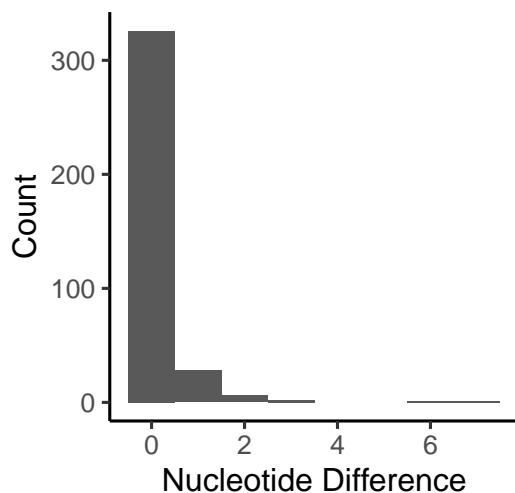


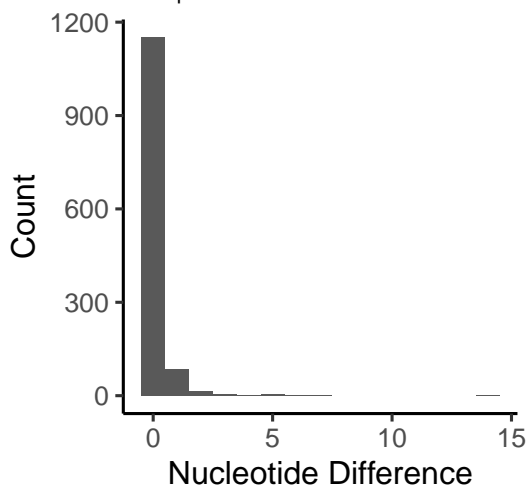
IGHV1-2*04

364 sequences assigned
326 (89.6%) exact matches, in which:
313 unique CDR3
7 unique J



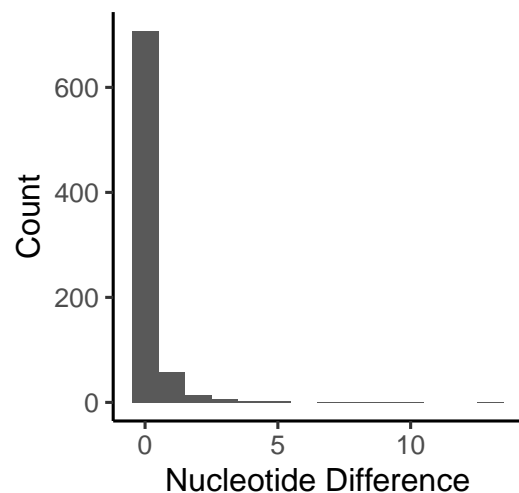
IGHV1-18*01

1268 sequences assigned
1151 (90.8%) exact matches, in which:
1123 unique CDR3
7 unique J



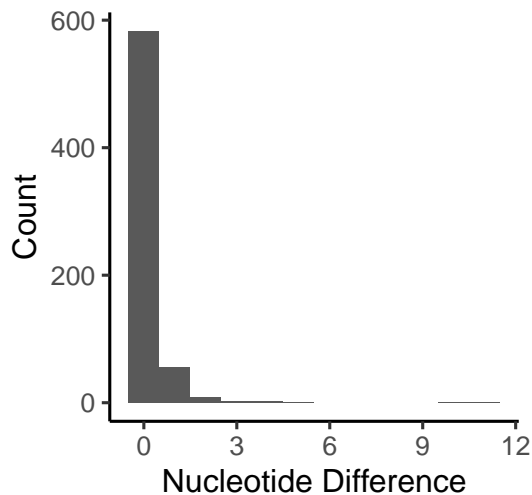
IGHV1-46*01

796 sequences assigned
708 (88.9%) exact matches, in which:
689 unique CDR3
7 unique J



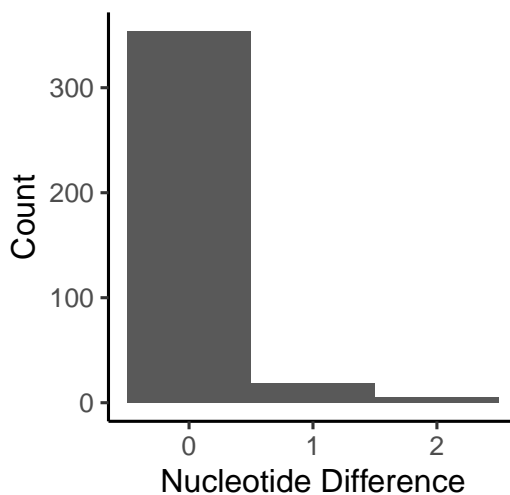
IGHV1-3*01

654 sequences assigned
583 (89.1%) exact matches, in which:
571 unique CDR3
7 unique J



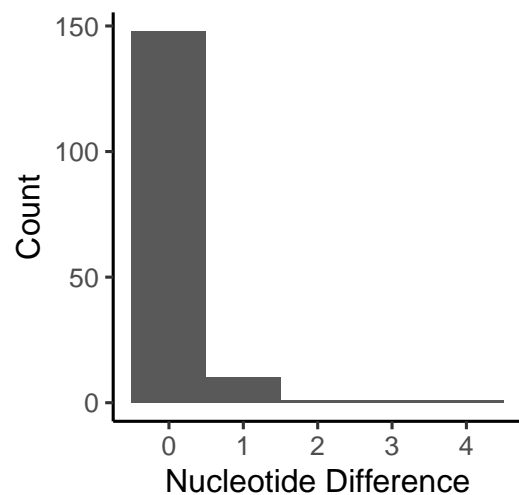
IGHV1-24*01

378 sequences assigned
354 (93.7%) exact matches, in which:
348 unique CDR3
7 unique J



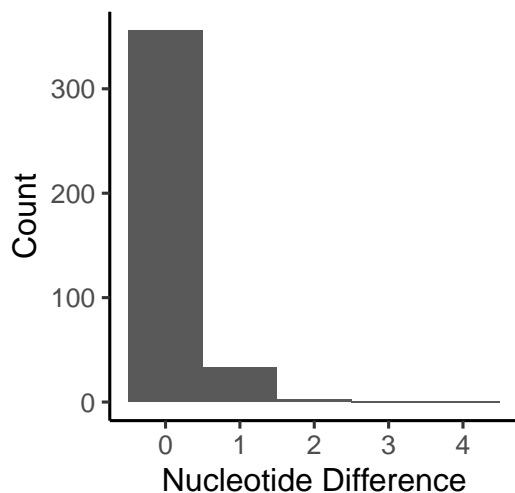
IGHV1-58*01

161 sequences assigned
148 (91.9%) exact matches, in which:
144 unique CDR3
7 unique J



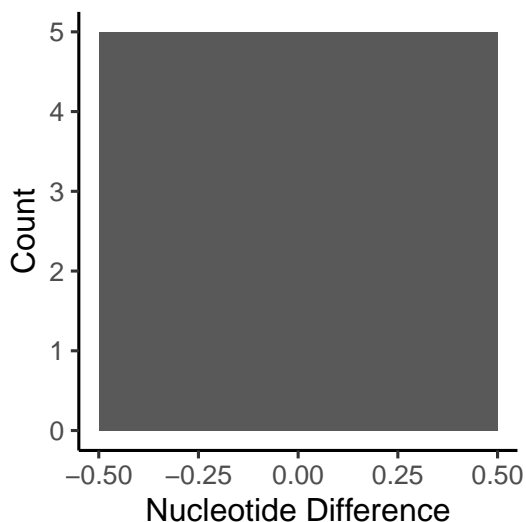
IGHV1-8*01

395 sequences assigned
356 (90.1%) exact matches, in which:
344 unique CDR3
7 unique J



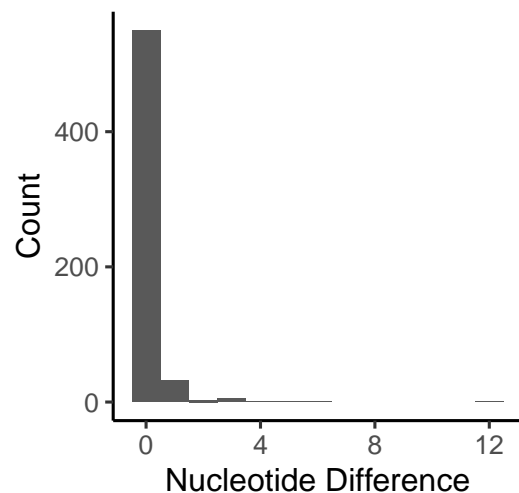
IGHV1-45*02

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



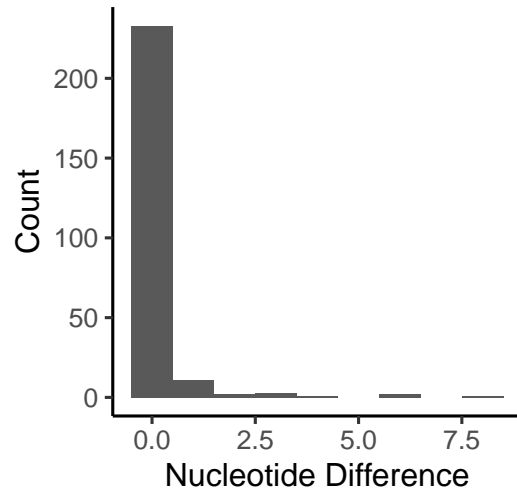
IGHV2-5*02

594 sequences assigned
550 (92.6%) exact matches, in which:
540 unique CDR3
7 unique J



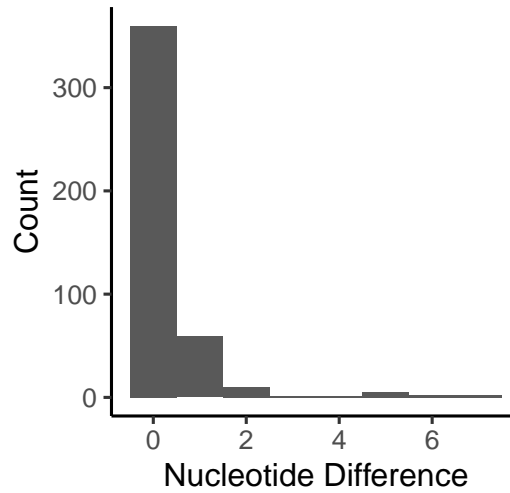
IGHV2-26*01

253 sequences assigned
233 (92.1%) exact matches, in which:
232 unique CDR3
6 unique J



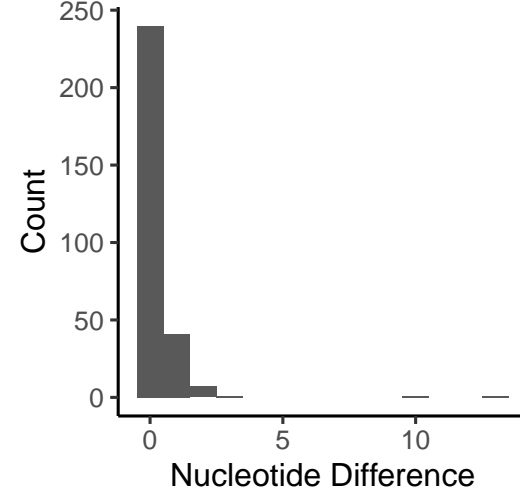
IGHV3-7*03

442 sequences assigned
360 (81.4%) exact matches, in which:
345 unique CDR3
6 unique J



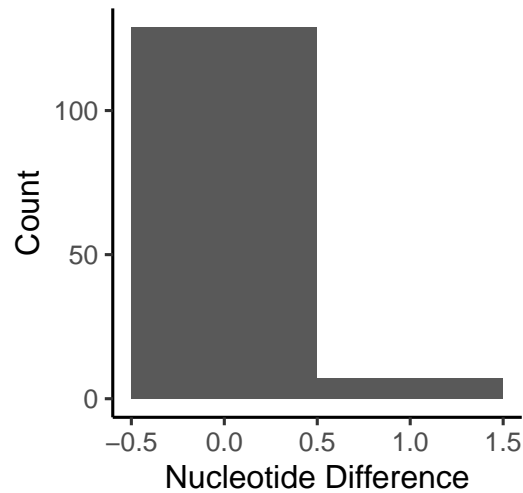
IGHV3-11*06

291 sequences assigned
240 (82.5%) exact matches, in which:
232 unique CDR3
6 unique J



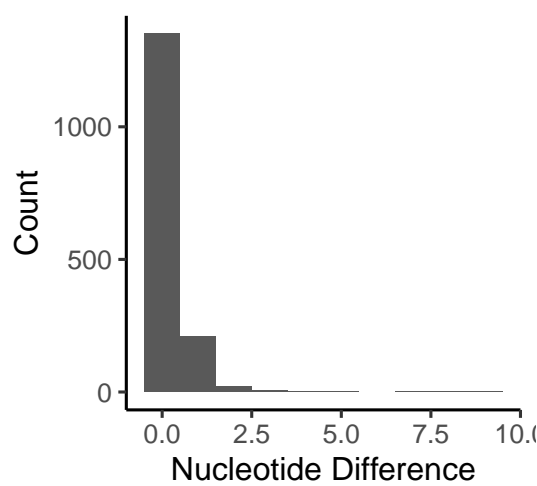
IGHV2-70*01

136 sequences assigned
129 (94.9%) exact matches, in which:
127 unique CDR3
6 unique J



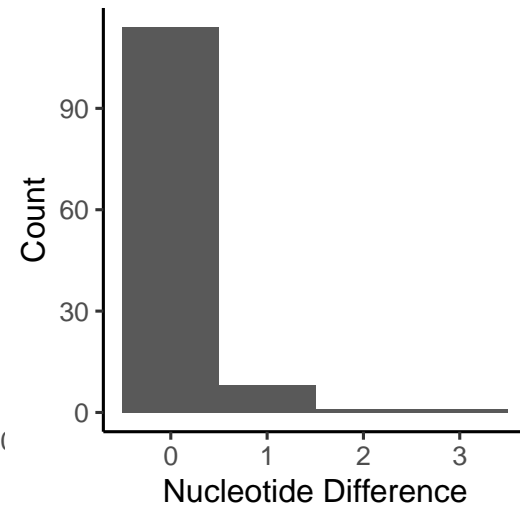
IGHV3-9*01

1593 sequences assigned
1351 (84.8%) exact matches, in which:
1265 unique CDR3
6 unique J



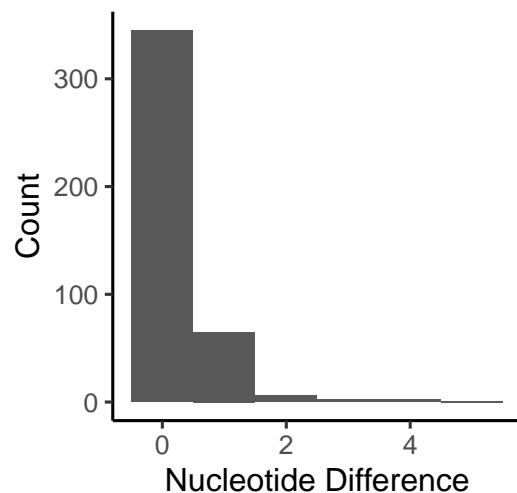
IGHV3-13*01

124 sequences assigned
114 (91.9%) exact matches, in which:
113 unique CDR3
6 unique J



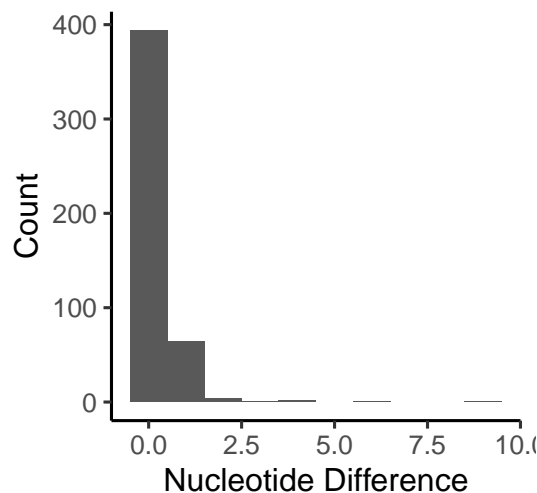
IGHV3-7*01

422 sequences assigned
345 (81.8%) exact matches, in which:
329 unique CDR3
7 unique J



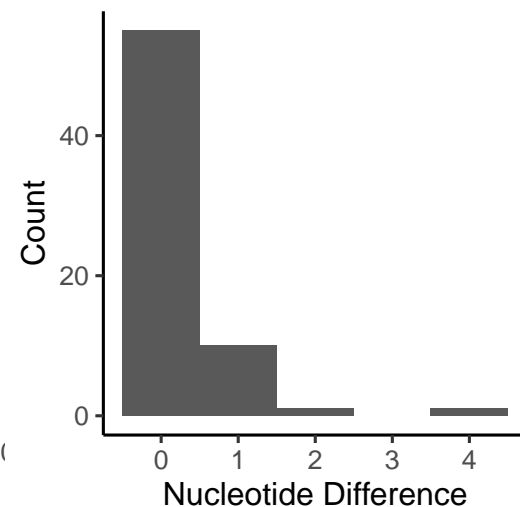
IGHV3-11*01

467 sequences assigned
394 (84.4%) exact matches, in which:
379 unique CDR3
6 unique J



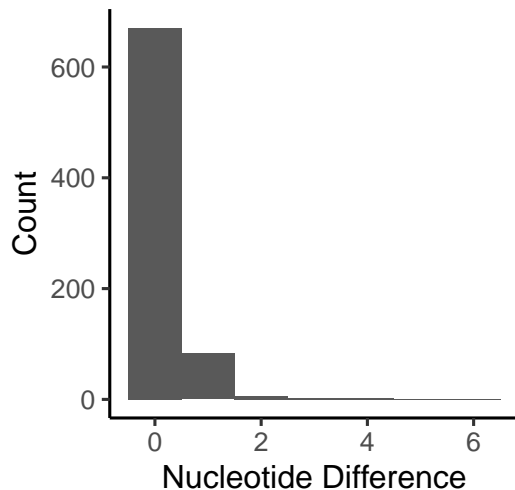
IGHV3-13*05

67 sequences assigned
55 (82.1%) exact matches, in which:
54 unique CDR3
4 unique J



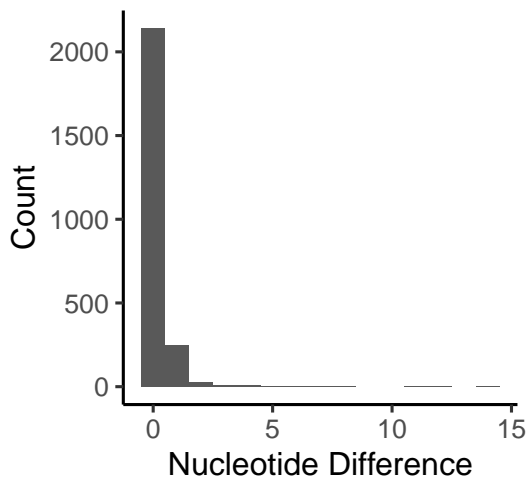
IGHV3–15*01

768 sequences assigned
671 (87.4%) exact matches, in which:
650 unique CDR3
7 unique J



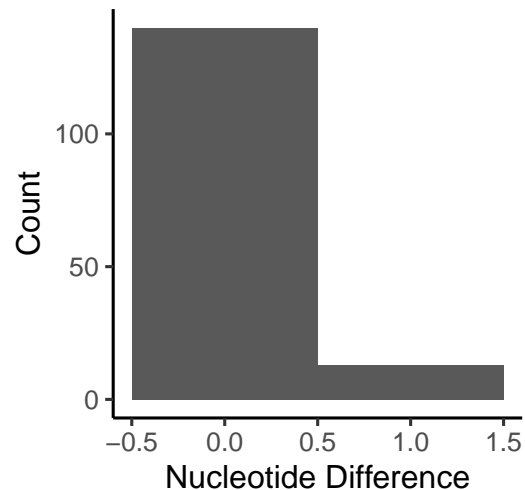
IGHV3–21*01

2446 sequences assigned
2140 (87.5%) exact matches, in which:
2018 unique CDR3
7 unique J



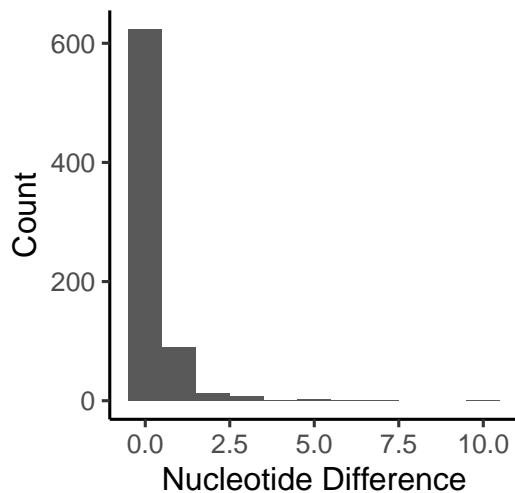
IGHV3–43*01

153 sequences assigned
140 (91.5%) exact matches, in which:
137 unique CDR3
6 unique J



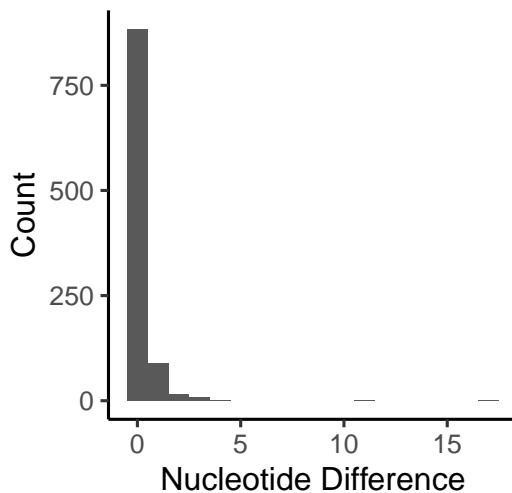
IGHV3–15*07

741 sequences assigned
624 (84.2%) exact matches, in which:
606 unique CDR3
6 unique J



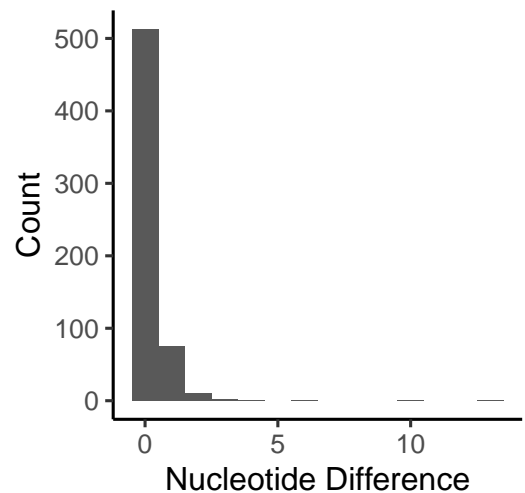
IGHV3–30*01

1002 sequences assigned
884 (88.2%) exact matches, in which:
841 unique CDR3
6 unique J



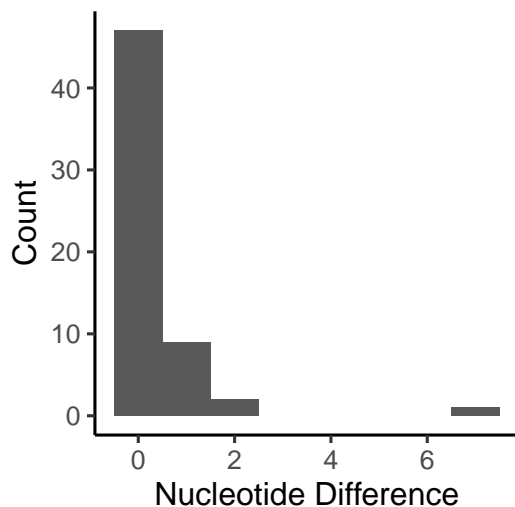
IGHV3–48*02

604 sequences assigned
513 (84.9%) exact matches, in which:
505 unique CDR3
7 unique J



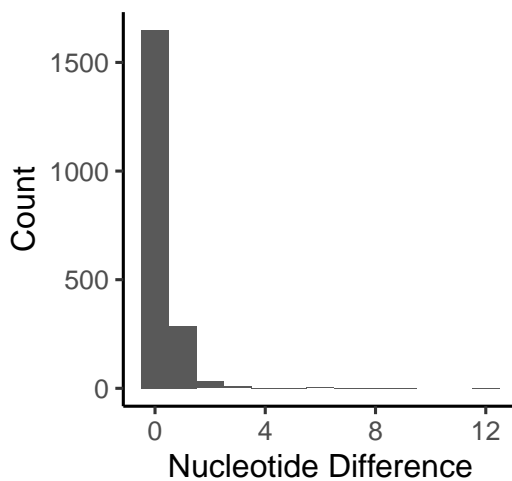
IGHV3–20*04

59 sequences assigned
47 (79.7%) exact matches, in which:
43 unique CDR3
5 unique J



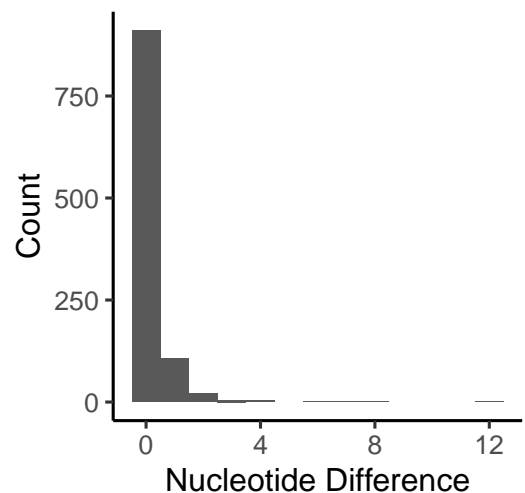
IGHV3–33*01

1986 sequences assigned
1649 (83%) exact matches, in which:
1575 unique CDR3
7 unique J



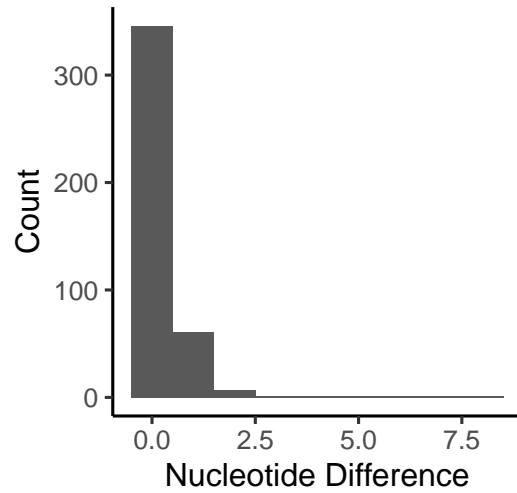
IGHV3–48*03

1052 sequences assigned
911 (86.6%) exact matches, in which:
873 unique CDR3
7 unique J



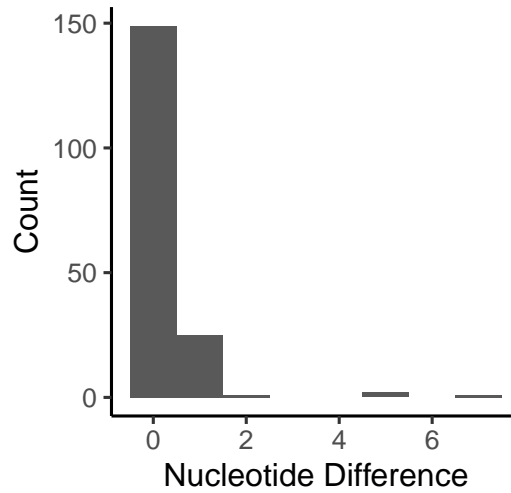
IGHV3-49*04

421 sequences assigned
346 (82.2%) exact matches, in which:
328 unique CDR3
5 unique J



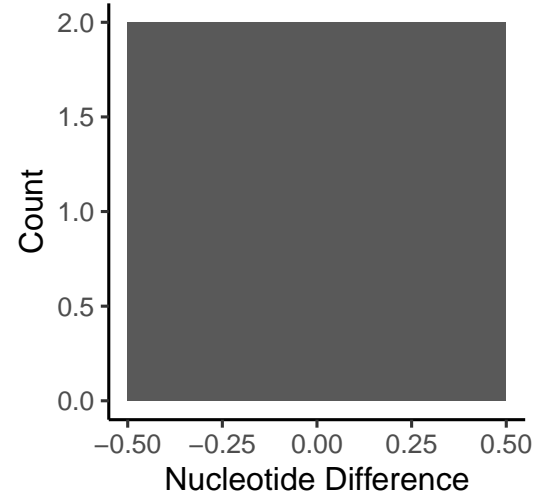
IGHV3-53*02

178 sequences assigned
149 (83.7%) exact matches, in which:
146 unique CDR3
6 unique J



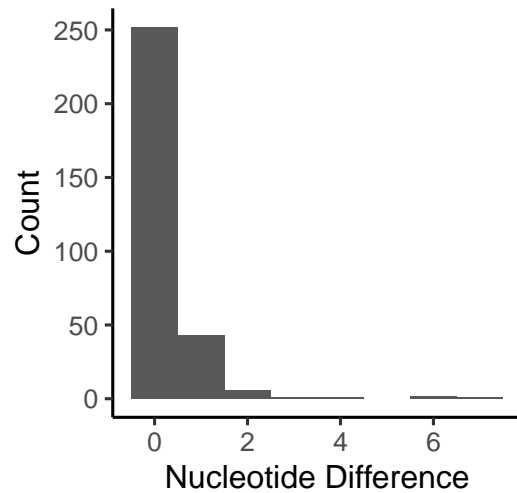
IGHV3-66*03

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



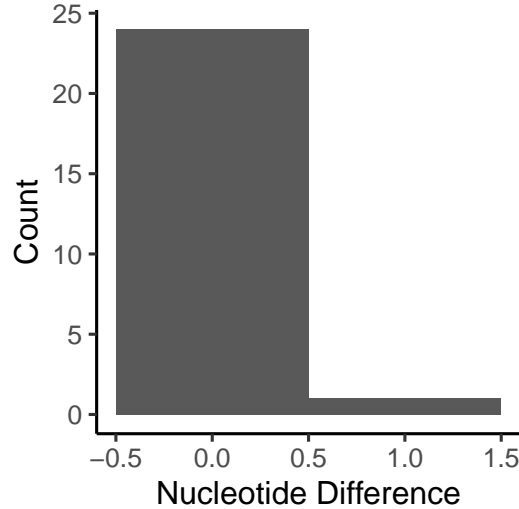
IGHV3-49*05

306 sequences assigned
252 (82.4%) exact matches, in which:
243 unique CDR3
6 unique J



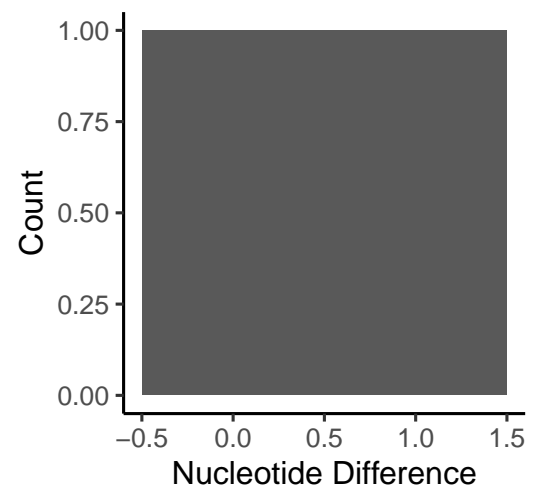
IGHV3-64*02

25 sequences assigned
24 (96%) exact matches, in which:
24 unique CDR3
5 unique J



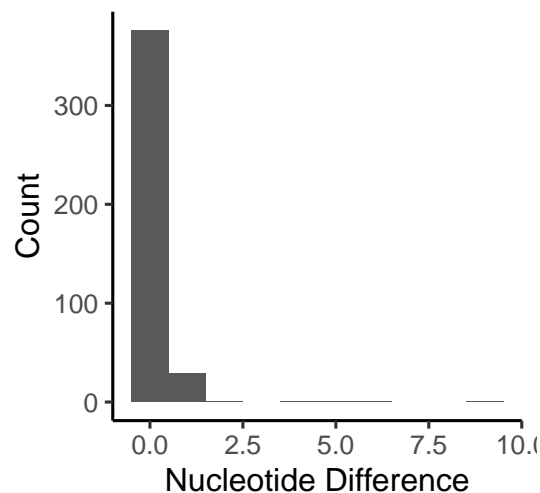
IGHV3-66*04

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



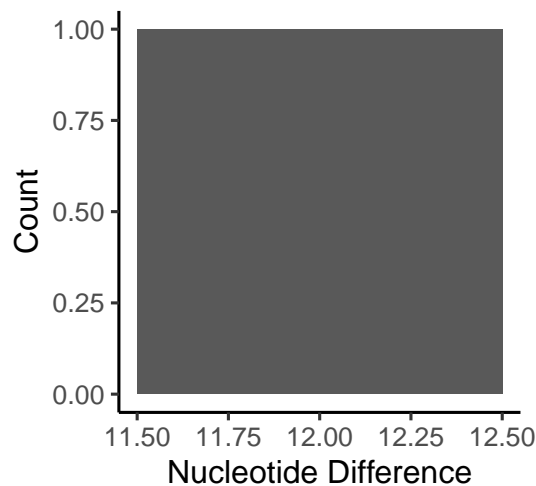
IGHV3-53*01

410 sequences assigned
376 (91.7%) exact matches, in which:
364 unique CDR3
6 unique J



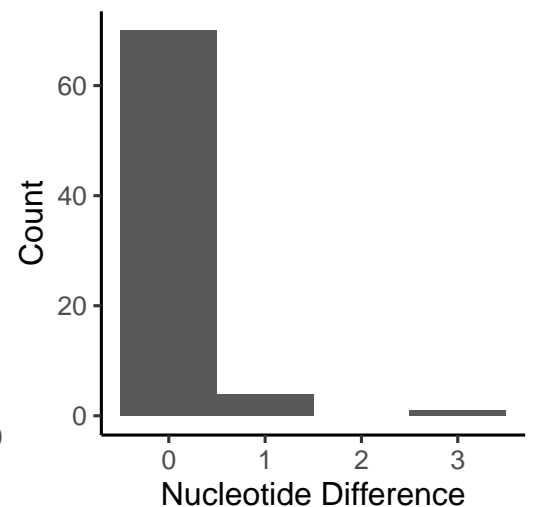
IGHV3-66*01

1 sequences assigned
No exact matches.



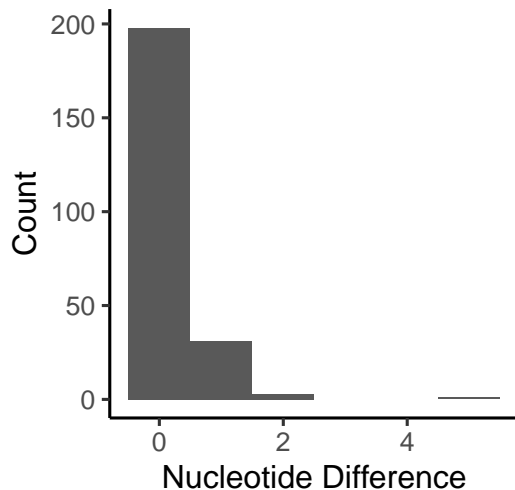
IGHV3-72*01

75 sequences assigned
70 (93.3%) exact matches, in which:
69 unique CDR3
7 unique J



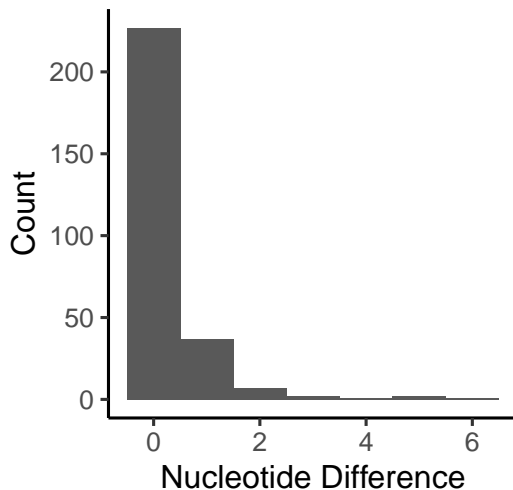
IGHV3–73*02

233 sequences assigned
198 (85%) exact matches, in which:
189 unique CDR3
7 unique J



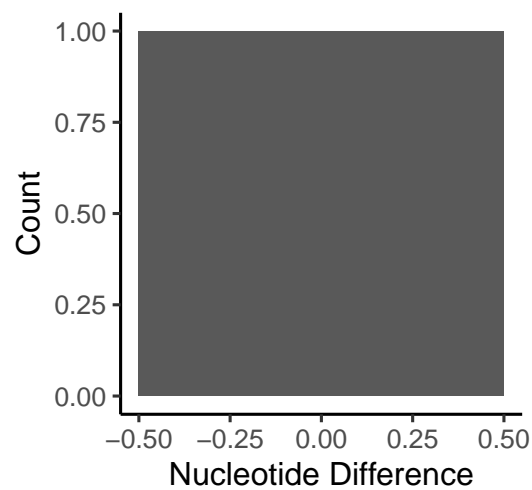
IGHV3–64D*06

277 sequences assigned
227 (81.9%) exact matches, in which:
221 unique CDR3
6 unique J



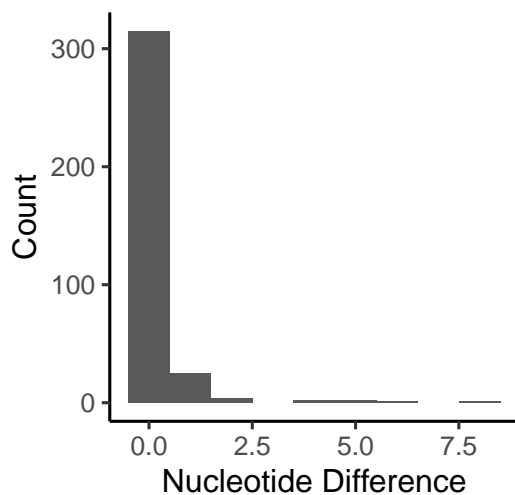
IGHV4–28*02

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



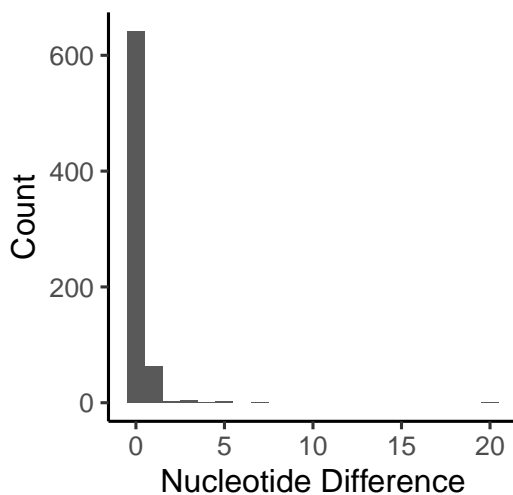
IGHV3–74*01

350 sequences assigned
315 (90%) exact matches, in which:
309 unique CDR3
7 unique J



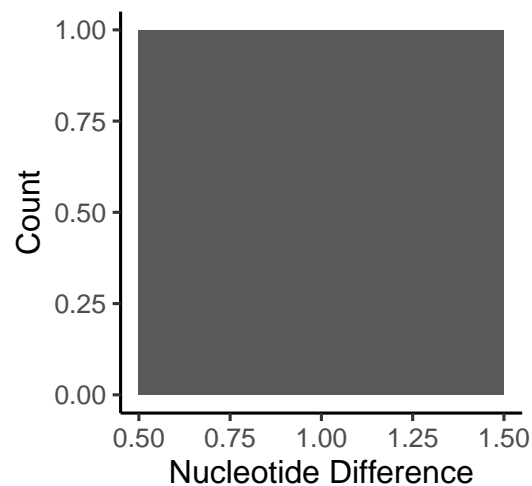
IGHV4–4*02

717 sequences assigned
642 (89.5%) exact matches, in which:
628 unique CDR3
7 unique J



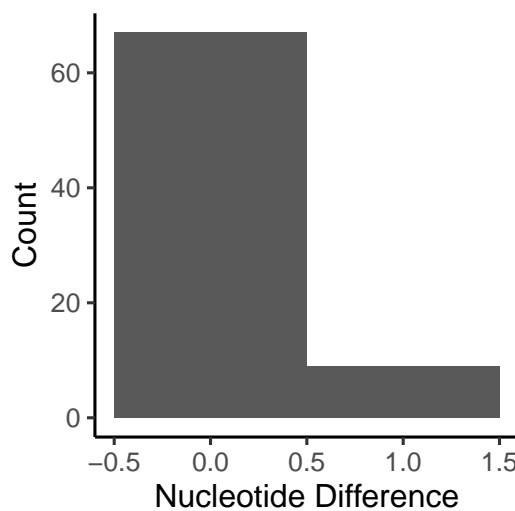
IGHV4–30–2*03

1 sequences assigned
No exact matches.



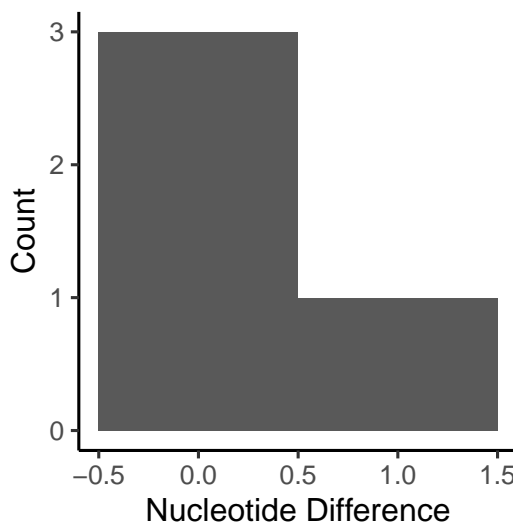
IGHV3–43D*04

76 sequences assigned
67 (88.2%) exact matches, in which:
66 unique CDR3
5 unique J



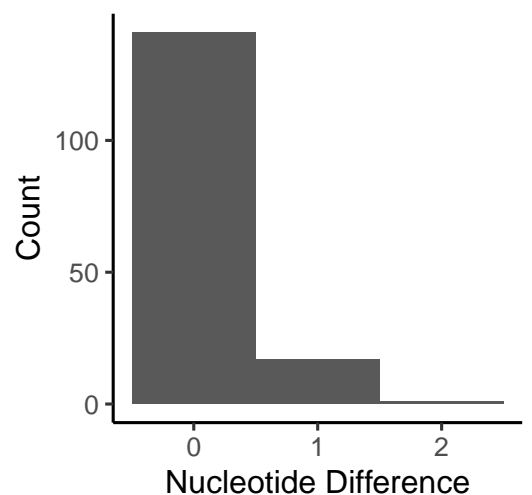
IGHV4–28*01

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



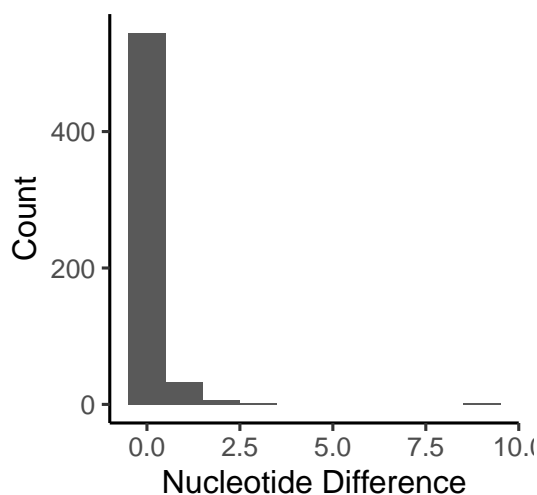
IGHV4–31*01

159 sequences assigned
141 (88.7%) exact matches, in which:
139 unique CDR3
5 unique J



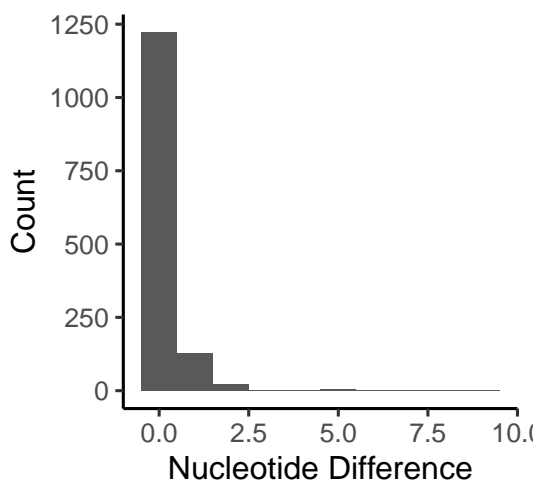
IGHV4–31*03

589 sequences assigned
545 (92.5%) exact matches, in which:
534 unique CDR3
7 unique J



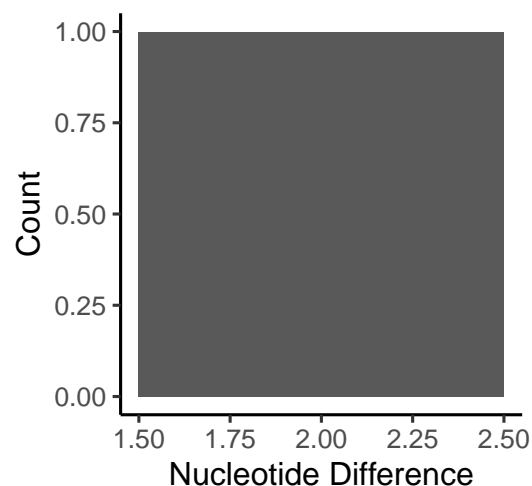
IGHV4–39*01

1387 sequences assigned
1222 (88.1%) exact matches, in which:
1189 unique CDR3
6 unique J



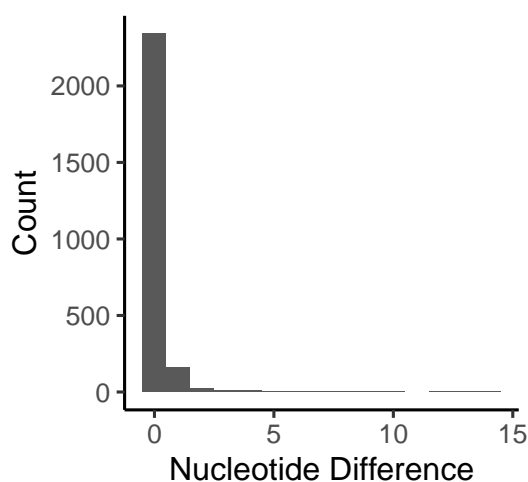
IGHV1/OR15–4*01

1 sequences assigned
No exact matches.



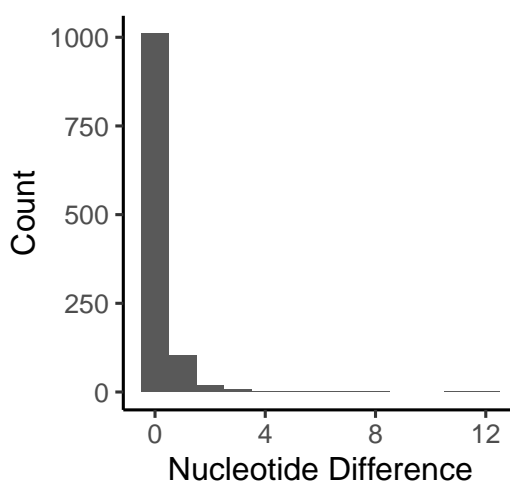
IGHV4–34*01

2573 sequences assigned
2341 (91%) exact matches, in which:
2254 unique CDR3
7 unique J



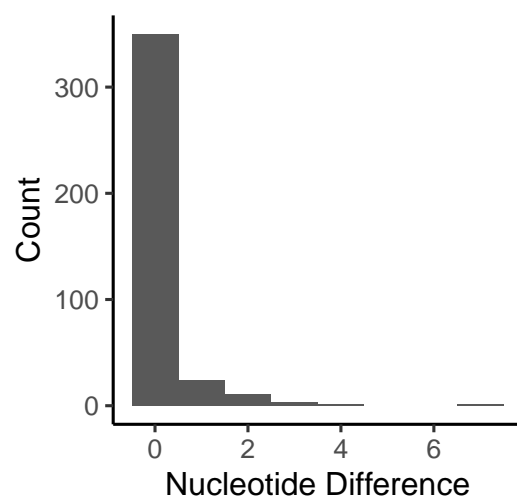
IGHV4–59*01

1151 sequences assigned
1010 (87.7%) exact matches, in which:
987 unique CDR3
7 unique J



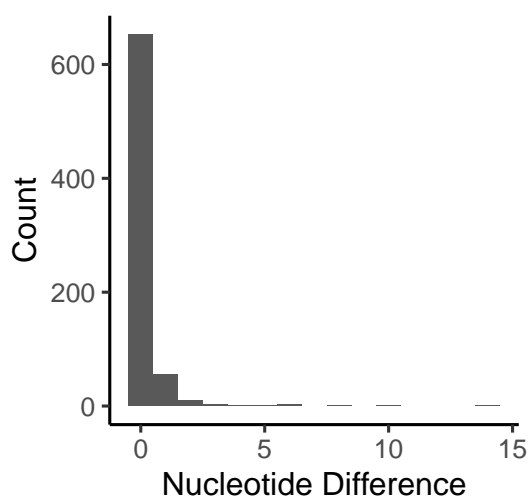
IGHV5–10–1*03

390 sequences assigned
350 (89.7%) exact matches, in which:
344 unique CDR3
7 unique J



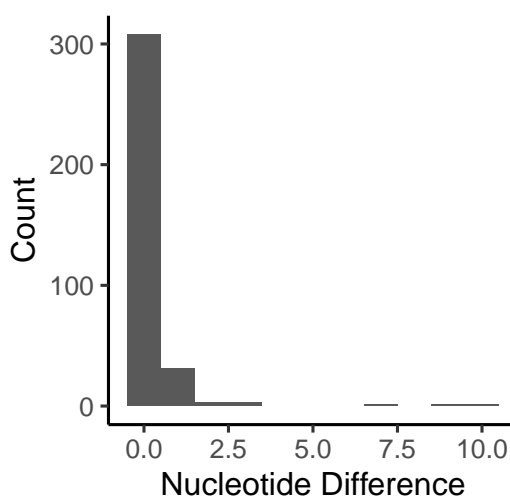
IGHV4–38–2*02_A70G

728 sequences assigned
653 (89.7%) exact matches, in which:
627 unique CDR3
6 unique J



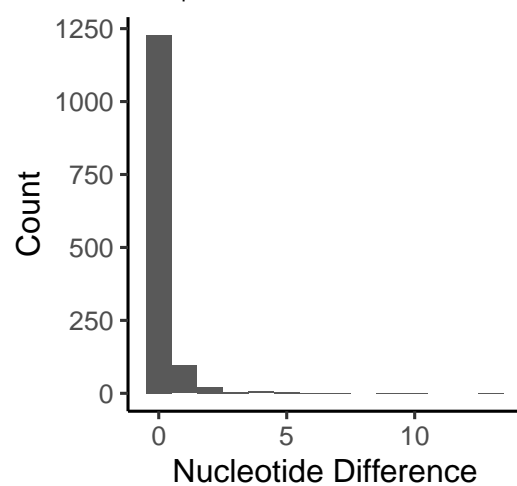
IGHV4–61*01

348 sequences assigned
308 (88.5%) exact matches, in which:
302 unique CDR3
7 unique J



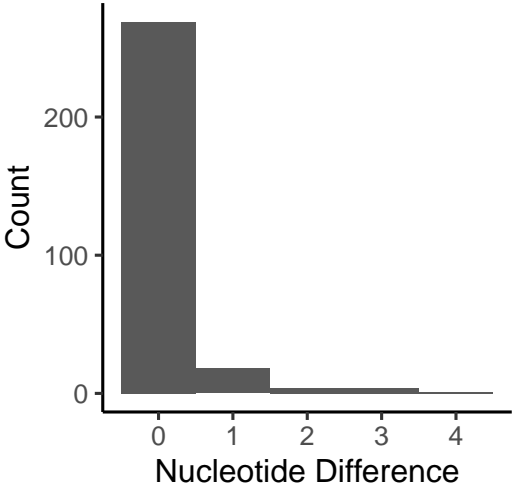
IGHV5–51*01

1370 sequences assigned
1228 (89.6%) exact matches, in which:
1189 unique CDR3
7 unique J



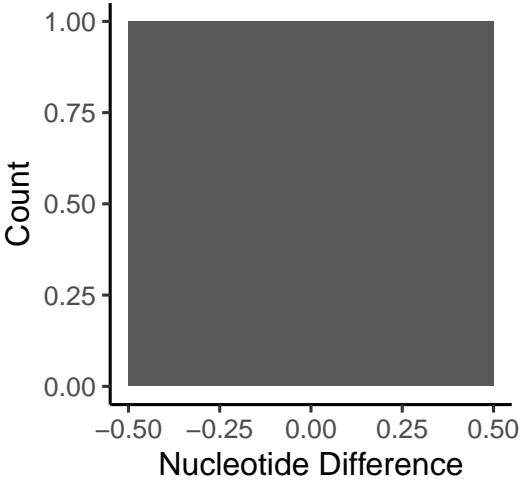
IGHV6-1*01

296 sequences assigned
269 (90.9%) exact matches, in which:
260 unique CDR3
7 unique J



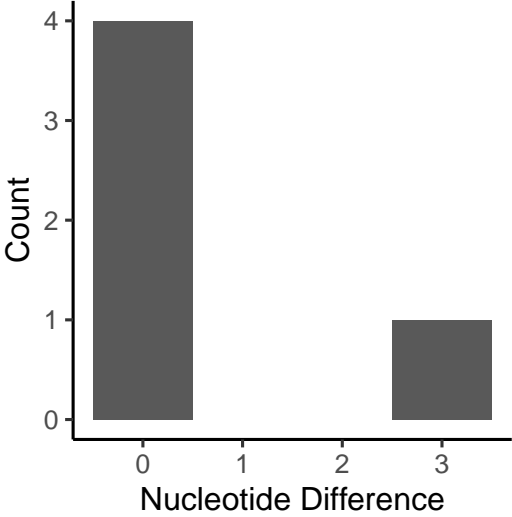
IGHV3/OR16-12*01

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

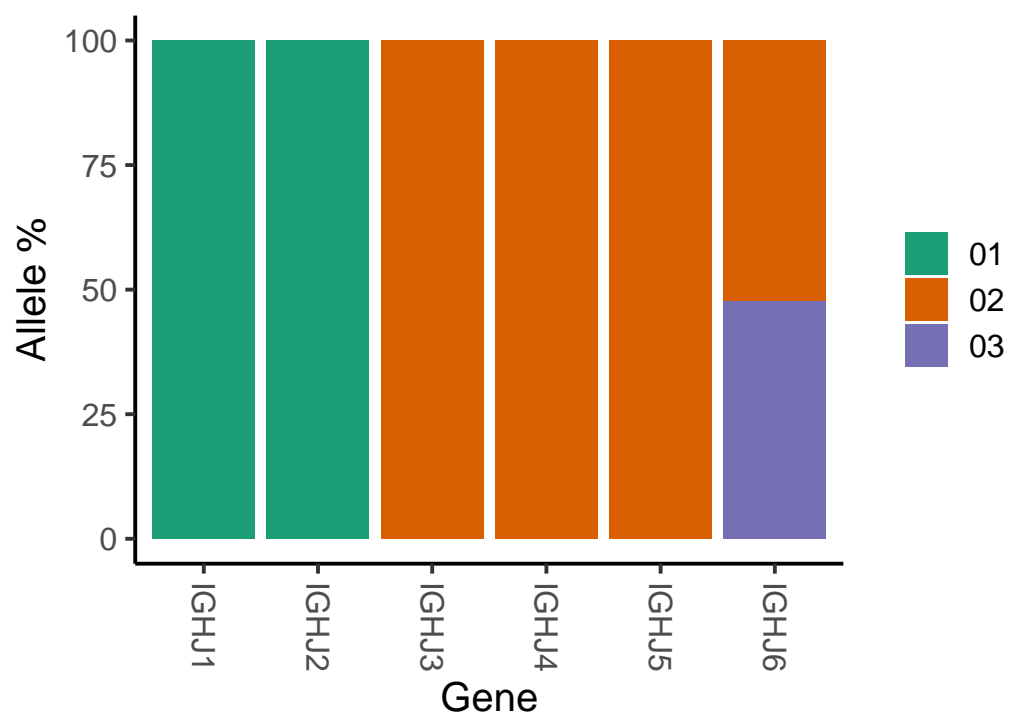


IGHV7-4-1*01

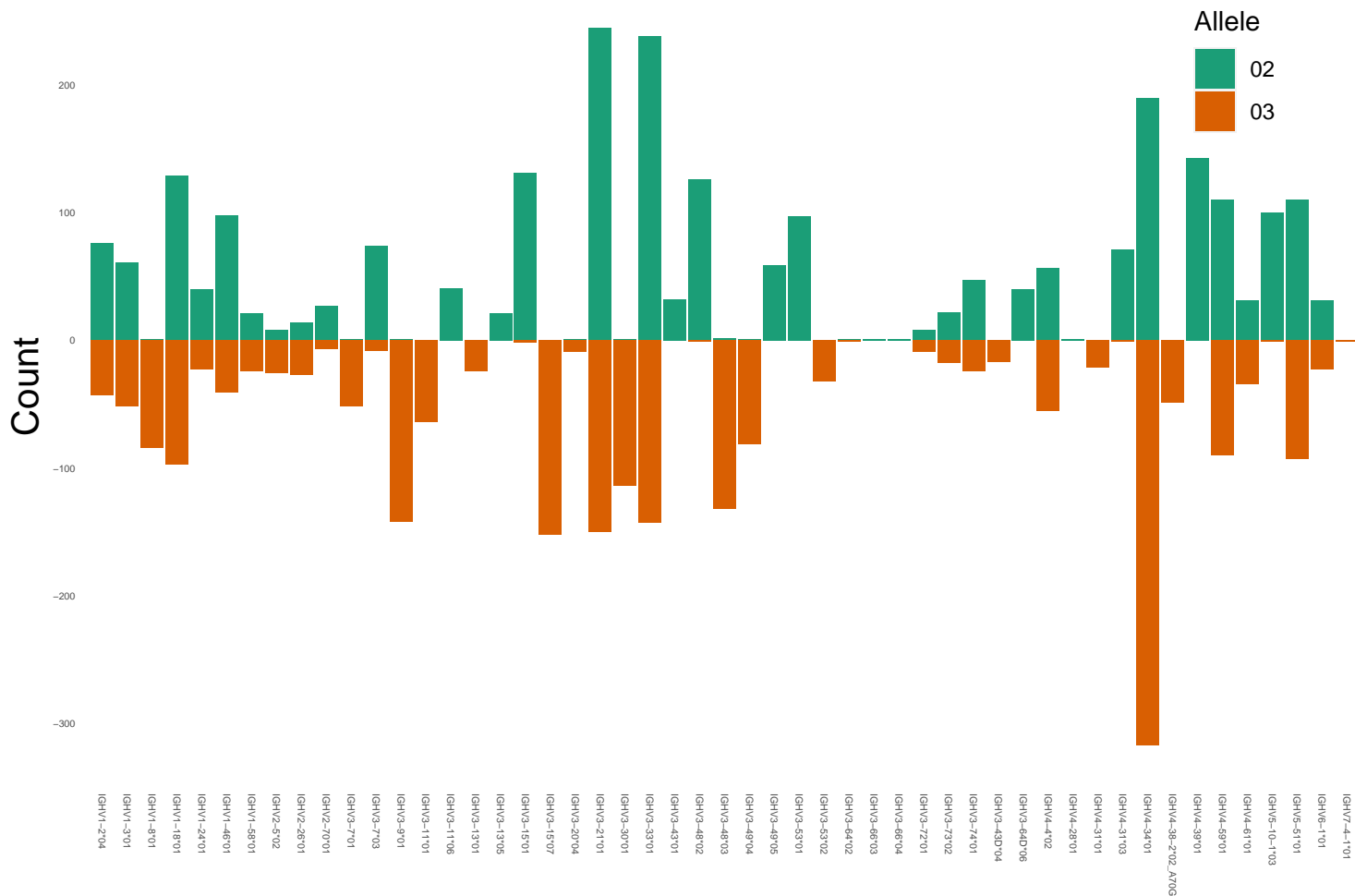
5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
3 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.