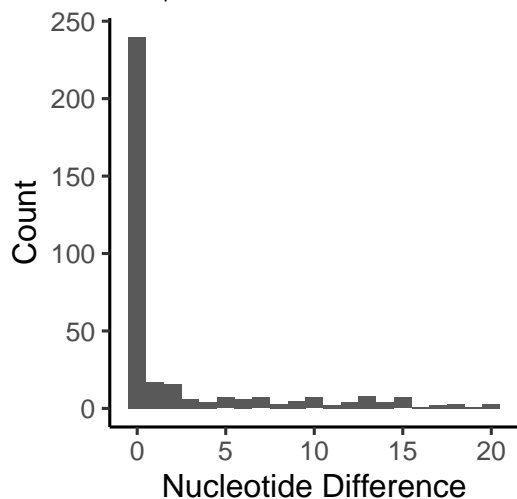


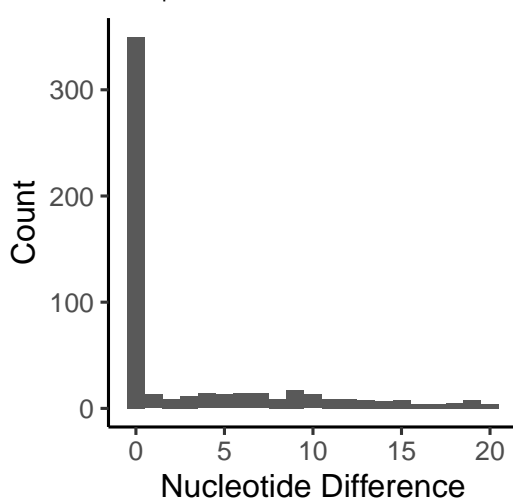
IGHV1-2*04

368 sequences assigned
240 (65.2%) exact matches, in which:
240 unique CDR3
5 unique J



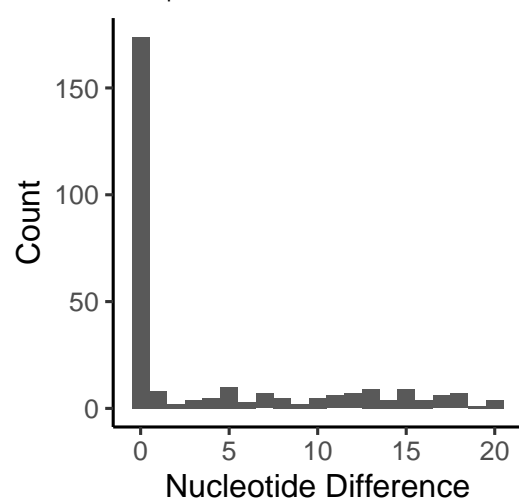
IGHV1-18*01

607 sequences assigned
350 (57.7%) exact matches, in which:
349 unique CDR3
6 unique J



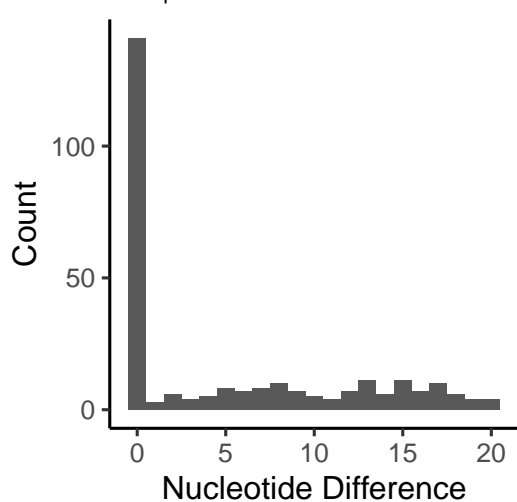
IGHV1-46*01

309 sequences assigned
174 (56.3%) exact matches, in which:
174 unique CDR3
5 unique J



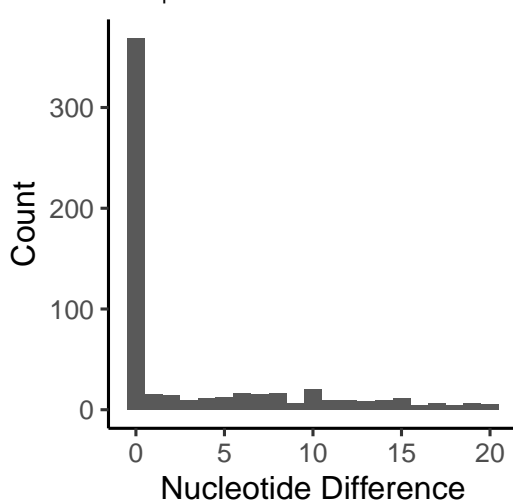
IGHV1-3*01_05

310 sequences assigned
141 (45.5%) exact matches, in which:
141 unique CDR3
6 unique J



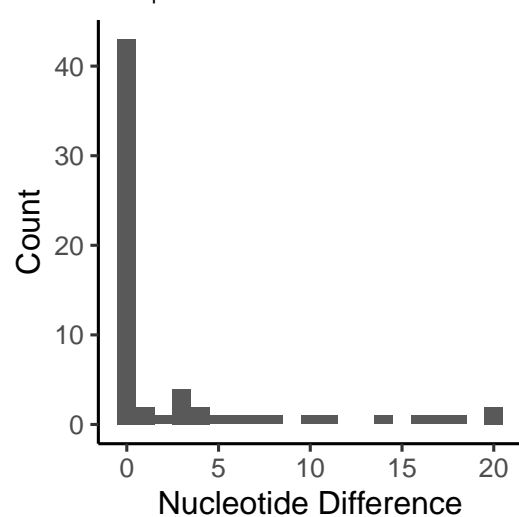
IGHV1-18*04

631 sequences assigned
369 (58.5%) exact matches, in which:
368 unique CDR3
6 unique J



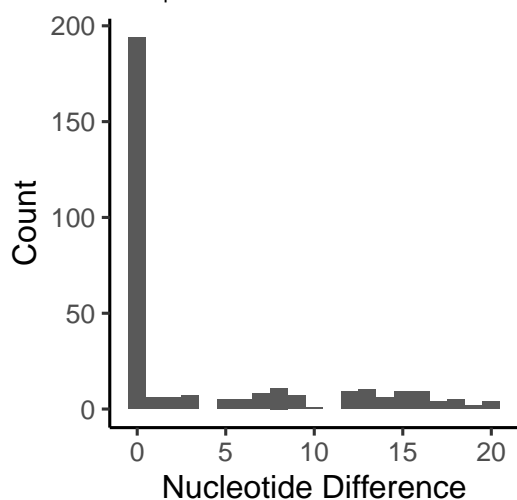
IGHV1-58*01_03

69 sequences assigned
43 (62.3%) exact matches, in which:
43 unique CDR3
4 unique J



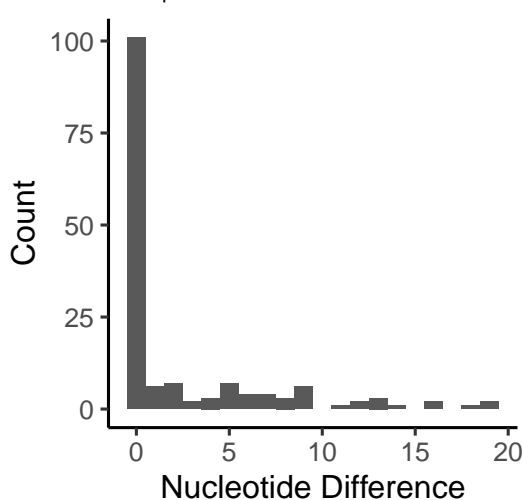
IGHV1-8*01

333 sequences assigned
194 (58.3%) exact matches, in which:
194 unique CDR3
6 unique J



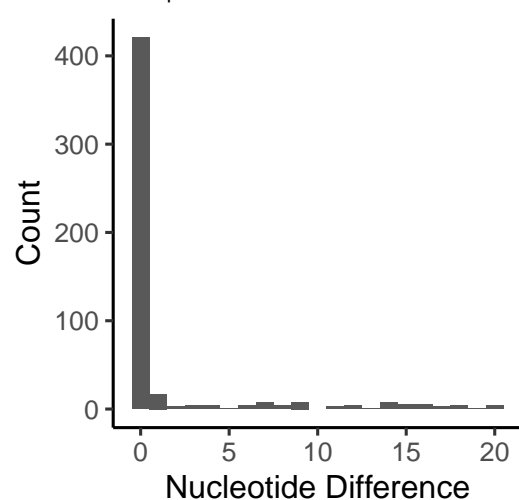
IGHV1-24*01

178 sequences assigned
101 (56.7%) exact matches, in which:
101 unique CDR3
6 unique J



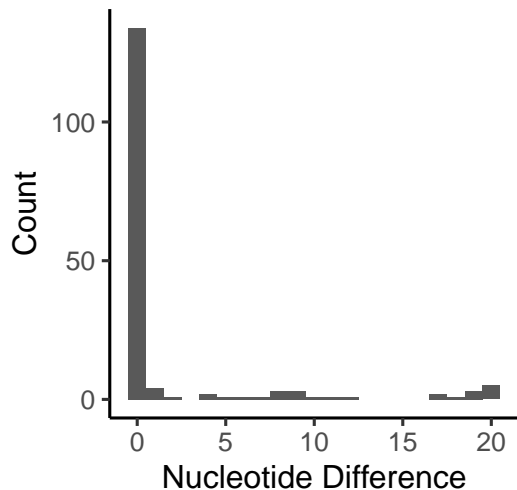
IGHV1-69*01_12_13

538 sequences assigned
421 (78.3%) exact matches, in which:
421 unique CDR3
6 unique J



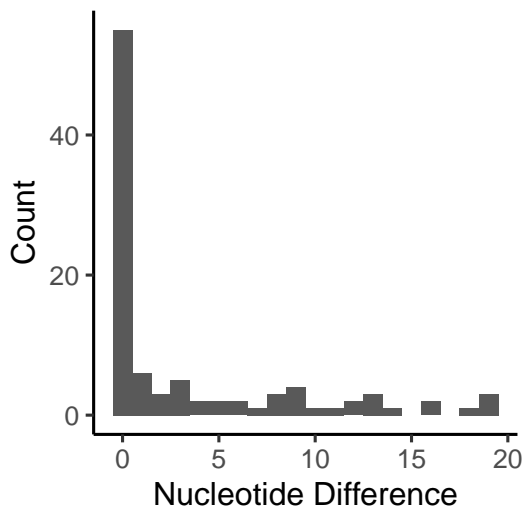
IGHV1–69*06_14

186 sequences assigned
134 (72%) exact matches, in which:
134 unique CDR3
5 unique J



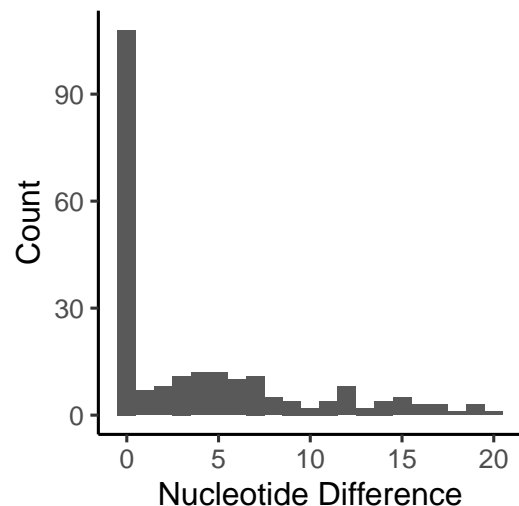
IGHV2–70*01

106 sequences assigned
55 (51.9%) exact matches, in which:
55 unique CDR3
5 unique J



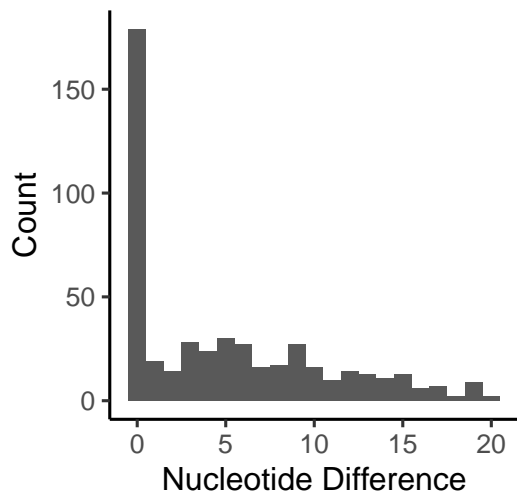
IGHV3–9*01

238 sequences assigned
108 (45.4%) exact matches, in which:
108 unique CDR3
5 unique J



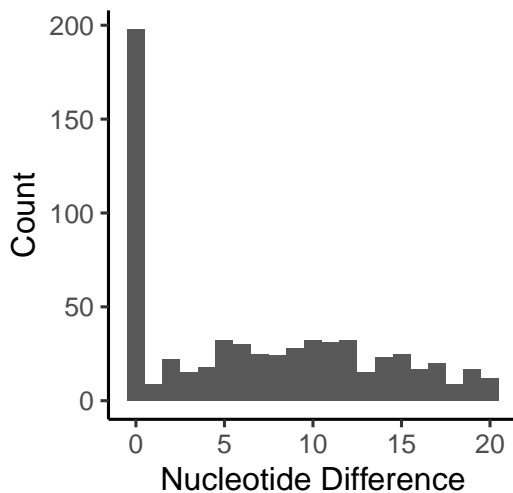
IGHV2–5*02

515 sequences assigned
179 (34.8%) exact matches, in which:
179 unique CDR3
6 unique J



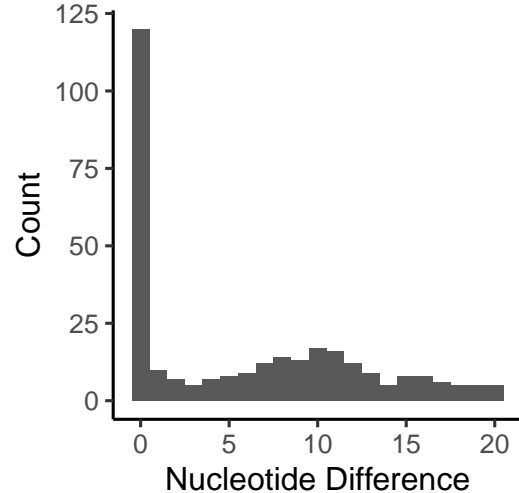
IGHV3–7*01

694 sequences assigned
198 (28.5%) exact matches, in which:
198 unique CDR3
6 unique J



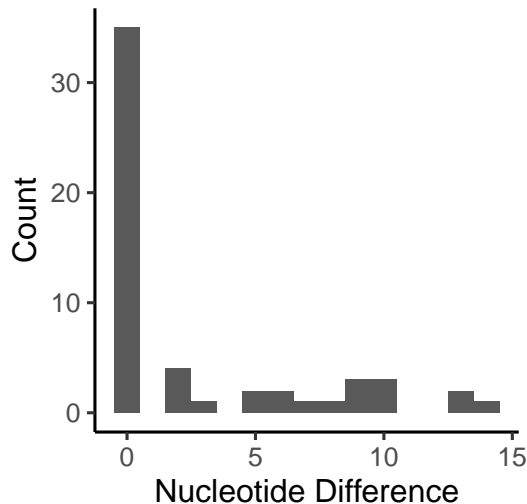
IGHV3–11*01

324 sequences assigned
120 (37%) exact matches, in which:
119 unique CDR3
5 unique J



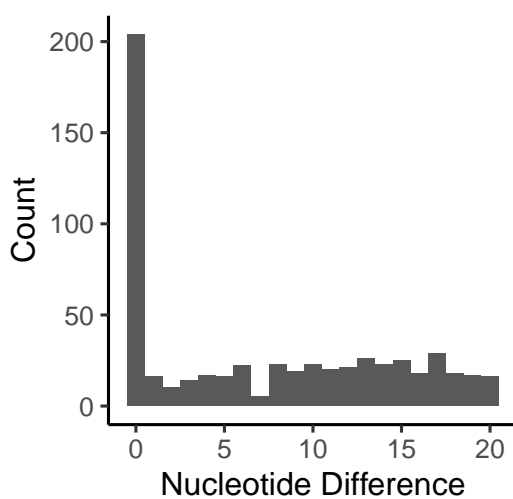
IGHV2–26*01

60 sequences assigned
35 (58.3%) exact matches, in which:
35 unique CDR3
5 unique J



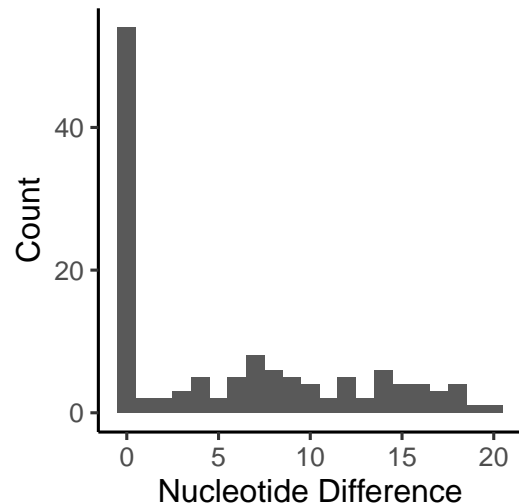
IGHV3–7*03

668 sequences assigned
204 (30.5%) exact matches, in which:
204 unique CDR3
5 unique J



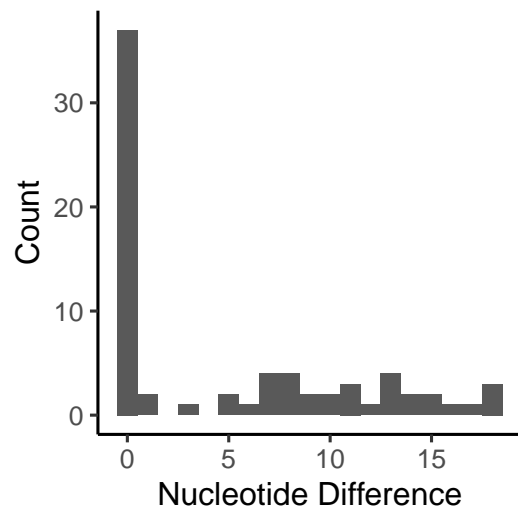
IGHV3–11*06

136 sequences assigned
54 (39.7%) exact matches, in which:
54 unique CDR3
4 unique J



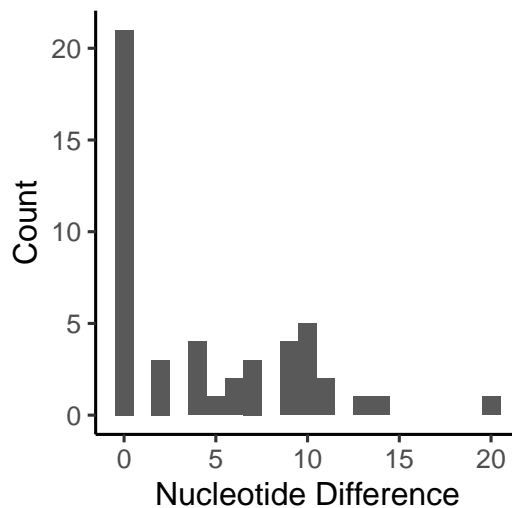
IGHV3-13*01

80 sequences assigned
37 (46.2%) exact matches, in which:
37 unique CDR3
5 unique J



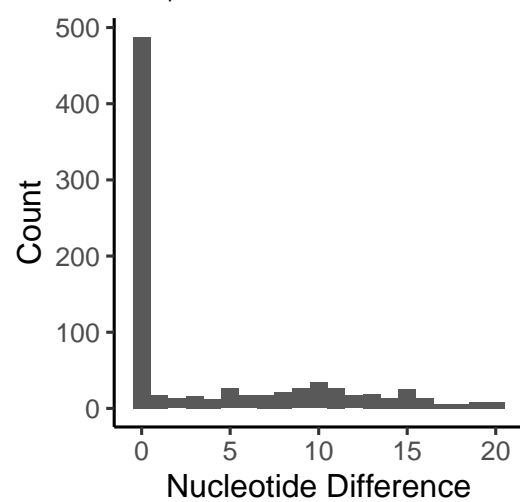
IGHV3-20*01_02

48 sequences assigned
21 (43.8%) exact matches, in which:
21 unique CDR3
5 unique J



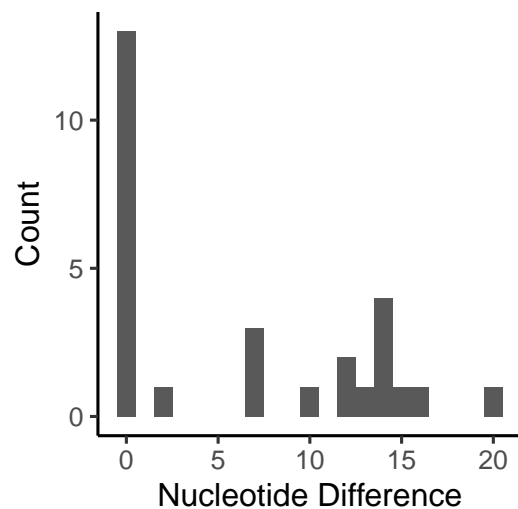
IGHV3-30-3*01

912 sequences assigned
488 (53.5%) exact matches, in which:
486 unique CDR3
6 unique J



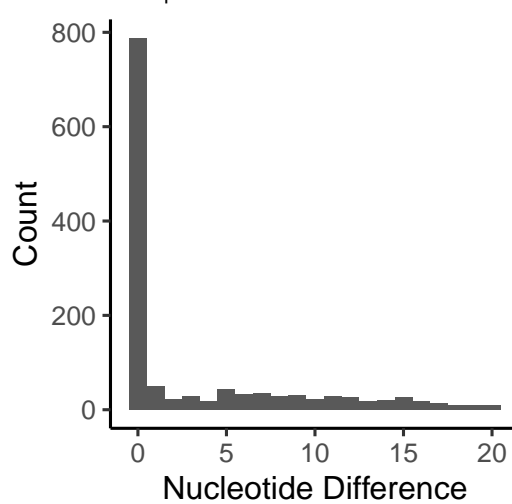
IGHV3-13*05

30 sequences assigned
13 (43.3%) exact matches, in which:
13 unique CDR3
4 unique J



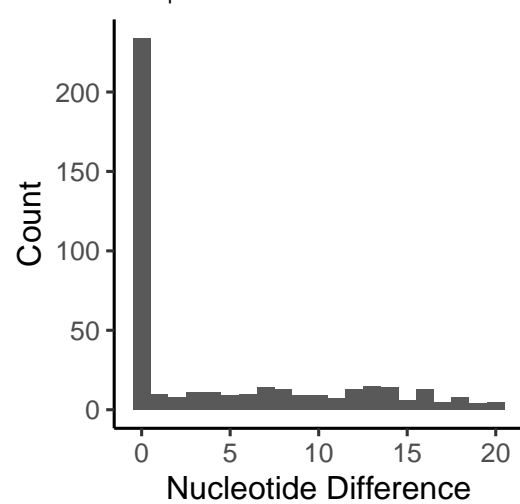
IGHV3-21*01_02

1382 sequences assigned
788 (57%) exact matches, in which:
781 unique CDR3
6 unique J



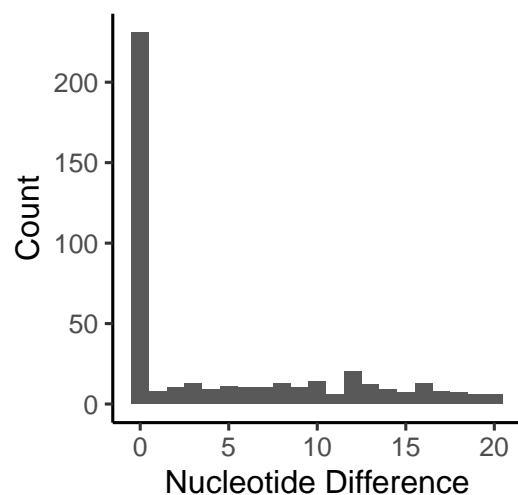
IGHV3-33*01

460 sequences assigned
234 (50.9%) exact matches, in which:
234 unique CDR3
6 unique J



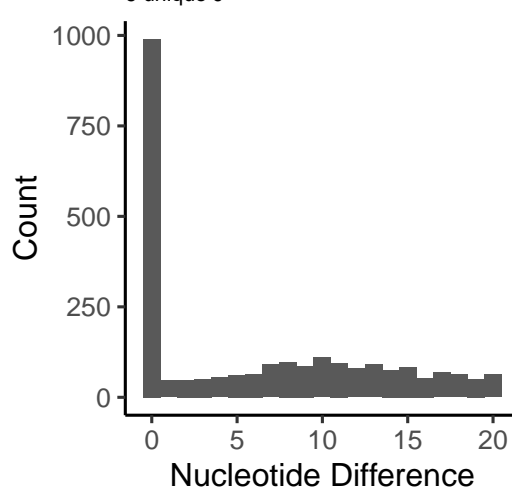
IGHV3-15*01_02

490 sequences assigned
231 (47.1%) exact matches, in which:
231 unique CDR3
6 unique J



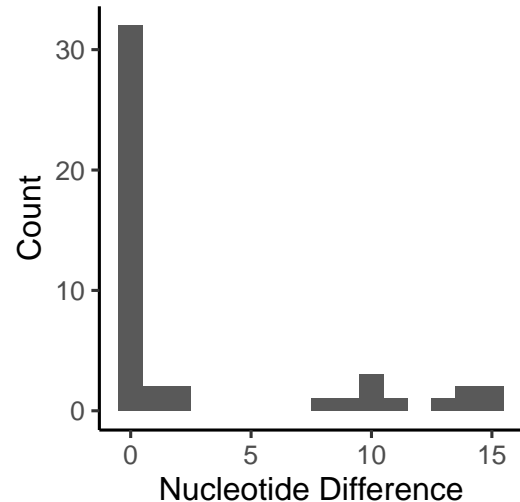
IGHV3-23*01_04

2778 sequences assigned
990 (35.6%) exact matches, in which:
985 unique CDR3
6 unique J



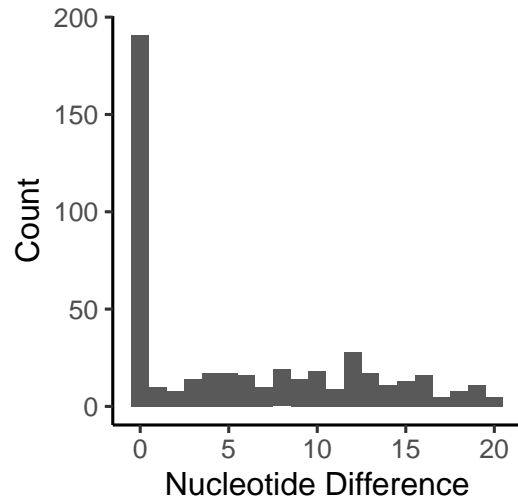
IGHV3-43*01

52 sequences assigned
32 (61.5%) exact matches, in which:
32 unique CDR3
4 unique J



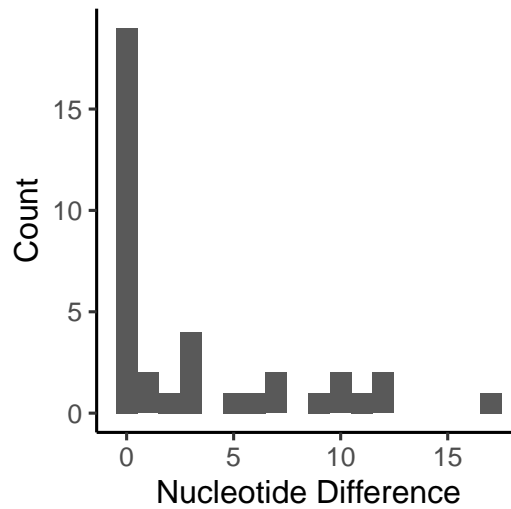
IGHV3-48*02

493 sequences assigned
191 (38.7%) exact matches, in which:
189 unique CDR3
6 unique J



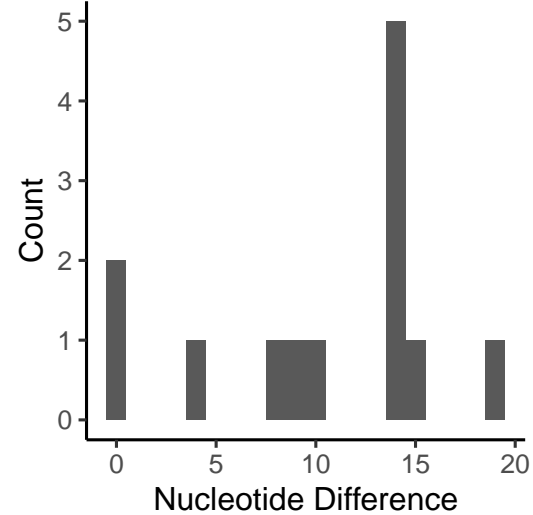
IGHV3-49*03_05

43 sequences assigned
19 (44.2%) exact matches, in which:
19 unique CDR3
4 unique J



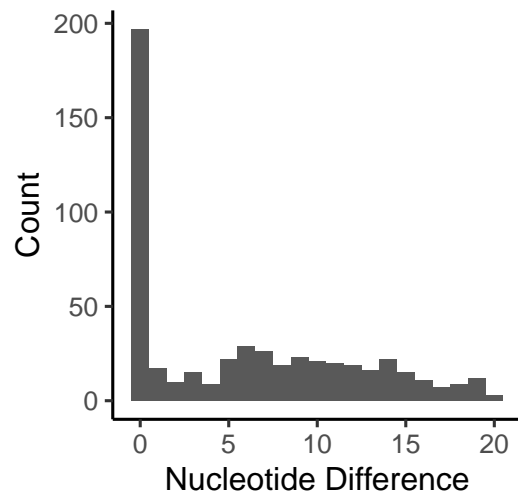
IGHV3-64*02_07

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



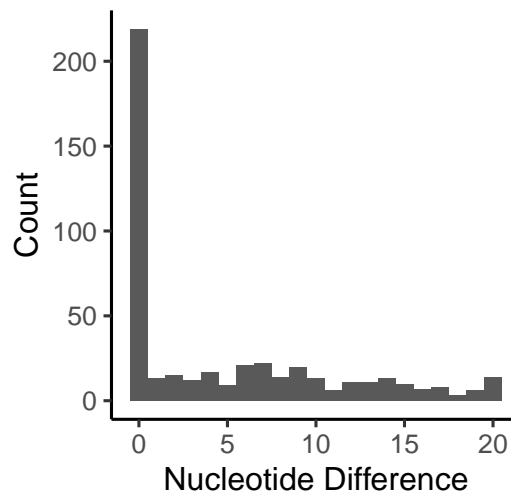
IGHV3-48*03

566 sequences assigned
197 (34.8%) exact matches, in which:
195 unique CDR3
6 unique J



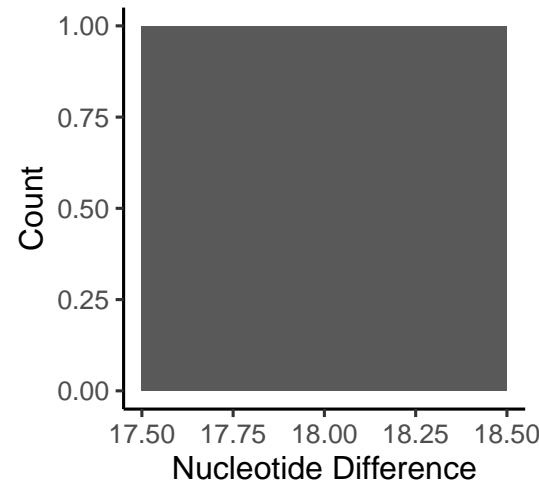
IGHV3-53*01_02

517 sequences assigned
219 (42.4%) exact matches, in which:
219 unique CDR3
6 unique J



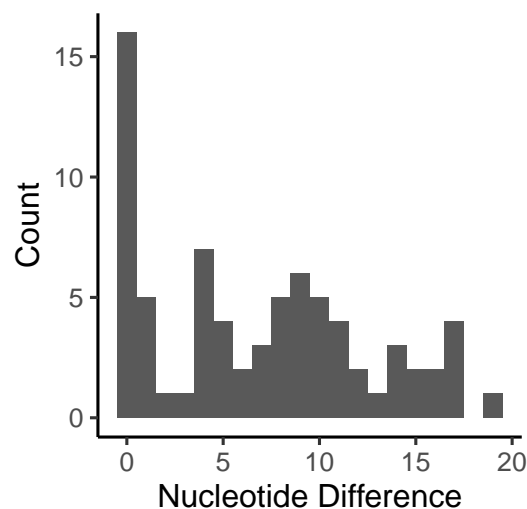
IGHV3-69-1*01

2 sequences assigned
No exact matches.



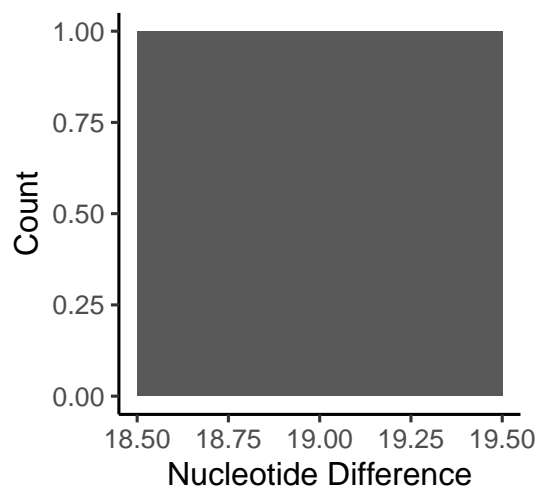
IGHV3-49*04

91 sequences assigned
16 (17.6%) exact matches, in which:
16 unique CDR3
4 unique J



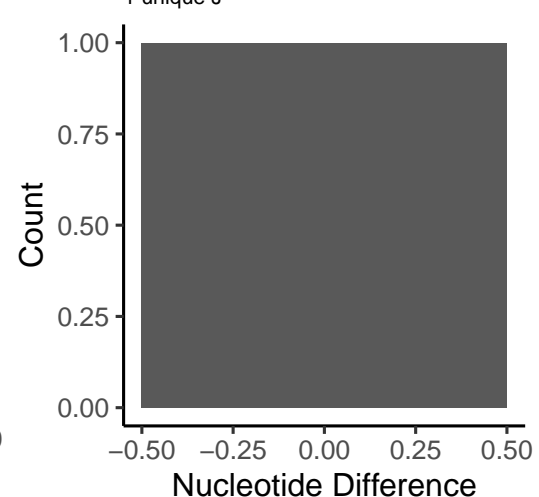
IGHV3-64*05

1 sequences assigned
No exact matches.



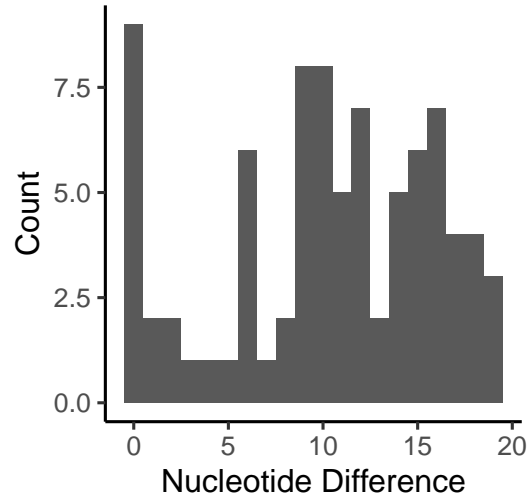
IGHV3-69-1*02

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



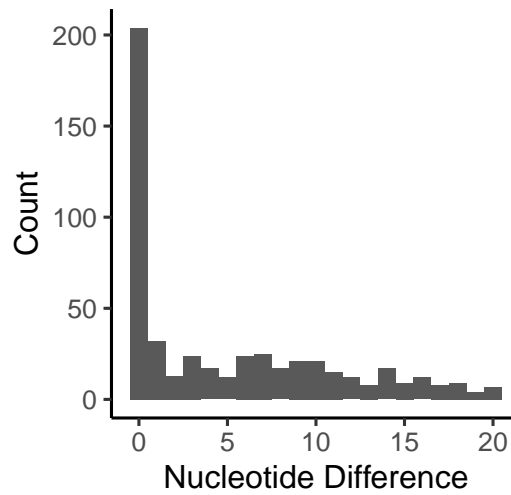
IGHV3-72*01

95 sequences assigned
9 (9.5%) exact matches, in which:
9 unique CDR3
3 unique J



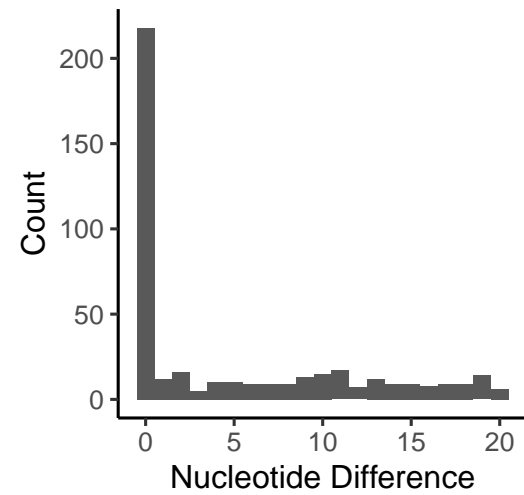
IGHV3-74*01_02

555 sequences assigned
204 (36.8%) exact matches, in which:
200 unique CDR3
6 unique J



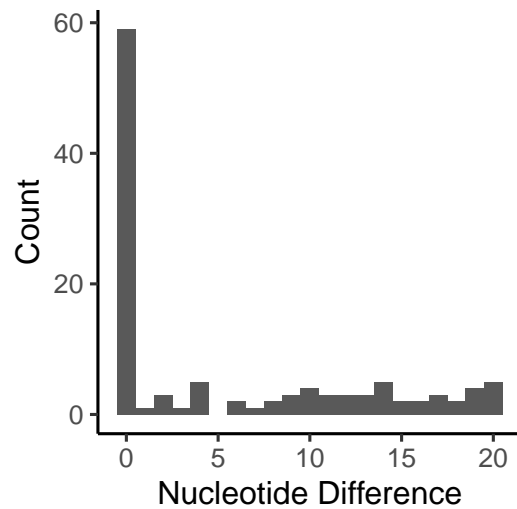
IGHV4-4*02_03

503 sequences assigned
218 (43.3%) exact matches, in which:
218 unique CDR3
6 unique J



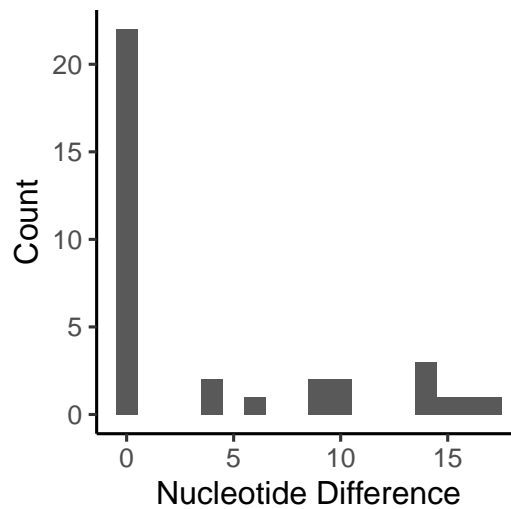
IGHV3-73*01_02

120 sequences assigned
59 (49.2%) exact matches, in which:
59 unique CDR3
5 unique J



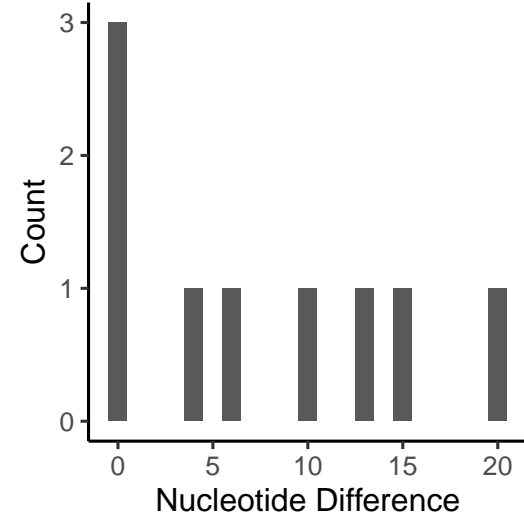
IGHV3-43D*04

37 sequences assigned
22 (59.5%) exact matches, in which:
22 unique CDR3
4 unique J



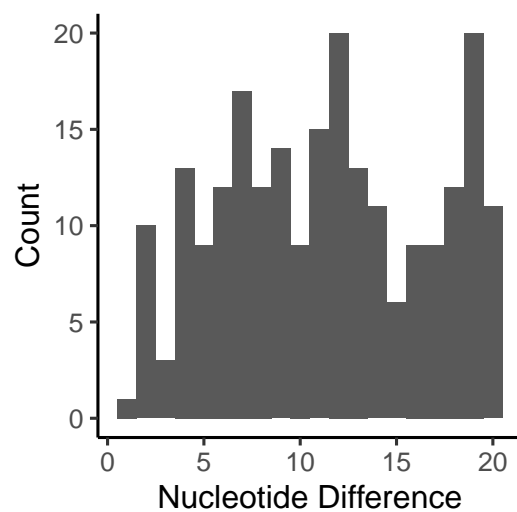
IGHV4-28*01_07

10 sequences assigned
3 (30%) exact matches, in which:
3 unique CDR3
2 unique J



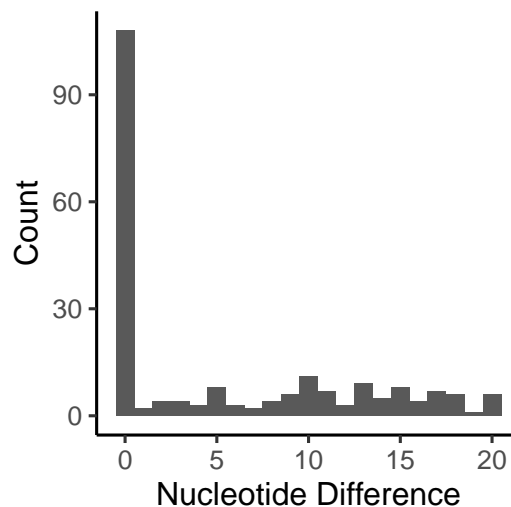
IGHV3-74*03

261 sequences assigned
No exact matches.



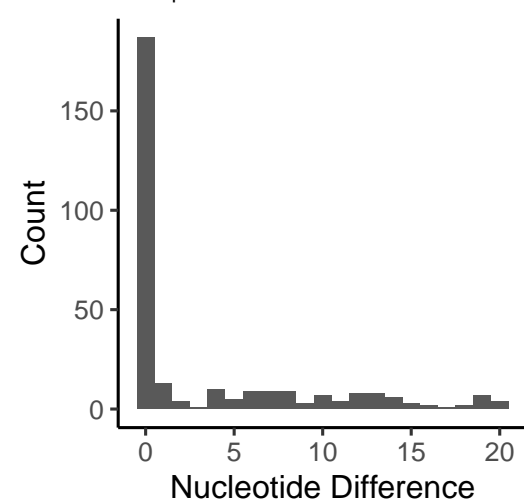
IGHV3-64D*06

234 sequences assigned
108 (46.2%) exact matches, in which:
108 unique CDR3
6 unique J



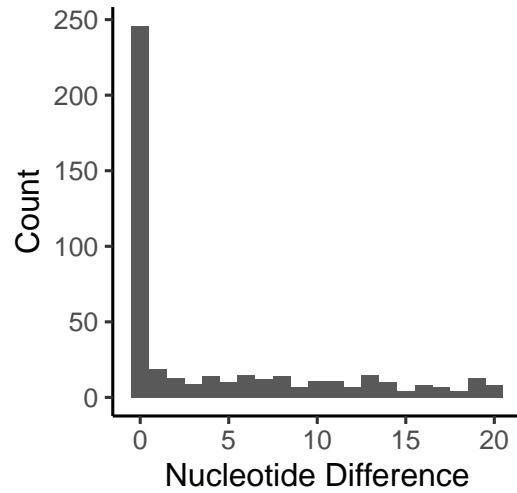
IGHV4-30-2*01

332 sequences assigned
187 (56.3%) exact matches, in which:
187 unique CDR3
6 unique J



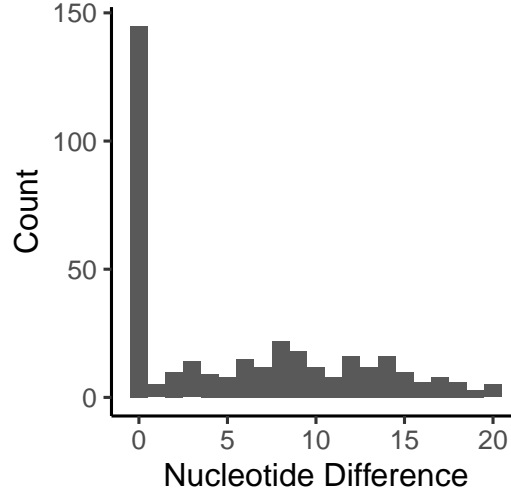
IGHV4-30-4*01

506 sequences assigned
246 (48.6%) exact matches, in which:
245 unique CDR3
5 unique J



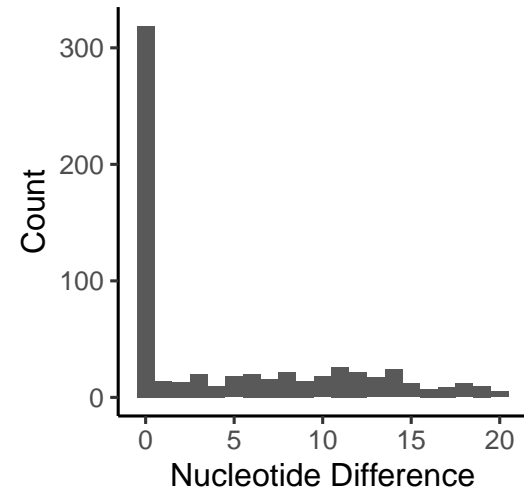
IGHV4-38-2*02_A70G

399 sequences assigned
145 (36.3%) exact matches, in which:
145 unique CDR3
5 unique J



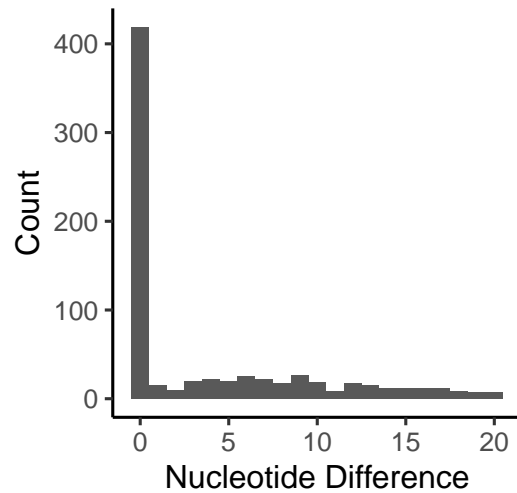
IGHV4-61*01

726 sequences assigned
319 (43.9%) exact matches, in which:
319 unique CDR3
6 unique J



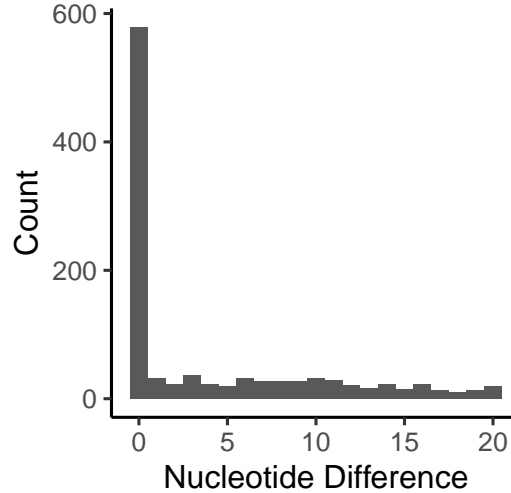
IGHV4-31*02

797 sequences assigned
419 (52.6%) exact matches, in which:
418 unique CDR3
6 unique J



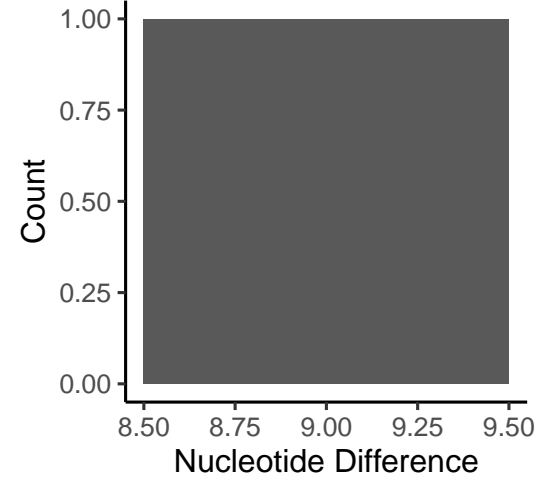
IGHV4-39*02_C258G

1177 sequences assigned
579 (49.2%) exact matches, in which:
574 unique CDR3
6 unique J



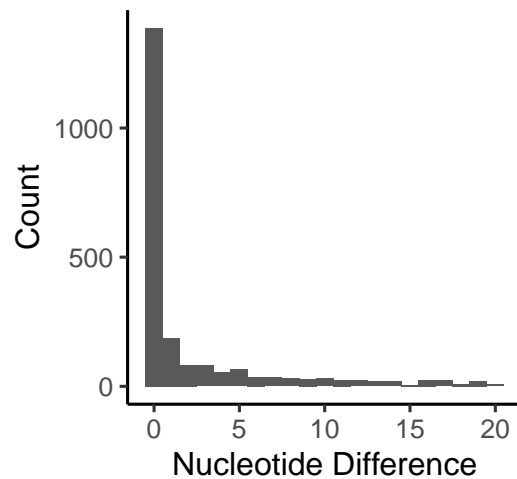
IGHV4/OR15-8*01

3 sequences assigned
No exact matches.



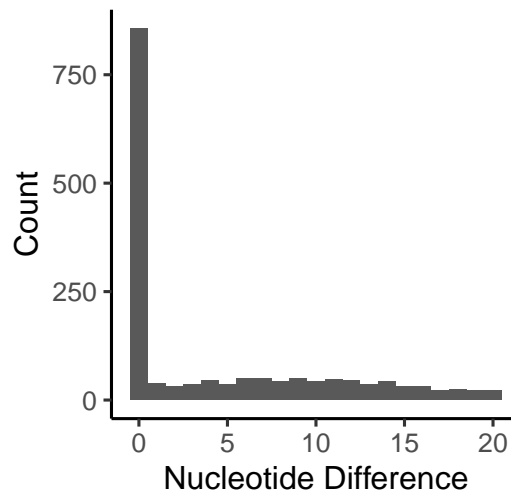
IGHV4-34*01_02

2413 sequences assigned
1387 (57.5%) exact matches, in which:
1374 unique CDR3
6 unique J



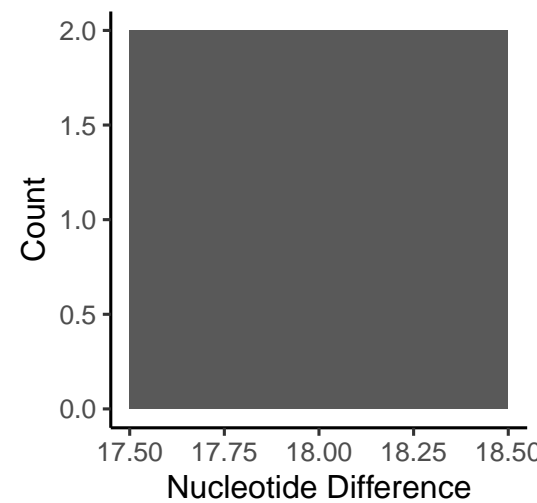
IGHV4-59*02_G88A

1768 sequences assigned
857 (48.5%) exact matches, in which:
852 unique CDR3
6 unique J



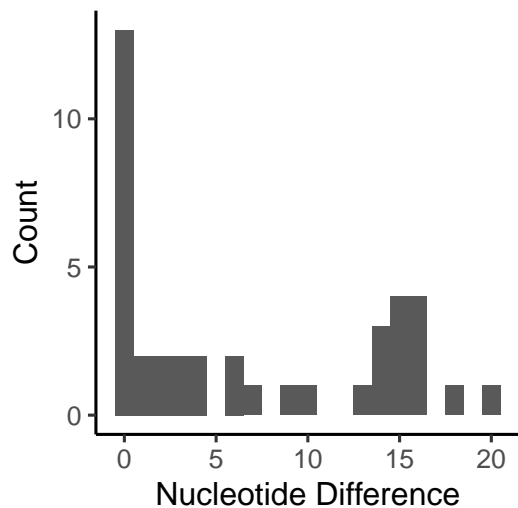
IGHV4/OR15-8*02

5 sequences assigned
No exact matches.



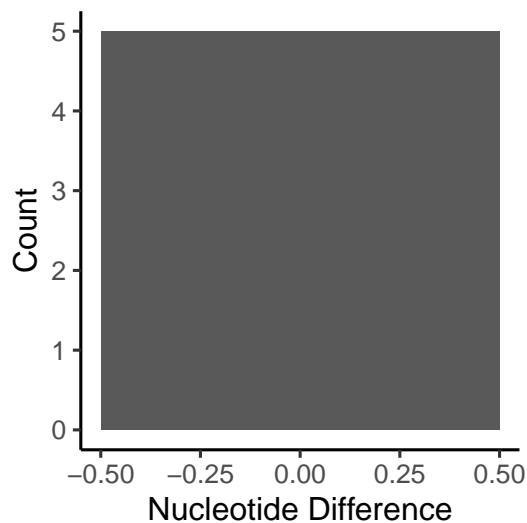
IGHV5-10-1*01_03

45 sequences assigned
13 (28.9%) exact matches, in which:
13 unique CDR3
4 unique J



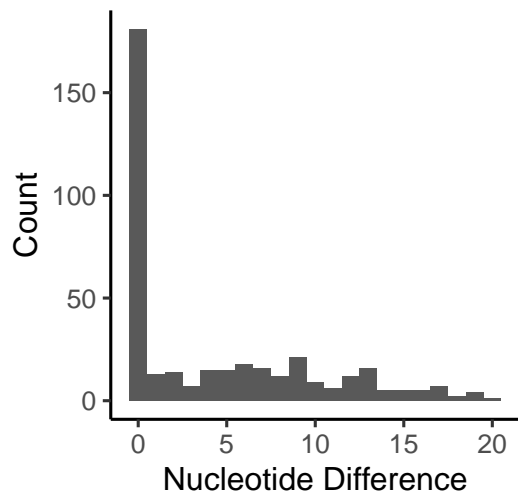
IGHV7-4-1*01

5 sequences assigned
5 (100%) exact matches, in which:
5 unique CDR3
2 unique J



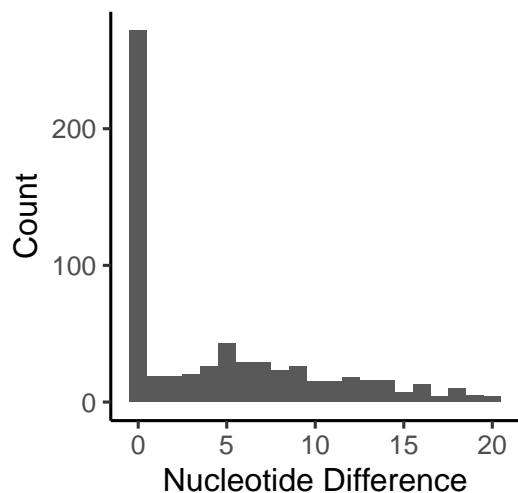
IGHV5-51*07_A128G

406 sequences assigned
181 (44.6%) exact matches, in which:
181 unique CDR3
6 unique J



IGHV6-1*01_02

671 sequences assigned
272 (40.5%) exact matches, in which:
272 unique CDR3
6 unique J





Warning – no inferred sequences found.