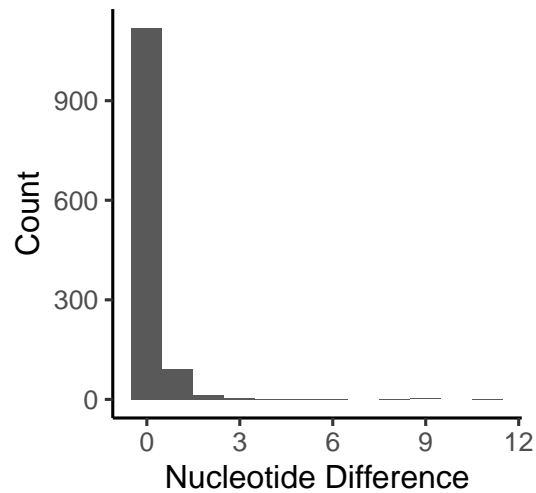


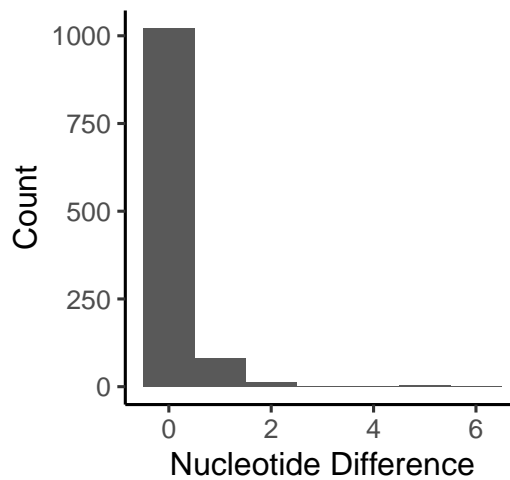
IGHV1-2*02

1240 sequences assigned
1120 (90.3%) exact matches, in which:
1074 unique CDR3
6 unique J



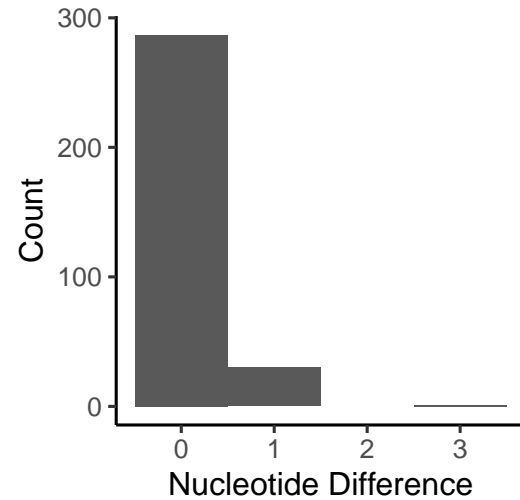
IGHV1-18*01

1125 sequences assigned
1021 (90.8%) exact matches, in which:
982 unique CDR3
6 unique J



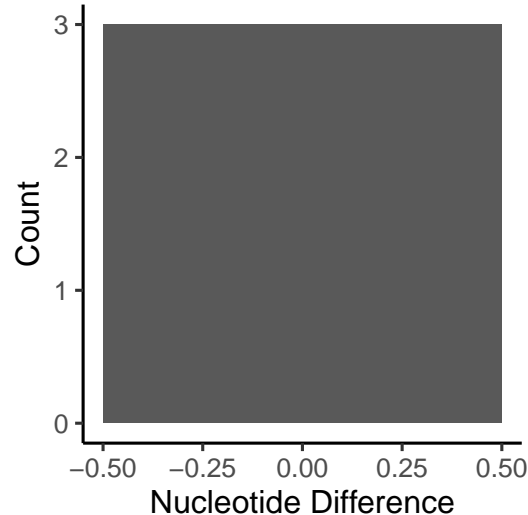
IGHV1-46*01

318 sequences assigned
287 (90.3%) exact matches, in which:
283 unique CDR3
6 unique J



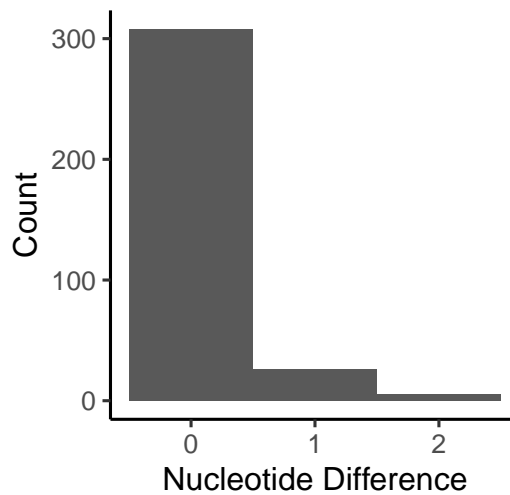
IGHV1-3*02

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



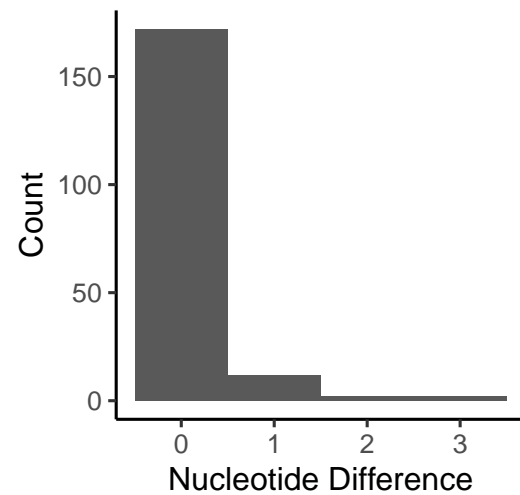
IGHV1-24*01

340 sequences assigned
308 (90.6%) exact matches, in which:
298 unique CDR3
6 unique J



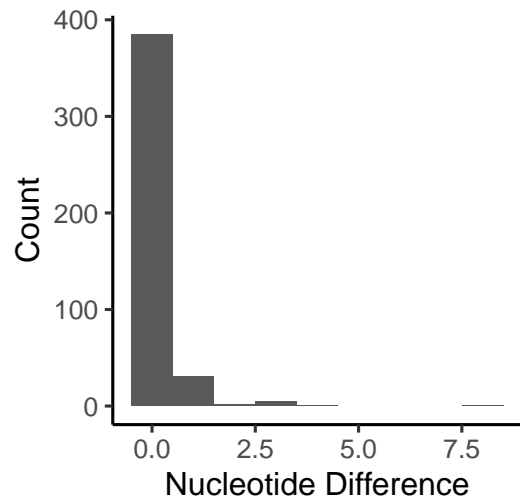
IGHV1-46*03

188 sequences assigned
172 (91.5%) exact matches, in which:
167 unique CDR3
6 unique J



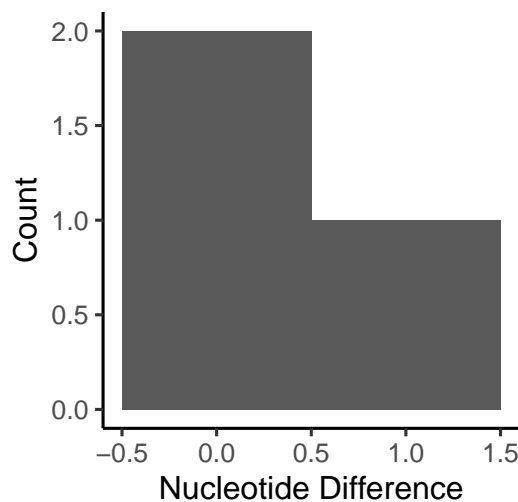
IGHV1-8*01

425 sequences assigned
385 (90.6%) exact matches, in which:
369 unique CDR3
6 unique J



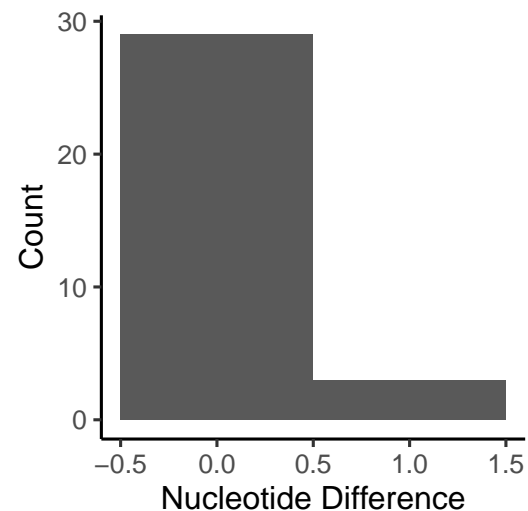
IGHV1-45*02

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
1 unique J



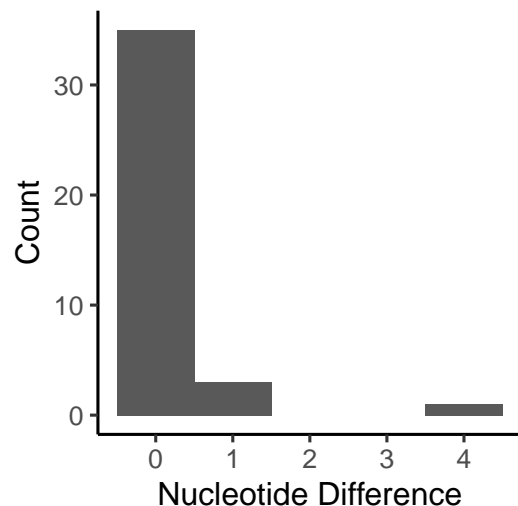
IGHV1-58*01

32 sequences assigned
29 (90.6%) exact matches, in which:
29 unique CDR3
5 unique J



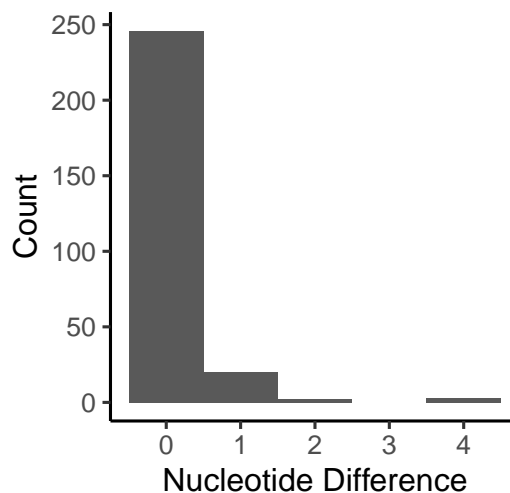
IGHV1-58*02

39 sequences assigned
35 (89.7%) exact matches, in which:
32 unique CDR3
5 unique J



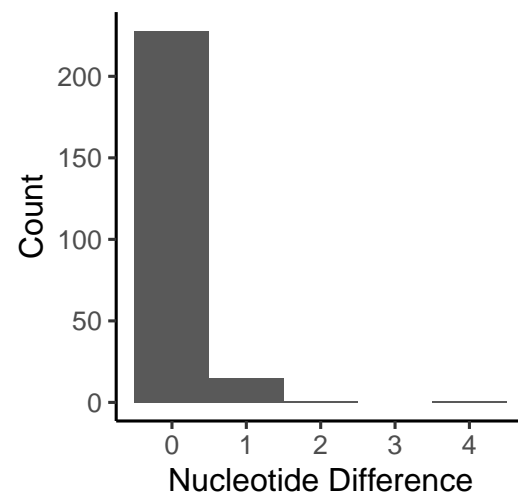
IGHV1-69*02

271 sequences assigned
246 (90.8%) exact matches, in which:
239 unique CDR3
6 unique J



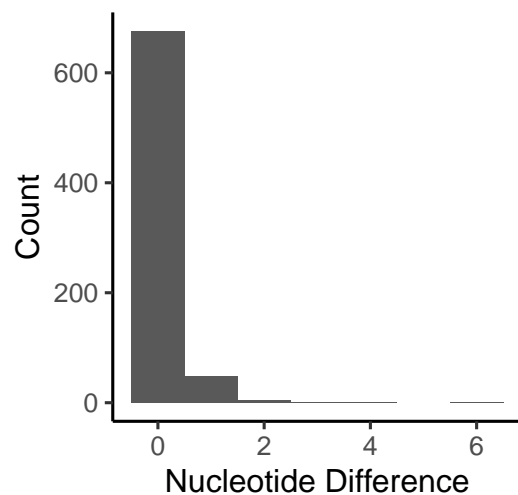
IGHV2-5*01

245 sequences assigned
228 (93.1%) exact matches, in which:
226 unique CDR3
6 unique J



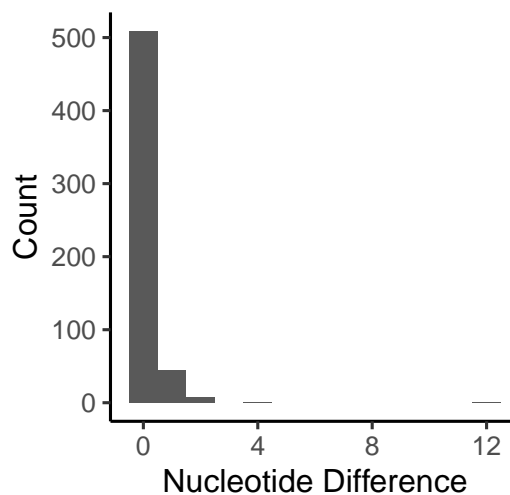
IGHV1-69*01

733 sequences assigned
676 (92.2%) exact matches, in which:
644 unique CDR3
6 unique J



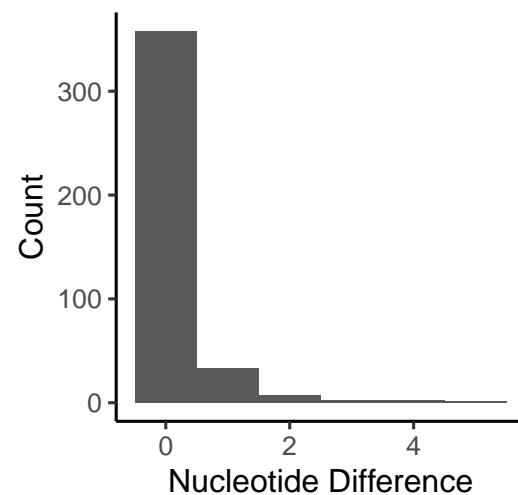
IGHV1-69*06

565 sequences assigned
509 (90.1%) exact matches, in which:
488 unique CDR3
6 unique J



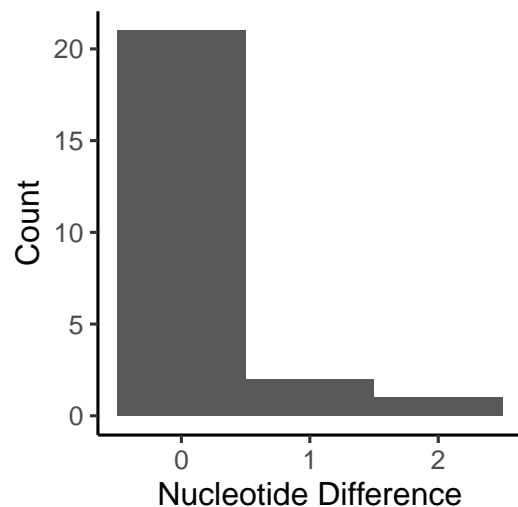
IGHV2-5*02

403 sequences assigned
358 (88.8%) exact matches, in which:
344 unique CDR3
6 unique J



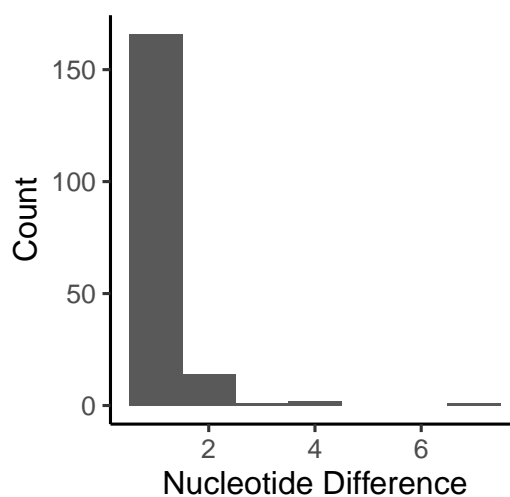
IGHV1-69-2*01

24 sequences assigned
21 (87.5%) exact matches, in which:
21 unique CDR3
5 unique J



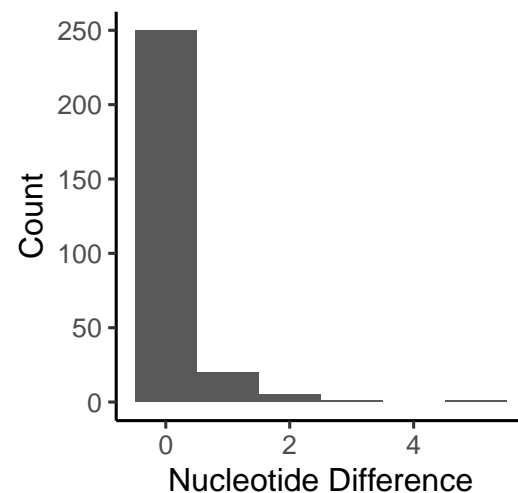
IGHV1-69*08

184 sequences assigned
No exact matches.



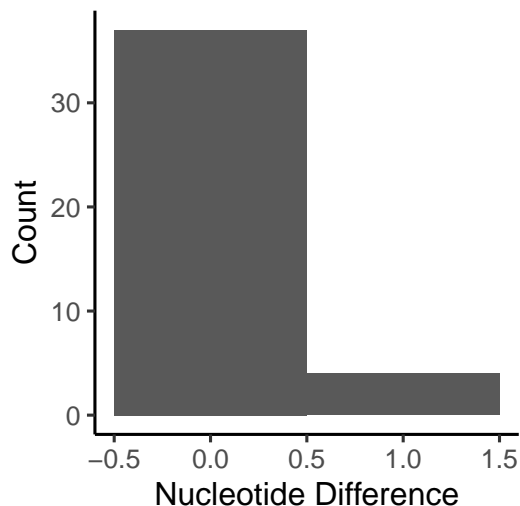
IGHV2-26*01

277 sequences assigned
250 (90.3%) exact matches, in which:
246 unique CDR3
6 unique J



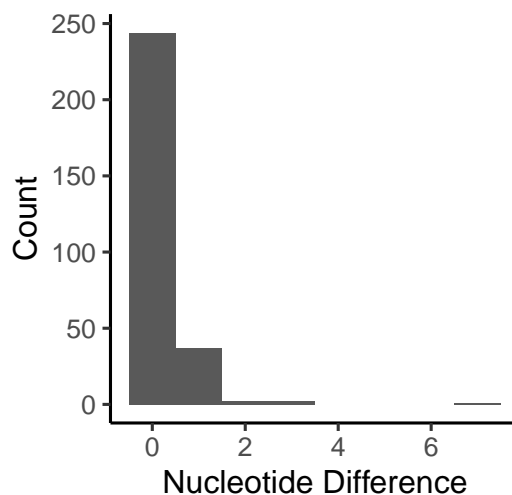
IGHV2-70*04

41 sequences assigned
37 (90.2%) exact matches, in which:
36 unique CDR3
3 unique J



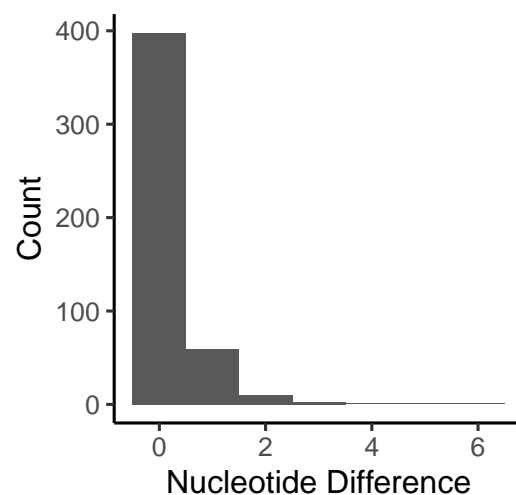
IGHV3-7*04

286 sequences assigned
244 (85.3%) exact matches, in which:
222 unique CDR3
6 unique J



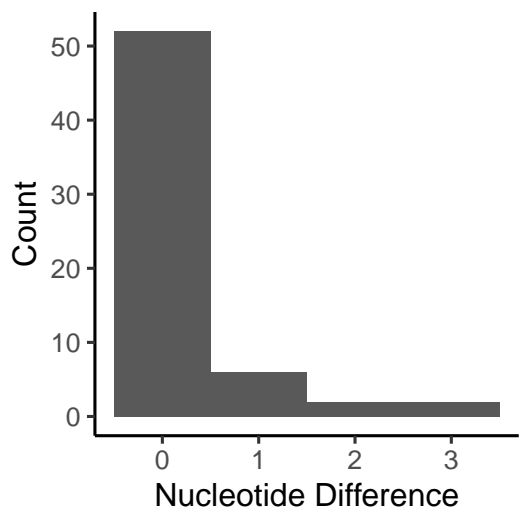
IGHV3-11*05

473 sequences assigned
398 (84.1%) exact matches, in which:
376 unique CDR3
6 unique J



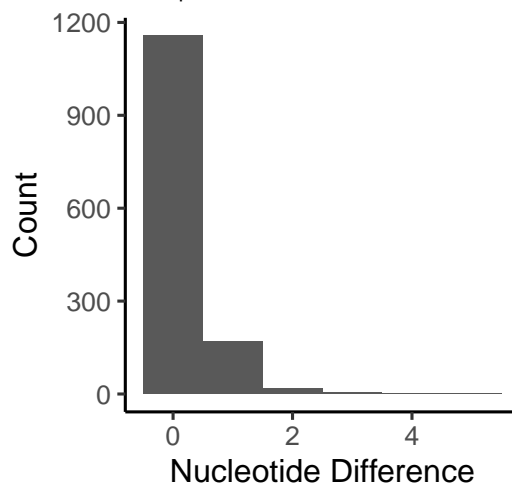
IGHV2-70*15

62 sequences assigned
52 (83.9%) exact matches, in which:
51 unique CDR3
5 unique J



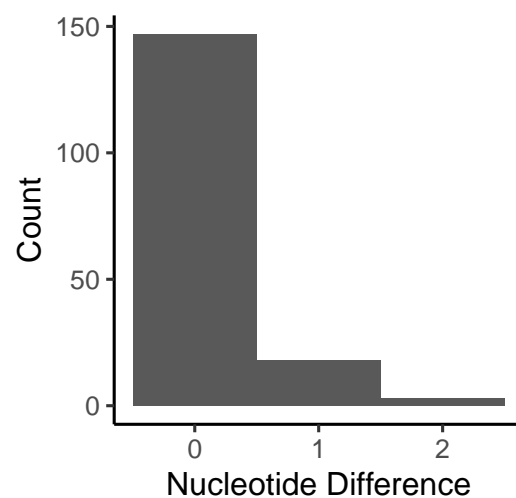
IGHV3-9*01

1357 sequences assigned
1157 (85.3%) exact matches, in which:
1074 unique CDR3
6 unique J



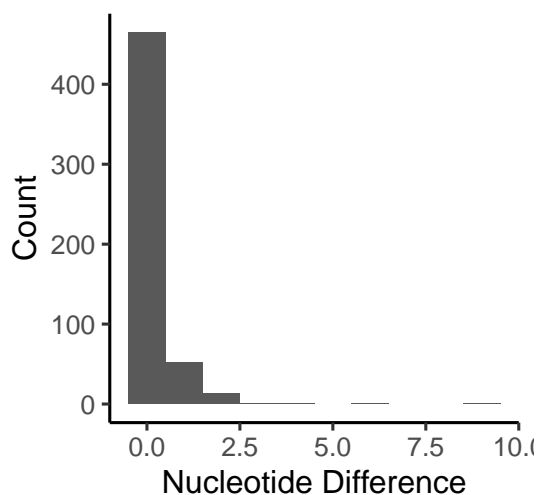
IGHV3-13*01

168 sequences assigned
147 (87.5%) exact matches, in which:
144 unique CDR3
6 unique J



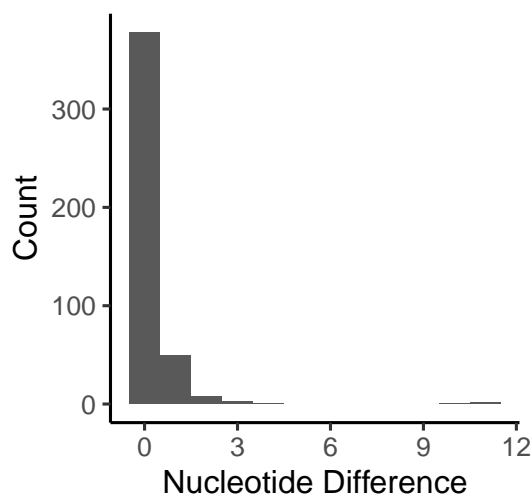
IGHV3-7*01

534 sequences assigned
465 (87.1%) exact matches, in which:
443 unique CDR3
6 unique J



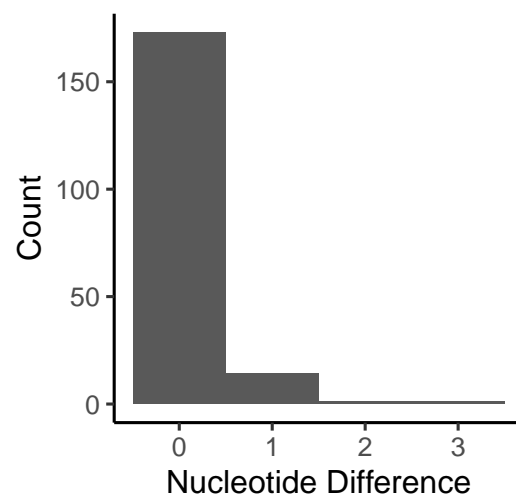
IGHV3-11*01

442 sequences assigned
378 (85.5%) exact matches, in which:
367 unique CDR3
6 unique J



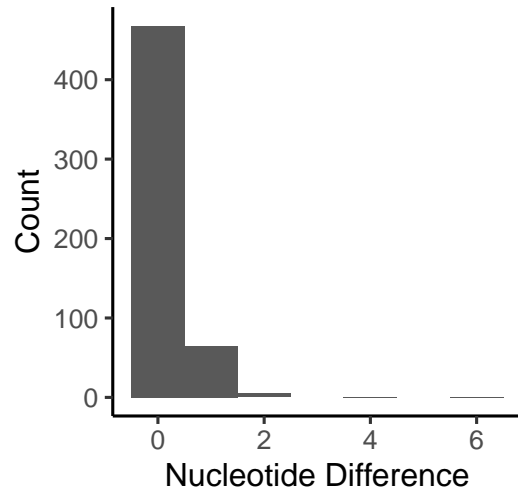
IGHV3-13*04

189 sequences assigned
173 (91.5%) exact matches, in which:
164 unique CDR3
5 unique J



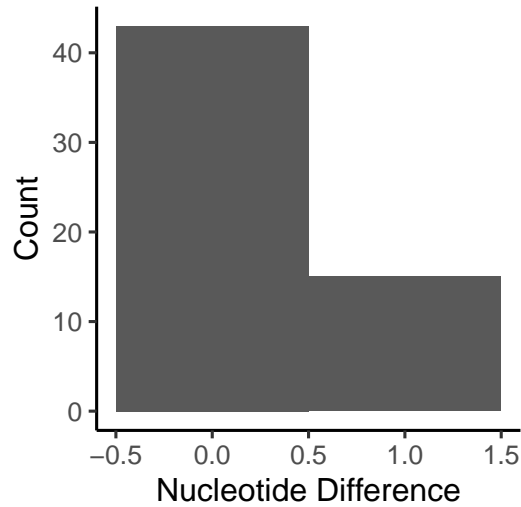
IGHV3-15*01

540 sequences assigned
468 (86.7%) exact matches, in which:
445 unique CDR3
6 unique J



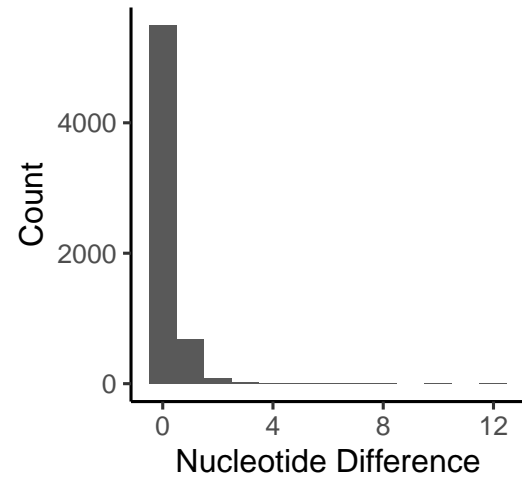
IGHV3-20*01

58 sequences assigned
43 (74.1%) exact matches, in which:
40 unique CDR3
5 unique J



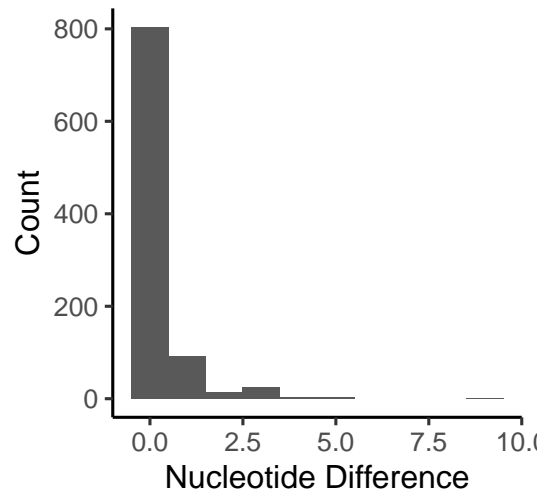
IGHV3-23*01

6330 sequences assigned
5493 (86.8%) exact matches, in which:
5121 unique CDR3
6 unique J



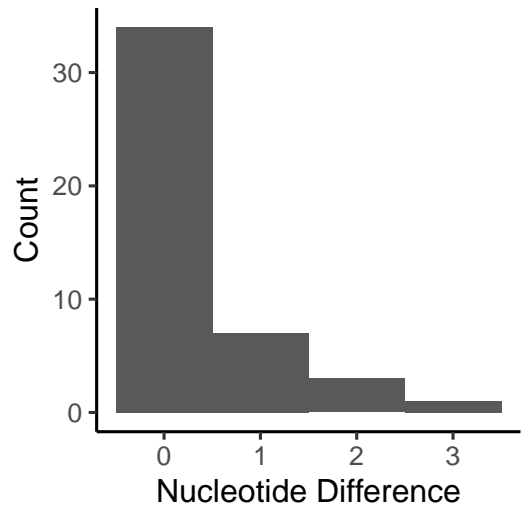
IGHV3-15*07

941 sequences assigned
804 (85.4%) exact matches, in which:
761 unique CDR3
6 unique J



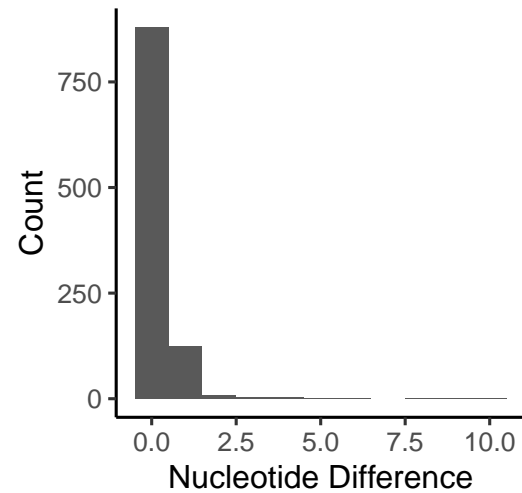
IGHV3-20*04

45 sequences assigned
34 (75.6%) exact matches, in which:
32 unique CDR3
6 unique J



IGHV3-30-3*01

1026 sequences assigned
880 (85.8%) exact matches, in which:
825 unique CDR3
6 unique J



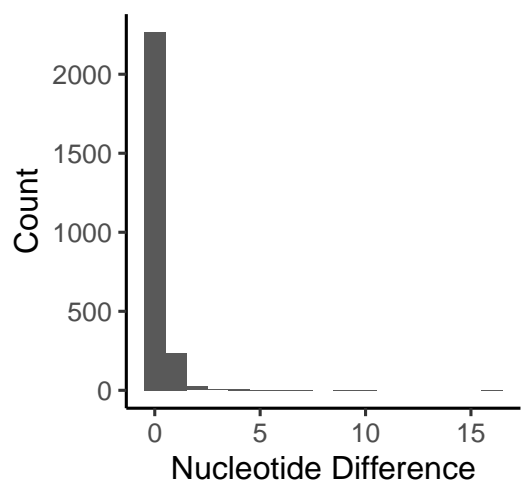
IGHV3-19*01

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



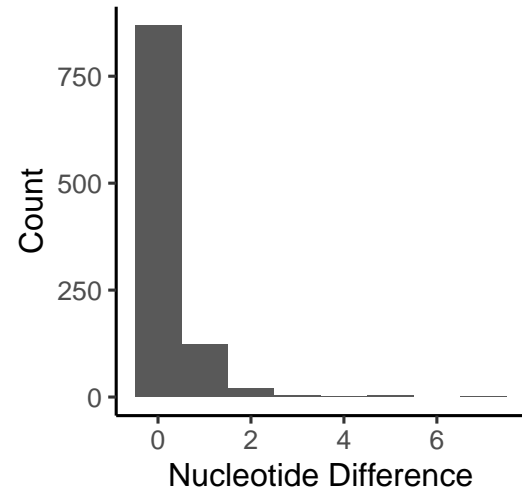
IGHV3-21*01

2549 sequences assigned
2267 (88.9%) exact matches, in which:
2110 unique CDR3
6 unique J



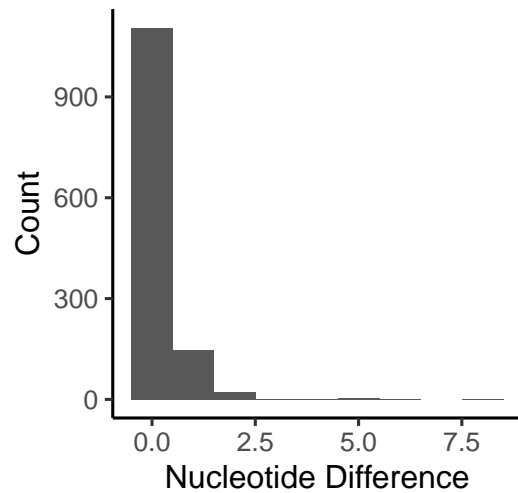
IGHV3-30*18

1021 sequences assigned
869 (85.1%) exact matches, in which:
826 unique CDR3
6 unique J



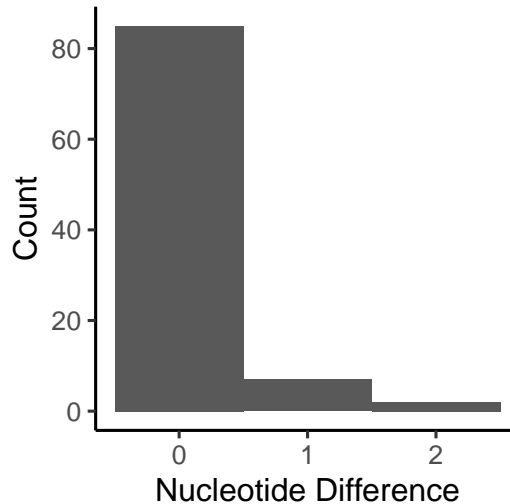
IGHV3–33*01

1286 sequences assigned
1106 (86%) exact matches, in which:
1018 unique CDR3
6 unique J



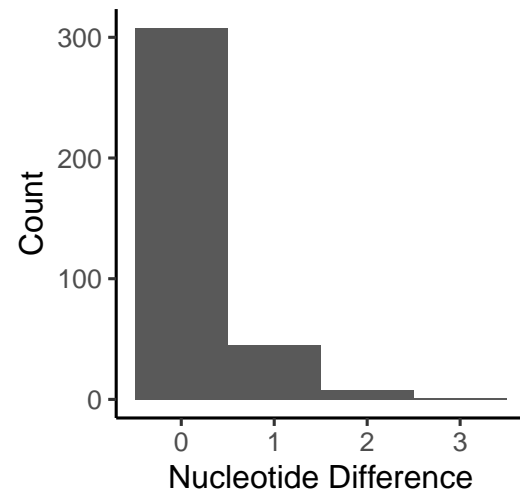
IGHV3–43*01

94 sequences assigned
85 (90.4%) exact matches, in which:
80 unique CDR3
5 unique J



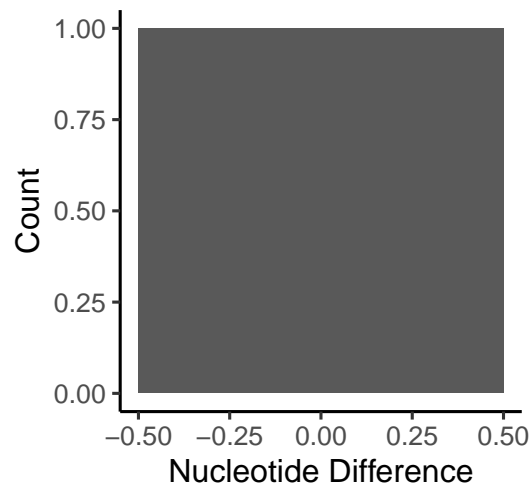
IGHV3–49*03

363 sequences assigned
308 (84.8%) exact matches, in which:
289 unique CDR3
6 unique J



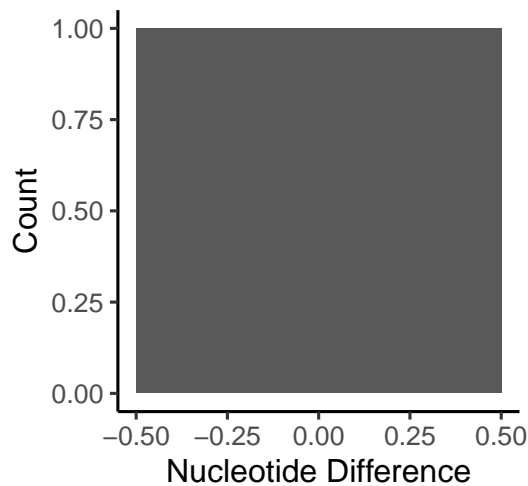
IGHV3–35*01

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



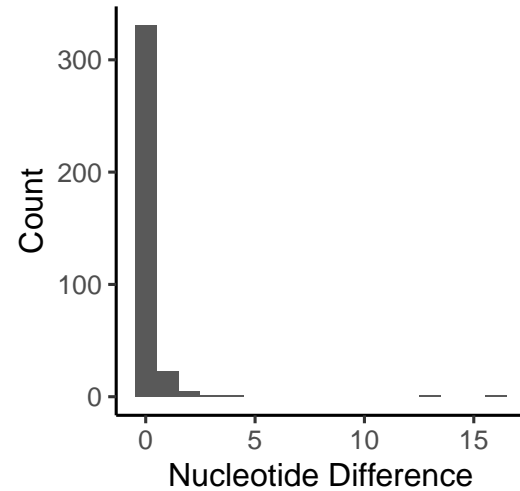
IGHV3–47*02

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



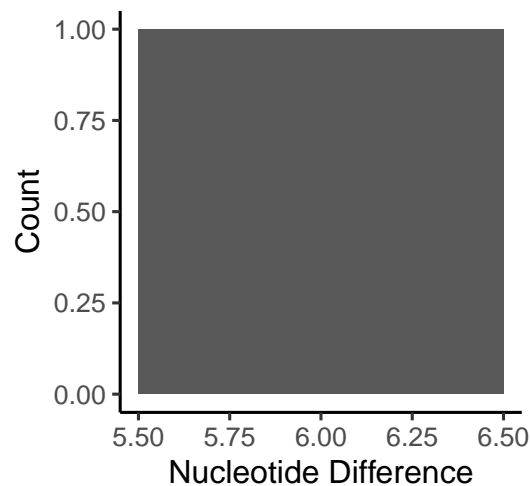
IGHV3–53*01

363 sequences assigned
331 (91.2%) exact matches, in which:
318 unique CDR3
6 unique J



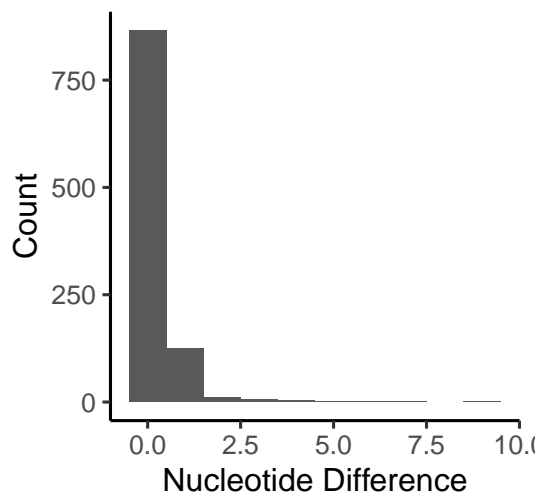
IGHV3–41*02

1 sequences assigned
No exact matches.



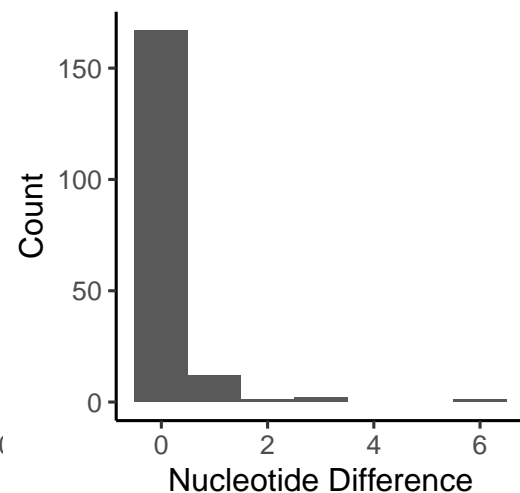
IGHV3–48*01

1015 sequences assigned
866 (85.3%) exact matches, in which:
813 unique CDR3
6 unique J



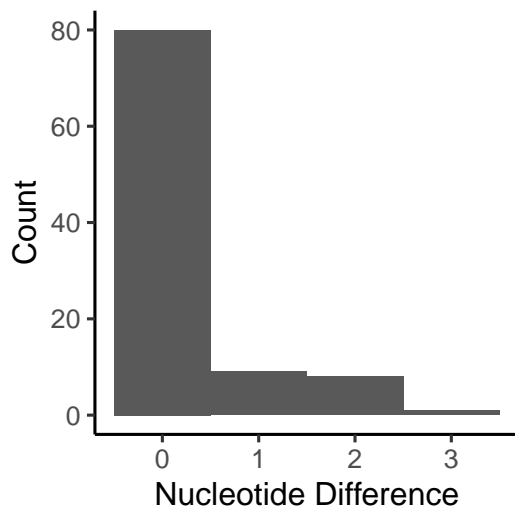
IGHV3–53*02

183 sequences assigned
167 (91.3%) exact matches, in which:
158 unique CDR3
6 unique J



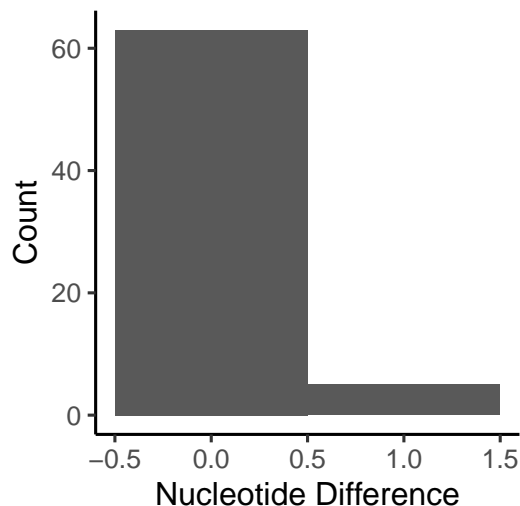
IGHV3-64*01

98 sequences assigned
80 (81.6%) exact matches, in which:
79 unique CDR3
6 unique J



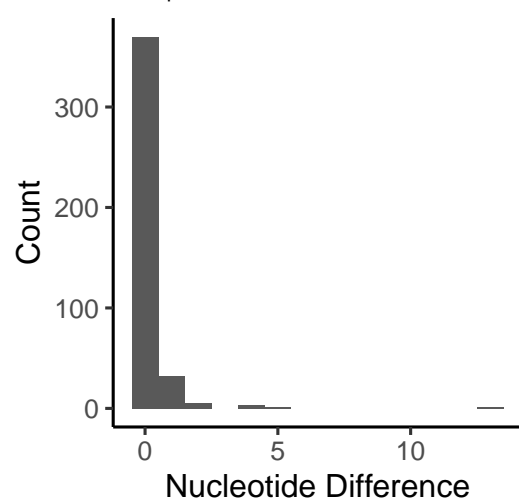
IGHV3-72*01

68 sequences assigned
63 (92.6%) exact matches, in which:
59 unique CDR3
5 unique J



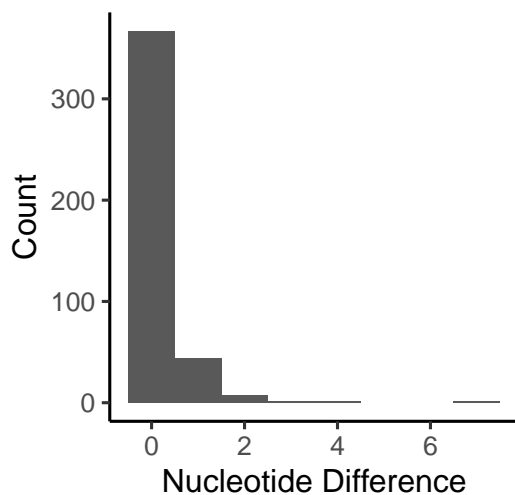
IGHV3-74*01

412 sequences assigned
370 (89.8%) exact matches, in which:
349 unique CDR3
6 unique J



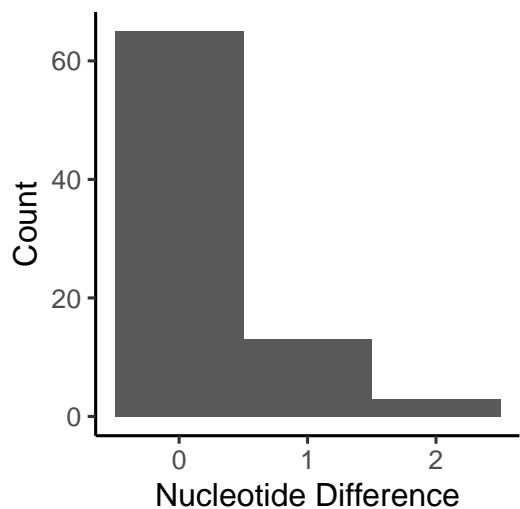
IGHV3-66*02

422 sequences assigned
367 (87%) exact matches, in which:
344 unique CDR3
6 unique J



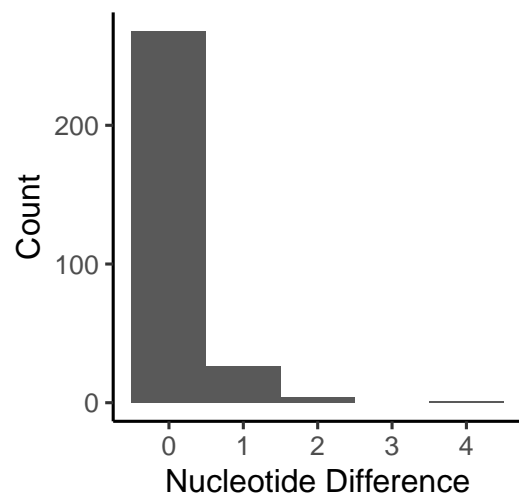
IGHV3-73*01

81 sequences assigned
65 (80.2%) exact matches, in which:
63 unique CDR3
6 unique J



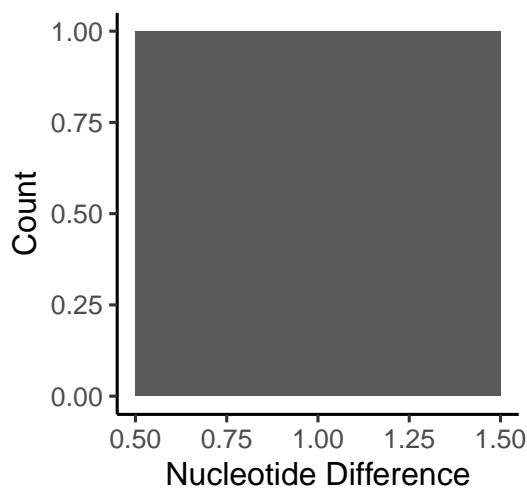
IGHV3-64D*06

299 sequences assigned
268 (89.6%) exact matches, in which:
242 unique CDR3
6 unique J



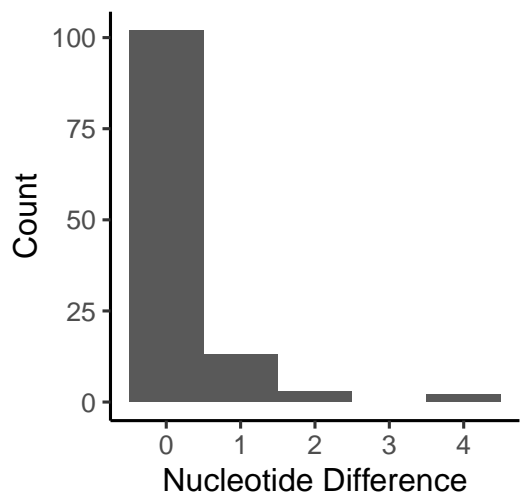
IGHV3-69-1*01

1 sequences assigned
No exact matches.



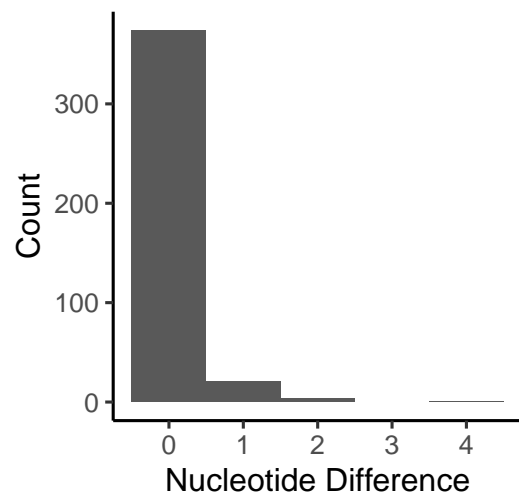
IGHV3-73*02

120 sequences assigned
102 (85%) exact matches, in which:
95 unique CDR3
5 unique J



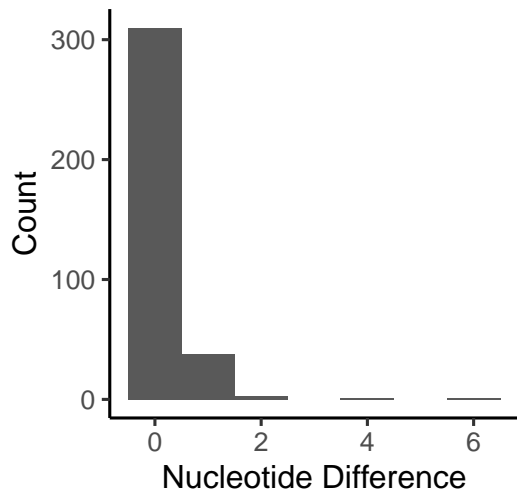
IGHV4-4*02

400 sequences assigned
374 (93.5%) exact matches, in which:
362 unique CDR3
6 unique J



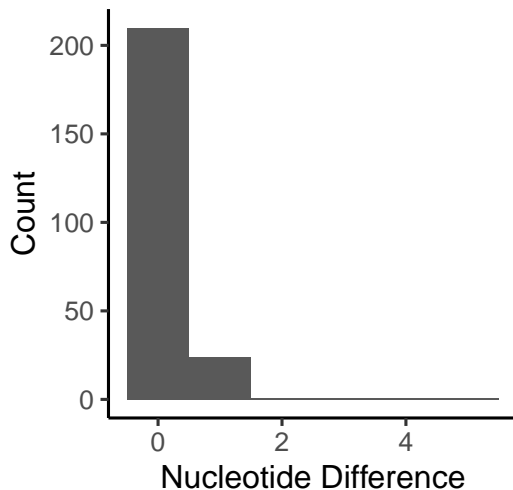
IGHV4-4*07

353 sequences assigned
310 (87.8%) exact matches, in which:
297 unique CDR3
6 unique J



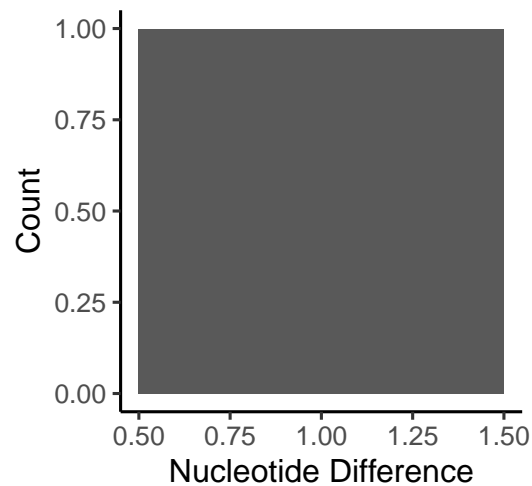
IGHV4-30-2*01

240 sequences assigned
210 (87.5%) exact matches, in which:
199 unique CDR3
6 unique J



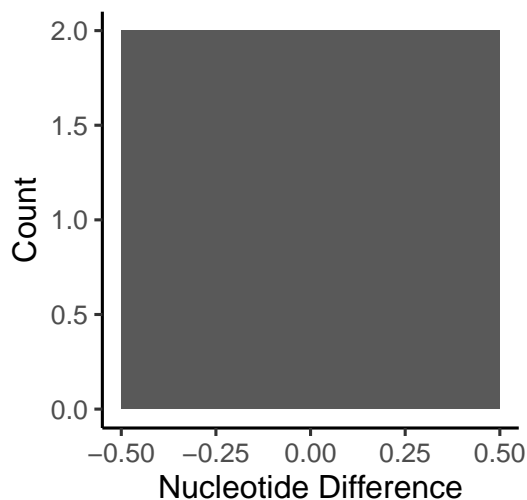
IGHV4-38-2*02

1 sequences assigned
No exact matches.



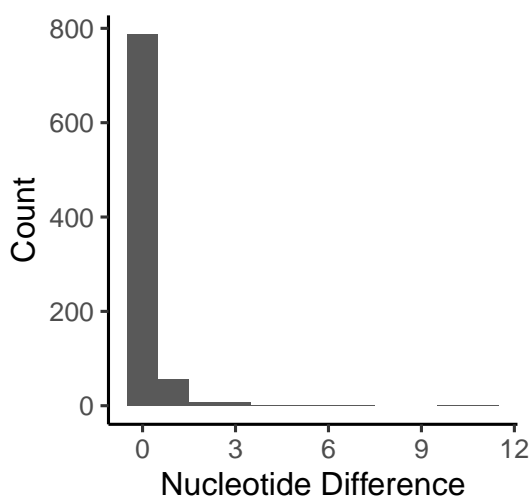
IGHV4-28*01

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



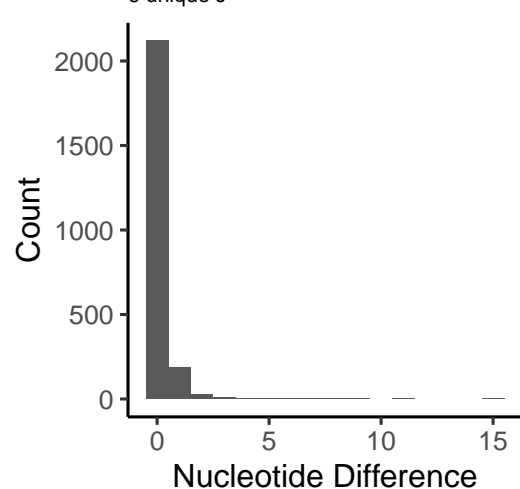
IGHV4-31*03

866 sequences assigned
788 (91%) exact matches, in which:
773 unique CDR3
6 unique J



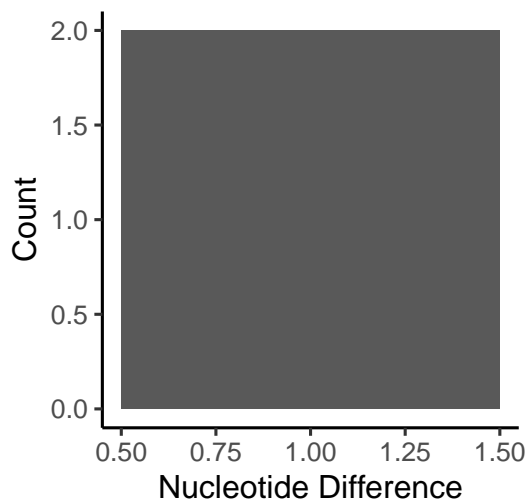
IGHV4-39*01

2362 sequences assigned
2120 (89.8%) exact matches, in which:
2010 unique CDR3
6 unique J



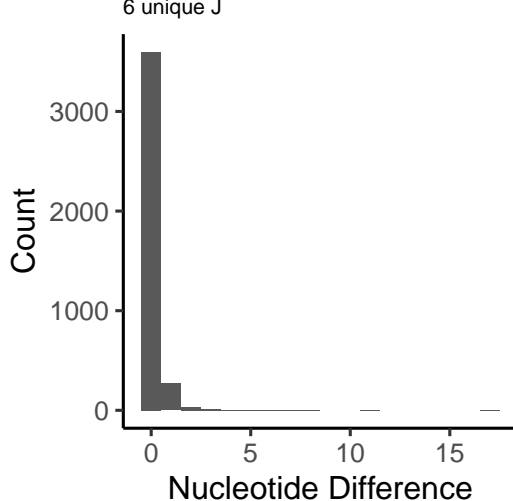
IGHV4-28*05

2 sequences assigned
No exact matches.



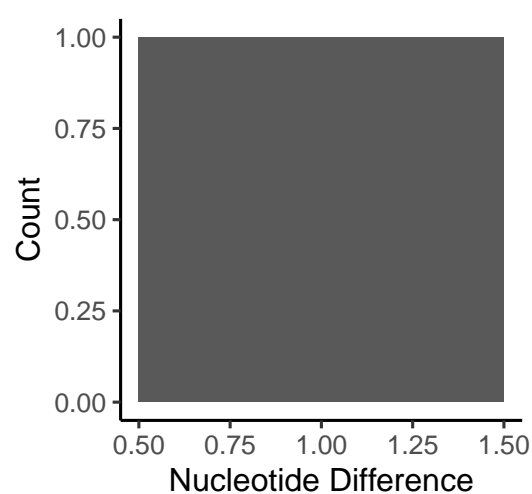
IGHV4-34*01

3932 sequences assigned
3596 (91.5%) exact matches, in which:
3392 unique CDR3
6 unique J



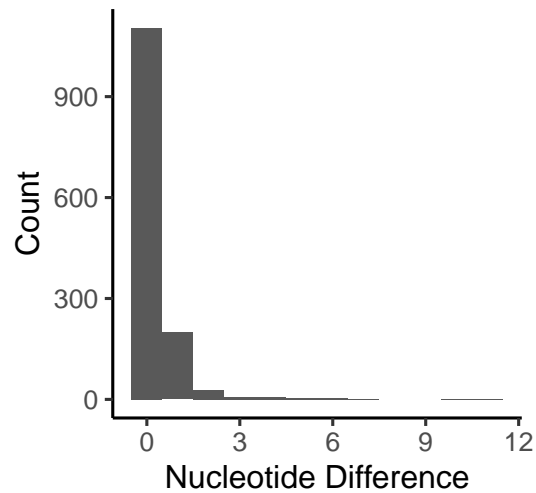
IGHV4-55*08

1 sequences assigned
No exact matches.



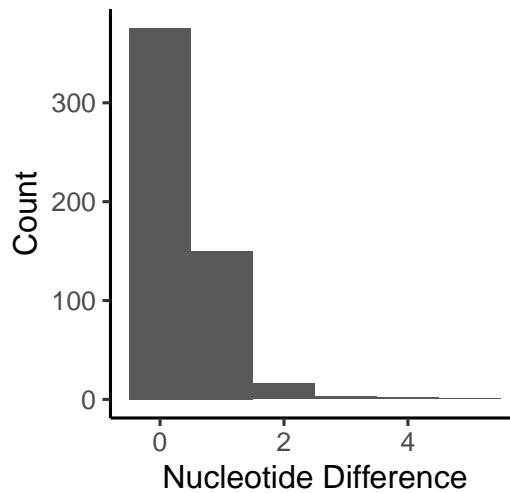
IGHV4–59*01

1355 sequences assigned
1105 (81.5%) exact matches, in which:
1067 unique CDR3
6 unique J



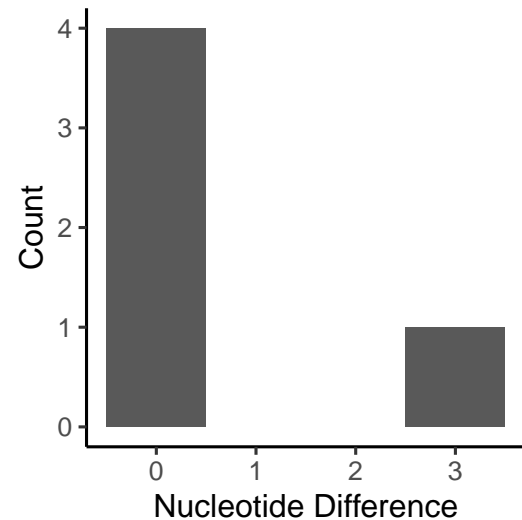
IGHV5–51*01

548 sequences assigned
376 (68.6%) exact matches, in which:
363 unique CDR3
6 unique J



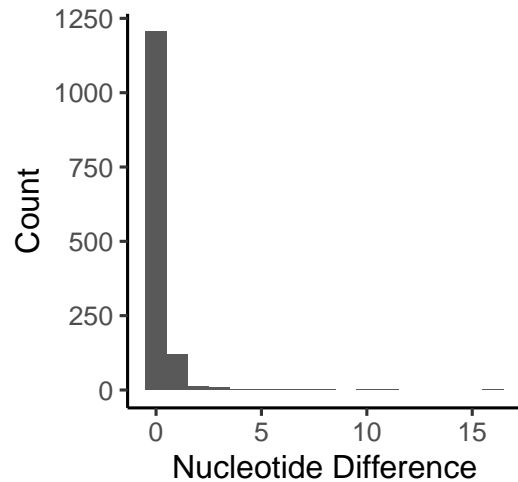
IGHV7–4–1*01

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



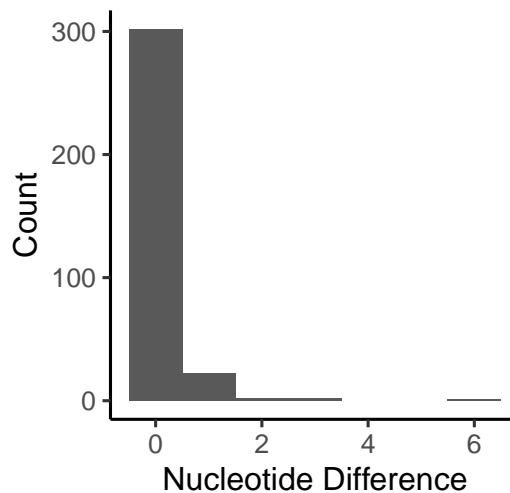
IGHV4–61*02

1357 sequences assigned
1205 (88.8%) exact matches, in which:
1166 unique CDR3
6 unique J



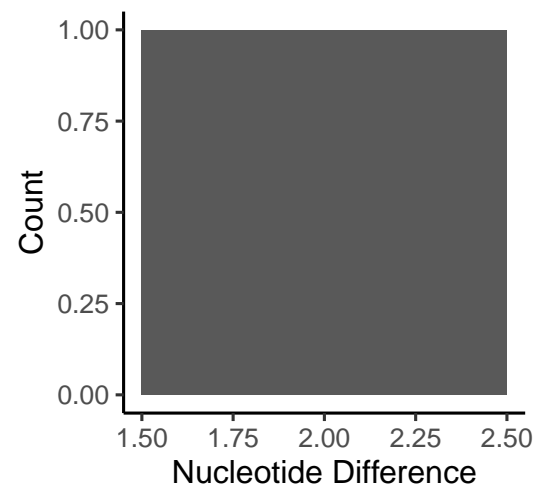
IGHV5–51*03

330 sequences assigned
302 (91.5%) exact matches, in which:
294 unique CDR3
6 unique J



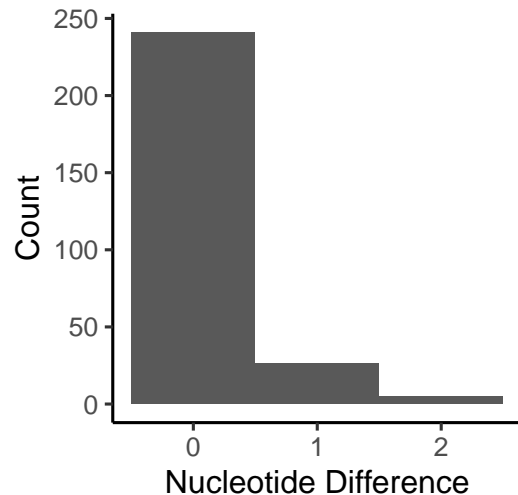
IGHV7–81*01

1 sequences assigned
No exact matches.



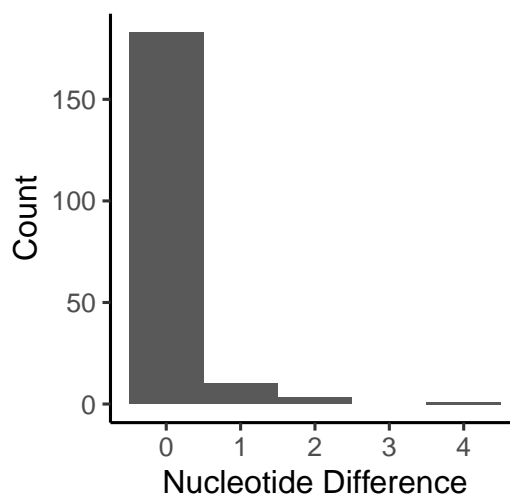
IGHV5–10–1*01

272 sequences assigned
241 (88.6%) exact matches, in which:
230 unique CDR3
6 unique J



IGHV6–1*01

197 sequences assigned
183 (92.9%) exact matches, in which:
179 unique CDR3
6 unique J





Warning – no inferred sequences found.