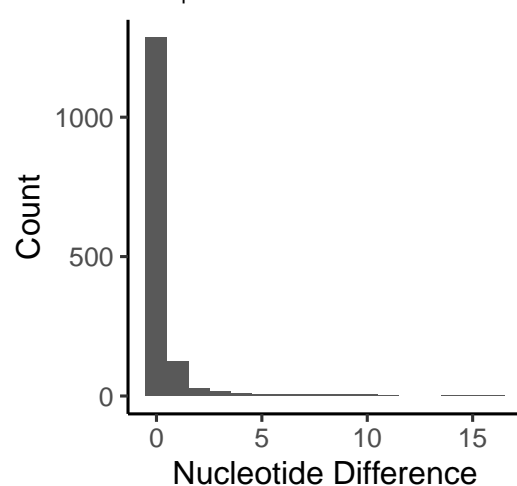
IGHV3-15*07

388 sequences assigned
322 (83%) exact matches, in which:
312 unique CDR3
6 unique J



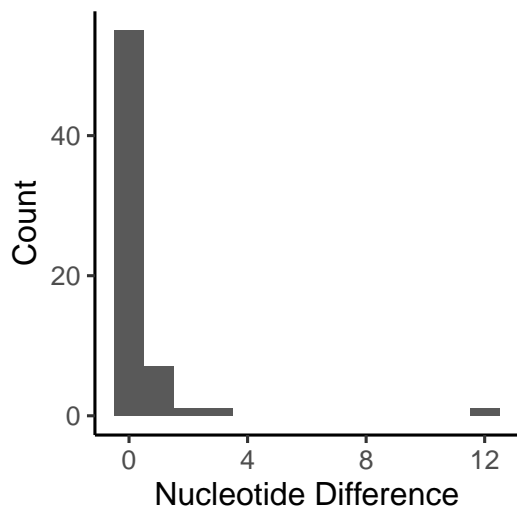
IGHV3-21*01

1497 sequences assigned
1285 (85.8%) exact matches, in which:
1230 unique CDR3
6 unique J



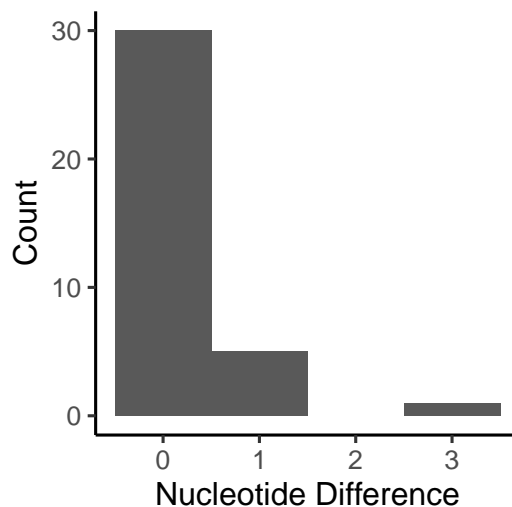
IGHV3-13*01_G290A_T30I

65 sequences assigned
55 (84.6%) exact matches, in which:
53 unique CDR3
5 unique J



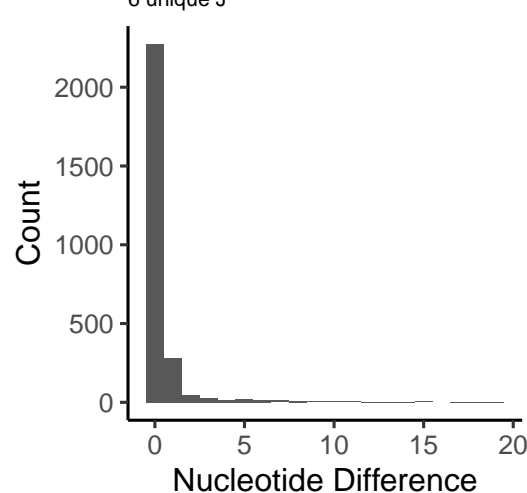
IGHV3-20*01

36 sequences assigned
30 (83.3%) exact matches, in which:
29 unique CDR3
5 unique J



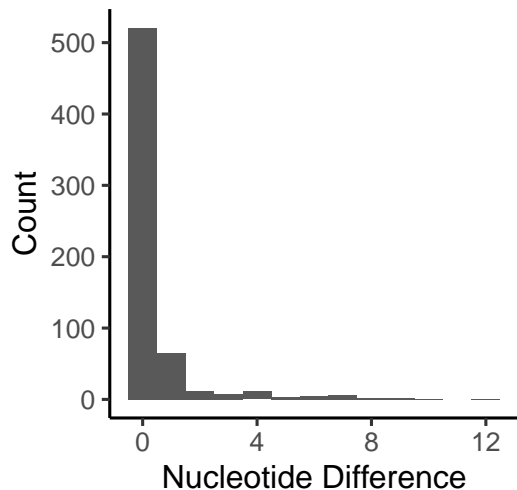
IGHV3-30-3*01

2732 sequences assigned
2274 (83.2%) exact matches, in which:
2172 unique CDR3
6 unique J



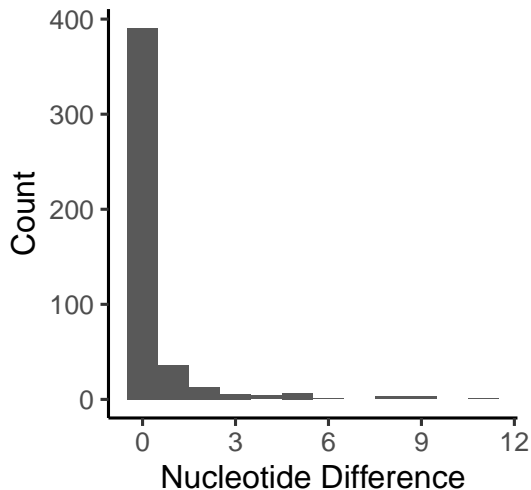
IGHV3–33*01

640 sequences assigned
521 (81.4%) exact matches, in which:
498 unique CDR3
6 unique J



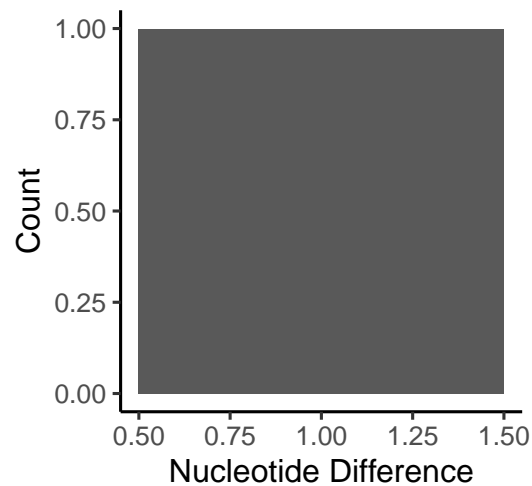
IGHV3–49*03

465 sequences assigned
391 (84.1%) exact matches, in which:
373 unique CDR3
6 unique J



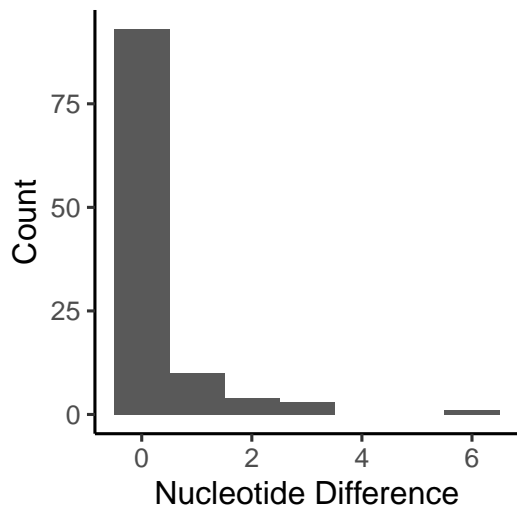
IGHV3–64*05

1 sequences assigned
No exact matches.



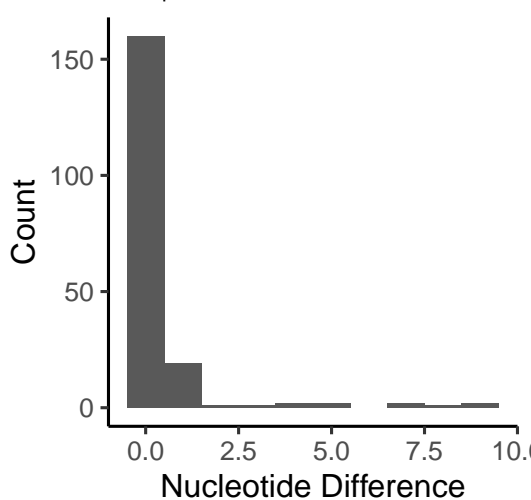
IGHV3–43*01

111 sequences assigned
93 (83.8%) exact matches, in which:
89 unique CDR3
6 unique J



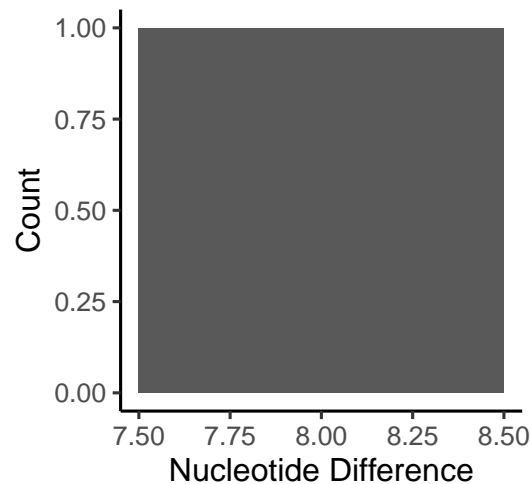
IGHV3–53*02

191 sequences assigned
160 (83.8%) exact matches, in which:
156 unique CDR3
6 unique J



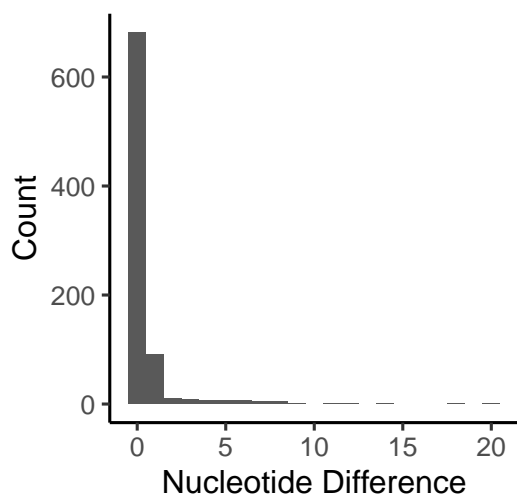
IGHV3–66*01

1 sequences assigned
No exact matches.



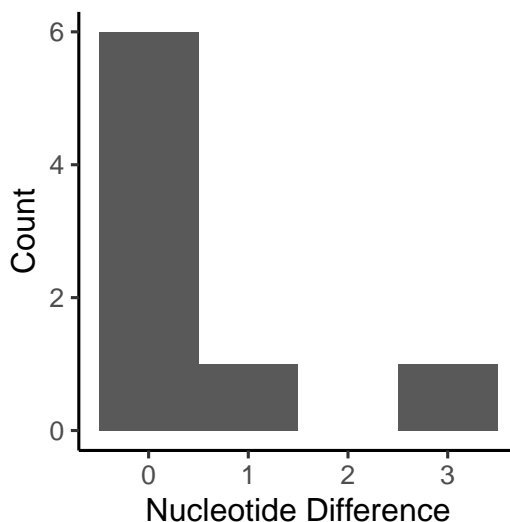
IGHV3–48*01

828 sequences assigned
682 (82.4%) exact matches, in which:
649 unique CDR3
6 unique J



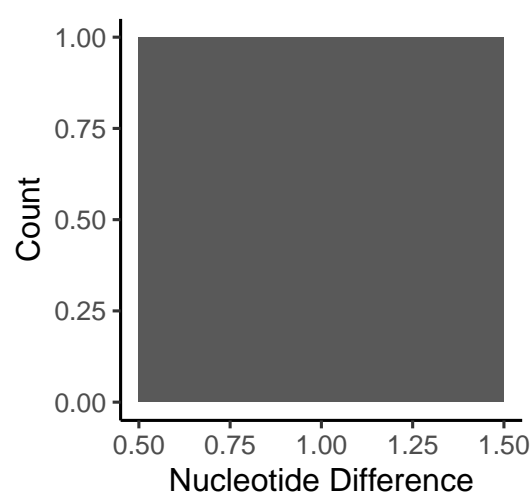
IGHV3–64*02

8 sequences assigned
6 (75%) exact matches, in which:
6 unique CDR3
2 unique J



IGHV3–66*04

1 sequences assigned
No exact matches.



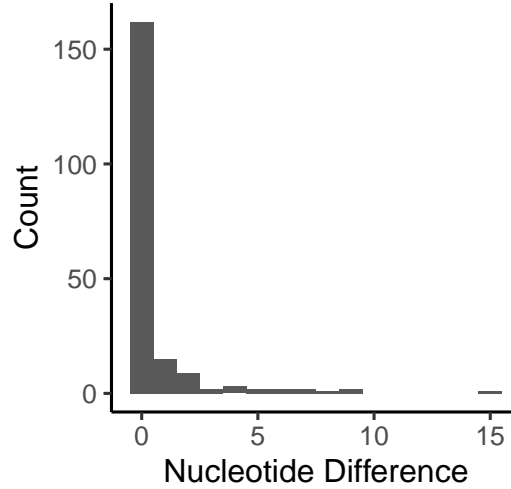
IGHV3-69-1*01

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



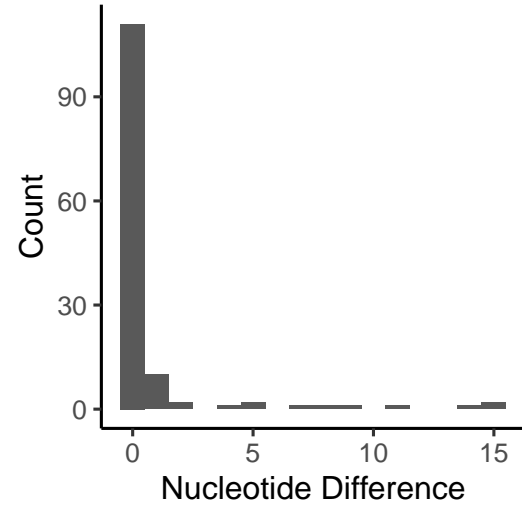
IGHV3-74*01

201 sequences assigned
162 (80.6%) exact matches, in which:
160 unique CDR3
6 unique J



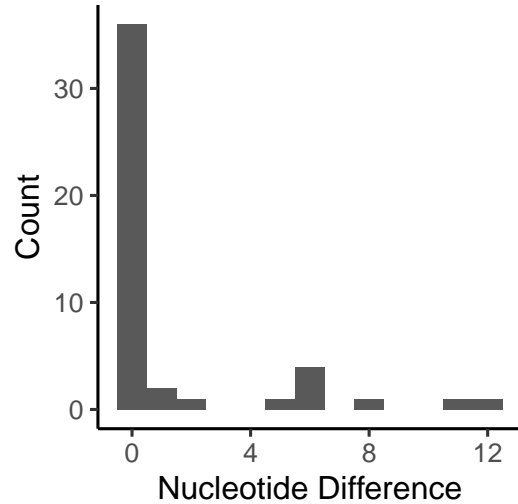
IGHV4-4*02

133 sequences assigned
111 (83.5%) exact matches, in which:
105 unique CDR3
6 unique J



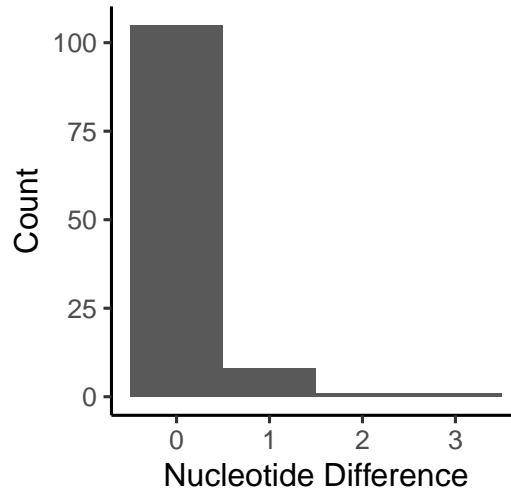
IGHV3-72*01

49 sequences assigned
36 (73.5%) exact matches, in which:
33 unique CDR3
4 unique J



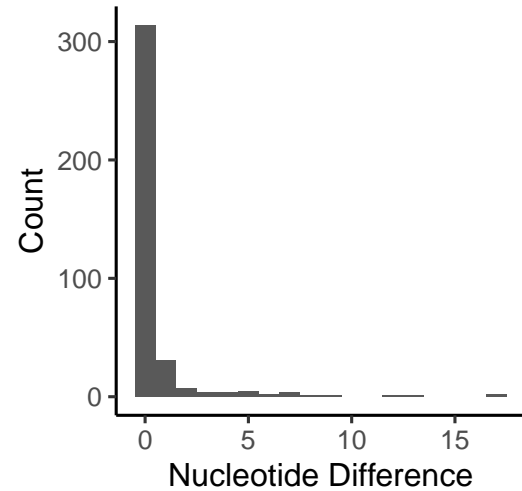
IGHV3-43D*03

115 sequences assigned
105 (91.3%) exact matches, in which:
104 unique CDR3
5 unique J



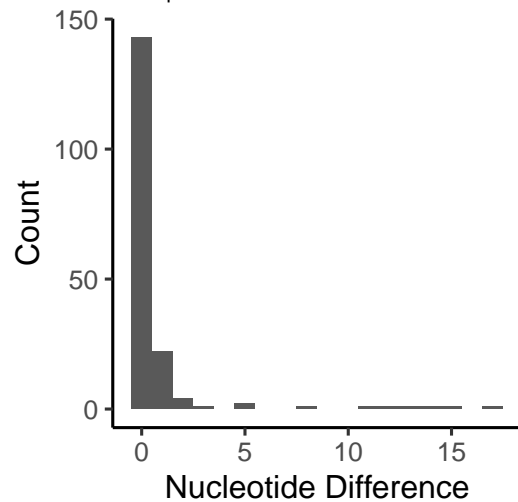
IGHV4-4*07

378 sequences assigned
314 (83.1%) exact matches, in which:
312 unique CDR3
6 unique J



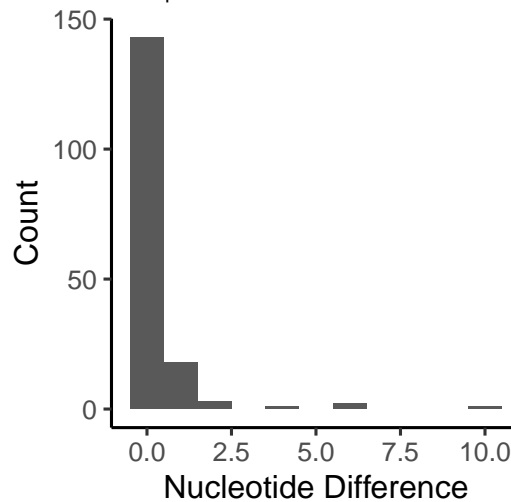
IGHV3-73*02

179 sequences assigned
143 (79.9%) exact matches, in which:
139 unique CDR3
6 unique J



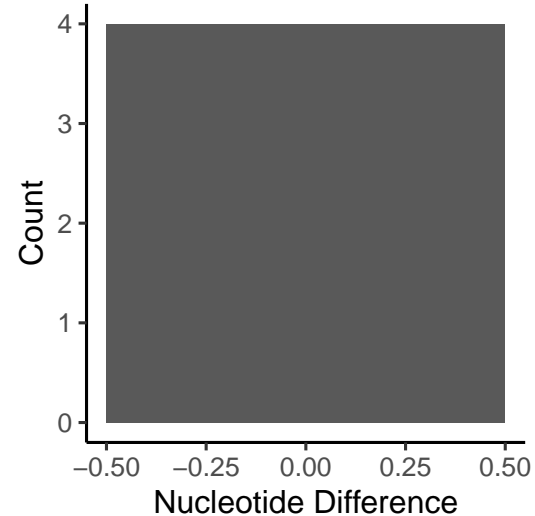
IGHV3-64D*08

168 sequences assigned
143 (85.1%) exact matches, in which:
137 unique CDR3
6 unique J



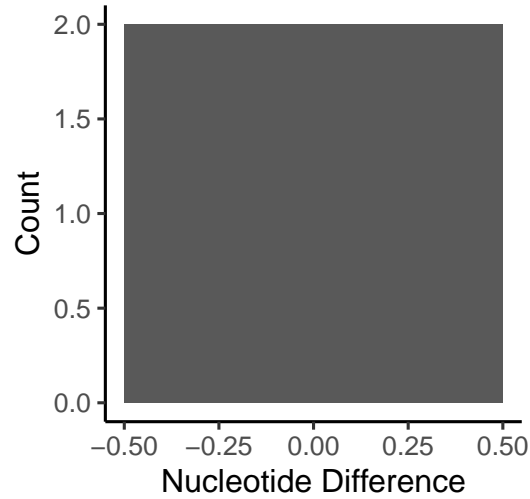
IGHV4-28*01

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



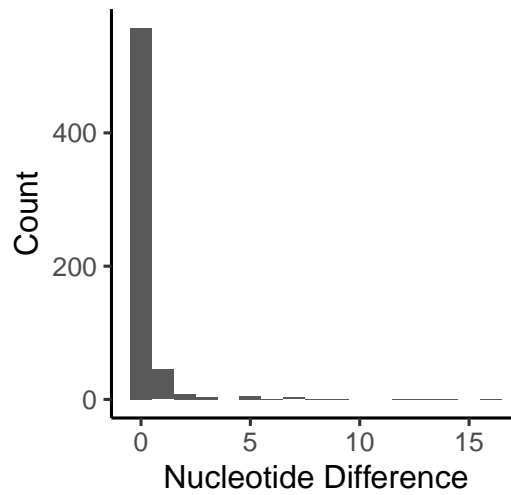
IGHV4-28*03

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



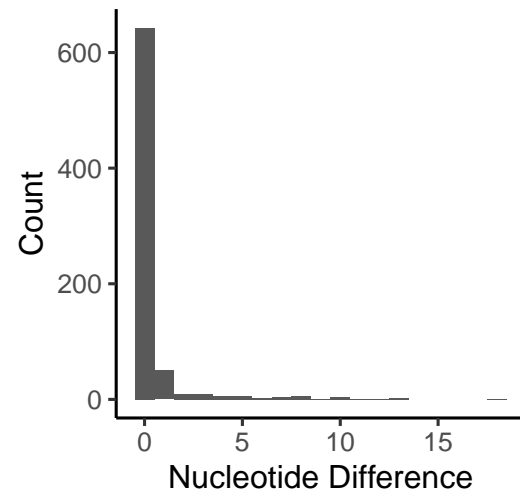
IGHV4-30-2*01

630 sequences assigned
558 (88.6%) exact matches, in which:
533 unique CDR3
6 unique J



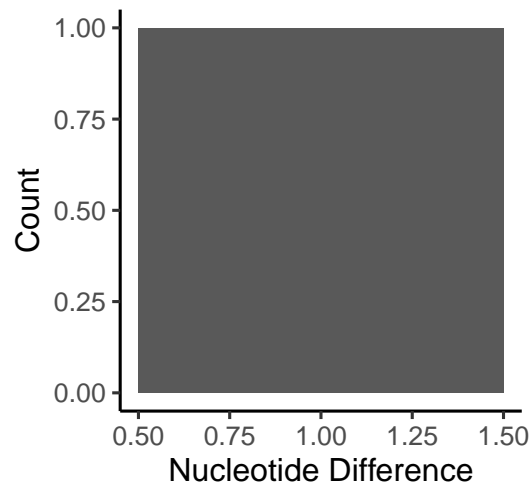
IGHV4-38-2*02

747 sequences assigned
643 (86.1%) exact matches, in which:
621 unique CDR3
6 unique J



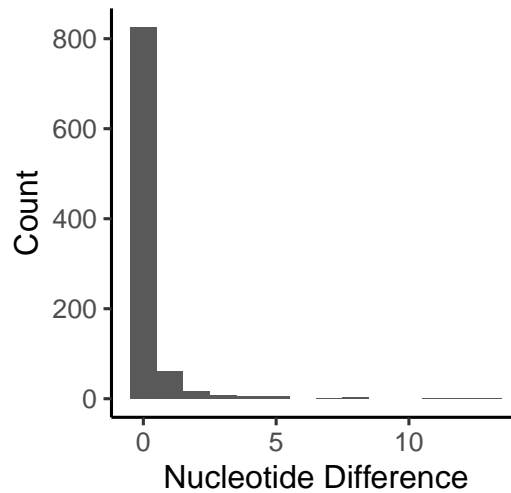
IGHV4-28*06

1 sequences assigned
No exact matches.



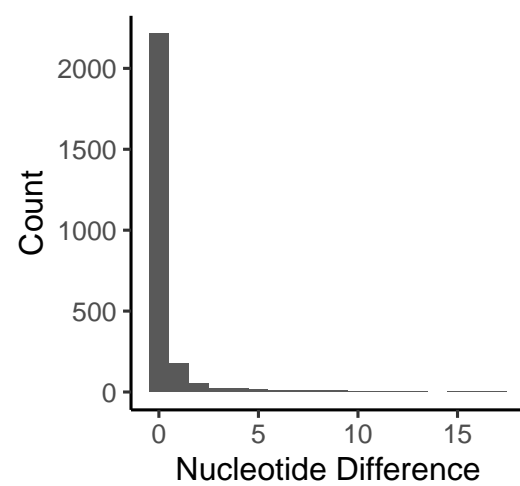
IGHV4-31*03

935 sequences assigned
826 (88.3%) exact matches, in which:
794 unique CDR3
6 unique J



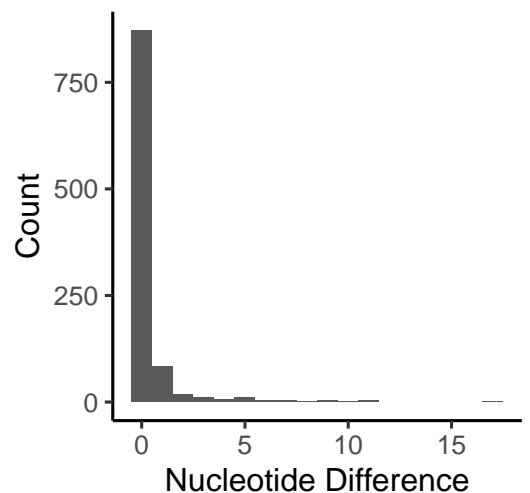
IGHV4-39*01

2558 sequences assigned
2214 (86.6%) exact matches, in which:
2118 unique CDR3
6 unique J



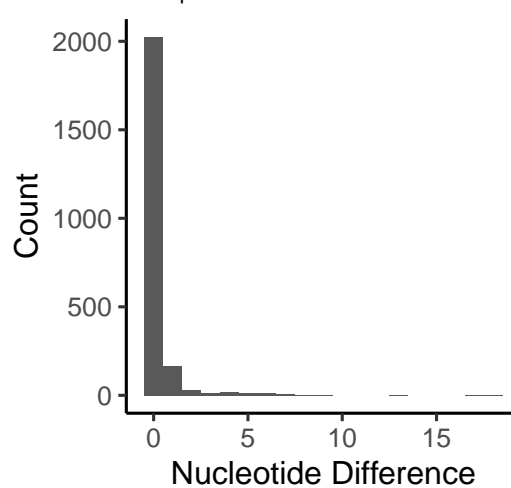
IGHV4-30-4*01

1017 sequences assigned
872 (85.7%) exact matches, in which:
849 unique CDR3
6 unique J



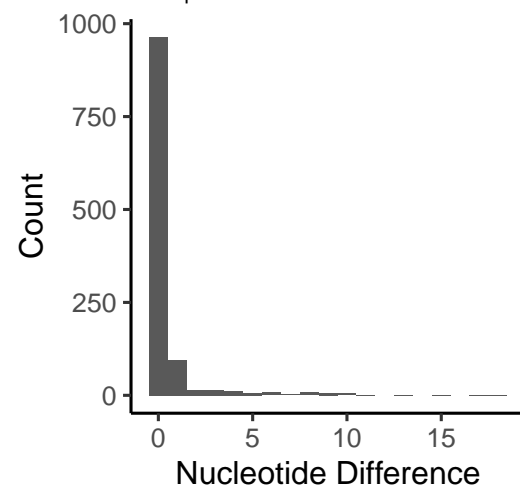
IGHV4-34*01

2298 sequences assigned
2024 (88.1%) exact matches, in which:
1926 unique CDR3
6 unique J



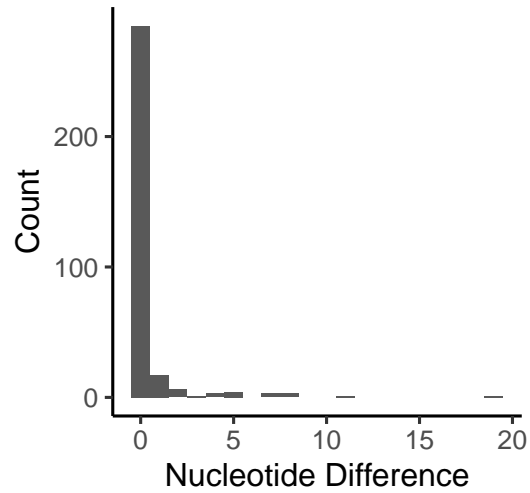
IGHV4-59*01

1140 sequences assigned
964 (84.6%) exact matches, in which:
942 unique CDR3
6 unique J



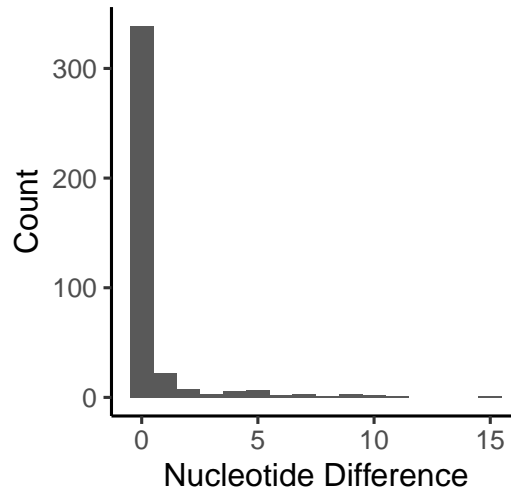
IGHV4–61*01

324 sequences assigned
285 (88%) exact matches, in which:
278 unique CDR3
6 unique J



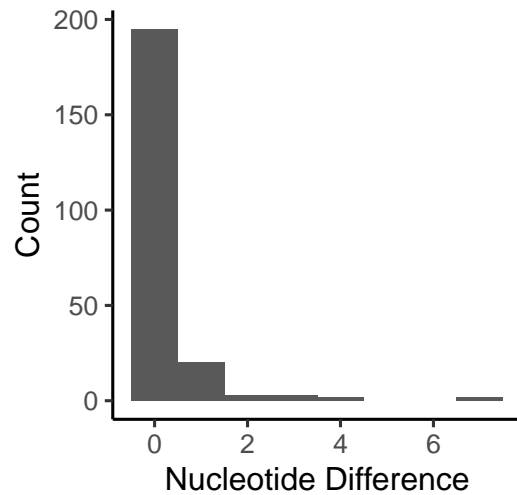
IGHV5–51*03

398 sequences assigned
339 (85.2%) exact matches, in which:
325 unique CDR3
6 unique J



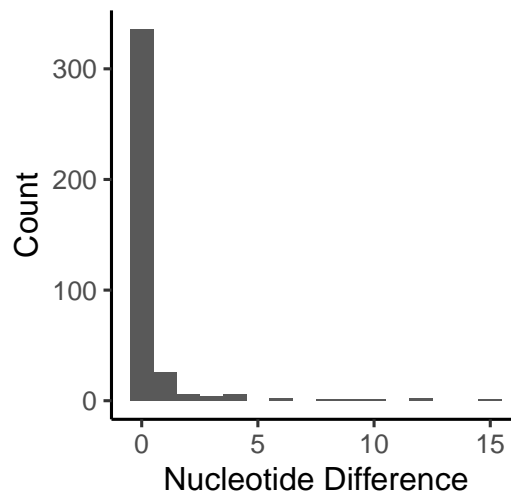
IGHV5–10–1*03

225 sequences assigned
195 (86.7%) exact matches, in which:
189 unique CDR3
5 unique J



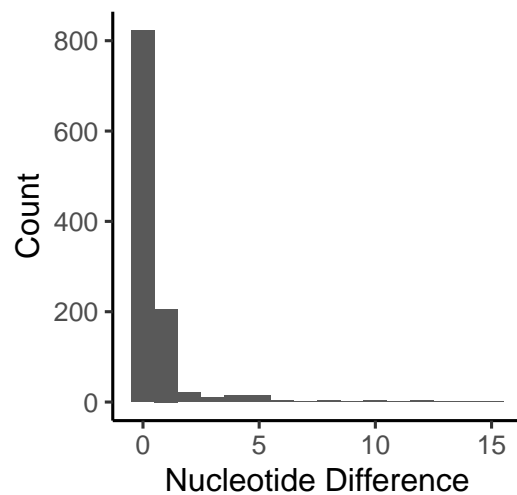
IGHV6–1*01

386 sequences assigned
336 (87%) exact matches, in which:
325 unique CDR3
6 unique J



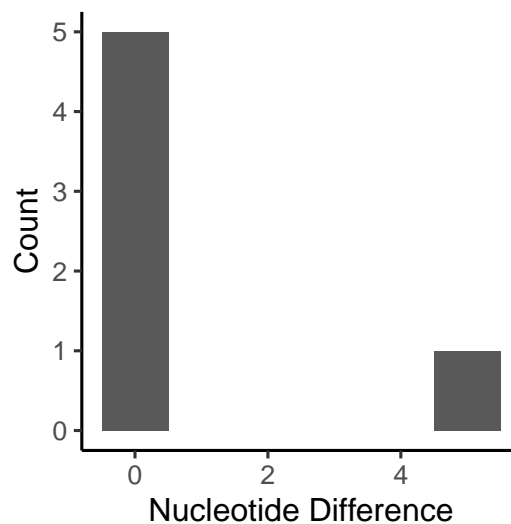
IGHV5–51*01

1112 sequences assigned
823 (74%) exact matches, in which:
795 unique CDR3
6 unique J



IGHV7–4–1*01

6 sequences assigned
5 (83.3%) exact matches, in which:
5 unique CDR3
2 unique J



Allele Usage



Warning – no inferred sequences found.