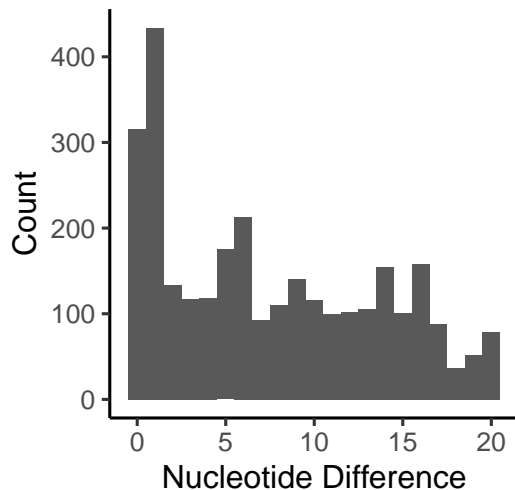


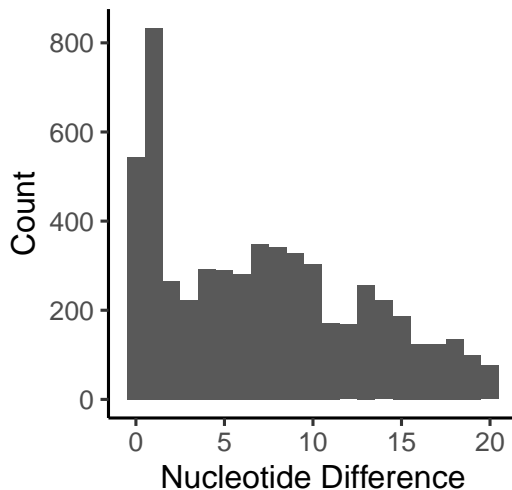
IGHV1-2*04

3180 sequences assigned
316 (9.9%) exact matches, in which:
238 unique CDR3
6 unique J



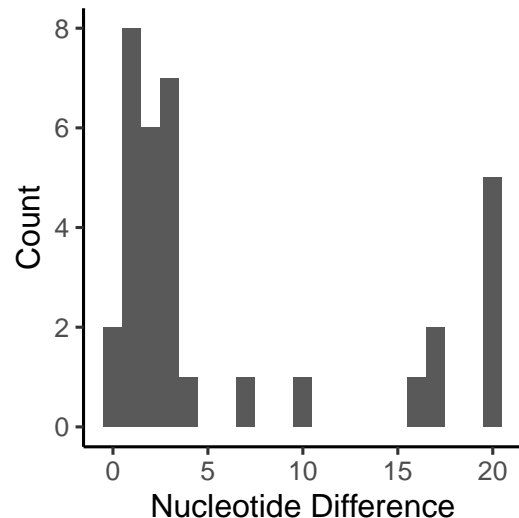
IGHV1-18*01

7489 sequences assigned
543 (7.3%) exact matches, in which:
414 unique CDR3
7 unique J



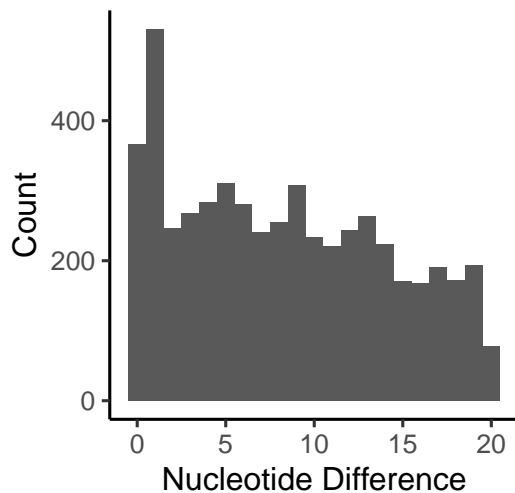
IGHV1-45*02

132 sequences assigned
2 (1.5%) exact matches, in which:
2 unique CDR3
1 unique J



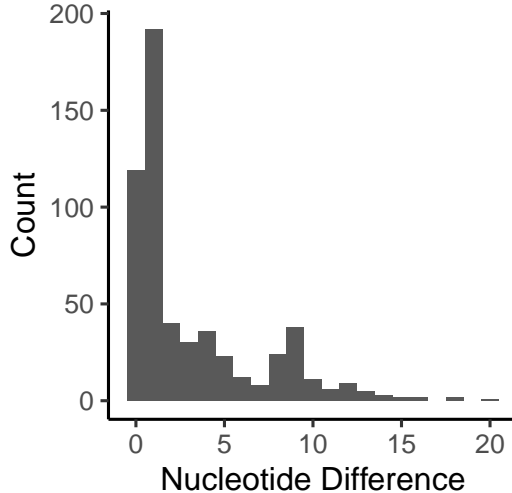
IGHV1-3*01_05

5574 sequences assigned
366 (6.6%) exact matches, in which:
275 unique CDR3
7 unique J



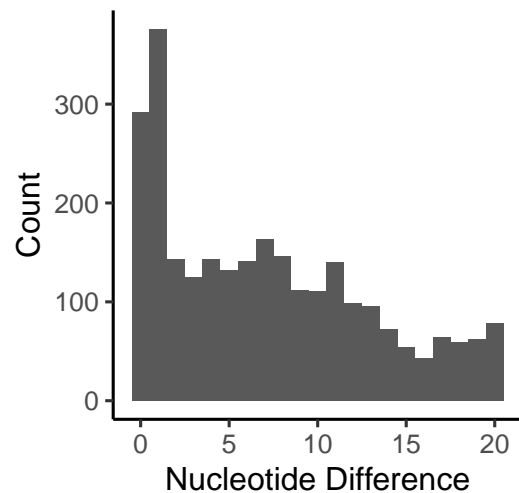
IGHV1-24*01

714 sequences assigned
119 (16.7%) exact matches, in which:
86 unique CDR3
7 unique J



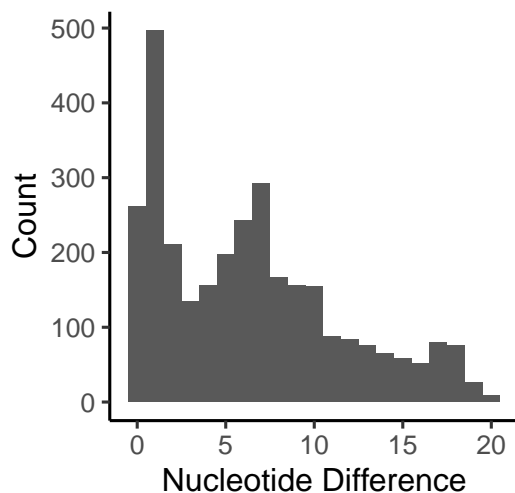
IGHV1-46*01

3531 sequences assigned
292 (8.3%) exact matches, in which:
240 unique CDR3
7 unique J



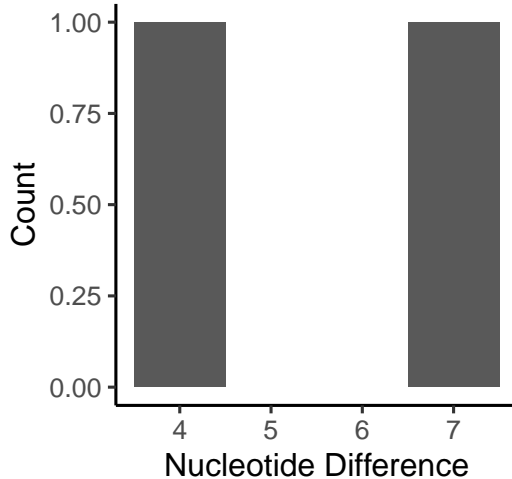
IGHV1-8*01

3785 sequences assigned
262 (6.9%) exact matches, in which:
218 unique CDR3
7 unique J



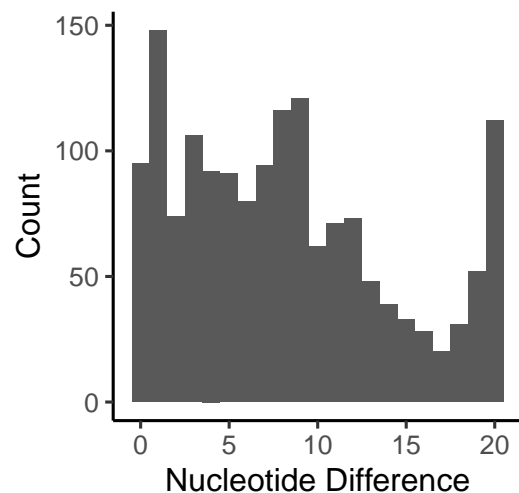
IGHV1-45*01

2 sequences assigned
No exact matches.



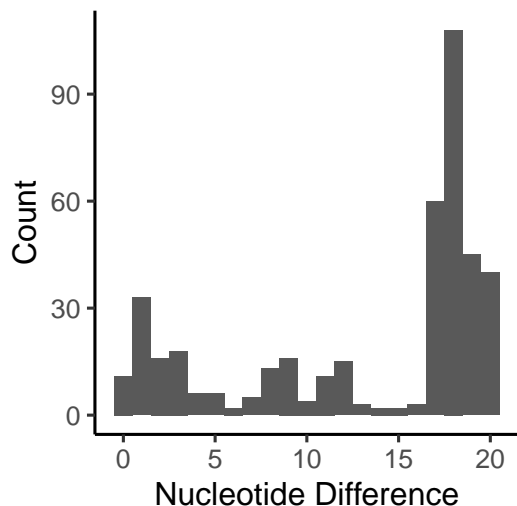
IGHV1-46*03

1718 sequences assigned
95 (5.5%) exact matches, in which:
68 unique CDR3
6 unique J



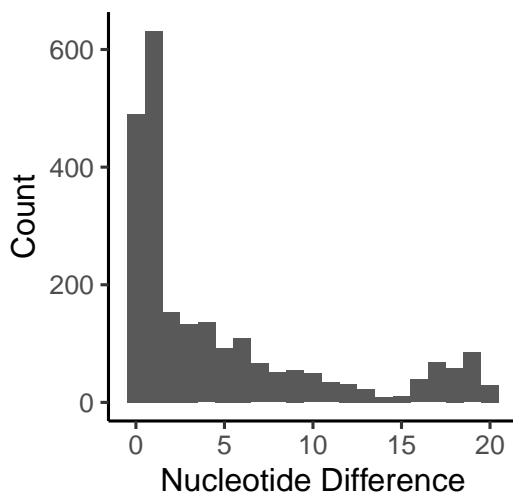
IGHV1-58*02

430 sequences assigned
11 (2.6%) exact matches, in which:
7 unique CDR3
4 unique J



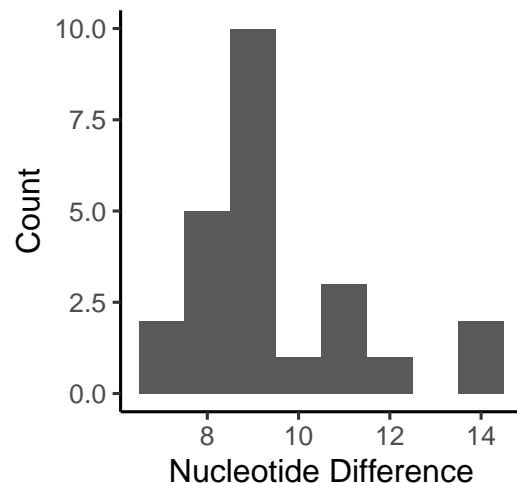
IGHV1-69*01_12_13

3399 sequences assigned
490 (14.4%) exact matches, in which:
393 unique CDR3
7 unique J



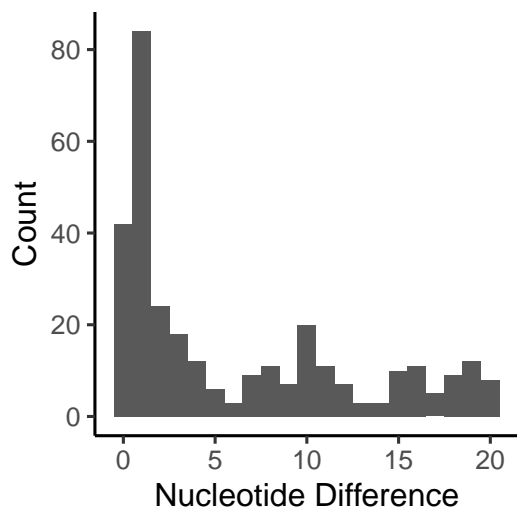
IGHV1-NL1*01

24 sequences assigned
No exact matches.



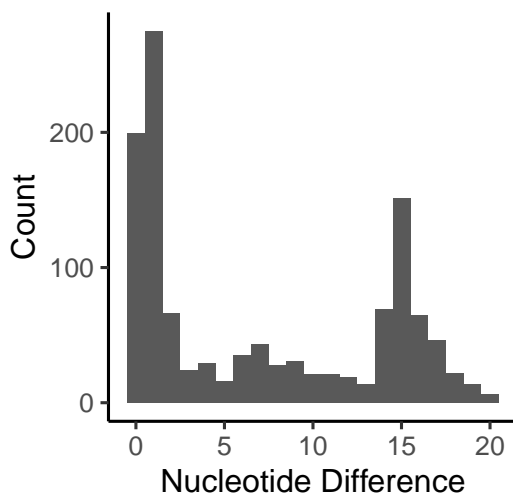
IGHV1-58*01_03

351 sequences assigned
42 (12%) exact matches, in which:
30 unique CDR3
5 unique J



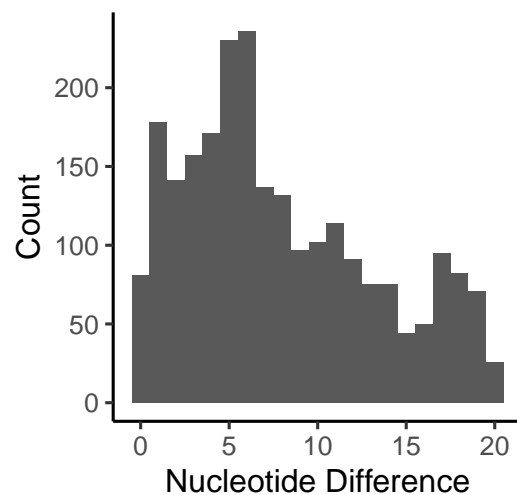
IGHV1-69*04_09

1262 sequences assigned
199 (15.8%) exact matches, in which:
163 unique CDR3
7 unique J



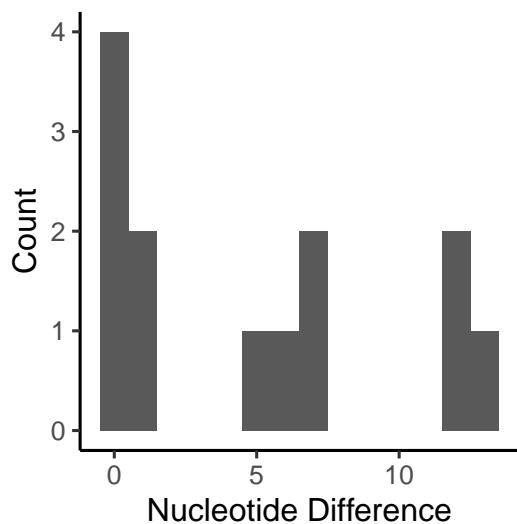
IGHV2-5*02

2698 sequences assigned
81 (3%) exact matches, in which:
61 unique CDR3
5 unique J



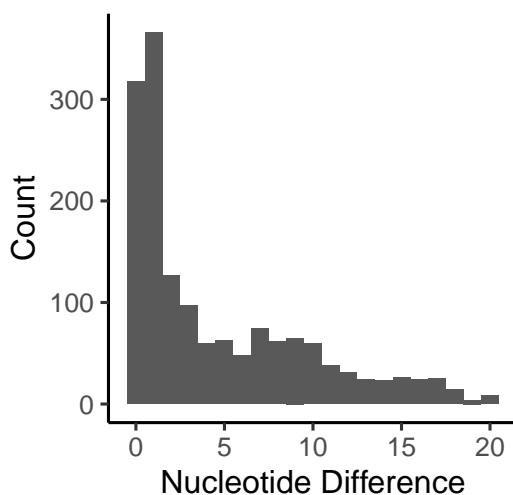
IGHV1-69-2*01

61 sequences assigned
4 (6.6%) exact matches, in which:
4 unique CDR3
2 unique J



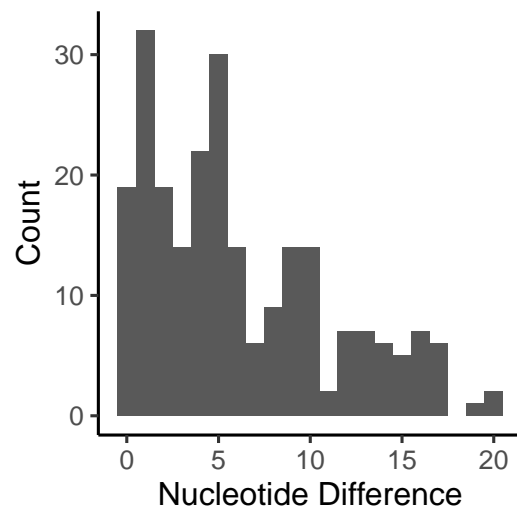
IGHV1-69*06_14

1636 sequences assigned
318 (19.4%) exact matches, in which:
250 unique CDR3
7 unique J



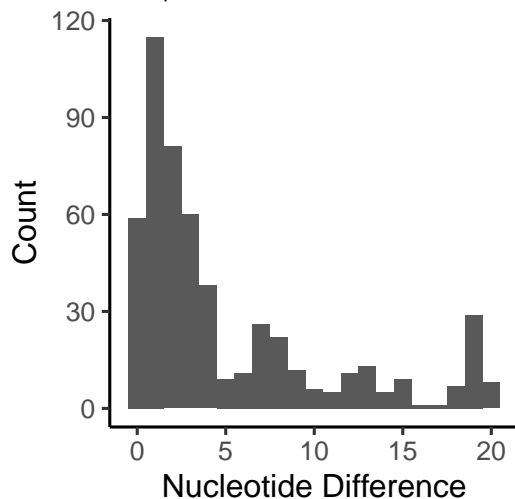
IGHV2-26*01

240 sequences assigned
19 (7.9%) exact matches, in which:
14 unique CDR3
5 unique J



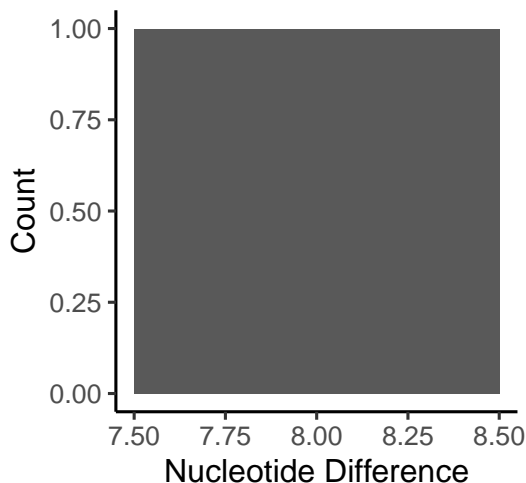
IGHV2-70*01

736 sequences assigned
59 (8%) exact matches, in which:
49 unique CDR3
3 unique J



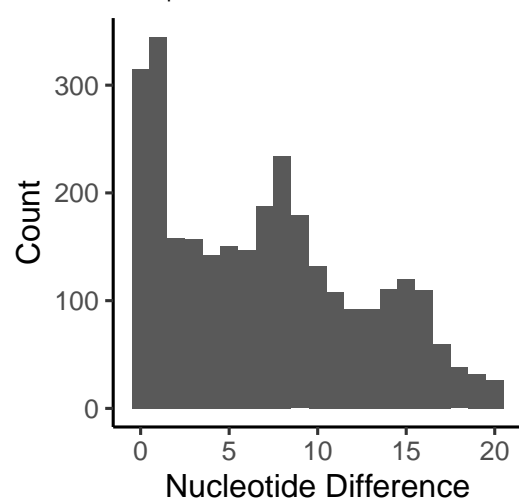
IGHV2-70D*14

1 sequences assigned
No exact matches.



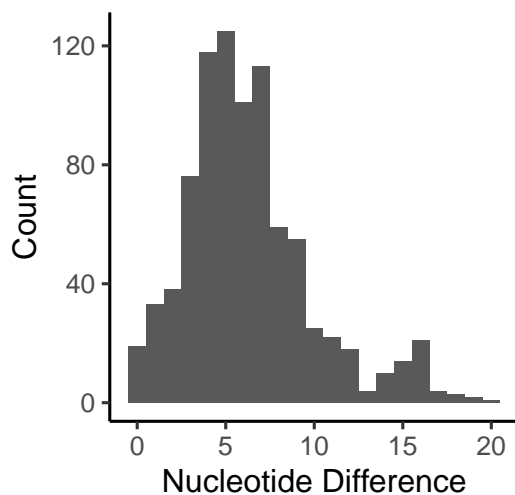
IGHV3-9*01

3807 sequences assigned
315 (8.3%) exact matches, in which:
176 unique CDR3
7 unique J



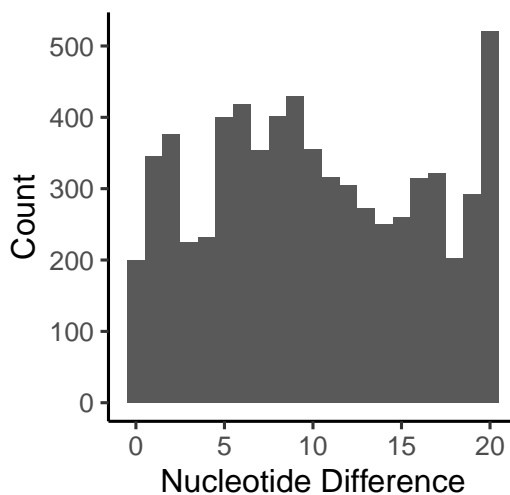
IGHV2-70*04

874 sequences assigned
19 (2.2%) exact matches, in which:
15 unique CDR3
3 unique J



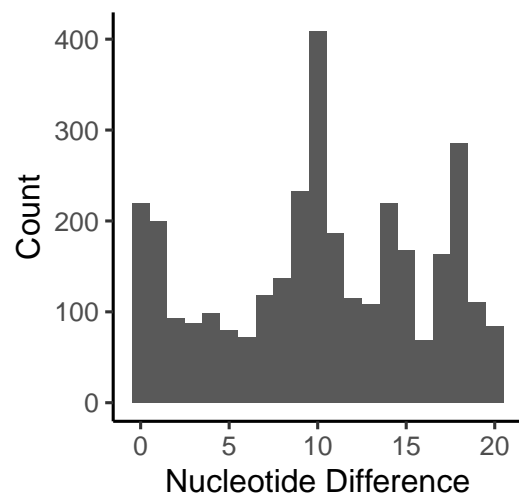
IGHV3-7*01

8107 sequences assigned
200 (2.5%) exact matches, in which:
122 unique CDR3
7 unique J



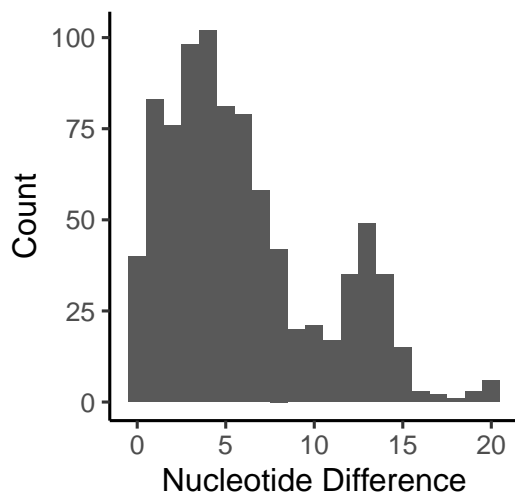
IGHV3-11*01

4001 sequences assigned
219 (5.5%) exact matches, in which:
133 unique CDR3
6 unique J



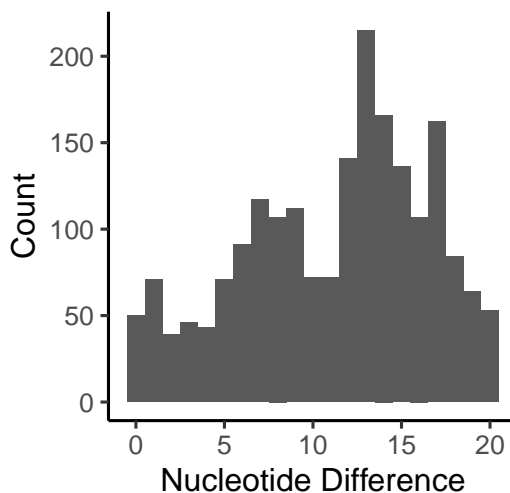
IGHV2-70*11_15

1111 sequences assigned
40 (3.6%) exact matches, in which:
34 unique CDR3
6 unique J



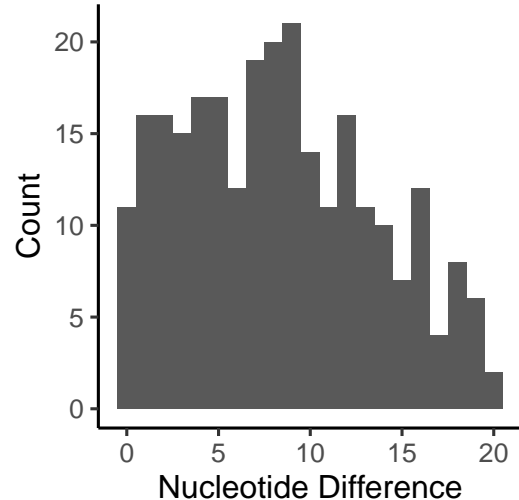
IGHV3-7*04

2774 sequences assigned
50 (1.8%) exact matches, in which:
28 unique CDR3
4 unique J



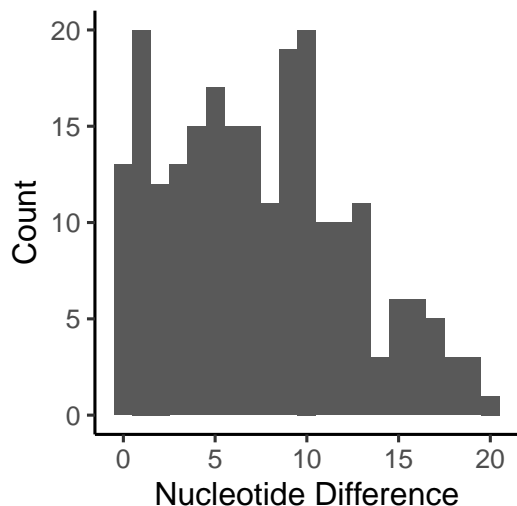
IGHV3-11*04

294 sequences assigned
11 (3.7%) exact matches, in which:
11 unique CDR3
4 unique J



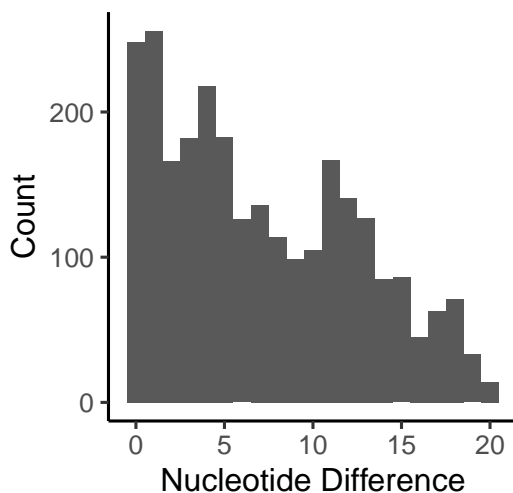
IGHV3-11*06

249 sequences assigned
13 (5.2%) exact matches, in which:
13 unique CDR3
5 unique J



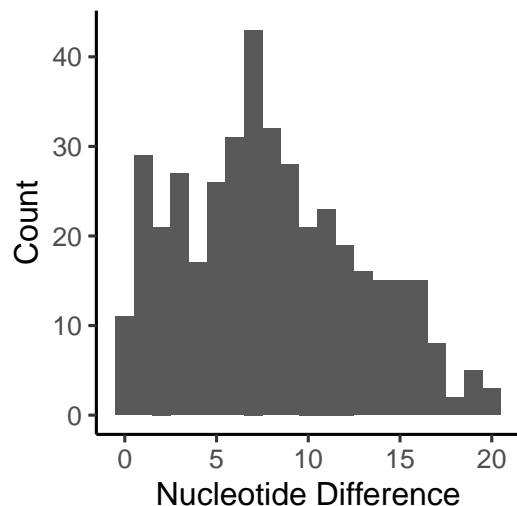
IGHV3-15*07

3846 sequences assigned
248 (6.4%) exact matches, in which:
151 unique CDR3
7 unique J



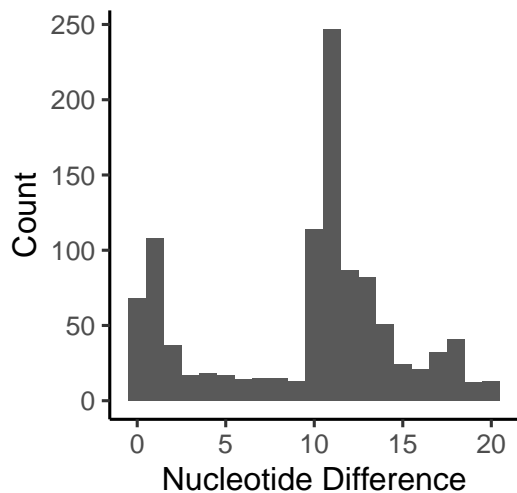
IGHV3-21*04

473 sequences assigned
11 (2.3%) exact matches, in which:
10 unique CDR3
4 unique J



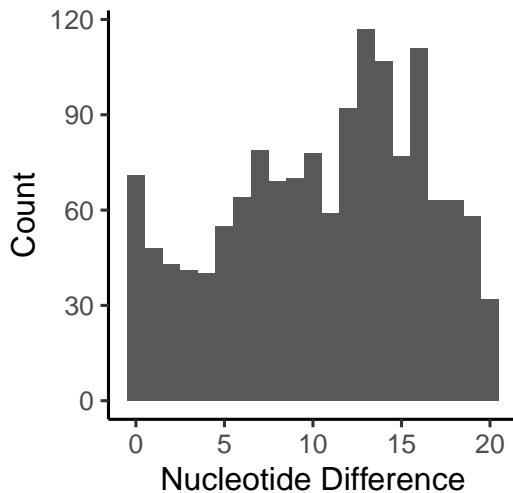
IGHV3-13*01

1187 sequences assigned
68 (5.7%) exact matches, in which:
41 unique CDR3
4 unique J



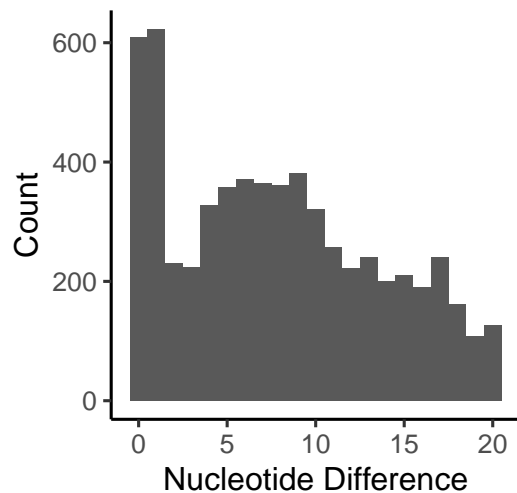
IGHV3-15*01_02

1667 sequences assigned
71 (4.3%) exact matches, in which:
45 unique CDR3
6 unique J



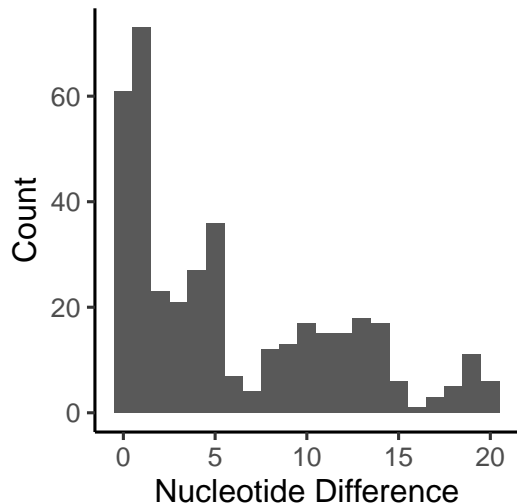
IGHV3-21*01_02

7453 sequences assigned
609 (8.2%) exact matches, in which:
366 unique CDR3
7 unique J



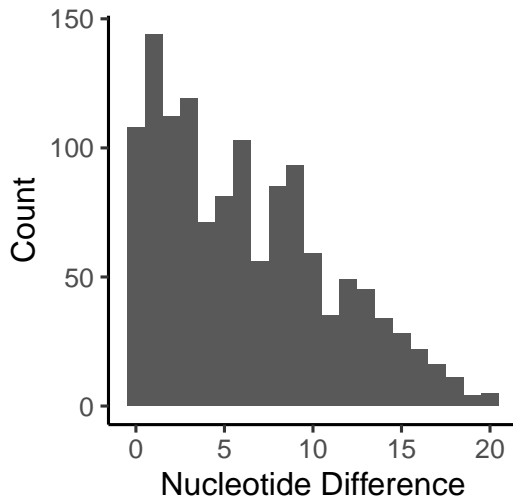
IGHV3-13*04

400 sequences assigned
61 (15.2%) exact matches, in which:
38 unique CDR3
4 unique J



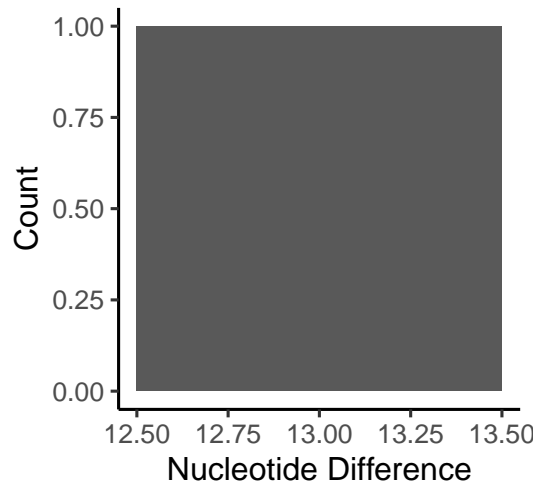
IGHV3-20*03_04

1474 sequences assigned
108 (7.3%) exact matches, in which:
65 unique CDR3
5 unique J



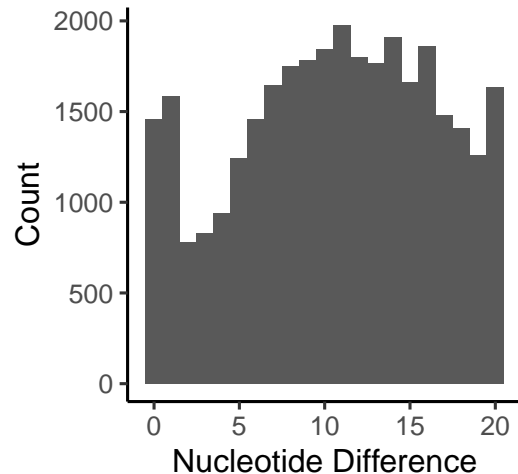
IGHV3-22*01_02

1 sequences assigned
No exact matches.



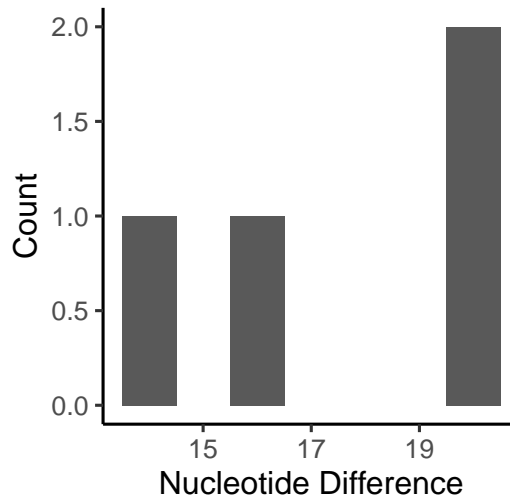
IGHV3-23*01_04

45924 sequences assigned
1458 (3.2%) exact matches, in which:
865 unique CDR3
6 unique J



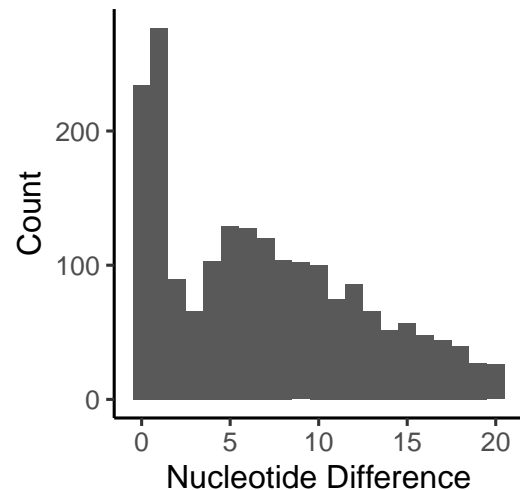
IGHV3-30-3*02

10 sequences assigned
No exact matches.



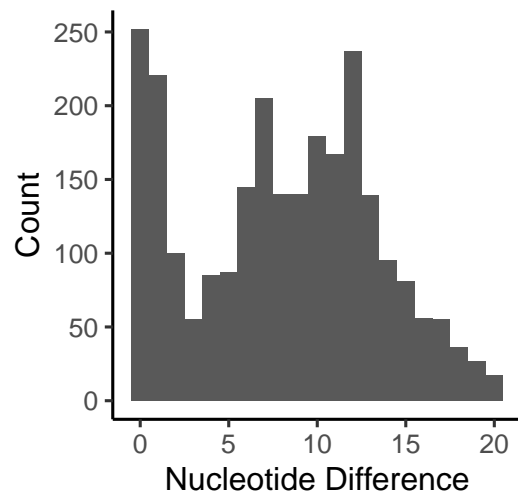
IGHV3-30*18

2960 sequences assigned
234 (7.9%) exact matches, in which:
120 unique CDR3
5 unique J



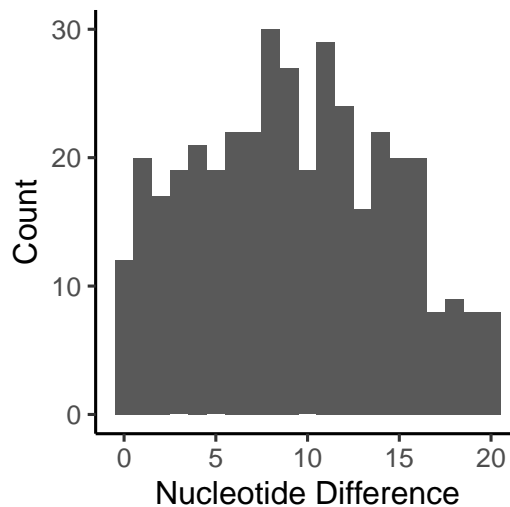
IGHV3-30*01

3628 sequences assigned
252 (6.9%) exact matches, in which:
151 unique CDR3
6 unique J



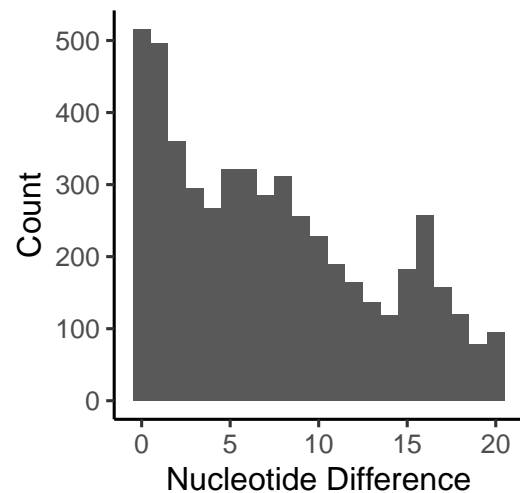
IGHV3-30*03

467 sequences assigned
12 (2.6%) exact matches, in which:
12 unique CDR3
6 unique J



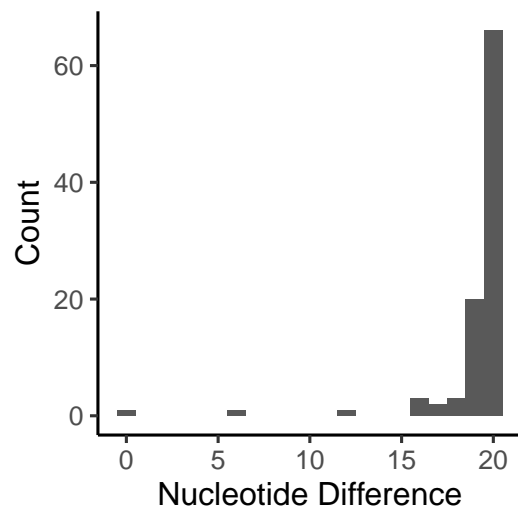
IGHV3-33*01

6502 sequences assigned
516 (7.9%) exact matches, in which:
311 unique CDR3
6 unique J



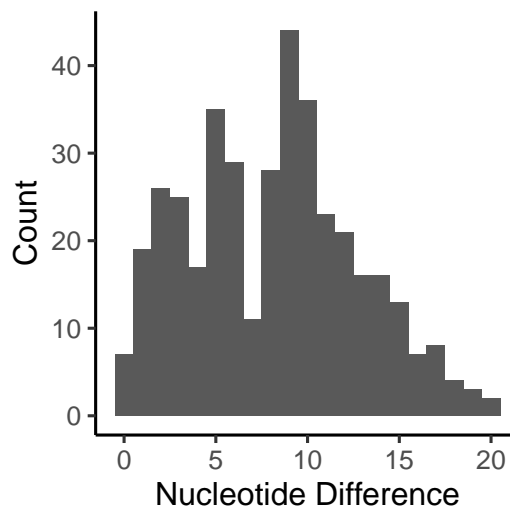
IGHV3-30-3*01

176 sequences assigned
1 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



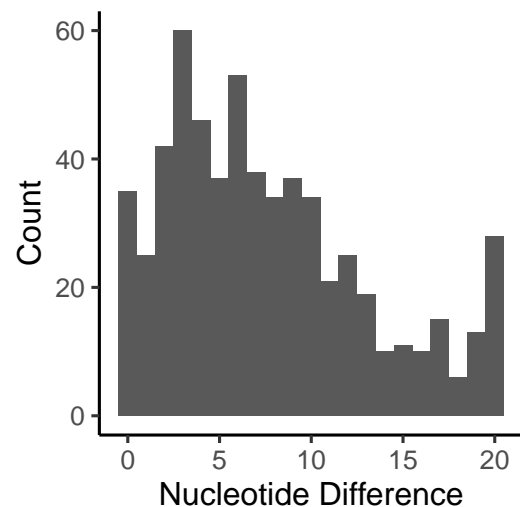
IGHV3-30*07

414 sequences assigned
7 (1.7%) exact matches, in which:
7 unique CDR3
3 unique J



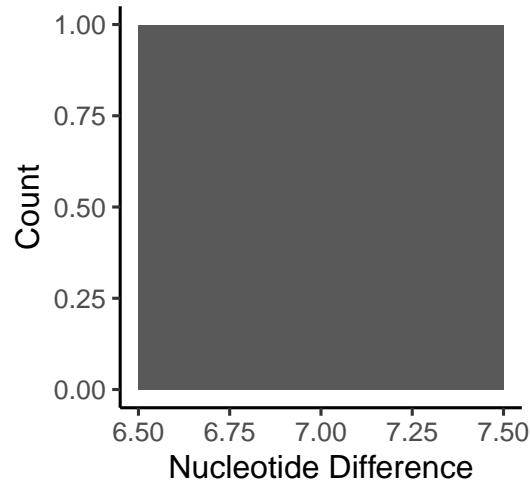
IGHV3-33*06

702 sequences assigned
35 (5%) exact matches, in which:
30 unique CDR3
5 unique J



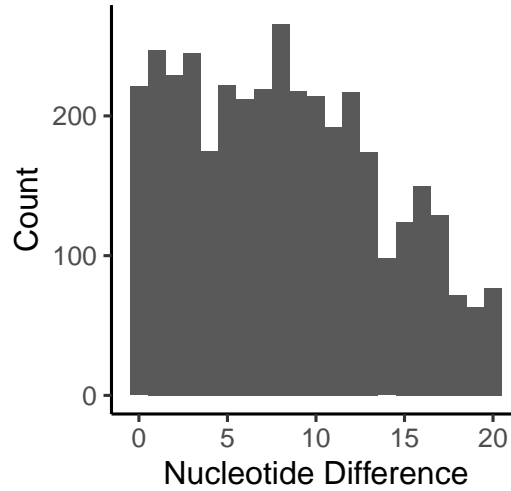
IGHV3-35*01

1 sequences assigned
No exact matches.



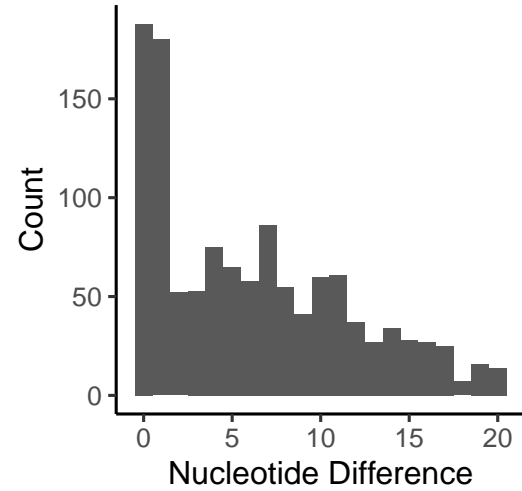
IGHV3-48*01

4102 sequences assigned
221 (5.4%) exact matches, in which:
141 unique CDR3
7 unique J



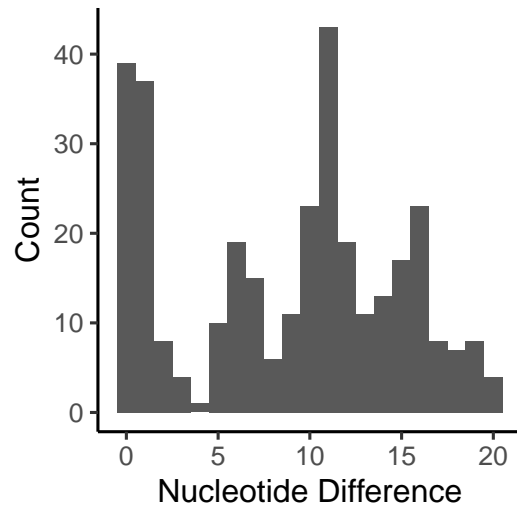
IGHV3-49*03_05

1331 sequences assigned
188 (14.1%) exact matches, in which:
98 unique CDR3
6 unique J



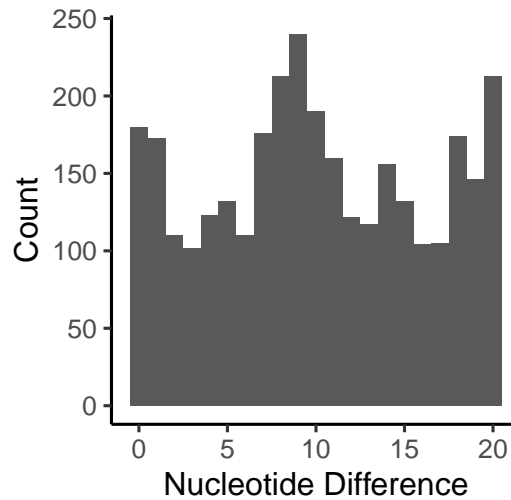
IGHV3-43*01

387 sequences assigned
39 (10.1%) exact matches, in which:
23 unique CDR3
5 unique J



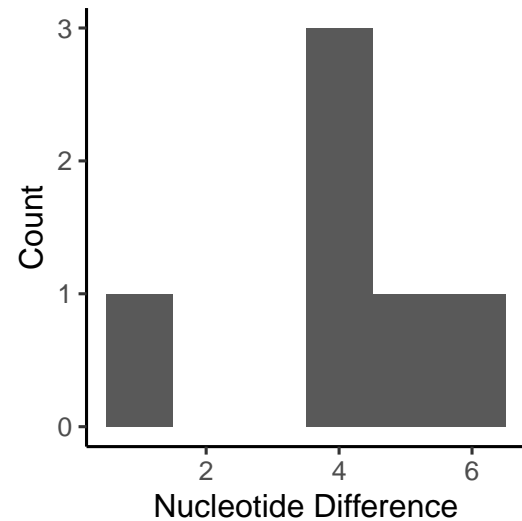
IGHV3-48*02

4275 sequences assigned
180 (4.2%) exact matches, in which:
103 unique CDR3
6 unique J



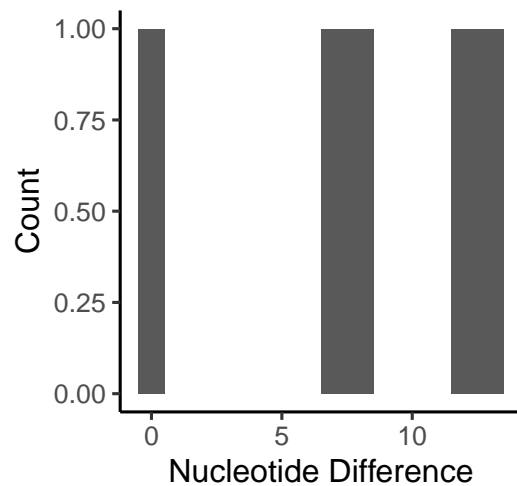
IGHV3-52*02

6 sequences assigned
No exact matches.



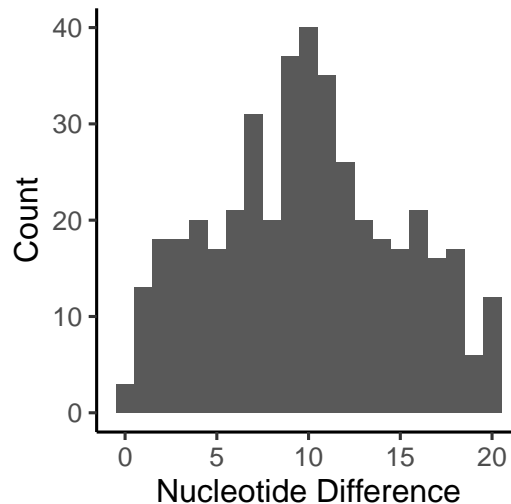
IGHV3-47*02

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



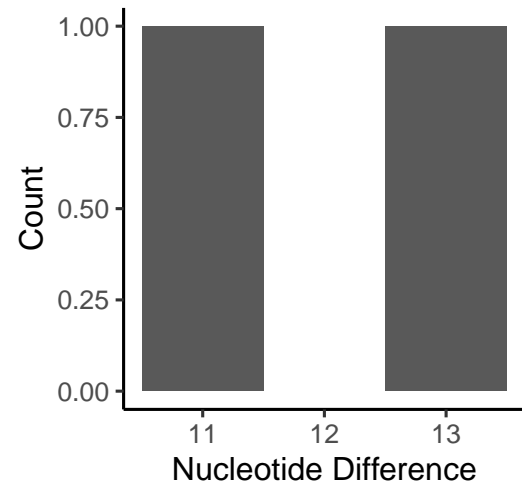
IGHV3-48*04

686 sequences assigned
3 (0.4%) exact matches, in which:
3 unique CDR3
1 unique J



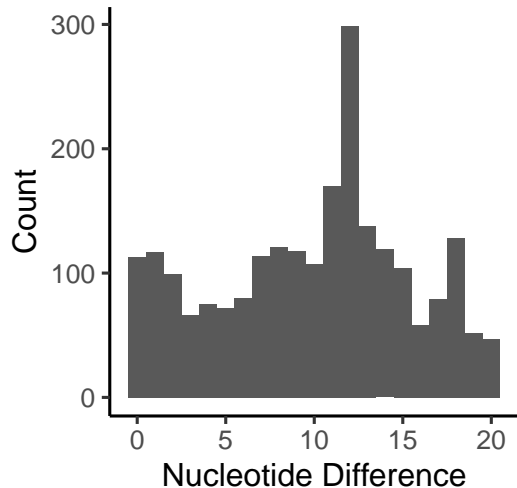
IGHV3-52*01_03

2 sequences assigned
No exact matches.



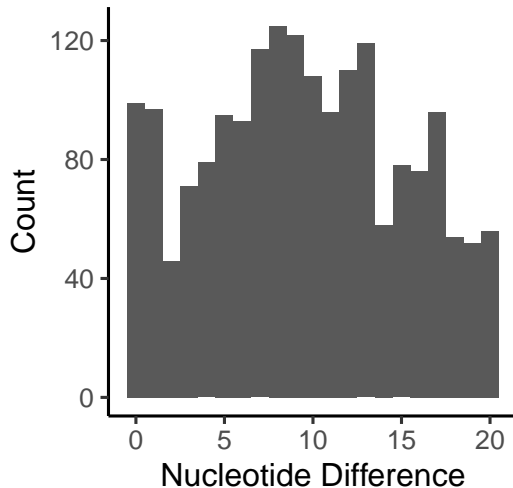
IGHV3–53*01_02

2580 sequences assigned
113 (4.4%) exact matches, in which:
68 unique CDR3
7 unique J



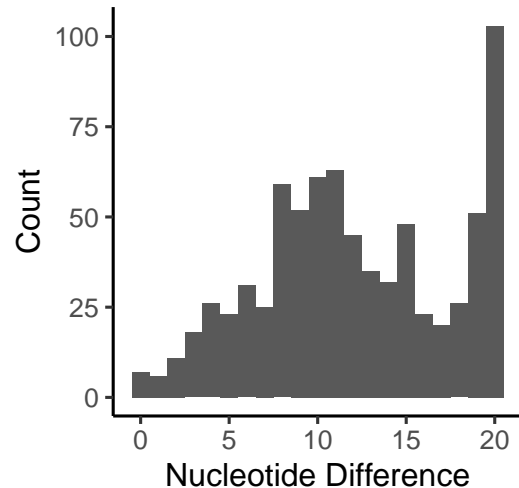
IGHV3–66*01

3108 sequences assigned
99 (3.2%) exact matches, in which:
62 unique CDR3
6 unique J



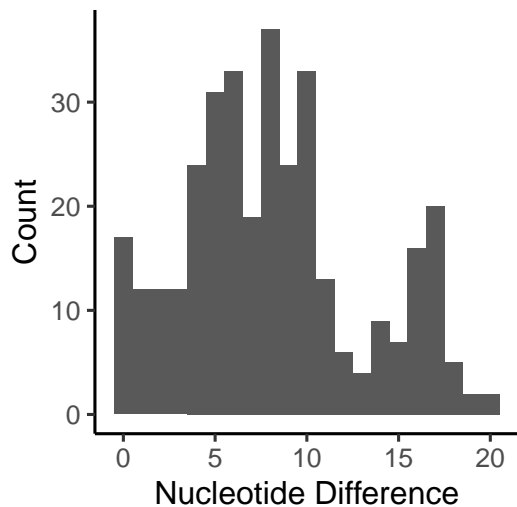
IGHV3–72*01

1308 sequences assigned
7 (0.5%) exact matches, in which:
3 unique CDR3
2 unique J



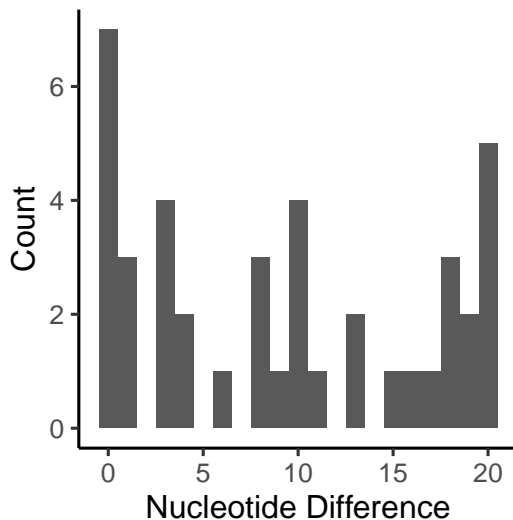
IGHV3–64*01

385 sequences assigned
17 (4.4%) exact matches, in which:
10 unique CDR3
3 unique J



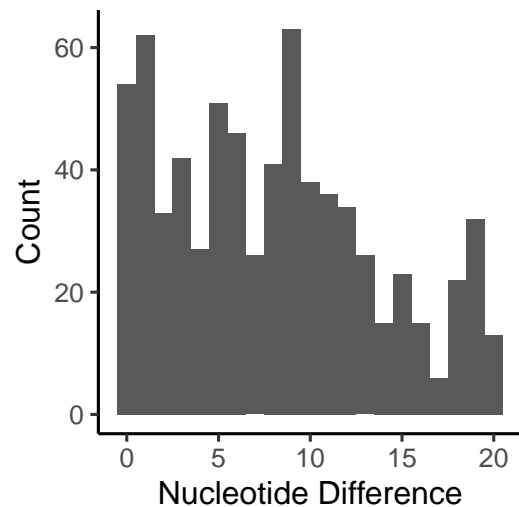
IGHV3–69–1*01

258 sequences assigned
7 (2.7%) exact matches, in which:
5 unique CDR3
3 unique J



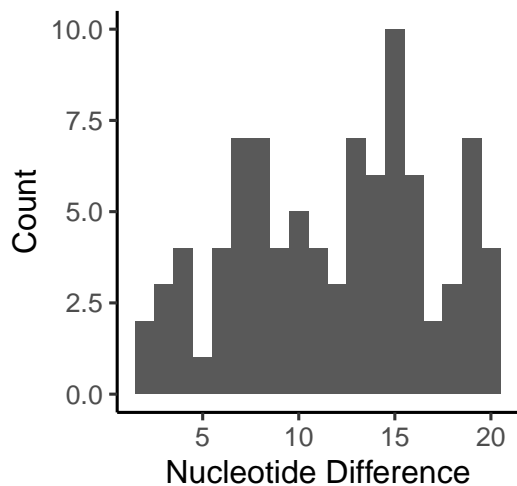
IGHV3–73*01_02

1254 sequences assigned
54 (4.3%) exact matches, in which:
29 unique CDR3
4 unique J



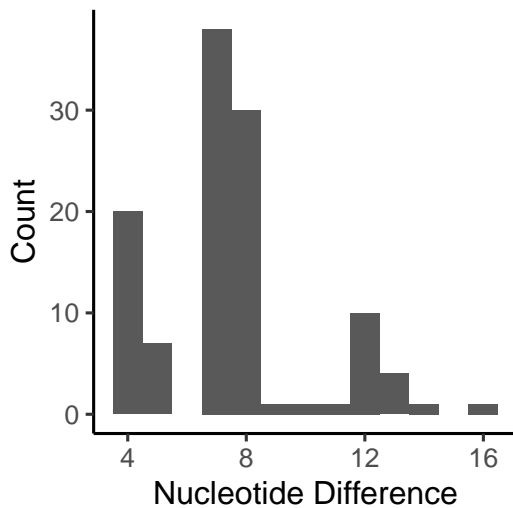
IGHV3–64*04

116 sequences assigned
No exact matches.



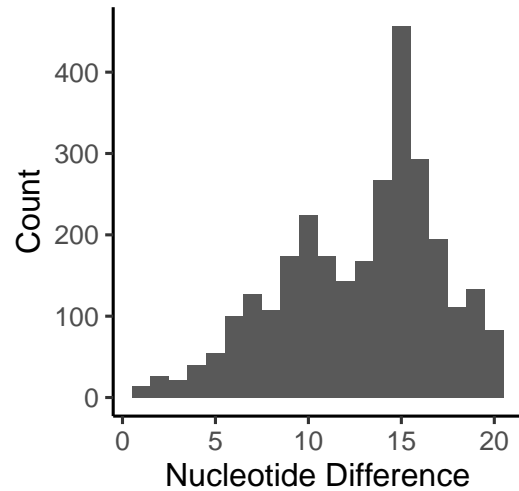
IGHV3–69–1*02

190 sequences assigned
No exact matches.



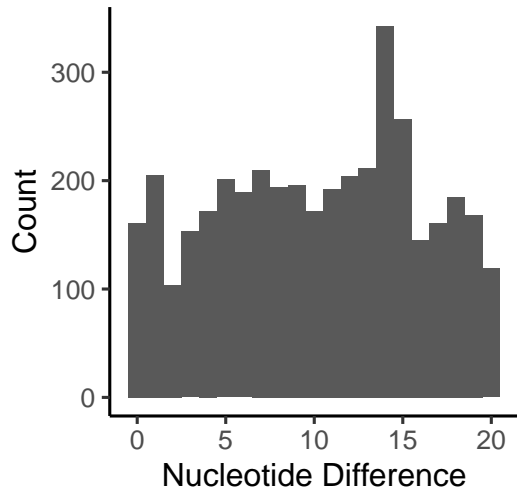
IGHV3–74*03

3600 sequences assigned
No exact matches.



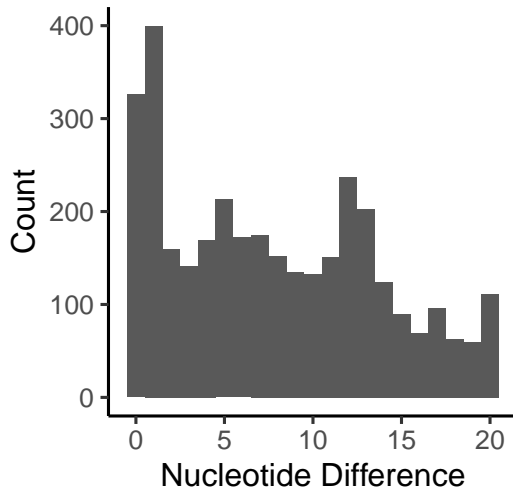
IGHV3-74*01_02

5045 sequences assigned
161 (3.2%) exact matches, in which:
96 unique CDR3
6 unique J



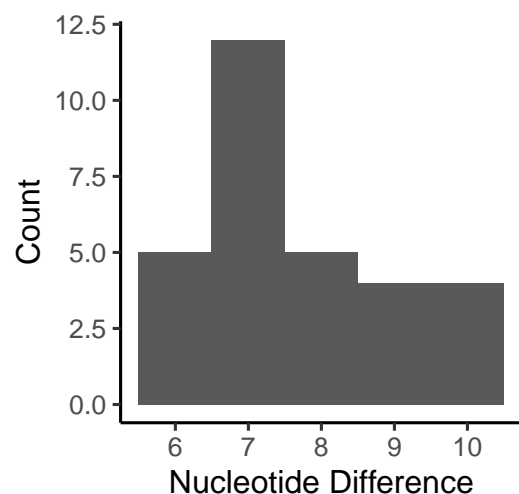
IGHV4-4*02_03

4511 sequences assigned
326 (7.2%) exact matches, in which:
246 unique CDR3
7 unique J



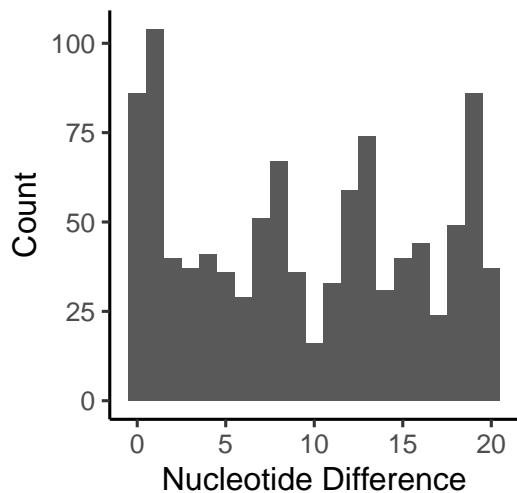
IGHV4-28*02_05

30 sequences assigned
No exact matches.



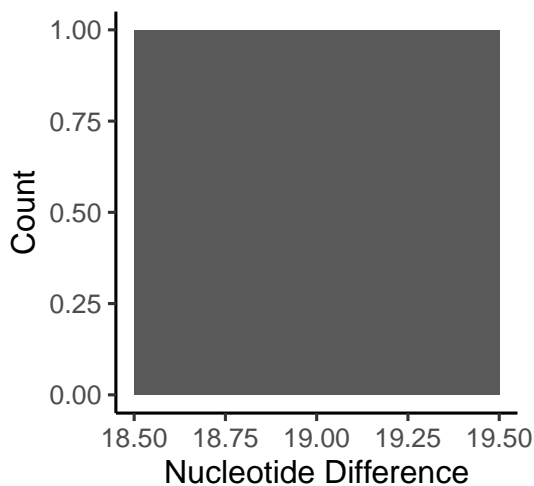
IGHV3-64D*06

1895 sequences assigned
86 (4.5%) exact matches, in which:
52 unique CDR3
5 unique J



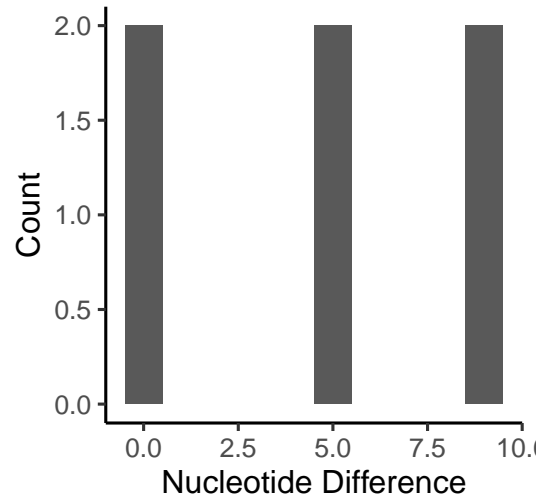
IGHV4-28*03

1 sequences assigned
No exact matches.



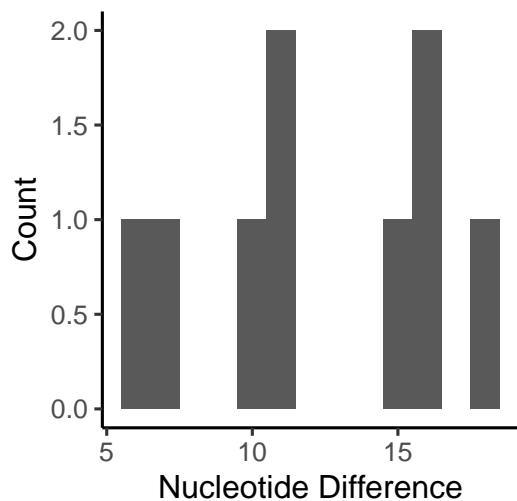
IGHV4-30-4*01

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



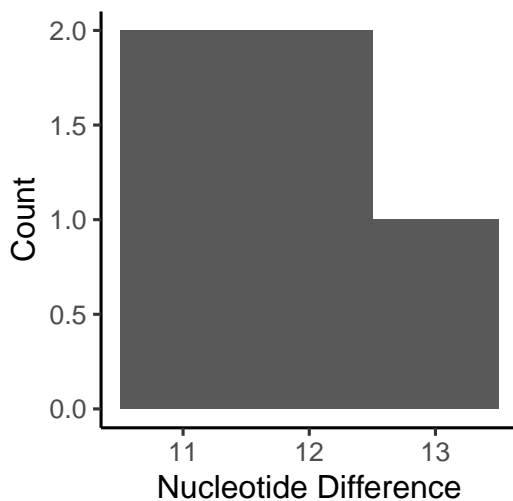
IGHV3-NL1*01

16 sequences assigned
No exact matches.



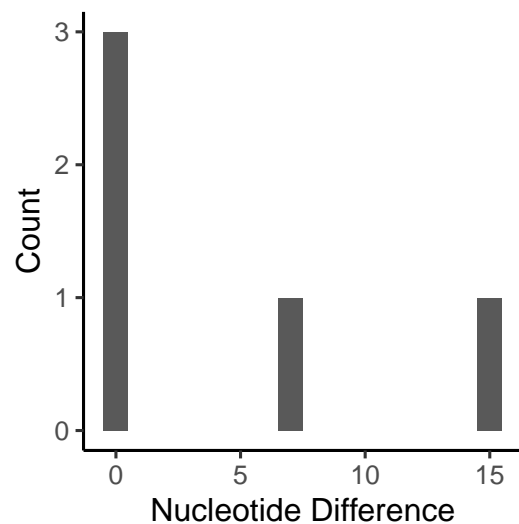
IGHV4-28*01_07

5 sequences assigned
No exact matches.



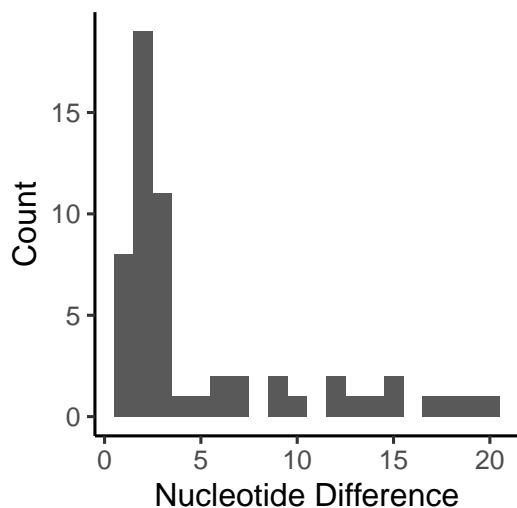
IGHV4-30-2*01

7 sequences assigned
3 (42.9%) exact matches, in which:
3 unique CDR3
2 unique J



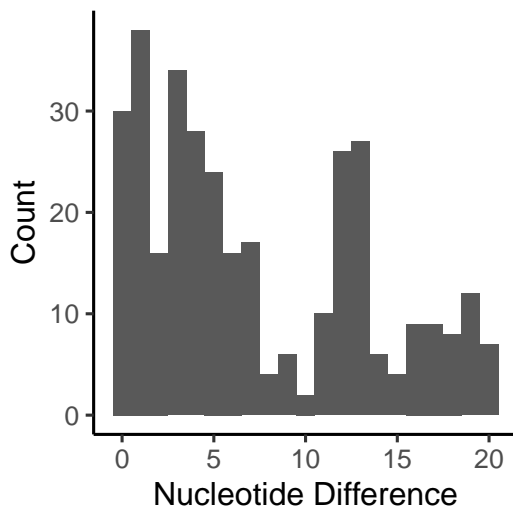
IGHV4-30-2*03

66 sequences assigned
No exact matches.



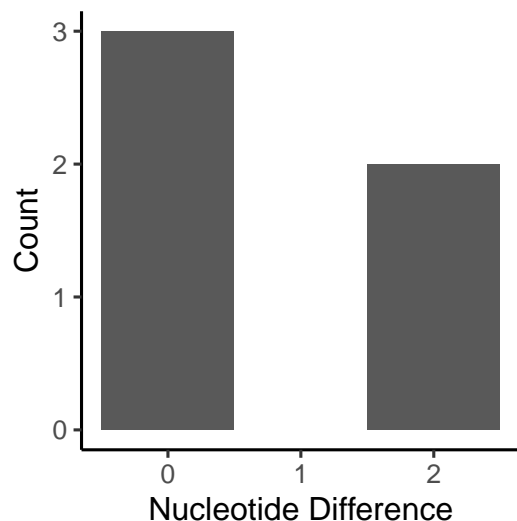
IGHV4-31*01

1268 sequences assigned
30 (2.4%) exact matches, in which:
23 unique CDR3
5 unique J



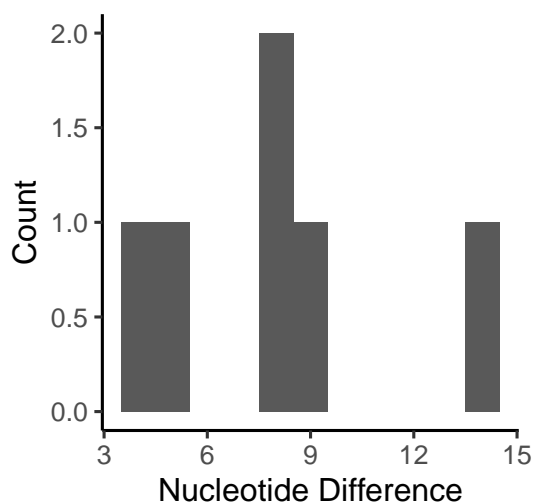
IGHV4-38-2*01

6 sequences assigned
3 (50%) exact matches, in which:
3 unique CDR3
2 unique J



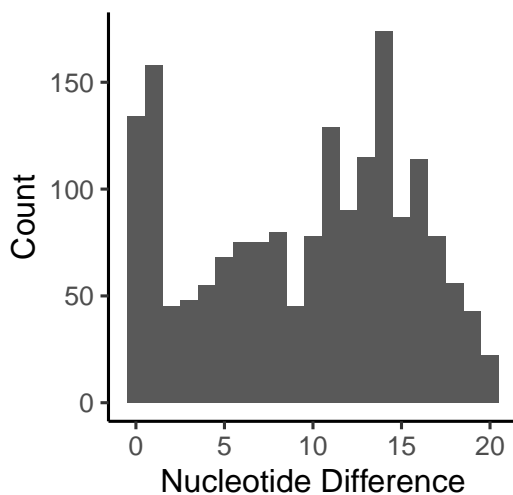
IGHV4-30-2*04

6 sequences assigned
No exact matches.



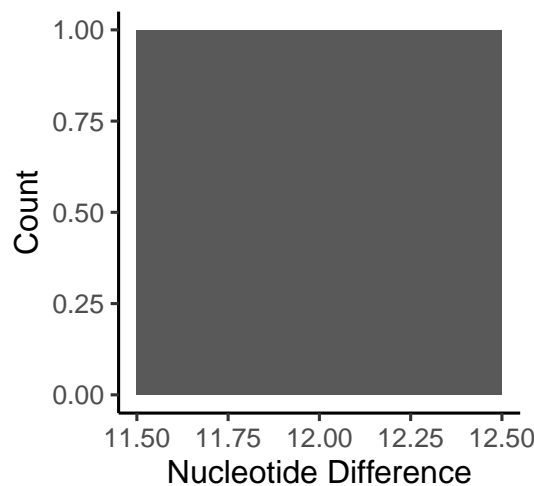
IGHV4-31*02

2973 sequences assigned
134 (4.5%) exact matches, in which:
107 unique CDR3
7 unique J



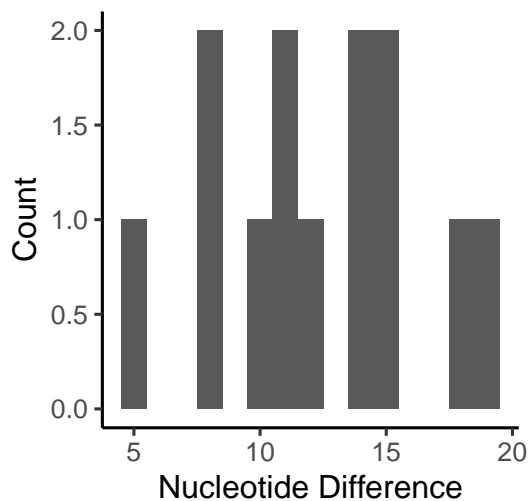
IGHV4-38-2*02

6 sequences assigned
No exact matches.



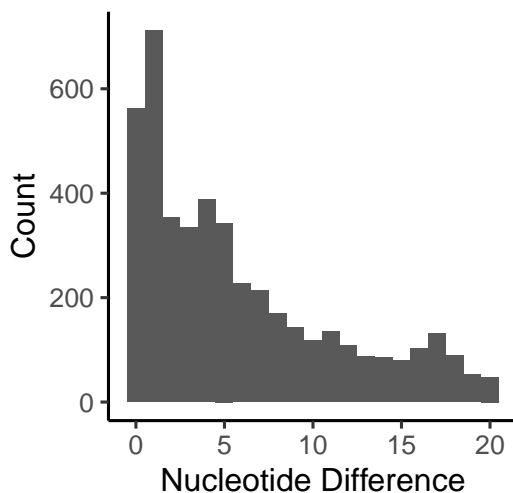
IGHV4-30-4*08

14 sequences assigned
No exact matches.



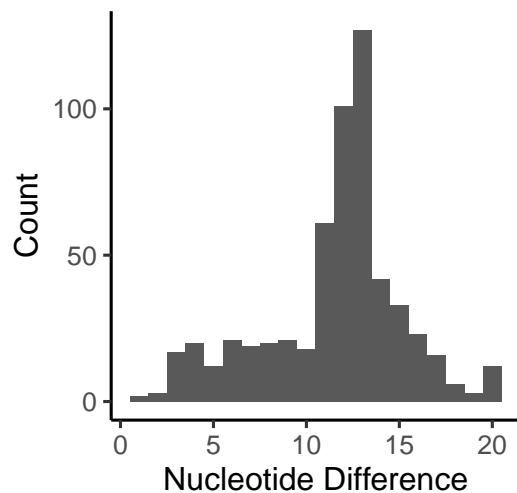
IGHV4-34*01_02

5018 sequences assigned
563 (11.2%) exact matches, in which:
411 unique CDR3
7 unique J



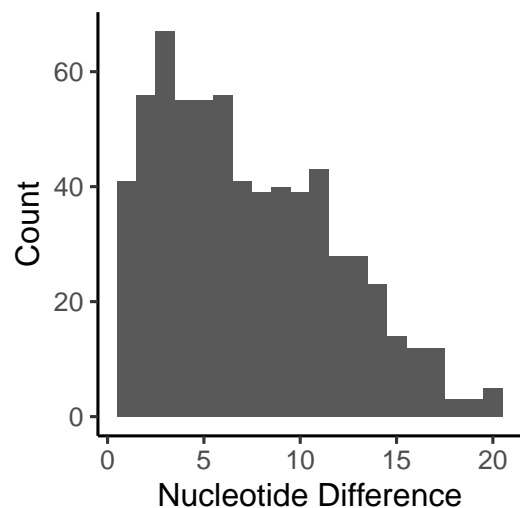
IGHV4-39*02

1585 sequences assigned
No exact matches.



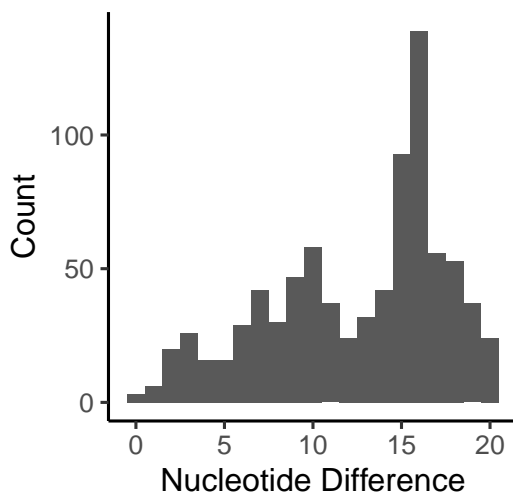
IGHV4-39*07

688 sequences assigned
No exact matches.



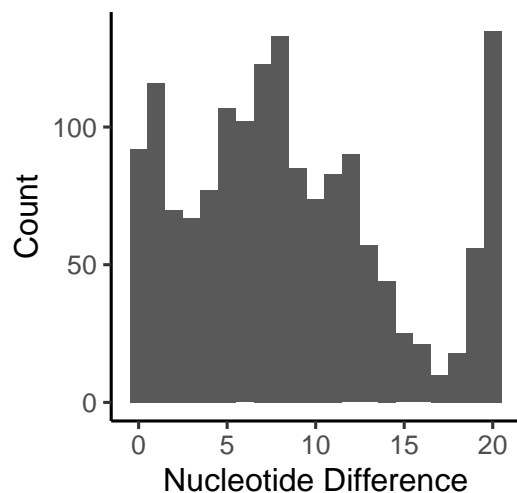
IGHV4-59*11

1180 sequences assigned
3 (0.3%) exact matches, in which:
3 unique CDR3
2 unique J



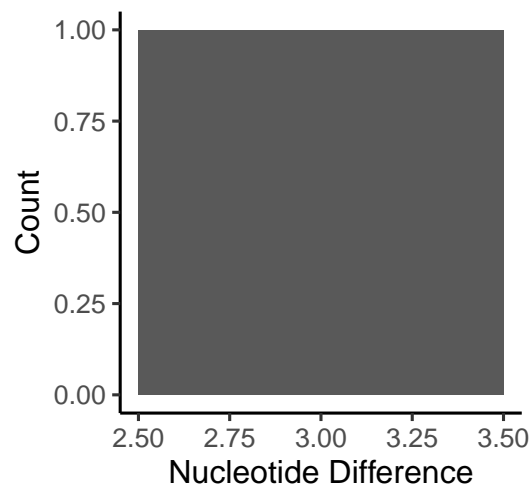
IGHV4-61*01

2374 sequences assigned
92 (3.9%) exact matches, in which:
72 unique CDR3
6 unique J



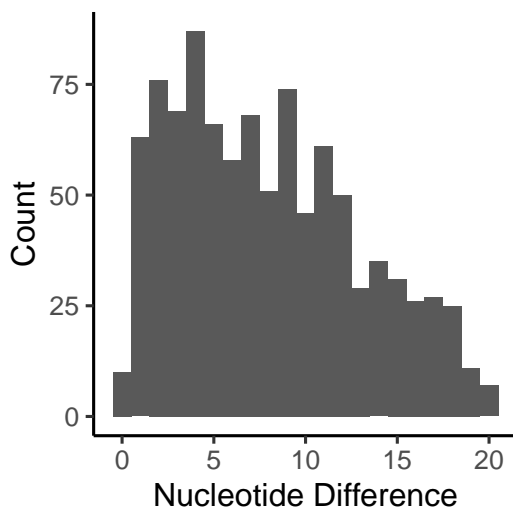
IGHV4-55*09

1 sequences assigned
No exact matches.



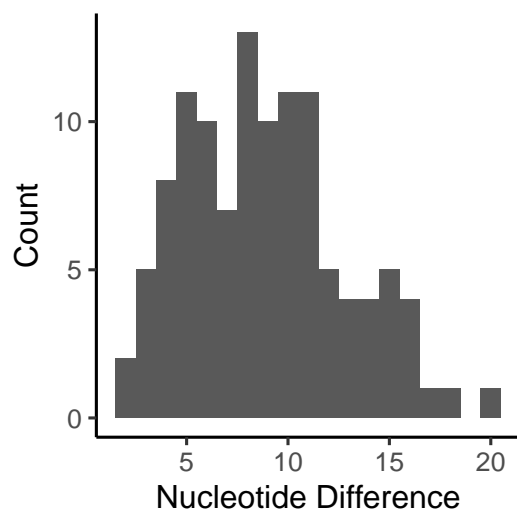
IGHV4-59*12

1095 sequences assigned
10 (0.9%) exact matches, in which:
10 unique CDR3
4 unique J



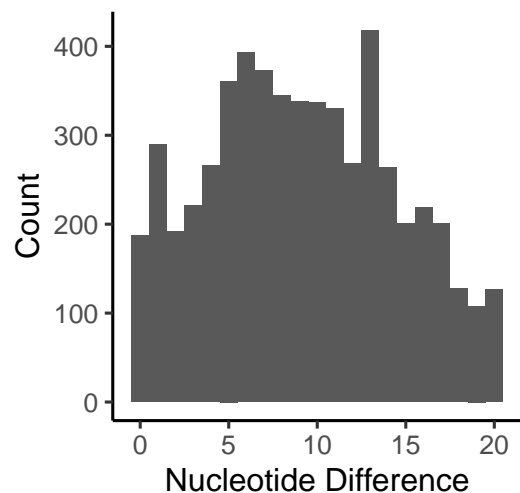
IGHV4-61*05

126 sequences assigned
No exact matches.



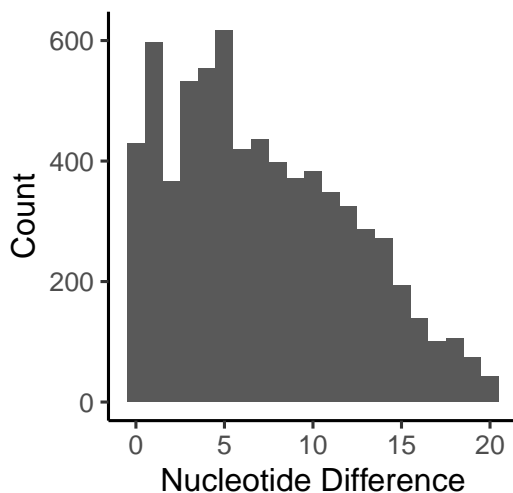
IGHV4-59*08

7580 sequences assigned
187 (2.5%) exact matches, in which:
149 unique CDR3
7 unique J



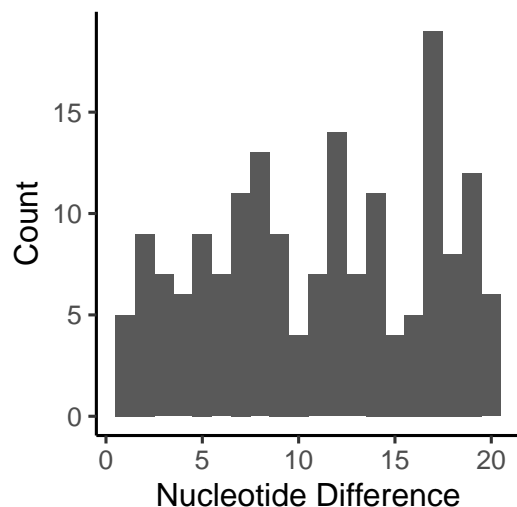
IGHV4-59*01_07

8136 sequences assigned
429 (5.3%) exact matches, in which:
337 unique CDR3
7 unique J



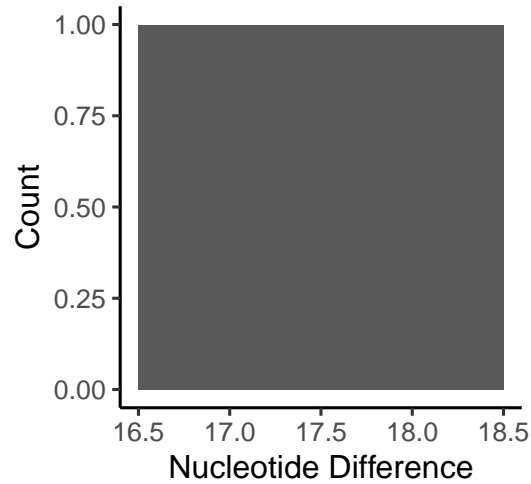
IGHV4-61*08

373 sequences assigned
No exact matches.



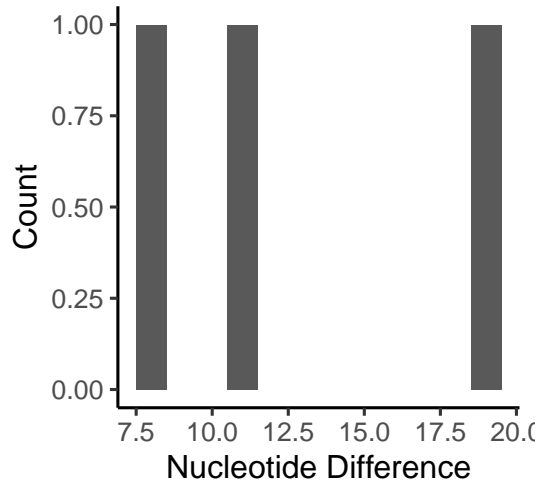
IGHV1/OR15-2*02_03

2 sequences assigned
No exact matches.



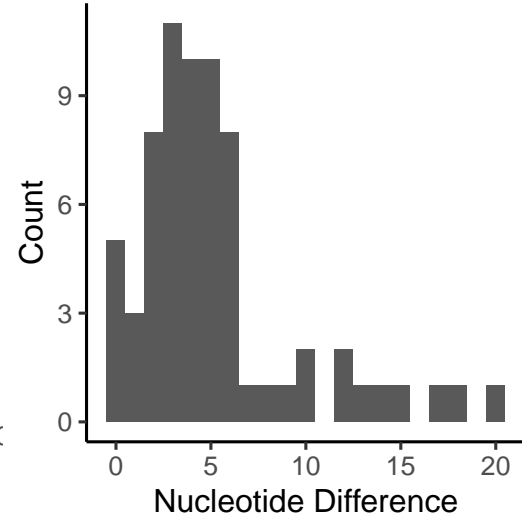
IGHV4/OR15-8*02

5 sequences assigned
No exact matches.



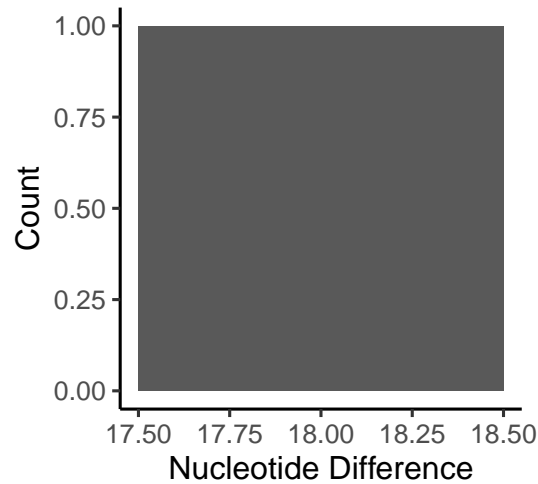
IGHV5-51*06

71 sequences assigned
5 (7%) exact matches, in which:
5 unique CDR3
2 unique J



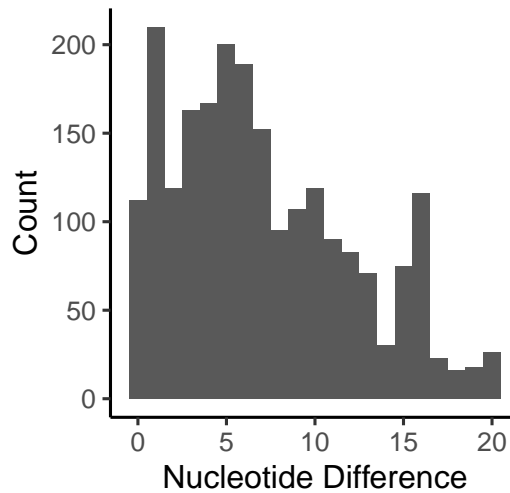
IGHV1/OR15-3*02

1 sequences assigned
No exact matches.



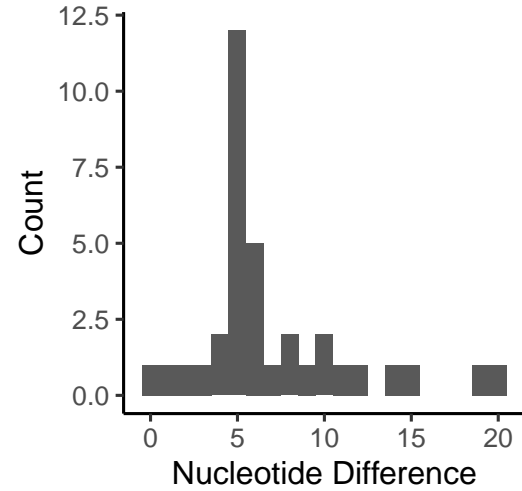
IGHV5-10-1*01_03

2494 sequences assigned
112 (4.5%) exact matches, in which:
72 unique CDR3
6 unique J



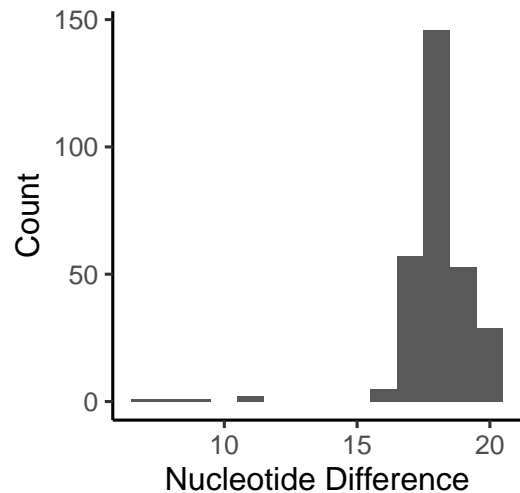
IGHV5-51*07

39 sequences assigned
1 (2.6%) exact matches, in which:
1 unique CDR3
1 unique J



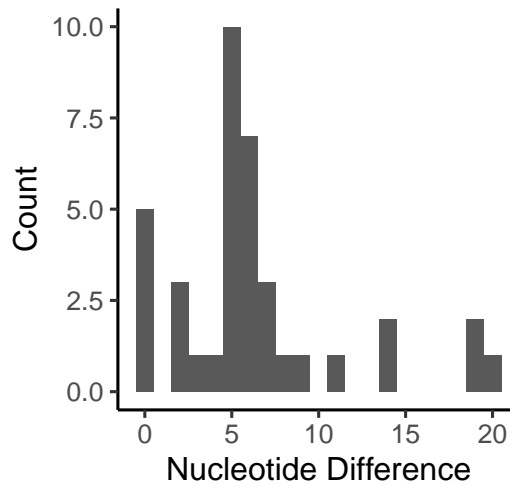
IGHV4/OR15-8*01

343 sequences assigned
No exact matches.



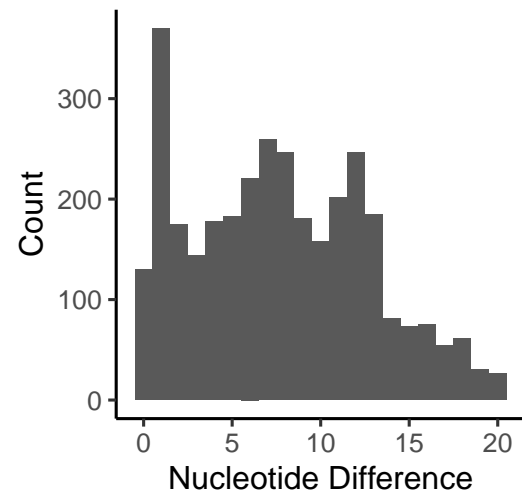
IGHV5-51*04

48 sequences assigned
5 (10.4%) exact matches, in which:
5 unique CDR3
3 unique J



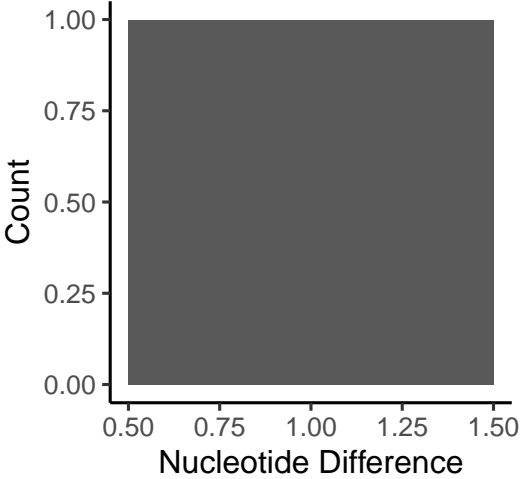
IGHV6-1*01_02

3527 sequences assigned
130 (3.7%) exact matches, in which:
91 unique CDR3
5 unique J



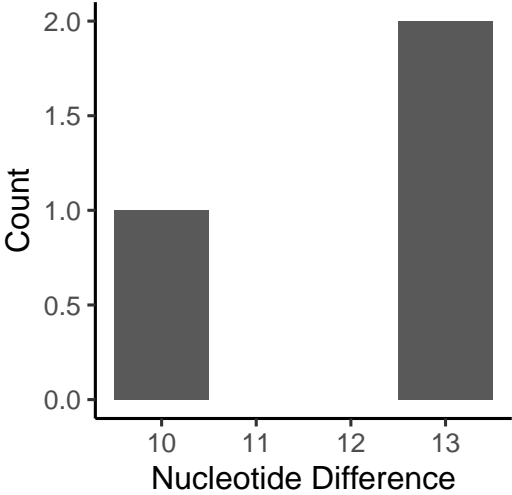
IGHV7-4-1*01

1 sequences assigned
No exact matches.

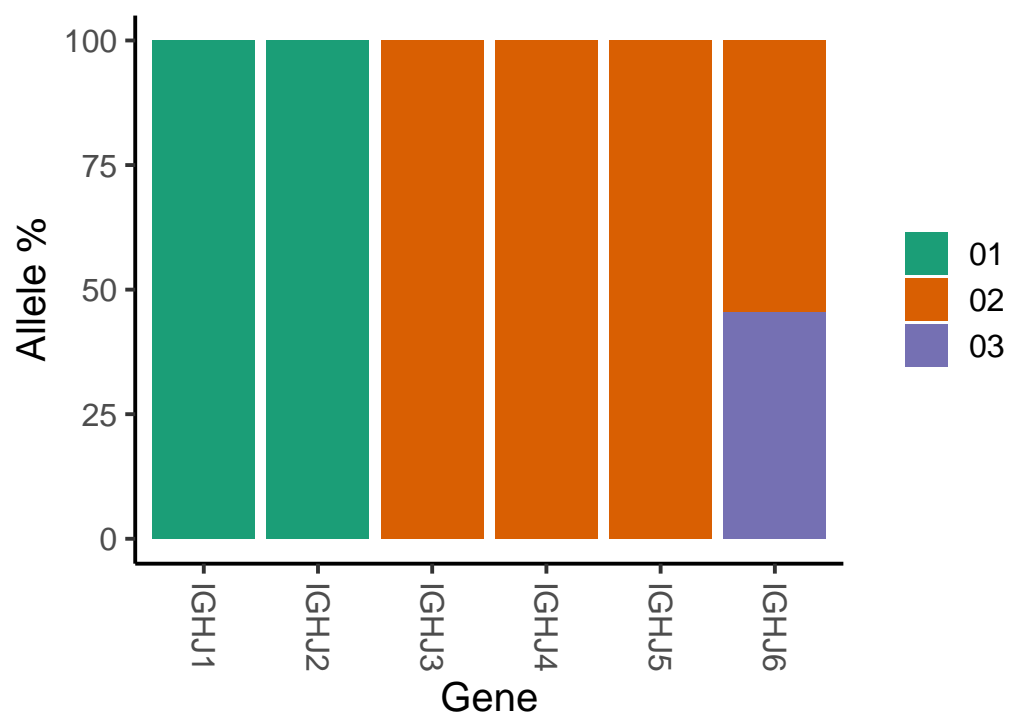


IGHV7-4-1*02

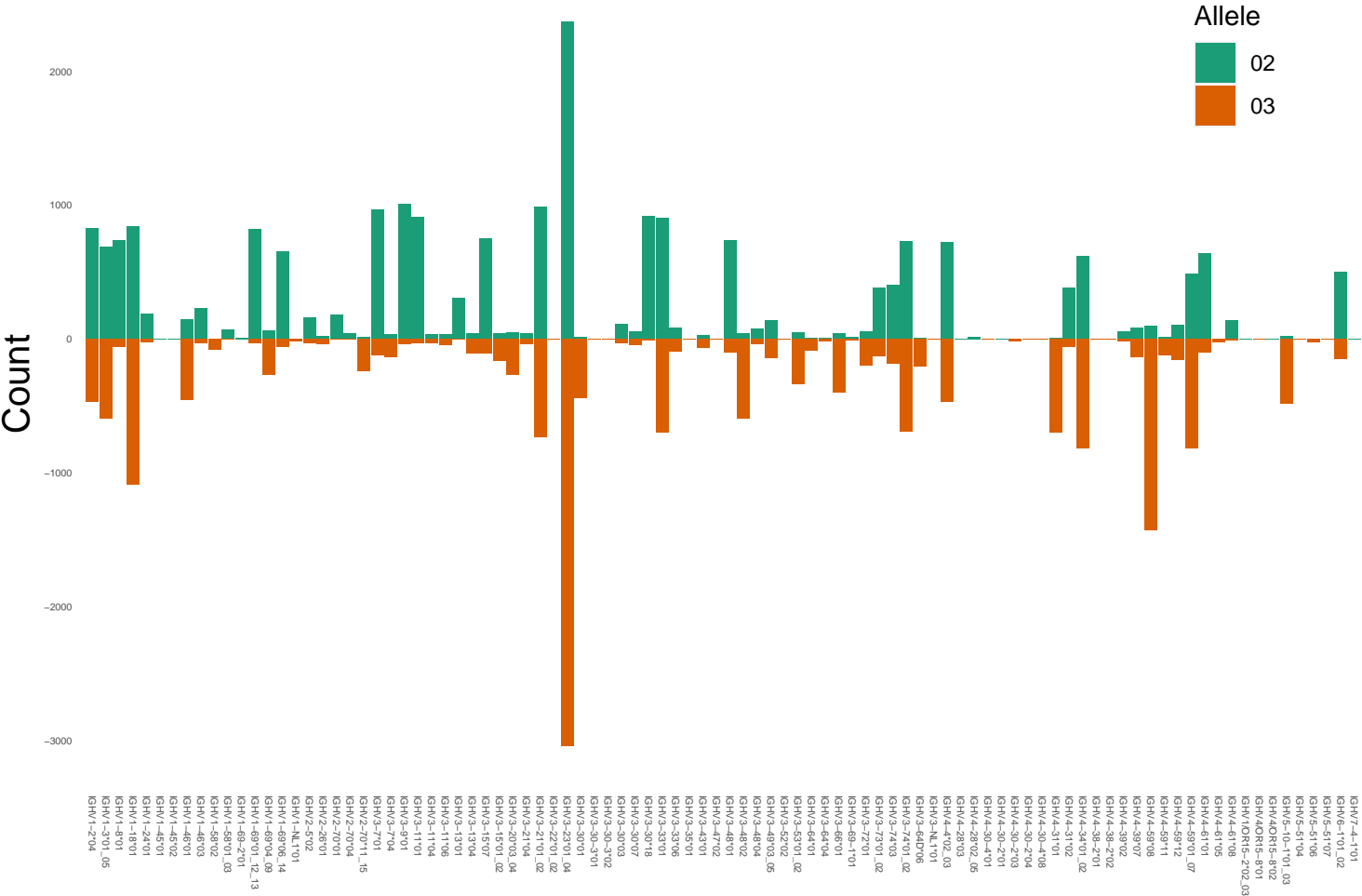
3 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.