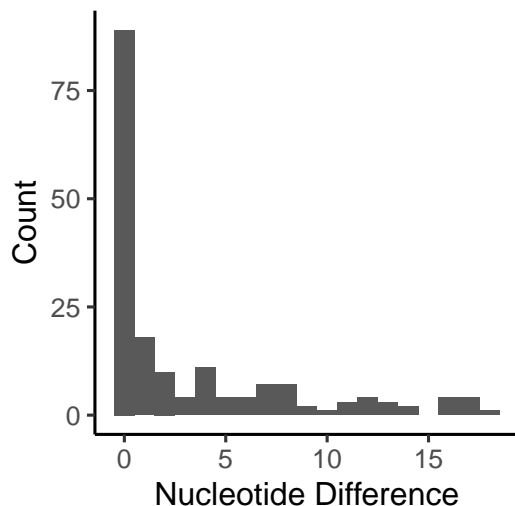


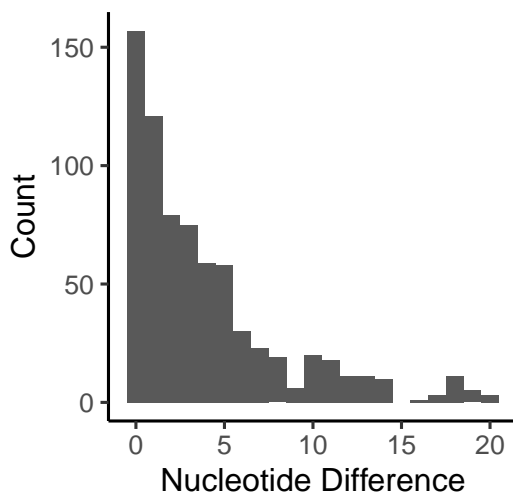
IGHV1-124*01_S6748

189 sequences assigned
89 (47.1%) exact matches, in which:
69 unique CDR3
6 unique J



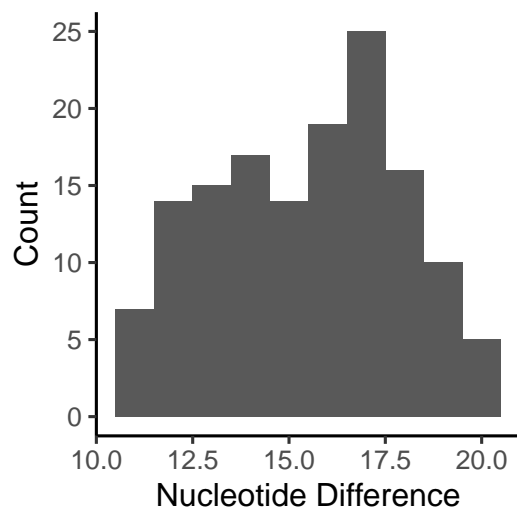
IGHV2-7*02_S4285

728 sequences assigned
157 (21.6%) exact matches, in which:
120 unique CDR3
7 unique J



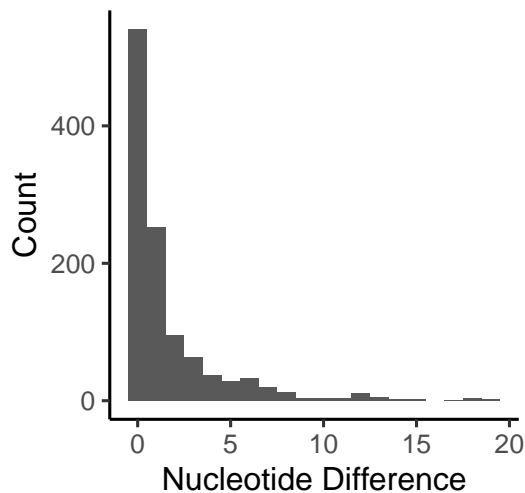
IGHV2-NL_1*01_S5211

242 sequences assigned
No exact matches.



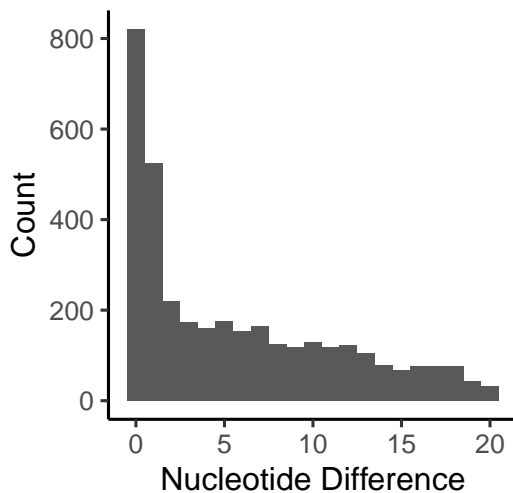
IGHV1-138*01_S2054

1130 sequences assigned
541 (47.9%) exact matches, in which:
475 unique CDR3
8 unique J



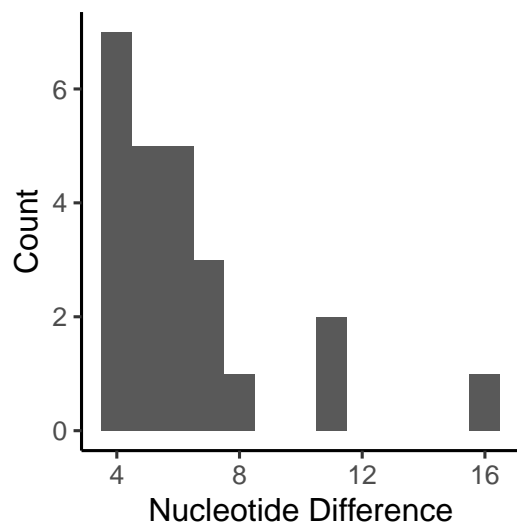
IGHV2-69*01_S8735_T1

3720 sequences assigned
821 (22.1%) exact matches, in which:
560 unique CDR3
7 unique J



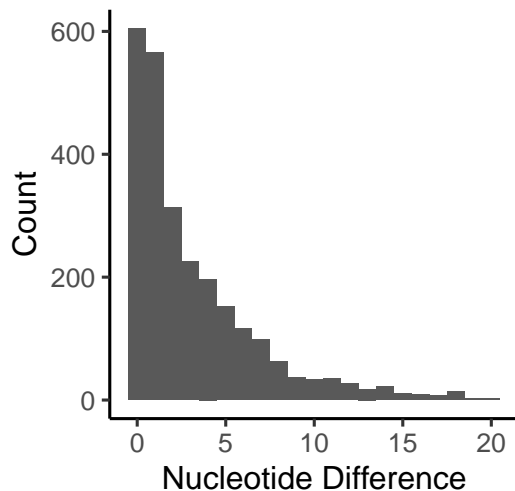
IGHV2-NL_1*01_S5431

24 sequences assigned
No exact matches.



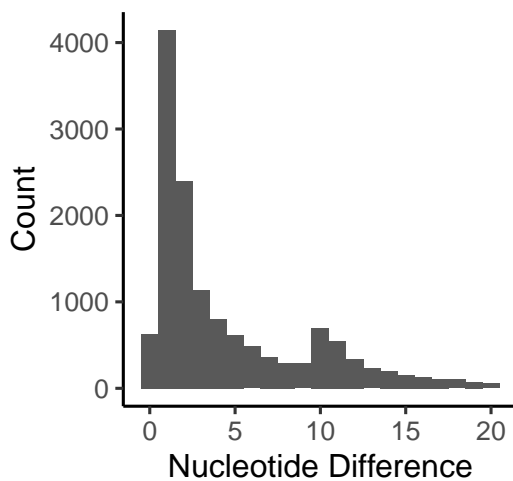
IGHV2-7*02_S1732

2602 sequences assigned
605 (23.3%) exact matches, in which:
444 unique CDR3
7 unique J



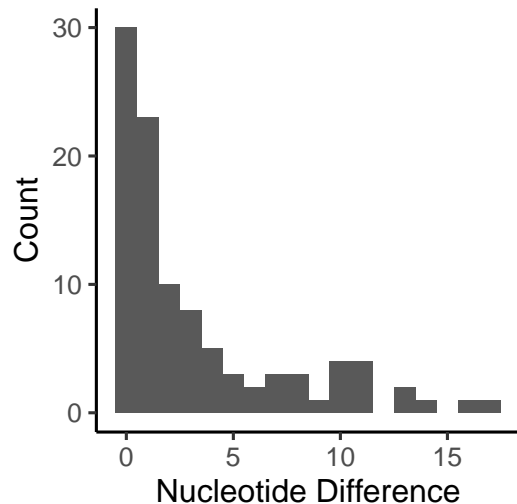
IGHV2-173*01_G289T

14139 sequences assigned
626 (4.4%) exact matches, in which:
609 unique CDR3
7 unique J



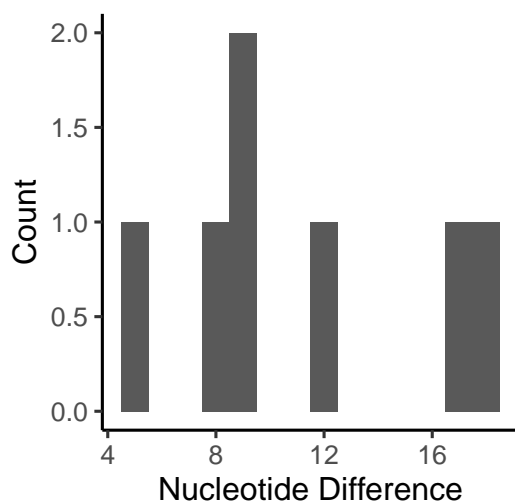
IGHV3-5*01_S0388

134 sequences assigned
30 (22.4%) exact matches, in which:
22 unique CDR3
5 unique J



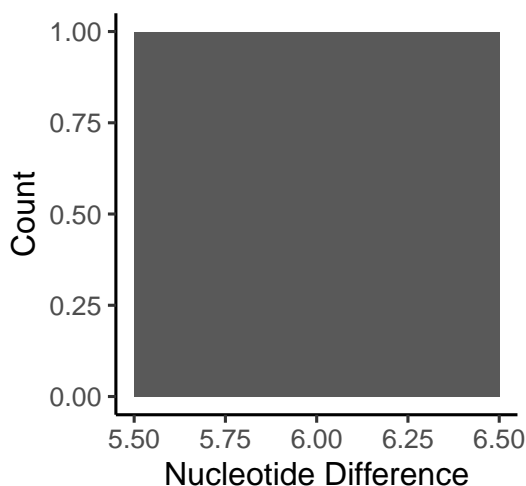
IGHV3-28*01_S0096

12 sequences assigned
No exact matches.



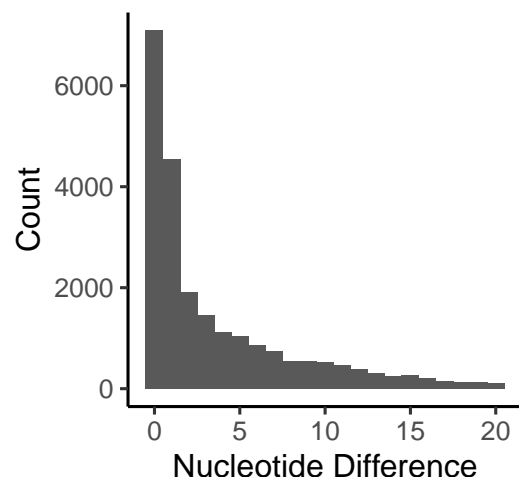
IGHV3-36*01_S7141

2 sequences assigned
No exact matches.



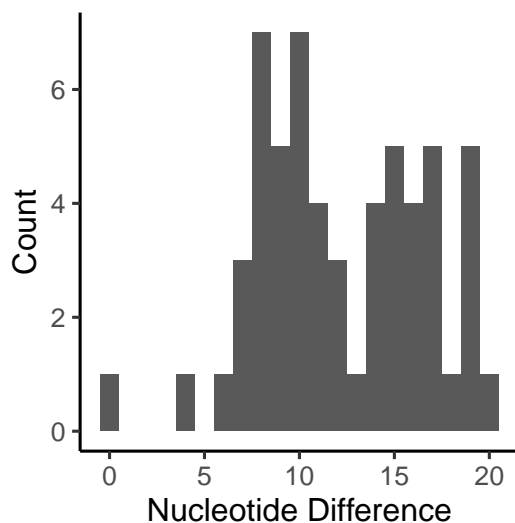
IGHV3-50*01_S1879

23415 sequences assigned
7095 (30.3%) exact matches, in which:
5249 unique CDR3
8 unique J



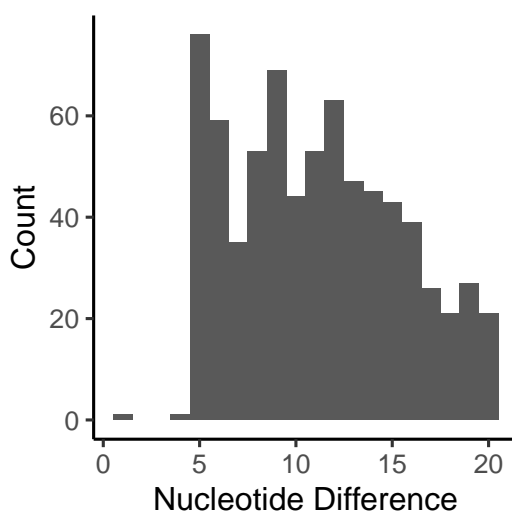
IGHV3-28*01_S3792

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



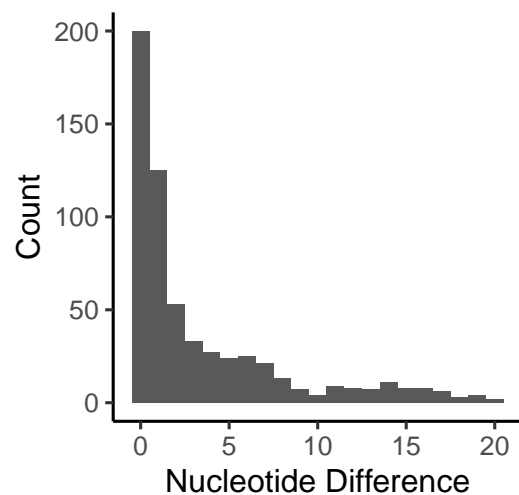
IGHV3-37*01_S6630

857 sequences assigned
No exact matches.



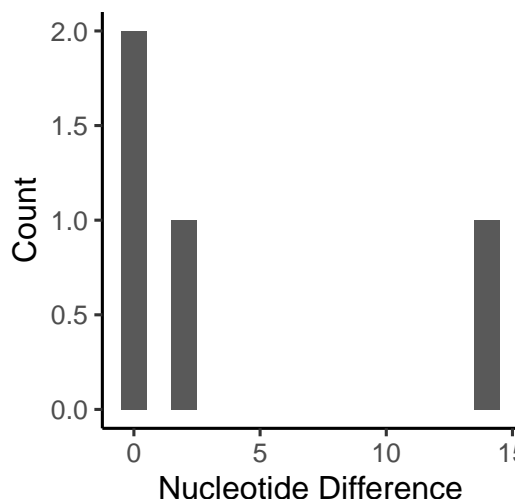
IGHV3-52*02_S5117

620 sequences assigned
200 (32.3%) exact matches, in which:
147 unique CDR3
8 unique J



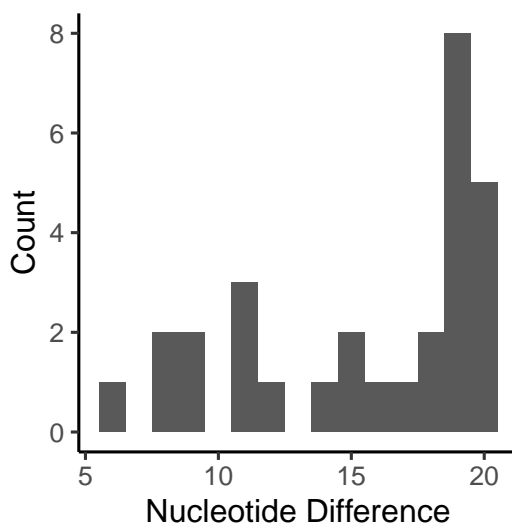
IGHV3-34*01_S1309

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



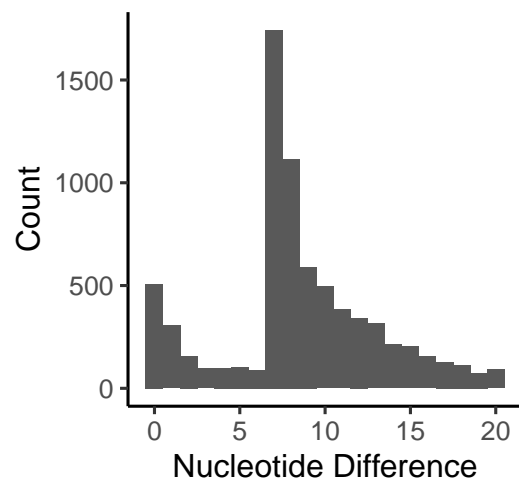
IGHV3-37*01_S9699

270 sequences assigned
No exact matches.



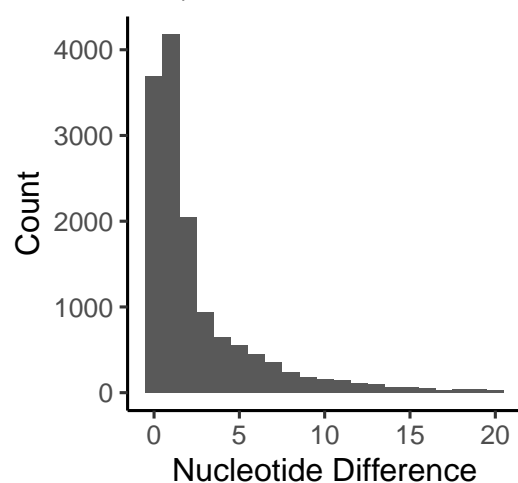
IGHV3-53*01_S3647

7725 sequences assigned
508 (6.6%) exact matches, in which:
385 unique CDR3
7 unique J



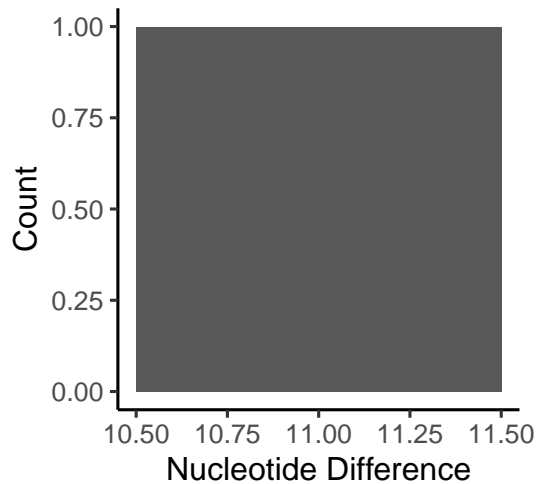
IGHV3-94*01_S4458

14451 sequences assigned
3693 (25.6%) exact matches, in which:
2779 unique CDR3
8 unique J



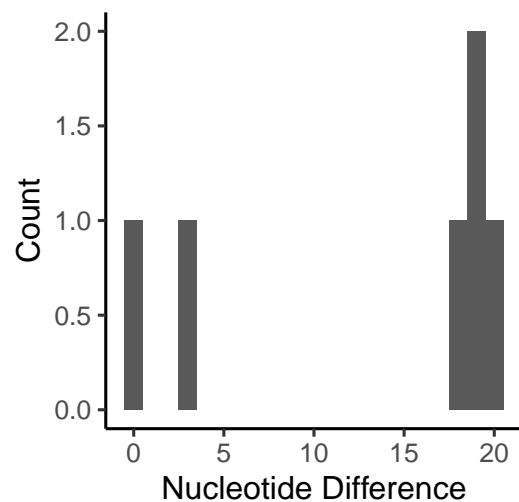
IGHV3-141*01_S3493

1 sequences assigned
No exact matches.



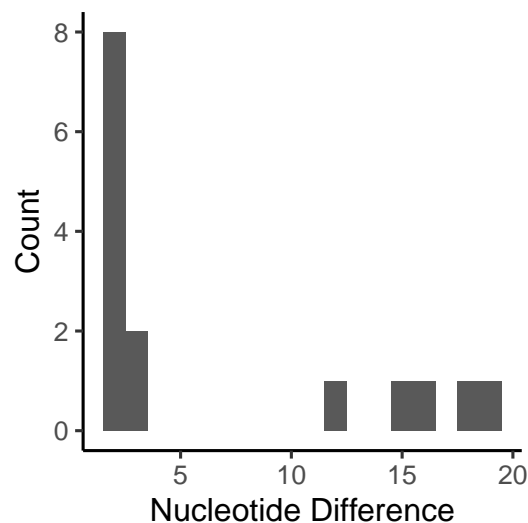
IGHV3-NL_1*01_S1080

1770 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



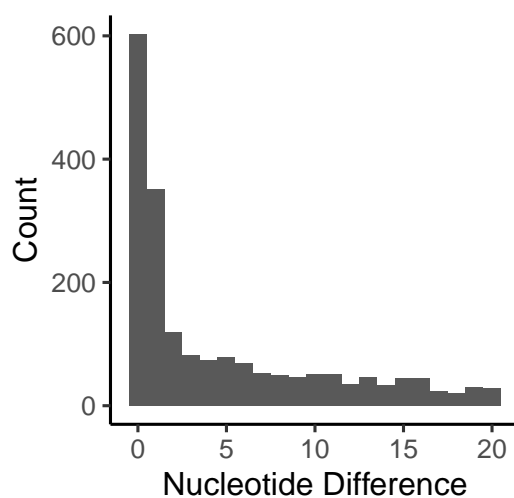
IGHV3-120*01_S4231

22 sequences assigned
No exact matches.



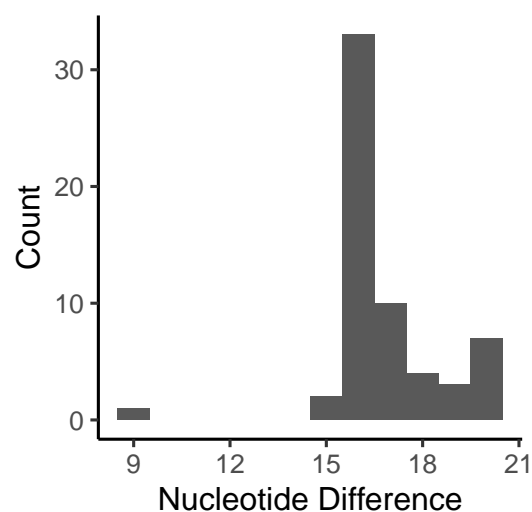
IGHV3-177*01_S1591

2057 sequences assigned
603 (29.3%) exact matches, in which:
458 unique CDR3
7 unique J



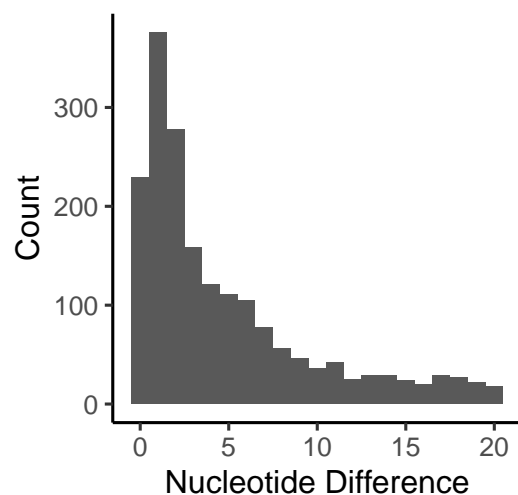
IGHV3-NL_1*01_S4549

414 sequences assigned
No exact matches.



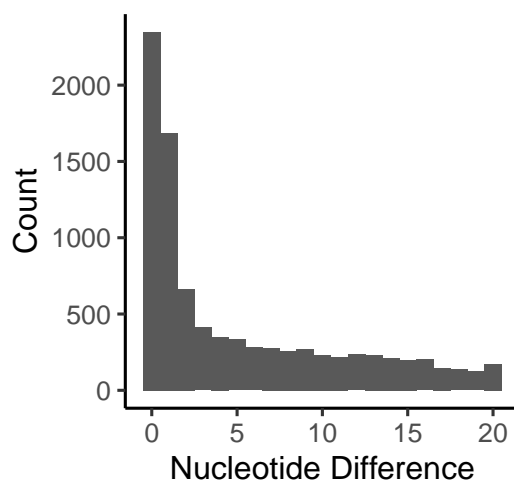
IGHV3-127*01_S3553

2057 sequences assigned
229 (11.1%) exact matches, in which:
157 unique CDR3
7 unique J



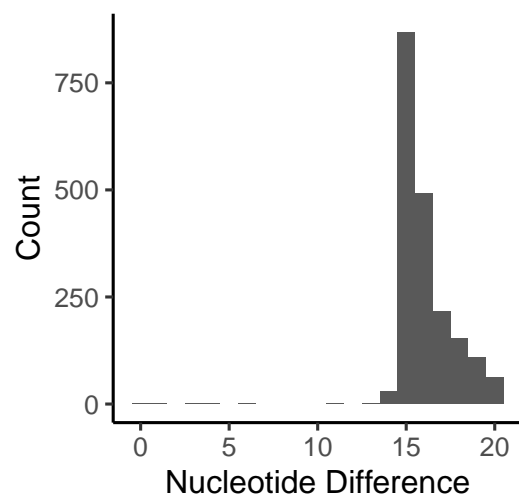
IGHV3-187*01_S1133

9973 sequences assigned
2348 (23.5%) exact matches, in which:
1667 unique CDR3
8 unique J



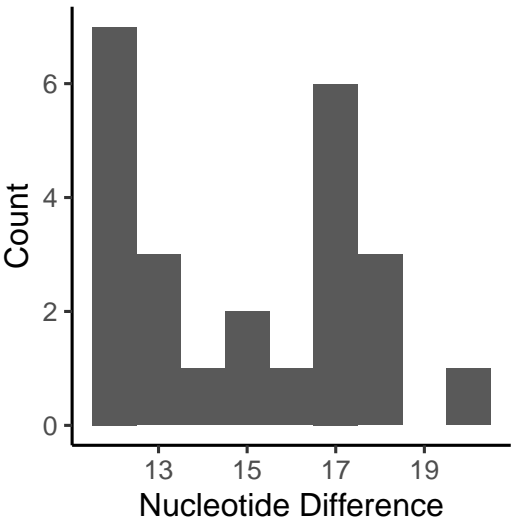
IGHV3-NL_1*01_S9854

2715 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



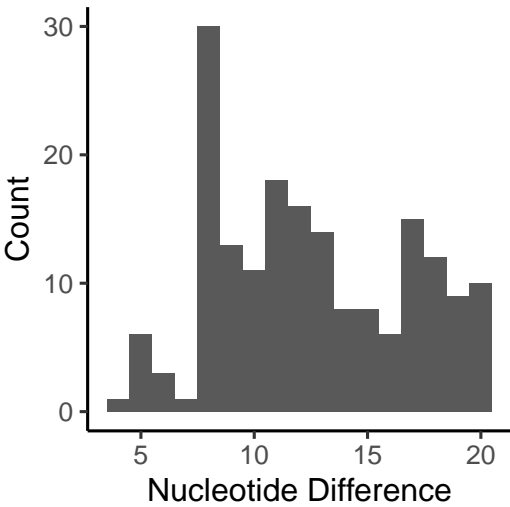
IGHV3–NL_10*02_S1970

69 sequences assigned
No exact matches.



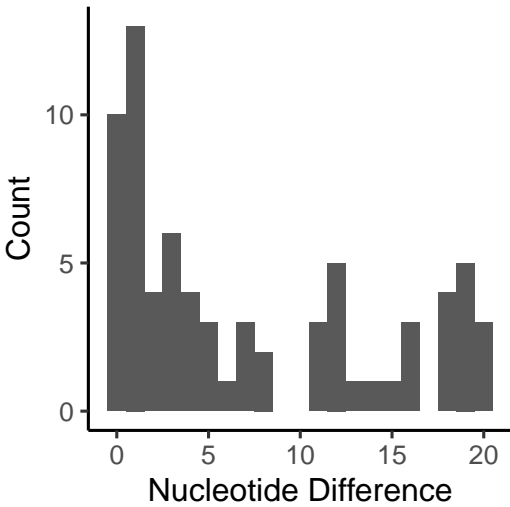
IGHV3–NL_11*01_S6390

235 sequences assigned
No exact matches.



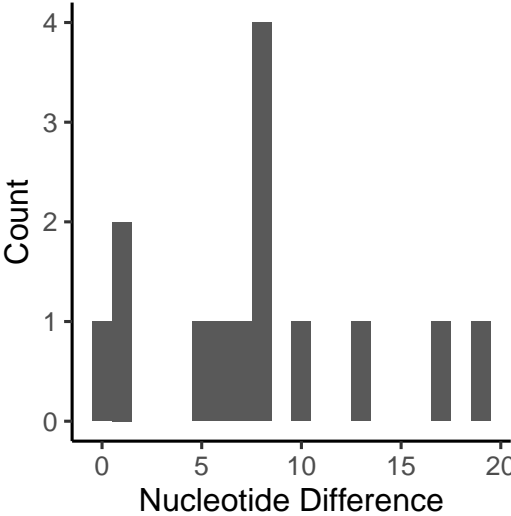
IGHV3–NL_13*01_S3940

107 sequences assigned
10 (9.3%) exact matches, in which:
7 unique CDR3
4 unique J



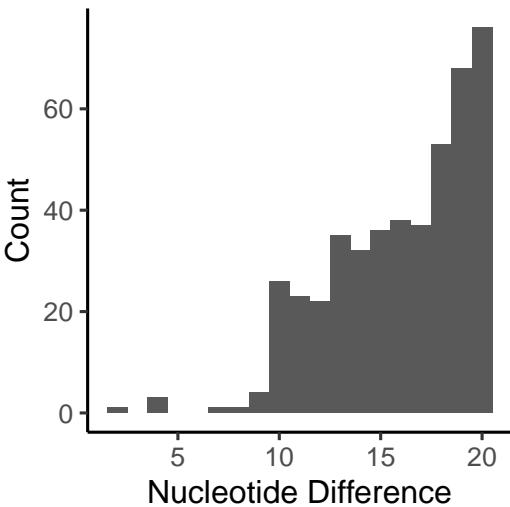
IGHV3–NL_11*01_S3736

22 sequences assigned
1 (4.5%) exact matches, in which:
1 unique CDR3
0 unique J



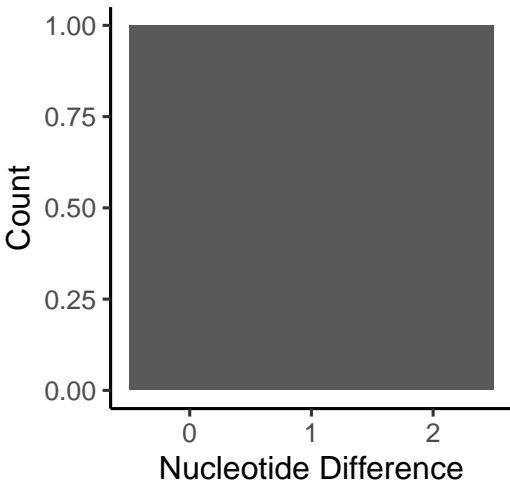
IGHV3–NL_11*02_S2668

1076 sequences assigned
No exact matches.



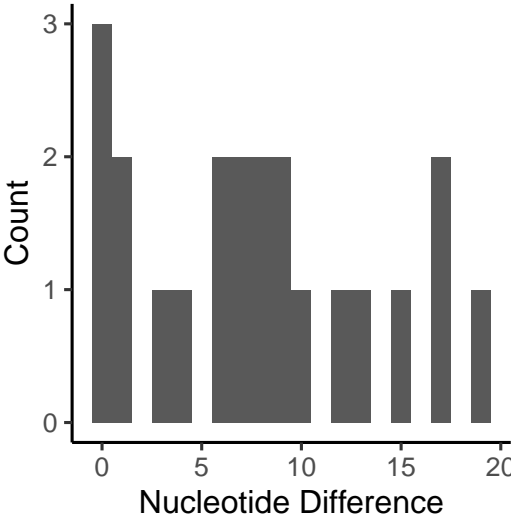
IGHV3–NL_14*01_S1113

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



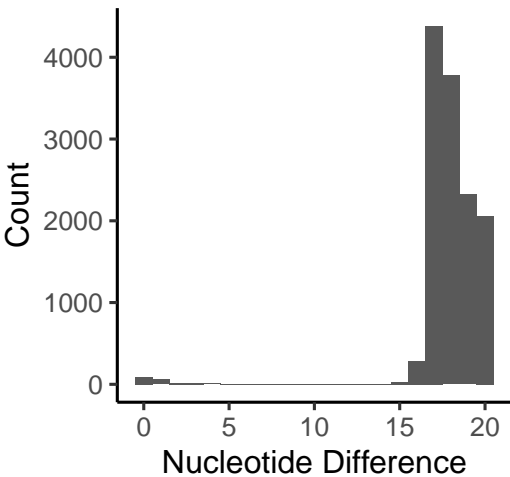
IGHV3–NL_11*01_S5714

24 sequences assigned
3 (12.5%) exact matches, in which:
3 unique CDR3
2 unique J



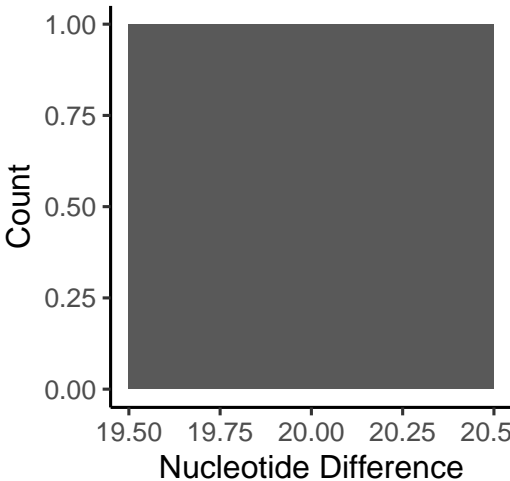
IGHV3–NL_12*02_S699

33721 sequences assigned
91 (0.3%) exact matches, in which:
74 unique CDR3
6 unique J



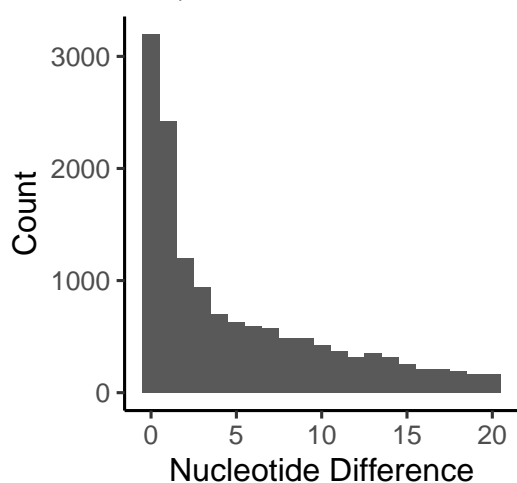
IGHV3–NL_16*01_S8234

1 sequences assigned
No exact matches.



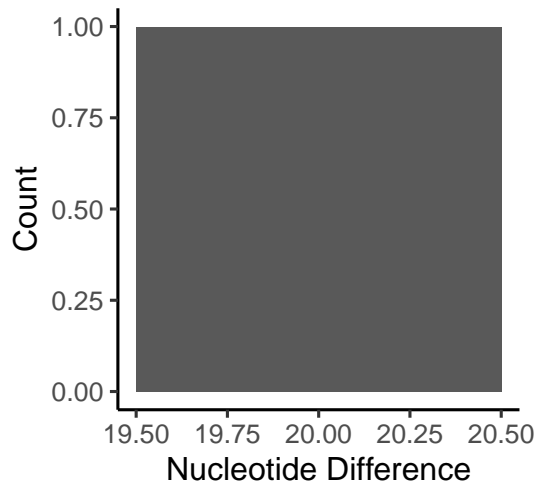
IGHV3-NL_17*01_S050

14939 sequences assigned
3196 (21.4%) exact matches, in which:
2211 unique CDR3
8 unique J



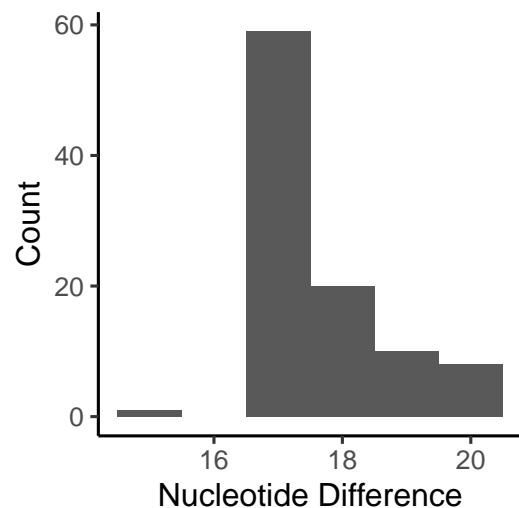
IGHV3-NL_4*01_S2727

1 sequences assigned
No exact matches.



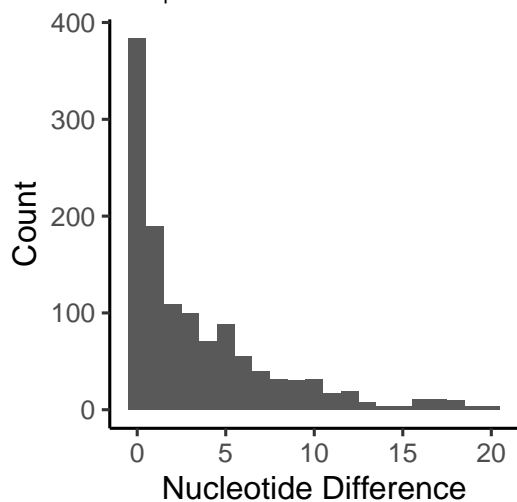
IGHV3-NL_6*02_S7808

168 sequences assigned
No exact matches.



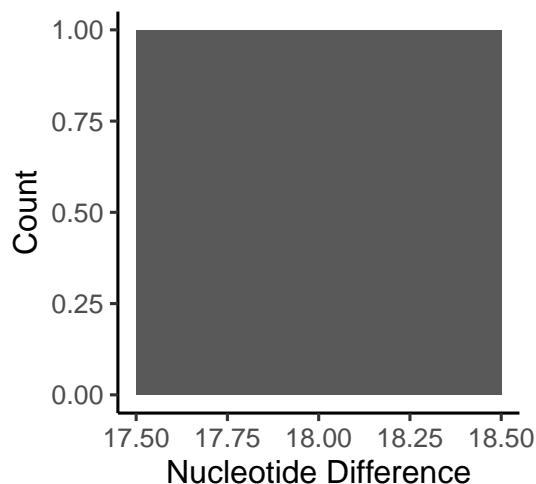
IGHV3-NL_18*01_S3867

1242 sequences assigned
384 (30.9%) exact matches, in which:
317 unique CDR3
8 unique J



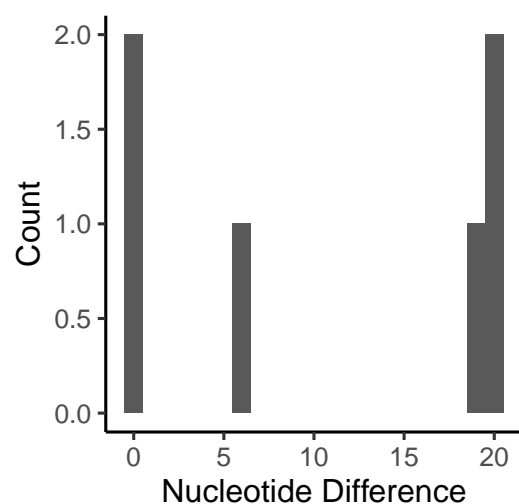
IGHV3-NL_4*01_S9635

17 sequences assigned
No exact matches.



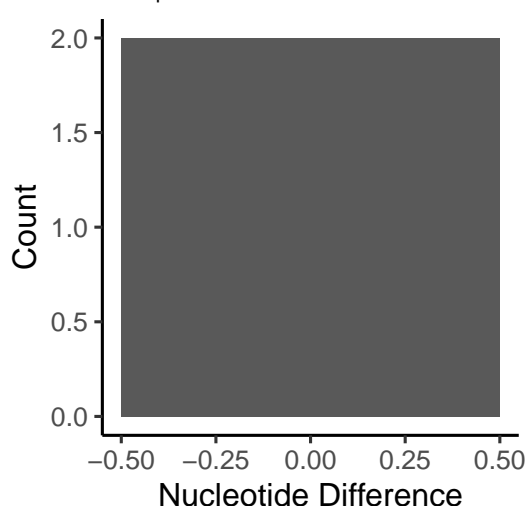
IGHV3-NL_7*01_S0199

8 sequences assigned
2 (25%) exact matches, in which:
2 unique CDR3
2 unique J



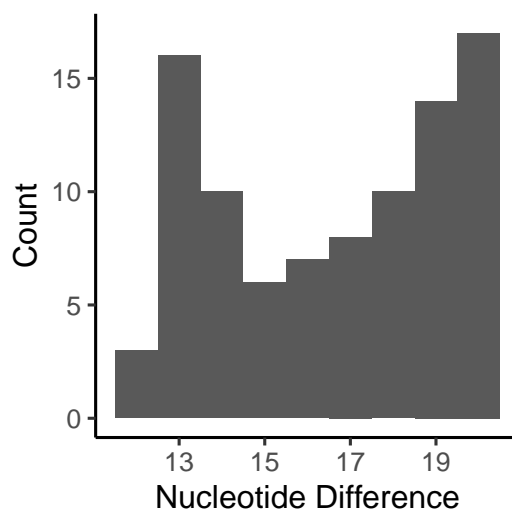
IGHV3-NL_19*01_S6635

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



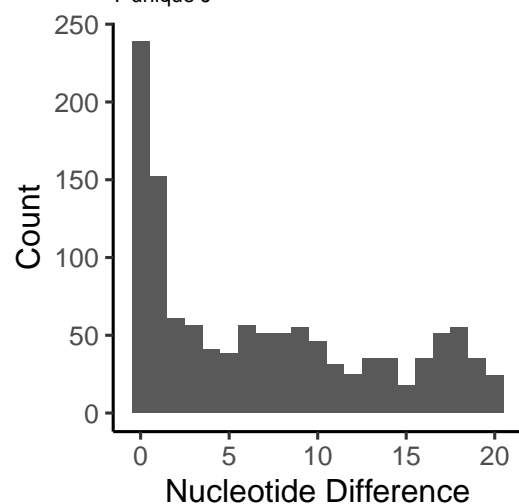
IGHV3-NL_5*01_S8361

2983 sequences assigned
No exact matches.



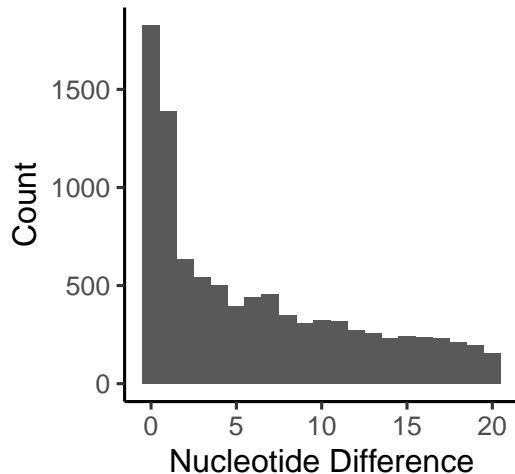
IGHV3-NL_8*01_S7474

1575 sequences assigned
239 (15.2%) exact matches, in which:
193 unique CDR3
7 unique J



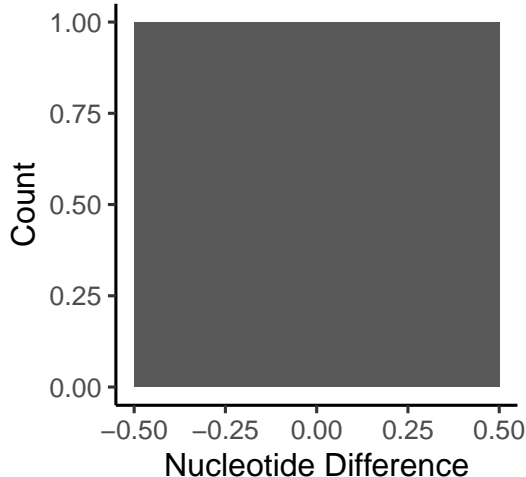
IGHV3–NL_9*01_S6098

10650 sequences assigned
1826 (17.1%) exact matches, in which:
1326 unique CDR3
8 unique J



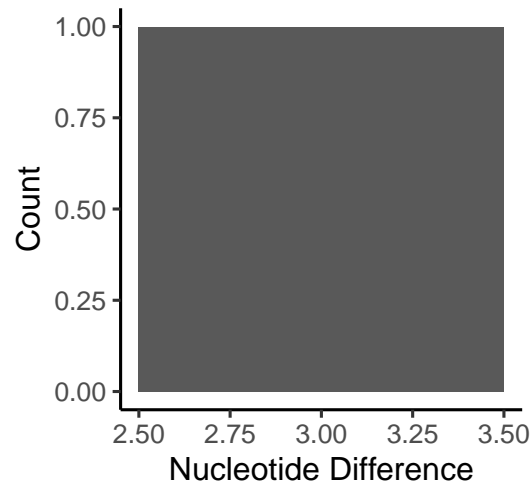
IGHV4–144*01_S3676

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



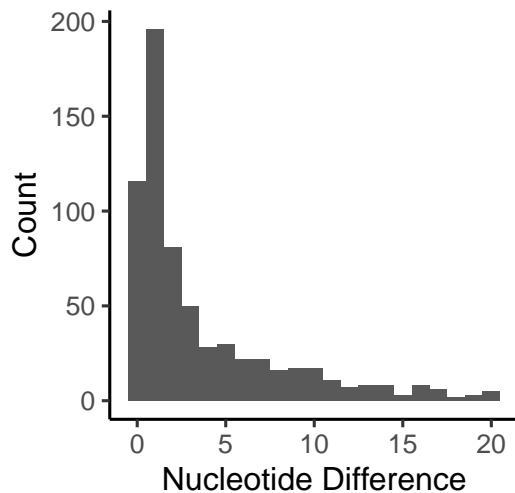
IGHV4–150*01_S2067

8 sequences assigned
No exact matches.



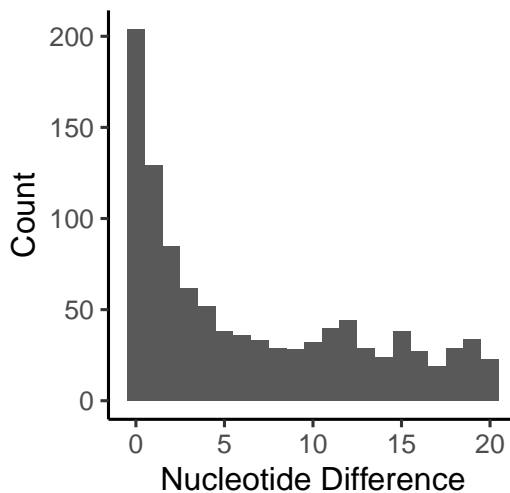
IGHV4–67*01_S8827

702 sequences assigned
116 (16.5%) exact matches, in which:
109 unique CDR3
6 unique J



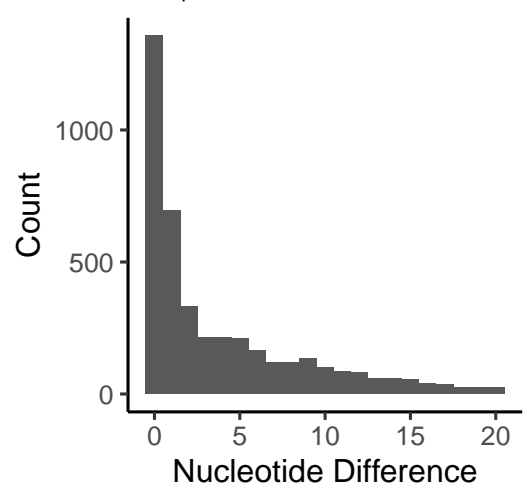
IGHV4–149*02_S6878

1185 sequences assigned
204 (17.2%) exact matches, in which:
182 unique CDR3
8 unique J



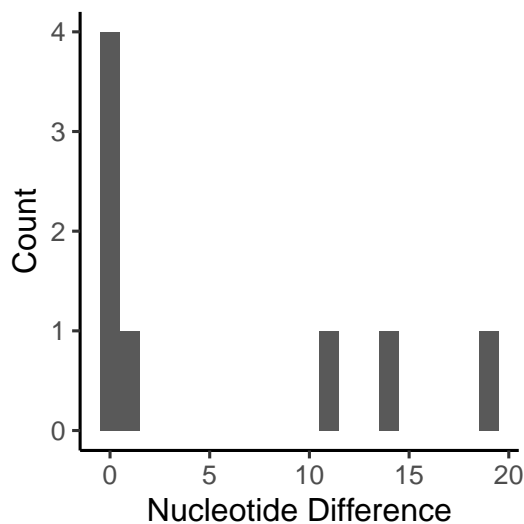
IGHV4–NL_1*01_S7297

4325 sequences assigned
1357 (31.4%) exact matches, in which:
1160 unique CDR3
7 unique J



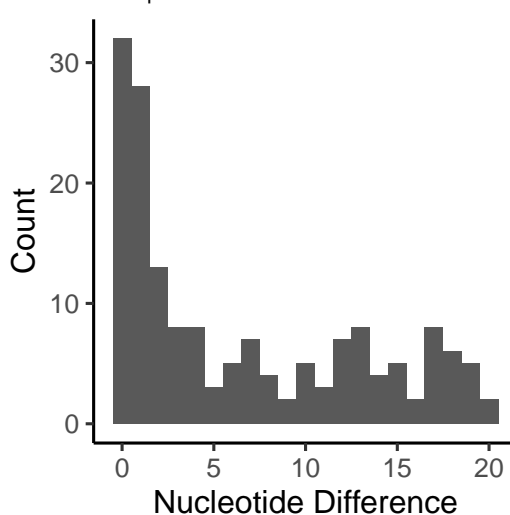
IGHV4–144*01_S3113

9 sequences assigned
4 (44.4%) exact matches, in which:
4 unique CDR3
3 unique J



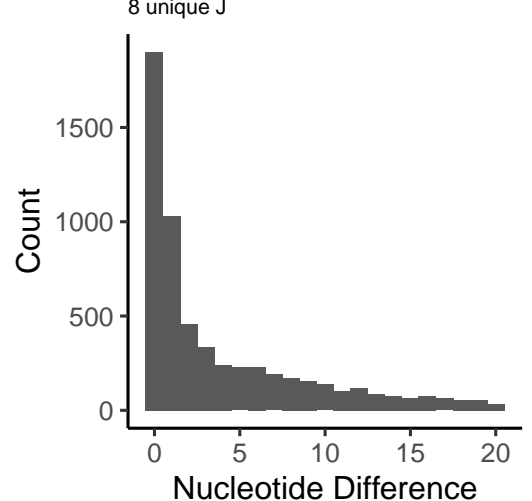
IGHV4–149*02_S8521

184 sequences assigned
32 (17.4%) exact matches, in which:
29 unique CDR3
5 unique J



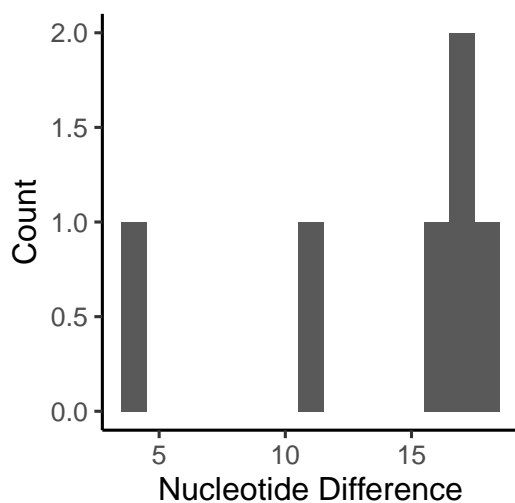
IGHV4–NL_1*01_S8720

6155 sequences assigned
1900 (30.9%) exact matches, in which:
1664 unique CDR3
8 unique J



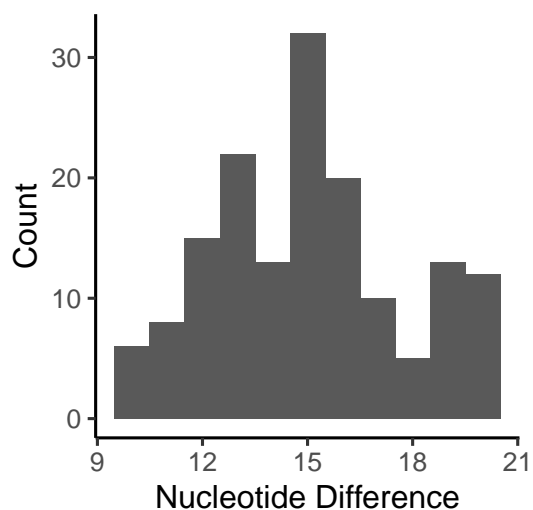
IGHV4–NL_10*01_S6744

31 sequences assigned
No exact matches.



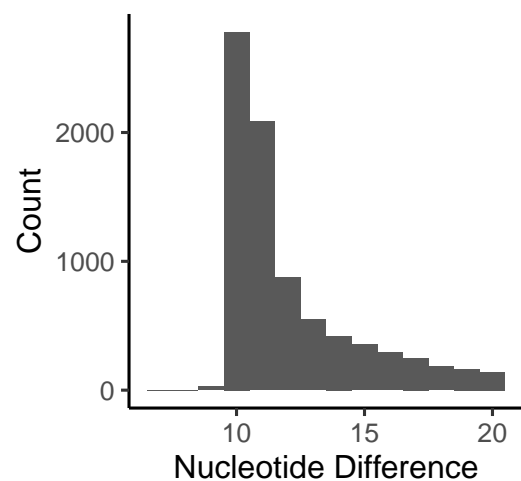
IGHV4–NL_12*01_S5174

224 sequences assigned
No exact matches.



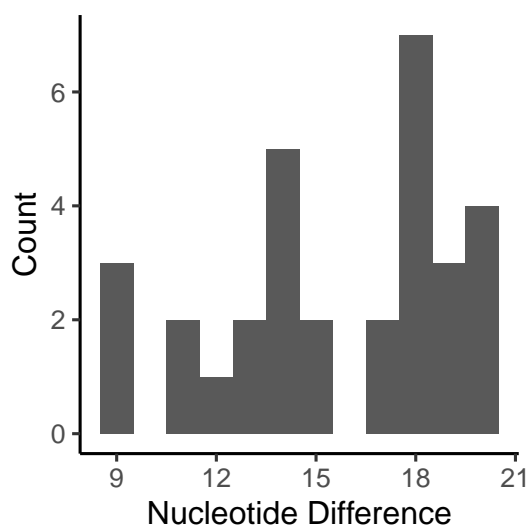
IGHV4–NL_13*01_S974

8719 sequences assigned
No exact matches.



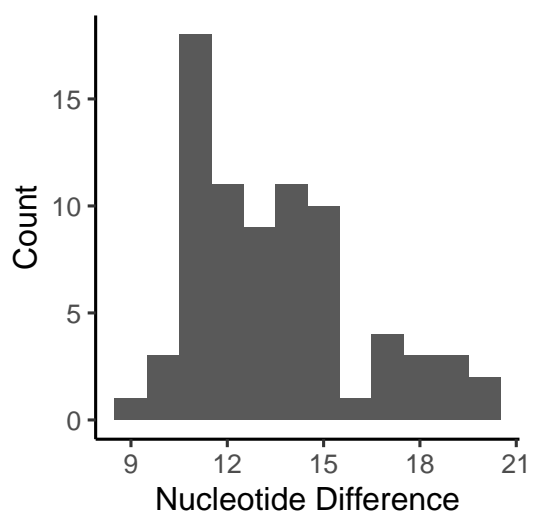
IGHV4–NL_11*01_S5570

81 sequences assigned
No exact matches.



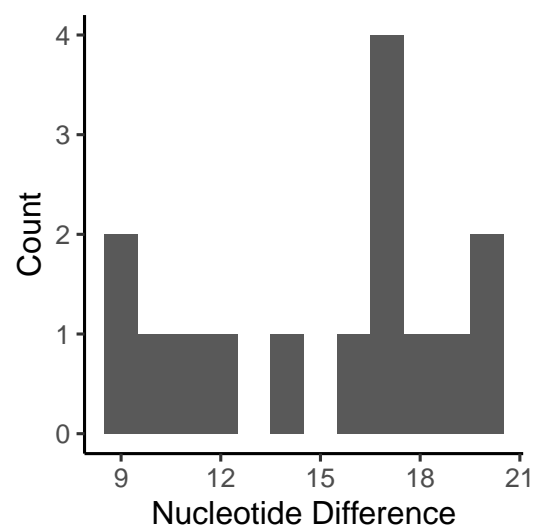
IGHV4–NL_12*01_S8068

86 sequences assigned
No exact matches.



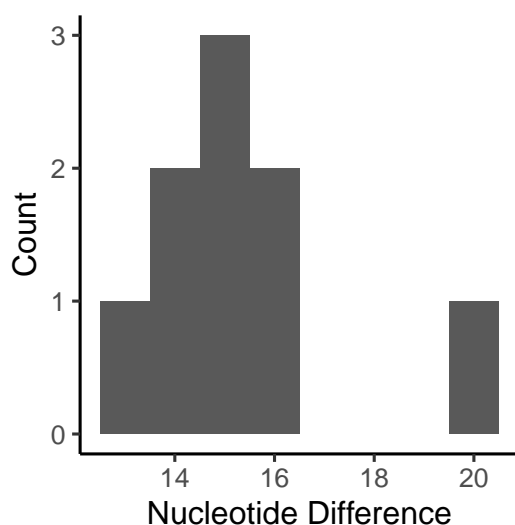
IGHV4–NL_15*01_S5717

21 sequences assigned
No exact matches.



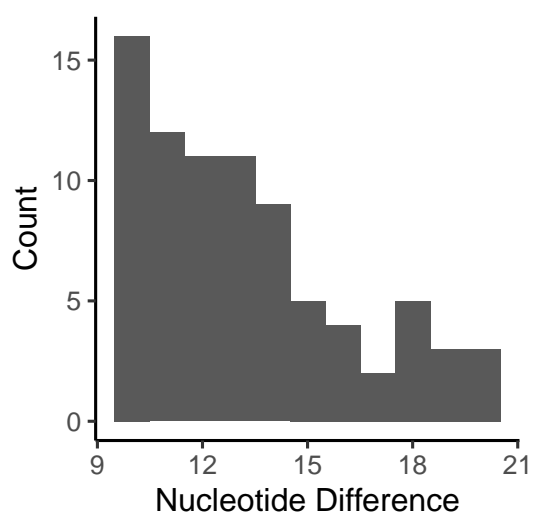
IGHV4–NL_11*01_S9942

20 sequences assigned
No exact matches.



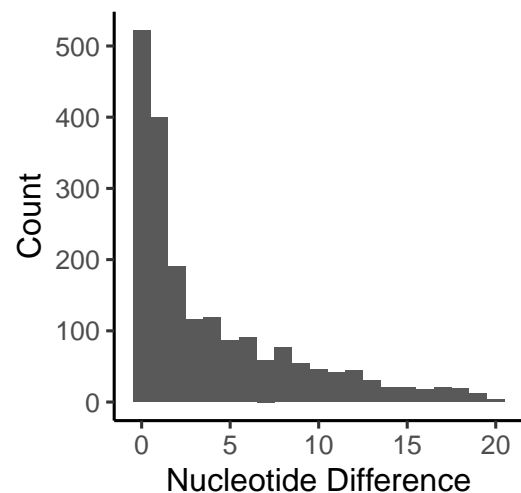
IGHV4–NL_13*01_S9624

116 sequences assigned
No exact matches.



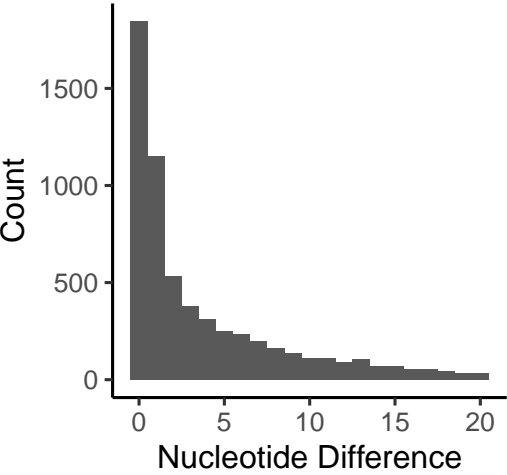
IGHV4–NL_16*01_S2324

2135 sequences assigned
522 (24.4%) exact matches, in which:
459 unique CDR3
7 unique J



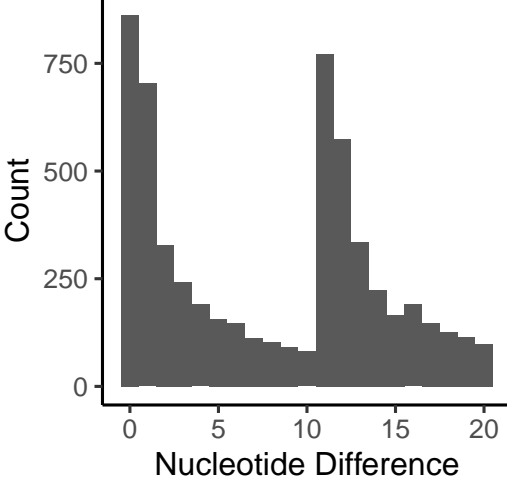
IGHV4–NL_17*01_S409

6212 sequences assigned
1845 (29.7%) exact matches, in which:
1604 unique CDR3
7 unique J



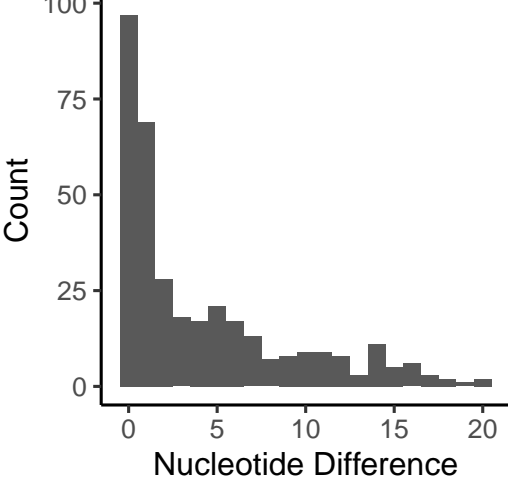
IGHV4–NL_21*01_S0138

6186 sequences assigned
863 (14%) exact matches, in which:
750 unique CDR3
7 unique J



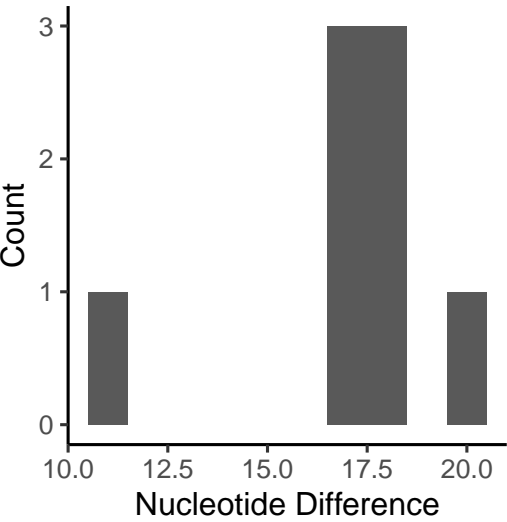
IGHV4–NL_23*01_S1296

366 sequences assigned
97 (26.5%) exact matches, in which:
88 unique CDR3
6 unique J



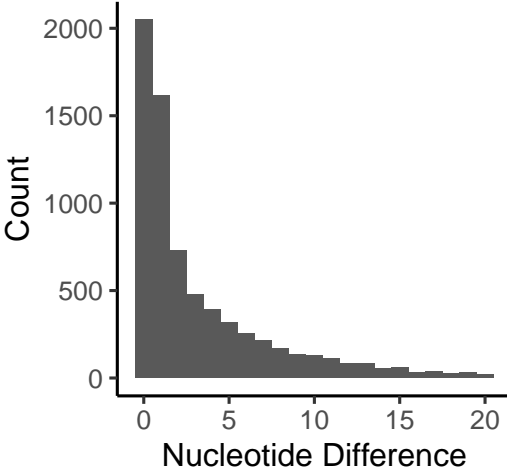
IGHV4–NL_19*01_S3005

8 sequences assigned
No exact matches.



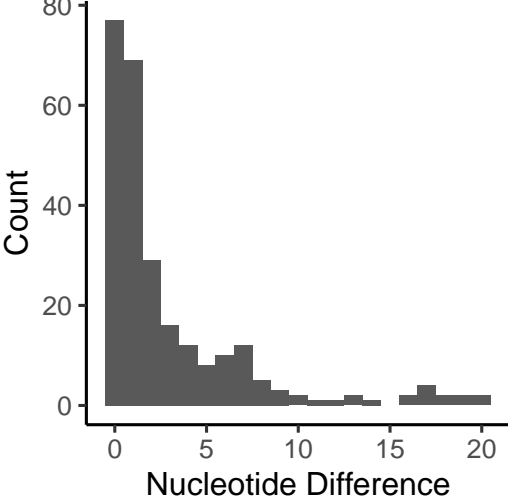
IGHV4–NL_21*01_S665

7158 sequences assigned
2049 (28.6%) exact matches, in which:
1784 unique CDR3
8 unique J



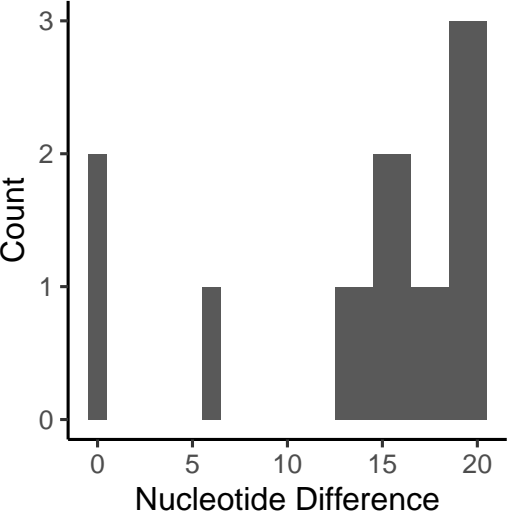
IGHV4–NL_23*01_S6914

266 sequences assigned
77 (28.9%) exact matches, in which:
65 unique CDR3
5 unique J



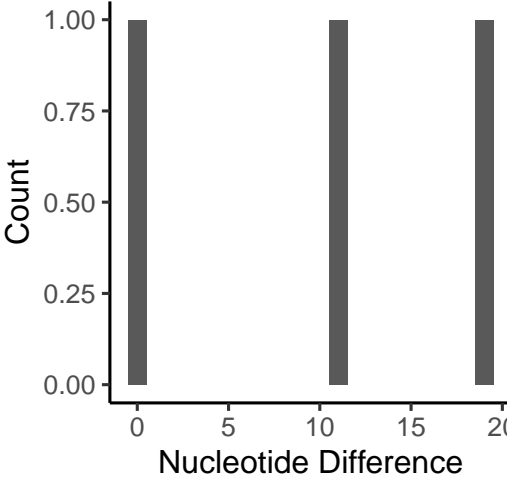
IGHV4–NL_20*01_S4754

32 sequences assigned
2 (6.2%) exact matches, in which:
2 unique CDR3
2 unique J



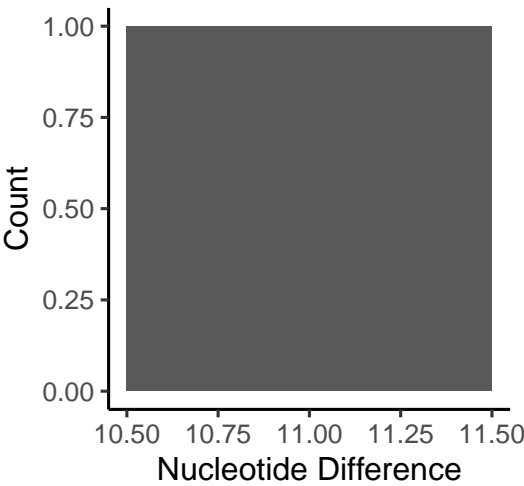
IGHV4–NL_22*01_S2393

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



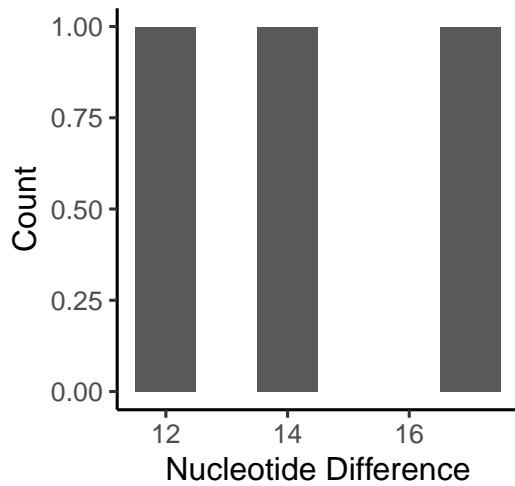
IGHV4–NL_24*01_S5697

1 sequences assigned
No exact matches.



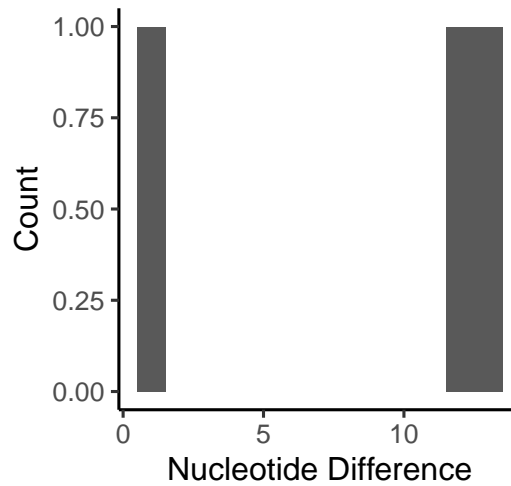
IGHV4–NL_25*01_S2780

9 sequences assigned
No exact matches.



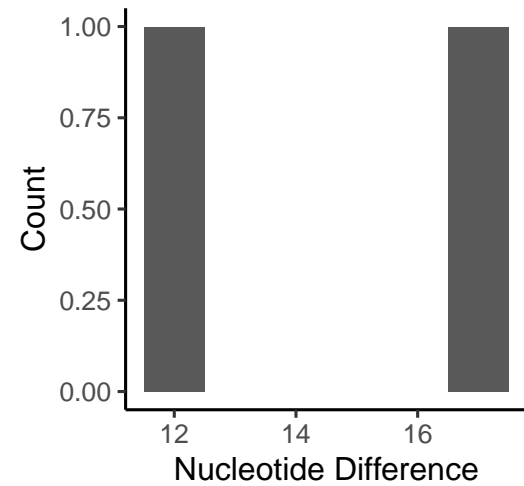
IGHV4–NL_27*01_S7643

3 sequences assigned
No exact matches.



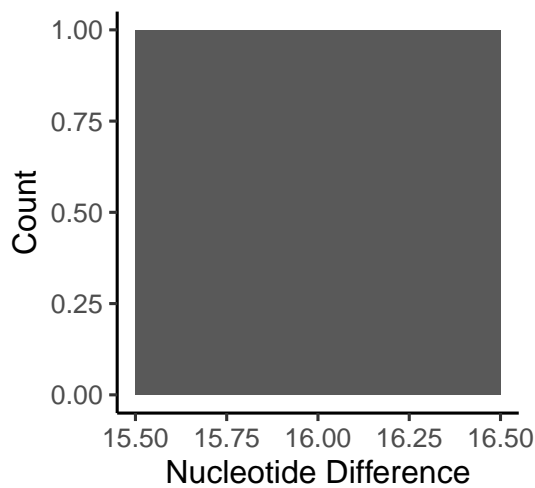
IGHV4–NL_3*01_S1577

4 sequences assigned
No exact matches.



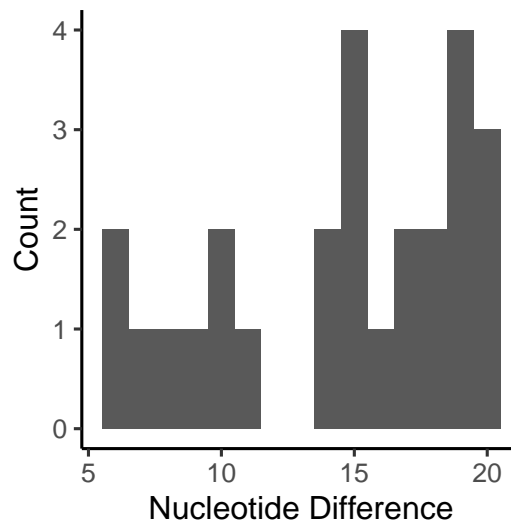
IGHV4–NL_27*01_S5157

1 sequences assigned
No exact matches.



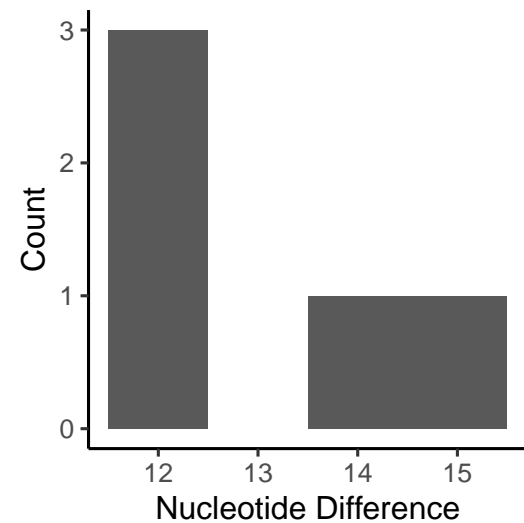
IGHV4–NL_29*01_S3761

49 sequences assigned
No exact matches.



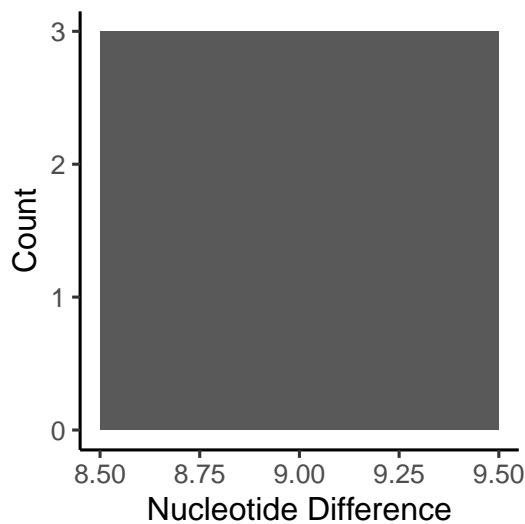
IGHV4–NL_3*01_S7576

5 sequences assigned
No exact matches.



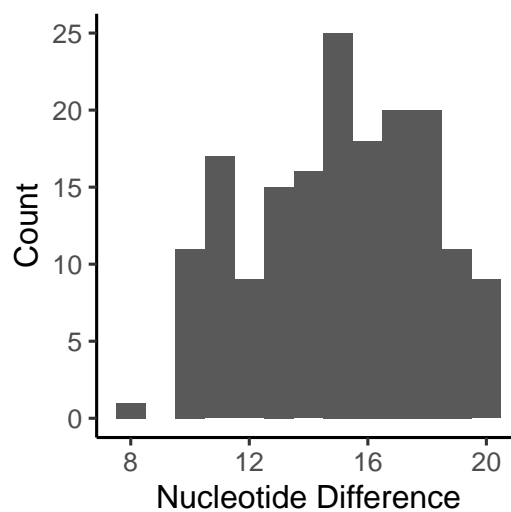
IGHV4–NL_27*01_S6960

3 sequences assigned
No exact matches.



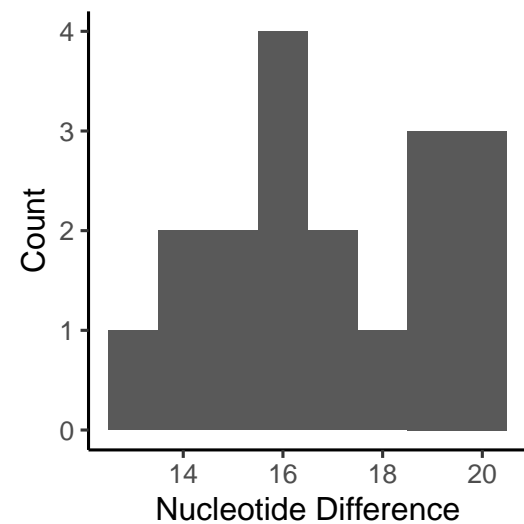
IGHV4–NL_29*01_S5315

334 sequences assigned
No exact matches.



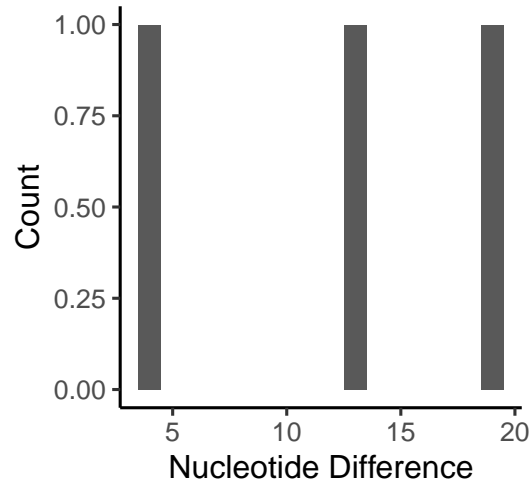
IGHV4–NL_3*01_S7864

29 sequences assigned
No exact matches.



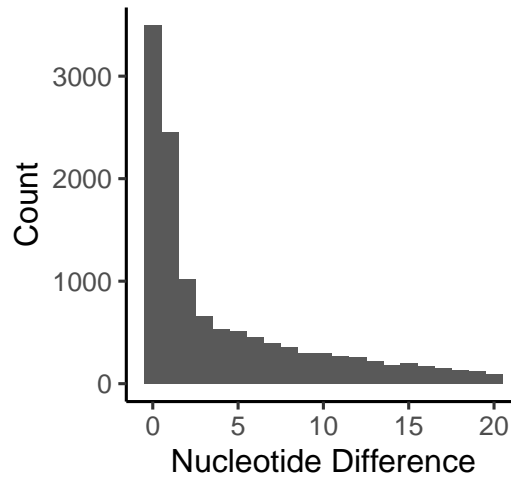
IGHV4-NL_30*01_S4257

4 sequences assigned
No exact matches.



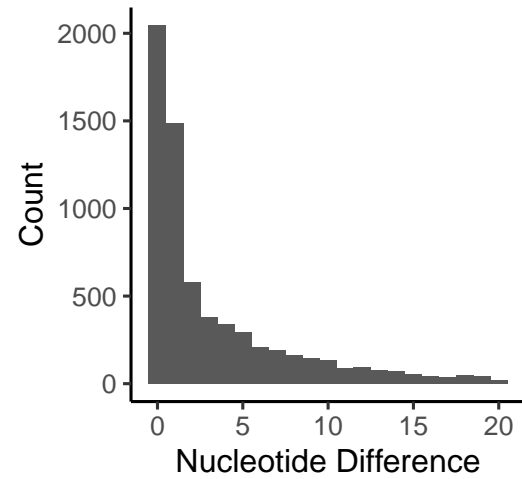
IGHV4-NL_33*01_S437

12941 sequences assigned
3495 (27%) exact matches, in which:
2883 unique CDR3
8 unique J



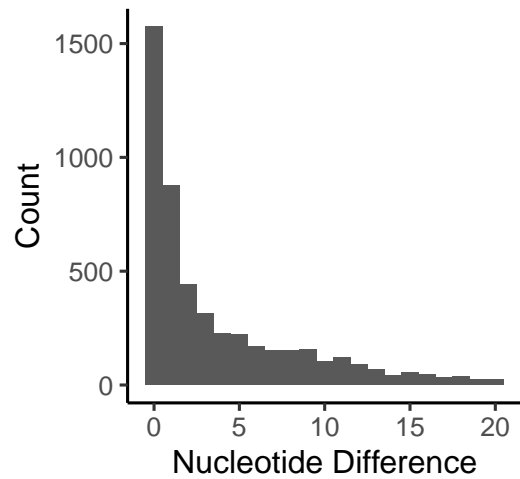
IGHV4-NL_38*01_S843

6684 sequences assigned
2045 (30.6%) exact matches, in which:
1710 unique CDR3
7 unique J



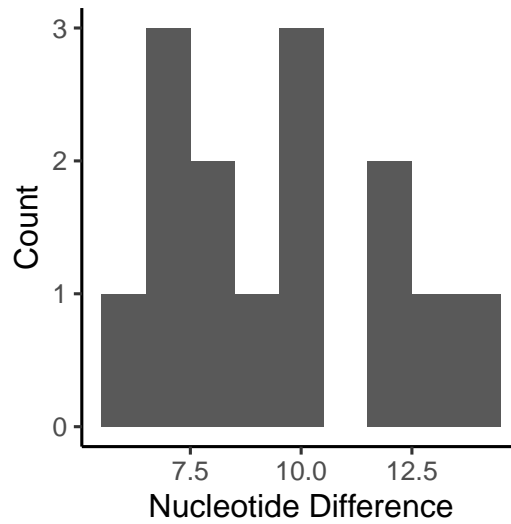
IGHV4-NL_31*01_S769

5181 sequences assigned
1574 (30.4%) exact matches, in which:
1405 unique CDR3
8 unique J



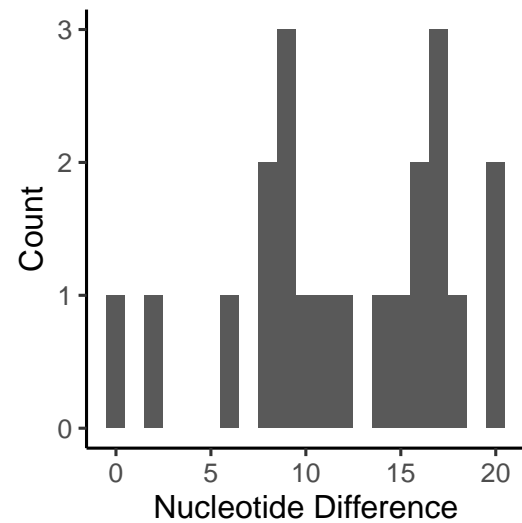
IGHV4-NL_34*01_S4637

17 sequences assigned
No exact matches.



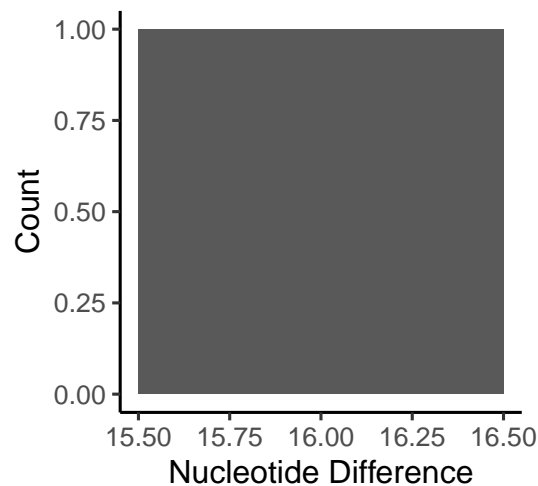
IGHV4-NL_4*01_S8866

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



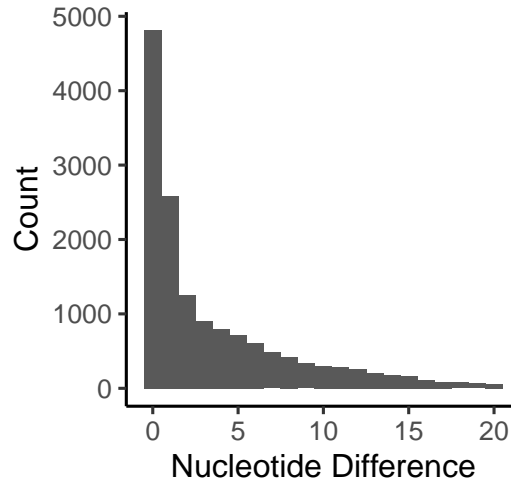
IGHV4-NL_32*01_S3033

5 sequences assigned
No exact matches.



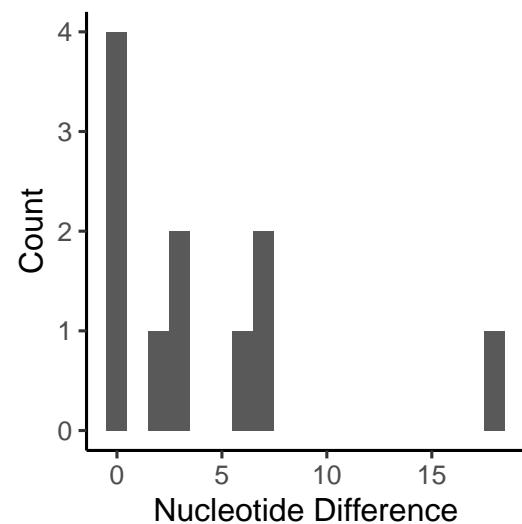
IGHV4-NL_36*01_S820

15082 sequences assigned
4815 (31.9%) exact matches, in which:
4152 unique CDR3
8 unique J



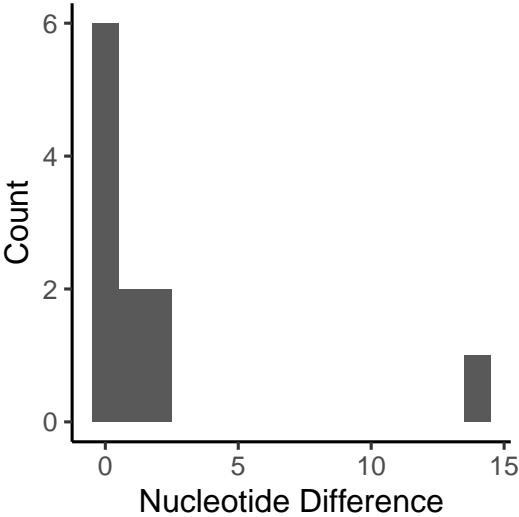
IGHV4-NL_40*01_S0696

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



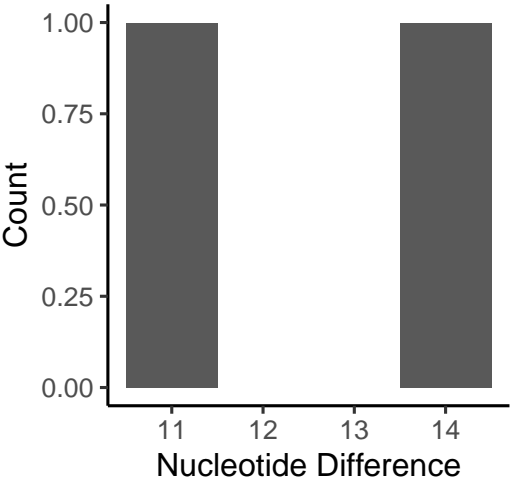
IGHV4-NL_40*01_S6921

11 sequences assigned
6 (54.5%) exact matches, in which:
6 unique CDR3
3 unique J



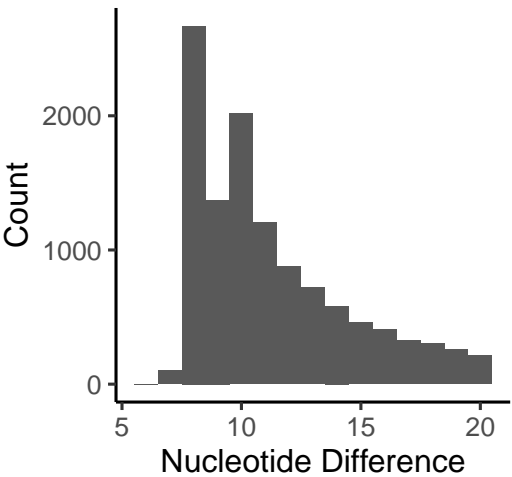
IGHV4-NL_43*01_S4510

19 sequences assigned
No exact matches.



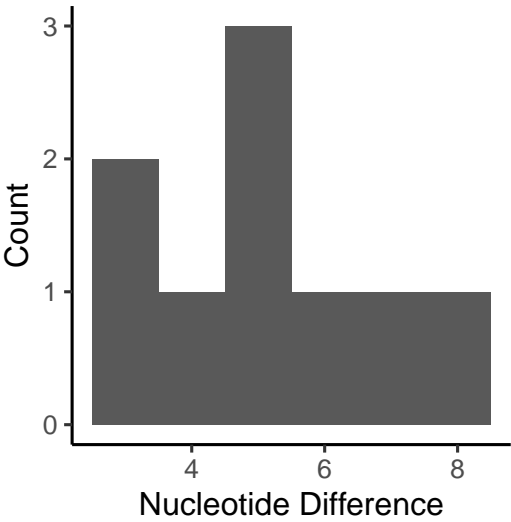
IGHV4-NL_5*01_S6281

12576 sequences assigned
No exact matches.



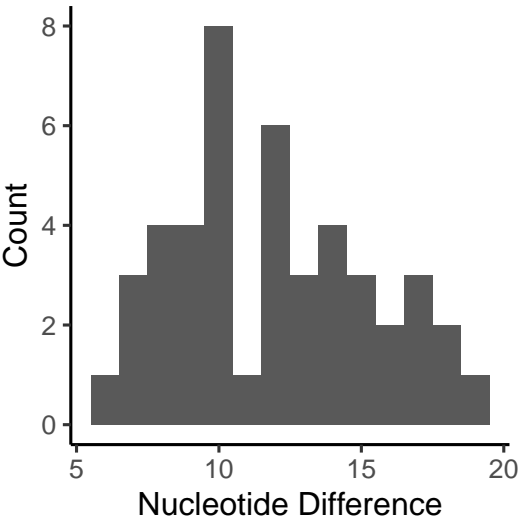
IGHV4-NL_42*01_S3076

10 sequences assigned
No exact matches.



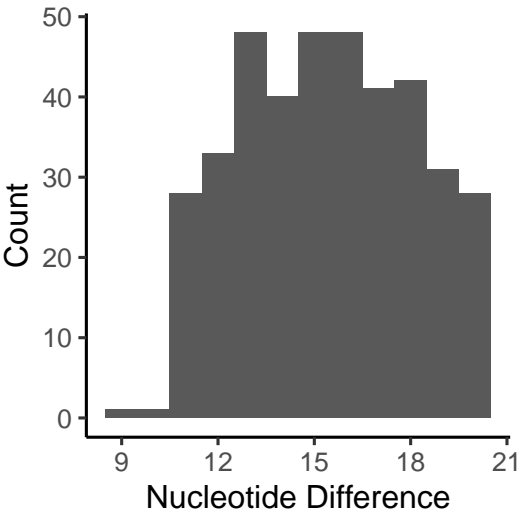
IGHV4-NL_5*01_S0876

62 sequences assigned
No exact matches.



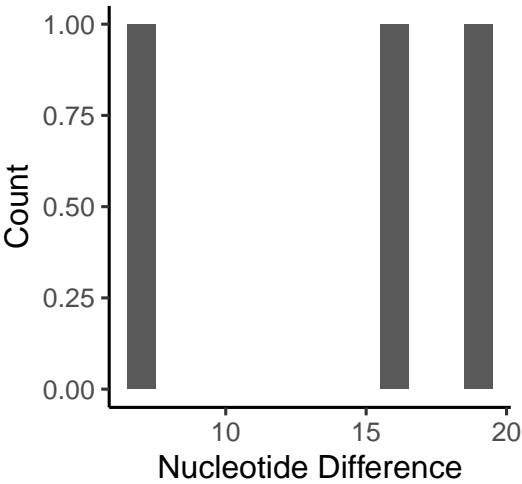
IGHV4-NL_5*01_S8913

569 sequences assigned
No exact matches.



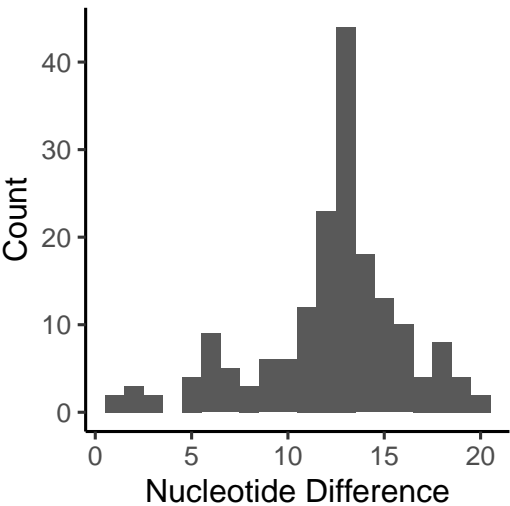
IGHV4-NL_42*01_S6064

3 sequences assigned
No exact matches.



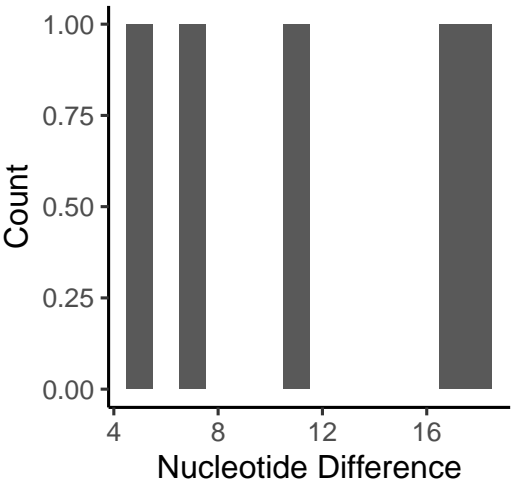
IGHV4-NL_5*01_S5308

222 sequences assigned
No exact matches.



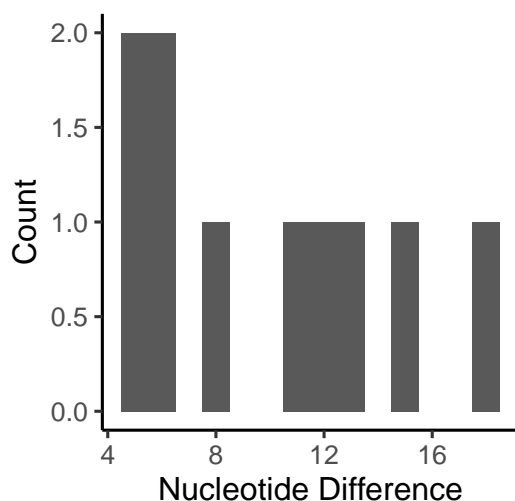
IGHV4-NL_9*01_S2406

7 sequences assigned
No exact matches.



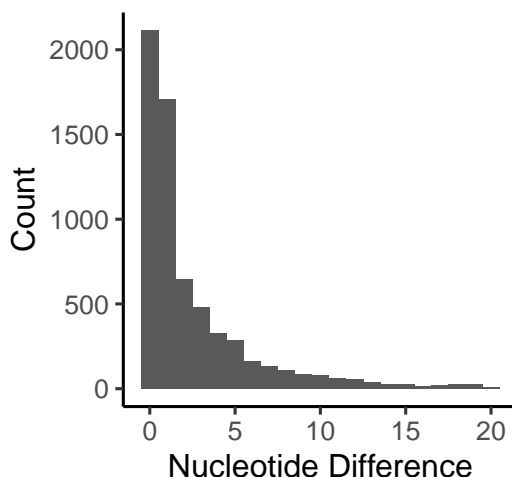
IGHV4–NL_9*01_S4567

13 sequences assigned
No exact matches.



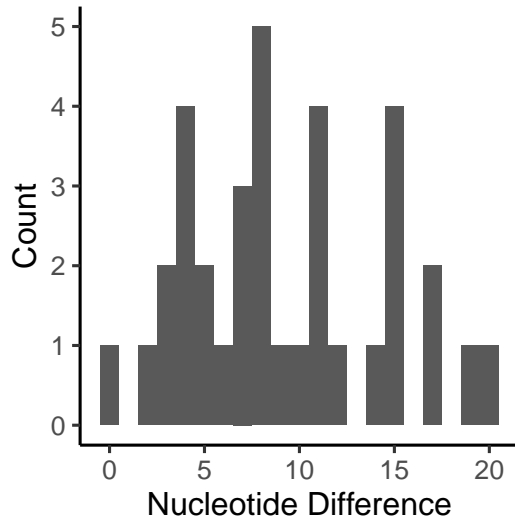
IGHV5–157*01_S3631

6480 sequences assigned
2114 (32.6%) exact matches, in which:
1181 unique CDR3
8 unique J



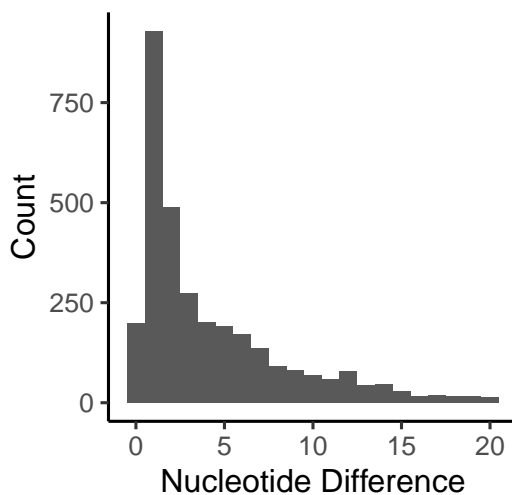
IGHV4–NL_9*01_S9889

43 sequences assigned
1 (2.3%) exact matches, in which:
1 unique CDR3
1 unique J



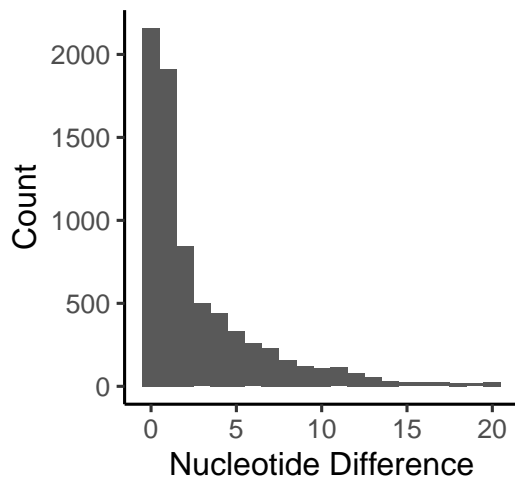
IGHV6–1*02_G280T

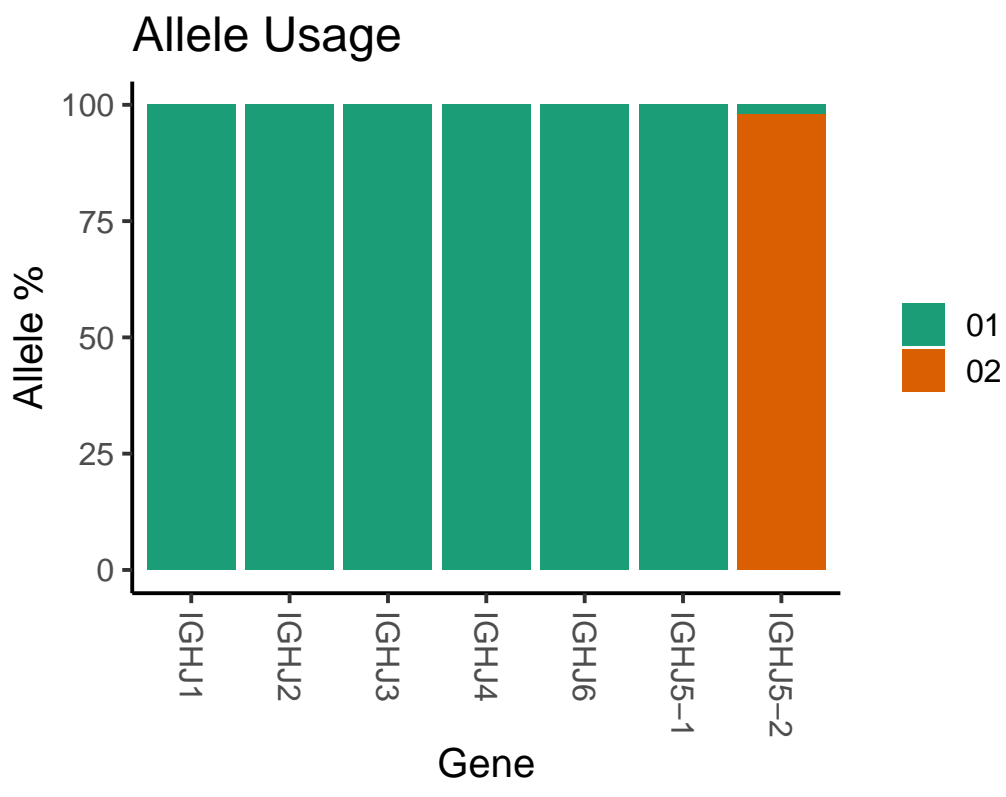
3233 sequences assigned
199 (6.2%) exact matches, in which:
191 unique CDR3
7 unique J



IGHV5–15*01_S0203

7554 sequences assigned
2159 (28.6%) exact matches, in which:
1450 unique CDR3
8 unique J





Warning – no inferred sequences found.