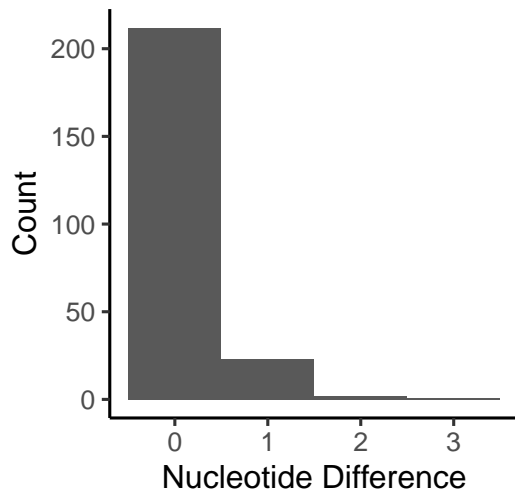


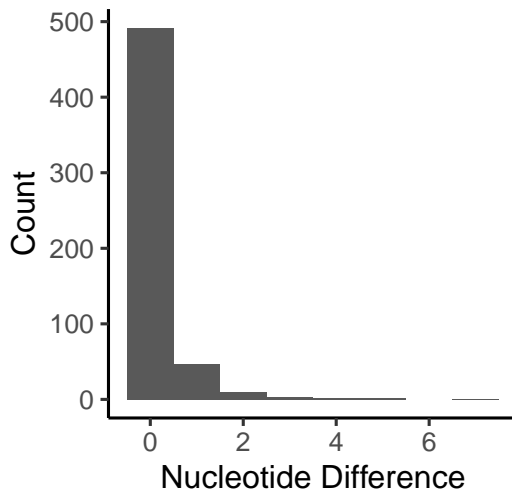
IGHV1-2*04

238 sequences assigned
212 (89.1%) exact matches, in which:
205 unique CDR3
6 unique J



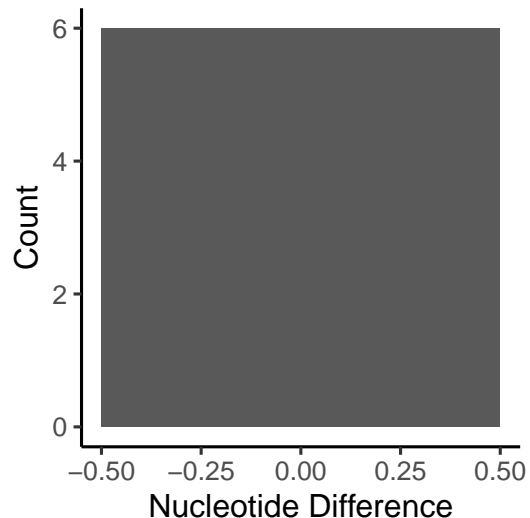
IGHV1-8*01

557 sequences assigned
492 (88.3%) exact matches, in which:
472 unique CDR3
6 unique J



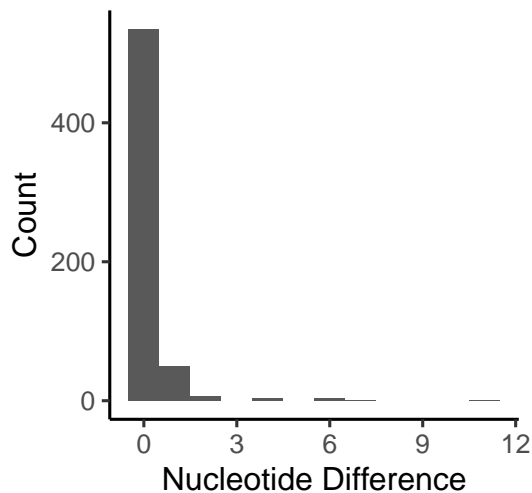
IGHV1-45*02

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



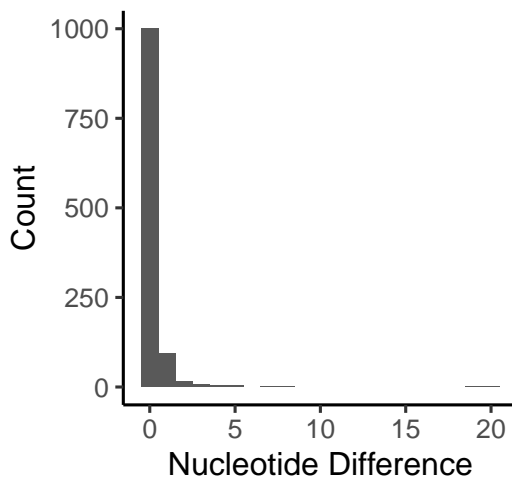
IGHV1-2*06

600 sequences assigned
535 (89.2%) exact matches, in which:
515 unique CDR3
6 unique J



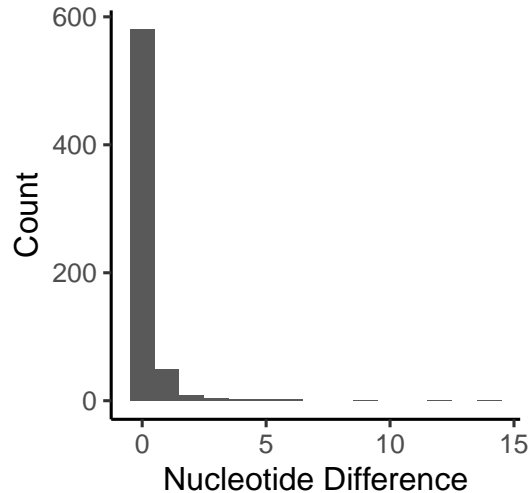
IGHV1-18*01

1129 sequences assigned
1000 (88.6%) exact matches, in which:
956 unique CDR3
6 unique J



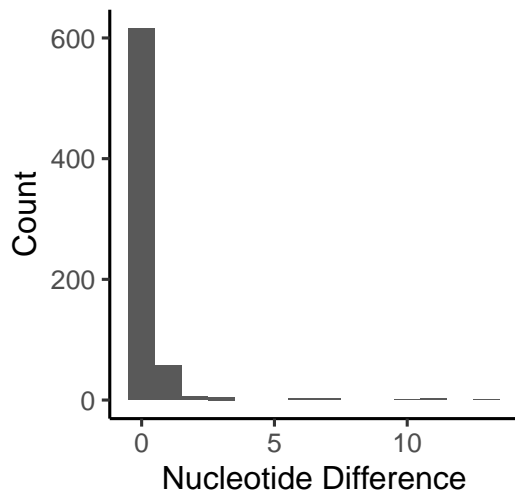
IGHV1-46*01

655 sequences assigned
581 (88.7%) exact matches, in which:
563 unique CDR3
6 unique J



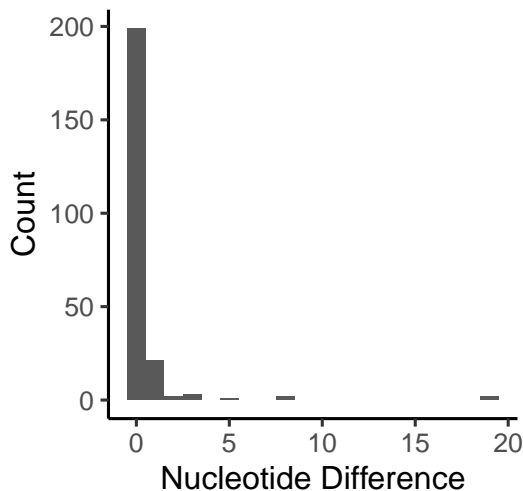
IGHV1-3*01

694 sequences assigned
616 (88.8%) exact matches, in which:
594 unique CDR3
6 unique J



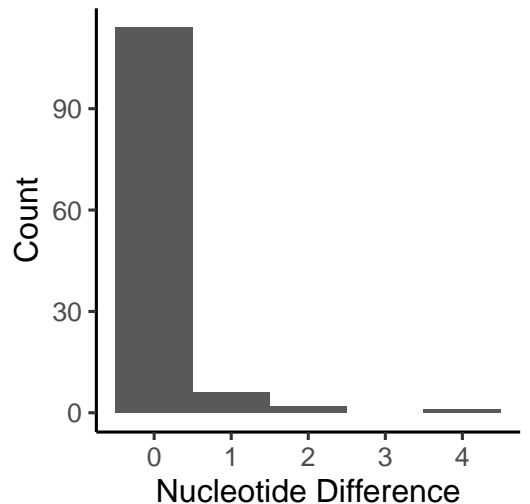
IGHV1-24*01

230 sequences assigned
199 (86.5%) exact matches, in which:
194 unique CDR3
6 unique J



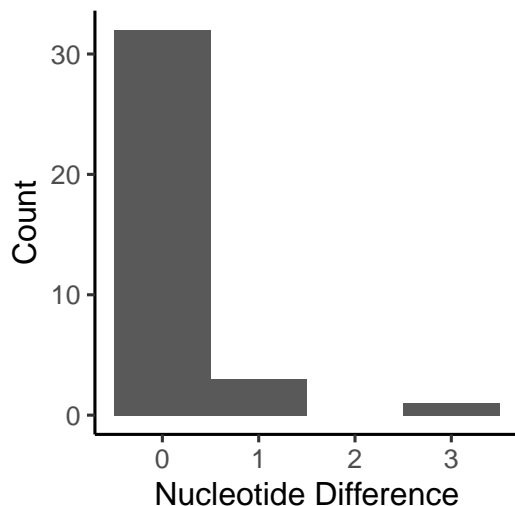
IGHV1-58*01

123 sequences assigned
114 (92.7%) exact matches, in which:
109 unique CDR3
5 unique J



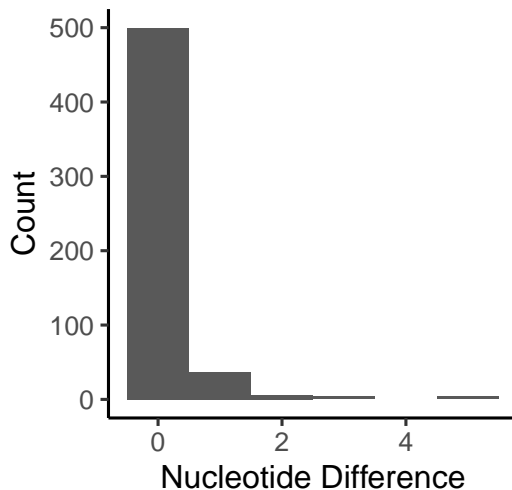
IGHV1-69-2*01

37 sequences assigned
32 (86.5%) exact matches, in which:
32 unique CDR3
5 unique J



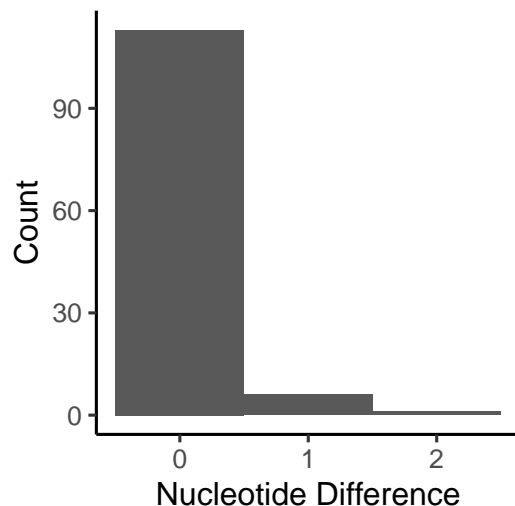
IGHV2-5*02

551 sequences assigned
500 (90.7%) exact matches, in which:
484 unique CDR3
6 unique J



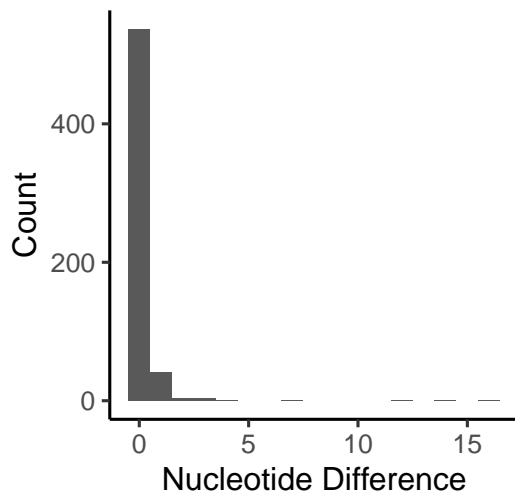
IGHV2-70*15

120 sequences assigned
113 (94.2%) exact matches, in which:
110 unique CDR3
6 unique J



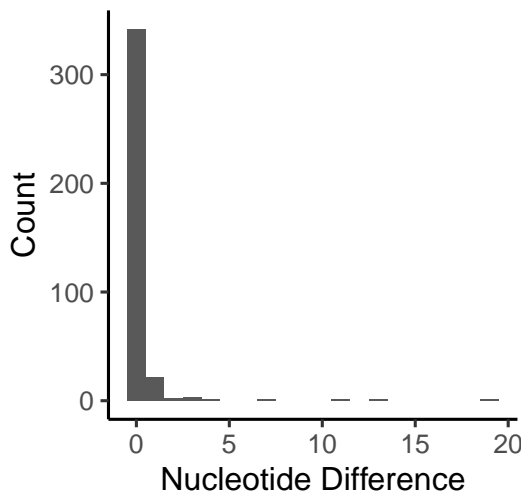
IGHV1-69*06

590 sequences assigned
537 (91%) exact matches, in which:
507 unique CDR3
6 unique J



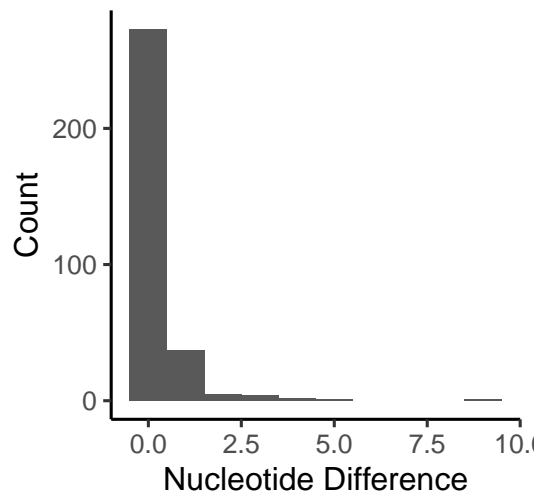
IGHV2-26*01

374 sequences assigned
342 (91.4%) exact matches, in which:
322 unique CDR3
6 unique J



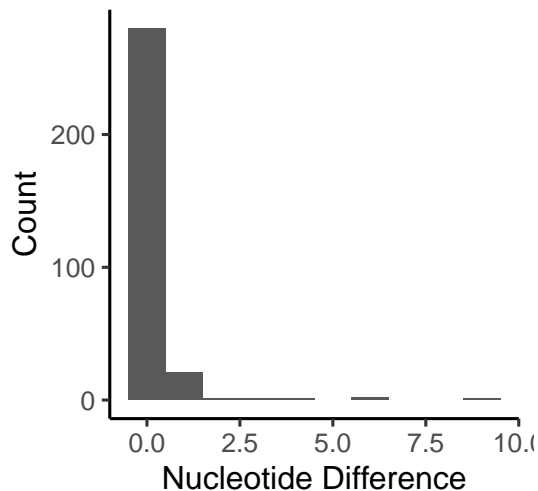
IGHV3-7*01

323 sequences assigned
273 (84.5%) exact matches, in which:
260 unique CDR3
6 unique J



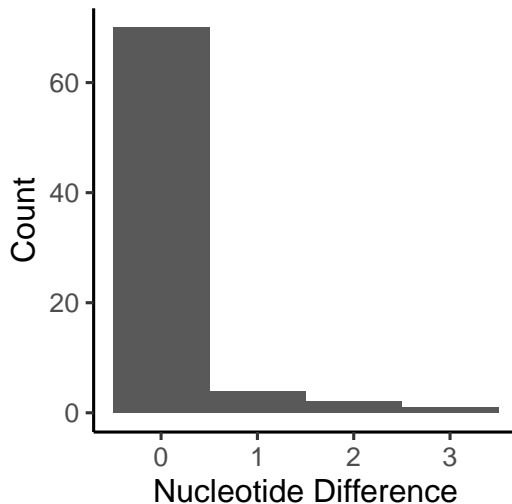
IGHV2-5*01

307 sequences assigned
280 (91.2%) exact matches, in which:
270 unique CDR3
6 unique J



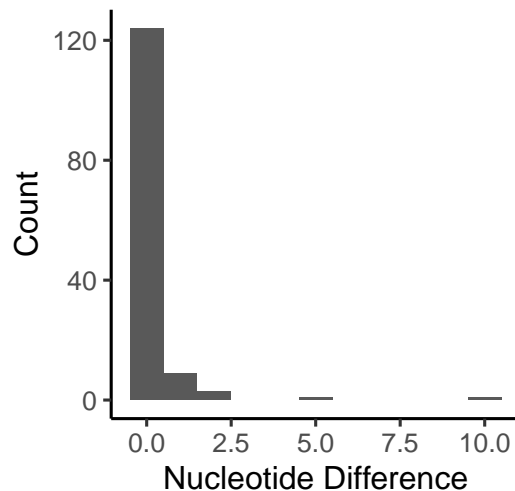
IGHV2-70*01

77 sequences assigned
70 (90.9%) exact matches, in which:
70 unique CDR3
5 unique J



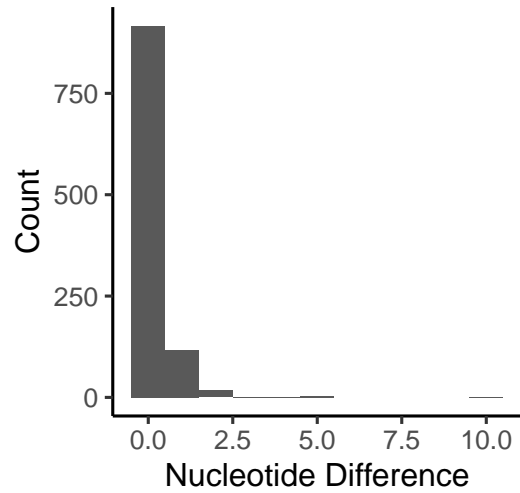
IGHV3-7*05

138 sequences assigned
124 (89.9%) exact matches, in which:
119 unique CDR3
6 unique J



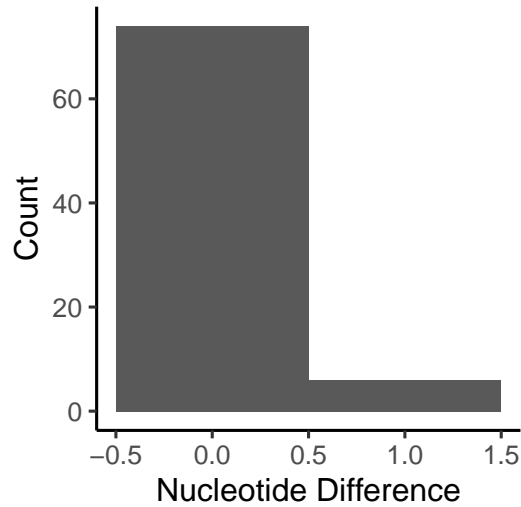
IGHV3-9*01

1058 sequences assigned
917 (86.7%) exact matches, in which:
864 unique CDR3
6 unique J



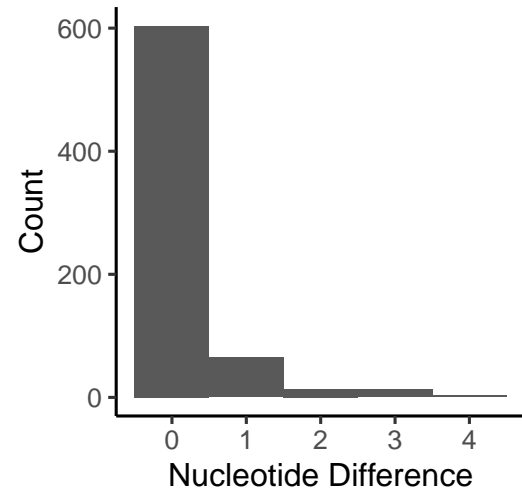
IGHV3-13*01

80 sequences assigned
74 (92.5%) exact matches, in which:
72 unique CDR3
5 unique J



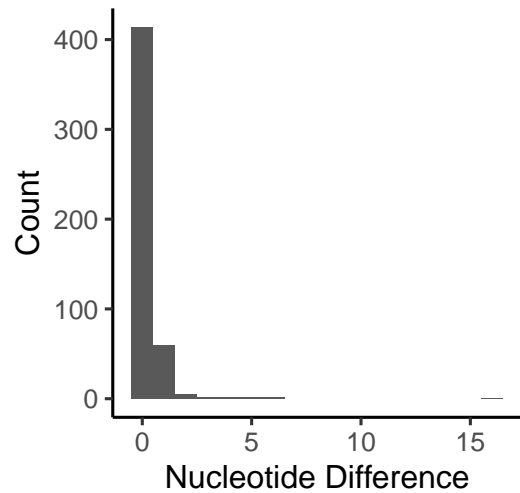
IGHV3-15*07

699 sequences assigned
604 (86.4%) exact matches, in which:
588 unique CDR3
6 unique J



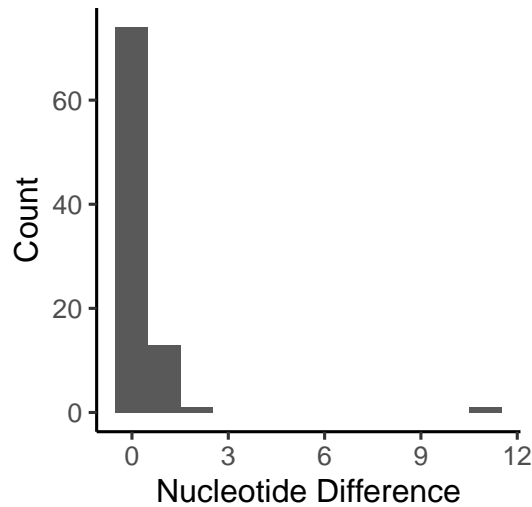
IGHV3-11*01

488 sequences assigned
414 (84.8%) exact matches, in which:
402 unique CDR3
6 unique J



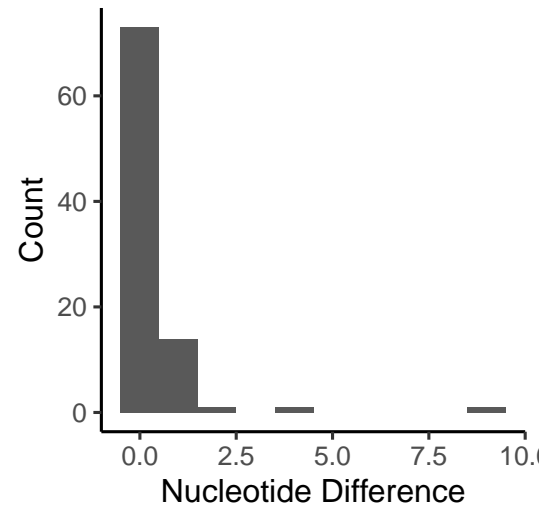
IGHV3-13*01_G290A_T301

89 sequences assigned
74 (83.1%) exact matches, in which:
70 unique CDR3
5 unique J



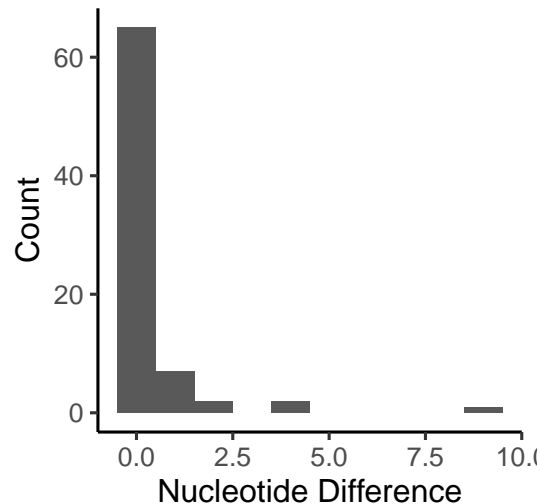
IGHV3-20*01

90 sequences assigned
73 (81.1%) exact matches, in which:
68 unique CDR3
5 unique J



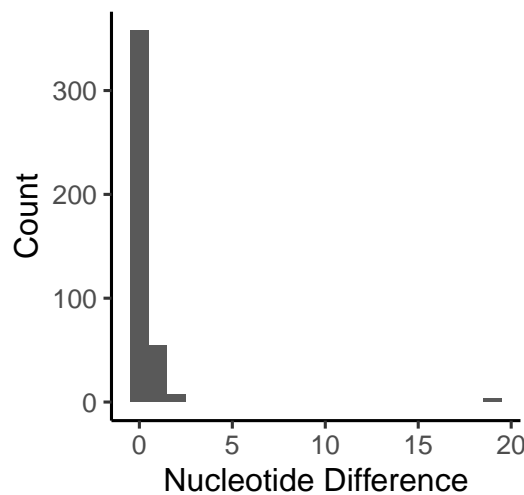
IGHV3-11*06

78 sequences assigned
65 (83.3%) exact matches, in which:
62 unique CDR3
5 unique J



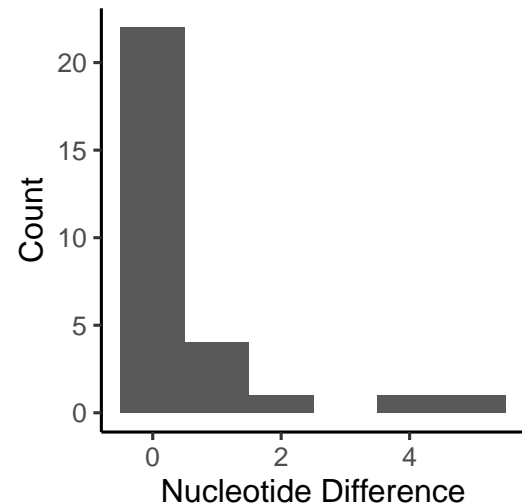
IGHV3-15*01

431 sequences assigned
358 (83.1%) exact matches, in which:
347 unique CDR3
6 unique J



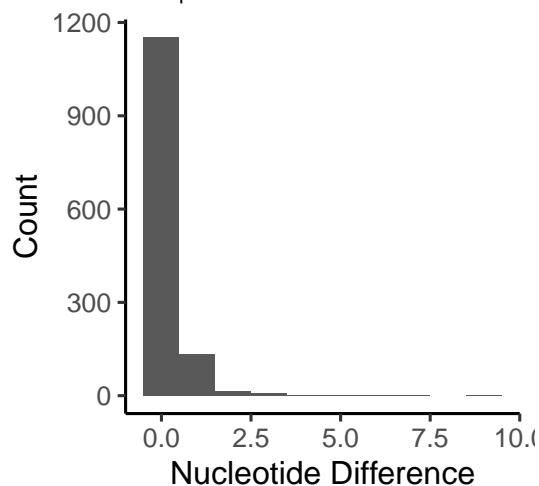
IGHV3-20*04

29 sequences assigned
22 (75.9%) exact matches, in which:
22 unique CDR3
6 unique J



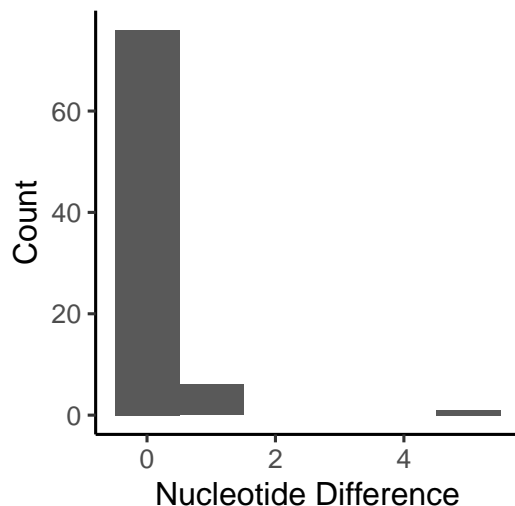
IGHV3-21*01

1324 sequences assigned
1152 (87%) exact matches, in which:
1095 unique CDR3
6 unique J



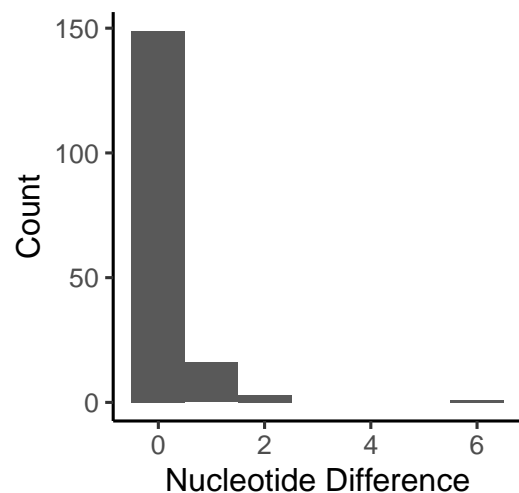
IGHV3-43*01

83 sequences assigned
76 (91.6%) exact matches, in which:
74 unique CDR3
5 unique J



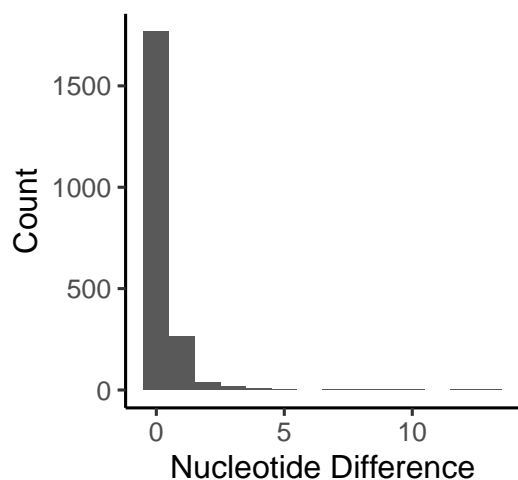
IGHV3-49*03

169 sequences assigned
149 (88.2%) exact matches, in which:
142 unique CDR3
6 unique J



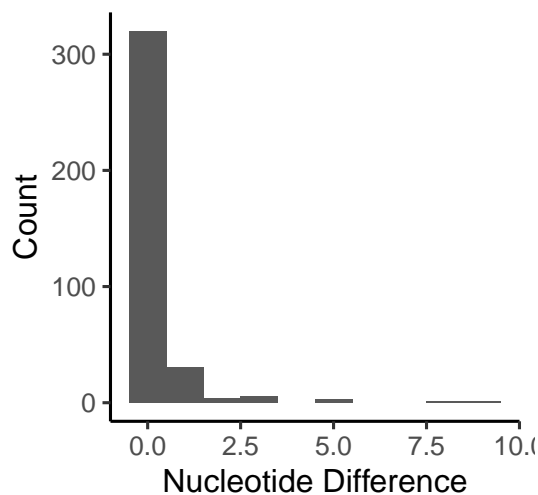
IGHV3-30-3*01

2106 sequences assigned
1767 (83.9%) exact matches, in which:
1702 unique CDR3
6 unique J



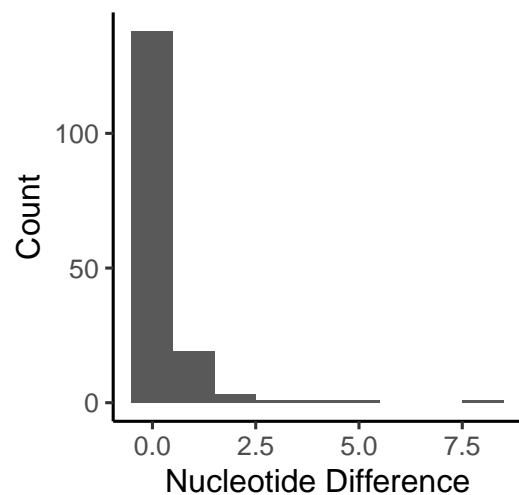
IGHV3-48*01

366 sequences assigned
320 (87.4%) exact matches, in which:
305 unique CDR3
6 unique J



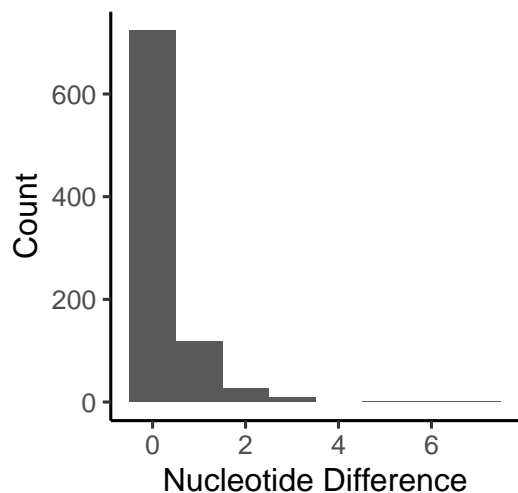
IGHV3-49*04

164 sequences assigned
138 (84.1%) exact matches, in which:
136 unique CDR3
6 unique J



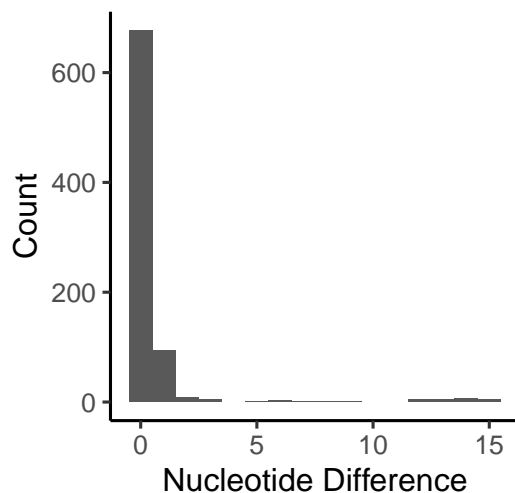
IGHV3-33*01

878 sequences assigned
724 (82.5%) exact matches, in which:
692 unique CDR3
6 unique J



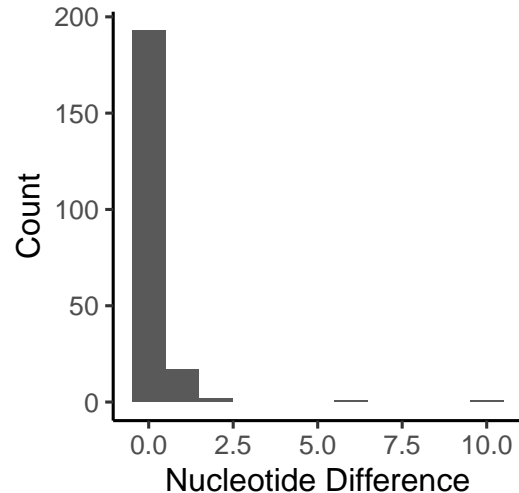
IGHV3-48*03

814 sequences assigned
677 (83.2%) exact matches, in which:
647 unique CDR3
6 unique J



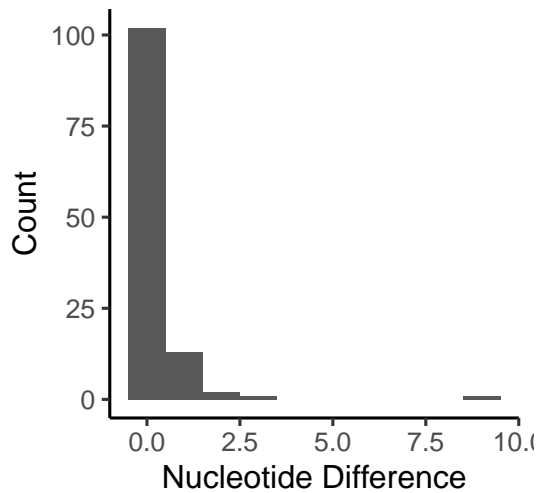
IGHV3-53*01

214 sequences assigned
193 (90.2%) exact matches, in which:
182 unique CDR3
6 unique J



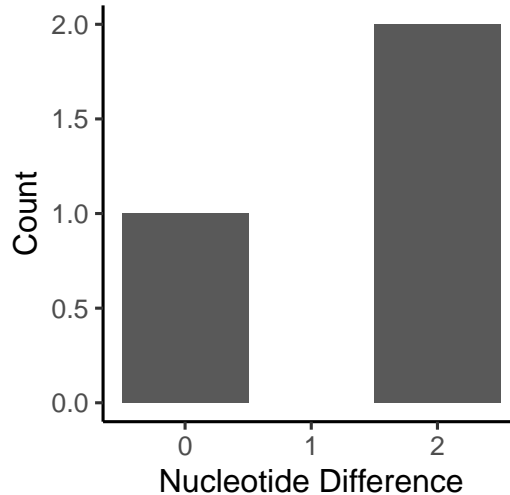
IGHV3-53*02

119 sequences assigned
102 (85.7%) exact matches, in which:
99 unique CDR3
5 unique J



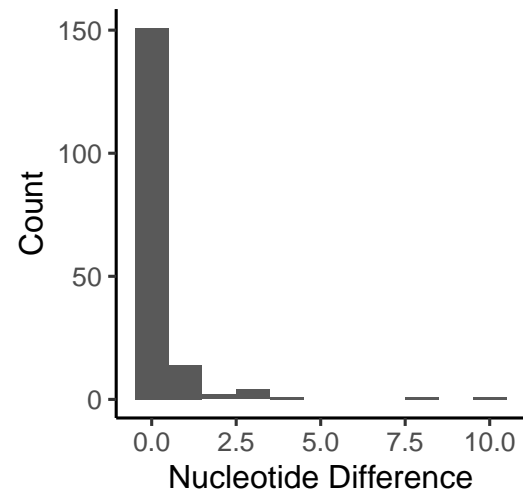
IGHV3-71*03

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



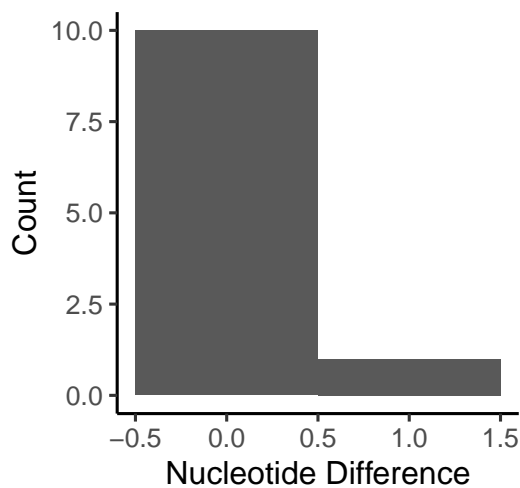
IGHV3-74*01

174 sequences assigned
151 (86.8%) exact matches, in which:
146 unique CDR3
6 unique J



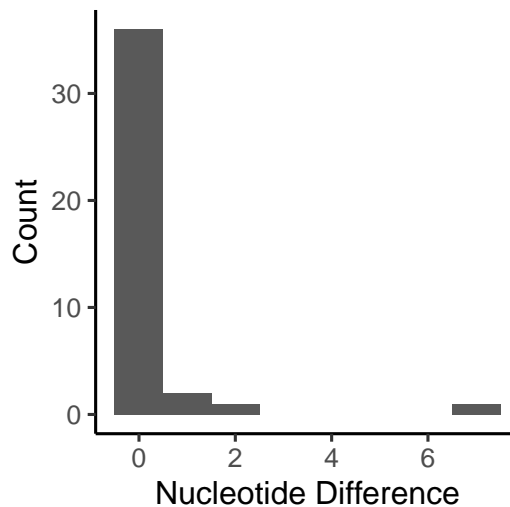
IGHV3-64*02

11 sequences assigned
10 (90.9%) exact matches, in which:
10 unique CDR3
4 unique J



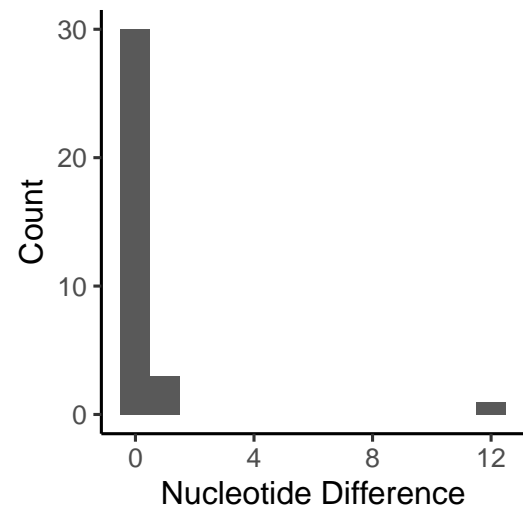
IGHV3-72*01

40 sequences assigned
36 (90%) exact matches, in which:
34 unique CDR3
4 unique J



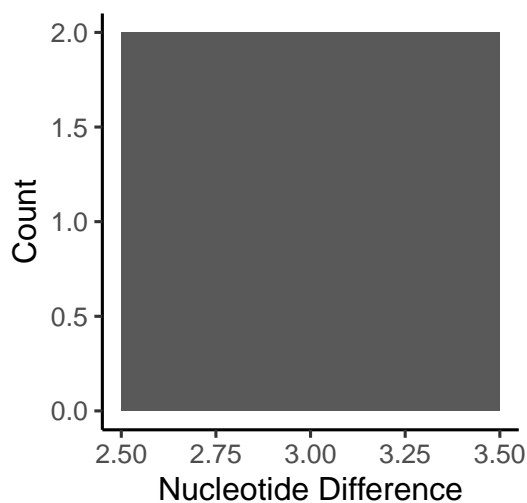
IGHV3-43D*04

34 sequences assigned
30 (88.2%) exact matches, in which:
28 unique CDR3
6 unique J



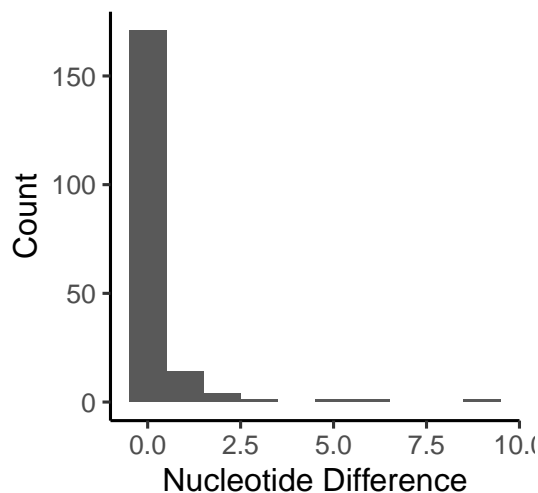
IGHV3-64*04

2 sequences assigned
No exact matches.



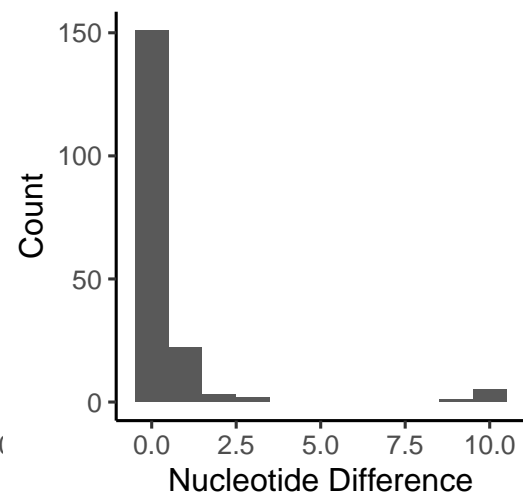
IGHV3-73*02

193 sequences assigned
171 (88.6%) exact matches, in which:
166 unique CDR3
6 unique J



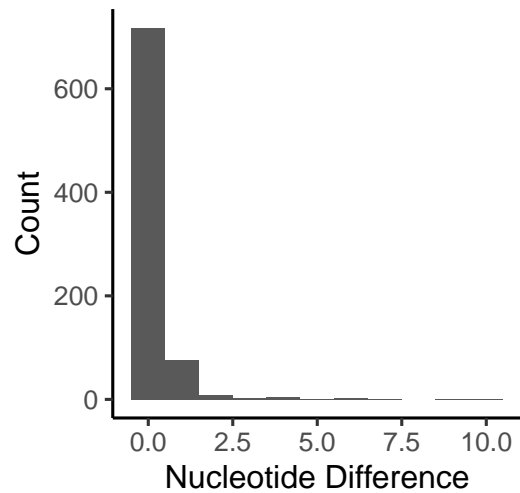
IGHV3-64D*08

184 sequences assigned
151 (82.1%) exact matches, in which:
143 unique CDR3
6 unique J



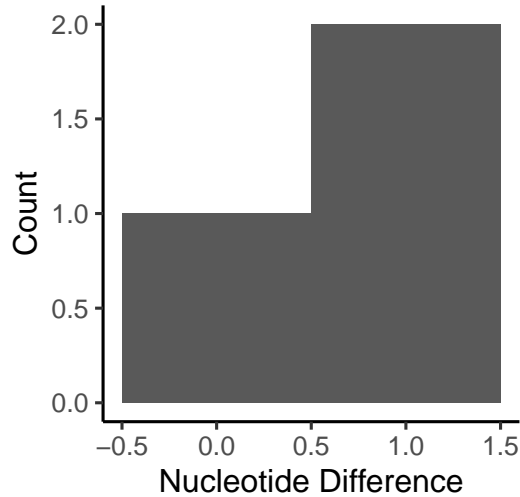
IGHV4-4*02

816 sequences assigned
718 (88%) exact matches, in which:
701 unique CDR3
6 unique J



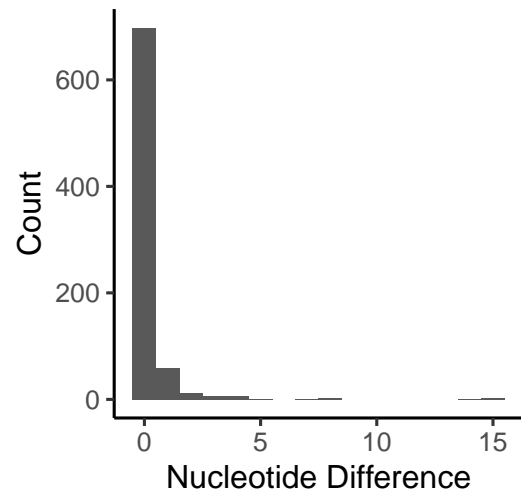
IGHV4-28*04

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



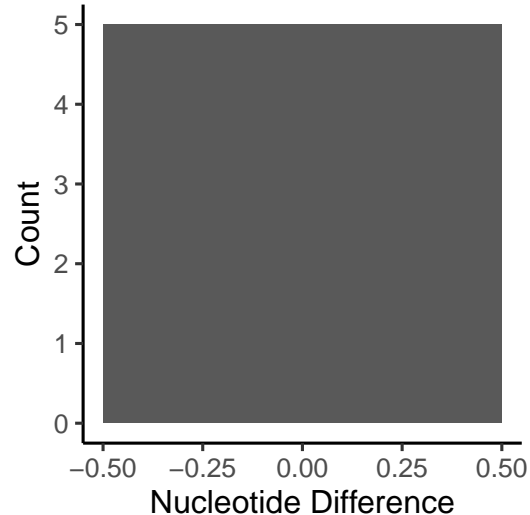
IGHV4-31*03

789 sequences assigned
698 (88.5%) exact matches, in which:
670 unique CDR3
6 unique J



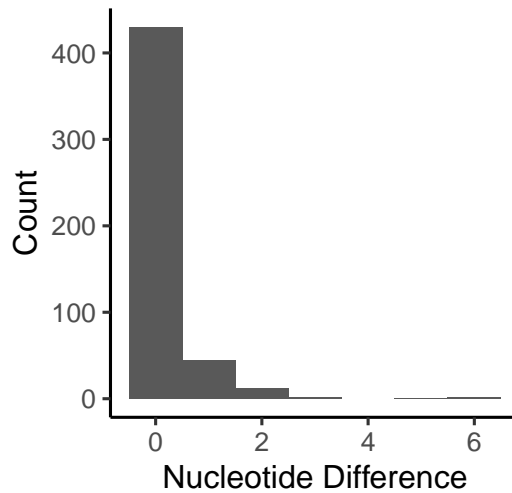
IGHV4-28*01

5 sequences assigned
5 (100%) exact matches, in which:
4 unique CDR3
2 unique J



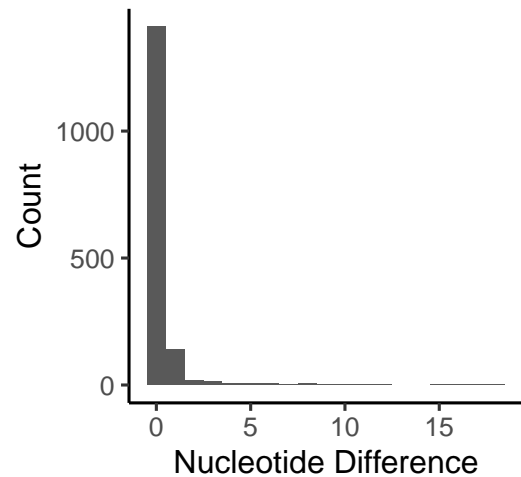
IGHV4-30-2*01

491 sequences assigned
430 (87.6%) exact matches, in which:
417 unique CDR3
6 unique J



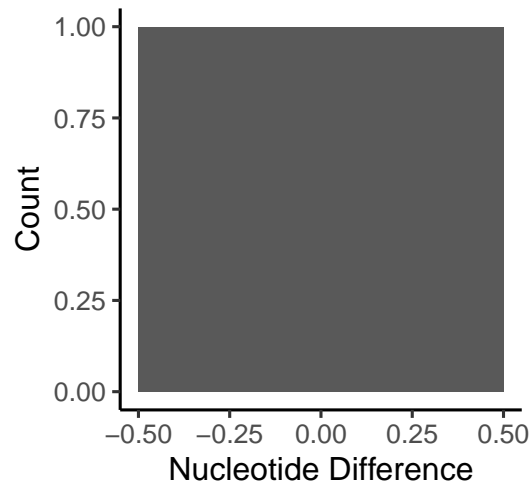
IGHV4-34*01

1630 sequences assigned
1411 (86.6%) exact matches, in which:
1322 unique CDR3
6 unique J



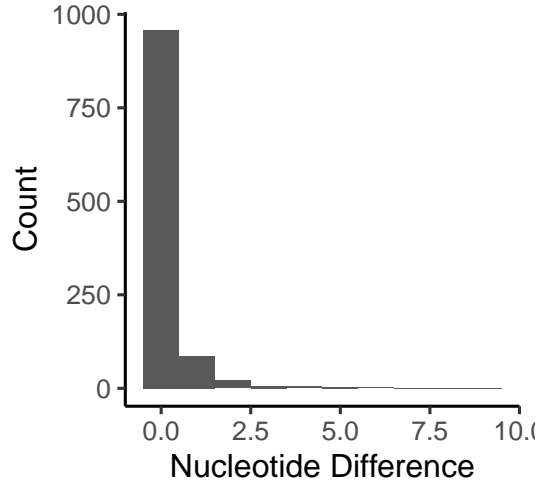
IGHV4-28*03

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



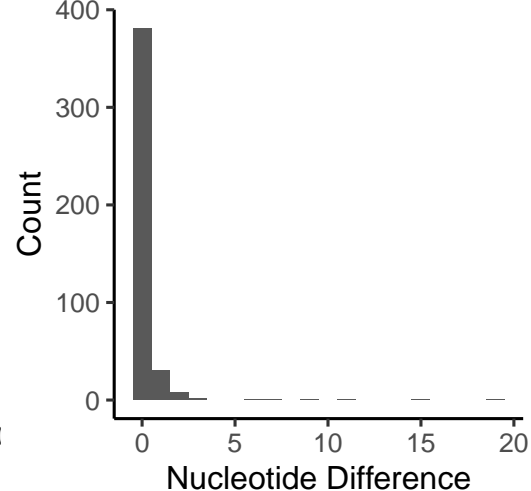
IGHV4-30-4*01

1084 sequences assigned
958 (88.4%) exact matches, in which:
927 unique CDR3
6 unique J



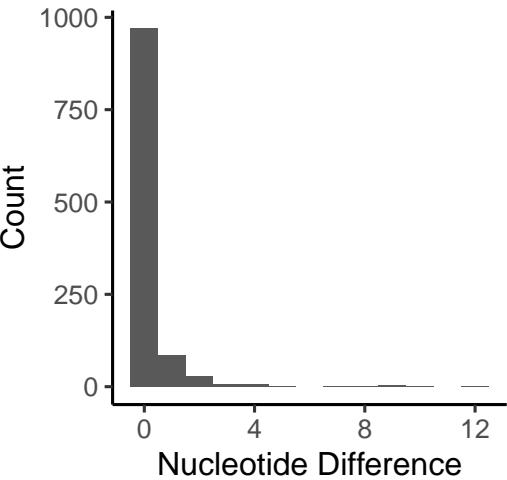
IGHV4-38-2*02_A70G

427 sequences assigned
381 (89.2%) exact matches, in which:
360 unique CDR3
6 unique J



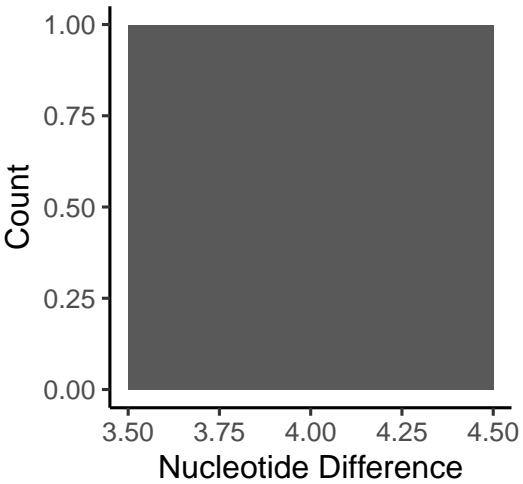
IGHV4–39*01

1114 sequences assigned
970 (87.1%) exact matches, in which:
917 unique CDR3
6 unique J



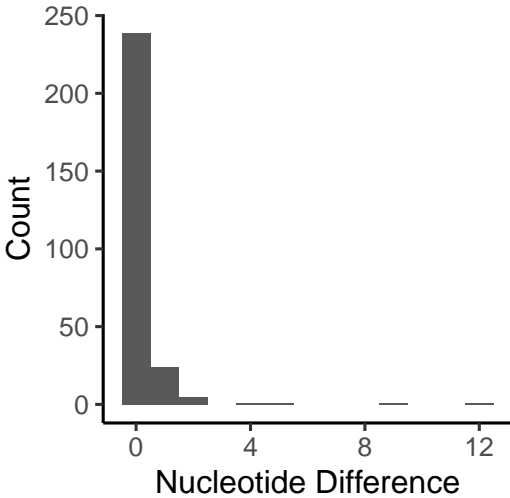
IGHV1/OR15–4*01

1 sequences assigned
No exact matches.



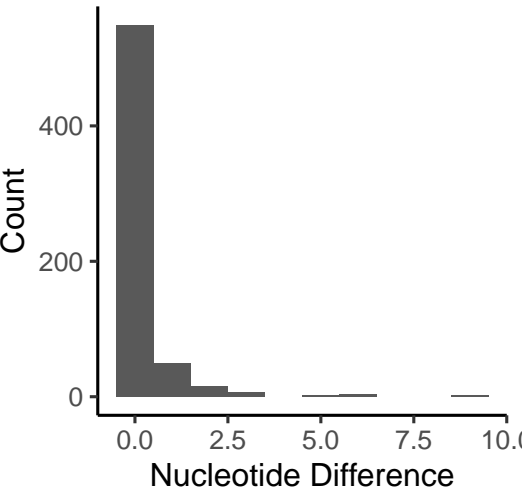
IGHV6–1*01

272 sequences assigned
239 (87.9%) exact matches, in which:
220 unique CDR3
6 unique J



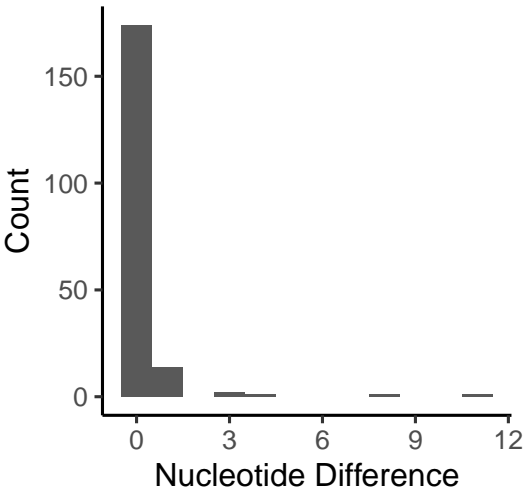
IGHV4–59*01

629 sequences assigned
549 (87.3%) exact matches, in which:
528 unique CDR3
6 unique J



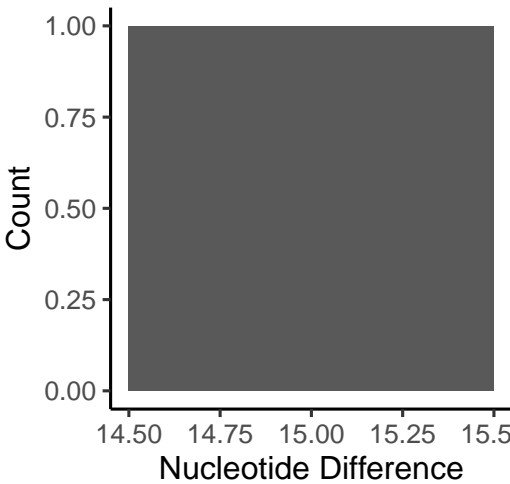
IGHV5–10–1*03

193 sequences assigned
174 (90.2%) exact matches, in which:
167 unique CDR3
6 unique J



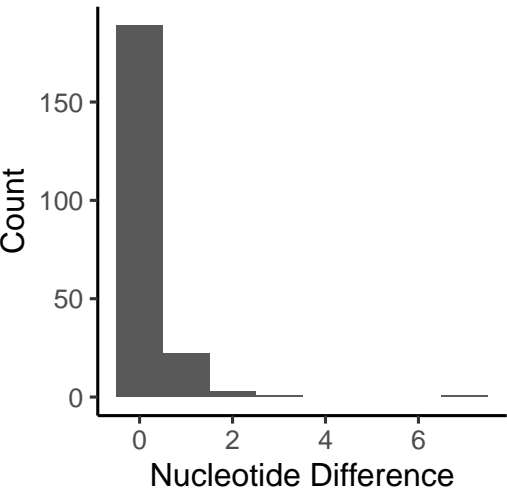
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



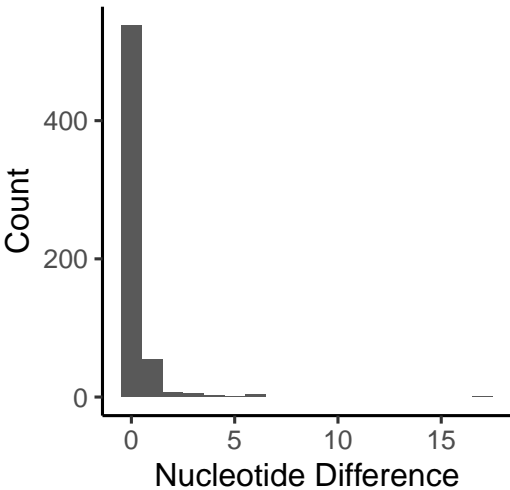
IGHV4–61*01

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



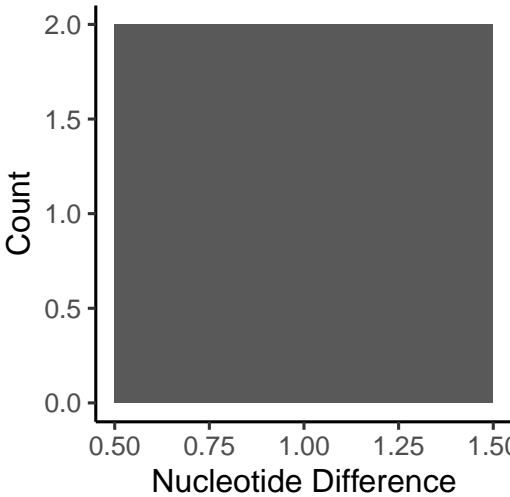
IGHV5–51*01

612 sequences assigned
538 (87.9%) exact matches, in which:
519 unique CDR3
6 unique J



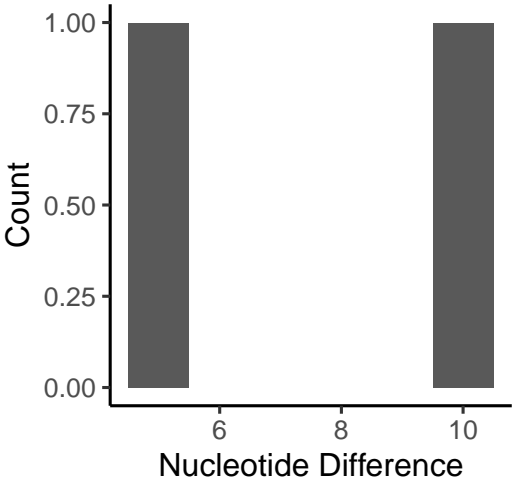
IGHV3/OR16–12*01

2 sequences assigned
No exact matches.



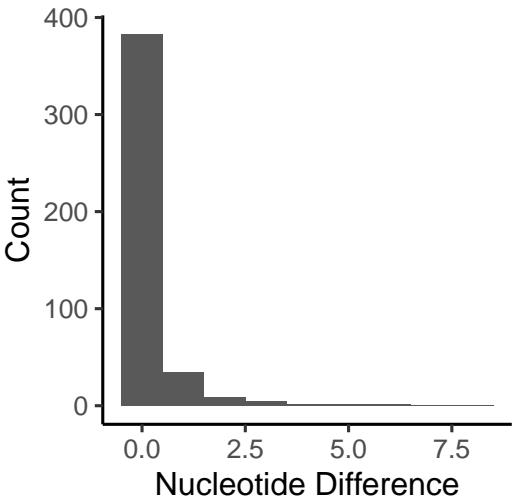
IGHV3/OR16-15*02

2 sequences assigned
No exact matches.



IGHV7-4-1*02

440 sequences assigned
383 (87%) exact matches, in which:
374 unique CDR3
6 unique J





Warning – no inferred sequences found.