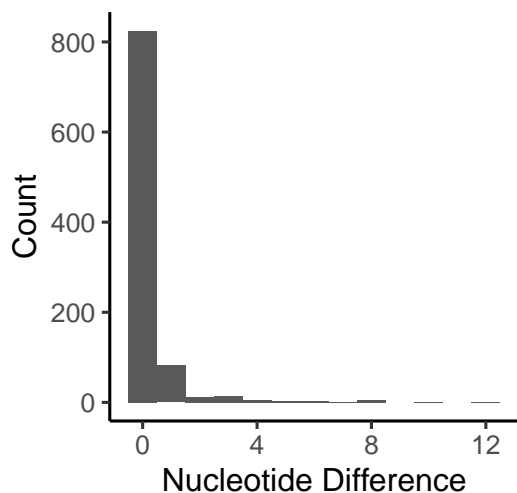


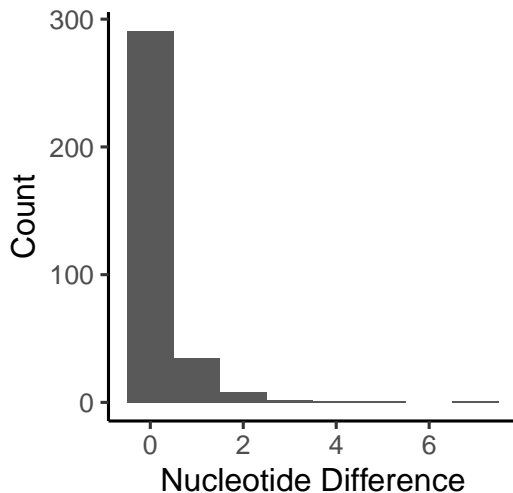
IGHV1-2*02

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



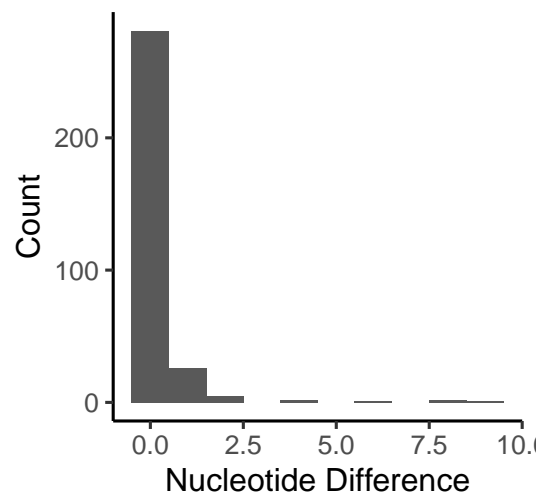
IGHV1-8*03

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



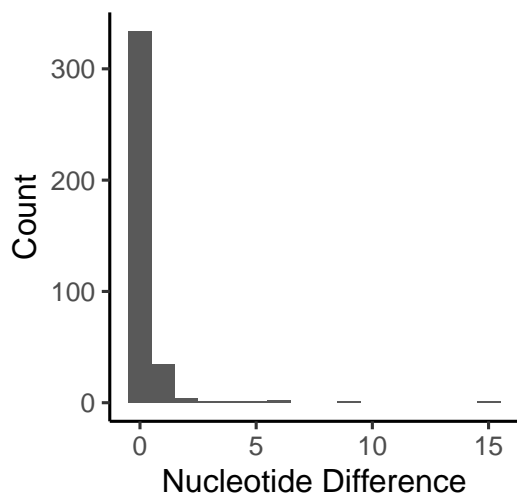
IGHV1-24*01

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



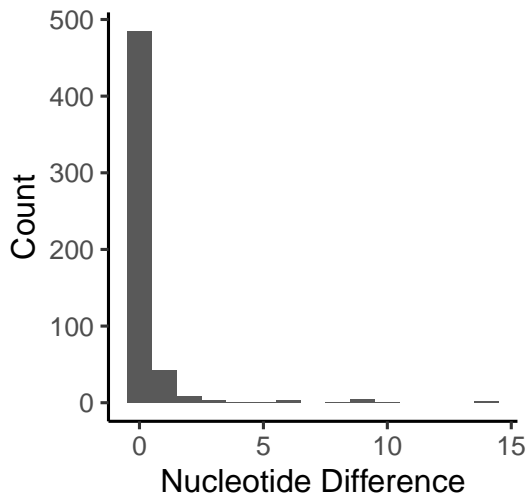
IGHV1-2*04

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



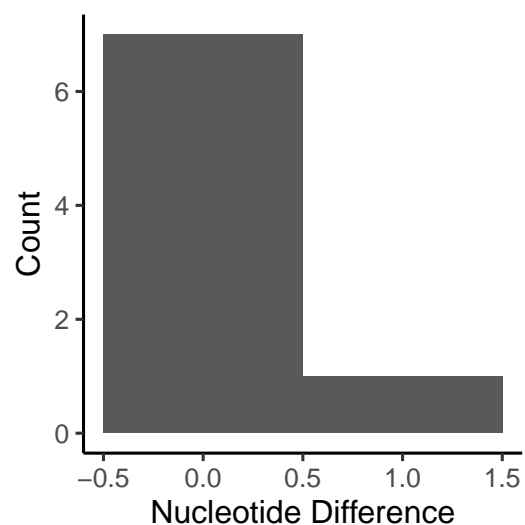
IGHV1-18*01

551 sequences assigned
485 (88%) exact matches, in which:
460 unique CDR3
6 unique J



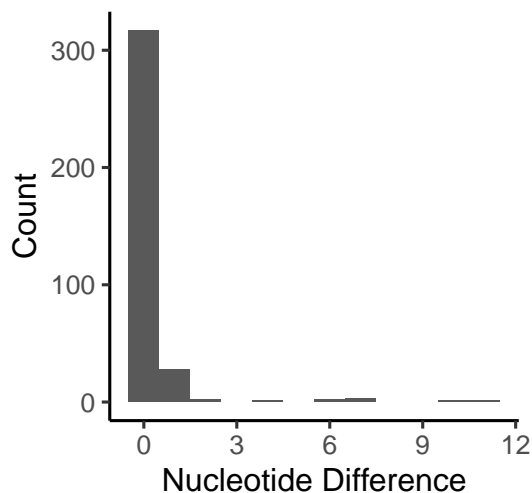
IGHV1-45*02

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



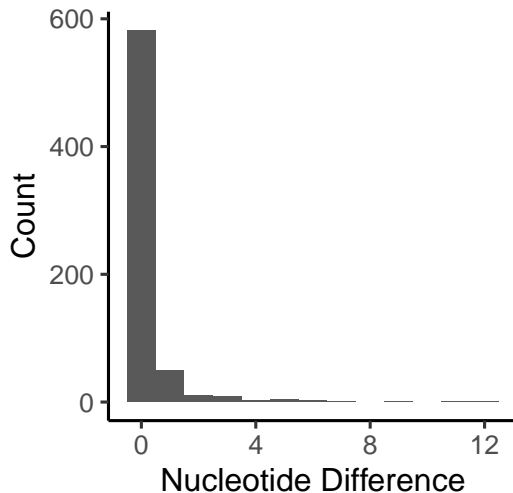
IGHV1-3*01

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



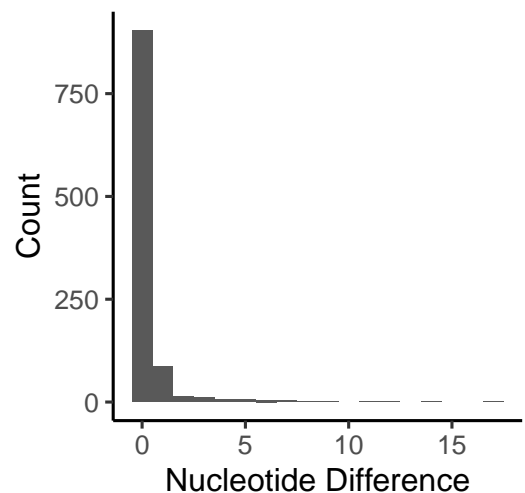
IGHV1-18*04

661 sequences assigned
582 (88%) exact matches, in which:
551 unique CDR3
6 unique J



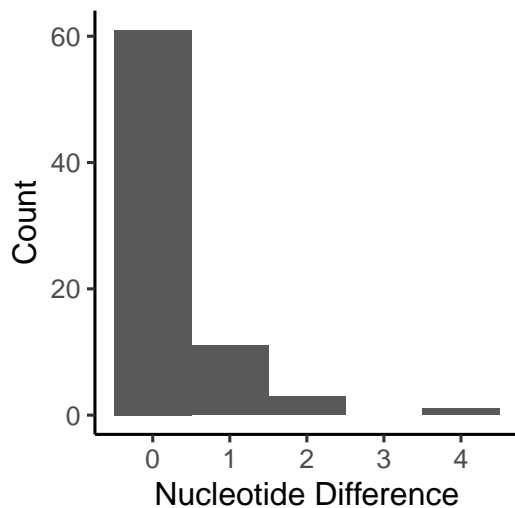
IGHV1-46*01

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



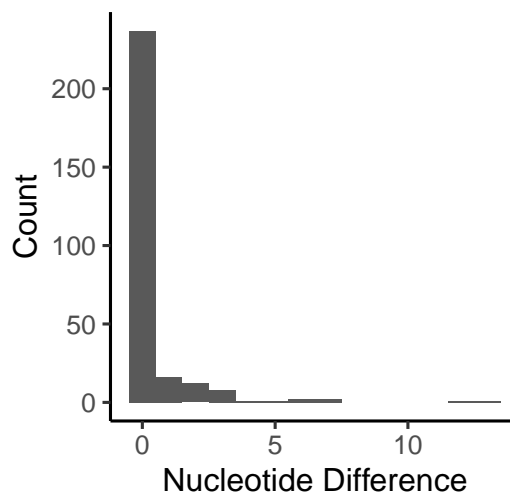
IGHV1-58*02

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



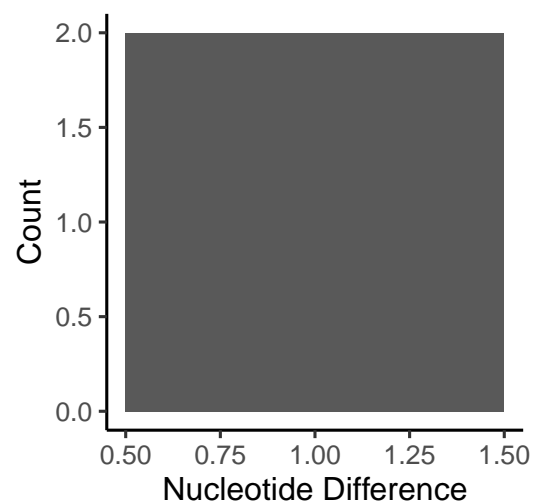
IGHV2-5*02

281 sequences assigned
237 (84.3%) exact matches, in which:
224 unique CDR3
6 unique J



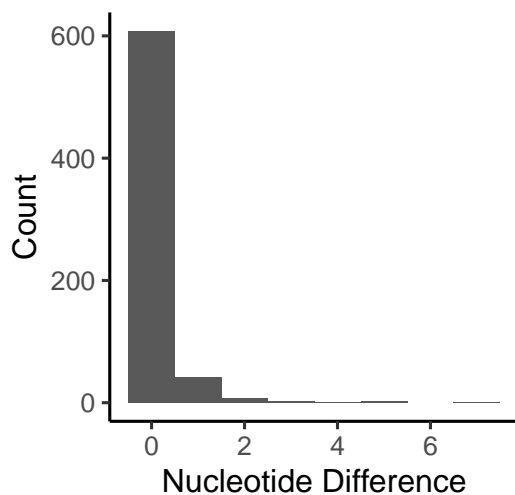
IGHV2-70D*04

2 sequences assigned
No exact matches.



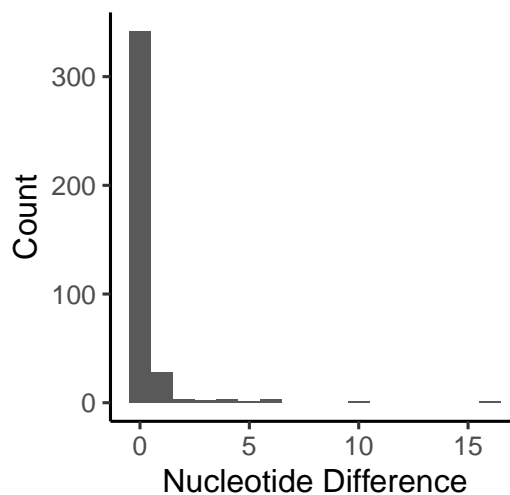
IGHV1-69*08_C191T

665 sequences assigned
608 (91.4%) exact matches, in which:
575 unique CDR3
6 unique J



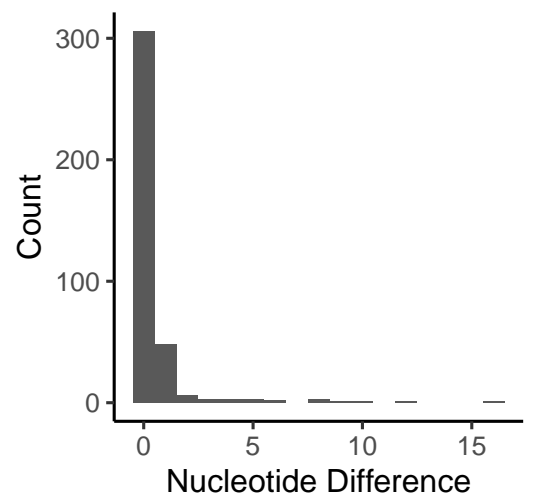
IGHV2-26*01

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



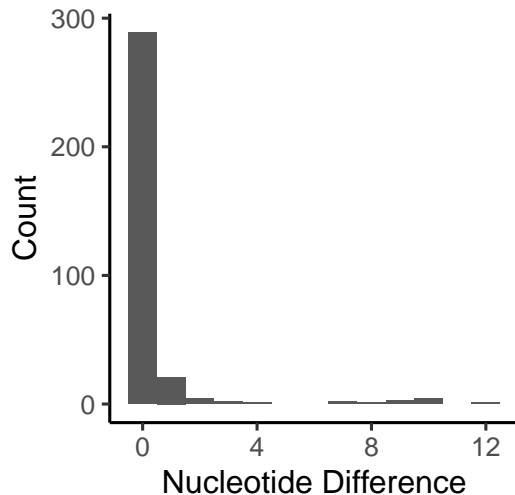
IGHV3-7*01

379 sequences assigned
306 (80.7%) exact matches, in which:
295 unique CDR3
6 unique J



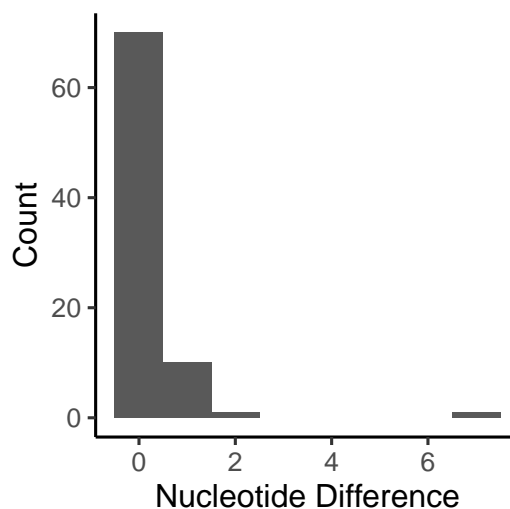
IGHV2-5*01

328 sequences assigned
289 (88.1%) exact matches, in which:
273 unique CDR3
6 unique J



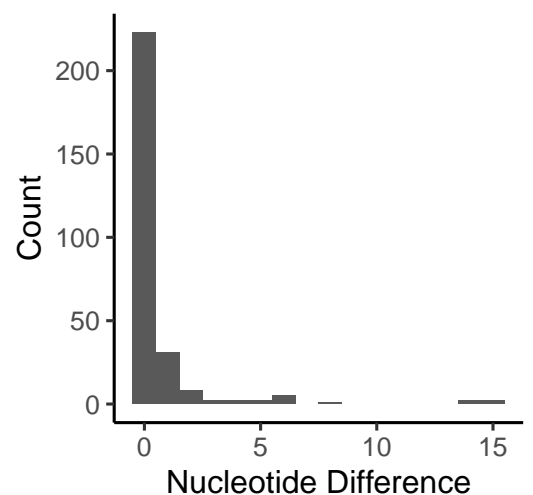
IGHV2-70*01

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



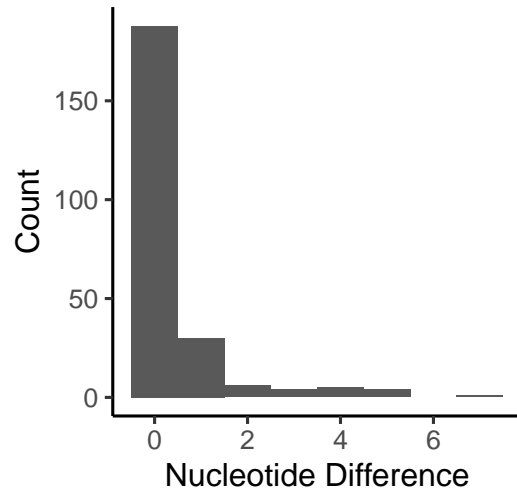
IGHV3-7*03

278 sequences assigned
223 (80.2%) exact matches, in which:
217 unique CDR3
6 unique J



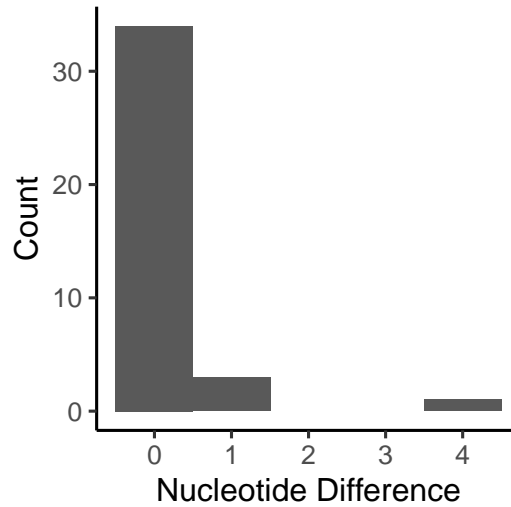
IGHV3-9*03

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



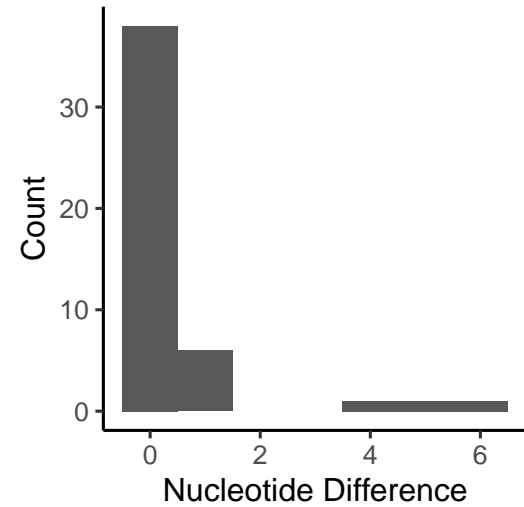
IGHV3-13*05

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



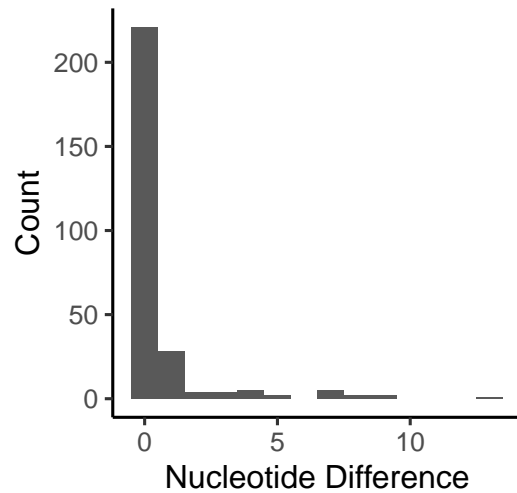
IGHV3-20*01

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



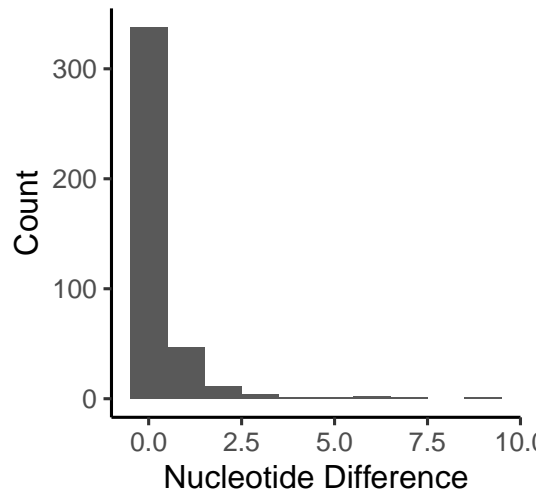
IGHV3-11*04

274 sequences assigned
221 (80.7%) exact matches, in which:
213 unique CDR3
6 unique J



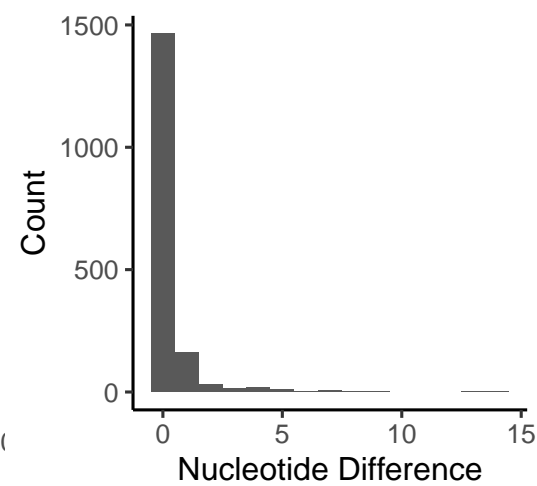
IGHV3-15*01

406 sequences assigned
338 (83.3%) exact matches, in which:
322 unique CDR3
6 unique J



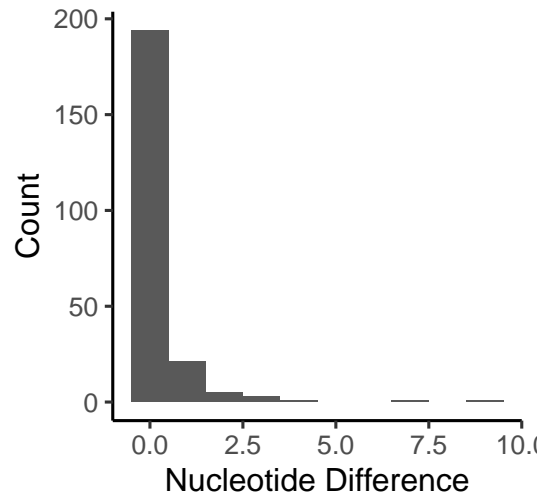
IGHV3-21*01

1714 sequences assigned
1464 (85.4%) exact matches, in which:
1387 unique CDR3
6 unique J



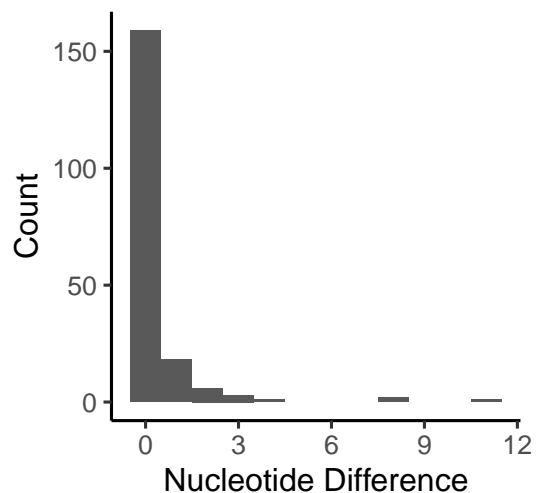
IGHV3-11*06

226 sequences assigned
194 (85.8%) exact matches, in which:
186 unique CDR3
6 unique J



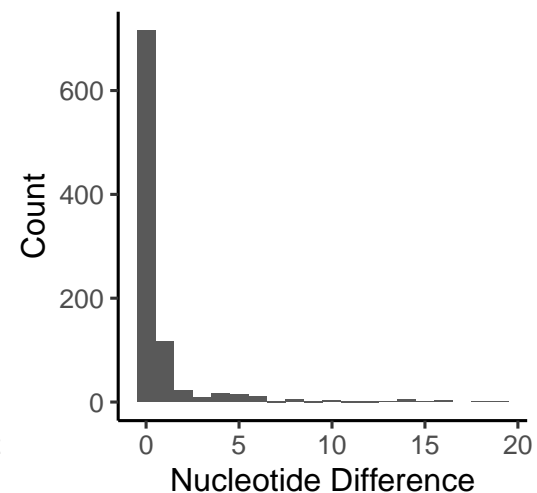
IGHV3-15*01_A313T

190 sequences assigned
159 (83.7%) exact matches, in which:
152 unique CDR3
6 unique J



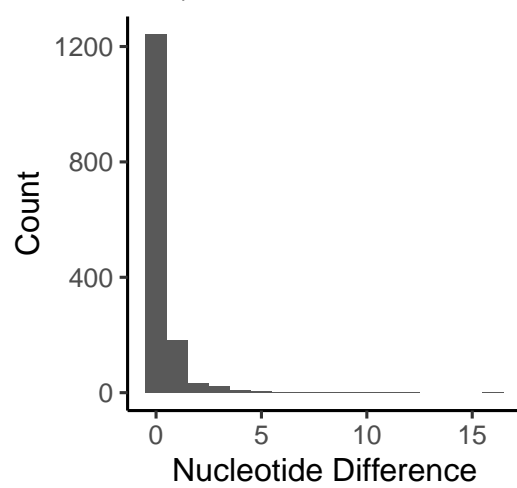
IGHV3-23*04

934 sequences assigned
716 (76.7%) exact matches, in which:
685 unique CDR3
6 unique J



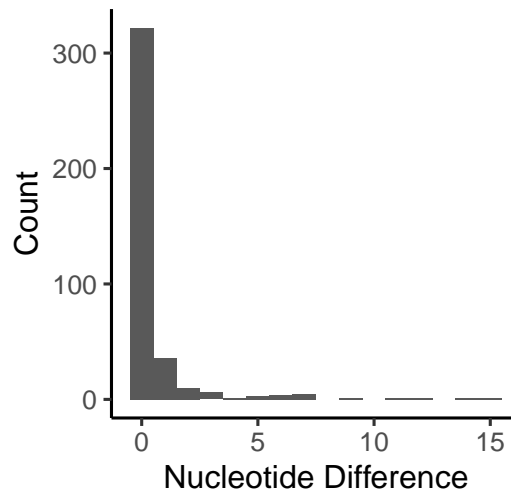
IGHV3-30-3*01

1508 sequences assigned
1242 (82.4%) exact matches, in which:
1186 unique CDR3
6 unique J



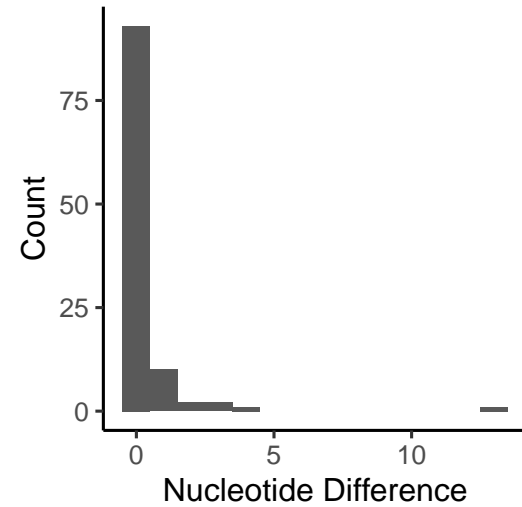
IGHV3-48*02

392 sequences assigned
322 (82.1%) exact matches, in which:
302 unique CDR3
6 unique J



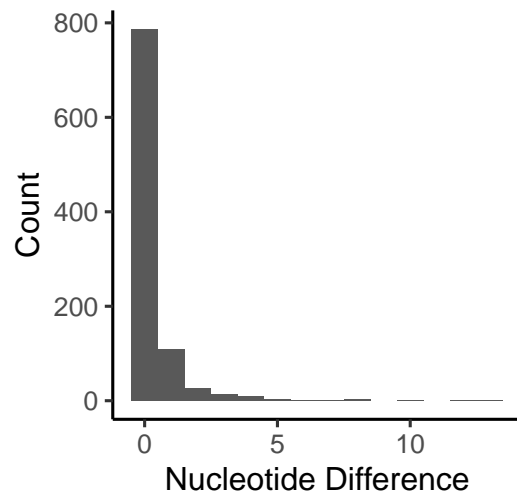
IGHV3-49*05

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



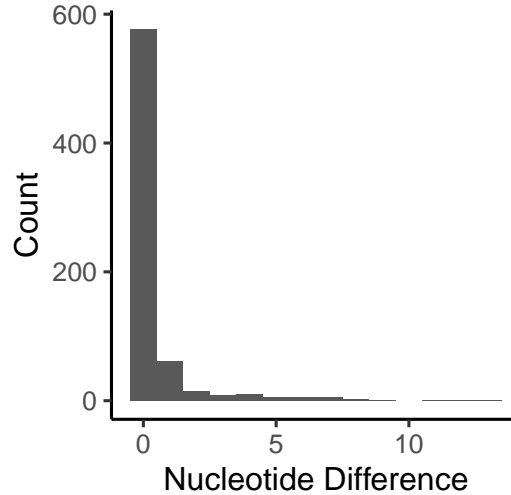
IGHV3-33*01

958 sequences assigned
787 (82.2%) exact matches, in which:
739 unique CDR3
6 unique J



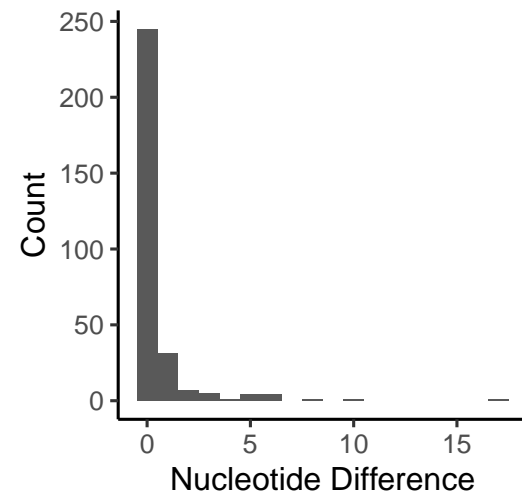
IGHV3-48*03

696 sequences assigned
577 (82.9%) exact matches, in which:
547 unique CDR3
6 unique J



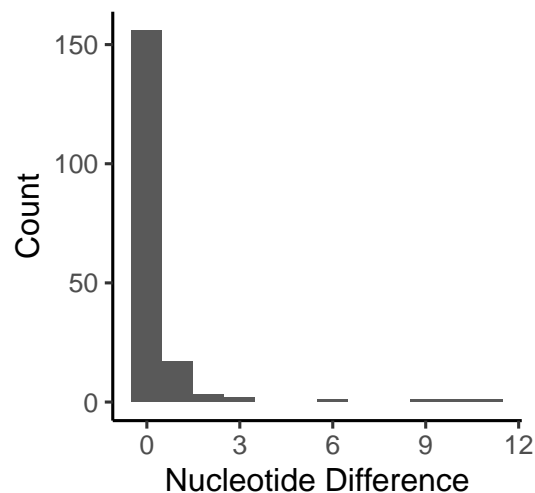
IGHV3-53*01

301 sequences assigned
245 (81.4%) exact matches, in which:
238 unique CDR3
6 unique J



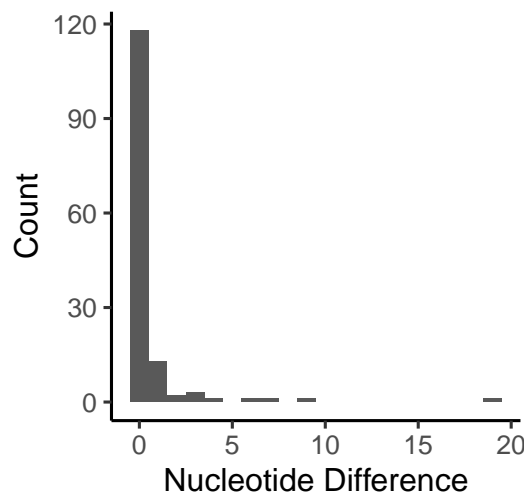
IGHV3-43*01

182 sequences assigned
156 (85.7%) exact matches, in which:
148 unique CDR3
6 unique J



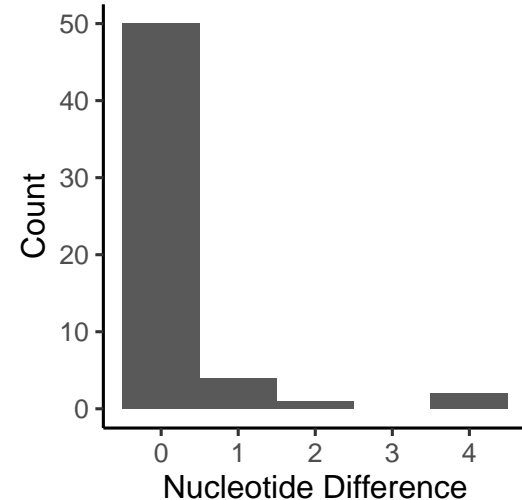
IGHV3-49*03

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



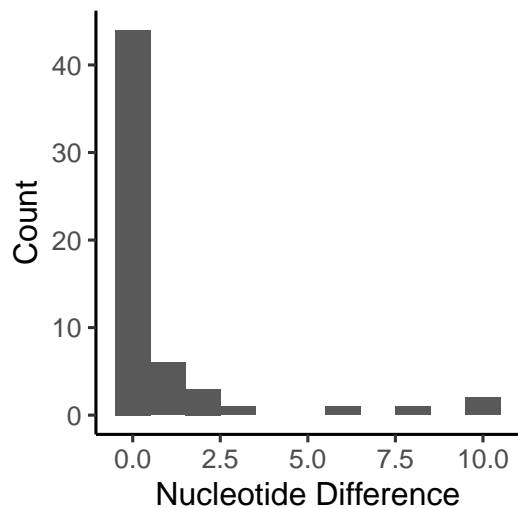
IGHV3-53*04

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



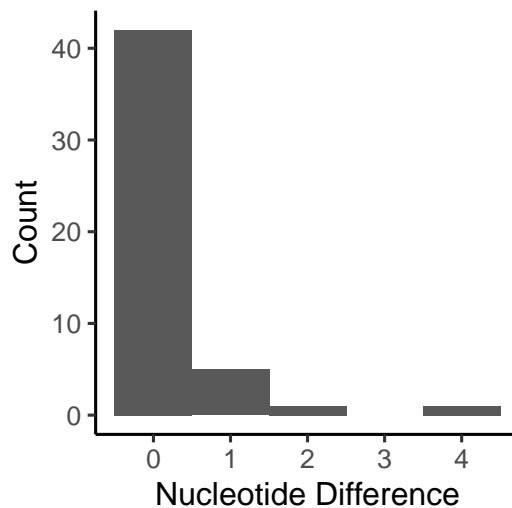
IGHV3-64*01

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



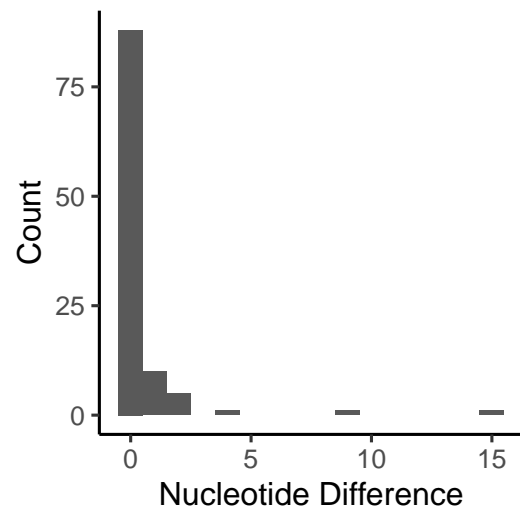
IGHV3-73*01

49 sequences assigned
42 (85.7%) exact matches, in which:
41 unique CDR3
5 unique J



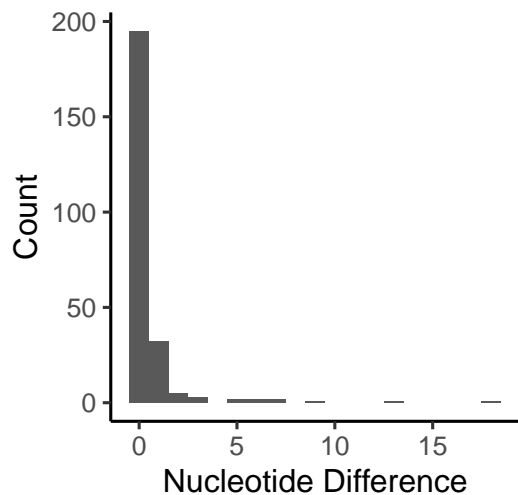
IGHV3-43D*04

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



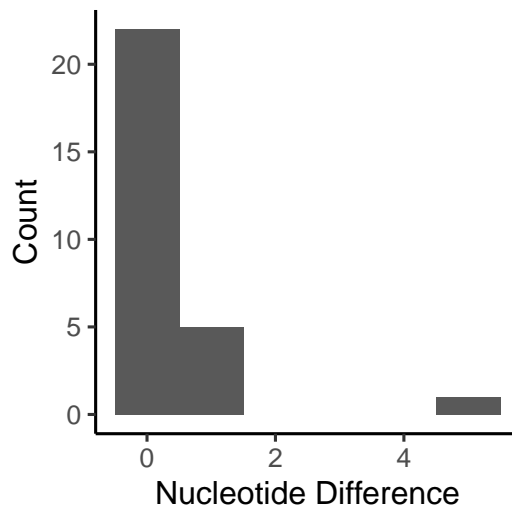
IGHV3-66*02

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



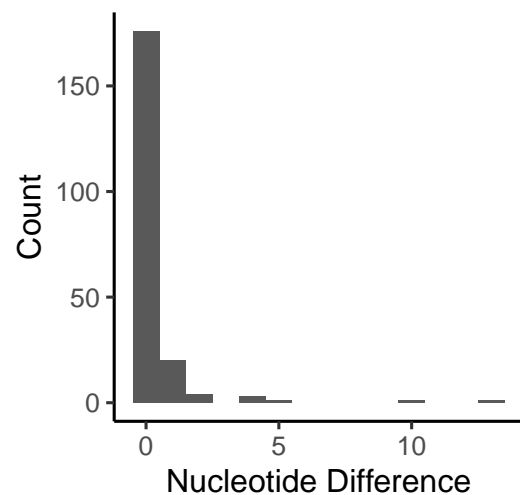
IGHV3-73*02

28 sequences assigned
22 (78.6%) exact matches, in which:
21 unique CDR3
4 unique J



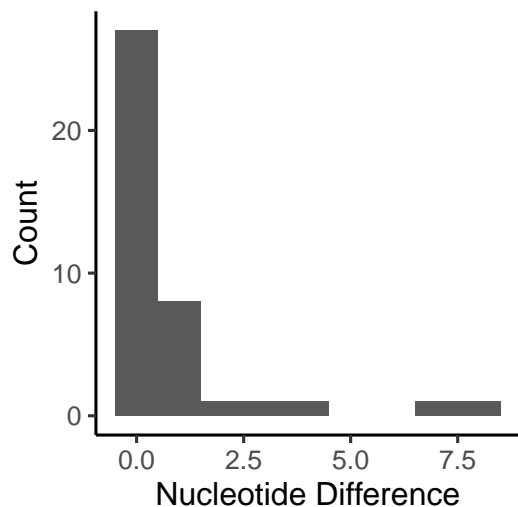
IGHV3-64D*06

206 sequences assigned
176 (85.4%) exact matches, in which:
161 unique CDR3
6 unique J



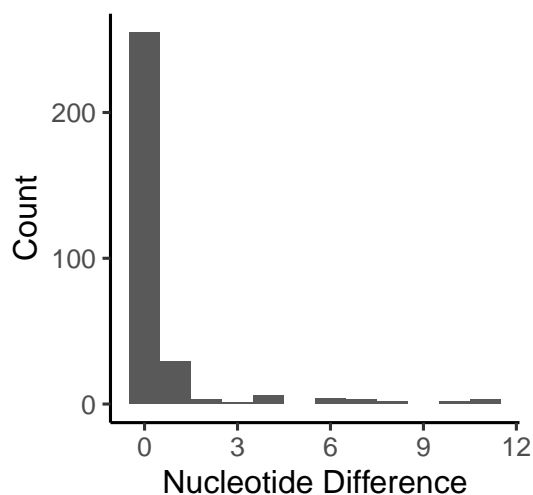
IGHV3-72*01

41 sequences assigned
27 (65.9%) exact matches, in which:
25 unique CDR3
5 unique J



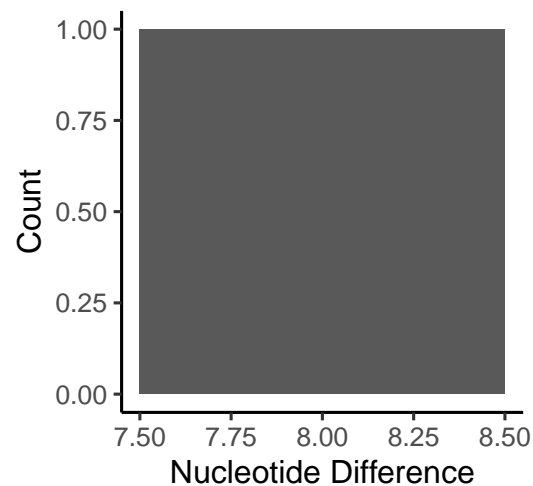
IGHV3-74*01

308 sequences assigned
255 (82.8%) exact matches, in which:
244 unique CDR3
6 unique J



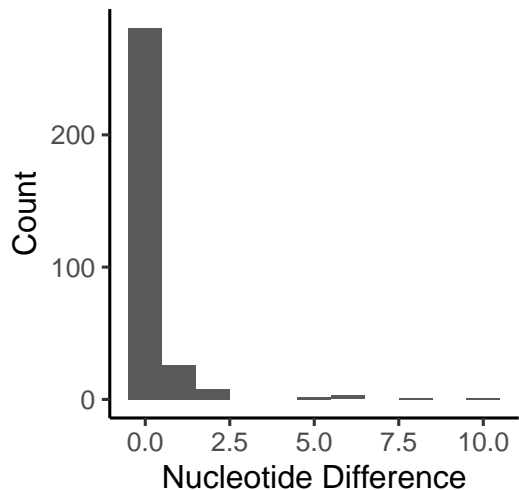
IGHV3-NL1*01

1 sequences assigned
No exact matches.



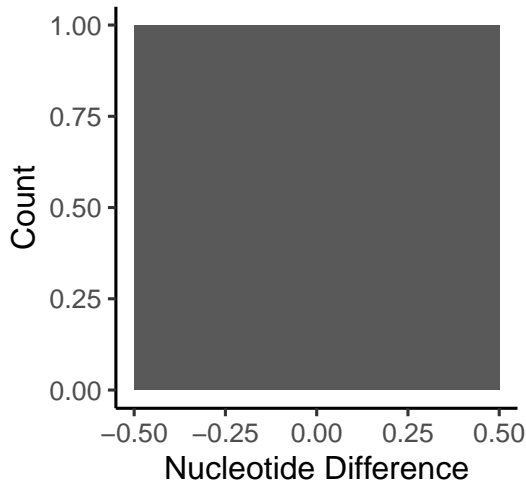
IGHV4-4*02

322 sequences assigned
281 (87.3%) exact matches, in which:
264 unique CDR3
6 unique J



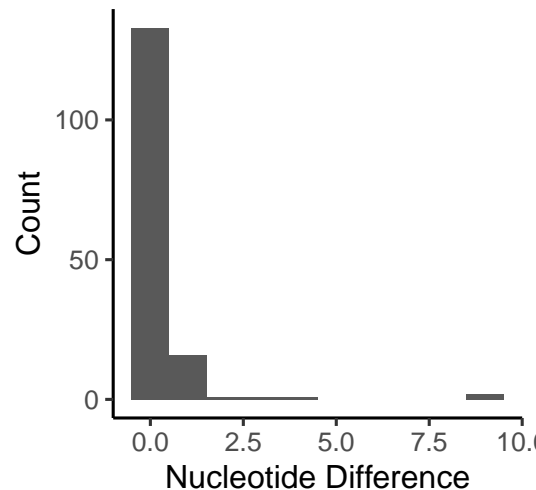
IGHV4-28*07

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



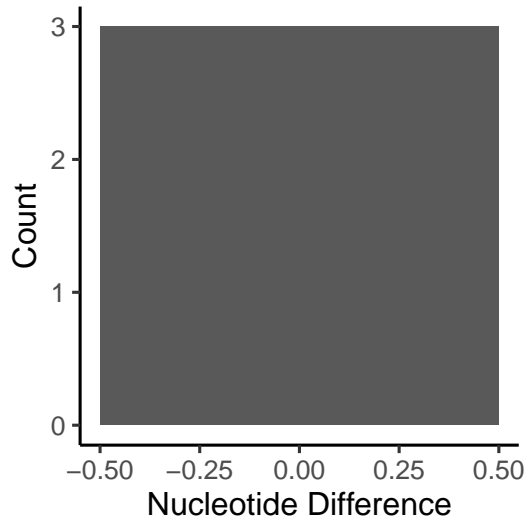
IGHV4-30-4*07

154 sequences assigned
133 (86.4%) exact matches, in which:
124 unique CDR3
5 unique J



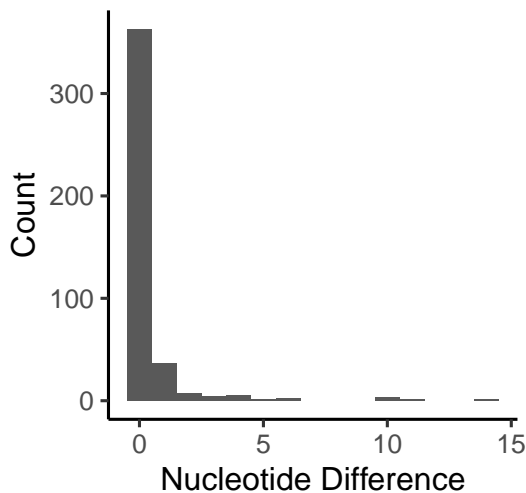
IGHV4-28*01

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



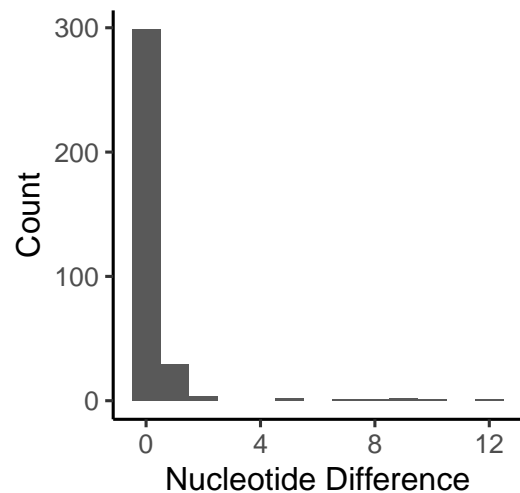
IGHV4-30-2*01

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



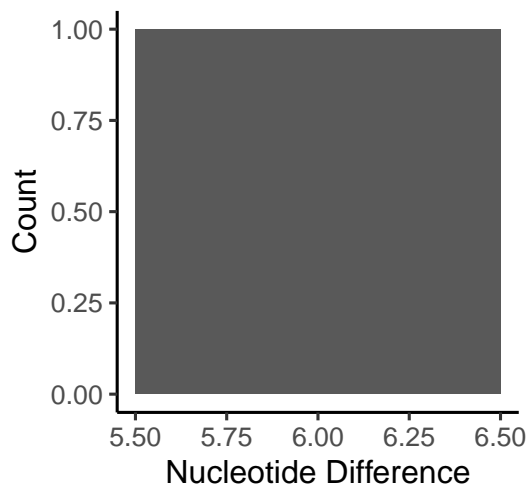
IGHV4-30-4*08

340 sequences assigned
299 (87.9%) exact matches, in which:
284 unique CDR3
6 unique J



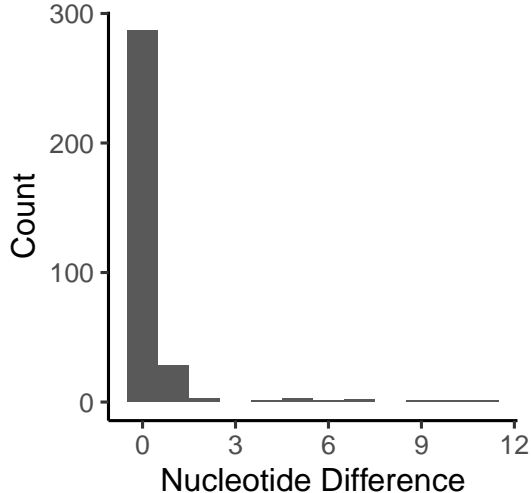
IGHV4-28*03

1 sequences assigned
No exact matches.



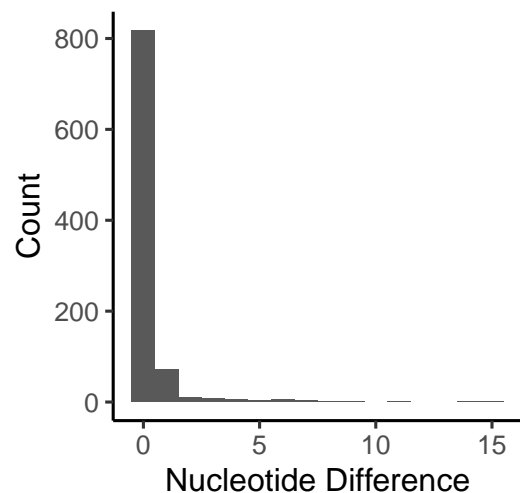
IGHV4-30-4*01

329 sequences assigned
287 (87.2%) exact matches, in which:
274 unique CDR3
6 unique J



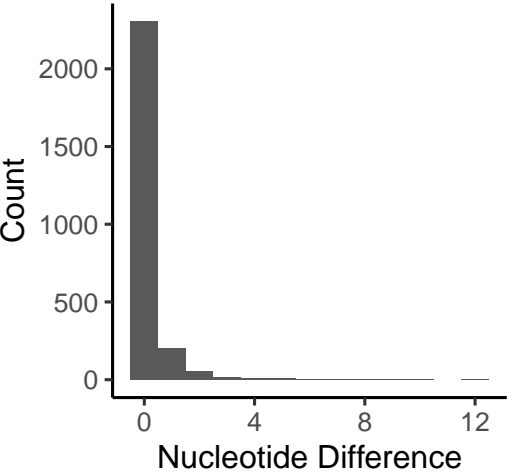
IGHV4-31*03

930 sequences assigned
818 (88%) exact matches, in which:
782 unique CDR3
6 unique J



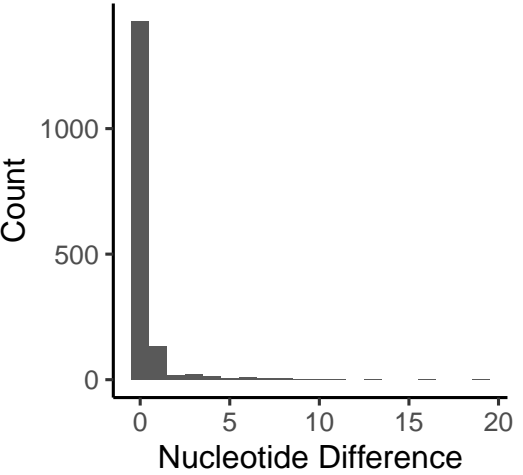
IGHV4-34*01

2606 sequences assigned
2305 (88.4%) exact matches, in which:
2167 unique CDR3
6 unique J



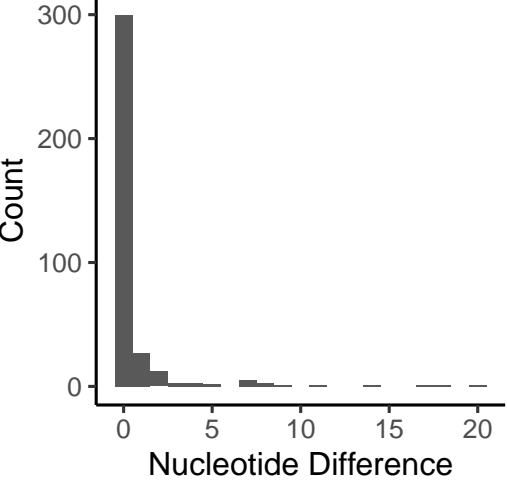
IGHV4-39*07

1647 sequences assigned
1427 (86.6%) exact matches, in which:
1329 unique CDR3
6 unique J



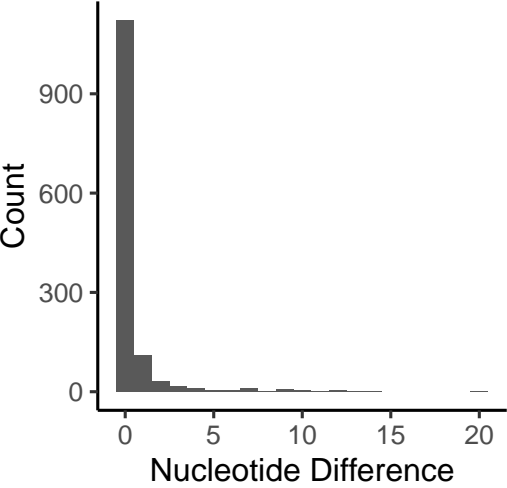
IGHV4-59*12

361 sequences assigned
300 (83.1%) exact matches, in which:
280 unique CDR3
6 unique J



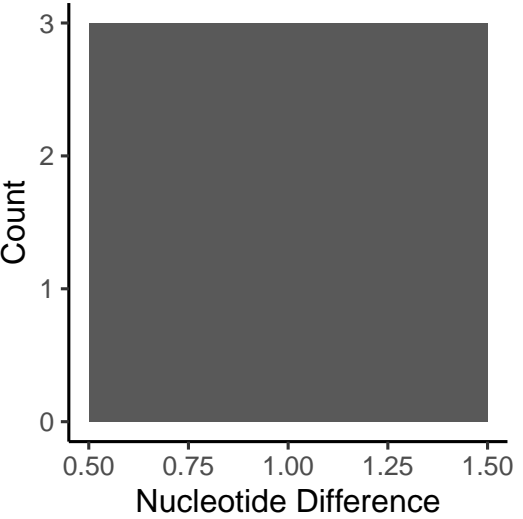
IGHV4-38-2*01

1342 sequences assigned
1123 (83.7%) exact matches, in which:
1028 unique CDR3
6 unique J



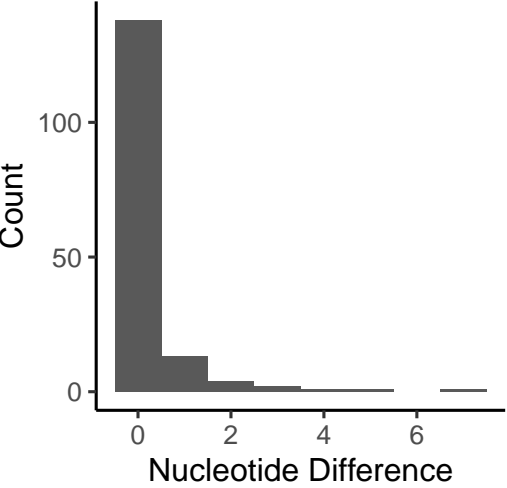
IGHV4-55*08

3 sequences assigned
No exact matches.



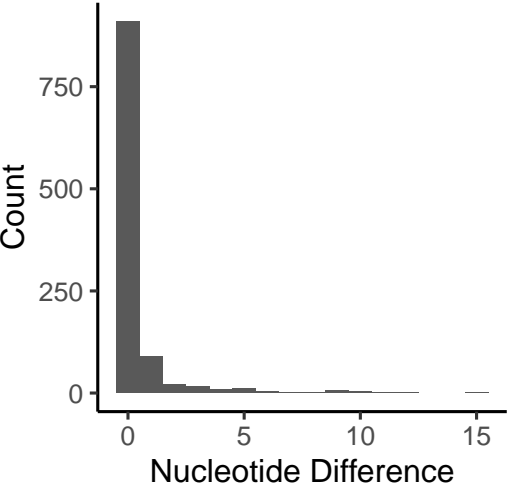
IGHV4-61*01

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



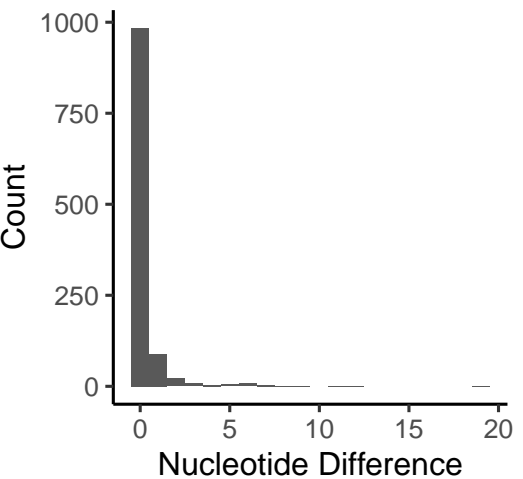
IGHV4-39*01

1076 sequences assigned
910 (84.6%) exact matches, in which:
867 unique CDR3
6 unique J



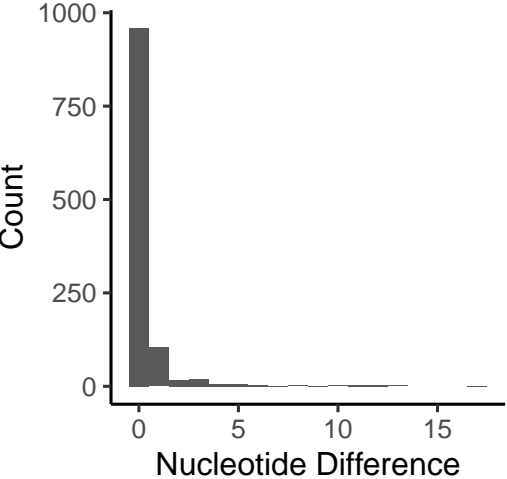
IGHV4-59*01

1131 sequences assigned
984 (87%) exact matches, in which:
935 unique CDR3
6 unique J



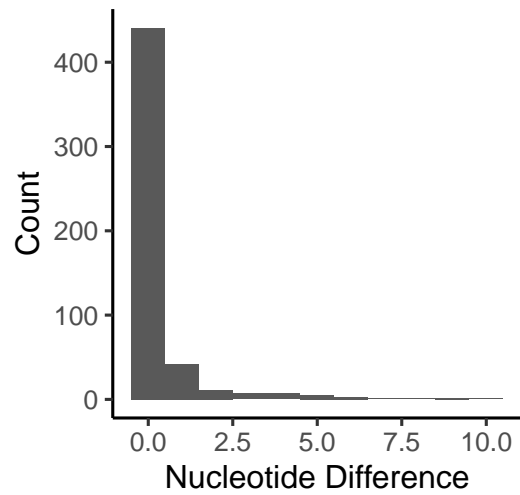
IGHV4-61*02

1131 sequences assigned
959 (84.8%) exact matches, in which:
910 unique CDR3
6 unique J



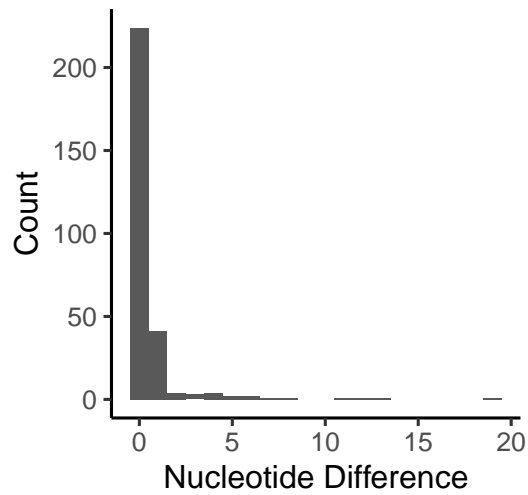
IGHV5-10-1*03

523 sequences assigned
441 (84.3%) exact matches, in which:
418 unique CDR3
6 unique J



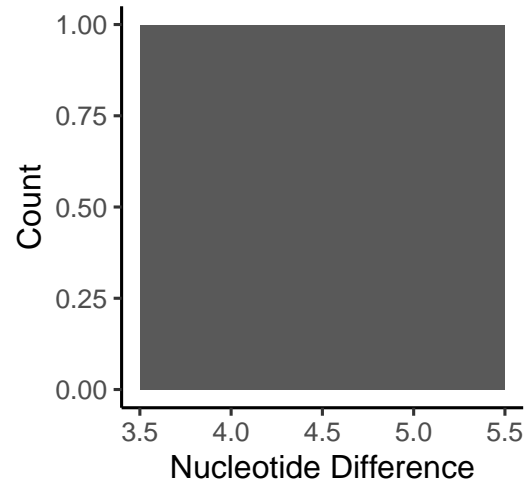
IGHV6-1*01

286 sequences assigned
224 (78.3%) exact matches, in which:
215 unique CDR3
6 unique J



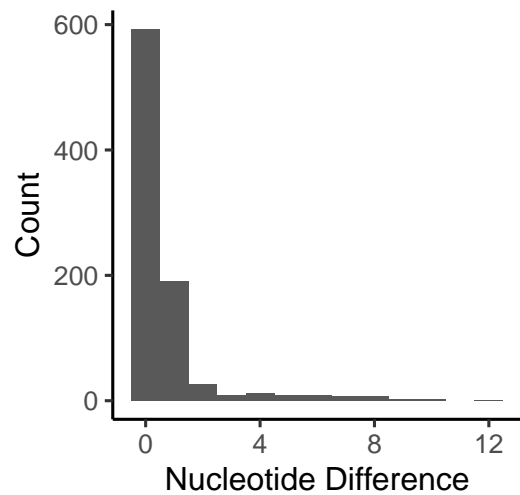
IGHV7-81*01

2 sequences assigned
No exact matches.



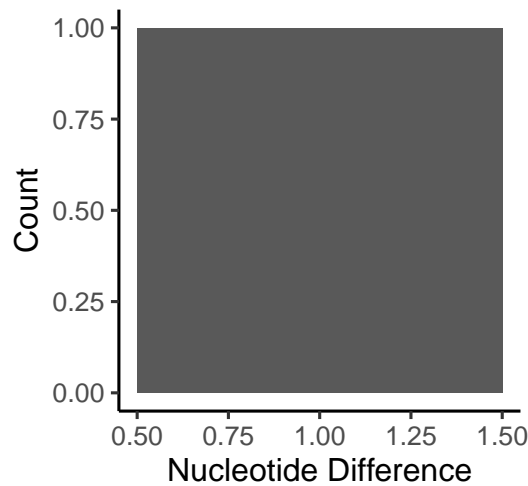
IGHV5-51*01

868 sequences assigned
593 (68.3%) exact matches, in which:
562 unique CDR3
6 unique J



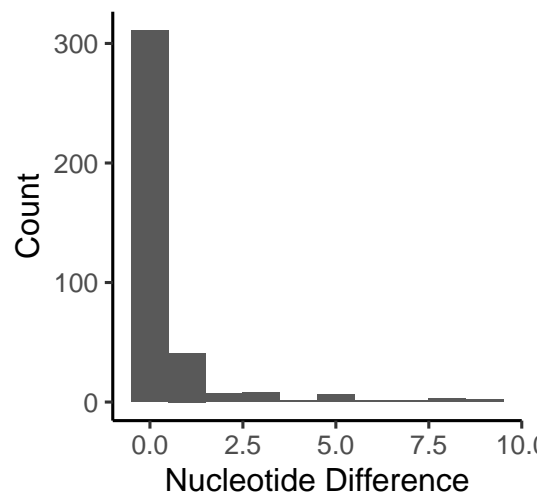
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



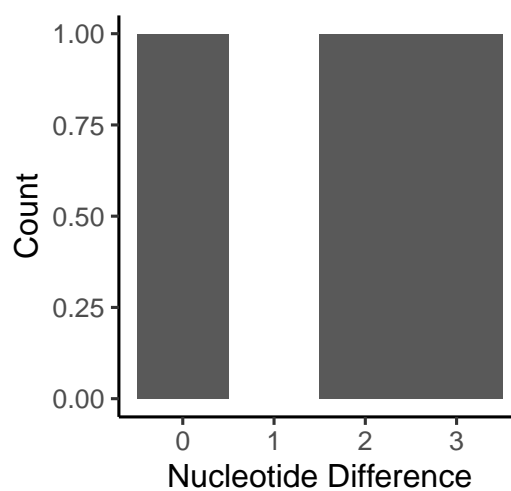
IGHV5-51*03

383 sequences assigned
311 (81.2%) exact matches, in which:
294 unique CDR3
6 unique J



IGHV7-4-1*01

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





Warning – no inferred sequences found.