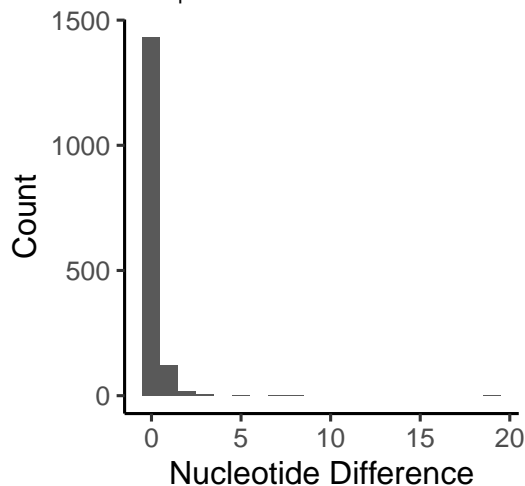


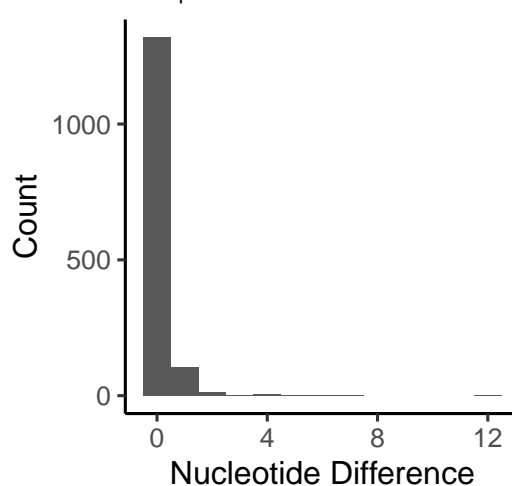
IGHV1-2*02

1582 sequences assigned
1431 (90.5%) exact matches, in which:
1382 unique CDR3
6 unique J



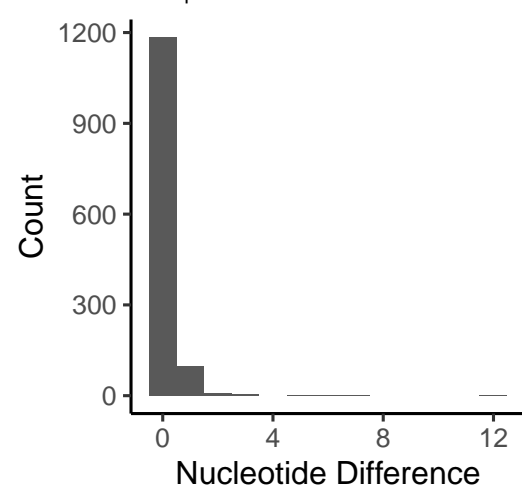
IGHV1-18*01

1449 sequences assigned
1319 (91%) exact matches, in which:
1278 unique CDR3
6 unique J



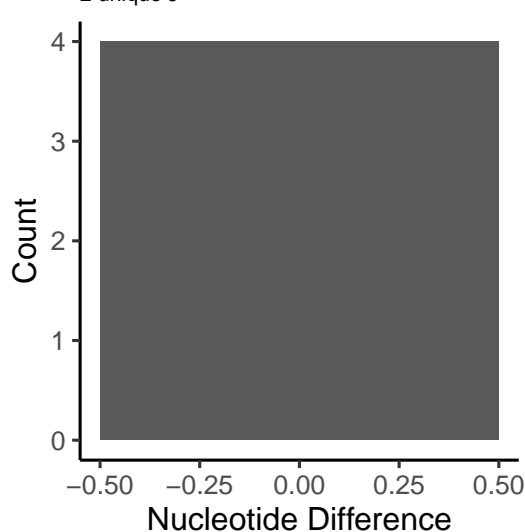
IGHV1-46*01

1303 sequences assigned
1184 (90.9%) exact matches, in which:
1141 unique CDR3
6 unique J



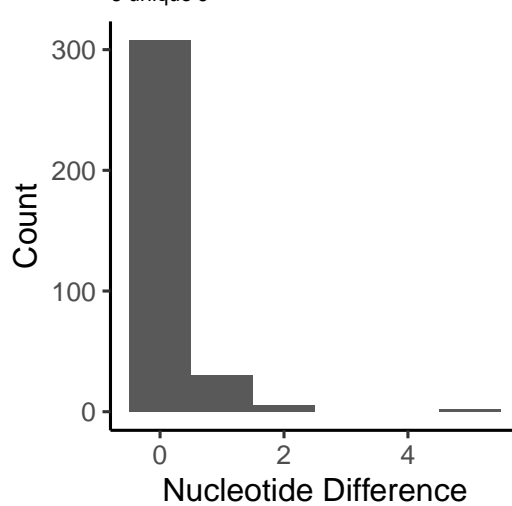
IGHV1-3*02

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



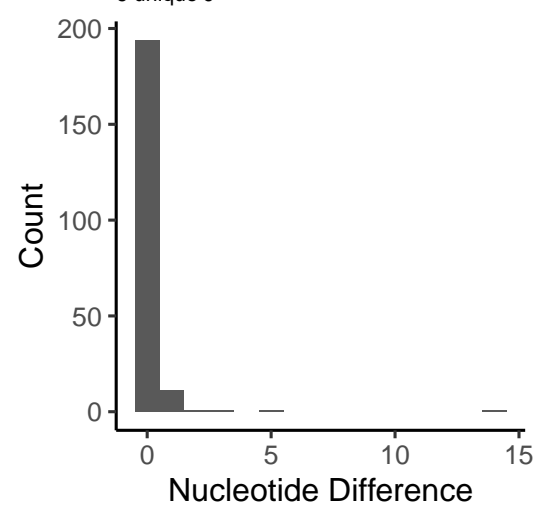
IGHV1-24*01

345 sequences assigned
308 (89.3%) exact matches, in which:
294 unique CDR3
6 unique J



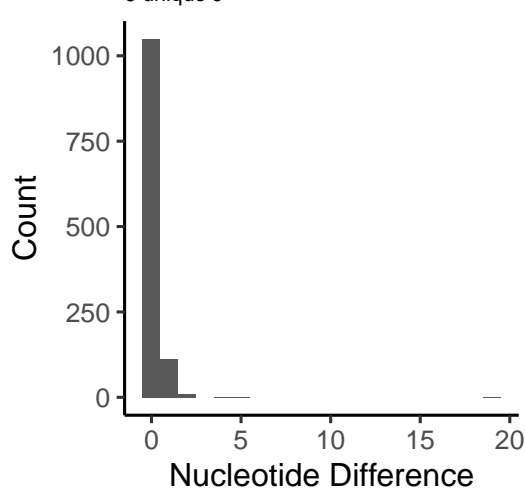
IGHV1-58*01

209 sequences assigned
194 (92.8%) exact matches, in which:
189 unique CDR3
6 unique J



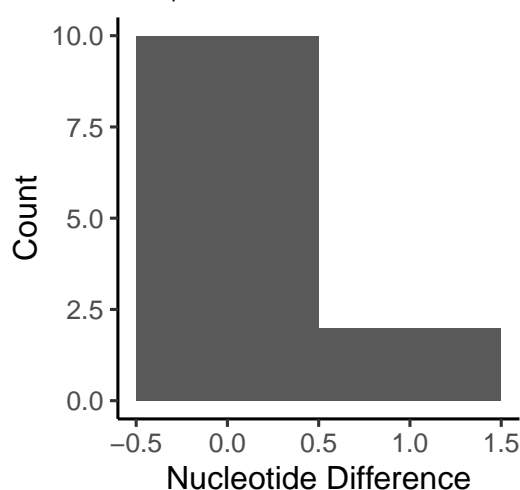
IGHV1-8*01

1175 sequences assigned
1049 (89.3%) exact matches, in which:
1008 unique CDR3
6 unique J



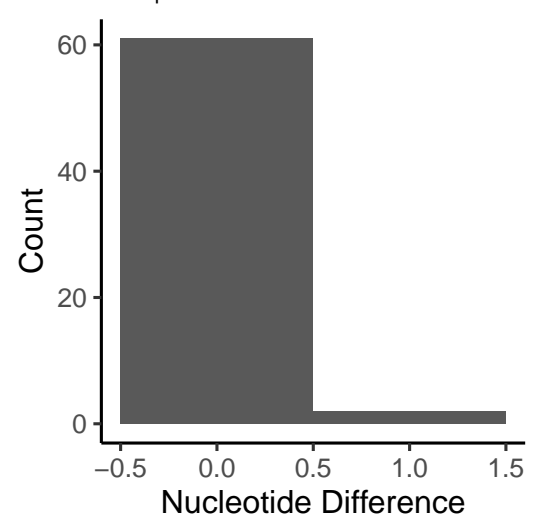
IGHV1-45*02

12 sequences assigned
10 (83.3%) exact matches, in which:
9 unique CDR3
3 unique J



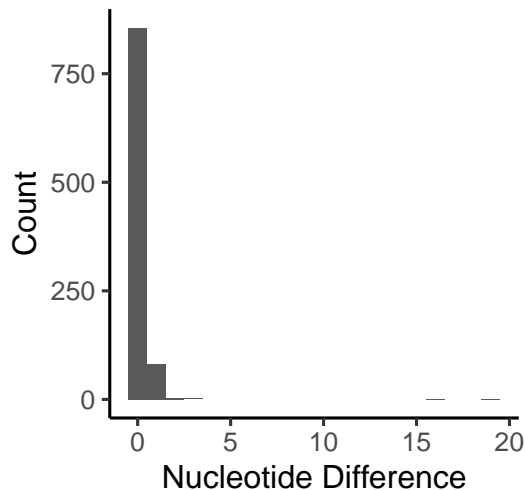
IGHV1-69-2*01

63 sequences assigned
61 (96.8%) exact matches, in which:
61 unique CDR3
5 unique J



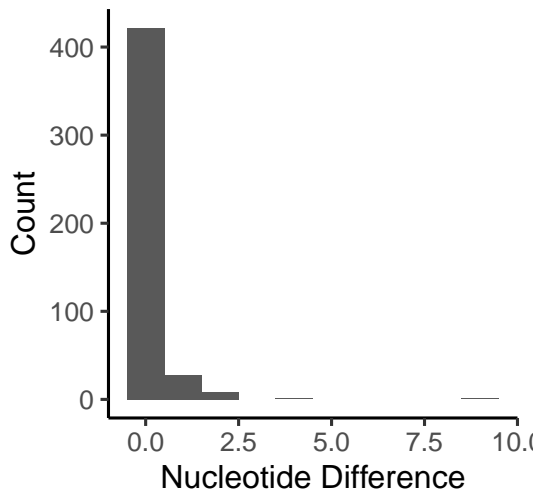
IGHV1–69*06

945 sequences assigned
856 (90.6%) exact matches, in which:
810 unique CDR3
6 unique J



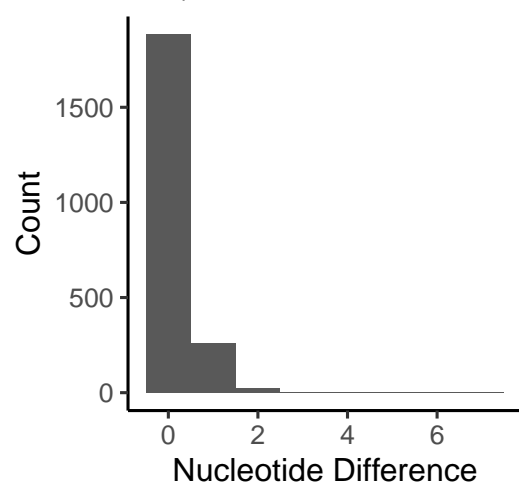
IGHV2–26*01

460 sequences assigned
422 (91.7%) exact matches, in which:
411 unique CDR3
6 unique J



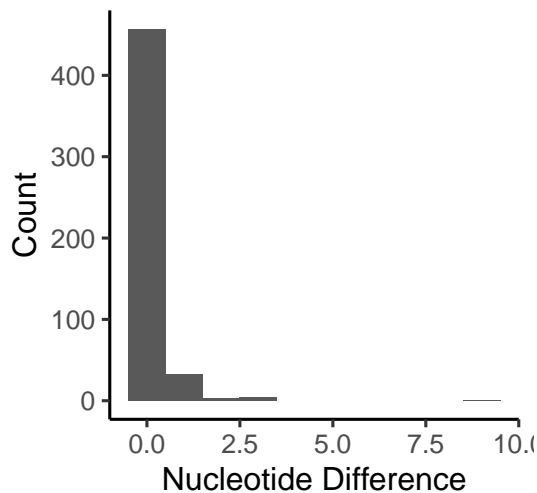
IGHV3–9*01

2183 sequences assigned
1883 (86.3%) exact matches, in which:
1785 unique CDR3
6 unique J



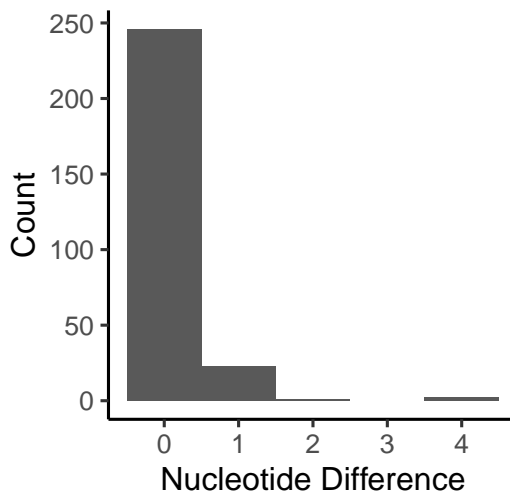
IGHV2–5*01

497 sequences assigned
457 (92%) exact matches, in which:
436 unique CDR3
6 unique J



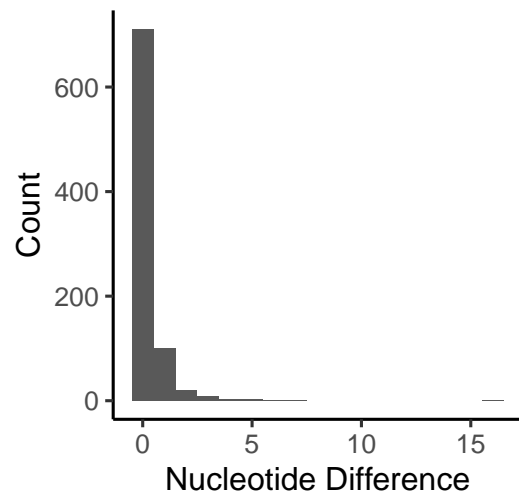
IGHV2–70*01

272 sequences assigned
246 (90.4%) exact matches, in which:
240 unique CDR3
6 unique J



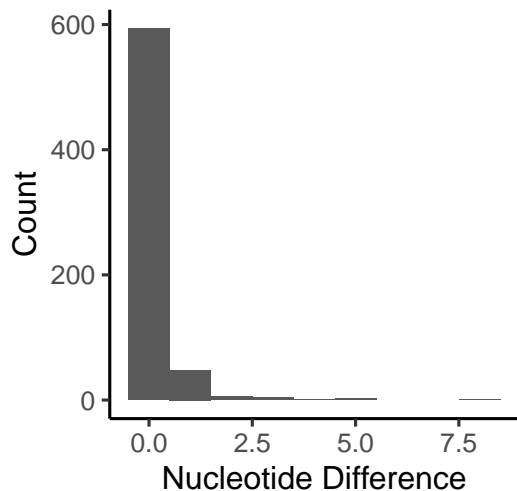
IGHV3–11*01

850 sequences assigned
711 (83.6%) exact matches, in which:
690 unique CDR3
6 unique J



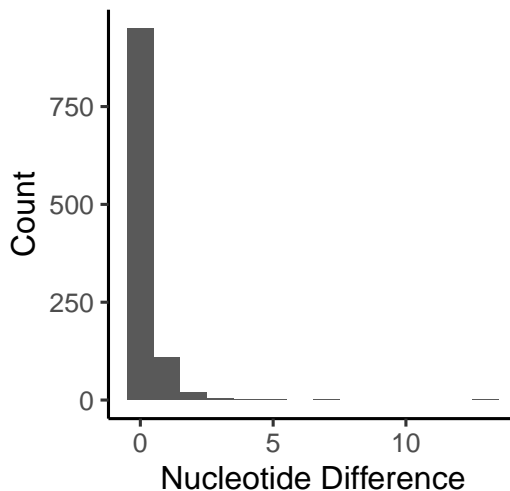
IGHV2–5*02

656 sequences assigned
594 (90.5%) exact matches, in which:
567 unique CDR3
6 unique J



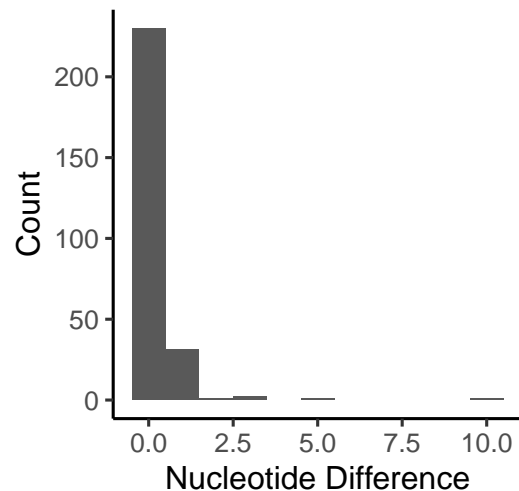
IGHV3–7*01

1087 sequences assigned
950 (87.4%) exact matches, in which:
924 unique CDR3
6 unique J



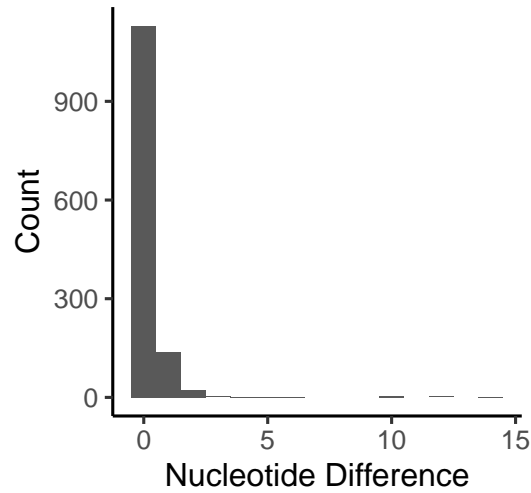
IGHV3–13*01

266 sequences assigned
230 (86.5%) exact matches, in which:
225 unique CDR3
6 unique J



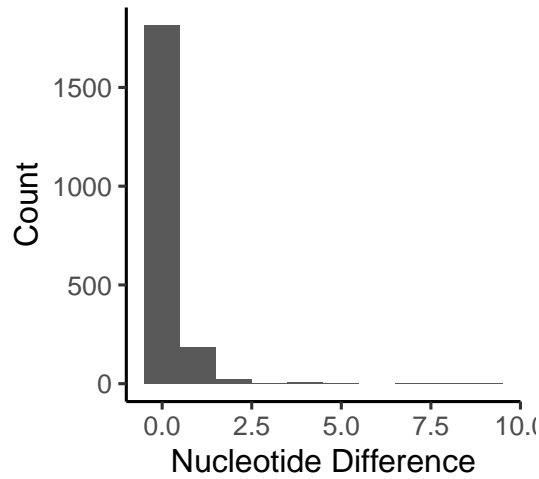
IGHV3–15*01

1308 sequences assigned
1130 (86.4%) exact matches, in which:
1092 unique CDR3
6 unique J



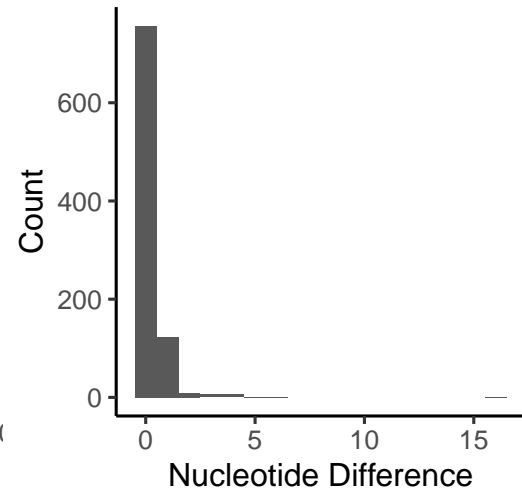
IGHV3–21*01

2039 sequences assigned
1814 (89%) exact matches, in which:
1738 unique CDR3
6 unique J



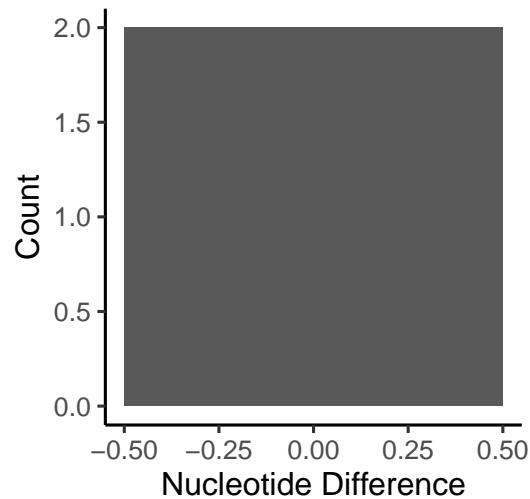
IGHV3–33*01

904 sequences assigned
757 (83.7%) exact matches, in which:
725 unique CDR3
6 unique J



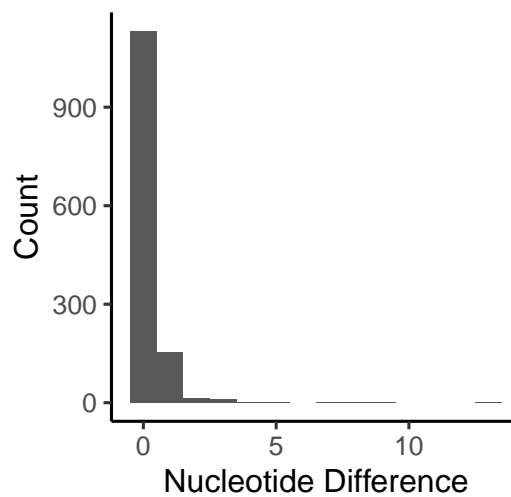
IGHV3–19*01

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



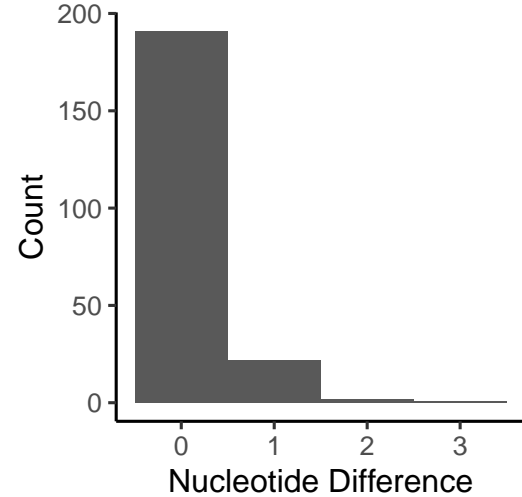
IGHV3–23*04

1319 sequences assigned
1132 (85.8%) exact matches, in which:
1094 unique CDR3
6 unique J



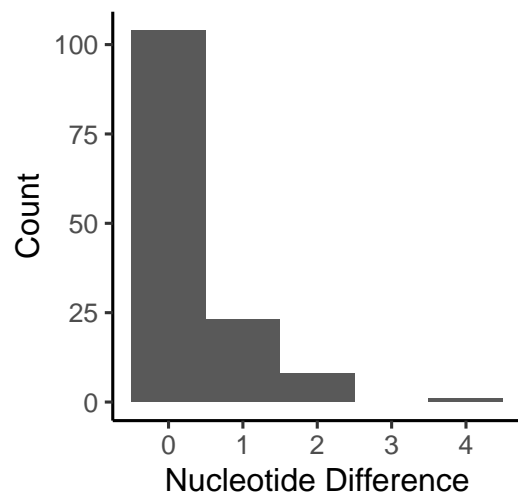
IGHV3–43*01

216 sequences assigned
191 (88.4%) exact matches, in which:
187 unique CDR3
6 unique J



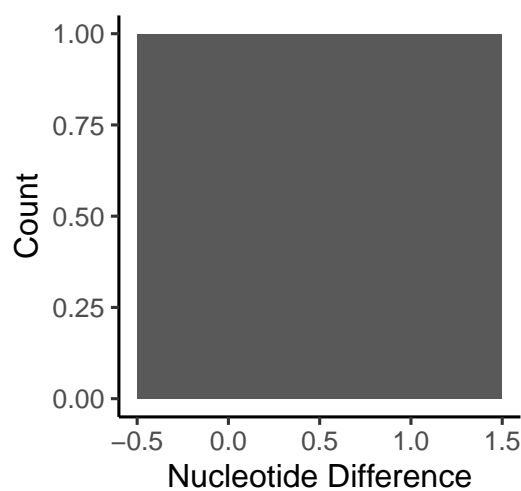
IGHV3–20*01

136 sequences assigned
104 (76.5%) exact matches, in which:
98 unique CDR3
5 unique J



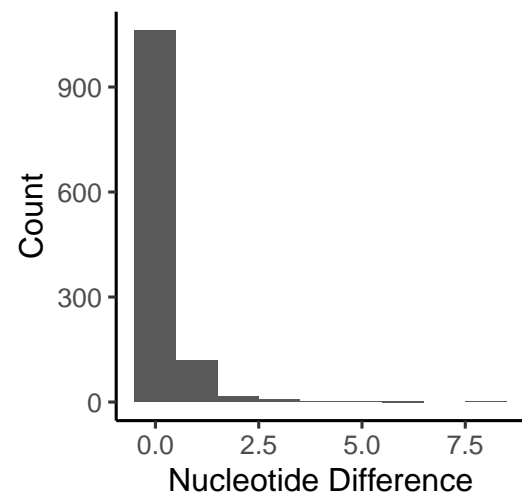
IGHV3–30–5*01

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



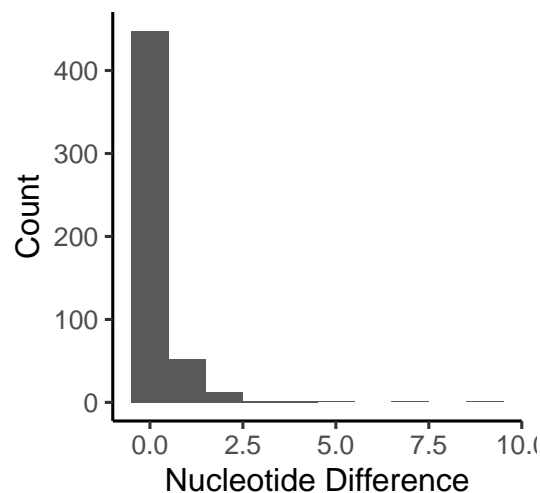
IGHV3–48*02

1213 sequences assigned
1062 (87.6%) exact matches, in which:
1032 unique CDR3
6 unique J



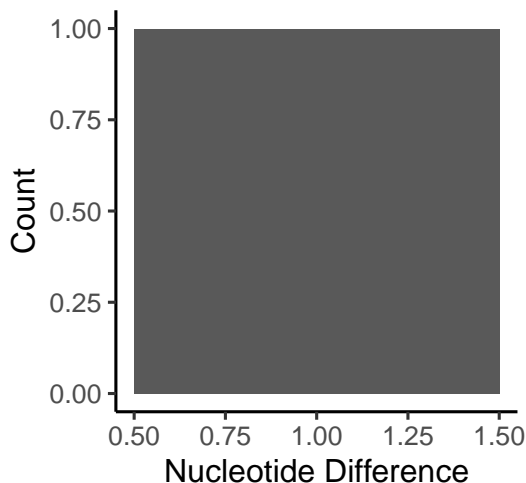
IGHV3-49*05

520 sequences assigned
448 (86.2%) exact matches, in which:
427 unique CDR3
6 unique J



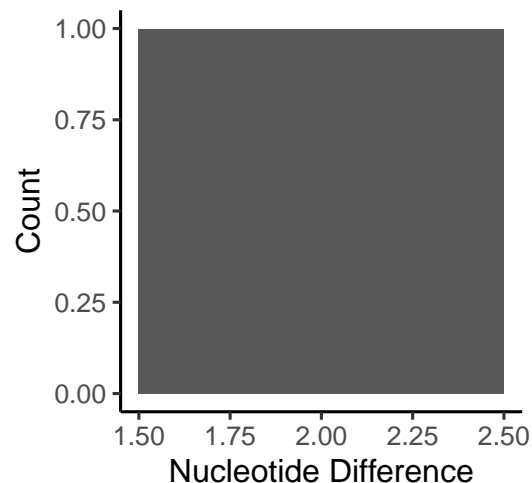
IGHV3-64*04

1 sequences assigned
No exact matches.



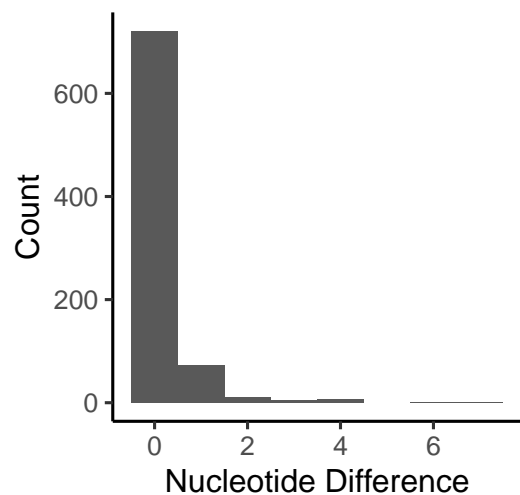
IGHV3-69-1*01

1 sequences assigned
No exact matches.



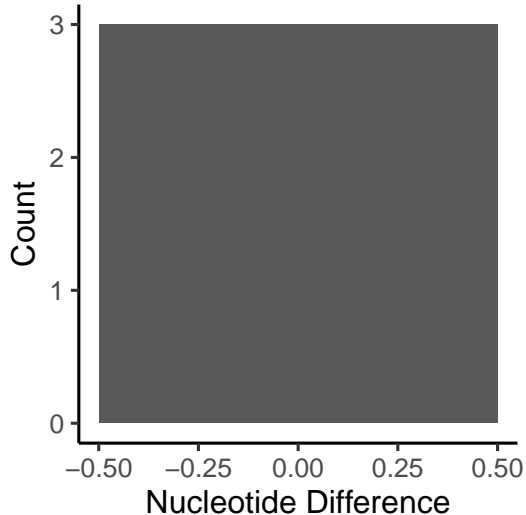
IGHV3-53*01

816 sequences assigned
721 (88.4%) exact matches, in which:
691 unique CDR3
6 unique J



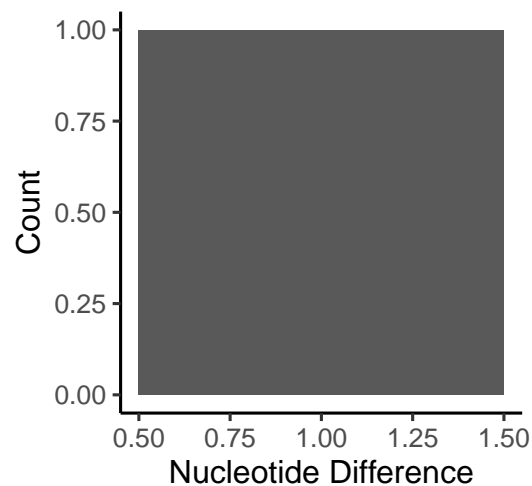
IGHV3-66*03

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



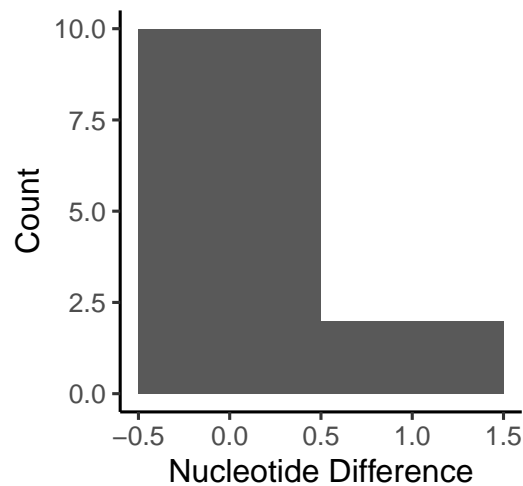
IGHV3-71*03

1 sequences assigned
No exact matches.



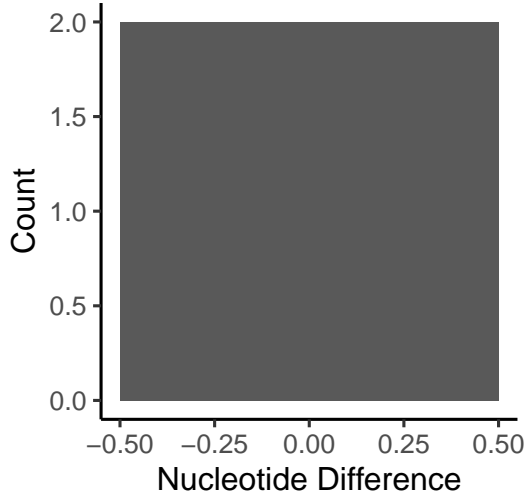
IGHV3-64*02

12 sequences assigned
10 (83.3%) exact matches, in which:
10 unique CDR3
4 unique J



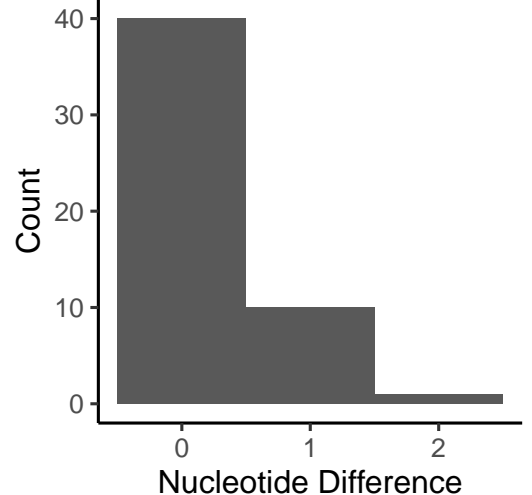
IGHV3-66*04

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



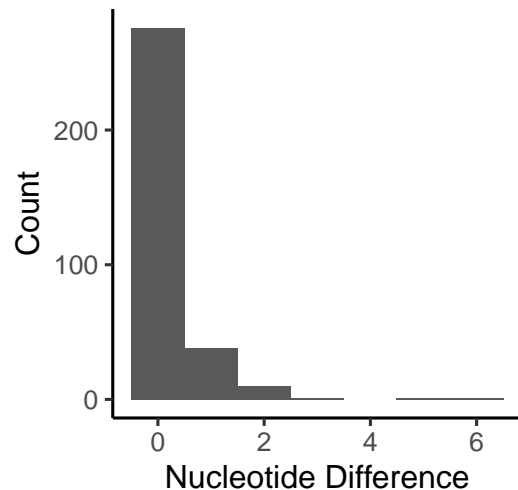
IGHV3-72*01

51 sequences assigned
40 (78.4%) exact matches, in which:
40 unique CDR3
5 unique J



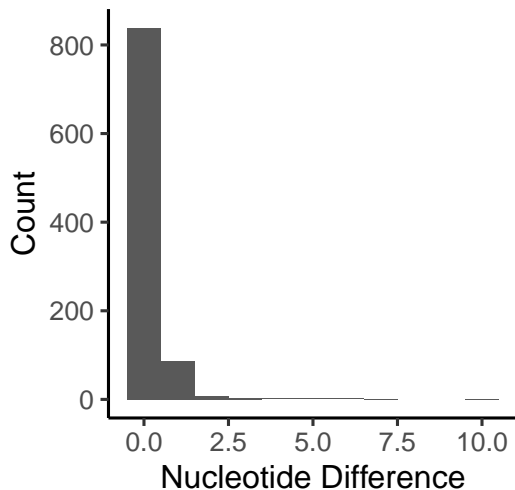
IGHV3–73*02

327 sequences assigned
276 (84.4%) exact matches, in which:
264 unique CDR3
5 unique J



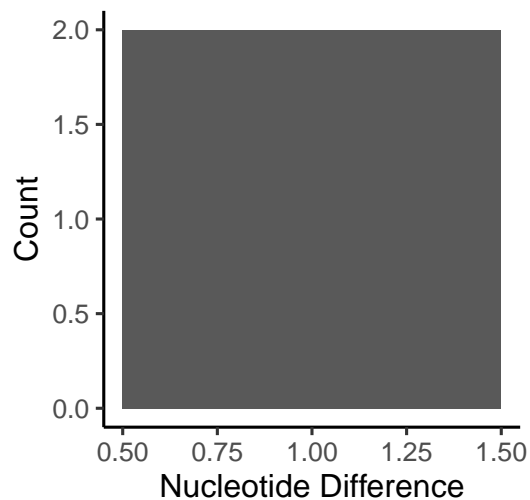
IGHV4–4*07

945 sequences assigned
839 (88.8%) exact matches, in which:
814 unique CDR3
6 unique J



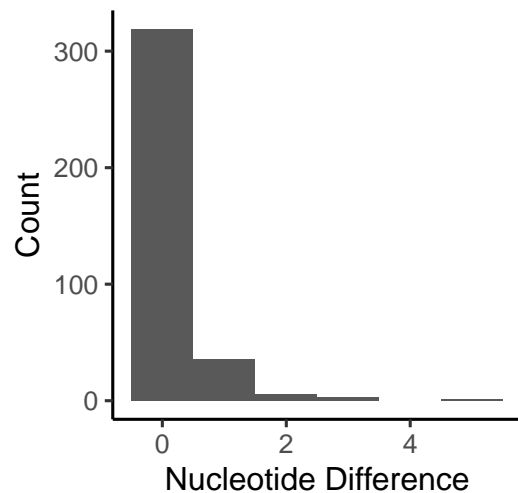
IGHV4–28*04

2 sequences assigned
No exact matches.



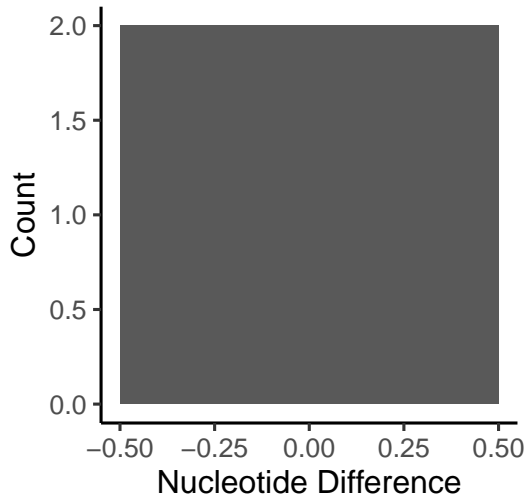
IGHV3–74*01

365 sequences assigned
319 (87.4%) exact matches, in which:
310 unique CDR3
6 unique J



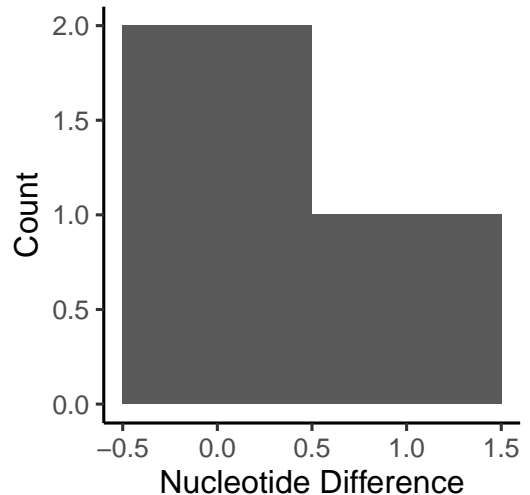
IGHV4–28*01

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



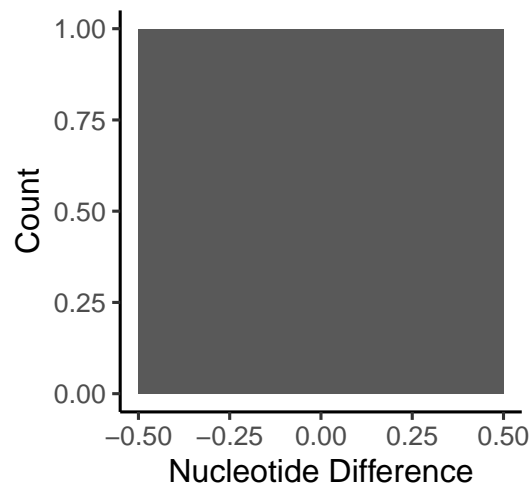
IGHV4–28*05

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



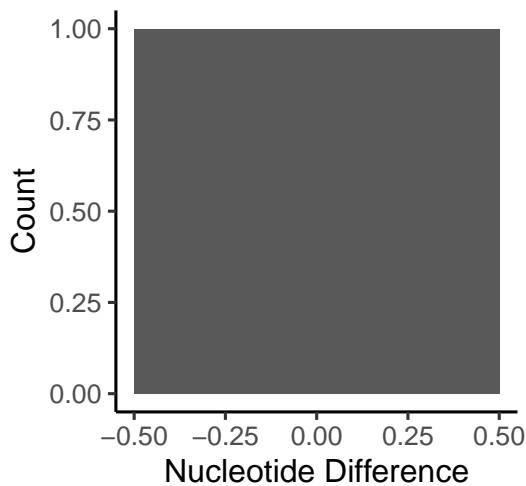
IGHV3–64D*06

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



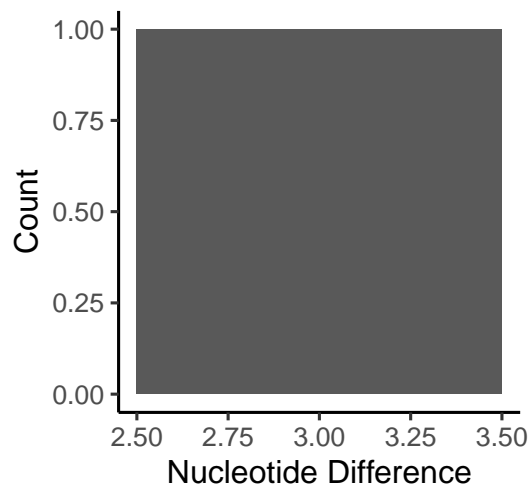
IGHV4–28*03

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



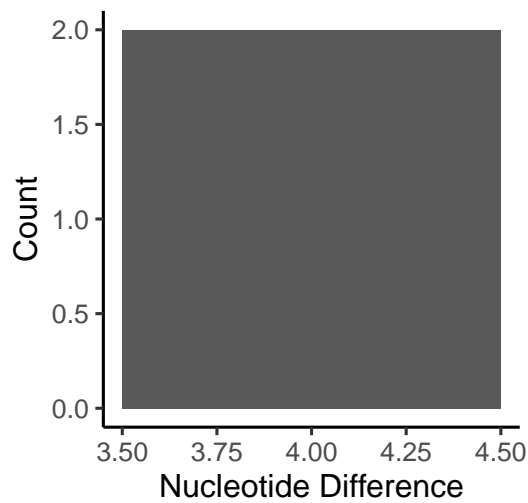
IGHV4–30–4*01

1 sequences assigned
No exact matches.



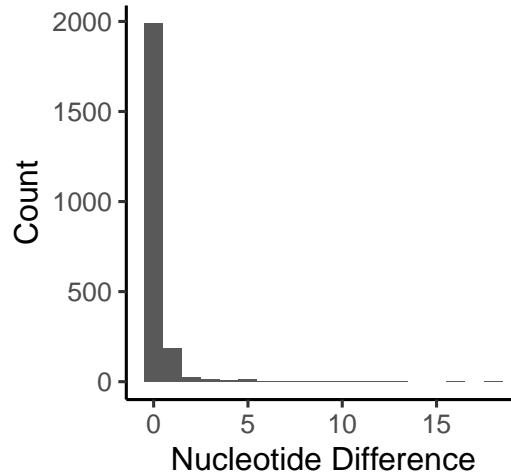
IGHV4-30-2*03

3 sequences assigned
No exact matches.



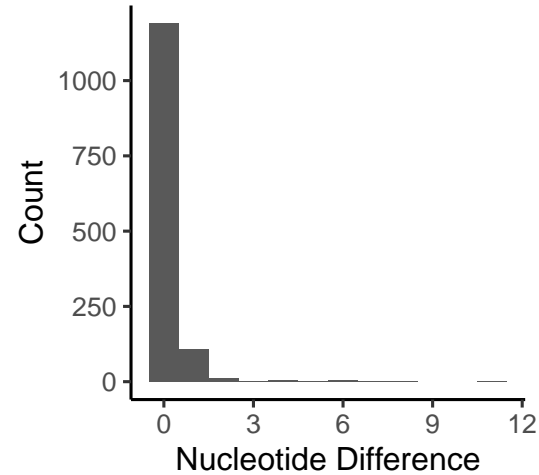
IGHV4-34*01

2264 sequences assigned
1989 (87.9%) exact matches, in which:
1880 unique CDR3
6 unique J



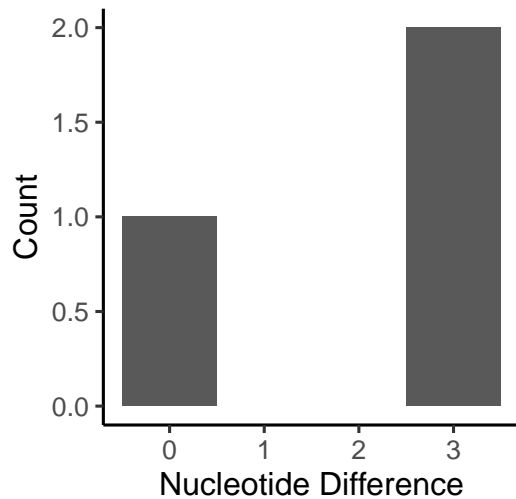
IGHV4-59*01

1324 sequences assigned
1190 (89.9%) exact matches, in which:
1167 unique CDR3
6 unique J



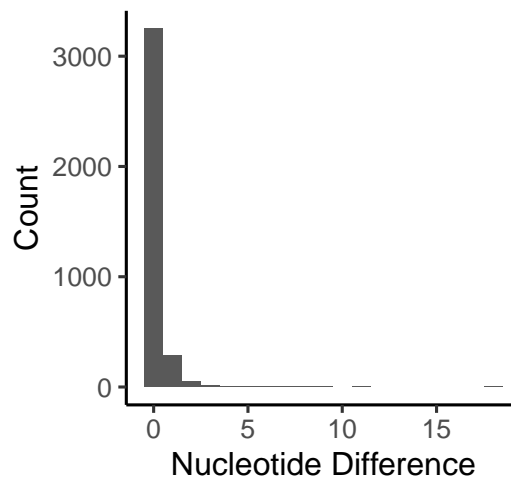
IGHV4-31*03

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



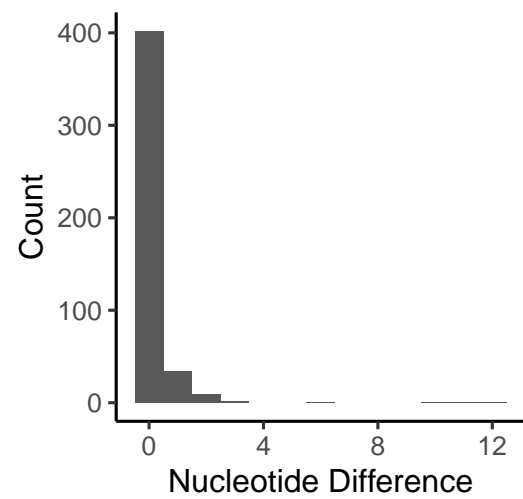
IGHV4-39*01

3620 sequences assigned
3249 (89.8%) exact matches, in which:
3114 unique CDR3
6 unique J



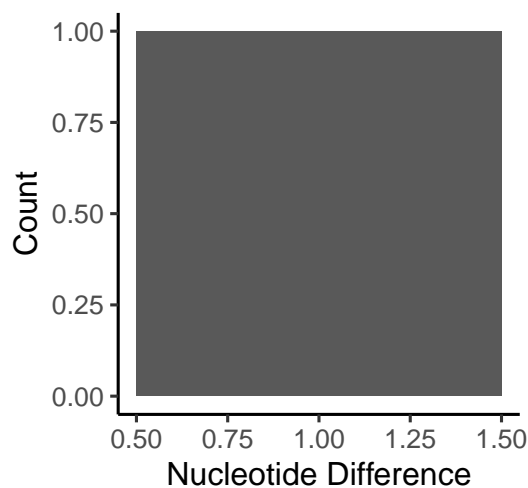
IGHV4-61*01

452 sequences assigned
402 (88.9%) exact matches, in which:
395 unique CDR3
6 unique J



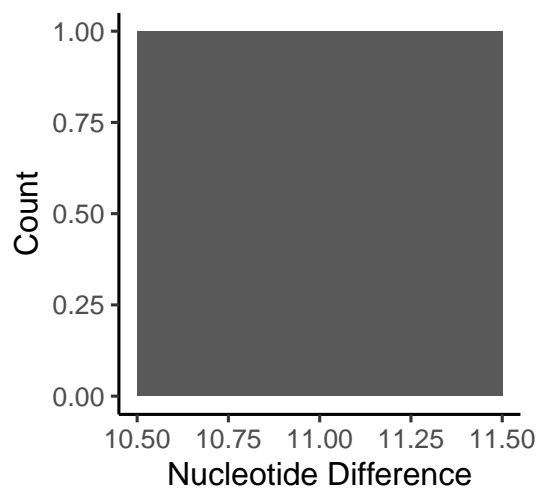
IGHV4-31*05

1 sequences assigned
No exact matches.



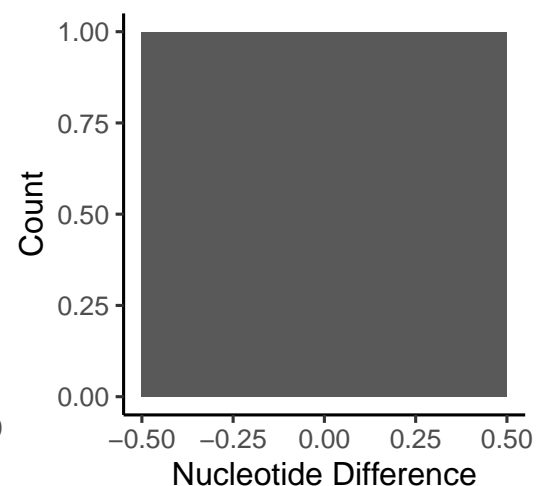
IGHV4-55*08

1 sequences assigned
No exact matches.



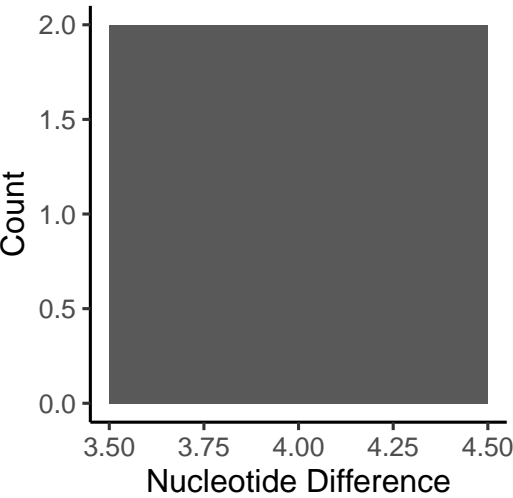
IGHV1/OR15-2*01

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



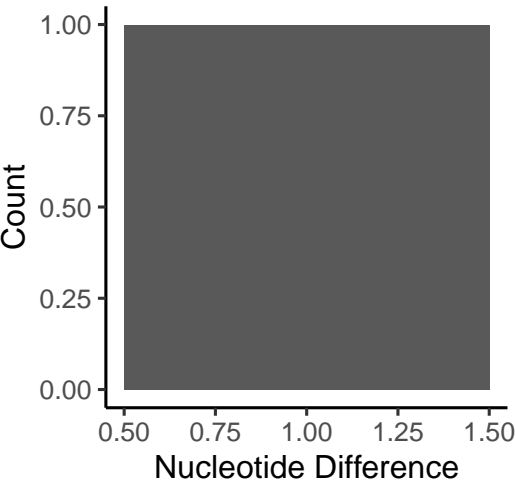
IGHV4/OR15–8*01

2 sequences assigned
No exact matches.



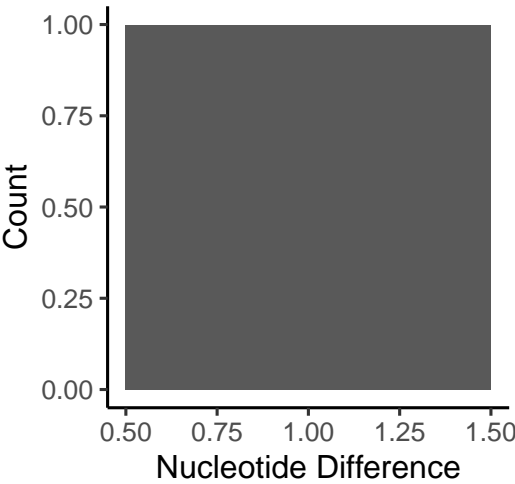
IGHV3/OR16–6*02

1 sequences assigned
No exact matches.



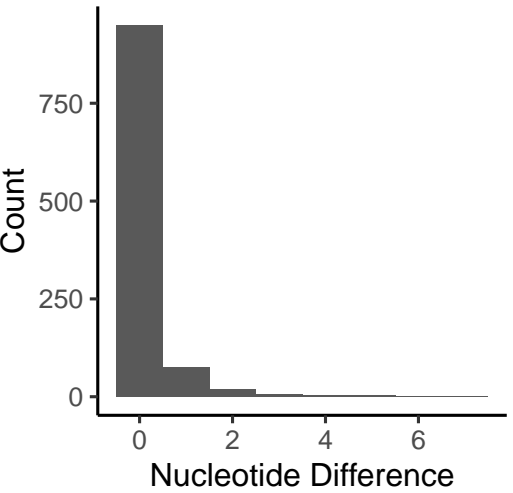
IGHV7–34–1*01

1 sequences assigned
No exact matches.



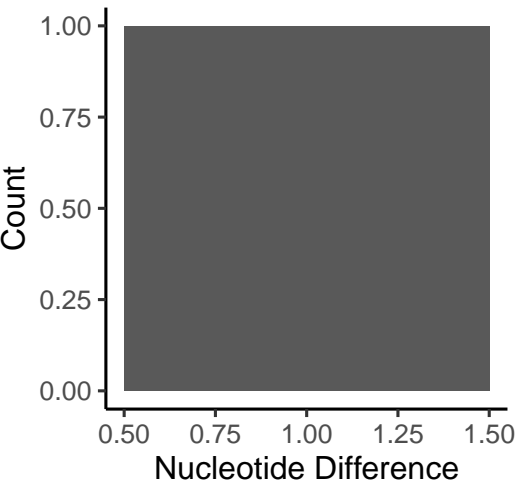
IGHV5–51*01

1062 sequences assigned
950 (89.5%) exact matches, in which:
913 unique CDR3
6 unique J



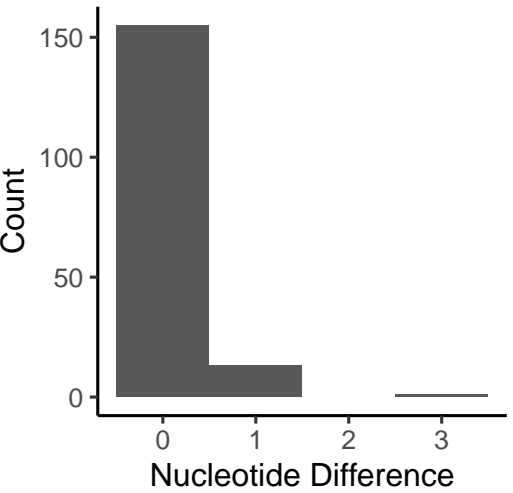
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



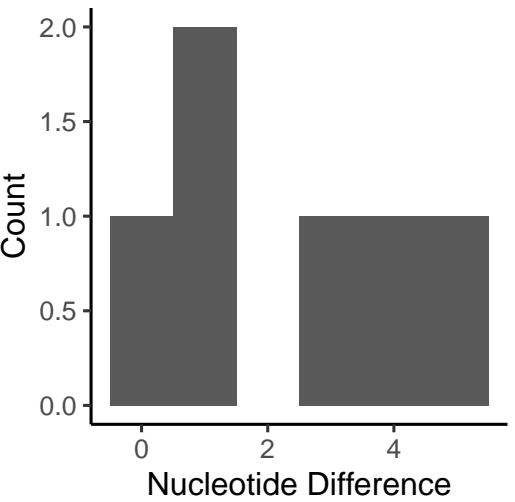
IGHV6–1*01

169 sequences assigned
155 (91.7%) exact matches, in which:
146 unique CDR3
5 unique J



IGHV7–4–1*02

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J





[illegible]