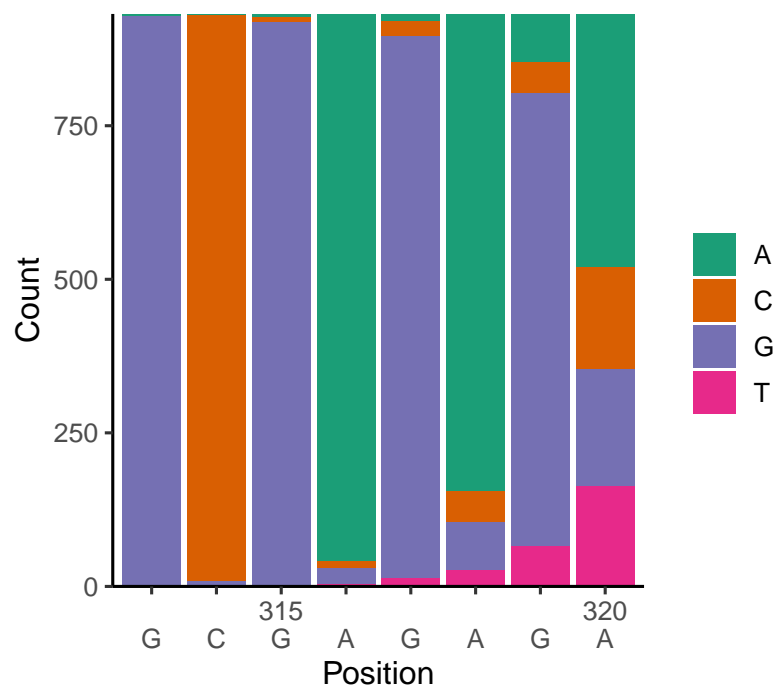
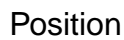


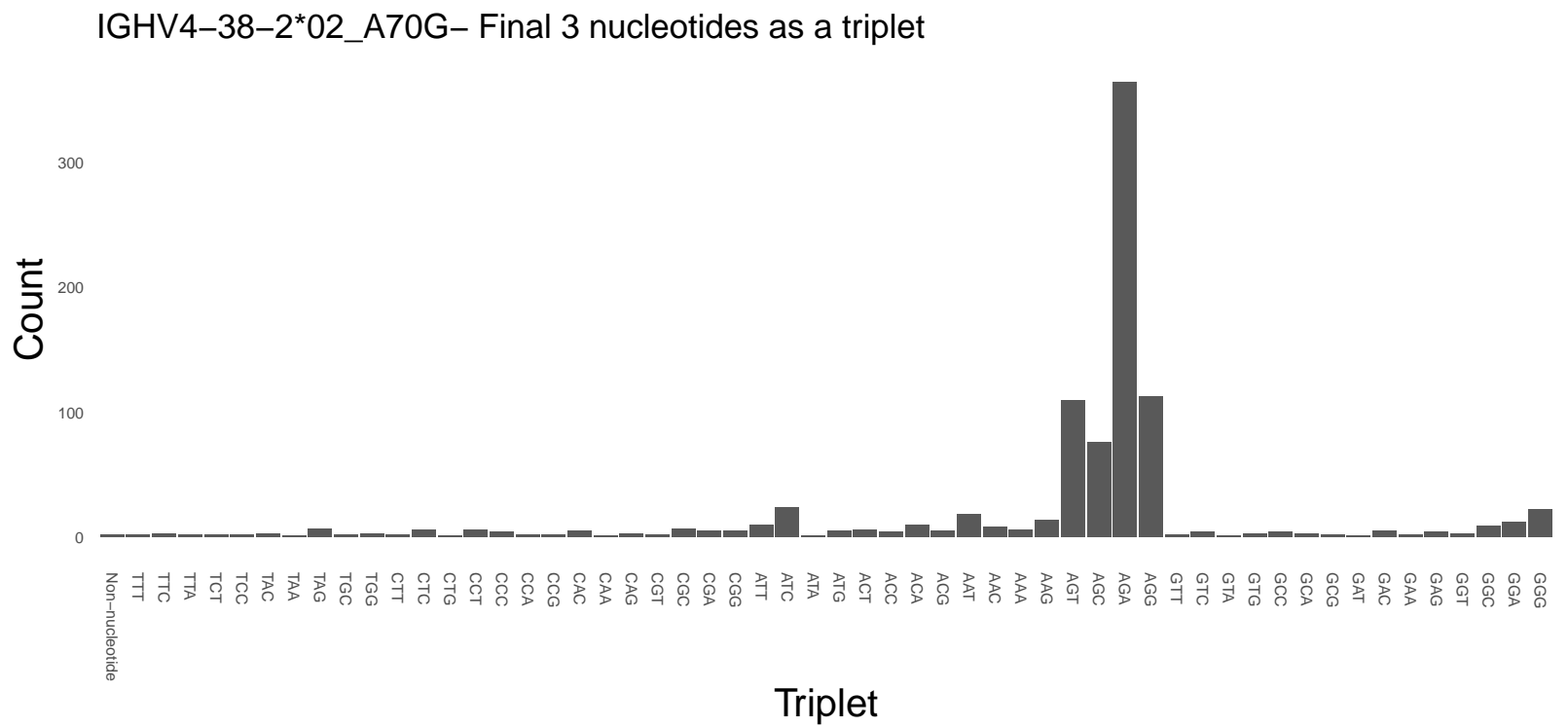
Gene IGHV4-38-2*02_A70G



Gene IGHV4-38-2*02_A70G

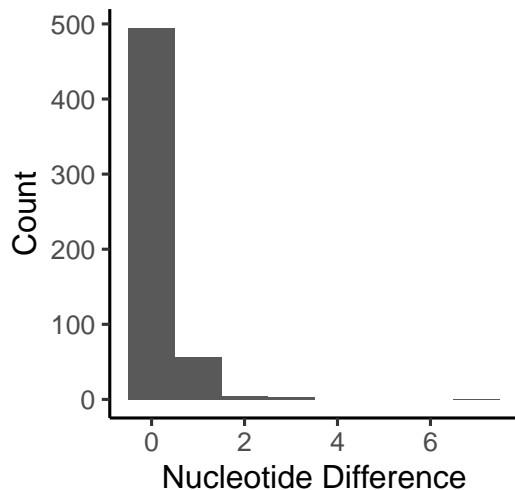


IGHV4-38-2*02_A70G- Final 3 nucleotides as a triplet



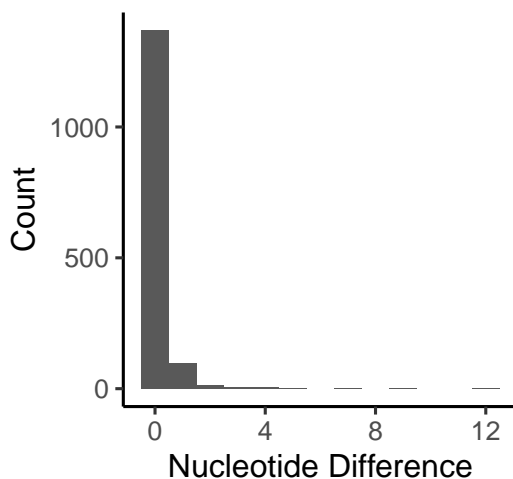
IGHV1-2*04

560 sequences assigned
495 (88.4%) exact matches, in which:
460 unique CDR3
6 unique J



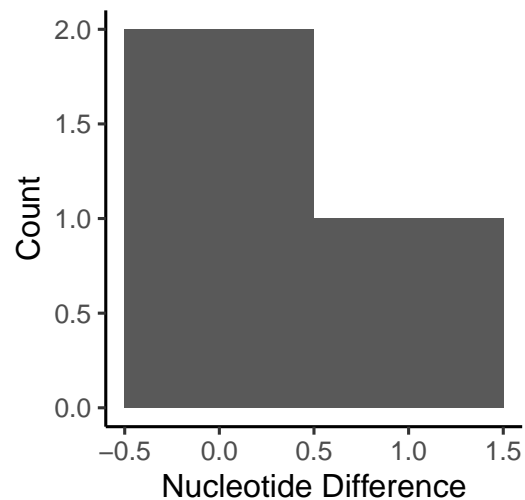
IGHV1-8*01

1497 sequences assigned
1369 (91.4%) exact matches, in which:
1262 unique CDR3
6 unique J



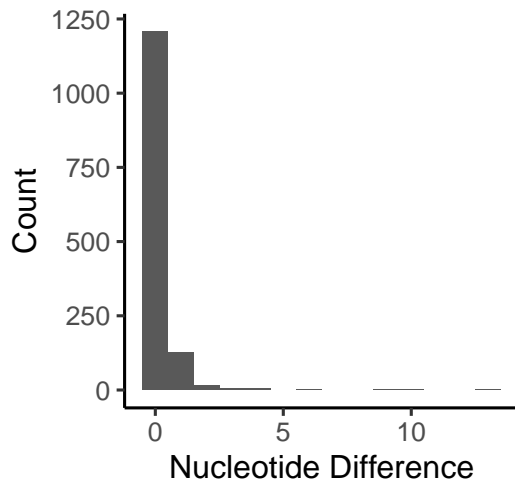
IGHV1-45*03

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



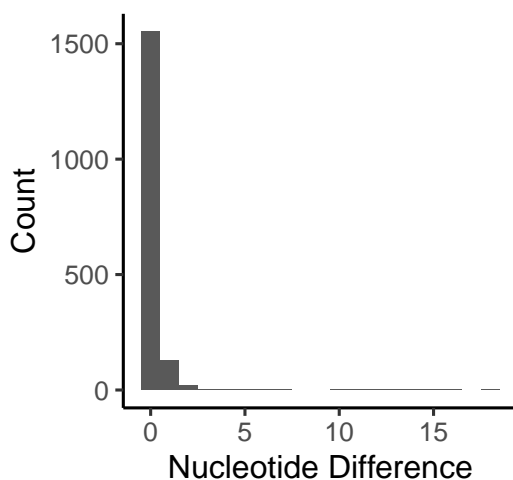
IGHV1-2*06

1365 sequences assigned
1207 (88.4%) exact matches, in which:
1116 unique CDR3
6 unique J



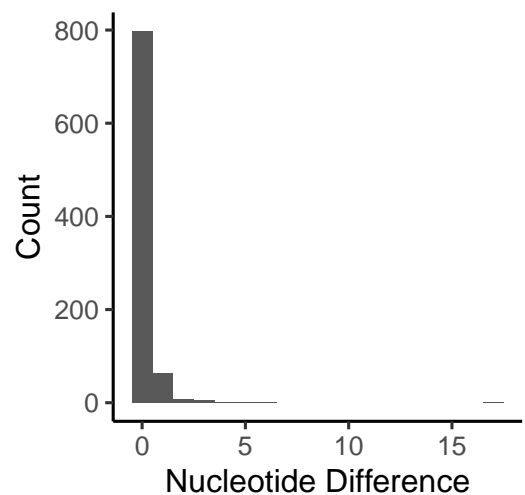
IGHV1-18*01

1717 sequences assigned
1552 (90.4%) exact matches, in which:
1459 unique CDR3
6 unique J



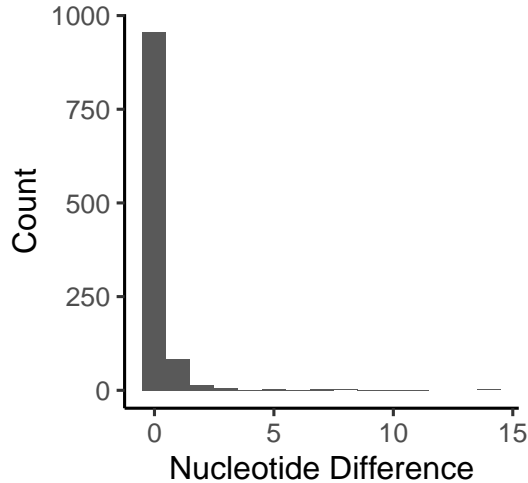
IGHV1-46*01

879 sequences assigned
798 (90.8%) exact matches, in which:
743 unique CDR3
6 unique J



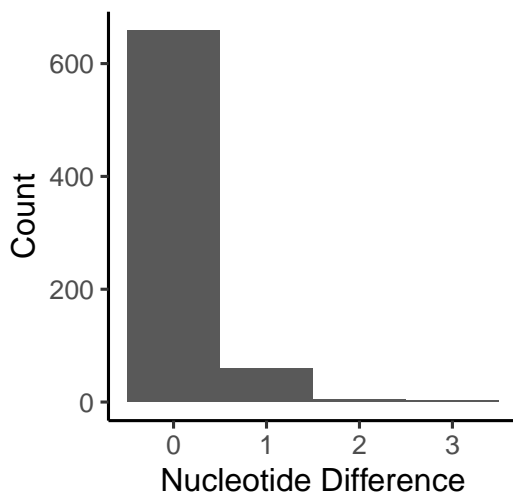
IGHV1-3*01

1076 sequences assigned
956 (88.8%) exact matches, in which:
911 unique CDR3
6 unique J



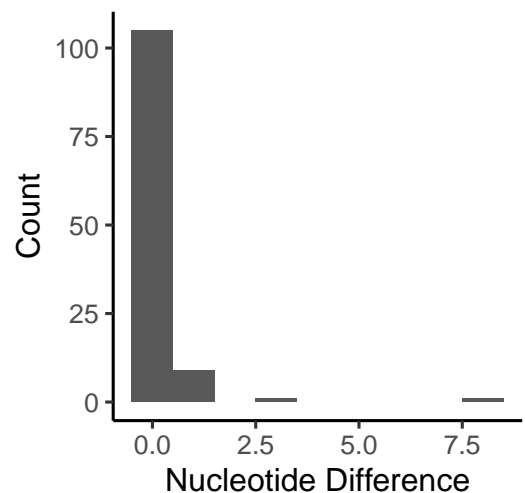
IGHV1-24*01

726 sequences assigned
659 (90.8%) exact matches, in which:
610 unique CDR3
6 unique J



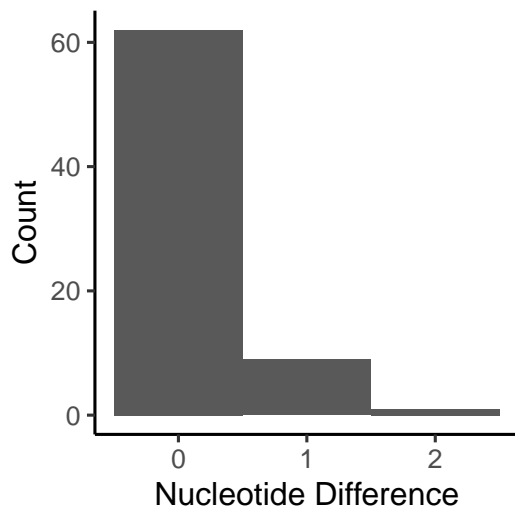
IGHV1-58*01

117 sequences assigned
105 (89.7%) exact matches, in which:
94 unique CDR3
5 unique J



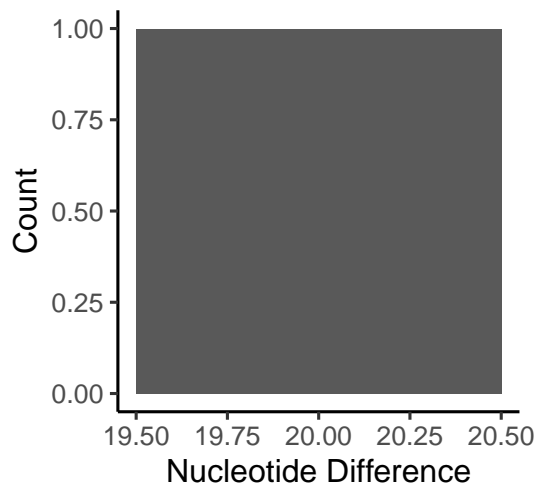
IGHV1-58*02

72 sequences assigned
62 (86.1%) exact matches, in which:
57 unique CDR3
4 unique J



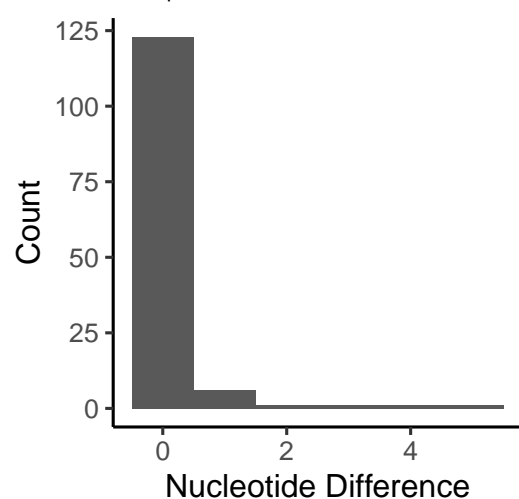
IGHV1-NL1*01

1 sequences assigned
No exact matches.



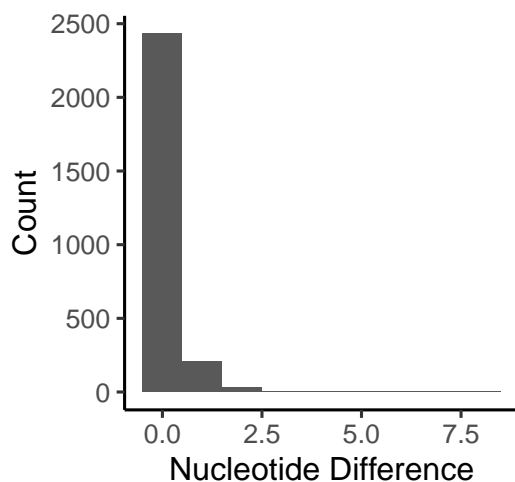
IGHV2-70*01

133 sequences assigned
123 (92.5%) exact matches, in which:
117 unique CDR3
6 unique J



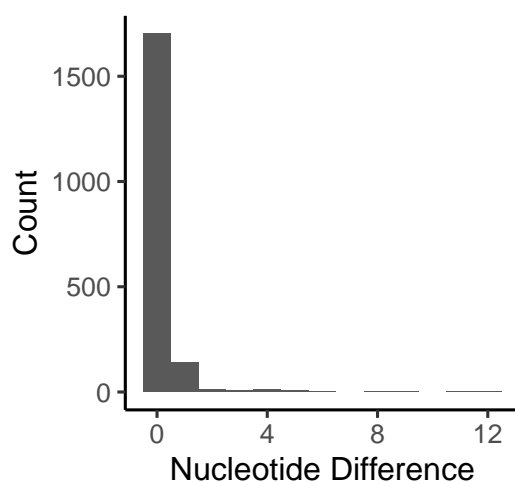
IGHV1-69*01

2680 sequences assigned
2432 (90.7%) exact matches, in which:
2223 unique CDR3
6 unique J



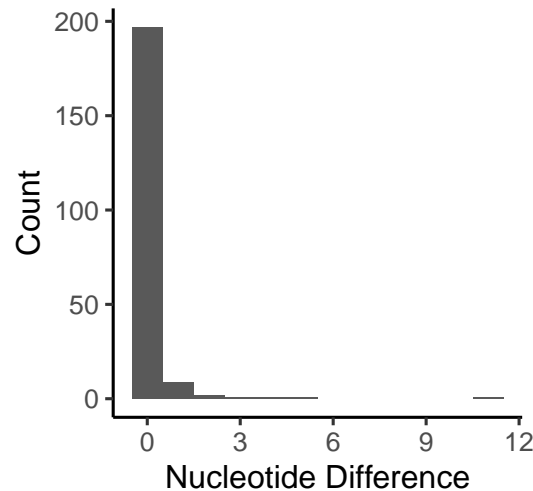
IGHV2-5*02

1888 sequences assigned
1702 (90.1%) exact matches, in which:
1594 unique CDR3
6 unique J



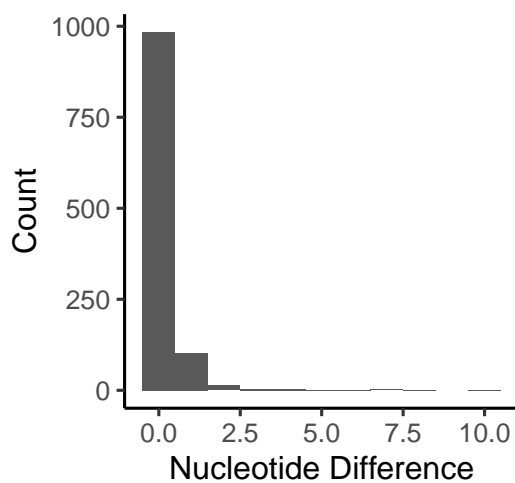
IGHV2-70*15

212 sequences assigned
197 (92.9%) exact matches, in which:
189 unique CDR3
6 unique J



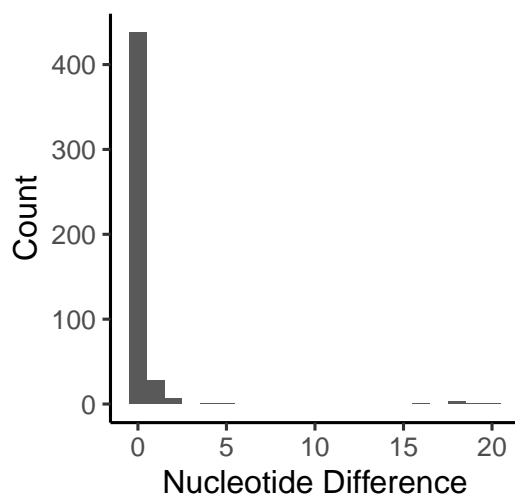
IGHV1-69*04

1114 sequences assigned
984 (88.3%) exact matches, in which:
904 unique CDR3
6 unique J



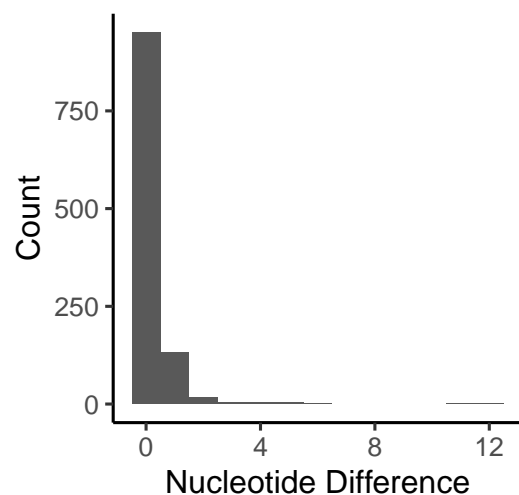
IGHV2-26*01

481 sequences assigned
438 (91.1%) exact matches, in which:
412 unique CDR3
6 unique J



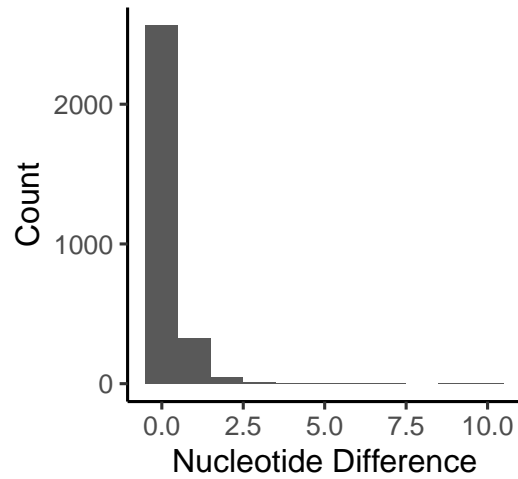
IGHV3-7*01

1114 sequences assigned
951 (85.4%) exact matches, in which:
897 unique CDR3
6 unique J



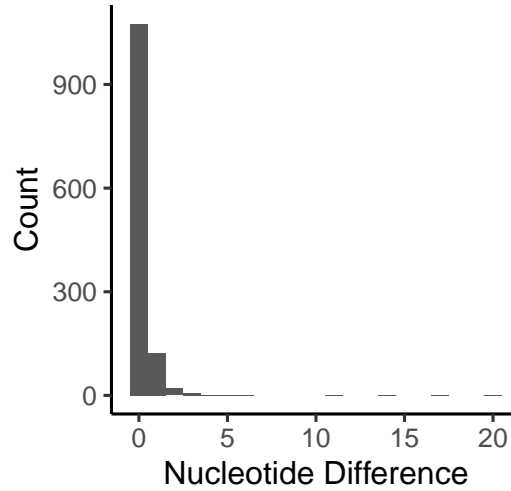
IGHV3–9*01

2956 sequences assigned
2564 (86.7%) exact matches, in which:
2296 unique CDR3
6 unique J



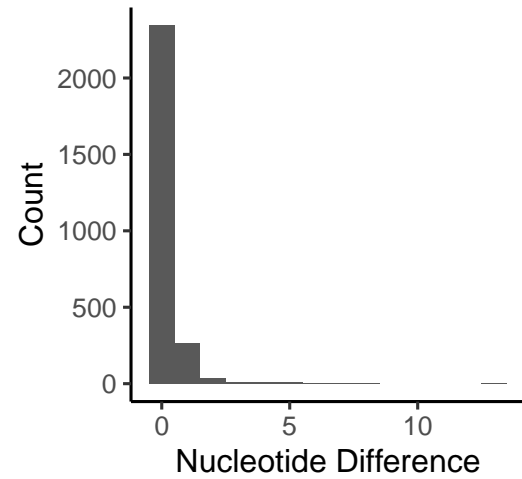
IGHV3–15*01

1236 sequences assigned
1076 (87.1%) exact matches, in which:
984 unique CDR3
6 unique J



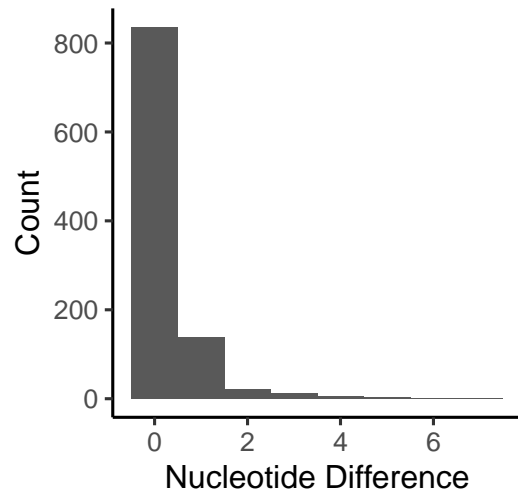
IGHV3–21*01

2682 sequences assigned
2344 (87.4%) exact matches, in which:
2137 unique CDR3
6 unique J



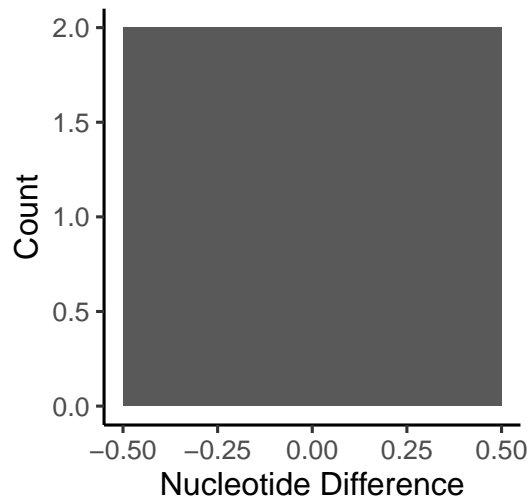
IGHV3–11*01

1019 sequences assigned
836 (82%) exact matches, in which:
785 unique CDR3
6 unique J



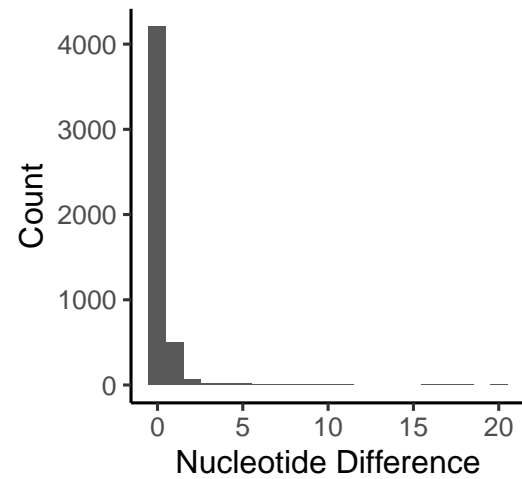
IGHV3–19*01

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



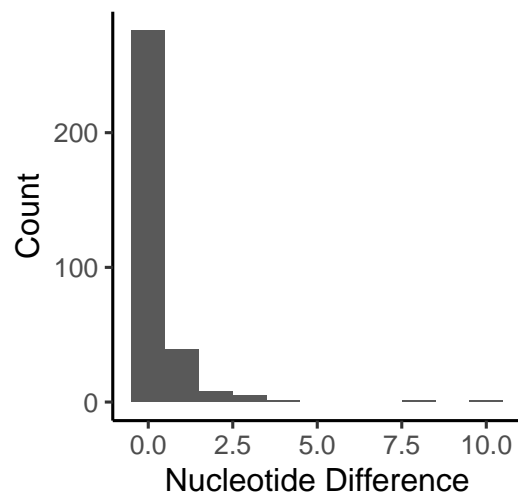
IGHV3–23*01

4849 sequences assigned
4204 (86.7%) exact matches, in which:
3821 unique CDR3
6 unique J



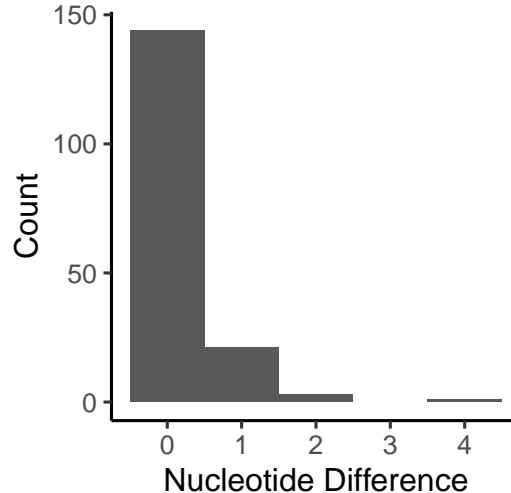
IGHV3–13*01

331 sequences assigned
276 (83.4%) exact matches, in which:
254 unique CDR3
5 unique J



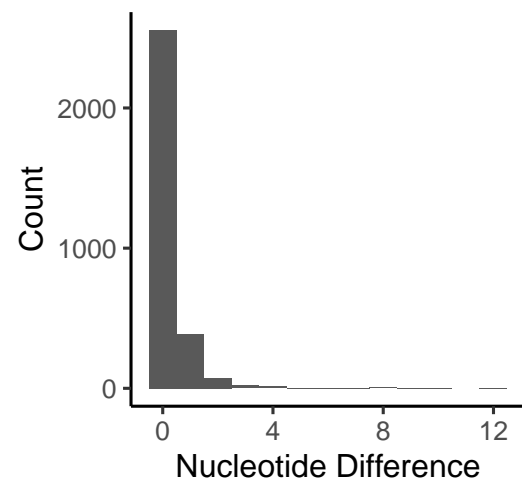
IGHV3–20*01

169 sequences assigned
144 (85.2%) exact matches, in which:
126 unique CDR3
5 unique J



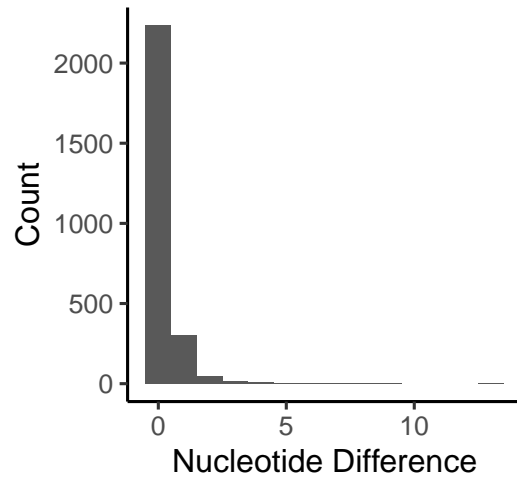
IGHV3–30–3*01

3072 sequences assigned
2556 (83.2%) exact matches, in which:
2342 unique CDR3
6 unique J



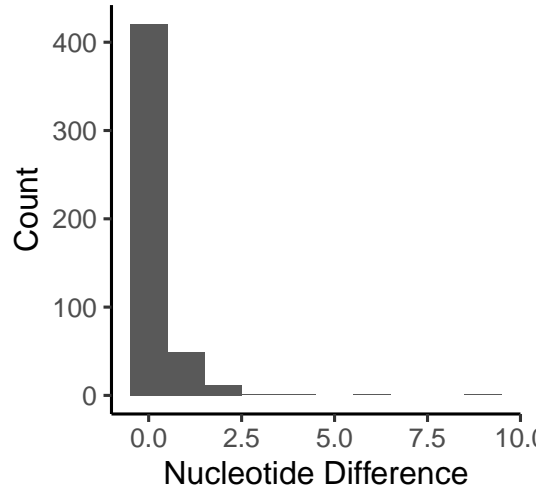
IGHV3–30*18

2625 sequences assigned
2235 (85.1%) exact matches, in which:
2068 unique CDR3
6 unique J



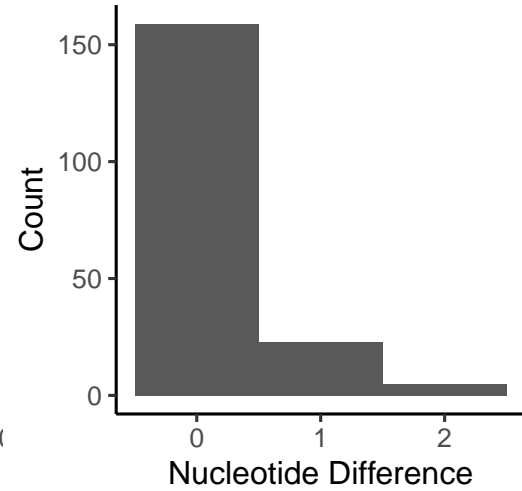
IGHV3–43*02

486 sequences assigned
421 (86.6%) exact matches, in which:
388 unique CDR3
6 unique J



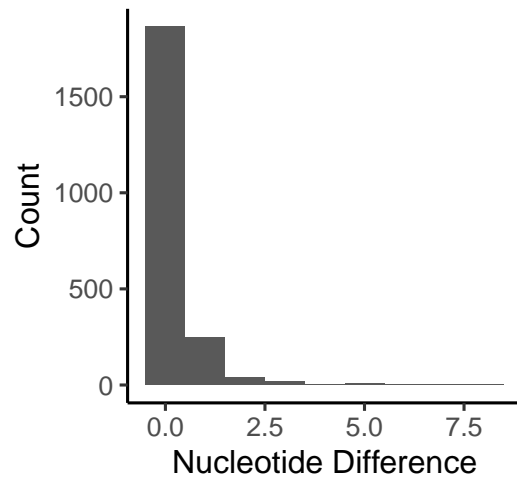
IGHV3–53*02

187 sequences assigned
159 (85%) exact matches, in which:
150 unique CDR3
6 unique J



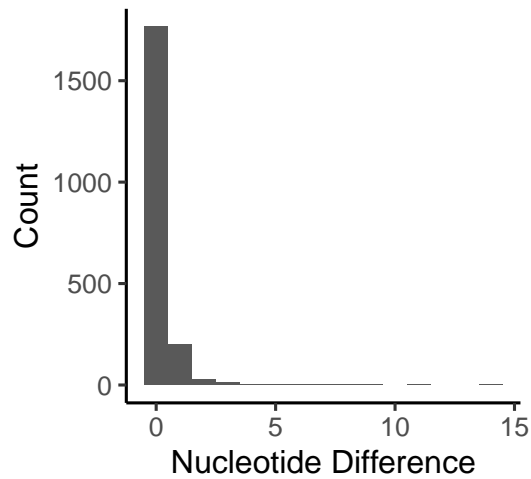
IGHV3–33*01

2191 sequences assigned
1864 (85.1%) exact matches, in which:
1715 unique CDR3
6 unique J



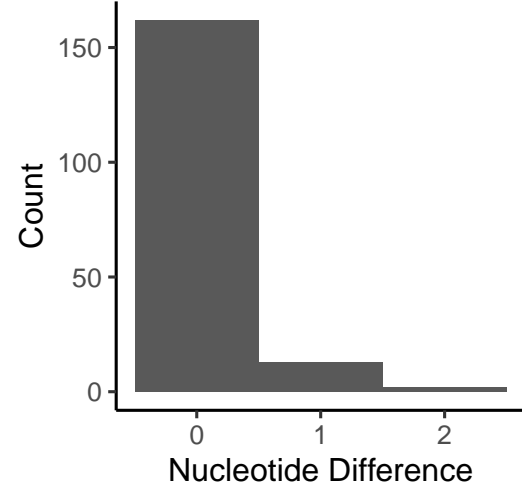
IGHV3–48*03

2017 sequences assigned
1766 (87.6%) exact matches, in which:
1632 unique CDR3
6 unique J



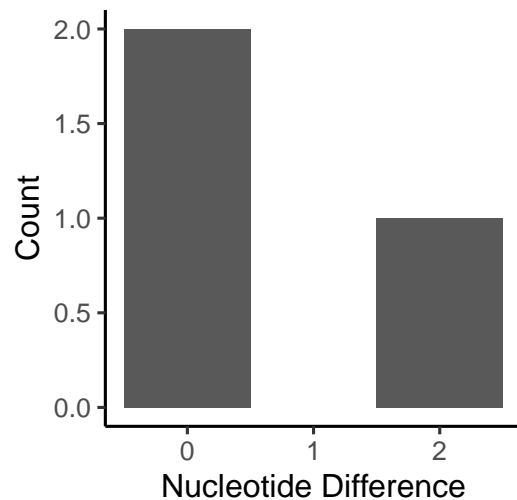
IGHV3–53*04

177 sequences assigned
162 (91.5%) exact matches, in which:
151 unique CDR3
5 unique J



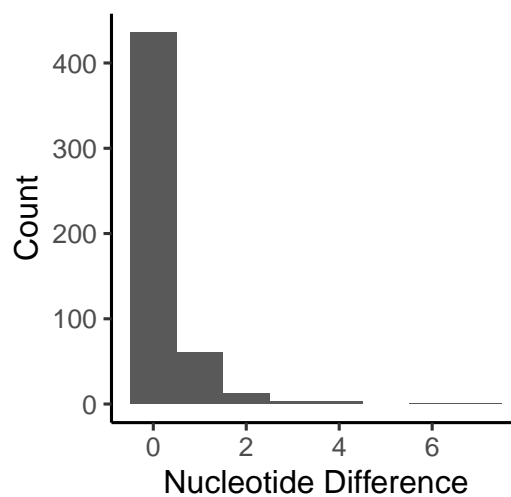
IGHV3–35*01

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



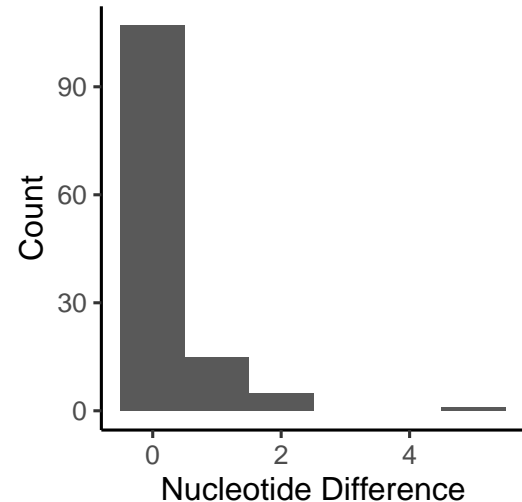
IGHV3–49*04

517 sequences assigned
436 (84.3%) exact matches, in which:
401 unique CDR3
6 unique J



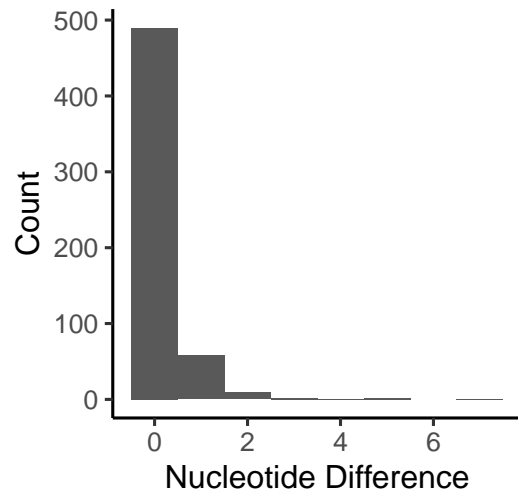
IGHV3–64*01

128 sequences assigned
107 (83.6%) exact matches, in which:
96 unique CDR3
6 unique J



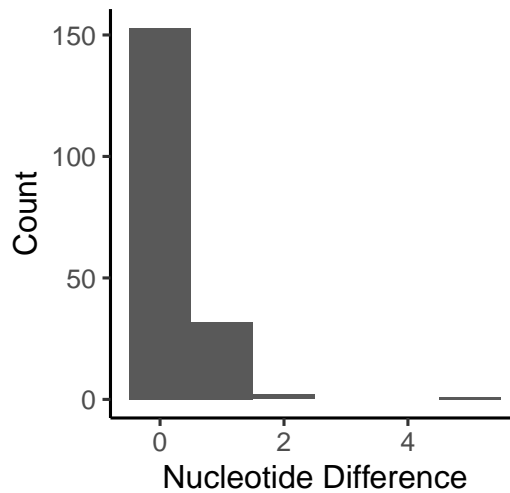
IGHV3–66*01

563 sequences assigned
490 (87%) exact matches, in which:
447 unique CDR3
6 unique J



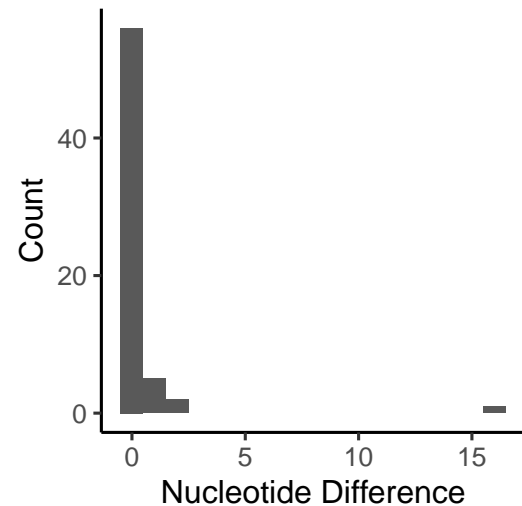
IGHV3–73*01

188 sequences assigned
153 (81.4%) exact matches, in which:
143 unique CDR3
5 unique J



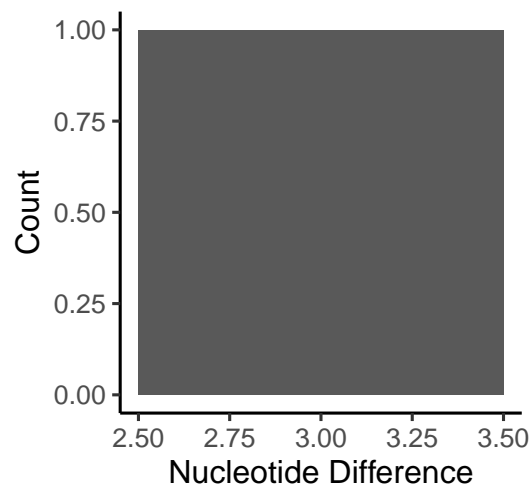
IGHV3–43D*04

64 sequences assigned
56 (87.5%) exact matches, in which:
52 unique CDR3
6 unique J



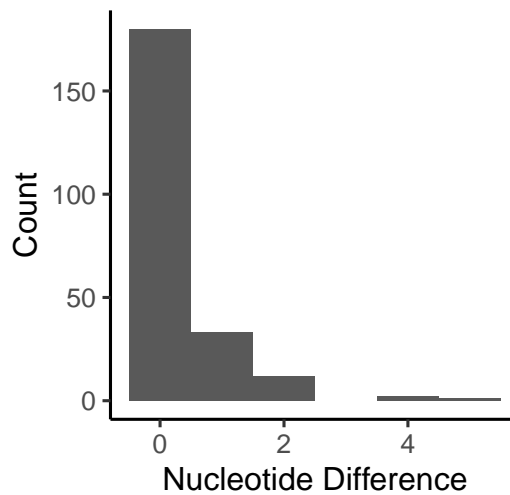
IGHV3–69–1*01

1 sequences assigned
No exact matches.



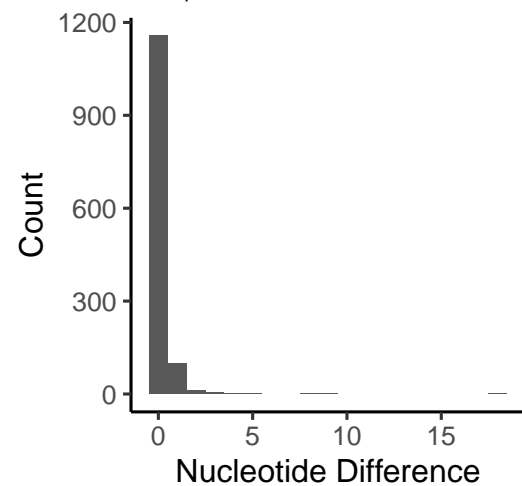
IGHV3–73*02

228 sequences assigned
180 (78.9%) exact matches, in which:
155 unique CDR3
6 unique J



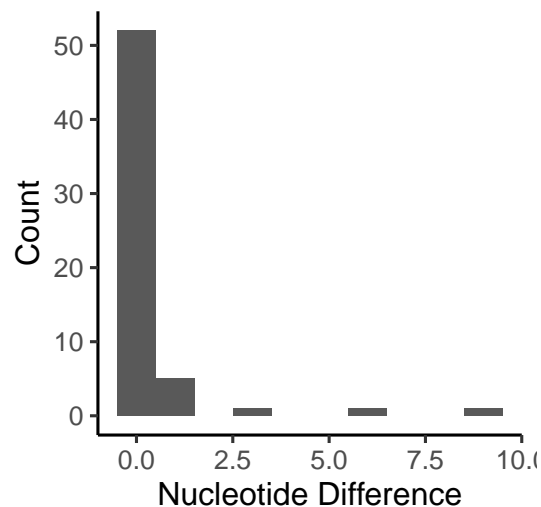
IGHV4–4*02

1280 sequences assigned
1157 (90.4%) exact matches, in which:
1088 unique CDR3
6 unique J



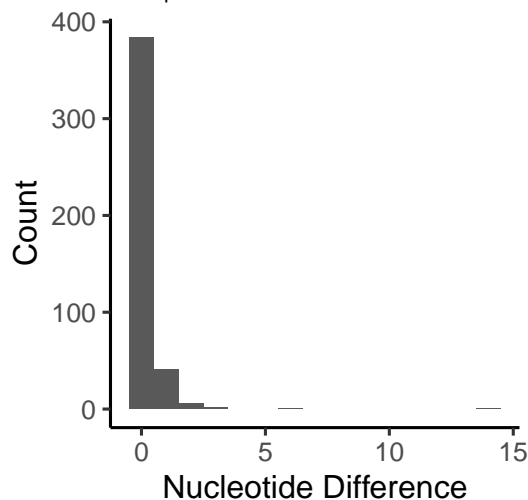
IGHV3–72*01

60 sequences assigned
52 (86.7%) exact matches, in which:
48 unique CDR3
5 unique J



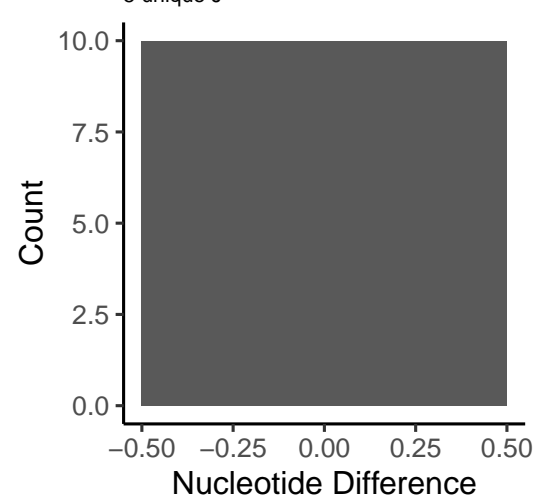
IGHV3–74*01

435 sequences assigned
384 (88.3%) exact matches, in which:
365 unique CDR3
6 unique J



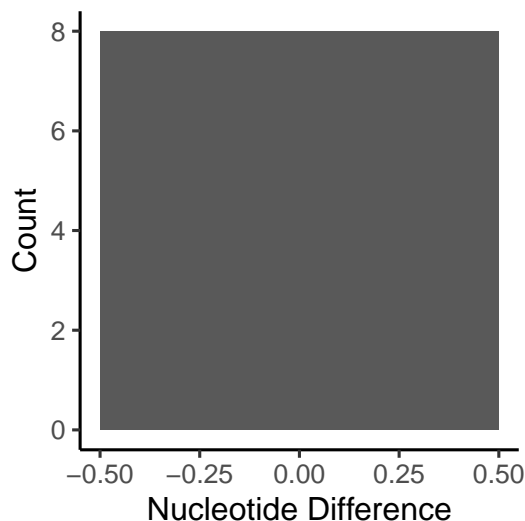
IGHV4–28*01

10 sequences assigned
10 (100%) exact matches, in which:
10 unique CDR3
5 unique J



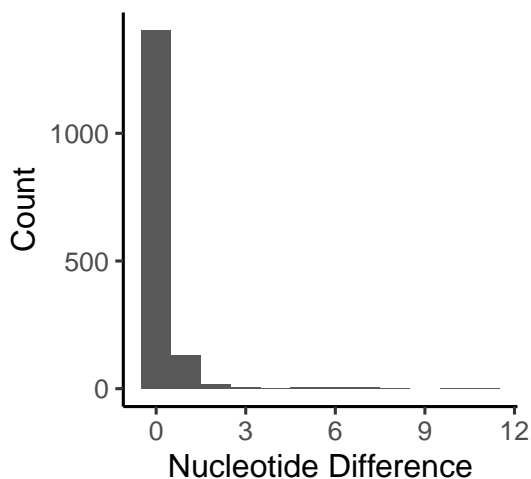
IGHV4–28*03

8 sequences assigned
8 (100%) exact matches, in which:
6 unique CDR3
3 unique J



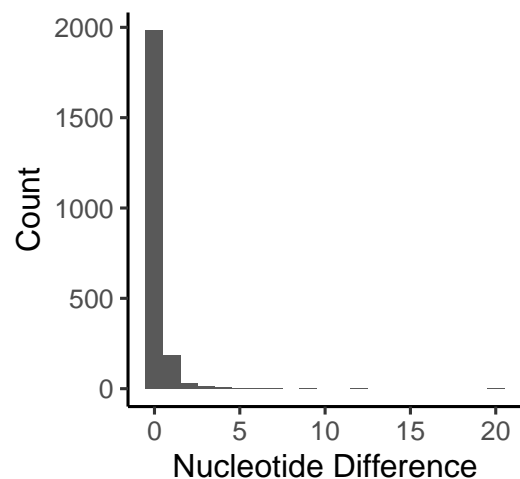
IGHV4–31*03

1578 sequences assigned
1403 (88.9%) exact matches, in which:
1330 unique CDR3
6 unique J



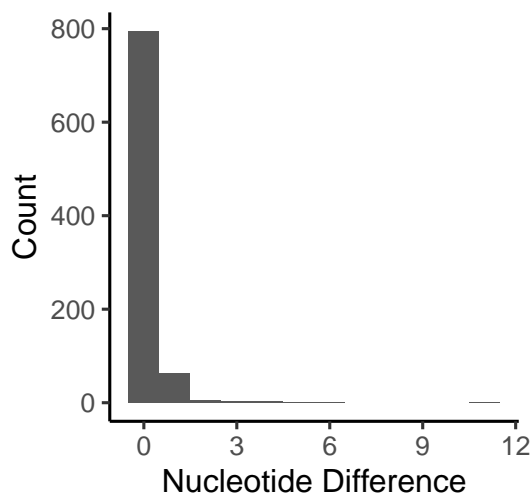
IGHV4–39*01

2226 sequences assigned
1983 (89.1%) exact matches, in which:
1772 unique CDR3
6 unique J



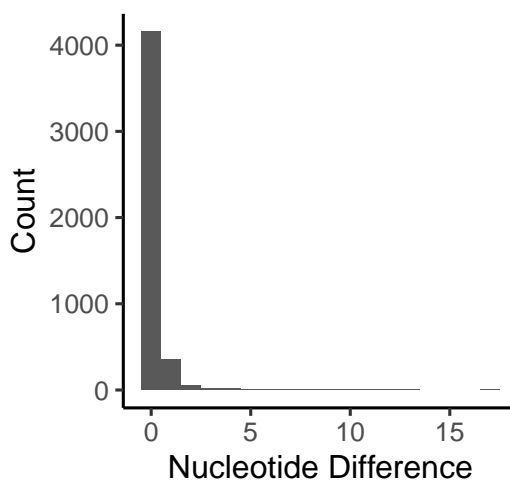
IGHV4–30–4*01

875 sequences assigned
795 (90.9%) exact matches, in which:
748 unique CDR3
6 unique J



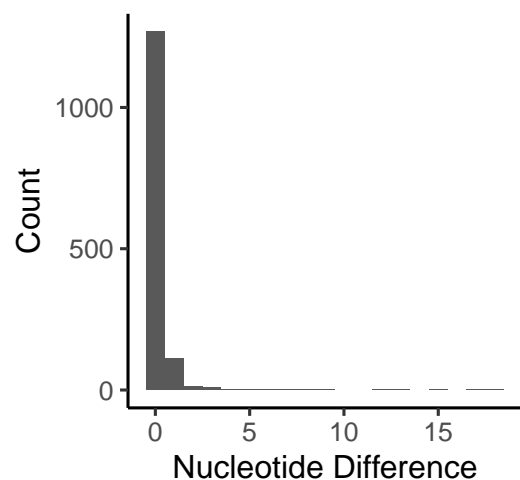
IGHV4–34*01

4612 sequences assigned
4156 (90.1%) exact matches, in which:
3753 unique CDR3
6 unique J



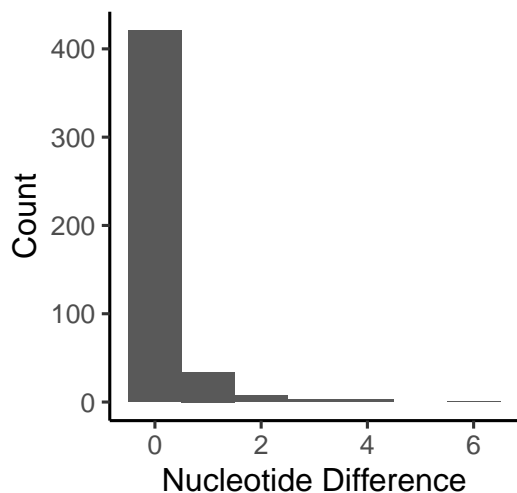
IGHV4–59*01

1413 sequences assigned
1268 (89.7%) exact matches, in which:
1216 unique CDR3
6 unique J



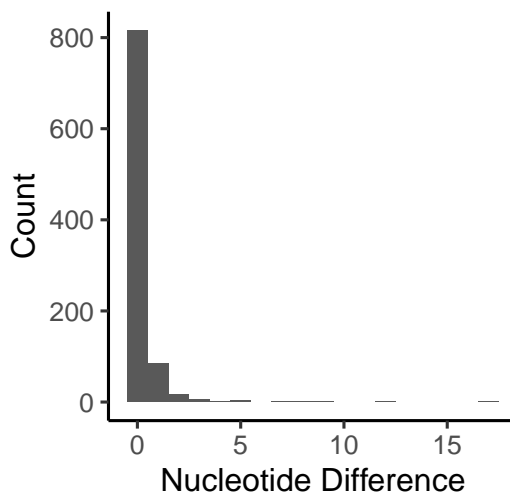
IGHV4–30–2*01

469 sequences assigned
421 (89.8%) exact matches, in which:
392 unique CDR3
6 unique J



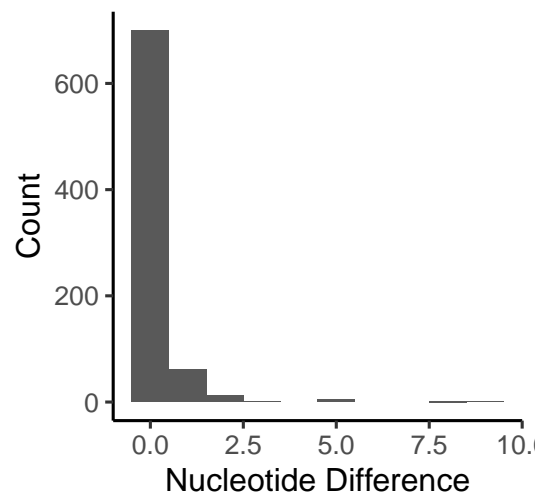
IGHV4–38–2*02_A70G

932 sequences assigned
816 (87.6%) exact matches, in which:
732 unique CDR3
6 unique J



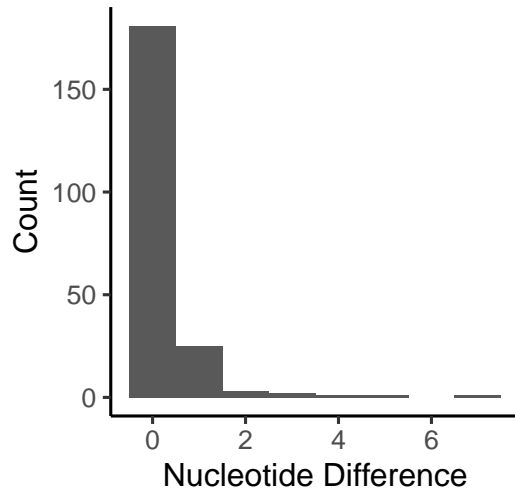
IGHV4–59*08

782 sequences assigned
700 (89.5%) exact matches, in which:
661 unique CDR3
6 unique J



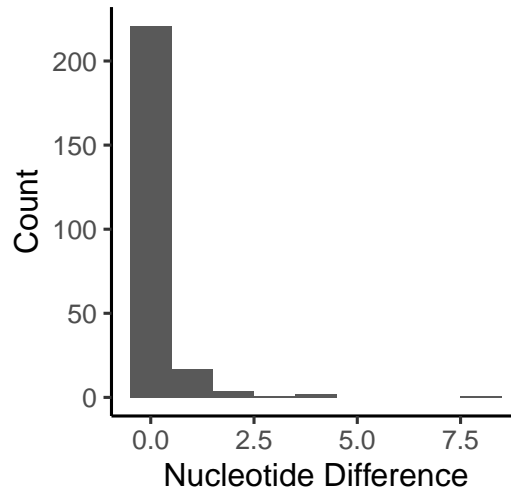
IGHV4–61*01

214 sequences assigned
181 (84.6%) exact matches, in which:
171 unique CDR3
6 unique J



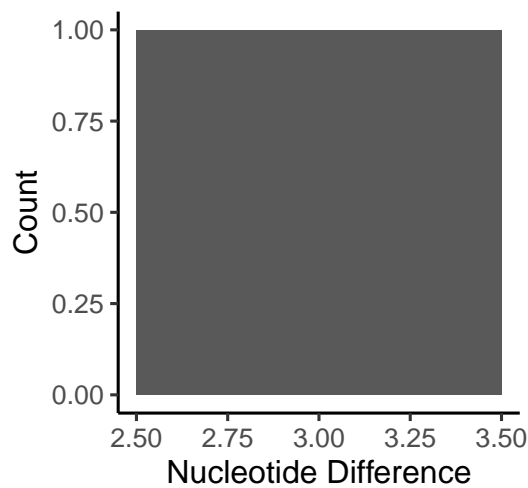
IGHV6–1*01

246 sequences assigned
221 (89.8%) exact matches, in which:
205 unique CDR3
6 unique J



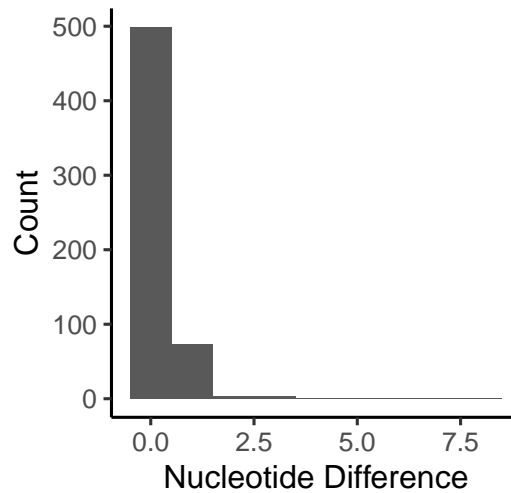
IGHV4/OR15–8*03

1 sequences assigned
No exact matches.



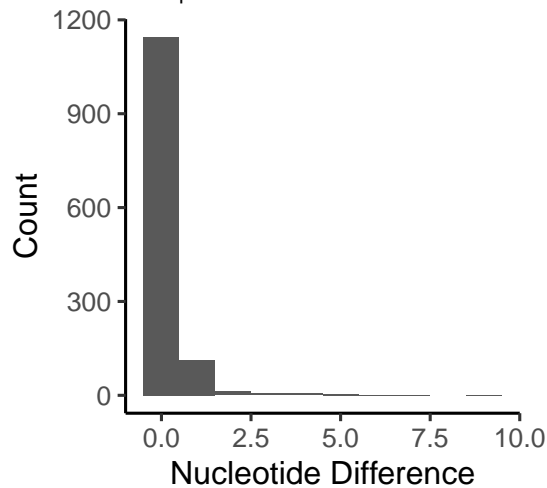
IGHV7–4–1*02

584 sequences assigned
499 (85.4%) exact matches, in which:
478 unique CDR3
6 unique J



IGHV5–51*01

1290 sequences assigned
1145 (88.8%) exact matches, in which:
1061 unique CDR3
6 unique J



IGHV4-38-2*02_A70G

