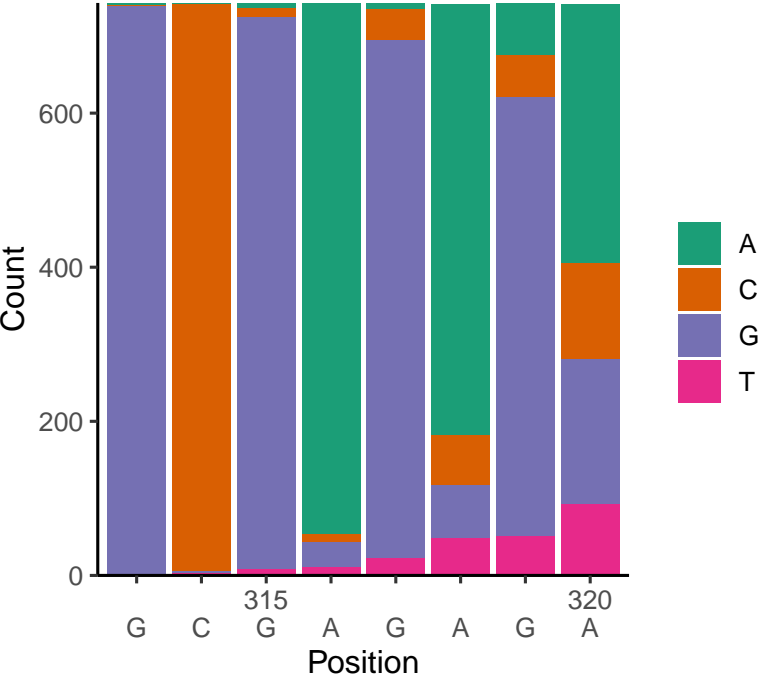
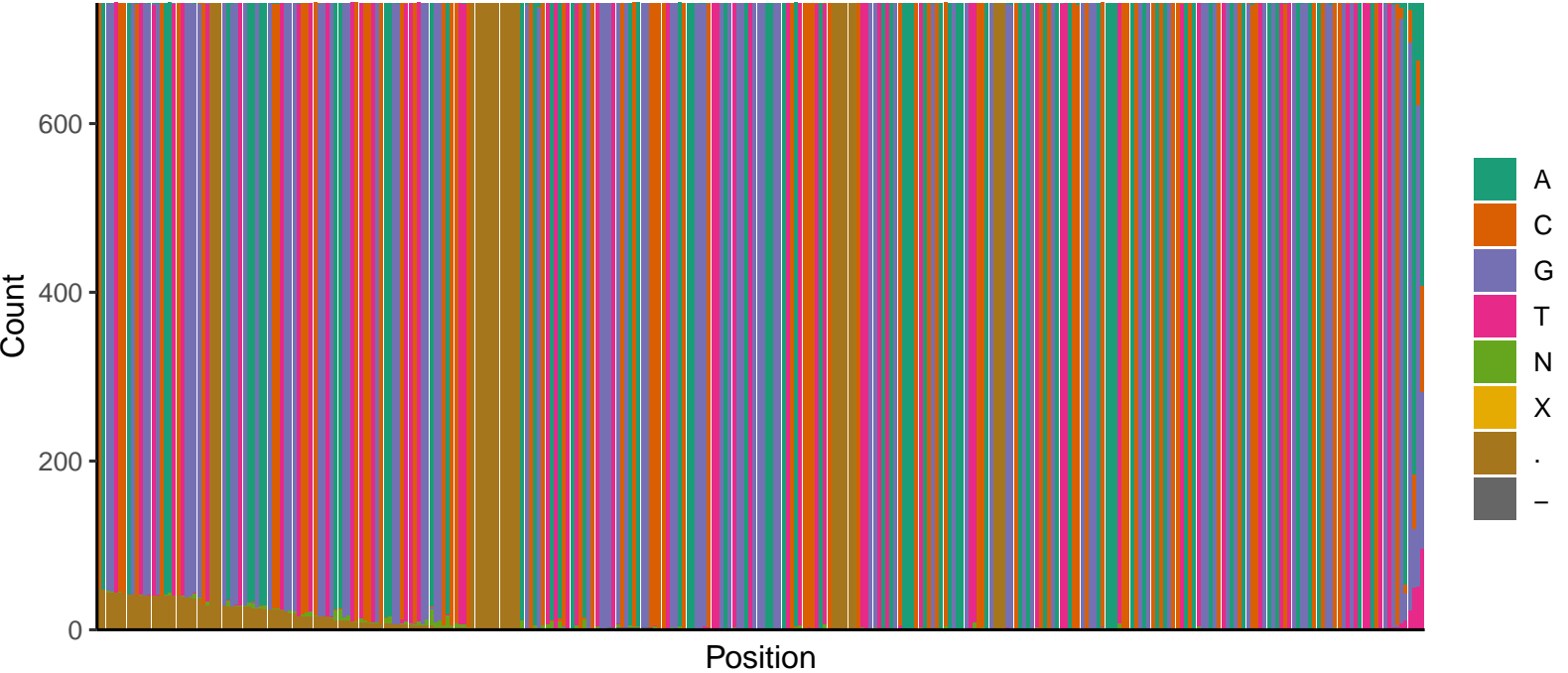


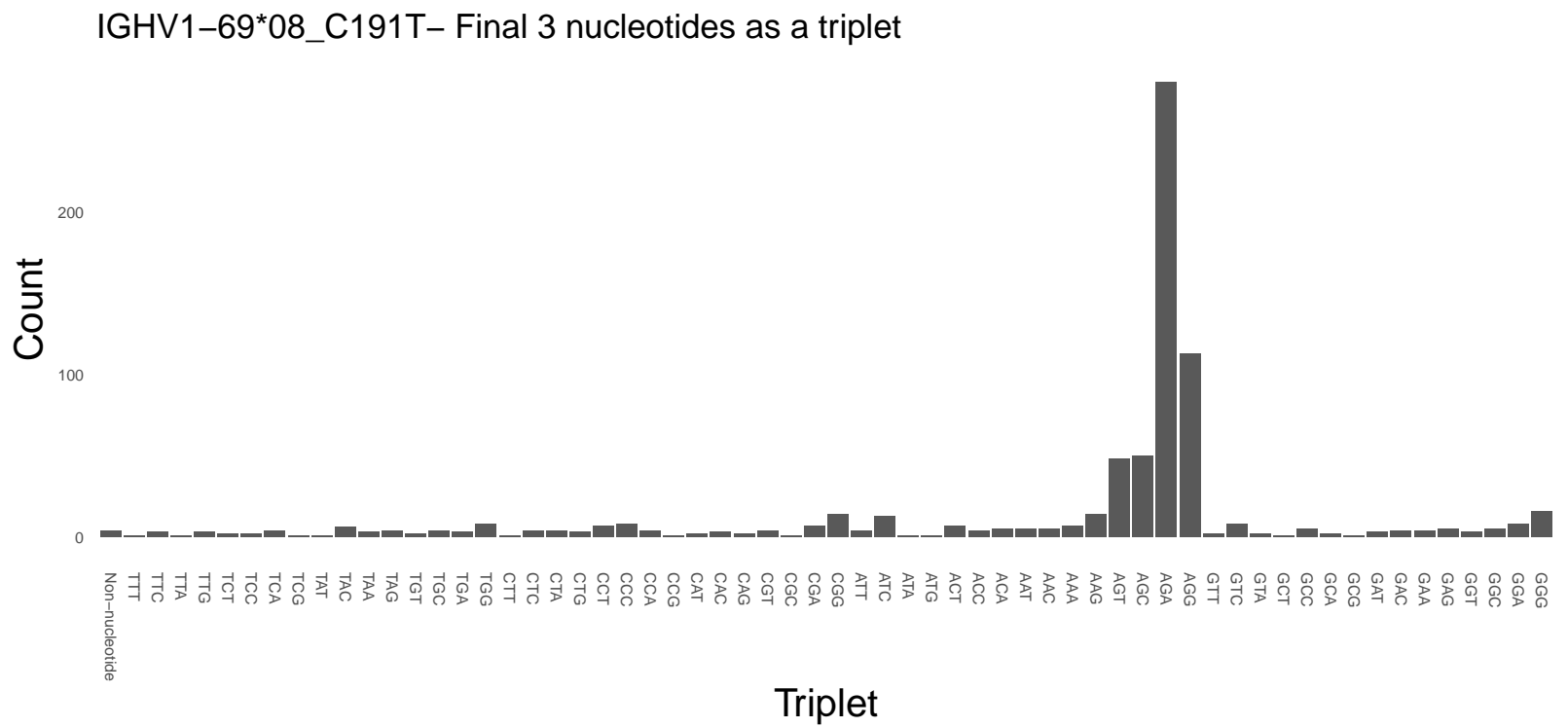
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

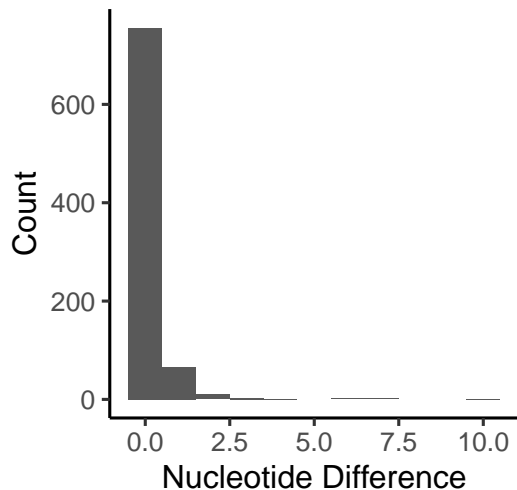


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



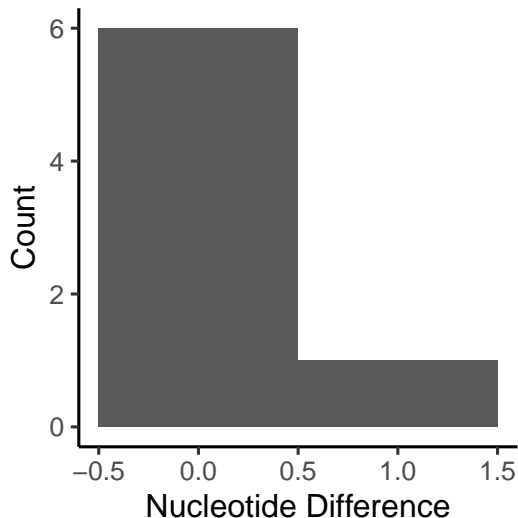
IGHV1-2*02

842 sequences assigned
756 (89.8%) exact matches, in which:
729 unique CDR3
6 unique J



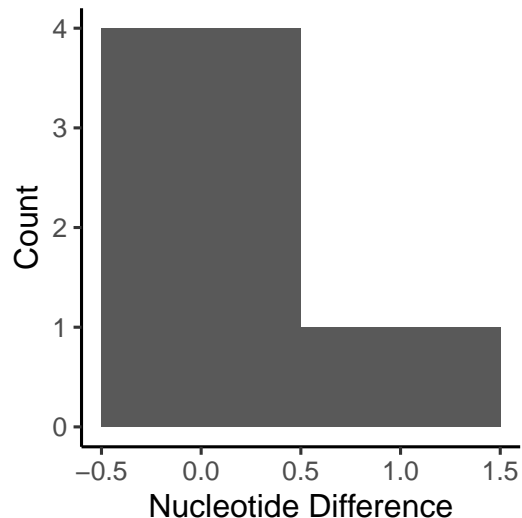
IGHV1-8*01

7 sequences assigned
6 (85.7%) exact matches, in which:
6 unique CDR3
3 unique J



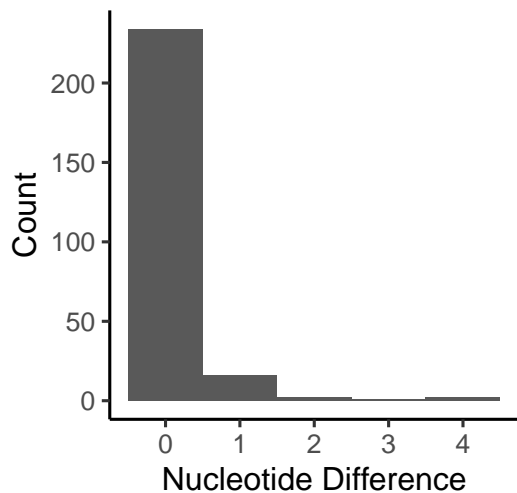
IGHV1-45*02

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



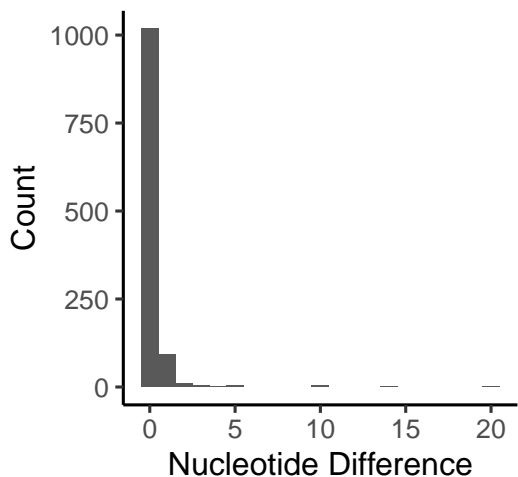
IGHV1-2*04

255 sequences assigned
234 (91.8%) exact matches, in which:
224 unique CDR3
6 unique J



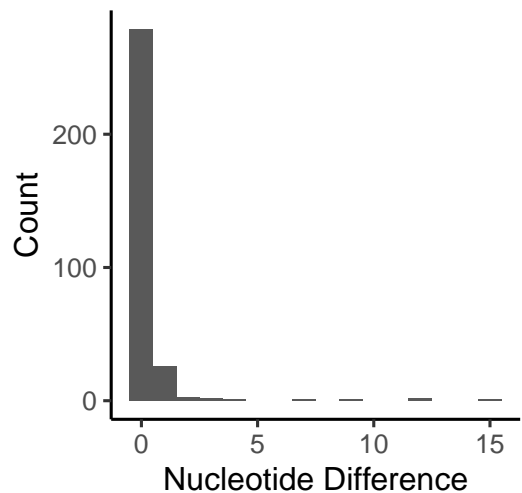
IGHV1-18*01

1134 sequences assigned
1018 (89.8%) exact matches, in which:
982 unique CDR3
6 unique J



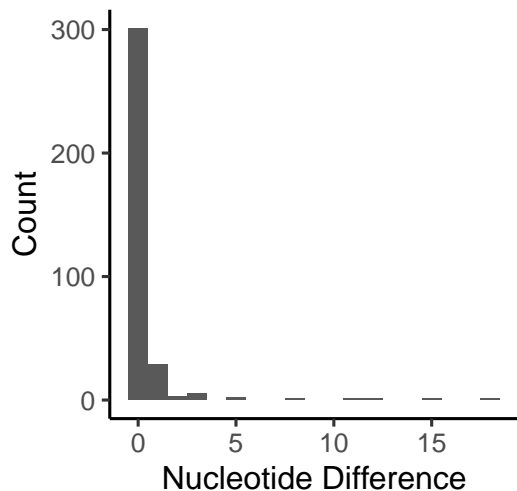
IGHV1-46*01

316 sequences assigned
279 (88.3%) exact matches, in which:
265 unique CDR3
5 unique J



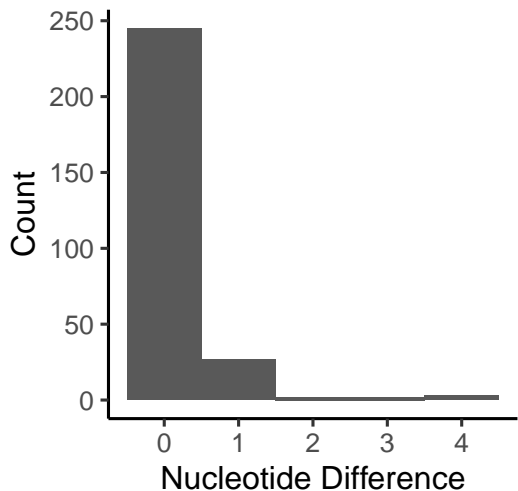
IGHV1-3*01

345 sequences assigned
301 (87.2%) exact matches, in which:
286 unique CDR3
6 unique J



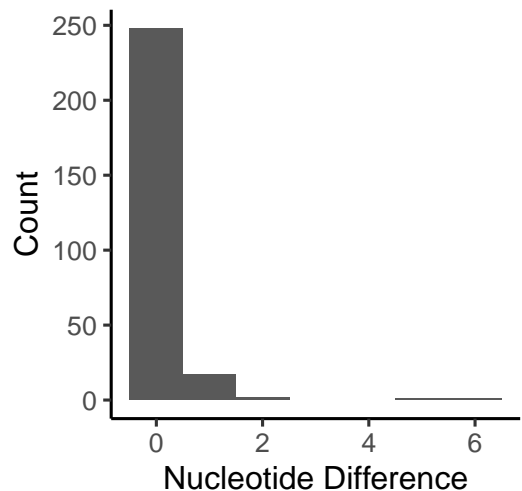
IGHV1-24*01

279 sequences assigned
245 (87.8%) exact matches, in which:
240 unique CDR3
5 unique J



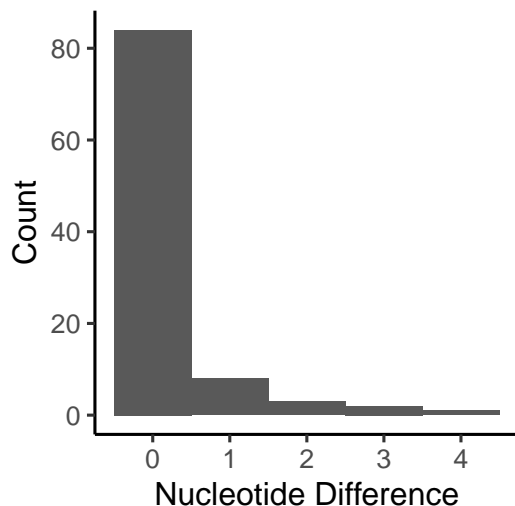
IGHV1-46*03

270 sequences assigned
248 (91.9%) exact matches, in which:
232 unique CDR3
6 unique J



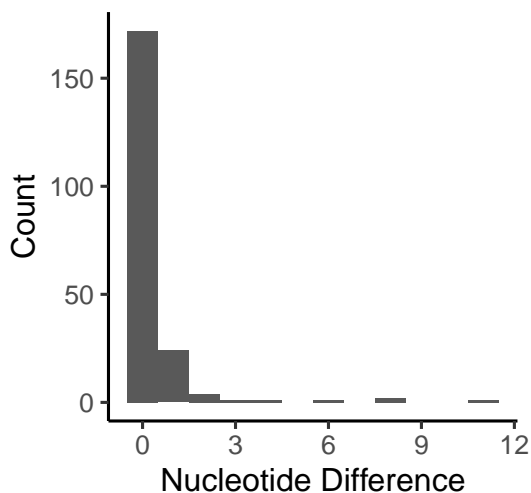
IGHV1-58*02

98 sequences assigned
84 (85.7%) exact matches, in which:
82 unique CDR3
6 unique J



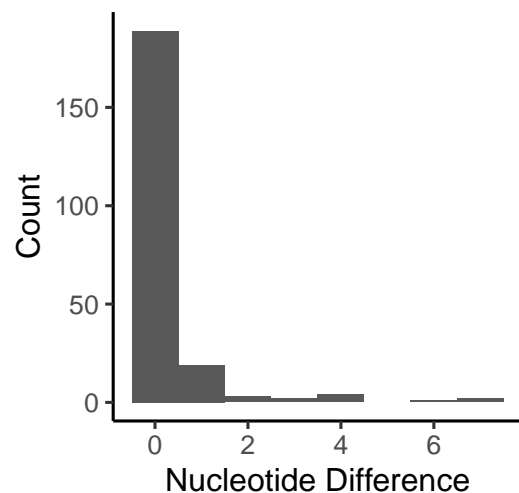
IGHV2-5*01

206 sequences assigned
172 (83.5%) exact matches, in which:
170 unique CDR3
6 unique J



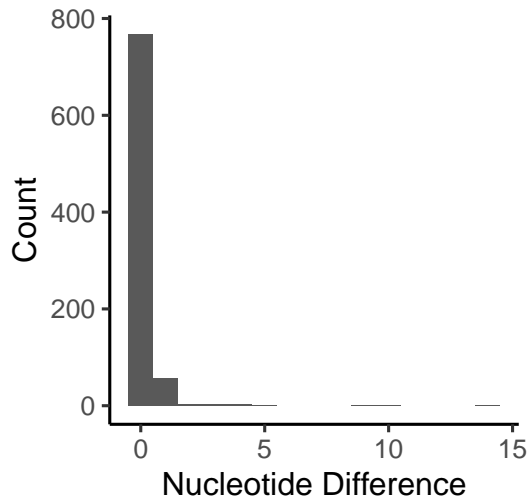
IGHV2-70*15

220 sequences assigned
189 (85.9%) exact matches, in which:
188 unique CDR3
4 unique J



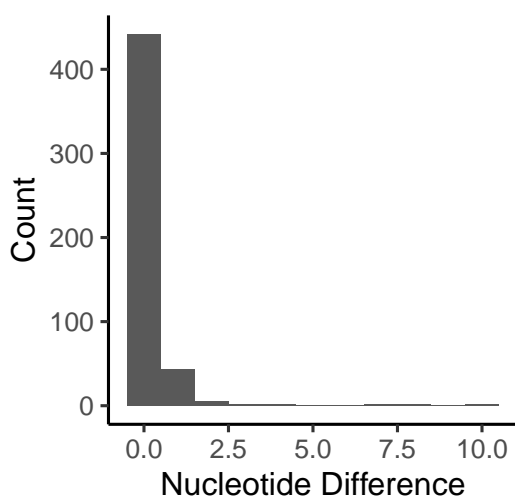
IGHV1-69*04

840 sequences assigned
768 (91.4%) exact matches, in which:
735 unique CDR3
6 unique J



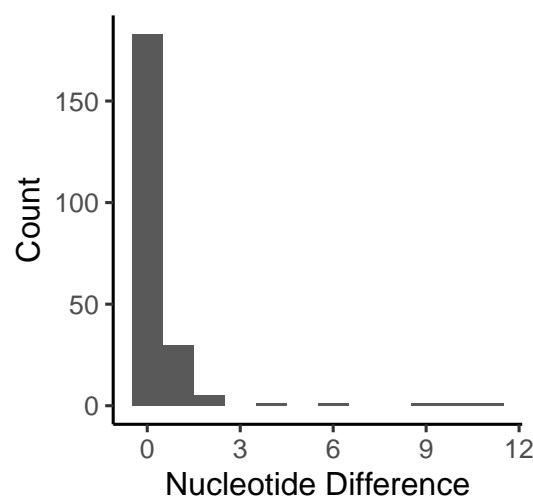
IGHV2-5*02

503 sequences assigned
442 (87.9%) exact matches, in which:
425 unique CDR3
6 unique J



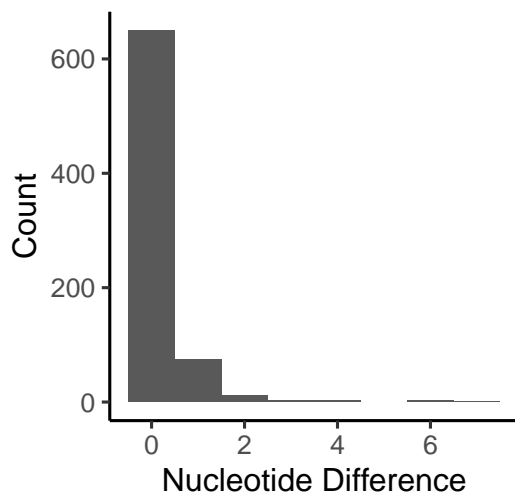
IGHV3-7*04

223 sequences assigned
183 (82.1%) exact matches, in which:
177 unique CDR3
6 unique J



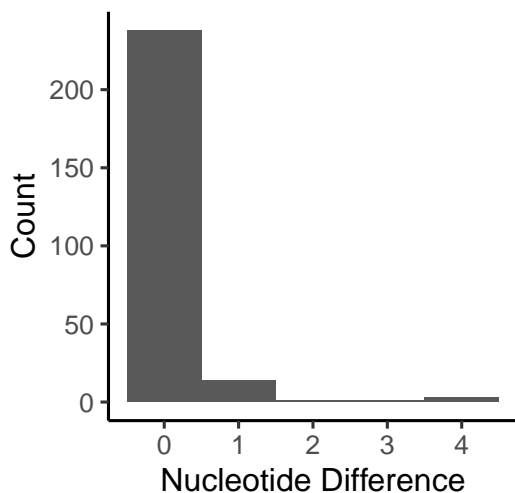
IGHV1-69*08_C191T

743 sequences assigned
650 (87.5%) exact matches, in which:
610 unique CDR3
6 unique J



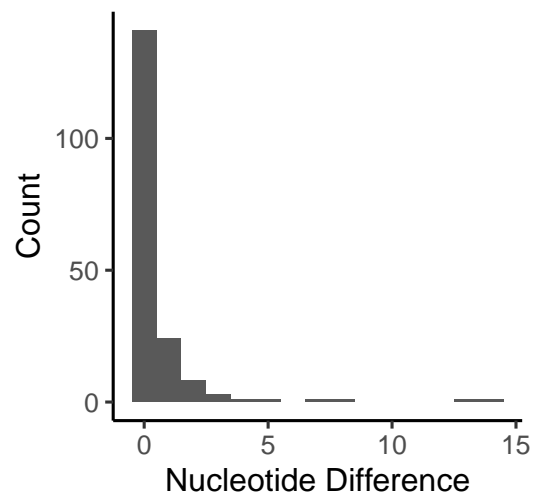
IGHV2-26*01

257 sequences assigned
238 (92.6%) exact matches, in which:
231 unique CDR3
5 unique J



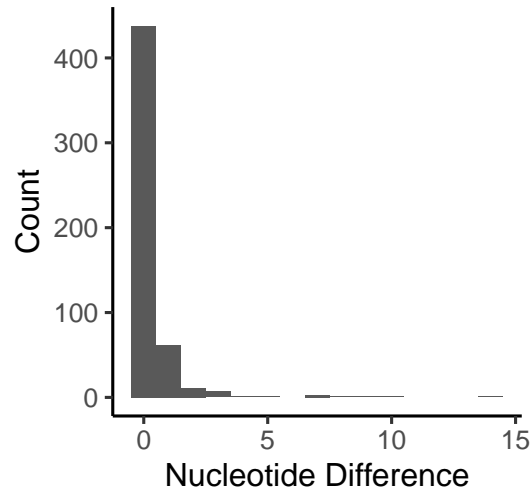
IGHV3-7*05

182 sequences assigned
141 (77.5%) exact matches, in which:
137 unique CDR3
6 unique J



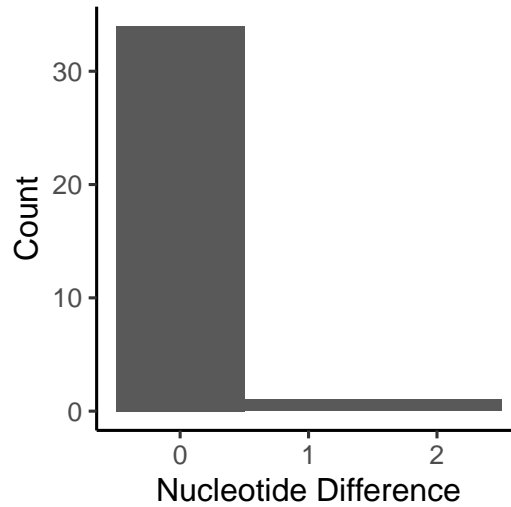
IGHV3-11*05

527 sequences assigned
438 (83.1%) exact matches, in which:
413 unique CDR3
6 unique J



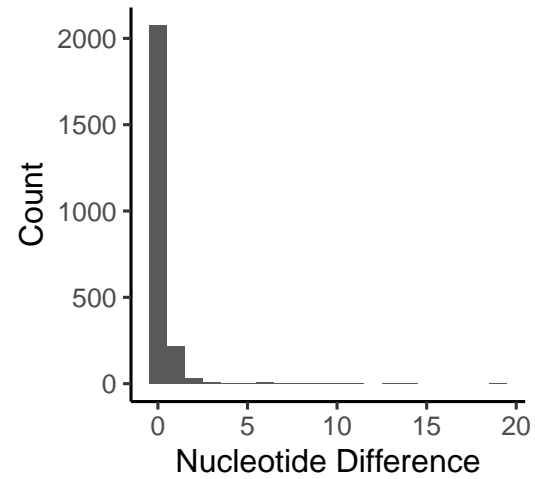
IGHV3-13*05

36 sequences assigned
34 (94.4%) exact matches, in which:
32 unique CDR3
5 unique J



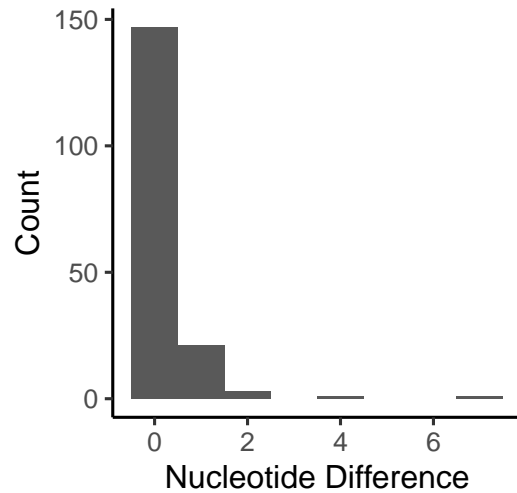
IGHV3-21*01

2367 sequences assigned
2075 (87.7%) exact matches, in which:
1900 unique CDR3
6 unique J



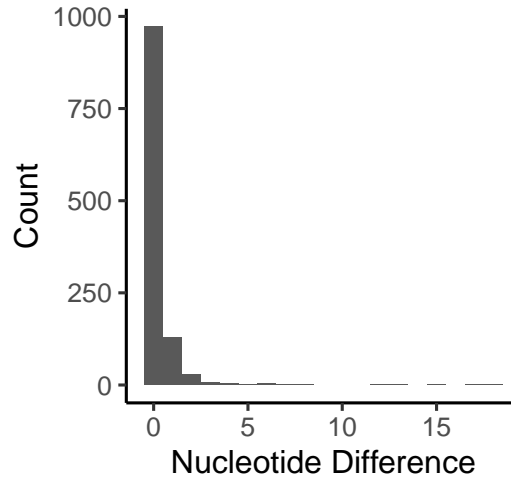
IGHV3-11*06

173 sequences assigned
147 (85%) exact matches, in which:
139 unique CDR3
6 unique J



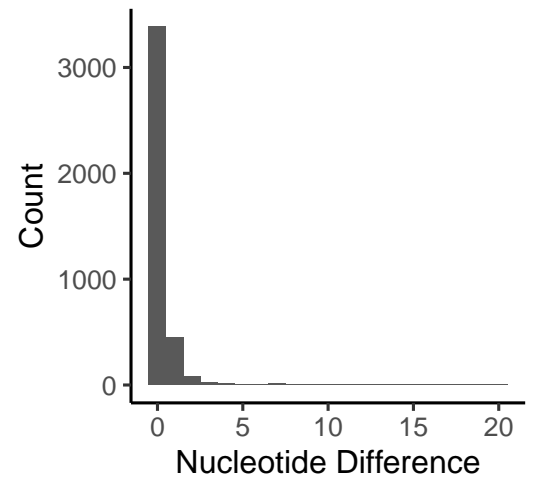
IGHV3-15*01

1156 sequences assigned
972 (84.1%) exact matches, in which:
916 unique CDR3
6 unique J



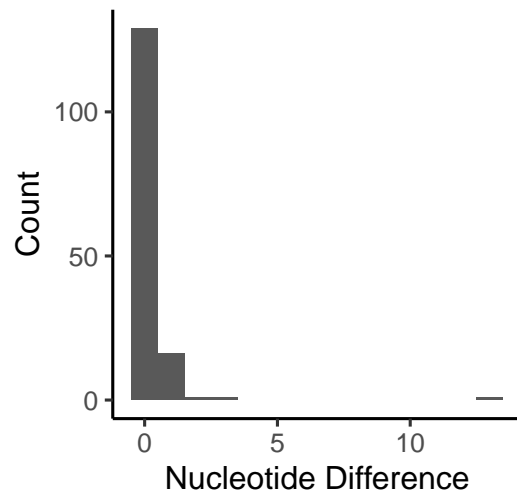
IGHV3-23*01

4037 sequences assigned
3385 (83.8%) exact matches, in which:
3114 unique CDR3
6 unique J



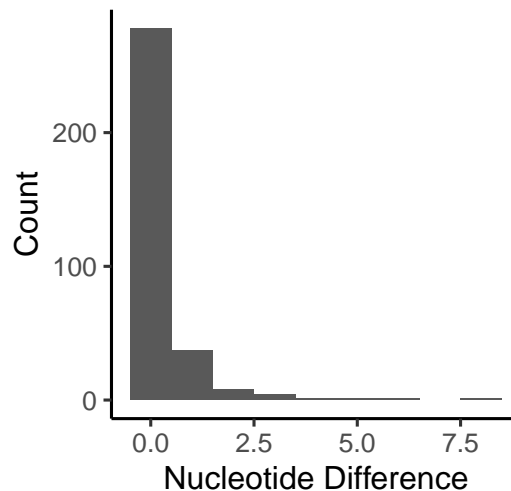
IGHV3-13*04

148 sequences assigned
129 (87.2%) exact matches, in which:
123 unique CDR3
6 unique J



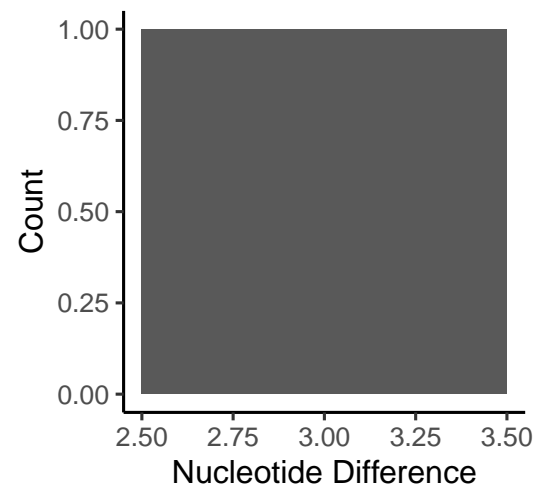
IGHV3-20*04

331 sequences assigned
278 (84%) exact matches, in which:
260 unique CDR3
6 unique J



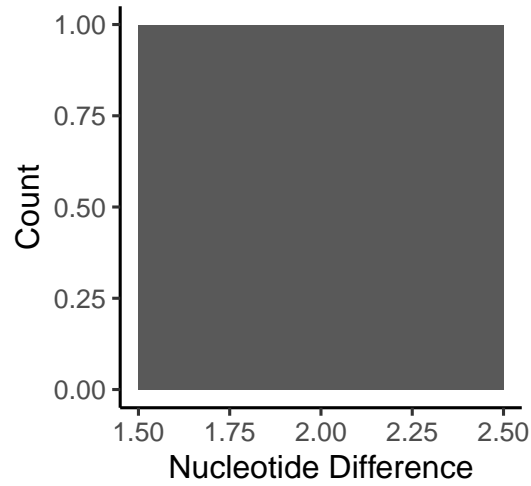
IGHV3-30-3*01

1 sequences assigned
No exact matches.



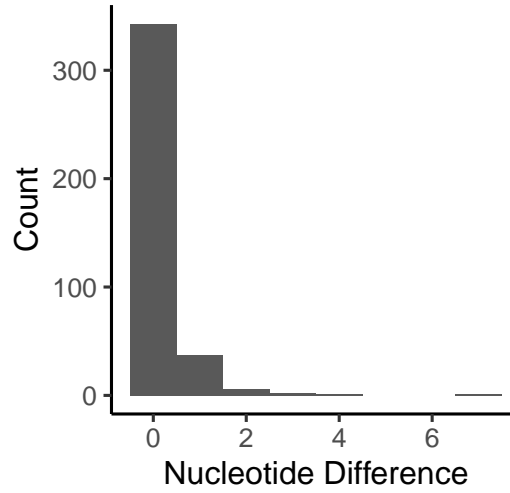
IGHV3-30-3*02

1 sequences assigned
No exact matches.



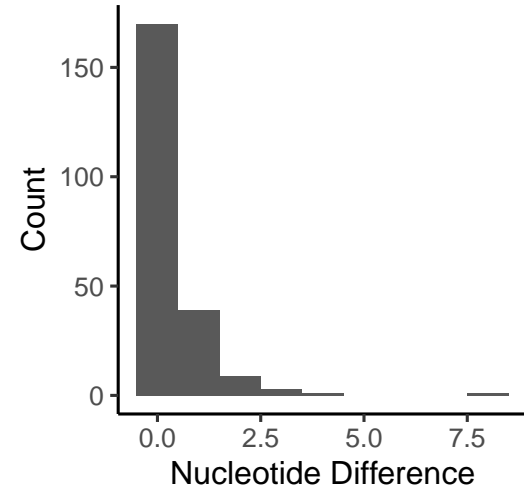
IGHV3-43*02

390 sequences assigned
343 (87.9%) exact matches, in which:
322 unique CDR3
6 unique J



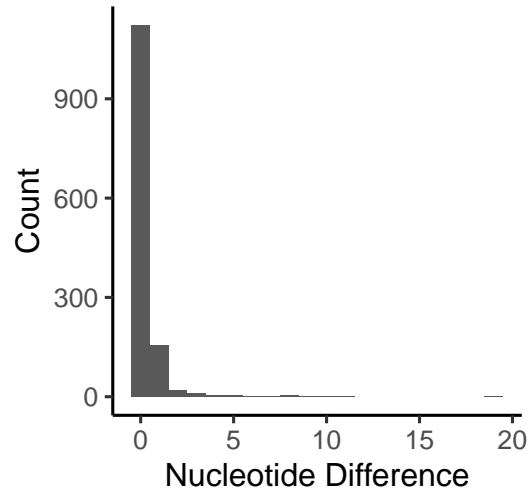
IGHV3-49*03

223 sequences assigned
170 (76.2%) exact matches, in which:
161 unique CDR3
5 unique J



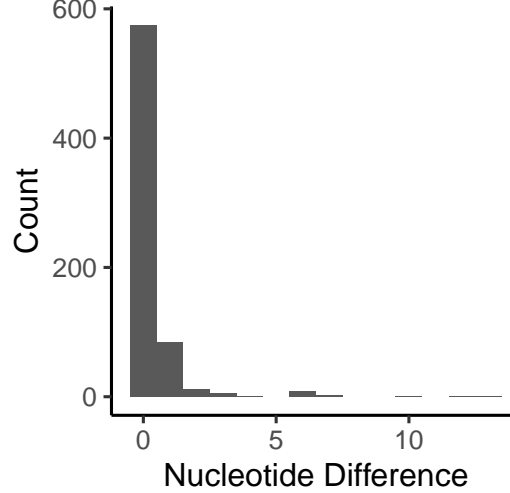
IGHV3-30*18

1334 sequences assigned
1123 (84.2%) exact matches, in which:
1058 unique CDR3
6 unique J



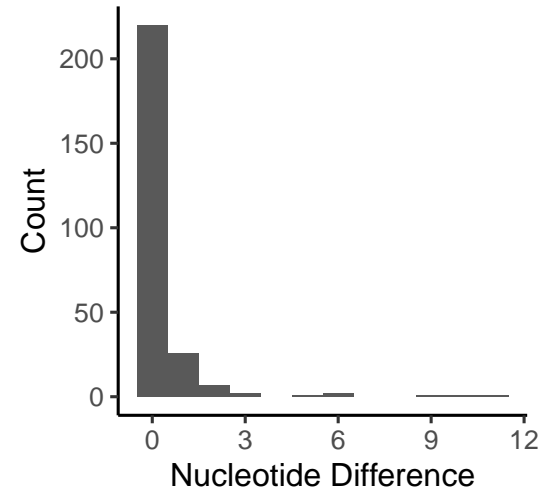
IGHV3-48*01

692 sequences assigned
575 (83.1%) exact matches, in which:
537 unique CDR3
6 unique J



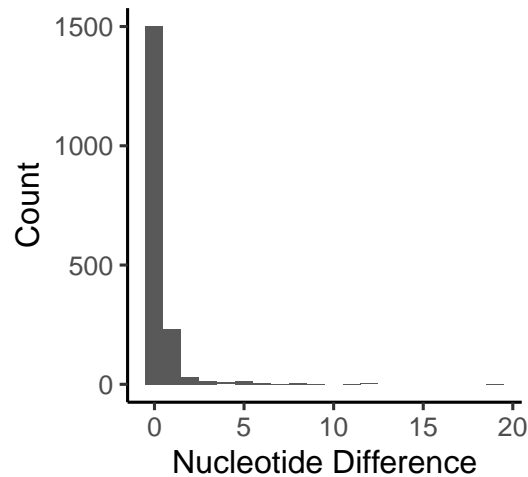
IGHV3-49*04

261 sequences assigned
220 (84.3%) exact matches, in which:
207 unique CDR3
6 unique J



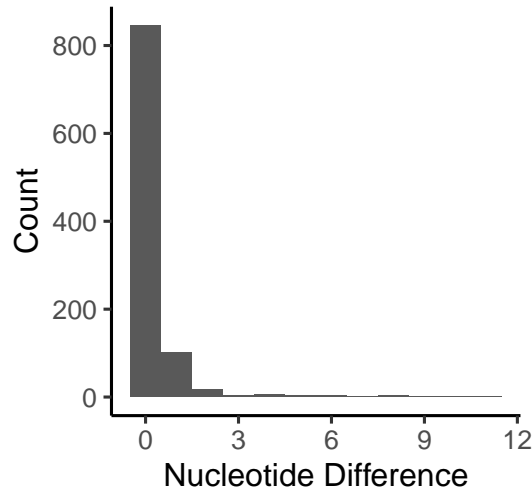
IGHV3-33*01

1827 sequences assigned
1502 (82.2%) exact matches, in which:
1391 unique CDR3
6 unique J



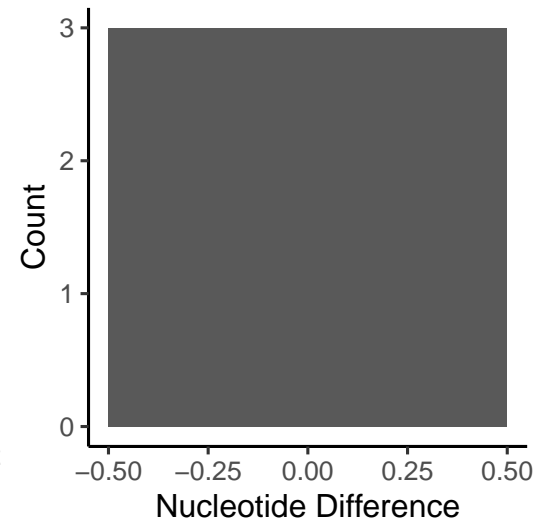
IGHV3-48*03

987 sequences assigned
846 (85.7%) exact matches, in which:
798 unique CDR3
6 unique J



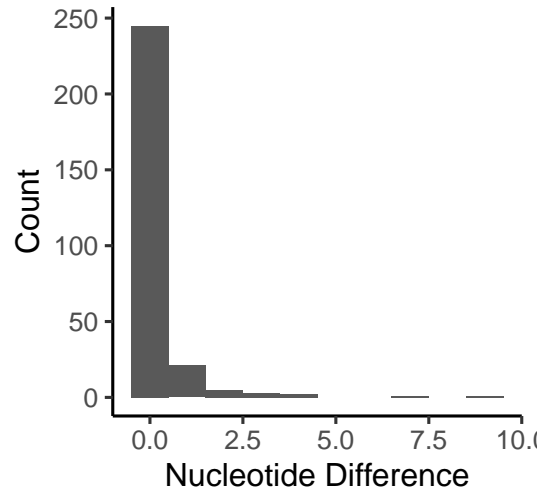
IGHV3-52*01

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



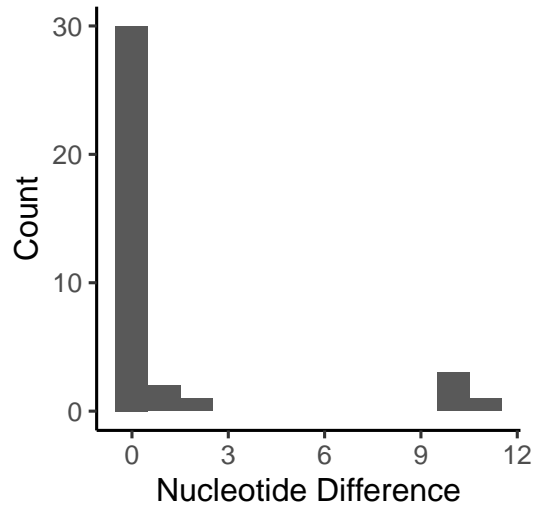
IGHV3-53*04

278 sequences assigned
245 (88.1%) exact matches, in which:
233 unique CDR3
5 unique J



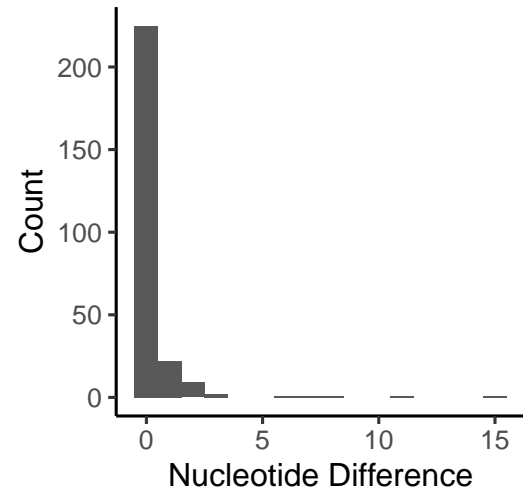
IGHV3-72*01

37 sequences assigned
30 (81.1%) exact matches, in which:
27 unique CDR3
5 unique J



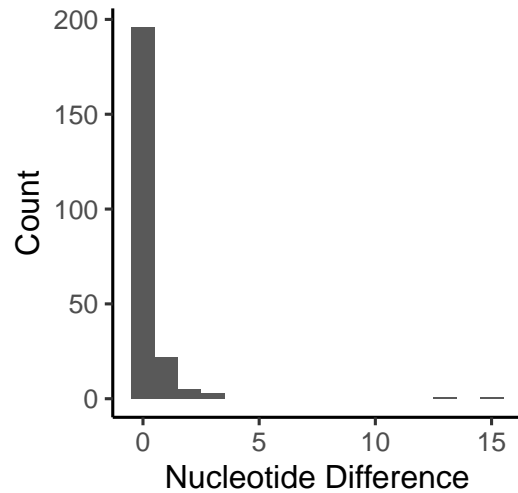
IGHV3-64D*06

263 sequences assigned
225 (85.6%) exact matches, in which:
203 unique CDR3
5 unique J



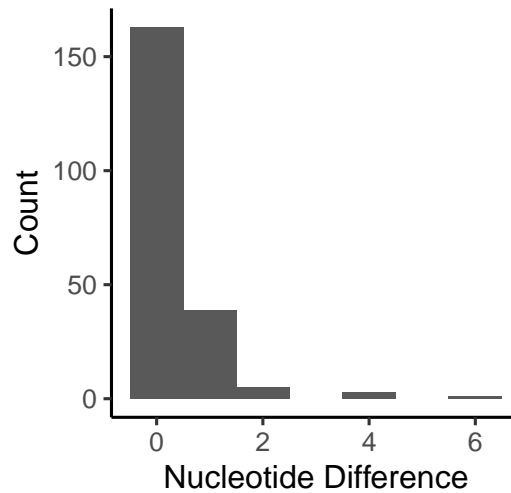
IGHV3-64*01

229 sequences assigned
196 (85.6%) exact matches, in which:
182 unique CDR3
6 unique J



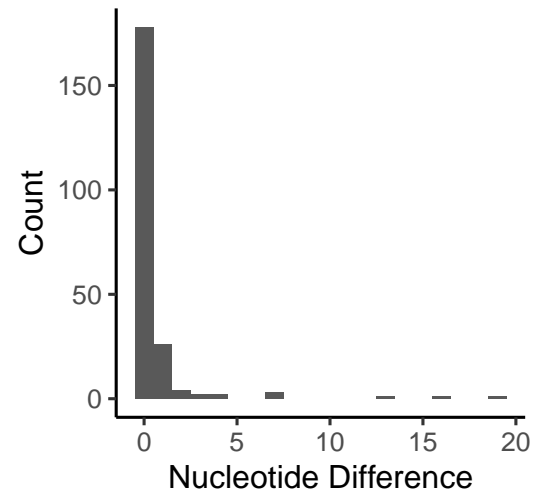
IGHV3-73*01

211 sequences assigned
163 (77.3%) exact matches, in which:
153 unique CDR3
5 unique J



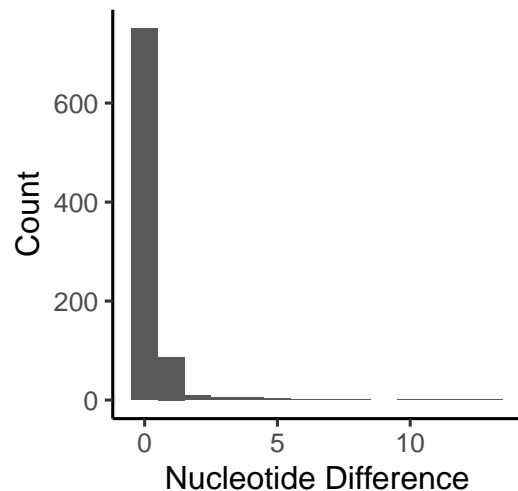
IGHV3-64D*09

218 sequences assigned
178 (81.7%) exact matches, in which:
167 unique CDR3
6 unique J



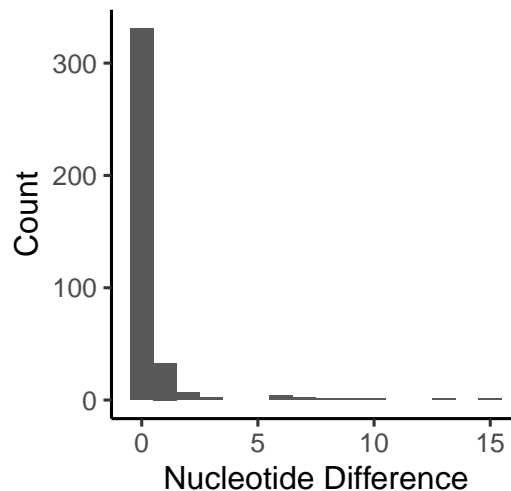
IGHV3-66*01

870 sequences assigned
751 (86.3%) exact matches, in which:
708 unique CDR3
6 unique J



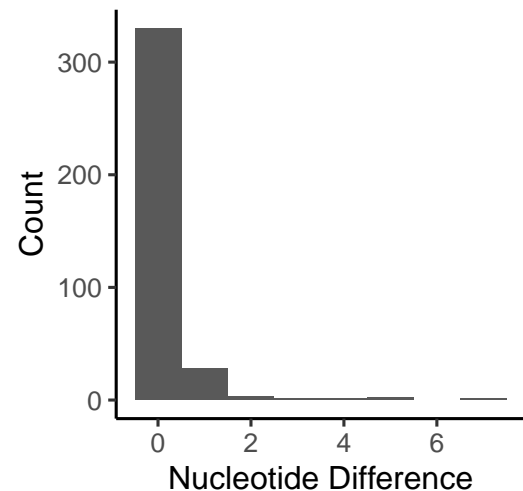
IGHV3-74*01

384 sequences assigned
331 (86.2%) exact matches, in which:
310 unique CDR3
6 unique J



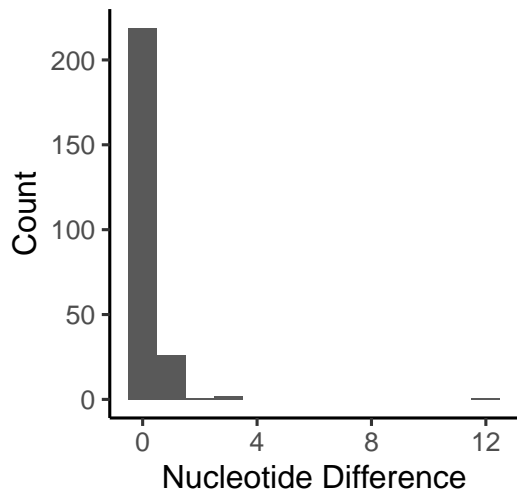
IGHV4-4*02

366 sequences assigned
330 (90.2%) exact matches, in which:
322 unique CDR3
6 unique J



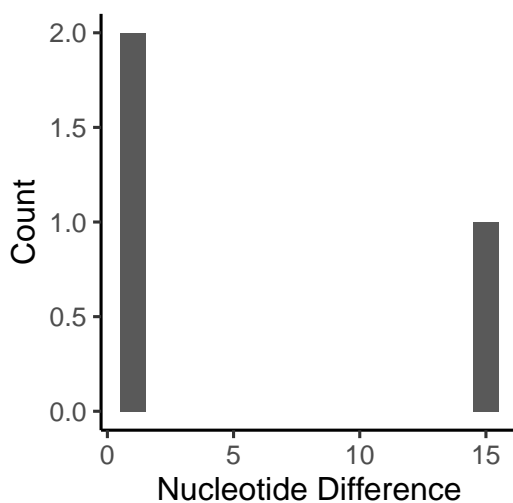
IGHV4-4*07

249 sequences assigned
219 (88%) exact matches, in which:
213 unique CDR3
5 unique J



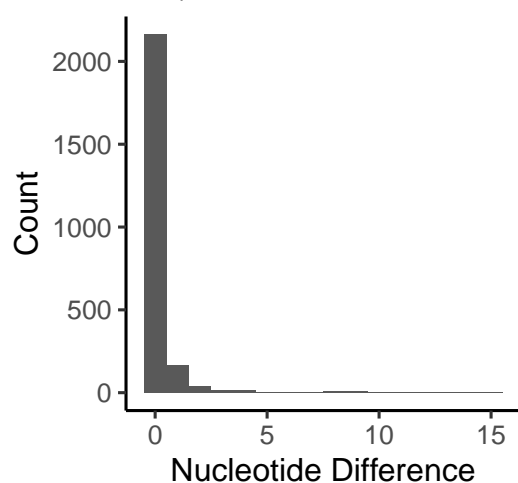
IGHV4-30-2*03

3 sequences assigned
No exact matches.



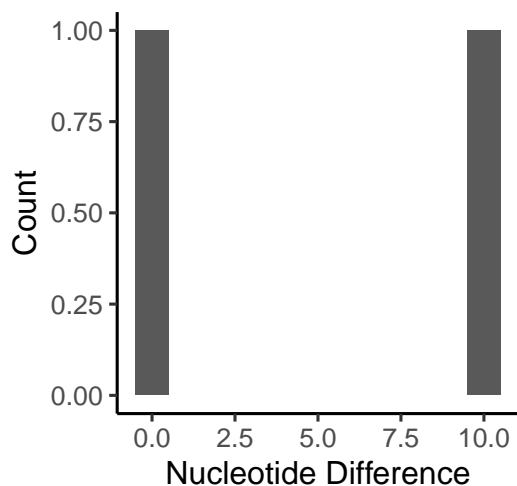
IGHV4-39*01

2446 sequences assigned
2163 (88.4%) exact matches, in which:
2039 unique CDR3
6 unique J



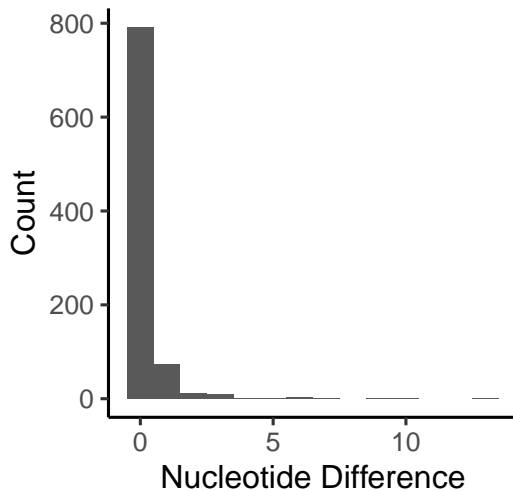
IGHV4-28*01

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



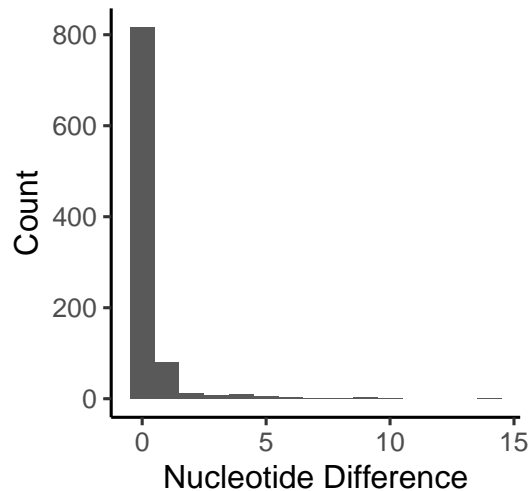
IGHV4-31*03

898 sequences assigned
792 (88.2%) exact matches, in which:
759 unique CDR3
6 unique J



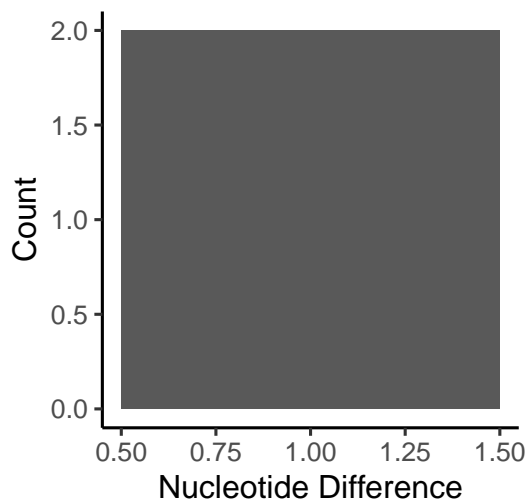
IGHV4-59*01

949 sequences assigned
817 (86.1%) exact matches, in which:
794 unique CDR3
6 unique J



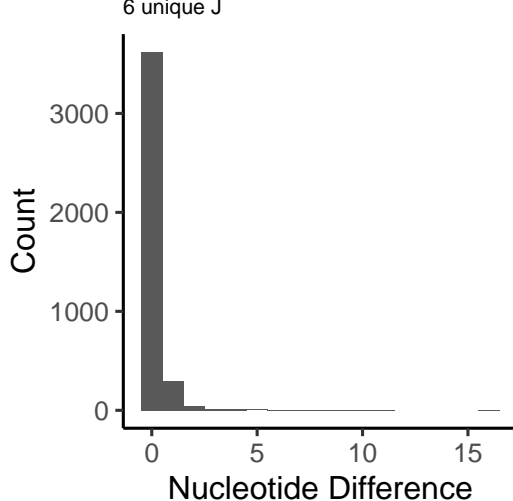
IGHV4-28*04

2 sequences assigned
No exact matches.



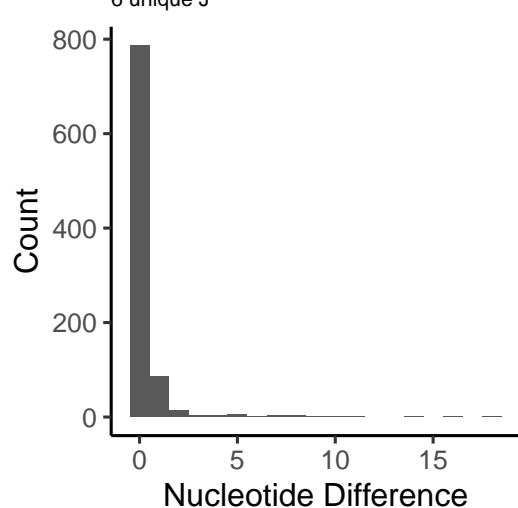
IGHV4-34*01

4020 sequences assigned
3620 (90%) exact matches, in which:
3402 unique CDR3
6 unique J



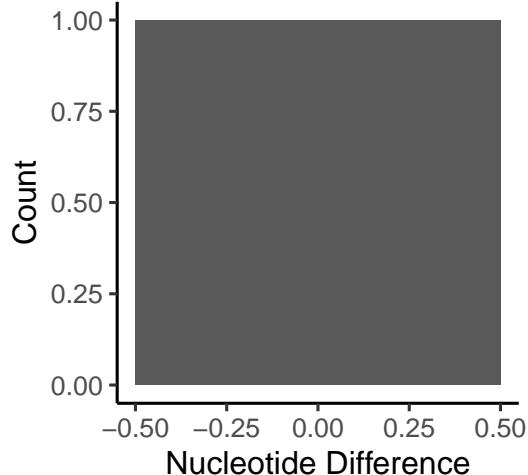
IGHV4-59*08

916 sequences assigned
787 (85.9%) exact matches, in which:
747 unique CDR3
6 unique J



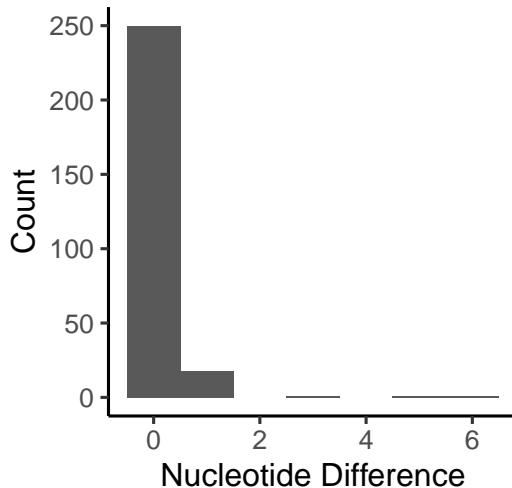
IGHV4-61*02

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



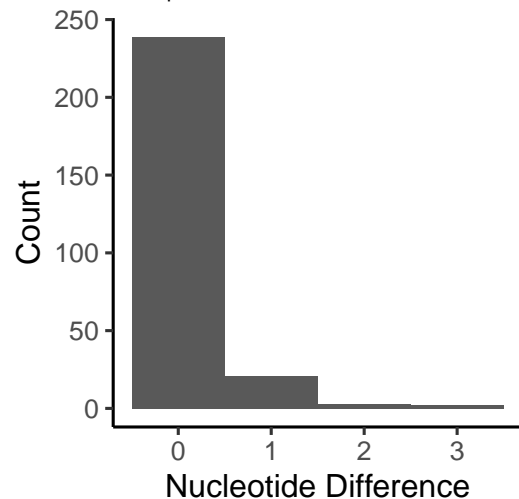
IGHV5-10-1*01

271 sequences assigned
250 (92.3%) exact matches, in which:
243 unique CDR3
5 unique J



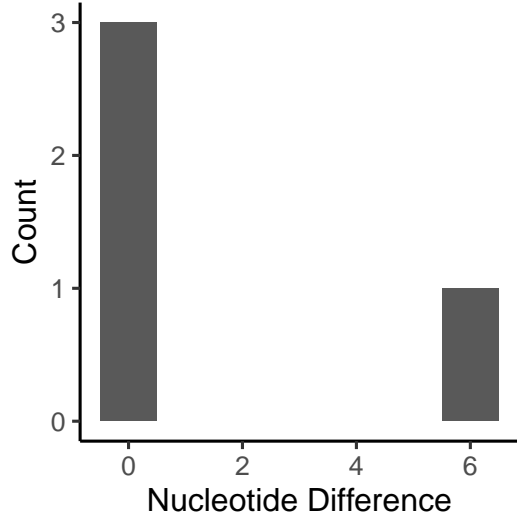
IGHV5-51*03

267 sequences assigned
239 (89.5%) exact matches, in which:
227 unique CDR3
5 unique J



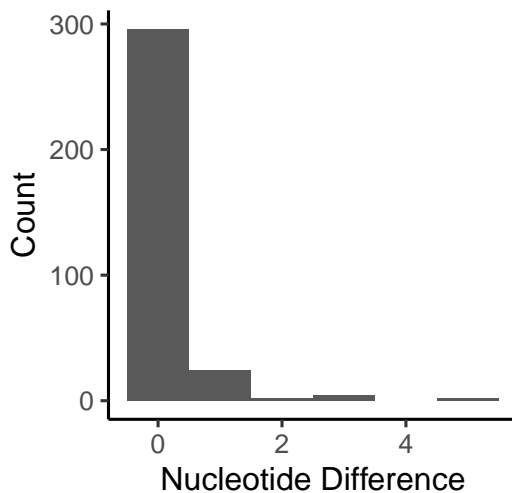
IGHV4-61*07

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



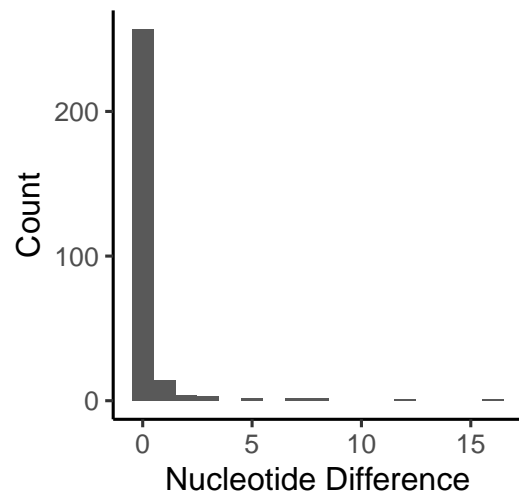
IGHV5-10-1*03

328 sequences assigned
296 (90.2%) exact matches, in which:
290 unique CDR3
6 unique J



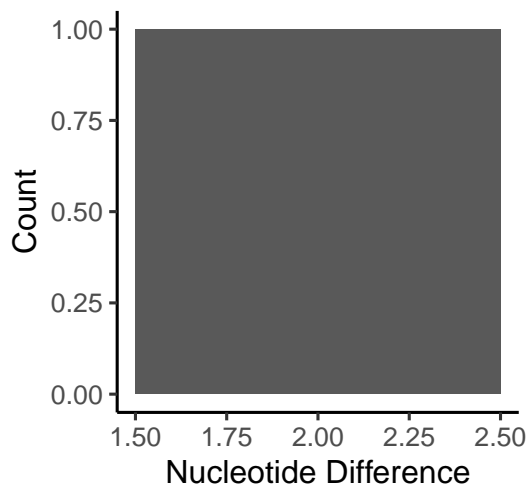
IGHV6-1*01

286 sequences assigned
257 (89.9%) exact matches, in which:
240 unique CDR3
6 unique J



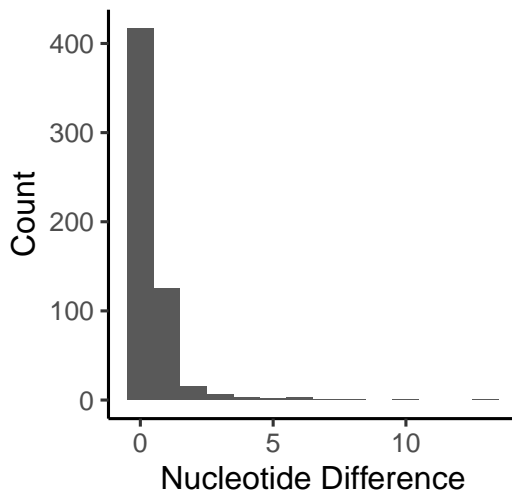
IGHV1/OR15-1*01

1 sequences assigned
No exact matches.



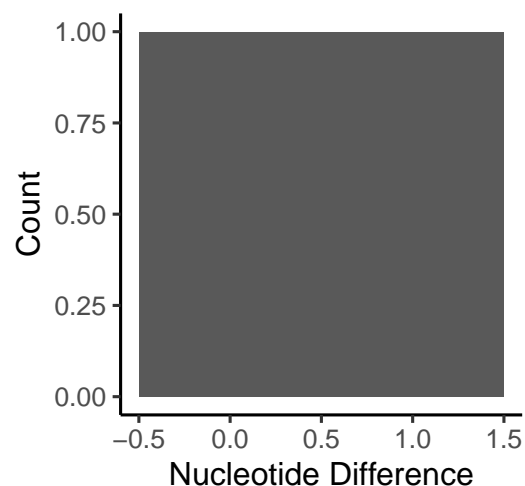
IGHV5-51*01

575 sequences assigned
417 (72.5%) exact matches, in which:
401 unique CDR3
6 unique J



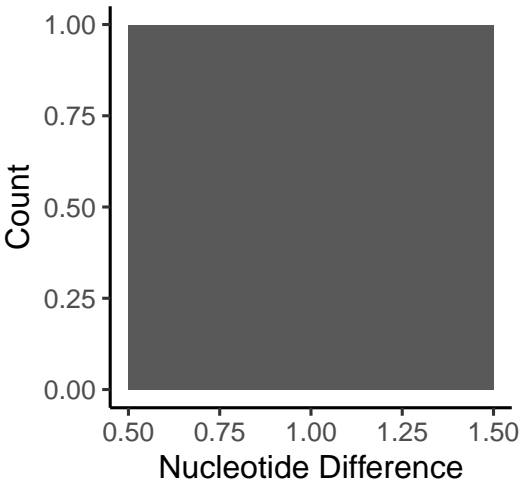
IGHV3/OR16-6*02

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



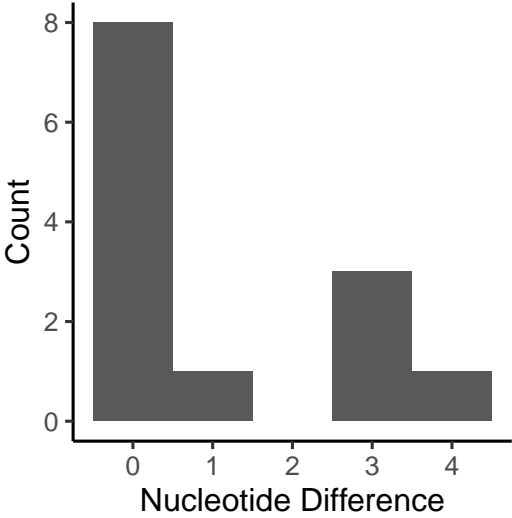
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



IGHV7-4-1*01

13 sequences assigned
8 (61.5%) exact matches, in which:
8 unique CDR3
3 unique J



IGHV1-69*08_C191T

