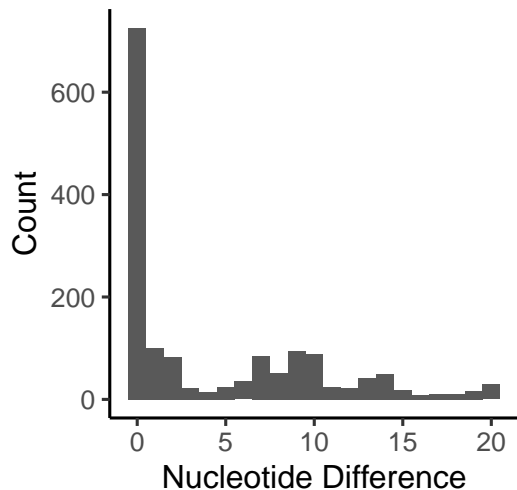


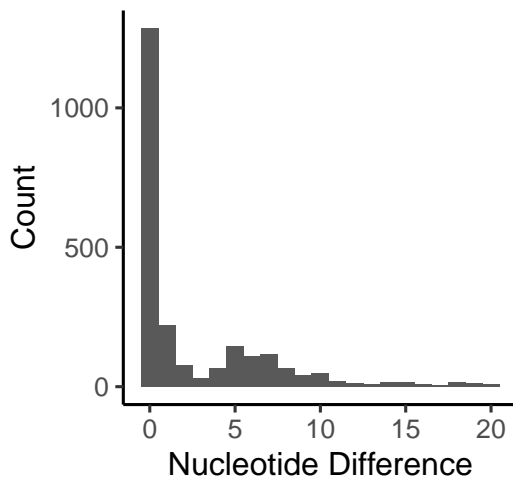
IGHV1-2*02

1661 sequences assigned
726 (43.7%) exact matches, in which:
696 unique CDR3
6 unique J



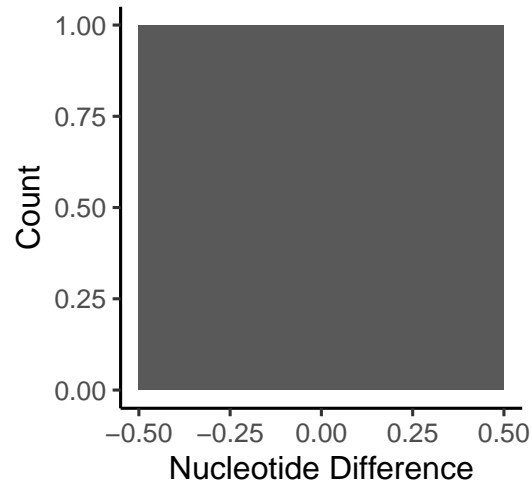
IGHV1-8*01

2538 sequences assigned
1285 (50.6%) exact matches, in which:
1212 unique CDR3
6 unique J



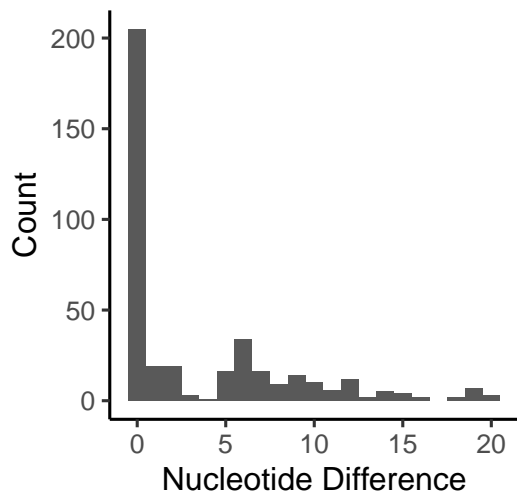
IGHV1-45*02

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



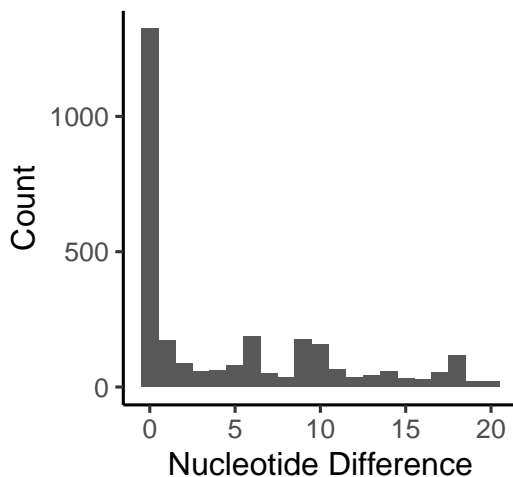
IGHV1-2*04

395 sequences assigned
205 (51.9%) exact matches, in which:
198 unique CDR3
6 unique J



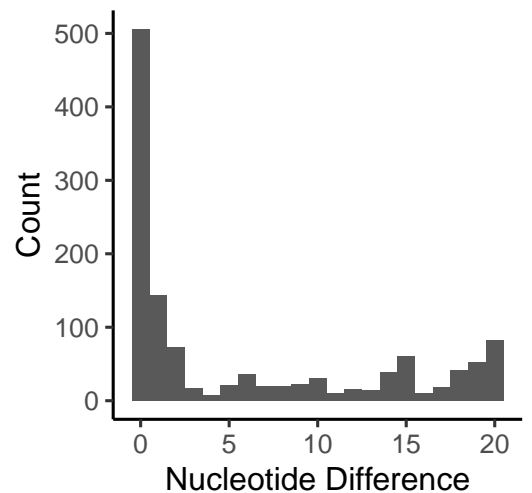
IGHV1-18*01

3266 sequences assigned
1324 (40.5%) exact matches, in which:
1276 unique CDR3
6 unique J



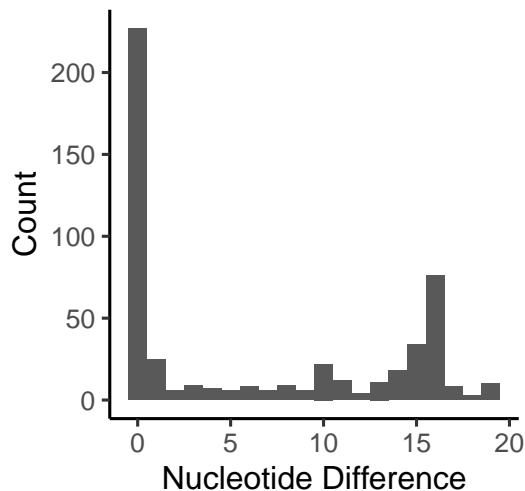
IGHV1-46*01

1450 sequences assigned
506 (34.9%) exact matches, in which:
486 unique CDR3
6 unique J



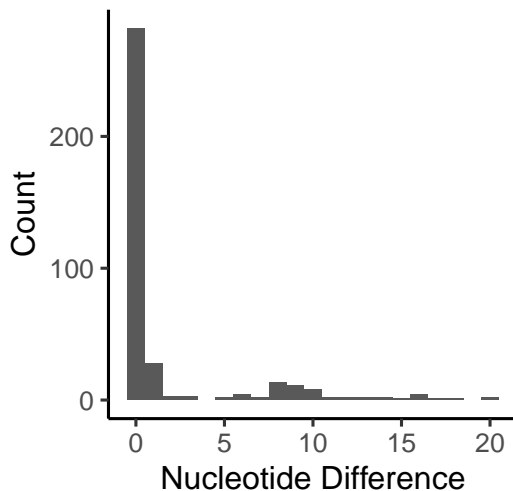
IGHV1-3*01_05

533 sequences assigned
227 (42.6%) exact matches, in which:
218 unique CDR3
6 unique J



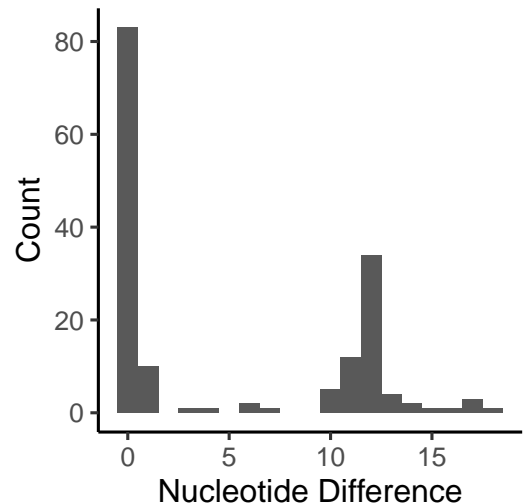
IGHV1-24*01

382 sequences assigned
282 (73.8%) exact matches, in which:
268 unique CDR3
6 unique J



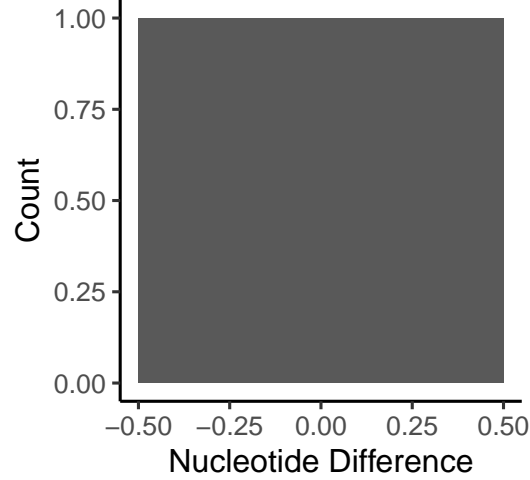
IGHV1-58*01_03

177 sequences assigned
83 (46.9%) exact matches, in which:
80 unique CDR3
5 unique J



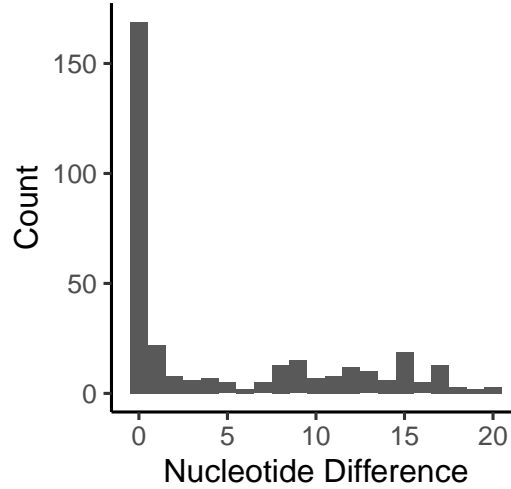
IGHV1-68*01

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



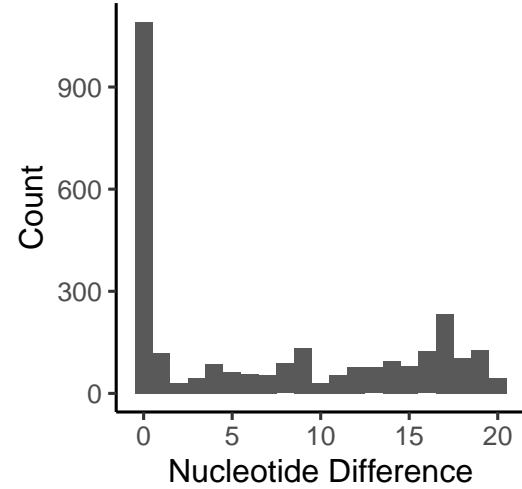
IGHV2-5*01

398 sequences assigned
169 (42.5%) exact matches, in which:
167 unique CDR3
6 unique J



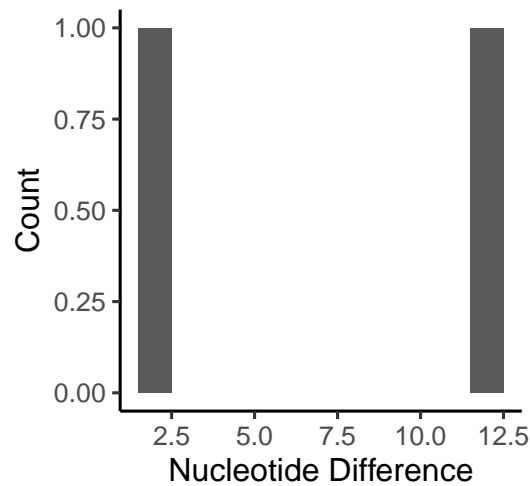
IGHV3-7*01

3089 sequences assigned
1092 (35.4%) exact matches, in which:
688 unique CDR3
6 unique J



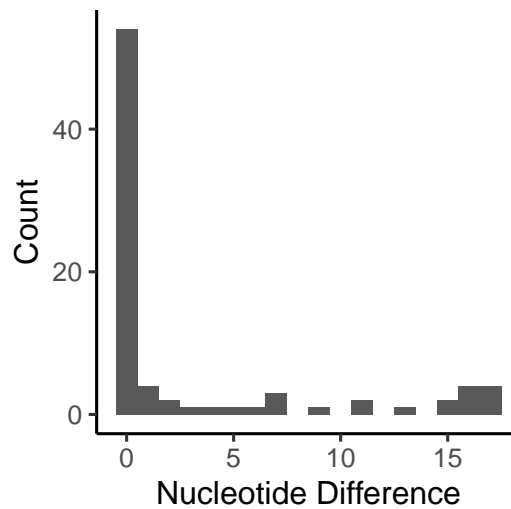
IGHV1-69-2*01

5 sequences assigned
No exact matches.



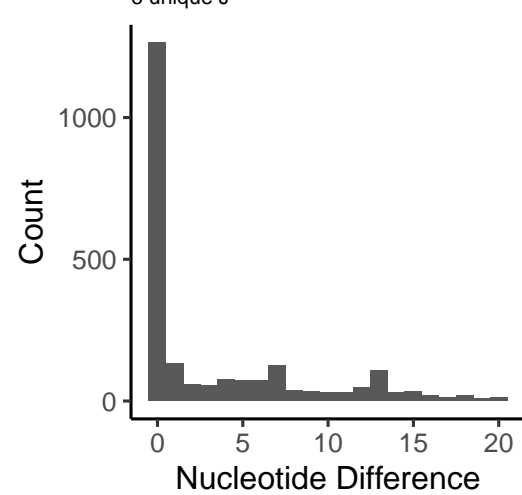
IGHV2-26*01

86 sequences assigned
54 (62.8%) exact matches, in which:
53 unique CDR3
5 unique J



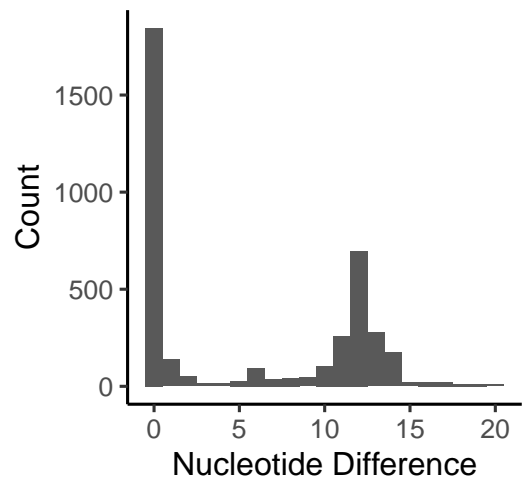
IGHV3-9*01

2397 sequences assigned
1264 (52.7%) exact matches, in which:
798 unique CDR3
6 unique J



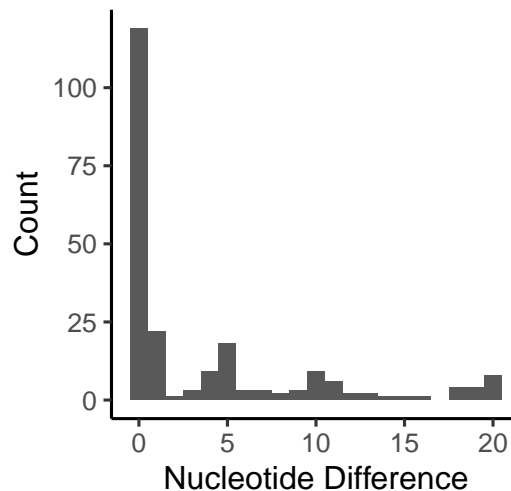
IGHV1-69*01_12_13

4024 sequences assigned
1845 (45.8%) exact matches, in which:
1830 unique CDR3
6 unique J



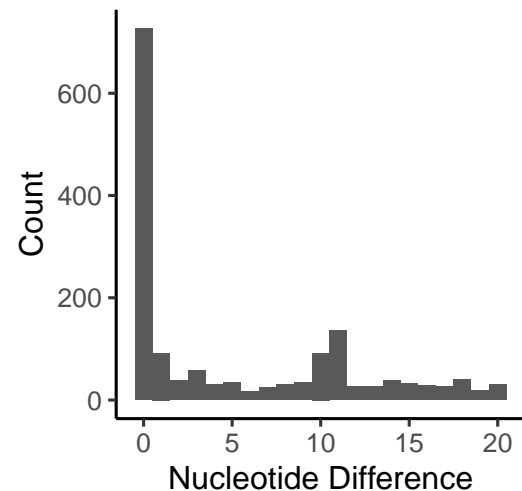
IGHV2-70*01

267 sequences assigned
119 (44.6%) exact matches, in which:
115 unique CDR3
6 unique J



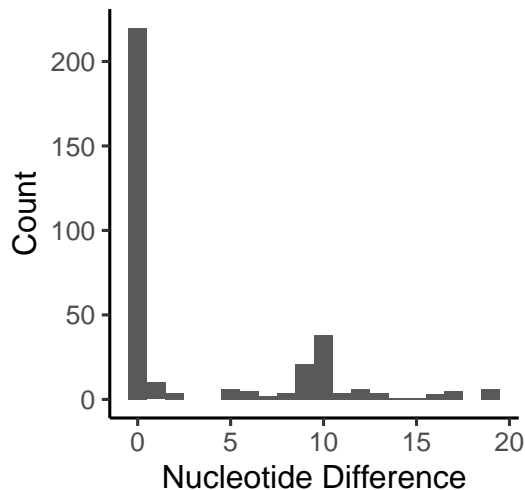
IGHV3-11*01

2417 sequences assigned
727 (30.1%) exact matches, in which:
459 unique CDR3
6 unique J



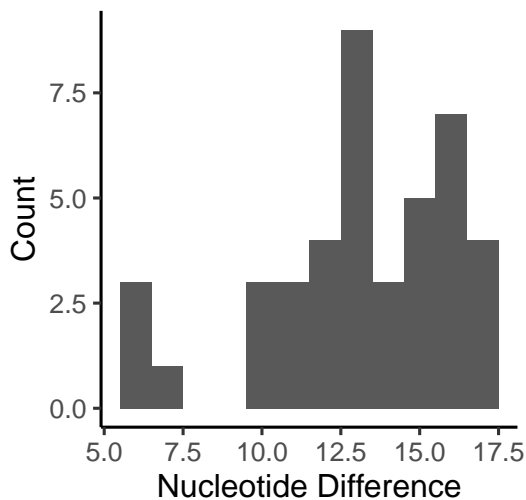
IGHV3-13*01

367 sequences assigned
220 (59.9%) exact matches, in which:
132 unique CDR3
5 unique J



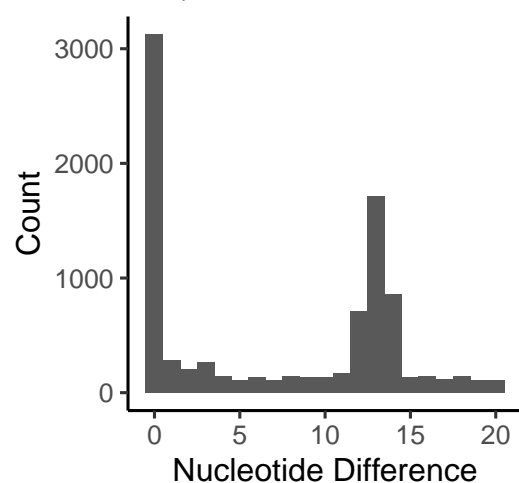
IGHV3-20*03_04

43 sequences assigned
No exact matches.



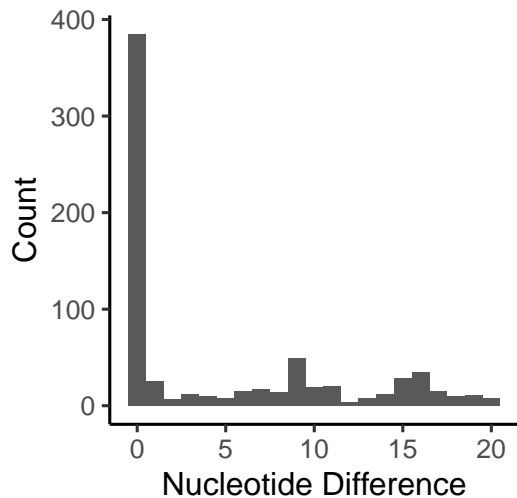
IGHV3-23*01_04

11212 sequences assigned
3125 (27.9%) exact matches, in which:
1907 unique CDR3
6 unique J



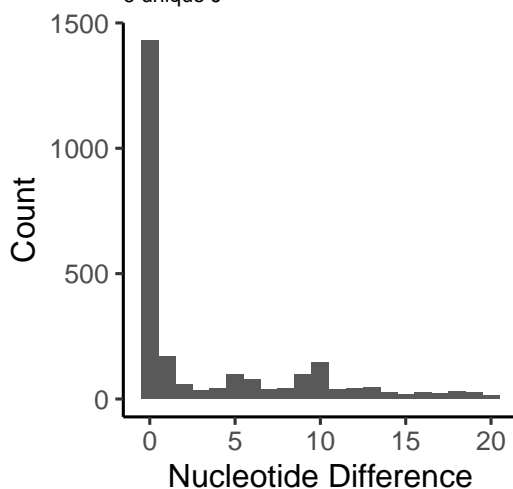
IGHV3-15*01_02

792 sequences assigned
385 (48.6%) exact matches, in which:
252 unique CDR3
6 unique J



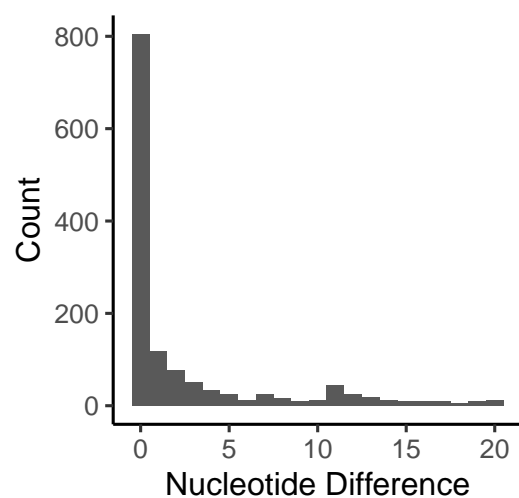
IGHV3-21*01_02

3043 sequences assigned
1429 (47%) exact matches, in which:
886 unique CDR3
6 unique J



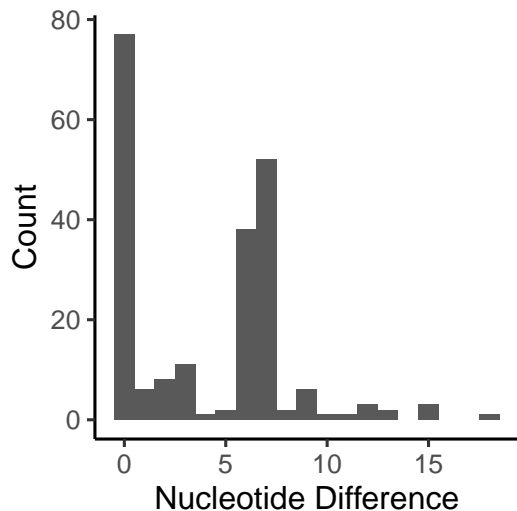
IGHV3-30*01

1487 sequences assigned
805 (54.1%) exact matches, in which:
535 unique CDR3
6 unique J



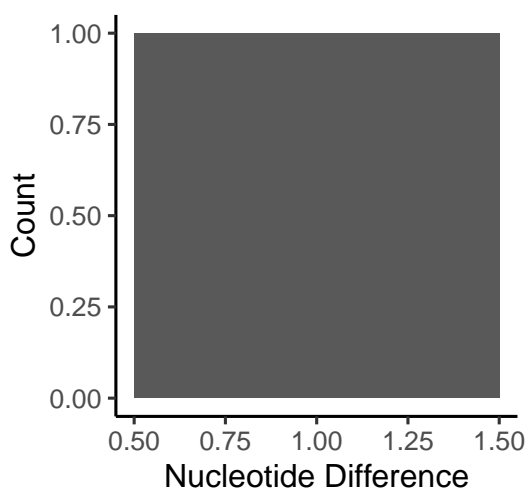
IGHV3-20*01_02

215 sequences assigned
77 (35.8%) exact matches, in which:
44 unique CDR3
5 unique J



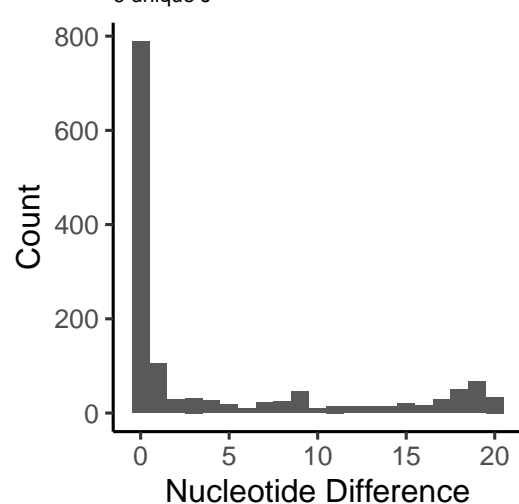
IGHV3-22*01_02

1 sequences assigned
No exact matches.



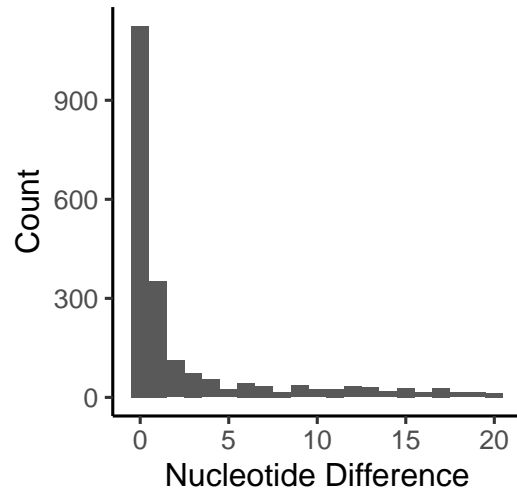
IGHV3-30-3*01

1538 sequences assigned
789 (51.3%) exact matches, in which:
513 unique CDR3
6 unique J



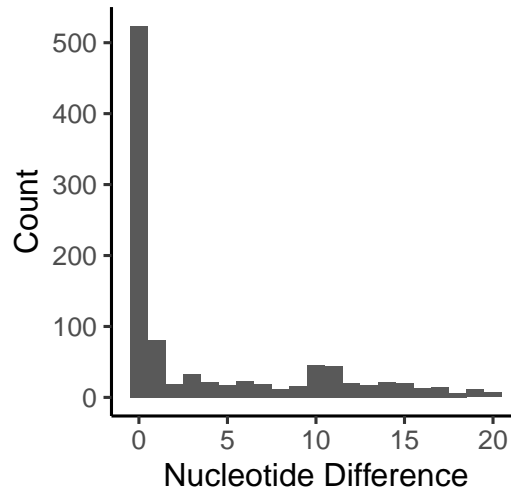
IGHV3–33*01

2243 sequences assigned
1126 (50.2%) exact matches, in which:
724 unique CDR3
6 unique J



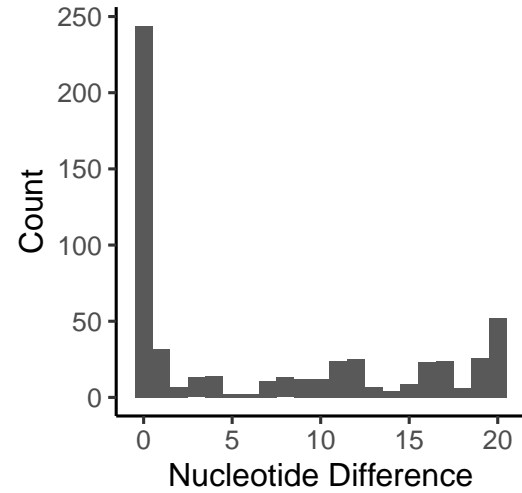
IGHV3–48*03

1083 sequences assigned
524 (48.4%) exact matches, in which:
335 unique CDR3
6 unique J



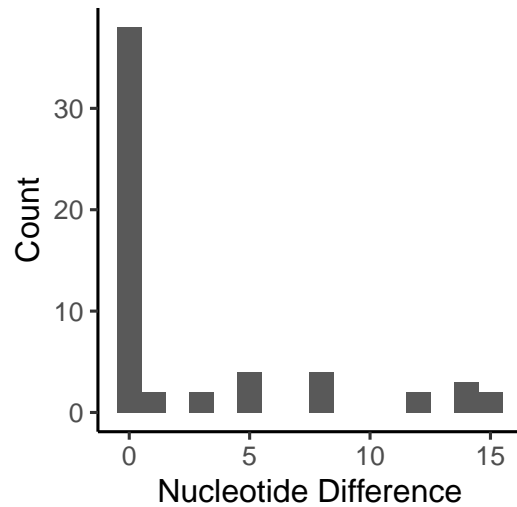
IGHV3–53*01_02

720 sequences assigned
244 (33.9%) exact matches, in which:
146 unique CDR3
6 unique J



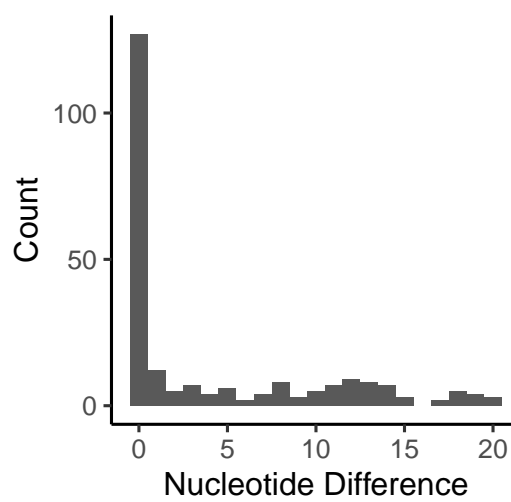
IGHV3–43*01

66 sequences assigned
38 (57.6%) exact matches, in which:
24 unique CDR3
5 unique J



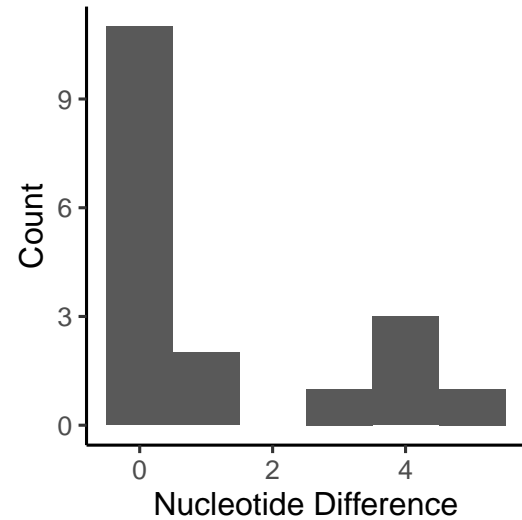
IGHV3–49*04

249 sequences assigned
127 (51%) exact matches, in which:
76 unique CDR3
6 unique J



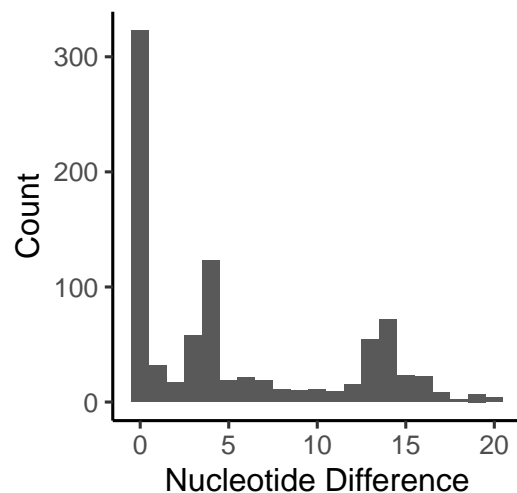
IGHV3–64*02_07

18 sequences assigned
11 (61.1%) exact matches, in which:
7 unique CDR3
1 unique J



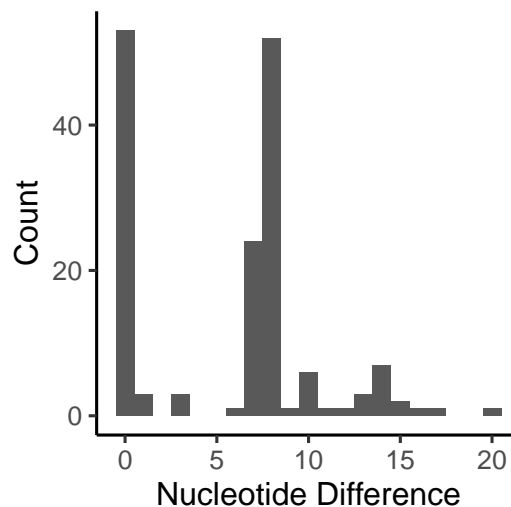
IGHV3–48*02

966 sequences assigned
323 (33.4%) exact matches, in which:
191 unique CDR3
6 unique J



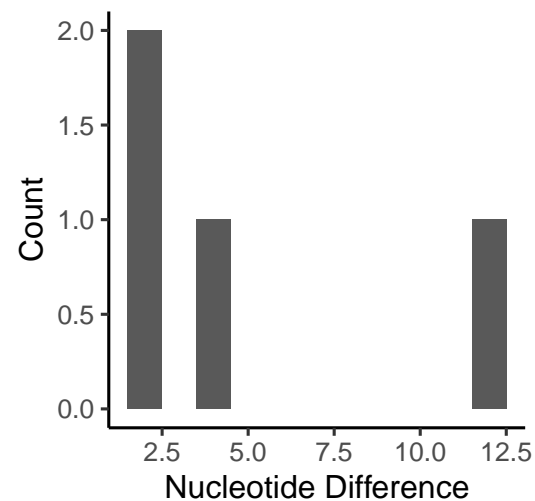
IGHV3–49*03_05

160 sequences assigned
53 (33.1%) exact matches, in which:
35 unique CDR3
5 unique J



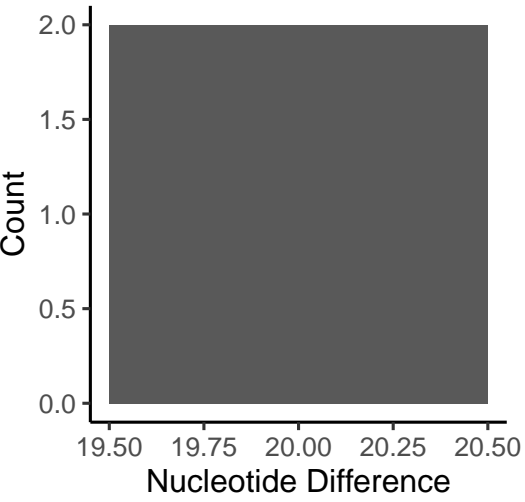
IGHV3–66*03

4 sequences assigned
No exact matches.



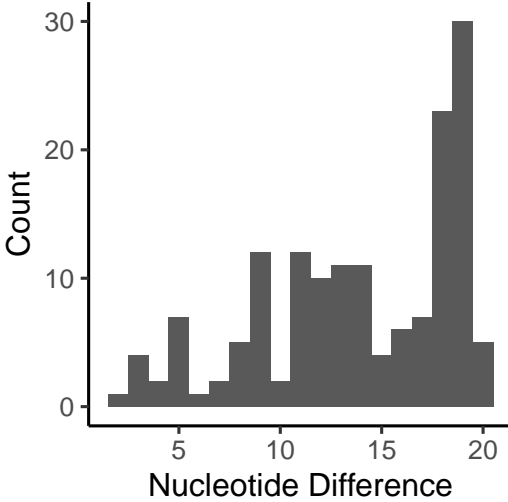
IGHV3-69-1*02

2 sequences assigned
No exact matches.



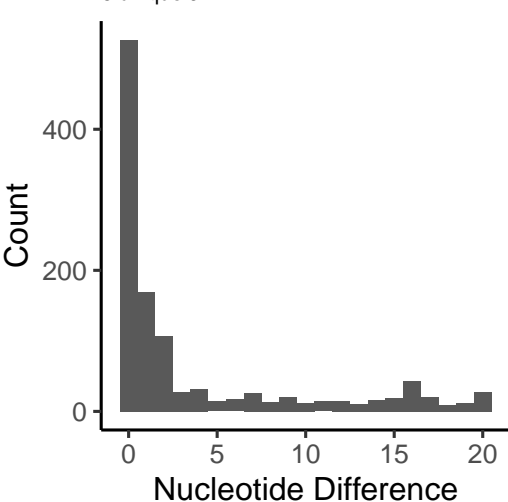
IGHV3-74*03

192 sequences assigned
No exact matches.



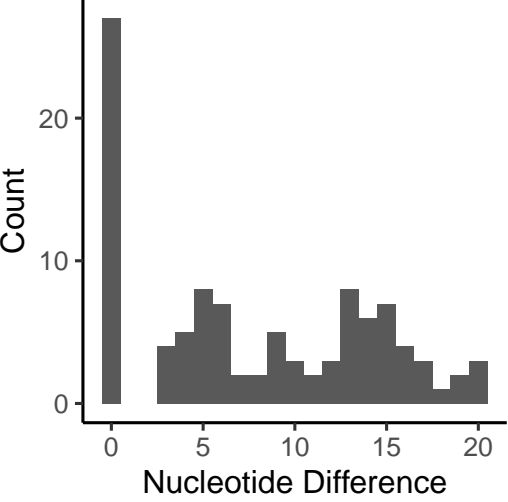
IGHV4-4*07

1350 sequences assigned
527 (39%) exact matches, in which:
508 unique CDR3
6 unique J



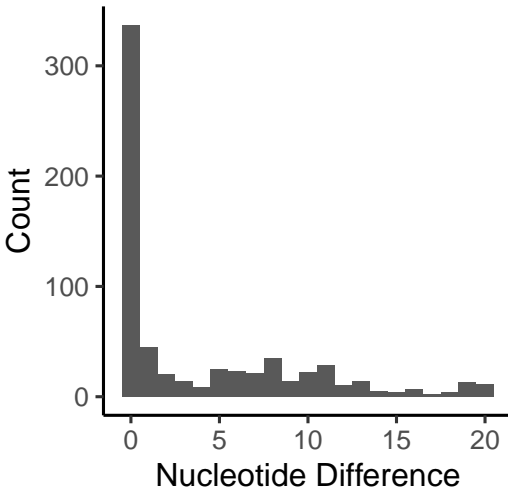
IGHV3-72*01

119 sequences assigned
27 (22.7%) exact matches, in which:
17 unique CDR3
3 unique J



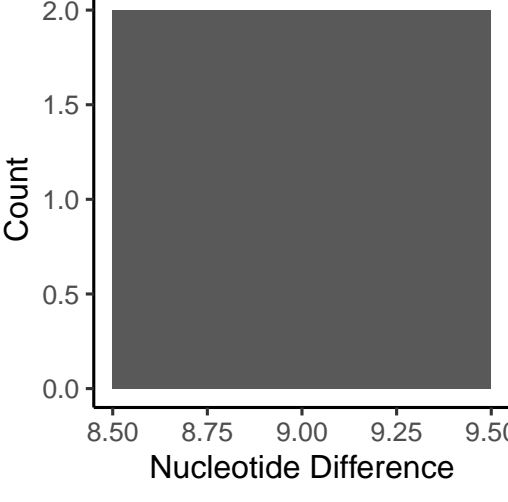
IGHV3-74*01_02

743 sequences assigned
337 (45.4%) exact matches, in which:
198 unique CDR3
6 unique J



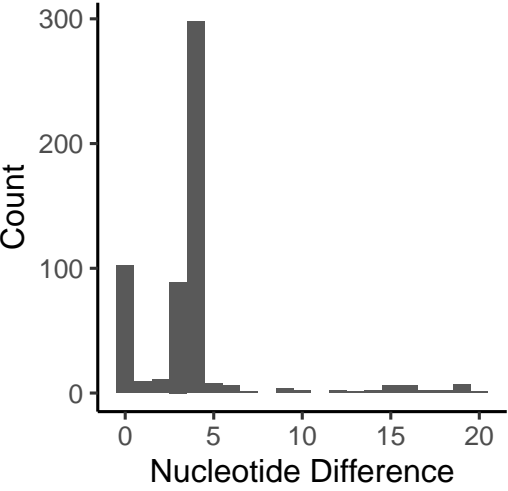
IGHV4-28*03

2 sequences assigned
No exact matches.



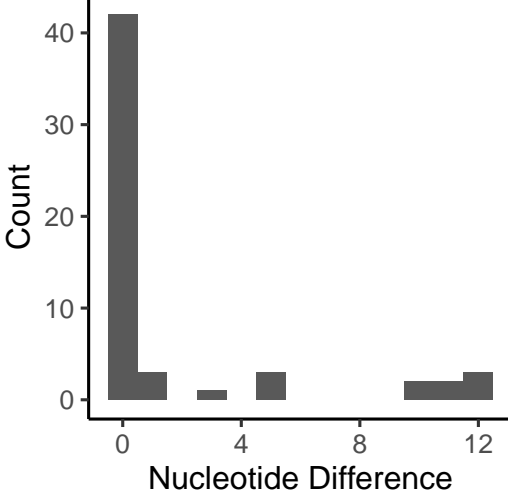
IGHV3-73*01_02

570 sequences assigned
102 (17.9%) exact matches, in which:
62 unique CDR3
6 unique J



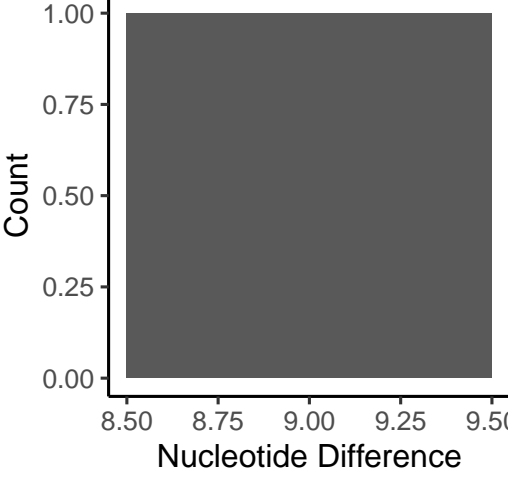
IGHV3-43D*04

56 sequences assigned
42 (75%) exact matches, in which:
27 unique CDR3
5 unique J



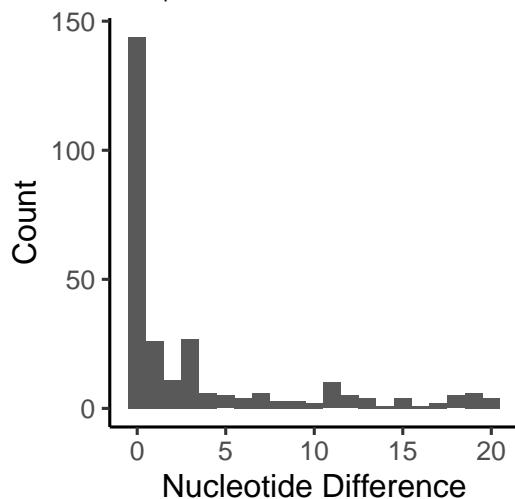
IGHV4-28*01_07

1 sequences assigned
No exact matches.



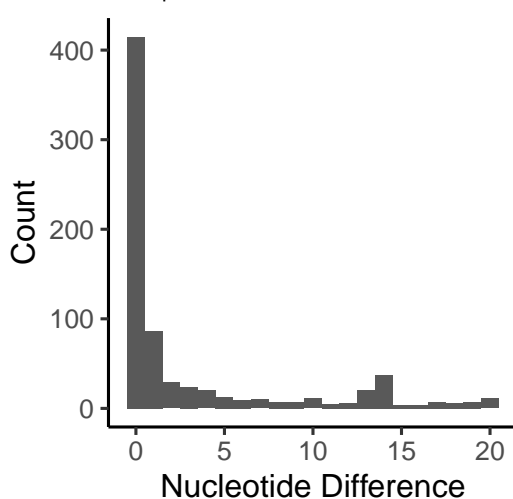
IGHV4-30-4*01

341 sequences assigned
144 (42.2%) exact matches, in which:
141 unique CDR3
6 unique J



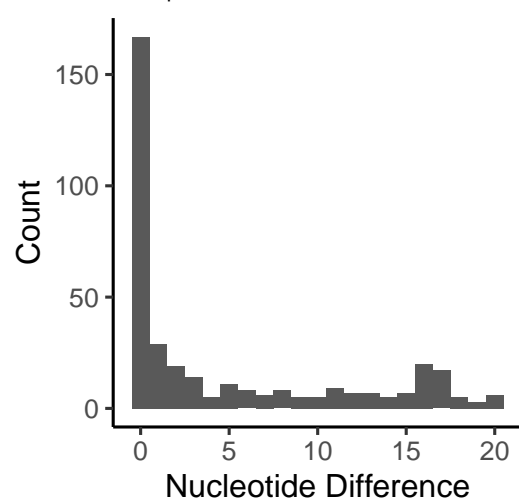
IGHV4-31*02

856 sequences assigned
415 (48.5%) exact matches, in which:
403 unique CDR3
6 unique J



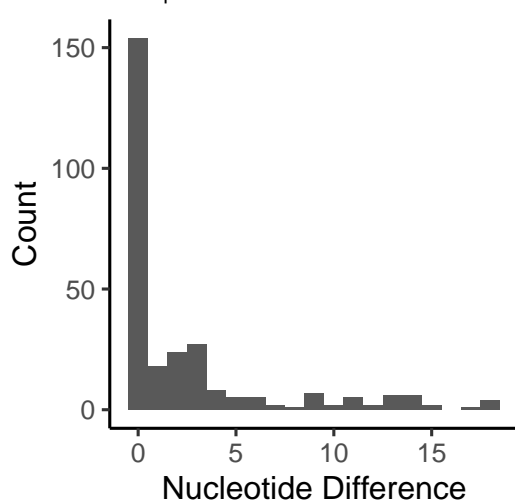
IGHV4-38-2*02_A70G

418 sequences assigned
167 (40%) exact matches, in which:
159 unique CDR3
5 unique J



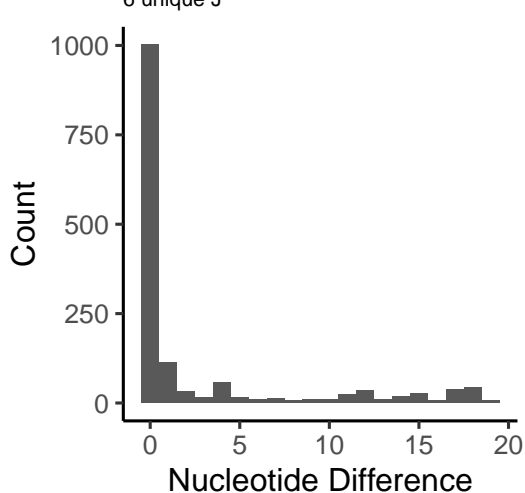
IGHV4-30-2*01

303 sequences assigned
154 (50.8%) exact matches, in which:
135 unique CDR3
6 unique J



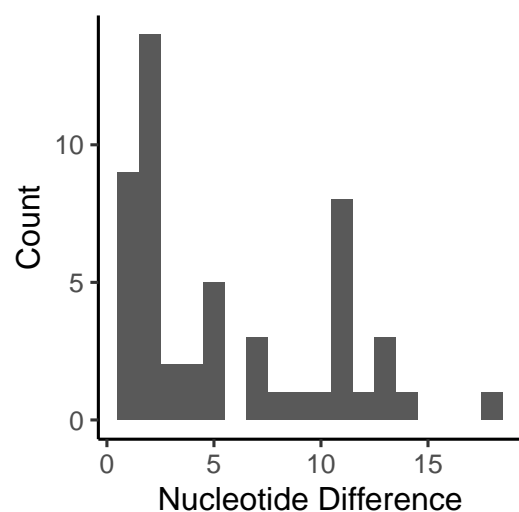
IGHV4-34*01_02

1607 sequences assigned
1002 (62.4%) exact matches, in which:
978 unique CDR3
6 unique J



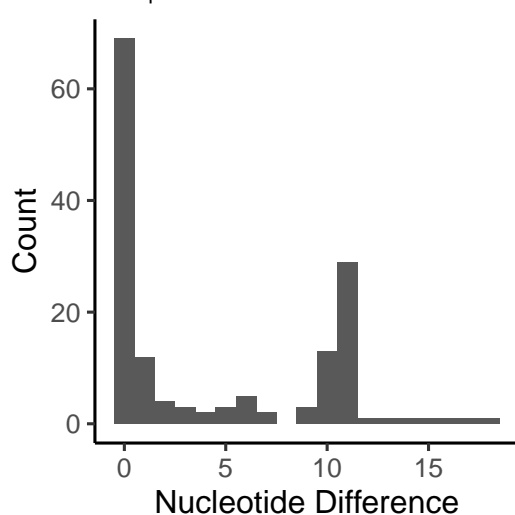
IGHV4-39*07

54 sequences assigned
No exact matches.



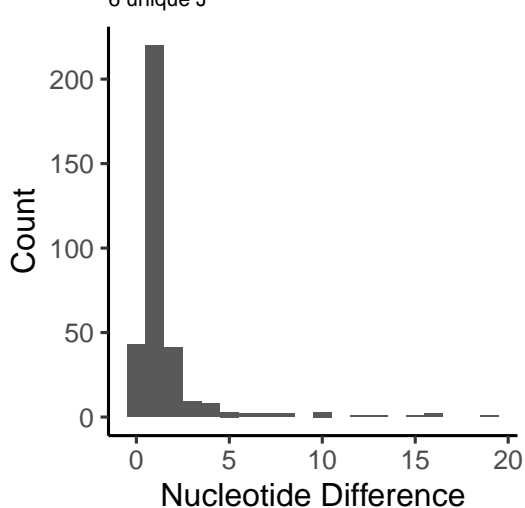
IGHV4-31*01

153 sequences assigned
69 (45.1%) exact matches, in which:
66 unique CDR3
5 unique J



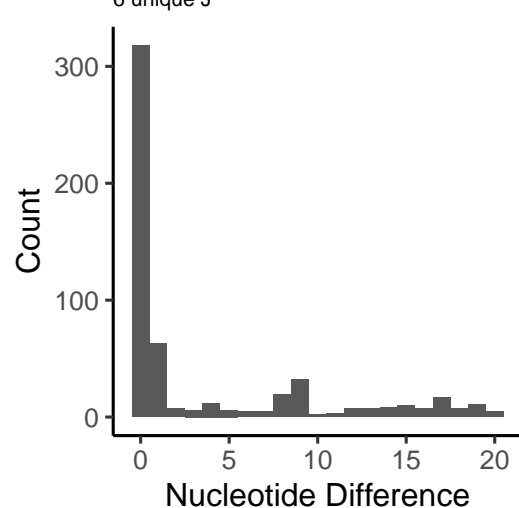
IGHV4-34*01_02_T300C

339 sequences assigned
43 (12.7%) exact matches, in which:
43 unique CDR3
6 unique J



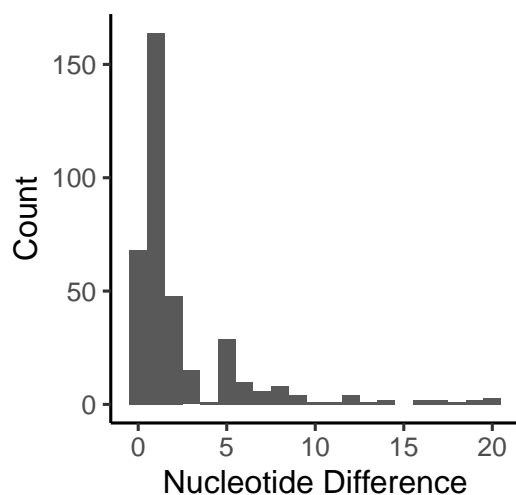
IGHV4-39*02_C258G

612 sequences assigned
318 (52%) exact matches, in which:
287 unique CDR3
6 unique J



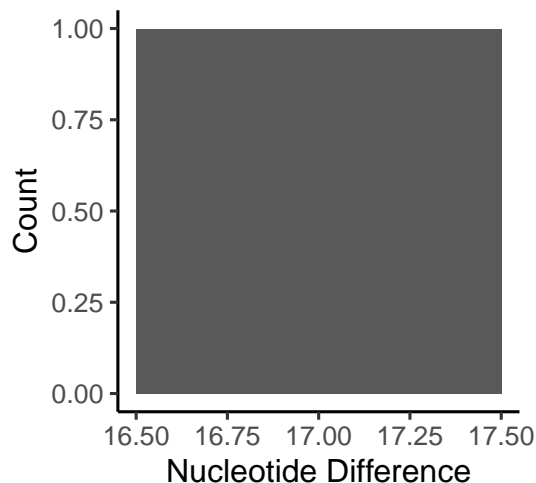
IGHV4–59*12

529 sequences assigned
68 (12.9%) exact matches, in which:
68 unique CDR3
6 unique J



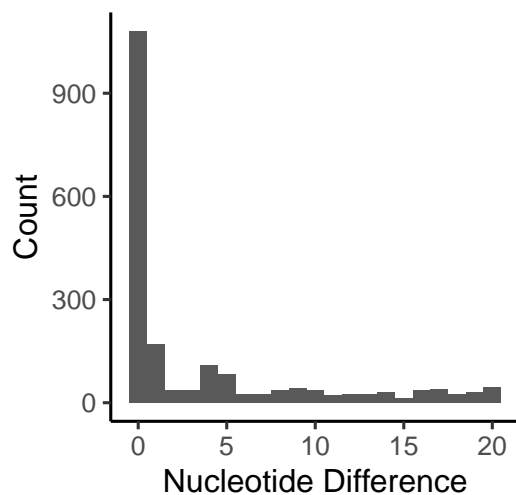
IGHV1/OR15–2*02_03

1 sequences assigned
No exact matches.



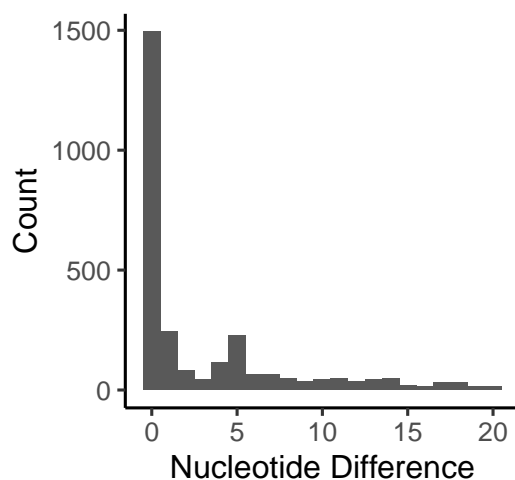
IGHV4–59*02_G88A

3489 sequences assigned
1081 (31%) exact matches, in which:
1035 unique CDR3
6 unique J



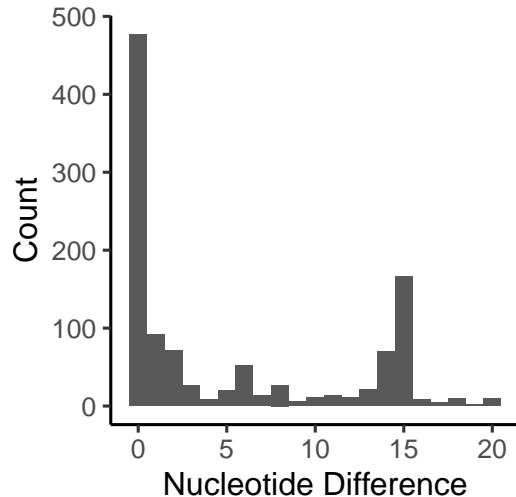
IGHV5–51*07_A128G

3010 sequences assigned
1494 (49.6%) exact matches, in which:
1096 unique CDR3
6 unique J



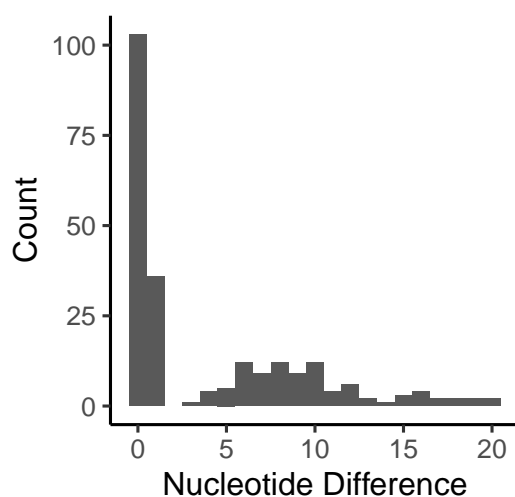
IGHV4–61*01

1232 sequences assigned
477 (38.7%) exact matches, in which:
466 unique CDR3
6 unique J



IGHV6–1*01_02

243 sequences assigned
103 (42.4%) exact matches, in which:
102 unique CDR3
5 unique J





Warning – no inferred sequences found.