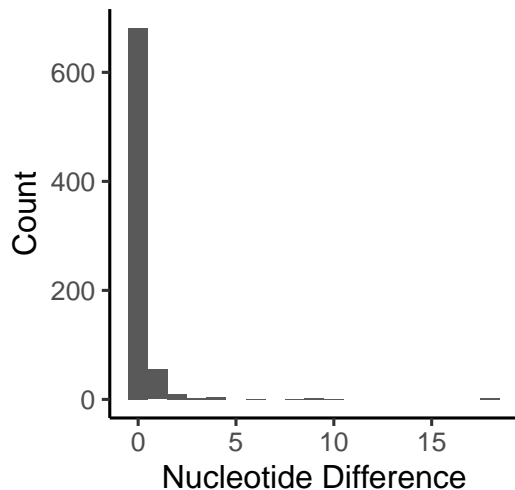


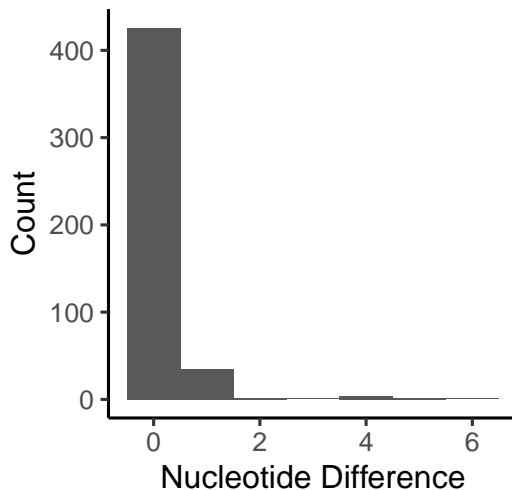
IGHV1-2*02

763 sequences assigned
682 (89.4%) exact matches, in which:
641 unique CDR3
6 unique J



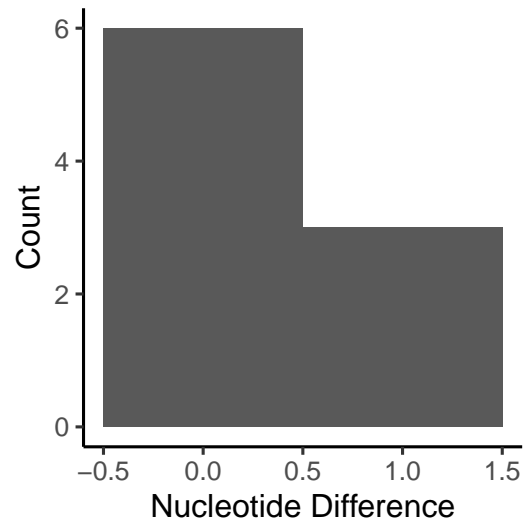
IGHV1-8*01

471 sequences assigned
426 (90.4%) exact matches, in which:
404 unique CDR3
6 unique J



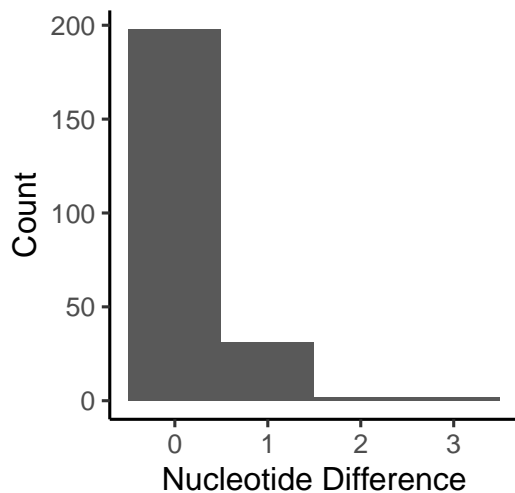
IGHV1-45*02

9 sequences assigned
6 (66.7%) exact matches, in which:
6 unique CDR3
3 unique J



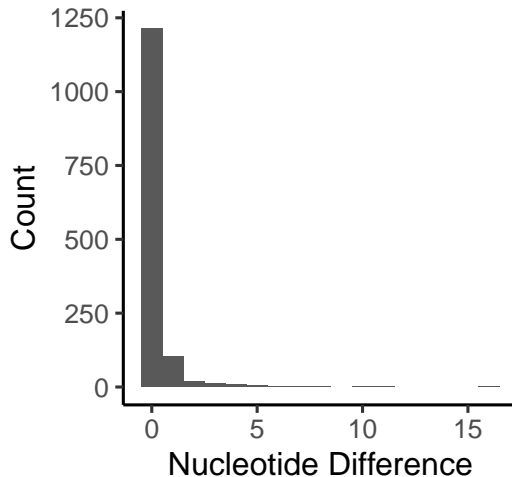
IGHV1-2*04

233 sequences assigned
198 (85%) exact matches, in which:
185 unique CDR3
6 unique J



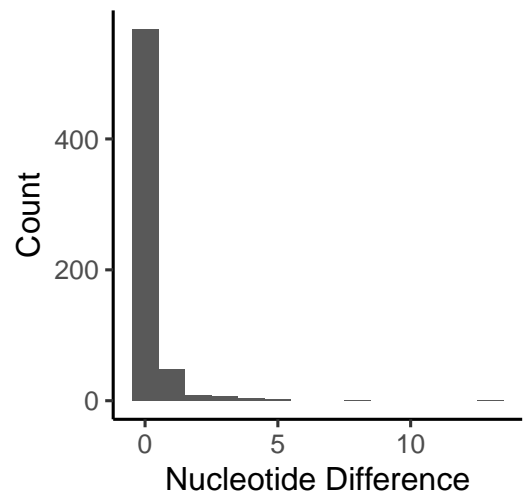
IGHV1-18*01

1374 sequences assigned
1213 (88.3%) exact matches, in which:
1149 unique CDR3
6 unique J



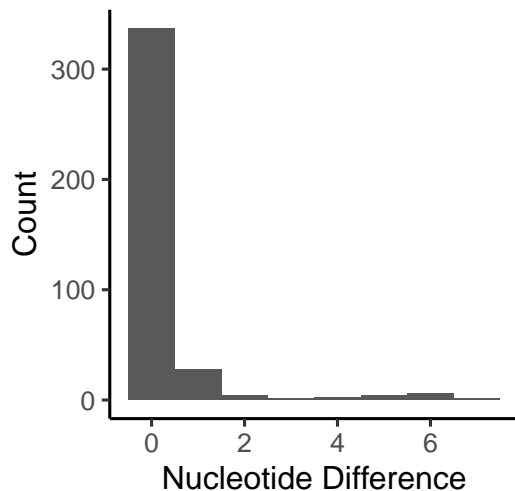
IGHV1-46*01

640 sequences assigned
568 (88.8%) exact matches, in which:
539 unique CDR3
6 unique J



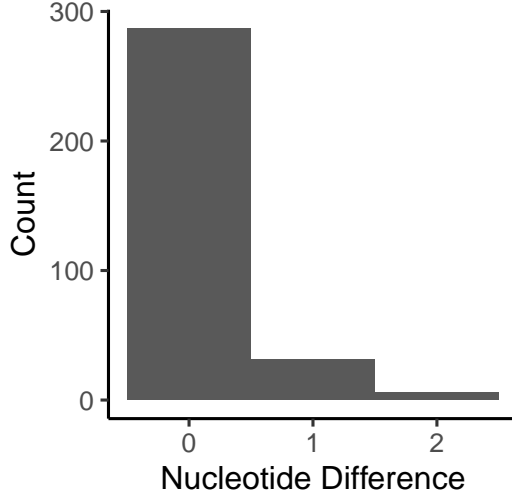
IGHV1-3*01

383 sequences assigned
337 (88%) exact matches, in which:
316 unique CDR3
6 unique J



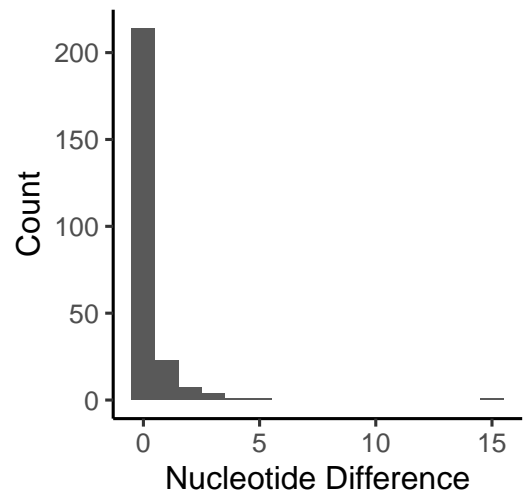
IGHV1-24*01

324 sequences assigned
287 (88.6%) exact matches, in which:
269 unique CDR3
6 unique J



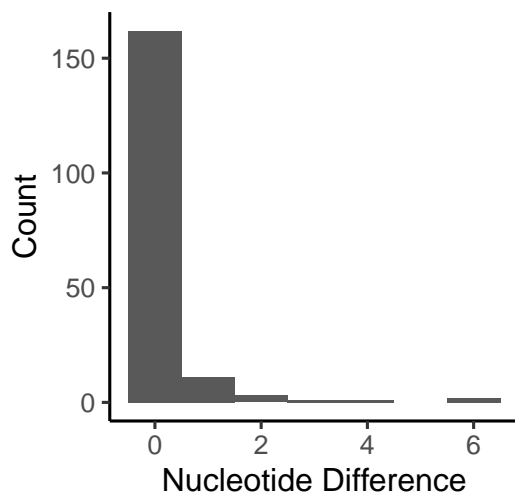
IGHV1-46*03

253 sequences assigned
214 (84.6%) exact matches, in which:
204 unique CDR3
6 unique J



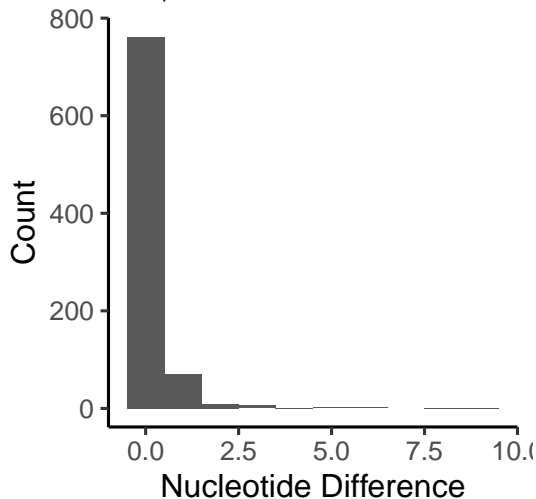
IGHV1–58*01

180 sequences assigned
162 (90%) exact matches, in which:
147 unique CDR3
5 unique J



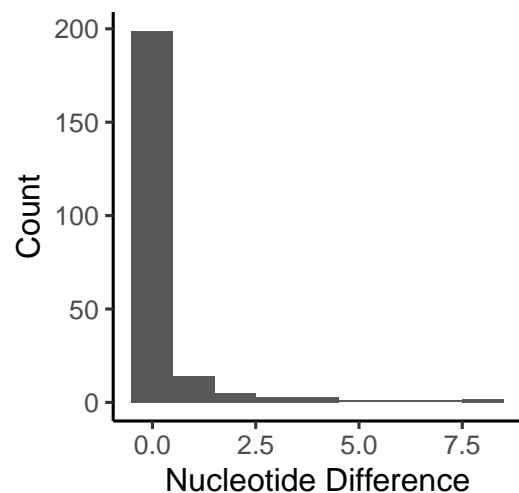
IGHV1–69*06

855 sequences assigned
762 (89.1%) exact matches, in which:
707 unique CDR3
6 unique J



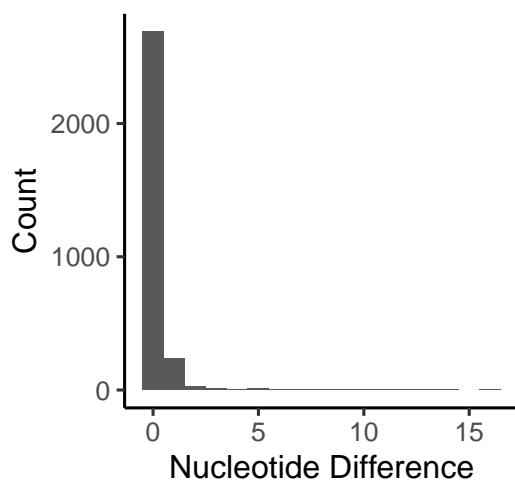
IGHV2–26*01

229 sequences assigned
199 (86.9%) exact matches, in which:
193 unique CDR3
5 unique J



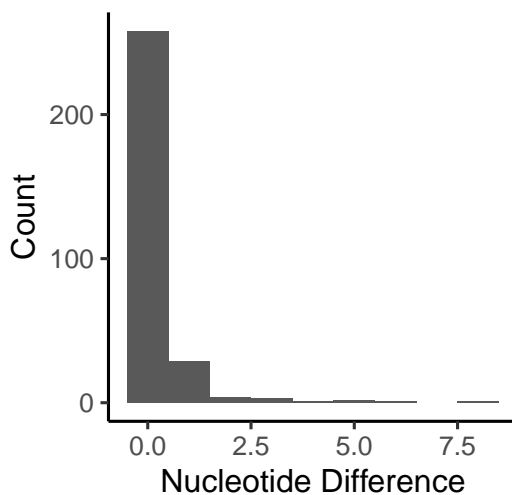
IGHV1–69*01

2998 sequences assigned
2689 (89.7%) exact matches, in which:
2498 unique CDR3
6 unique J



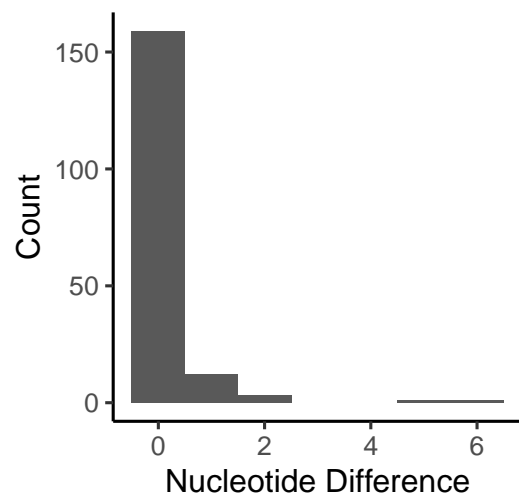
IGHV2–5*01

299 sequences assigned
258 (86.3%) exact matches, in which:
246 unique CDR3
6 unique J



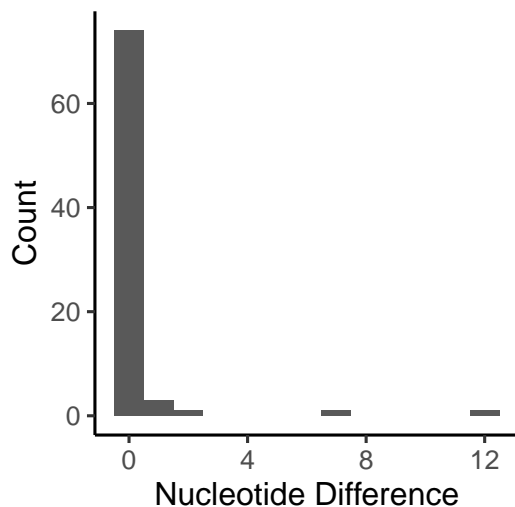
IGHV2–70*01

176 sequences assigned
159 (90.3%) exact matches, in which:
155 unique CDR3
5 unique J



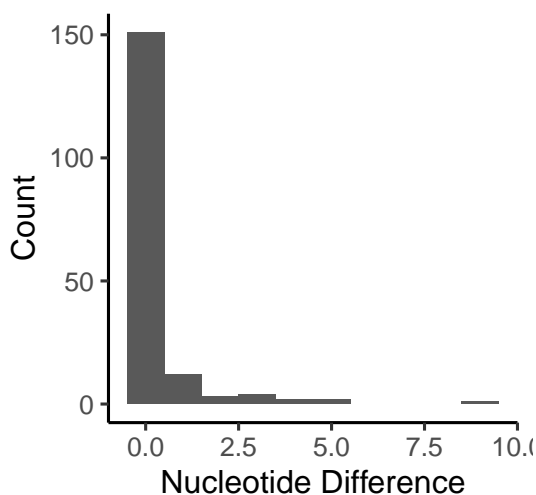
IGHV1–69–2*01

80 sequences assigned
74 (92.5%) exact matches, in which:
69 unique CDR3
5 unique J



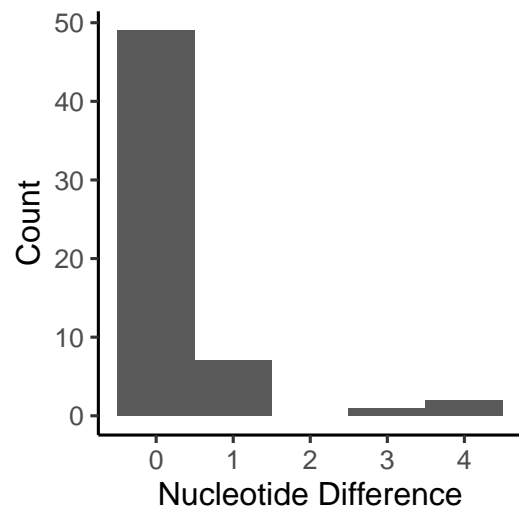
IGHV2–5*02

175 sequences assigned
151 (86.3%) exact matches, in which:
147 unique CDR3
5 unique J



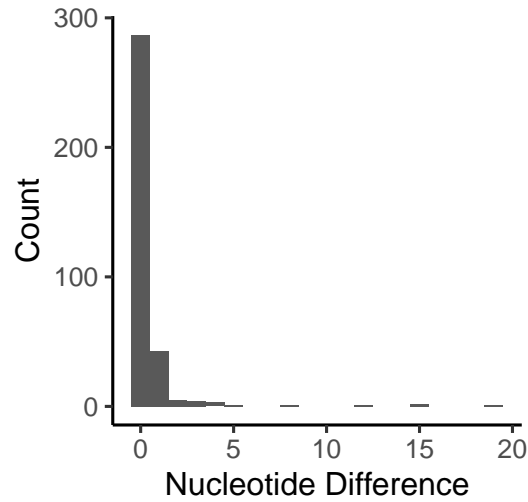
IGHV2–70*04

59 sequences assigned
49 (83.1%) exact matches, in which:
48 unique CDR3
6 unique J



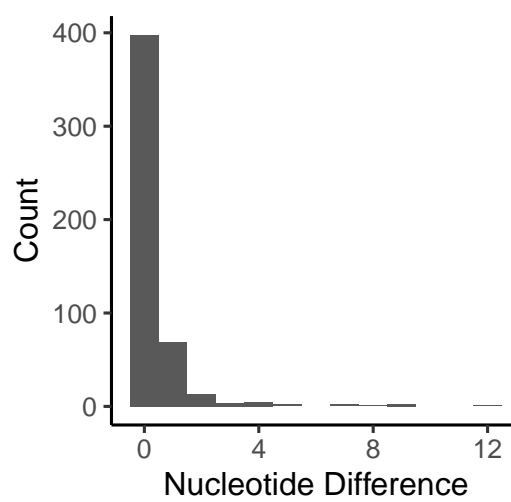
IGHV3-7*01

348 sequences assigned
287 (82.5%) exact matches, in which:
274 unique CDR3
6 unique J



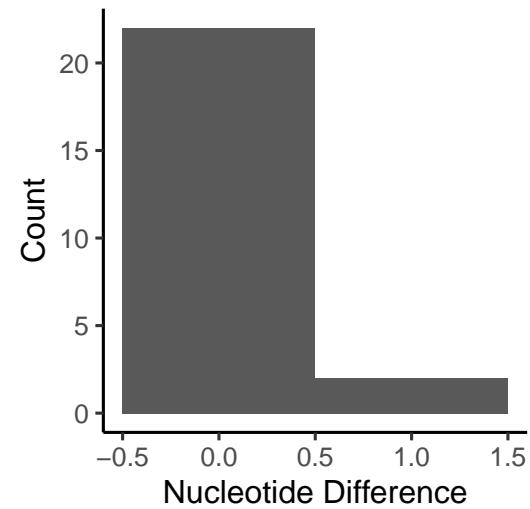
IGHV3-11*01

498 sequences assigned
398 (79.9%) exact matches, in which:
376 unique CDR3
6 unique J



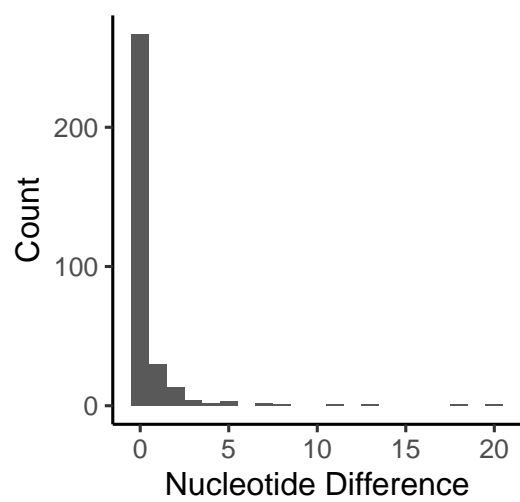
IGHV3-13*05

24 sequences assigned
22 (91.7%) exact matches, in which:
19 unique CDR3
5 unique J



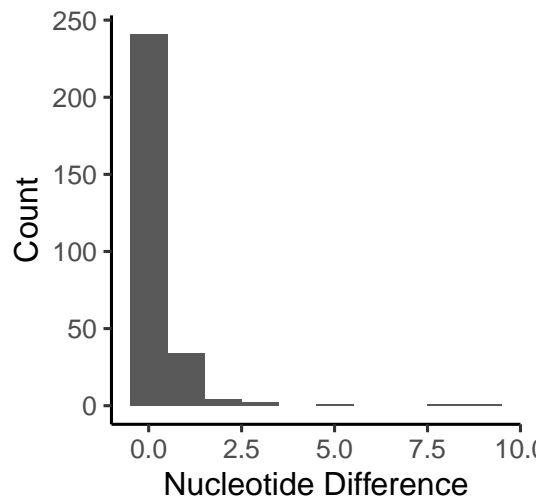
IGHV3-7*03

327 sequences assigned
267 (81.7%) exact matches, in which:
252 unique CDR3
6 unique J



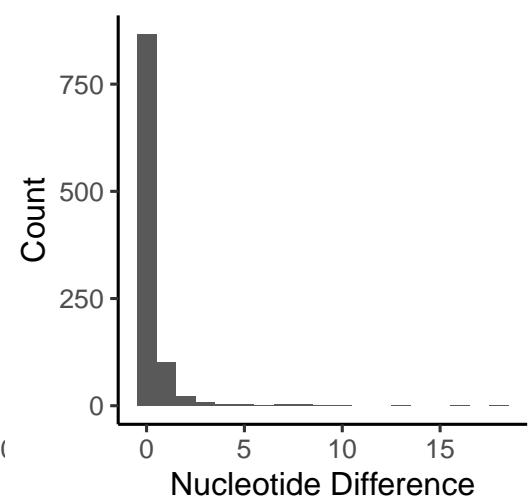
IGHV3-11*06

285 sequences assigned
241 (84.6%) exact matches, in which:
228 unique CDR3
6 unique J



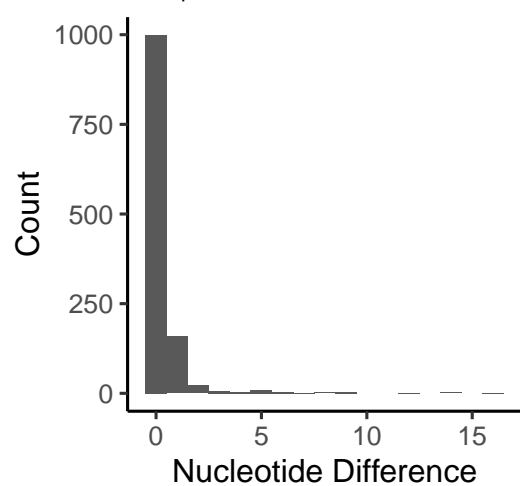
IGHV3-15*01

1019 sequences assigned
867 (85.1%) exact matches, in which:
829 unique CDR3
6 unique J



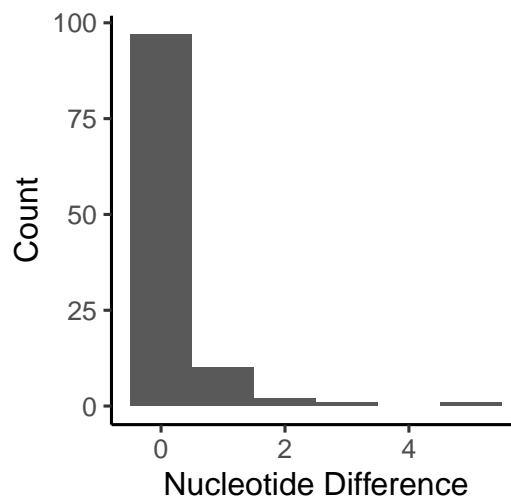
IGHV3-9*01

1214 sequences assigned
999 (82.3%) exact matches, in which:
915 unique CDR3
6 unique J



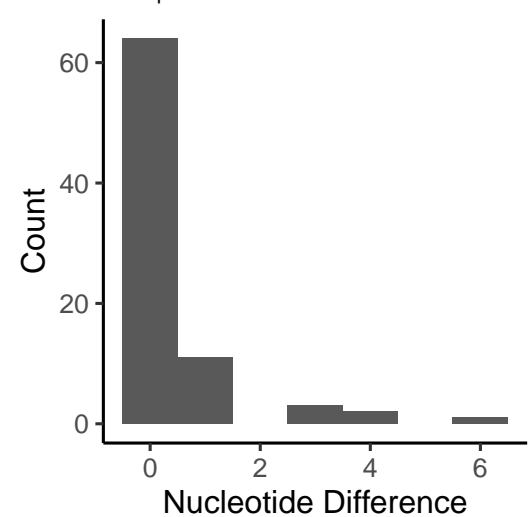
IGHV3-13*01

111 sequences assigned
97 (87.4%) exact matches, in which:
91 unique CDR3
5 unique J



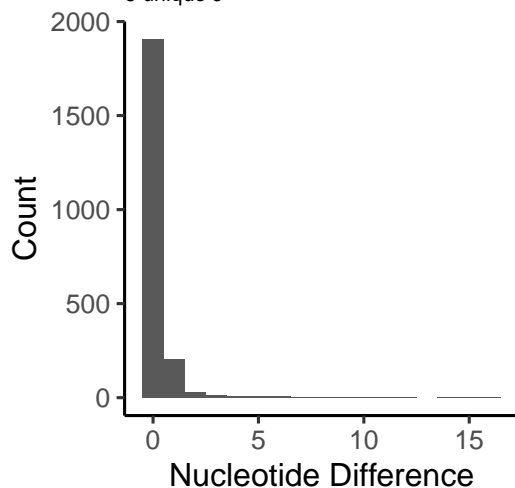
IGHV3-20*01

81 sequences assigned
64 (79%) exact matches, in which:
59 unique CDR3
4 unique J



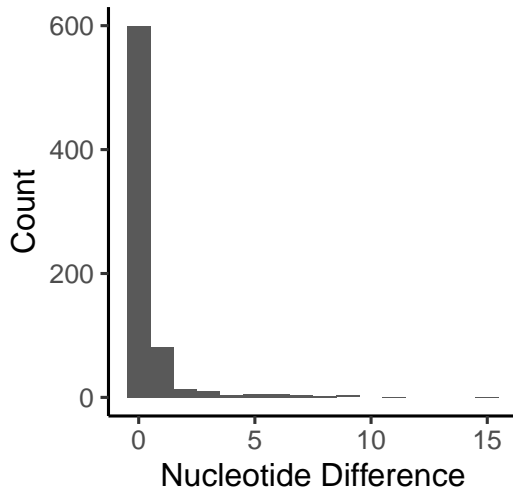
IGHV3–21*01

2189 sequences assigned
1905 (87%) exact matches, in which:
1758 unique CDR3
6 unique J



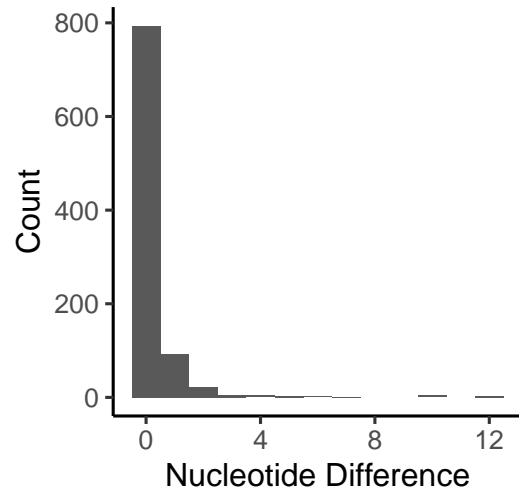
IGHV3–30*18

732 sequences assigned
600 (82%) exact matches, in which:
565 unique CDR3
6 unique J



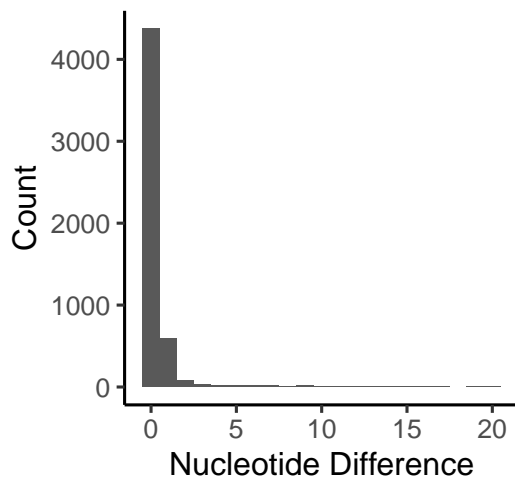
IGHV3–48*02

932 sequences assigned
794 (85.2%) exact matches, in which:
735 unique CDR3
6 unique J



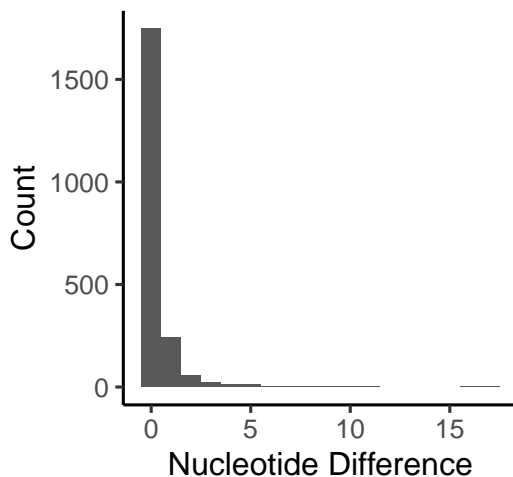
IGHV3–23*01

5232 sequences assigned
4374 (83.6%) exact matches, in which:
4017 unique CDR3
6 unique J



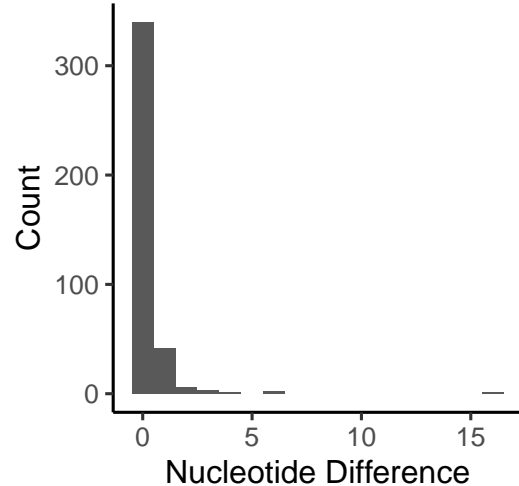
IGHV3–33*01

2107 sequences assigned
1747 (82.9%) exact matches, in which:
1619 unique CDR3
6 unique J



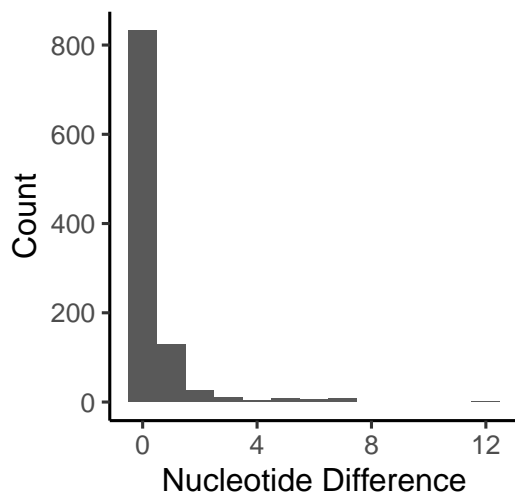
IGHV3–49*05

395 sequences assigned
340 (86.1%) exact matches, in which:
326 unique CDR3
6 unique J



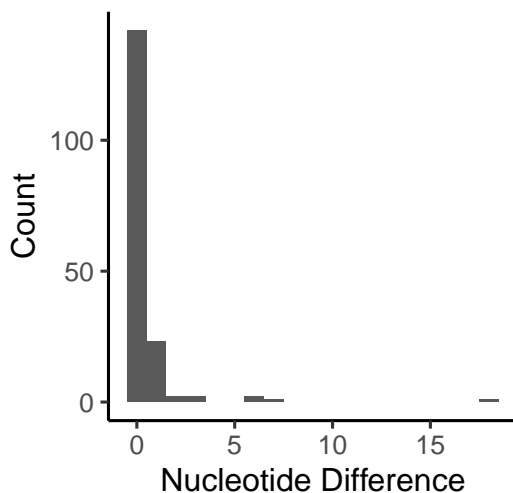
IGHV3–30*03

1023 sequences assigned
833 (81.4%) exact matches, in which:
766 unique CDR3
6 unique J



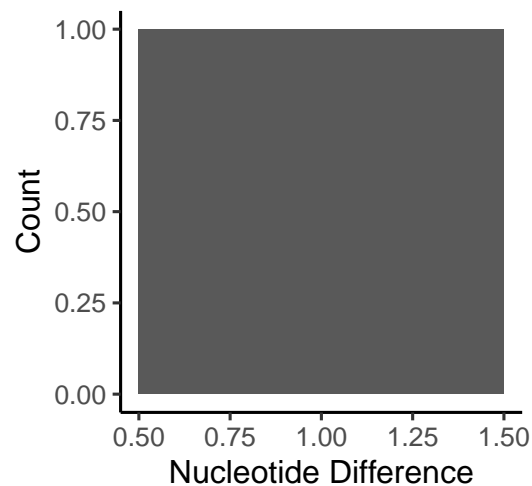
IGHV3–43*01

173 sequences assigned
142 (82.1%) exact matches, in which:
132 unique CDR3
6 unique J



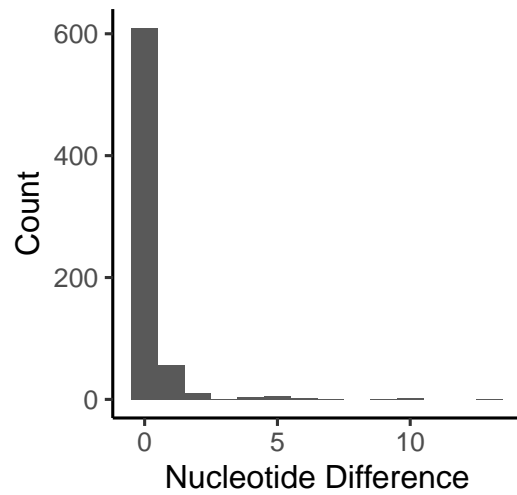
IGHV3–52*01

1 sequences assigned
No exact matches.



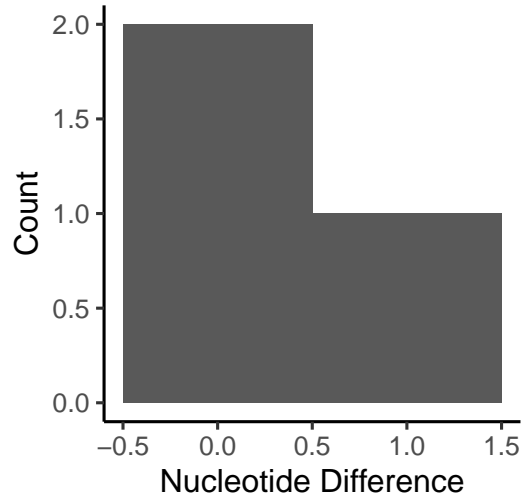
IGHV3–53*01

694 sequences assigned
610 (87.9%) exact matches, in which:
580 unique CDR3
6 unique J



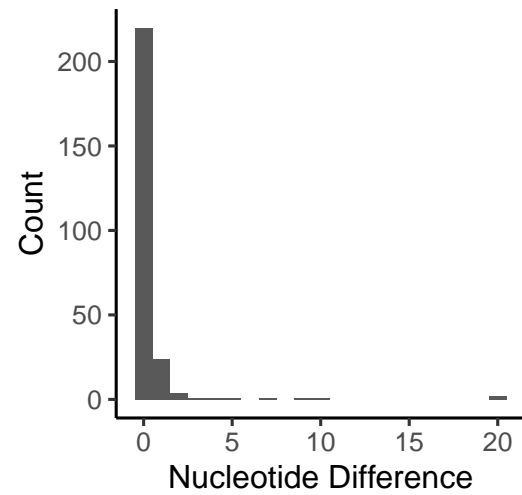
IGHV3–66*04

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



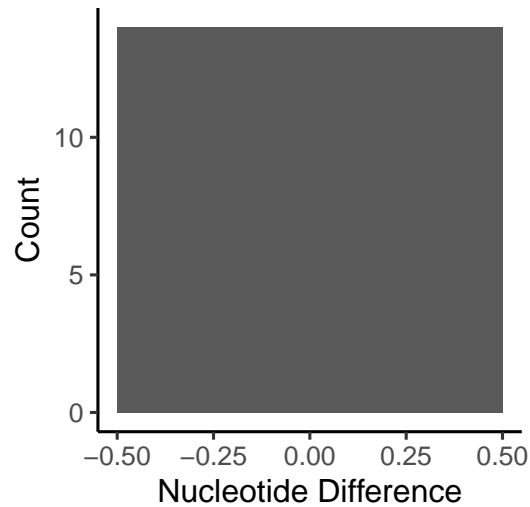
IGHV3–73*02

257 sequences assigned
220 (85.6%) exact matches, in which:
202 unique CDR3
6 unique J



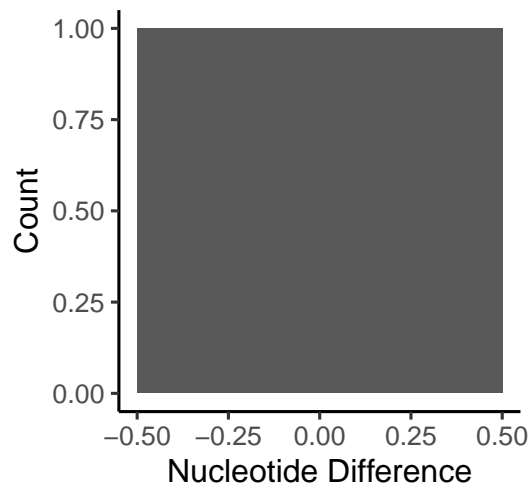
IGHV3–64*02

14 sequences assigned
14 (100%) exact matches, in which:
14 unique CDR3
4 unique J



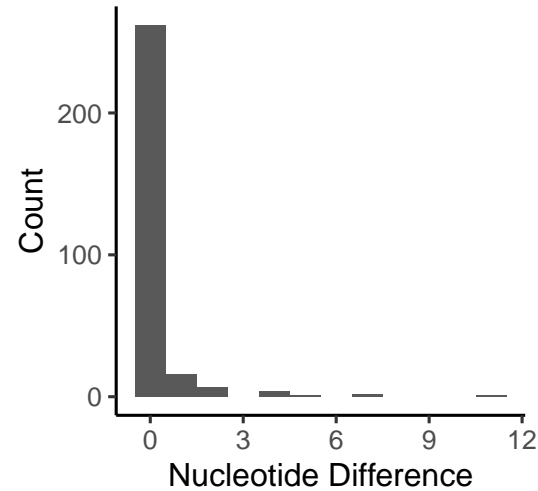
IGHV3–69–1*01

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



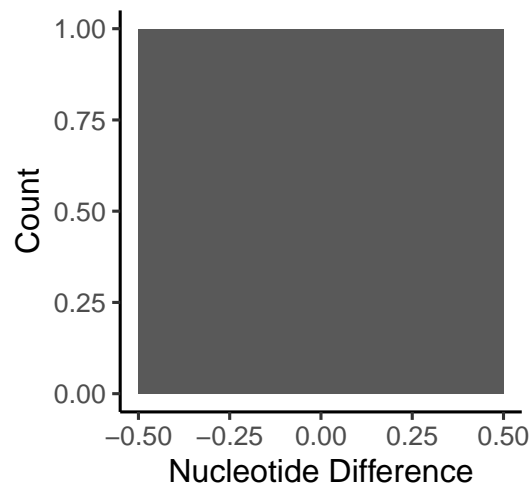
IGHV3–74*01

295 sequences assigned
262 (88.8%) exact matches, in which:
254 unique CDR3
6 unique J



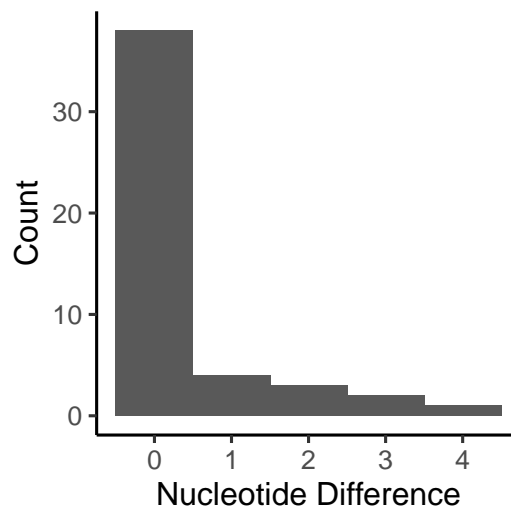
IGHV3–66*03

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



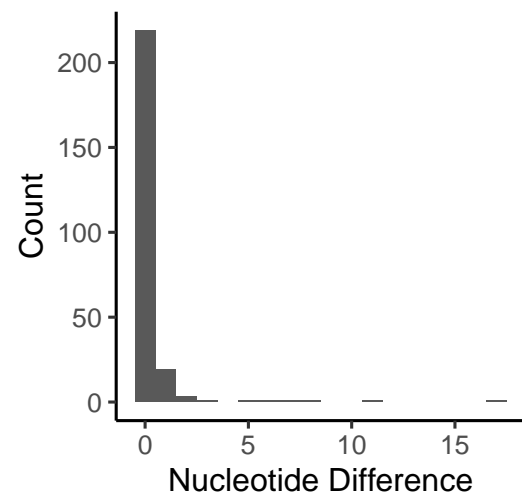
IGHV3–72*01

48 sequences assigned
38 (79.2%) exact matches, in which:
37 unique CDR3
5 unique J



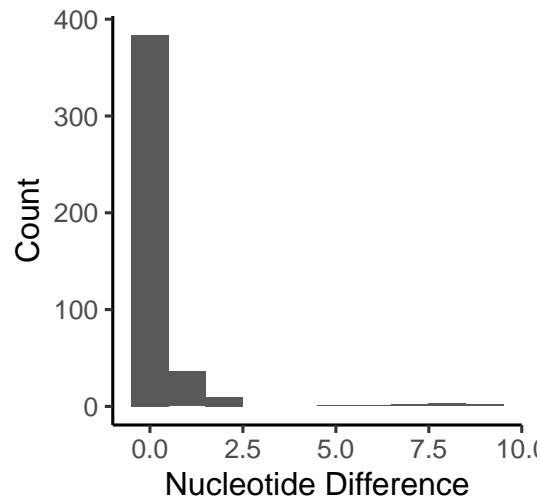
IGHV3–64D*06

248 sequences assigned
219 (88.3%) exact matches, in which:
203 unique CDR3
6 unique J



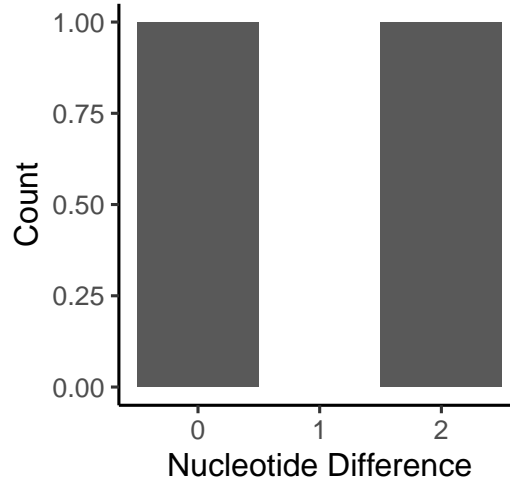
IGHV4-4*02

440 sequences assigned
384 (87.3%) exact matches, in which:
373 unique CDR3
6 unique J



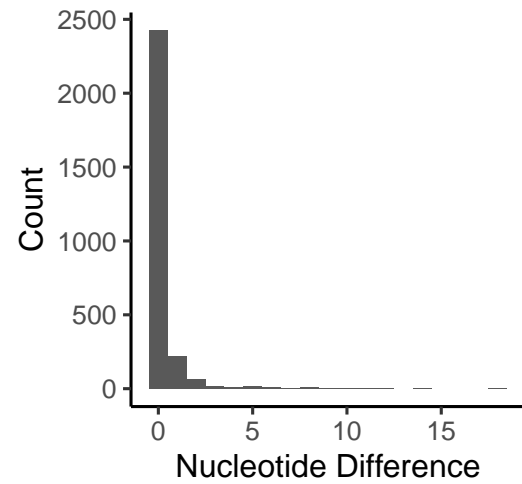
IGHV4-28*03

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



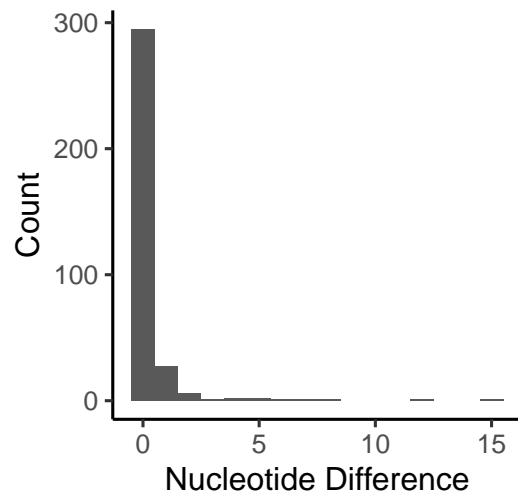
IGHV4-39*01

2800 sequences assigned
2425 (86.6%) exact matches, in which:
2226 unique CDR3
6 unique J



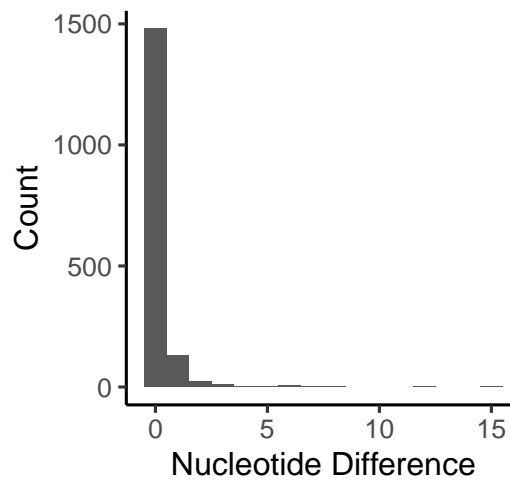
IGHV4-4*07

338 sequences assigned
295 (87.3%) exact matches, in which:
282 unique CDR3
6 unique J



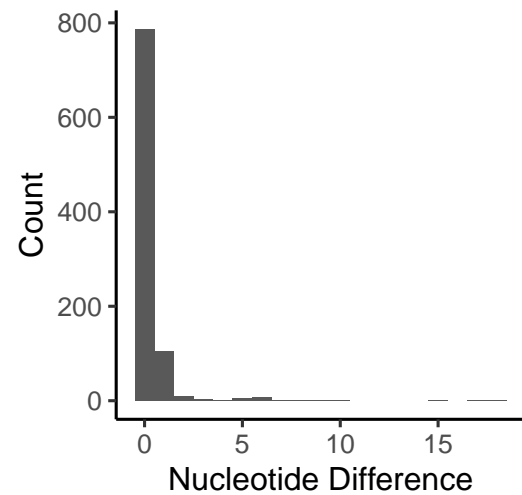
IGHV4-31*03

1666 sequences assigned
1480 (88.8%) exact matches, in which:
1407 unique CDR3
6 unique J



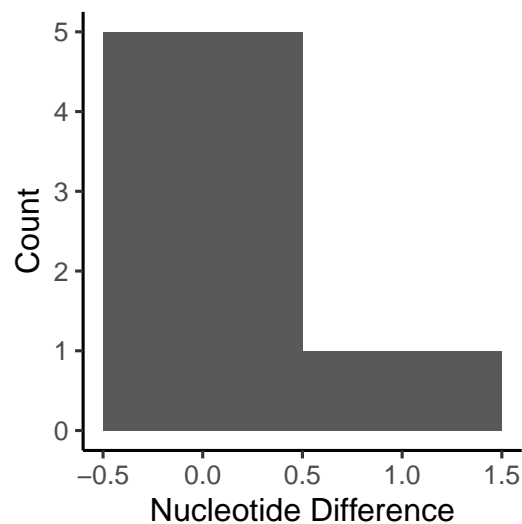
IGHV4-59*01

933 sequences assigned
787 (84.4%) exact matches, in which:
756 unique CDR3
6 unique J



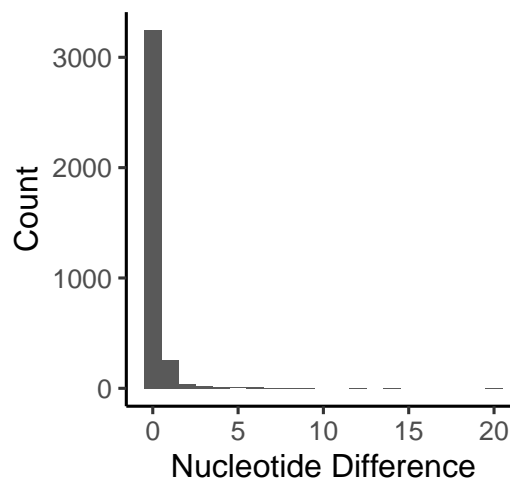
IGHV4-28*01

6 sequences assigned
5 (83.3%) exact matches, in which:
5 unique CDR3
4 unique J



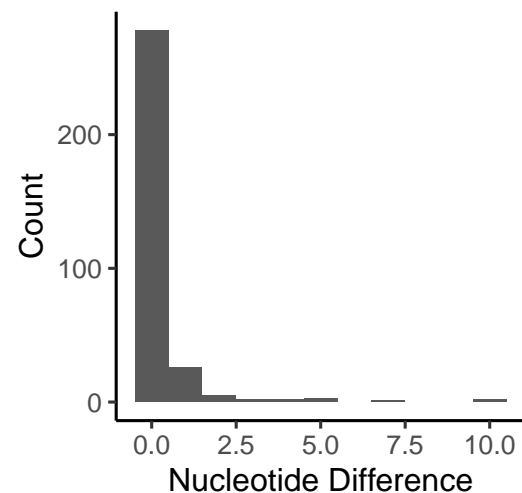
IGHV4-34*01

3604 sequences assigned
3247 (90.1%) exact matches, in which:
3027 unique CDR3
6 unique J



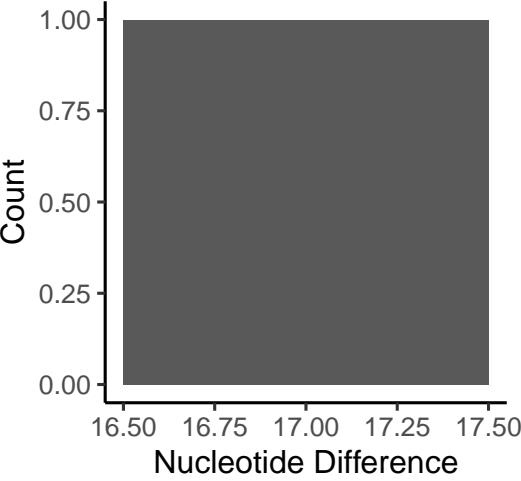
IGHV4-61*01

324 sequences assigned
278 (85.8%) exact matches, in which:
272 unique CDR3
6 unique J



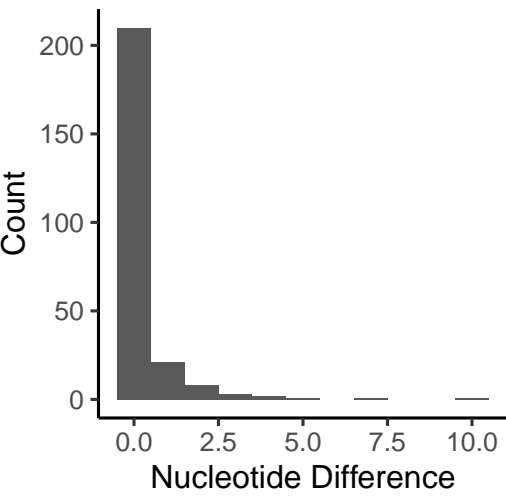
IGHV1/OR15-1*03

1 sequences assigned
No exact matches.



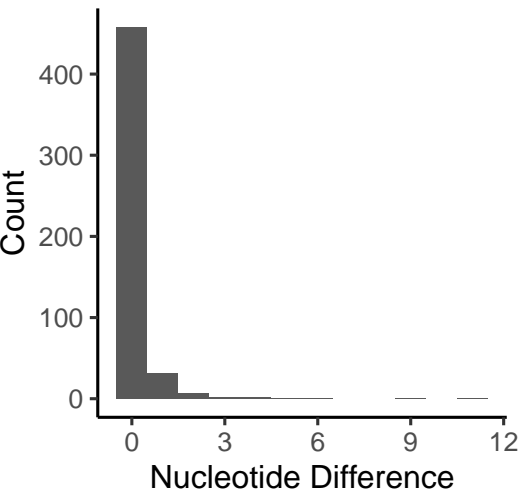
IGHV6-1*01

247 sequences assigned
210 (85%) exact matches, in which:
196 unique CDR3
6 unique J



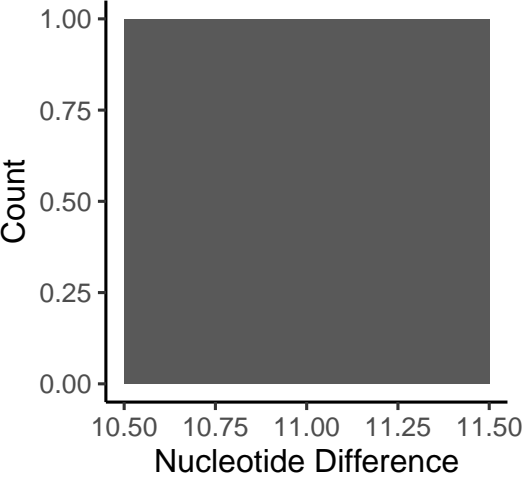
IGHV5-10-1*03

507 sequences assigned
458 (90.3%) exact matches, in which:
438 unique CDR3
6 unique J



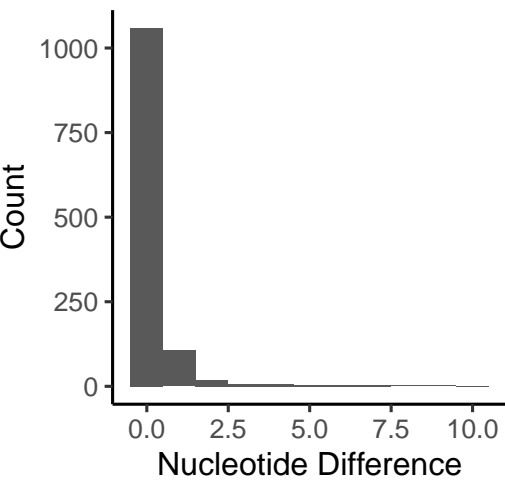
IGHV3/OR16-12*01

1 sequences assigned
No exact matches.



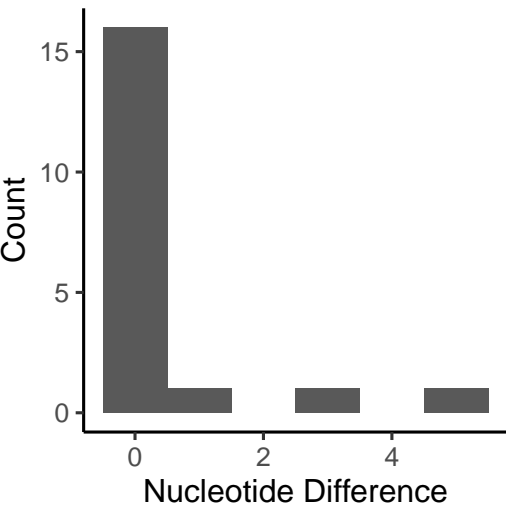
IGHV5-51*01

1215 sequences assigned
1059 (87.2%) exact matches, in which:
1004 unique CDR3
6 unique J



IGHV7-4-1*01

19 sequences assigned
16 (84.2%) exact matches, in which:
15 unique CDR3
3 unique J





Warning – no inferred sequences found.