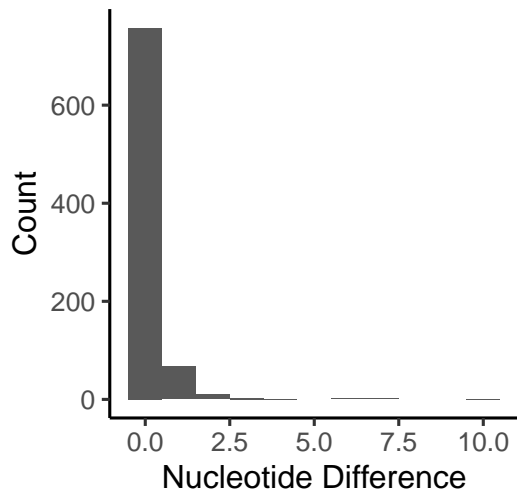


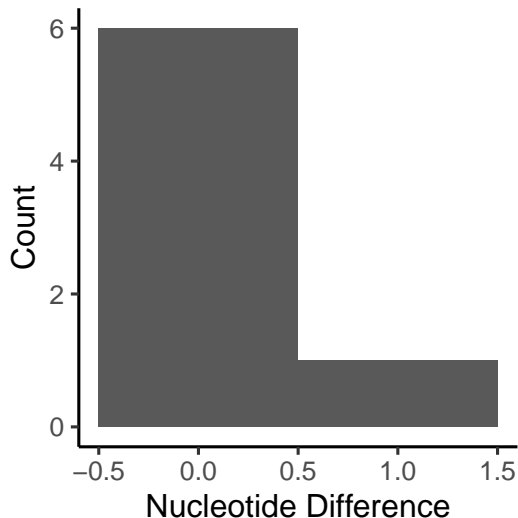
IGHV1-2*02

845 sequences assigned
758 (89.7%) exact matches, in which:
731 unique CDR3
6 unique J



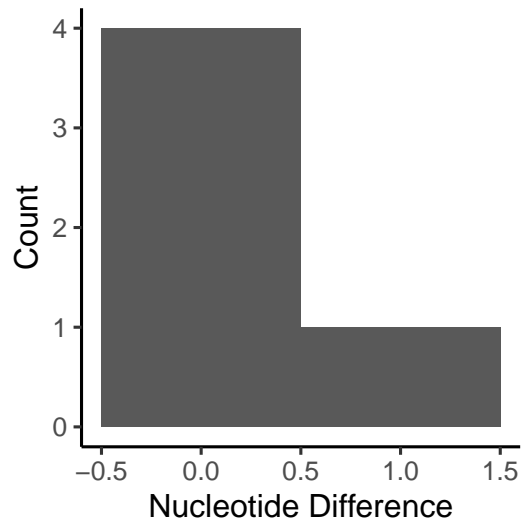
IGHV1-8*01

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



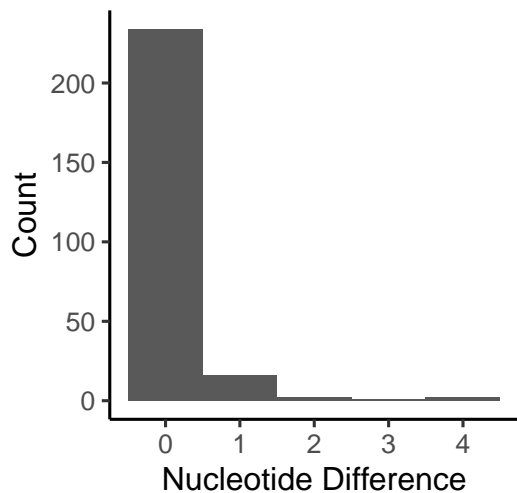
IGHV1-45*02

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



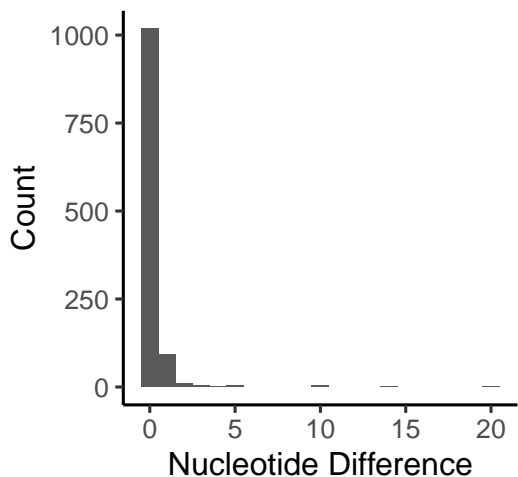
IGHV1-2*04

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



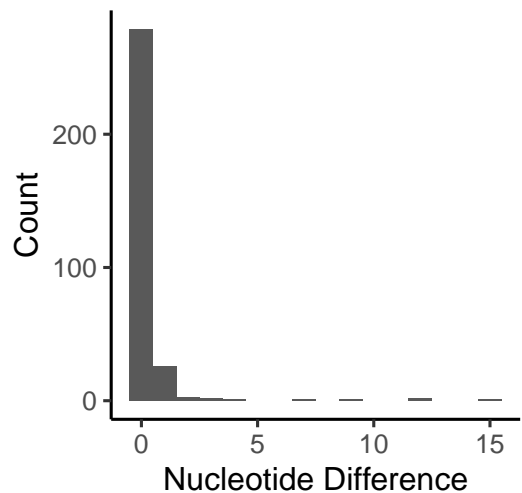
IGHV1-18*01

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



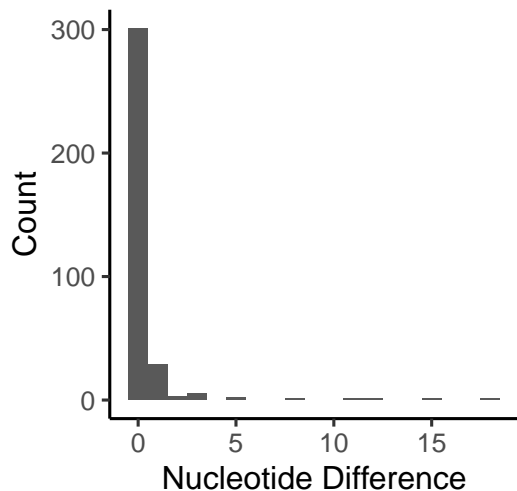
IGHV1-46*01

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



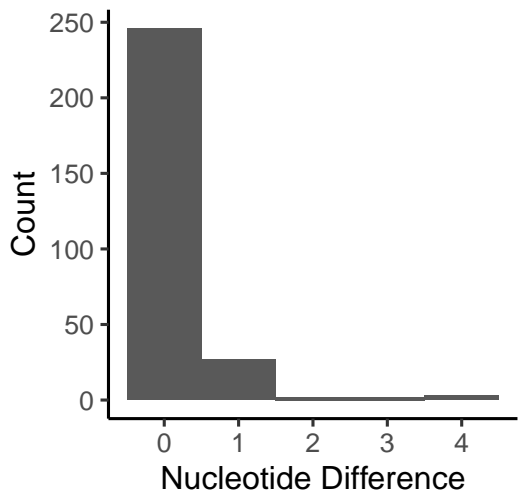
IGHV1-3*01

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



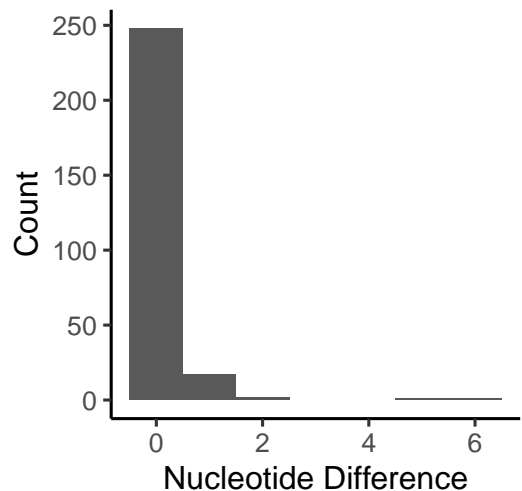
IGHV1-24*01

280 sequences assigned
246 (87.9%) exact matches, in which:
241 unique CDR3
5 unique J



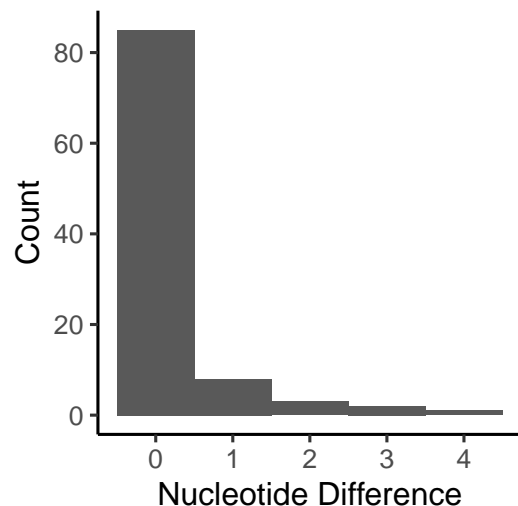
IGHV1-46*03

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



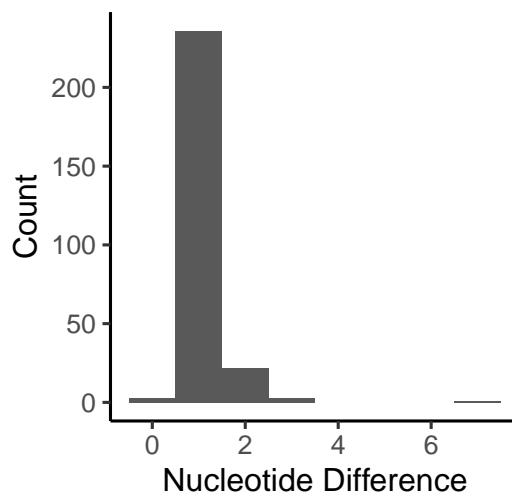
IGHV1-58*02

99 sequences assigned
85 (85.9%) exact matches, in which:
83 unique CDR3
6 unique J



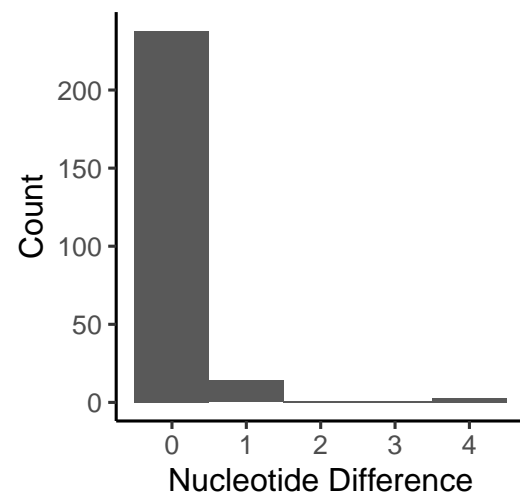
IGHV1-69*08

265 sequences assigned
3 (1.1%) exact matches, in which:
3 unique CDR3
2 unique J



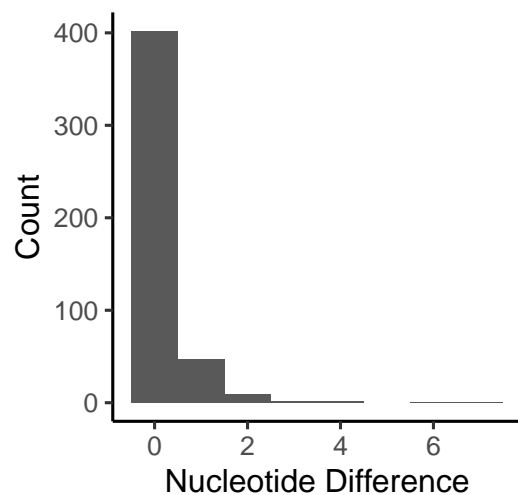
IGHV2-26*01

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



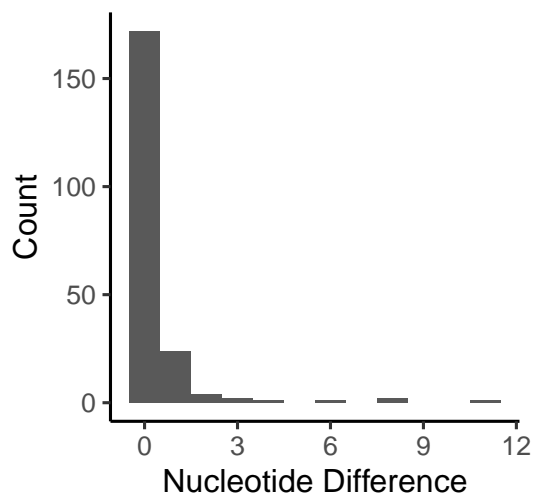
IGHV1-69*02

464 sequences assigned
402 (86.6%) exact matches, in which:
376 unique CDR3
6 unique J



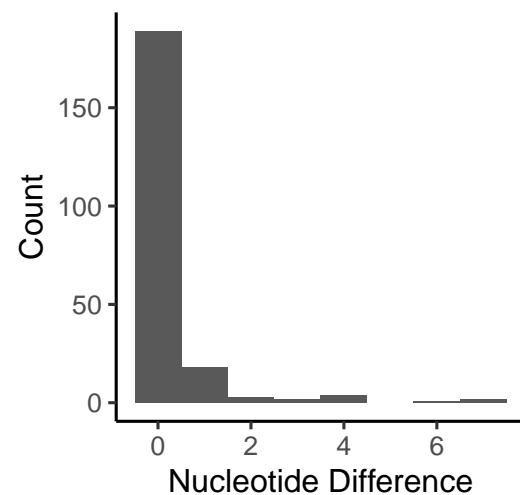
IGHV2-5*01

207 sequences assigned
172 (83.1%) exact matches, in which:
170 unique CDR3
6 unique J



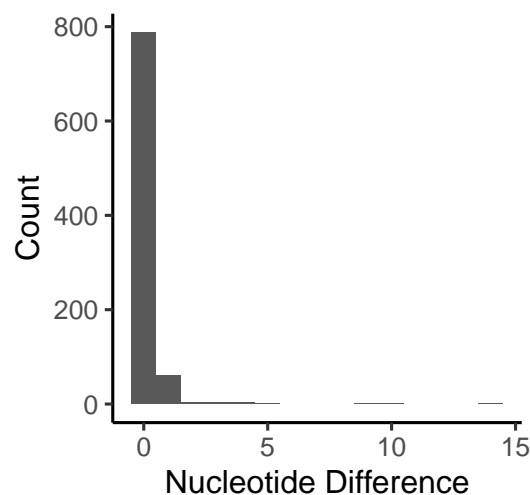
IGHV2-70*15

219 sequences assigned
189 (86.3%) exact matches, in which:
188 unique CDR3
4 unique J



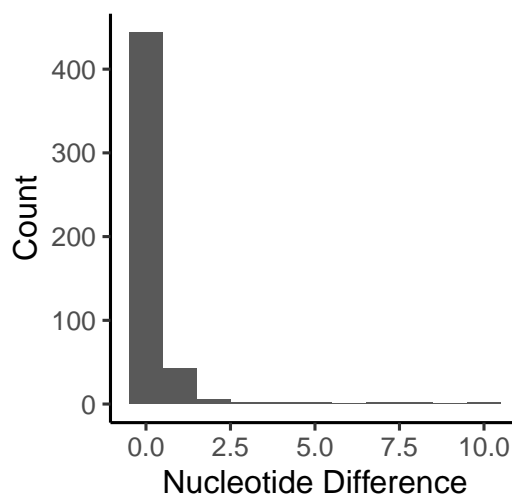
IGHV1-69*04

863 sequences assigned
788 (91.3%) exact matches, in which:
752 unique CDR3
6 unique J



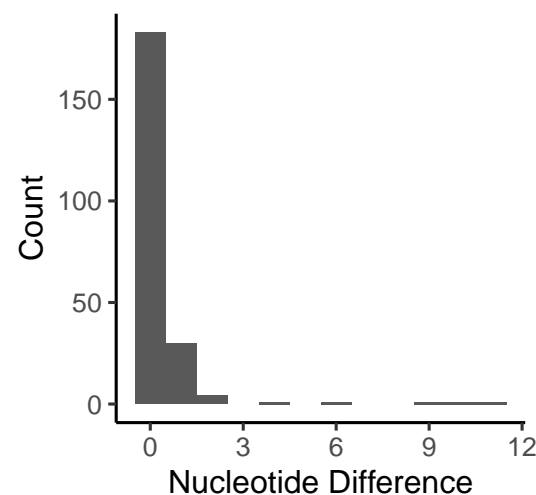
IGHV2-5*02

506 sequences assigned
444 (87.7%) exact matches, in which:
427 unique CDR3
6 unique J



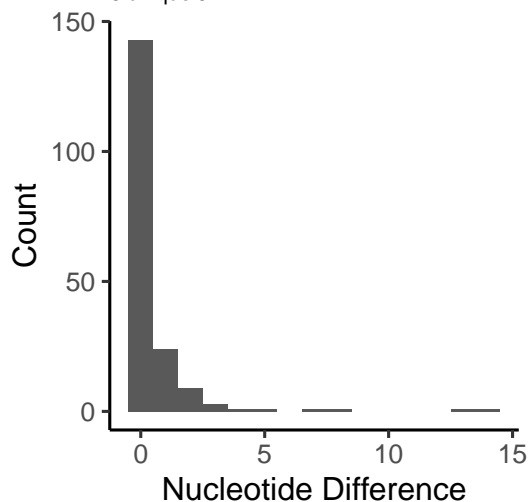
IGHV3-7*04

222 sequences assigned
183 (82.4%) exact matches, in which:
177 unique CDR3
6 unique J



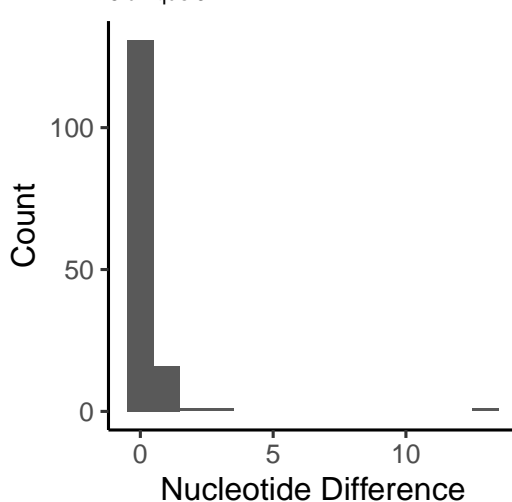
IGHV3-7*05

185 sequences assigned
143 (77.3%) exact matches, in which:
139 unique CDR3
6 unique J



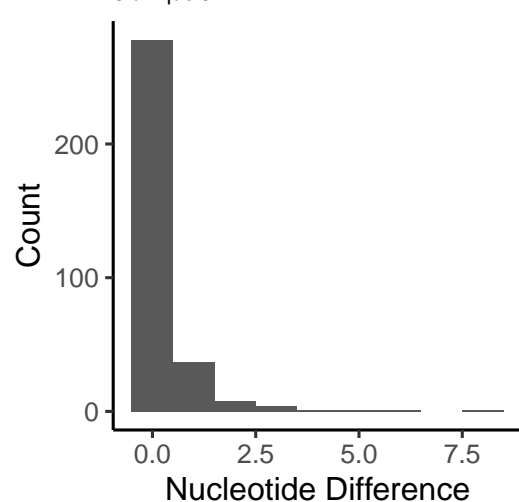
IGHV3-13*04

150 sequences assigned
131 (87.3%) exact matches, in which:
125 unique CDR3
6 unique J



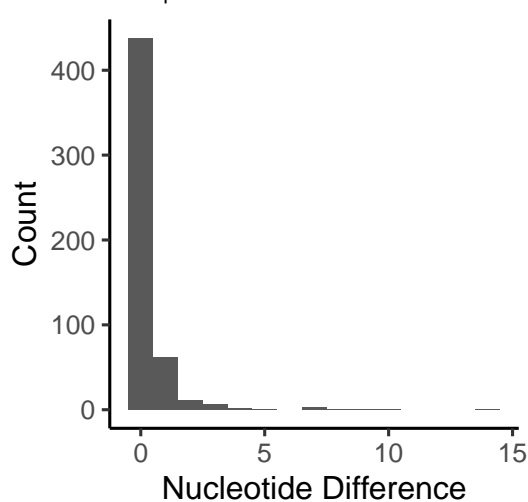
IGHV3-20*04

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



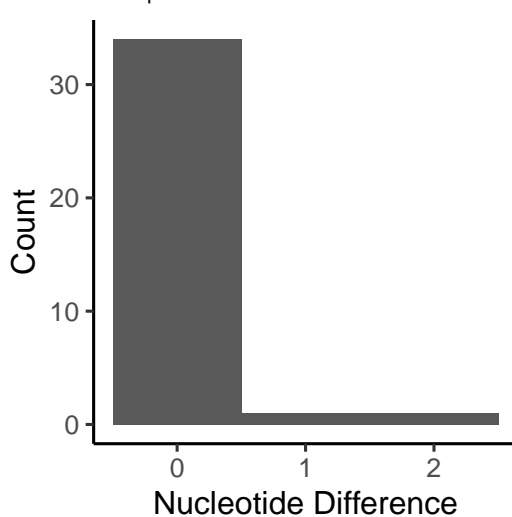
IGHV3-11*05

528 sequences assigned
438 (83%) exact matches, in which:
413 unique CDR3
6 unique J



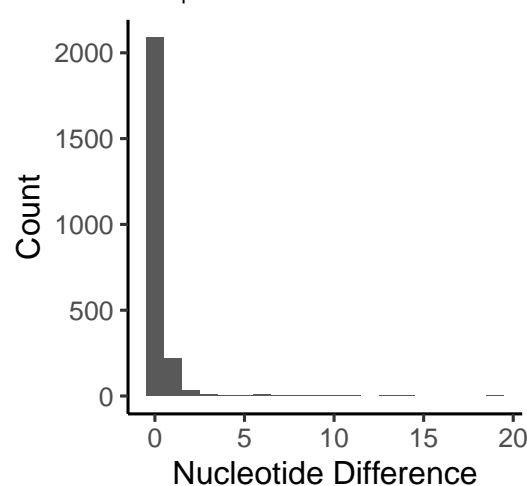
IGHV3-13*05

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



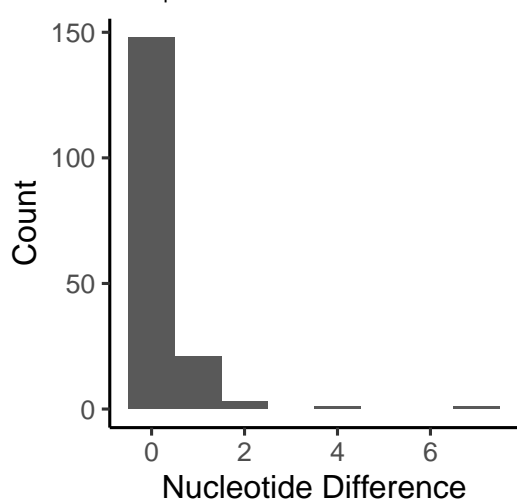
IGHV3-21*01

2380 sequences assigned
2088 (87.7%) exact matches, in which:
1912 unique CDR3
6 unique J



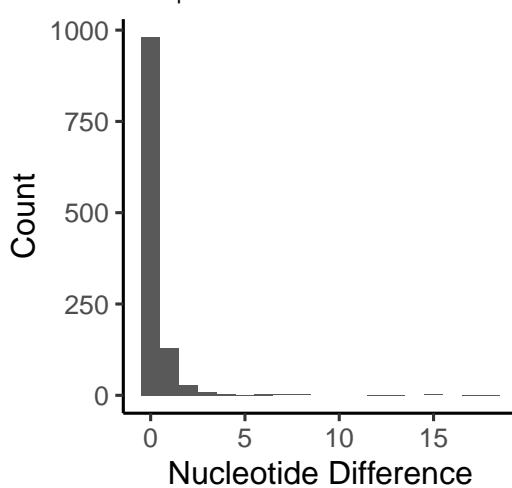
IGHV3-11*06

174 sequences assigned
148 (85.1%) exact matches, in which:
140 unique CDR3
6 unique J



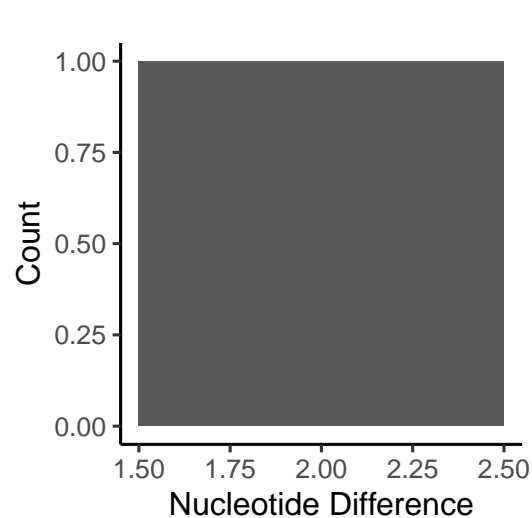
IGHV3-15*01

1167 sequences assigned
981 (84.1%) exact matches, in which:
924 unique CDR3
6 unique J



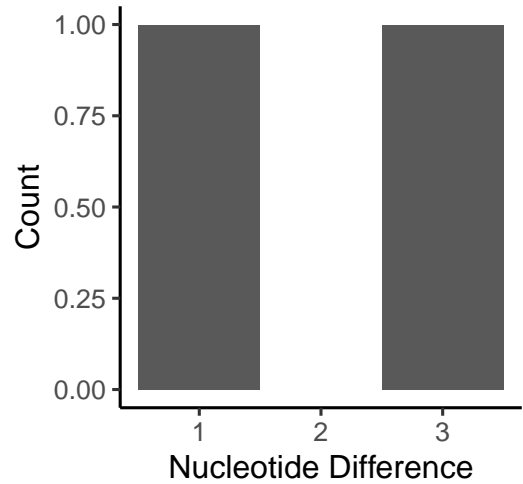
IGHV3-30-3*02

1 sequences assigned
No exact matches.



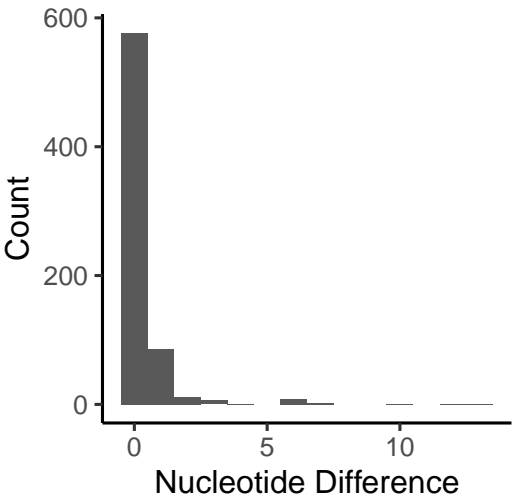
IGHV3-30-3*03

2 sequences assigned
No exact matches.



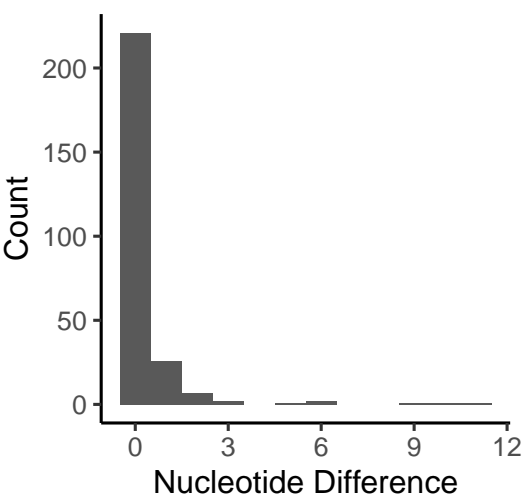
IGHV3-48*01

695 sequences assigned
577 (83%) exact matches, in which:
538 unique CDR3
6 unique J



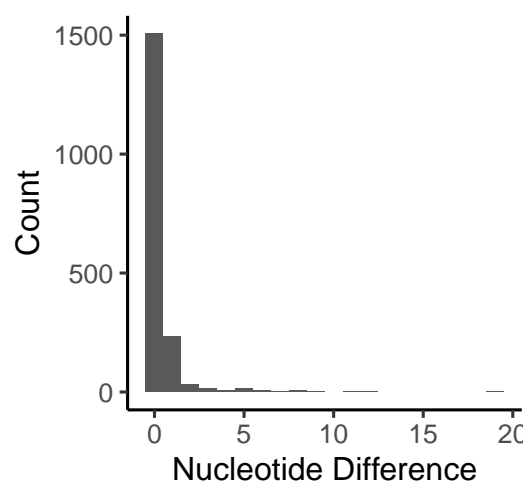
IGHV3-49*04

262 sequences assigned
221 (84.4%) exact matches, in which:
208 unique CDR3
6 unique J



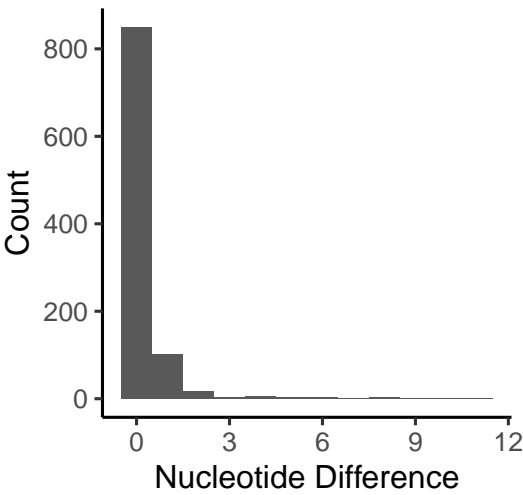
IGHV3-33*01

1833 sequences assigned
1506 (82.2%) exact matches, in which:
1394 unique CDR3
6 unique J



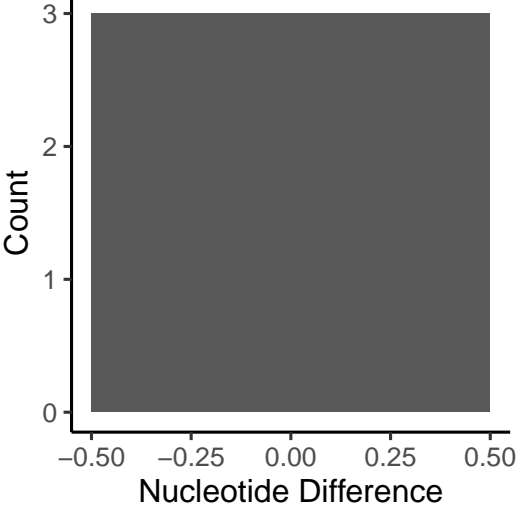
IGHV3-48*03

992 sequences assigned
850 (85.7%) exact matches, in which:
802 unique CDR3
6 unique J



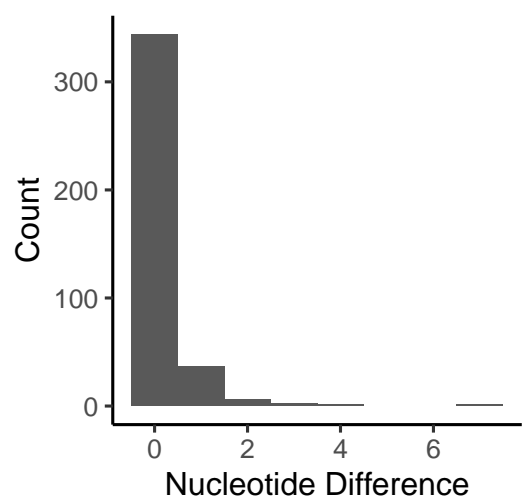
IGHV3-52*01

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



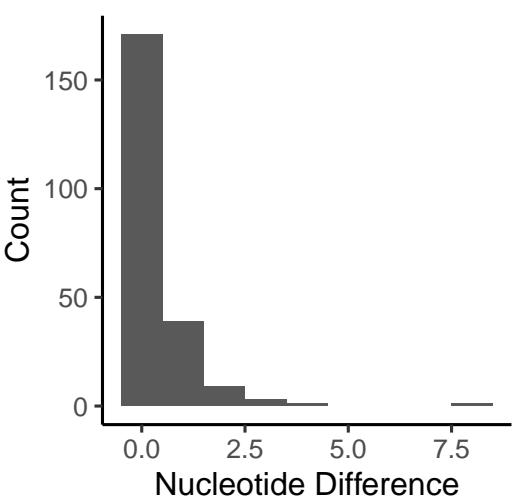
IGHV3-43*02

391 sequences assigned
344 (88%) exact matches, in which:
323 unique CDR3
6 unique J



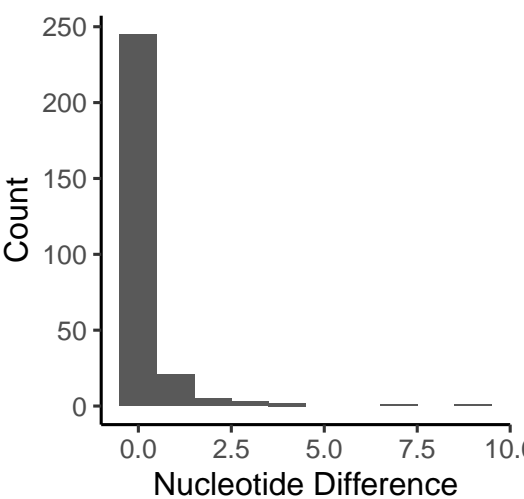
IGHV3-49*03

224 sequences assigned
171 (76.3%) exact matches, in which:
162 unique CDR3
5 unique J



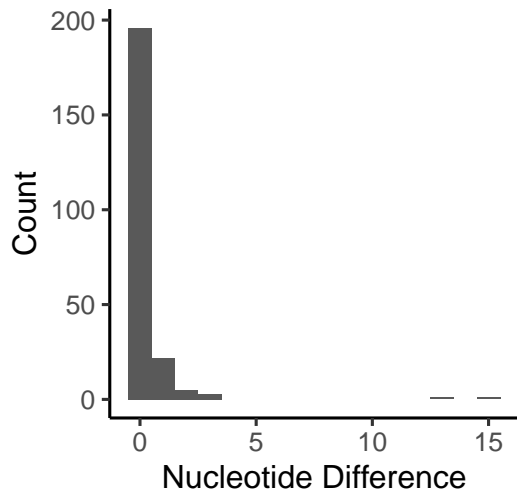
IGHV3-53*04

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



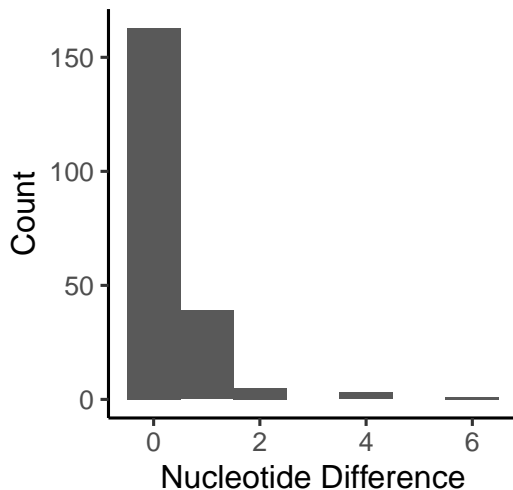
IGHV3–64*01

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



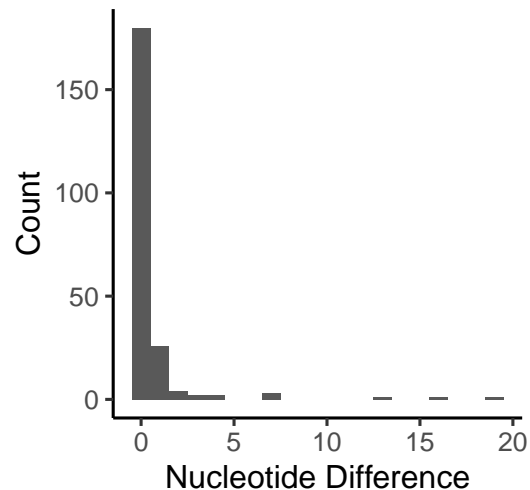
IGHV3–73*01

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



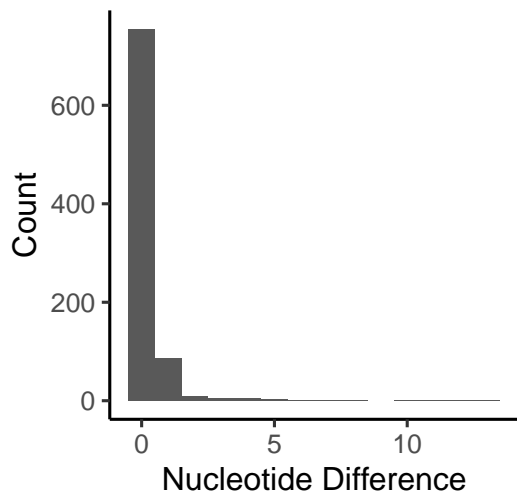
IGHV3–64D*09

220 sequences assigned
180 (81.8%) exact matches, in which:
169 unique CDR3
6 unique J



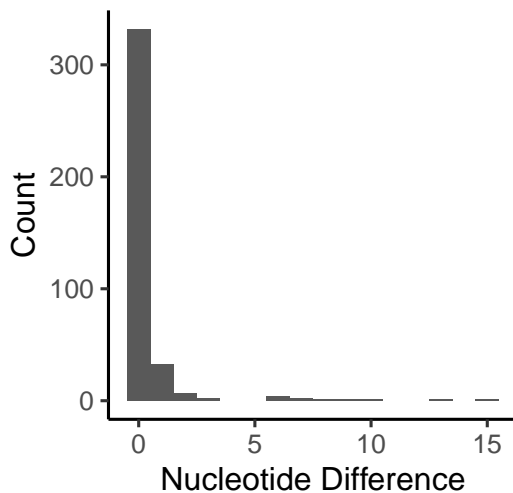
IGHV3–66*01

874 sequences assigned
755 (86.4%) exact matches, in which:
712 unique CDR3
6 unique J



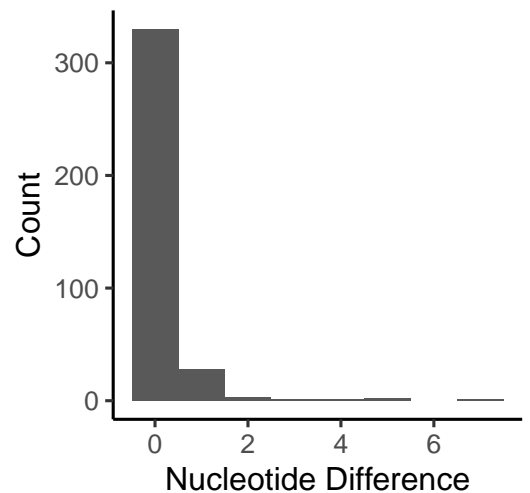
IGHV3–74*01

385 sequences assigned
332 (86.2%) exact matches, in which:
311 unique CDR3
6 unique J



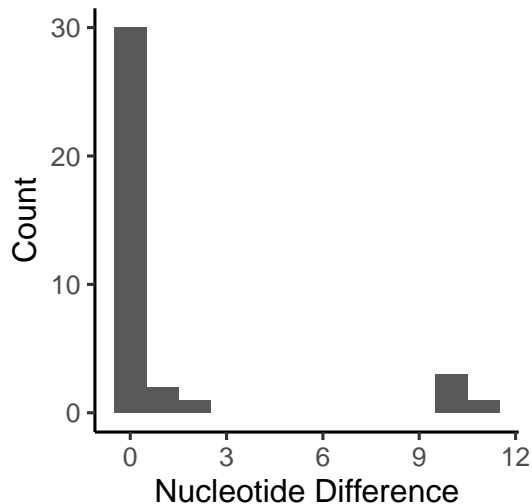
IGHV4–4*02

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



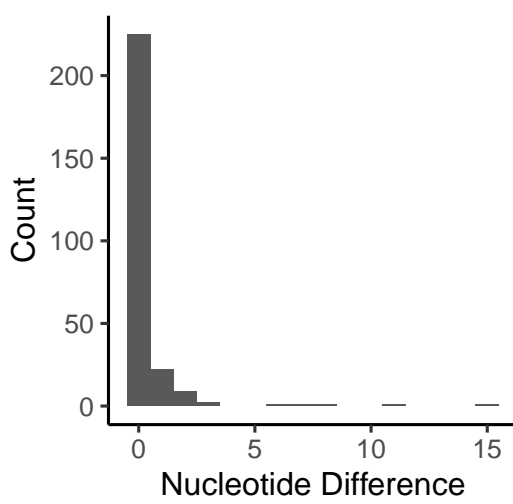
IGHV3–72*01

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



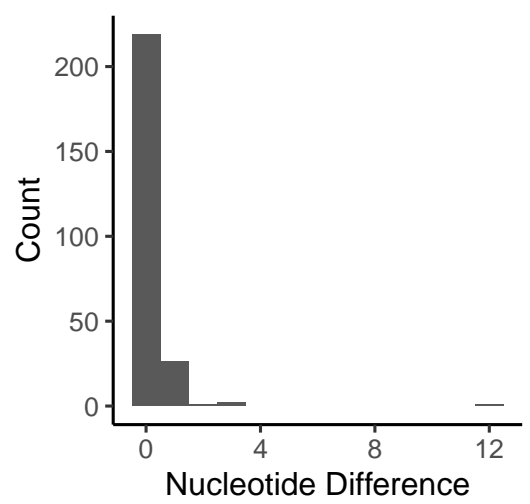
IGHV3–64D*06

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



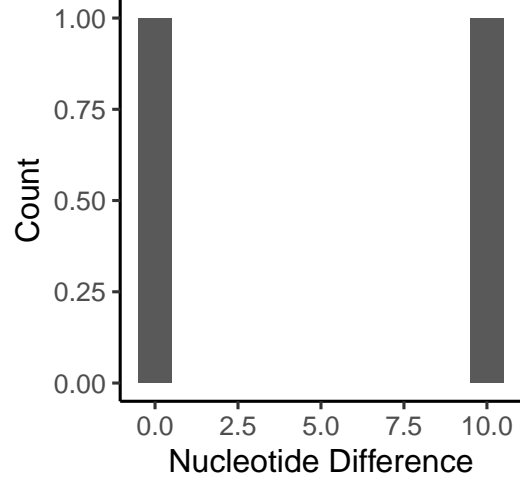
IGHV4–4*07

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



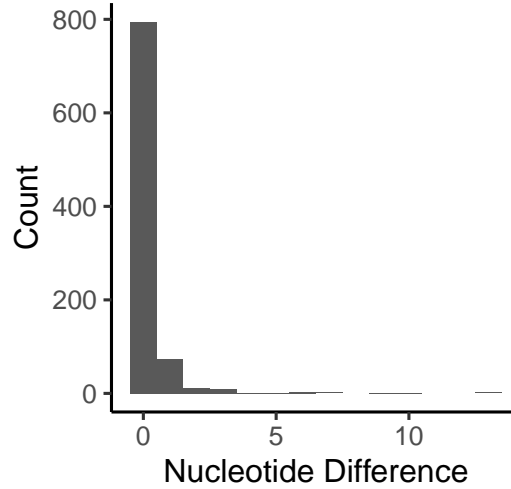
IGHV4-28*01

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



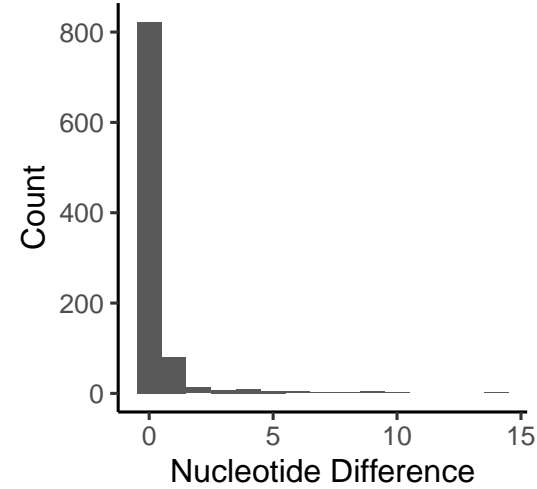
IGHV4-31*03

901 sequences assigned
795 (88.2%) exact matches, in which:
762 unique CDR3
6 unique J



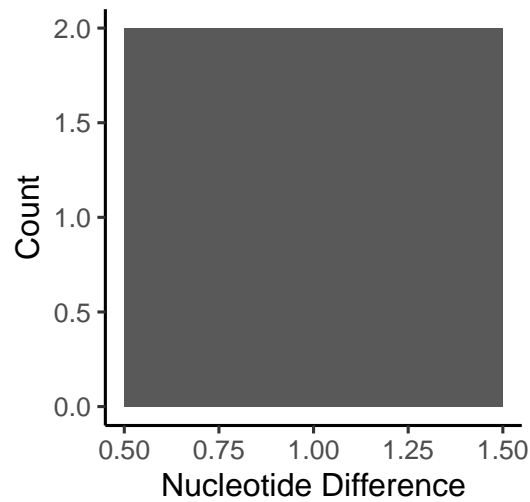
IGHV4-59*01

955 sequences assigned
823 (86.2%) exact matches, in which:
799 unique CDR3
6 unique J



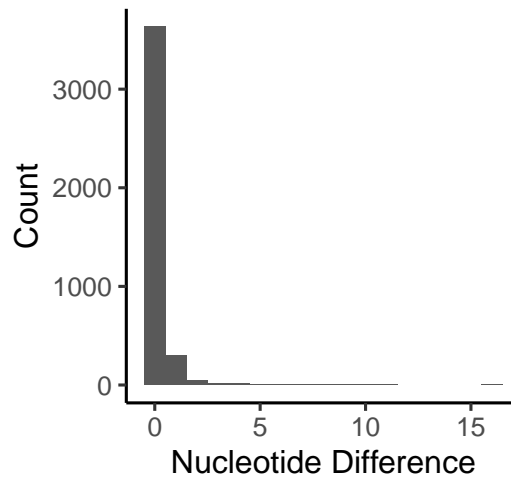
IGHV4-28*04

2 sequences assigned
No exact matches.



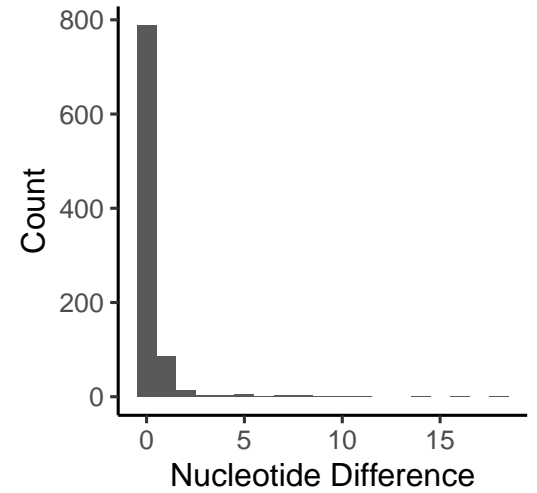
IGHV4-34*01

4036 sequences assigned
3633 (90%) exact matches, in which:
3413 unique CDR3
6 unique J



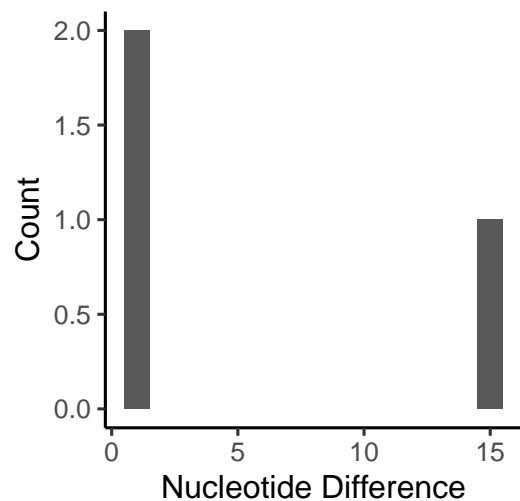
IGHV4-59*08

919 sequences assigned
789 (85.9%) exact matches, in which:
748 unique CDR3
6 unique J



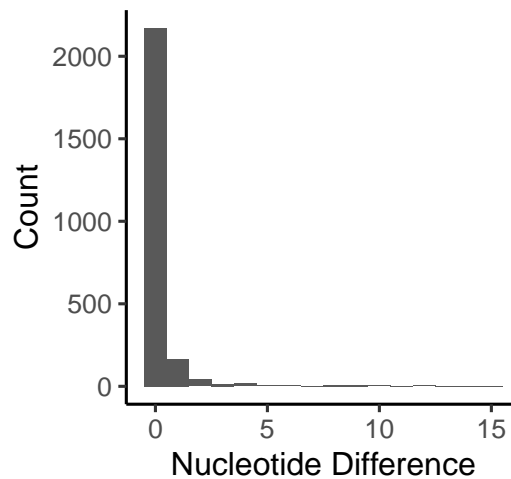
IGHV4-30-2*03

3 sequences assigned
No exact matches.



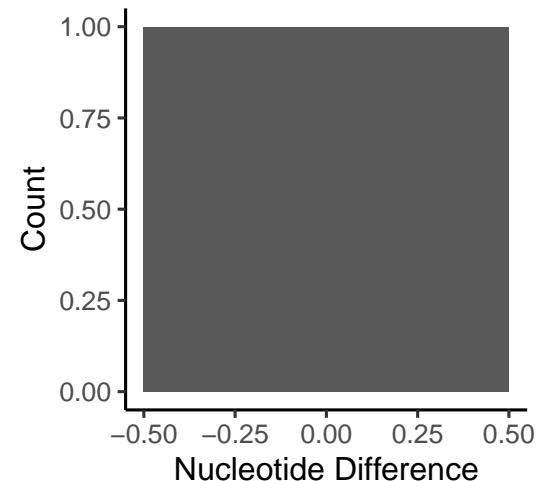
IGHV4-39*01

2455 sequences assigned
2171 (88.4%) exact matches, in which:
2046 unique CDR3
6 unique J



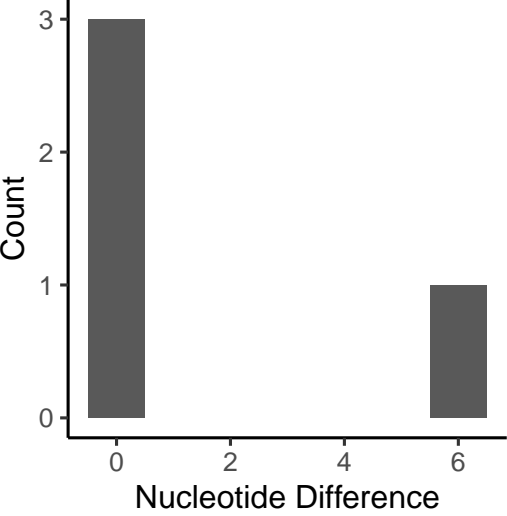
IGHV4-61*02

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



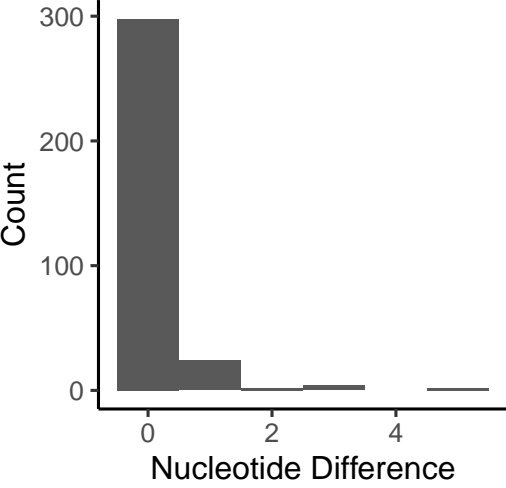
IGHV4-61*07

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



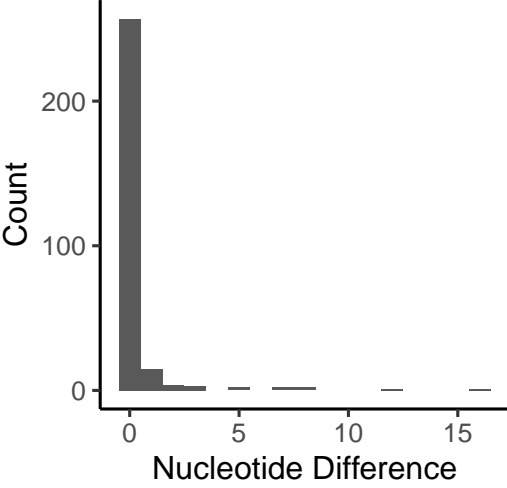
IGHV5-10-1*03

330 sequences assigned
298 (90.3%) exact matches, in which:
292 unique CDR3
6 unique J



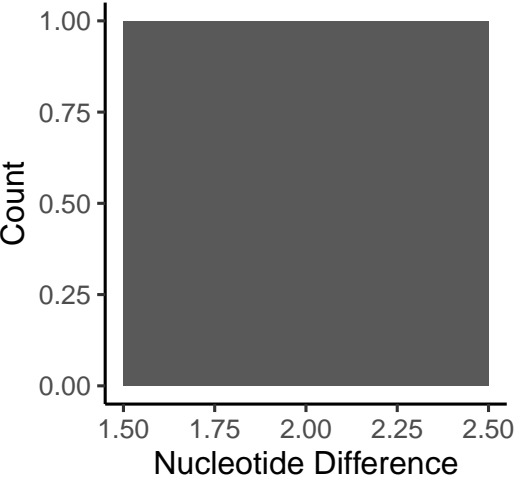
IGHV6-1*01

287 sequences assigned
257 (89.5%) exact matches, in which:
240 unique CDR3
6 unique J



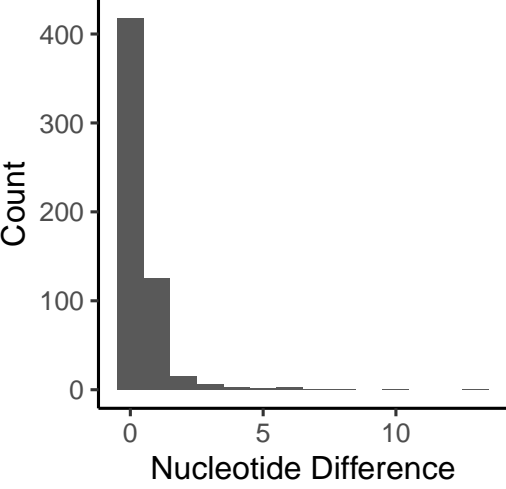
IGHV1/OR15-1*01

1 sequences assigned
No exact matches.



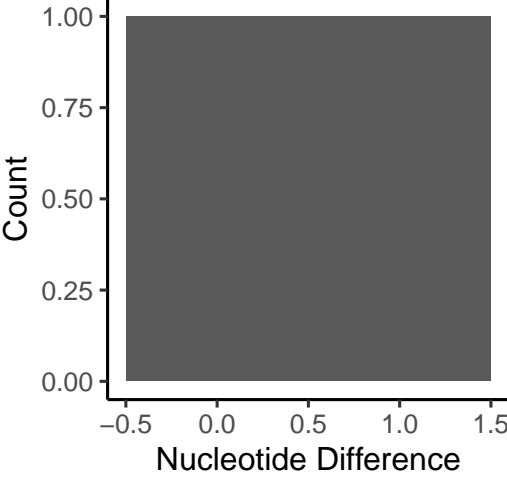
IGHV5-51*01

576 sequences assigned
418 (72.6%) exact matches, in which:
402 unique CDR3
6 unique J



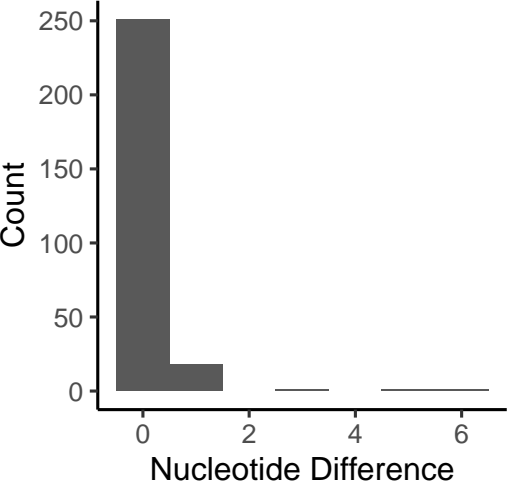
IGHV3/OR16-6*02

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



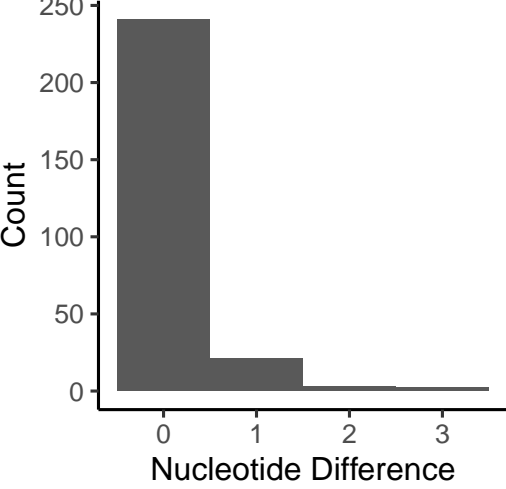
IGHV5-10-1*01

272 sequences assigned
251 (92.3%) exact matches, in which:
243 unique CDR3
5 unique J



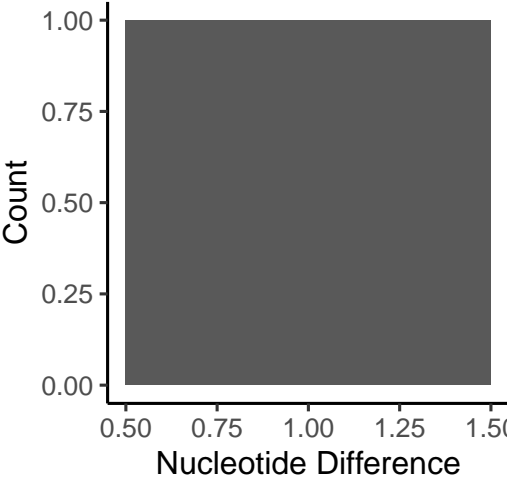
IGHV5-51*03

269 sequences assigned
241 (89.6%) exact matches, in which:
228 unique CDR3
5 unique J



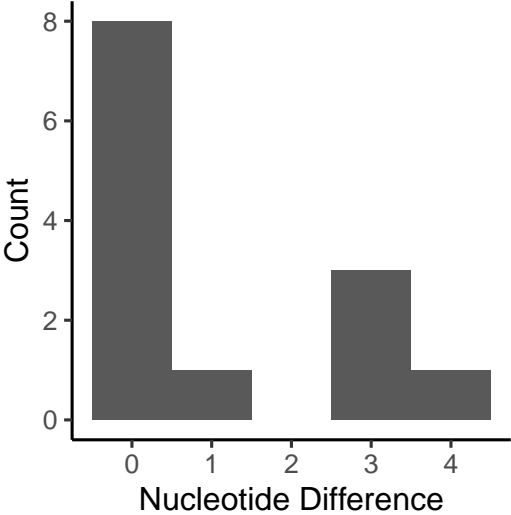
IGHV3/OR16-9*01

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





Warning – no inferred sequences found.