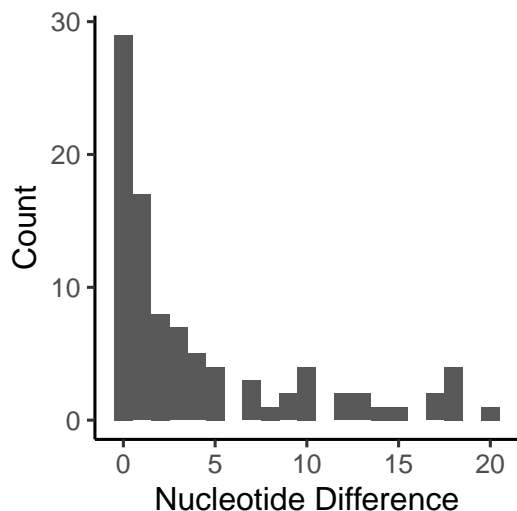


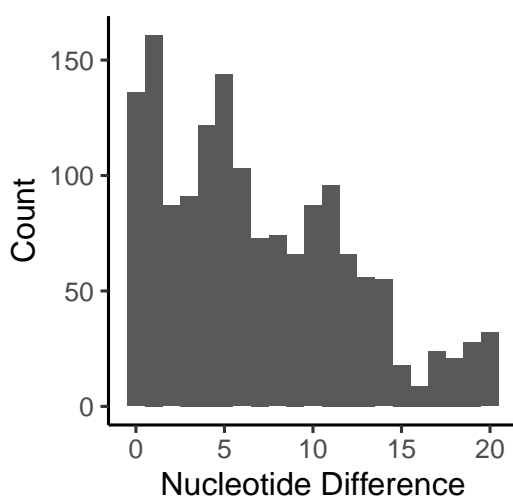
IGHV1-124*01_S6748

93 sequences assigned
29 (31.2%) exact matches, in which:
21 unique CDR3
4 unique J



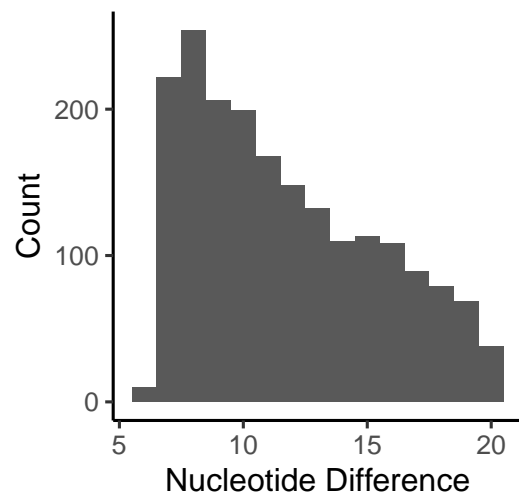
IGHV2-7*02_S4285

1616 sequences assigned
136 (8.4%) exact matches, in which:
74 unique CDR3
7 unique J



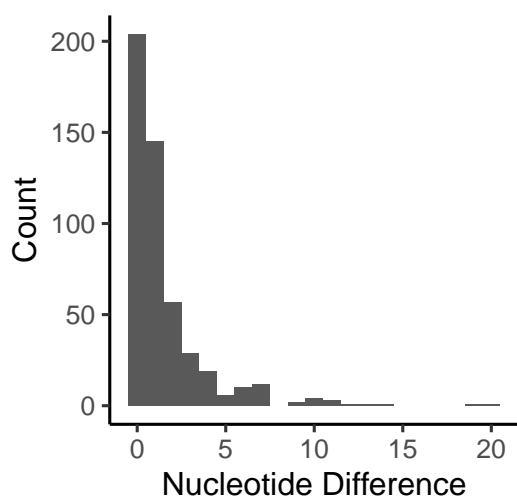
IGHV2-NL_1*01_S2133

2125 sequences assigned
No exact matches.



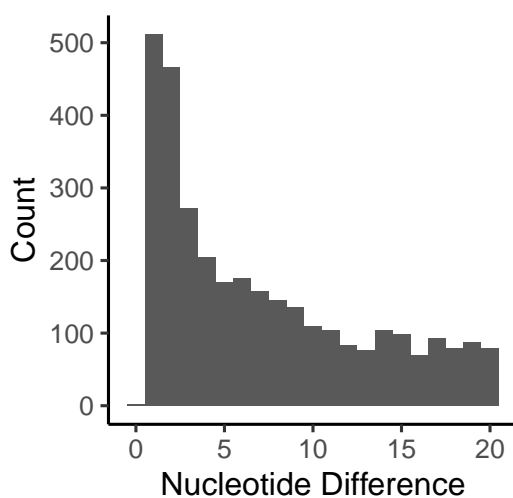
IGHV1-138*01_S2054

515 sequences assigned
204 (39.6%) exact matches, in which:
153 unique CDR3
7 unique J



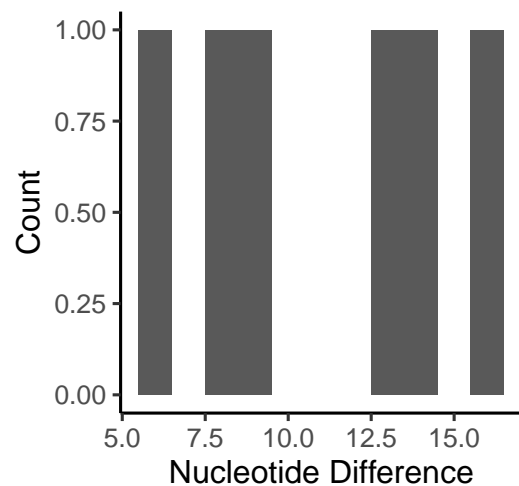
IGHV2-69*01_S8735

3708 sequences assigned
2 (0.1%) exact matches, in which:
2 unique CDR3
1 unique J



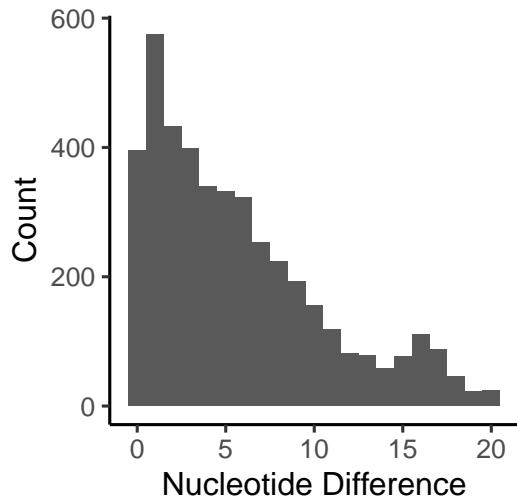
IGHV2-NL_1*01_S5211

36 sequences assigned
No exact matches.



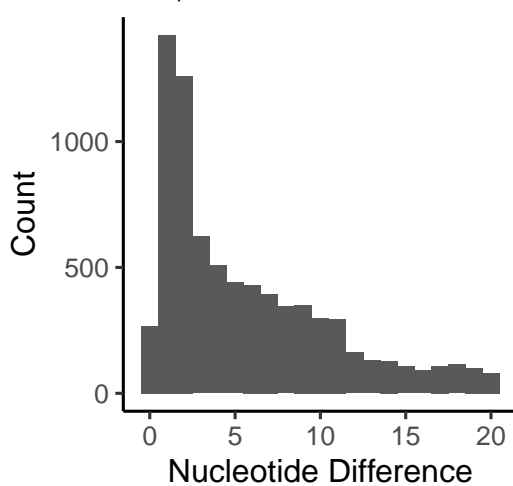
IGHV2-7*02_S1732

4459 sequences assigned
396 (8.9%) exact matches, in which:
242 unique CDR3
7 unique J



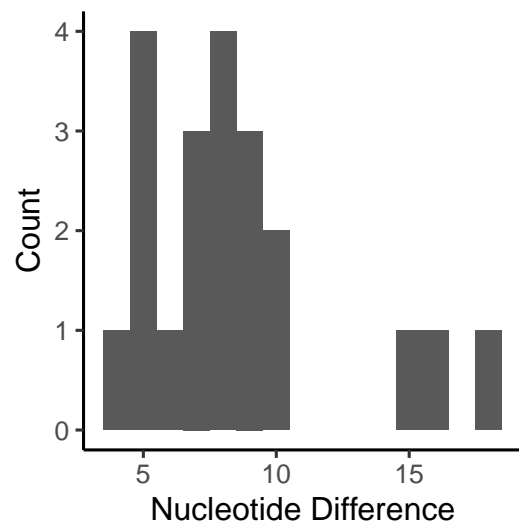
IGHV2-173*01_G289T

7996 sequences assigned
268 (3.4%) exact matches, in which:
251 unique CDR3
7 unique J



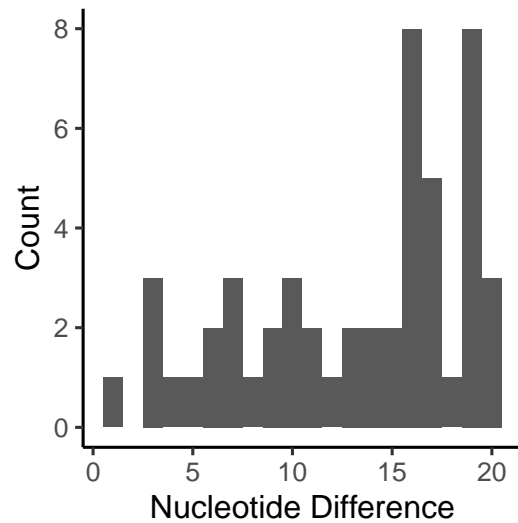
IGHV2-NL_1*01_S5431

22 sequences assigned
No exact matches.



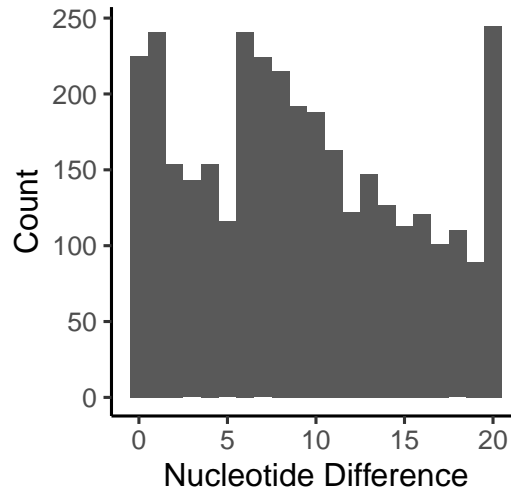
IGHV3-28*01_S3792

99 sequences assigned
No exact matches.



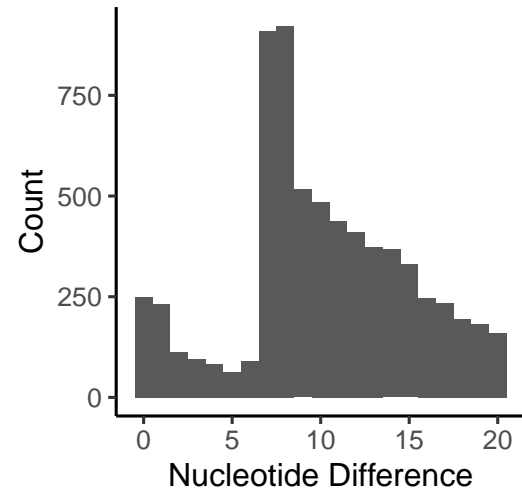
IGHV3-37*01_S6630

5006 sequences assigned
225 (4.5%) exact matches, in which:
156 unique CDR3
8 unique J



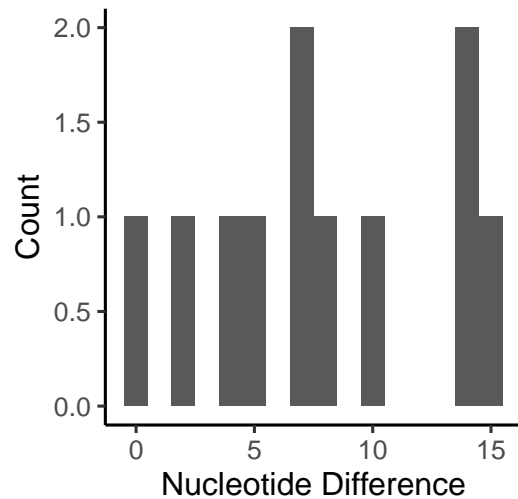
IGHV3-53*01_S3647

7634 sequences assigned
250 (3.3%) exact matches, in which:
166 unique CDR3
8 unique J



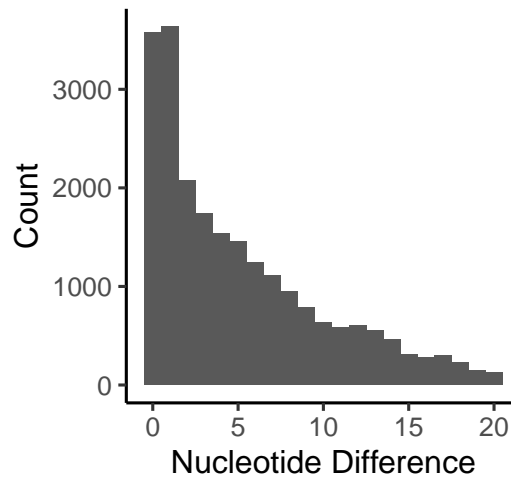
IGHV3-34*01_S1309

13 sequences assigned
1 (7.7%) exact matches, in which:
1 unique CDR3
1 unique J



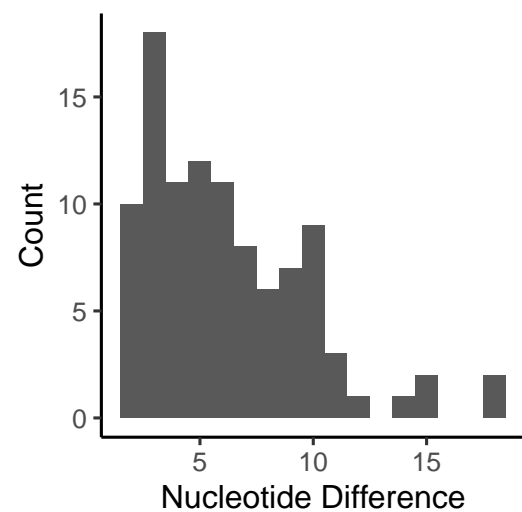
IGHV3-50*01_S1879

23055 sequences assigned
3580 (15.5%) exact matches, in which:
2258 unique CDR3
8 unique J



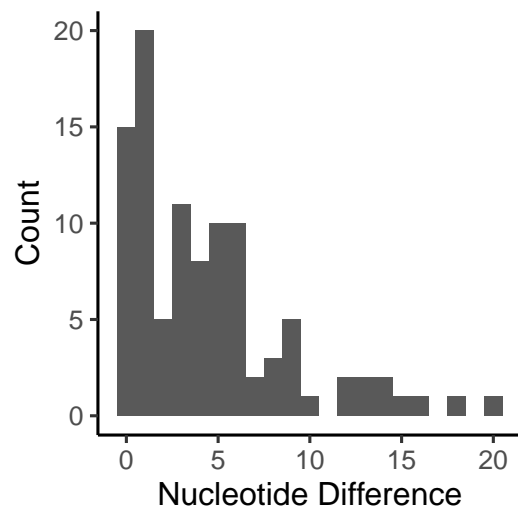
IGHV3-120*01_S4231

105 sequences assigned
No exact matches.



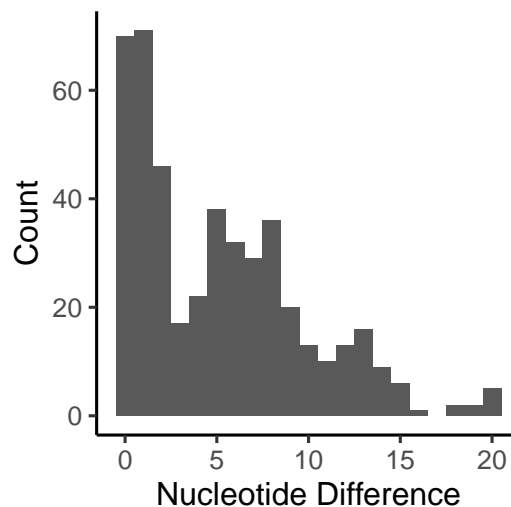
IGHV3-36*01_S5206

101 sequences assigned
15 (14.9%) exact matches, in which:
15 unique CDR3
4 unique J



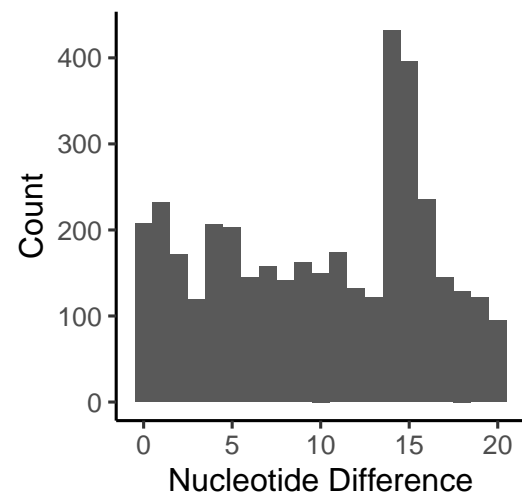
IGHV3-52*02_S5117

484 sequences assigned
70 (14.5%) exact matches, in which:
48 unique CDR3
5 unique J



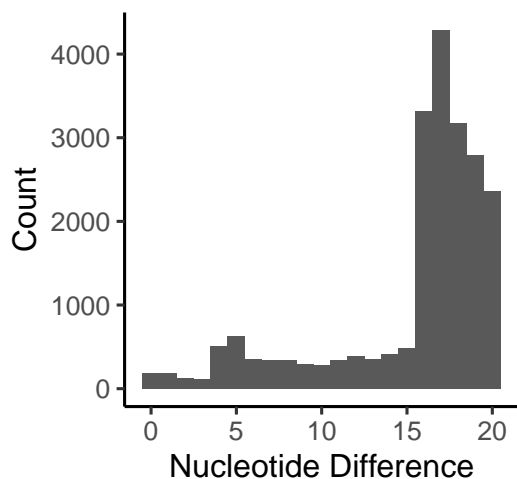
IGHV3-127*01_S5510

4261 sequences assigned
207 (4.9%) exact matches, in which:
126 unique CDR3
7 unique J



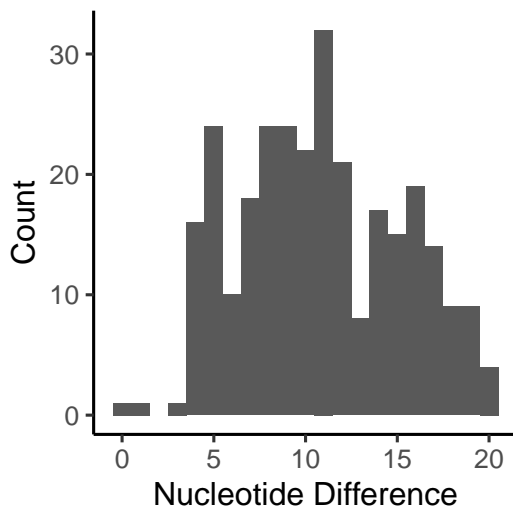
IGHV3-128*02_S0204

36790 sequences assigned
186 (0.5%) exact matches, in which:
106 unique CDR3
7 unique J



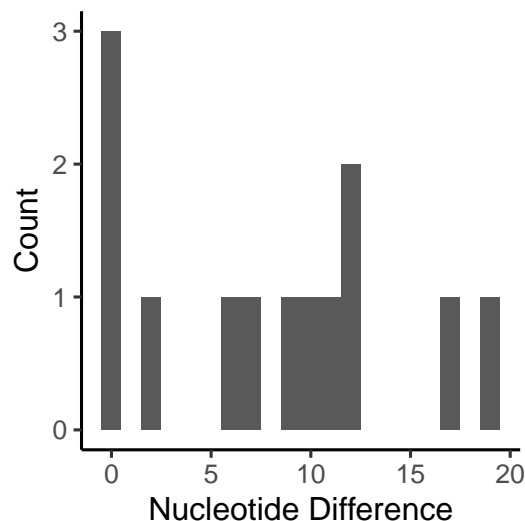
IGHV3-152*01_S7388

317 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



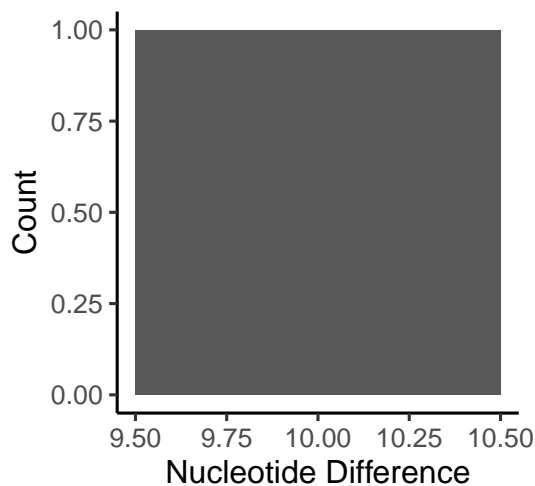
IGHV3-187*01_S1133

16 sequences assigned
3 (18.8%) exact matches, in which:
3 unique CDR3
2 unique J



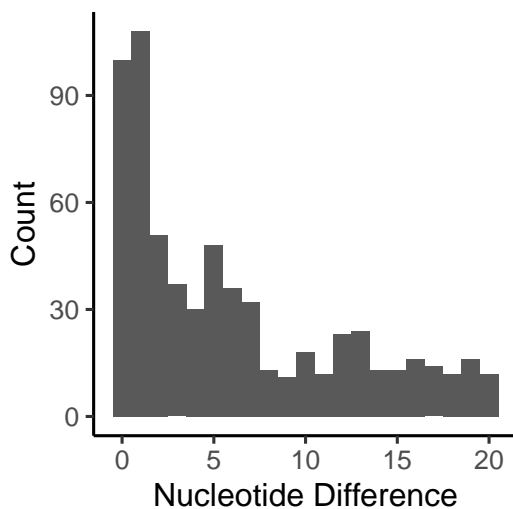
IGHV3-141*01_S5053

4 sequences assigned
No exact matches.



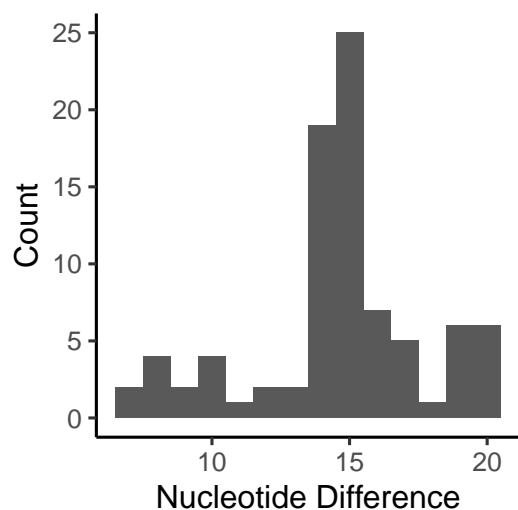
IGHV3-177*01_S1591

746 sequences assigned
100 (13.4%) exact matches, in which:
66 unique CDR3
6 unique J



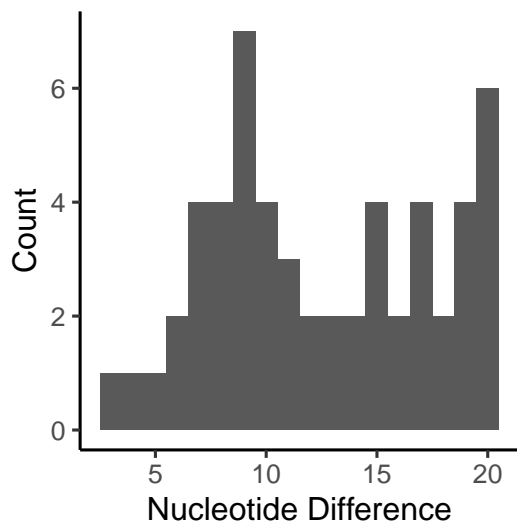
IGHV3-187*01_S4220

118 sequences assigned
No exact matches.



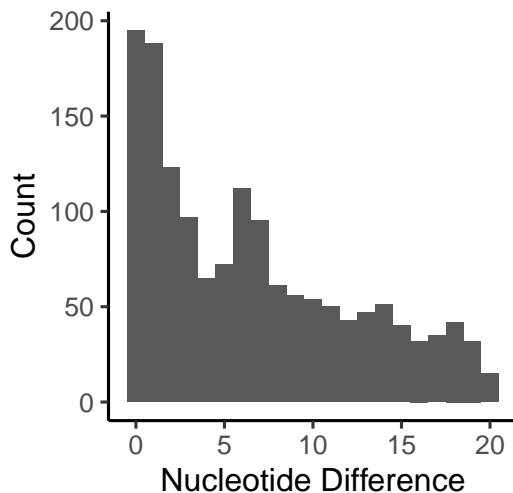
IGHV3-152*01_S1340

79 sequences assigned
No exact matches.



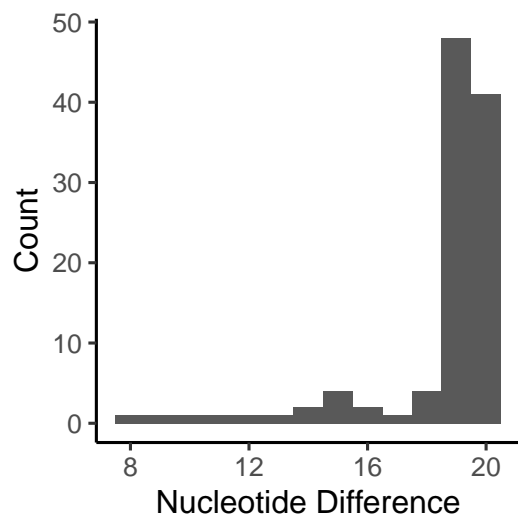
IGHV3-177*01_S5369

1674 sequences assigned
195 (11.6%) exact matches, in which:
128 unique CDR3
7 unique J



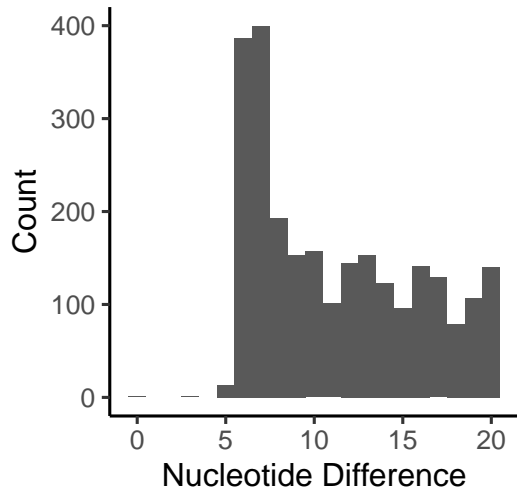
IGHV3-187*02_S6102

149 sequences assigned
No exact matches.



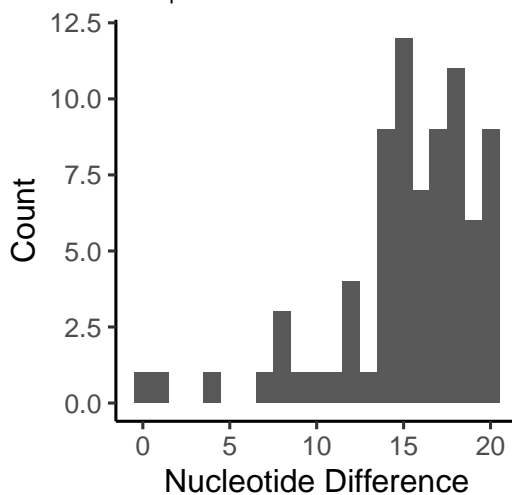
IGHV3-187*02_S8458

3087 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



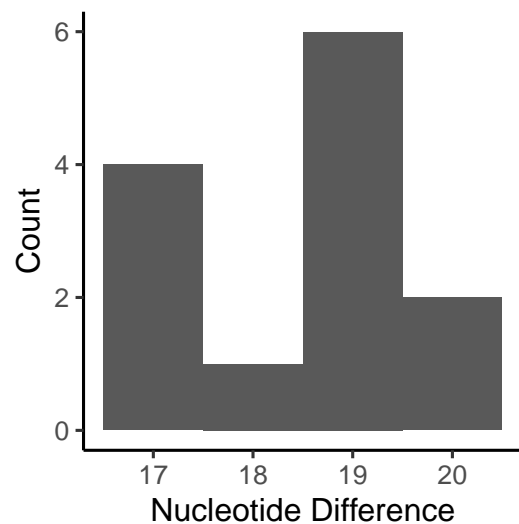
IGHV3-NL_1*01_S9854

558 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



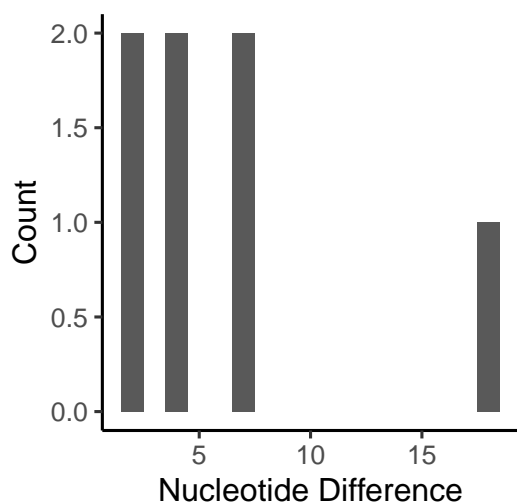
IGHV3-NL_12*02_S5864

159 sequences assigned
No exact matches.



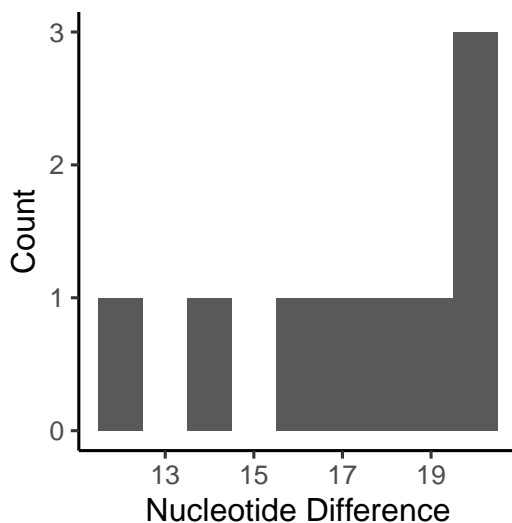
IGHV3-NL_1*01_S1080

1319 sequences assigned
No exact matches.



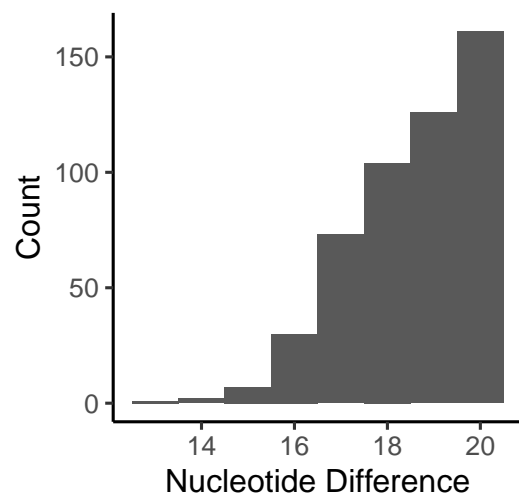
IGHV3-NL_10*02_S1970

90 sequences assigned
No exact matches.



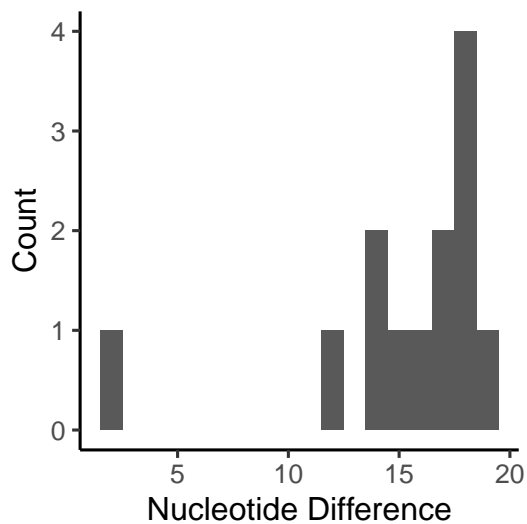
IGHV3-NL_12*02_S6994

2805 sequences assigned
No exact matches.



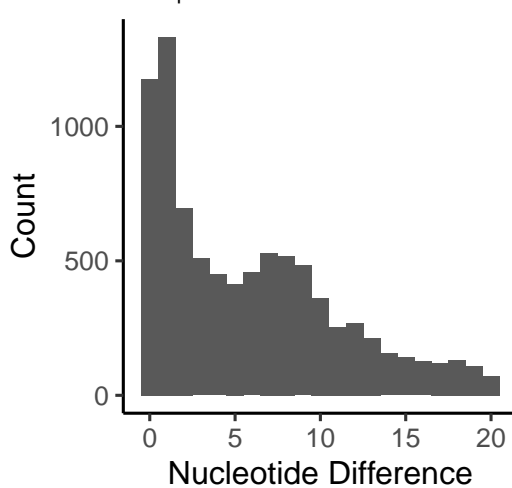
IGHV3-NL_1*01_S4549

312 sequences assigned
No exact matches.



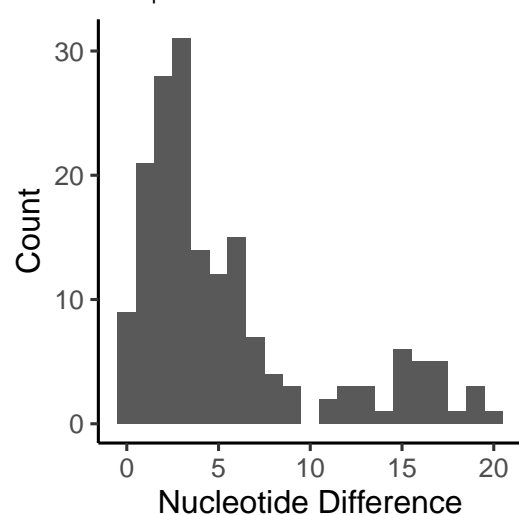
IGHV3-NL_11*01_S571

9365 sequences assigned
1177 (12.6%) exact matches, in which:
746 unique CDR3
8 unique J



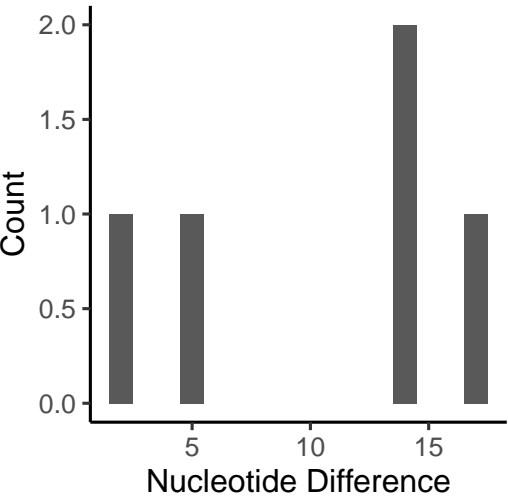
IGHV3-NL_13*01_S3940

213 sequences assigned
9 (4.2%) exact matches, in which:
5 unique CDR3
4 unique J



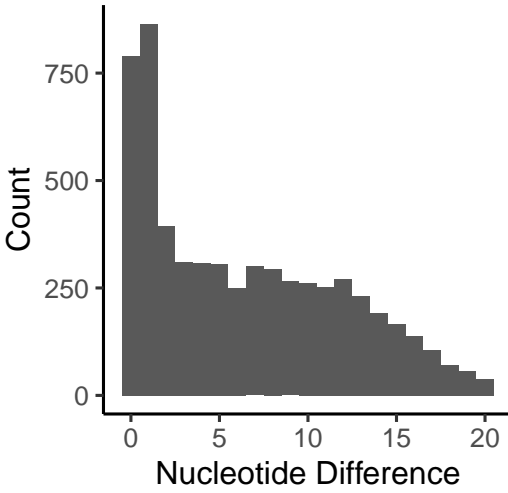
IGHV3–NL_14*01_S1113

8 sequences assigned
No exact matches.



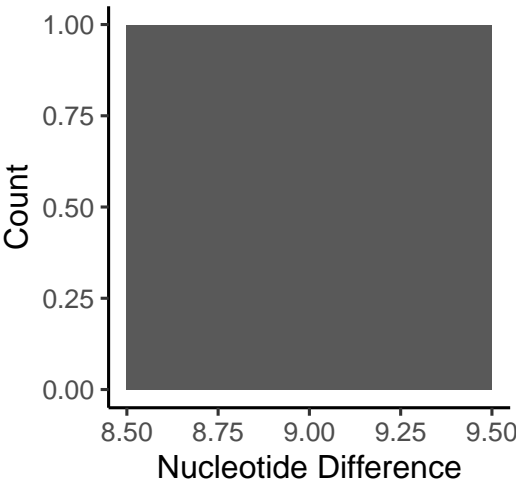
IGHV3–NL_17*01_S4250

6340 sequences assigned
790 (12.5%) exact matches, in which:
459 unique CDR3
8 unique J



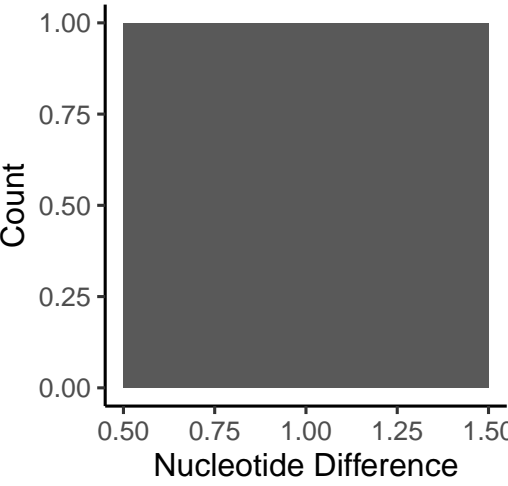
IGHV3–NL_2*01_S1693

9 sequences assigned
No exact matches.



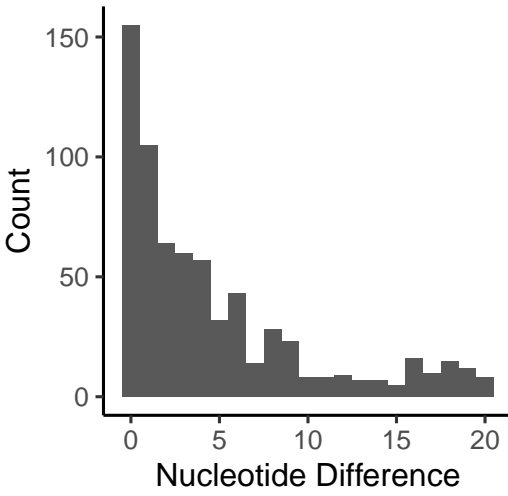
IGHV3–NL_15*01_S0604

1 sequences assigned
No exact matches.



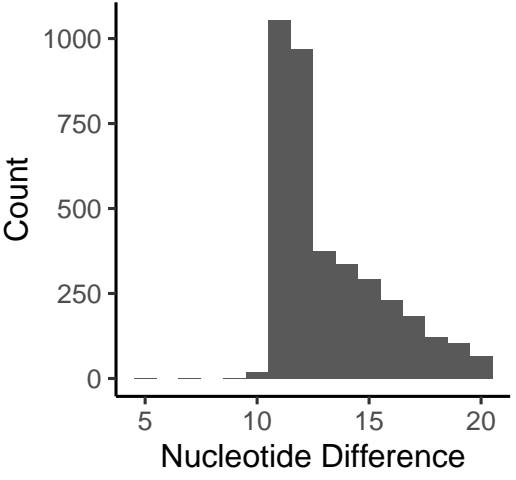
IGHV3–NL_18*01_S3867

713 sequences assigned
155 (21.7%) exact matches, in which:
112 unique CDR3
6 unique J



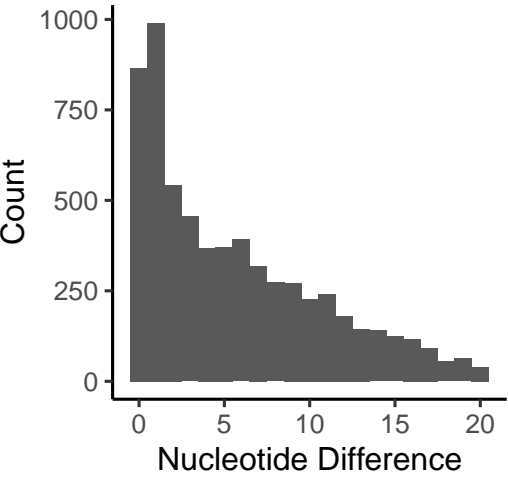
IGHV3–NL_4*01_S2727

4067 sequences assigned
No exact matches.



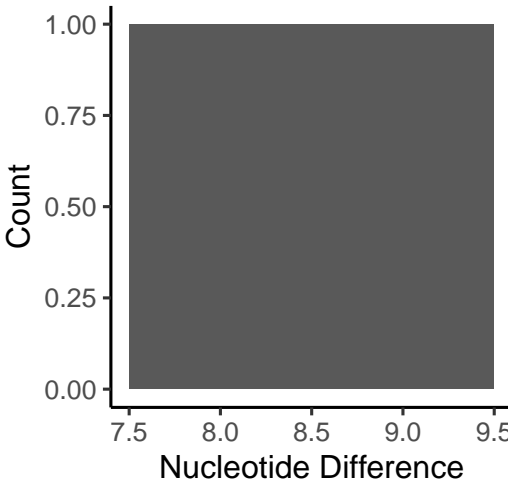
IGHV3–NL_17*01_S050

6622 sequences assigned
865 (13.1%) exact matches, in which:
497 unique CDR3
7 unique J



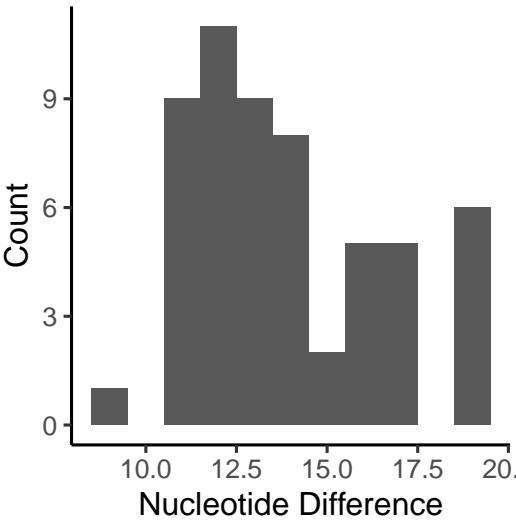
IGHV3–NL_19*01_S6635

2 sequences assigned
No exact matches.



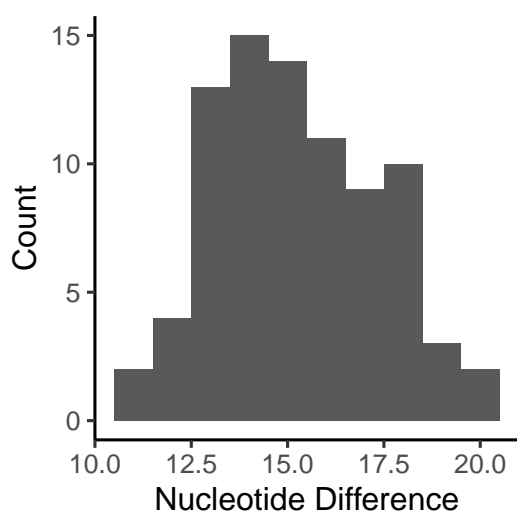
IGHV3–NL_4*01_S9067

103 sequences assigned
No exact matches.



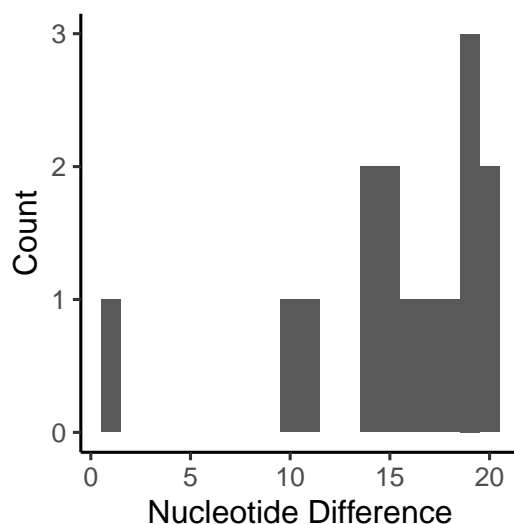
IGHV3–NL_4*01_S9635

152 sequences assigned
No exact matches.



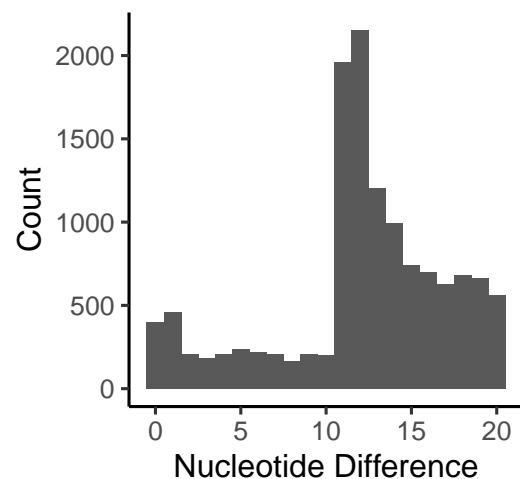
IGHV3–NL_7*01_S0199

21 sequences assigned
No exact matches.



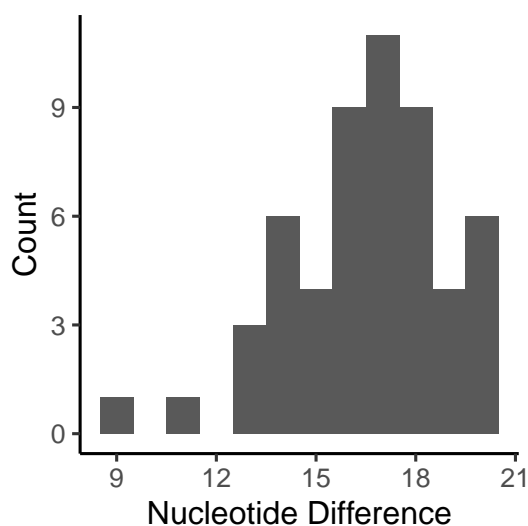
IGHV3–NL_9*01_S6098

16953 sequences assigned
399 (2.4%) exact matches, in which:
259 unique CDR3
6 unique J



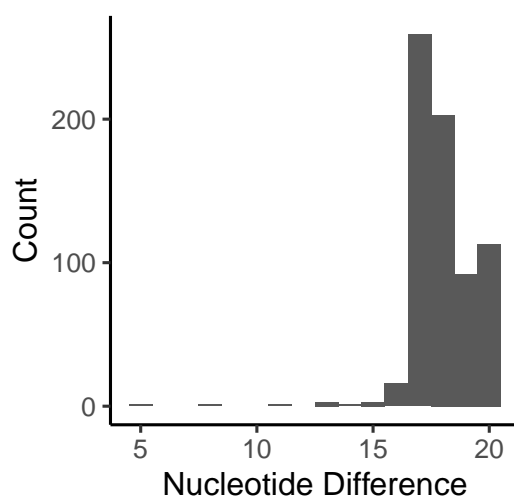
IGHV3–NL_5*01_S8361

104 sequences assigned
No exact matches.



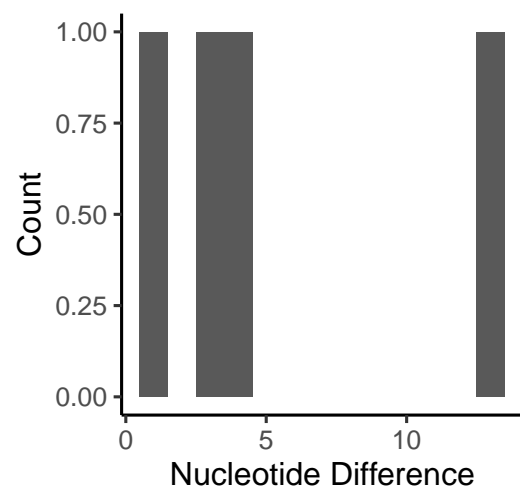
IGHV3–NL_8*01_S7474

1672 sequences assigned
No exact matches.



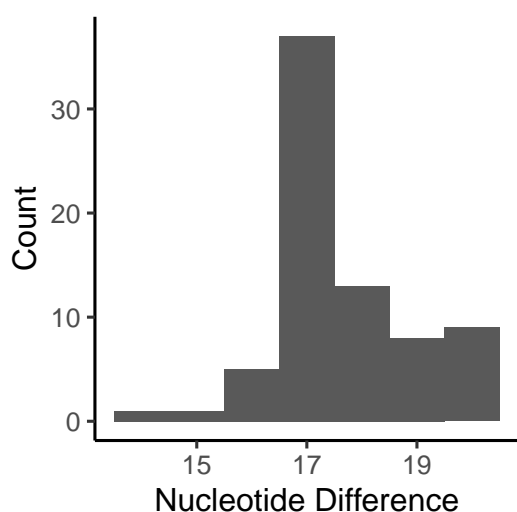
IGHV4–144*01_S3113

5 sequences assigned
No exact matches.



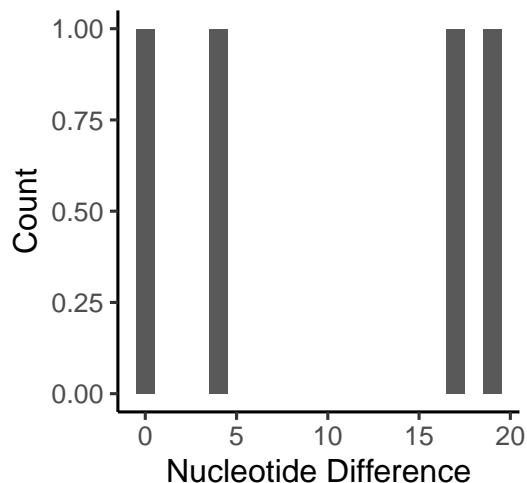
IGHV3–NL_6*02_S7808

149 sequences assigned
No exact matches.



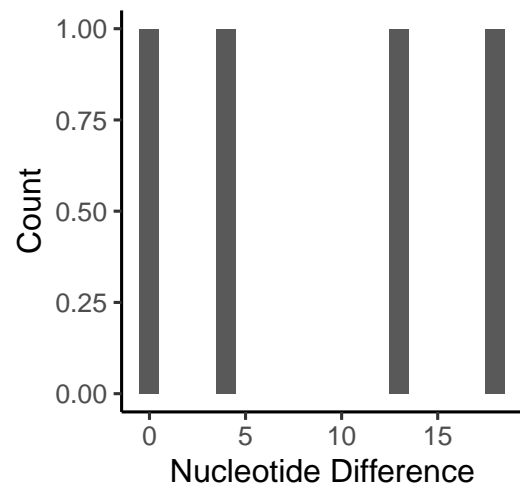
IGHV3–NL_8*01_S9578

81 sequences assigned
1 (1.2%) exact matches, in which:
1 unique CDR3
1 unique J



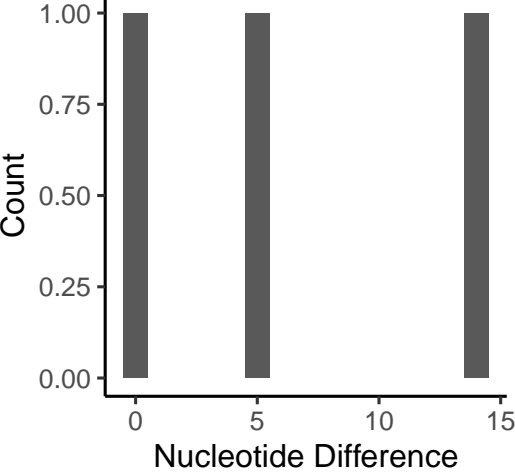
IGHV4–144*01_S3676

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



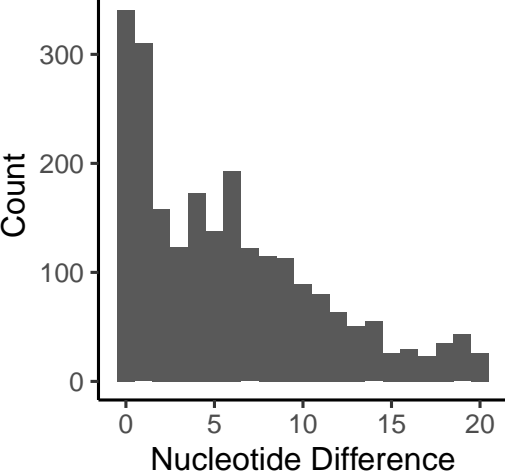
IGHV4-144*01_S9923

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



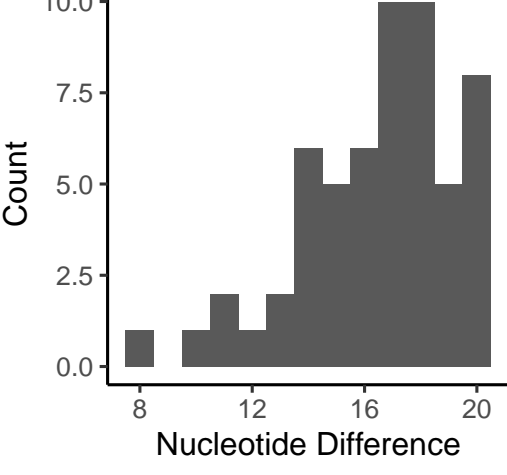
IGHV4-NL_1*01_S0860

2518 sequences assigned
341 (13.5%) exact matches, in which:
254 unique CDR3
7 unique J



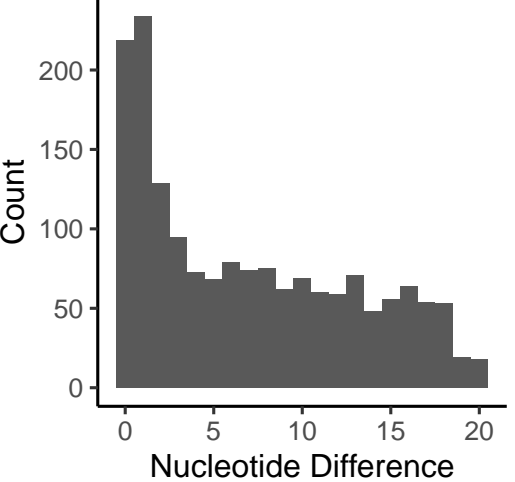
IGHV4-NL_11*01_S5570

137 sequences assigned
No exact matches.



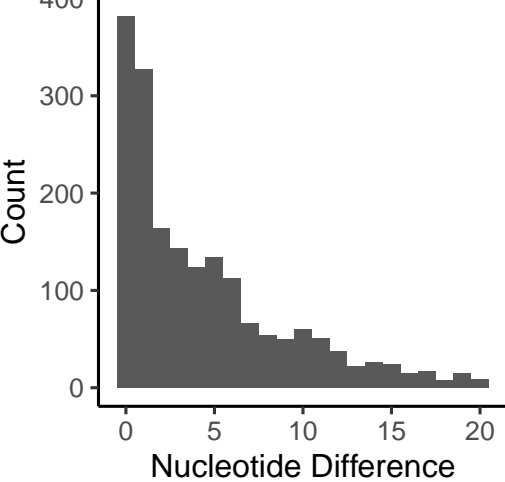
IGHV4-149*02_S6878

1939 sequences assigned
219 (11.3%) exact matches, in which:
182 unique CDR3
7 unique J



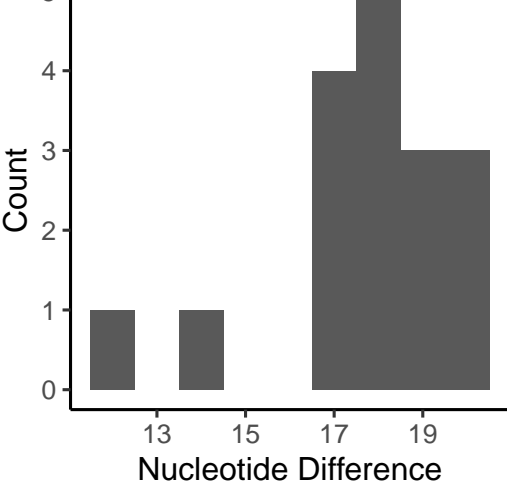
IGHV4-NL_1*01_S8720

2048 sequences assigned
382 (18.7%) exact matches, in which:
300 unique CDR3
7 unique J



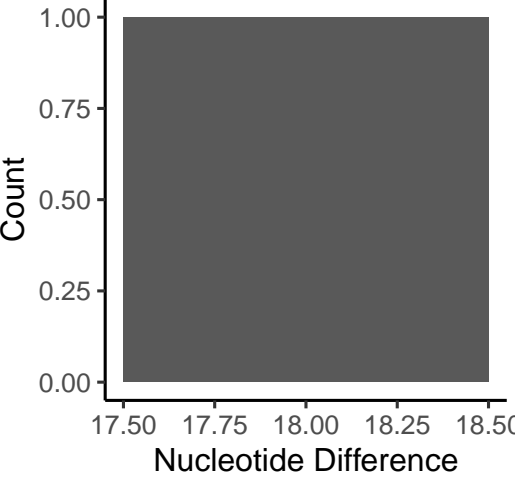
IGHV4-NL_11*01_S9942

51 sequences assigned
No exact matches.



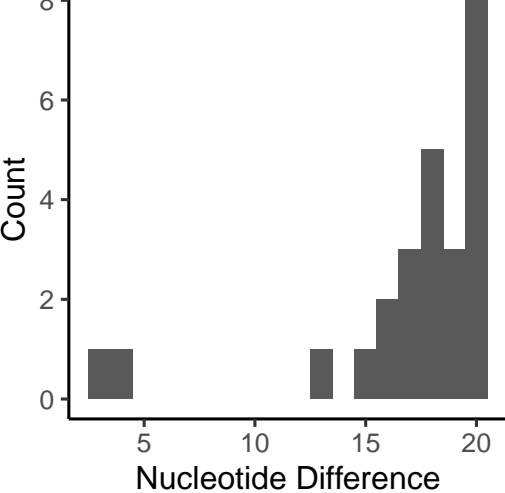
IGHV4-150*01_S9374

12 sequences assigned
No exact matches.



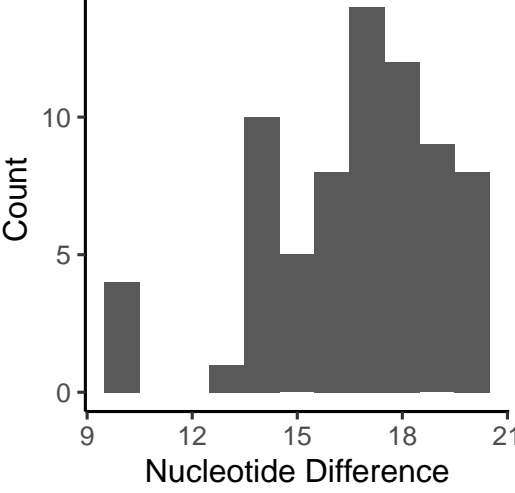
IGHV4-NL_10*01_S6744

63 sequences assigned
No exact matches.



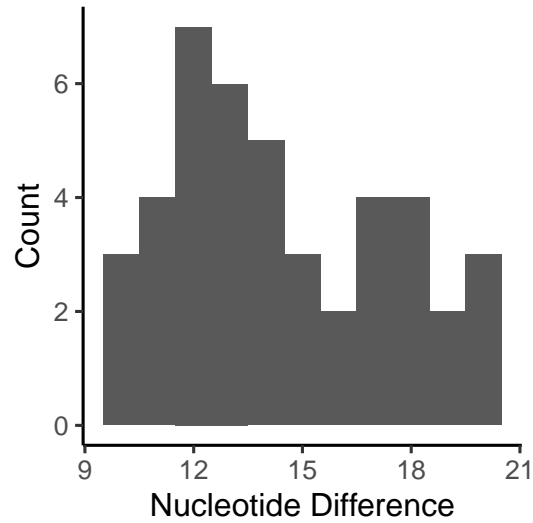
IGHV4-NL_12*01_S5174

389 sequences assigned
No exact matches.



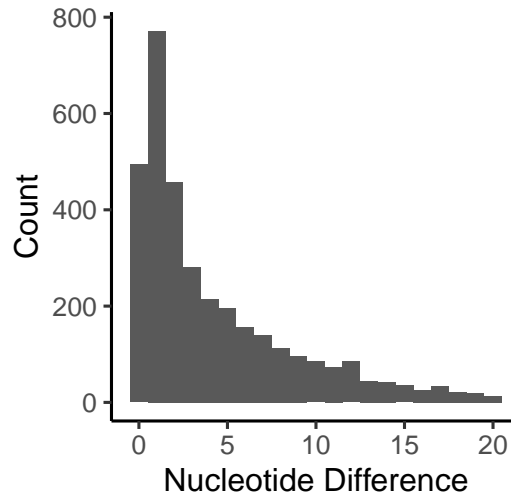
IGHV4–NL_12*01_S8068

55 sequences assigned
No exact matches.



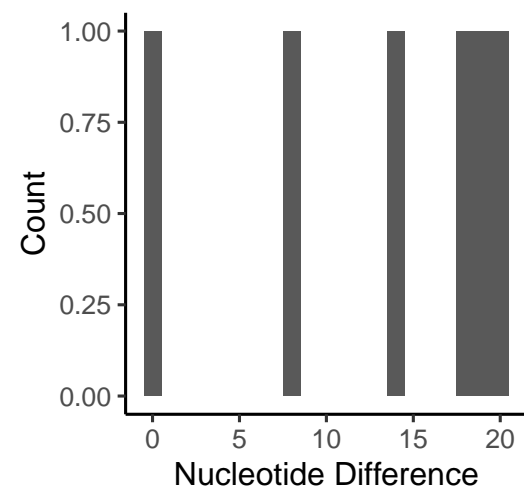
IGHV4–NL_16*01_S2324

3537 sequences assigned
494 (14%) exact matches, in which:
289 unique CDR3
8 unique J



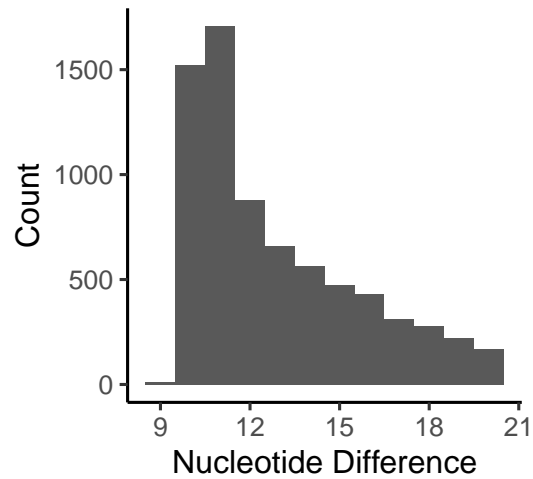
IGHV4–NL_20*01_S4754

141 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



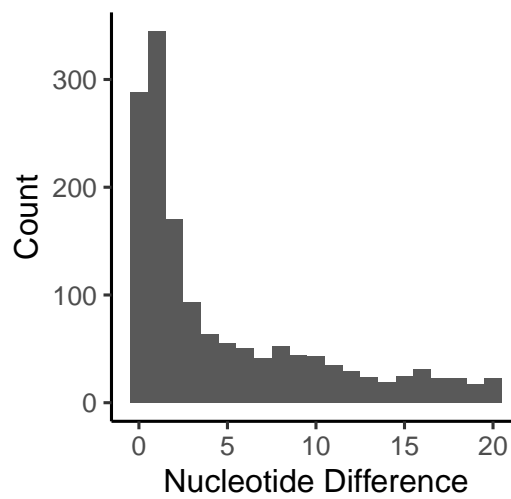
IGHV4–NL_13*01_S974

8137 sequences assigned
No exact matches.



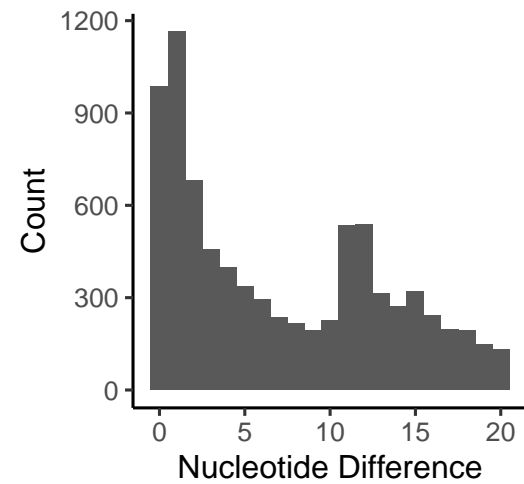
IGHV4–NL_17*01_S0904

1836 sequences assigned
288 (15.7%) exact matches, in which:
217 unique CDR3
7 unique J



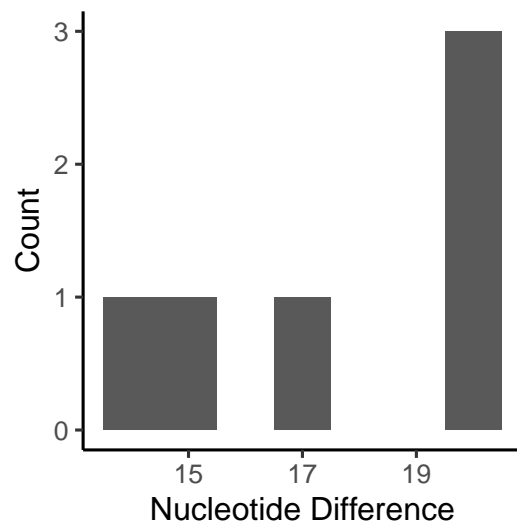
IGHV4–NL_21*01_S013

8798 sequences assigned
987 (11.2%) exact matches, in which:
725 unique CDR3
8 unique J



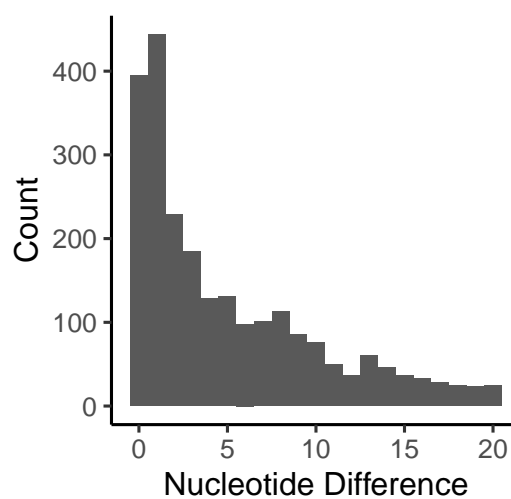
IGHV4–NL_15*01_S5717

22 sequences assigned
No exact matches.



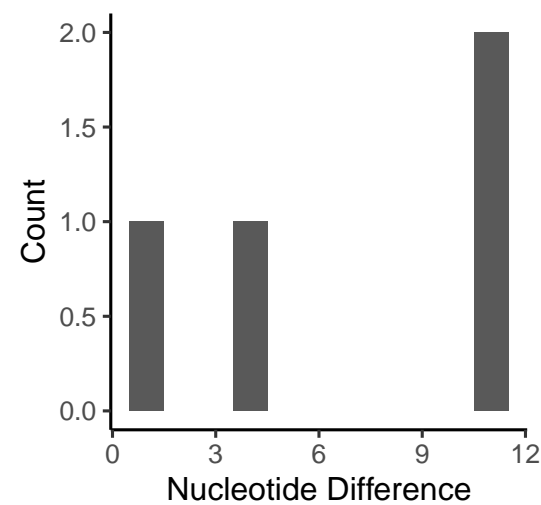
IGHV4–NL_17*01_S4099

2525 sequences assigned
395 (15.6%) exact matches, in which:
290 unique CDR3
8 unique J



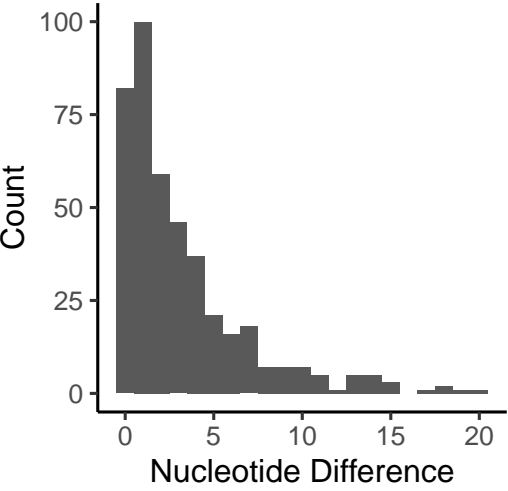
IGHV4–NL_22*01_S2393

8 sequences assigned
No exact matches.



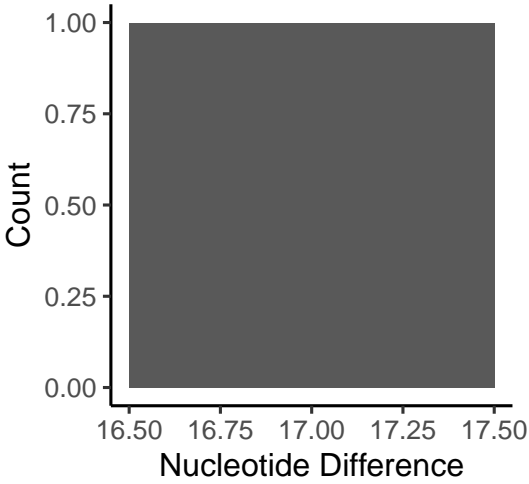
IGHV4–NL_23*01_S1296

438 sequences assigned
82 (18.7%) exact matches, in which:
71 unique CDR3
7 unique J



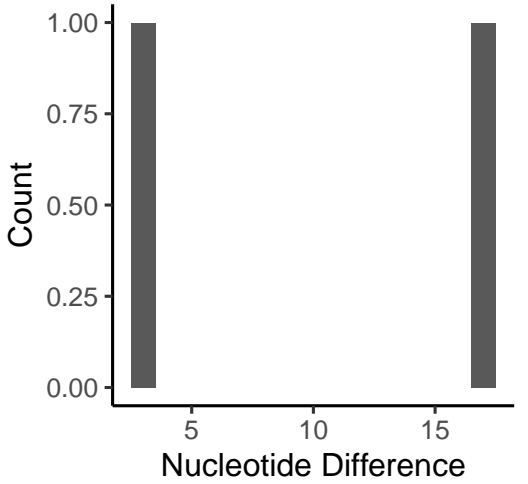
IGHV4–NL_25*01_S6200

6 sequences assigned
No exact matches.



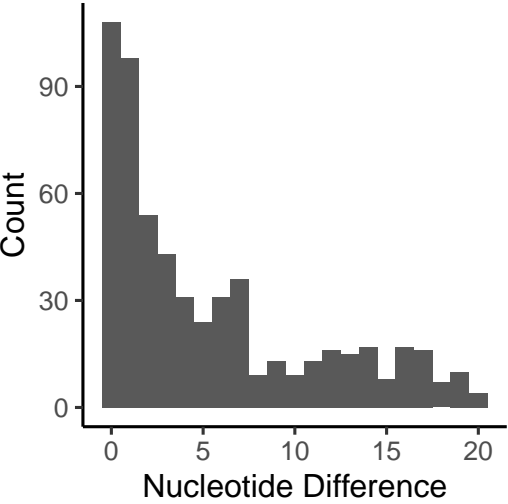
IGHV4–NL_27*01_S5157

7 sequences assigned
No exact matches.



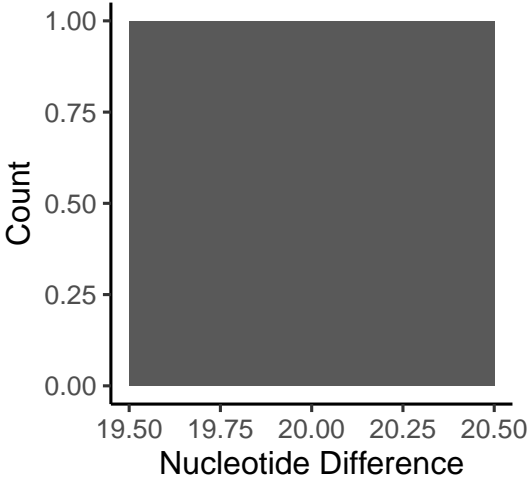
IGHV4–NL_23*01_S7000

614 sequences assigned
108 (17.6%) exact matches, in which:
88 unique CDR3
6 unique J



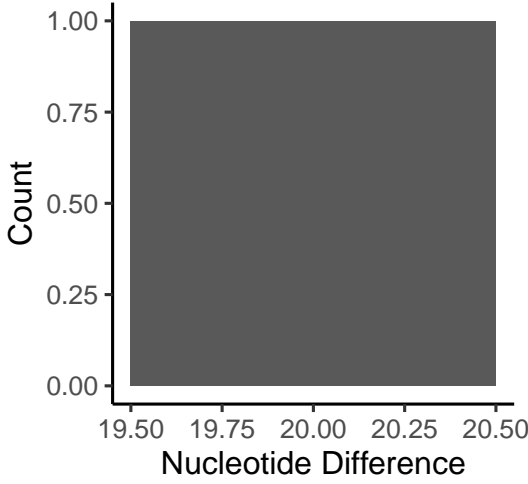
IGHV4–NL_25*01_S6604

1 sequences assigned
No exact matches.



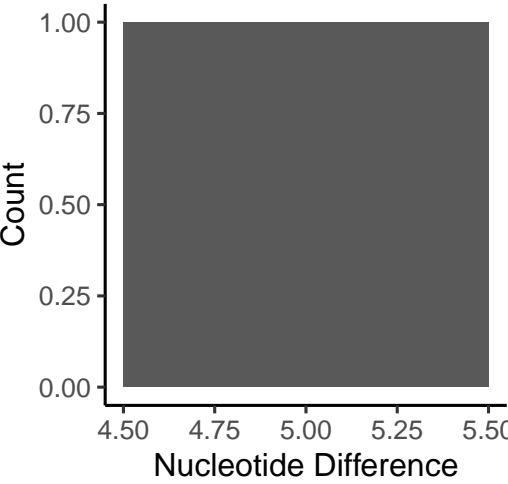
IGHV4–NL_27*01_S7150

1 sequences assigned
No exact matches.



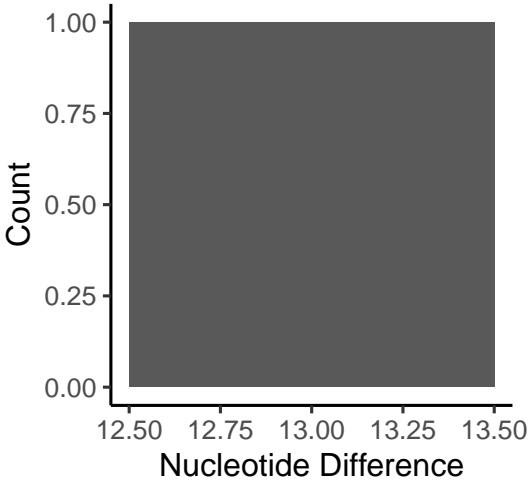
IGHV4–NL_24*01_S5697

1 sequences assigned
No exact matches.



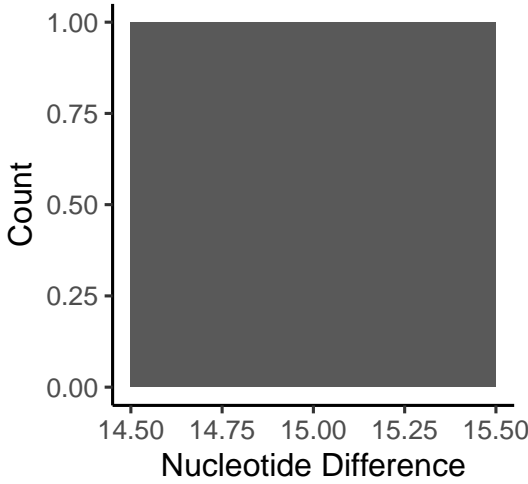
IGHV4–NL_25*01_S9957

1 sequences assigned
No exact matches.



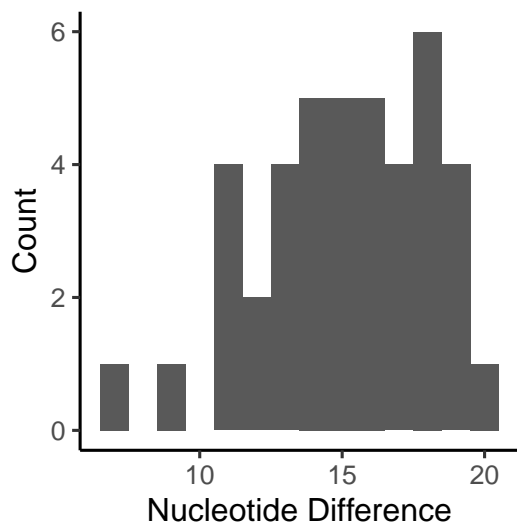
IGHV4–NL_27*01_S7643

1 sequences assigned
No exact matches.



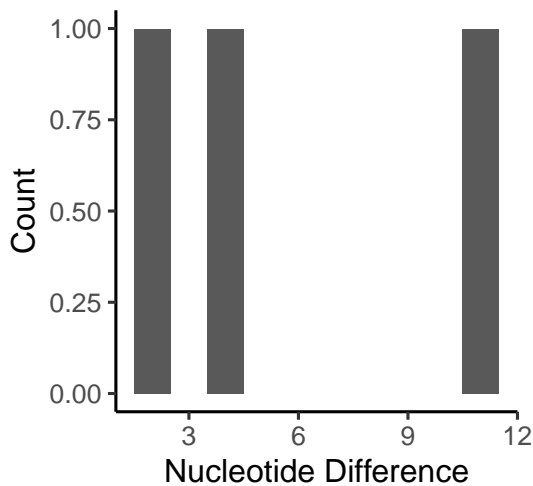
IGHV4–NL_29*01_S3761

263 sequences assigned
No exact matches.



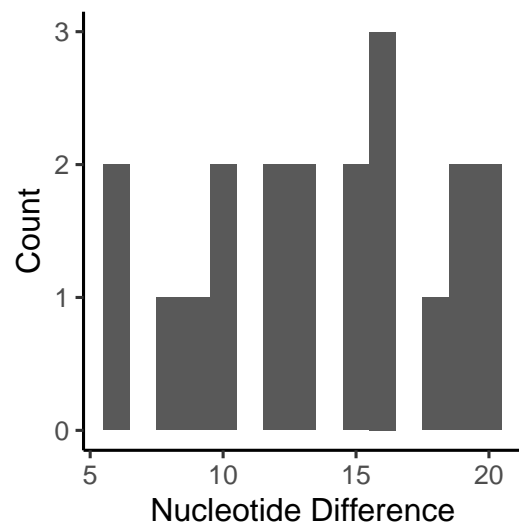
IGHV4–NL_31*01_S1675

8 sequences assigned
No exact matches.



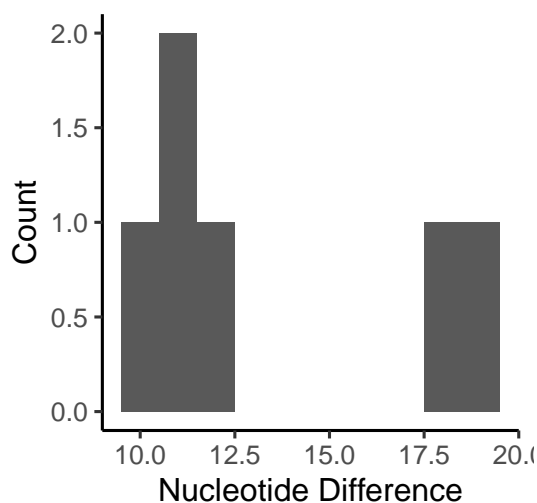
IGHV4–NL_34*01_S4637

21 sequences assigned
No exact matches.



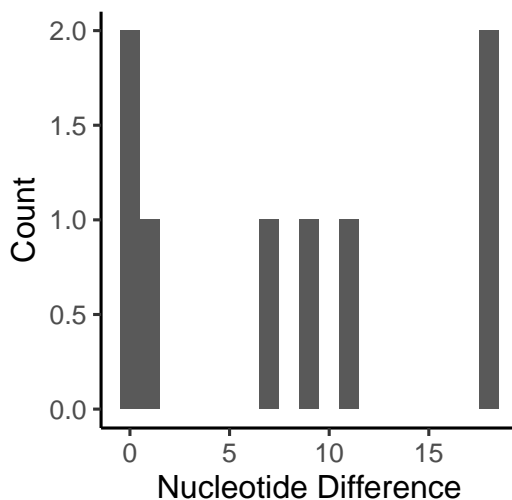
IGHV4–NL_3*01_S7576

8 sequences assigned
No exact matches.



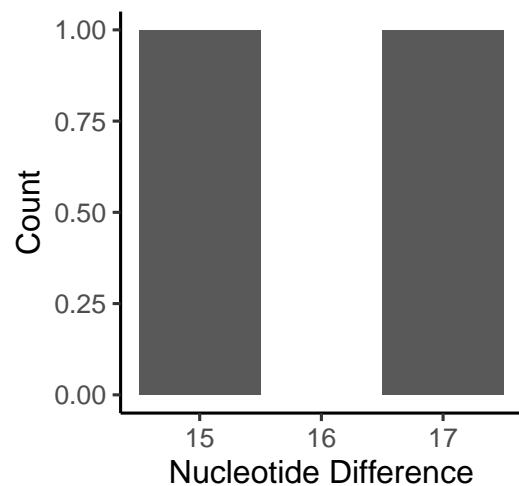
IGHV4–NL_31*01_S7693

11 sequences assigned
2 (18.2%) exact matches, in which:
2 unique CDR3
2 unique J



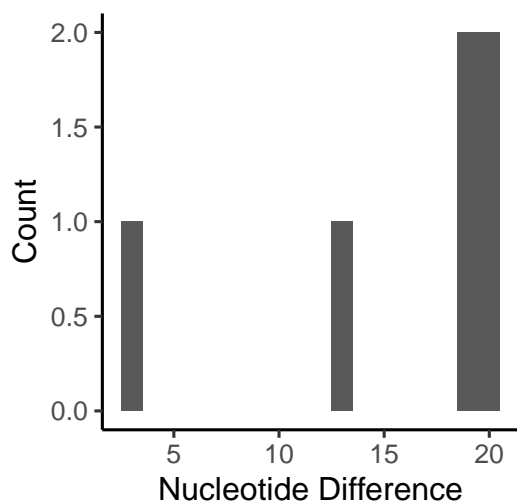
IGHV4–NL_34*01_S4749

6 sequences assigned
No exact matches.



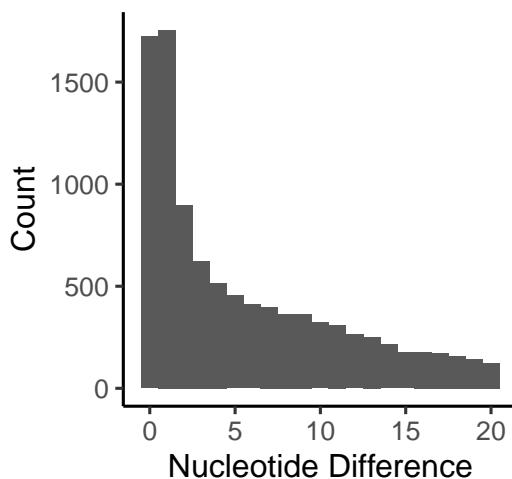
IGHV4–NL_30*01_S4251

45 sequences assigned
No exact matches.



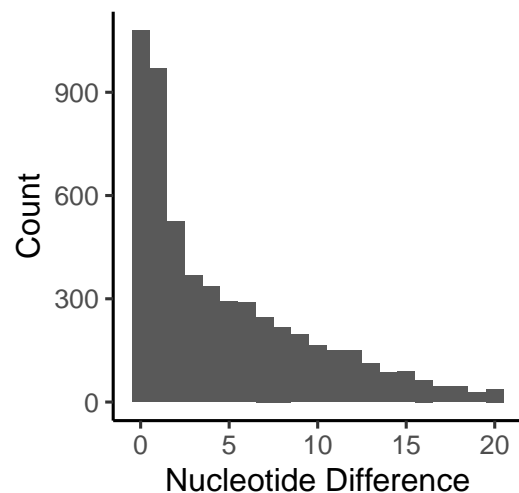
IGHV4–NL_33*01_S437

11194 sequences assigned
1724 (15.4%) exact matches, in which:
1258 unique CDR3
7 unique J



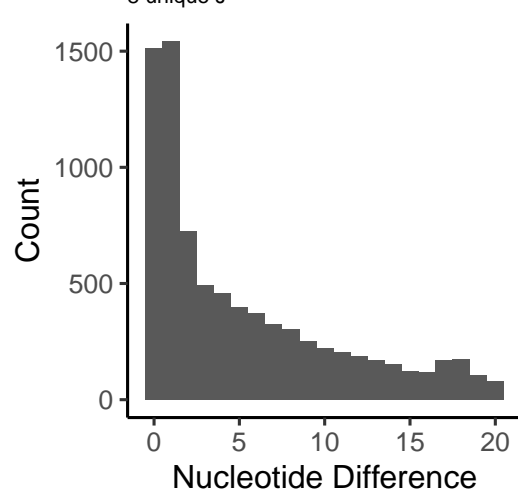
IGHV4–NL_36*01_S8200

5843 sequences assigned
1080 (18.5%) exact matches, in which:
804 unique CDR3
8 unique J



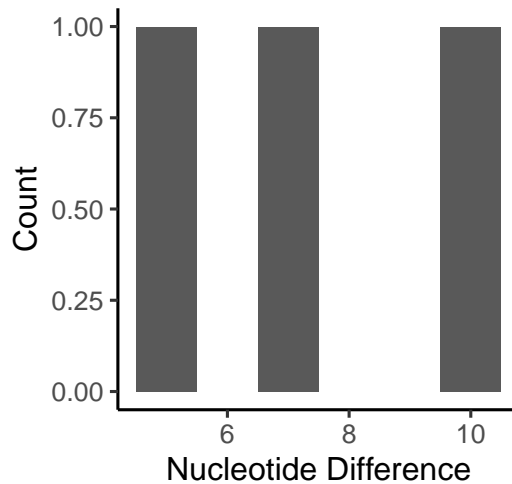
IGHV4-NL_38*01_S843

8604 sequences assigned
1512 (17.6%) exact matches, in which:
1150 unique CDR3
8 unique J



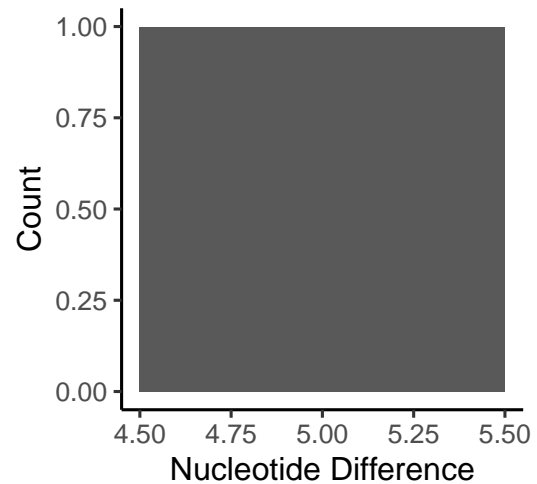
IGHV4-NL_40*01_S692'

5 sequences assigned
No exact matches.



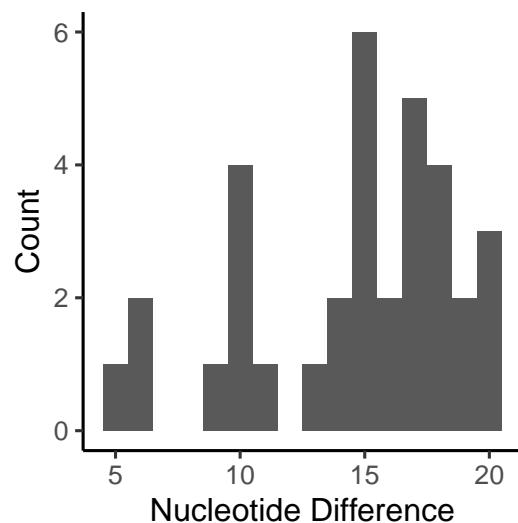
IGHV4-NL_42*01_S6064

1 sequences assigned
No exact matches.



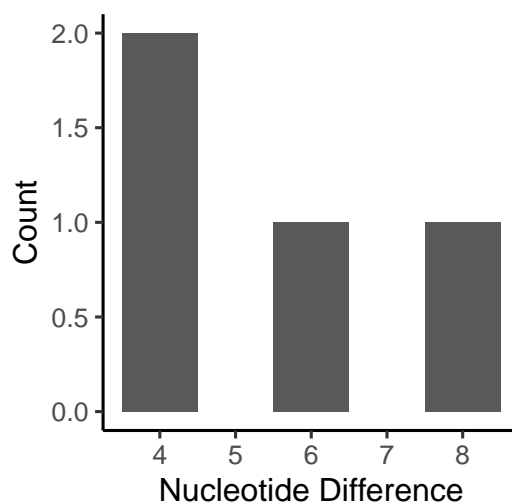
IGHV4-NL_4*01_S8866

66 sequences assigned
No exact matches.



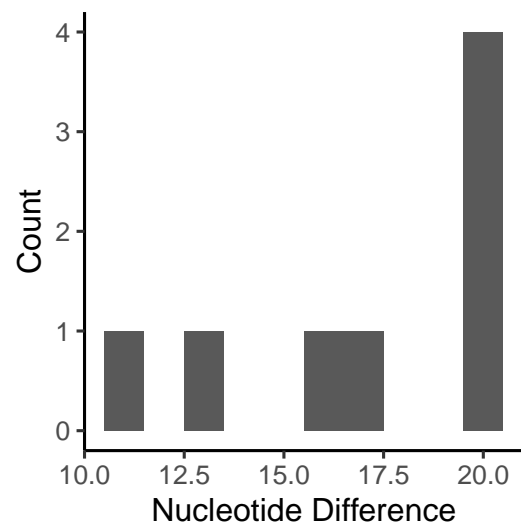
IGHV4-NL_42*01_S3076

5 sequences assigned
No exact matches.



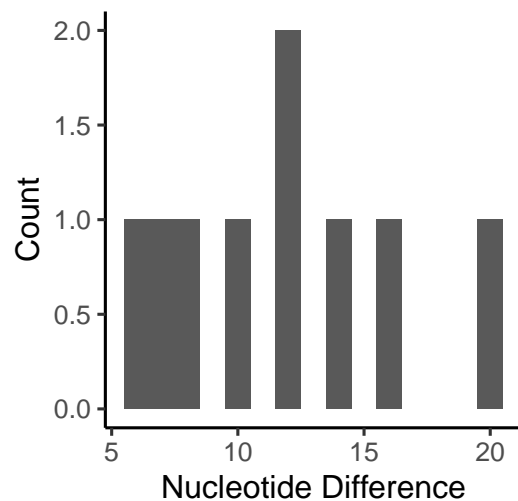
IGHV4-NL_43*01_S4510

58 sequences assigned
No exact matches.



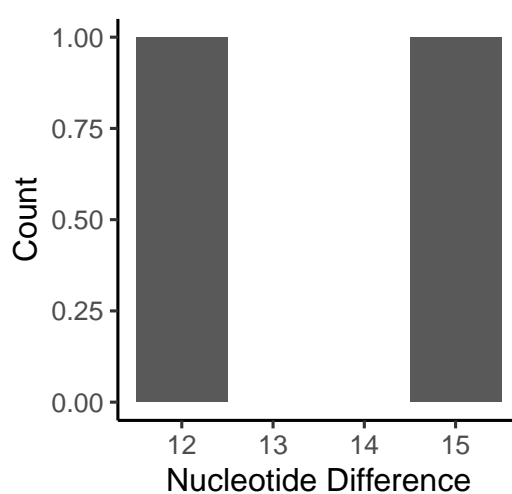
IGHV4-NL_40*01_S0696

13 sequences assigned
No exact matches.



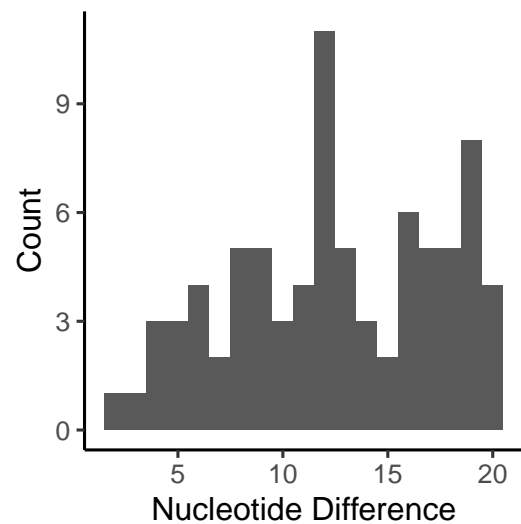
IGHV4-NL_42*01_S3666

2 sequences assigned
No exact matches.



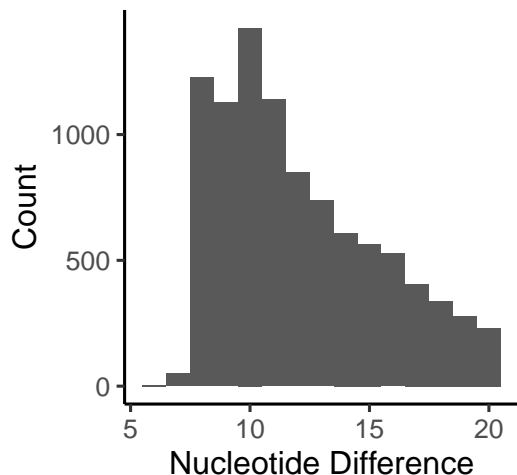
IGHV4-NL_5*01_S5308

150 sequences assigned
No exact matches.



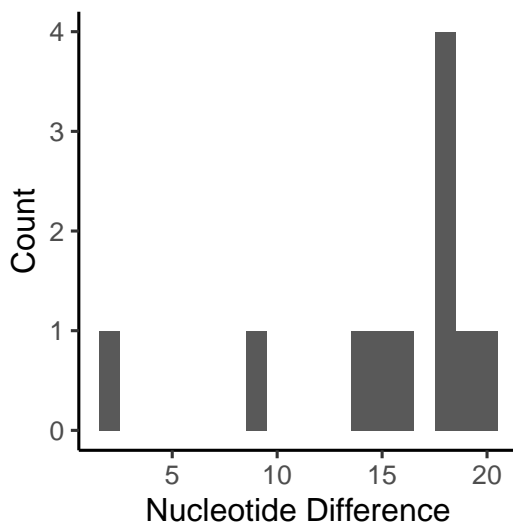
IGHV4–NL_5*01_S6281

10629 sequences assigned
No exact matches.



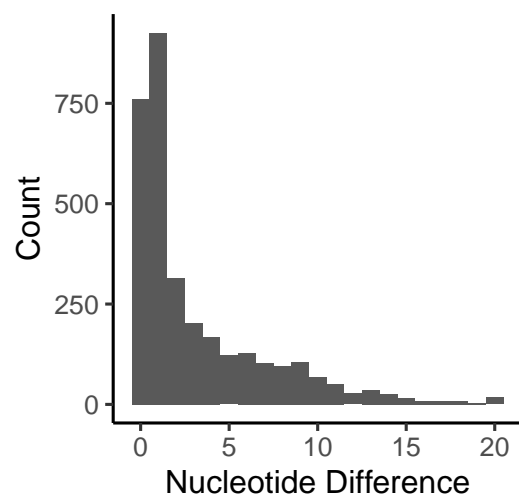
IGHV4–NL_9*01_S6142

24 sequences assigned
No exact matches.



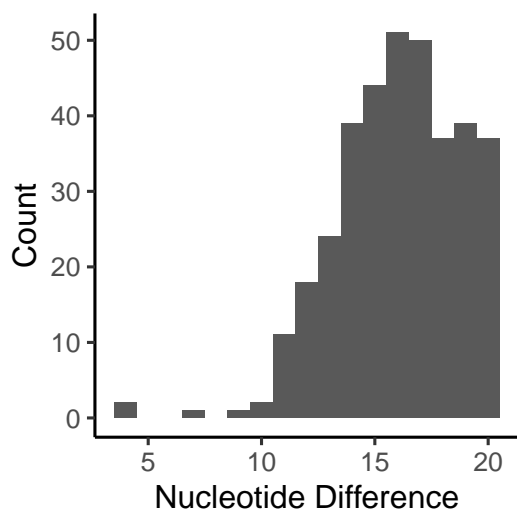
IGHV5–157*01_S8185

3256 sequences assigned
761 (23.4%) exact matches, in which:
388 unique CDR3
8 unique J



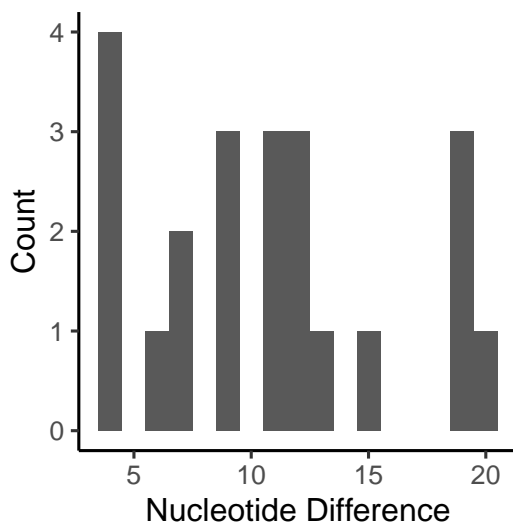
IGHV4–NL_5*01_S8913

670 sequences assigned
No exact matches.



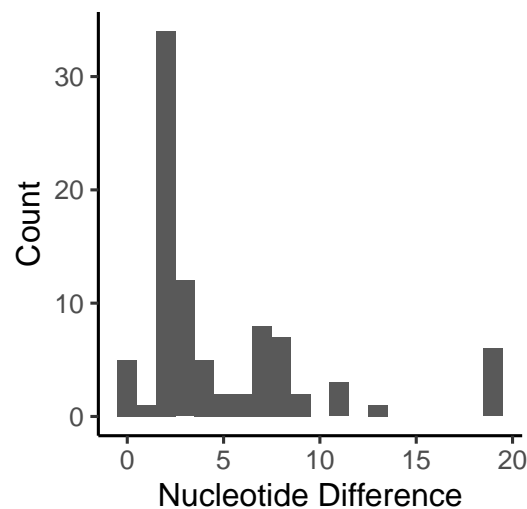
IGHV4–NL_9*01_S9889

28 sequences assigned
No exact matches.



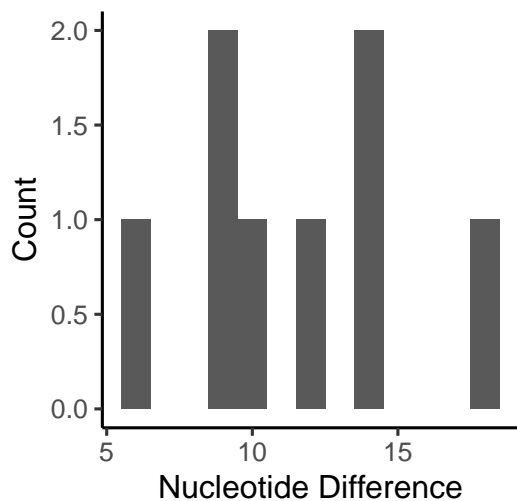
IGHV7–135*02_S1424

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



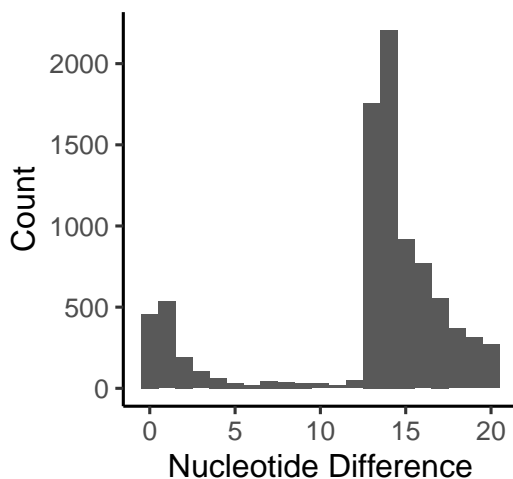
IGHV4–NL_9*01_S4567

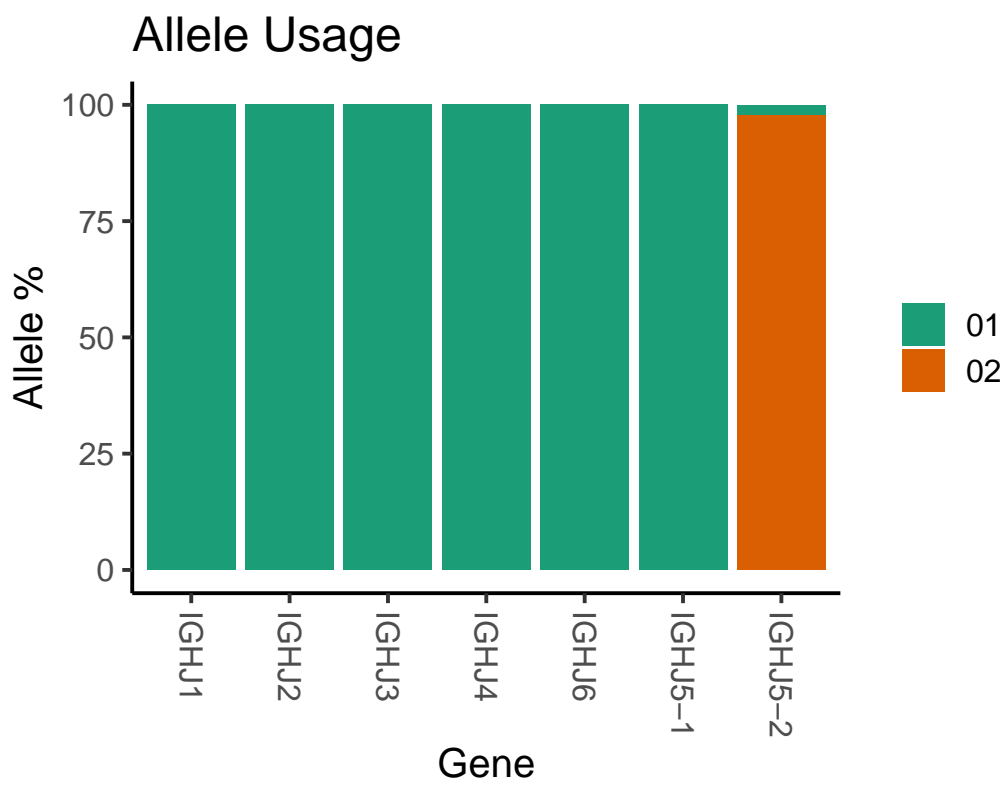
111 sequences assigned
No exact matches.



IGHV5–157*01_S3631

10277 sequences assigned
458 (4.5%) exact matches, in which:
226 unique CDR3
7 unique J





Warning – no inferred sequences found.