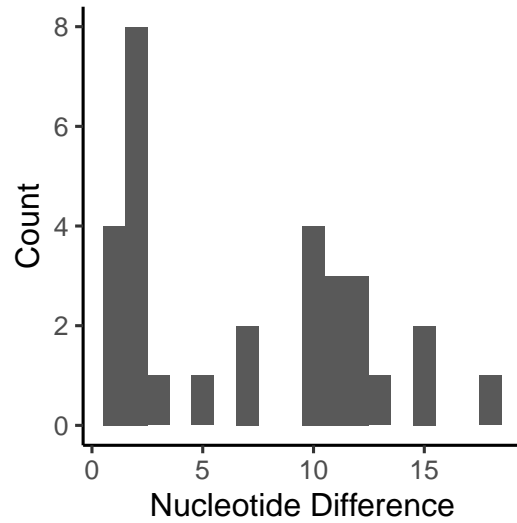


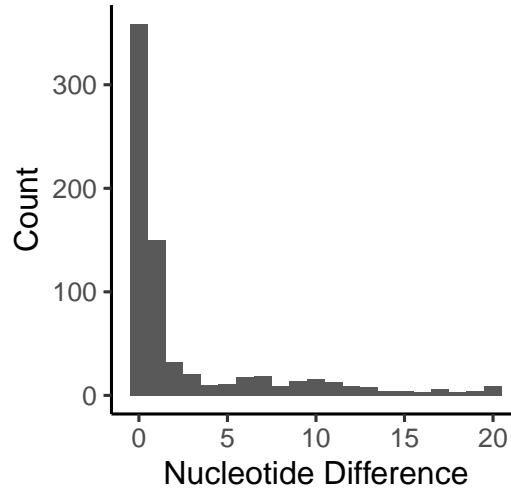
IGHV1-2*02

34 sequences assigned
No exact matches.



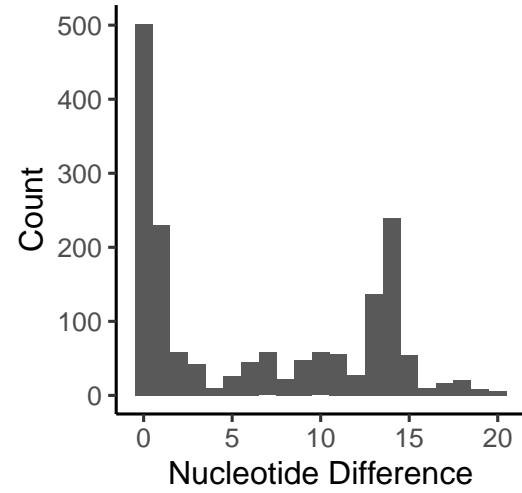
IGHV1-3*01_05

972 sequences assigned
359 (36.9%) exact matches, in which:
338 unique CDR3
7 unique J



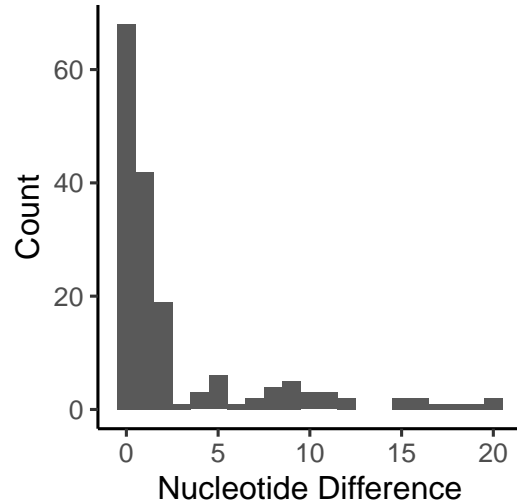
IGHV1-18*01

1864 sequences assigned
502 (26.9%) exact matches, in which:
480 unique CDR3
7 unique J



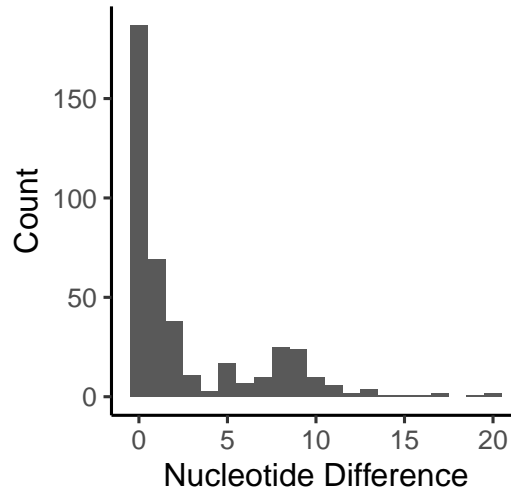
IGHV1-2*04

221 sequences assigned
68 (30.8%) exact matches, in which:
64 unique CDR3
5 unique J



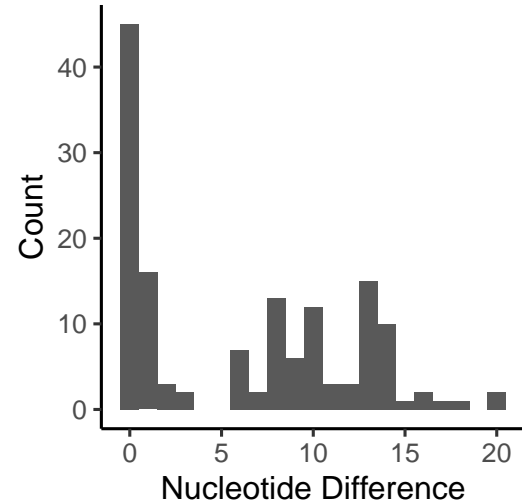
IGHV1-8*01

459 sequences assigned
187 (40.7%) exact matches, in which:
182 unique CDR3
7 unique J



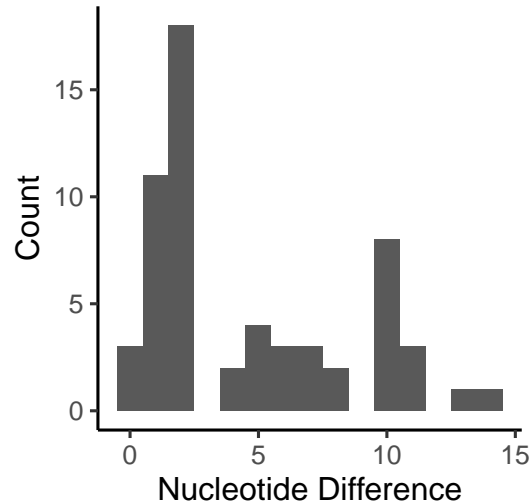
IGHV1-24*01

165 sequences assigned
45 (27.3%) exact matches, in which:
45 unique CDR3
4 unique J



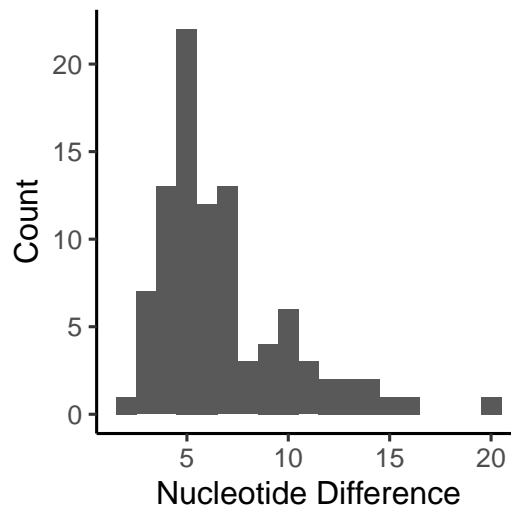
IGHV1-2*06

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



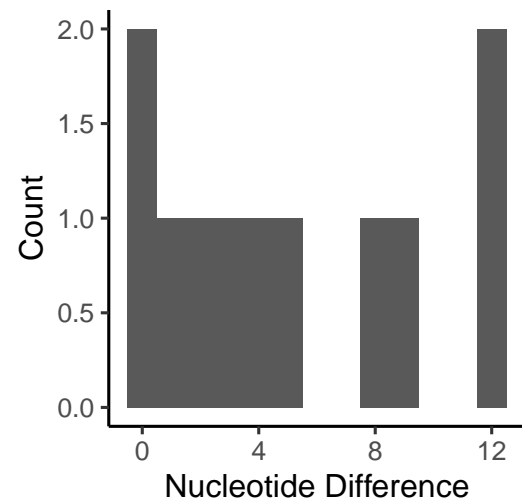
IGHV1-8*02

95 sequences assigned
No exact matches.



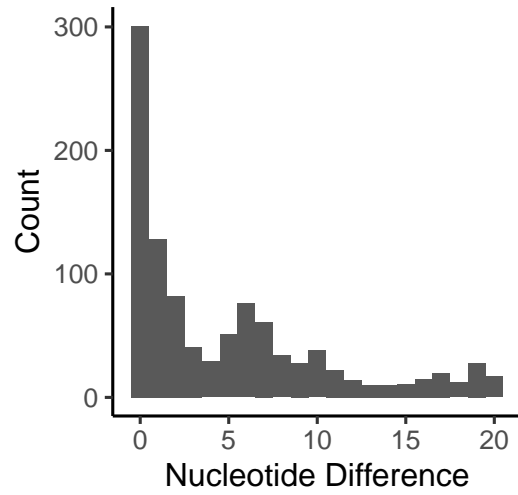
IGHV1-45*02

11 sequences assigned
2 (18.2%) exact matches, in which:
2 unique CDR3
2 unique J



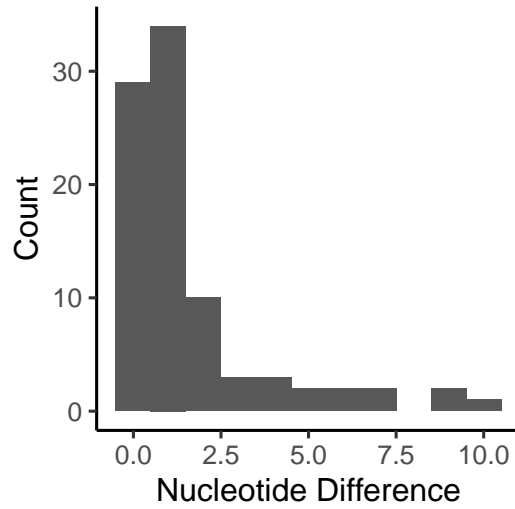
IGHV1-46*01

1252 sequences assigned
301 (24%) exact matches, in which:
285 unique CDR3
7 unique J



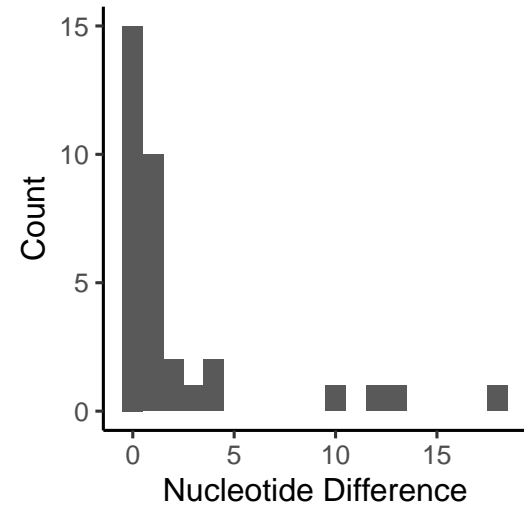
IGHV1-58*01_03

94 sequences assigned
29 (30.9%) exact matches, in which:
28 unique CDR3
5 unique J



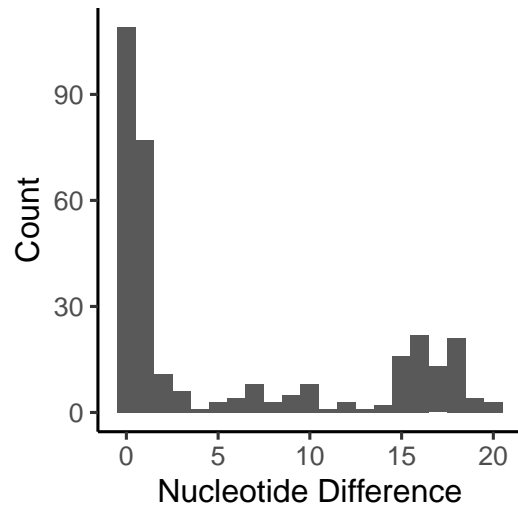
IGHV2-26*01

35 sequences assigned
15 (42.9%) exact matches, in which:
12 unique CDR3
4 unique J



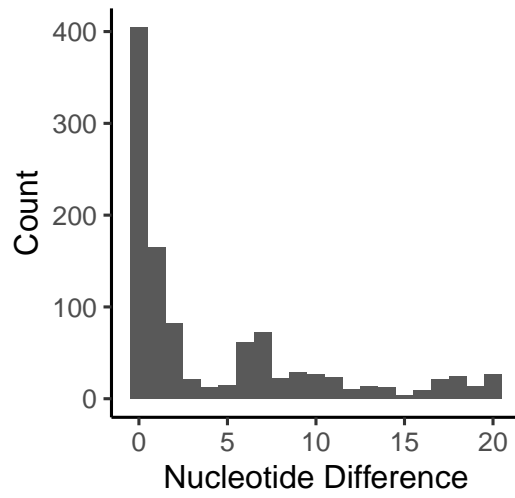
IGHV1-46*03

354 sequences assigned
109 (30.8%) exact matches, in which:
101 unique CDR3
7 unique J



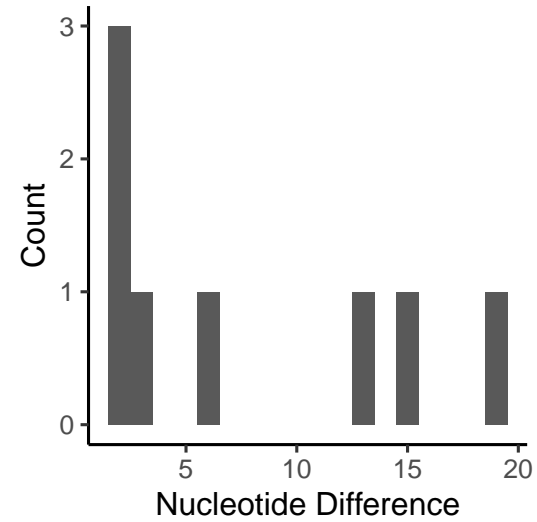
IGHV1-69*04_09

1177 sequences assigned
405 (34.4%) exact matches, in which:
402 unique CDR3
7 unique J



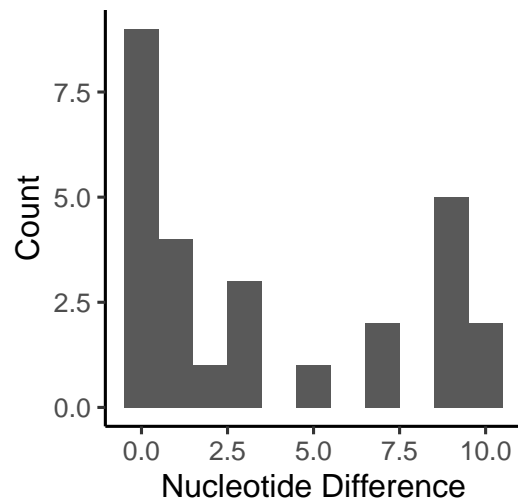
IGHV2-70*12

14 sequences assigned
No exact matches.



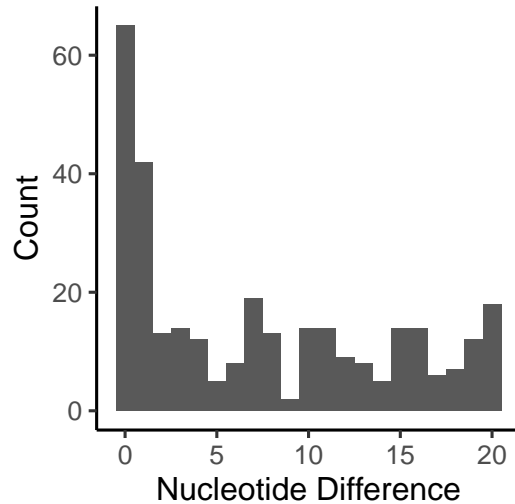
IGHV1-58*02

48 sequences assigned
9 (18.8%) exact matches, in which:
9 unique CDR3
3 unique J



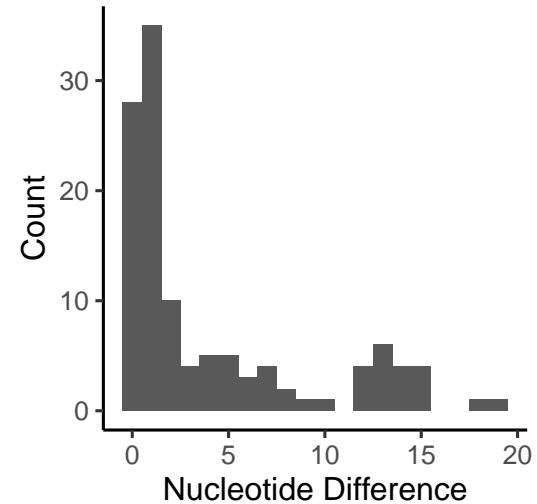
IGHV2-5*02

421 sequences assigned
65 (15.4%) exact matches, in which:
60 unique CDR3
6 unique J



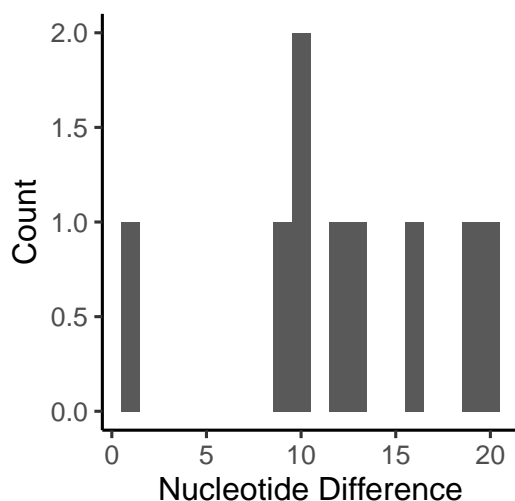
IGHV2-70*11_15

121 sequences assigned
28 (23.1%) exact matches, in which:
23 unique CDR3
4 unique J



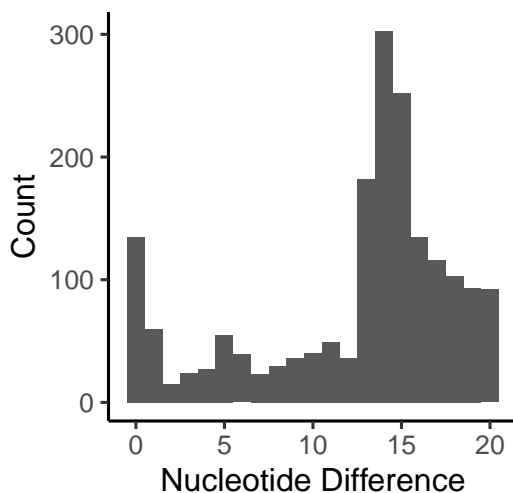
IGHV2-70D*04

10 sequences assigned
No exact matches.



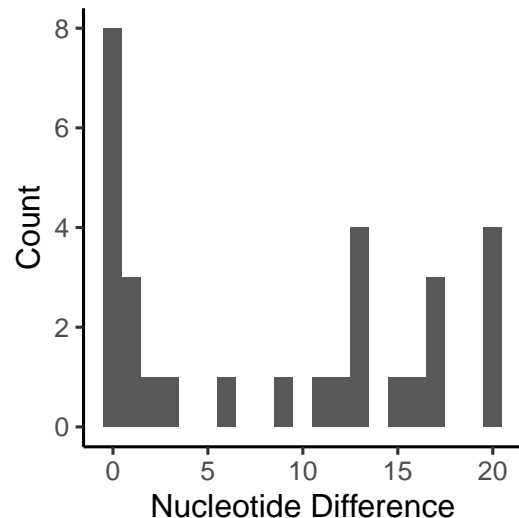
IGHV3-9*01

2379 sequences assigned
135 (5.7%) exact matches, in which:
108 unique CDR3
7 unique J



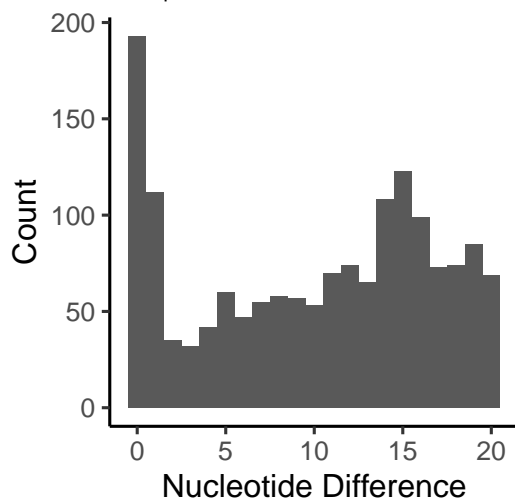
IGHV3-11*06

41 sequences assigned
8 (19.5%) exact matches, in which:
5 unique CDR3
2 unique J



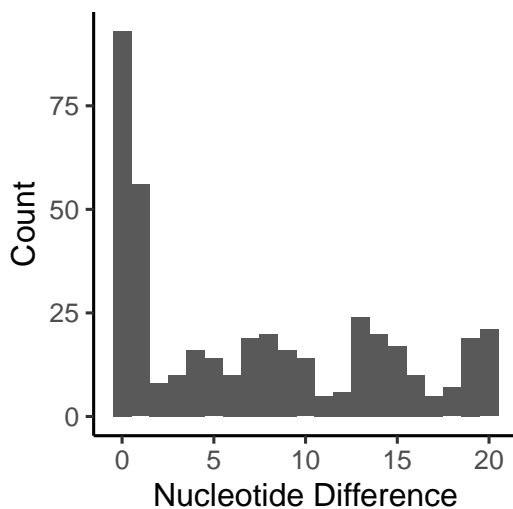
IGHV3-7*01

2071 sequences assigned
193 (9.3%) exact matches, in which:
175 unique CDR3
7 unique J



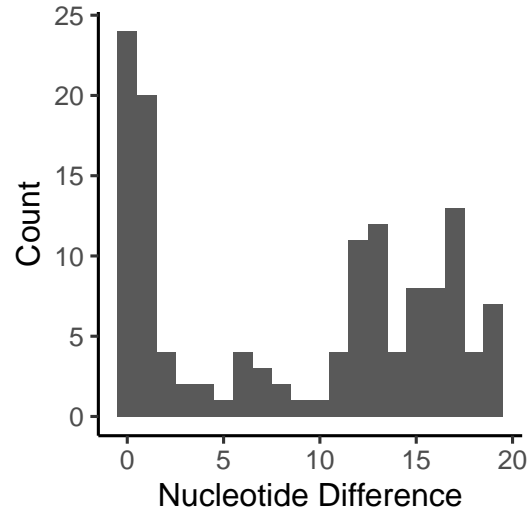
IGHV3-11*01

551 sequences assigned
93 (16.9%) exact matches, in which:
81 unique CDR3
5 unique J



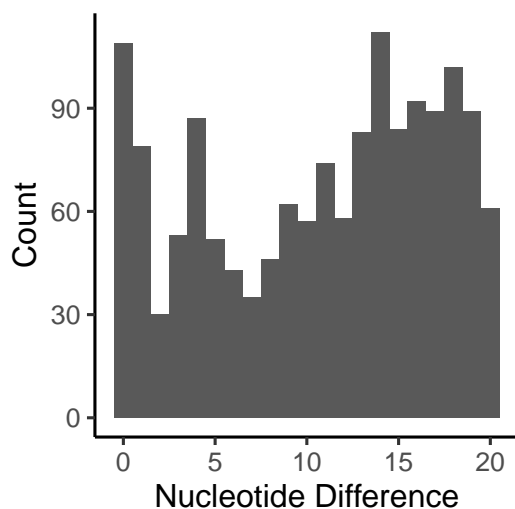
IGHV3-13*01

207 sequences assigned
24 (11.6%) exact matches, in which:
21 unique CDR3
5 unique J



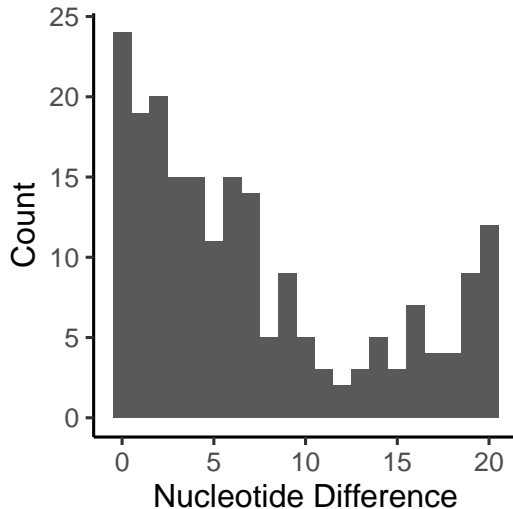
IGHV3-7*03

2222 sequences assigned
109 (4.9%) exact matches, in which:
89 unique CDR3
7 unique J



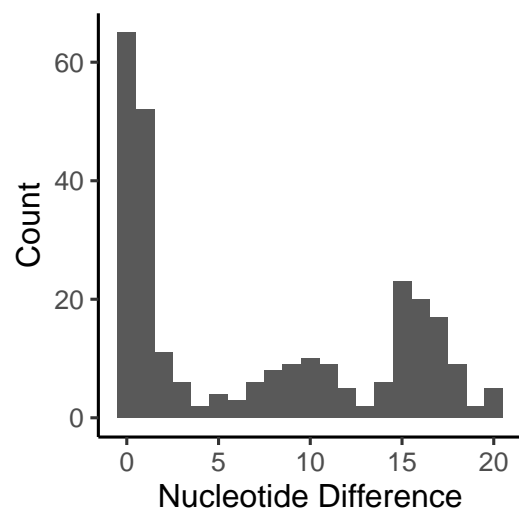
IGHV3-11*04

238 sequences assigned
24 (10.1%) exact matches, in which:
24 unique CDR3
5 unique J



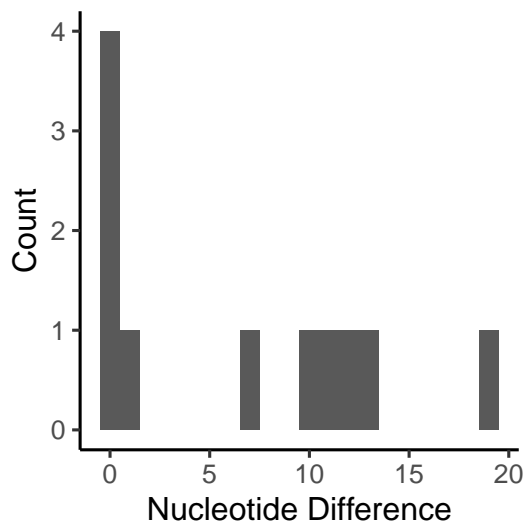
IGHV3-15*01_02

434 sequences assigned
65 (15%) exact matches, in which:
45 unique CDR3
6 unique J



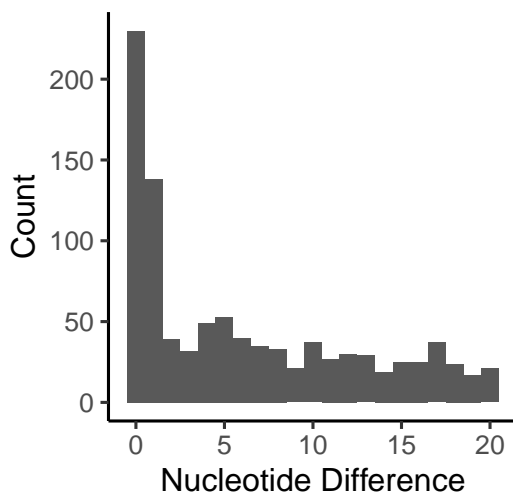
IGHV3-20*01_02

14 sequences assigned
4 (28.6%) exact matches, in which:
4 unique CDR3
3 unique J



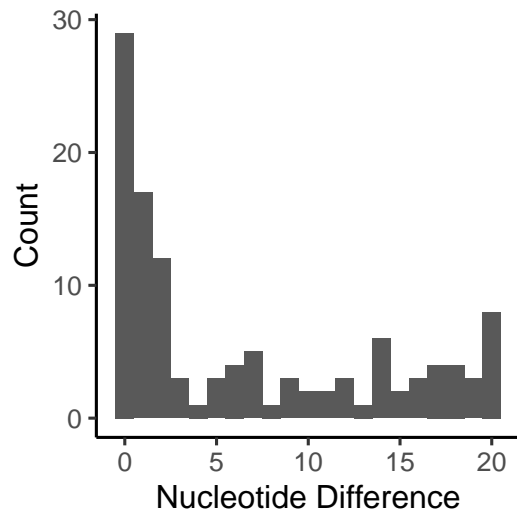
IGHV3-21*01_02

1116 sequences assigned
230 (20.6%) exact matches, in which:
187 unique CDR3
7 unique J



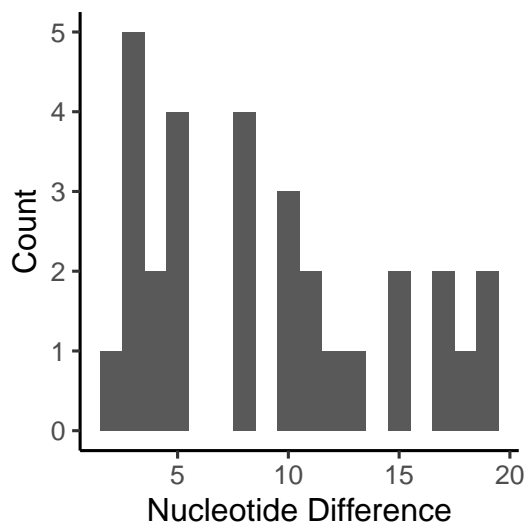
IGHV3-30*03

165 sequences assigned
29 (17.6%) exact matches, in which:
29 unique CDR3
6 unique J



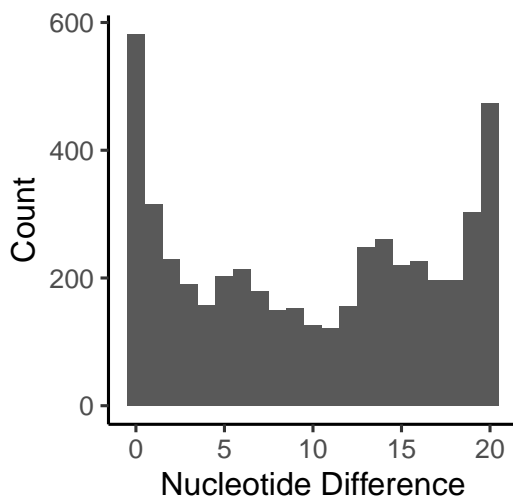
IGHV3-20*03_04

45 sequences assigned
No exact matches.



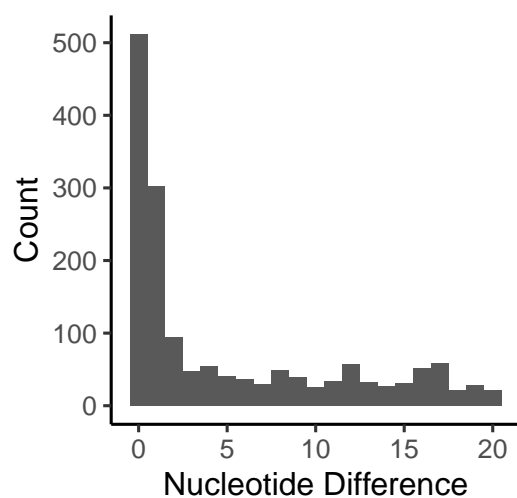
IGHV3-23*01_04

7256 sequences assigned
582 (8%) exact matches, in which:
492 unique CDR3
7 unique J



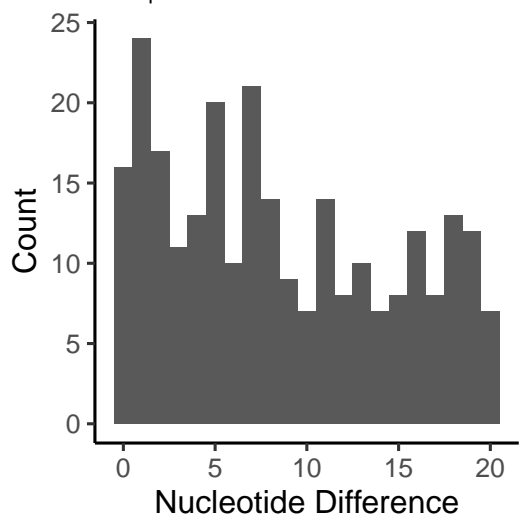
IGHV3-33*01

1931 sequences assigned
512 (26.5%) exact matches, in which:
431 unique CDR3
7 unique J



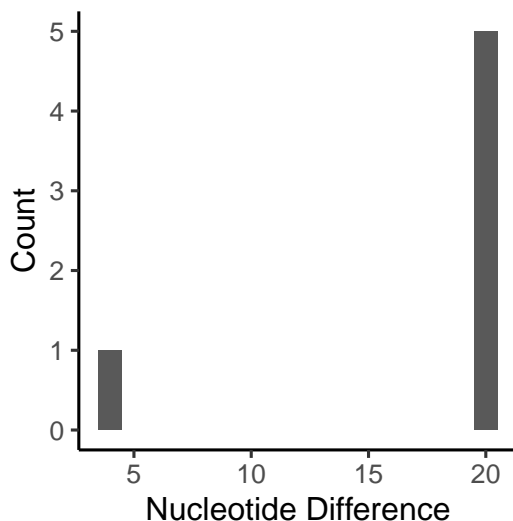
IGHV3-21*04

324 sequences assigned
16 (4.9%) exact matches, in which:
16 unique CDR3
4 unique J



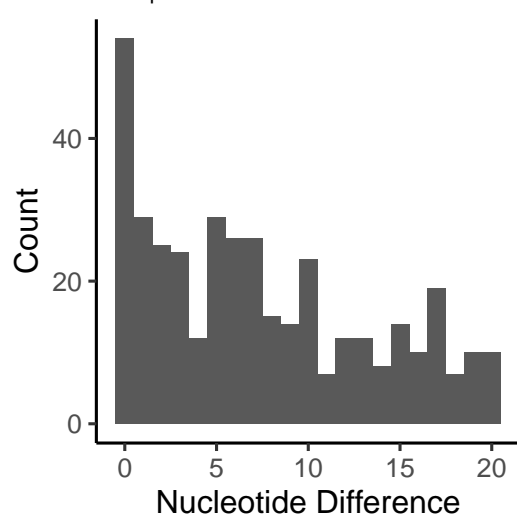
IGHV3-30-3*01

25 sequences assigned
No exact matches.



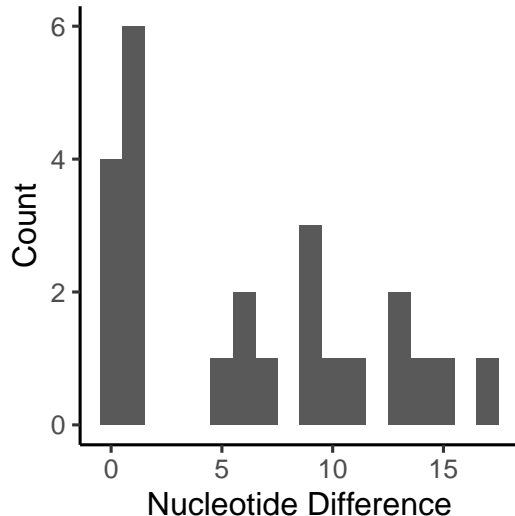
IGHV3-33*08

480 sequences assigned
54 (11.2%) exact matches, in which:
52 unique CDR3
7 unique J



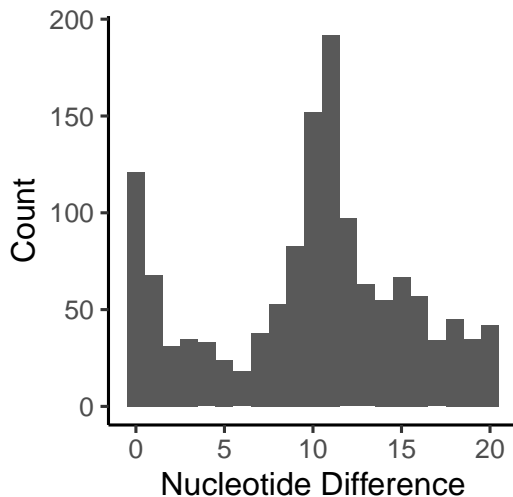
IGHV3-43*01

77 sequences assigned
4 (5.2%) exact matches, in which:
3 unique CDR3
2 unique J



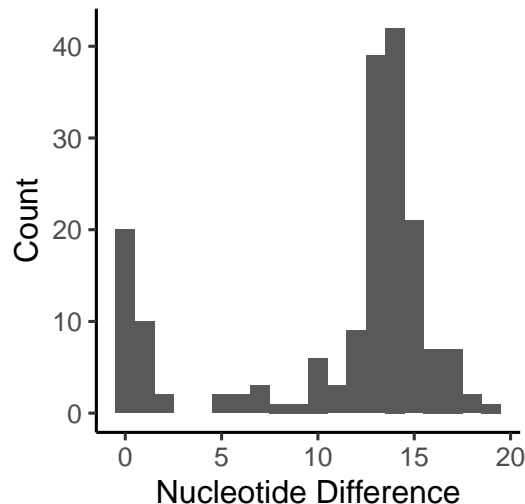
IGHV3-48*02

1637 sequences assigned
121 (7.4%) exact matches, in which:
108 unique CDR3
7 unique J



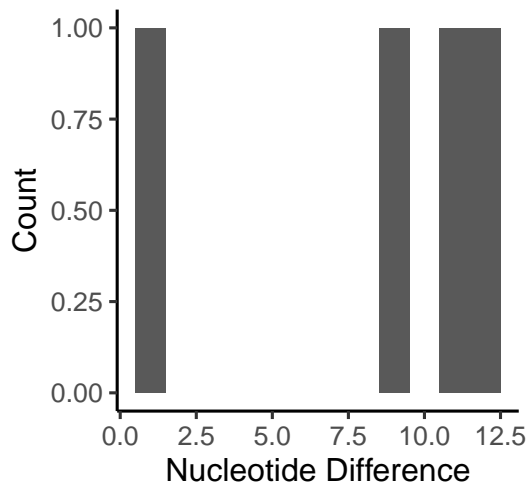
IGHV3-49*03_05

223 sequences assigned
20 (9%) exact matches, in which:
18 unique CDR3
3 unique J



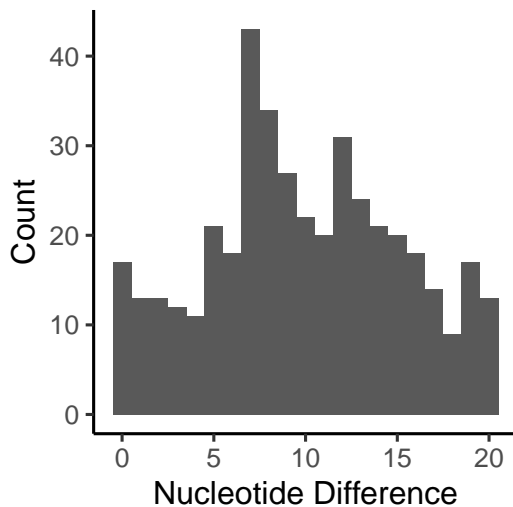
IGHV3-47*02

4 sequences assigned
No exact matches.



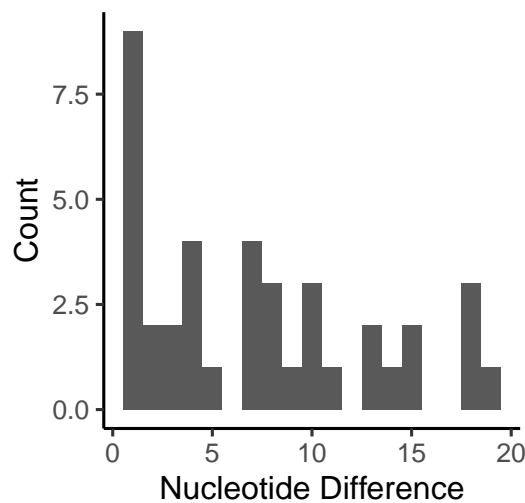
IGHV3-48*04

552 sequences assigned
17 (3.1%) exact matches, in which:
17 unique CDR3
5 unique J



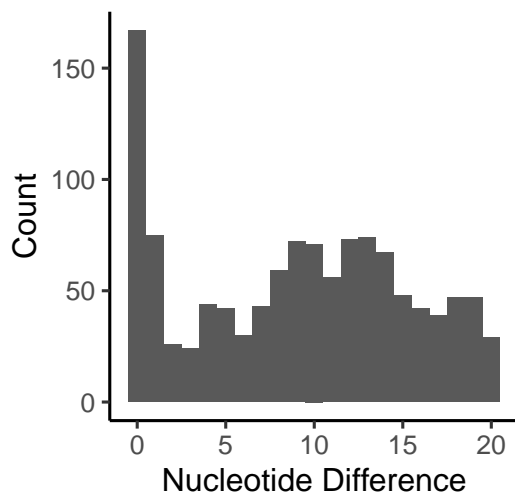
IGHV3-53*05

47 sequences assigned
No exact matches.



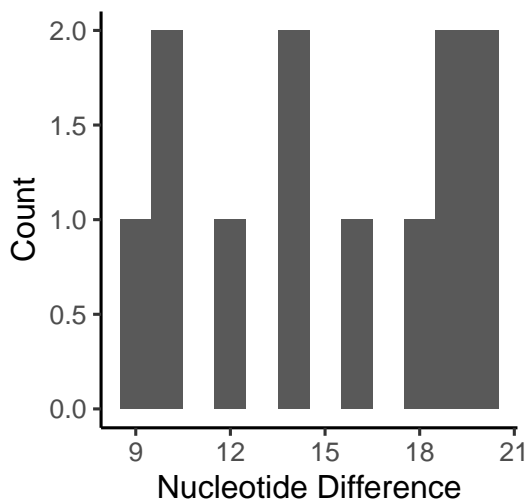
IGHV3-48*01

1405 sequences assigned
167 (11.9%) exact matches, in which:
150 unique CDR3
7 unique J



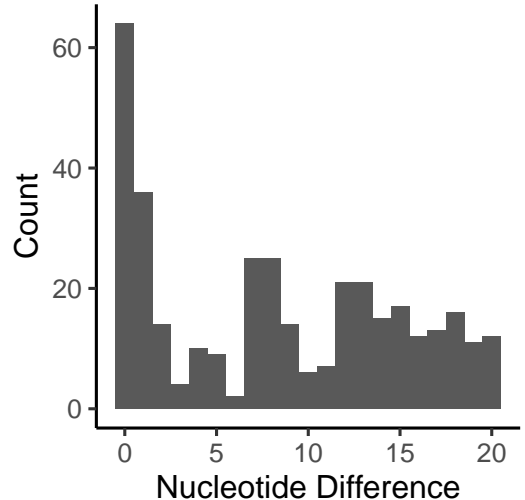
IGHV3-49*04

53 sequences assigned
No exact matches.



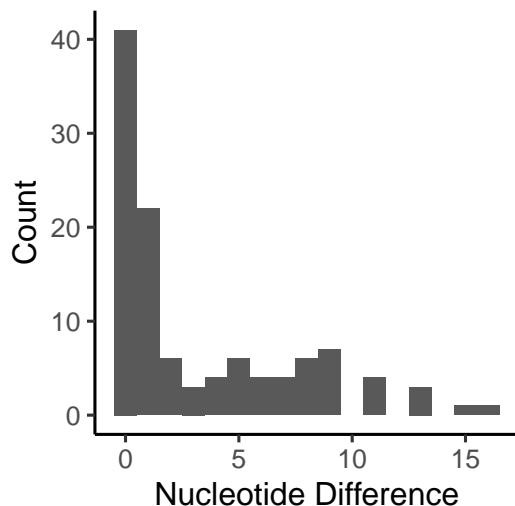
IGHV3-53*01_02

506 sequences assigned
64 (12.6%) exact matches, in which:
57 unique CDR3
7 unique J



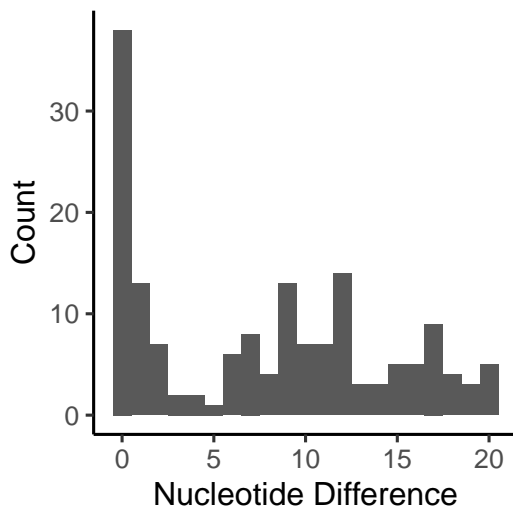
IGHV3-64*01

192 sequences assigned
41 (21.4%) exact matches, in which:
33 unique CDR3
4 unique J



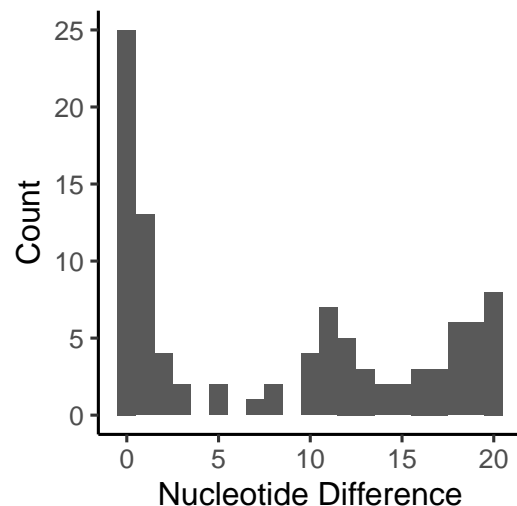
IGHV3-66*02

202 sequences assigned
38 (18.8%) exact matches, in which:
36 unique CDR3
5 unique J



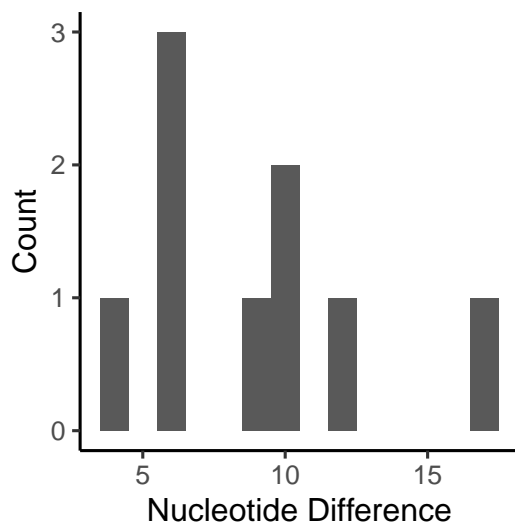
IGHV3-73*01_02

247 sequences assigned
25 (10.1%) exact matches, in which:
20 unique CDR3
5 unique J



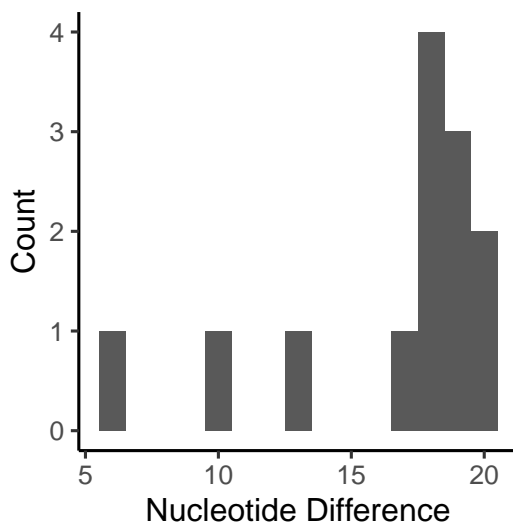
IGHV3-64*04

15 sequences assigned
No exact matches.



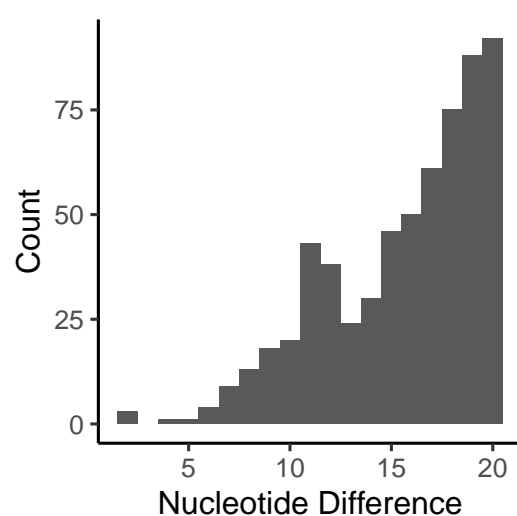
IGHV3-69-1*01

26 sequences assigned
No exact matches.



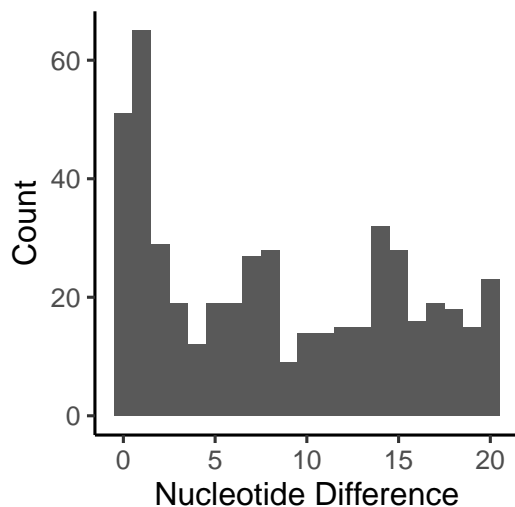
IGHV3-74*03

1193 sequences assigned
No exact matches.



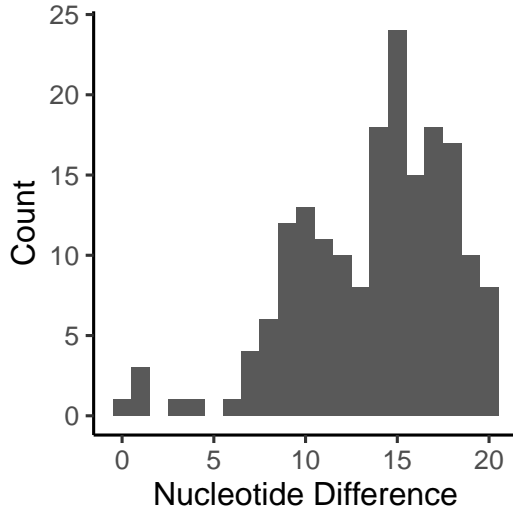
IGHV3-66*01

666 sequences assigned
51 (7.7%) exact matches, in which:
45 unique CDR3
7 unique J



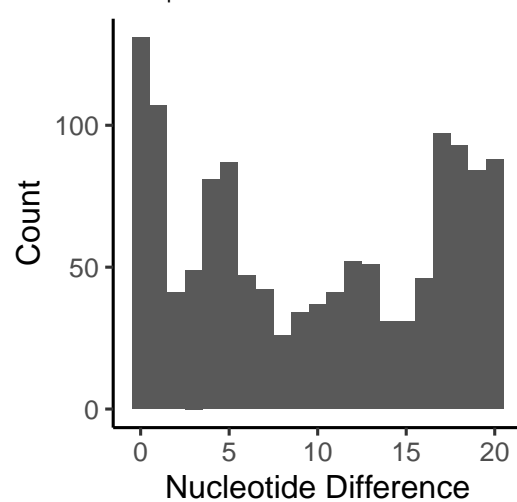
IGHV3-72*01

451 sequences assigned
1 (0.2%) exact matches, in which:
1 unique CDR3
1 unique J



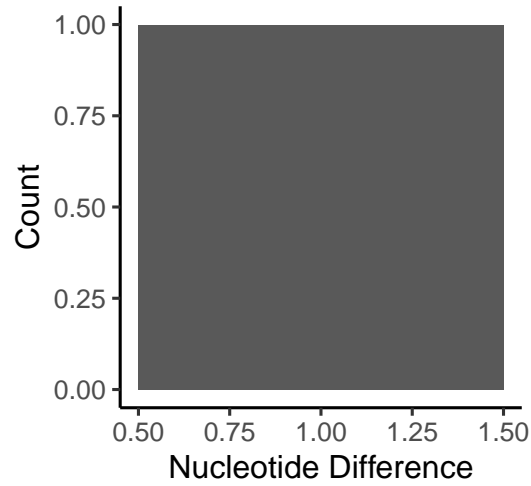
IGHV3-74*01_02

2221 sequences assigned
131 (5.9%) exact matches, in which:
109 unique CDR3
7 unique J



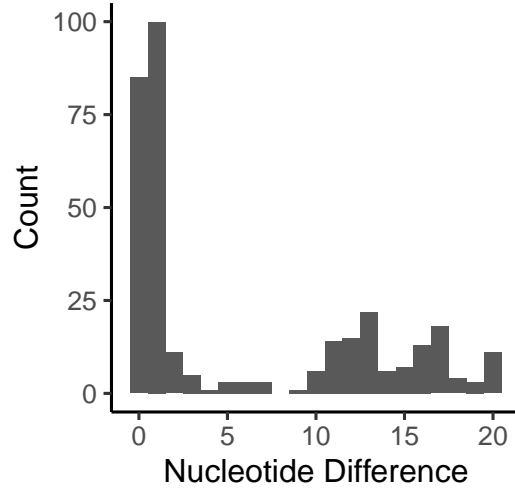
IGHV3-64D*06

197 sequences assigned
No exact matches.



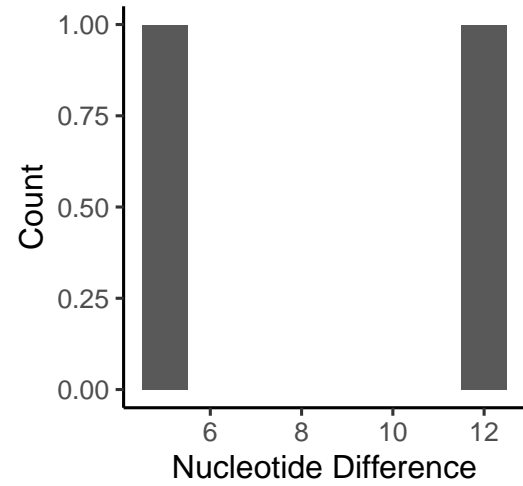
IGHV4-4*02_03

394 sequences assigned
85 (21.6%) exact matches, in which:
75 unique CDR3
6 unique J



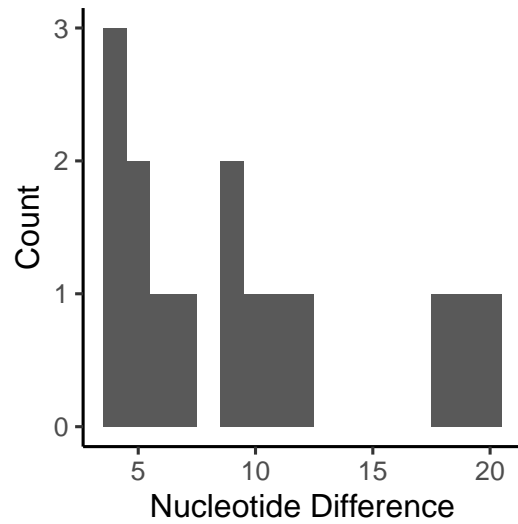
IGHV4-30-2*01

5 sequences assigned
No exact matches.



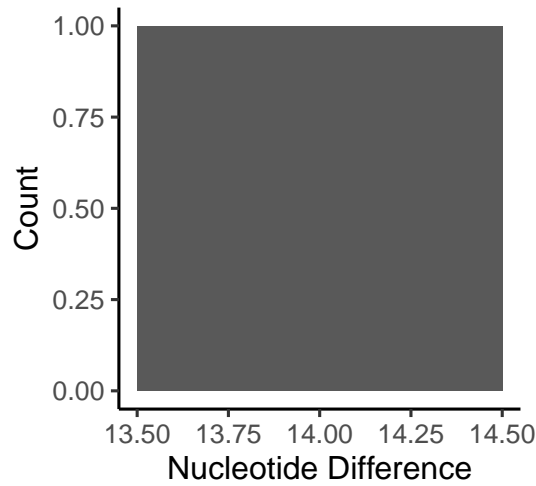
IGHV3-NL1*01

34 sequences assigned
No exact matches.



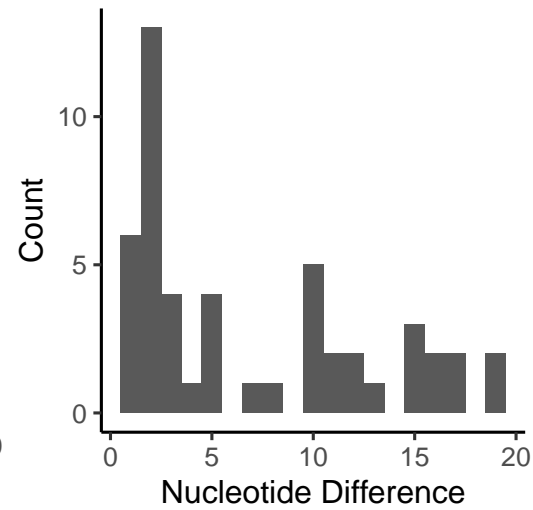
IGHV4-28*03

2 sequences assigned
No exact matches.



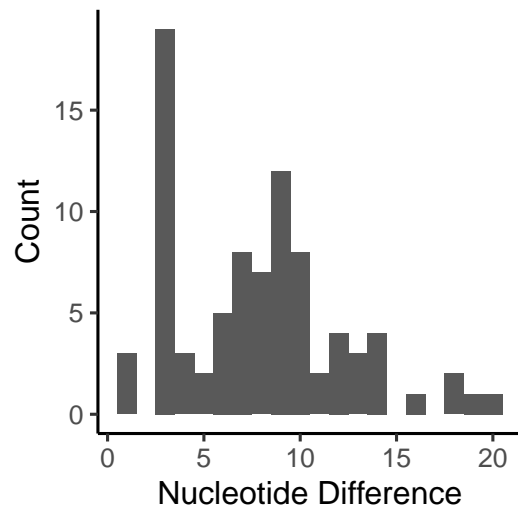
IGHV4-30-2*03

72 sequences assigned
No exact matches.



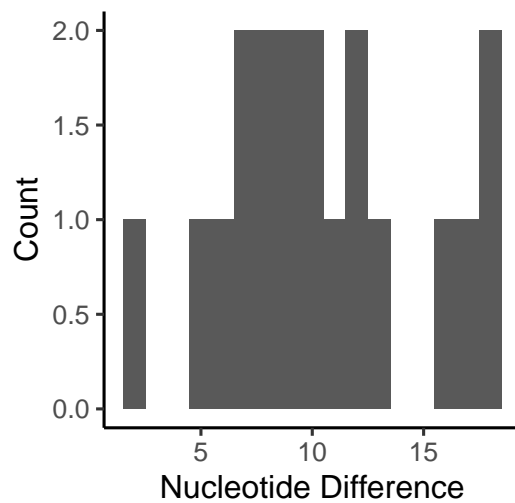
IGHV4-4*08

122 sequences assigned
No exact matches.



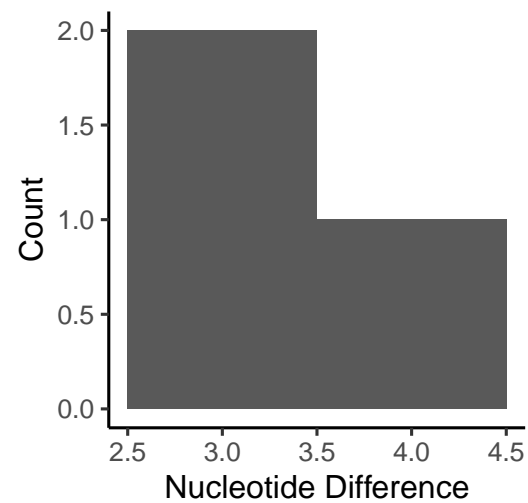
IGHV4-30-4*01

28 sequences assigned
No exact matches.



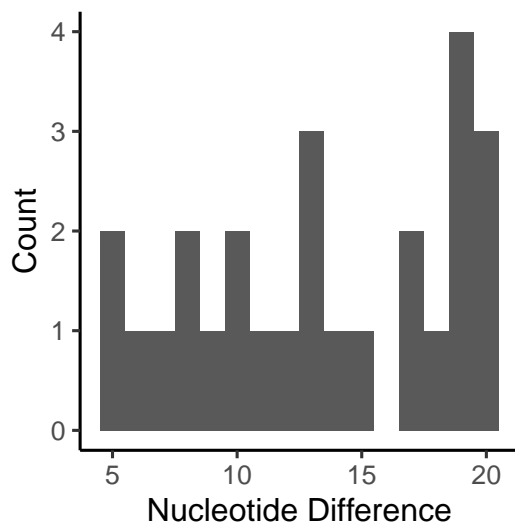
IGHV4-30-2*04

4 sequences assigned
No exact matches.



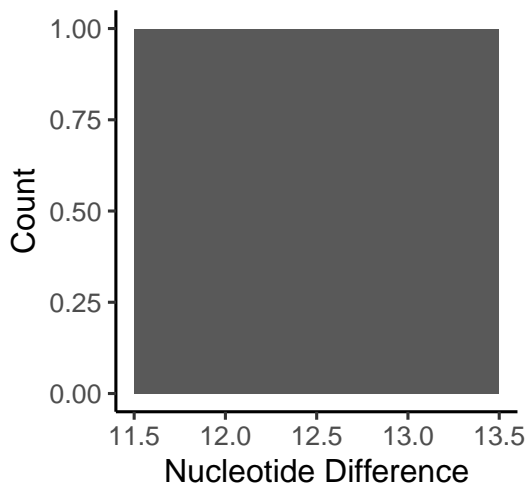
IGHV4-30-4*08

38 sequences assigned
No exact matches.



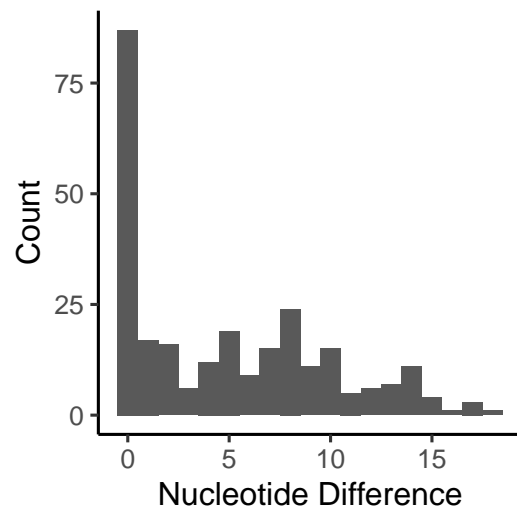
IGHV4-38-2*01

2 sequences assigned
No exact matches.



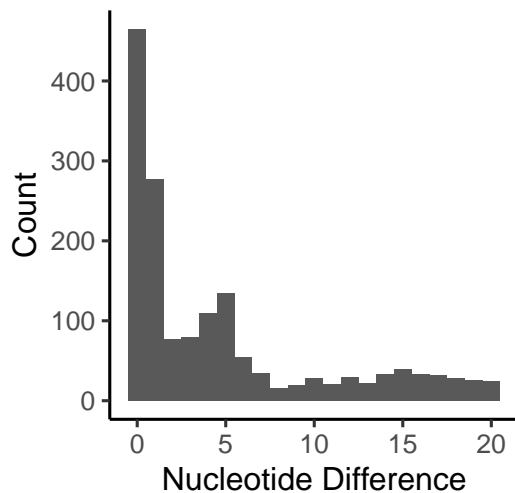
IGHV4-59*08

302 sequences assigned
87 (28.8%) exact matches, in which:
87 unique CDR3
7 unique J



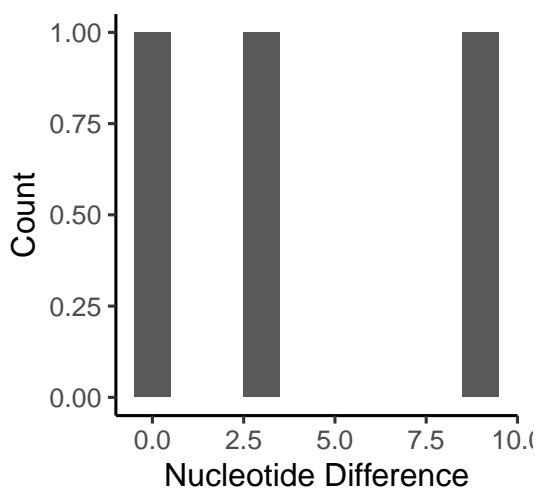
IGHV4-31*02

1910 sequences assigned
465 (24.3%) exact matches, in which:
445 unique CDR3
7 unique J



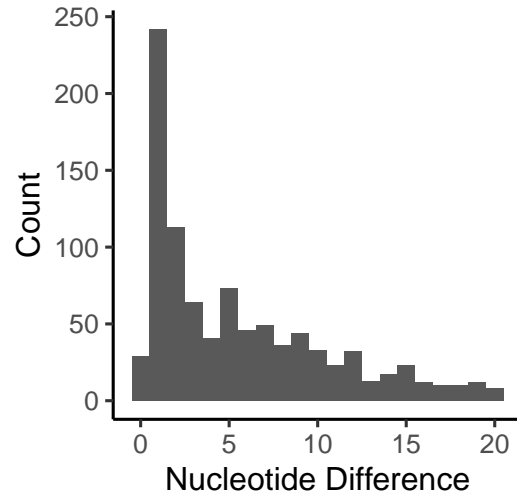
IGHV4-38-2*02

6 sequences assigned
1 (16.7%) exact matches, in which:
1 unique CDR3
1 unique J



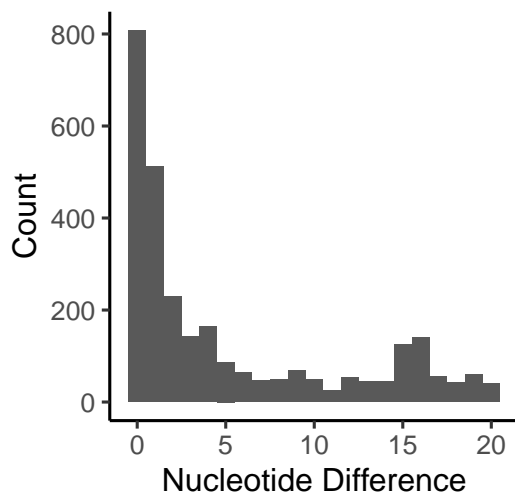
IGHV4-59*12

1218 sequences assigned
29 (2.4%) exact matches, in which:
29 unique CDR3
5 unique J



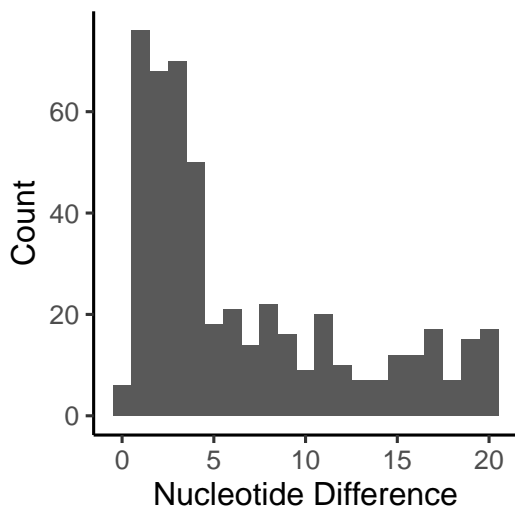
IGHV4-34*01_02

3345 sequences assigned
808 (24.2%) exact matches, in which:
736 unique CDR3
7 unique J



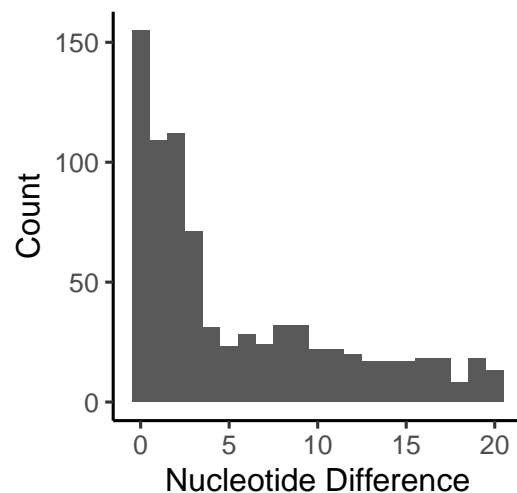
IGHV4-39*07

712 sequences assigned
6 (0.8%) exact matches, in which:
6 unique CDR3
2 unique J



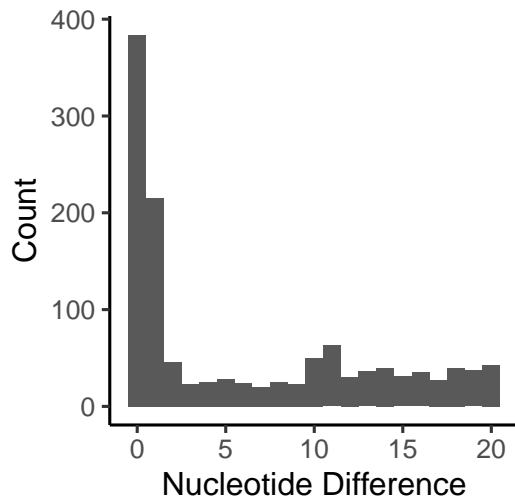
IGHV4-61*01

1113 sequences assigned
155 (13.9%) exact matches, in which:
141 unique CDR3
6 unique J



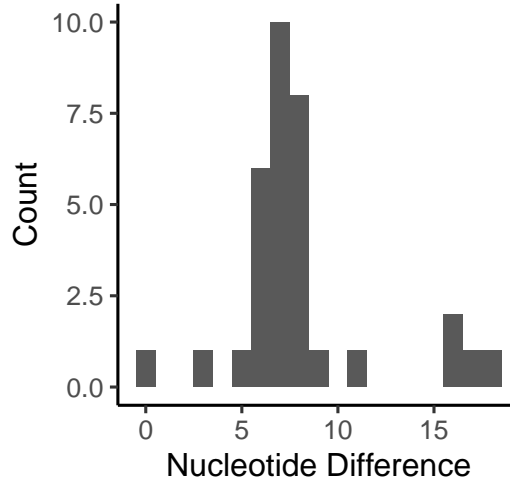
IGHV4–61*02

1698 sequences assigned
384 (22.6%) exact matches, in which:
357 unique CDR3
7 unique J



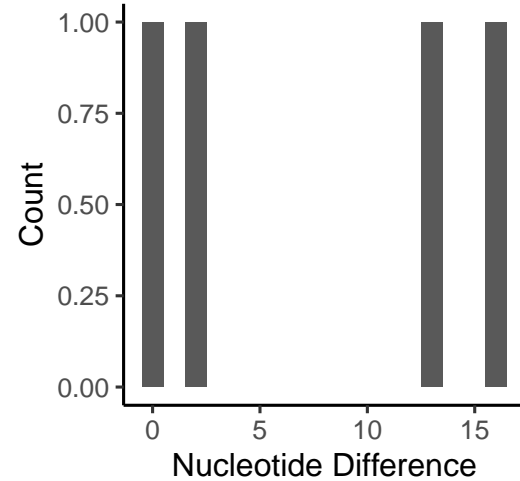
IGHV5–10–1*01_03

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



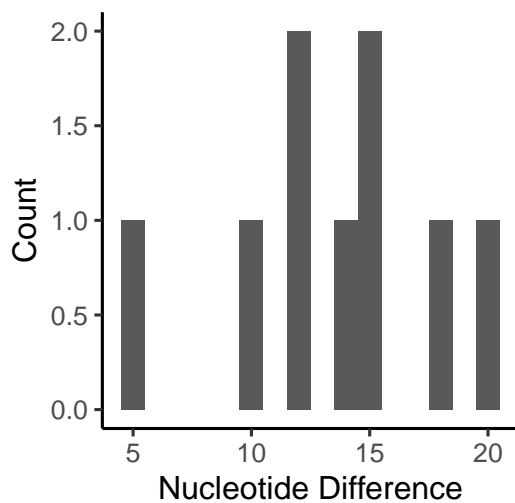
IGHV5–51*07

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



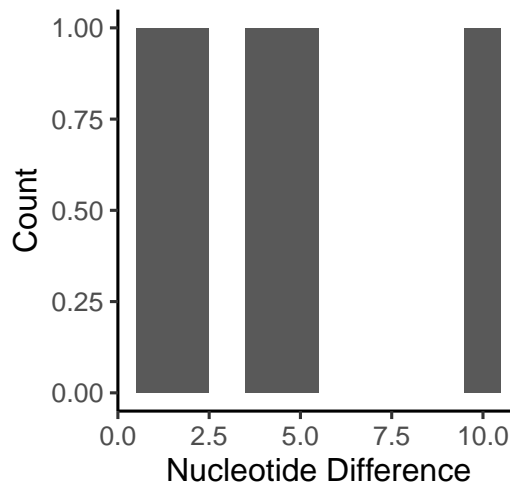
IGHV4/OR15–8*01

12 sequences assigned
No exact matches.



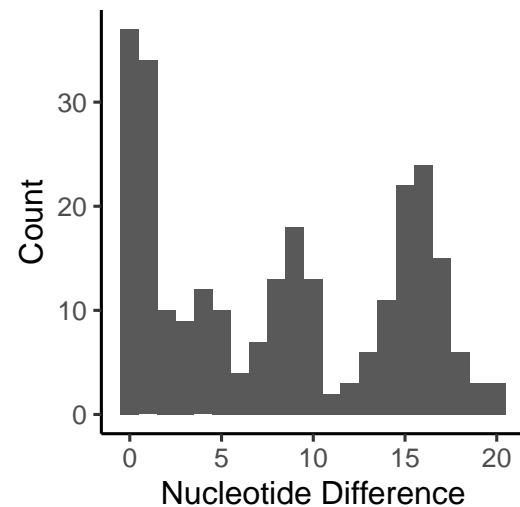
IGHV5–51*04

6 sequences assigned
No exact matches.



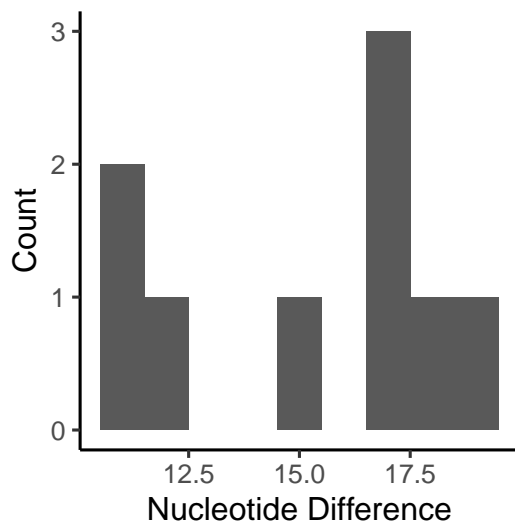
IGHV6–1*01_02

283 sequences assigned
37 (13.1%) exact matches, in which:
31 unique CDR3
6 unique J



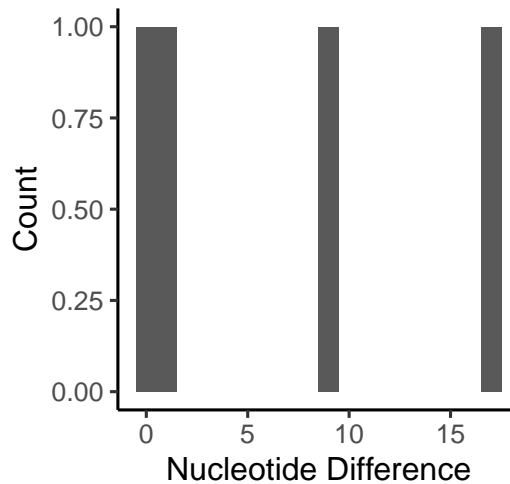
IGHV4/OR15–8*02

21 sequences assigned
No exact matches.



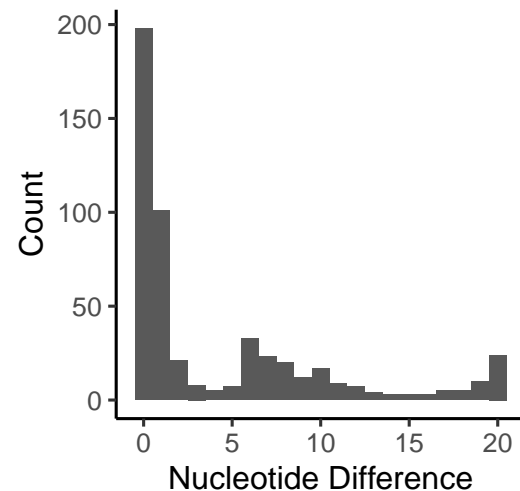
IGHV5–51*06

5 sequences assigned
1 (20%) exact matches, in which:
1 unique CDR3
1 unique J

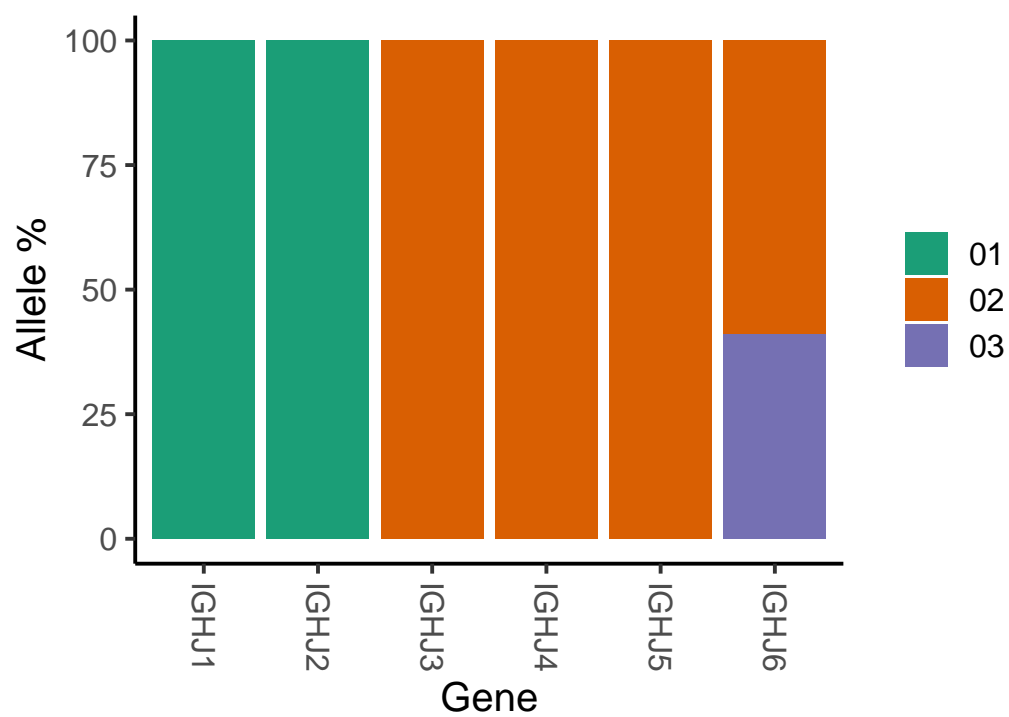


IGHV7–4–1*02

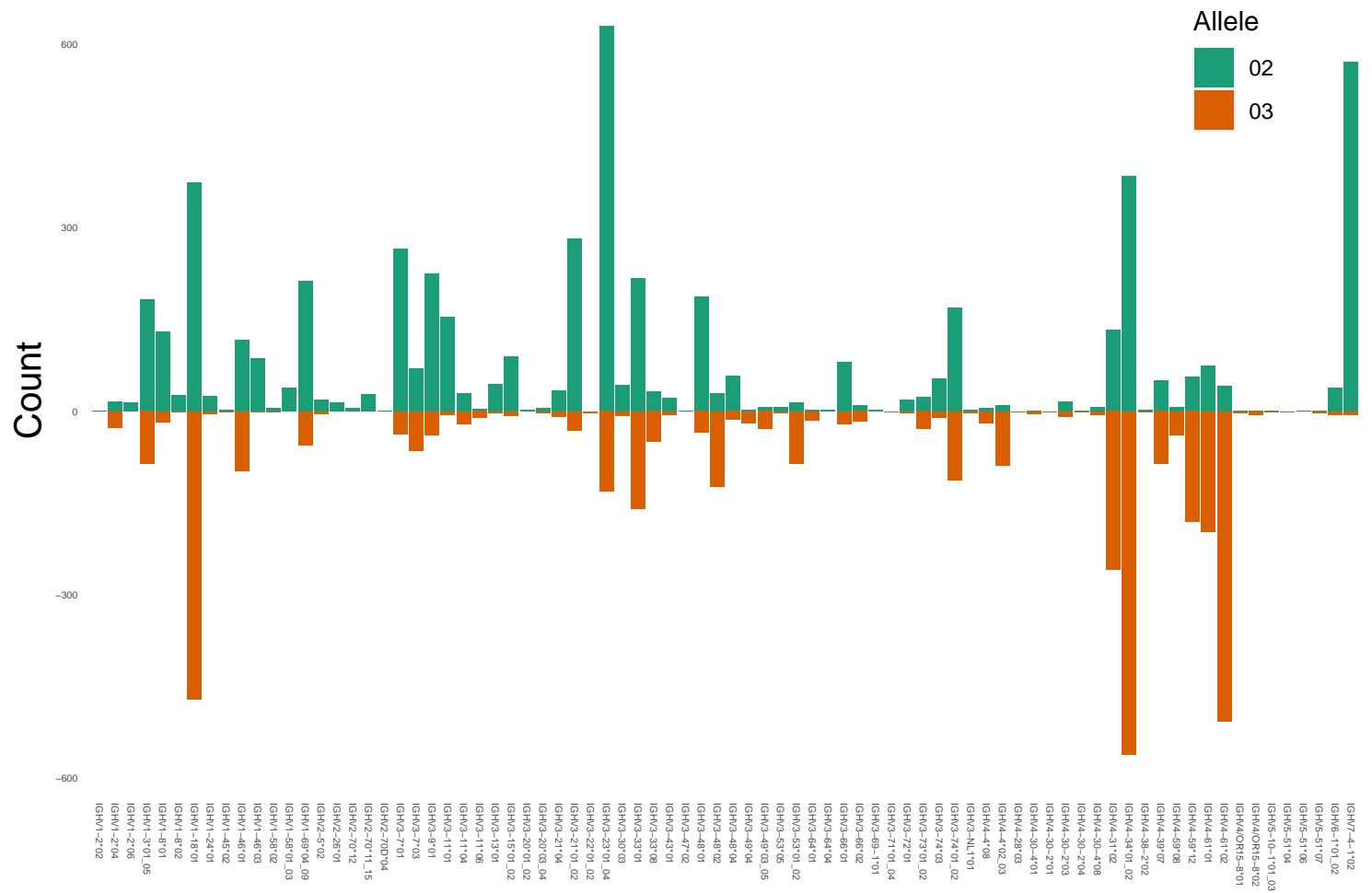
1086 sequences assigned
198 (18.2%) exact matches, in which:
183 unique CDR3
7 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.