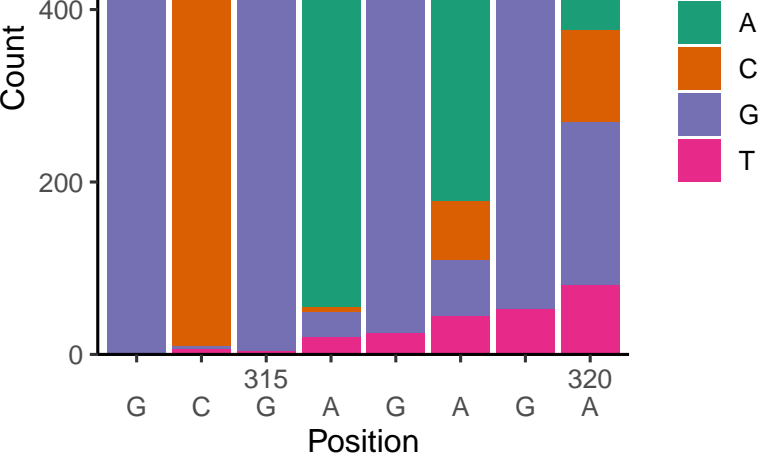
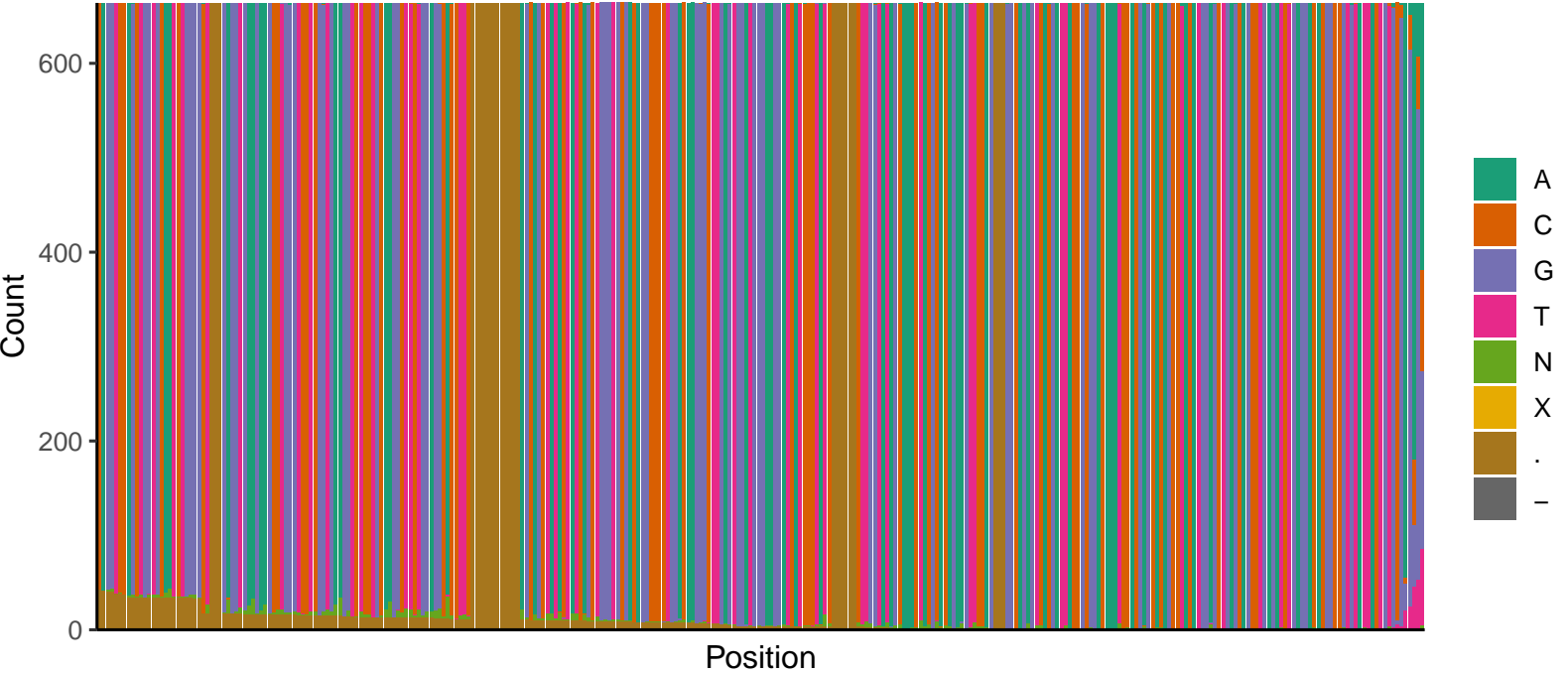


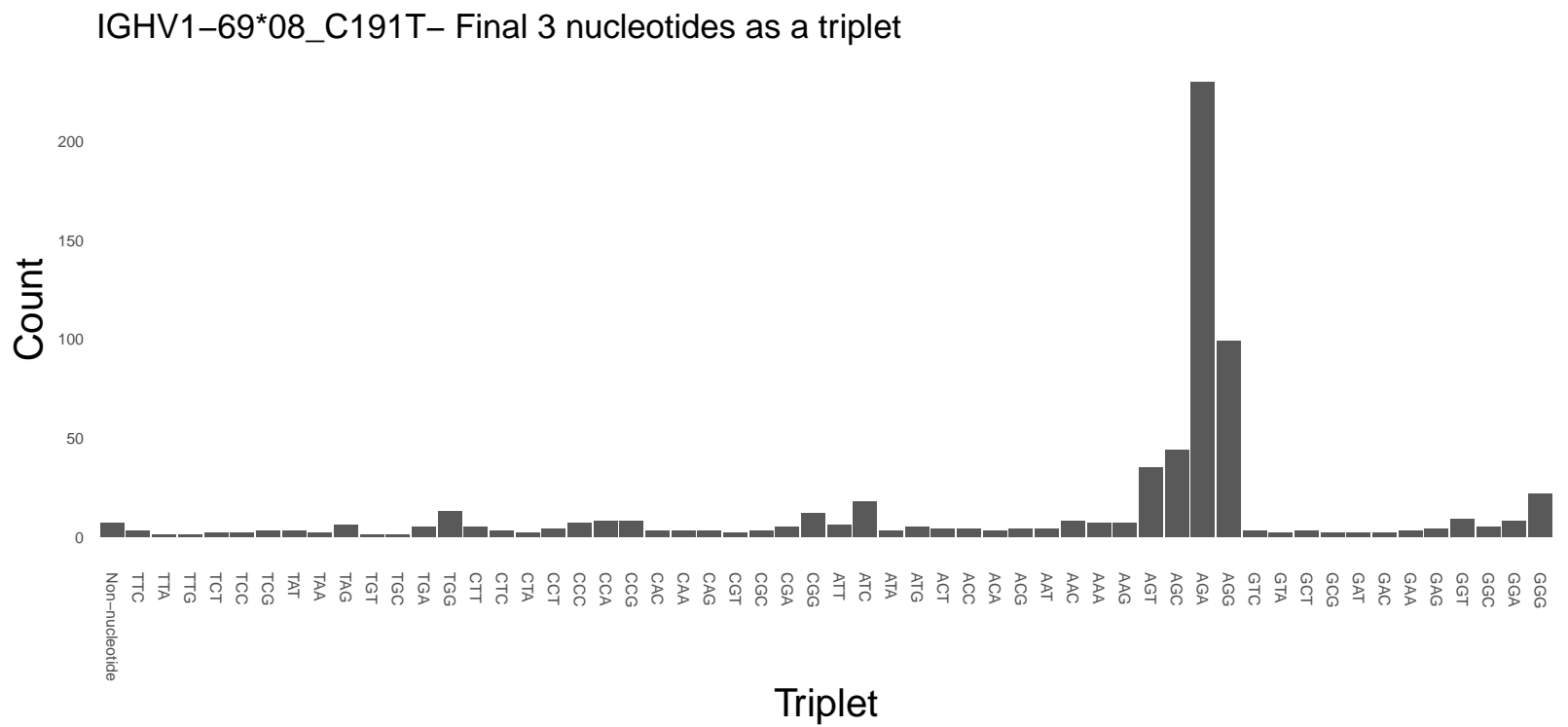
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

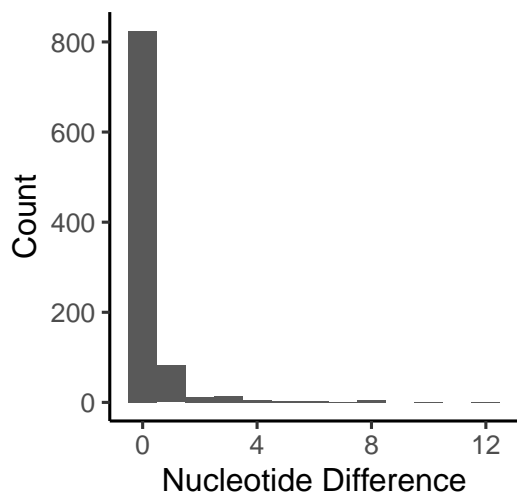


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



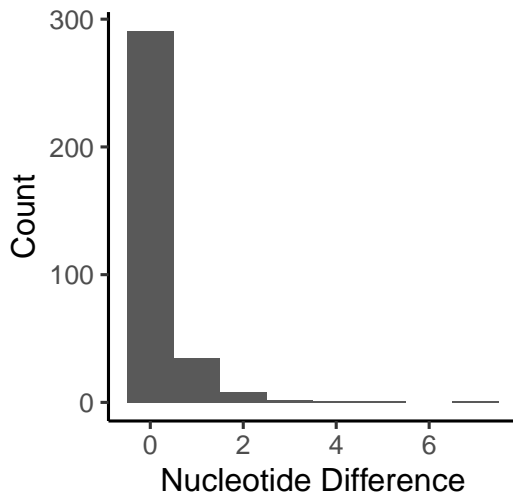
IGHV1-2*02

956 sequences assigned
825 (86.3%) exact matches, in which:
785 unique CDR3
6 unique J



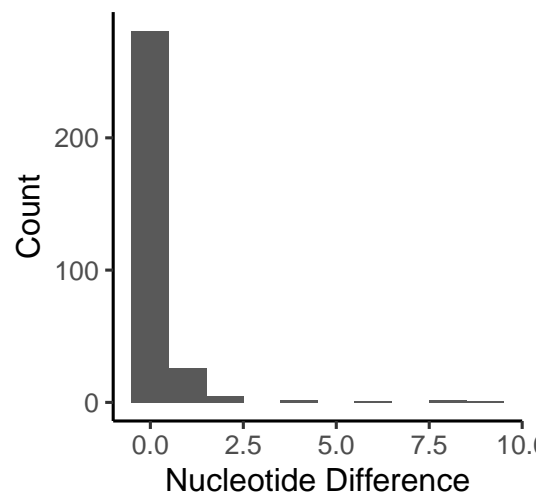
IGHV1-8*03

339 sequences assigned
291 (85.8%) exact matches, in which:
277 unique CDR3
6 unique J



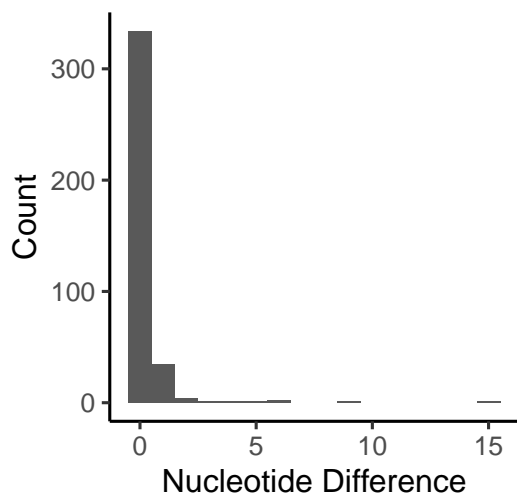
IGHV1-24*01

318 sequences assigned
281 (88.4%) exact matches, in which:
262 unique CDR3
6 unique J



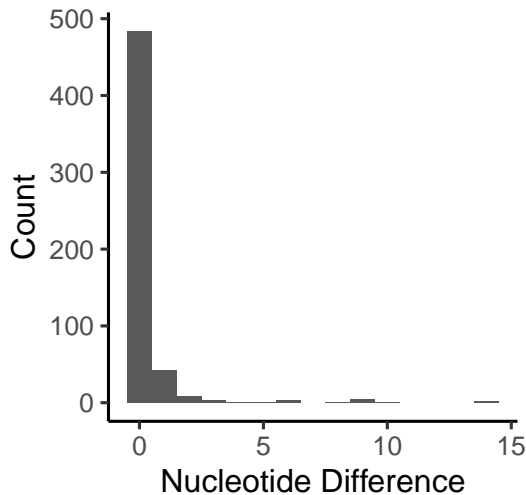
IGHV1-2*04

380 sequences assigned
334 (87.9%) exact matches, in which:
318 unique CDR3
6 unique J



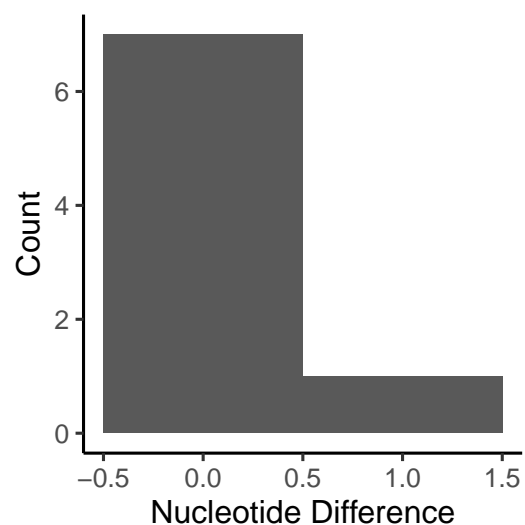
IGHV1-18*01

550 sequences assigned
484 (88%) exact matches, in which:
459 unique CDR3
6 unique J



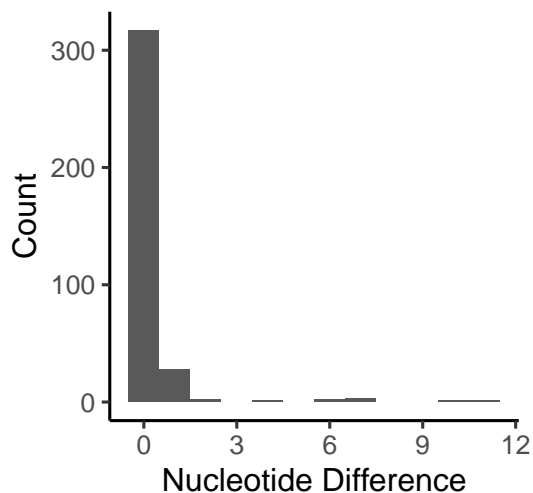
IGHV1-45*02

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



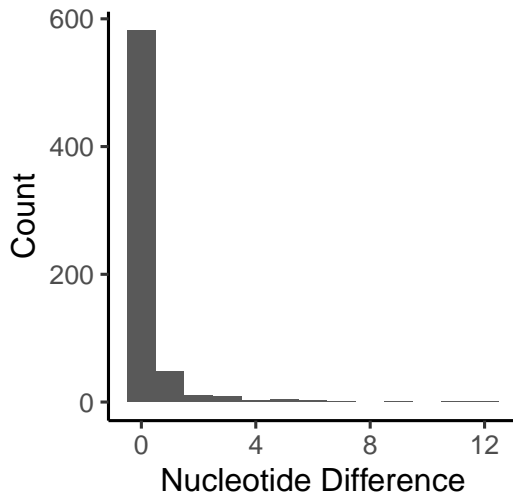
IGHV1-3*01

356 sequences assigned
317 (89%) exact matches, in which:
305 unique CDR3
6 unique J



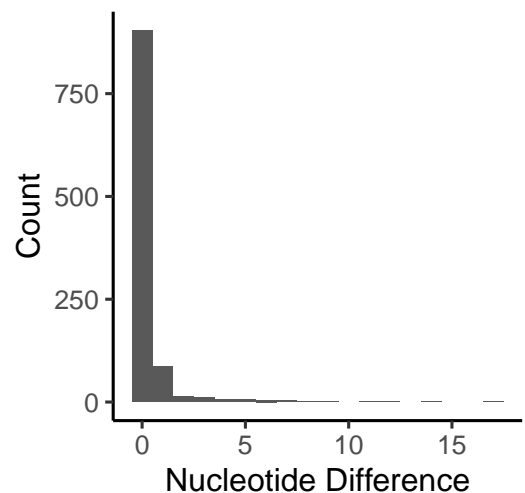
IGHV1-18*04

660 sequences assigned
582 (88.2%) exact matches, in which:
551 unique CDR3
6 unique J



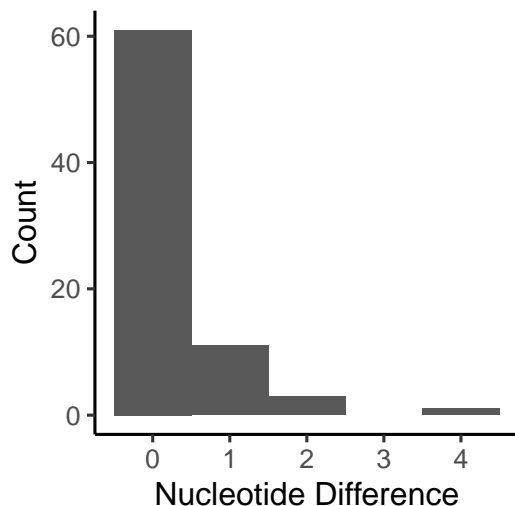
IGHV1-46*01

1046 sequences assigned
904 (86.4%) exact matches, in which:
866 unique CDR3
6 unique J



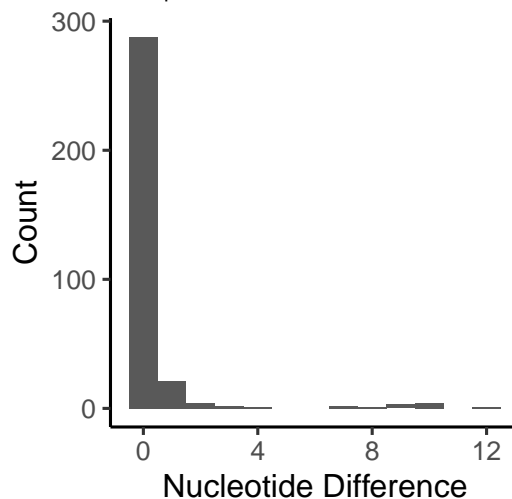
IGHV1-58*02

76 sequences assigned
61 (80.3%) exact matches, in which:
56 unique CDR3
5 unique J



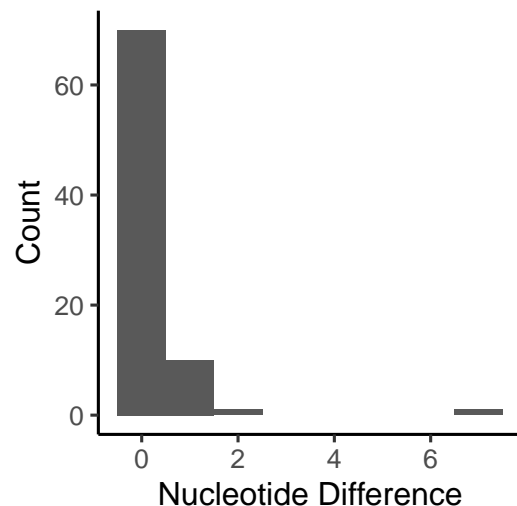
IGHV2-5*01

327 sequences assigned
288 (88.1%) exact matches, in which:
272 unique CDR3
6 unique J



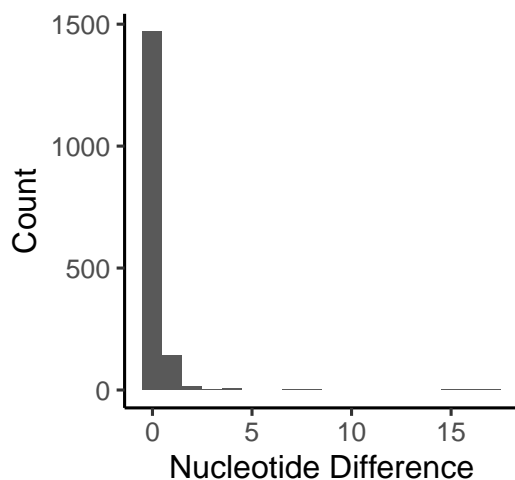
IGHV2-70*01

82 sequences assigned
70 (85.4%) exact matches, in which:
70 unique CDR3
5 unique J



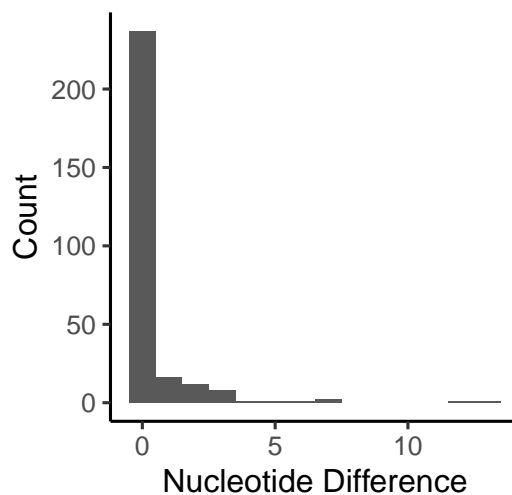
IGHV1-69*01

1641 sequences assigned
1469 (89.5%) exact matches, in which:
1364 unique CDR3
6 unique J



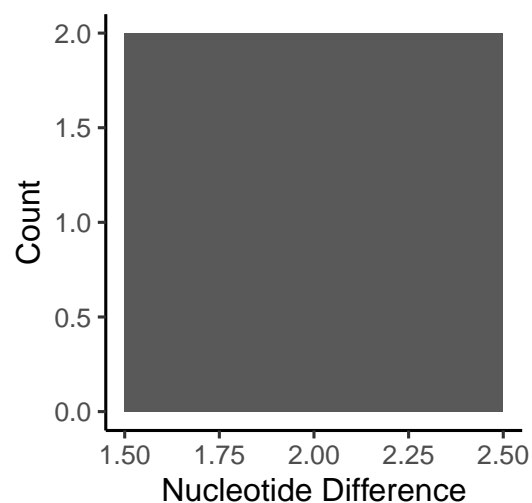
IGHV2-5*02

280 sequences assigned
237 (84.6%) exact matches, in which:
224 unique CDR3
6 unique J



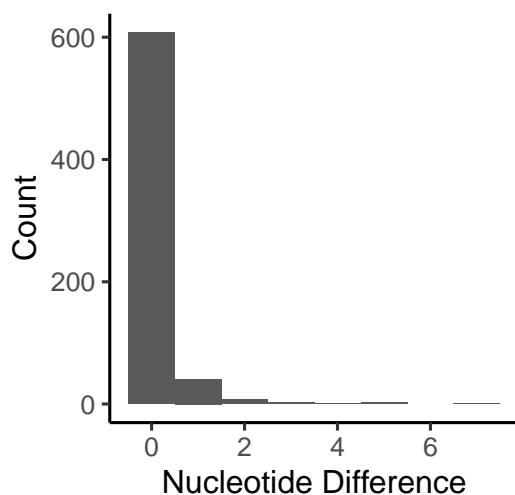
IGHV2-70D*14

2 sequences assigned
No exact matches.



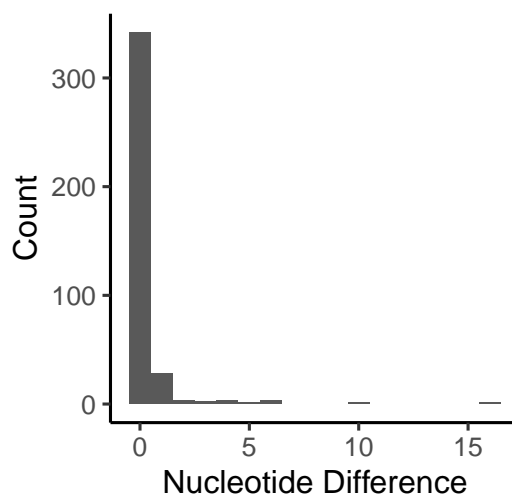
IGHV1-69*08_C191T

664 sequences assigned
608 (91.6%) exact matches, in which:
575 unique CDR3
6 unique J



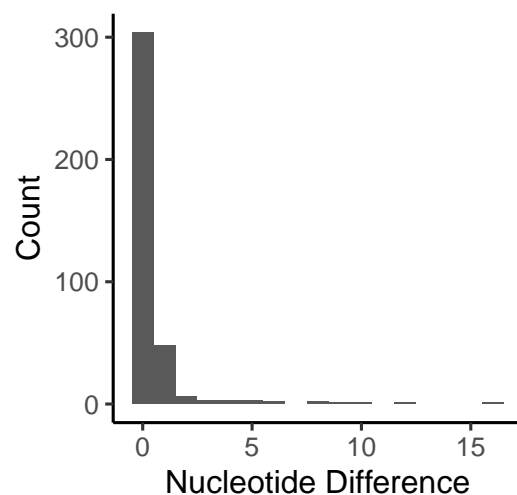
IGHV2-26*01

384 sequences assigned
342 (89.1%) exact matches, in which:
337 unique CDR3
6 unique J



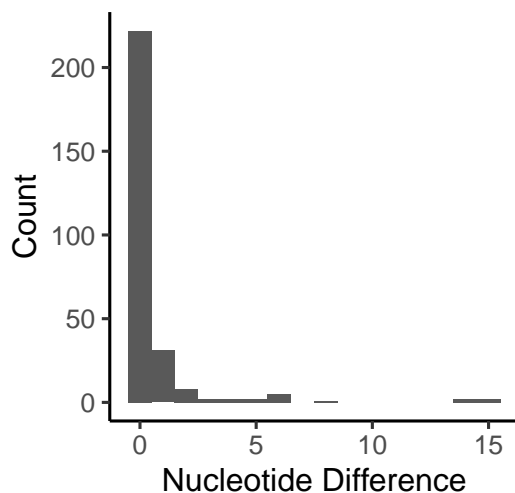
IGHV3-7*01

376 sequences assigned
304 (80.9%) exact matches, in which:
293 unique CDR3
6 unique J



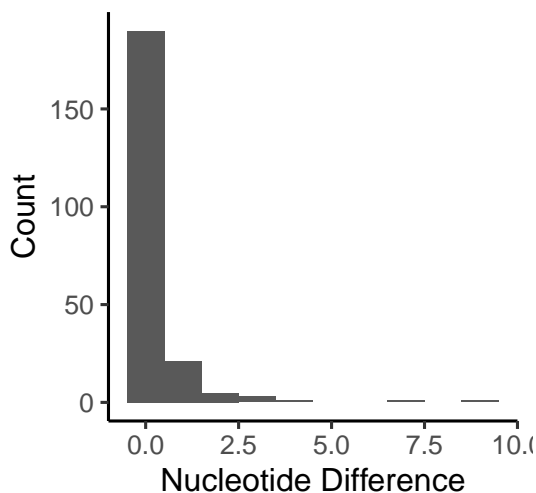
IGHV3-7*03

277 sequences assigned
222 (80.1%) exact matches, in which:
216 unique CDR3
6 unique J



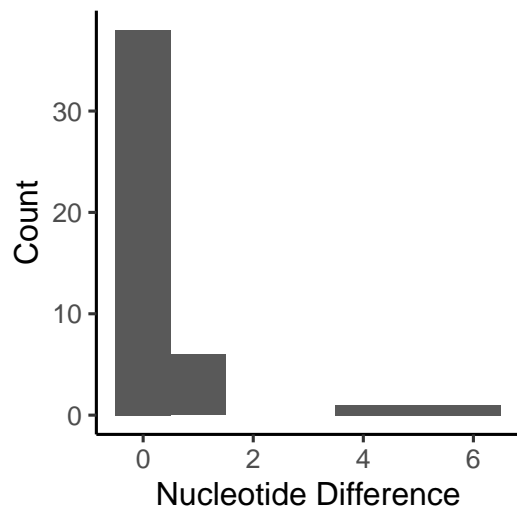
IGHV3-11*06

222 sequences assigned
190 (85.6%) exact matches, in which:
182 unique CDR3
6 unique J



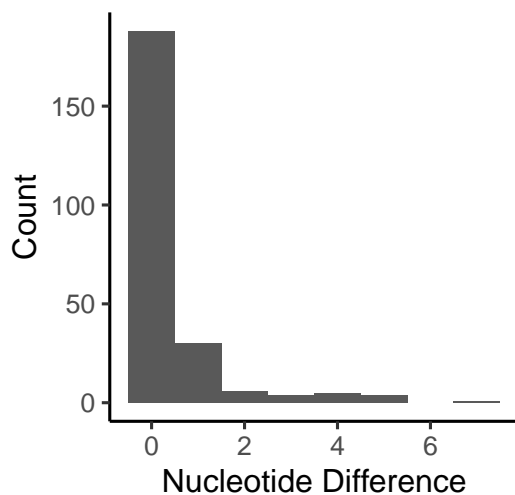
IGHV3-20*01

47 sequences assigned
38 (80.9%) exact matches, in which:
34 unique CDR3
5 unique J



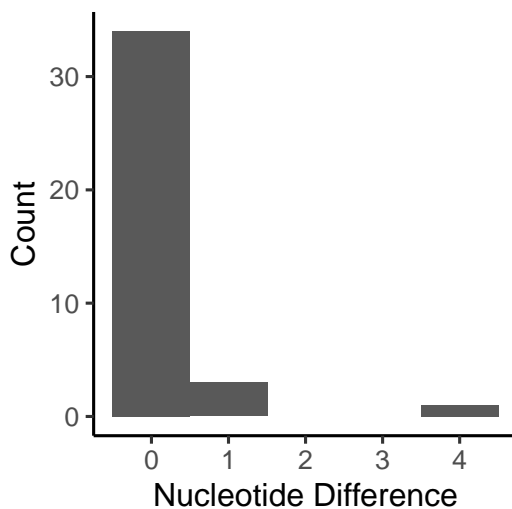
IGHV3-9*03

238 sequences assigned
188 (79%) exact matches, in which:
177 unique CDR3
6 unique J



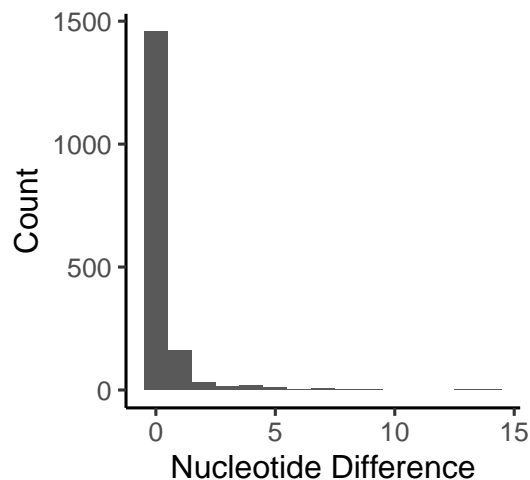
IGHV3-13*05

38 sequences assigned
34 (89.5%) exact matches, in which:
34 unique CDR3
4 unique J



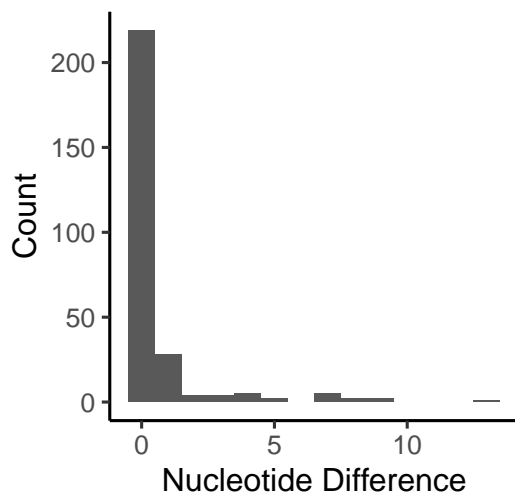
IGHV3-21*01

1707 sequences assigned
1457 (85.4%) exact matches, in which:
1380 unique CDR3
6 unique J



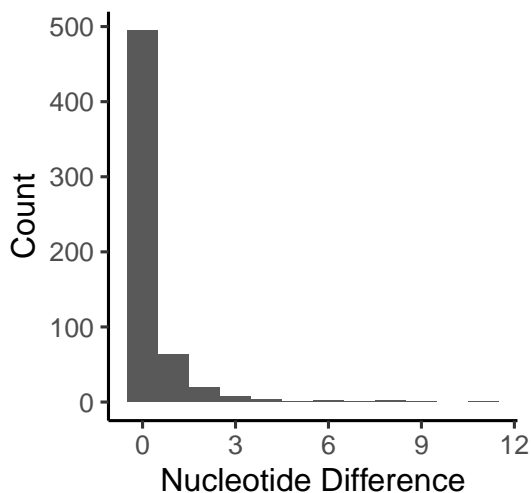
IGHV3-11*04

272 sequences assigned
219 (80.5%) exact matches, in which:
211 unique CDR3
6 unique J



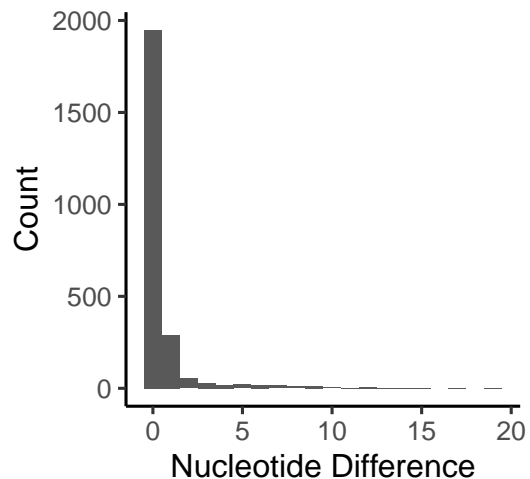
IGHV3-15*01

595 sequences assigned
495 (83.2%) exact matches, in which:
472 unique CDR3
6 unique J



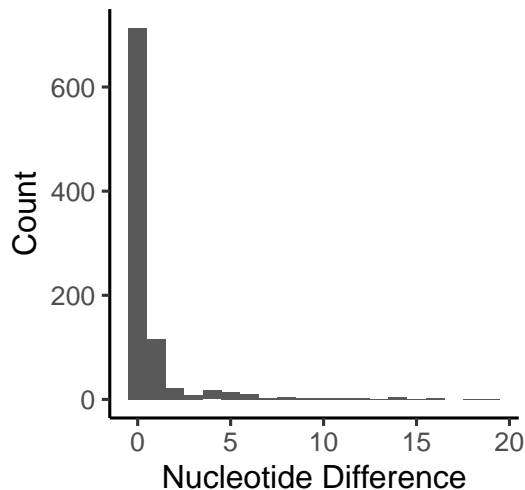
IGHV3-23*01

2437 sequences assigned
1948 (79.9%) exact matches, in which:
1850 unique CDR3
6 unique J



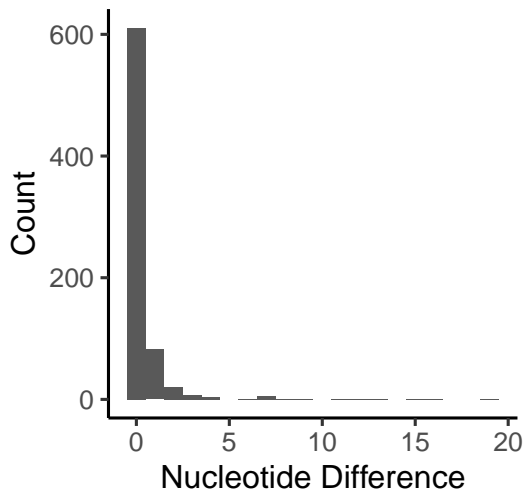
IGHV3–23*04

931 sequences assigned
714 (76.7%) exact matches, in which:
683 unique CDR3
6 unique J



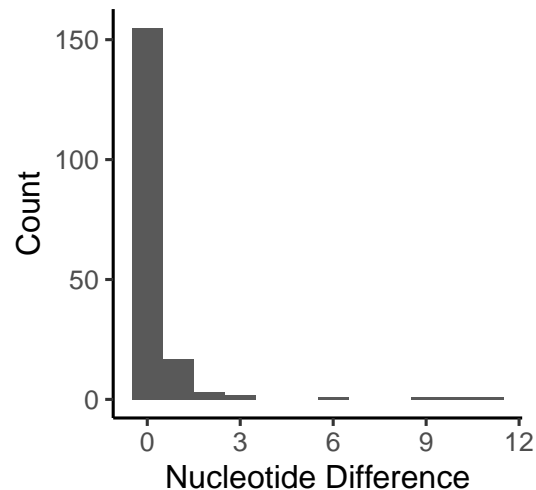
IGHV3–30*04

738 sequences assigned
611 (82.8%) exact matches, in which:
582 unique CDR3
6 unique J



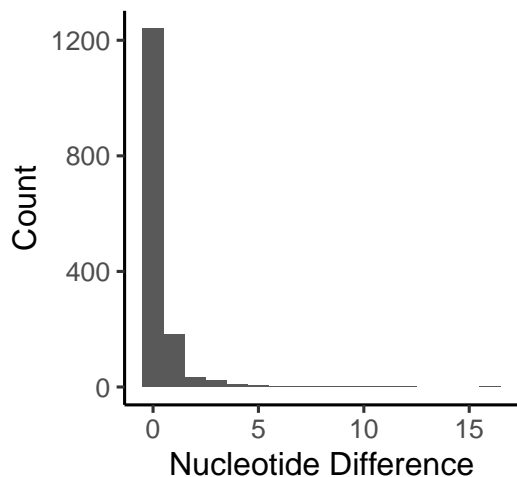
IGHV3–43*01

181 sequences assigned
155 (85.6%) exact matches, in which:
147 unique CDR3
6 unique J



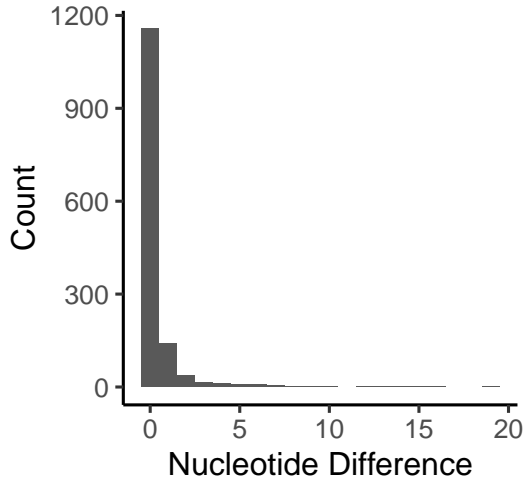
IGHV3–30–3*01

1505 sequences assigned
1240 (82.4%) exact matches, in which:
1184 unique CDR3
6 unique J



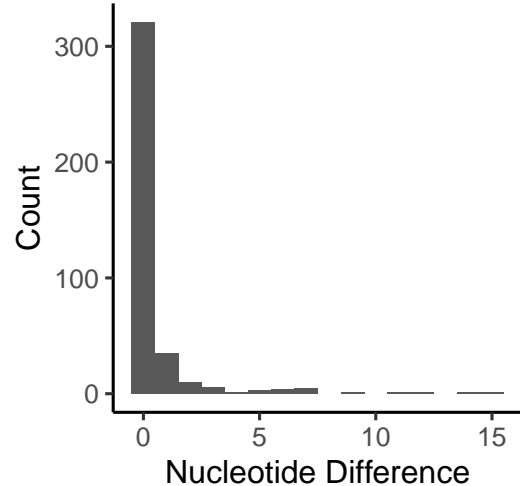
IGHV3–30*18

1402 sequences assigned
1157 (82.5%) exact matches, in which:
1110 unique CDR3
6 unique J



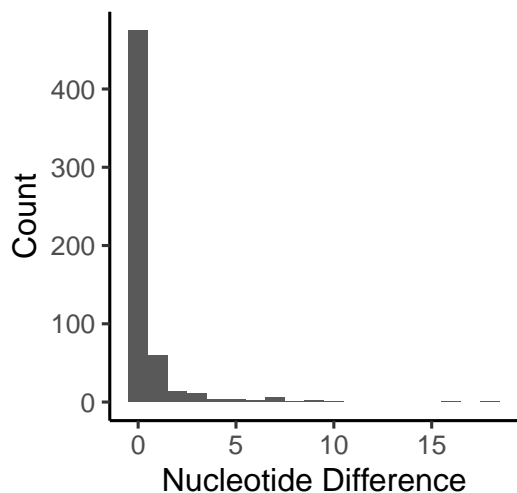
IGHV3–48*02

390 sequences assigned
321 (82.3%) exact matches, in which:
301 unique CDR3
6 unique J



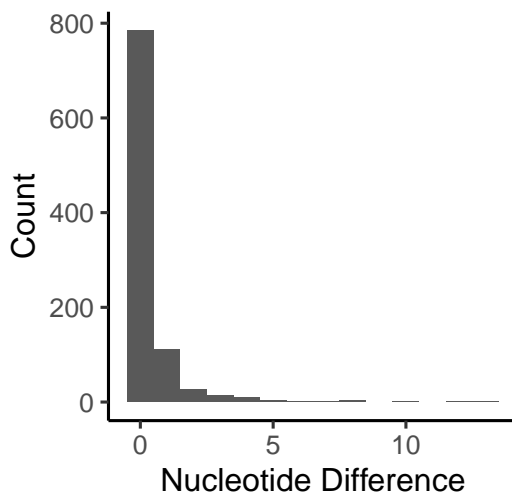
IGHV3–30*02

580 sequences assigned
475 (81.9%) exact matches, in which:
452 unique CDR3
6 unique J



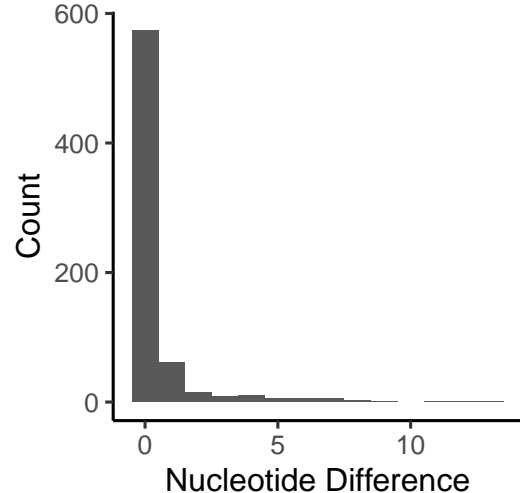
IGHV3–33*01

956 sequences assigned
785 (82.1%) exact matches, in which:
737 unique CDR3
6 unique J



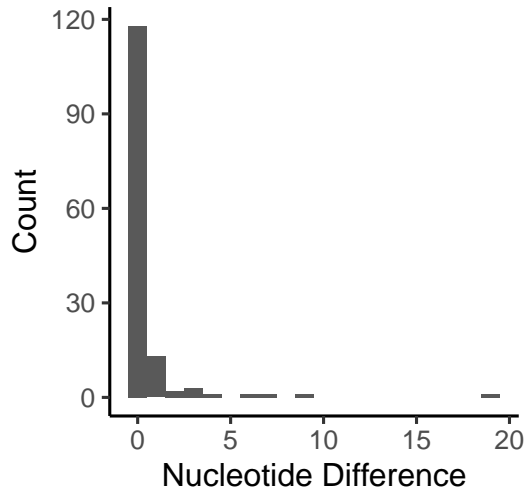
IGHV3–48*03

692 sequences assigned
574 (82.9%) exact matches, in which:
544 unique CDR3
6 unique J



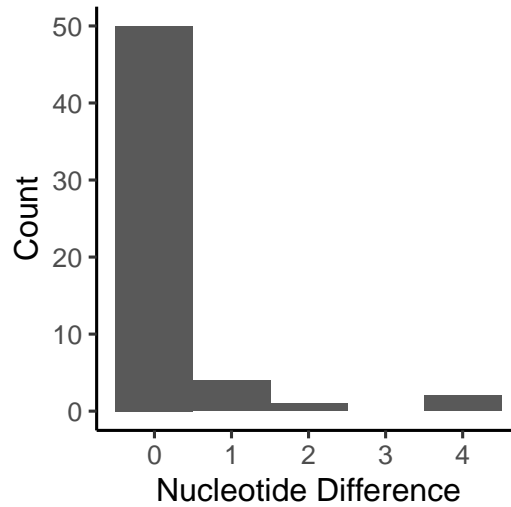
IGHV3-49*03

141 sequences assigned
118 (83.7%) exact matches, in which:
114 unique CDR3
6 unique J



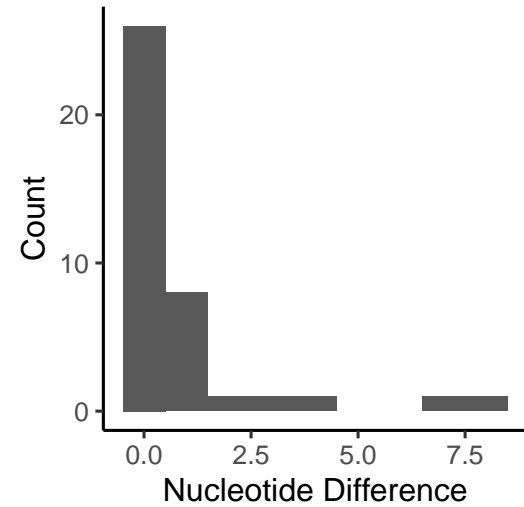
IGHV3-53*04

57 sequences assigned
50 (87.7%) exact matches, in which:
45 unique CDR3
6 unique J



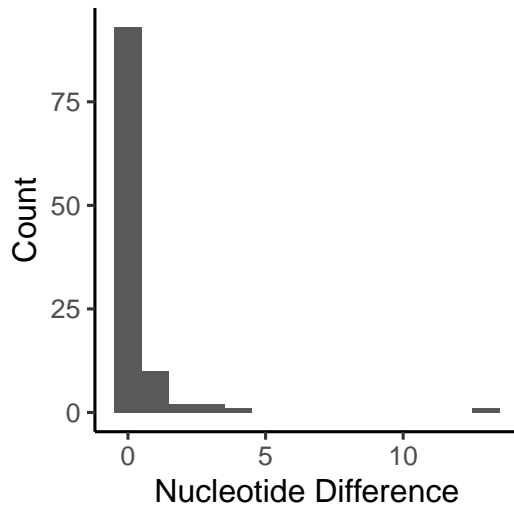
IGHV3-72*01

40 sequences assigned
26 (65%) exact matches, in which:
24 unique CDR3
5 unique J



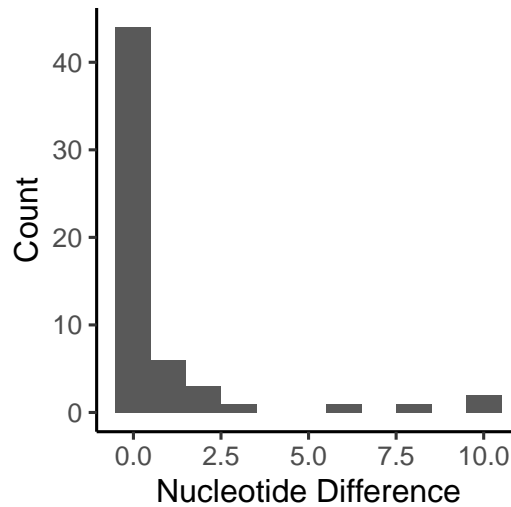
IGHV3-49*05

109 sequences assigned
93 (85.3%) exact matches, in which:
91 unique CDR3
6 unique J



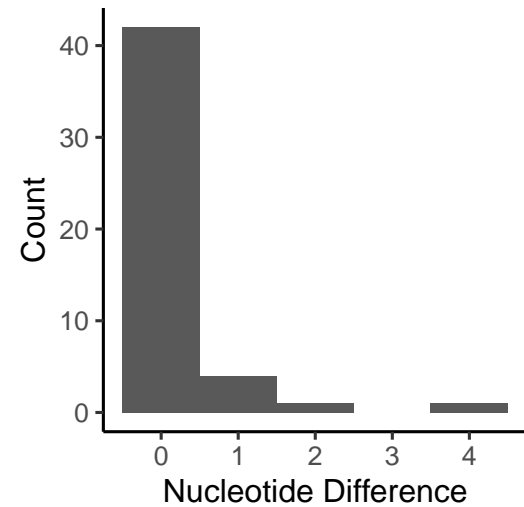
IGHV3-64*01

58 sequences assigned
44 (75.9%) exact matches, in which:
43 unique CDR3
5 unique J



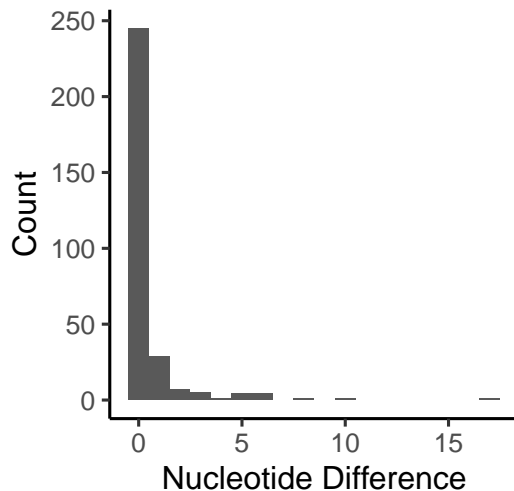
IGHV3-73*01

48 sequences assigned
42 (87.5%) exact matches, in which:
41 unique CDR3
5 unique J



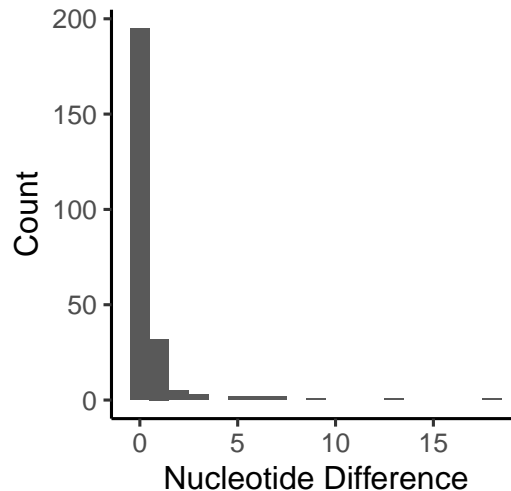
IGHV3-53*01

299 sequences assigned
245 (81.9%) exact matches, in which:
238 unique CDR3
6 unique J



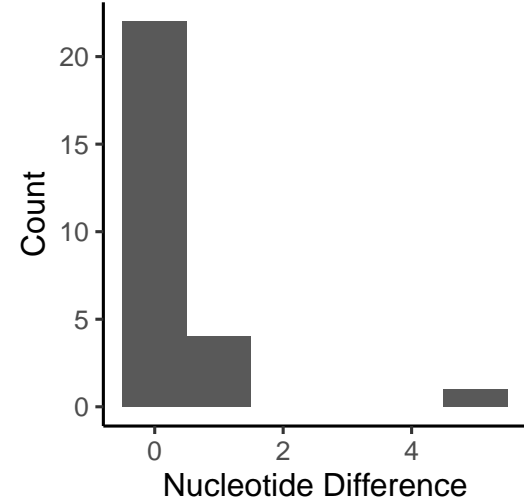
IGHV3-66*02

244 sequences assigned
195 (79.9%) exact matches, in which:
182 unique CDR3
6 unique J



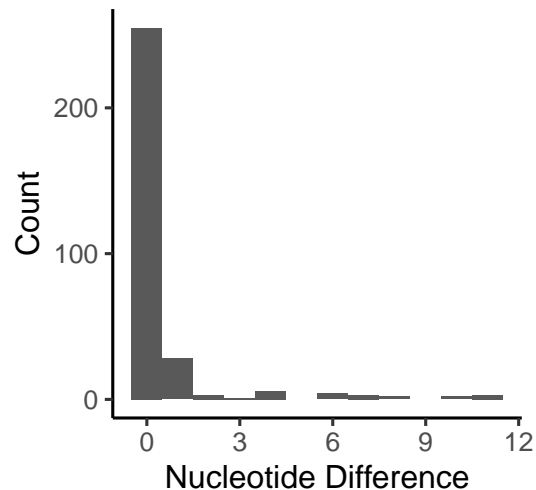
IGHV3-73*02

27 sequences assigned
22 (81.5%) exact matches, in which:
21 unique CDR3
4 unique J



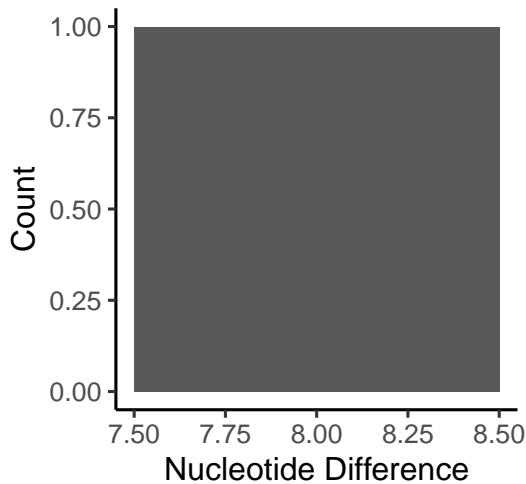
IGHV3-74*01

307 sequences assigned
255 (83.1%) exact matches, in which:
244 unique CDR3
6 unique J



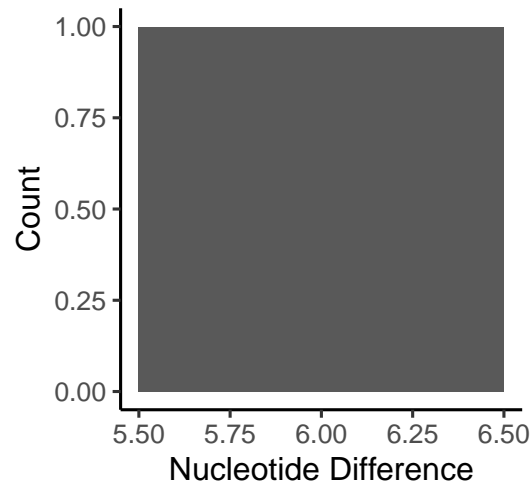
IGHV3-NL1*01

1 sequences assigned
No exact matches.



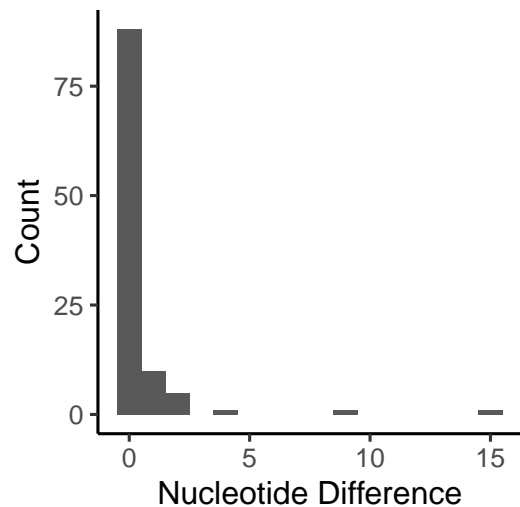
IGHV4-28*03

1 sequences assigned
No exact matches.



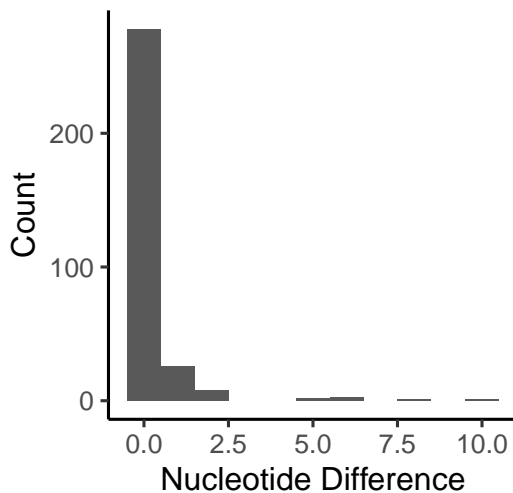
IGHV3-43D*04

106 sequences assigned
88 (83%) exact matches, in which:
84 unique CDR3
4 unique J



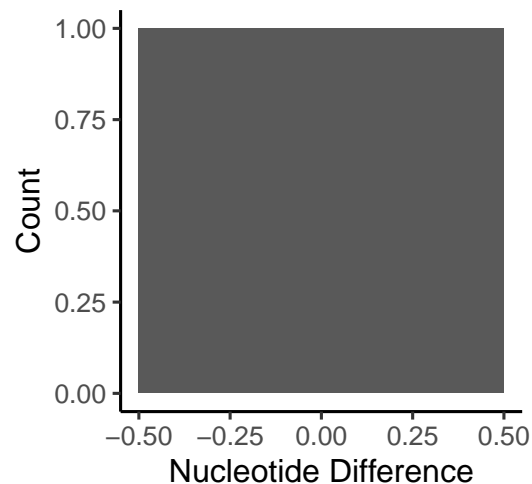
IGHV4-4*02

319 sequences assigned
278 (87.1%) exact matches, in which:
261 unique CDR3
6 unique J



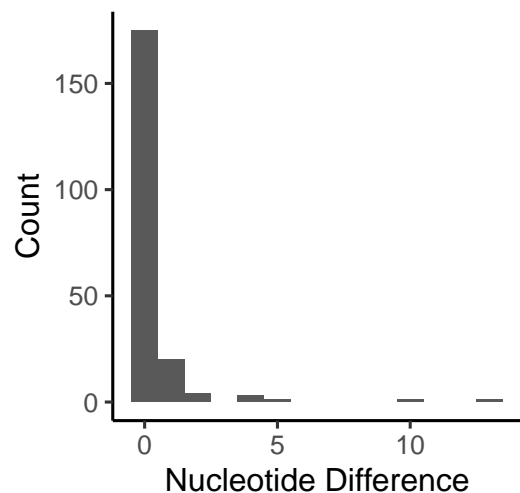
IGHV4-28*07

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



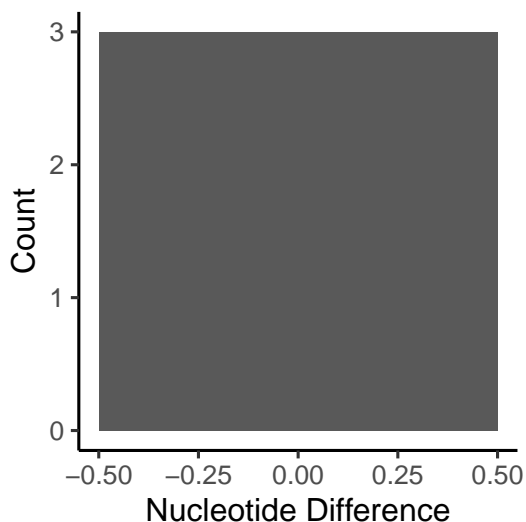
IGHV3-64D*06

205 sequences assigned
175 (85.4%) exact matches, in which:
160 unique CDR3
6 unique J



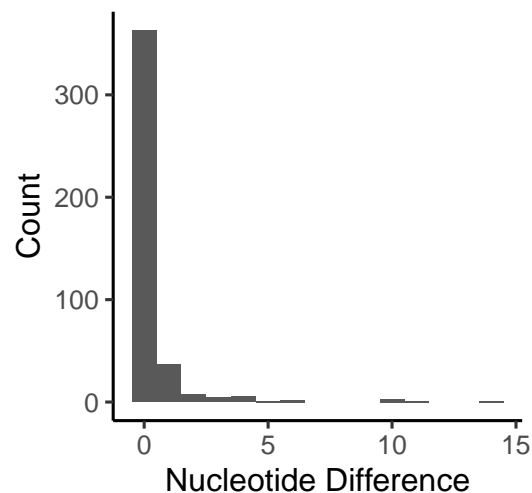
IGHV4-28*01

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



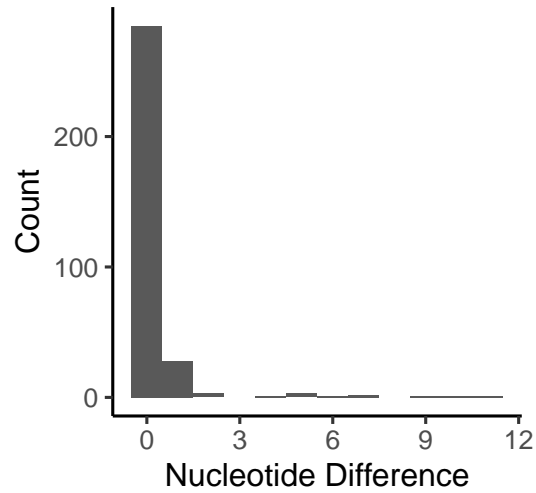
IGHV4-30-2*01

424 sequences assigned
363 (85.6%) exact matches, in which:
348 unique CDR3
6 unique J



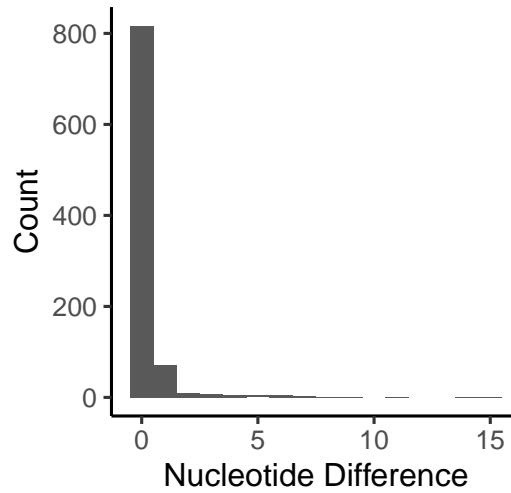
IGHV4-30-4*01

327 sequences assigned
285 (87.2%) exact matches, in which:
272 unique CDR3
6 unique J



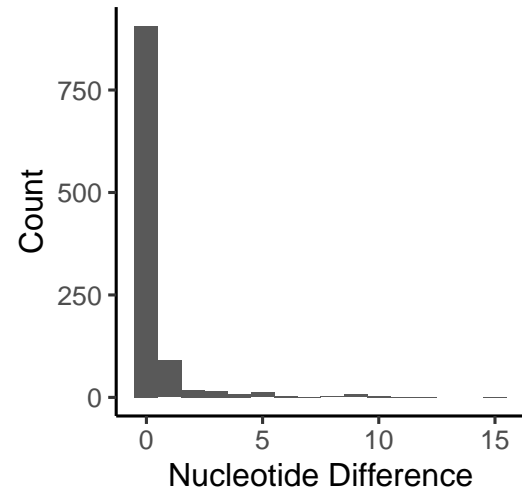
IGHV4-31*03

929 sequences assigned
817 (87.9%) exact matches, in which:
781 unique CDR3
6 unique J



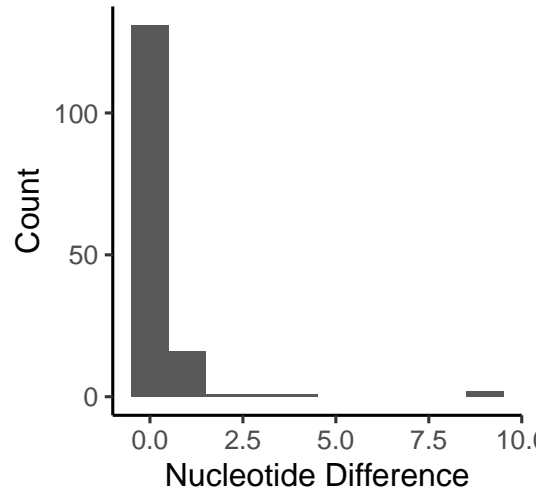
IGHV4-39*01

1072 sequences assigned
907 (84.6%) exact matches, in which:
865 unique CDR3
6 unique J



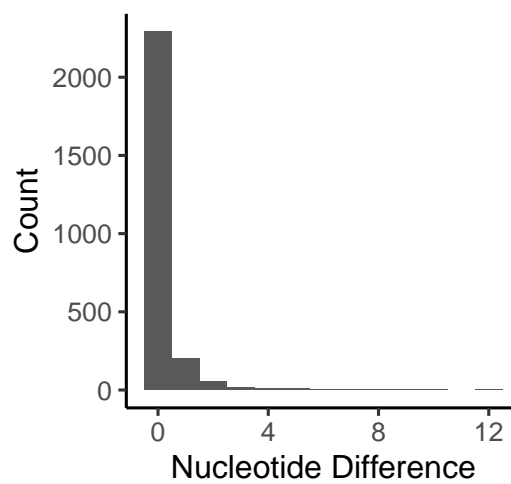
IGHV4-30-4*07

152 sequences assigned
131 (86.2%) exact matches, in which:
122 unique CDR3
5 unique J



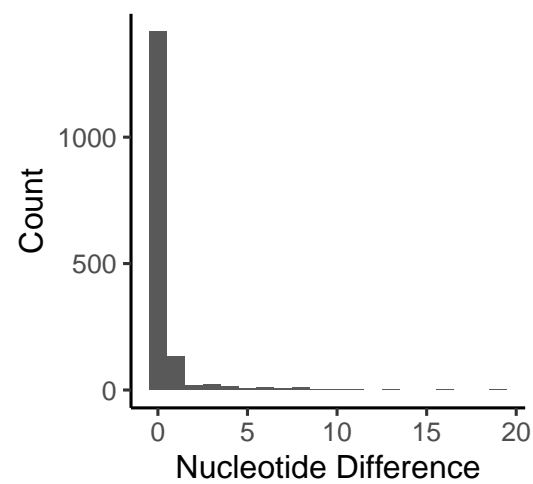
IGHV4-34*01

2590 sequences assigned
2291 (88.5%) exact matches, in which:
2156 unique CDR3
6 unique J



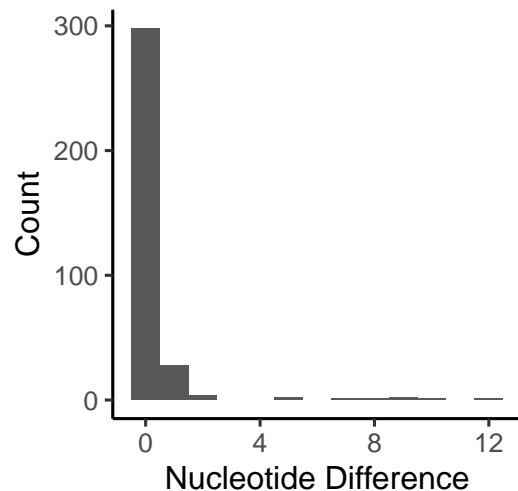
IGHV4-39*07

1635 sequences assigned
1417 (86.7%) exact matches, in which:
1322 unique CDR3
6 unique J



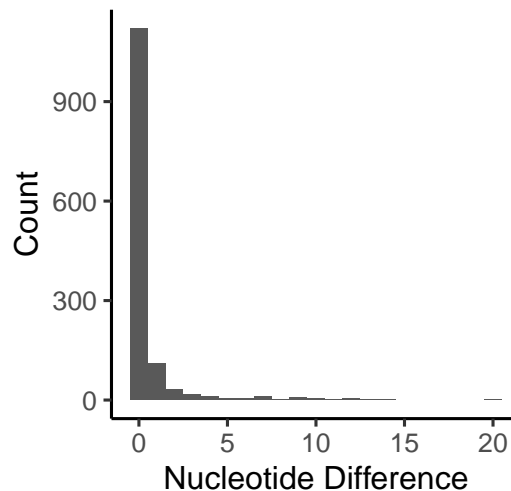
IGHV4-30-4*08

338 sequences assigned
298 (88.2%) exact matches, in which:
283 unique CDR3
6 unique J



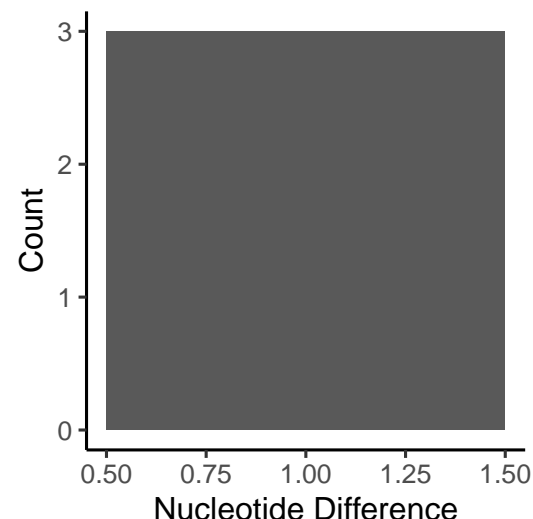
IGHV4-38-2*01

1338 sequences assigned
1121 (83.8%) exact matches, in which:
1026 unique CDR3
6 unique J



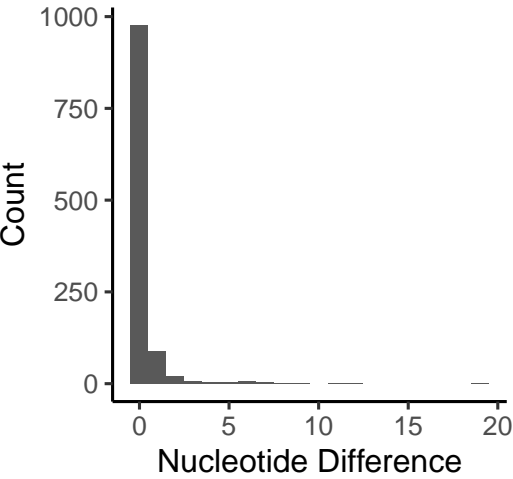
IGHV4-55*08

3 sequences assigned
No exact matches.



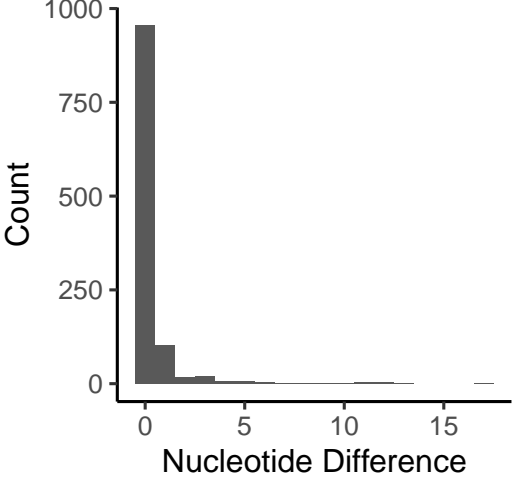
IGHV4–59*01

1122 sequences assigned
976 (87%) exact matches, in which:
929 unique CDR3
6 unique J



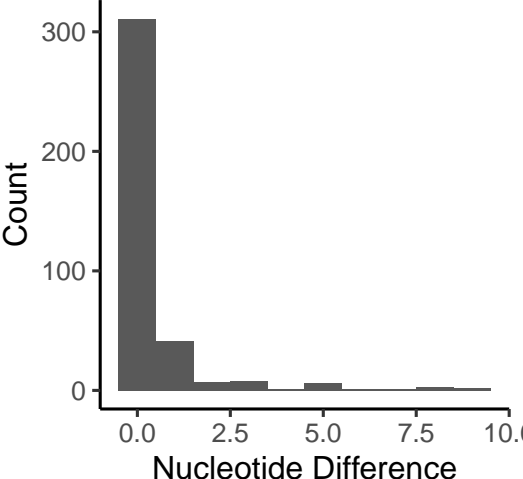
IGHV4–61*02

1125 sequences assigned
955 (84.9%) exact matches, in which:
908 unique CDR3
6 unique J



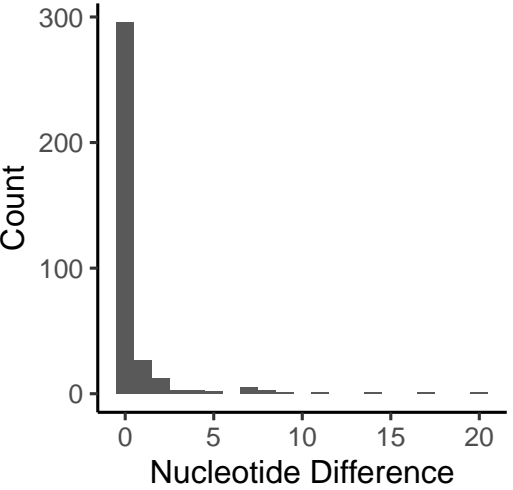
IGHV5–51*03

382 sequences assigned
311 (81.4%) exact matches, in which:
294 unique CDR3
6 unique J



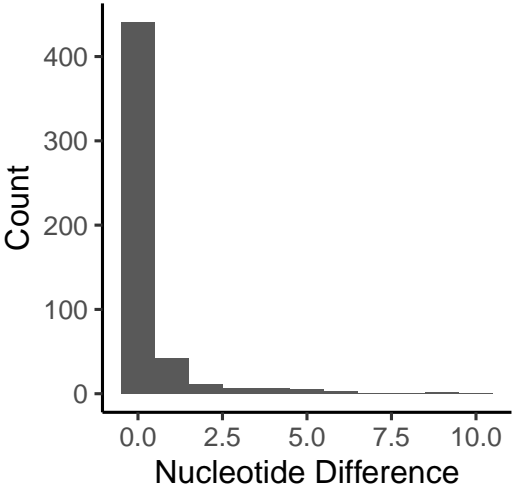
IGHV4–59*12

356 sequences assigned
296 (83.1%) exact matches, in which:
276 unique CDR3
6 unique J



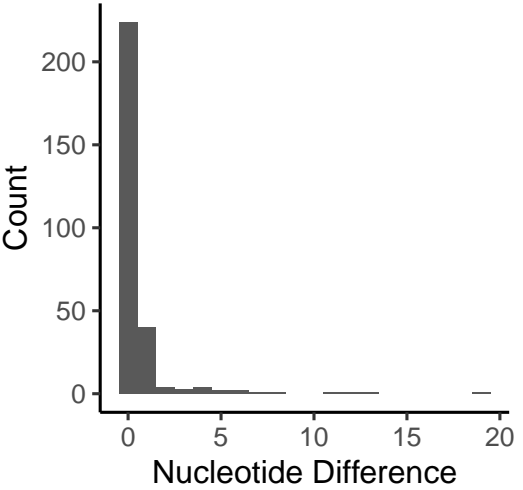
IGHV5–10–1*03

522 sequences assigned
441 (84.5%) exact matches, in which:
418 unique CDR3
6 unique J



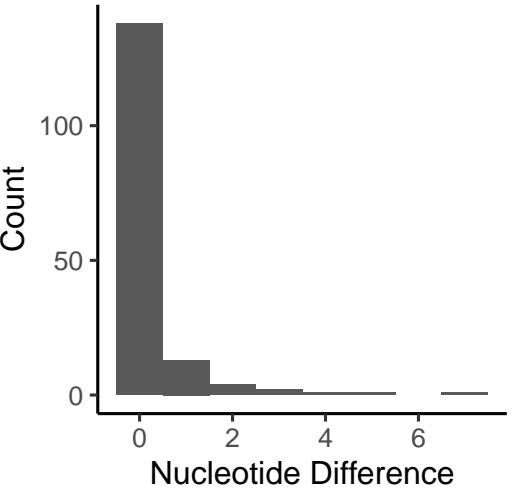
IGHV6–1*01

285 sequences assigned
224 (78.6%) exact matches, in which:
215 unique CDR3
6 unique J



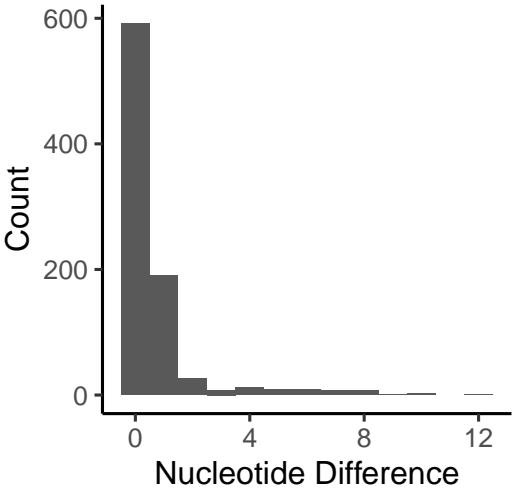
IGHV4–61*01

160 sequences assigned
138 (86.2%) exact matches, in which:
135 unique CDR3
5 unique J



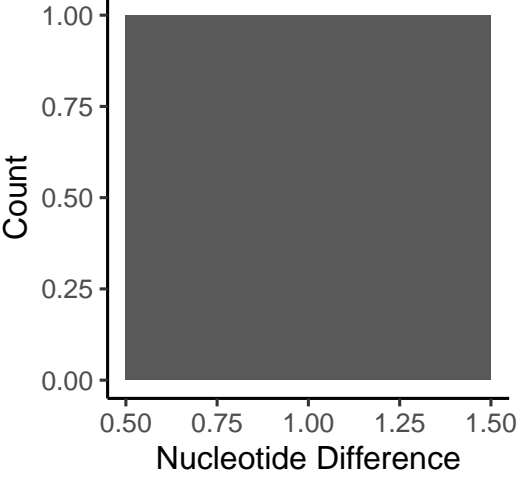
IGHV5–51*01

865 sequences assigned
592 (68.4%) exact matches, in which:
562 unique CDR3
6 unique J



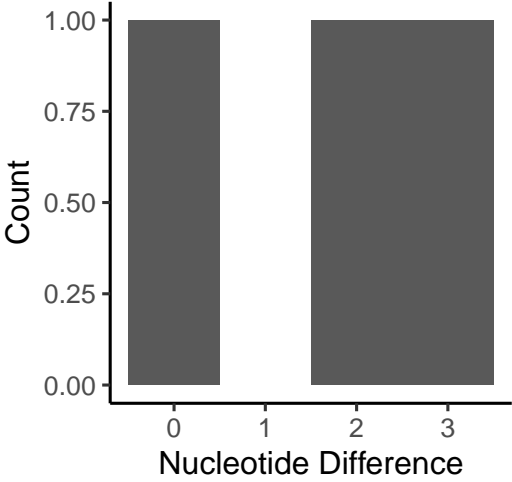
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



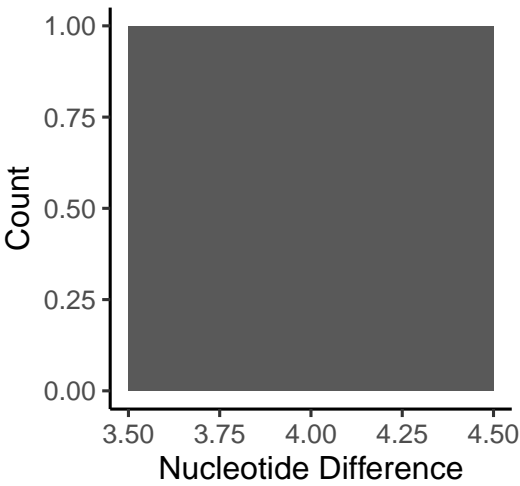
IGHV7-4-1*01

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



IGHV7-81*01

1 sequences assigned
No exact matches.



IGHV1-69*08_C191T

