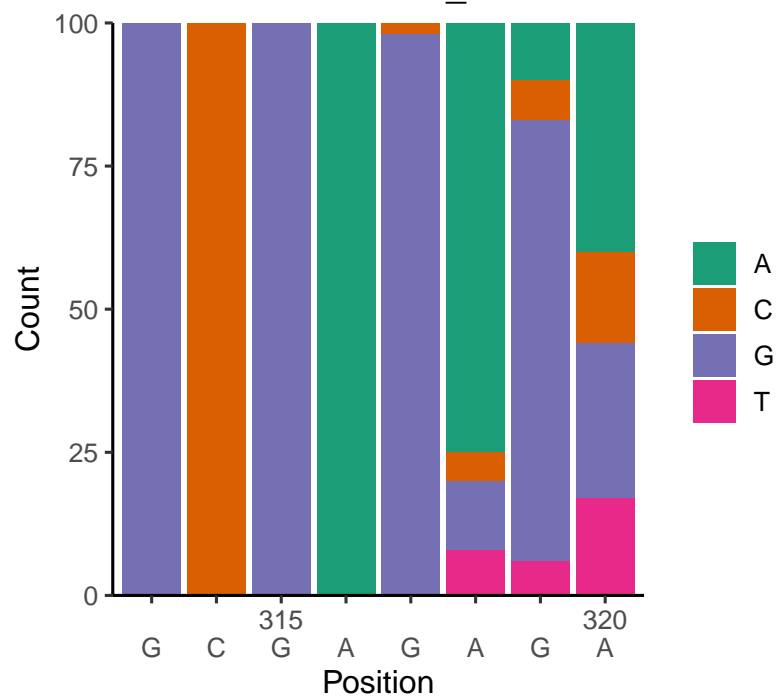
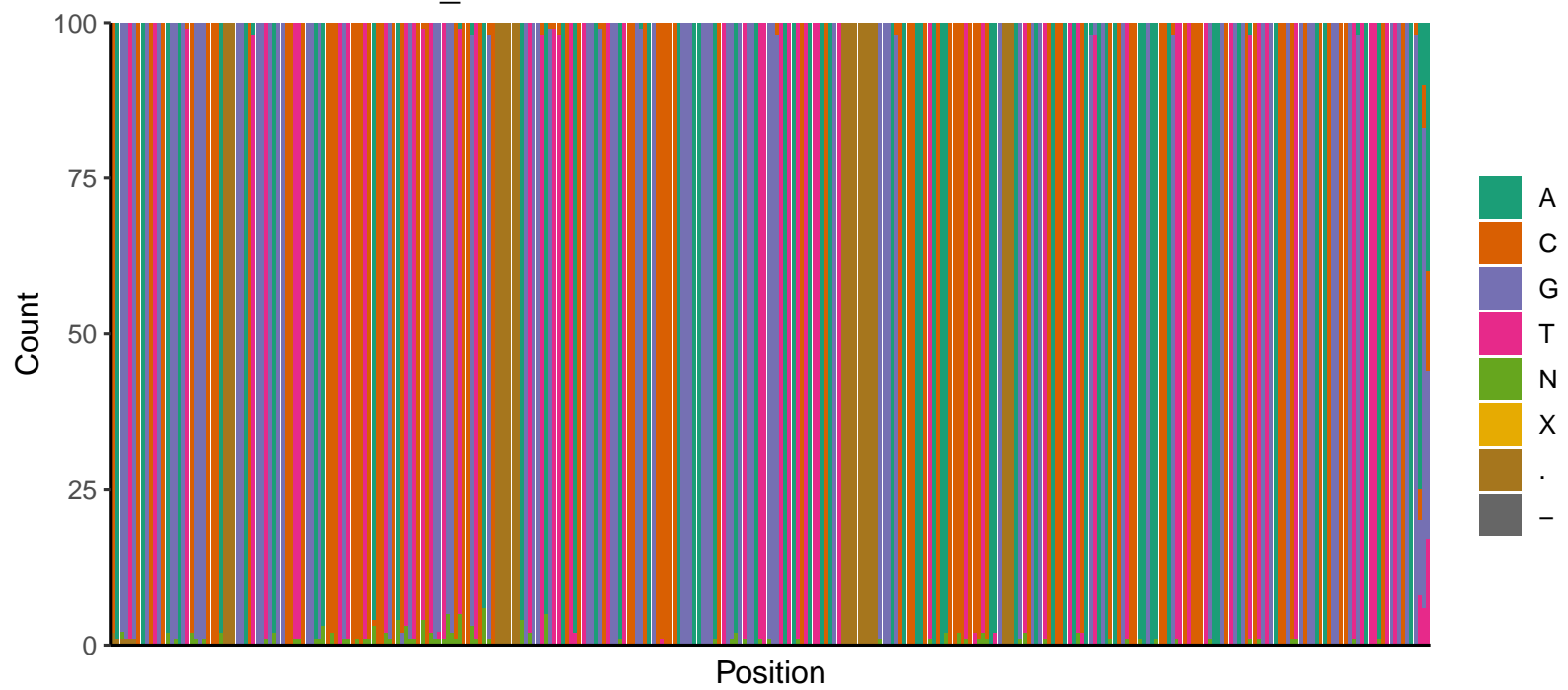


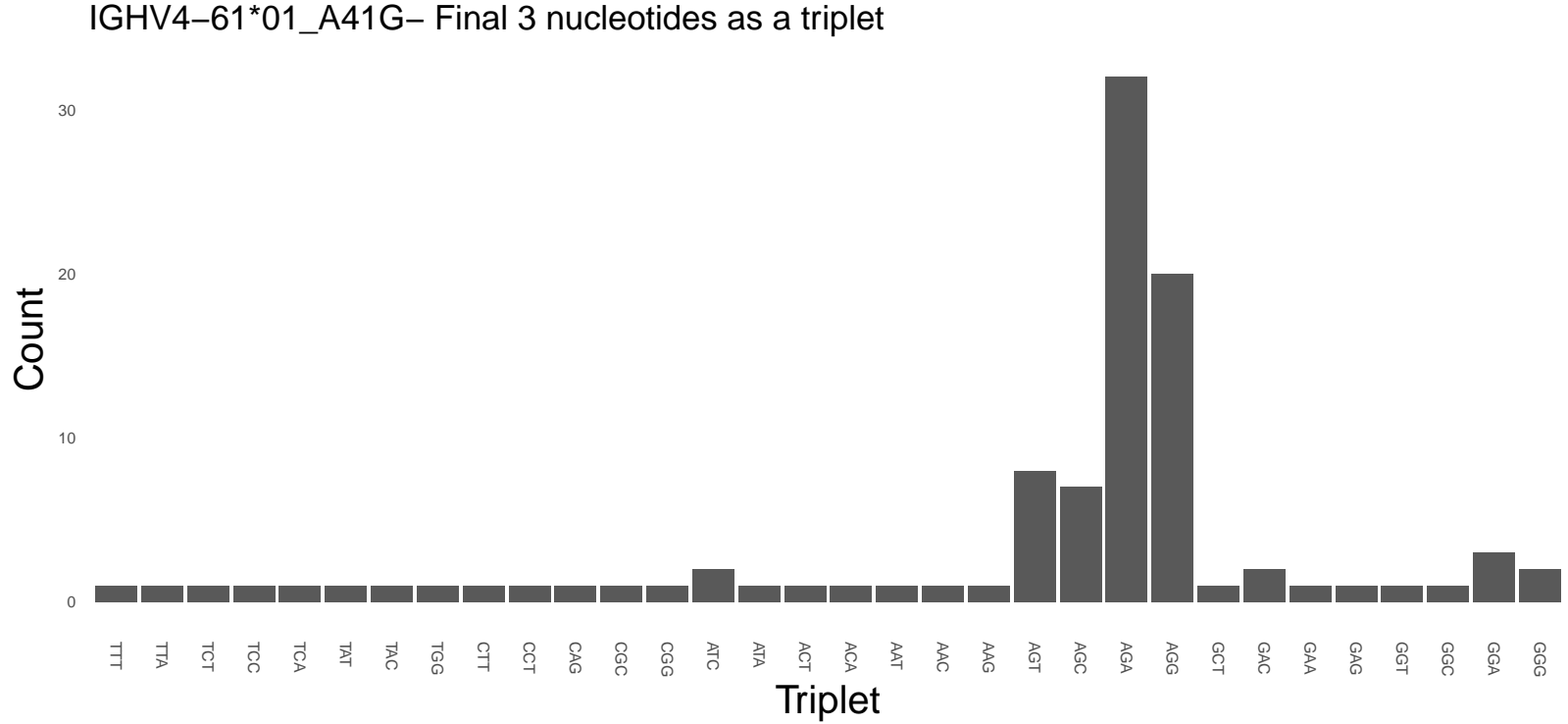
Gene IGHV4-61*01_A41G



Gene IGHV4-61*01_A41G

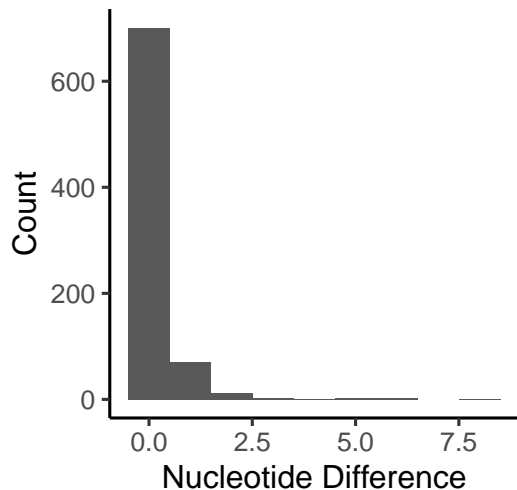


IGHV4-61*01_A41G- Final 3 nucleotides as a triplet



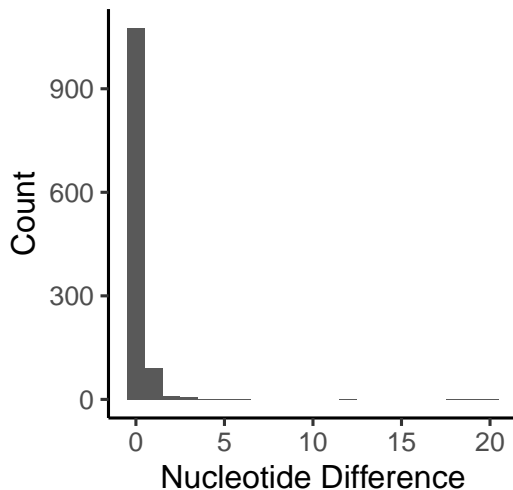
IGHV1-2*02

793 sequences assigned
701 (88.4%) exact matches, in which:
664 unique CDR3
6 unique J



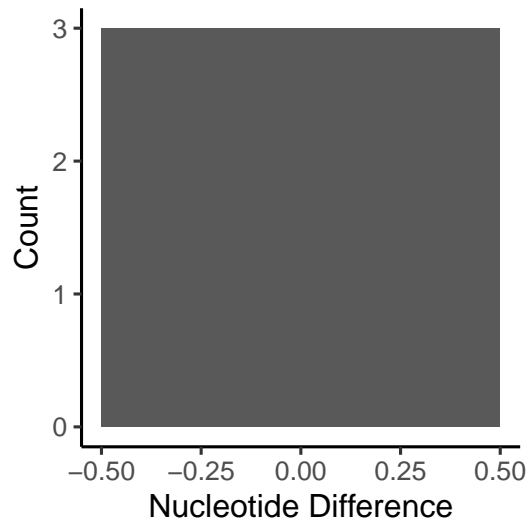
IGHV1-8*01

1195 sequences assigned
1077 (90.1%) exact matches, in which:
1033 unique CDR3
7 unique J



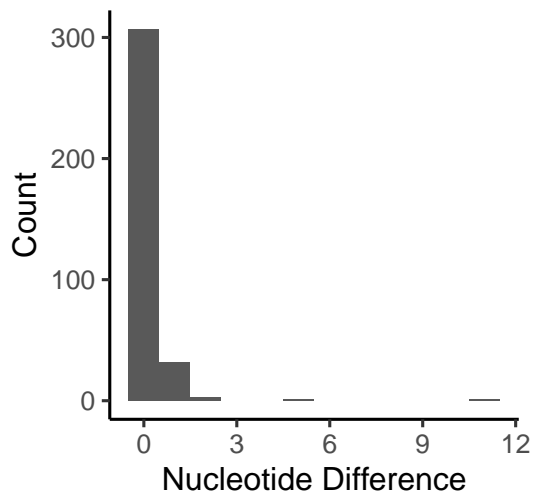
IGHV1-45*02

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



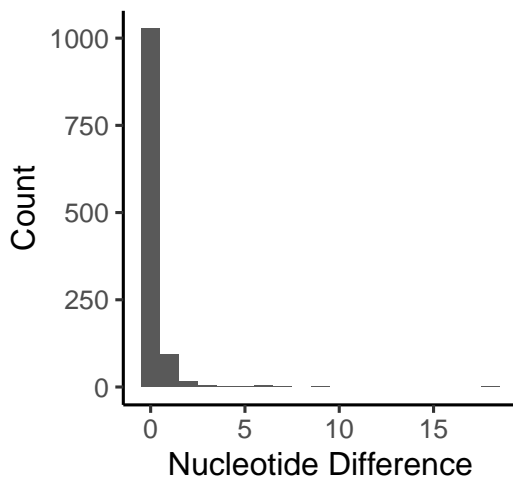
IGHV1-2*04

344 sequences assigned
307 (89.2%) exact matches, in which:
292 unique CDR3
6 unique J



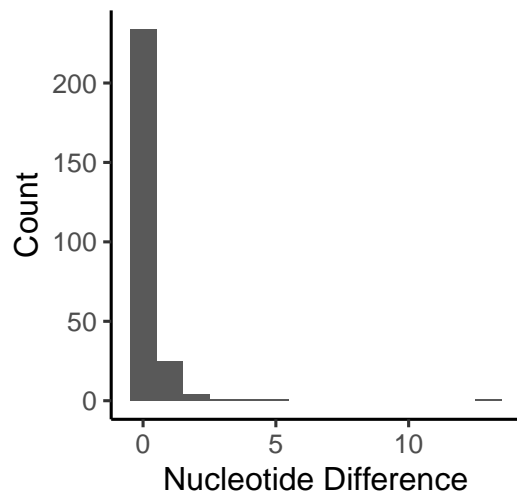
IGHV1-18*01

1149 sequences assigned
1027 (89.4%) exact matches, in which:
997 unique CDR3
7 unique J



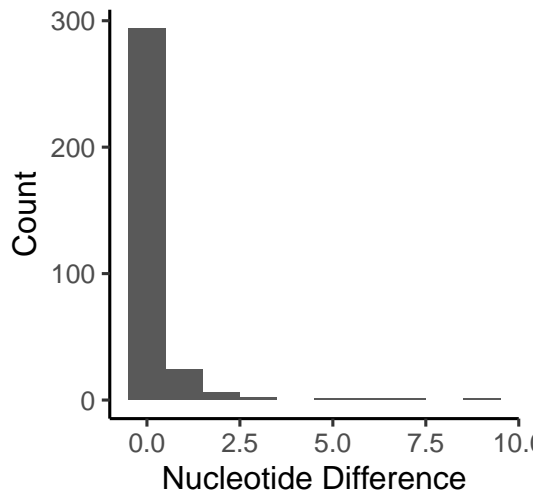
IGHV1-46*01

272 sequences assigned
234 (86%) exact matches, in which:
227 unique CDR3
7 unique J



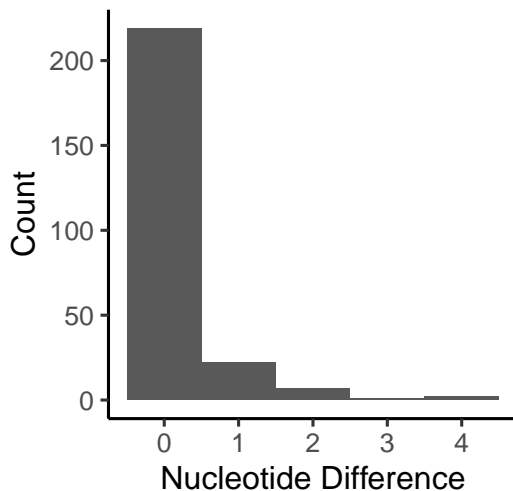
IGHV1-3*01

333 sequences assigned
294 (88.3%) exact matches, in which:
284 unique CDR3
6 unique J



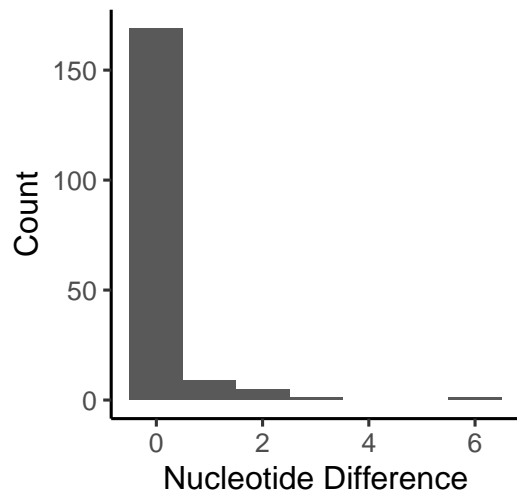
IGHV1-24*01

251 sequences assigned
219 (87.3%) exact matches, in which:
213 unique CDR3
7 unique J



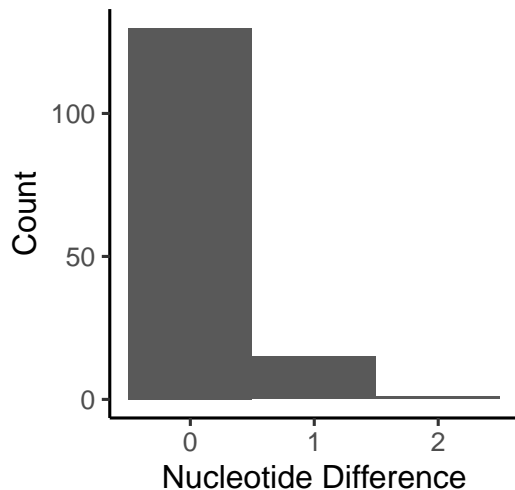
IGHV1-46*03

185 sequences assigned
169 (91.4%) exact matches, in which:
163 unique CDR3
6 unique J



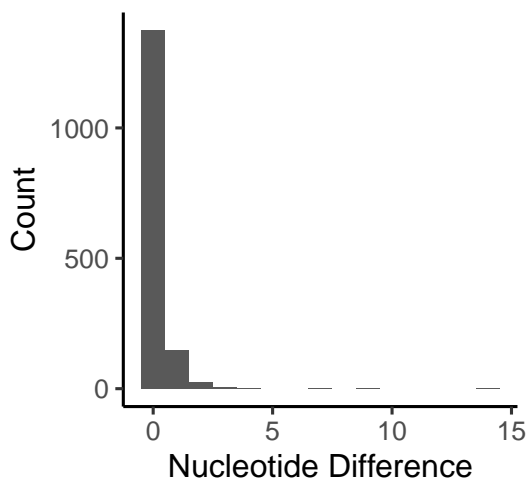
IGHV1–58*01

146 sequences assigned
130 (89%) exact matches, in which:
124 unique CDR3
7 unique J



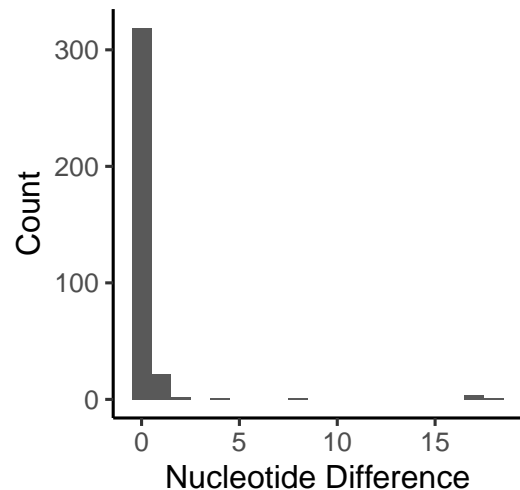
IGHV1–69*06

1560 sequences assigned
1374 (88.1%) exact matches, in which:
1316 unique CDR3
7 unique J



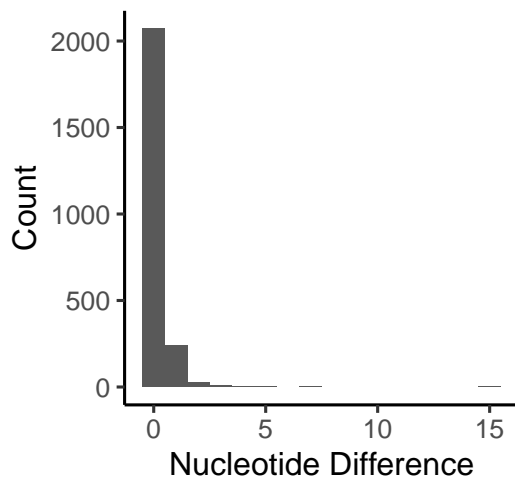
IGHV2–26*01

350 sequences assigned
319 (91.1%) exact matches, in which:
311 unique CDR3
7 unique J



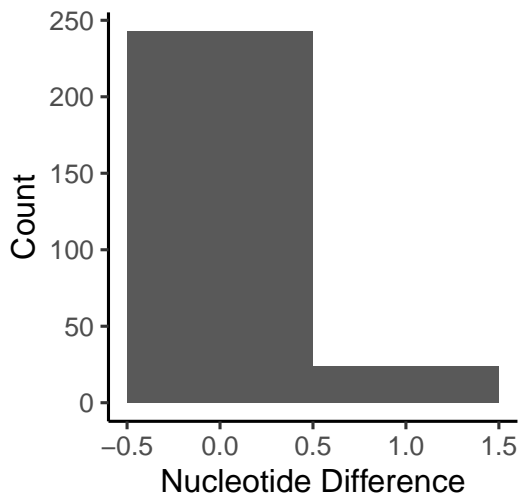
IGHV1–69*01

2354 sequences assigned
2071 (88%) exact matches, in which:
1993 unique CDR3
7 unique J



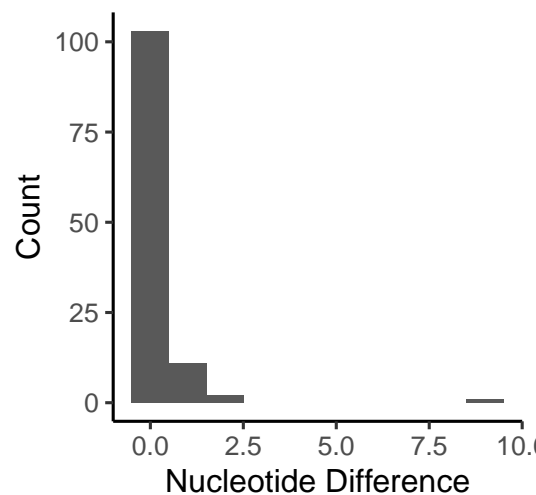
IGHV2–5*01

267 sequences assigned
243 (91%) exact matches, in which:
236 unique CDR3
6 unique J



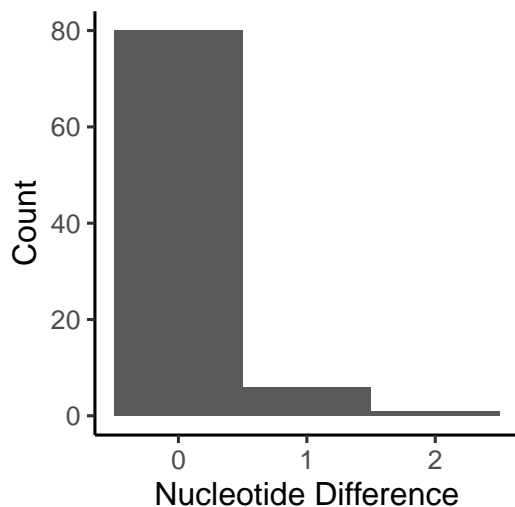
IGHV2–70*01

117 sequences assigned
103 (88%) exact matches, in which:
101 unique CDR3
6 unique J



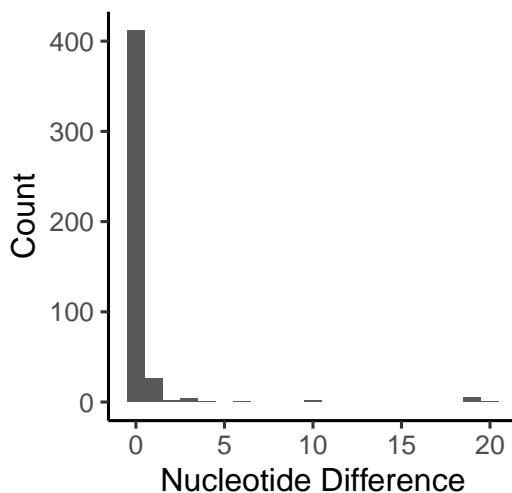
IGHV1–69–2*01

87 sequences assigned
80 (92%) exact matches, in which:
76 unique CDR3
6 unique J



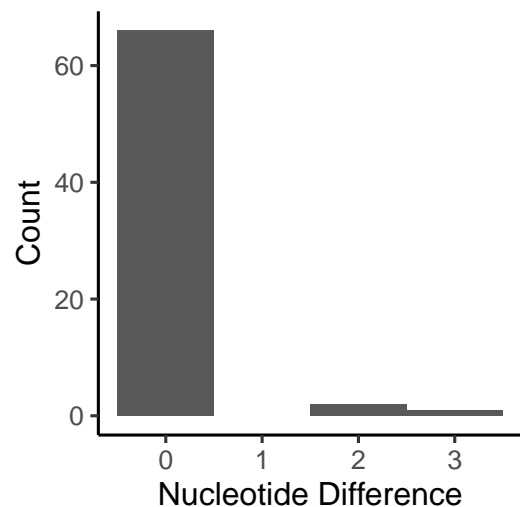
IGHV2–5*02

455 sequences assigned
412 (90.5%) exact matches, in which:
400 unique CDR3
6 unique J



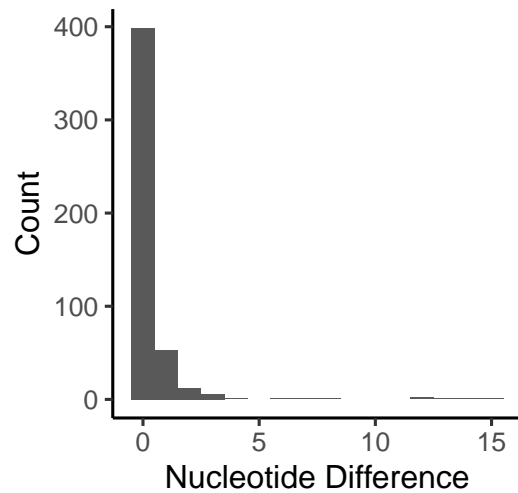
IGHV2–70*04

69 sequences assigned
66 (95.7%) exact matches, in which:
65 unique CDR3
6 unique J



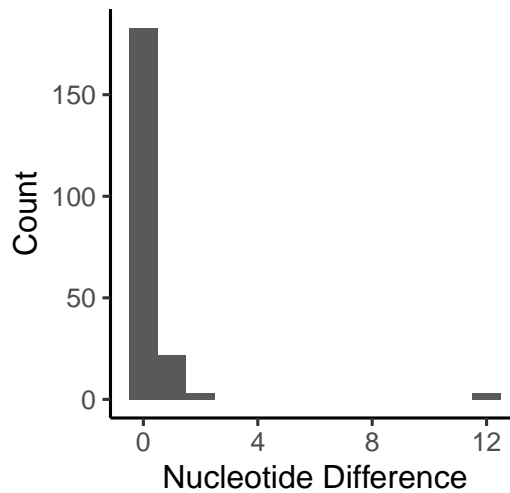
IGHV3-7*01

480 sequences assigned
399 (83.1%) exact matches, in which:
394 unique CDR3
7 unique J



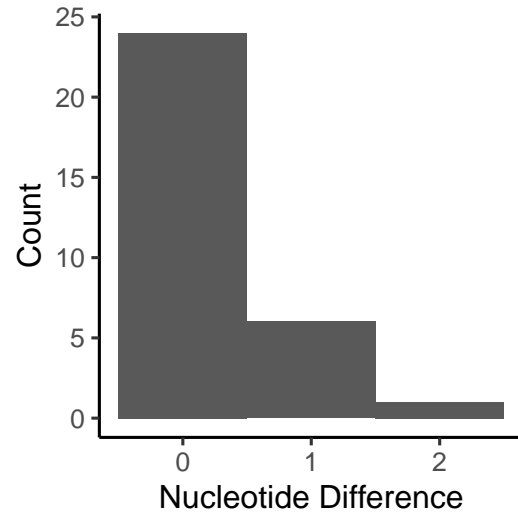
IGHV3-13*01

211 sequences assigned
183 (86.7%) exact matches, in which:
177 unique CDR3
6 unique J



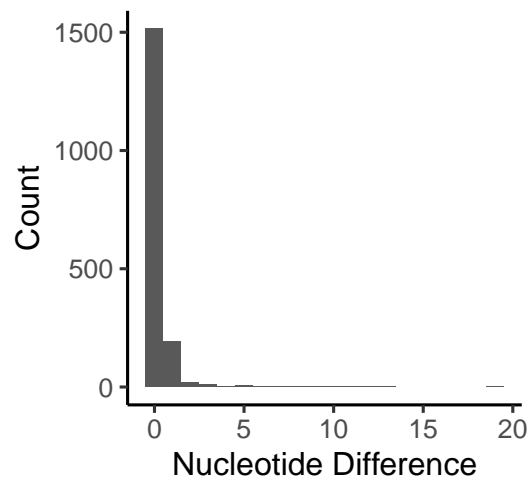
IGHV3-20*01

31 sequences assigned
24 (77.4%) exact matches, in which:
24 unique CDR3
5 unique J



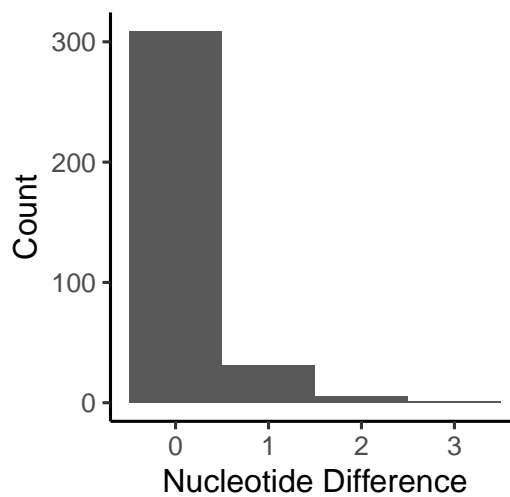
IGHV3-9*01

1764 sequences assigned
1515 (85.9%) exact matches, in which:
1459 unique CDR3
7 unique J



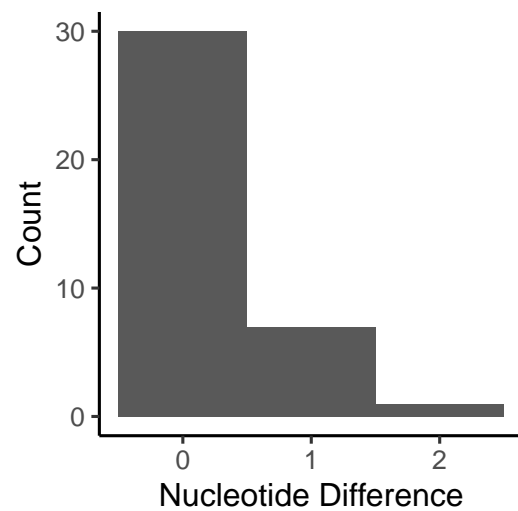
IGHV3-15*01

346 sequences assigned
309 (89.3%) exact matches, in which:
305 unique CDR3
6 unique J



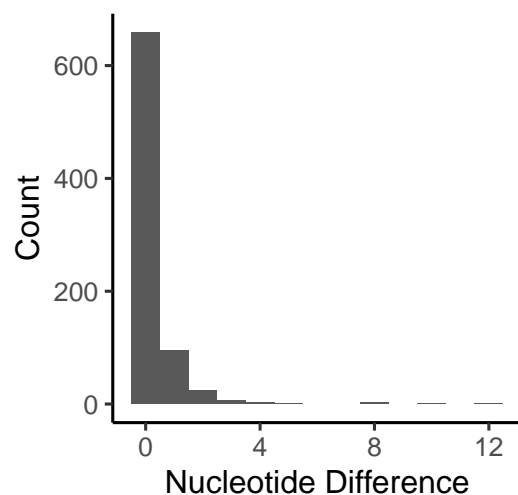
IGHV3-20*04

38 sequences assigned
30 (78.9%) exact matches, in which:
30 unique CDR3
3 unique J



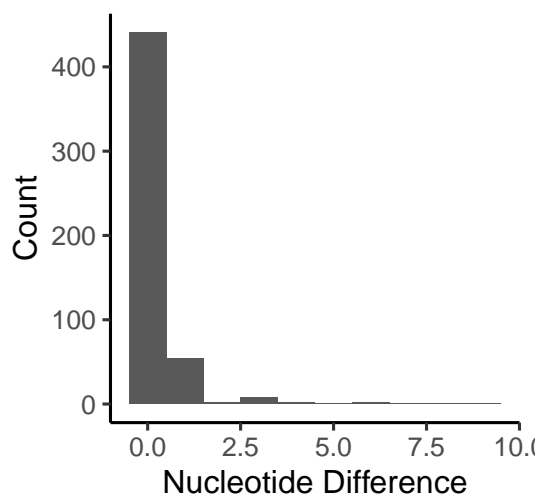
IGHV3-11*01

794 sequences assigned
659 (83%) exact matches, in which:
647 unique CDR3
7 unique J



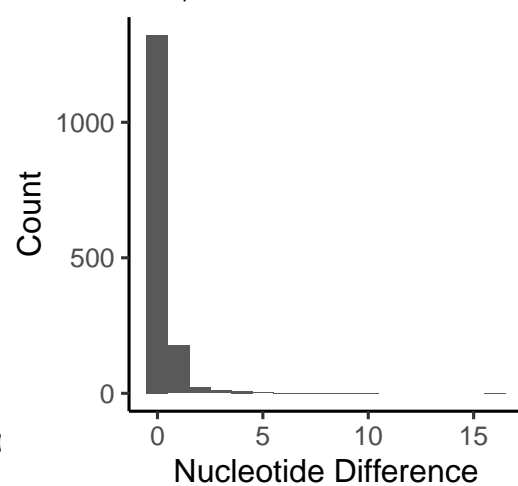
IGHV3-15*07

513 sequences assigned
441 (86%) exact matches, in which:
426 unique CDR3
6 unique J



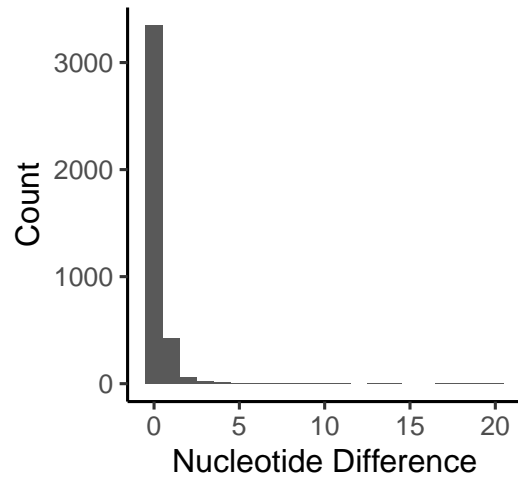
IGHV3-21*01

1551 sequences assigned
1322 (85.2%) exact matches, in which:
1281 unique CDR3
7 unique J



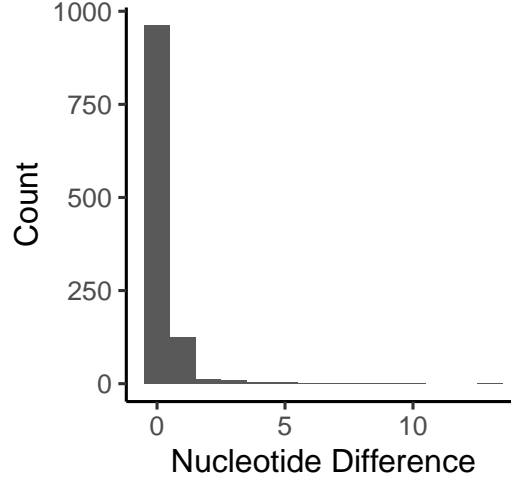
IGHV3-23*01

3919 sequences assigned
3347 (85.4%) exact matches, in which:
3228 unique CDR3
7 unique J



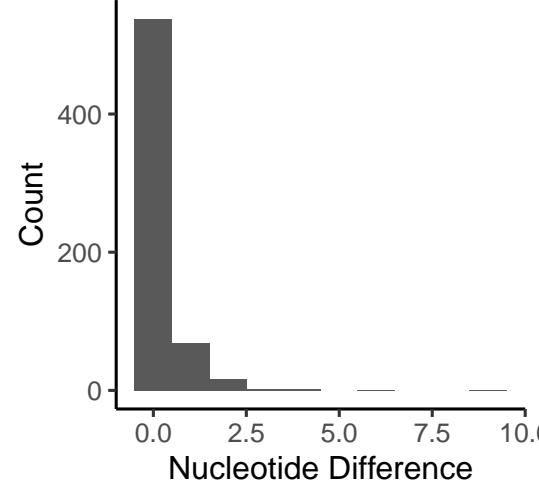
IGHV3-33*01

1127 sequences assigned
962 (85.4%) exact matches, in which:
936 unique CDR3
7 unique J



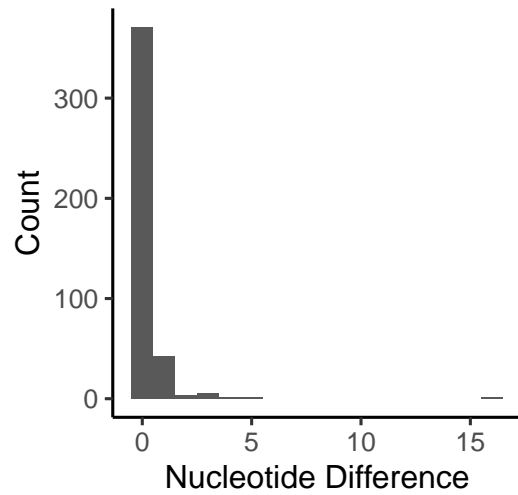
IGHV3-48*03

642 sequences assigned
538 (83.8%) exact matches, in which:
528 unique CDR3
6 unique J



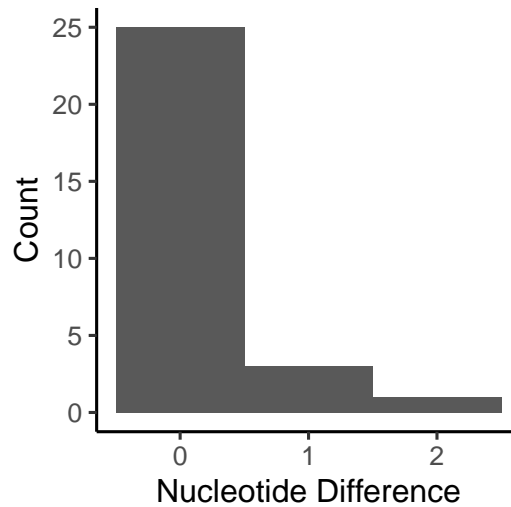
IGHV3-30*01

425 sequences assigned
371 (87.3%) exact matches, in which:
363 unique CDR3
7 unique J



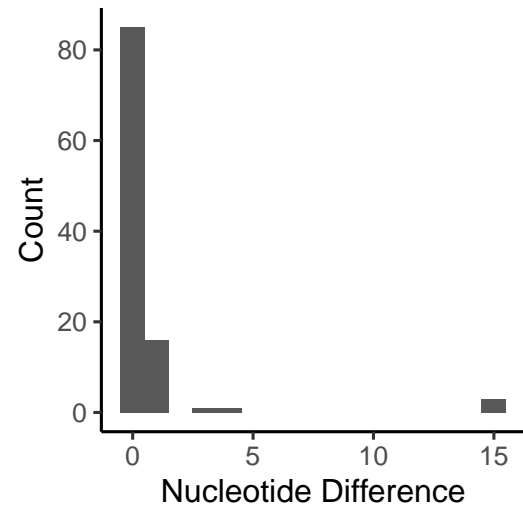
IGHV3-43*01

29 sequences assigned
25 (86.2%) exact matches, in which:
25 unique CDR3
5 unique J



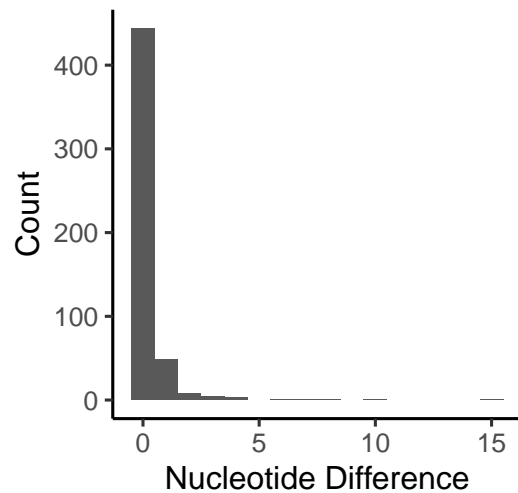
IGHV3-49*03

106 sequences assigned
85 (80.2%) exact matches, in which:
85 unique CDR3
6 unique J



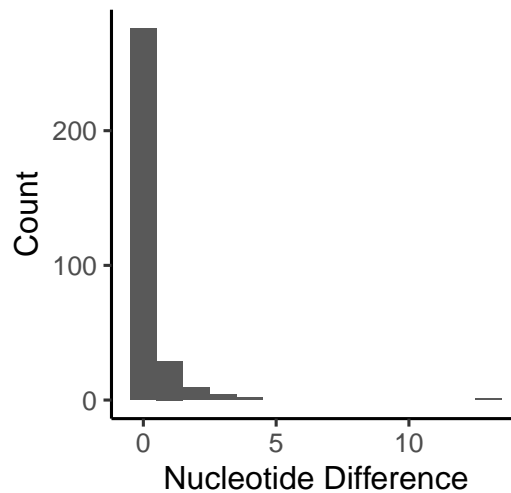
IGHV3-30*18

517 sequences assigned
444 (85.9%) exact matches, in which:
440 unique CDR3
6 unique J



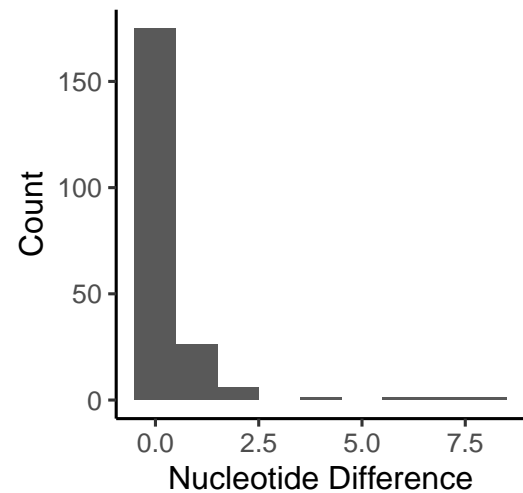
IGHV3-48*01

321 sequences assigned
276 (86%) exact matches, in which:
270 unique CDR3
6 unique J



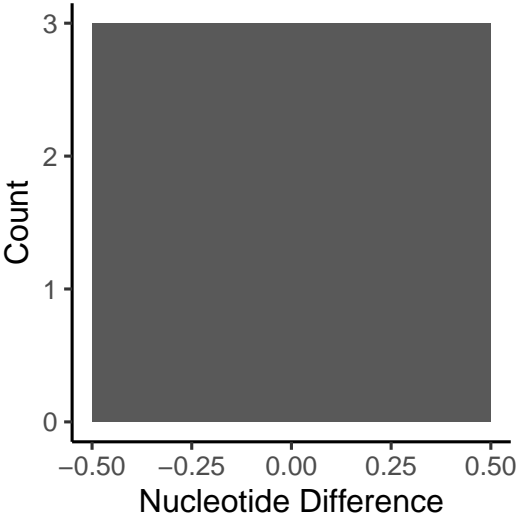
IGHV3-49*04

211 sequences assigned
175 (82.9%) exact matches, in which:
167 unique CDR3
7 unique J



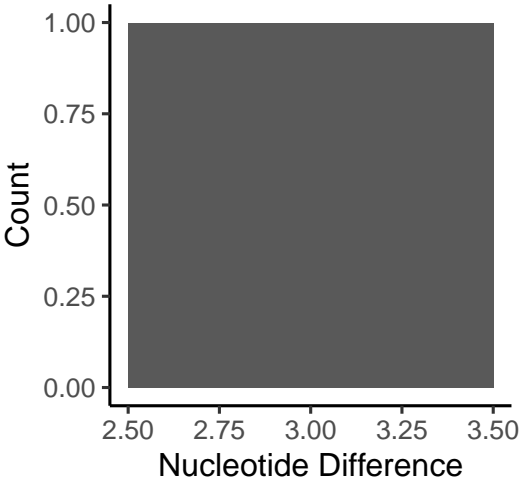
IGHV3-52*02

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



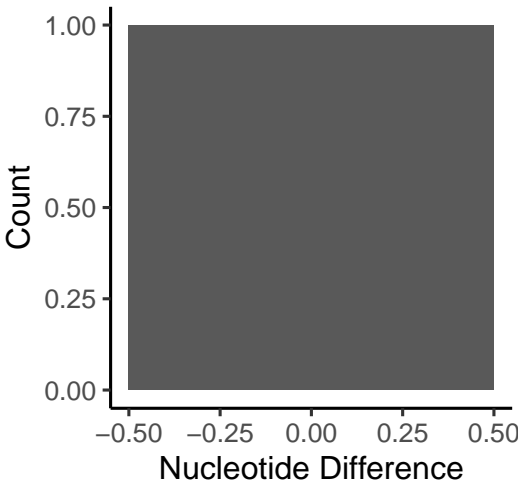
IGHV3-64*04

1 sequences assigned
No exact matches.



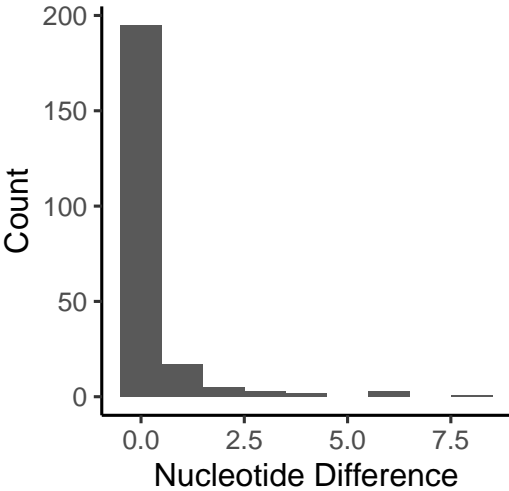
IGHV3-69-1*01

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



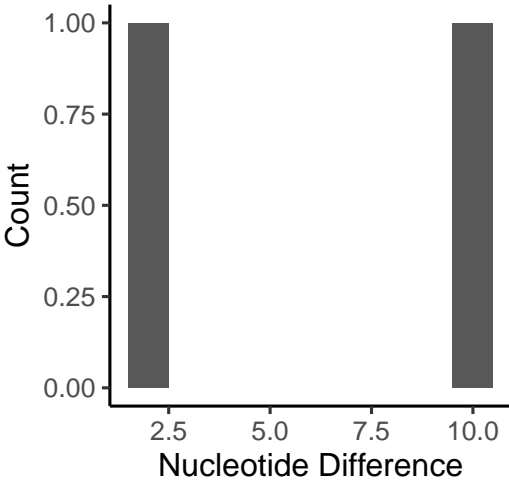
IGHV3-53*02

226 sequences assigned
195 (86.3%) exact matches, in which:
191 unique CDR3
7 unique J



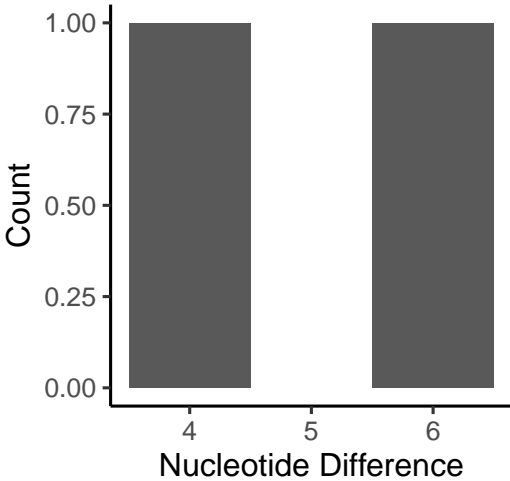
IGHV3-66*01

2 sequences assigned
No exact matches.



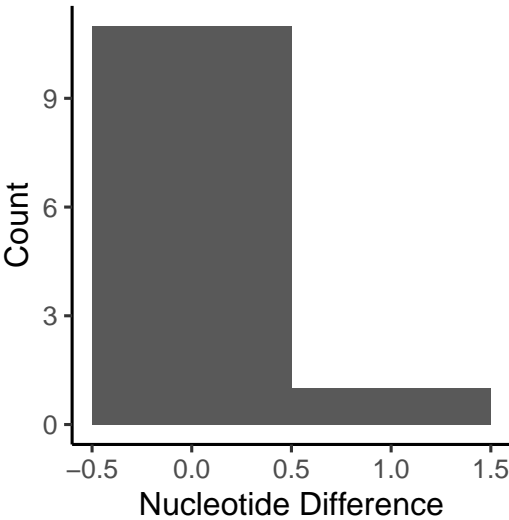
IGHV3-69-1*02

2 sequences assigned
No exact matches.



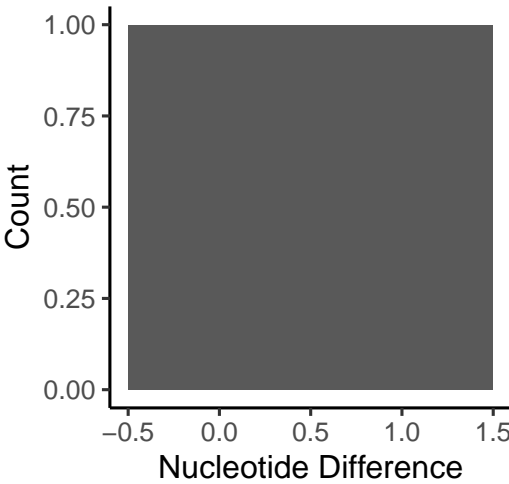
IGHV3-64*02

12 sequences assigned
11 (91.7%) exact matches, in which:
10 unique CDR3
3 unique J



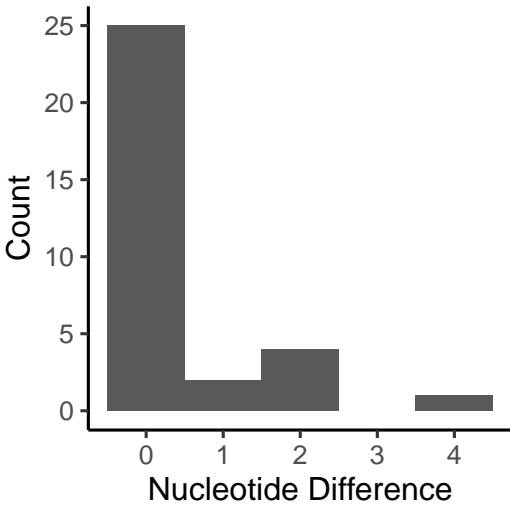
IGHV3-66*04

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



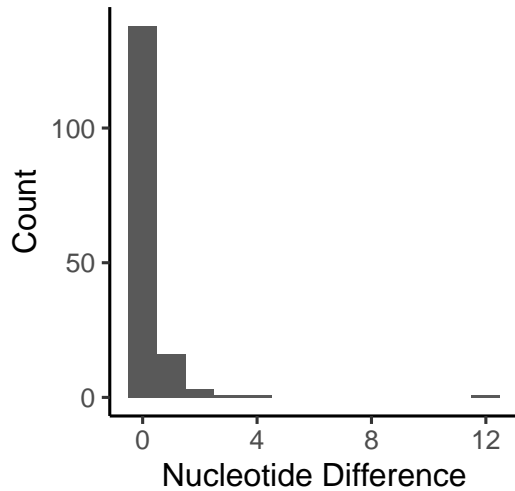
IGHV3-72*01

32 sequences assigned
25 (78.1%) exact matches, in which:
25 unique CDR3
4 unique J



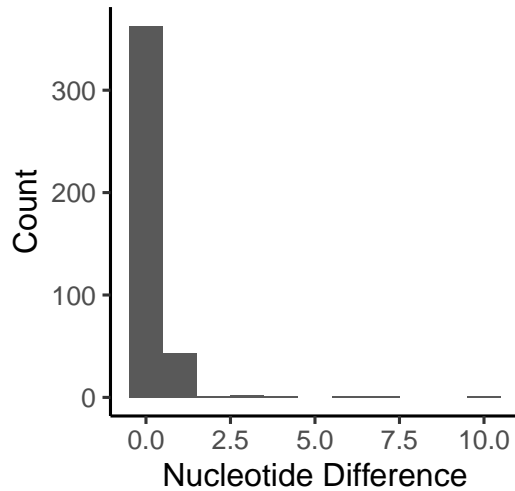
IGHV3–73*02

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



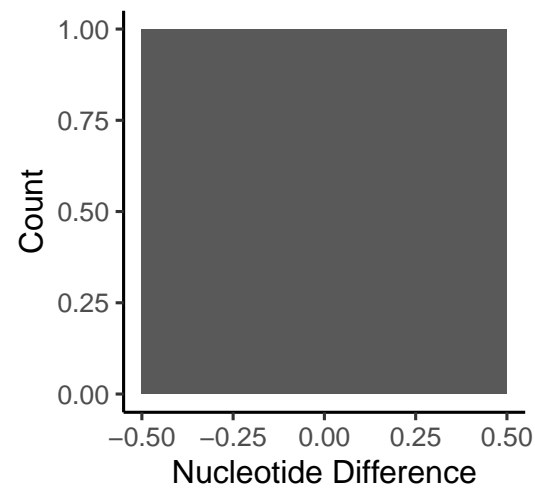
IGHV4–4*02

413 sequences assigned
363 (87.9%) exact matches, in which:
355 unique CDR3
6 unique J



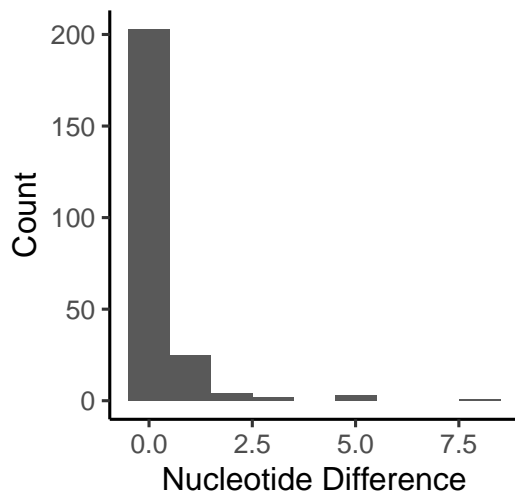
IGHV4–28*02

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



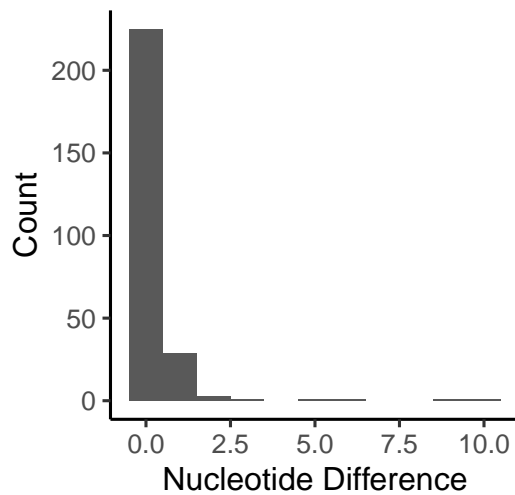
IGHV3–74*01

238 sequences assigned
203 (85.3%) exact matches, in which:
199 unique CDR3
7 unique J



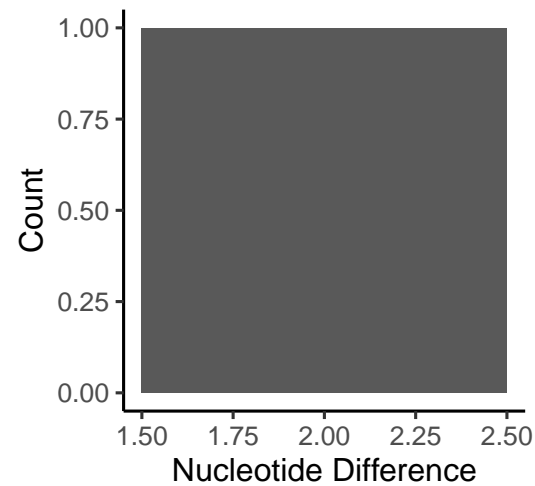
IGHV4–4*07

262 sequences assigned
225 (85.9%) exact matches, in which:
224 unique CDR3
5 unique J



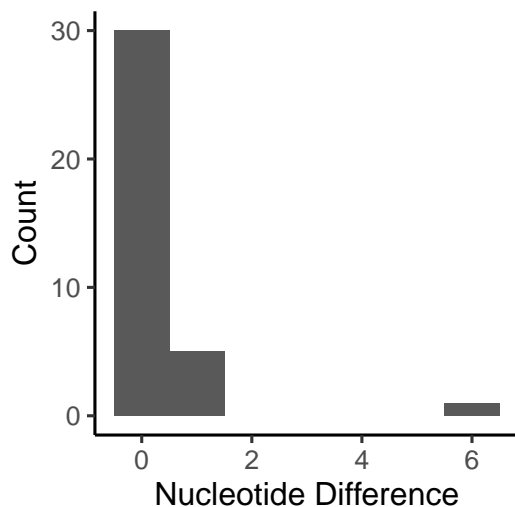
IGHV4–28*03

1 sequences assigned
No exact matches.



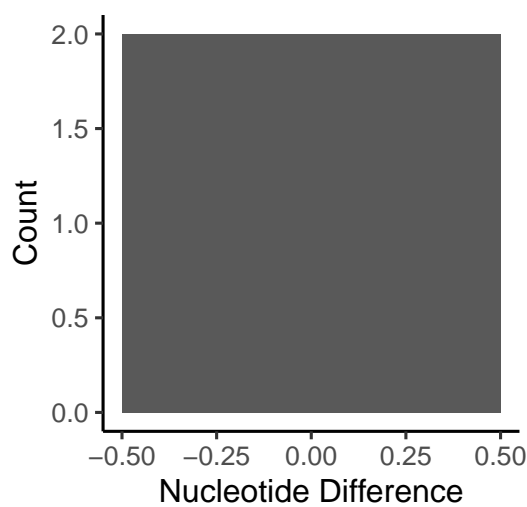
IGHV3–43D*04

36 sequences assigned
30 (83.3%) exact matches, in which:
29 unique CDR3
5 unique J



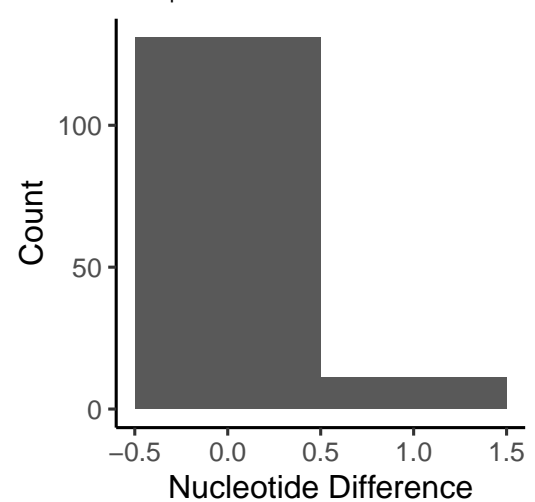
IGHV4–28*01

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



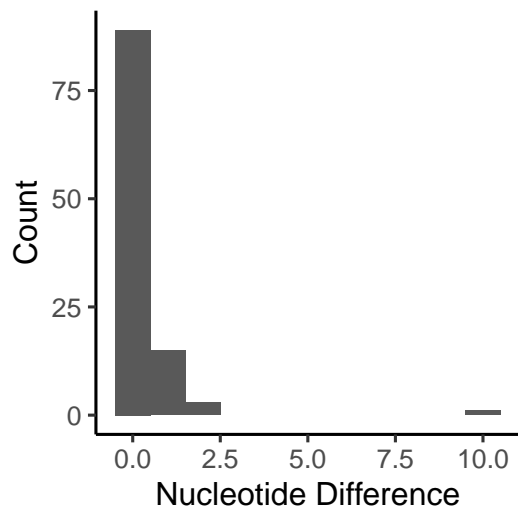
IGHV4–30–2*01

142 sequences assigned
131 (92.3%) exact matches, in which:
124 unique CDR3
5 unique J



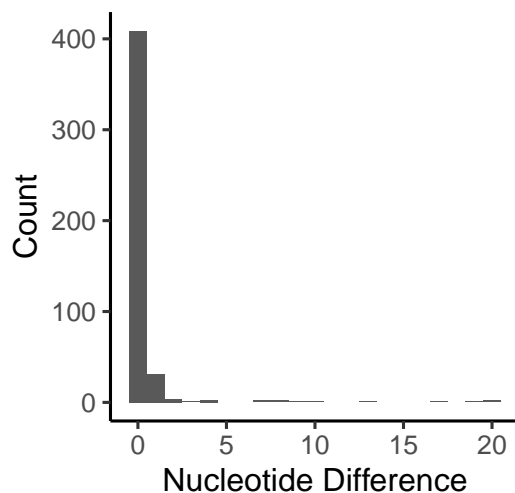
IGHV4-31*01

108 sequences assigned
89 (82.4%) exact matches, in which:
87 unique CDR3
6 unique J



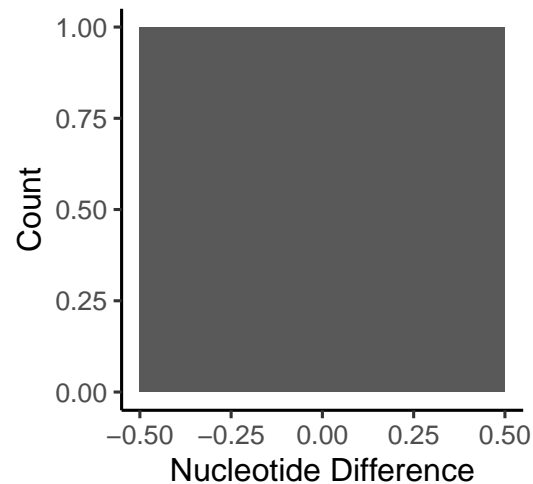
IGHV4-38-2*01

463 sequences assigned
409 (88.3%) exact matches, in which:
393 unique CDR3
7 unique J



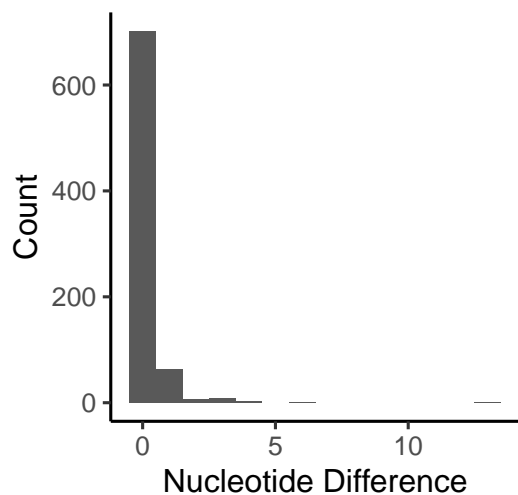
IGHV4-55*08

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



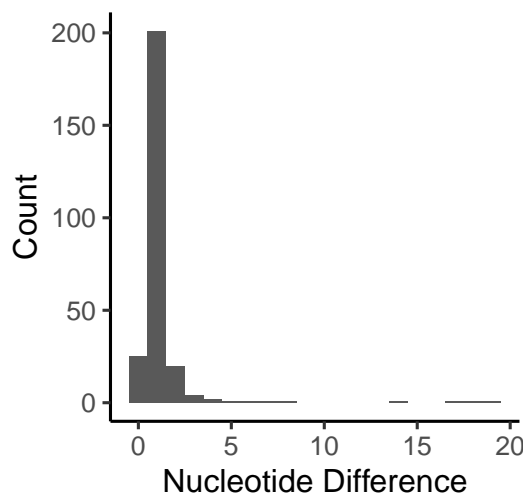
IGHV4-31*03

792 sequences assigned
702 (88.6%) exact matches, in which:
694 unique CDR3
6 unique J



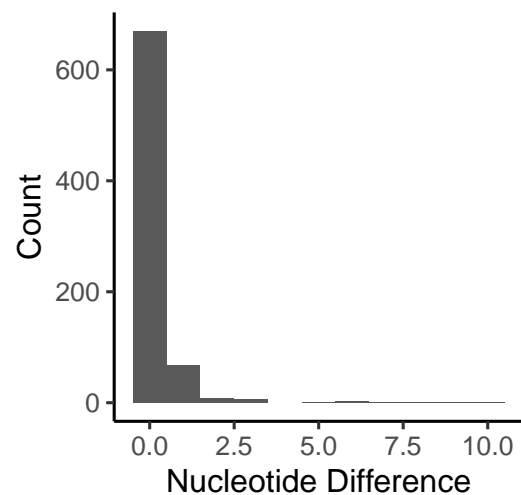
IGHV4-38-2*02

260 sequences assigned
25 (9.6%) exact matches, in which:
25 unique CDR3
4 unique J



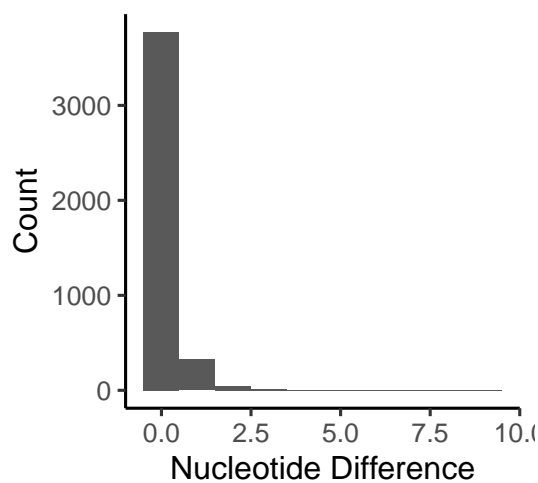
IGHV4-59*01

761 sequences assigned
670 (88%) exact matches, in which:
657 unique CDR3
7 unique J



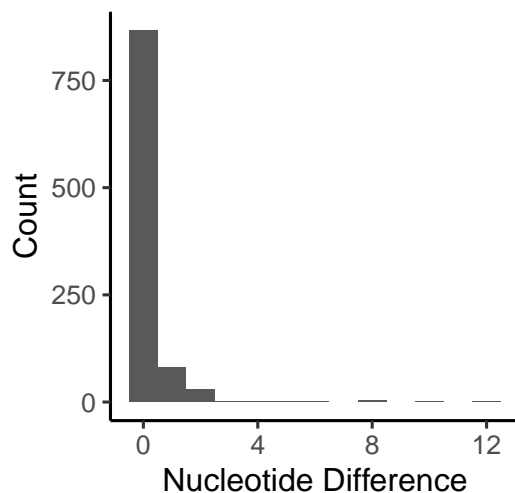
IGHV4-34*01

4180 sequences assigned
3772 (90.2%) exact matches, in which:
3587 unique CDR3
7 unique J



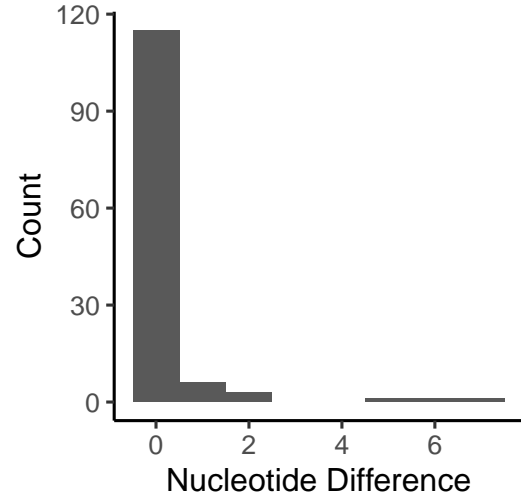
IGHV4-39*01

989 sequences assigned
867 (87.7%) exact matches, in which:
826 unique CDR3
7 unique J



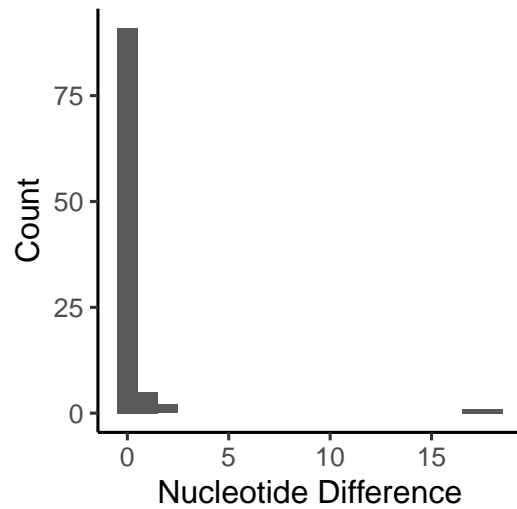
IGHV4-61*01

131 sequences assigned
115 (87.8%) exact matches, in which:
115 unique CDR3
7 unique J



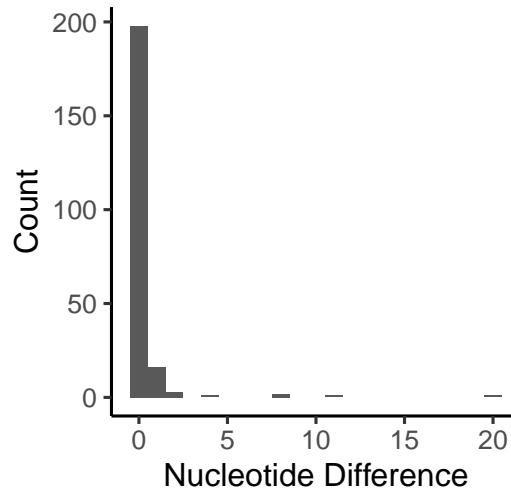
IGHV4-61*01_A41G

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



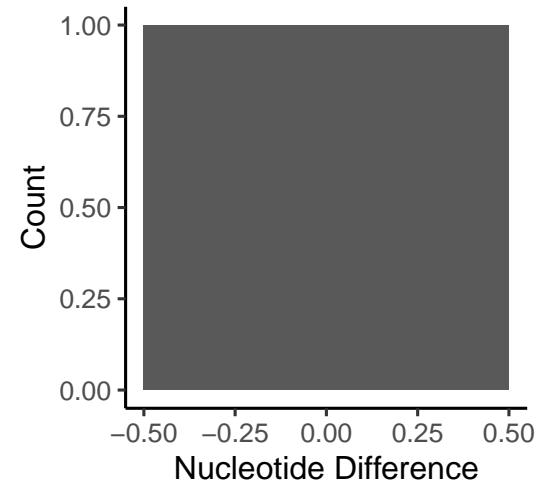
IGHV5-51*03

223 sequences assigned
198 (88.8%) exact matches, in which:
197 unique CDR3
6 unique J



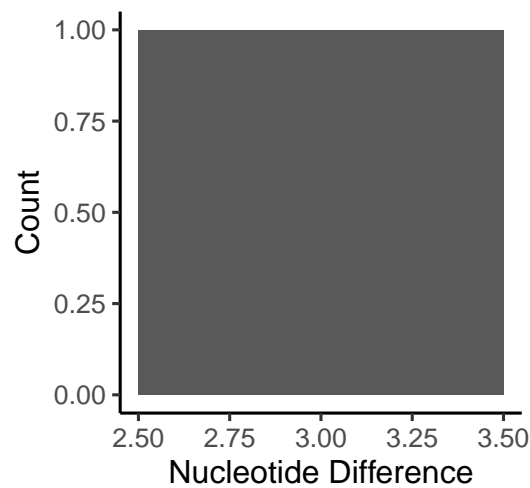
IGHV3/OR16-12*01

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



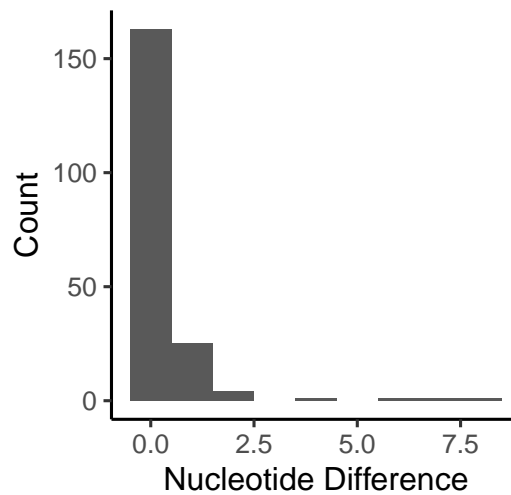
IGHV5-10-1*02

1 sequences assigned
No exact matches.



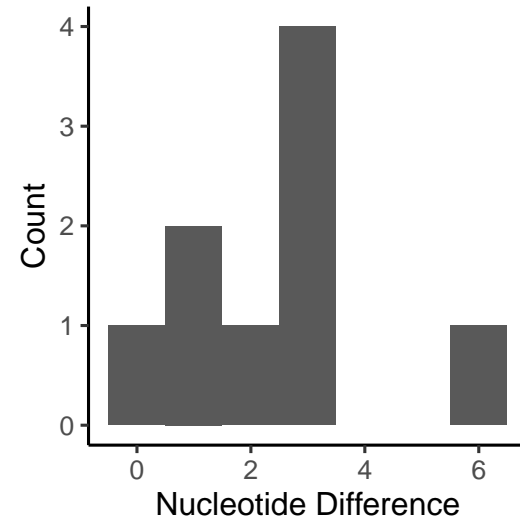
IGHV6-1*01

196 sequences assigned
163 (83.2%) exact matches, in which:
156 unique CDR3
7 unique J



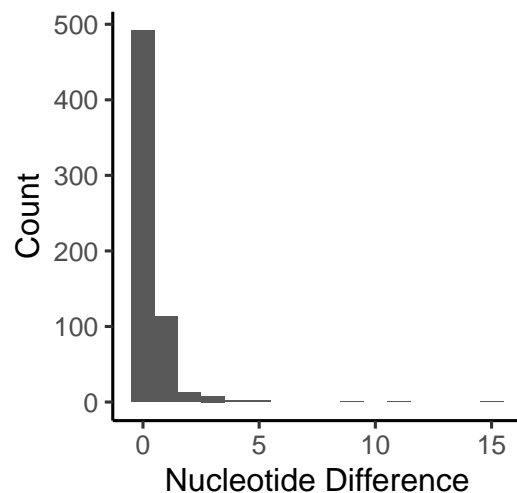
IGHV7-4-1*01

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



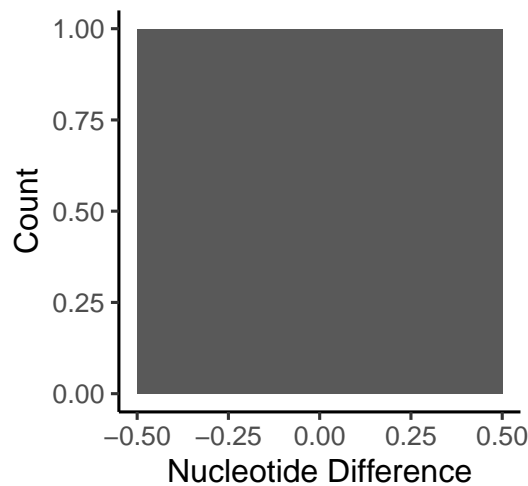
IGHV5-51*01

634 sequences assigned
492 (77.6%) exact matches, in which:
473 unique CDR3
7 unique J

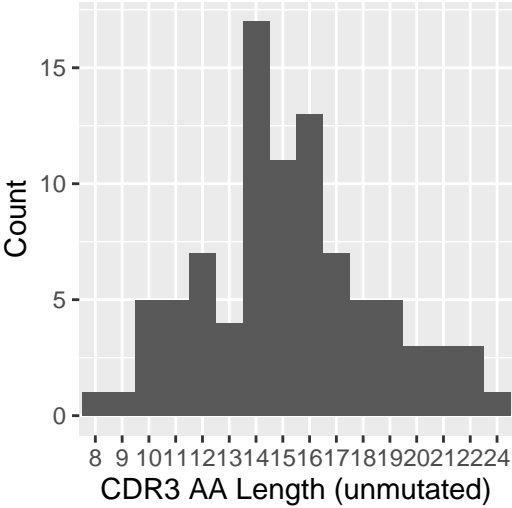


IGHV3/OR16-9*01

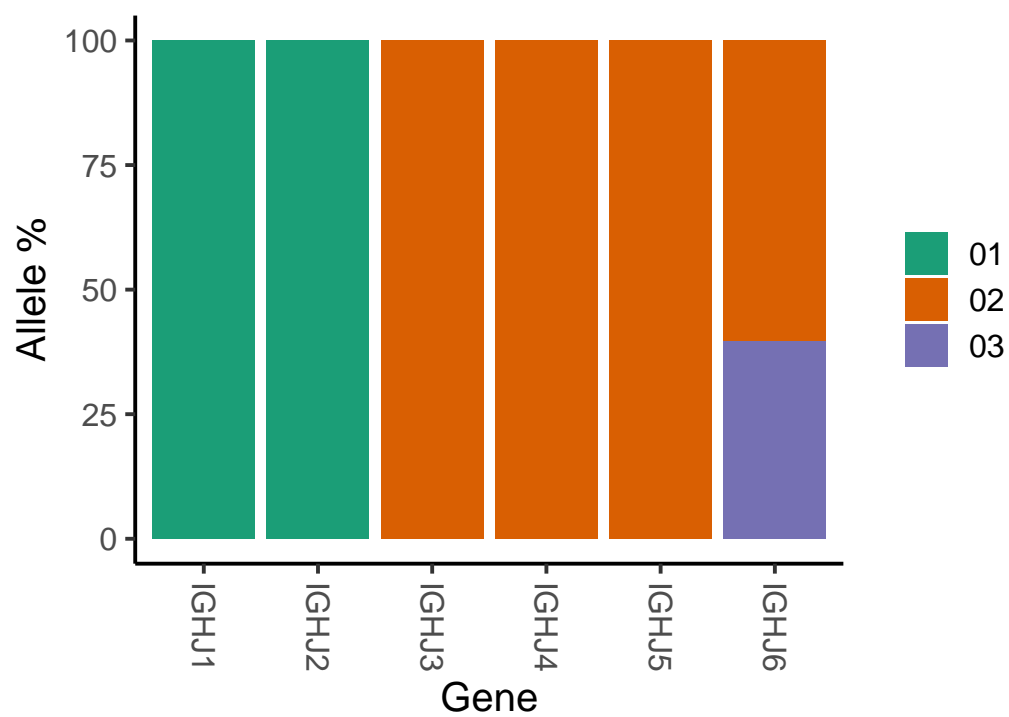
1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



IGHV4-61*01_A41G



Allele Usage



Sequence Count by IGHJ6 allele usage

