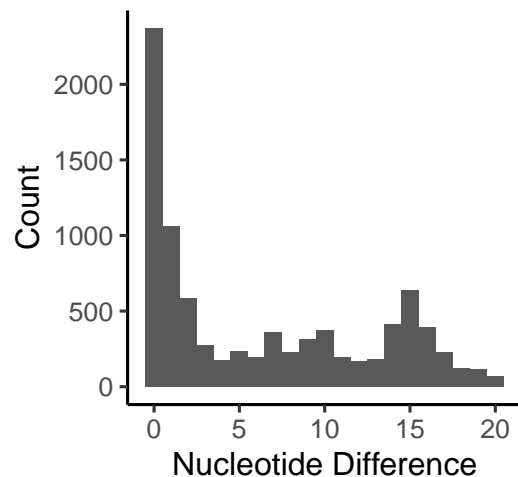


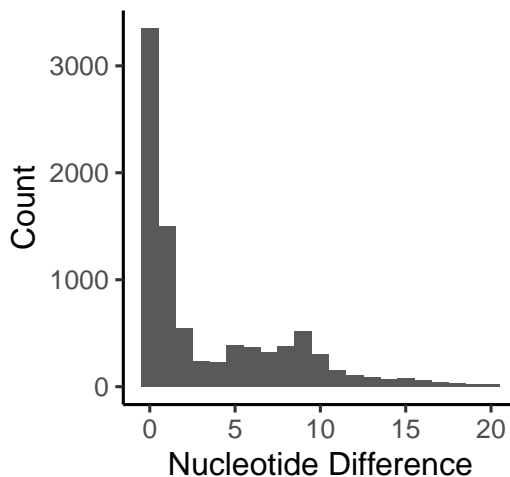
IGHV1-2*02

9153 sequences assigned
2370 (25.9%) exact matches, in which:
2250 unique CDR3
6 unique J



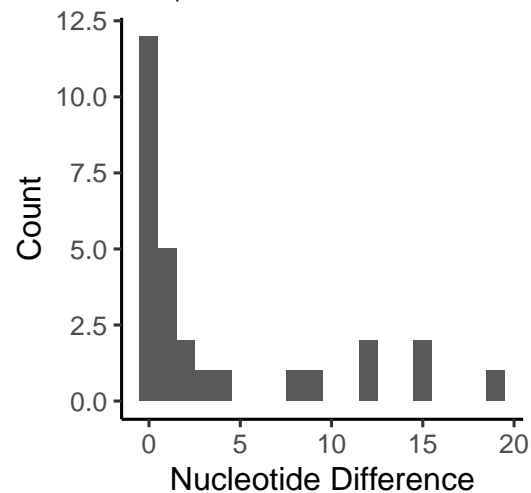
IGHV1-8*01

8994 sequences assigned
3350 (37.2%) exact matches, in which:
3153 unique CDR3
6 unique J



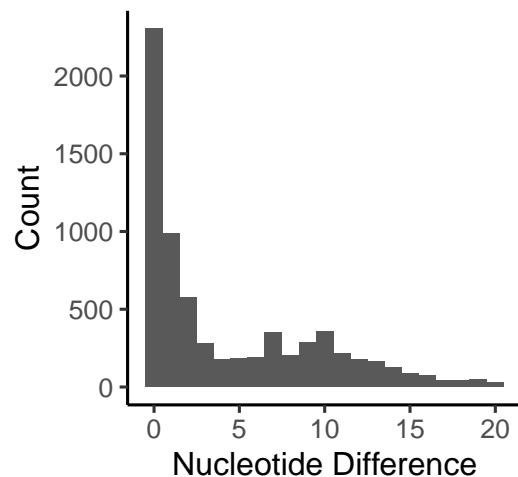
IGHV1-45*02

28 sequences assigned
12 (42.9%) exact matches, in which:
11 unique CDR3
4 unique J



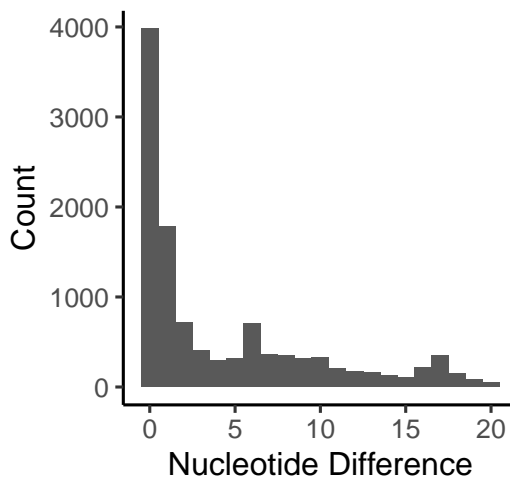
IGHV1-2*06

7106 sequences assigned
2304 (32.4%) exact matches, in which:
2184 unique CDR3
6 unique J



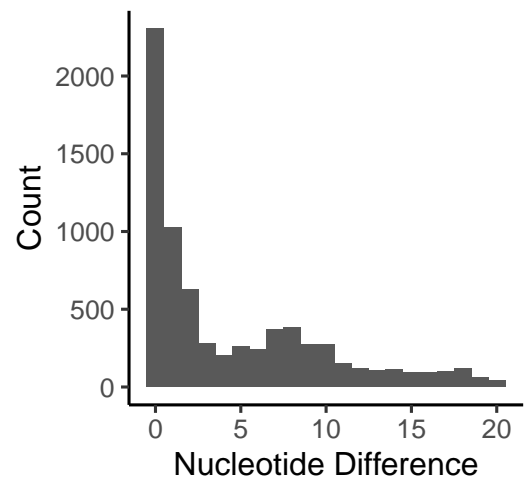
IGHV1-18*01

11578 sequences assigned
3980 (34.4%) exact matches, in which:
3738 unique CDR3
6 unique J



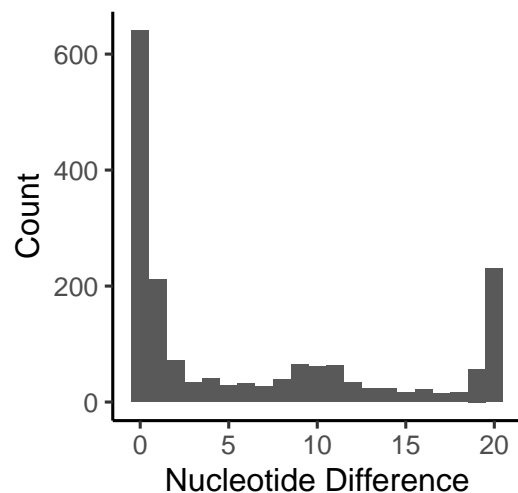
IGHV1-46*01

7718 sequences assigned
2304 (29.9%) exact matches, in which:
2180 unique CDR3
6 unique J



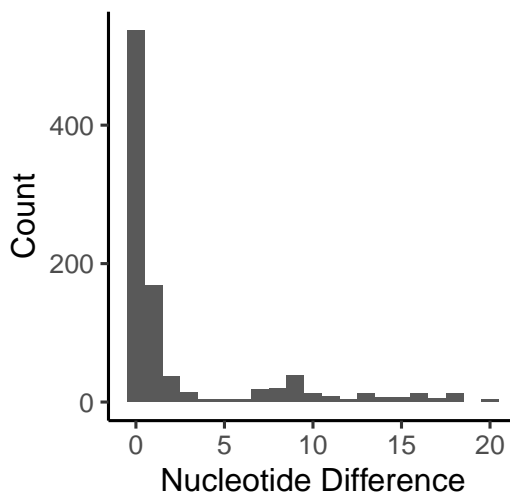
IGHV1-3*01_05

2686 sequences assigned
641 (23.9%) exact matches, in which:
596 unique CDR3
6 unique J



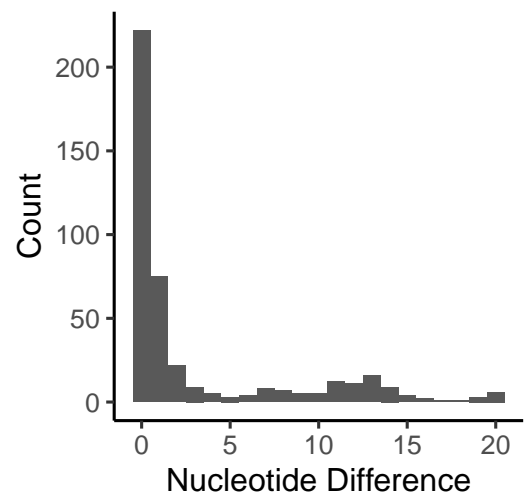
IGHV1-24*01

1008 sequences assigned
537 (53.3%) exact matches, in which:
495 unique CDR3
6 unique J



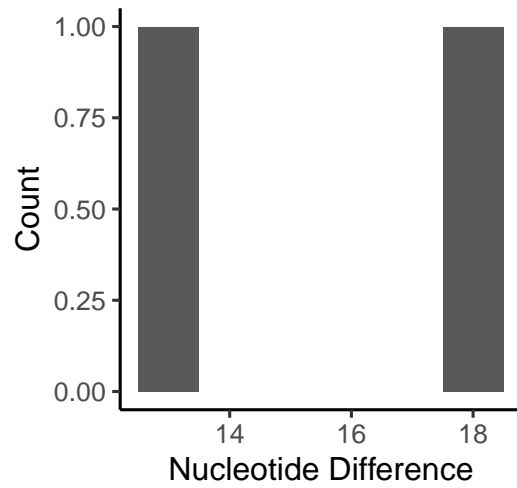
IGHV1-58*01_03

442 sequences assigned
222 (50.2%) exact matches, in which:
206 unique CDR3
6 unique J



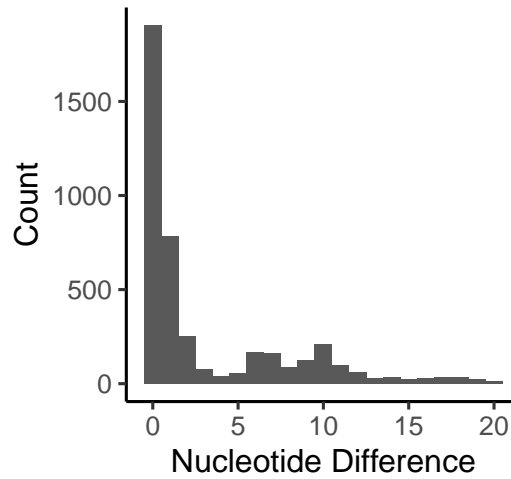
IGHV1-68*02_03

2 sequences assigned
No exact matches.



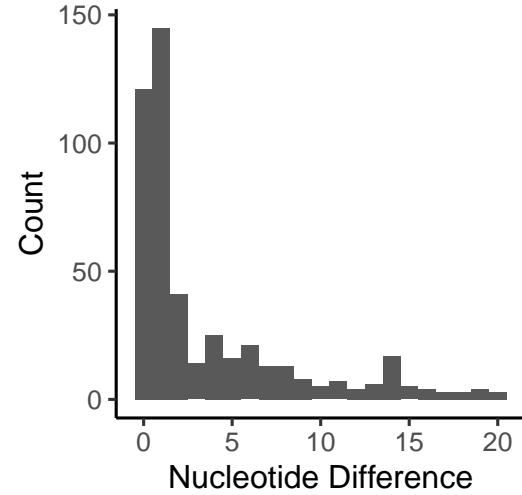
IGHV1-69*04_09

4425 sequences assigned
1904 (43%) exact matches, in which:
1834 unique CDR3
6 unique J



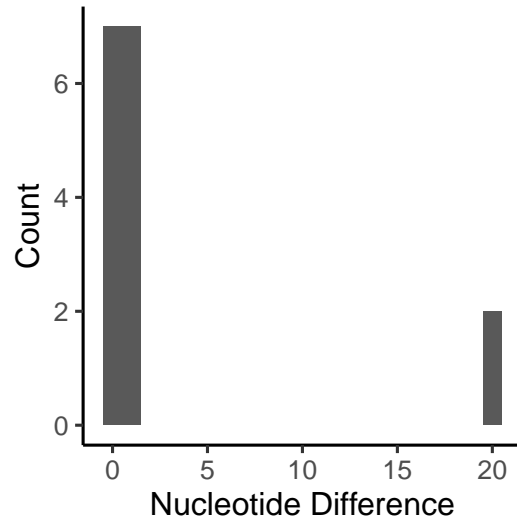
IGHV2-5*01

498 sequences assigned
121 (24.3%) exact matches, in which:
108 unique CDR3
5 unique J



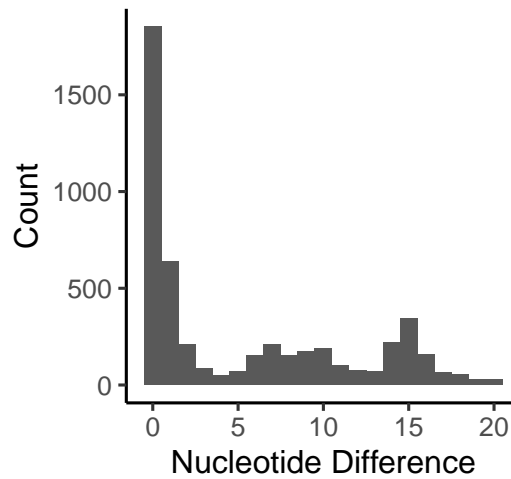
IGHV1-69-2*01

19 sequences assigned
7 (36.8%) exact matches, in which:
7 unique CDR3
2 unique J



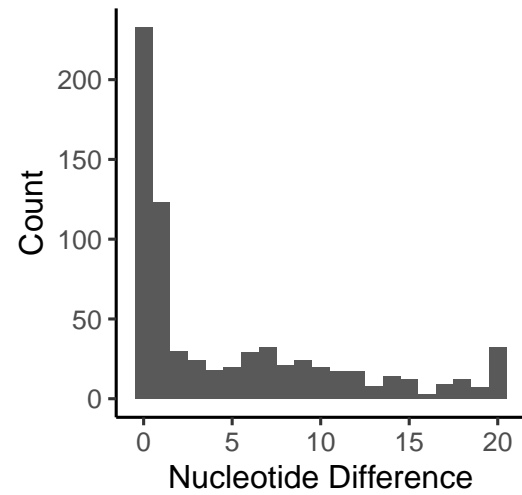
IGHV1-69*06_14

5048 sequences assigned
1852 (36.7%) exact matches, in which:
1801 unique CDR3
6 unique J



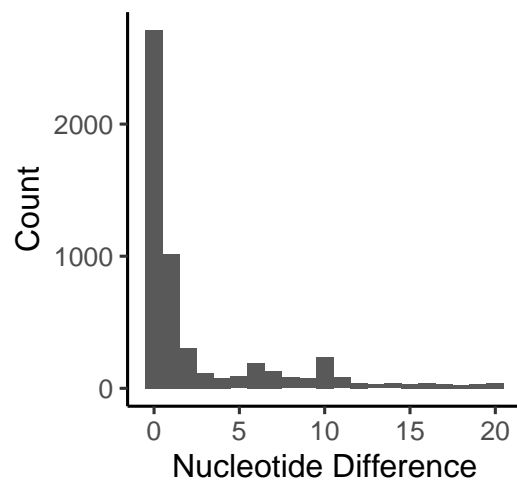
IGHV2-5*02

825 sequences assigned
233 (28.2%) exact matches, in which:
222 unique CDR3
6 unique J



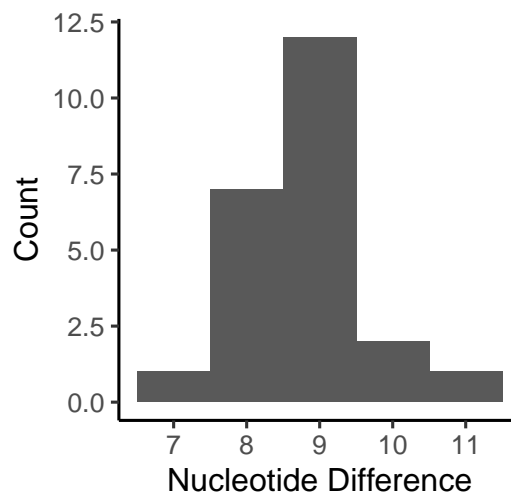
IGHV1-69*01_12_13

5573 sequences assigned
2712 (48.7%) exact matches, in which:
2606 unique CDR3
6 unique J



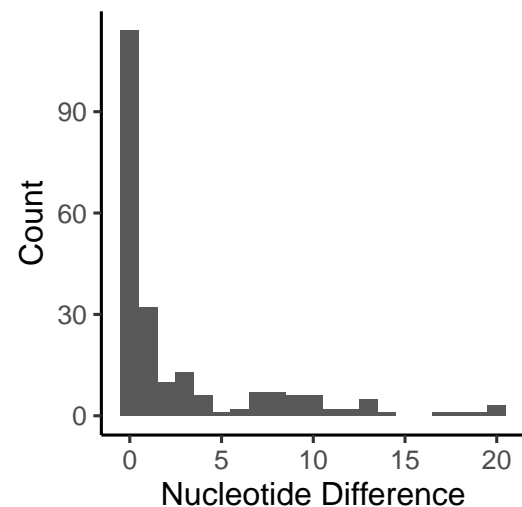
IGHV1-NL1*01

23 sequences assigned
No exact matches.



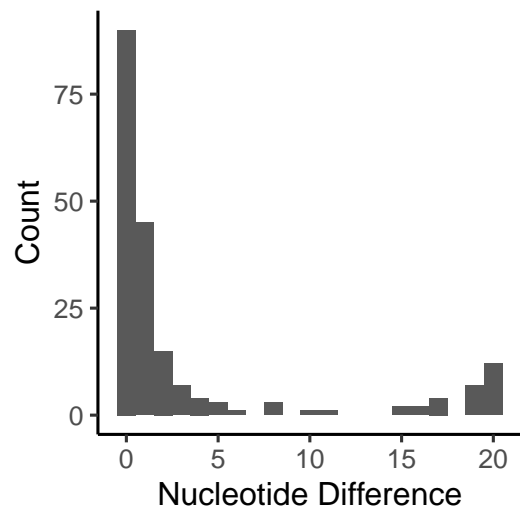
IGHV2-26*01

228 sequences assigned
114 (50%) exact matches, in which:
107 unique CDR3
5 unique J



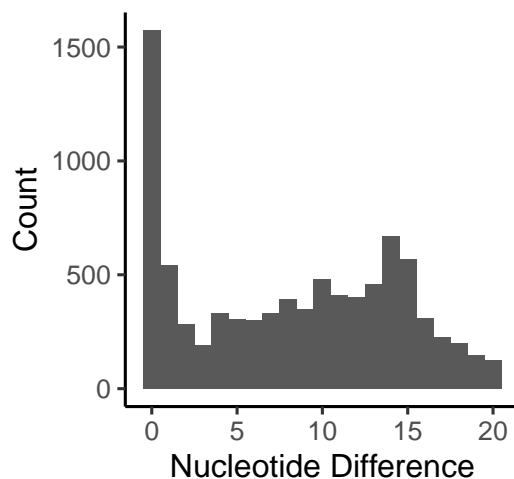
IGHV2-70*01

201 sequences assigned
90 (44.8%) exact matches, in which:
85 unique CDR3
4 unique J



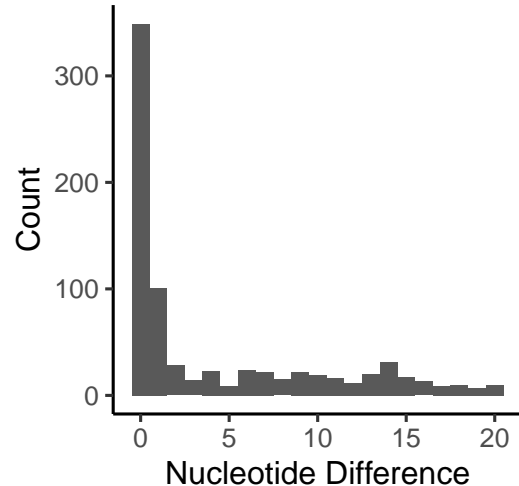
IGHV3-7*01

9010 sequences assigned
1573 (17.5%) exact matches, in which:
1266 unique CDR3
6 unique J



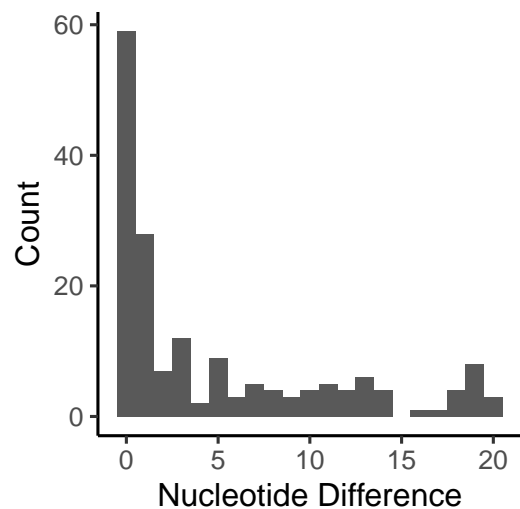
IGHV3-13*01

864 sequences assigned
349 (40.4%) exact matches, in which:
263 unique CDR3
5 unique J



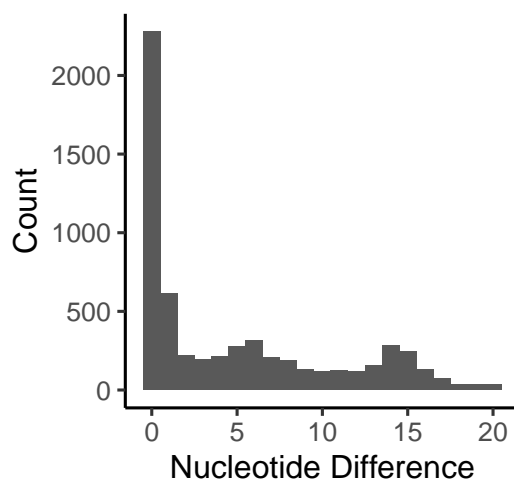
IGHV2-70*04

174 sequences assigned
59 (33.9%) exact matches, in which:
53 unique CDR3
5 unique J



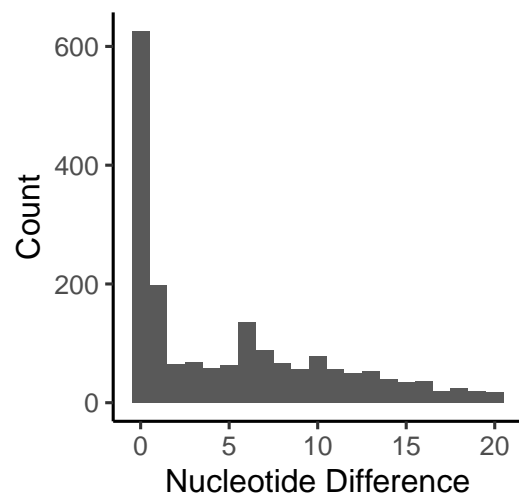
IGHV3-9*01

6152 sequences assigned
2278 (37%) exact matches, in which:
1833 unique CDR3
6 unique J



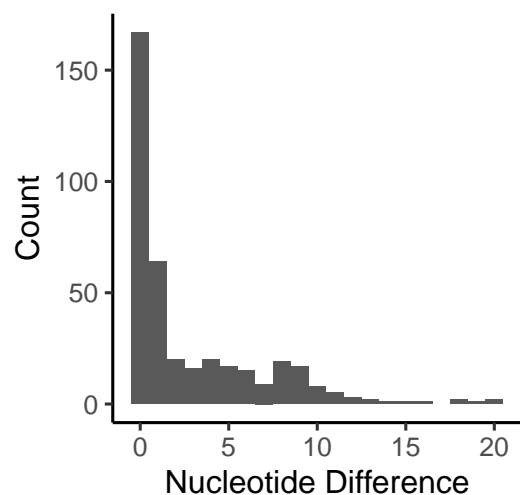
IGHV3-15*01_02

2026 sequences assigned
626 (30.9%) exact matches, in which:
525 unique CDR3
6 unique J



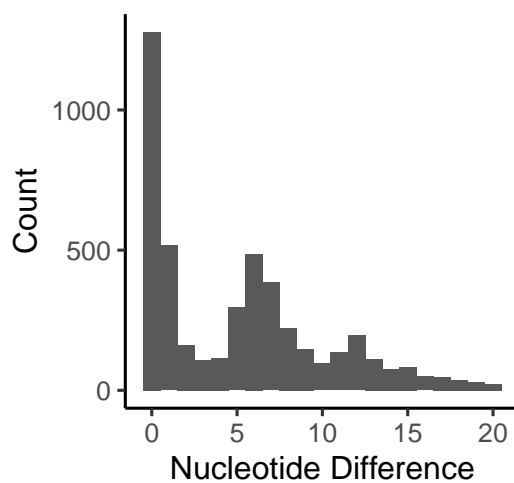
IGHV2-70*11_15

403 sequences assigned
167 (41.4%) exact matches, in which:
159 unique CDR3
5 unique J



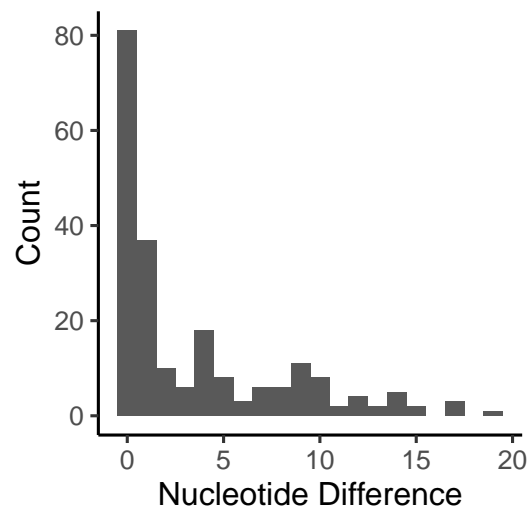
IGHV3-11*01

4813 sequences assigned
1278 (26.6%) exact matches, in which:
1046 unique CDR3
6 unique J



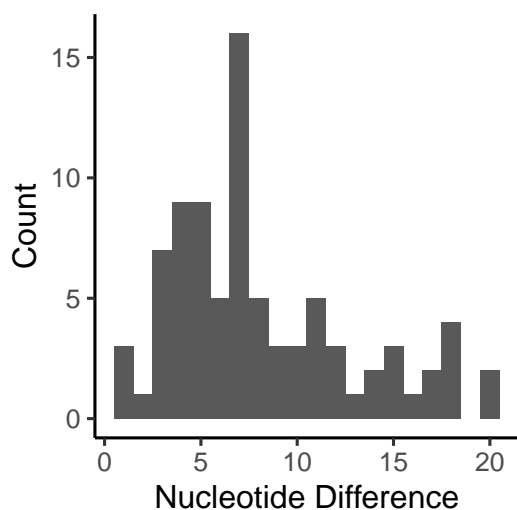
IGHV3-20*01_02

236 sequences assigned
81 (34.3%) exact matches, in which:
69 unique CDR3
5 unique J



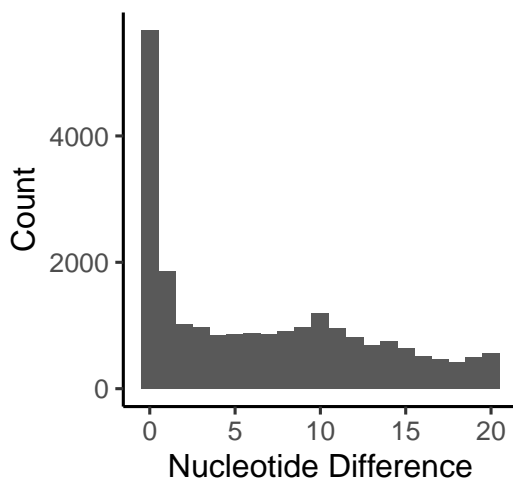
IGHV3-20*03_04

103 sequences assigned
No exact matches.



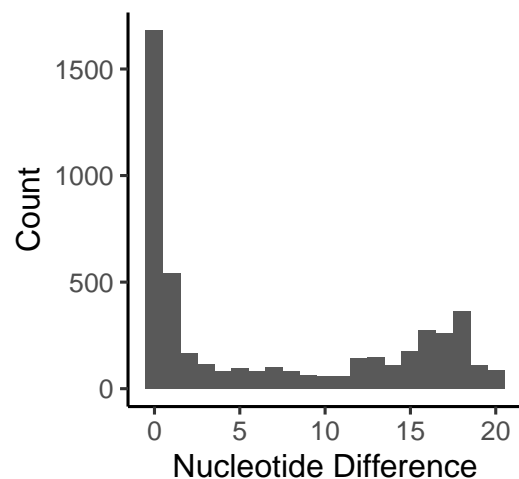
IGHV3-23*01_04

27116 sequences assigned
5670 (20.9%) exact matches, in which:
4470 unique CDR3
6 unique J



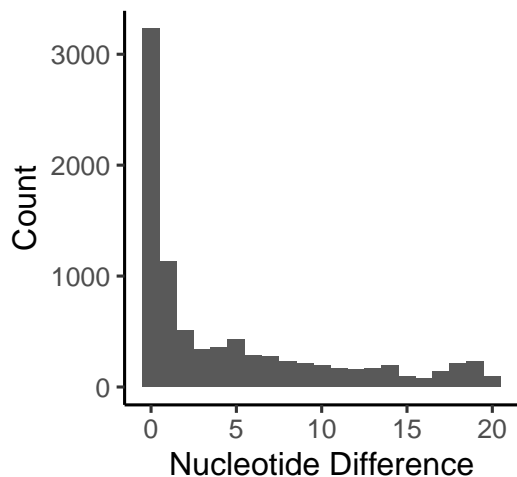
IGHV3-30*18

6427 sequences assigned
1681 (26.2%) exact matches, in which:
1380 unique CDR3
6 unique J



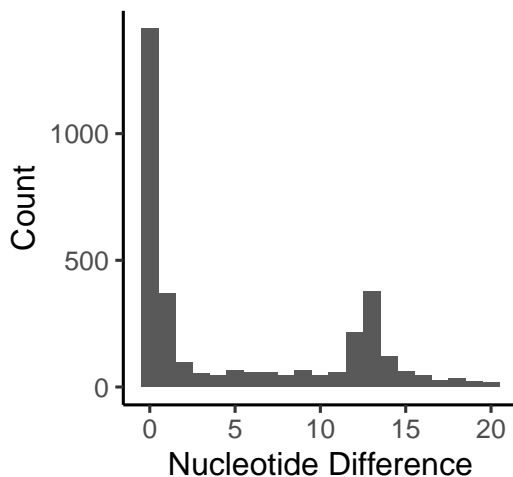
IGHV3-21*01_02

11848 sequences assigned
3230 (27.3%) exact matches, in which:
2589 unique CDR3
6 unique J



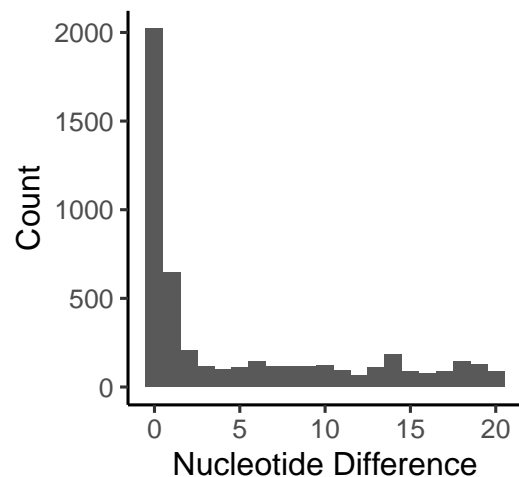
IGHV3-30-3*01

3444 sequences assigned
1414 (41.1%) exact matches, in which:
1162 unique CDR3
6 unique J



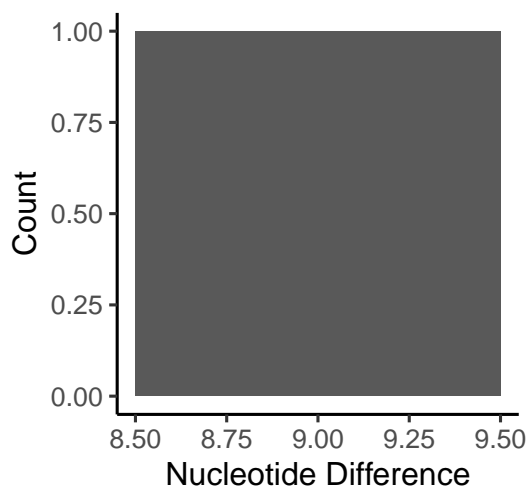
IGHV3-33*01

6353 sequences assigned
2021 (31.8%) exact matches, in which:
1712 unique CDR3
6 unique J



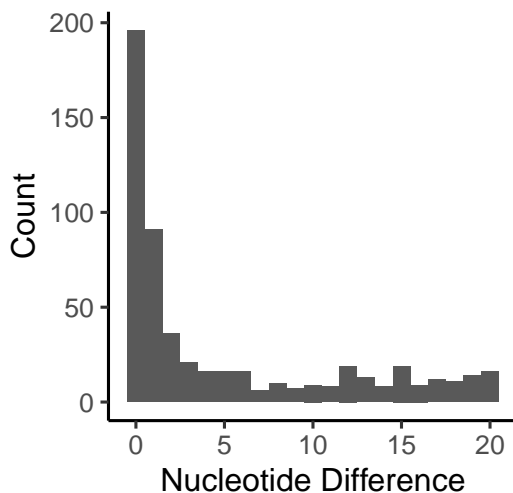
IGHV3-22*01_02

1 sequences assigned
No exact matches.



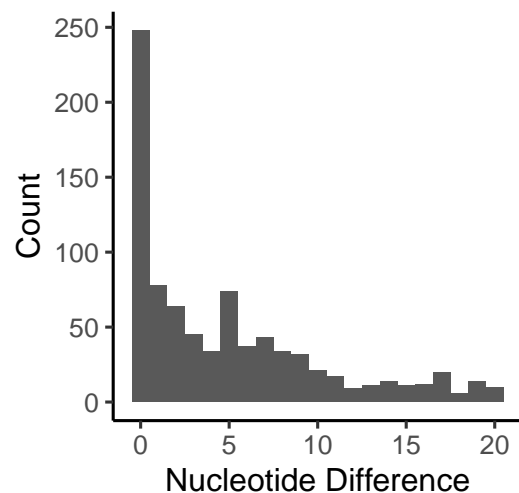
IGHV3-30*03

756 sequences assigned
196 (25.9%) exact matches, in which:
192 unique CDR3
6 unique J



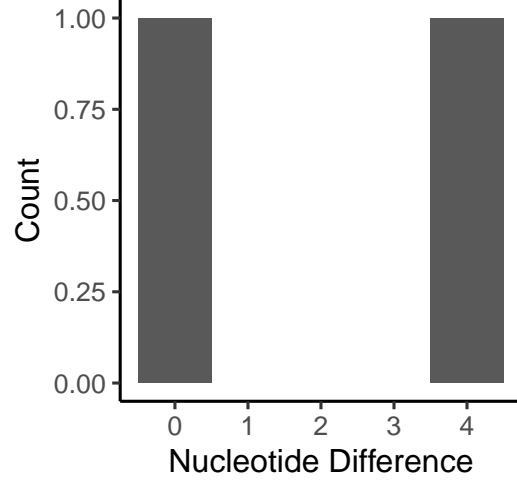
IGHV3-33*08

1204 sequences assigned
248 (20.6%) exact matches, in which:
246 unique CDR3
6 unique J



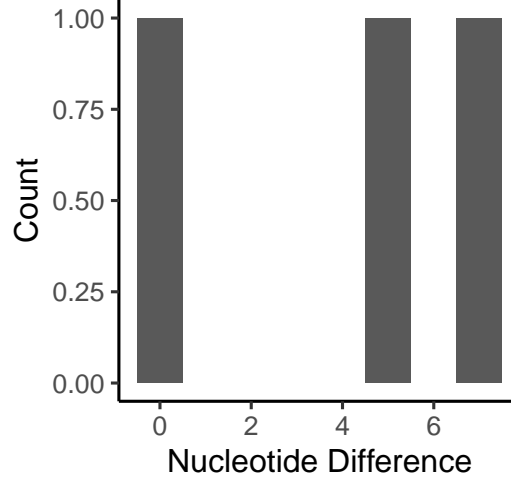
IGHV3-35*01

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



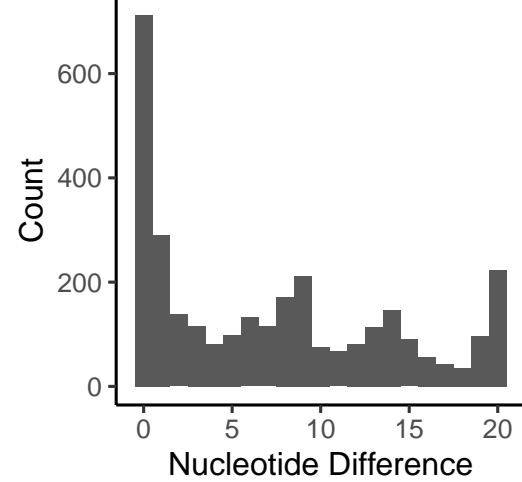
IGHV3-47*02

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



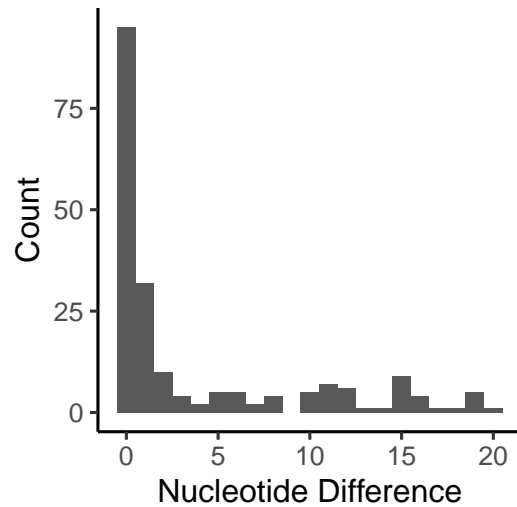
IGHV3-48*03

3363 sequences assigned
713 (21.2%) exact matches, in which:
590 unique CDR3
6 unique J



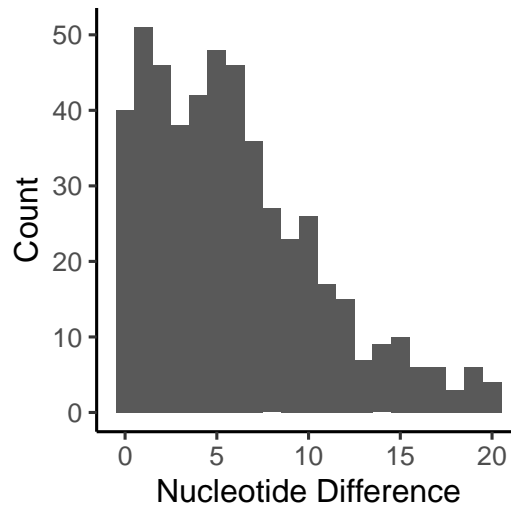
IGHV3-43*01

210 sequences assigned
95 (45.2%) exact matches, in which:
81 unique CDR3
6 unique J



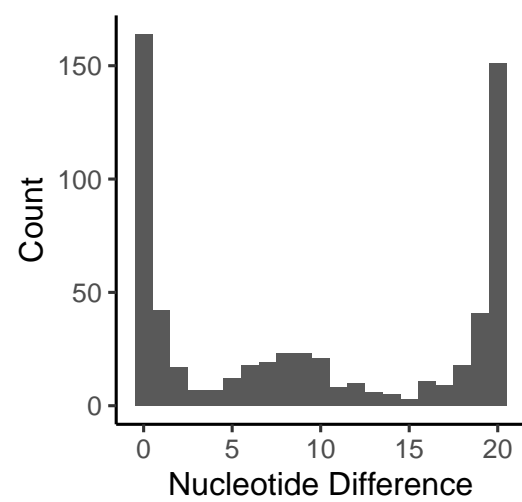
IGHV3-48*01

519 sequences assigned
40 (7.7%) exact matches, in which:
40 unique CDR3
4 unique J



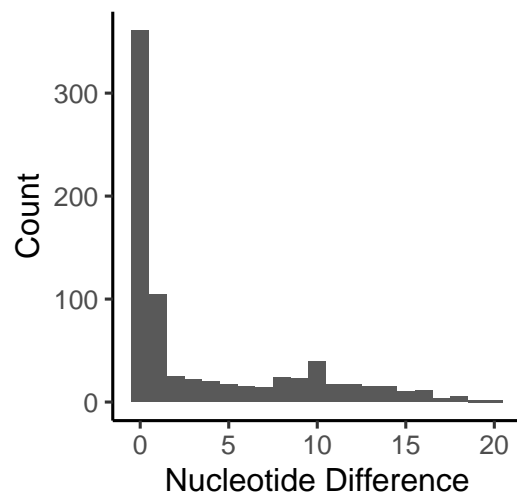
IGHV3-49*04

1188 sequences assigned
164 (13.8%) exact matches, in which:
137 unique CDR3
6 unique J



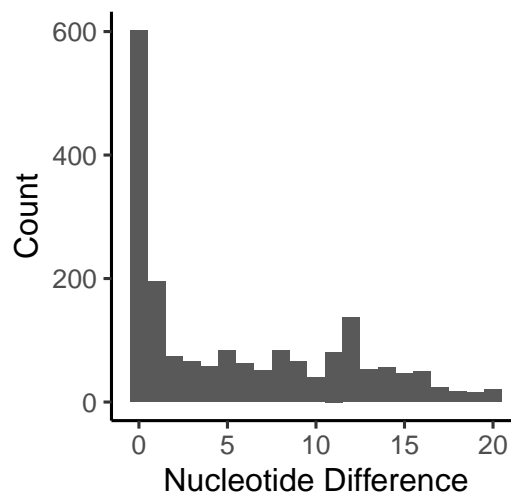
IGHV3-43*02

792 sequences assigned
361 (45.6%) exact matches, in which:
297 unique CDR3
6 unique J



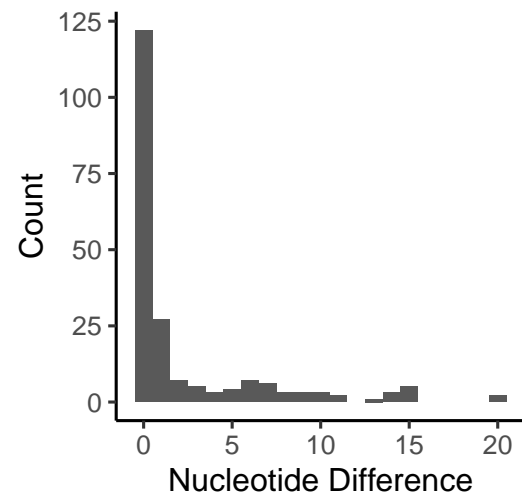
IGHV3-48*02

2014 sequences assigned
602 (29.9%) exact matches, in which:
498 unique CDR3
6 unique J



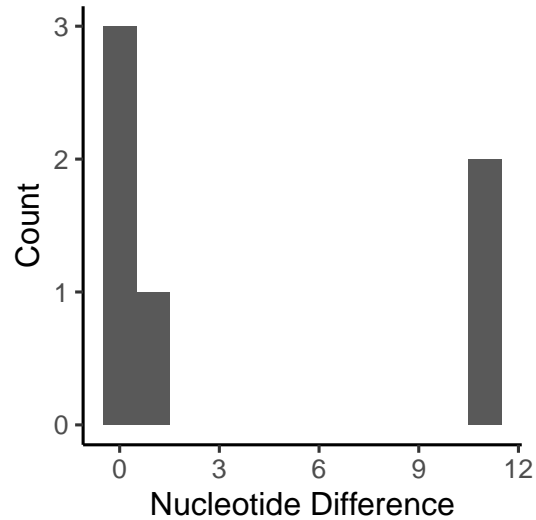
IGHV3-49*03_05

207 sequences assigned
122 (58.9%) exact matches, in which:
105 unique CDR3
4 unique J



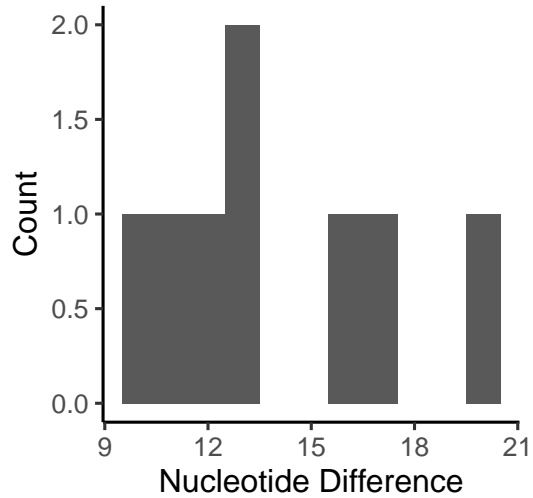
IGHV3-52*01_03

6 sequences assigned
3 (50%) exact matches, in which:
2 unique CDR3
2 unique J



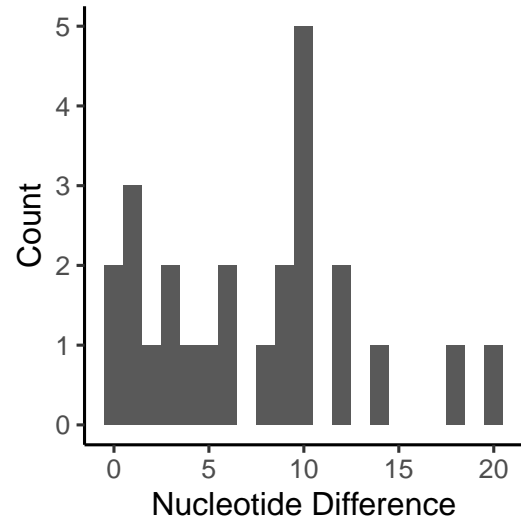
IGHV3-64*04

8 sequences assigned
No exact matches.



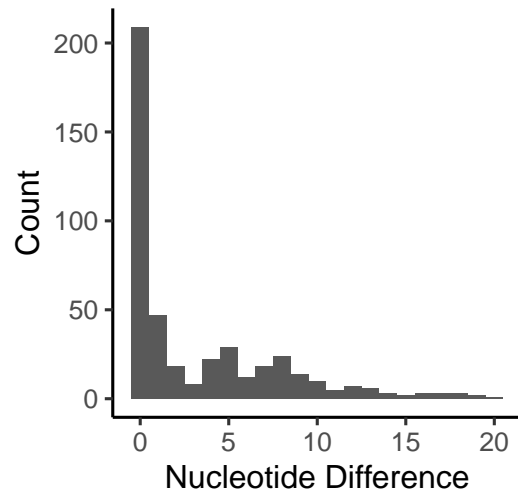
IGHV3-69-1*01

31 sequences assigned
2 (6.5%) exact matches, in which:
2 unique CDR3
2 unique J



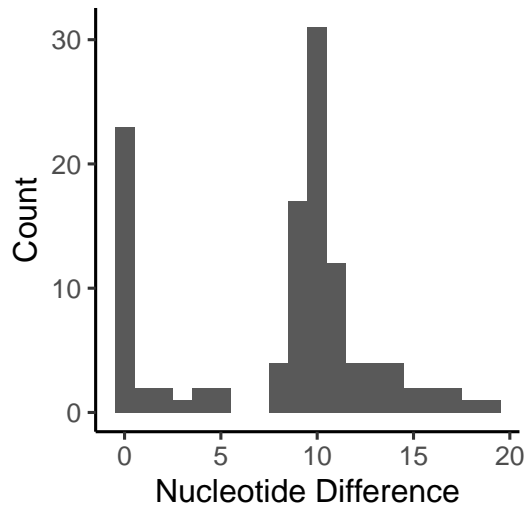
IGHV3-53*04

460 sequences assigned
209 (45.4%) exact matches, in which:
169 unique CDR3
5 unique J



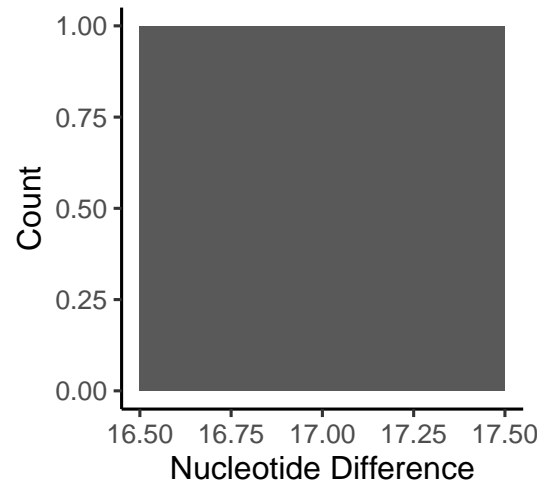
IGHV3-64*02_07

119 sequences assigned
23 (19.3%) exact matches, in which:
18 unique CDR3
5 unique J



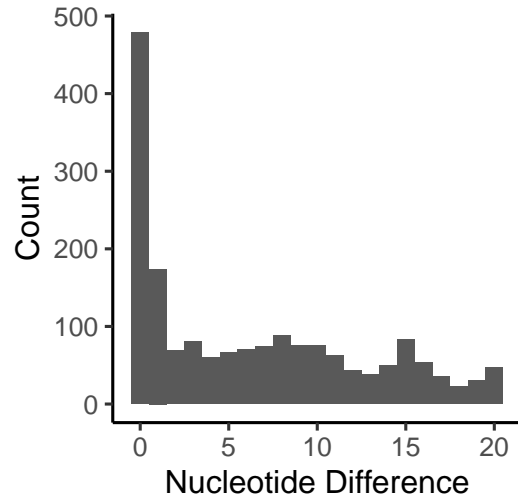
IGHV3-69-1*02

17 sequences assigned
No exact matches.



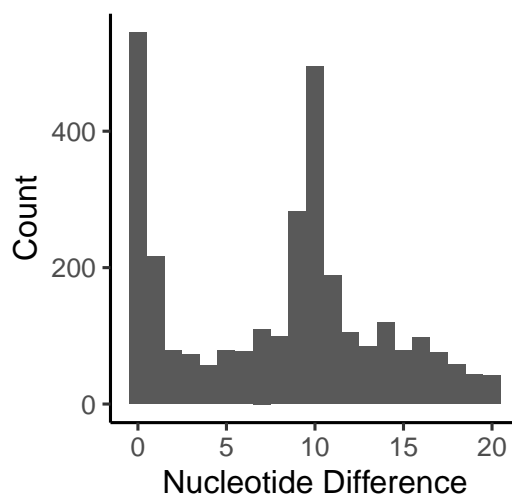
IGHV3-53*01_02

3338 sequences assigned
479 (14.3%) exact matches, in which:
397 unique CDR3
5 unique J



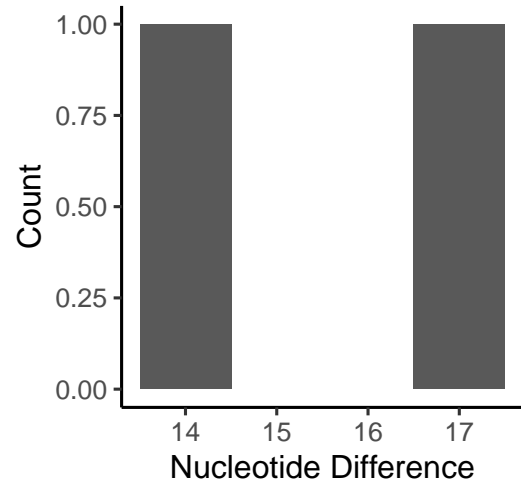
IGHV3-66*01

3438 sequences assigned
545 (15.9%) exact matches, in which:
440 unique CDR3
6 unique J

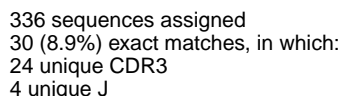


IGHV3-71*01_04

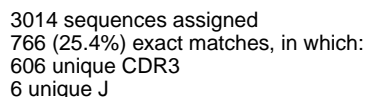
8 sequences assigned
No exact matches.



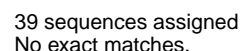
336 sequences assigned
30 (8.9%) exact matches, in which:
24 unique CDR3
4 unique J



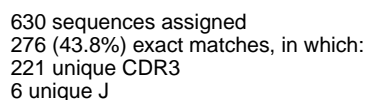
3014 sequences assigned
766 (25.4%) exact matches, in which:
606 unique CDR3
6 unique J



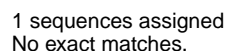
39 sequences assigned
No exact matches.



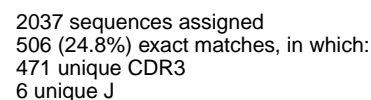
630 sequences assigned
276 (43.8%) exact matches, in which:
221 unique CDR3
6 unique J



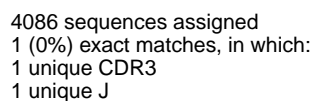
1 sequences assigned
No exact matches.



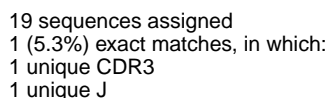
2037 sequences assigned
506 (24.8%) exact matches, in which:
471 unique CDR3
6 unique J



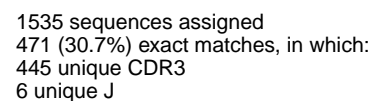
4086 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



19 sequences assigned
1 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J

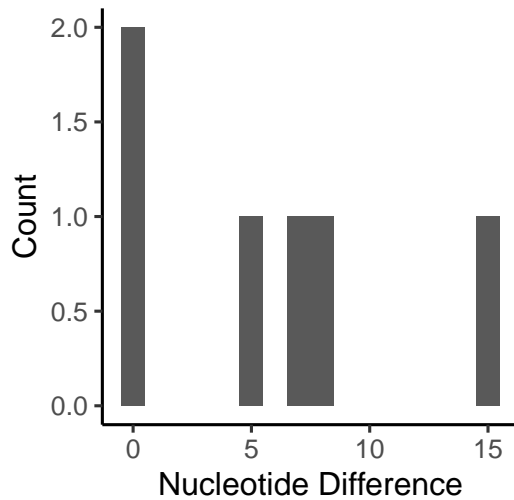


1535 sequences assigned
471 (30.7%) exact matches, in which:
445 unique CDR3
6 unique J



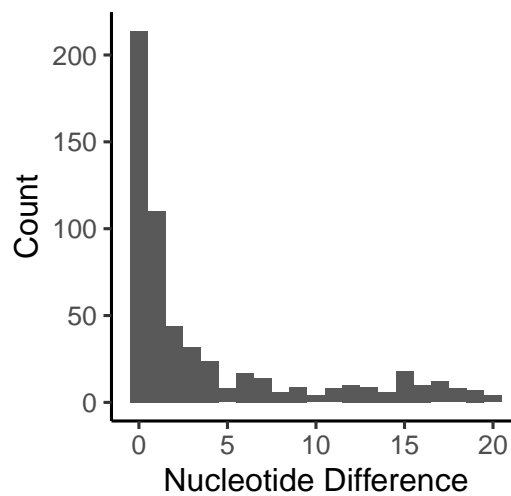
IGHV4-28*03

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



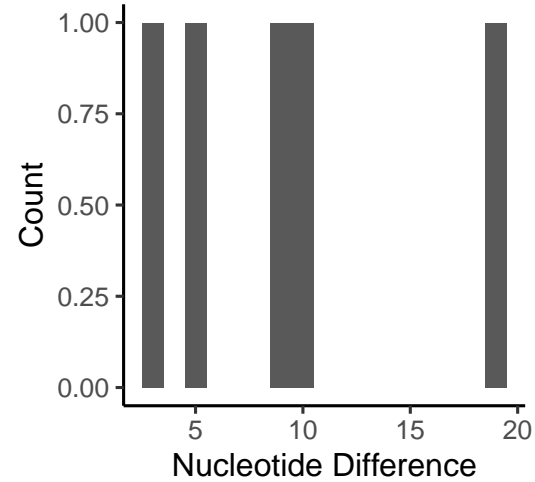
IGHV4-30-2*01

619 sequences assigned
214 (34.6%) exact matches, in which:
198 unique CDR3
6 unique J



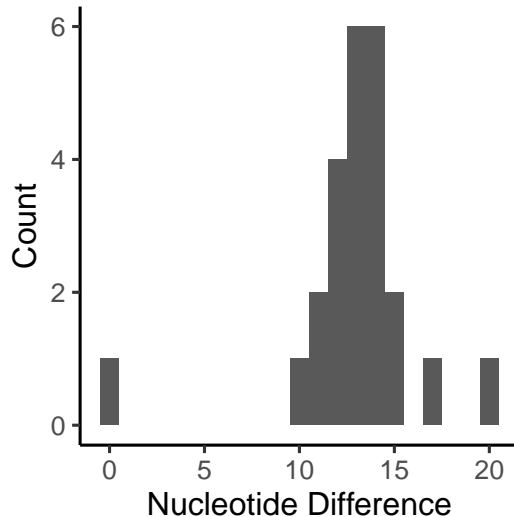
IGHV4-38-2*01

6 sequences assigned
No exact matches.



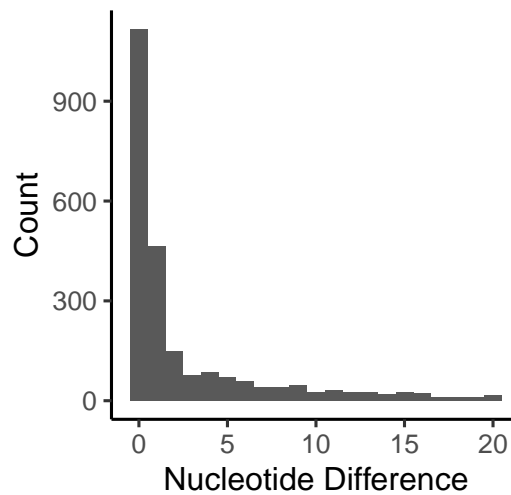
IGHV4-28*01_07

24 sequences assigned
1 (4.2%) exact matches, in which:
1 unique CDR3
1 unique J



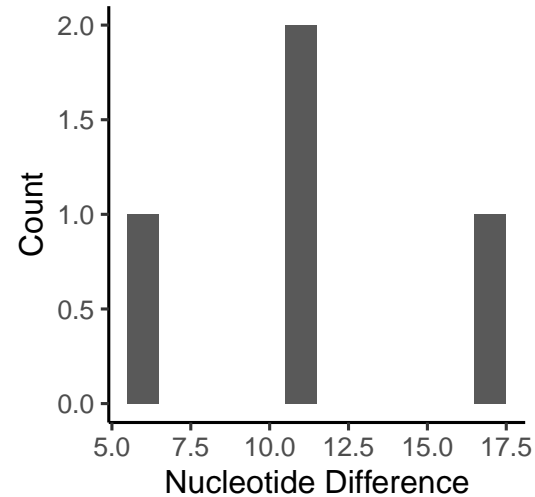
IGHV4-31*02

2710 sequences assigned
1117 (41.2%) exact matches, in which:
1087 unique CDR3
6 unique J



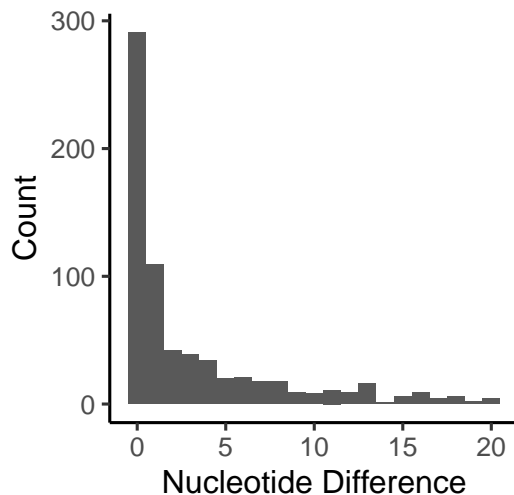
IGHV4-38-2*02

7 sequences assigned
No exact matches.



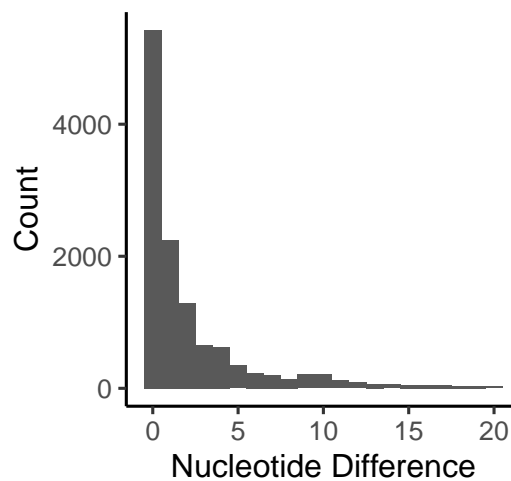
IGHV4-30-4*01

908 sequences assigned
291 (32%) exact matches, in which:
276 unique CDR3
6 unique J



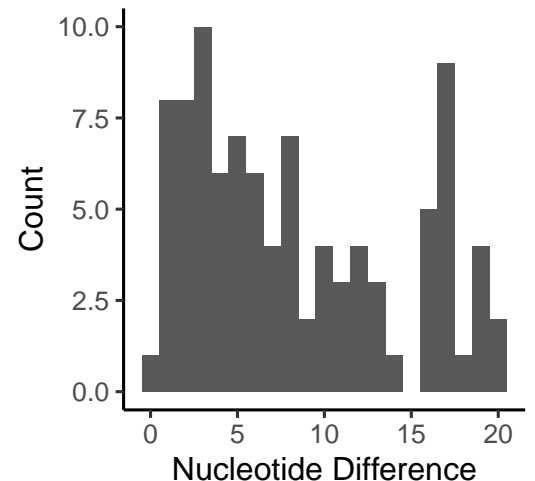
IGHV4-34*01_02

12348 sequences assigned
5426 (43.9%) exact matches, in which:
5036 unique CDR3
6 unique J



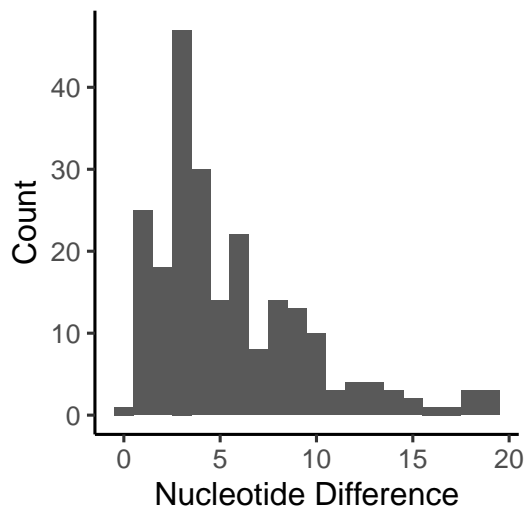
IGHV4-39*02

127 sequences assigned
1 (0.8%) exact matches, in which:
1 unique CDR3
1 unique J



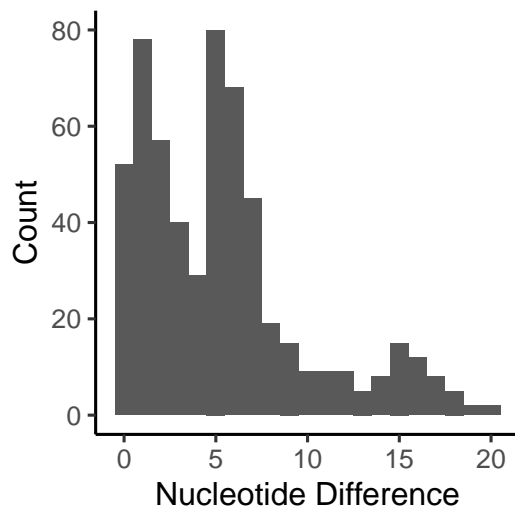
IGHV4–39*07

234 sequences assigned
1 (0.4%) exact matches, in which:
1 unique CDR3
1 unique J



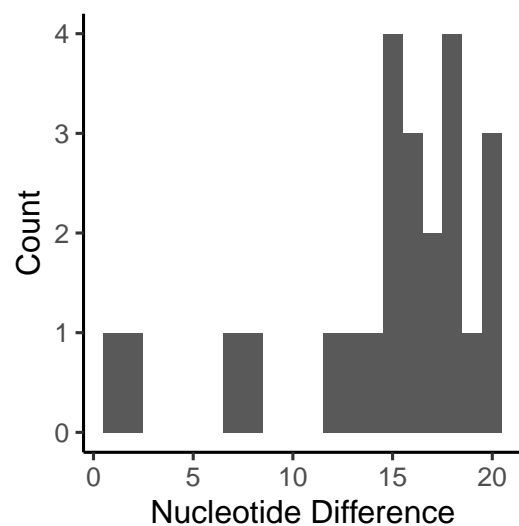
IGHV4–59*12

600 sequences assigned
52 (8.7%) exact matches, in which:
52 unique CDR3
4 unique J



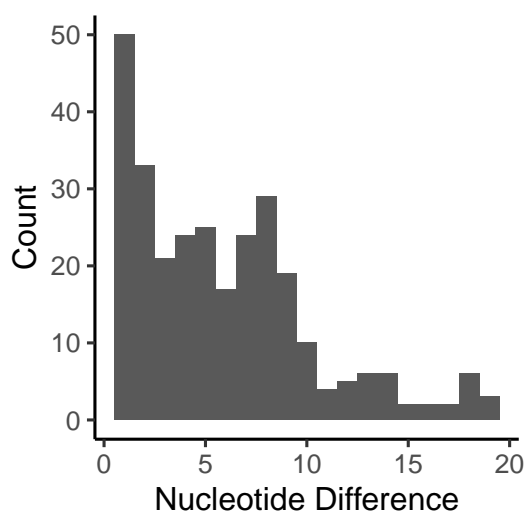
IGHV4/OR15–8*01

34 sequences assigned
No exact matches.



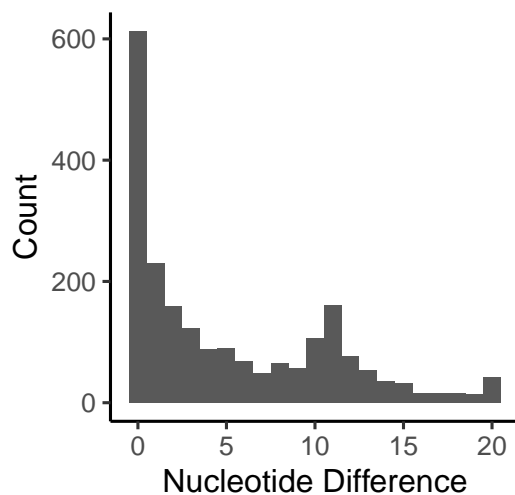
IGHV4–59*08

312 sequences assigned
No exact matches.



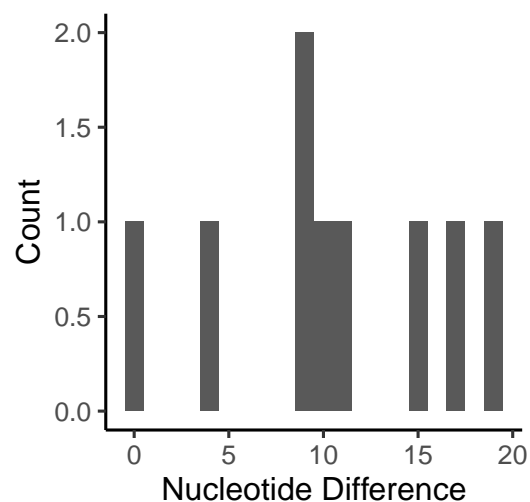
IGHV4–61*01

2281 sequences assigned
613 (26.9%) exact matches, in which:
594 unique CDR3
6 unique J



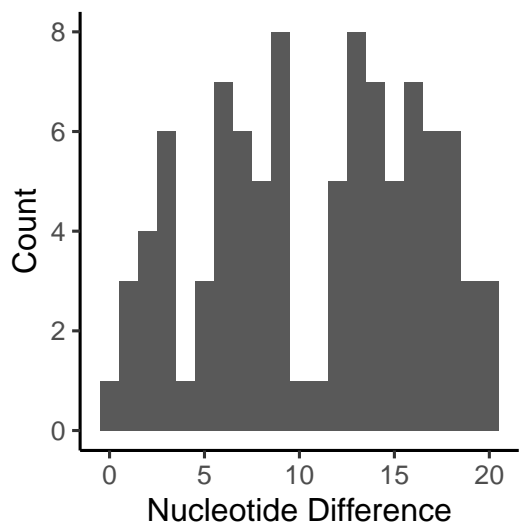
IGHV5–10–1*01_03

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



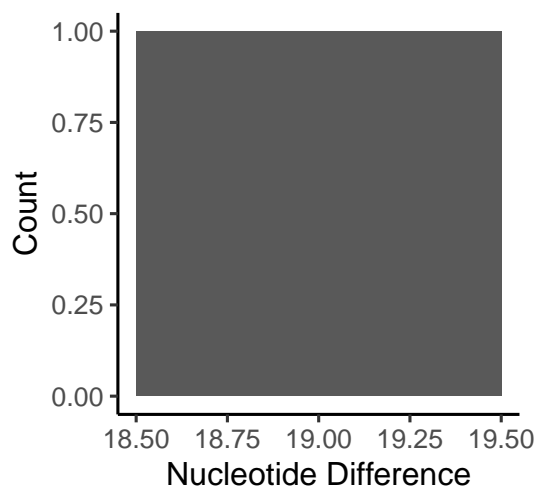
IGHV4–59*11

178 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



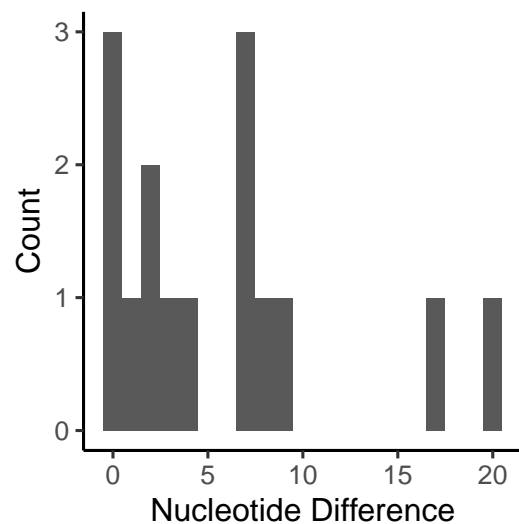
IGHV1/OR15–1*04

1 sequences assigned
No exact matches.



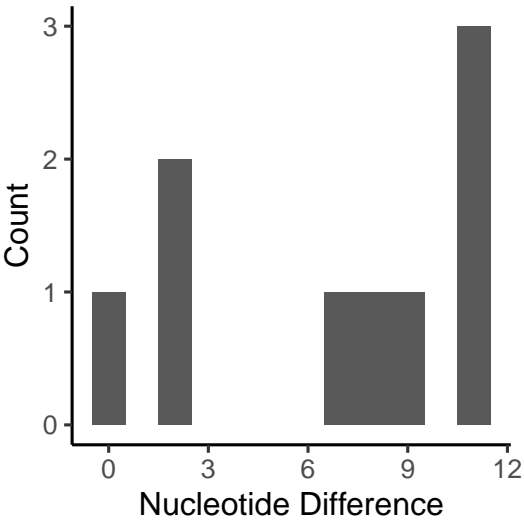
IGHV5–51*04

21 sequences assigned
3 (14.3%) exact matches, in which:
3 unique CDR3
2 unique J



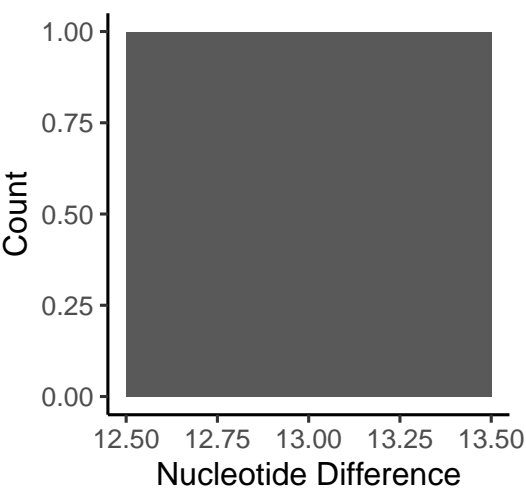
IGHV5–51*06

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



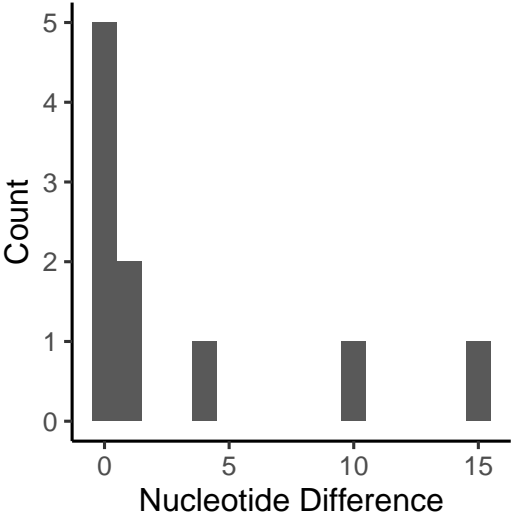
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



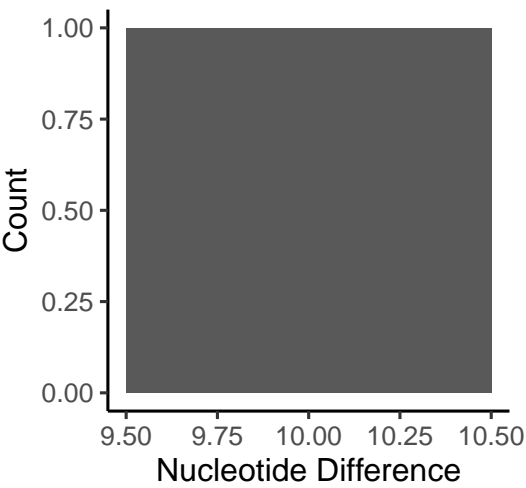
IGHV5–51*07

10 sequences assigned
5 (50%) exact matches, in which:
5 unique CDR3
2 unique J



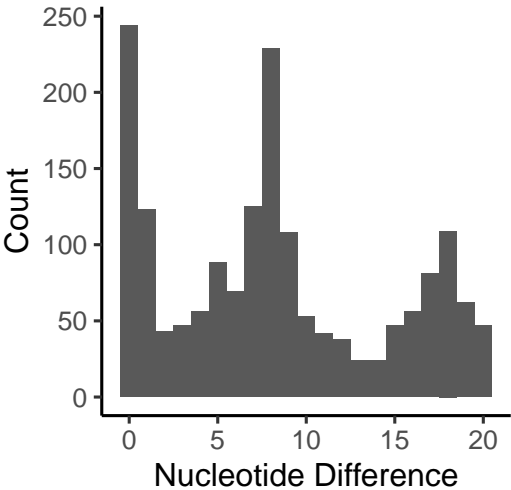
IGHV3/OR16–10*01_03

1 sequences assigned
No exact matches.



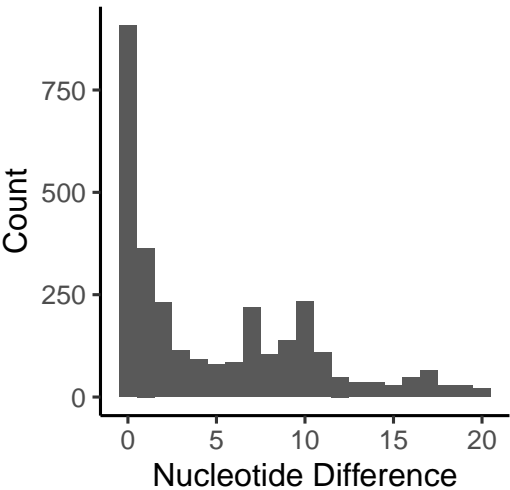
IGHV6–1*01_02

4427 sequences assigned
244 (5.5%) exact matches, in which:
233 unique CDR3
6 unique J



IGHV7–4–1*02

3084 sequences assigned
908 (29.4%) exact matches, in which:
858 unique CDR3
6 unique J





Warning – no inferred sequences found.