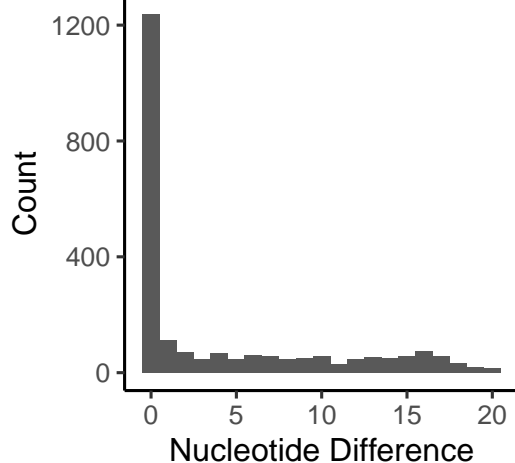


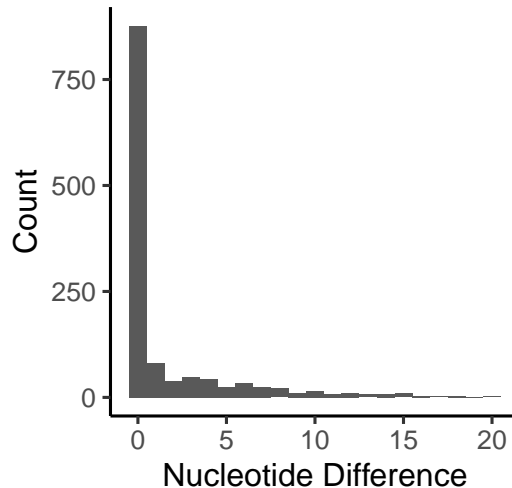
IGHV1-2*02

2344 sequences assigned
1237 (52.8%) exact matches, in which:
1228 unique CDR3
6 unique J



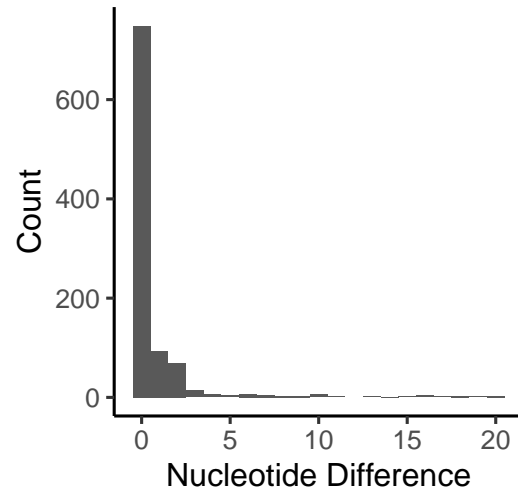
IGHV1-8*01

1285 sequences assigned
877 (68.2%) exact matches, in which:
870 unique CDR3
6 unique J



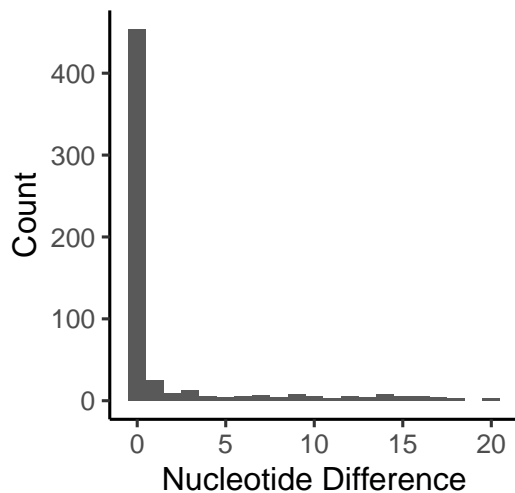
IGHV1-24*01

990 sequences assigned
749 (75.7%) exact matches, in which:
741 unique CDR3
6 unique J



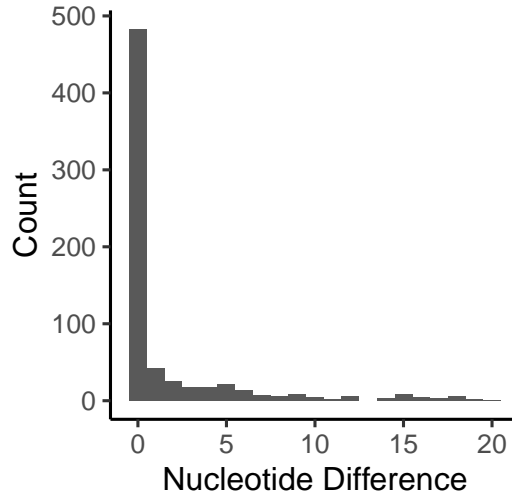
IGHV1-2*04

593 sequences assigned
454 (76.6%) exact matches, in which:
449 unique CDR3
6 unique J



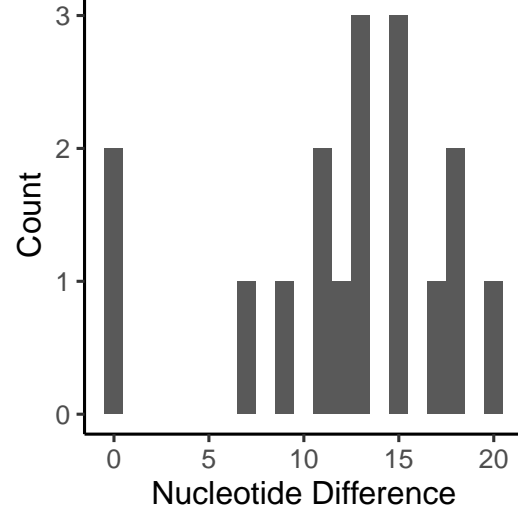
IGHV1-8*03

690 sequences assigned
483 (70%) exact matches, in which:
482 unique CDR3
6 unique J



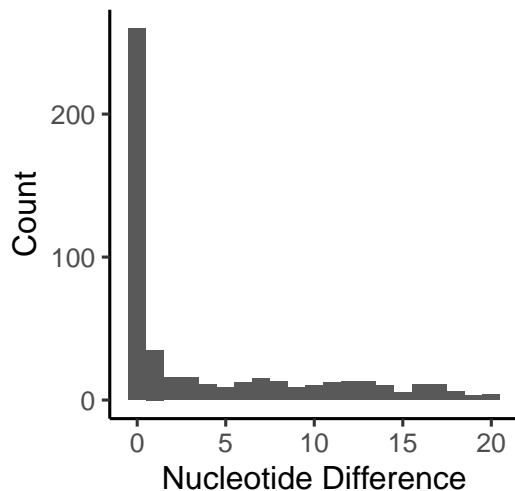
IGHV1-45*02

30 sequences assigned
2 (6.7%) exact matches, in which:
2 unique CDR3
2 unique J



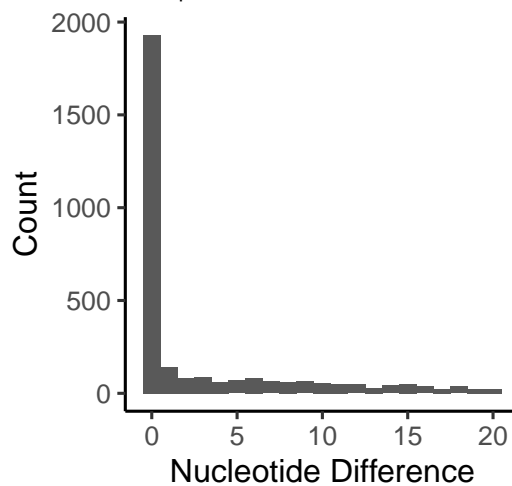
IGHV1-3*01_05

513 sequences assigned
260 (50.7%) exact matches, in which:
254 unique CDR3
6 unique J



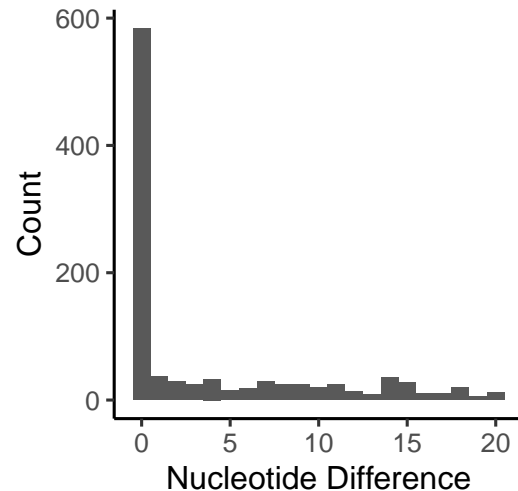
IGHV1-18*04

3181 sequences assigned
1930 (60.7%) exact matches, in which:
1918 unique CDR3
6 unique J



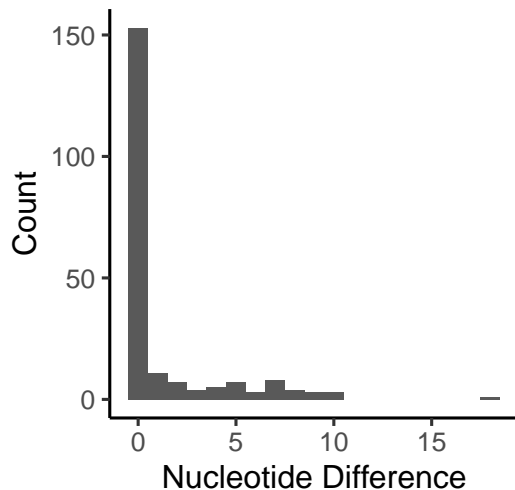
IGHV1-46*01

1085 sequences assigned
584 (53.8%) exact matches, in which:
578 unique CDR3
6 unique J



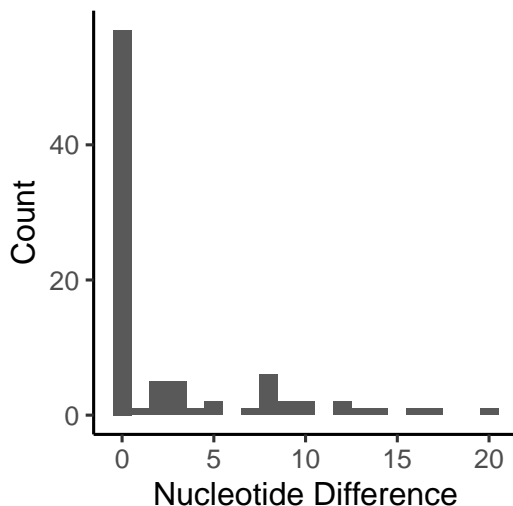
IGHV1–58*01_03

210 sequences assigned
153 (72.9%) exact matches, in which:
153 unique CDR3
6 unique J



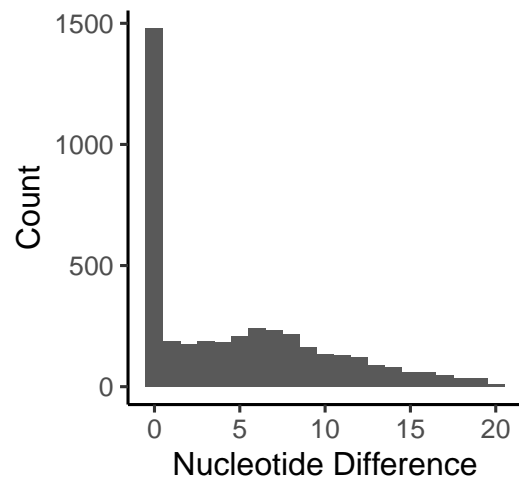
IGHV2–26*01

92 sequences assigned
57 (62%) exact matches, in which:
57 unique CDR3
6 unique J



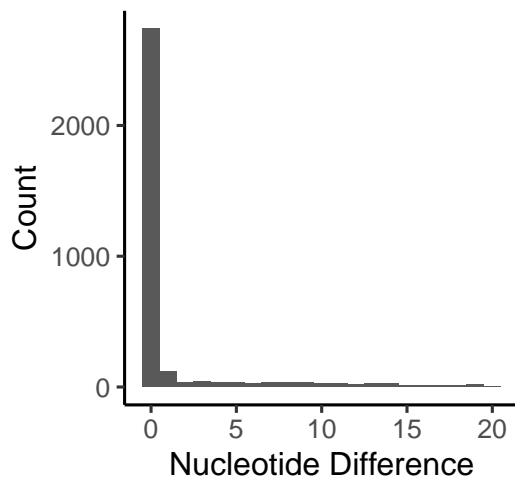
IGHV3–7*01

4137 sequences assigned
1479 (35.8%) exact matches, in which:
1418 unique CDR3
6 unique J



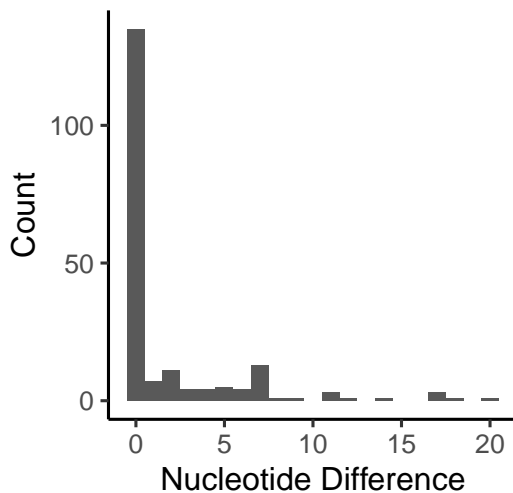
IGHV1–69*01_12_13

3424 sequences assigned
2740 (80%) exact matches, in which:
2728 unique CDR3
6 unique J



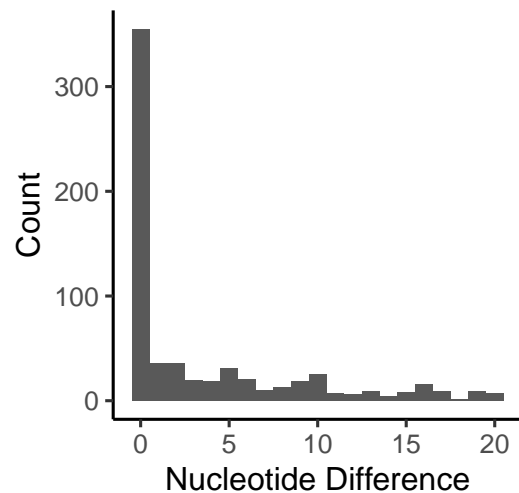
IGHV2–70*01

195 sequences assigned
135 (69.2%) exact matches, in which:
125 unique CDR3
5 unique J



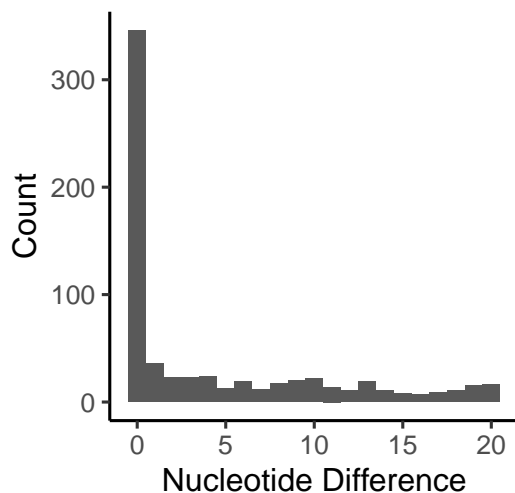
IGHV3–9*01

677 sequences assigned
355 (52.4%) exact matches, in which:
337 unique CDR3
6 unique J



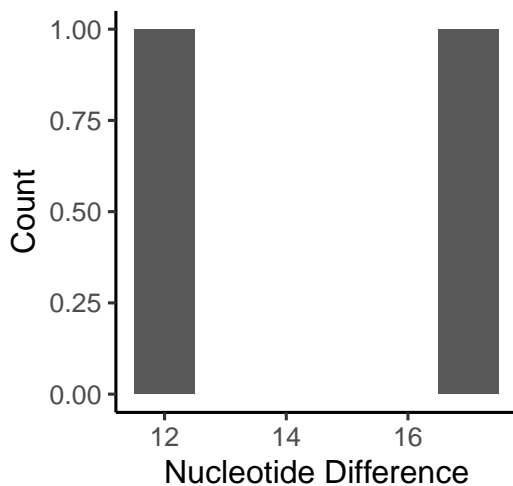
IGHV2–5*01

723 sequences assigned
346 (47.9%) exact matches, in which:
341 unique CDR3
6 unique J



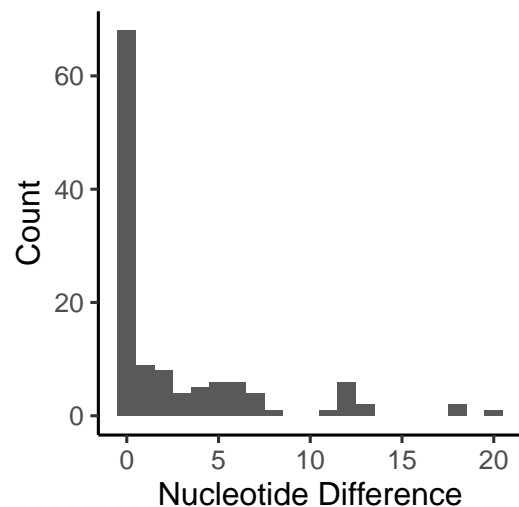
IGHV2–70D*14

2 sequences assigned
No exact matches.



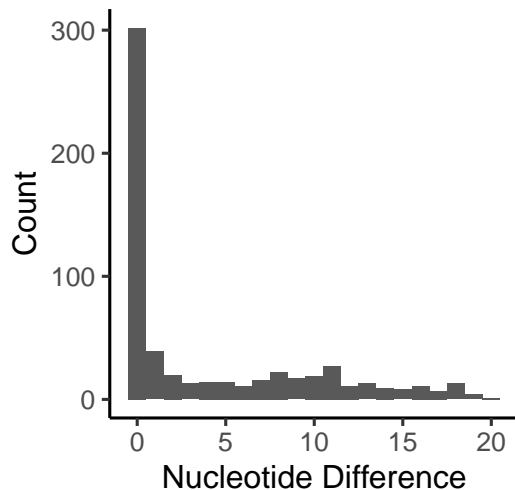
IGHV3–9*03

124 sequences assigned
68 (54.8%) exact matches, in which:
67 unique CDR3
5 unique J



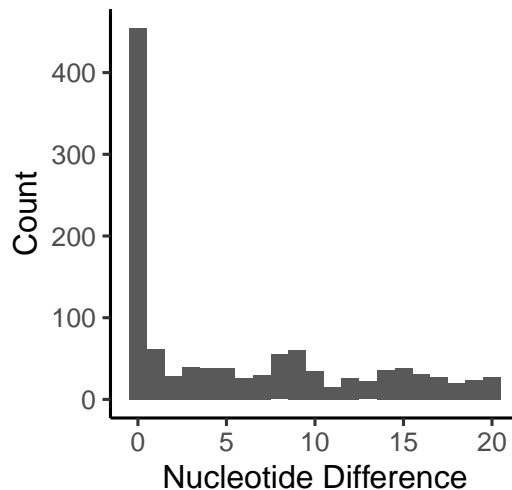
IGHV3-11*01

615 sequences assigned
302 (49.1%) exact matches, in which:
273 unique CDR3
6 unique J



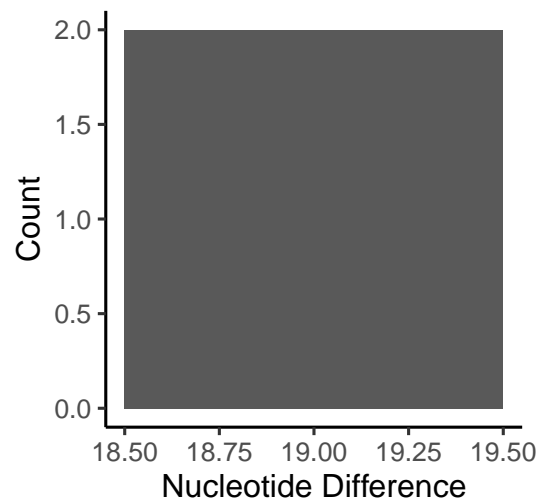
IGHV3-15*01_02

1235 sequences assigned
455 (36.8%) exact matches, in which:
419 unique CDR3
6 unique J



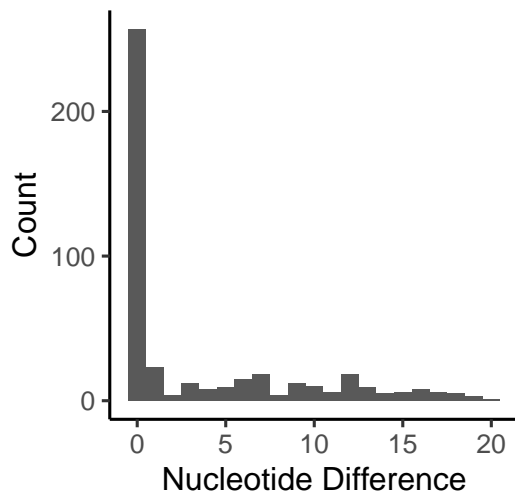
IGHV3-22*01_02

2 sequences assigned
No exact matches.



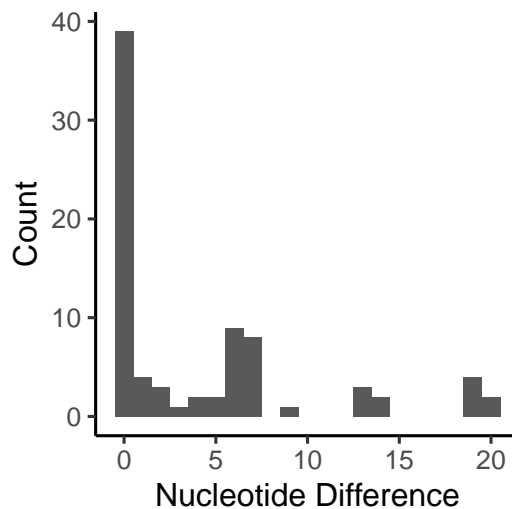
IGHV3-11*04

466 sequences assigned
257 (55.2%) exact matches, in which:
235 unique CDR3
6 unique J



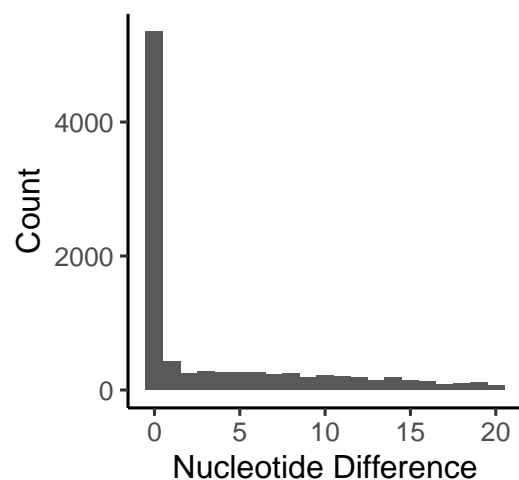
IGHV3-20*01_02

80 sequences assigned
39 (48.8%) exact matches, in which:
36 unique CDR3
5 unique J



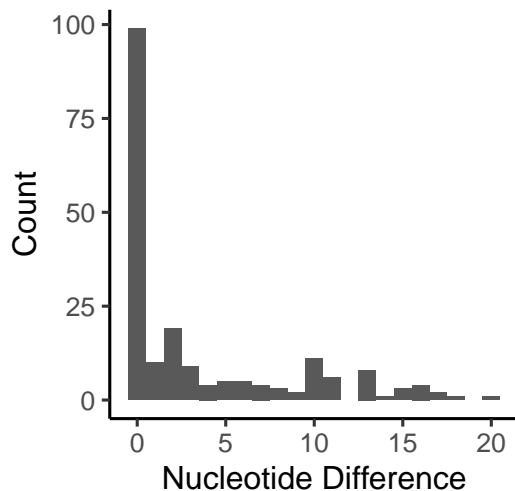
IGHV3-23*01_04

9664 sequences assigned
5348 (55.3%) exact matches, in which:
5174 unique CDR3
6 unique J



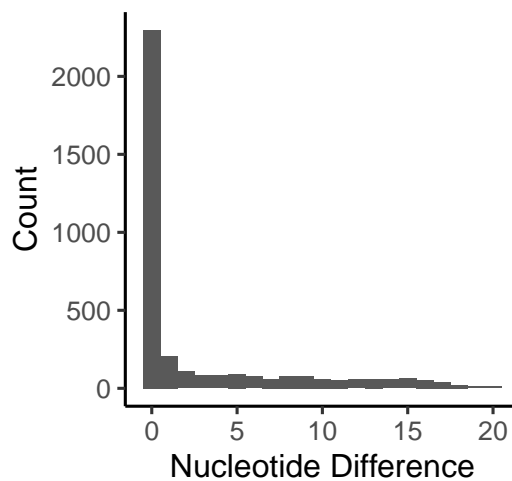
IGHV3-13*01

200 sequences assigned
99 (49.5%) exact matches, in which:
95 unique CDR3
5 unique J



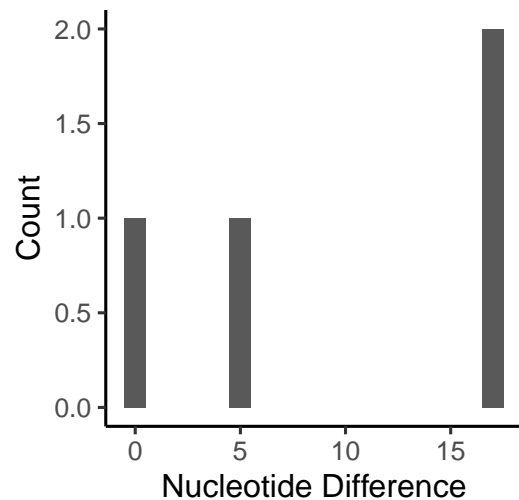
IGHV3-21*01_02

3902 sequences assigned
2297 (58.9%) exact matches, in which:
2207 unique CDR3
6 unique J



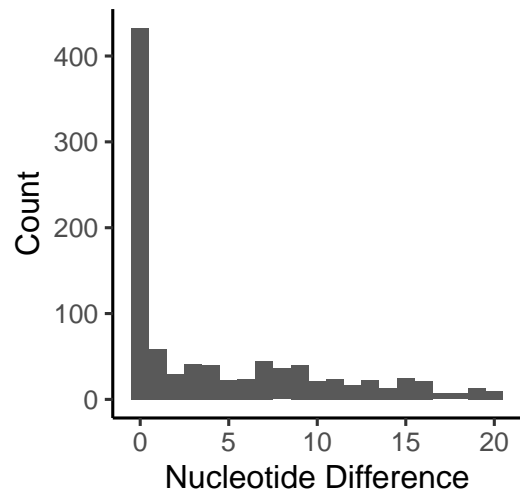
IGHV3-30-3*01

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J



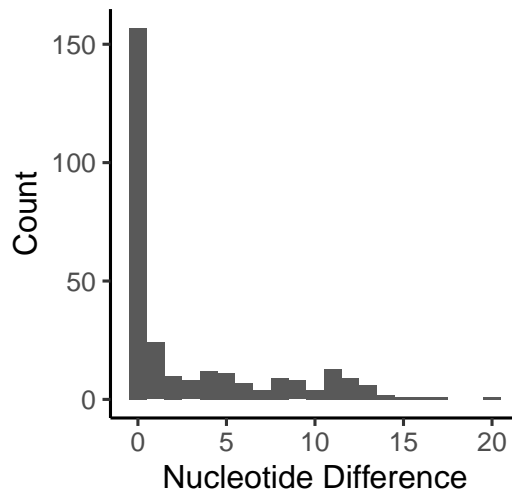
IGHV3–30*18

1004 sequences assigned
433 (43.1%) exact matches, in which:
398 unique CDR3
6 unique J



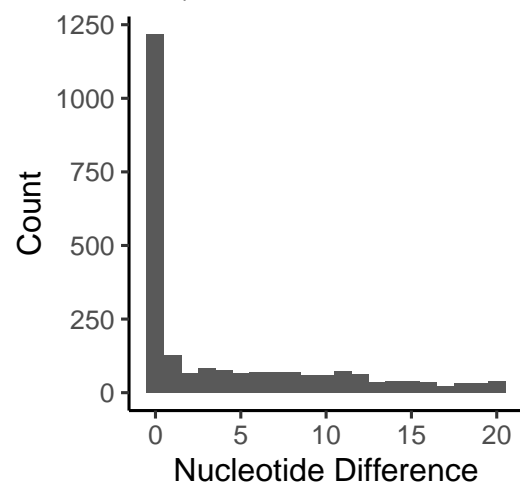
IGHV3–43*01

290 sequences assigned
157 (54.1%) exact matches, in which:
143 unique CDR3
6 unique J



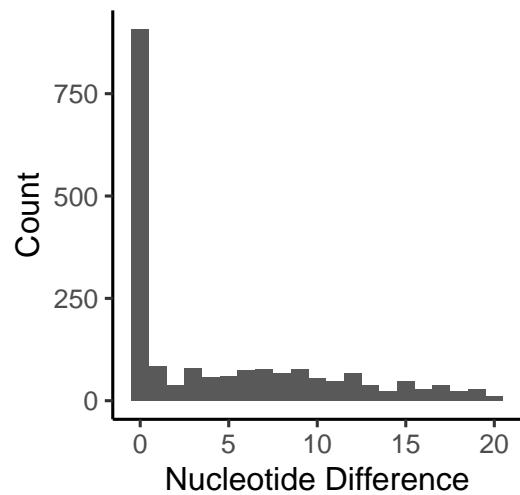
IGHV3–53*01_02

2499 sequences assigned
1217 (48.7%) exact matches, in which:
1168 unique CDR3
6 unique J



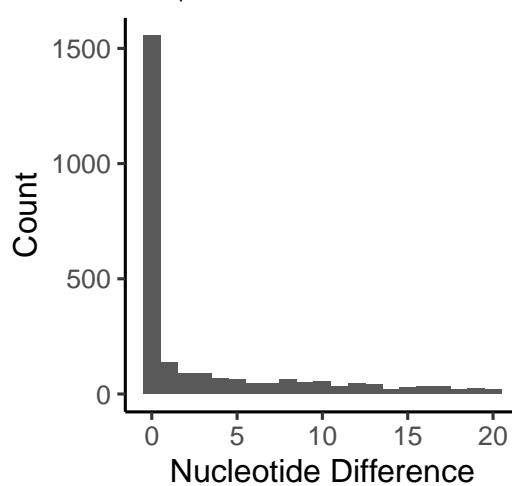
IGHV3–33*01

2031 sequences assigned
908 (44.7%) exact matches, in which:
873 unique CDR3
6 unique J



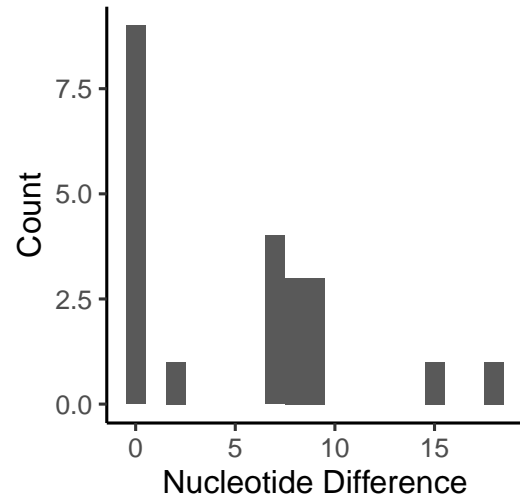
IGHV3–48*02

2608 sequences assigned
1555 (59.6%) exact matches, in which:
1458 unique CDR3
6 unique J



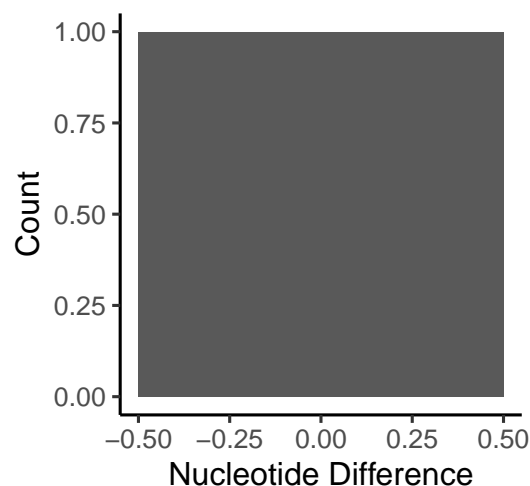
IGHV3–64*02_07

22 sequences assigned
9 (40.9%) exact matches, in which:
9 unique CDR3
3 unique J



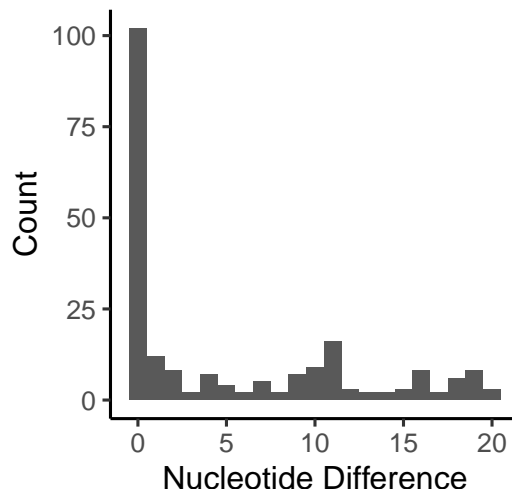
IGHV3–35*01

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



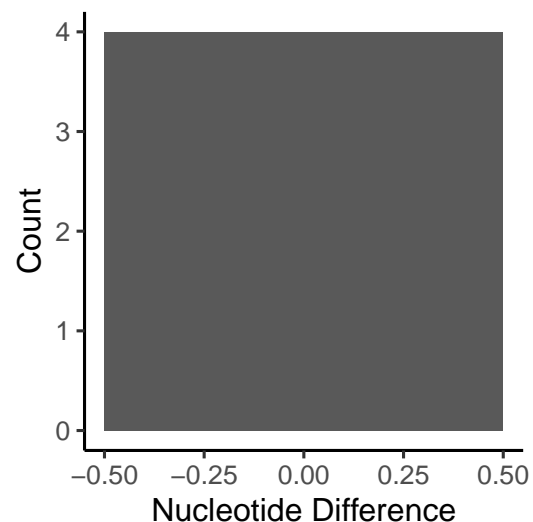
IGHV3–49*03_05

235 sequences assigned
102 (43.4%) exact matches, in which:
95 unique CDR3
5 unique J



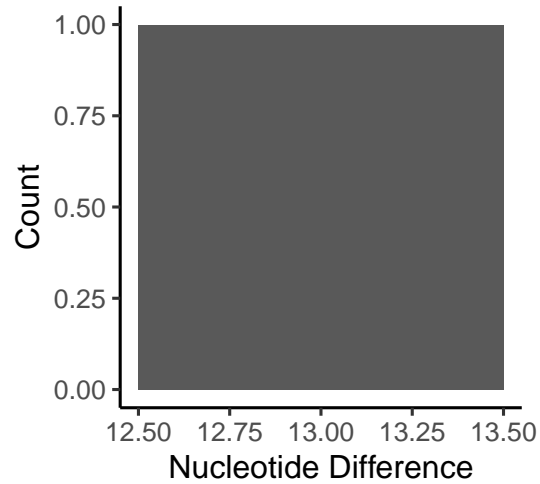
IGHV3–66*03

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



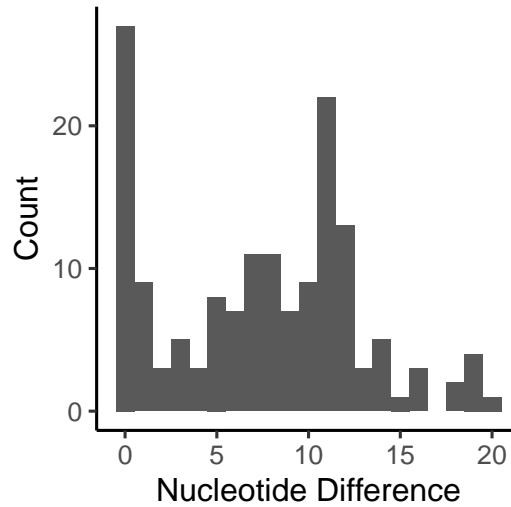
IGHV3-66*04

1 sequences assigned
No exact matches.



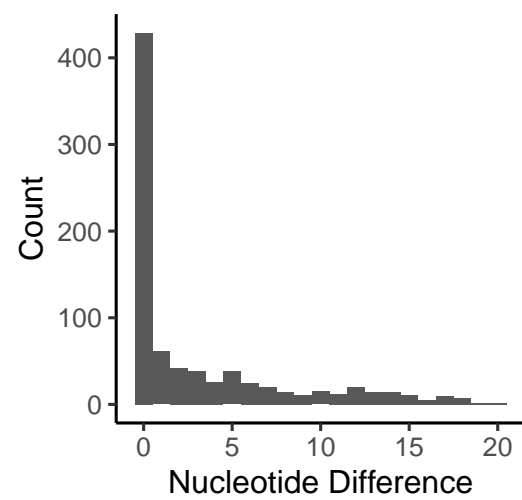
IGHV3-72*01

159 sequences assigned
27 (17%) exact matches, in which:
23 unique CDR3
5 unique J



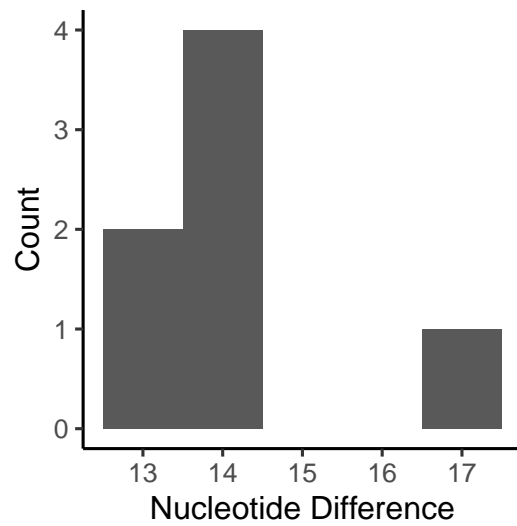
IGHV3-74*01_02

834 sequences assigned
429 (51.4%) exact matches, in which:
406 unique CDR3
6 unique J



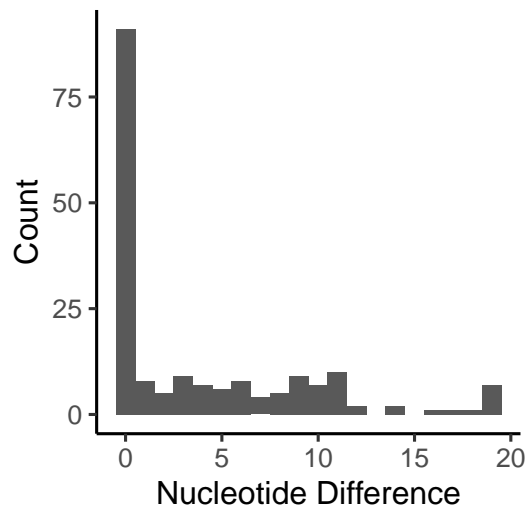
IGHV3-69-1*01

21 sequences assigned
No exact matches.



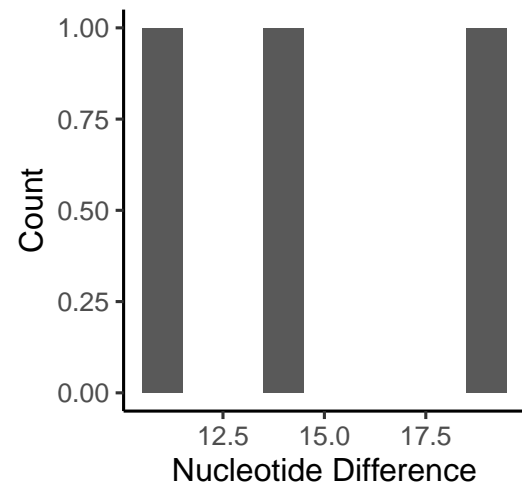
IGHV3-73*01_02

186 sequences assigned
91 (48.9%) exact matches, in which:
90 unique CDR3
6 unique J



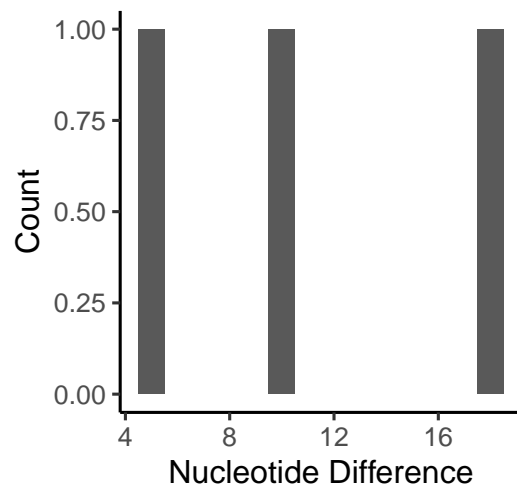
IGHV3-64D*06

3 sequences assigned
No exact matches.



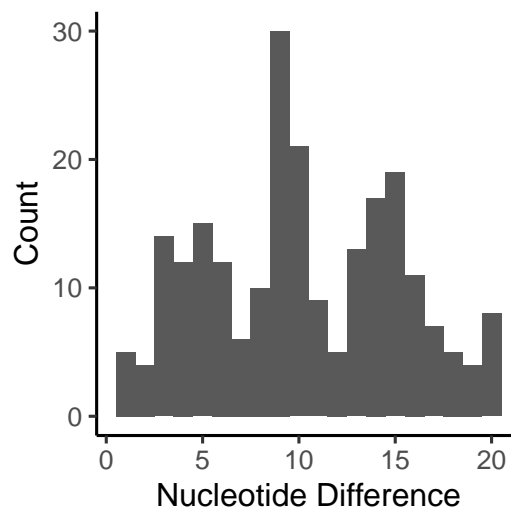
IGHV3-69-1*02

4 sequences assigned
No exact matches.



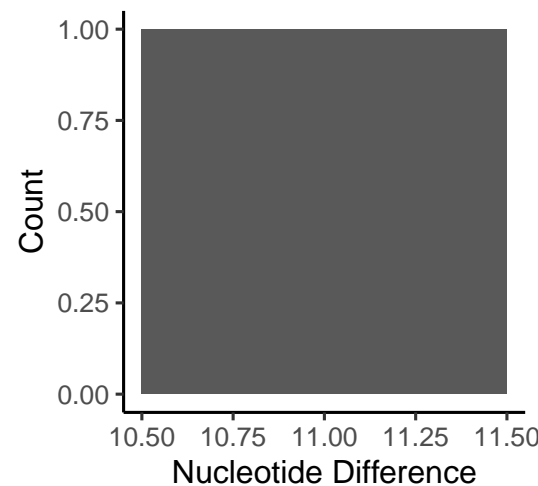
IGHV3-74*03

267 sequences assigned
No exact matches.



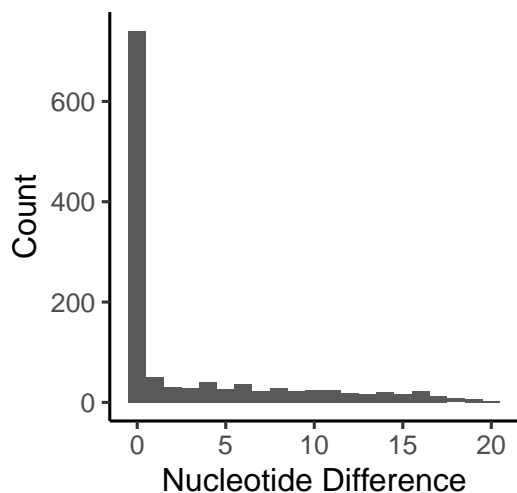
IGHV3-64D*09

1 sequences assigned
No exact matches.



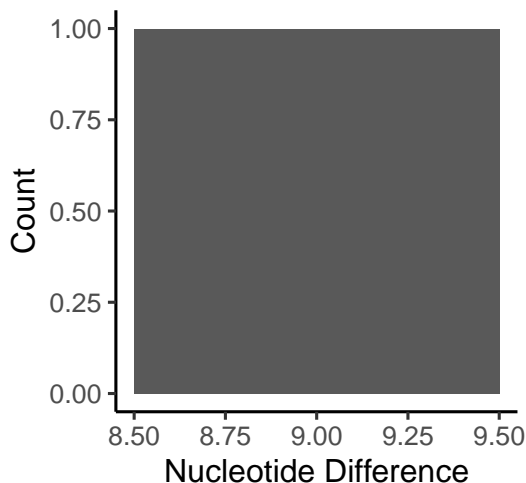
IGHV4-4*07

1239 sequences assigned
741 (59.8%) exact matches, in which:
708 unique CDR3
6 unique J



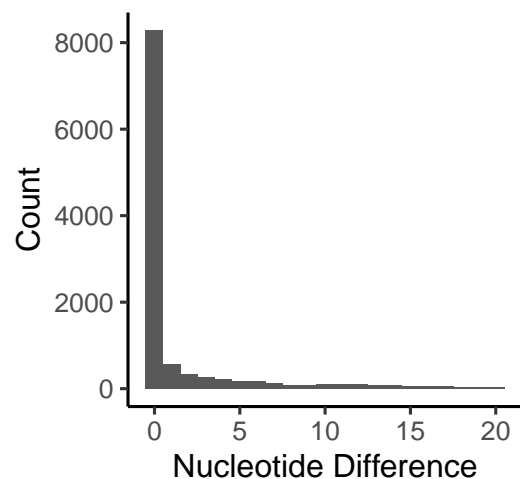
IGHV4-30-4*01

2 sequences assigned
No exact matches.



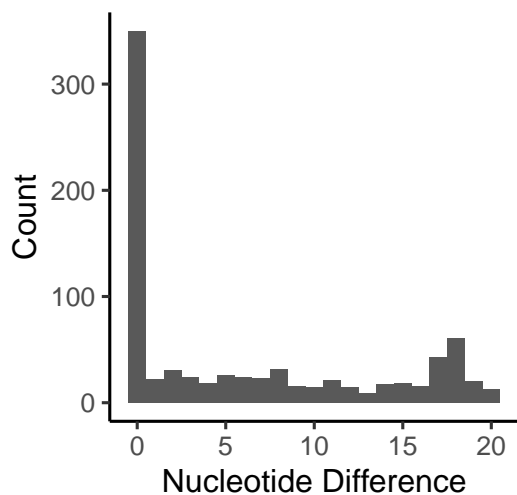
IGHV4-34*01_02

11237 sequences assigned
8283 (73.7%) exact matches, in which:
8100 unique CDR3
6 unique J



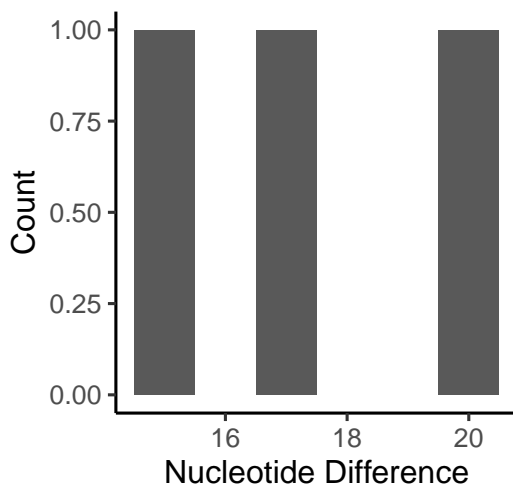
IGHV4-4*02_03

887 sequences assigned
350 (39.5%) exact matches, in which:
345 unique CDR3
6 unique J



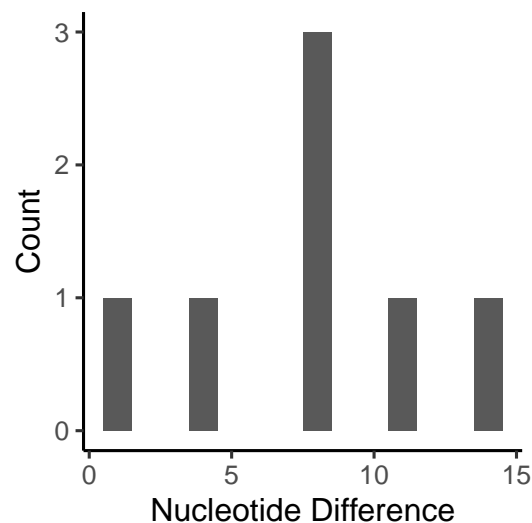
IGHV4-30-2*03

5 sequences assigned
No exact matches.



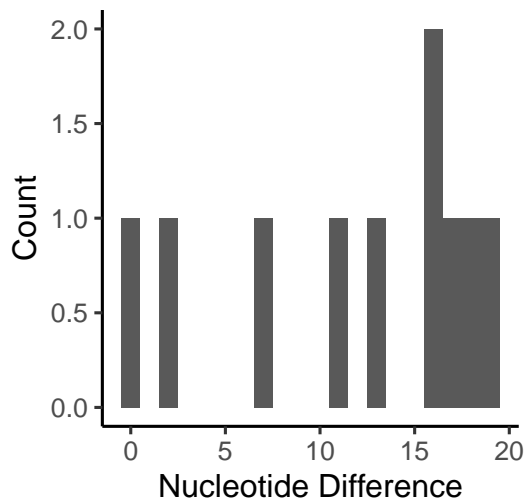
IGHV4-38-2*02

10 sequences assigned
No exact matches.



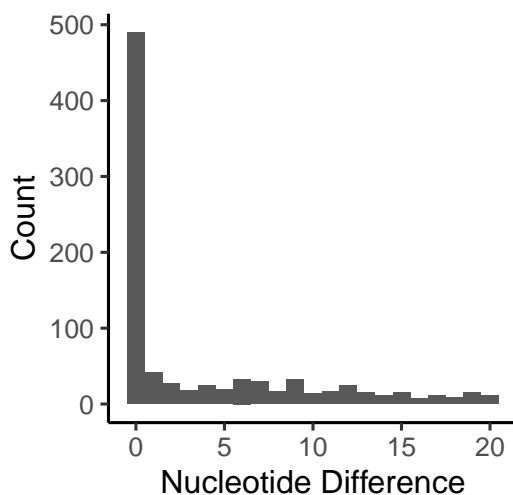
IGHV4-28*01_07

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



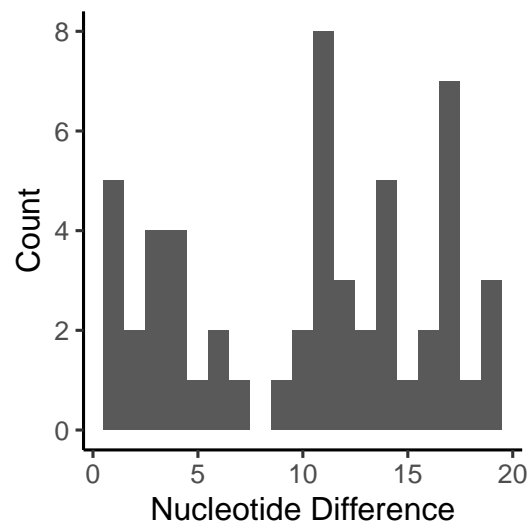
IGHV4-31*02

927 sequences assigned
490 (52.9%) exact matches, in which:
482 unique CDR3
6 unique J



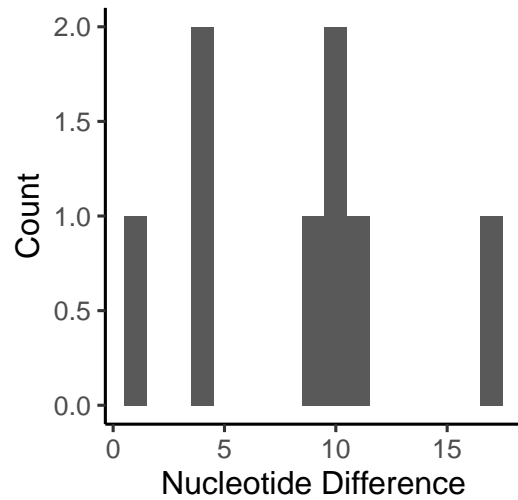
IGHV4-39*02

77 sequences assigned
No exact matches.



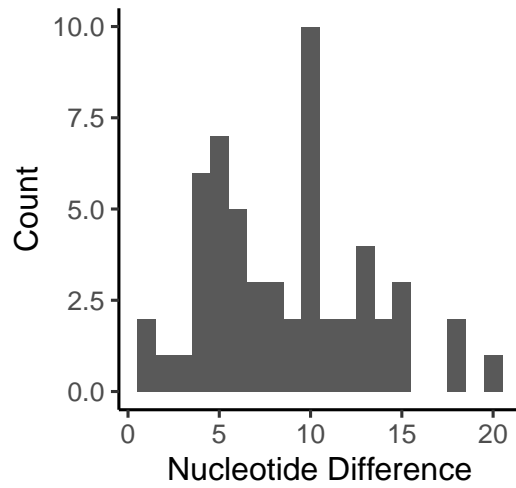
IGHV4–39*07

13 sequences assigned
No exact matches.



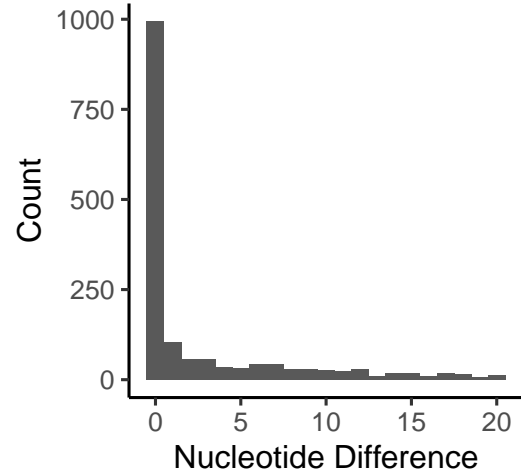
IGHV4–59*11

61 sequences assigned
No exact matches.



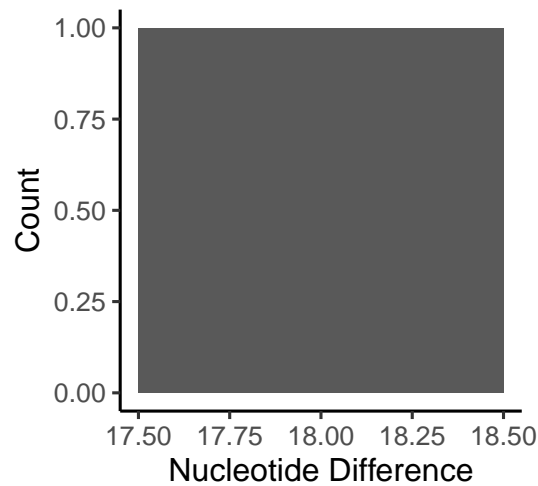
IGHV4–61*01

1676 sequences assigned
994 (59.3%) exact matches, in which:
962 unique CDR3
6 unique J



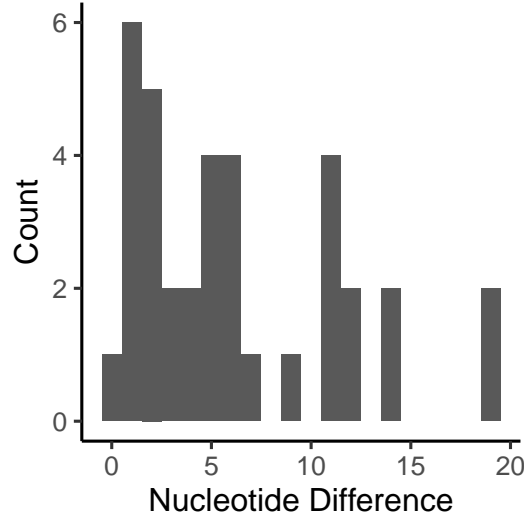
IGHV4–55*07

1 sequences assigned
No exact matches.



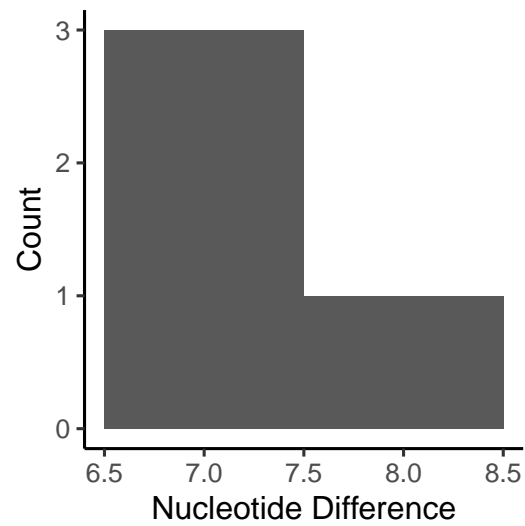
IGHV4–59*12

40 sequences assigned
1 (2.5%) exact matches, in which:
1 unique CDR3
1 unique J



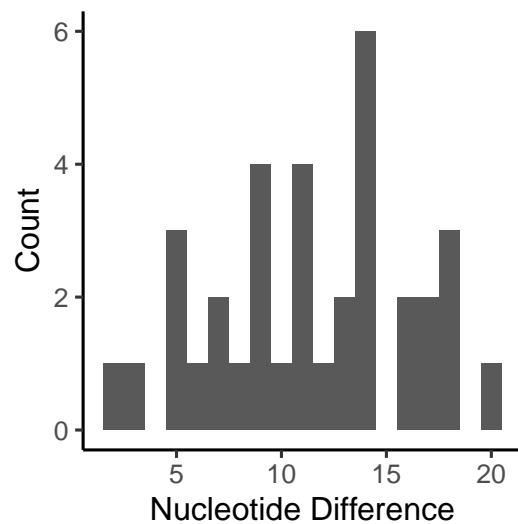
IGHV4/OR15–8*01

8 sequences assigned
No exact matches.



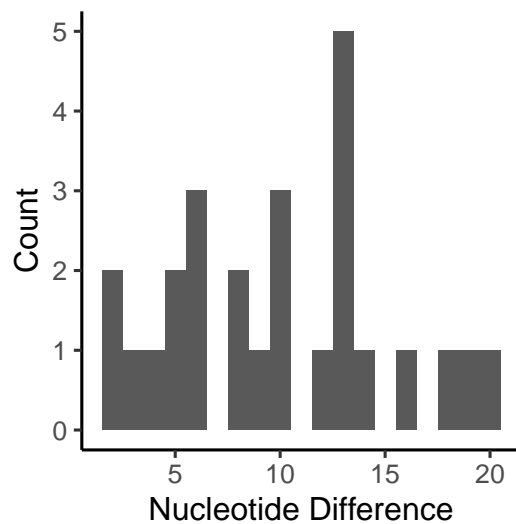
IGHV4–59*02

42 sequences assigned
No exact matches.



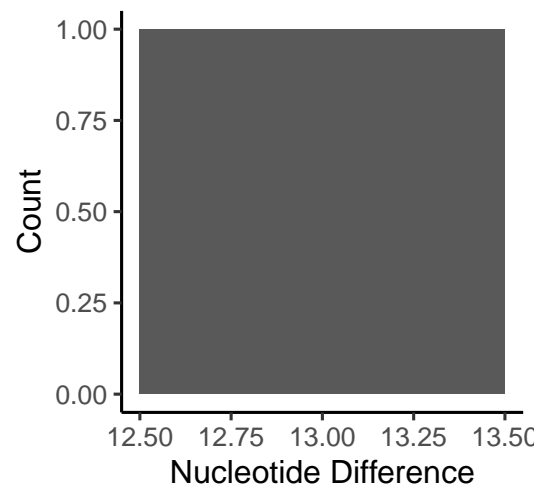
IGHV4–59*13

33 sequences assigned
No exact matches.



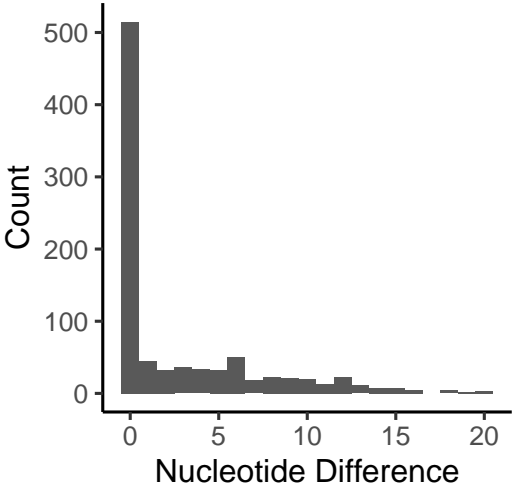
IGHV4/OR15–8*03

1 sequences assigned
No exact matches.



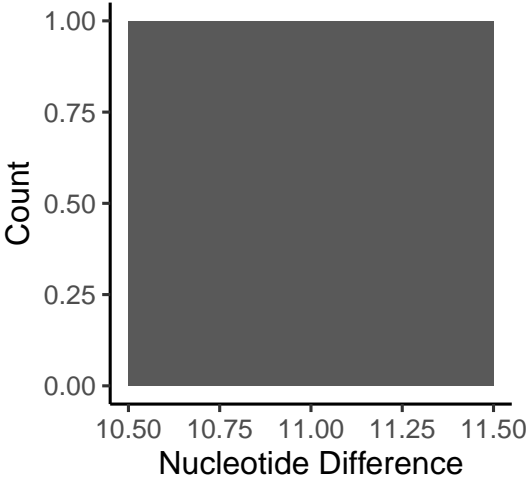
IGHV6-1*01_02

929 sequences assigned
515 (55.4%) exact matches, in which:
512 unique CDR3
6 unique J



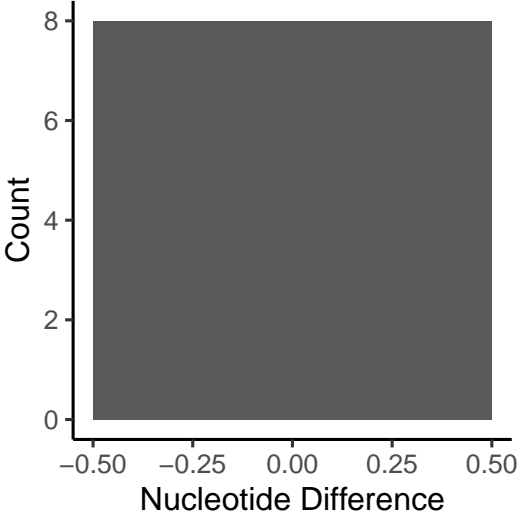
IGHV3/OR16-6*02

1 sequences assigned
No exact matches.



IGHV7-4-1*01

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





Warning – no inferred sequences found.