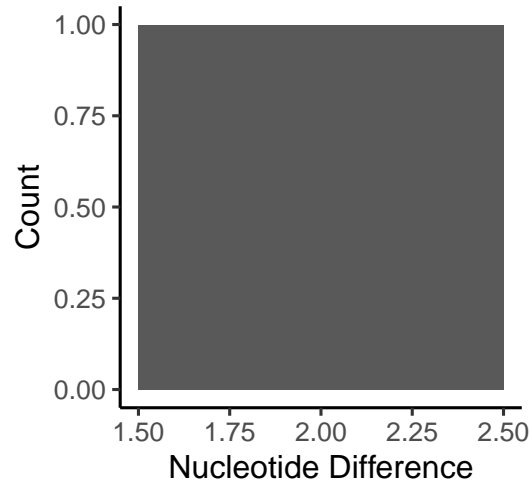


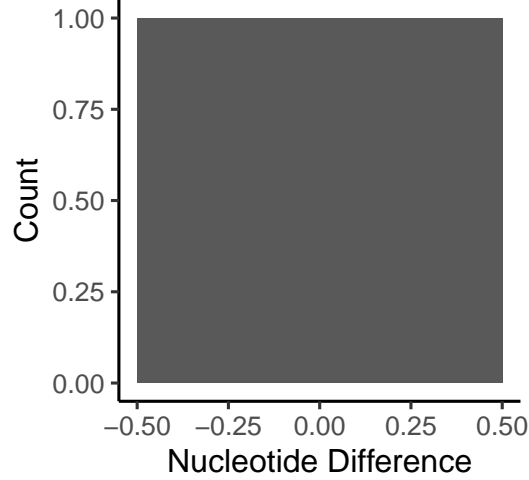
IGHV1-58*02

1 sequences assigned
No exact matches.



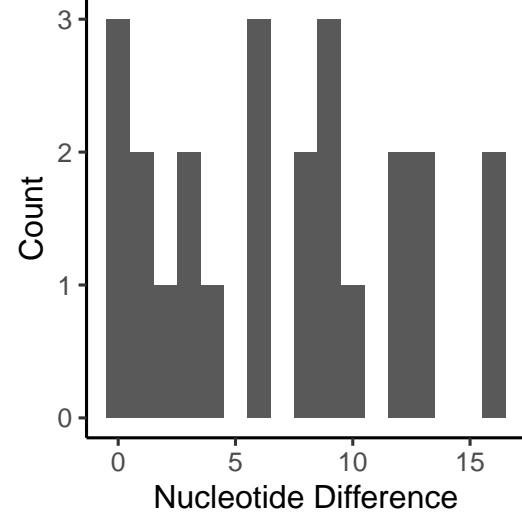
IGHV1-193*01_S6037

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



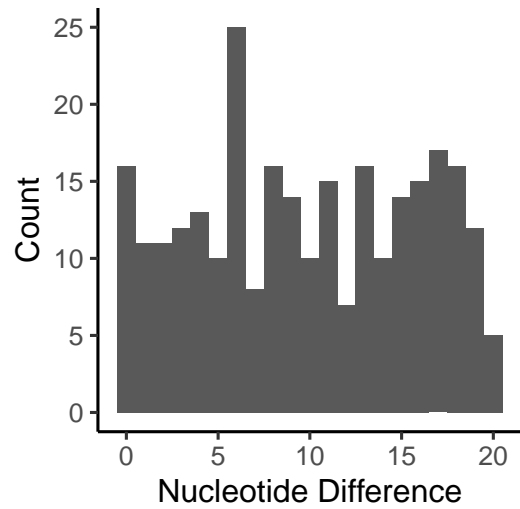
IGHV1-NL_2*01_S9896

26 sequences assigned
3 (11.5%) exact matches, in which:
1 unique CDR3
1 unique J



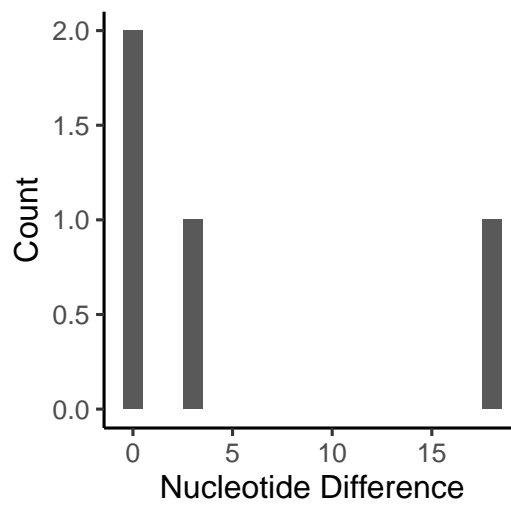
IGHV1-84*01_S4663

361 sequences assigned
16 (4.4%) exact matches, in which:
8 unique CDR3
3 unique J



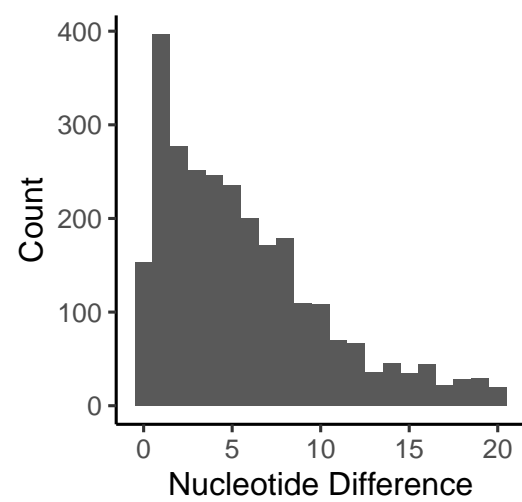
IGHV1-NL_1*01_S2052

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



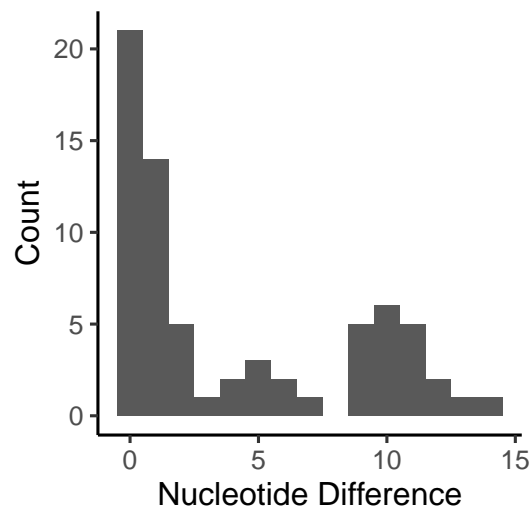
IGHV2-7*02_S4285

2805 sequences assigned
153 (5.5%) exact matches, in which:
99 unique CDR3
5 unique J



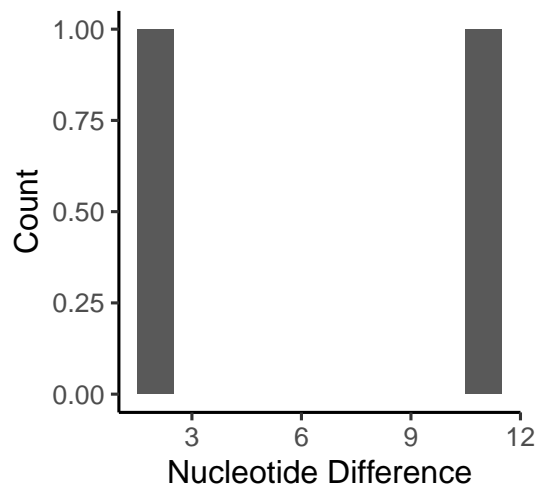
IGHV1-124*01_S6748

112 sequences assigned
21 (18.8%) exact matches, in which:
11 unique CDR3
3 unique J



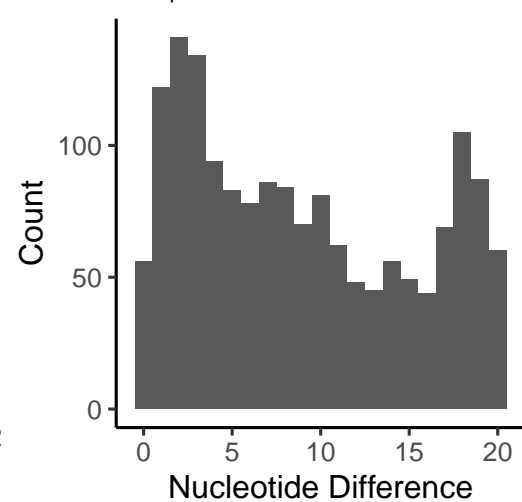
IGHV1-NL_1*01_S8523

2 sequences assigned
No exact matches.



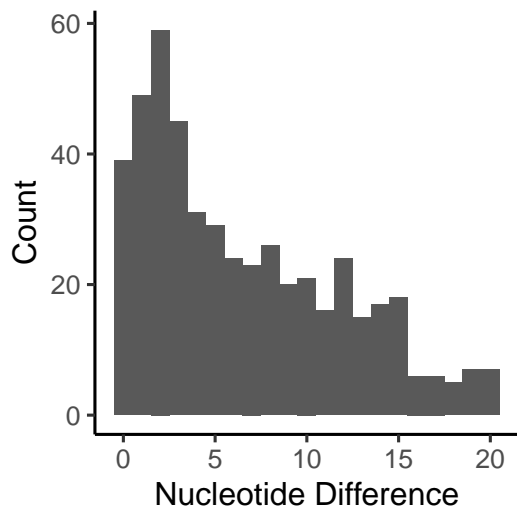
IGHV2-69*01_S2931

2019 sequences assigned
56 (2.8%) exact matches, in which:
28 unique CDR3
6 unique J



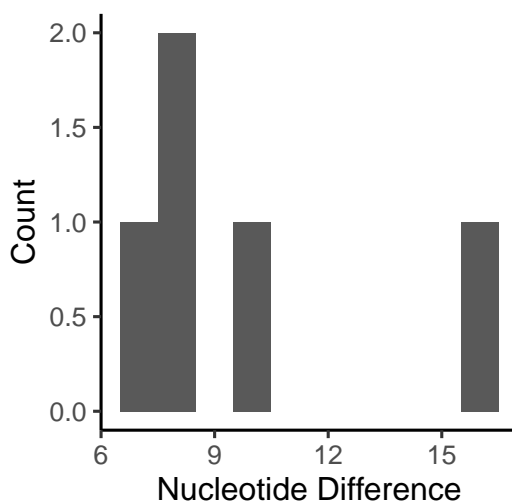
IGHV2-118*01_G175A_G

511 sequences assigned
39 (7.6%) exact matches, in which:
37 unique CDR3
6 unique J



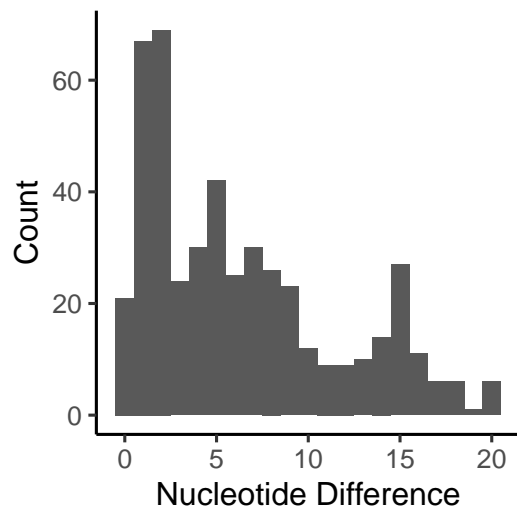
IGHV2-NL_1*01_S2133

5 sequences assigned
No exact matches.



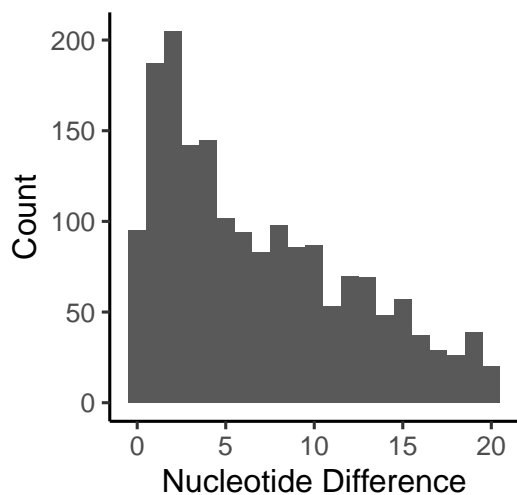
IGHV3-5*01_S2703

485 sequences assigned
21 (4.3%) exact matches, in which:
14 unique CDR3
4 unique J



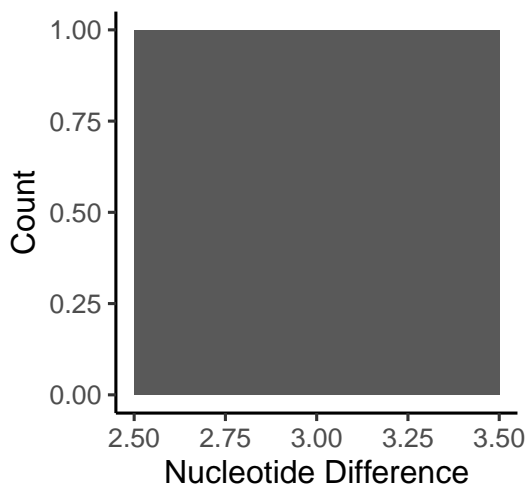
IGHV2-118*01_S3831

1923 sequences assigned
95 (4.9%) exact matches, in which:
60 unique CDR3
6 unique J



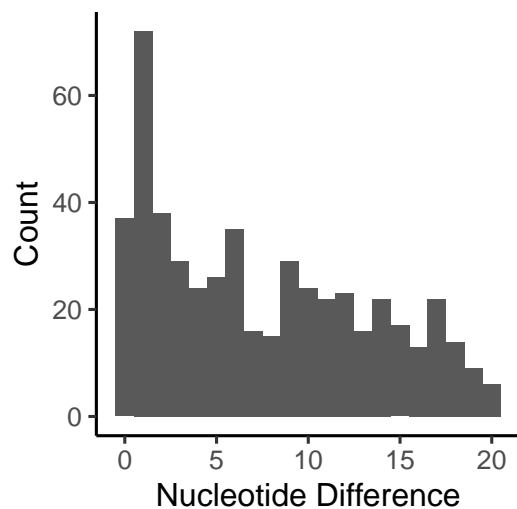
IGHV2-NL_1*01_S4514

1 sequences assigned
No exact matches.



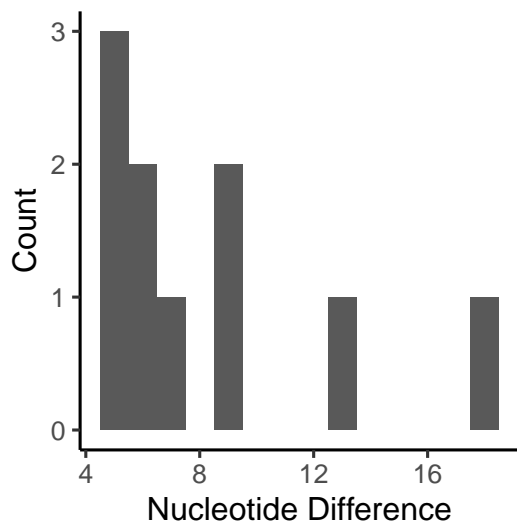
IGHV3-5*01_S6059

530 sequences assigned
37 (7%) exact matches, in which:
25 unique CDR3
5 unique J



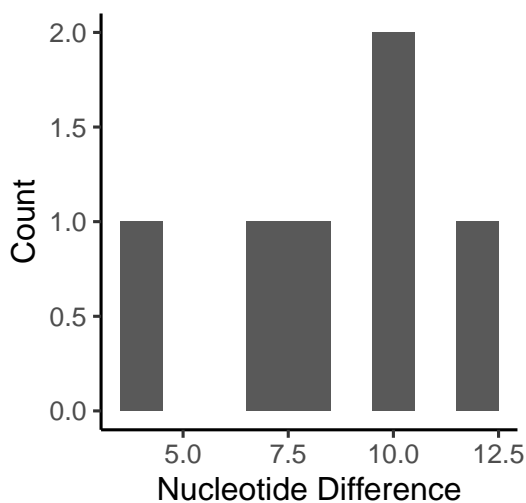
IGHV2-173*01_S9930

34 sequences assigned
No exact matches.



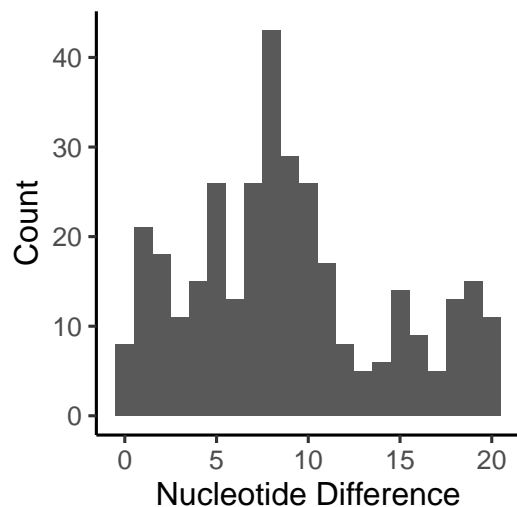
IGHV2-NL_2*01_S2193

6 sequences assigned
No exact matches.



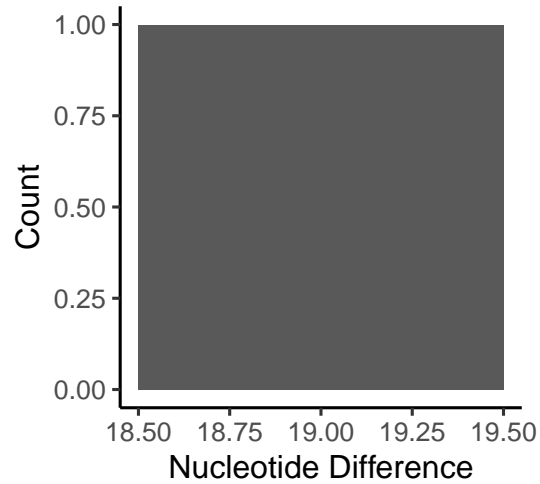
IGHV3-9*01_S8326

375 sequences assigned
8 (2.1%) exact matches, in which:
5 unique CDR3
2 unique J



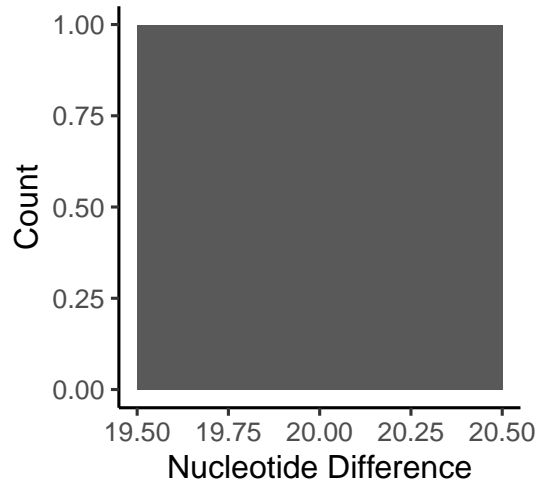
IGHV3-28*01_S3792

5 sequences assigned
No exact matches.



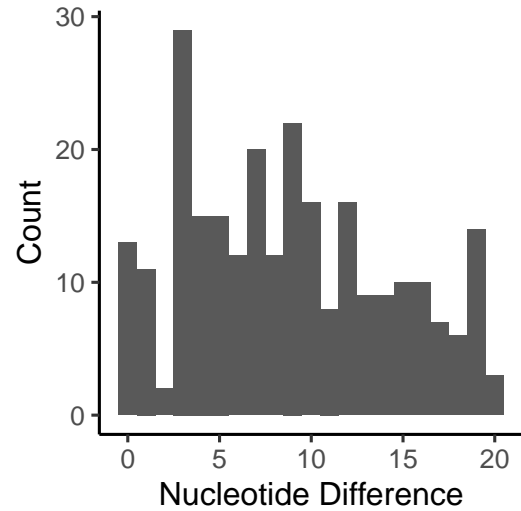
IGHV3-37*01_S4420

1 sequences assigned
No exact matches.



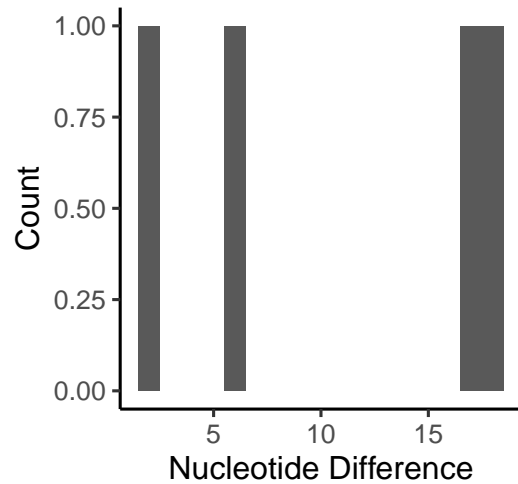
IGHV3-73*02_S4412

281 sequences assigned
13 (4.6%) exact matches, in which:
8 unique CDR3
3 unique J



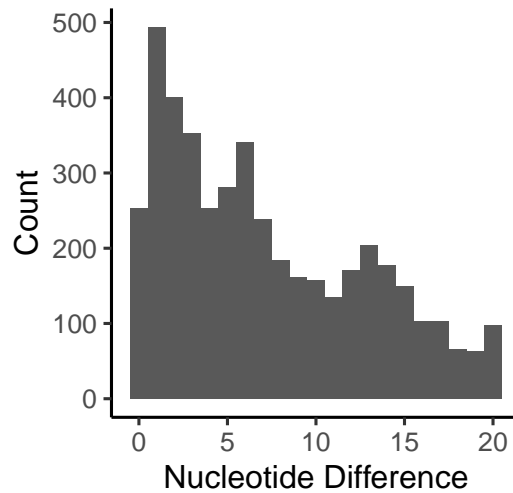
IGHV3-28*01_S5703

6 sequences assigned
No exact matches.



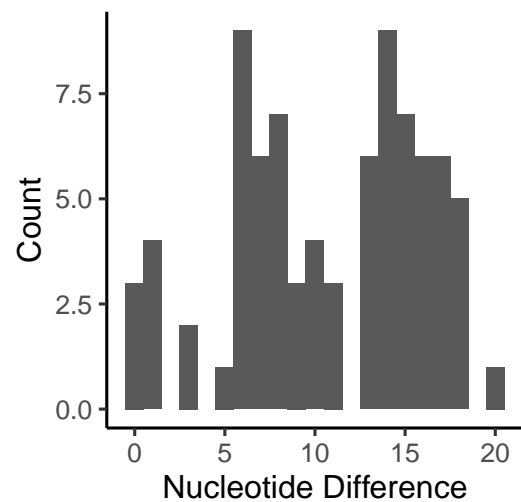
IGHV3-50*01_S5299

4831 sequences assigned
253 (5.2%) exact matches, in which:
167 unique CDR3
5 unique J



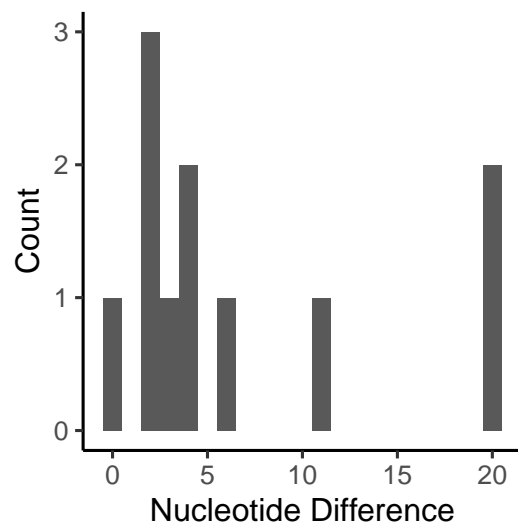
IGHV3-83*02_S9518

105 sequences assigned
3 (2.9%) exact matches, in which:
3 unique CDR3
2 unique J



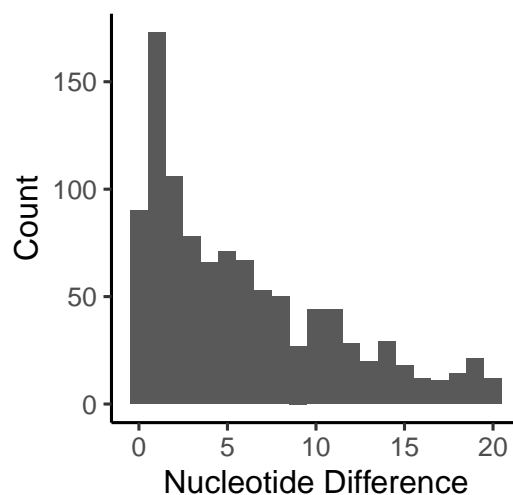
IGHV3-34*01_S1309

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



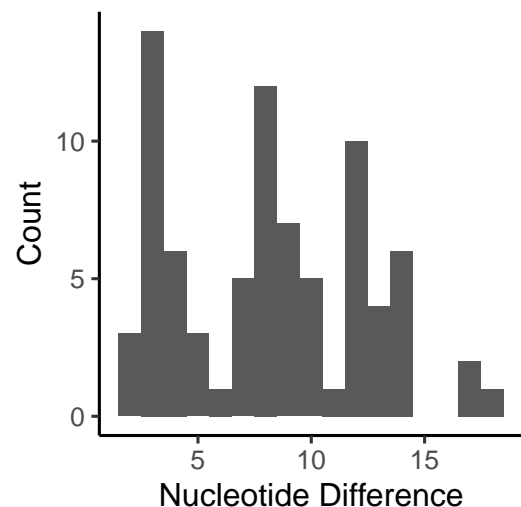
IGHV3-53*01_S1558

1139 sequences assigned
90 (7.9%) exact matches, in which:
56 unique CDR3
5 unique J



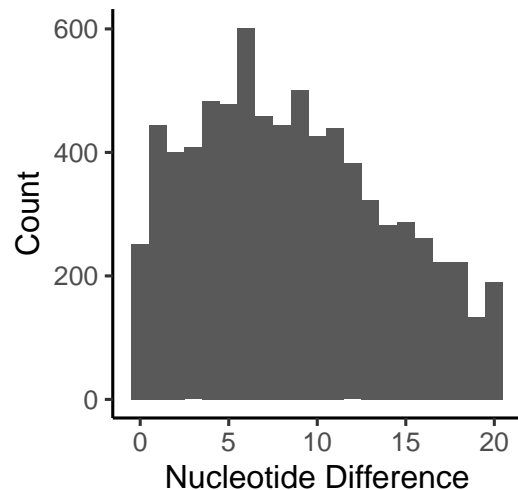
IGHV3-87*01_S6311

81 sequences assigned
No exact matches.



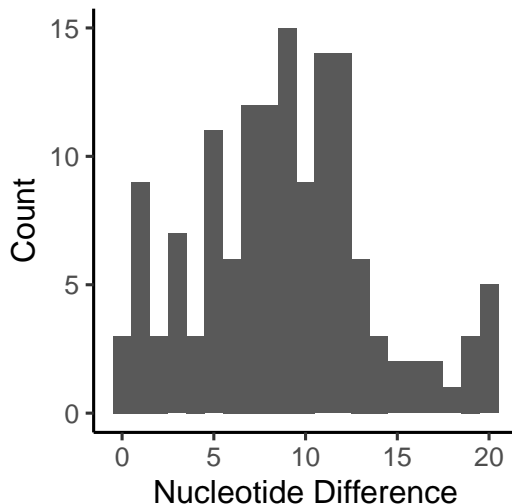
IGHV3–88*01_S6871

8731 sequences assigned
252 (2.9%) exact matches, in which:
111 unique CDR3
7 unique J



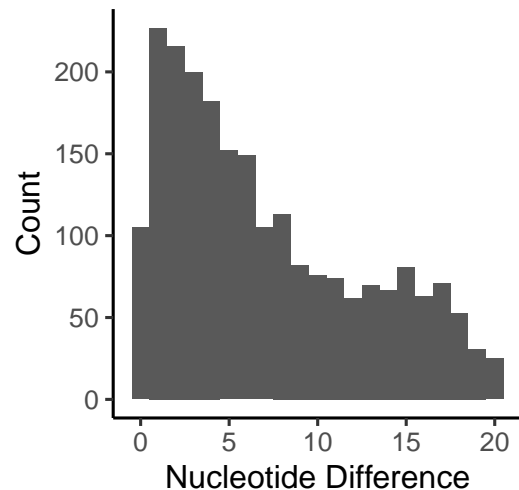
IGHV3–100*01_S4375

248 sequences assigned
3 (1.2%) exact matches, in which:
3 unique CDR3
2 unique J



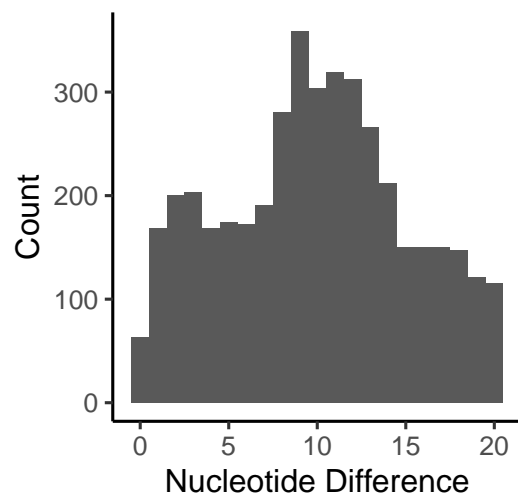
IGHV3–122*01_S6138

2344 sequences assigned
105 (4.5%) exact matches, in which:
64 unique CDR3
4 unique J



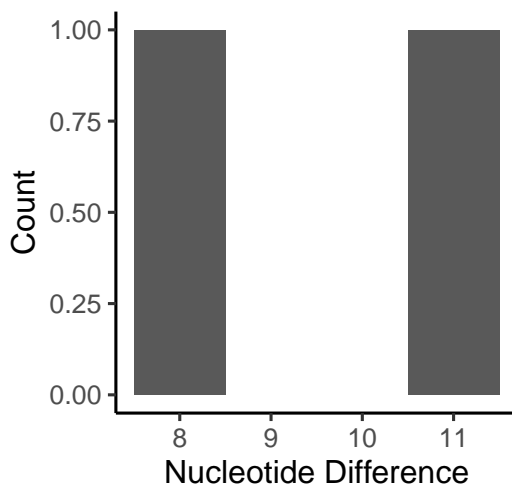
IGHV3–88*02_S5672

4922 sequences assigned
63 (1.3%) exact matches, in which:
40 unique CDR3
3 unique J



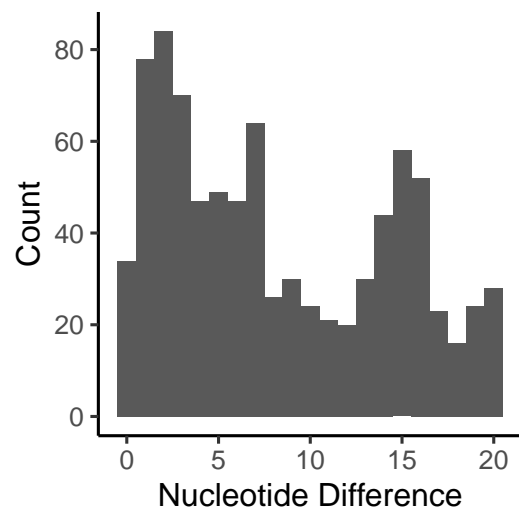
IGHV3–103*01_S2756

3 sequences assigned
No exact matches.



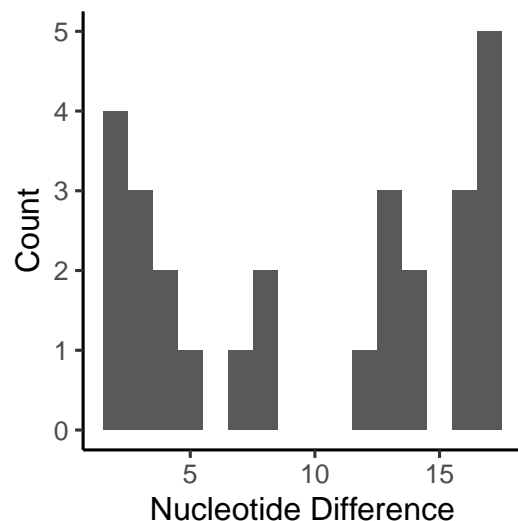
IGHV3–127*01_S7059

973 sequences assigned
34 (3.5%) exact matches, in which:
16 unique CDR3
4 unique J



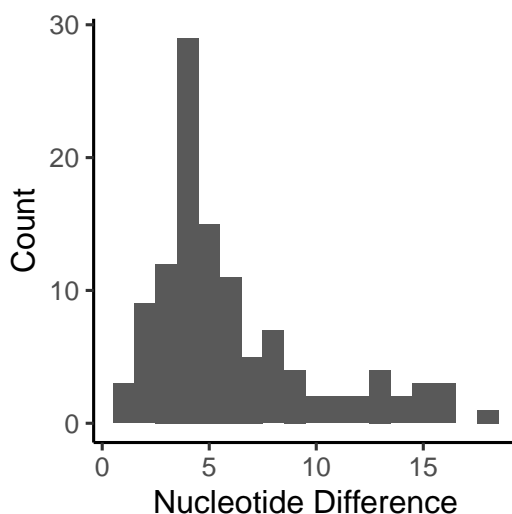
IGHV3–100*01_S4205

29 sequences assigned
No exact matches.



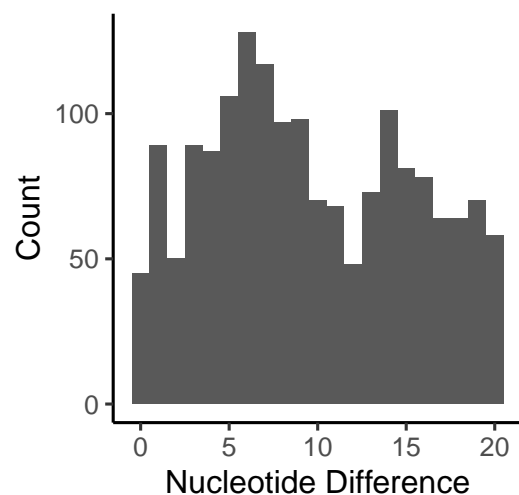
IGHV3–120*01_S4231

118 sequences assigned
No exact matches.



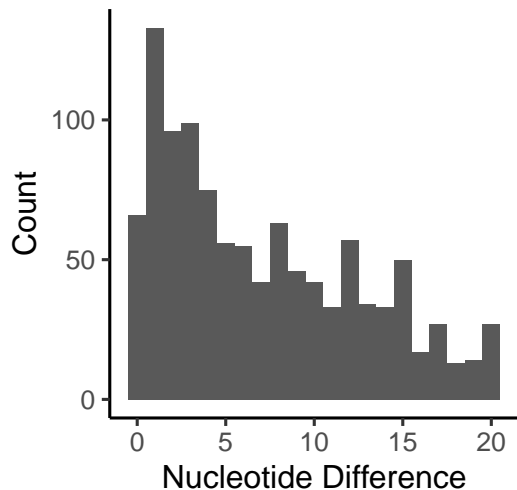
IGHV3–127*01_T164C_A

1841 sequences assigned
45 (2.4%) exact matches, in which:
29 unique CDR3
2 unique J



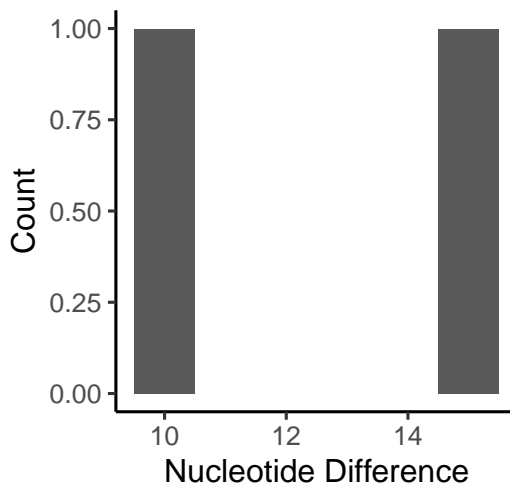
IGHV3-128*01_S5770

1193 sequences assigned
66 (5.5%) exact matches, in which:
43 unique CDR3
3 unique J



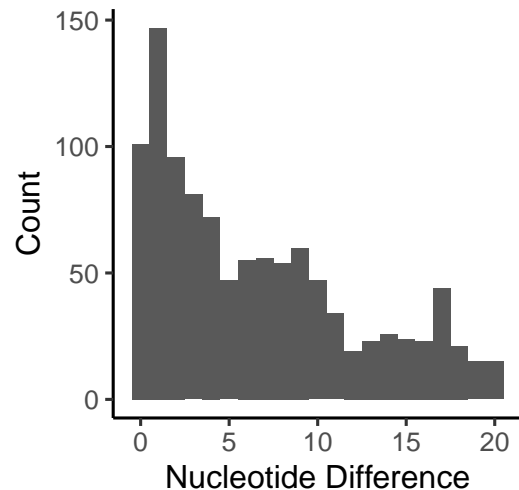
IGHV3-152*01_S5891

3 sequences assigned
No exact matches.



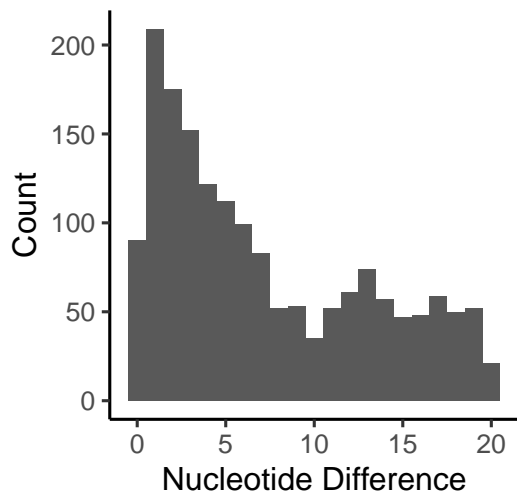
IGHV3-177*01_S5369

1238 sequences assigned
101 (8.2%) exact matches, in which:
68 unique CDR3
6 unique J



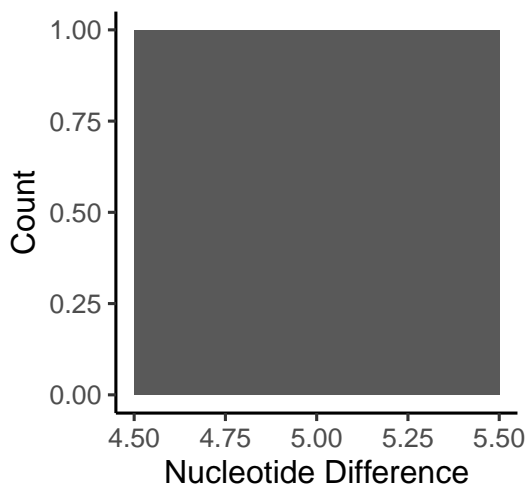
IGHV3-128*02_S0204

1903 sequences assigned
90 (4.7%) exact matches, in which:
52 unique CDR3
5 unique J



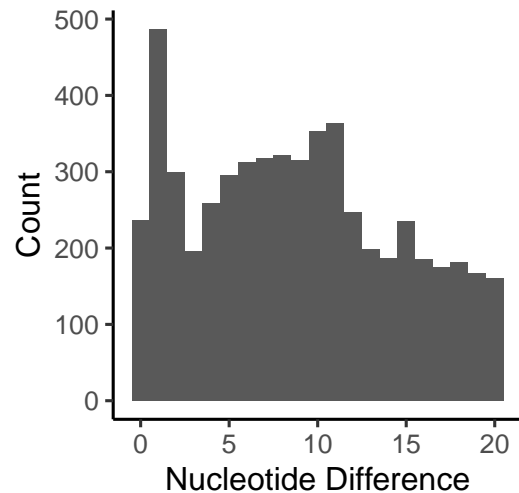
IGHV3-152*01_S7388

1 sequences assigned
No exact matches.



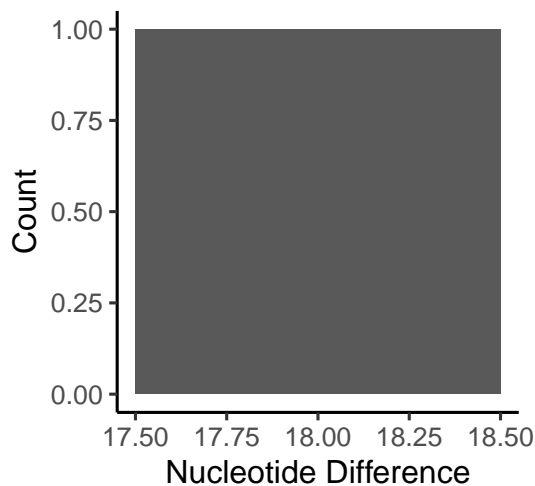
IGHV3-187*01_S8951

7464 sequences assigned
237 (3.2%) exact matches, in which:
140 unique CDR3
4 unique J



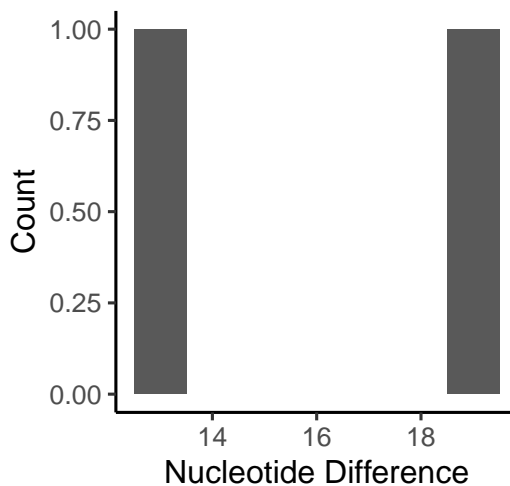
IGHV3-141*01_S3493

1 sequences assigned
No exact matches.



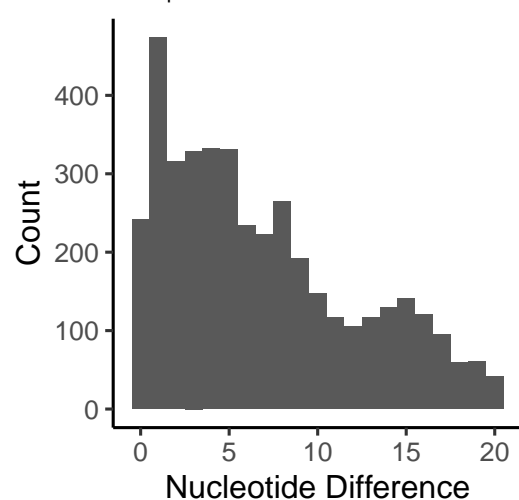
IGHV3-172*01_S2175

3 sequences assigned
No exact matches.



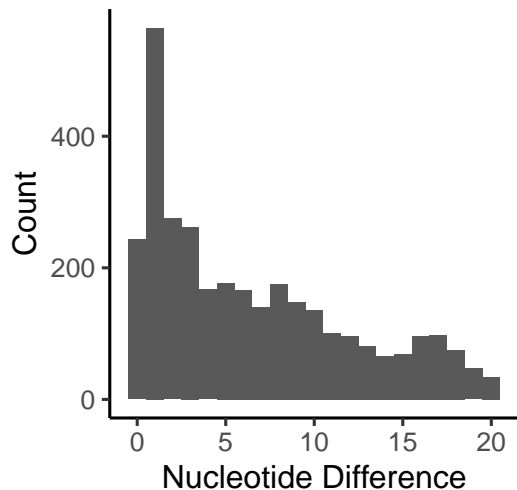
IGHV3-NL_1*01_S4331

4607 sequences assigned
242 (5.3%) exact matches, in which:
143 unique CDR3
5 unique J



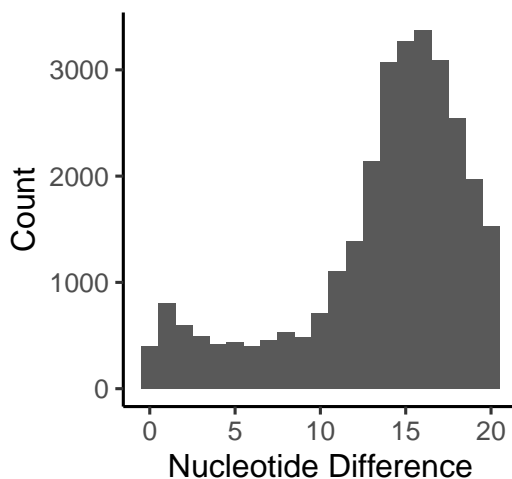
IGHV3–NL_1*01_S9854

3828 sequences assigned
243 (6.3%) exact matches, in which:
150 unique CDR3
5 unique J



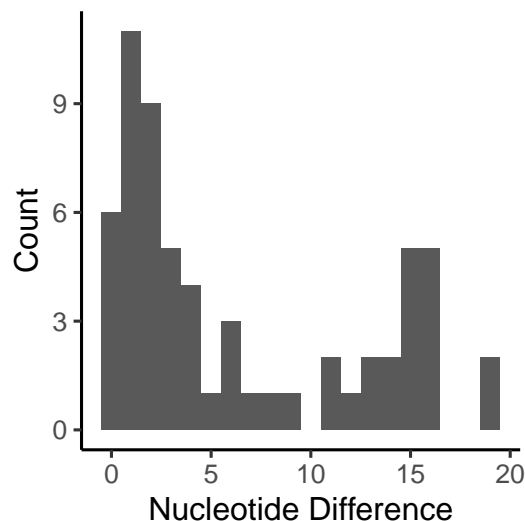
IGHV3–NL_11*01_S839

35917 sequences assigned
397 (1.1%) exact matches, in which:
269 unique CDR3
7 unique J



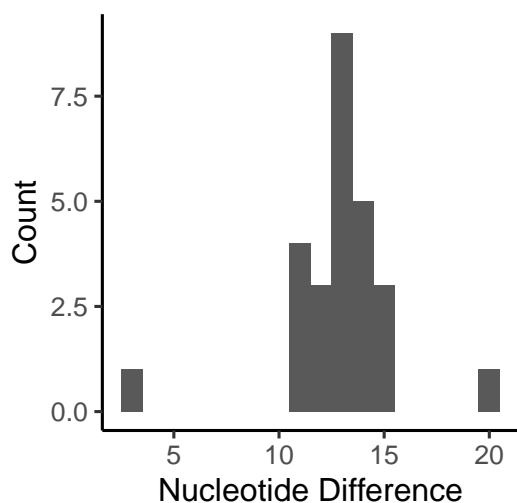
IGHV3–NL_12*02_S2468

63 sequences assigned
6 (9.5%) exact matches, in which:
6 unique CDR3
3 unique J



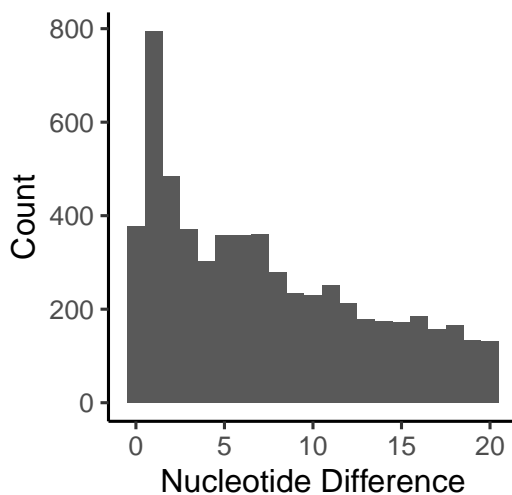
IGHV3–NL_10*02_S2212

37 sequences assigned
No exact matches.



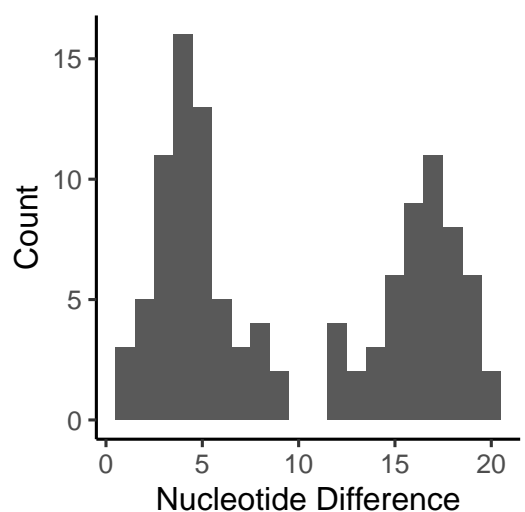
IGHV3–NL_11*02_S2668

7082 sequences assigned
378 (5.3%) exact matches, in which:
251 unique CDR3
6 unique J



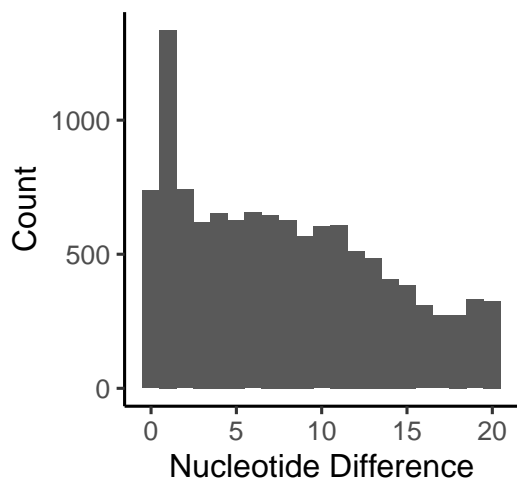
IGHV3–NL_13*01_S3940

132 sequences assigned
No exact matches.



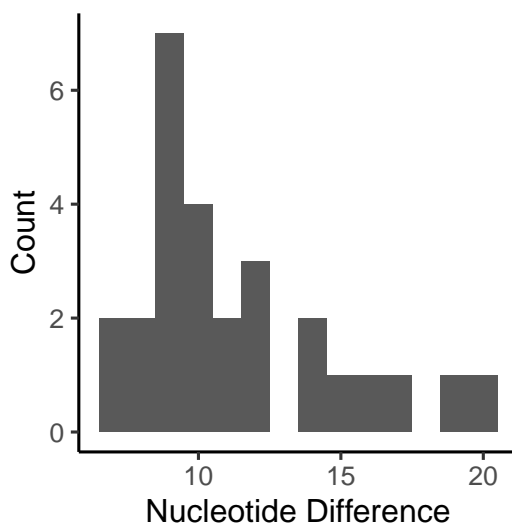
IGHV3–NL_11*01_S373

14165 sequences assigned
738 (5.2%) exact matches, in which:
492 unique CDR3
5 unique J



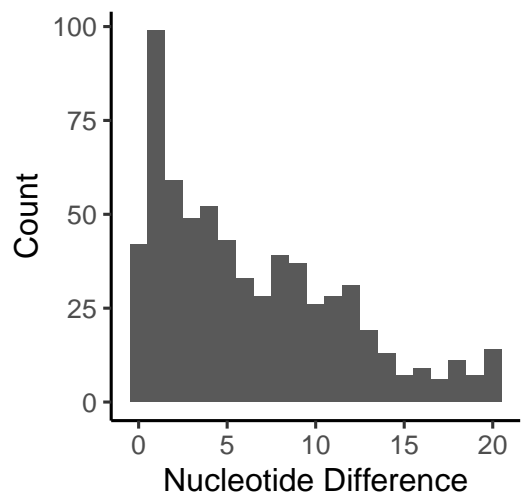
IGHV3–NL_12*02_S1760

46 sequences assigned
No exact matches.



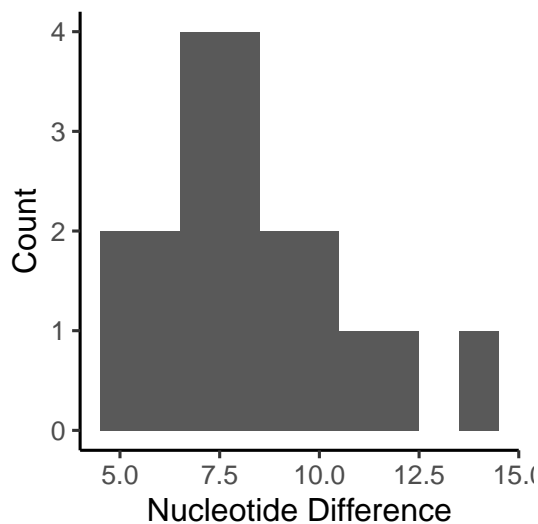
IGHV3–NL_14*01_S9303

676 sequences assigned
42 (6.2%) exact matches, in which:
26 unique CDR3
6 unique J



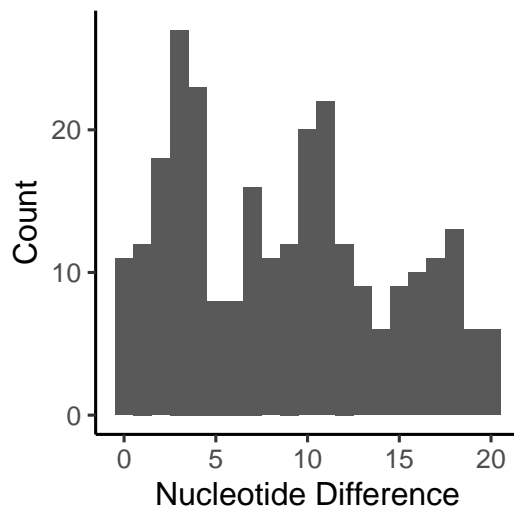
IGHV3–NL_15*01_S4749

20 sequences assigned
No exact matches.



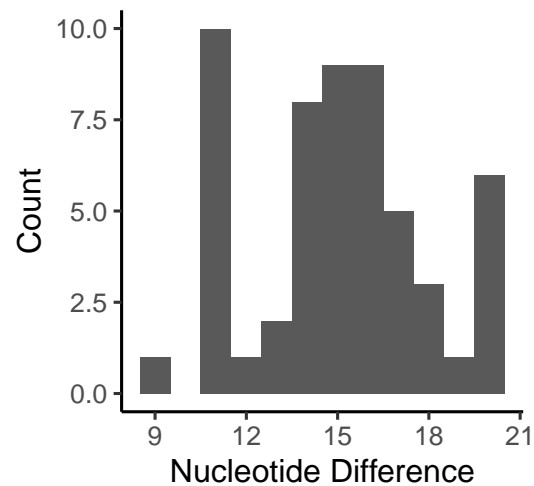
IGHV3–NL_2*01_S3900

305 sequences assigned
11 (3.6%) exact matches, in which:
9 unique CDR3
4 unique J



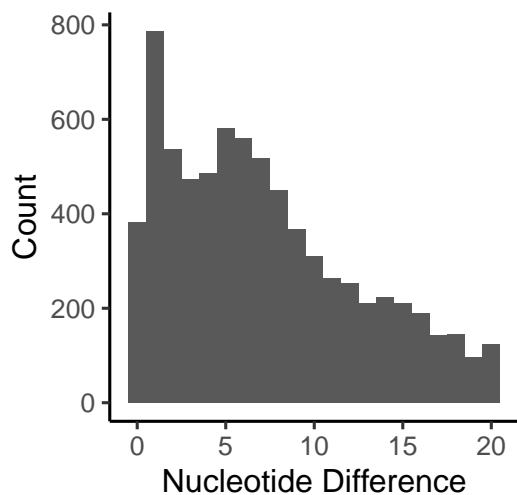
IGHV3–NL_4*01_S9635

81 sequences assigned
No exact matches.



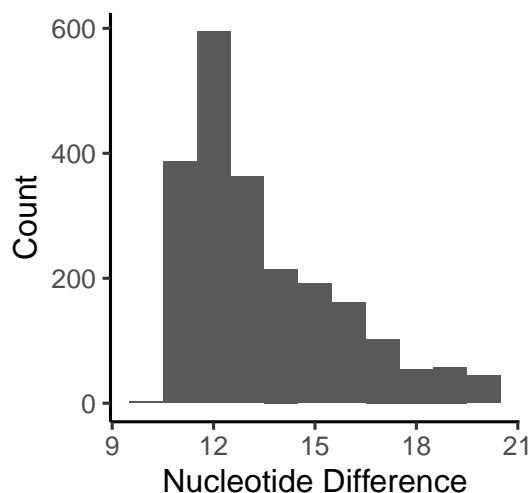
IGHV3–NL_17*01_S4736

8272 sequences assigned
382 (4.6%) exact matches, in which:
222 unique CDR3
6 unique J



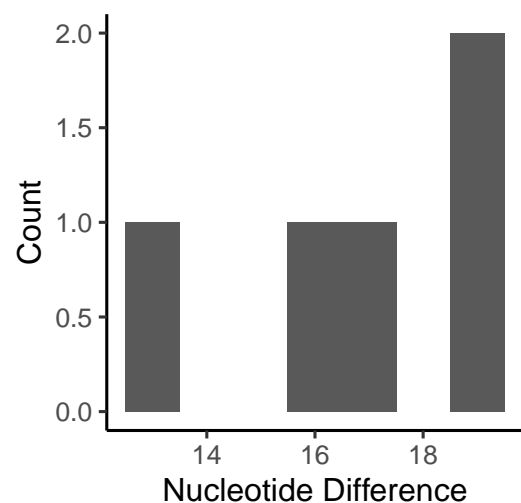
IGHV3–NL_4*01_S2727

2363 sequences assigned
No exact matches.



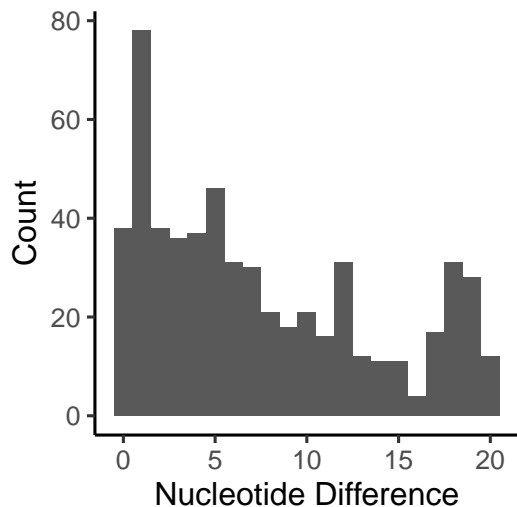
IGHV3–NL_5*01_S8361

5 sequences assigned
No exact matches.



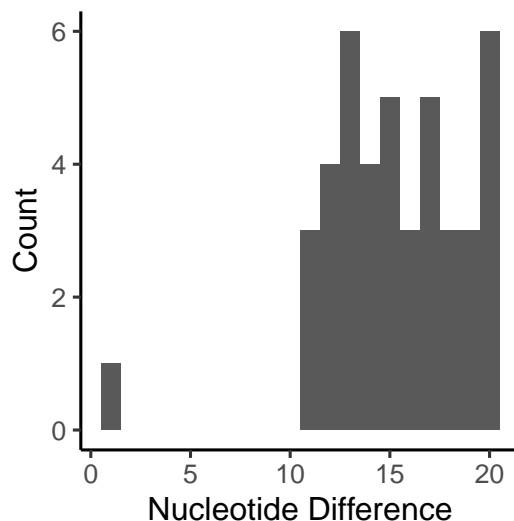
IGHV3–NL_18*01_S0984

612 sequences assigned
38 (6.2%) exact matches, in which:
30 unique CDR3
3 unique J



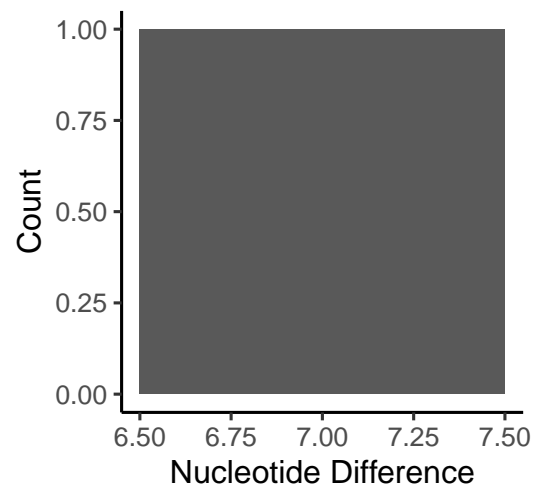
IGHV3–NL_4*01_S9067

59 sequences assigned
No exact matches.



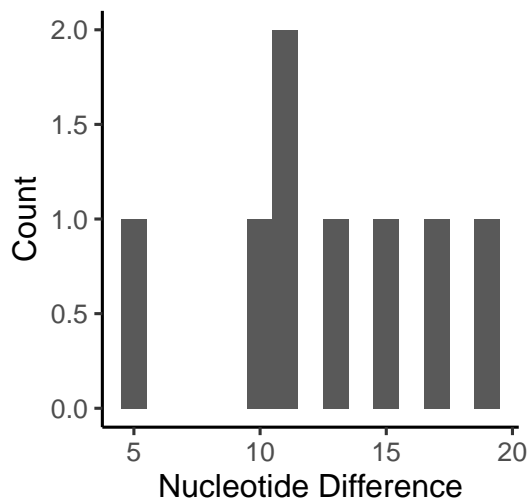
IGHV3–NL_6*02_S7808

1 sequences assigned
No exact matches.



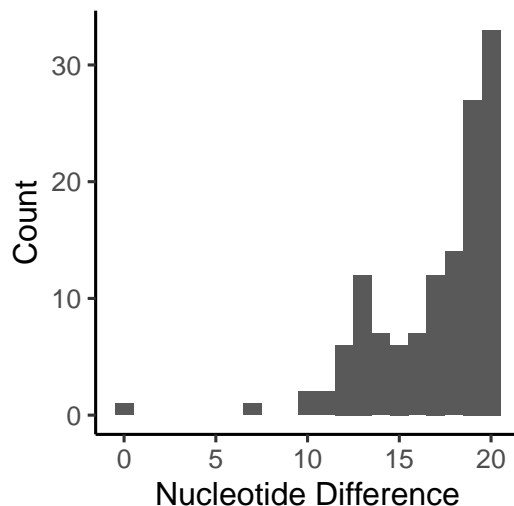
IGHV3–NL_7*01_S0199

13 sequences assigned
No exact matches.



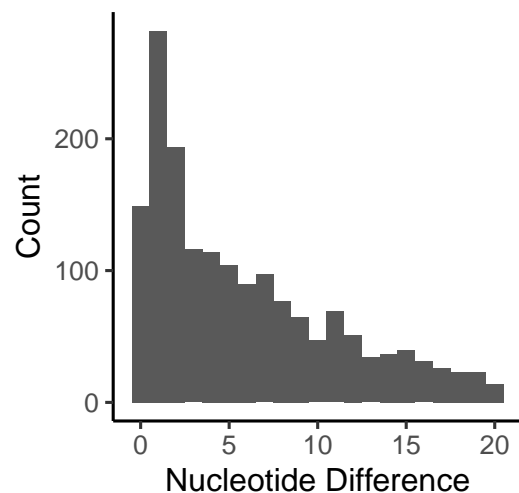
IGHV3–NL_9*01_S6098

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



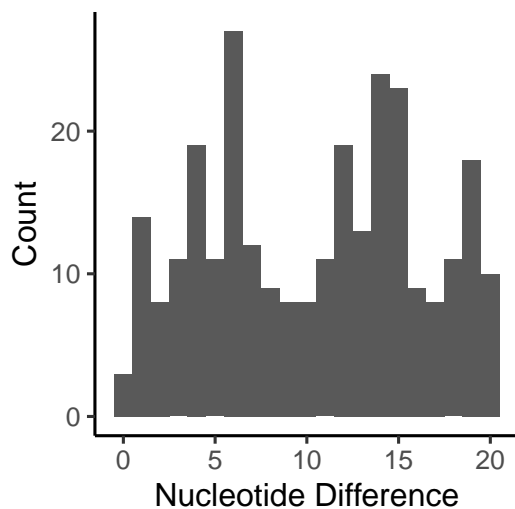
IGHV4–79*01_S1478

1778 sequences assigned
149 (8.4%) exact matches, in which:
125 unique CDR3
6 unique J



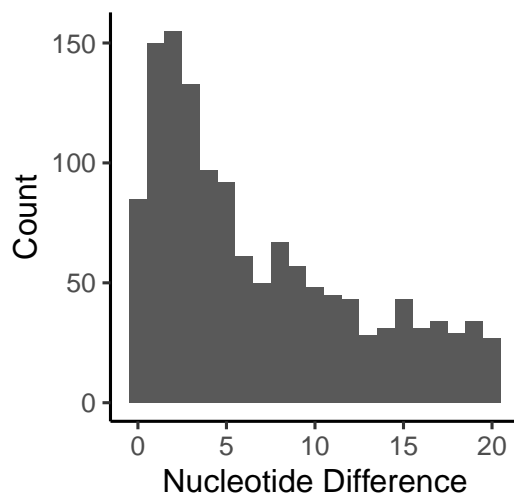
IGHV3–NL_8*01_S7474

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



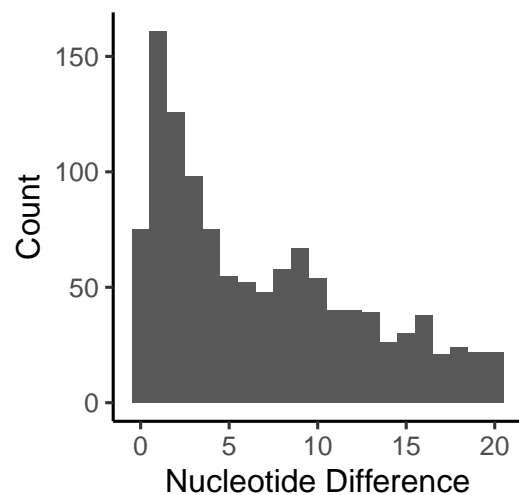
IGHV4–67*01_S8827

1526 sequences assigned
85 (5.6%) exact matches, in which:
65 unique CDR3
4 unique J



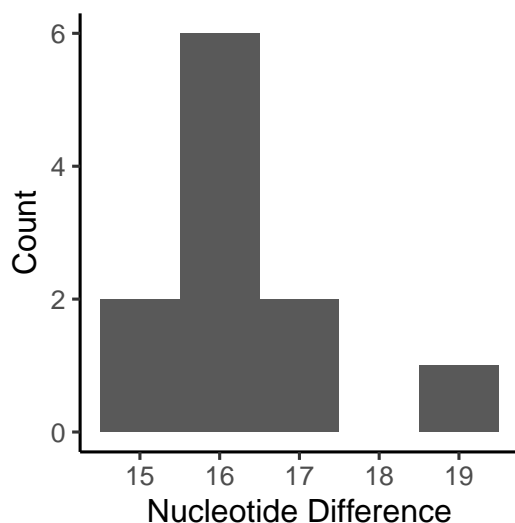
IGHV4–93*01_S0054

1385 sequences assigned
75 (5.4%) exact matches, in which:
63 unique CDR3
6 unique J



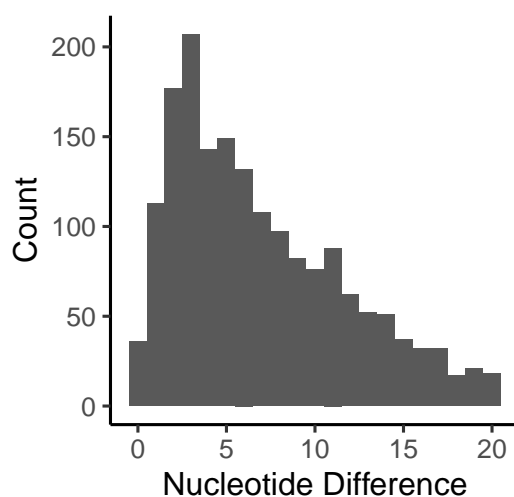
IGHV3–NL_8*01_S7860

47 sequences assigned
No exact matches.



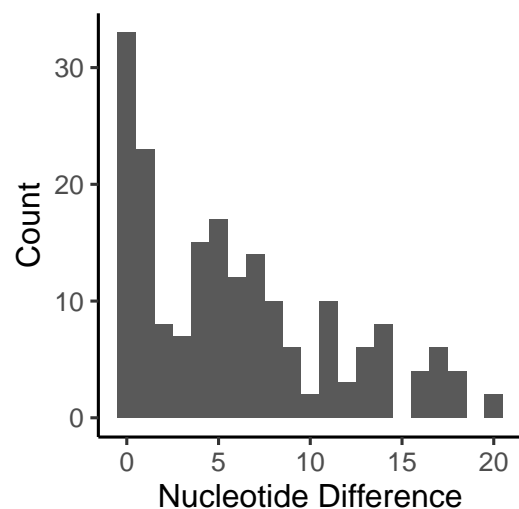
IGHV4–72*01_S8261

1879 sequences assigned
36 (1.9%) exact matches, in which:
28 unique CDR3
5 unique J



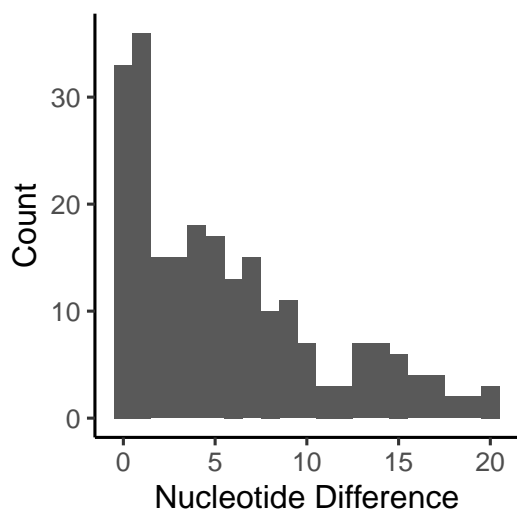
IGHV4–93*01_S8059

219 sequences assigned
33 (15.1%) exact matches, in which:
28 unique CDR3
5 unique J



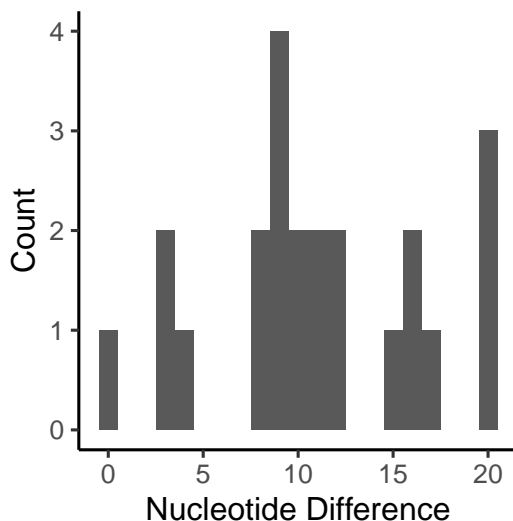
IGHV4-93*01_S8059_A29

286 sequences assigned
33 (11.5%) exact matches, in which:
29 unique CDR3
5 unique J



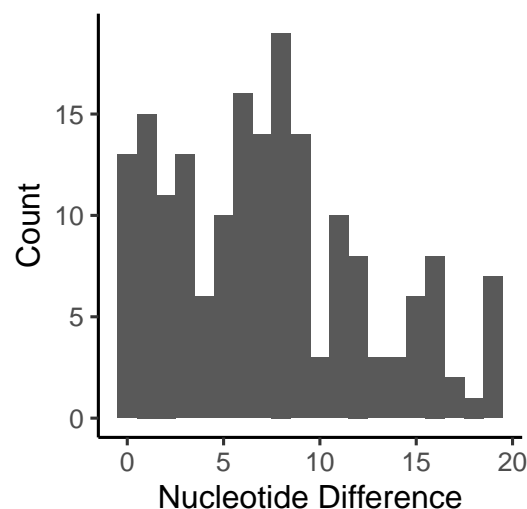
IGHV4-149*01_S0794

23 sequences assigned
1 (4.3%) exact matches, in which:
1 unique CDR3
1 unique J



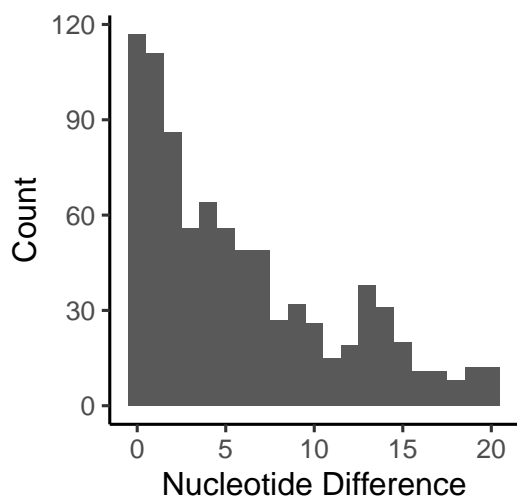
IGHV4-150*01_S8107

188 sequences assigned
13 (6.9%) exact matches, in which:
10 unique CDR3
2 unique J



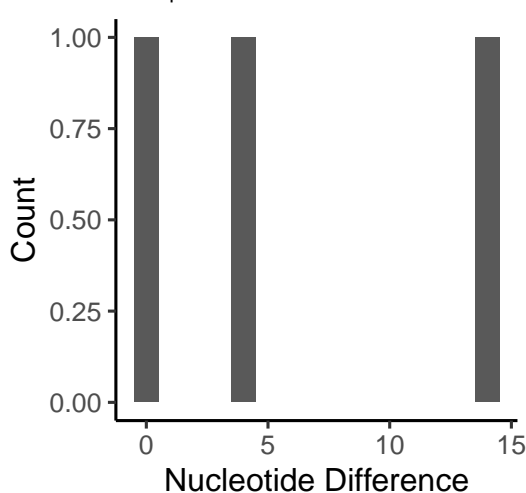
IGHV4-117*01_S4901

899 sequences assigned
117 (13%) exact matches, in which:
95 unique CDR3
6 unique J



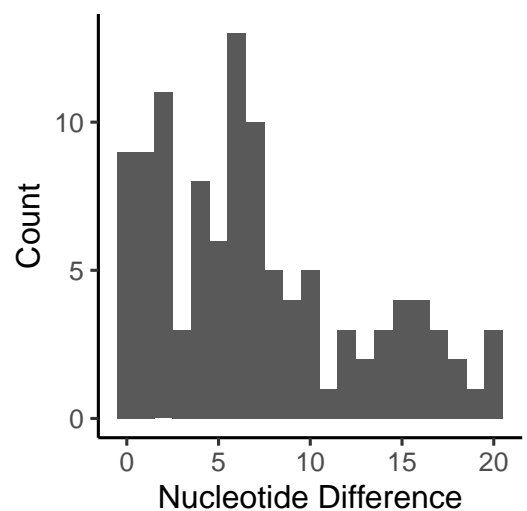
IGHV4-149*01_S1992

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



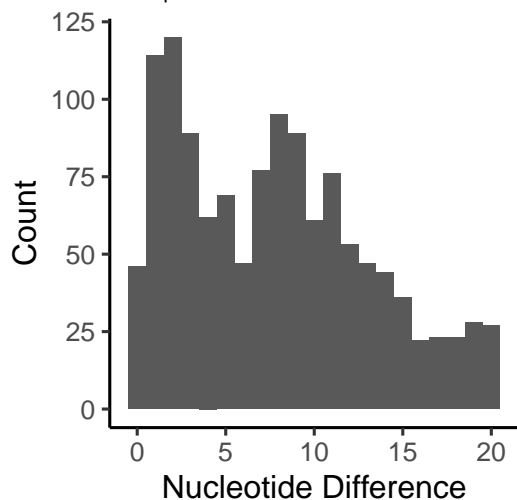
IGHV4-150*01_S9891

145 sequences assigned
9 (6.2%) exact matches, in which:
7 unique CDR3
4 unique J



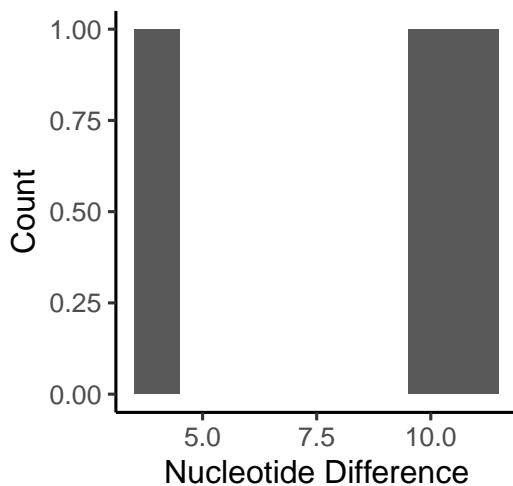
IGHV4-144*01_S5374

1862 sequences assigned
46 (2.5%) exact matches, in which:
35 unique CDR3
5 unique J



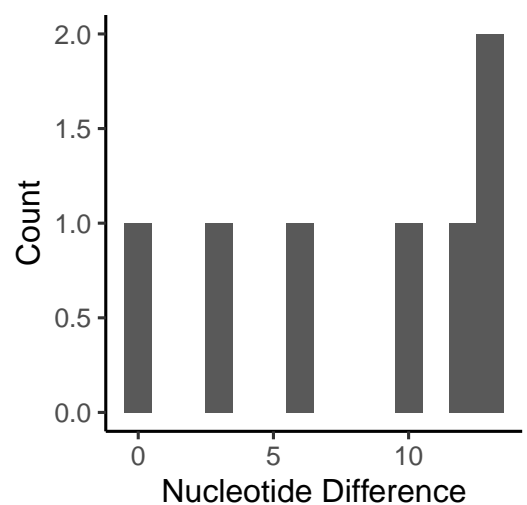
IGHV4-149*01_S6502

4 sequences assigned
No exact matches.



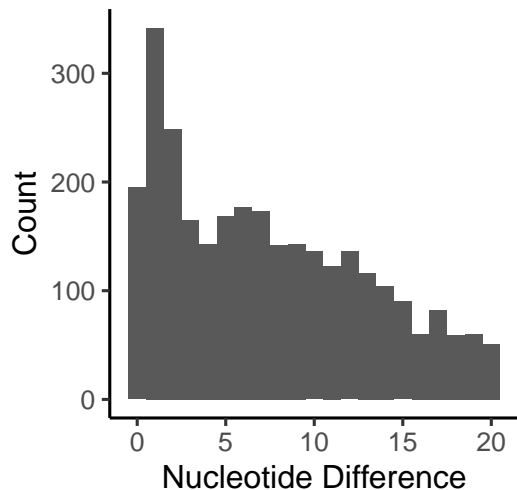
IGHV4-174*02_S3984

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



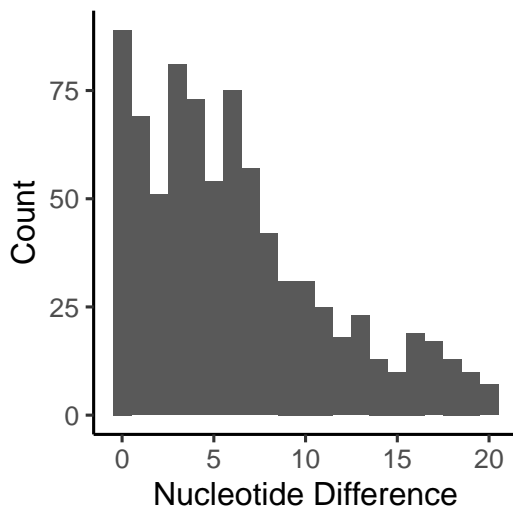
IGHV4–NL_1*01_S5917

3269 sequences assigned
195 (6%) exact matches, in which:
155 unique CDR3
5 unique J



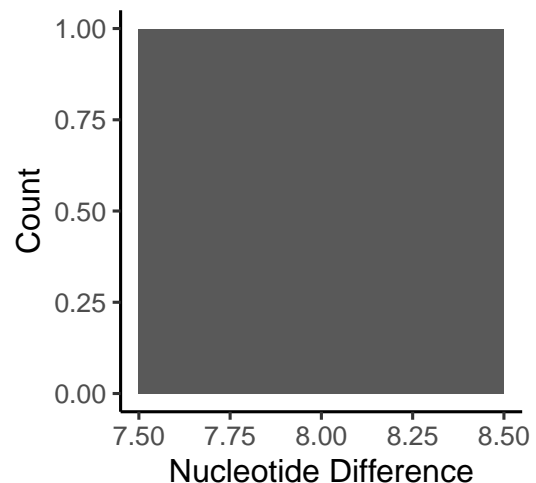
IGHV4–NL_15*01_S5717

893 sequences assigned
89 (10%) exact matches, in which:
75 unique CDR3
6 unique J



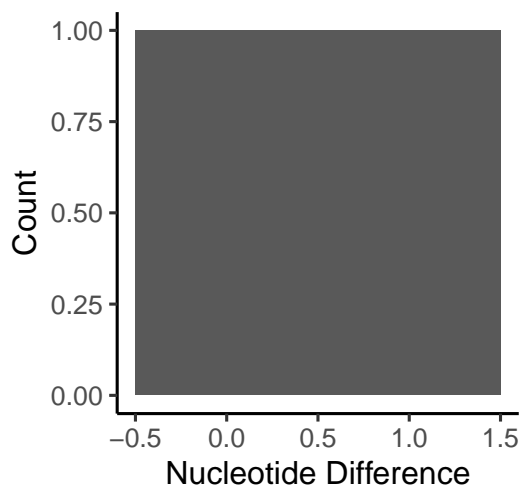
IGHV4–NL_16*01_S3062

1 sequences assigned
No exact matches.



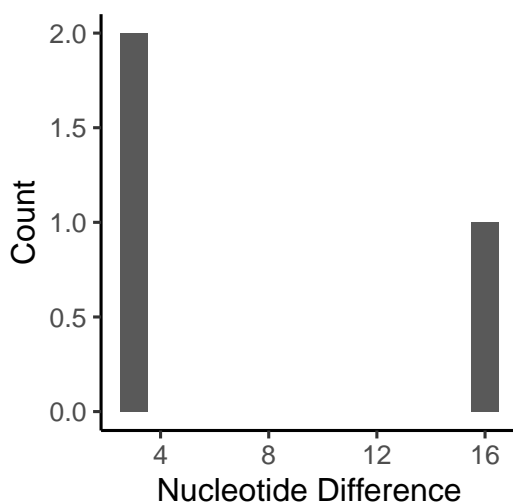
IGHV4–NL_10*01_S7684

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



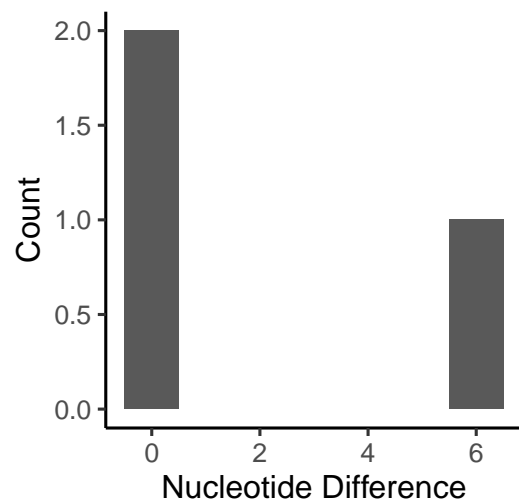
IGHV4–NL_16*01_S2138

3 sequences assigned
No exact matches.



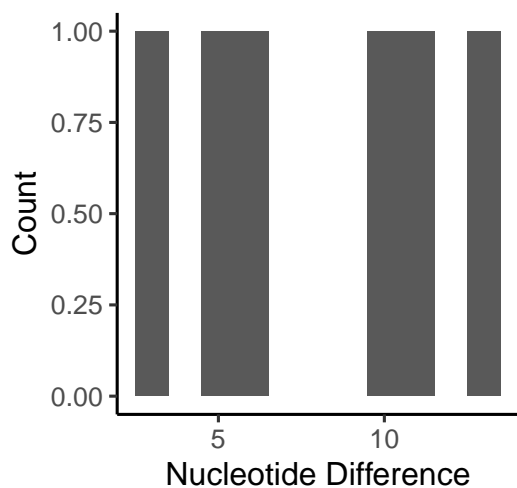
IGHV4–NL_17*01_S0936

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



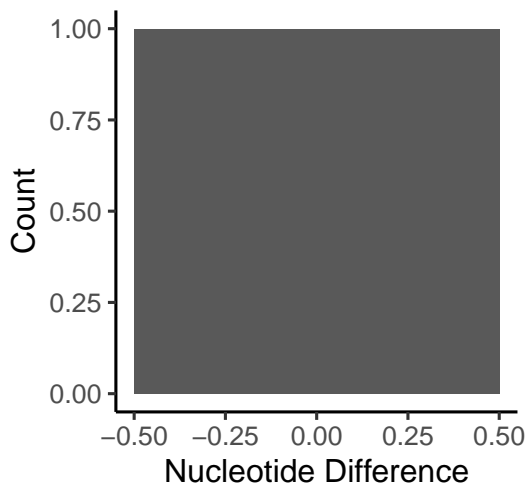
IGHV4–NL_13*01_S9744

6 sequences assigned
No exact matches.



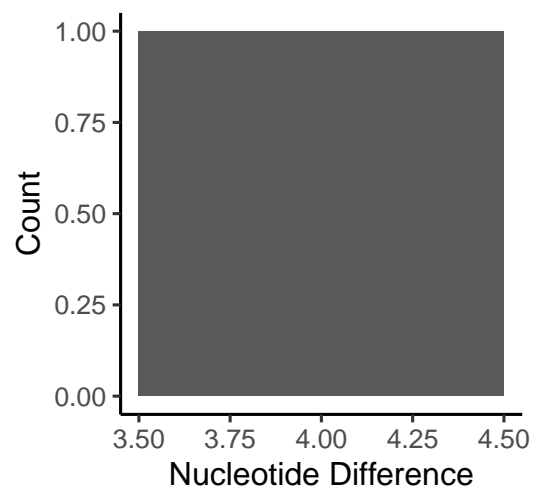
IGHV4–NL_16*01_S2324

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



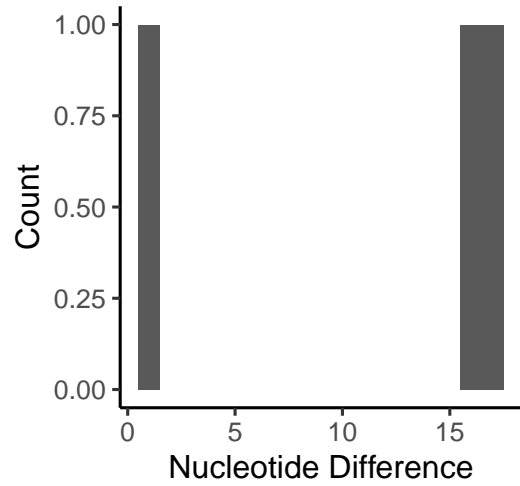
IGHV4–NL_17*01_S3082

1 sequences assigned
No exact matches.



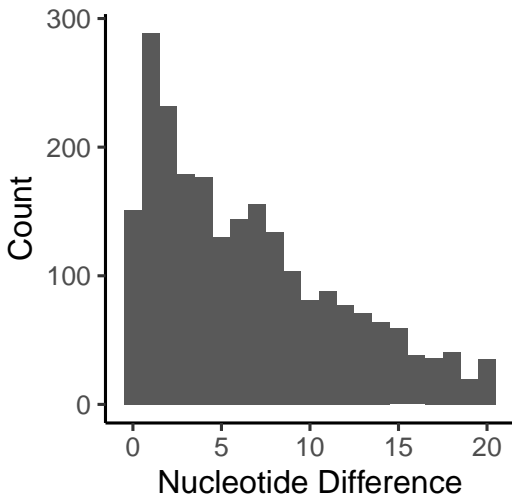
IGHV4-NL_17*01_S4093

3 sequences assigned
No exact matches.



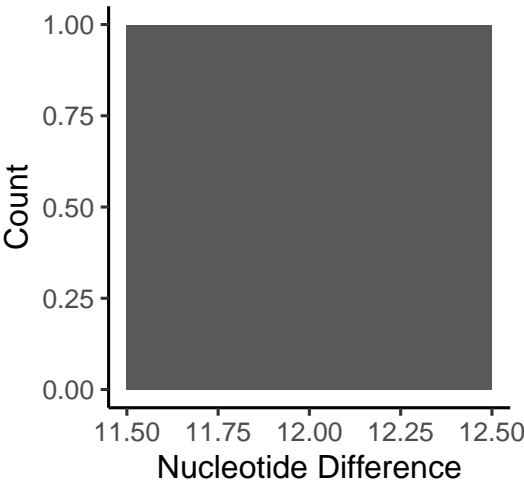
IGHV4-NL_21*01_S0138

2546 sequences assigned
151 (5.9%) exact matches, in which:
114 unique CDR3
5 unique J



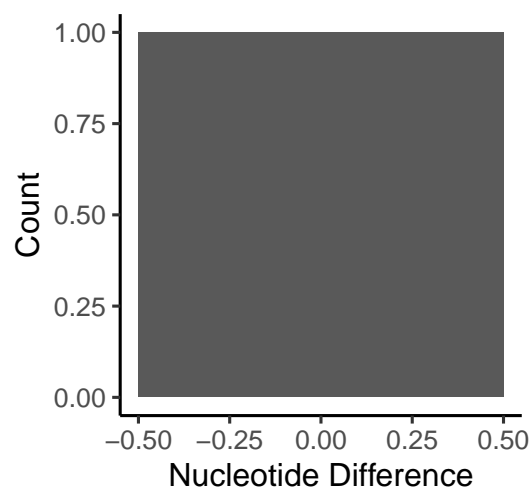
IGHV4-NL_22*01_S9255

1 sequences assigned
No exact matches.



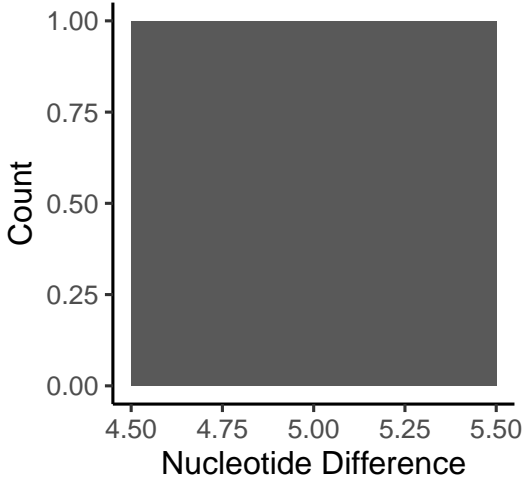
IGHV4-NL_17*01_S5437

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



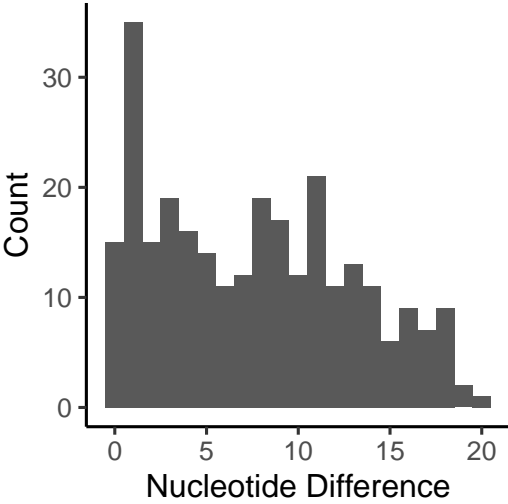
IGHV4-NL_22*01_S2393

1 sequences assigned
No exact matches.



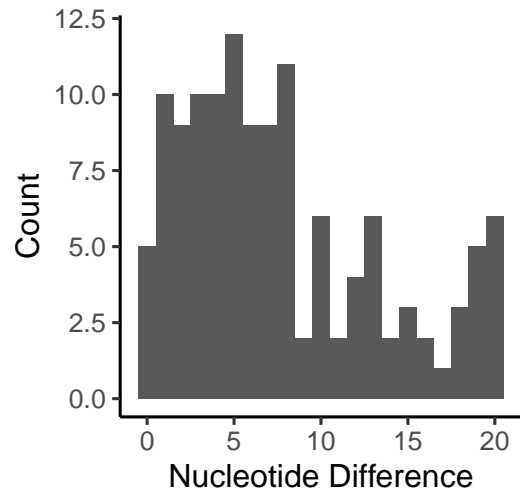
IGHV4-NL_24*01_S1628

300 sequences assigned
15 (5%) exact matches, in which:
13 unique CDR3
6 unique J



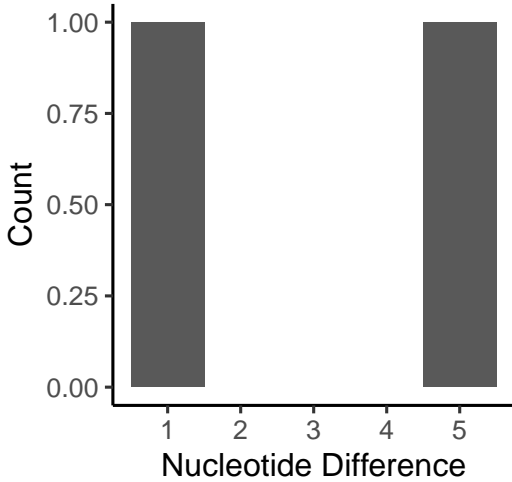
IGHV4-NL_20*01_S3862

147 sequences assigned
5 (3.4%) exact matches, in which:
5 unique CDR3
5 unique J



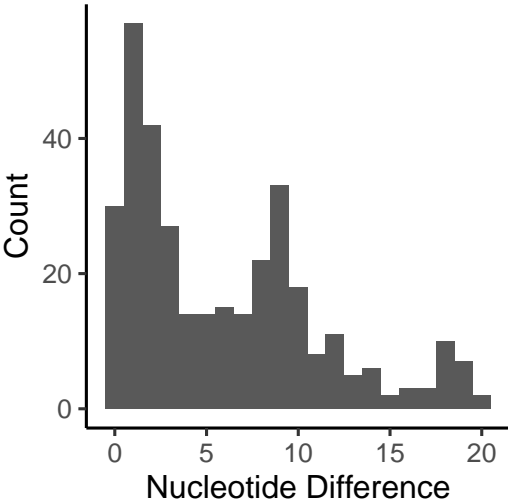
IGHV4-NL_22*01_S6977

2 sequences assigned
No exact matches.



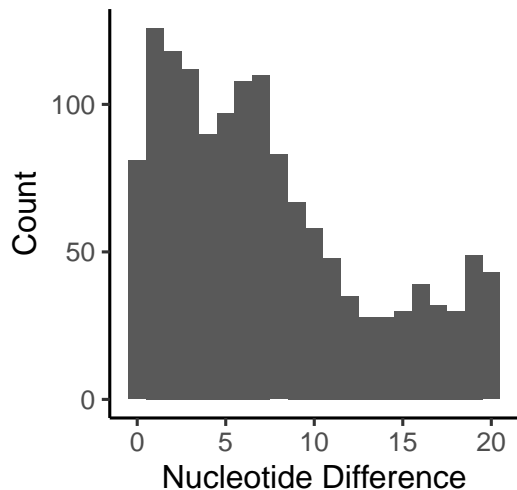
IGHV4-NL_24*01_S5697

365 sequences assigned
30 (8.2%) exact matches, in which:
24 unique CDR3
4 unique J



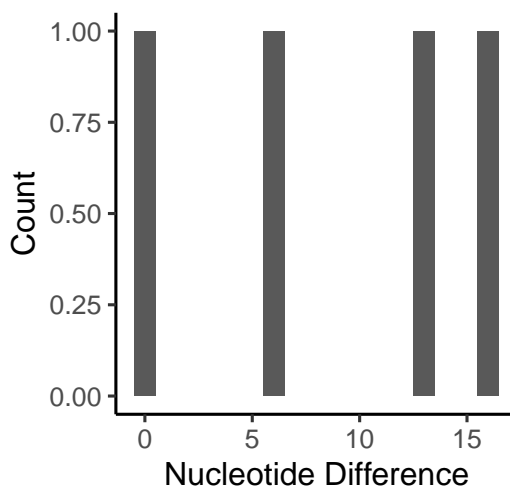
IGHV4–NL_25*01_S0581

1809 sequences assigned
81 (4.5%) exact matches, in which:
58 unique CDR3
6 unique J



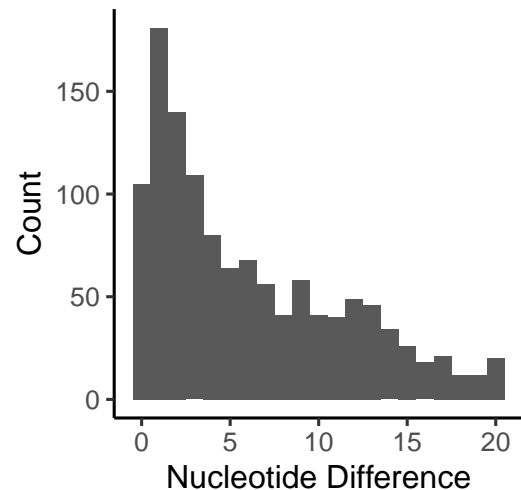
IGHV4–NL_27*01_S900

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



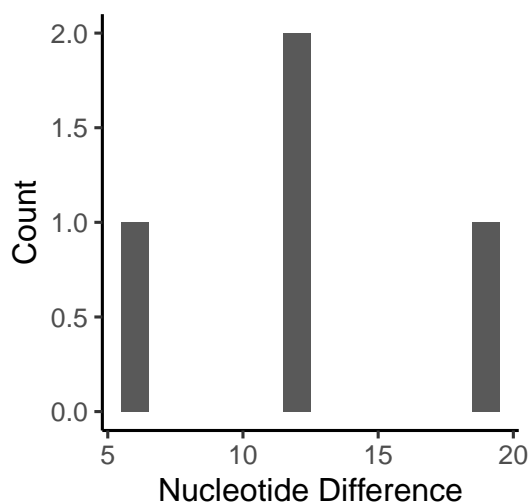
IGHV4–NL_31*01_S7693

1319 sequences assigned
105 (8%) exact matches, in which:
80 unique CDR3
5 unique J



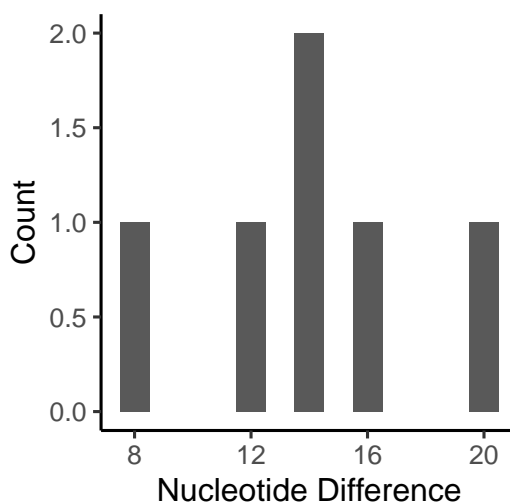
IGHV4–NL_26*01_S2261

4 sequences assigned
No exact matches.



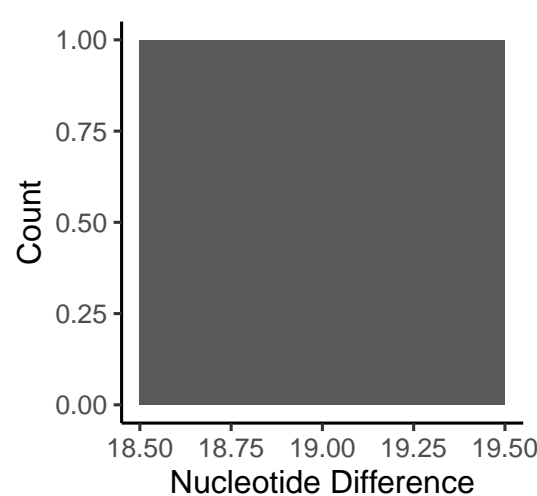
IGHV4–NL_29*01_S3761

7 sequences assigned
No exact matches.



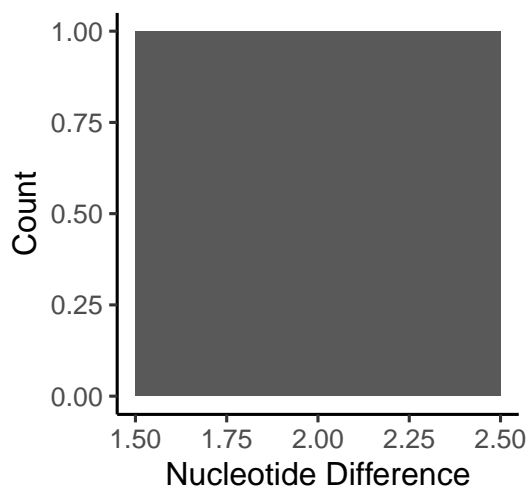
IGHV4–NL_32*01_S3033

1 sequences assigned
No exact matches.



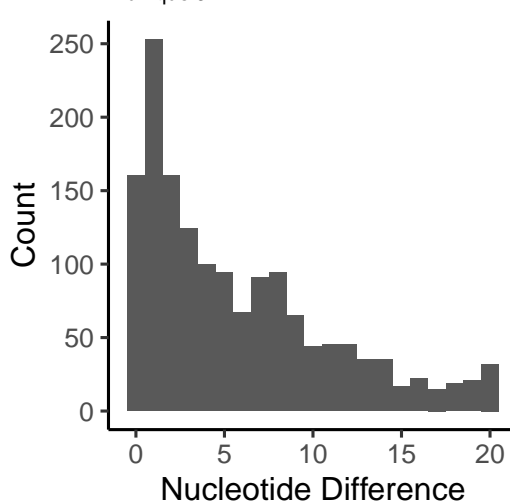
IGHV4–NL_27*01_S1458

1 sequences assigned
No exact matches.



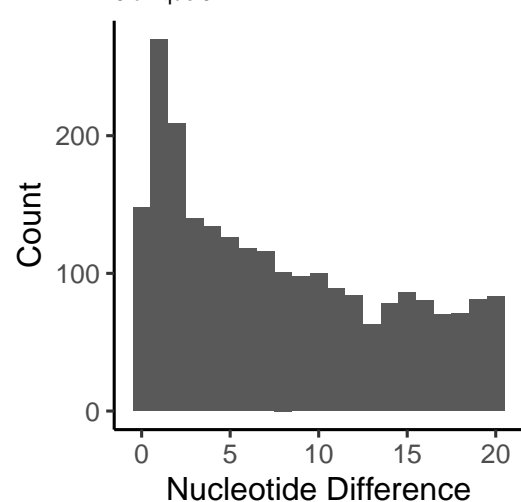
IGHV4–NL_31*01_S1675

1650 sequences assigned
160 (9.7%) exact matches, in which:
126 unique CDR3
7 unique J



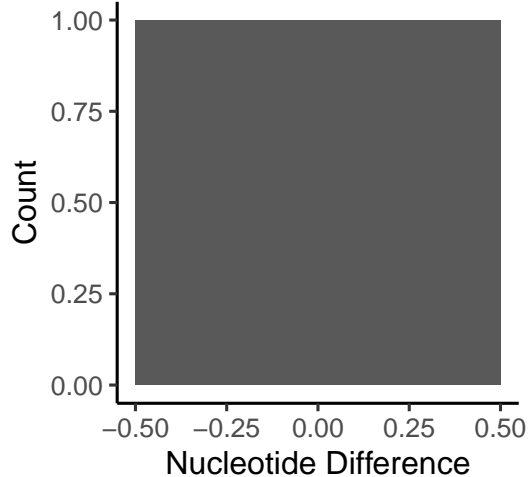
IGHV4–NL_33*01_S6730

2925 sequences assigned
148 (5.1%) exact matches, in which:
116 unique CDR3
6 unique J



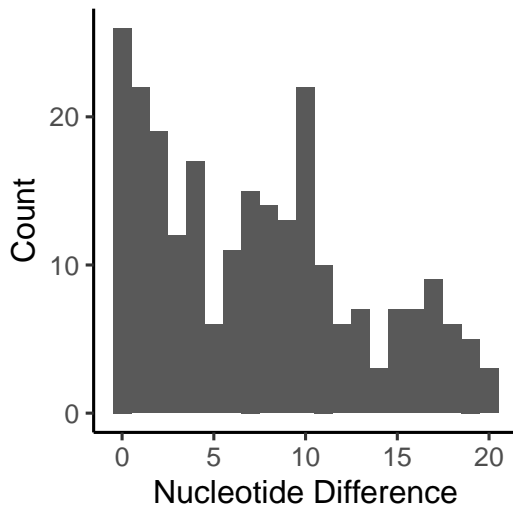
IGHV4–NL_34*01_S4637

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



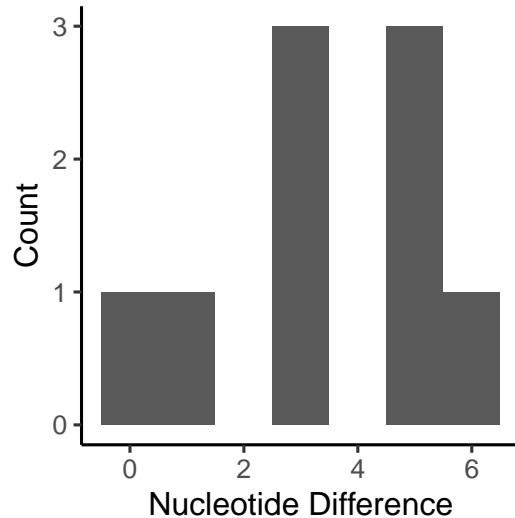
IGHV4–NL_38*01_S6954

262 sequences assigned
26 (9.9%) exact matches, in which:
22 unique CDR3
4 unique J



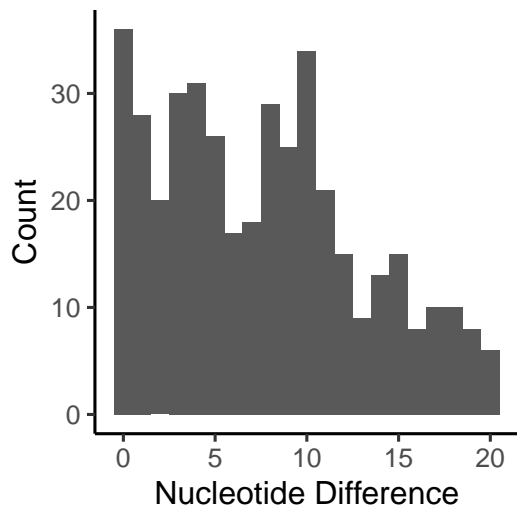
IGHV4–NL_43*01_S4510

10 sequences assigned
1 (10%) exact matches, in which:
1 unique CDR3
1 unique J



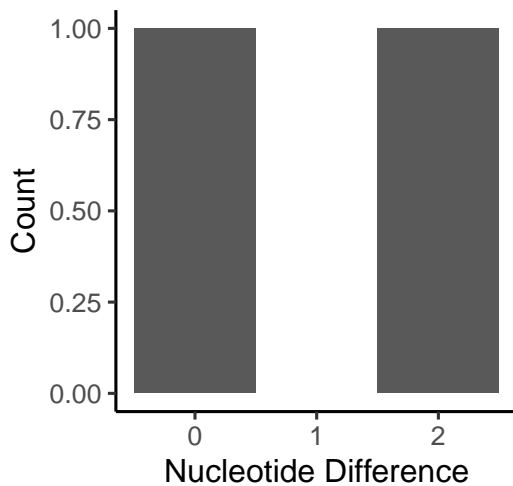
IGHV4–NL_36*01_S3780

428 sequences assigned
36 (8.4%) exact matches, in which:
30 unique CDR3
3 unique J



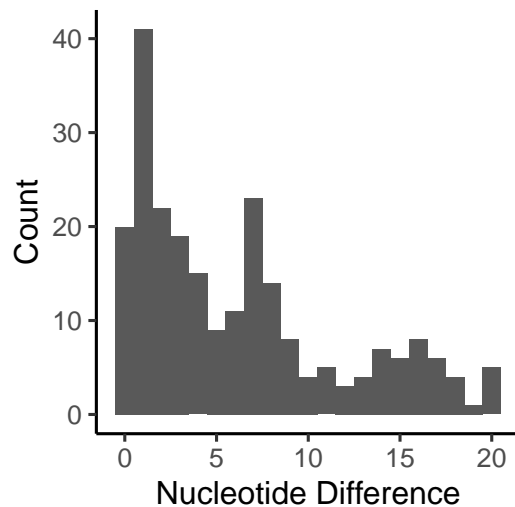
IGHV4–NL_40*01_S0979

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



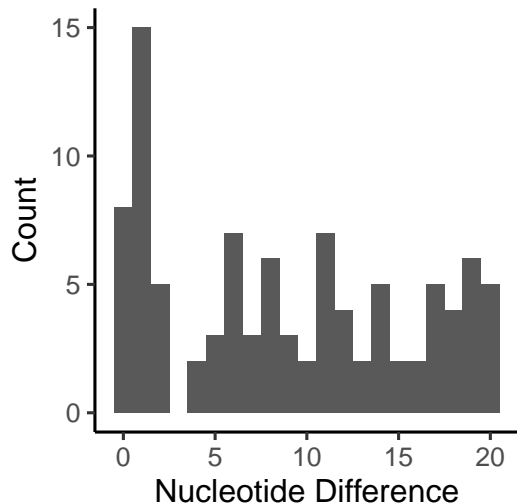
IGHV4–NL_5*01_S2528

275 sequences assigned
20 (7.3%) exact matches, in which:
19 unique CDR3
6 unique J



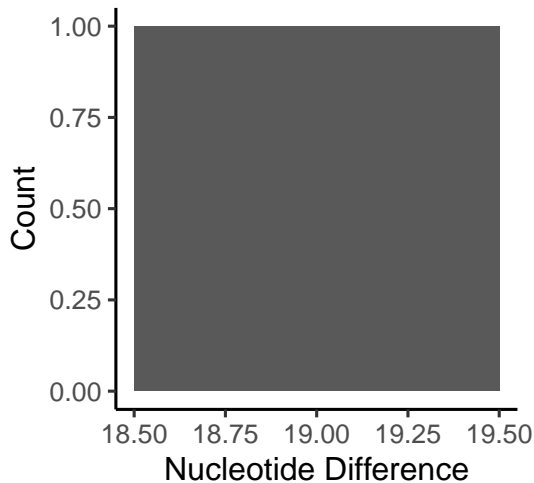
IGHV4–NL_38*01_S6639

130 sequences assigned
8 (6.2%) exact matches, in which:
7 unique CDR3
3 unique J



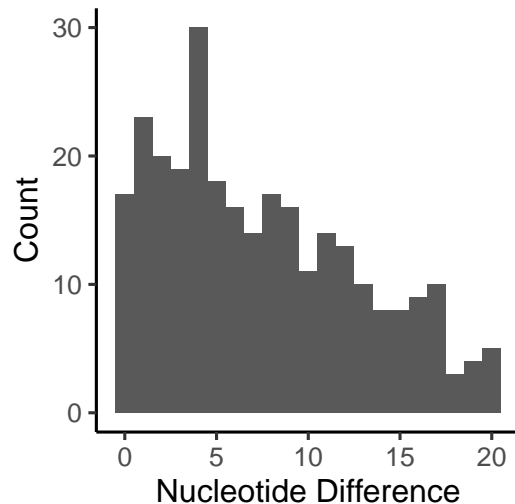
IGHV4–NL_42*01_S3572

1 sequences assigned
No exact matches.



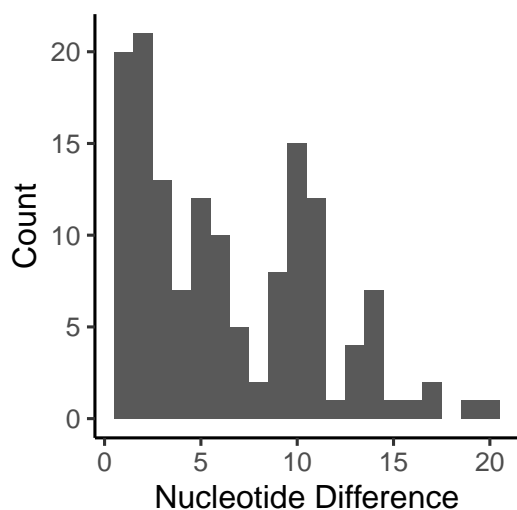
IGHV4–NL_5*01_S2634

310 sequences assigned
17 (5.5%) exact matches, in which:
13 unique CDR3
2 unique J



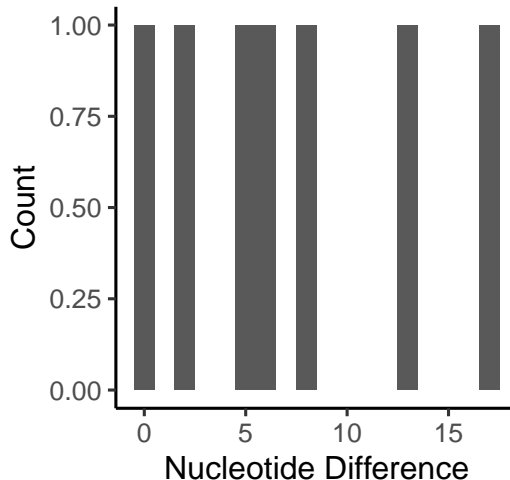
IGHV4–NL_5*01_S5442

158 sequences assigned
No exact matches.



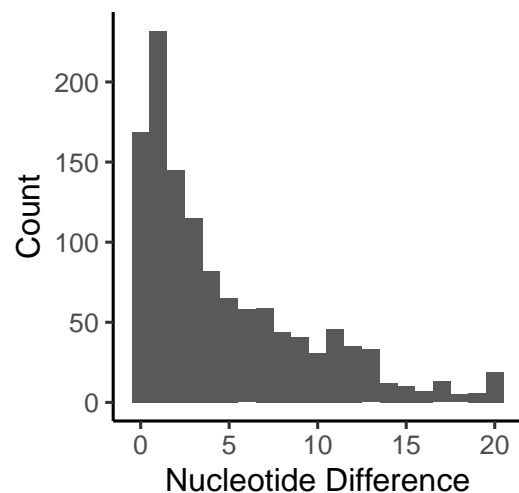
IGHV4–NL_9*01_S3502

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



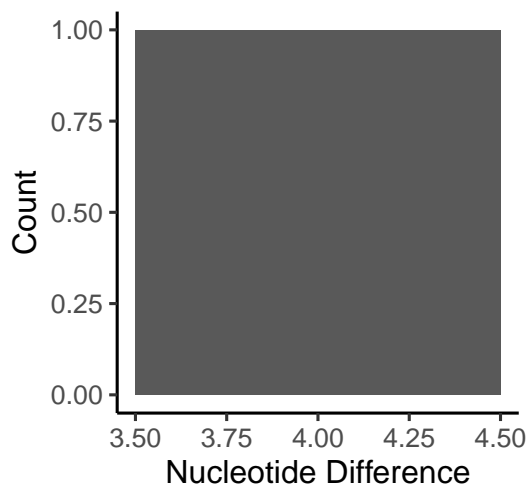
IGHV5–157*01_S5960

1359 sequences assigned
169 (12.4%) exact matches, in which:
77 unique CDR3
6 unique J



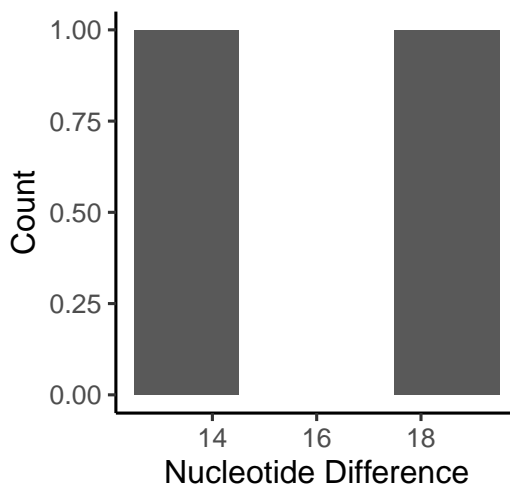
IGHV4–NL_7*02_S0143

1 sequences assigned
No exact matches.



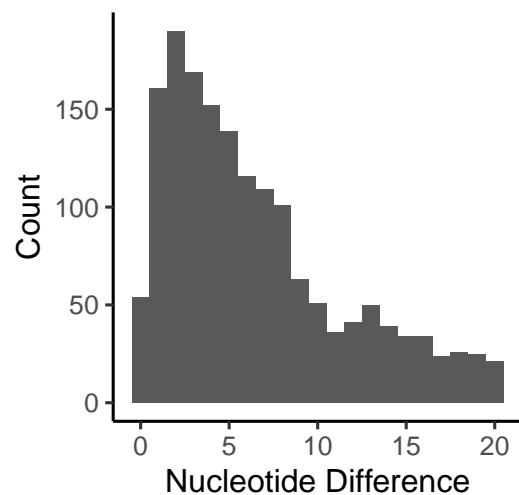
IGHV4–NL_9*01_S4567

4 sequences assigned
No exact matches.



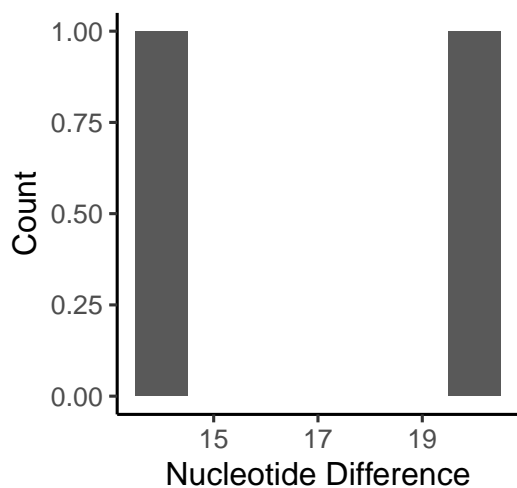
IGHV6–1*02_G280T

1717 sequences assigned
54 (3.1%) exact matches, in which:
40 unique CDR3
6 unique J



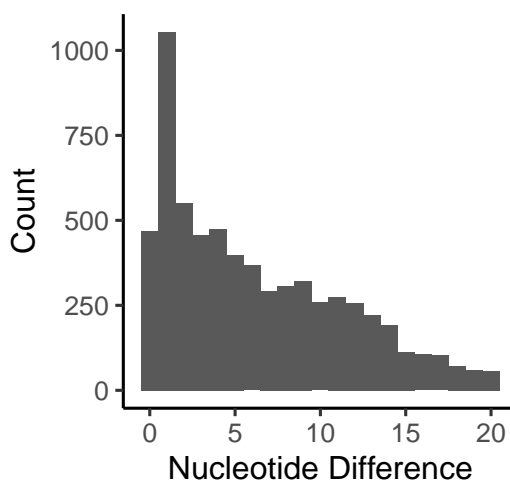
IGHV4–NL_9*01_S2406

2 sequences assigned
No exact matches.



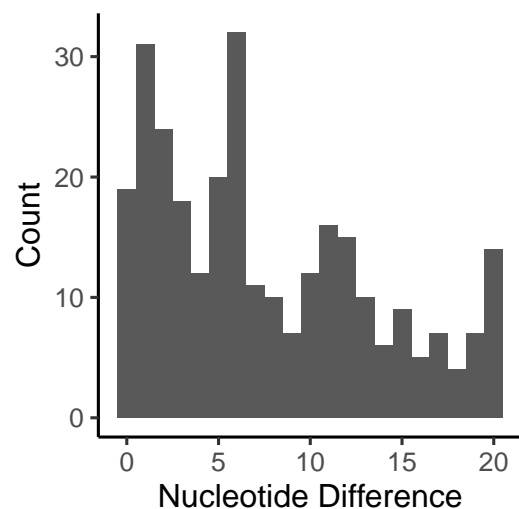
IGHV5–15*01_S8661

6586 sequences assigned
468 (7.1%) exact matches, in which:
303 unique CDR3
7 unique J



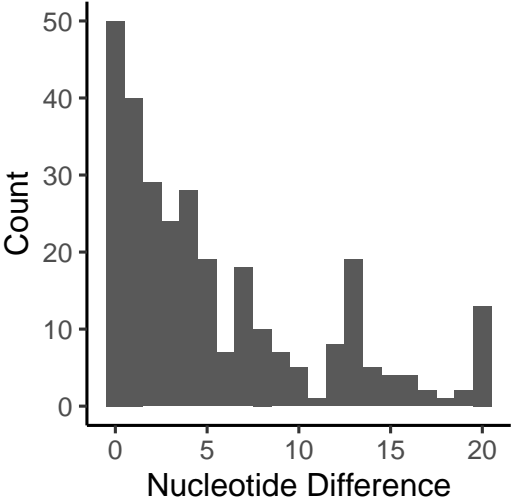
IGHV7–86*01_S2268

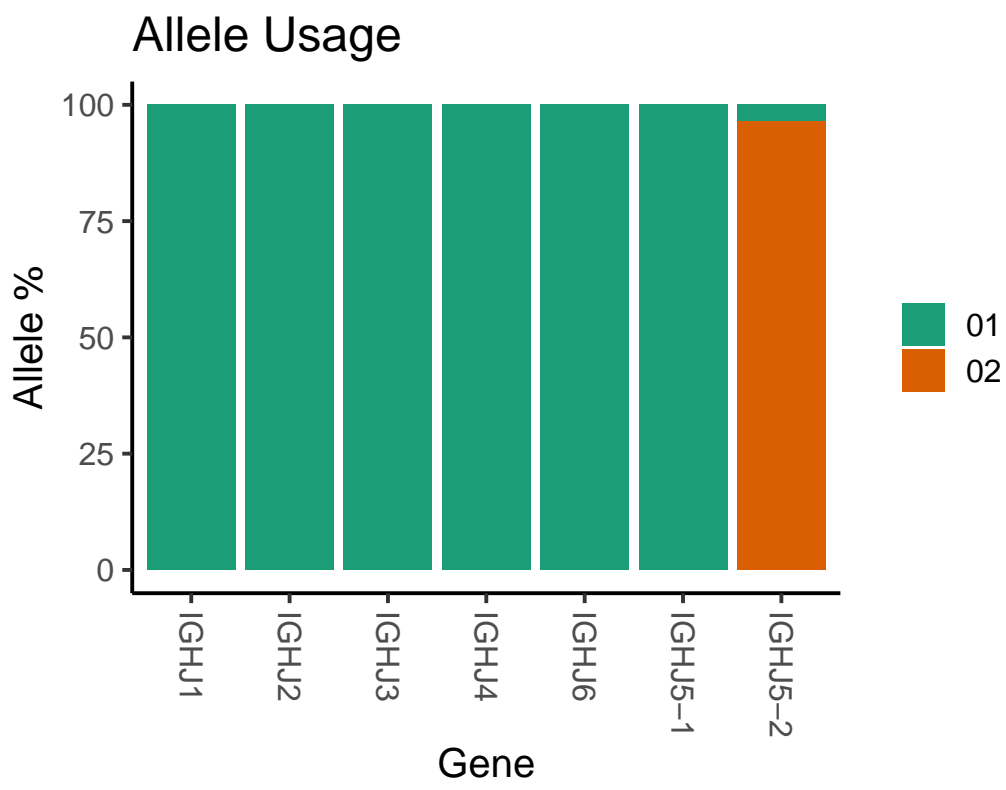
498 sequences assigned
19 (3.8%) exact matches, in which:
12 unique CDR3
3 unique J



IGHV7-86*01_S4789

353 sequences assigned
50 (14.2%) exact matches, in which:
27 unique CDR3
5 unique J





Warning – no inferred sequences found.