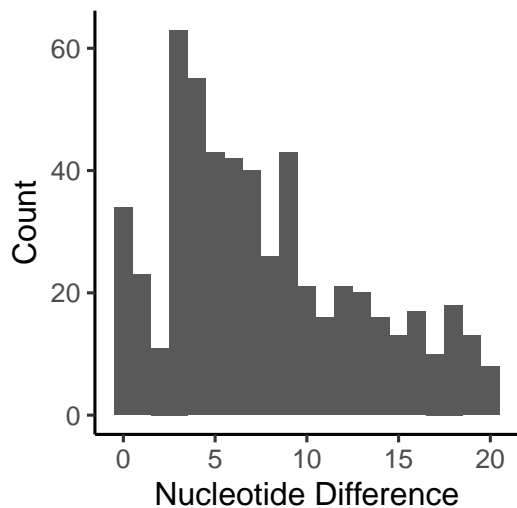


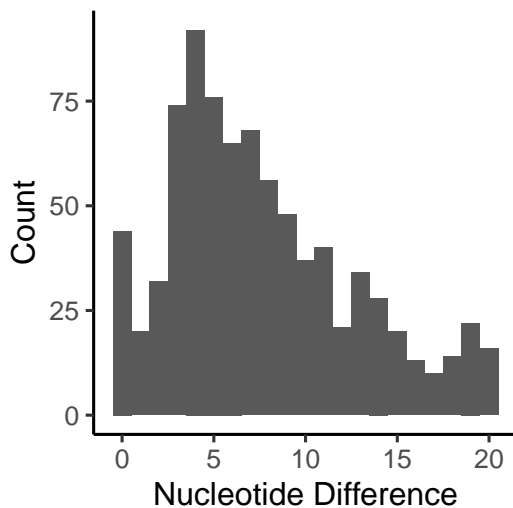
IGHV1-2*02

576 sequences assigned
34 (5.9%) exact matches, in which:
34 unique CDR3
5 unique J



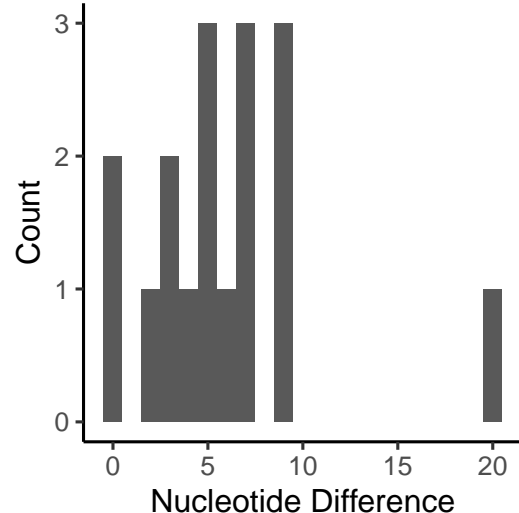
IGHV1-18*01

891 sequences assigned
44 (4.9%) exact matches, in which:
44 unique CDR3
5 unique J



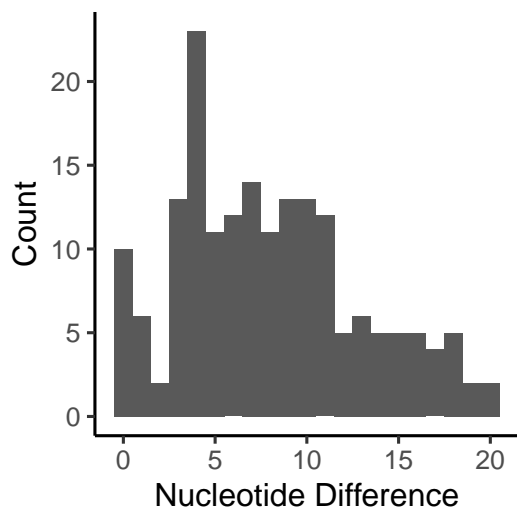
IGHV1-58*02

17 sequences assigned
2 (11.8%) exact matches, in which:
2 unique CDR3
2 unique J



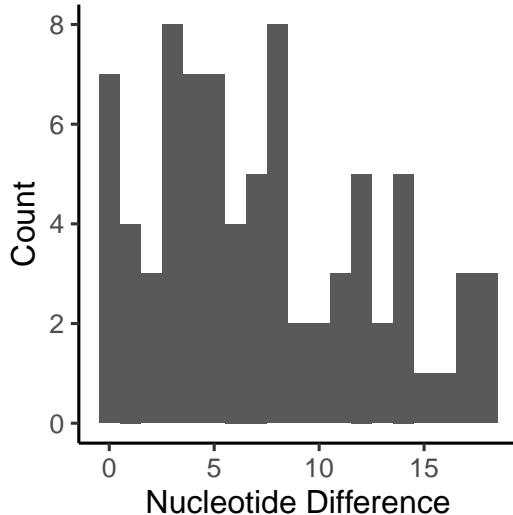
IGHV1-3*01_05

191 sequences assigned
10 (5.2%) exact matches, in which:
10 unique CDR3
3 unique J



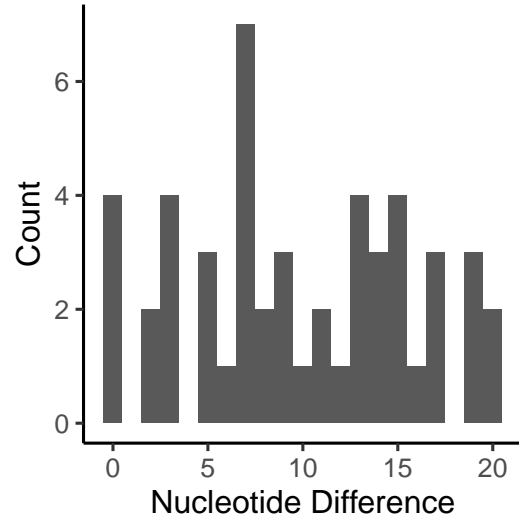
IGHV1-24*01

84 sequences assigned
7 (8.3%) exact matches, in which:
7 unique CDR3
2 unique J



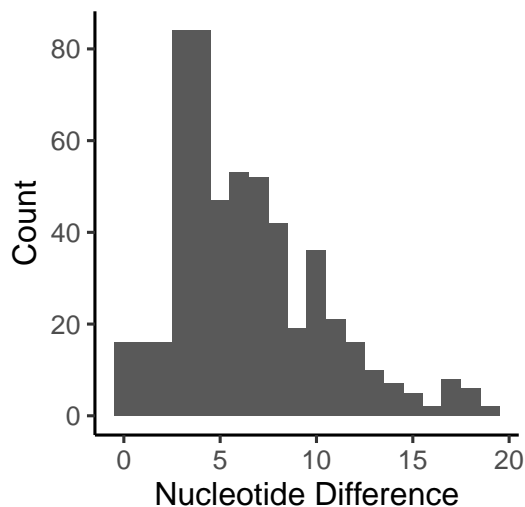
IGHV1-69*02

56 sequences assigned
4 (7.1%) exact matches, in which:
4 unique CDR3
1 unique J



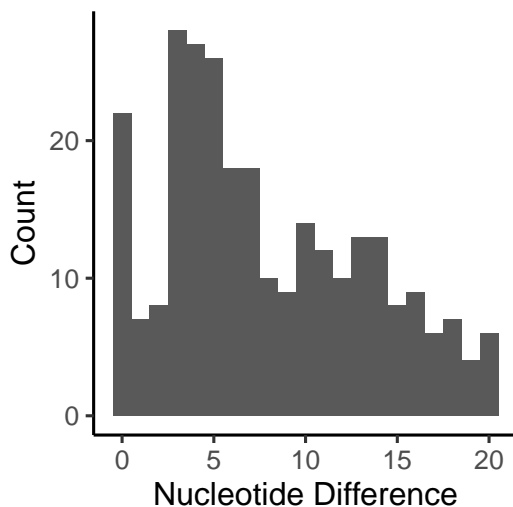
IGHV1-8*01

547 sequences assigned
16 (2.9%) exact matches, in which:
16 unique CDR3
4 unique J



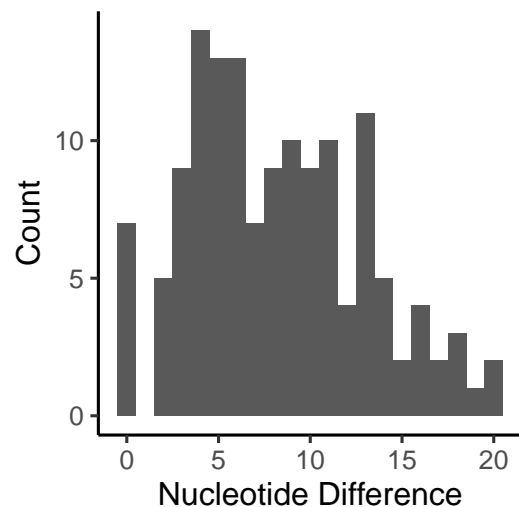
IGHV1-46*01

294 sequences assigned
22 (7.5%) exact matches, in which:
22 unique CDR3
4 unique J



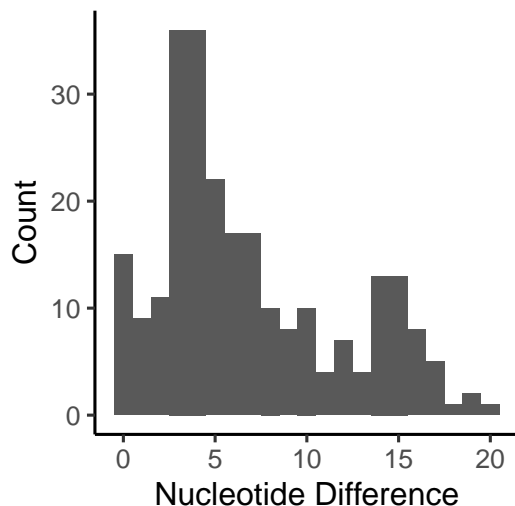
IGHV1-69*04_09

161 sequences assigned
7 (4.3%) exact matches, in which:
7 unique CDR3
3 unique J



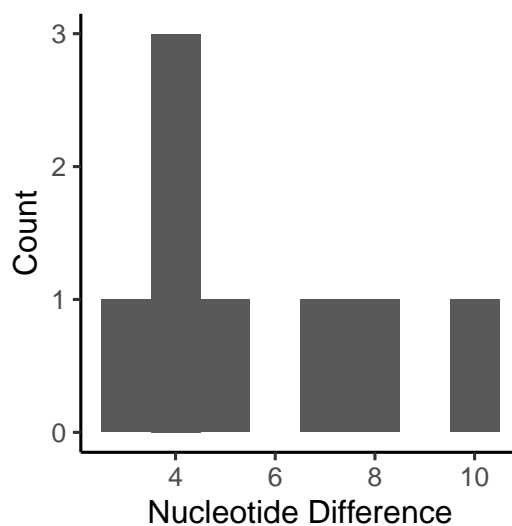
IGHV2-5*02

268 sequences assigned
15 (5.6%) exact matches, in which:
15 unique CDR3
5 unique J



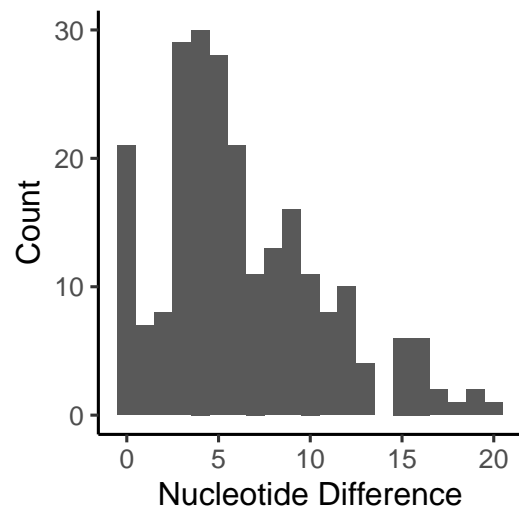
IGHV2-70D*04

8 sequences assigned
No exact matches.



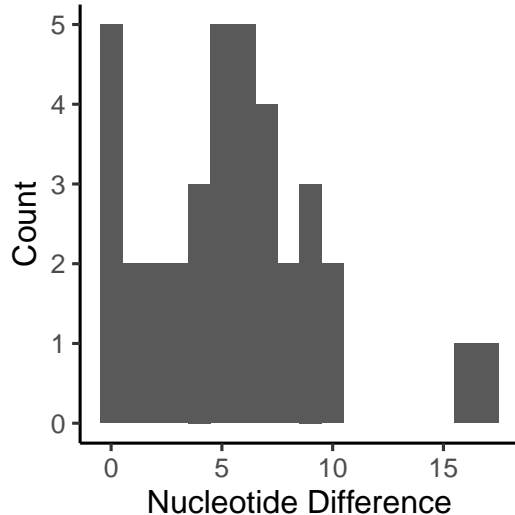
IGHV3-9*01

253 sequences assigned
21 (8.3%) exact matches, in which:
17 unique CDR3
4 unique J



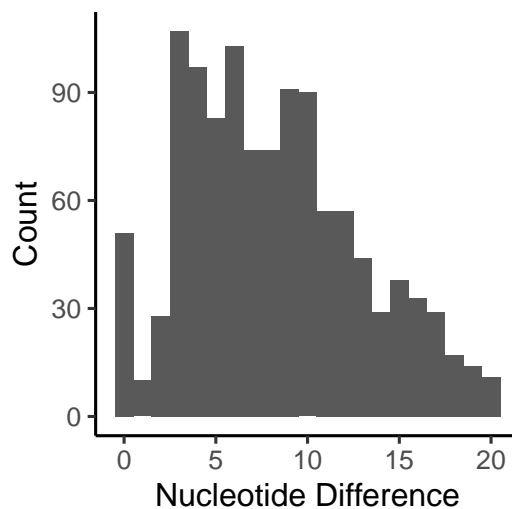
IGHV2-26*01

37 sequences assigned
5 (13.5%) exact matches, in which:
5 unique CDR3
3 unique J



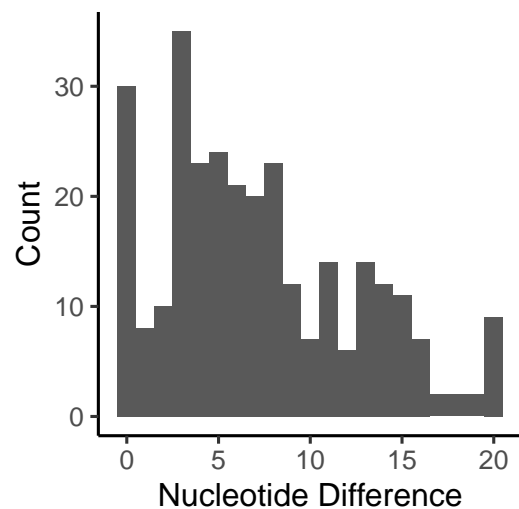
IGHV3-7*01

1172 sequences assigned
51 (4.4%) exact matches, in which:
33 unique CDR3
5 unique J



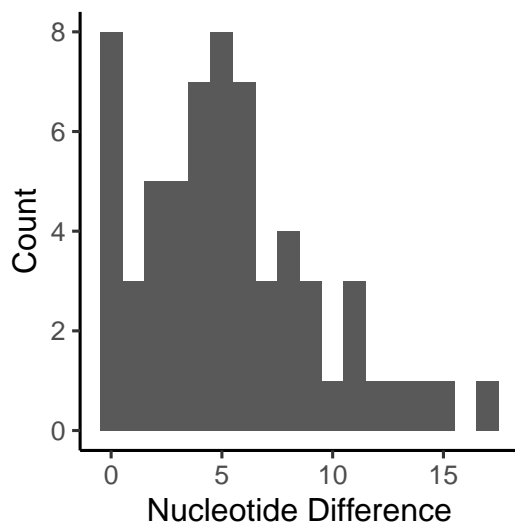
IGHV3-11*01

311 sequences assigned
30 (9.6%) exact matches, in which:
19 unique CDR3
4 unique J



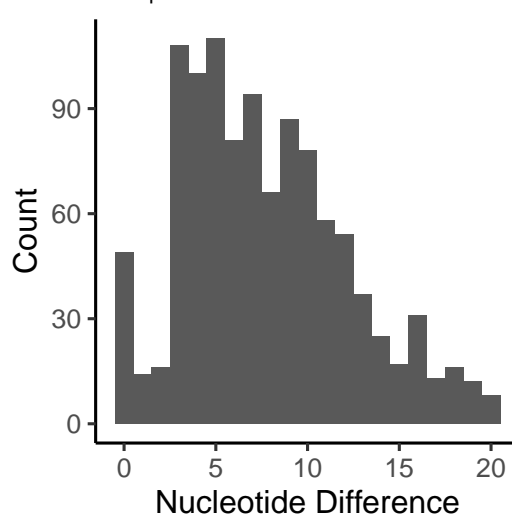
IGHV2-70*11_15

63 sequences assigned
8 (12.7%) exact matches, in which:
8 unique CDR3
3 unique J



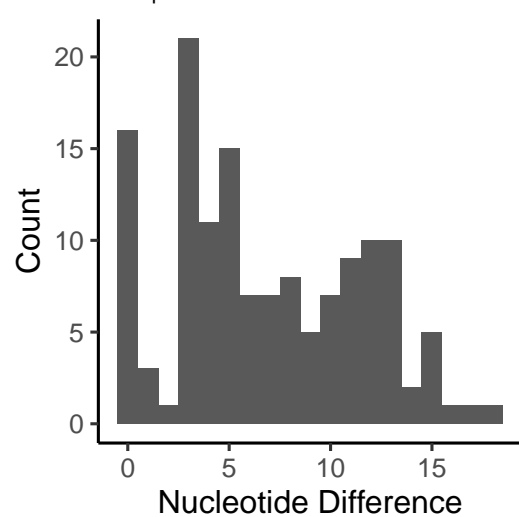
IGHV3-7*03

1090 sequences assigned
49 (4.5%) exact matches, in which:
28 unique CDR3
4 unique J



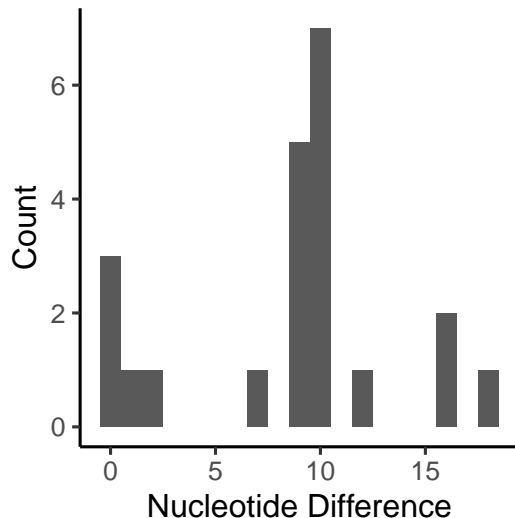
IGHV3-11*06

141 sequences assigned
16 (11.3%) exact matches, in which:
10 unique CDR3
4 unique J



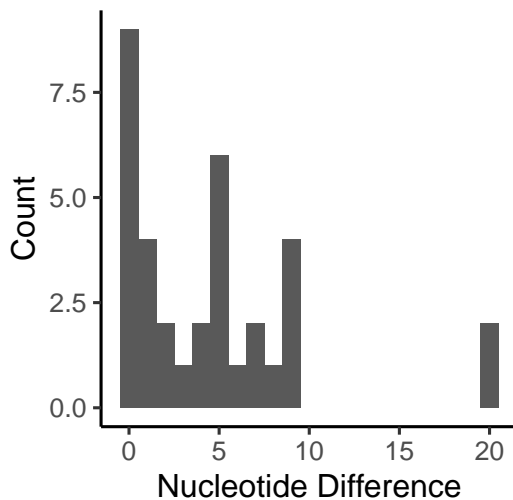
IGHV3-13*01

23 sequences assigned
3 (13%) exact matches, in which:
2 unique CDR3
2 unique J



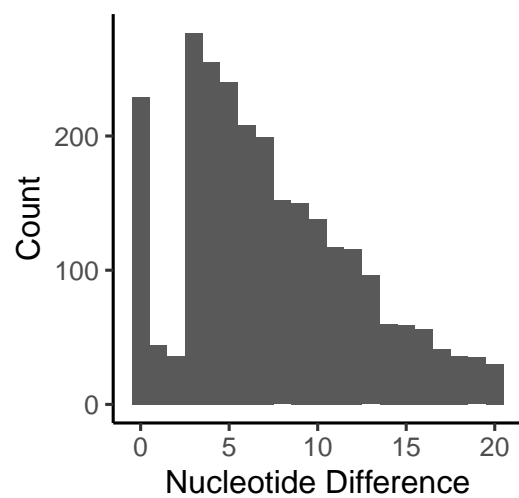
IGHV3-20*01_02

34 sequences assigned
9 (26.5%) exact matches, in which:
5 unique CDR3
3 unique J



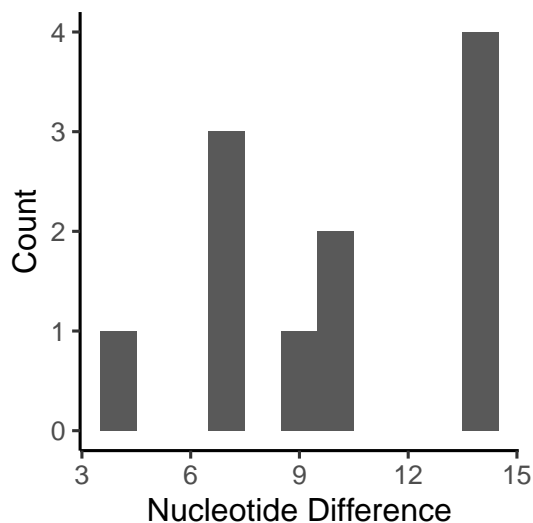
IGHV3-23*01_04

2747 sequences assigned
229 (8.3%) exact matches, in which:
151 unique CDR3
5 unique J



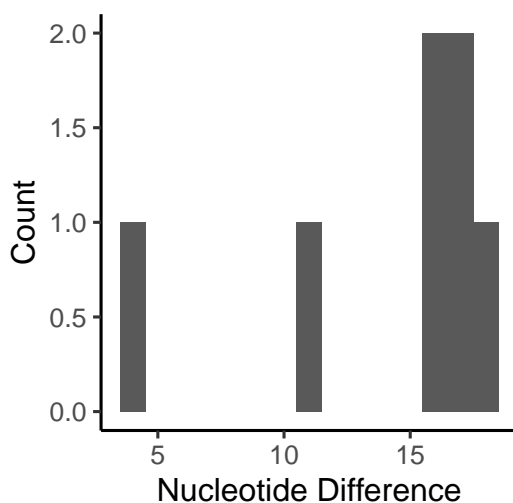
IGHV3-13*05

11 sequences assigned
No exact matches.



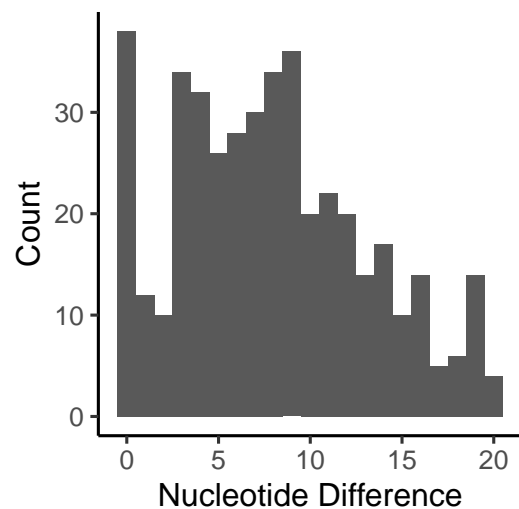
IGHV3-20*03_04

8 sequences assigned
No exact matches.



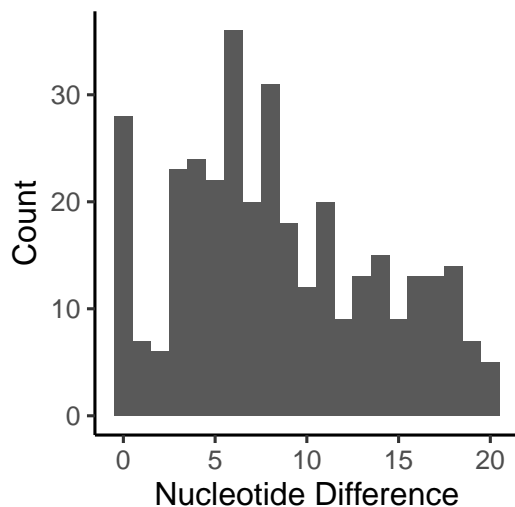
IGHV3-30-3*01

446 sequences assigned
38 (8.5%) exact matches, in which:
29 unique CDR3
6 unique J



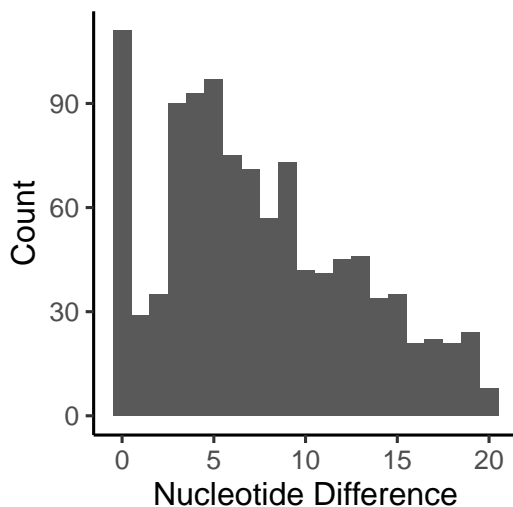
IGHV3-15*01_02

361 sequences assigned
28 (7.8%) exact matches, in which:
20 unique CDR3
4 unique J



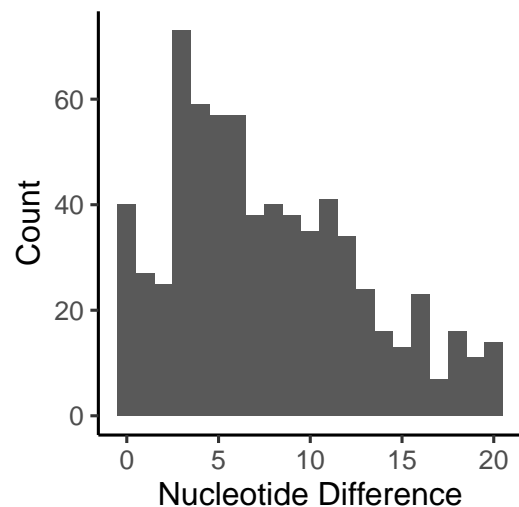
IGHV3-21*01_02

1128 sequences assigned
111 (9.8%) exact matches, in which:
68 unique CDR3
5 unique J



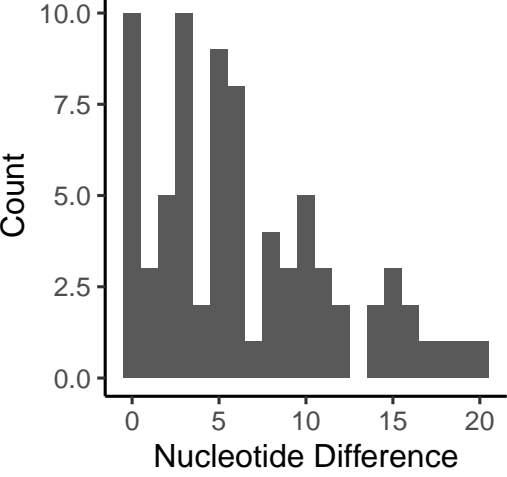
IGHV3-33*01

715 sequences assigned
40 (5.6%) exact matches, in which:
28 unique CDR3
4 unique J



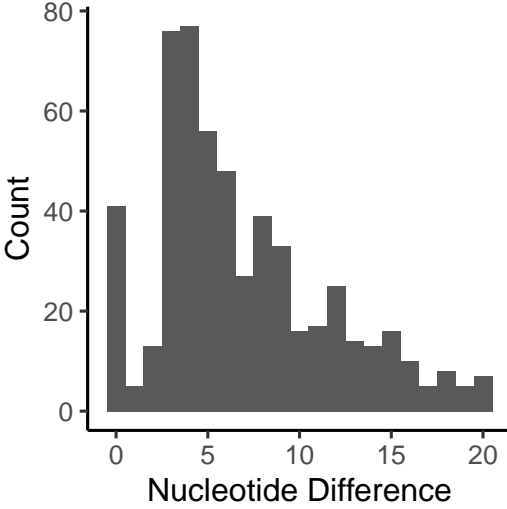
IGHV3-43*01

112 sequences assigned
10 (8.9%) exact matches, in which:
5 unique CDR3
2 unique J



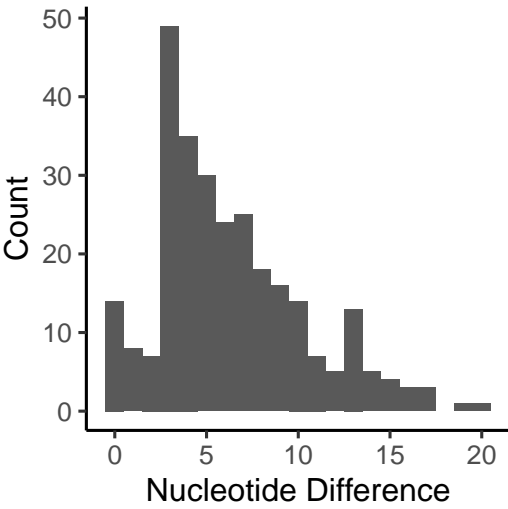
IGHV3-53*01_02

575 sequences assigned
41 (7.1%) exact matches, in which:
28 unique CDR3
3 unique J



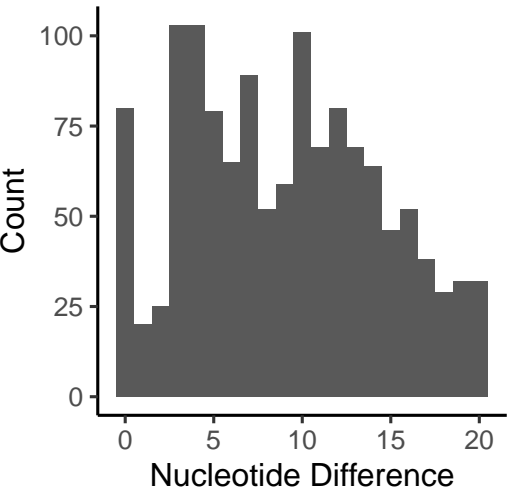
IGHV3-66*01

290 sequences assigned
14 (4.8%) exact matches, in which:
8 unique CDR3
3 unique J



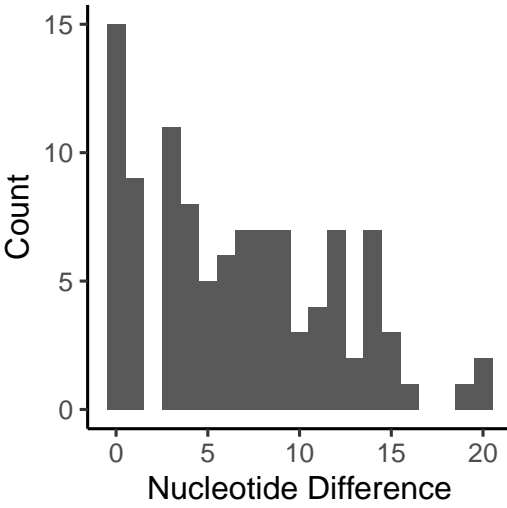
IGHV3-48*02

1393 sequences assigned
80 (5.7%) exact matches, in which:
46 unique CDR3
6 unique J



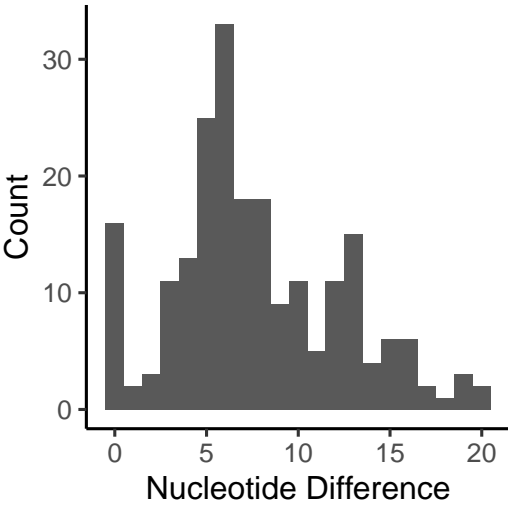
IGHV3-64*01

111 sequences assigned
15 (13.5%) exact matches, in which:
8 unique CDR3
3 unique J



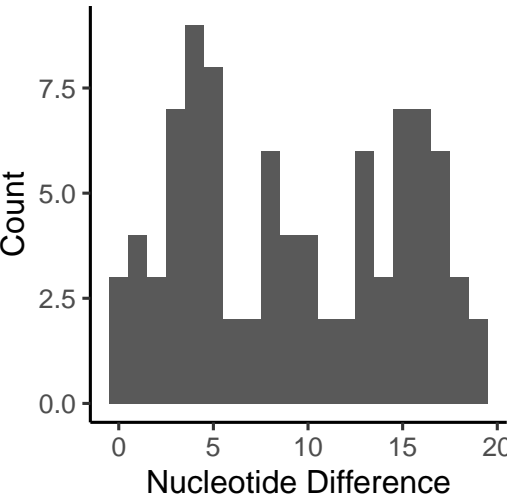
IGHV3-66*02

234 sequences assigned
16 (6.8%) exact matches, in which:
11 unique CDR3
4 unique J



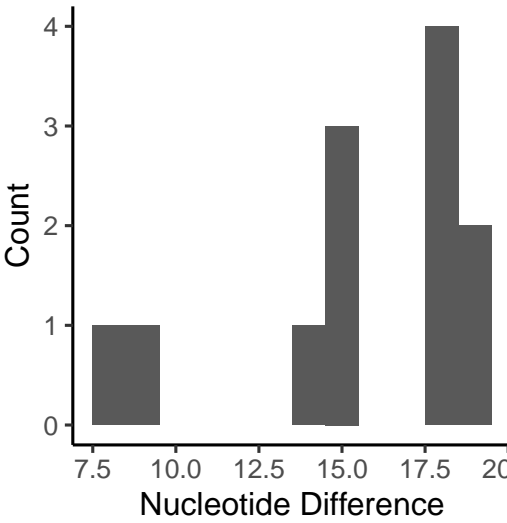
IGHV3-49*03_05

93 sequences assigned
3 (3.2%) exact matches, in which:
2 unique CDR3
2 unique J



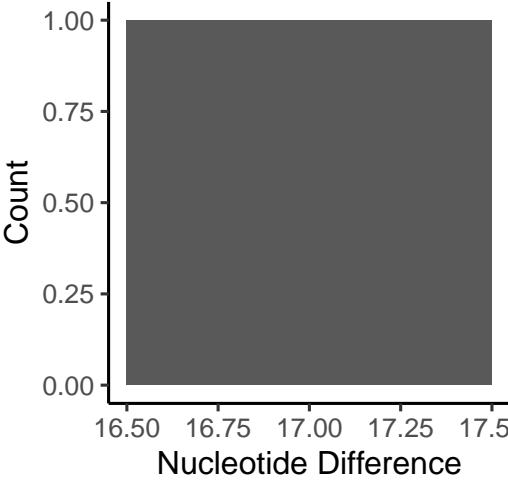
IGHV3-64*02_07

17 sequences assigned
No exact matches.



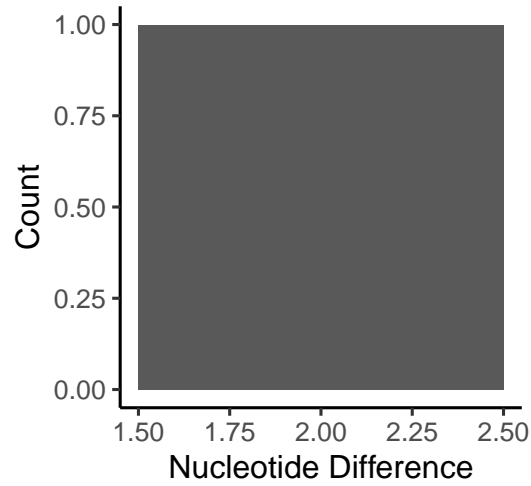
IGHV3-69-1*01

1 sequences assigned
No exact matches.



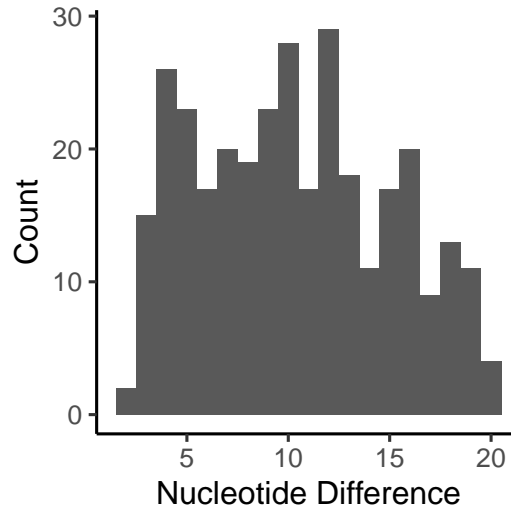
IGHV3-69-1*02

3 sequences assigned
No exact matches.



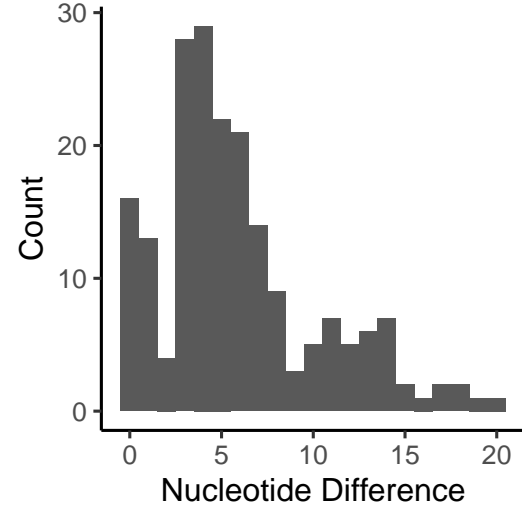
IGHV3-74*03

338 sequences assigned
No exact matches.



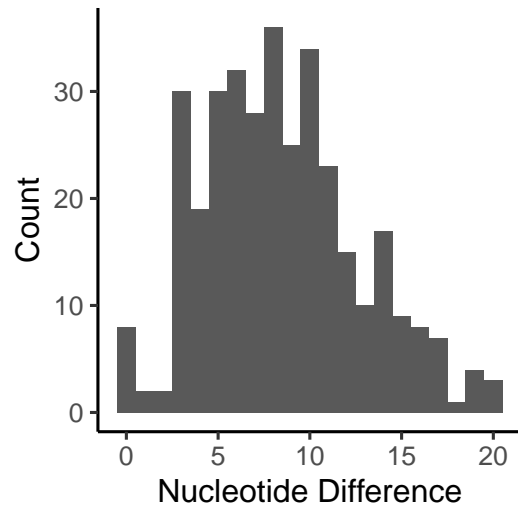
IGHV4-4*07

204 sequences assigned
16 (7.8%) exact matches, in which:
14 unique CDR3
4 unique J



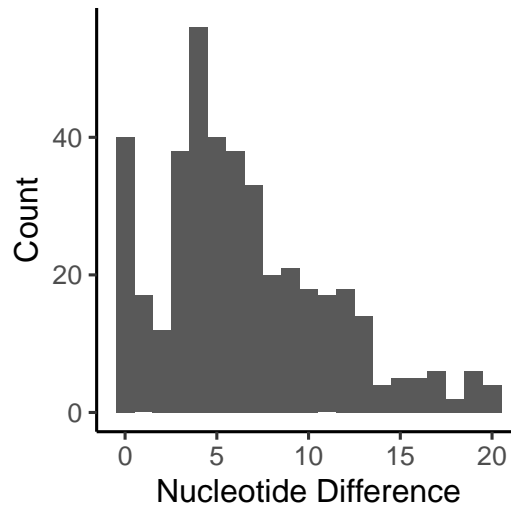
IGHV3-72*01

354 sequences assigned
8 (2.3%) exact matches, in which:
5 unique CDR3
2 unique J



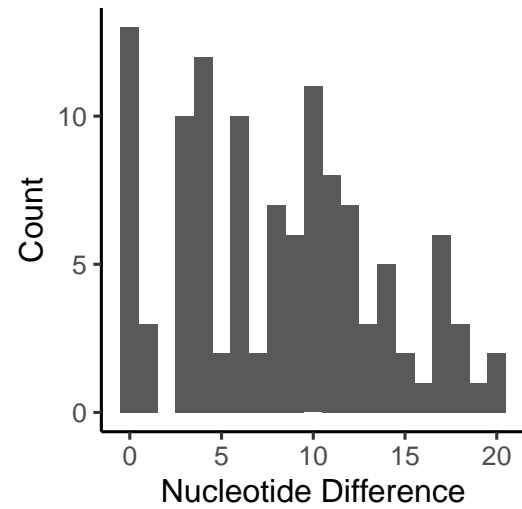
IGHV3-74*01_02

423 sequences assigned
40 (9.5%) exact matches, in which:
29 unique CDR3
5 unique J



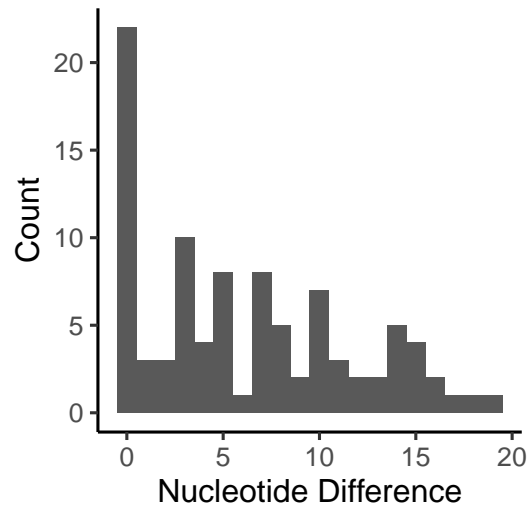
IGHV4-4*02_03

136 sequences assigned
13 (9.6%) exact matches, in which:
9 unique CDR3
4 unique J



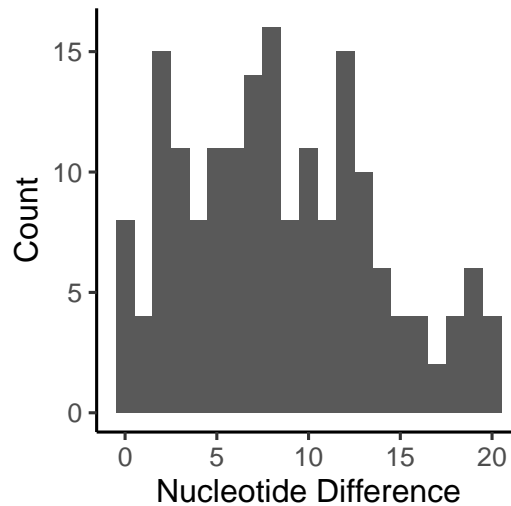
IGHV3-73*01_02

96 sequences assigned
22 (22.9%) exact matches, in which:
11 unique CDR3
4 unique J



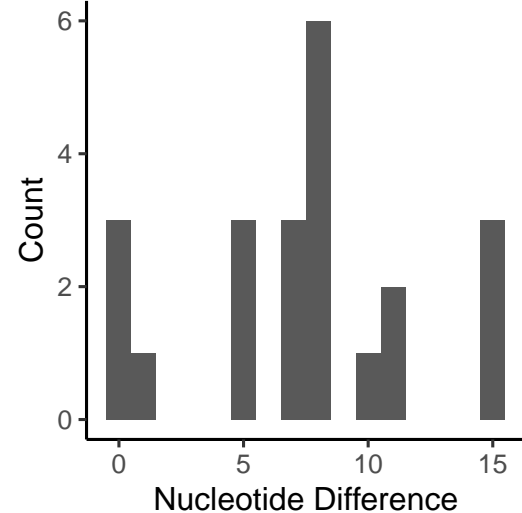
IGHV3-64D*09

187 sequences assigned
8 (4.3%) exact matches, in which:
7 unique CDR3
3 unique J



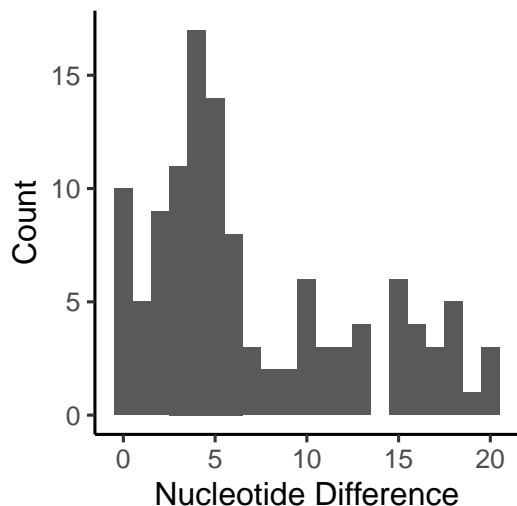
IGHV4-28*01_07

24 sequences assigned
3 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



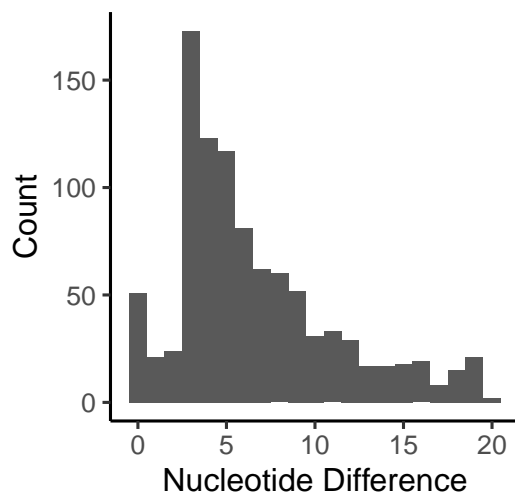
IGHV4-30-4*01

195 sequences assigned
10 (5.1%) exact matches, in which:
8 unique CDR3
5 unique J



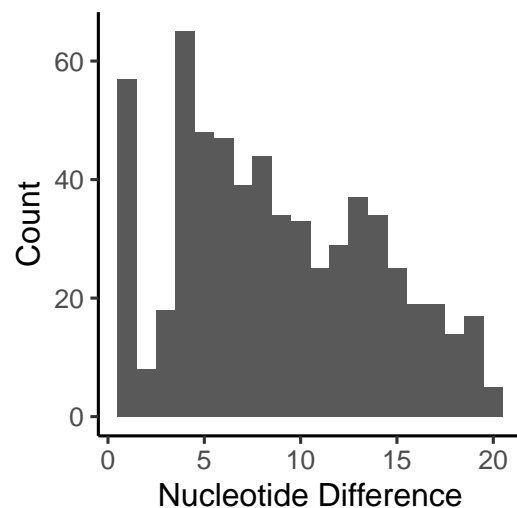
IGHV4-34*01_02

1012 sequences assigned
51 (5%) exact matches, in which:
38 unique CDR3
5 unique J



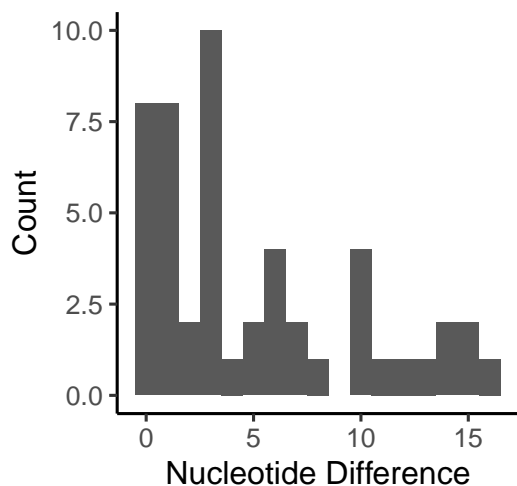
IGHV4-39*02

702 sequences assigned
No exact matches.



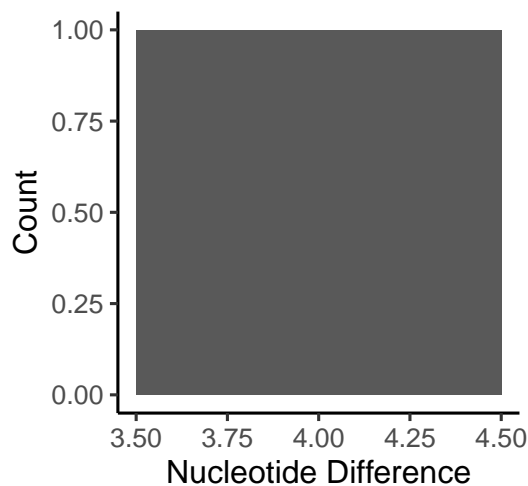
IGHV4-30-2*01

52 sequences assigned
8 (15.4%) exact matches, in which:
6 unique CDR3
3 unique J



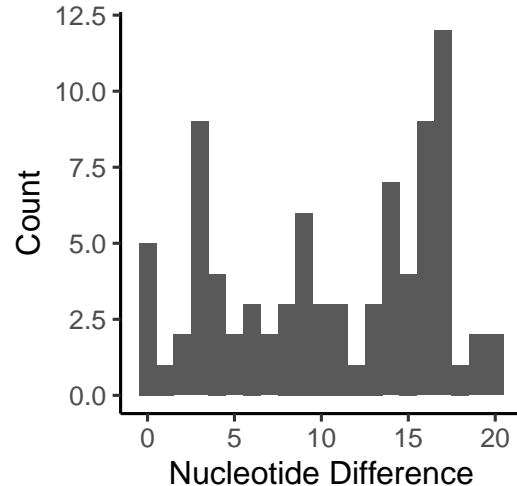
IGHV4-38-2*01

2 sequences assigned
No exact matches.



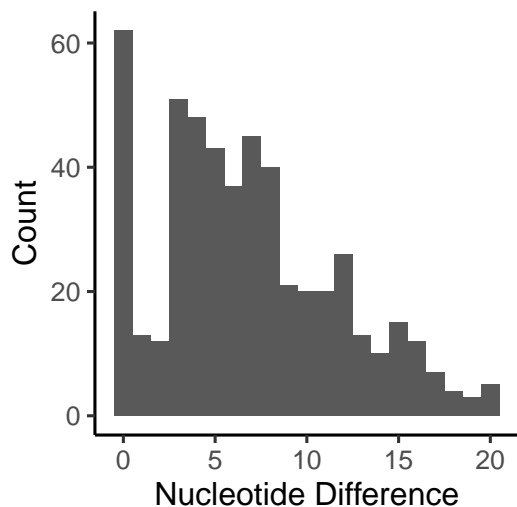
IGHV4-39*01_05

92 sequences assigned
5 (5.4%) exact matches, in which:
4 unique CDR3
1 unique J



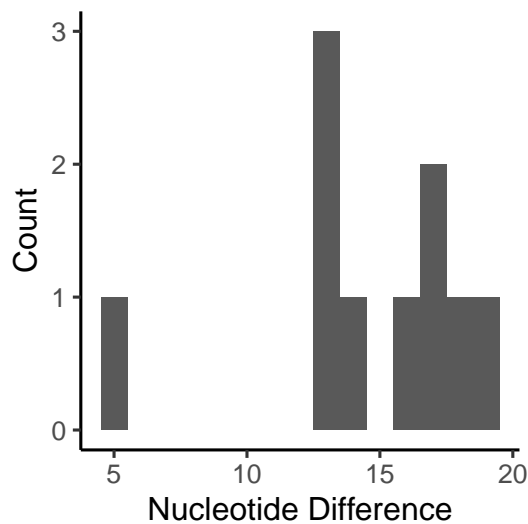
IGHV4-31*02

526 sequences assigned
62 (11.8%) exact matches, in which:
48 unique CDR3
5 unique J



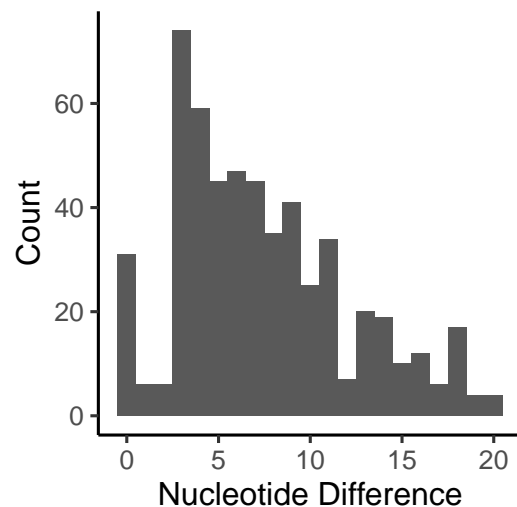
IGHV4-38-2*02

12 sequences assigned
No exact matches.



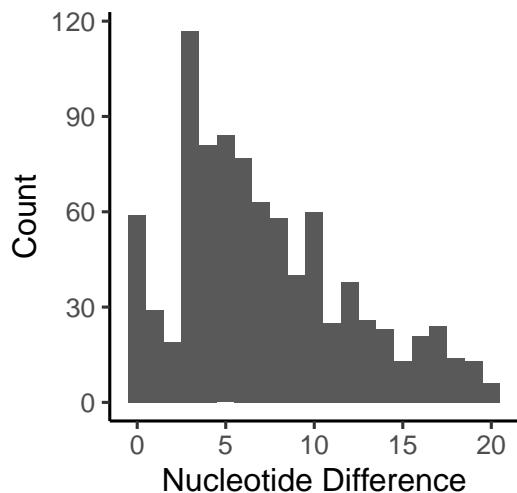
IGHV4-59*08

559 sequences assigned
31 (5.5%) exact matches, in which:
22 unique CDR3
5 unique J



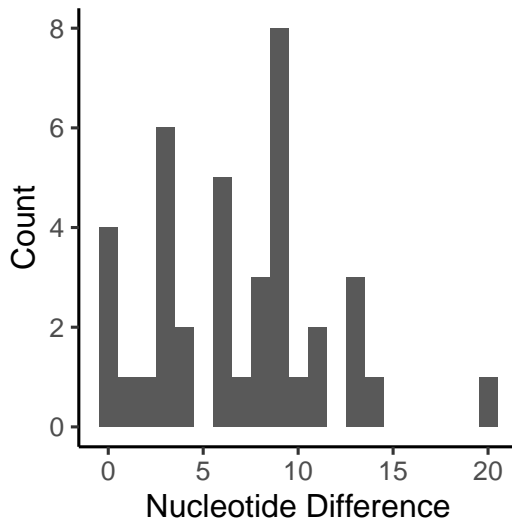
IGHV4-59*01_07

926 sequences assigned
59 (6.4%) exact matches, in which:
45 unique CDR3
5 unique J



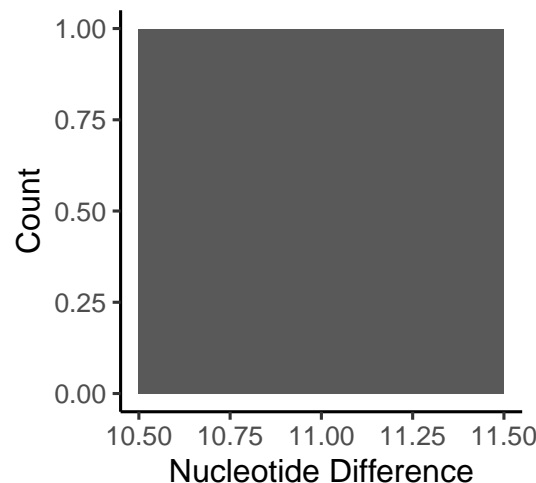
IGHV5-10-1*01_03

40 sequences assigned
4 (10%) exact matches, in which:
4 unique CDR3
3 unique J



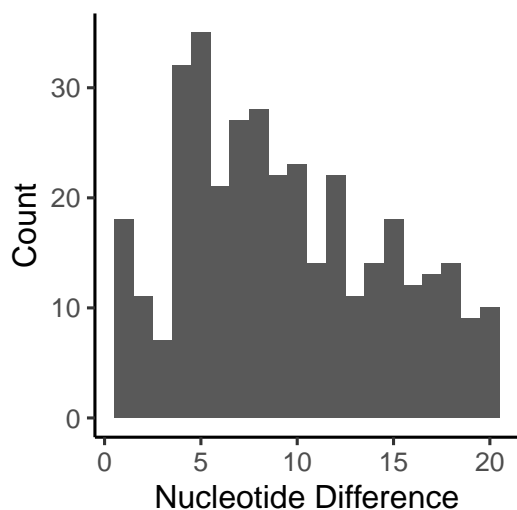
IGHV7-4-1*01

1 sequences assigned
No exact matches.



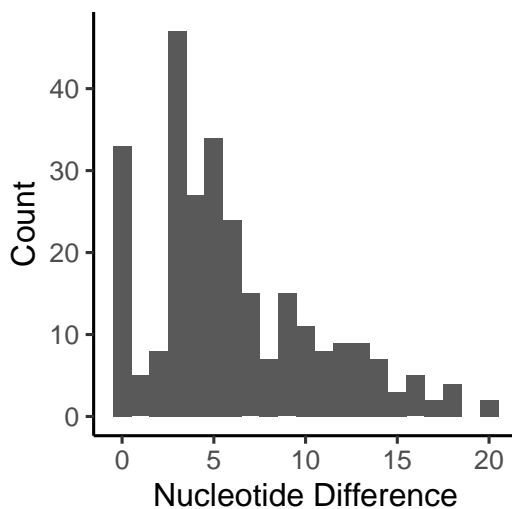
IGHV4-59*11

381 sequences assigned
No exact matches.



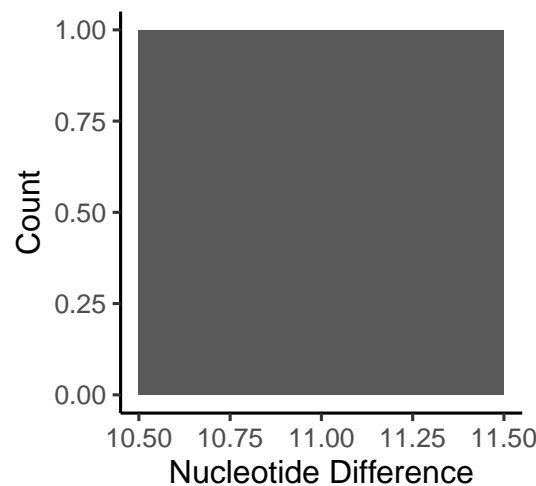
IGHV5-51*07_A128G

276 sequences assigned
33 (12%) exact matches, in which:
32 unique CDR3
5 unique J



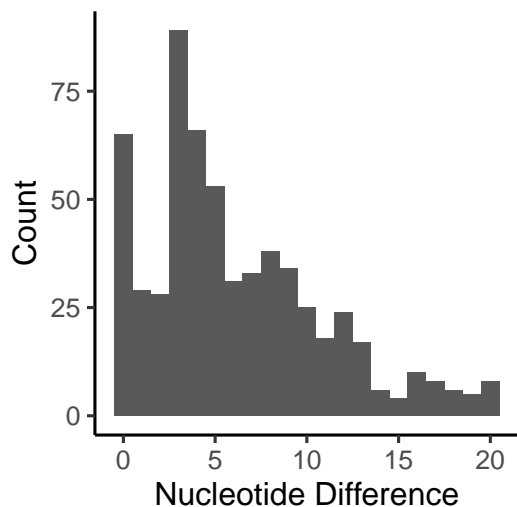
IGHV7-4-1*02

1 sequences assigned
No exact matches.



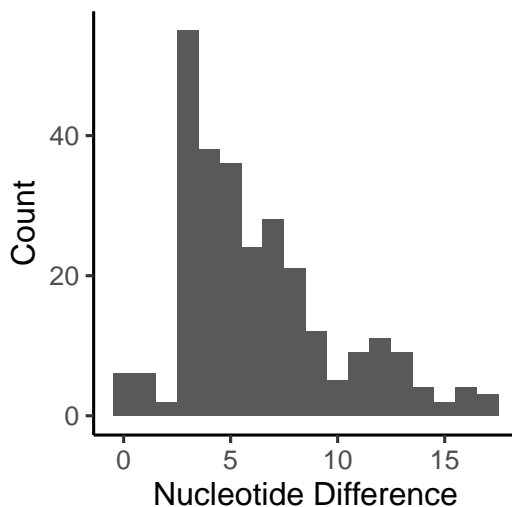
IGHV4-61*02

624 sequences assigned
65 (10.4%) exact matches, in which:
55 unique CDR3
6 unique J



IGHV6-1*01_02

279 sequences assigned
6 (2.2%) exact matches, in which:
5 unique CDR3
3 unique J





Warning – no inferred sequences found.