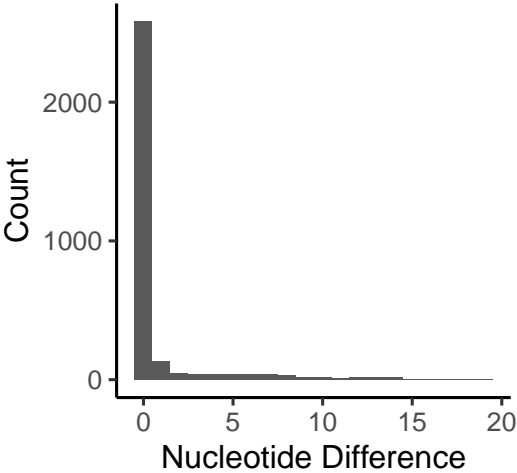


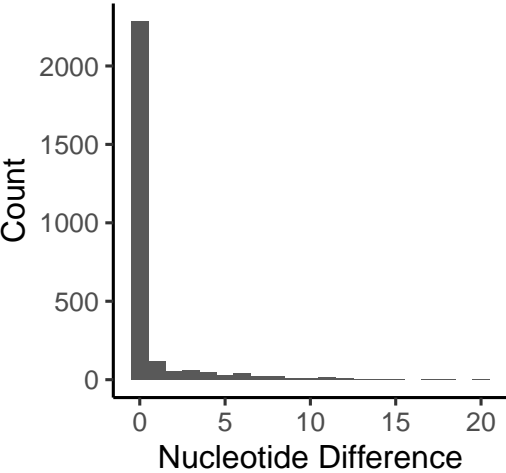
IGHV1-2*02

3116 sequences assigned
2582 (82.9%) exact matches, in which:
2568 unique CDR3
6 unique J



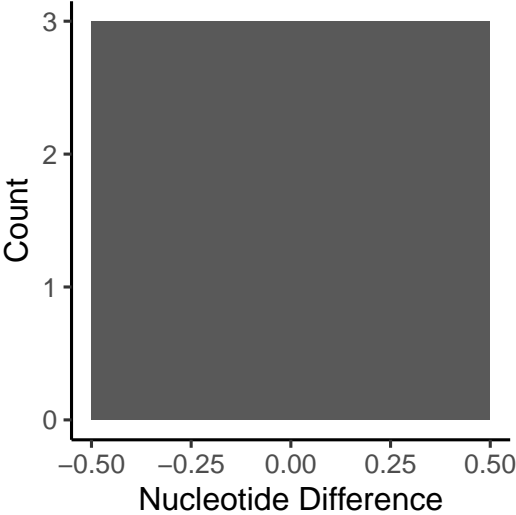
IGHV1-8*01

2737 sequences assigned
2284 (83.4%) exact matches, in which:
2276 unique CDR3
6 unique J



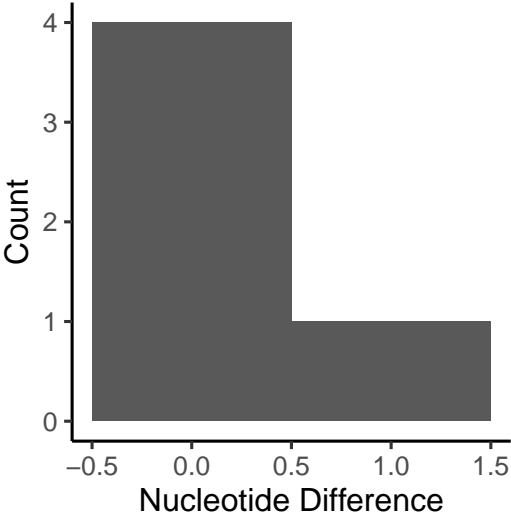
IGHV1-45*02

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



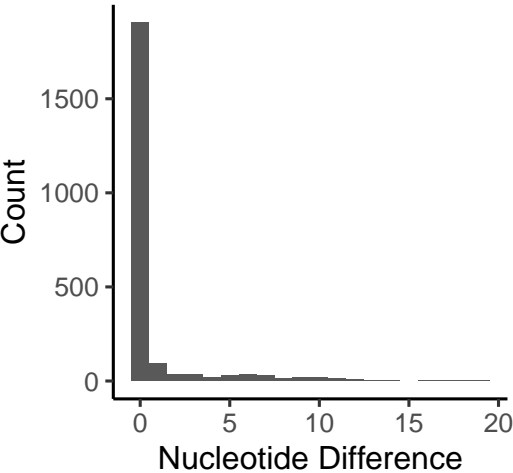
IGHV1-3*02

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



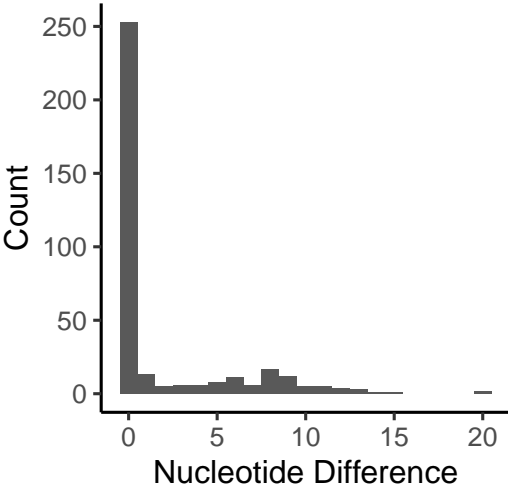
IGHV1-18*01

2267 sequences assigned
1904 (84%) exact matches, in which:
1896 unique CDR3
6 unique J



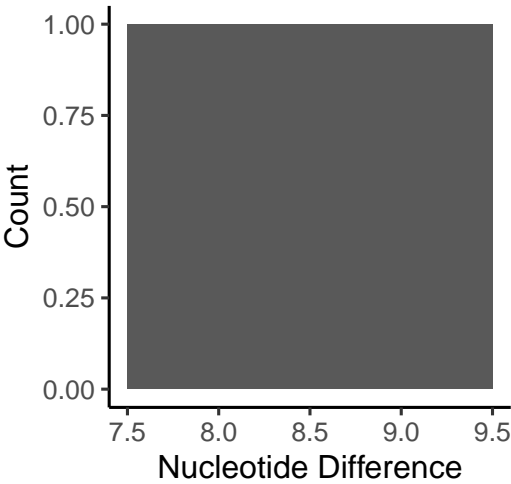
IGHV1-46*01

358 sequences assigned
253 (70.7%) exact matches, in which:
253 unique CDR3
6 unique J



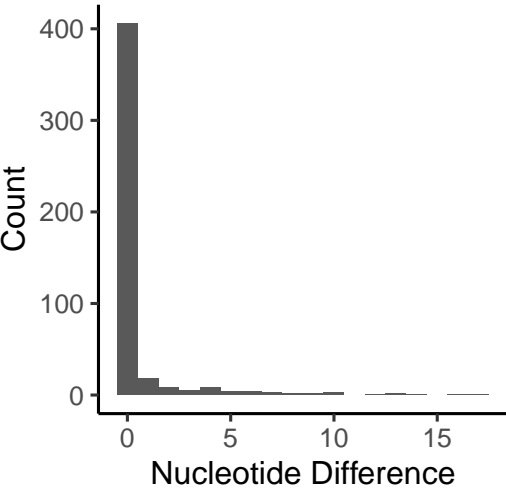
IGHV1-3*01_05

2 sequences assigned
No exact matches.



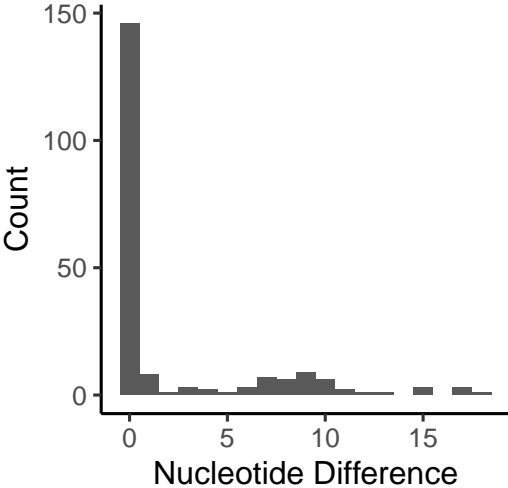
IGHV1-24*01

469 sequences assigned
406 (86.6%) exact matches, in which:
404 unique CDR3
6 unique J



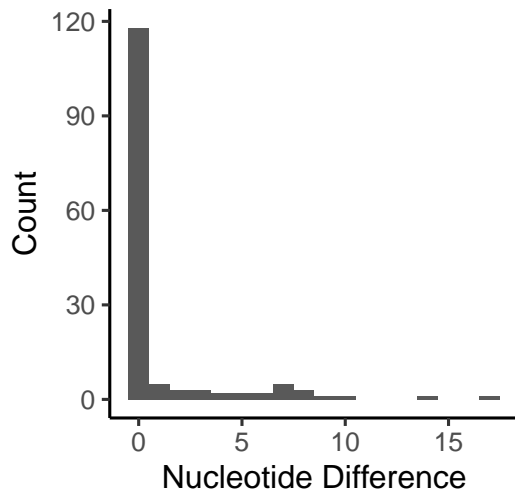
IGHV1-46*03

203 sequences assigned
146 (71.9%) exact matches, in which:
146 unique CDR3
6 unique J



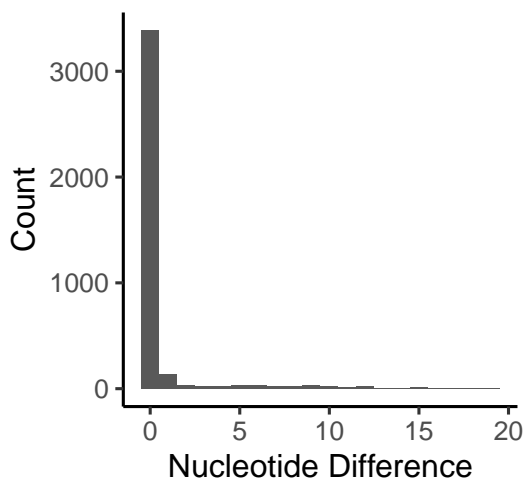
IGHV1–58*01_03

147 sequences assigned
118 (80.3%) exact matches, in which:
118 unique CDR3
5 unique J



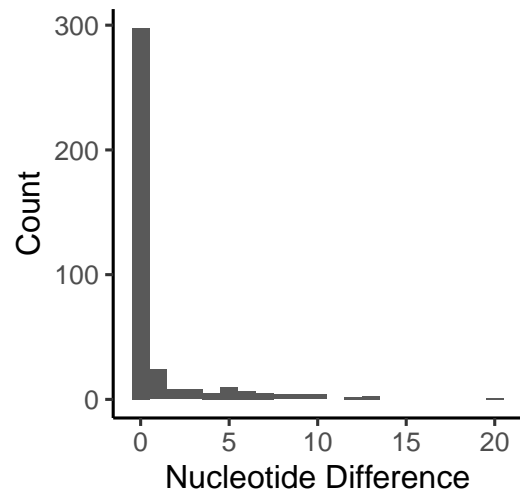
IGHV1–69*01_12_13

3836 sequences assigned
3386 (88.3%) exact matches, in which:
3380 unique CDR3
6 unique J



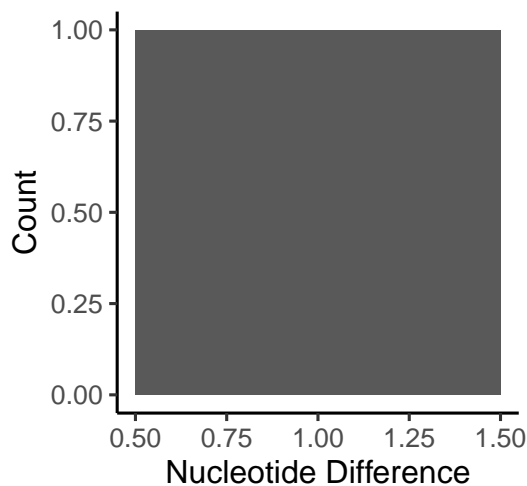
IGHV2–5*02

385 sequences assigned
298 (77.4%) exact matches, in which:
296 unique CDR3
6 unique J



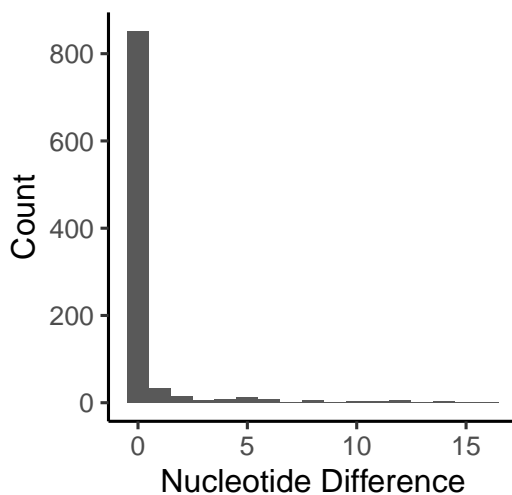
IGHV1–68*01

1 sequences assigned
No exact matches.



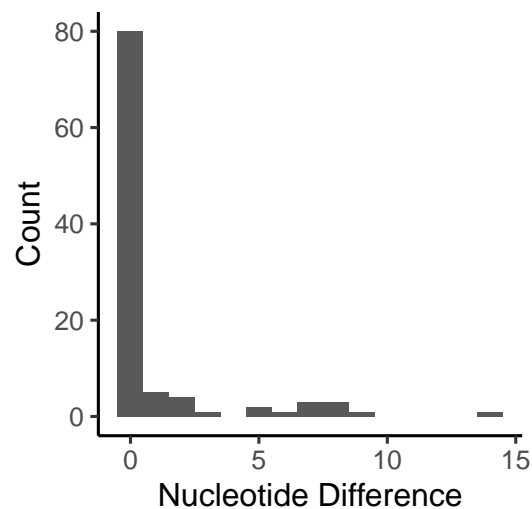
IGHV1–69*06_14

965 sequences assigned
852 (88.3%) exact matches, in which:
851 unique CDR3
6 unique J



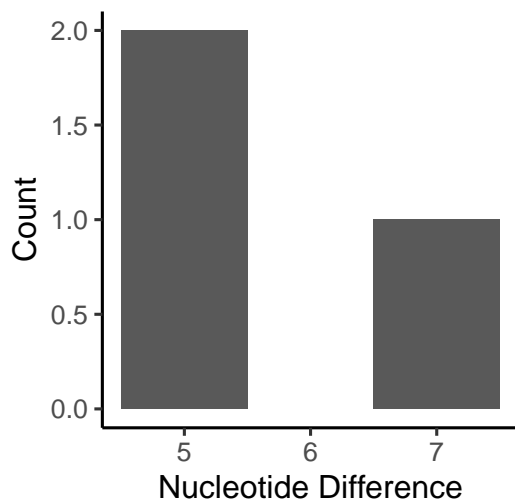
IGHV2–26*01

101 sequences assigned
80 (79.2%) exact matches, in which:
79 unique CDR3
5 unique J



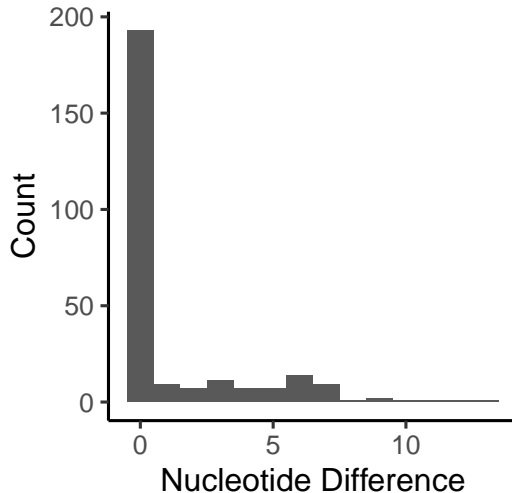
IGHV1–69–2*01

3 sequences assigned
No exact matches.



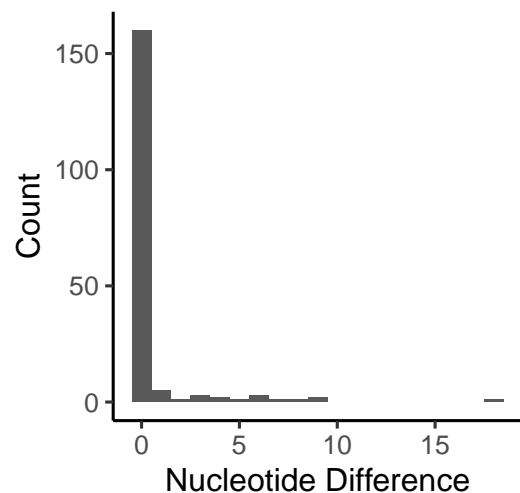
IGHV2–5*01

264 sequences assigned
193 (73.1%) exact matches, in which:
189 unique CDR3
6 unique J



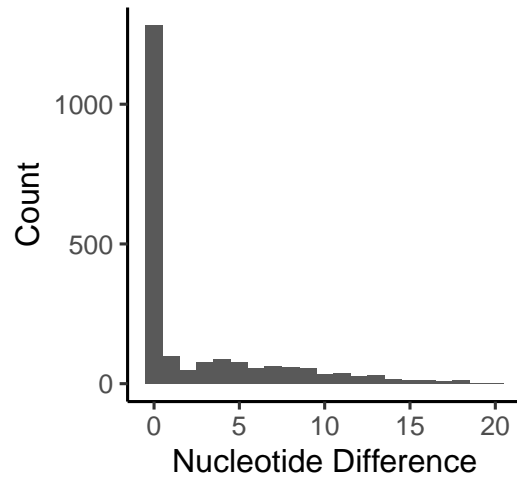
IGHV2–70*01

180 sequences assigned
160 (88.9%) exact matches, in which:
158 unique CDR3
5 unique J



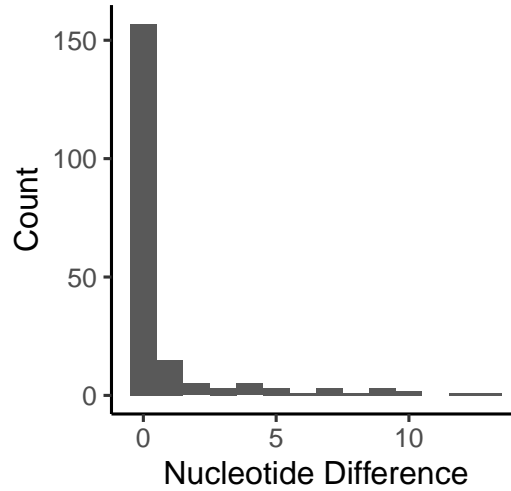
IGHV3-7*01

2110 sequences assigned
1282 (60.8%) exact matches, in which:
1231 unique CDR3
6 unique J



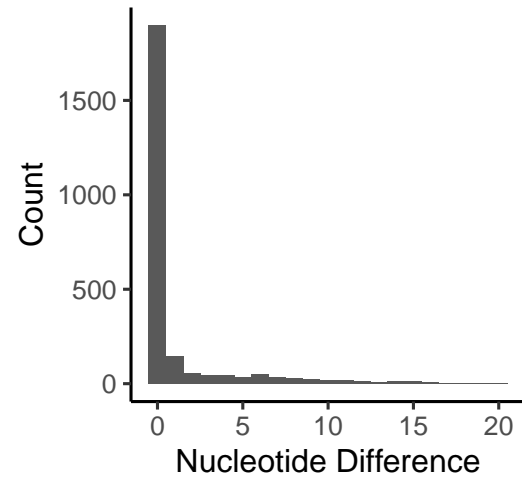
IGHV3-13*01

200 sequences assigned
157 (78.5%) exact matches, in which:
152 unique CDR3
5 unique J



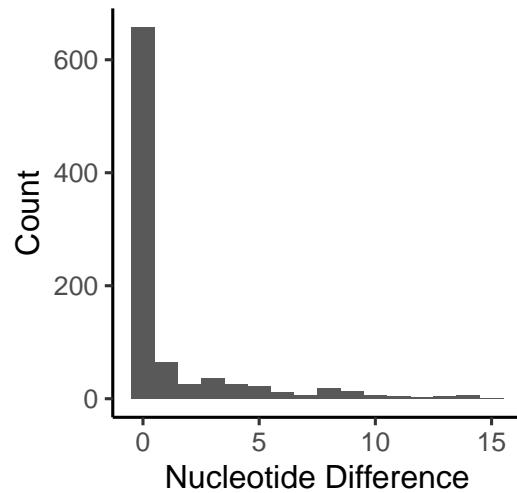
IGHV3-21*01_02

2465 sequences assigned
1897 (77%) exact matches, in which:
1859 unique CDR3
6 unique J



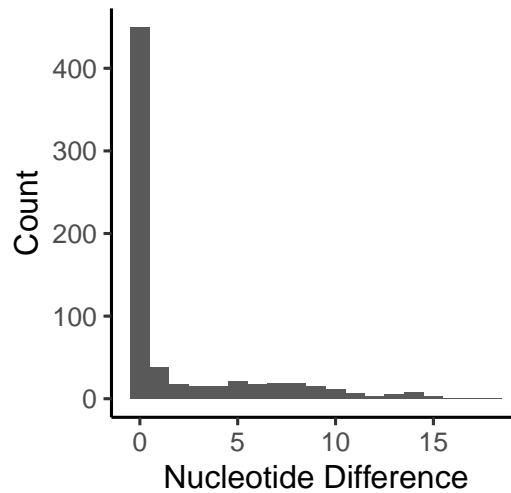
IGHV3-9*01

908 sequences assigned
658 (72.5%) exact matches, in which:
641 unique CDR3
6 unique J



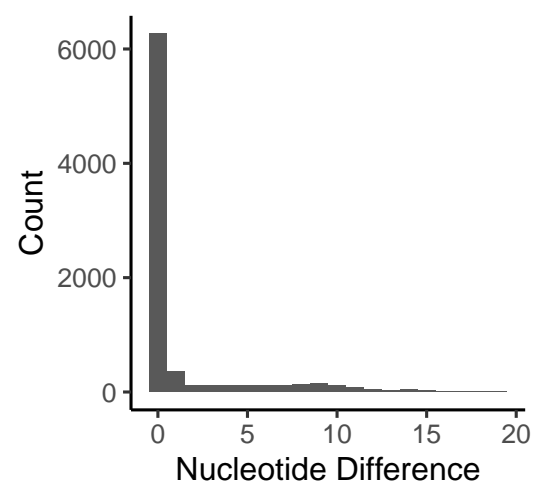
IGHV3-15*01_02

669 sequences assigned
450 (67.3%) exact matches, in which:
439 unique CDR3
6 unique J



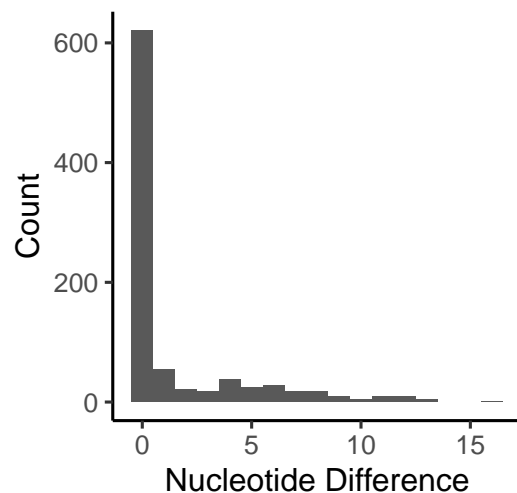
IGHV3-23*01_04

7978 sequences assigned
6267 (78.6%) exact matches, in which:
6119 unique CDR3
6 unique J



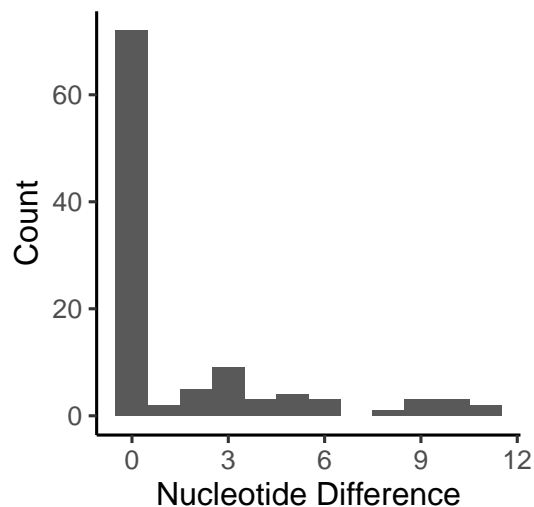
IGHV3-11*01

879 sequences assigned
621 (70.6%) exact matches, in which:
609 unique CDR3
6 unique J



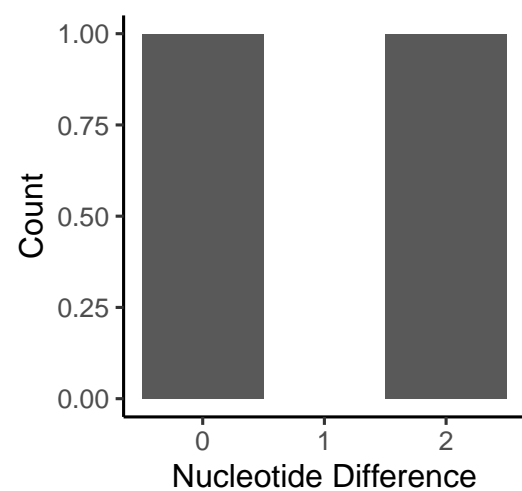
IGHV3-20*01_02

107 sequences assigned
72 (67.3%) exact matches, in which:
69 unique CDR3
6 unique J



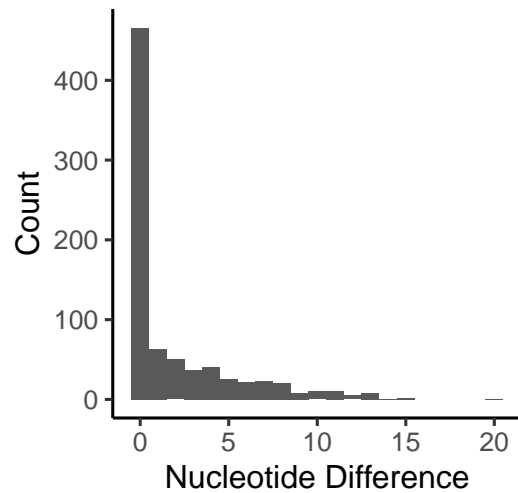
IGHV3-30-3*01

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



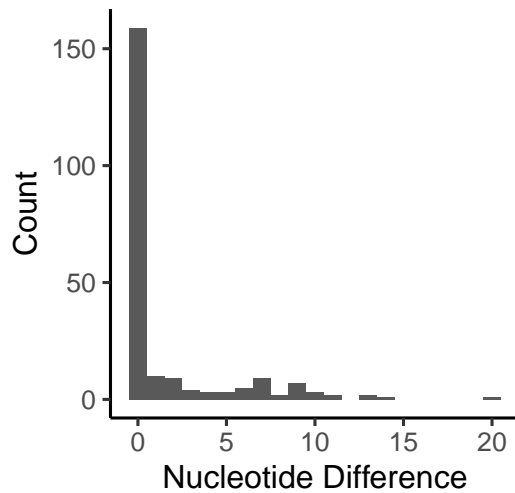
IGHV3–30*03

798 sequences assigned
466 (58.4%) exact matches, in which:
451 unique CDR3
6 unique J



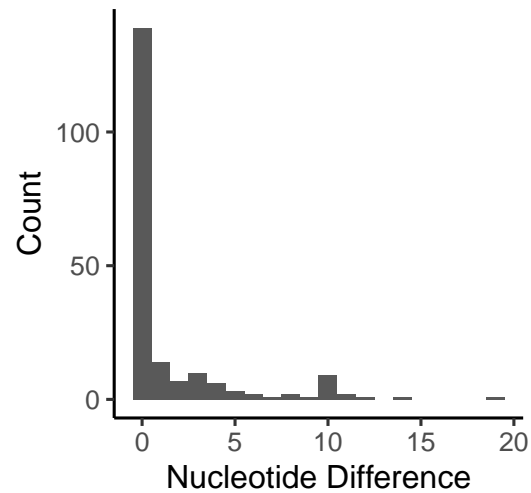
IGHV3–43*01

220 sequences assigned
159 (72.3%) exact matches, in which:
158 unique CDR3
6 unique J



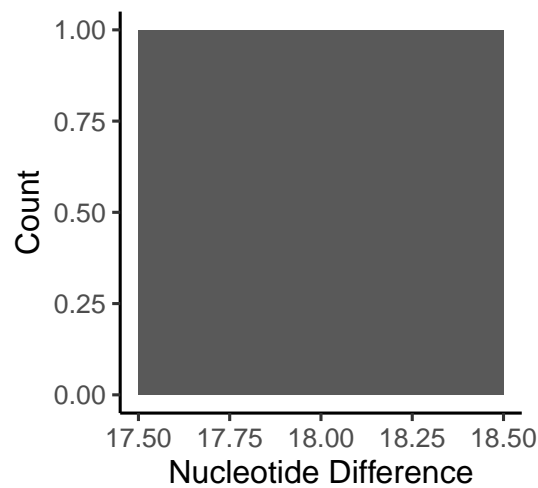
IGHV3–49*03_05

201 sequences assigned
139 (69.2%) exact matches, in which:
137 unique CDR3
6 unique J



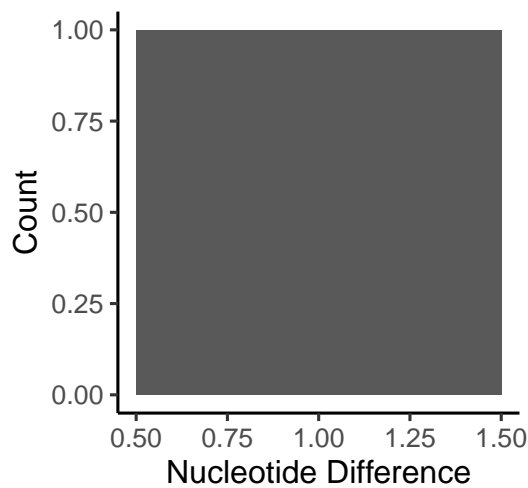
IGHV3–30–3*03

1 sequences assigned
No exact matches.



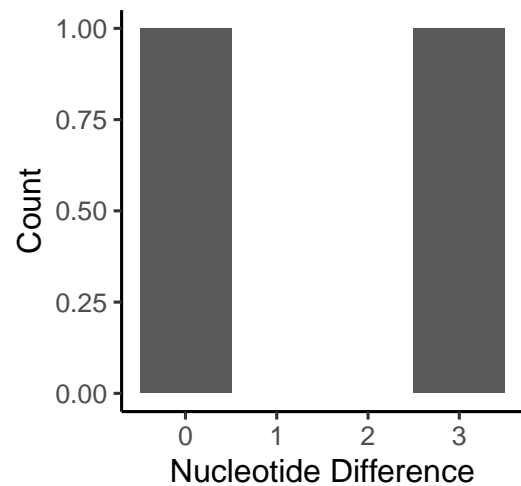
IGHV3–47*02

1 sequences assigned
No exact matches.



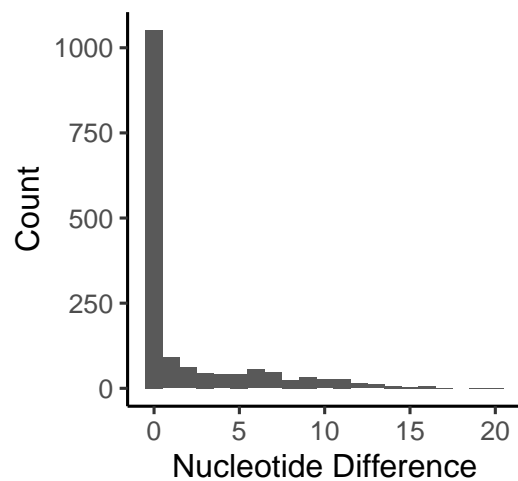
IGHV3–52*01_03

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



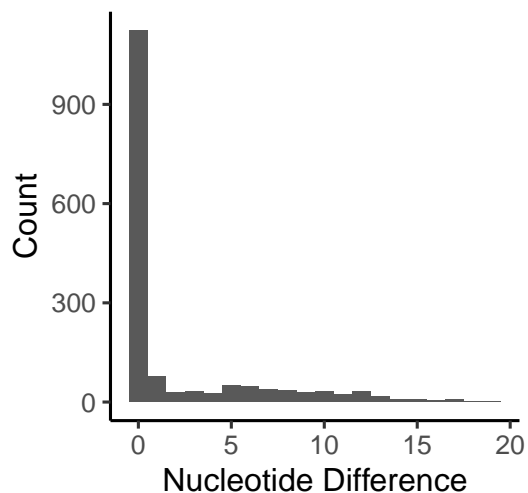
IGHV3–33*01

1591 sequences assigned
1052 (66.1%) exact matches, in which:
1030 unique CDR3
6 unique J



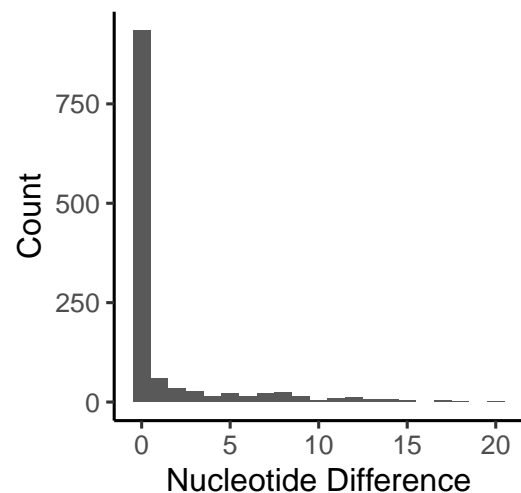
IGHV3–48*02

1630 sequences assigned
1124 (69%) exact matches, in which:
1095 unique CDR3
6 unique J



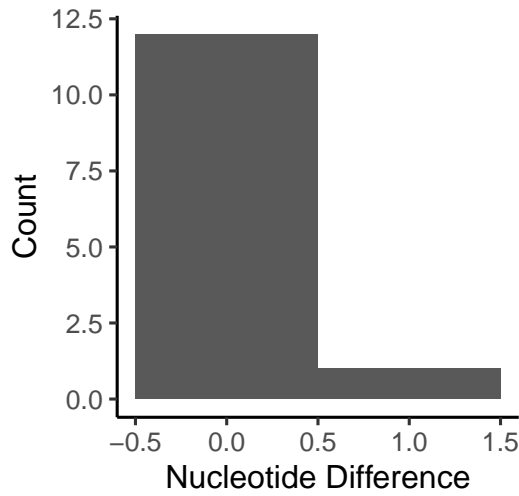
IGHV3–53*01_02

1213 sequences assigned
935 (77.1%) exact matches, in which:
921 unique CDR3
6 unique J



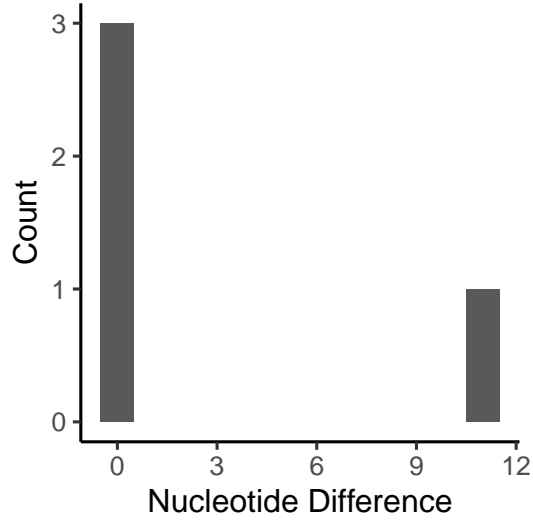
IGHV3-64*02_07

13 sequences assigned
12 (92.3%) exact matches, in which:
12 unique CDR3
4 unique J



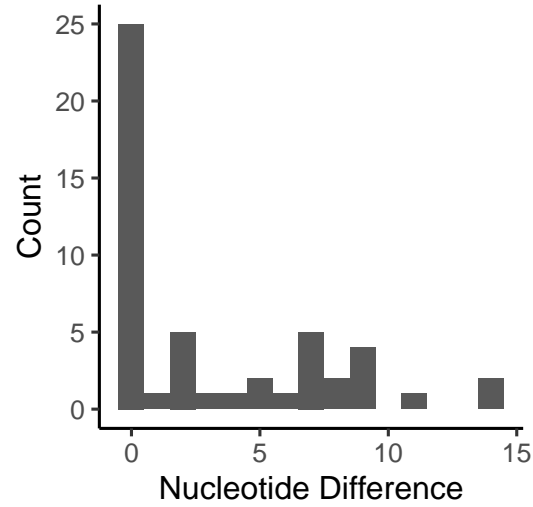
IGHV3-69-1*01

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



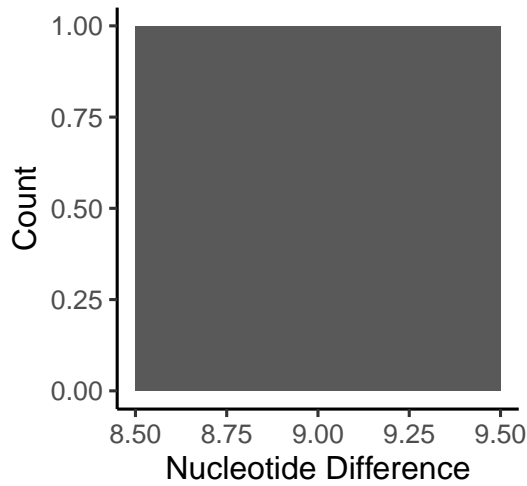
IGHV3-72*01

50 sequences assigned
25 (50%) exact matches, in which:
24 unique CDR3
4 unique J



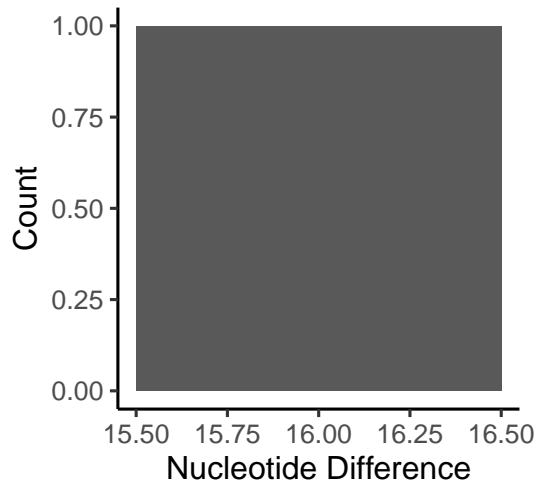
IGHV3-66*01

2 sequences assigned
No exact matches.



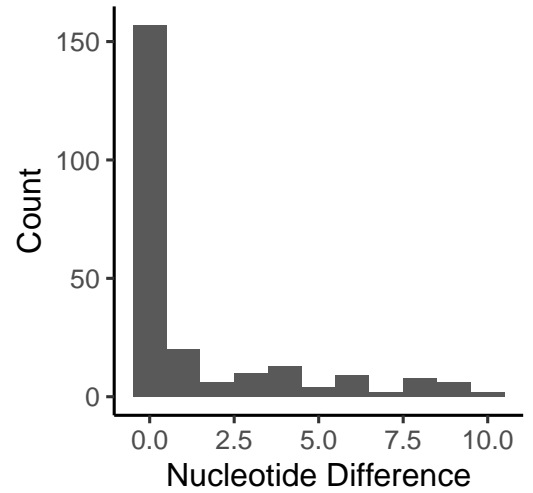
IGHV3-69-1*02

1 sequences assigned
No exact matches.



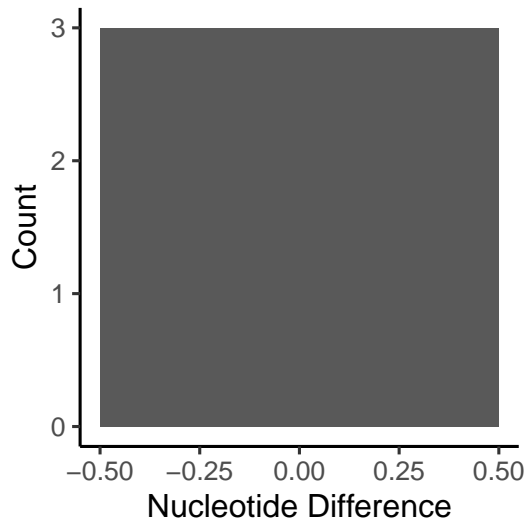
IGHV3-73*01_02

237 sequences assigned
157 (66.2%) exact matches, in which:
140 unique CDR3
6 unique J



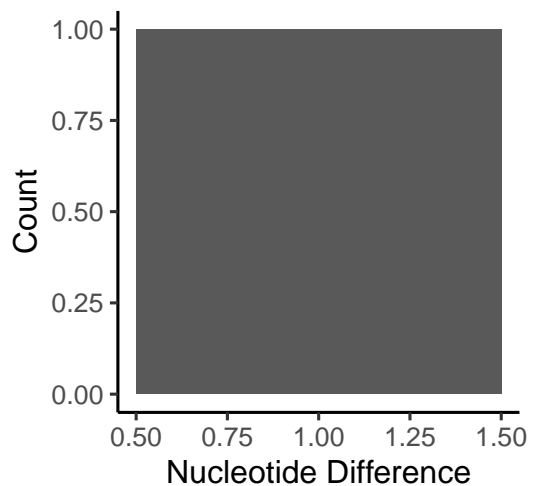
IGHV3-66*03

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



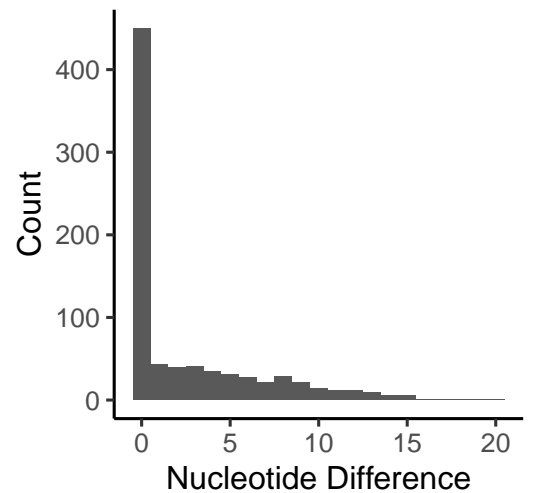
IGHV3-71*01_04

1 sequences assigned
No exact matches.



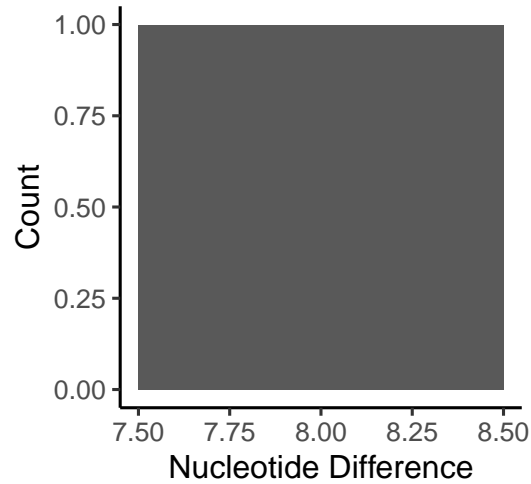
IGHV3-74*01_02

798 sequences assigned
450 (56.4%) exact matches, in which:
421 unique CDR3
6 unique J



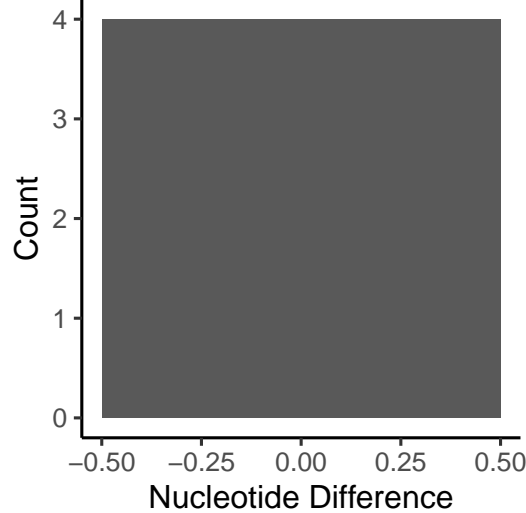
IGHV3-64D*09

2 sequences assigned
No exact matches.



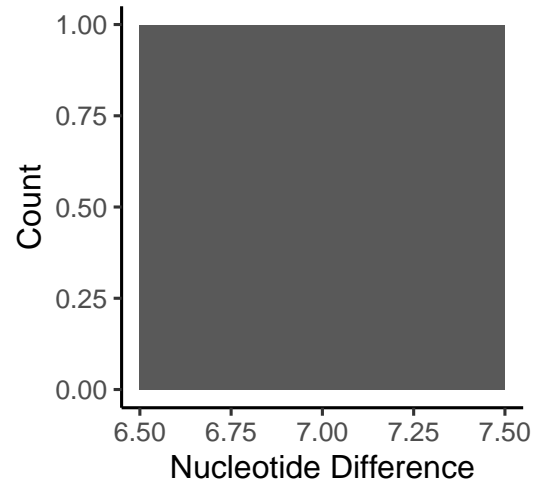
IGHV4-28*01_07

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



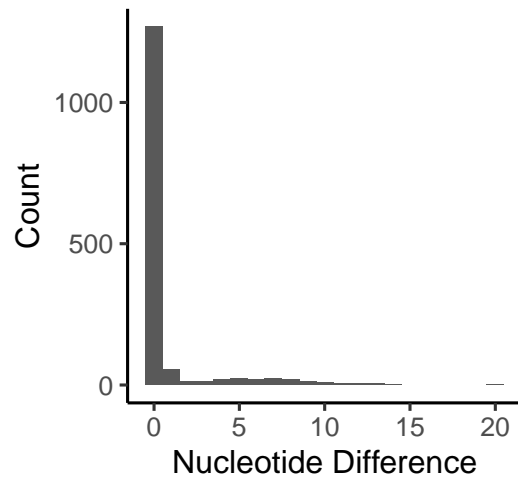
IGHV4-30-2*03

1 sequences assigned
No exact matches.



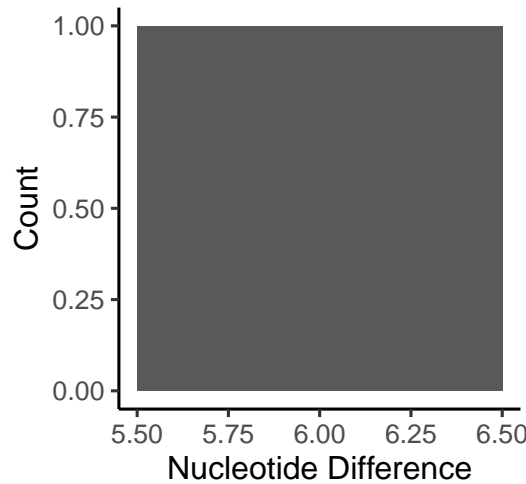
IGHV4-4*07

1487 sequences assigned
1268 (85.3%) exact matches, in which:
1237 unique CDR3
6 unique J



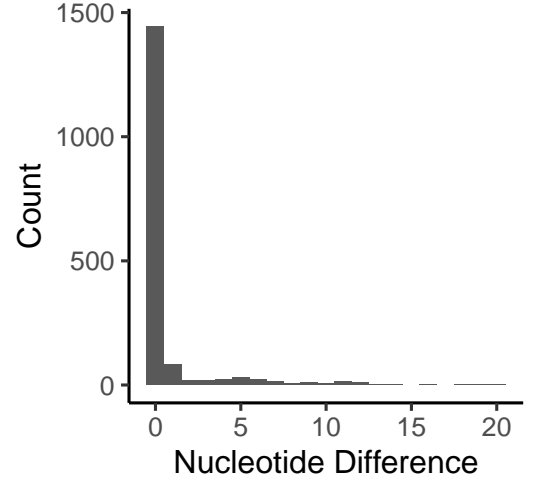
IGHV4-30-4*01

1 sequences assigned
No exact matches.



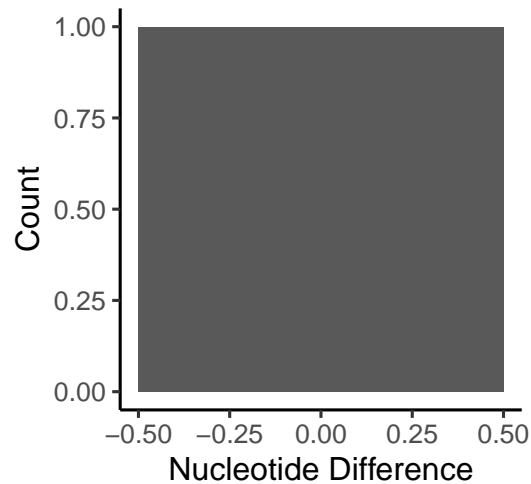
IGHV4-31*02

1720 sequences assigned
1443 (83.9%) exact matches, in which:
1425 unique CDR3
6 unique J



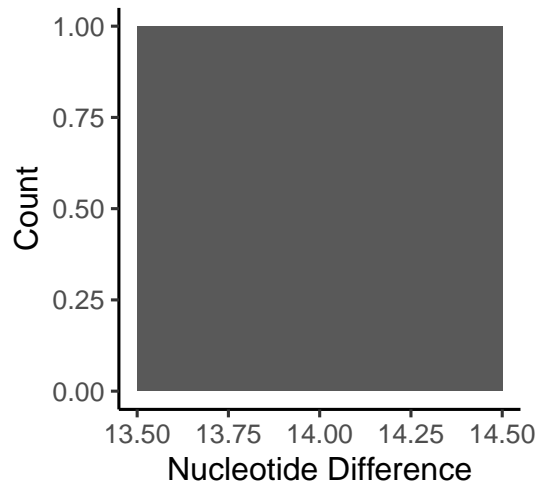
IGHV4-28*03

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



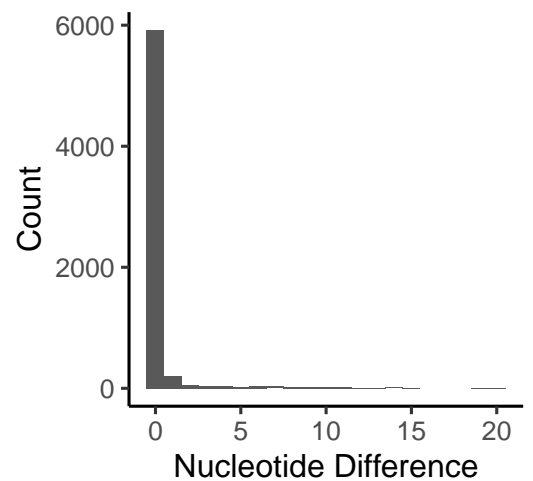
IGHV4-30-2*01

2 sequences assigned
No exact matches.



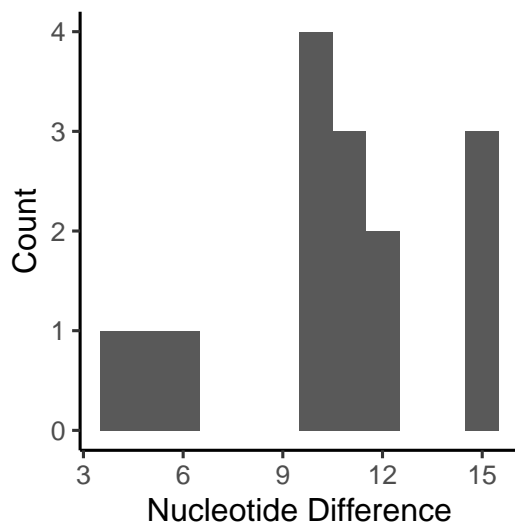
IGHV4-34*01_02

6475 sequences assigned
5920 (91.4%) exact matches, in which:
5843 unique CDR3
6 unique J



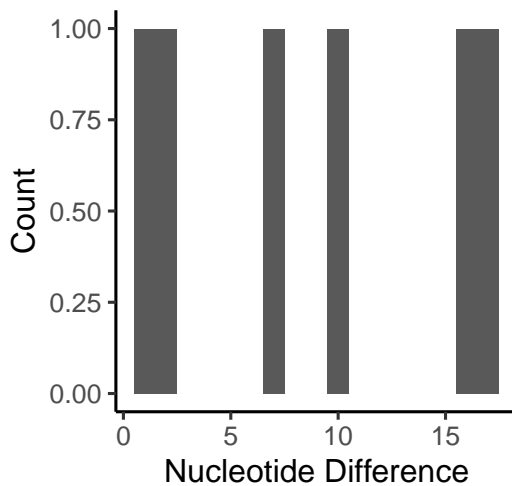
IGHV4-39*02

15 sequences assigned
No exact matches.



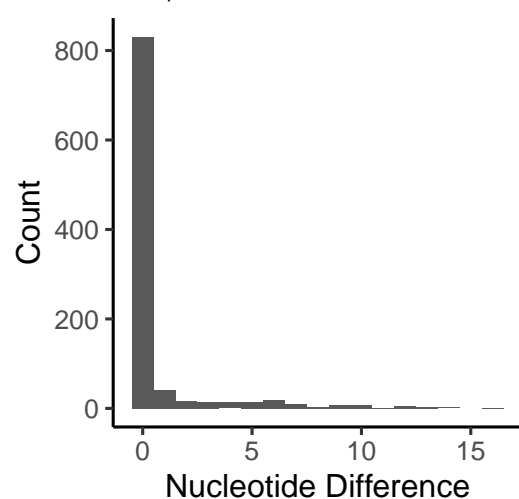
IGHV4-59*08

7 sequences assigned
No exact matches.



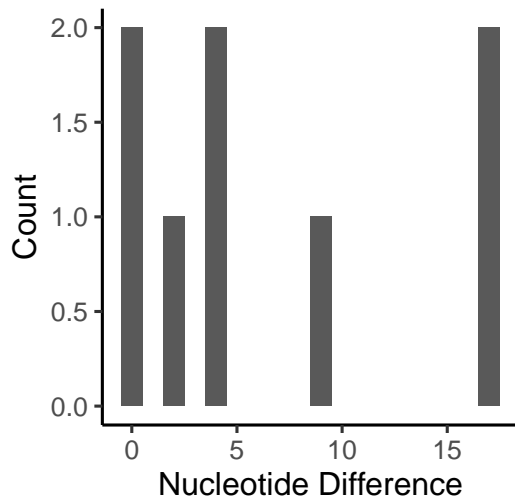
IGHV4-61*01

991 sequences assigned
831 (83.9%) exact matches, in which:
824 unique CDR3
6 unique J



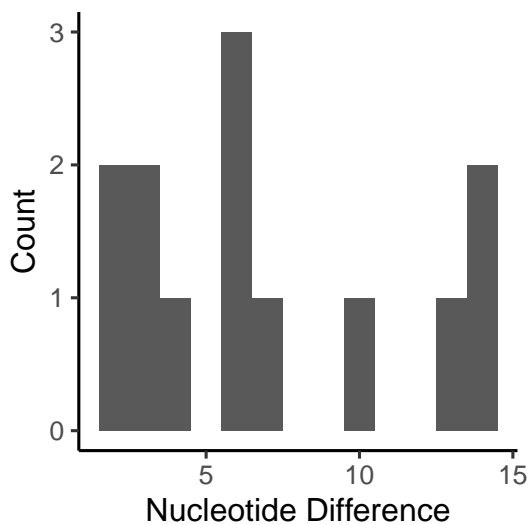
IGHV4-39*07

13 sequences assigned
2 (15.4%) exact matches, in which:
2 unique CDR3
1 unique J



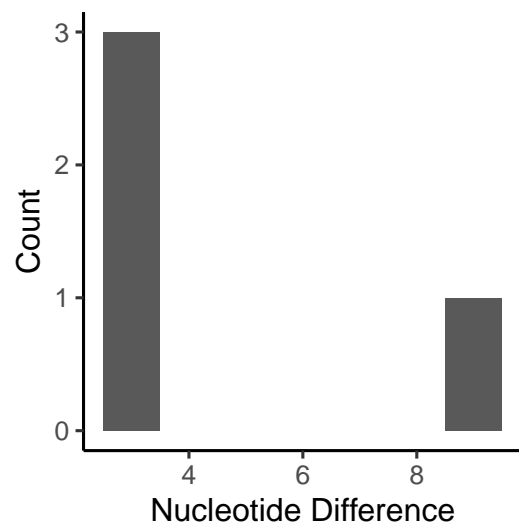
IGHV4-59*11

13 sequences assigned
No exact matches.



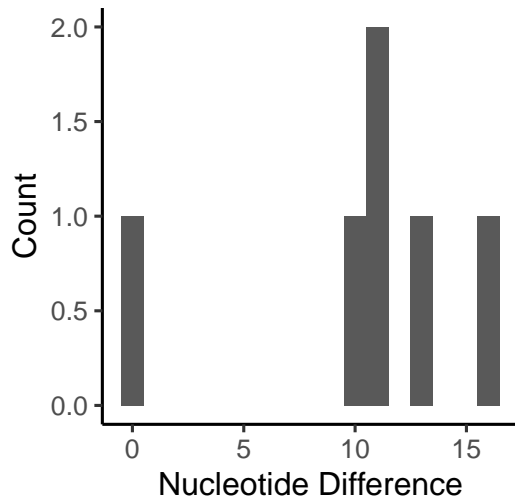
IGHV4/OR15-8*01

5 sequences assigned
No exact matches.



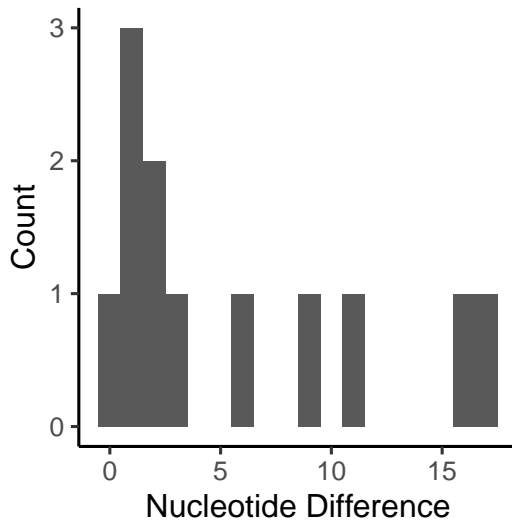
IGHV4-59*02

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



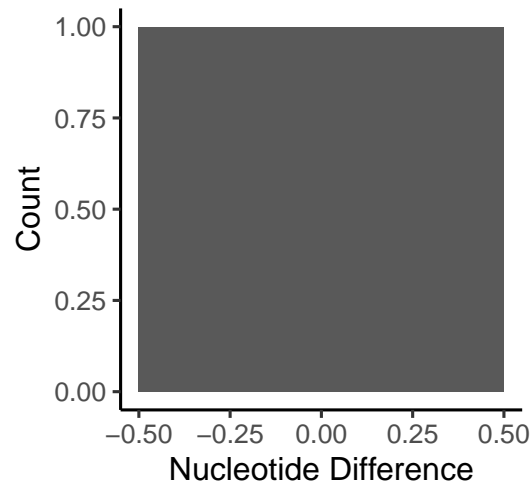
IGHV4-59*12

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



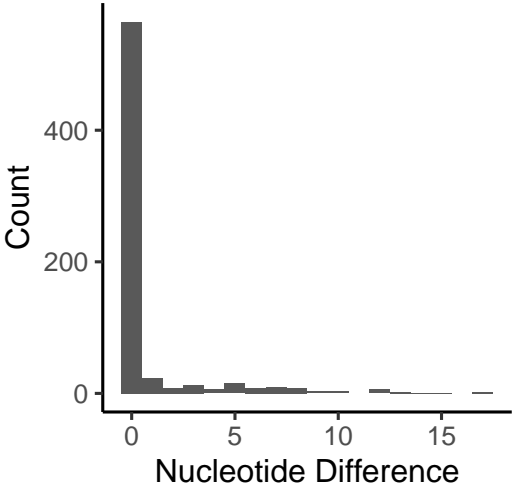
IGHV5-51*01_03

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



IGHV6-1*01_02

675 sequences assigned
565 (83.7%) exact matches, in which:
561 unique CDR3
6 unique J





[illegible]