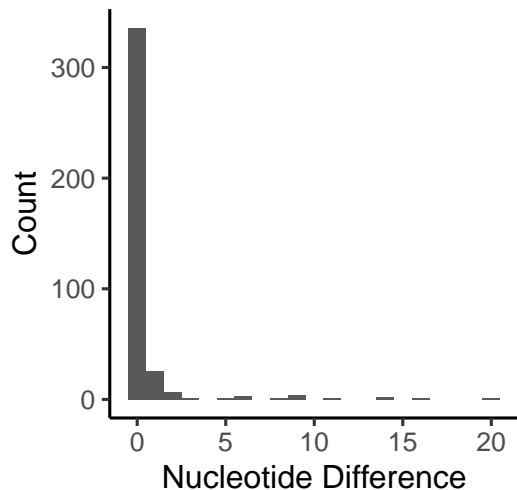


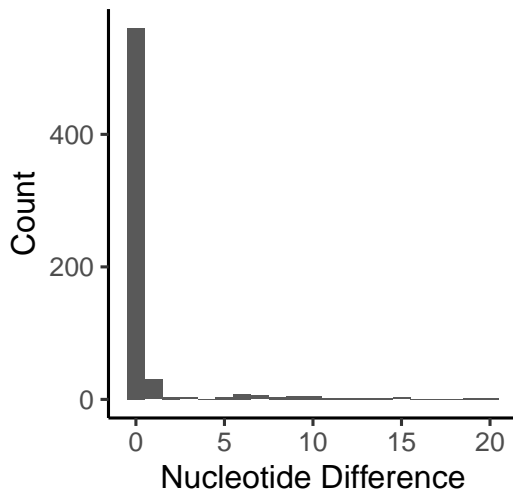
IGHV1-2*04

406 sequences assigned
336 (82.8%) exact matches, in which:
335 unique CDR3
6 unique J



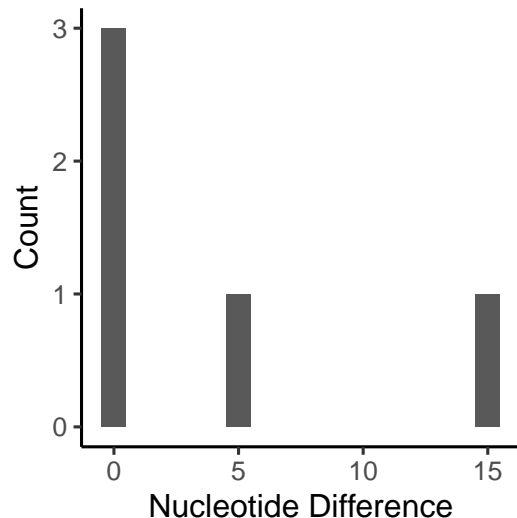
IGHV1-8*01

655 sequences assigned
561 (85.6%) exact matches, in which:
551 unique CDR3
6 unique J



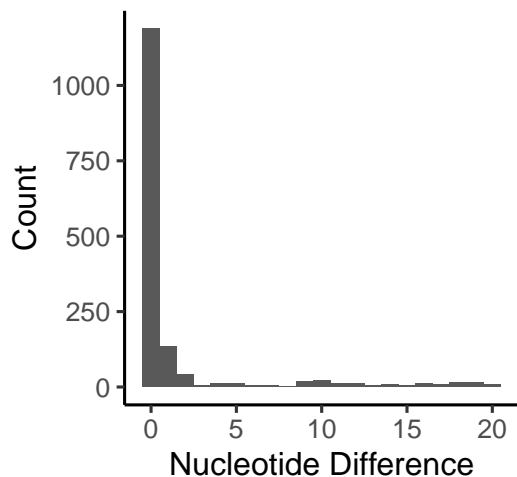
IGHV1-45*02

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
2 unique J



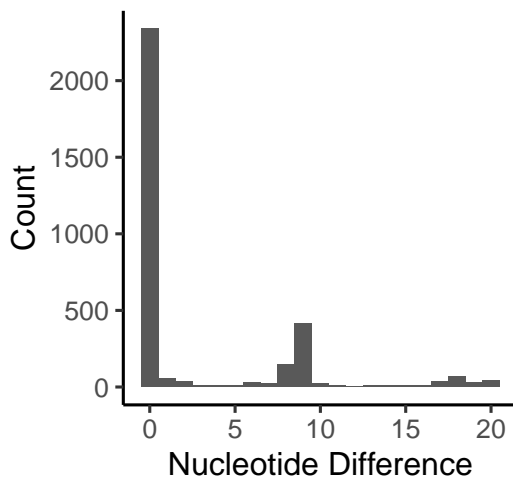
IGHV1-2*06

1699 sequences assigned
1188 (69.9%) exact matches, in which:
1172 unique CDR3
6 unique J



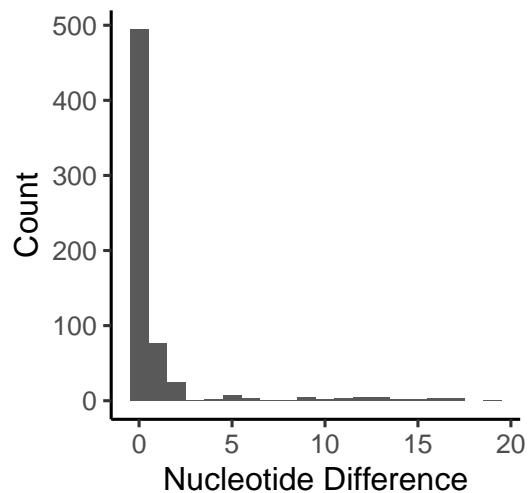
IGHV1-18*01

3495 sequences assigned
2339 (66.9%) exact matches, in which:
2308 unique CDR3
6 unique J



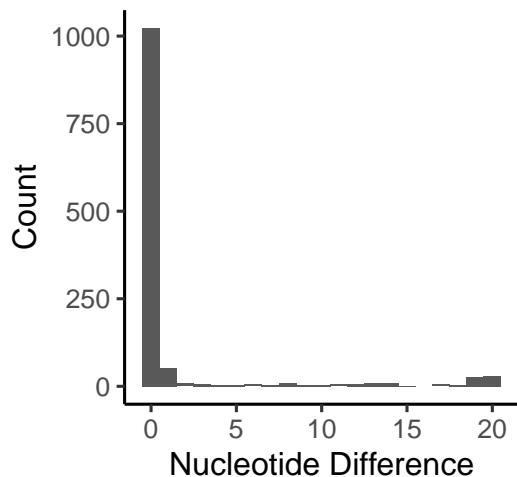
IGHV1-46*01

713 sequences assigned
495 (69.4%) exact matches, in which:
479 unique CDR3
6 unique J



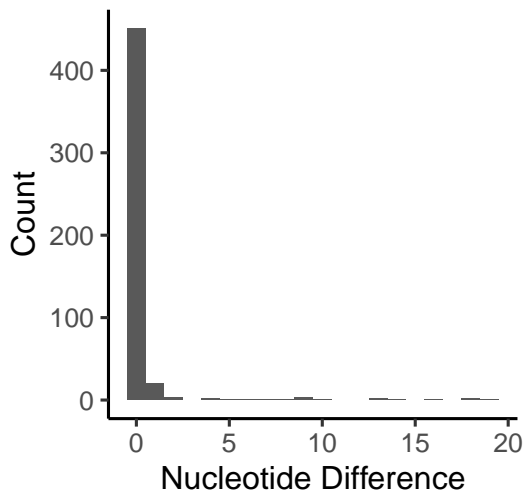
IGHV1-3*01_05

1280 sequences assigned
1023 (79.9%) exact matches, in which:
1009 unique CDR3
6 unique J



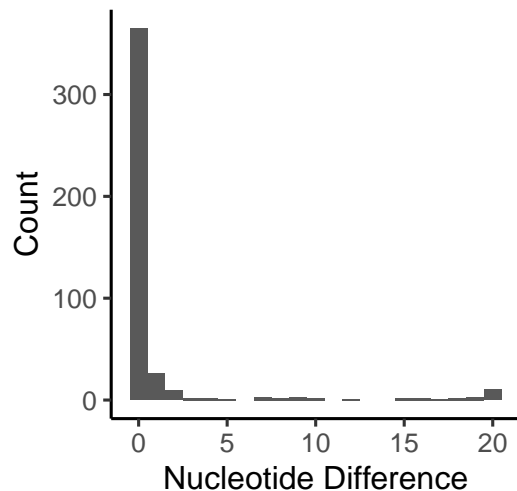
IGHV1-24*01

502 sequences assigned
451 (89.8%) exact matches, in which:
450 unique CDR3
6 unique J



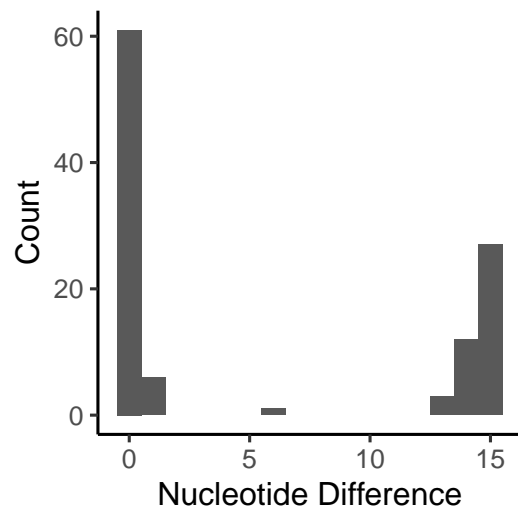
IGHV1-46*03

464 sequences assigned
365 (78.7%) exact matches, in which:
361 unique CDR3
6 unique J



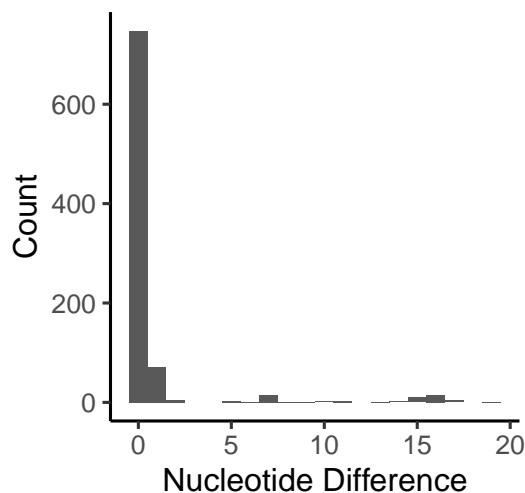
IGHV1-58*02

110 sequences assigned
61 (55.5%) exact matches, in which:
61 unique CDR3
5 unique J



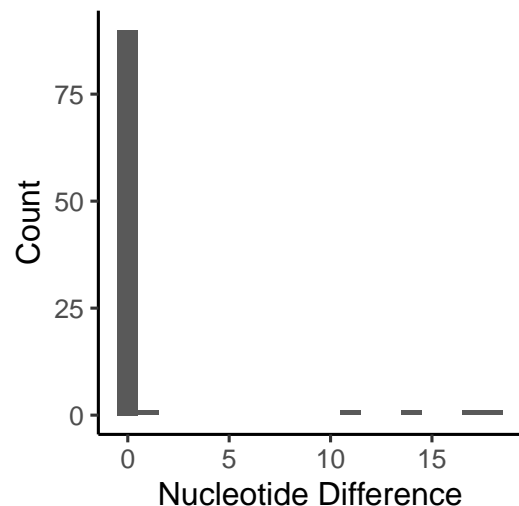
IGHV1-69*04_09_G112A

905 sequences assigned
748 (82.7%) exact matches, in which:
740 unique CDR3
6 unique J



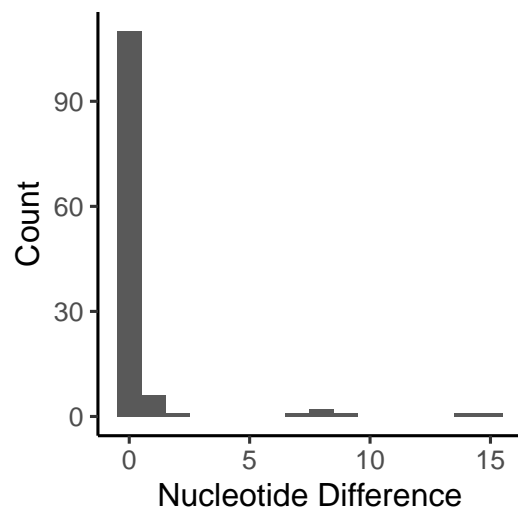
IGHV2-26*01

97 sequences assigned
90 (92.8%) exact matches, in which:
89 unique CDR3
5 unique J



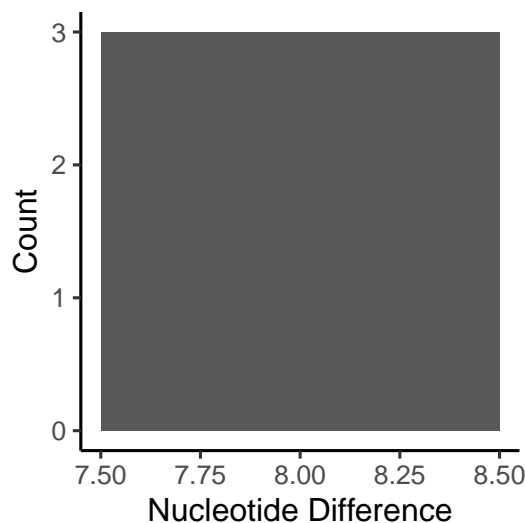
IGHV1-58*01_03

143 sequences assigned
110 (76.9%) exact matches, in which:
109 unique CDR3
6 unique J



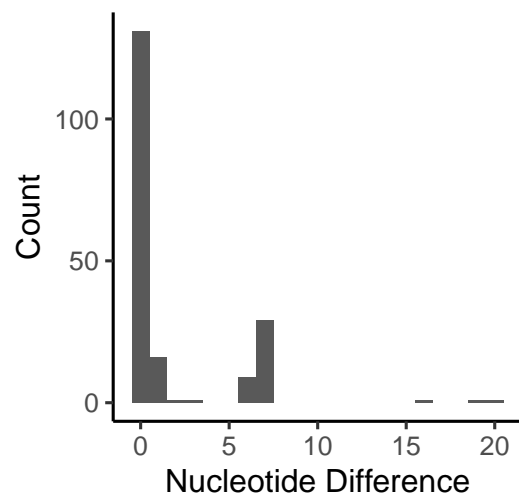
IGHV1-NL1*01

3 sequences assigned
No exact matches.



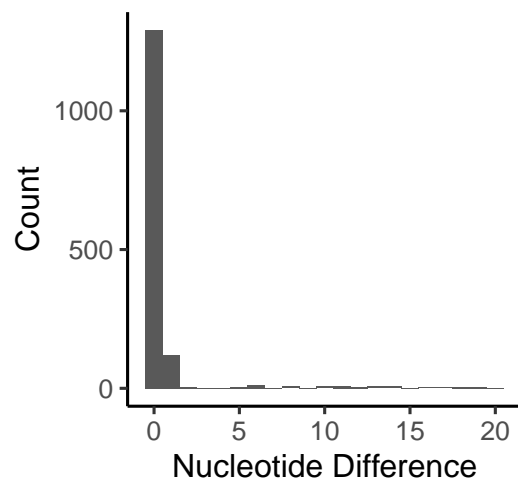
IGHV2-70*01

193 sequences assigned
131 (67.9%) exact matches, in which:
129 unique CDR3
5 unique J



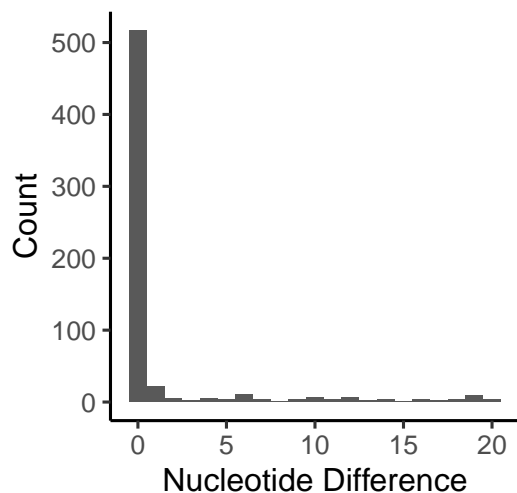
IGHV1-69*01_12_13

1612 sequences assigned
1291 (80.1%) exact matches, in which:
1277 unique CDR3
6 unique J



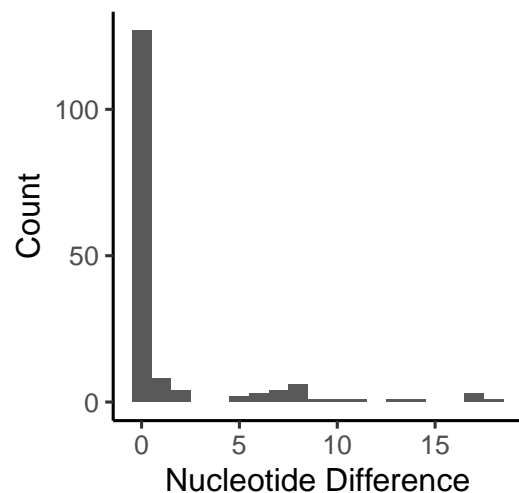
IGHV2-5*02

648 sequences assigned
517 (79.8%) exact matches, in which:
512 unique CDR3
6 unique J



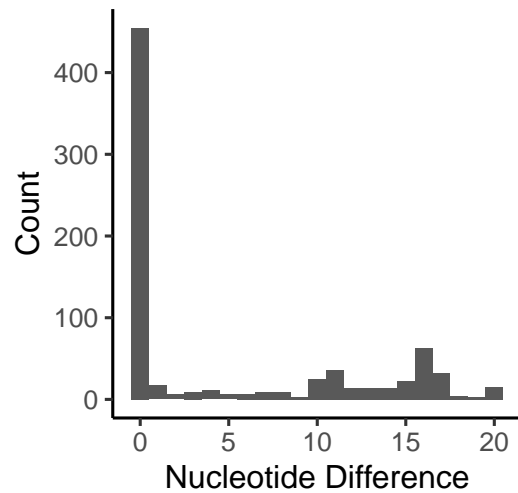
IGHV2-70*11_15

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



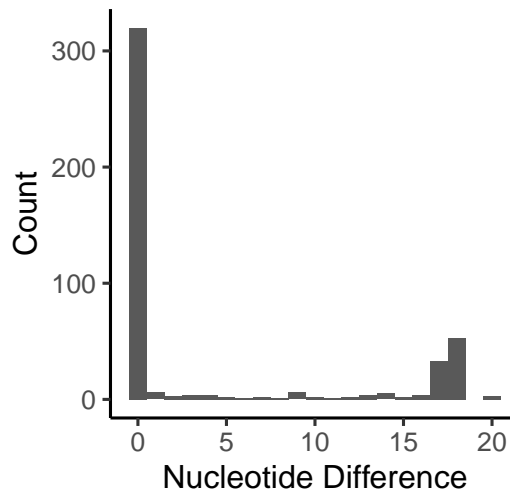
IGHV3-7*01

1855 sequences assigned
455 (24.5%) exact matches, in which:
325 unique CDR3
6 unique J



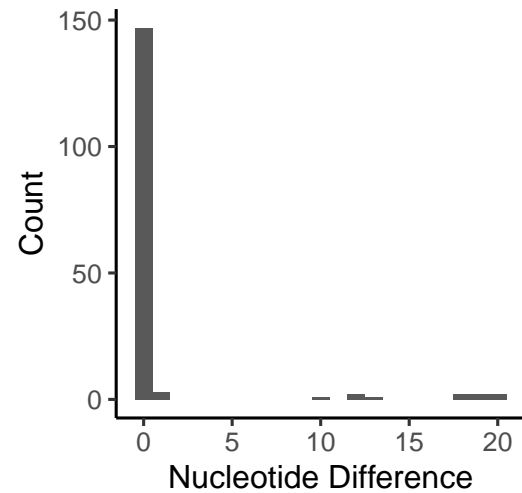
IGHV3-11*01

472 sequences assigned
320 (67.8%) exact matches, in which:
248 unique CDR3
6 unique J



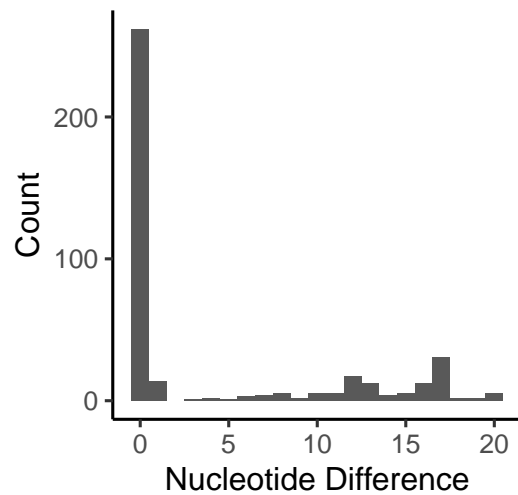
IGHV3-13*04

161 sequences assigned
147 (91.3%) exact matches, in which:
105 unique CDR3
5 unique J



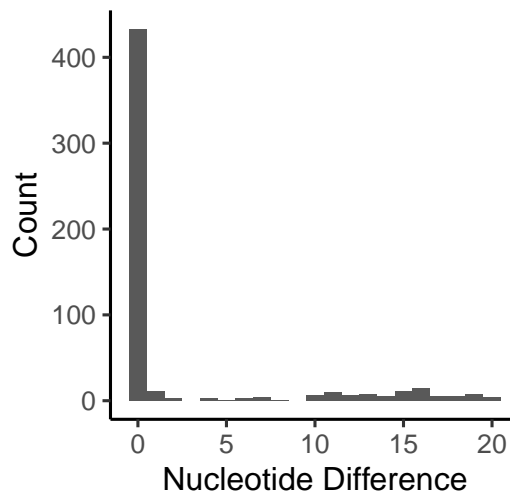
IGHV3-7*04

420 sequences assigned
262 (62.4%) exact matches, in which:
192 unique CDR3
6 unique J



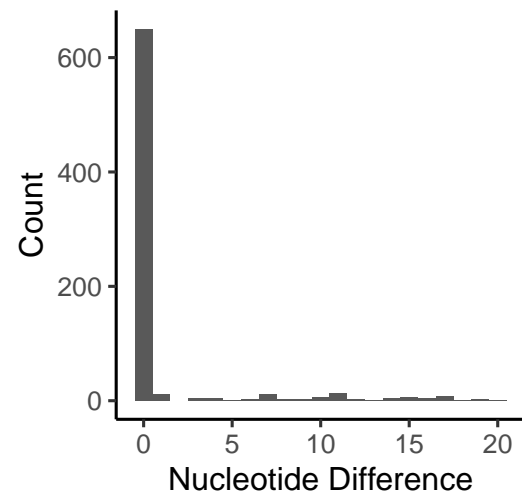
IGHV3-11*06_T300C

570 sequences assigned
433 (76%) exact matches, in which:
335 unique CDR3
6 unique J



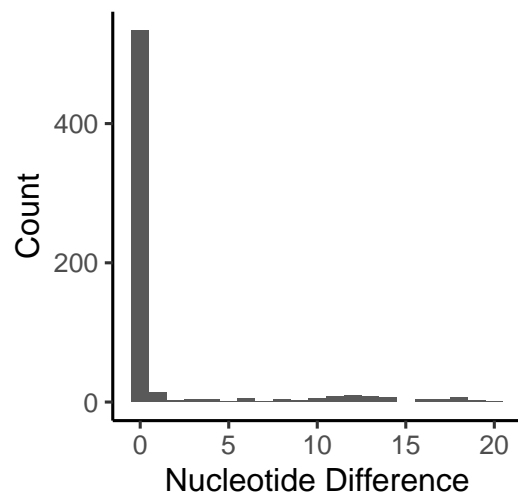
IGHV3-15*01_02

909 sequences assigned
650 (71.5%) exact matches, in which:
522 unique CDR3
6 unique J



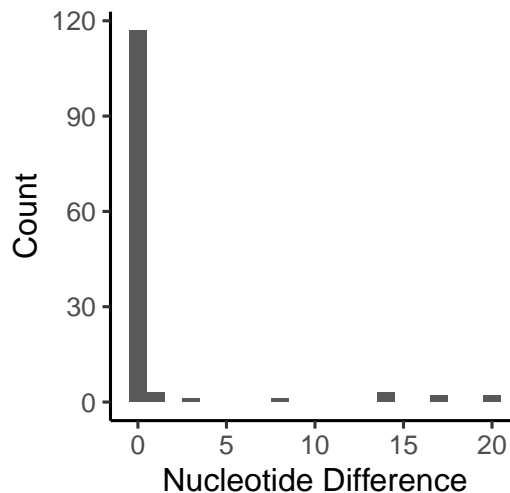
IGHV3-9*01

661 sequences assigned
534 (80.8%) exact matches, in which:
411 unique CDR3
6 unique J



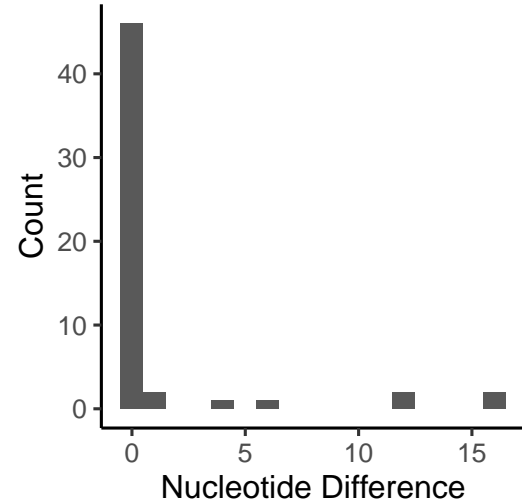
IGHV3-13*01

149 sequences assigned
117 (78.5%) exact matches, in which:
79 unique CDR3
5 unique J



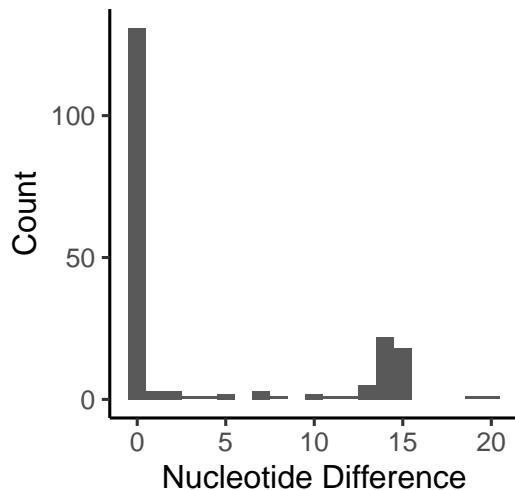
IGHV3-20*01_02

57 sequences assigned
46 (80.7%) exact matches, in which:
35 unique CDR3
5 unique J



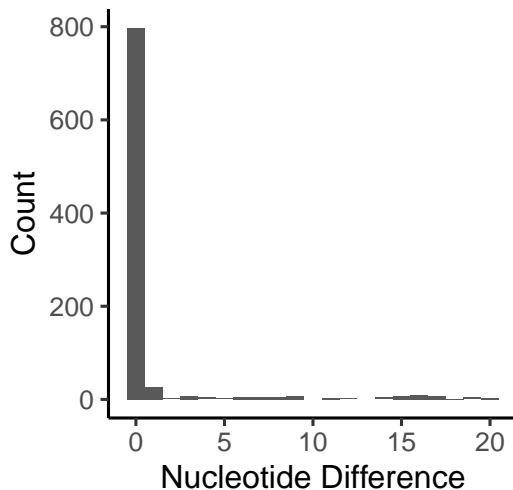
IGHV3–20*03_04

201 sequences assigned
131 (65.2%) exact matches, in which:
98 unique CDR3
5 unique J



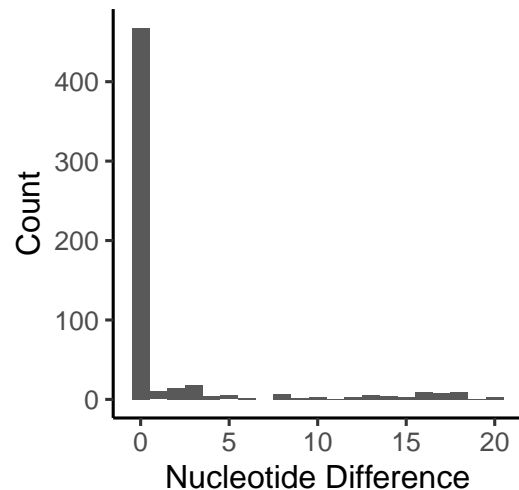
IGHV3–30*01

931 sequences assigned
798 (85.7%) exact matches, in which:
613 unique CDR3
6 unique J



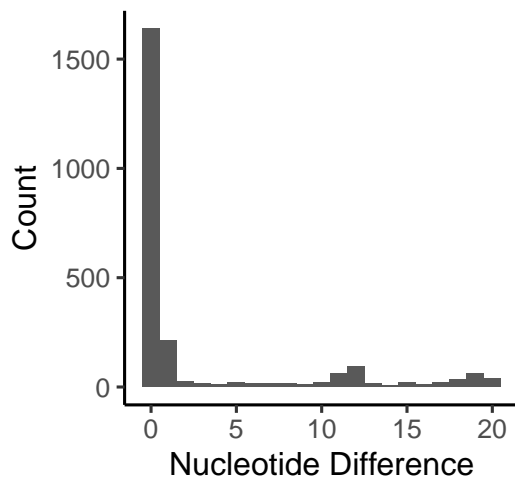
IGHV3–48*01

610 sequences assigned
468 (76.7%) exact matches, in which:
345 unique CDR3
6 unique J



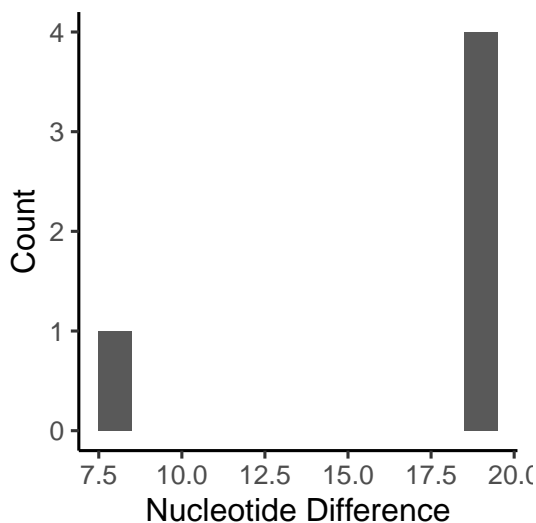
IGHV3–21*01_02

2523 sequences assigned
1639 (65%) exact matches, in which:
1176 unique CDR3
6 unique J



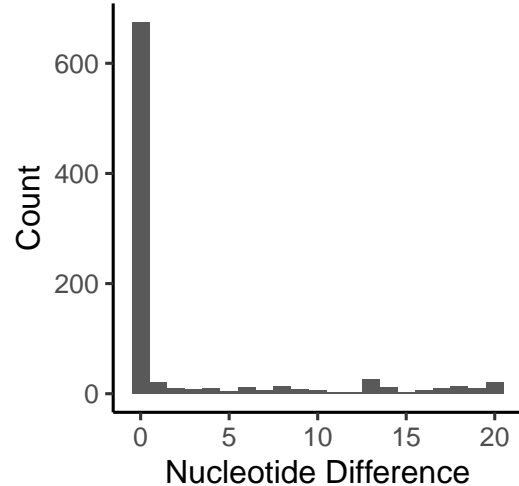
IGHV3–30–3*03

11 sequences assigned
No exact matches.



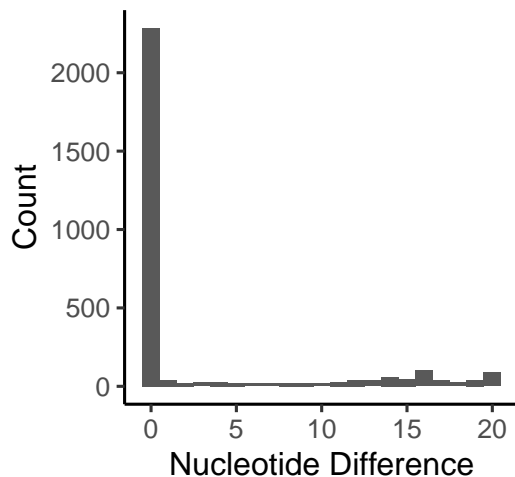
IGHV3–48*03

1186 sequences assigned
675 (56.9%) exact matches, in which:
524 unique CDR3
6 unique J



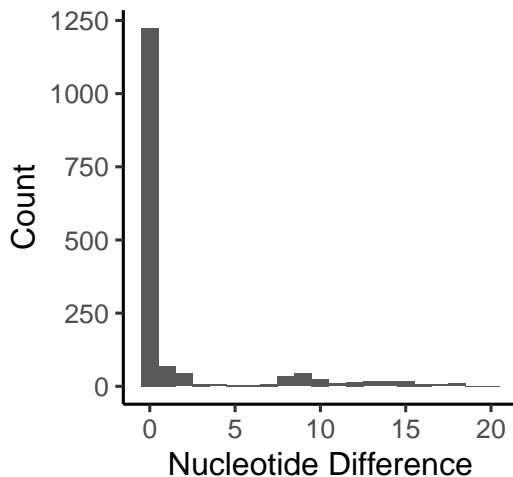
IGHV3–23*01_04

3718 sequences assigned
2285 (61.5%) exact matches, in which:
1701 unique CDR3
6 unique J



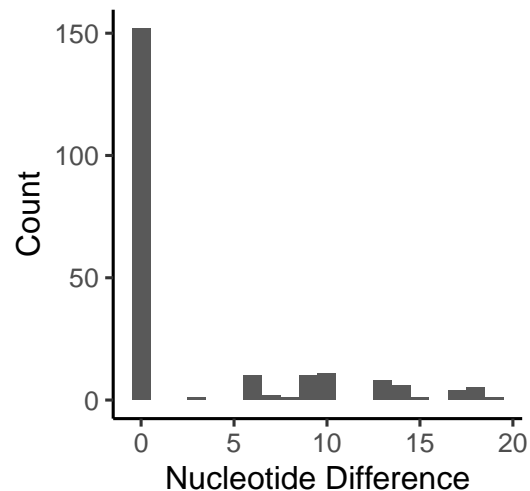
IGHV3–33*01

1674 sequences assigned
1224 (73.1%) exact matches, in which:
923 unique CDR3
6 unique J



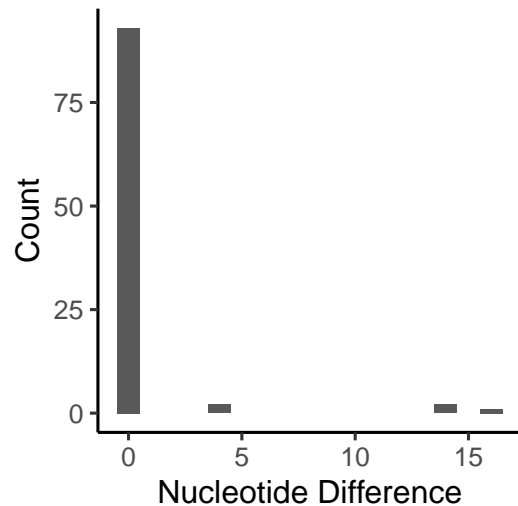
IGHV3–49*04

216 sequences assigned
152 (70.4%) exact matches, in which:
122 unique CDR3
5 unique J



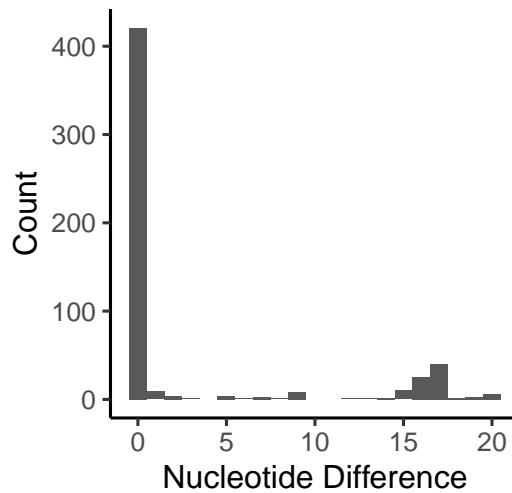
IGHV3-49*03_05

100 sequences assigned
93 (93%) exact matches, in which:
80 unique CDR3
5 unique J



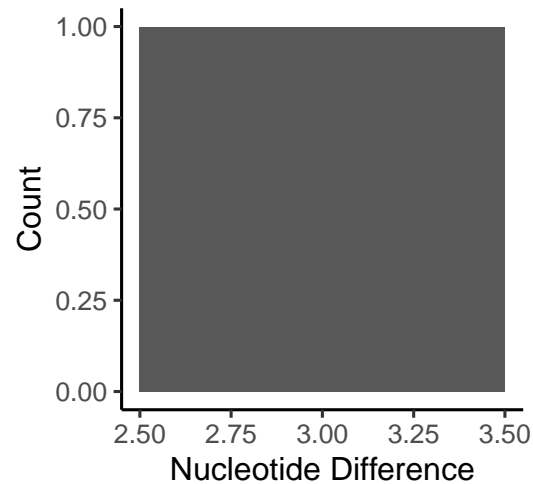
IGHV3-53*01_02

657 sequences assigned
421 (64.1%) exact matches, in which:
300 unique CDR3
6 unique J



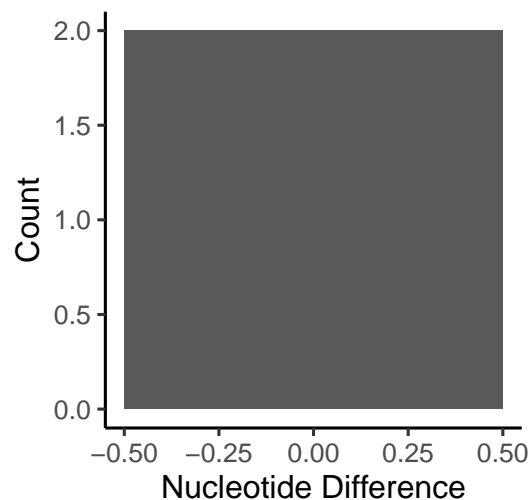
IGHV3-69-1*01

69 sequences assigned
No exact matches.



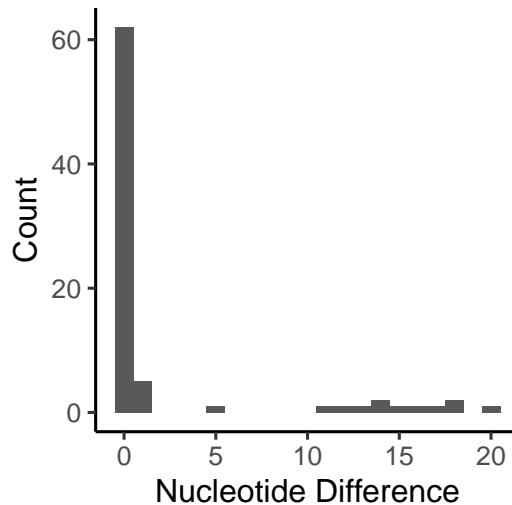
IGHV3-52*01_03

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



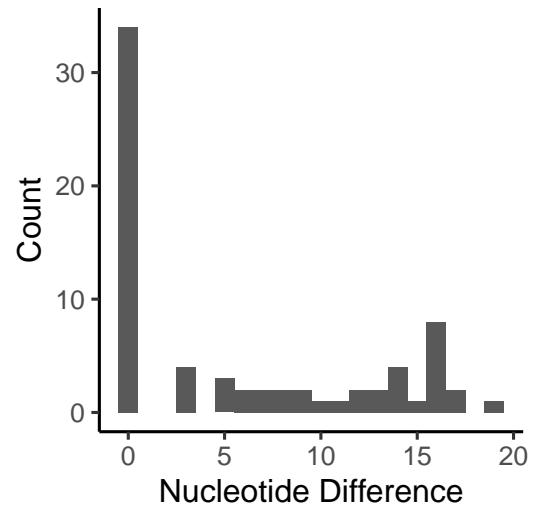
IGHV3-64*01

105 sequences assigned
62 (59%) exact matches, in which:
45 unique CDR3
4 unique J



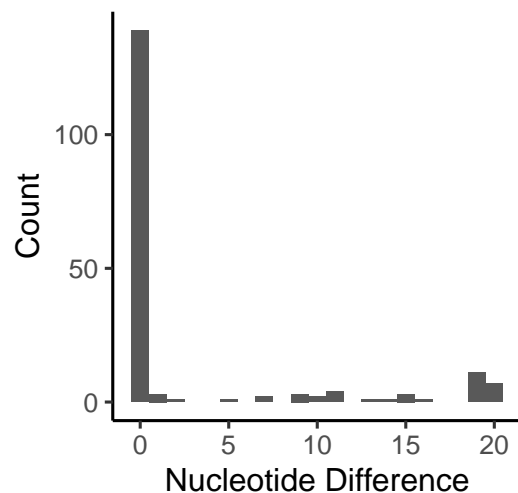
IGHV3-72*01

102 sequences assigned
34 (33.3%) exact matches, in which:
29 unique CDR3
4 unique J



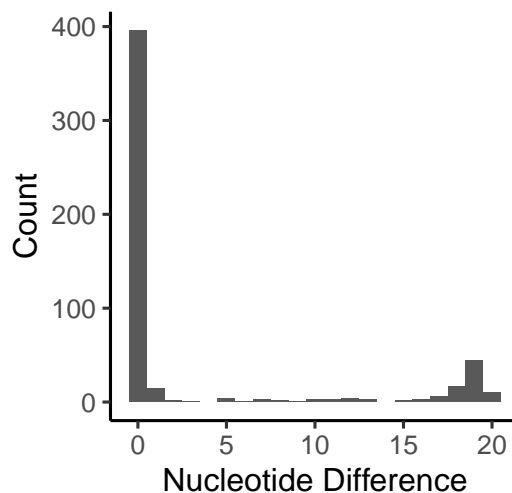
IGHV3-53*04

181 sequences assigned
139 (76.8%) exact matches, in which:
100 unique CDR3
6 unique J



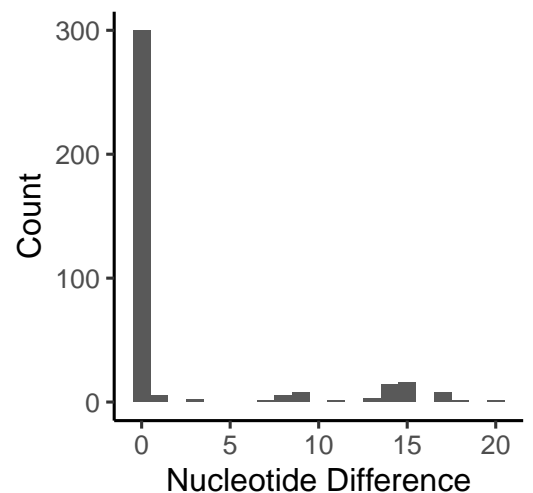
IGHV3-66*01

637 sequences assigned
396 (62.2%) exact matches, in which:
288 unique CDR3
6 unique J



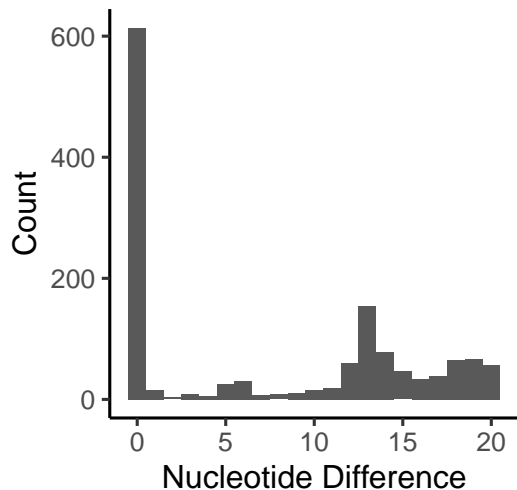
IGHV3-73*01_02

390 sequences assigned
300 (76.9%) exact matches, in which:
236 unique CDR3
6 unique J



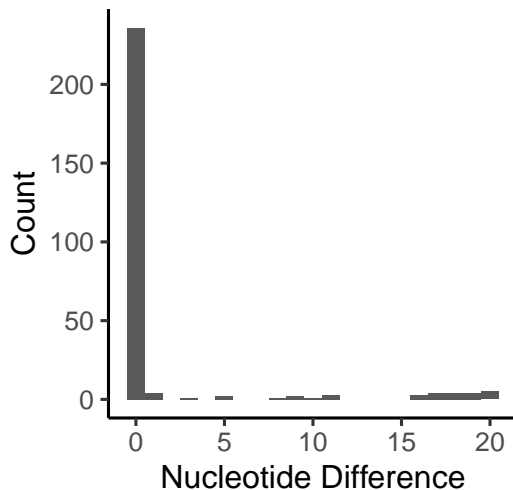
IGHV3–74*01_02

1779 sequences assigned
614 (34.5%) exact matches, in which:
436 unique CDR3
6 unique J



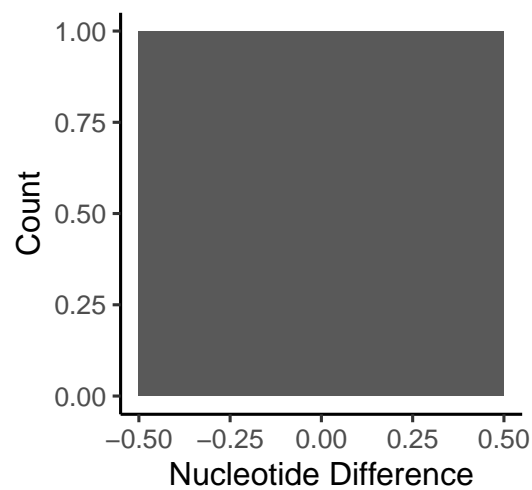
IGHV3–64D*06

299 sequences assigned
236 (78.9%) exact matches, in which:
169 unique CDR3
6 unique J



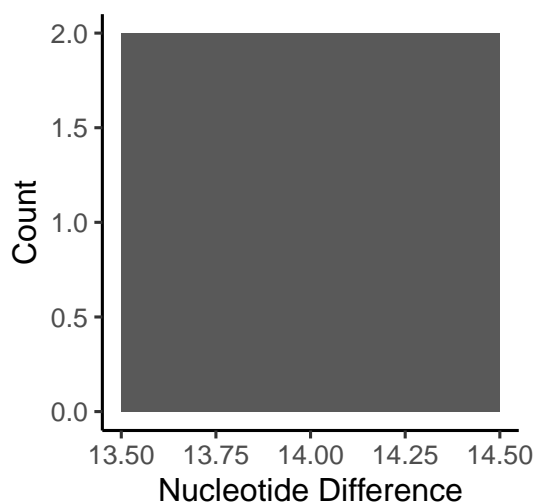
IGHV4–28*02_05

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



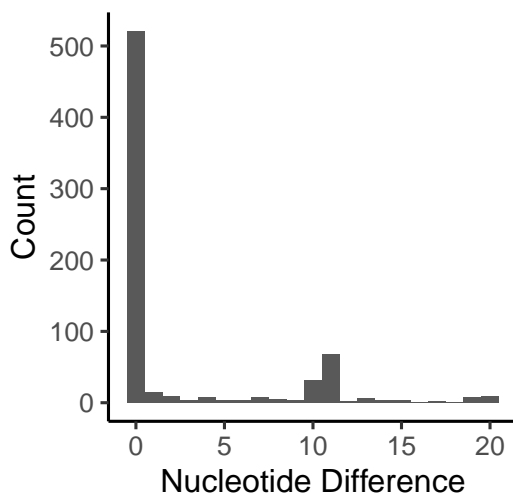
IGHV3–43D*03

3 sequences assigned
No exact matches.



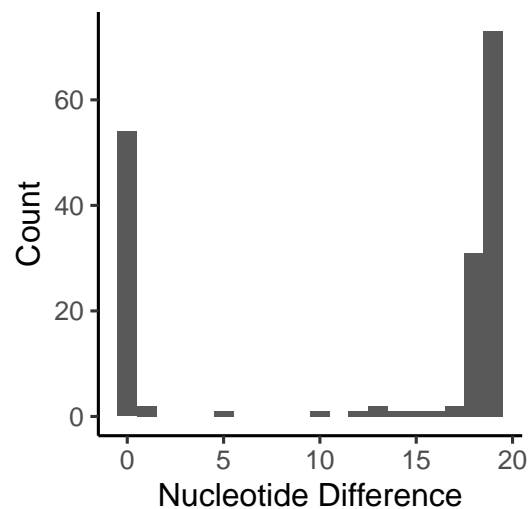
IGHV4–4*02_03

904 sequences assigned
521 (57.6%) exact matches, in which:
500 unique CDR3
6 unique J



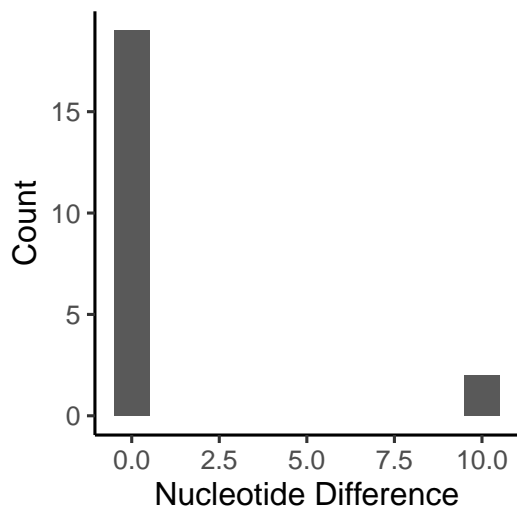
IGHV4–31*01

171 sequences assigned
54 (31.6%) exact matches, in which:
54 unique CDR3
5 unique J



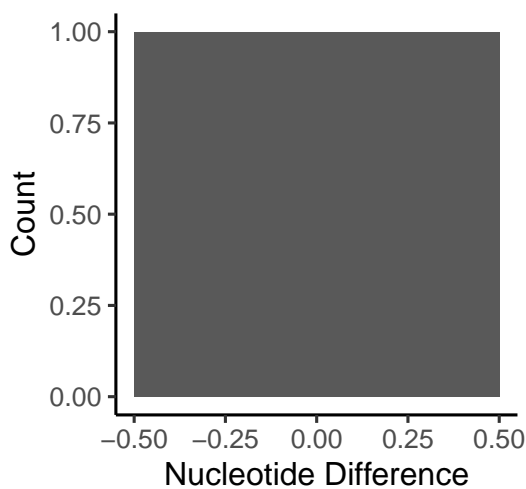
IGHV3–43D*04

21 sequences assigned
19 (90.5%) exact matches, in which:
13 unique CDR3
2 unique J



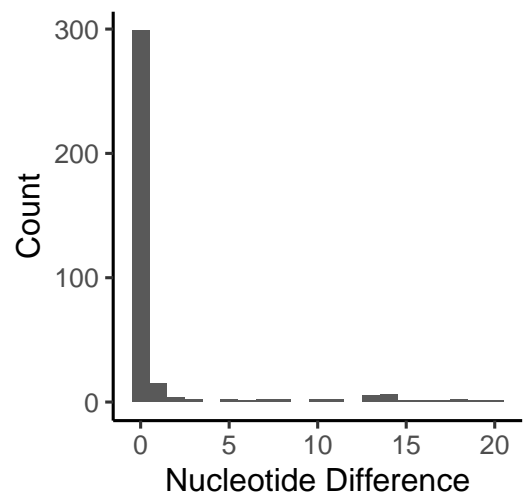
IGHV4–28*01_07

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



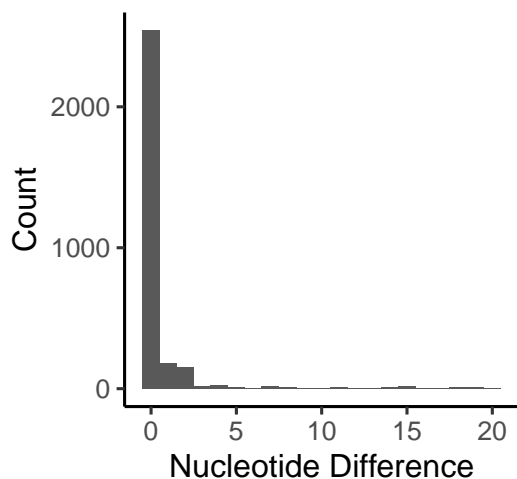
IGHV4–31*02

475 sequences assigned
299 (62.9%) exact matches, in which:
294 unique CDR3
6 unique J



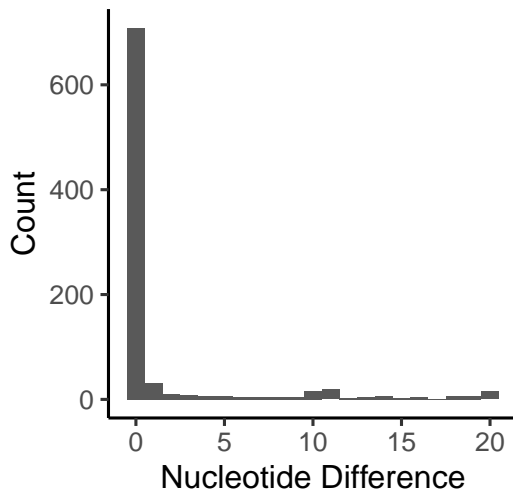
IGHV4-34*01_02

3473 sequences assigned
2542 (73.2%) exact matches, in which:
2458 unique CDR3
6 unique J



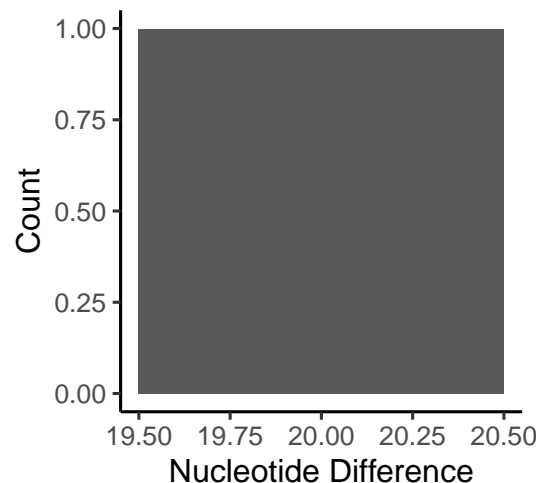
IGHV4-59*08

963 sequences assigned
709 (73.6%) exact matches, in which:
703 unique CDR3
6 unique J



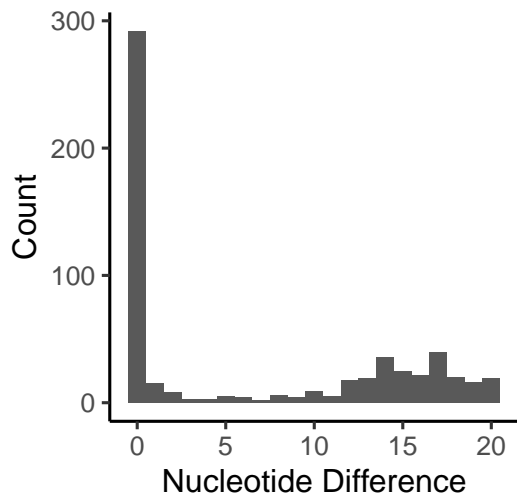
IGHV4/OR15-8*02

3 sequences assigned
No exact matches.



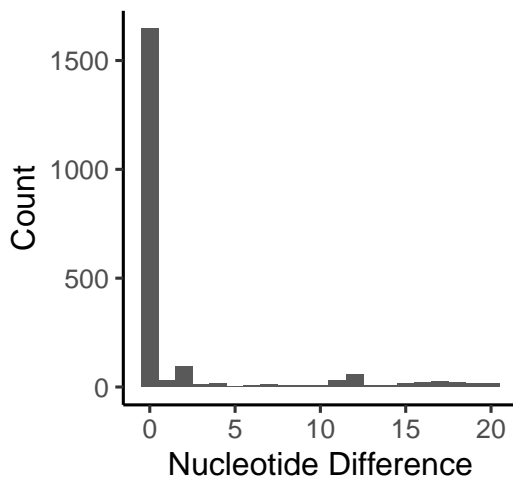
IGHV4-38-2*02_A70G

606 sequences assigned
292 (48.2%) exact matches, in which:
286 unique CDR3
6 unique J



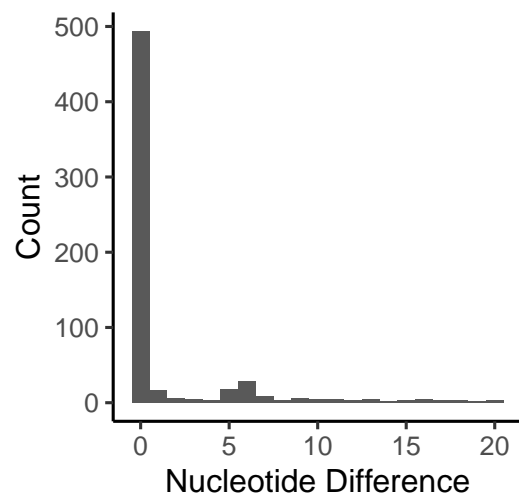
IGHV4-59*02_G88A

2624 sequences assigned
1646 (62.7%) exact matches, in which:
1637 unique CDR3
6 unique J



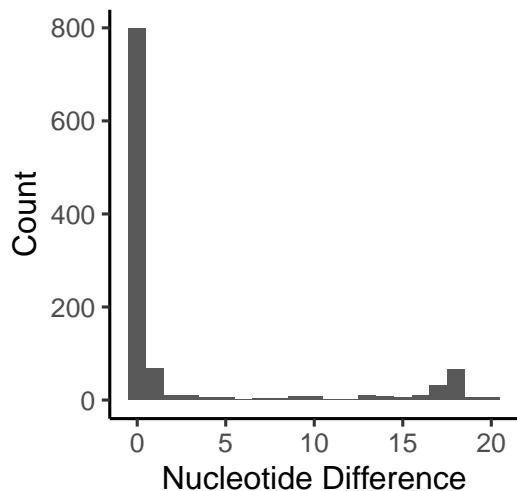
IGHV5-10-1*01_03

822 sequences assigned
494 (60.1%) exact matches, in which:
420 unique CDR3
6 unique J



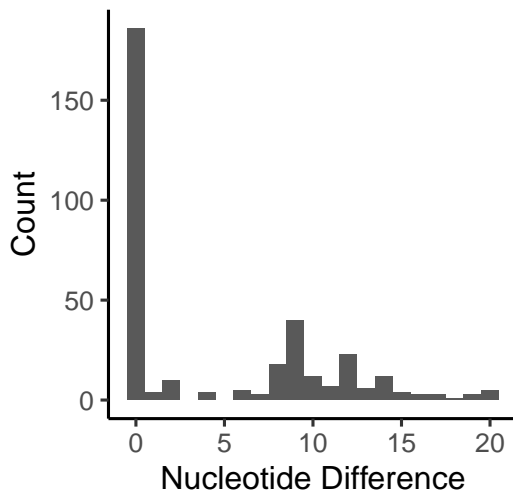
IGHV4-39*02_C258G

1297 sequences assigned
799 (61.6%) exact matches, in which:
767 unique CDR3
6 unique J



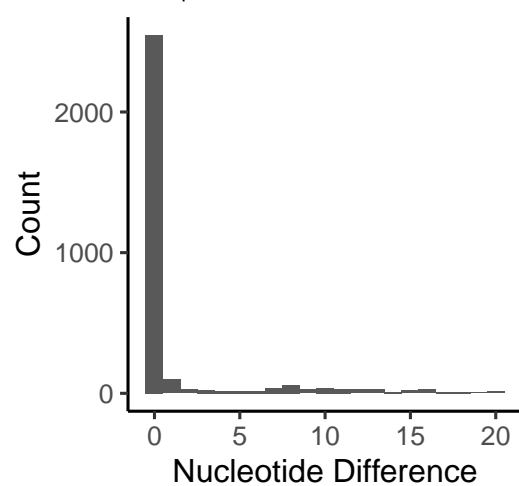
IGHV4-61*01

394 sequences assigned
186 (47.2%) exact matches, in which:
186 unique CDR3
6 unique J



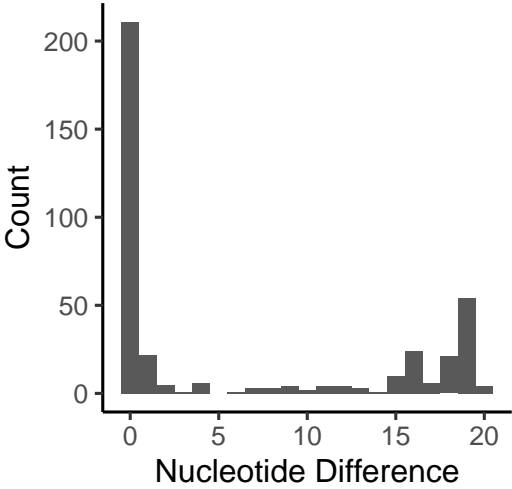
IGHV5-51*07_A128G

3413 sequences assigned
2547 (74.6%) exact matches, in which:
2035 unique CDR3
6 unique J



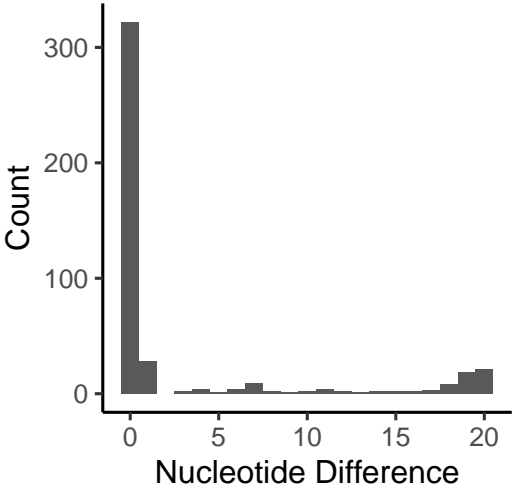
IGHV6-1*01_02

578 sequences assigned
211 (36.5%) exact matches, in which:
210 unique CDR3
6 unique J



IGHV7-4-1*02

455 sequences assigned
322 (70.8%) exact matches, in which:
320 unique CDR3
6 unique J





Warning – no inferred sequences found.