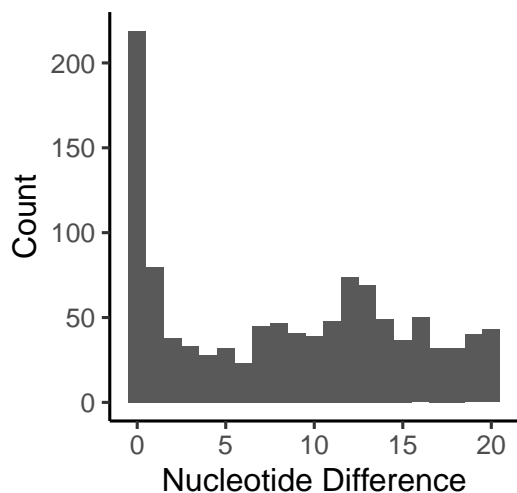


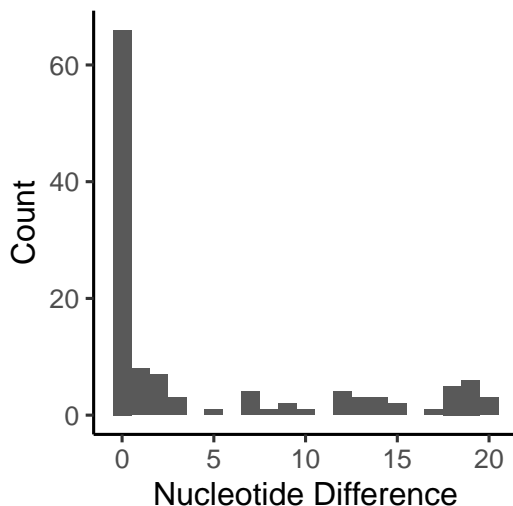
IGHV1-2*02

1458 sequences assigned
219 (15%) exact matches, in which:
211 unique CDR3
6 unique J



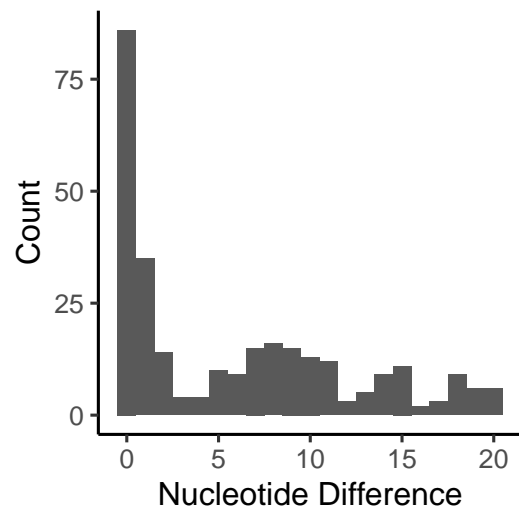
IGHV1-24*01

154 sequences assigned
66 (42.9%) exact matches, in which:
65 unique CDR3
6 unique J



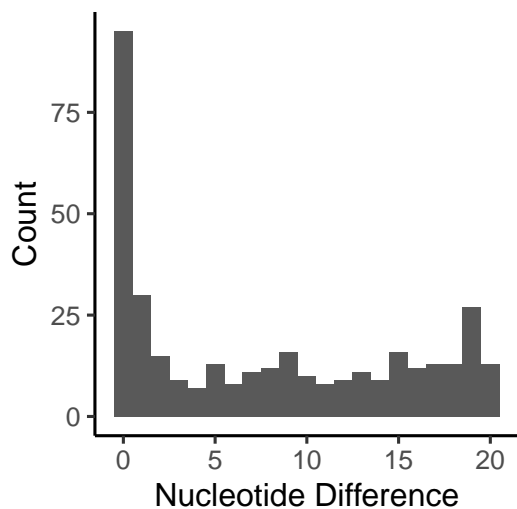
IGHV1-46*03

392 sequences assigned
86 (21.9%) exact matches, in which:
83 unique CDR3
5 unique J



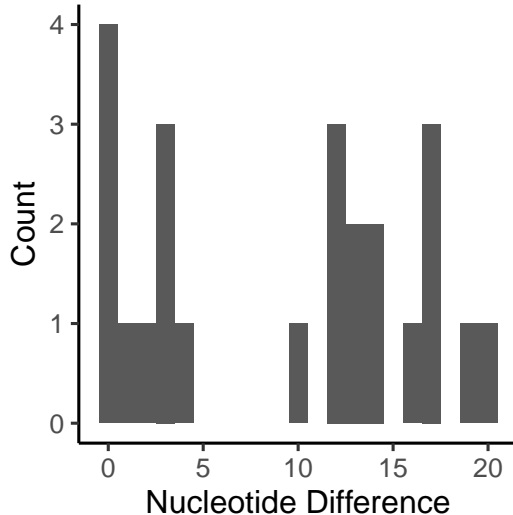
IGHV1-3*01

575 sequences assigned
95 (16.5%) exact matches, in which:
93 unique CDR3
6 unique J



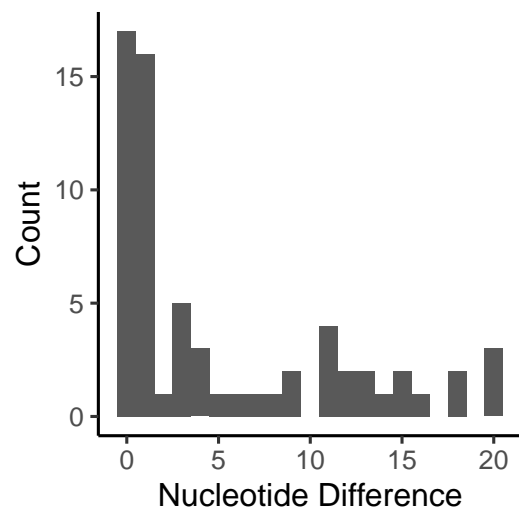
IGHV1-45*02

46 sequences assigned
4 (8.7%) exact matches, in which:
4 unique CDR3
3 unique J



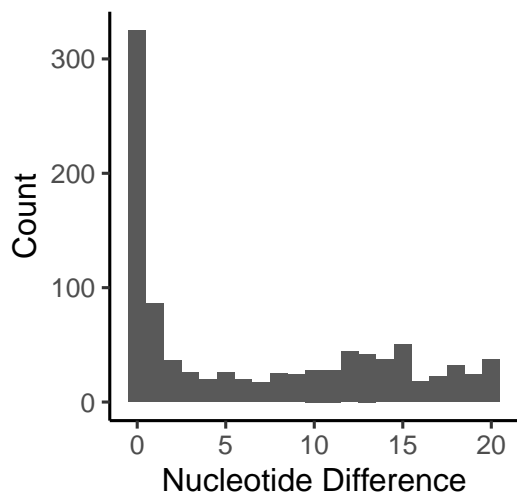
IGHV1-58*01

100 sequences assigned
17 (17%) exact matches, in which:
17 unique CDR3
4 unique J



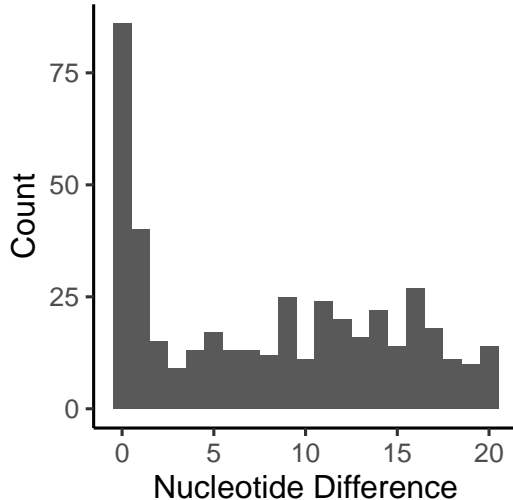
IGHV1-18*04

1480 sequences assigned
325 (22%) exact matches, in which:
315 unique CDR3
6 unique J



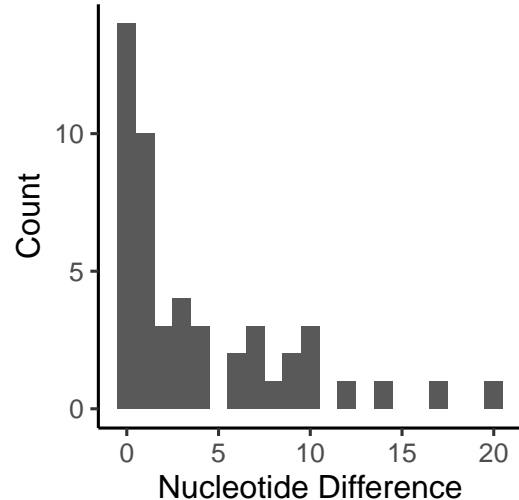
IGHV1-46*01

619 sequences assigned
86 (13.9%) exact matches, in which:
85 unique CDR3
4 unique J



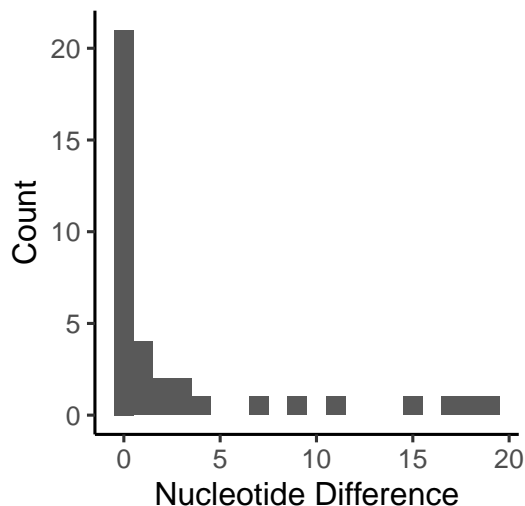
IGHV1-58*02

52 sequences assigned
14 (26.9%) exact matches, in which:
14 unique CDR3
3 unique J



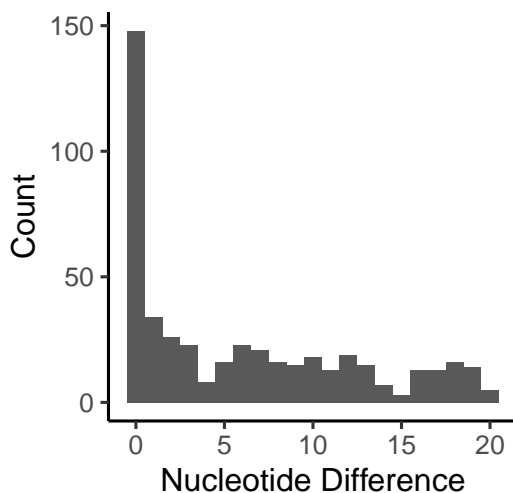
IGHV1-69-2*01

72 sequences assigned
21 (29.2%) exact matches, in which:
21 unique CDR3
5 unique J



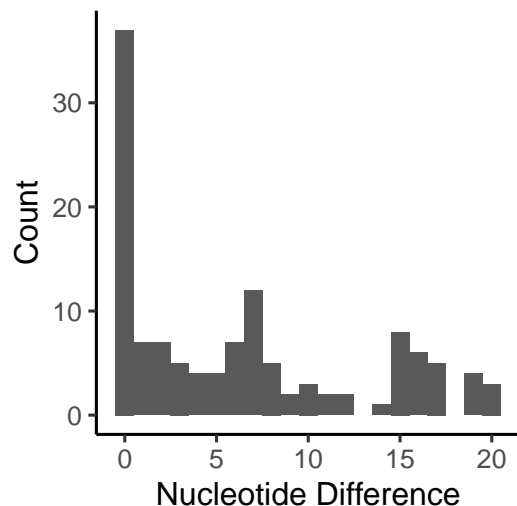
IGHV2-5*01

533 sequences assigned
148 (27.8%) exact matches, in which:
143 unique CDR3
6 unique J



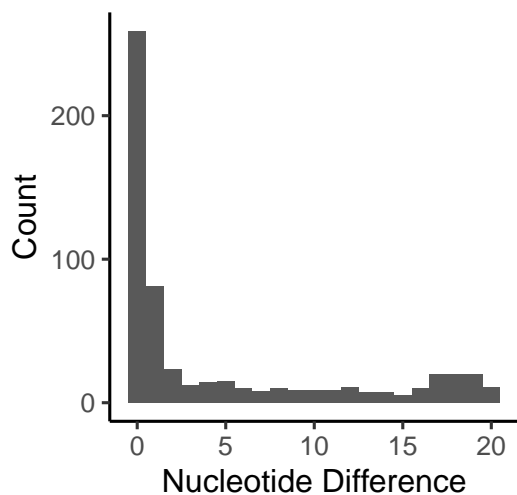
IGHV2-70*01

172 sequences assigned
37 (21.5%) exact matches, in which:
37 unique CDR3
6 unique J



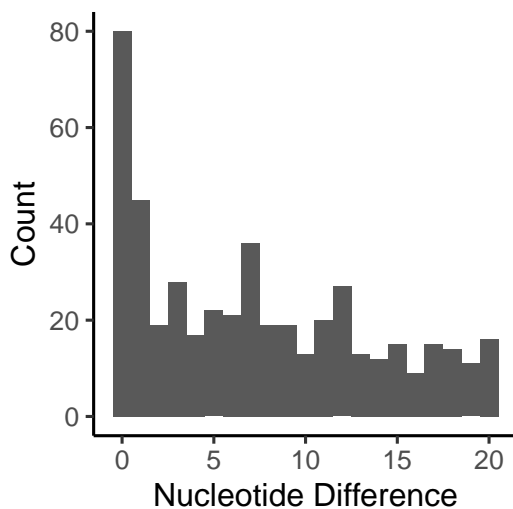
IGHV1-69*06

740 sequences assigned
259 (35%) exact matches, in which:
252 unique CDR3
5 unique J



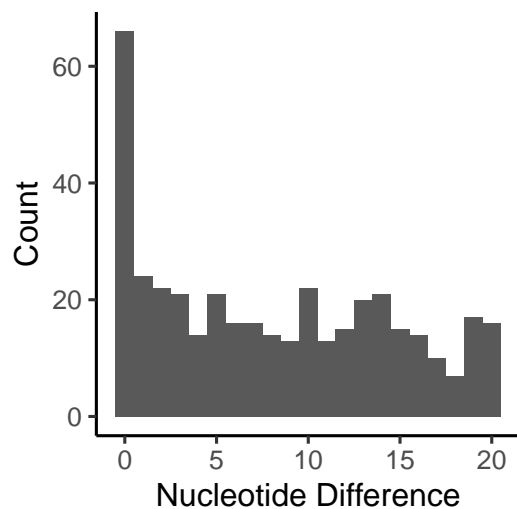
IGHV2-5*02

555 sequences assigned
80 (14.4%) exact matches, in which:
77 unique CDR3
6 unique J



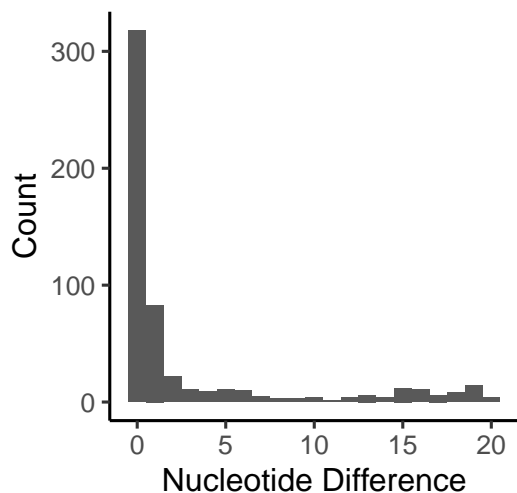
IGHV2-70*15

479 sequences assigned
66 (13.8%) exact matches, in which:
66 unique CDR3
6 unique J



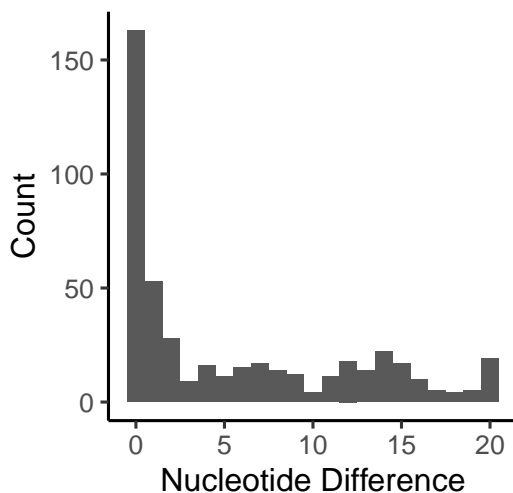
IGHV1-69*08_C191T

680 sequences assigned
318 (46.8%) exact matches, in which:
308 unique CDR3
6 unique J



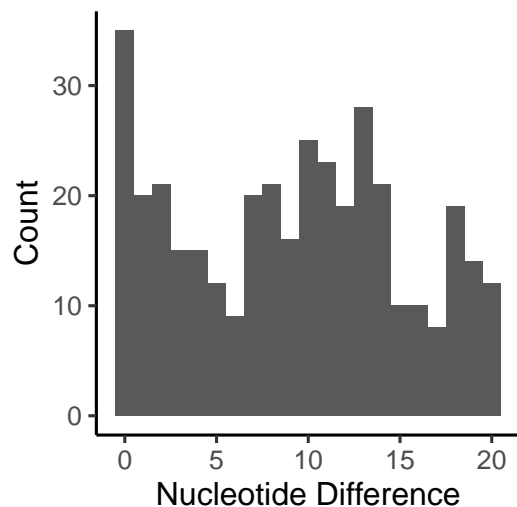
IGHV2-26*01

515 sequences assigned
163 (31.7%) exact matches, in which:
160 unique CDR3
5 unique J



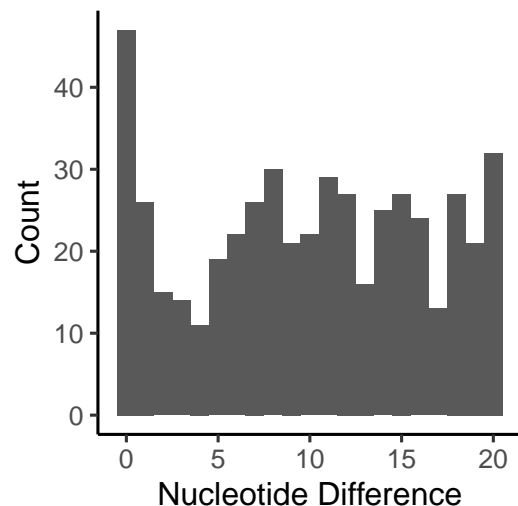
IGHV3-7*01

491 sequences assigned
35 (7.1%) exact matches, in which:
34 unique CDR3
6 unique J



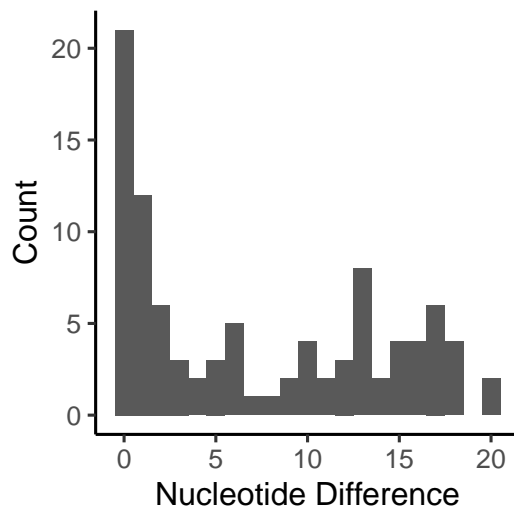
IGHV3-7*03

782 sequences assigned
47 (6%) exact matches, in which:
46 unique CDR3
5 unique J



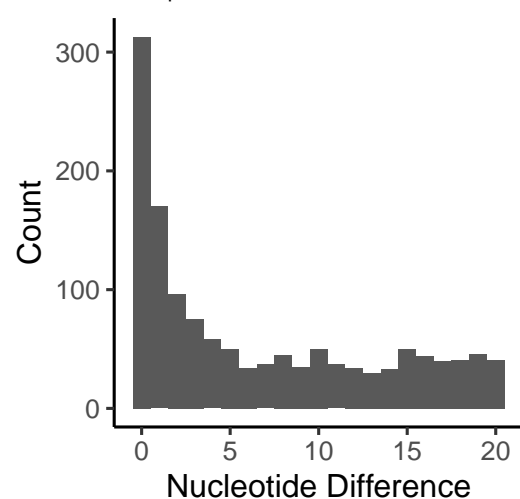
IGHV3-13*04

110 sequences assigned
21 (19.1%) exact matches, in which:
21 unique CDR3
5 unique J



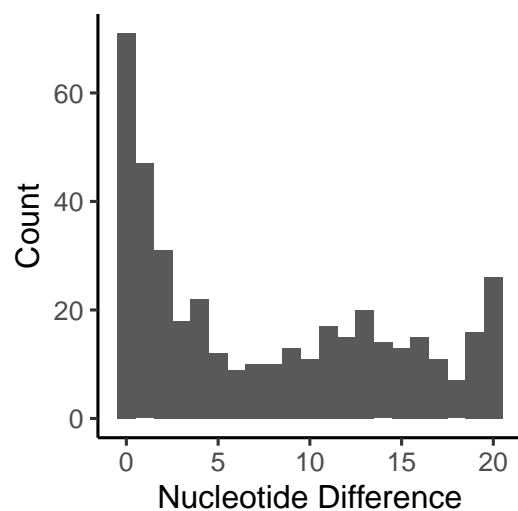
IGHV3-21*01

1865 sequences assigned
313 (16.8%) exact matches, in which:
298 unique CDR3
6 unique J



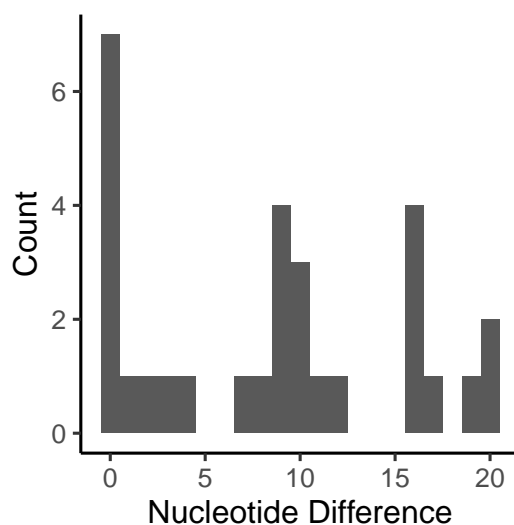
IGHV3-11*05

517 sequences assigned
71 (13.7%) exact matches, in which:
62 unique CDR3
5 unique J



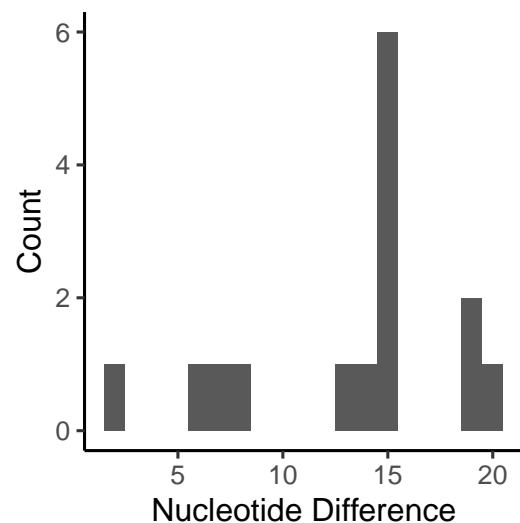
IGHV3-13*05

56 sequences assigned
7 (12.5%) exact matches, in which:
7 unique CDR3
2 unique J



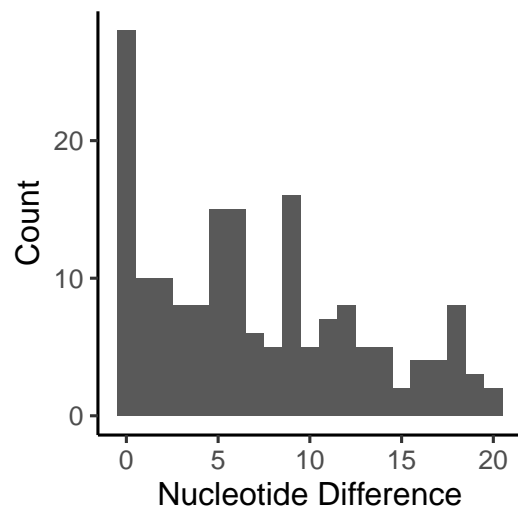
IGHV3-30-3*03

35 sequences assigned
No exact matches.



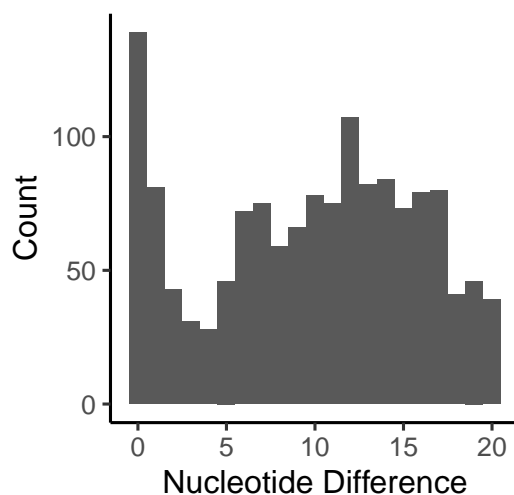
IGHV3-11*06

287 sequences assigned
28 (9.8%) exact matches, in which:
28 unique CDR3
4 unique J



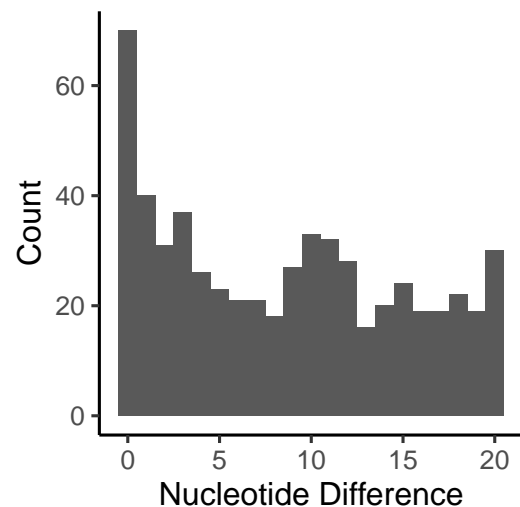
IGHV3-15*01

1724 sequences assigned
139 (8.1%) exact matches, in which:
135 unique CDR3
6 unique J



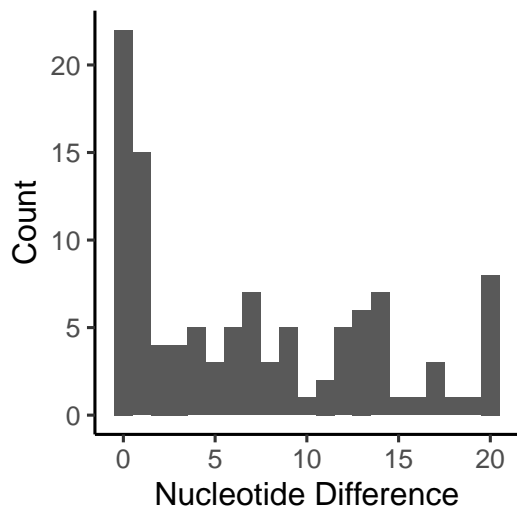
IGHV3-33*01

768 sequences assigned
70 (9.1%) exact matches, in which:
70 unique CDR3
6 unique J



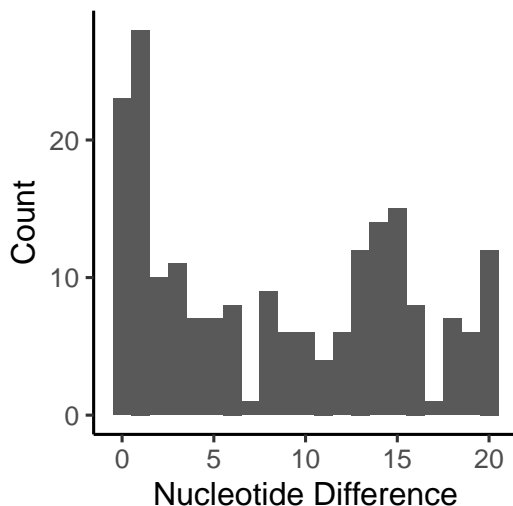
IGHV3-43*01

201 sequences assigned
22 (10.9%) exact matches, in which:
22 unique CDR3
5 unique J



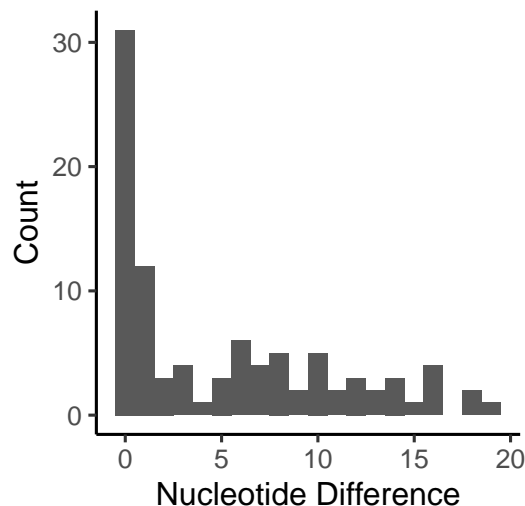
IGHV3-49*03

256 sequences assigned
23 (9%) exact matches, in which:
23 unique CDR3
3 unique J



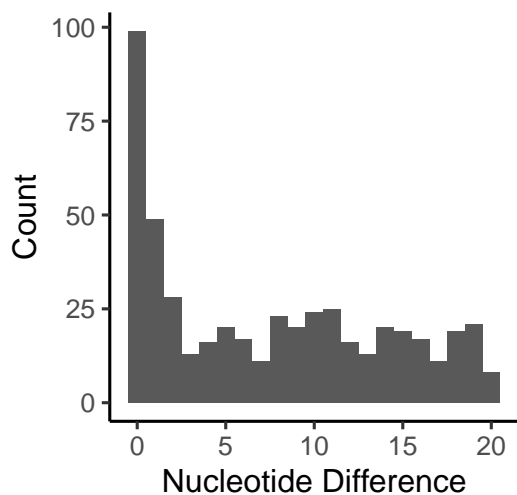
IGHV3-53*04

132 sequences assigned
31 (23.5%) exact matches, in which:
31 unique CDR3
5 unique J



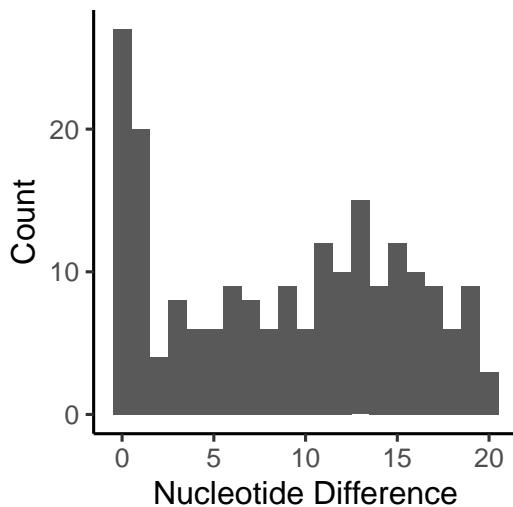
IGHV3-48*01

611 sequences assigned
99 (16.2%) exact matches, in which:
96 unique CDR3
5 unique J



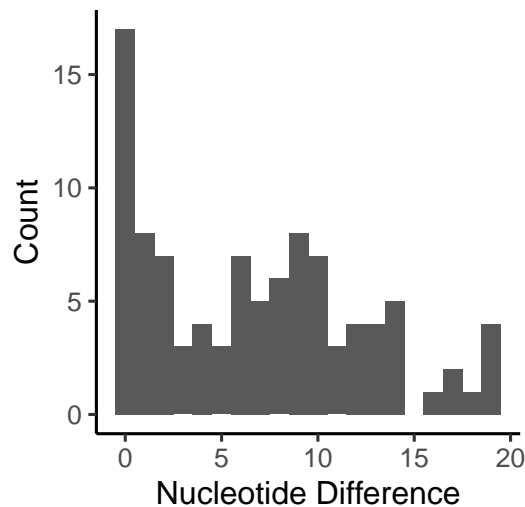
IGHV3-49*04

299 sequences assigned
27 (9%) exact matches, in which:
27 unique CDR3
4 unique J



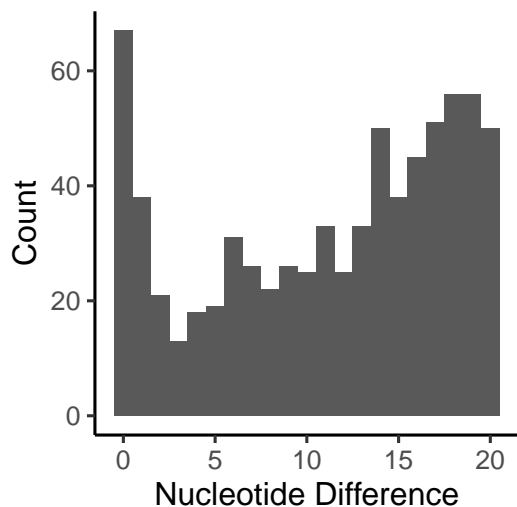
IGHV3-64*01

148 sequences assigned
17 (11.5%) exact matches, in which:
16 unique CDR3
4 unique J



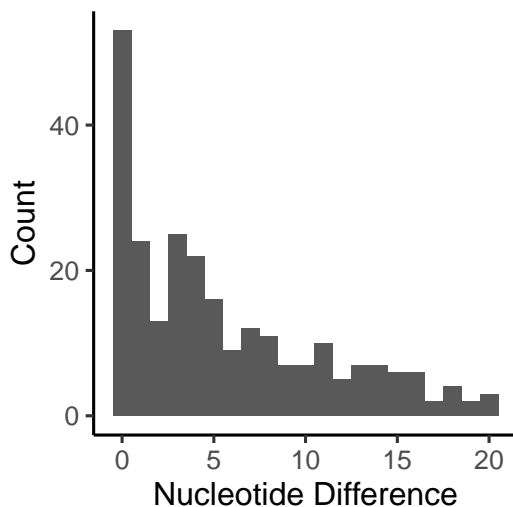
IGHV3-48*02

987 sequences assigned
67 (6.8%) exact matches, in which:
66 unique CDR3
5 unique J



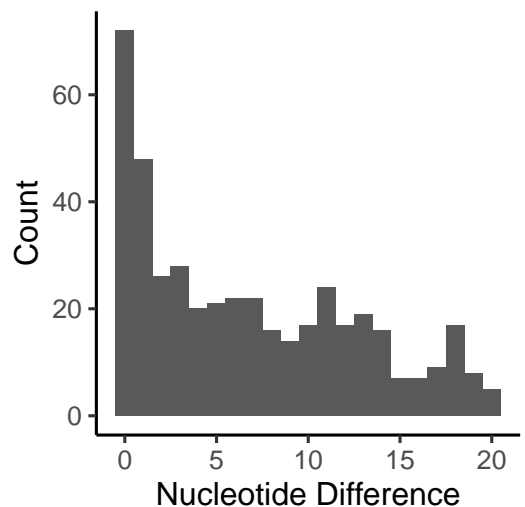
IGHV3-53*01

322 sequences assigned
53 (16.5%) exact matches, in which:
52 unique CDR3
5 unique J



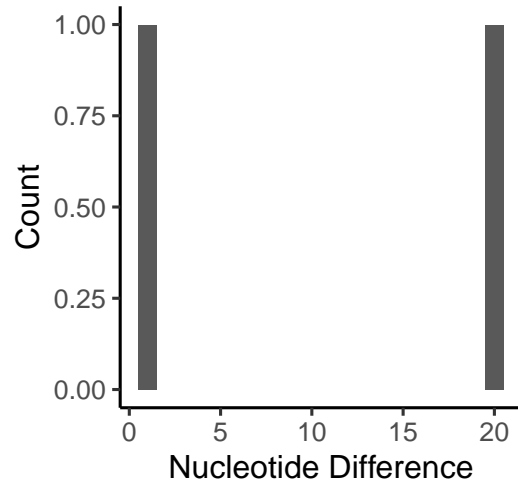
IGHV3-66*01

613 sequences assigned
72 (11.7%) exact matches, in which:
70 unique CDR3
5 unique J



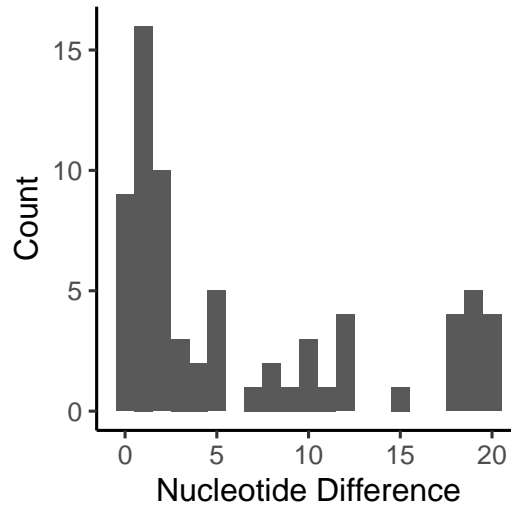
IGHV3-69-1*02

4 sequences assigned
No exact matches.



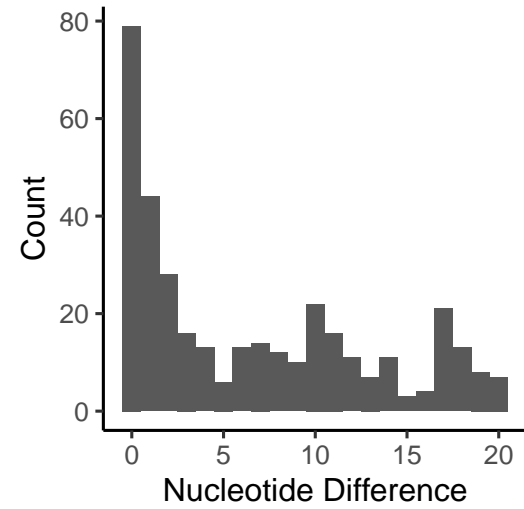
IGHV3-73*02

107 sequences assigned
9 (8.4%) exact matches, in which:
9 unique CDR3
3 unique J



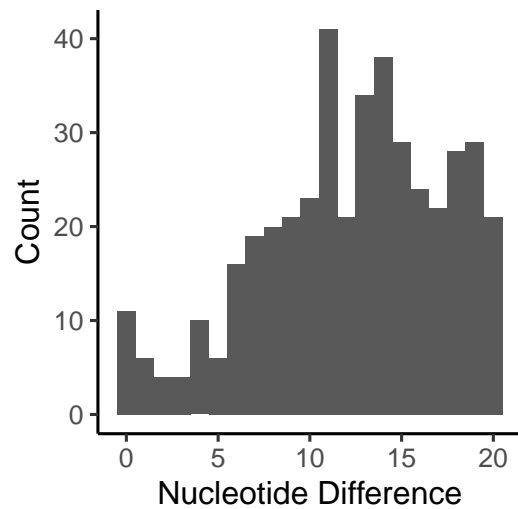
IGHV3-64D*09

455 sequences assigned
79 (17.4%) exact matches, in which:
74 unique CDR3
6 unique J



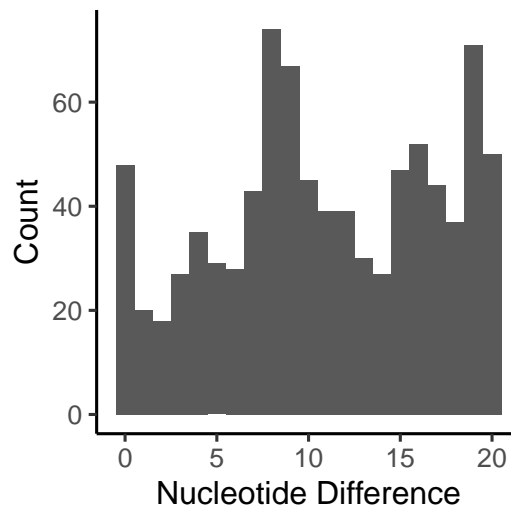
IGHV3-72*01

495 sequences assigned
11 (2.2%) exact matches, in which:
9 unique CDR3
3 unique J



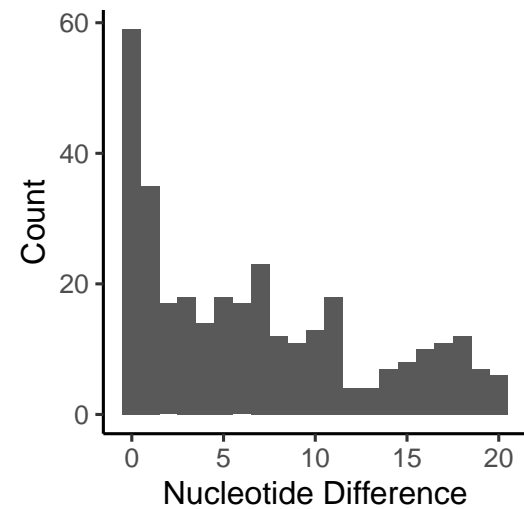
IGHV3-74*01

1245 sequences assigned
48 (3.9%) exact matches, in which:
46 unique CDR3
6 unique J



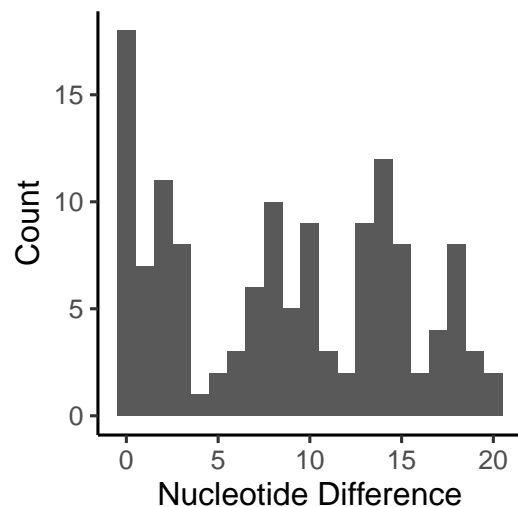
IGHV4-4*07

443 sequences assigned
59 (13.3%) exact matches, in which:
56 unique CDR3
5 unique J



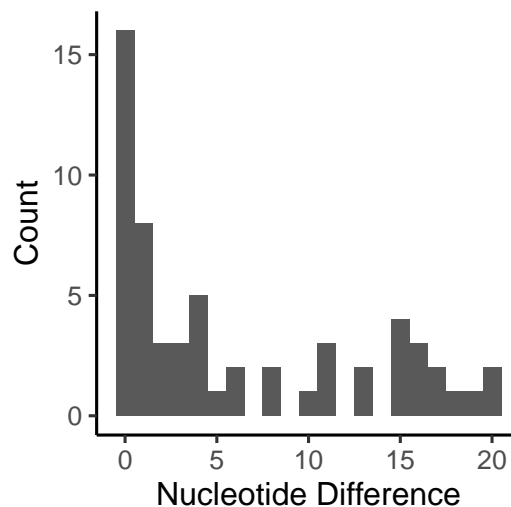
IGHV3-73*01

172 sequences assigned
18 (10.5%) exact matches, in which:
17 unique CDR3
4 unique J



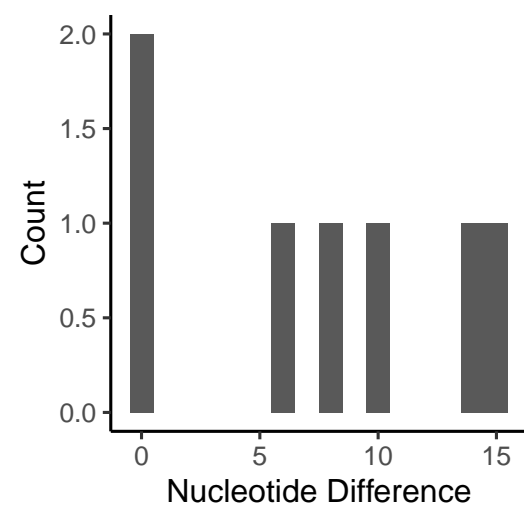
IGHV3-43D*03

78 sequences assigned
16 (20.5%) exact matches, in which:
16 unique CDR3
5 unique J



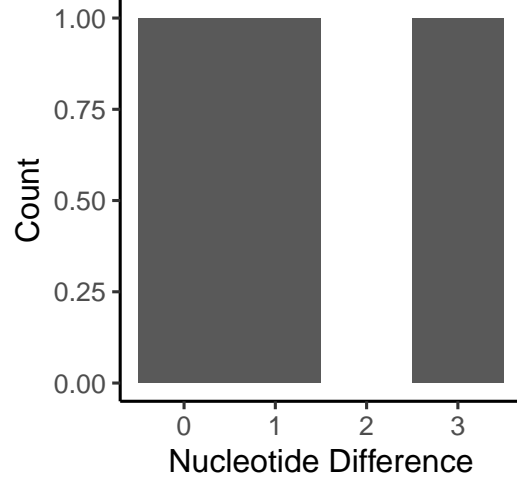
IGHV4-28*01

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



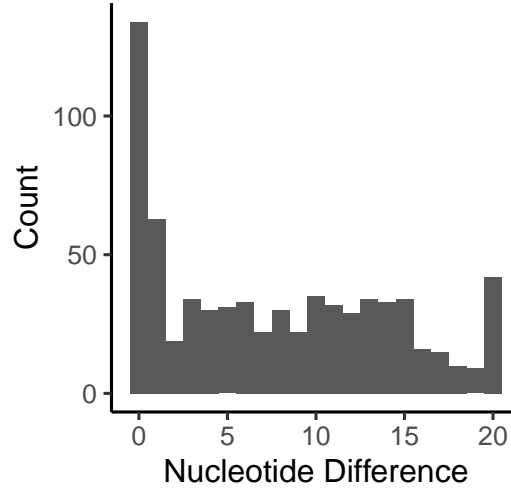
IGHV4-28*03

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



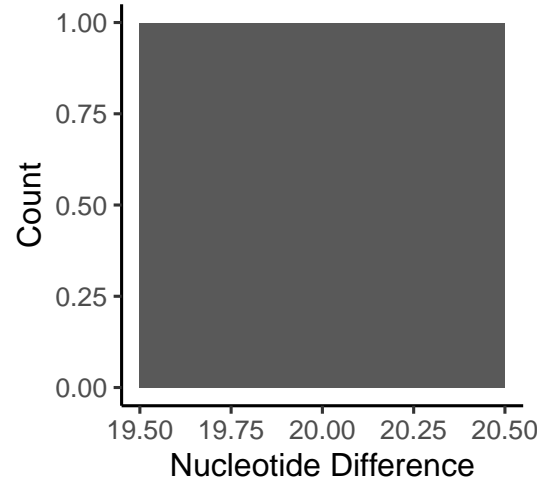
IGHV4-38-2*02

917 sequences assigned
134 (14.6%) exact matches, in which:
132 unique CDR3
6 unique J



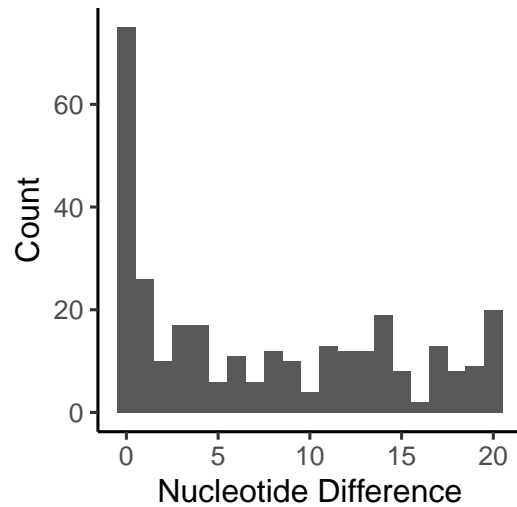
IGHV4-55*01

1 sequences assigned
No exact matches.



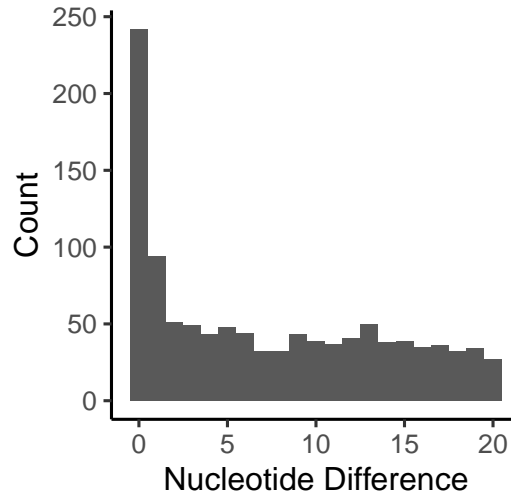
IGHV4-31*03

527 sequences assigned
75 (14.2%) exact matches, in which:
73 unique CDR3
5 unique J



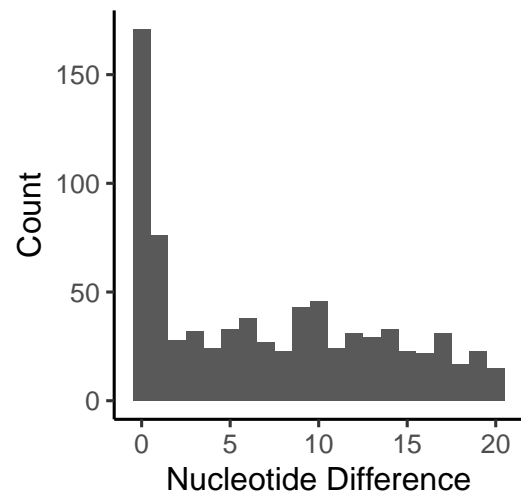
IGHV4-39*01

1507 sequences assigned
242 (16.1%) exact matches, in which:
239 unique CDR3
6 unique J



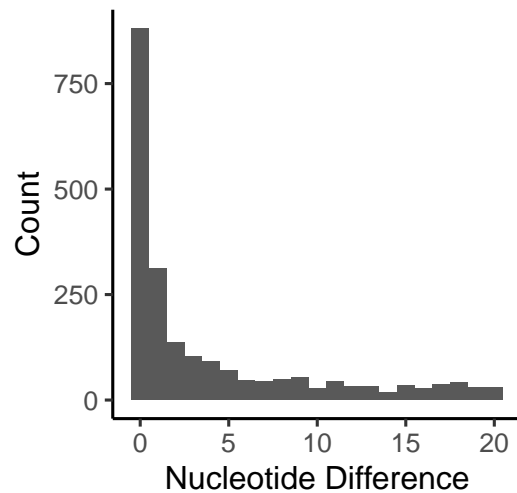
IGHV4-59*01

1144 sequences assigned
171 (14.9%) exact matches, in which:
170 unique CDR3
6 unique J



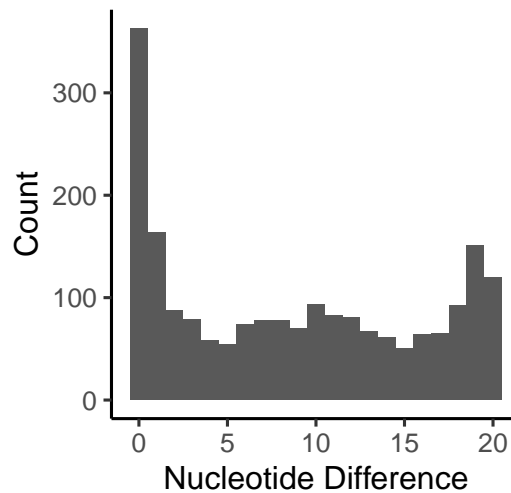
IGHV4-34*01

2576 sequences assigned
881 (34.2%) exact matches, in which:
829 unique CDR3
6 unique J



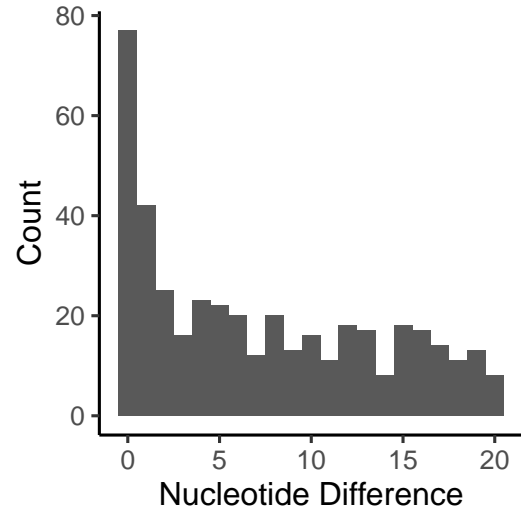
IGHV4-39*07

3170 sequences assigned
363 (11.5%) exact matches, in which:
354 unique CDR3
6 unique J



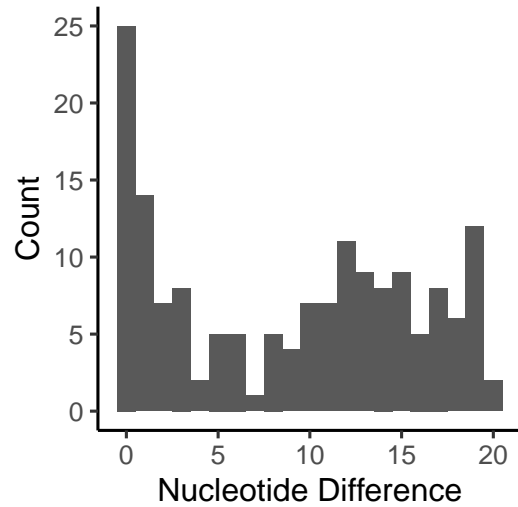
IGHV4-59*08

569 sequences assigned
77 (13.5%) exact matches, in which:
76 unique CDR3
6 unique J



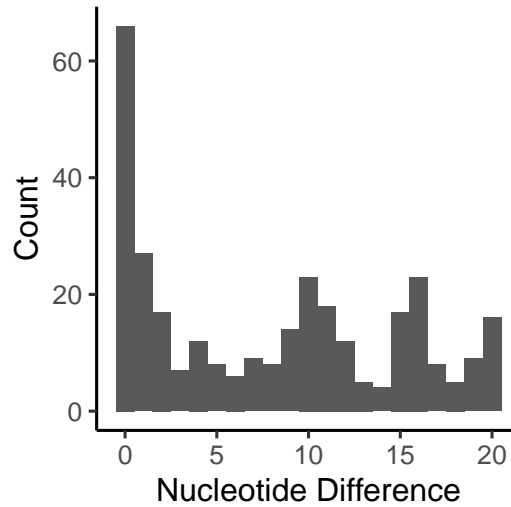
IGHV4-61*01

258 sequences assigned
25 (9.7%) exact matches, in which:
25 unique CDR3
5 unique J



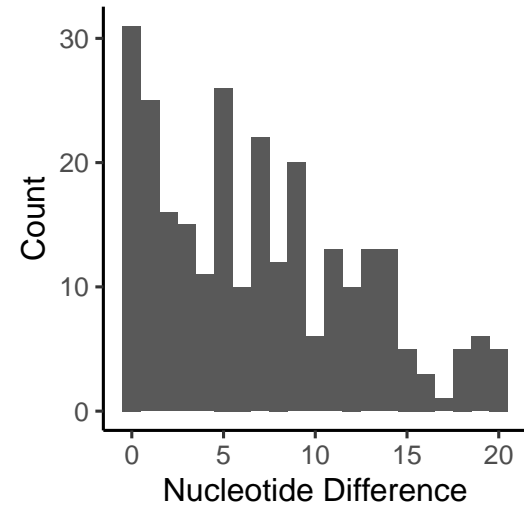
IGHV5-10-1*03

481 sequences assigned
66 (13.7%) exact matches, in which:
63 unique CDR3
6 unique J



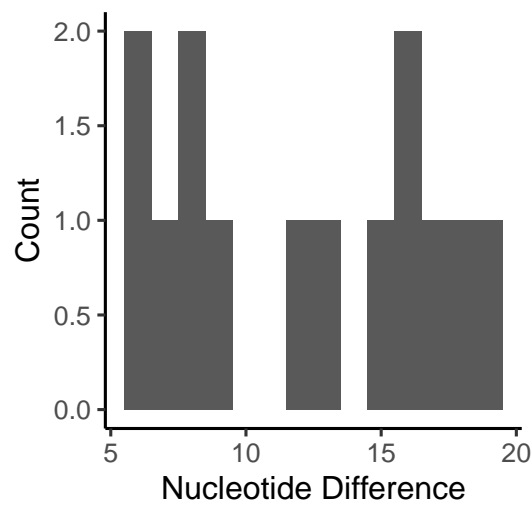
IGHV6-1*01

279 sequences assigned
31 (11.1%) exact matches, in which:
29 unique CDR3
5 unique J



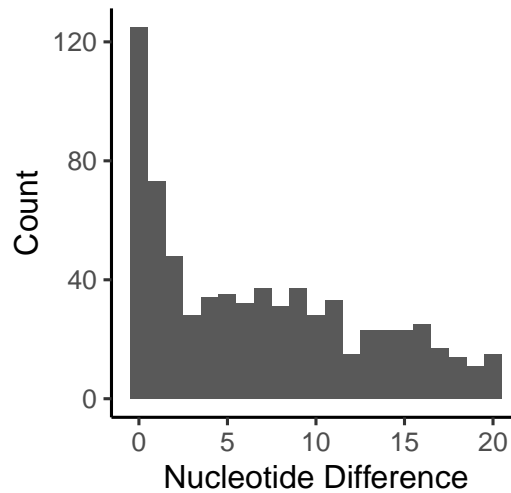
IGHV4/OR15-8*01

15 sequences assigned
No exact matches.



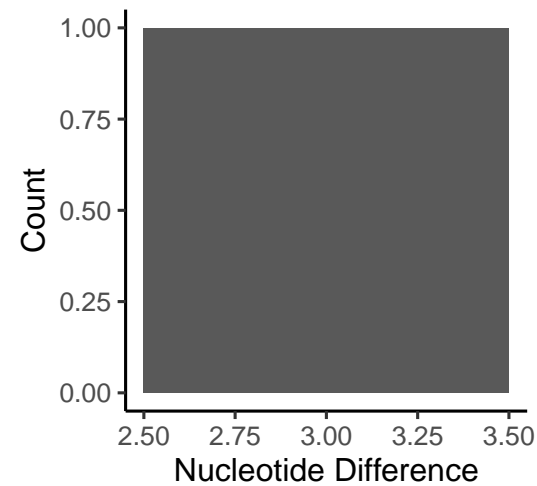
IGHV5-51*01

916 sequences assigned
125 (13.6%) exact matches, in which:
125 unique CDR3
6 unique J



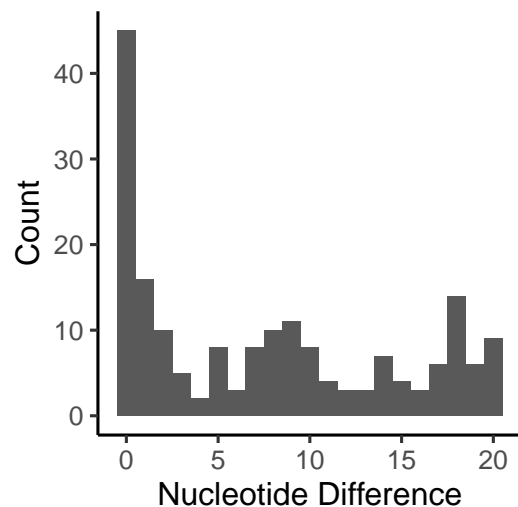
IGHV3/OR16-6*02

1 sequences assigned
No exact matches.



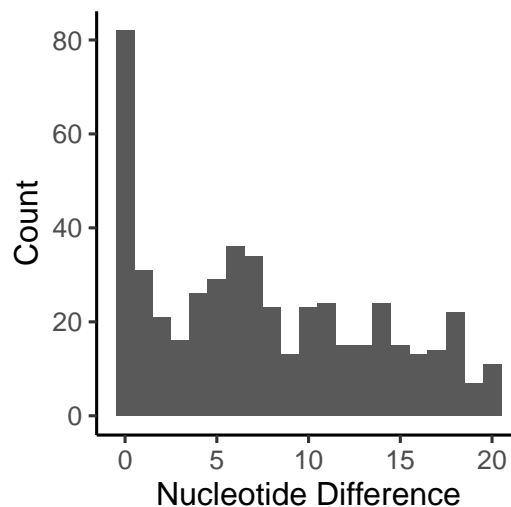
IGHV5-10-1*01

241 sequences assigned
45 (18.7%) exact matches, in which:
45 unique CDR3
6 unique J



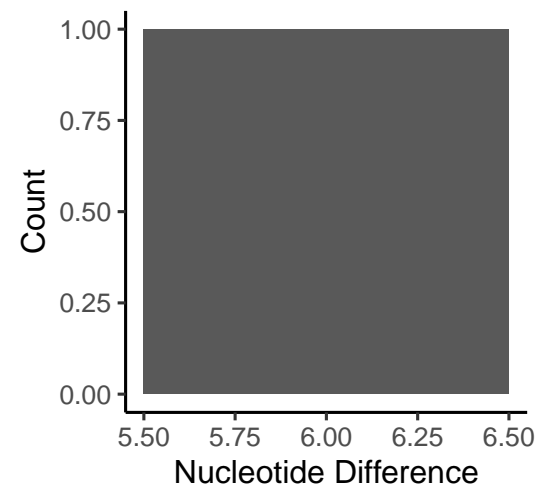
IGHV5-51*03

671 sequences assigned
82 (12.2%) exact matches, in which:
79 unique CDR3
6 unique J



IGHV3/OR16-9*01

1 sequences assigned
No exact matches.





Warning – no inferred sequences found.