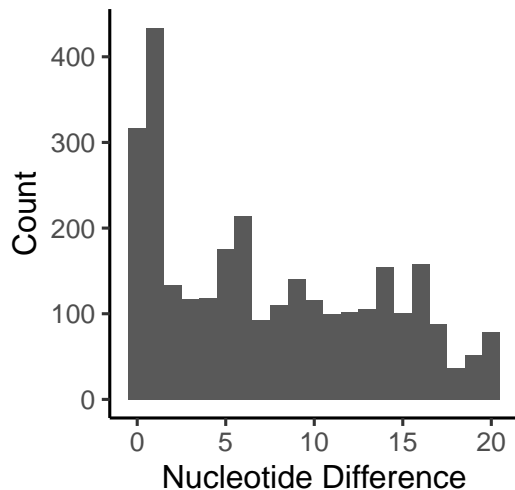


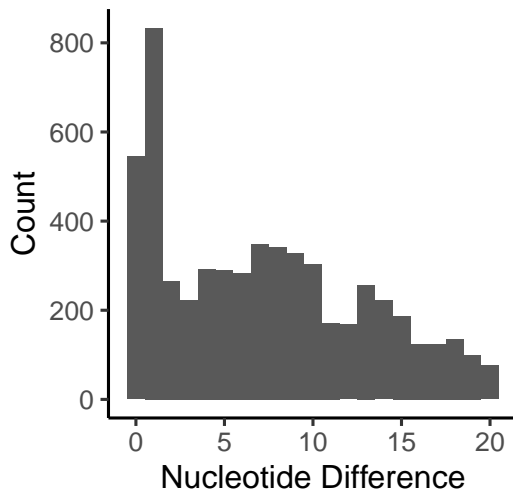
IGHV1-2*04

3183 sequences assigned
317 (10%) exact matches, in which:
238 unique CDR3
6 unique J



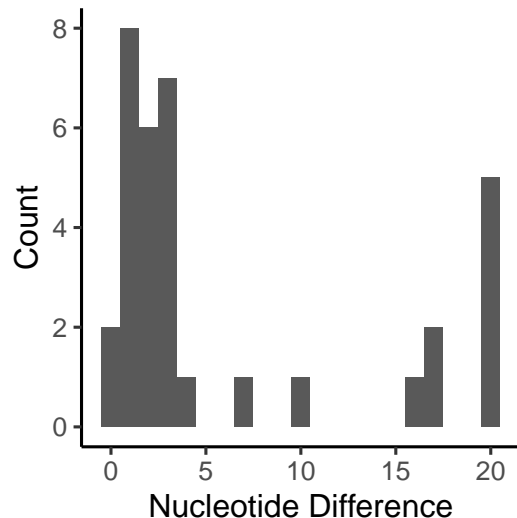
IGHV1-18*01

7494 sequences assigned
545 (7.3%) exact matches, in which:
414 unique CDR3
7 unique J



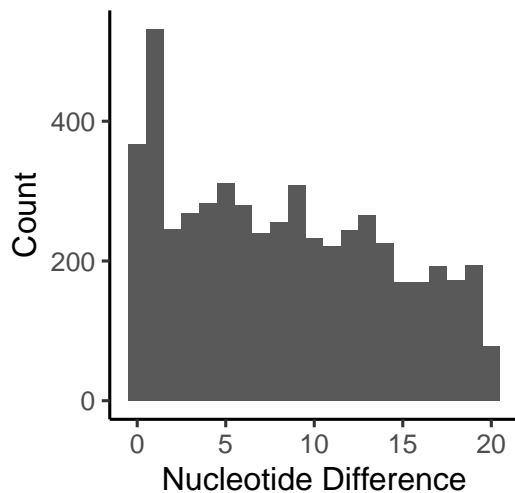
IGHV1-45*02

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



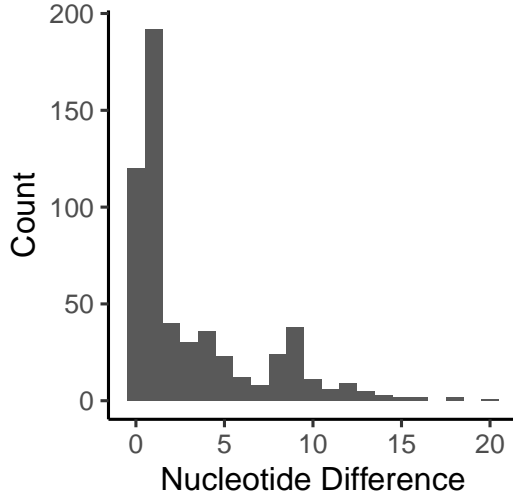
IGHV1-3*01_05

5583 sequences assigned
367 (6.6%) exact matches, in which:
276 unique CDR3
7 unique J



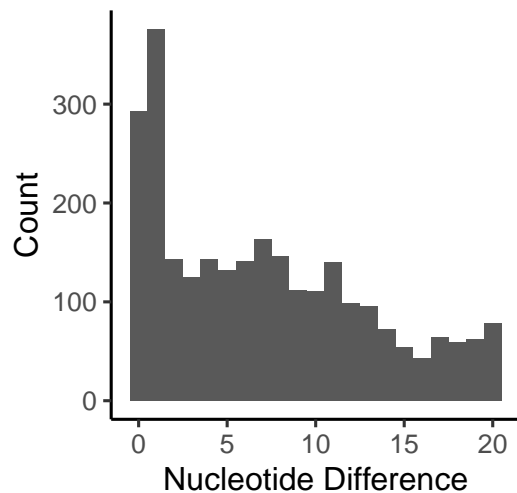
IGHV1-24*01

715 sequences assigned
120 (16.8%) exact matches, in which:
86 unique CDR3
7 unique J



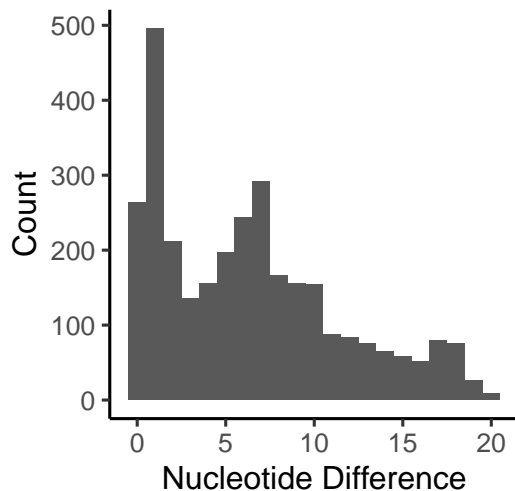
IGHV1-46*01

3532 sequences assigned
293 (8.3%) exact matches, in which:
240 unique CDR3
7 unique J



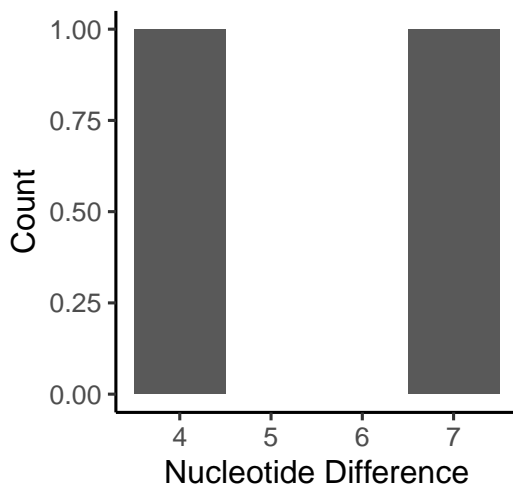
IGHV1-8*01

3787 sequences assigned
264 (7%) exact matches, in which:
218 unique CDR3
7 unique J



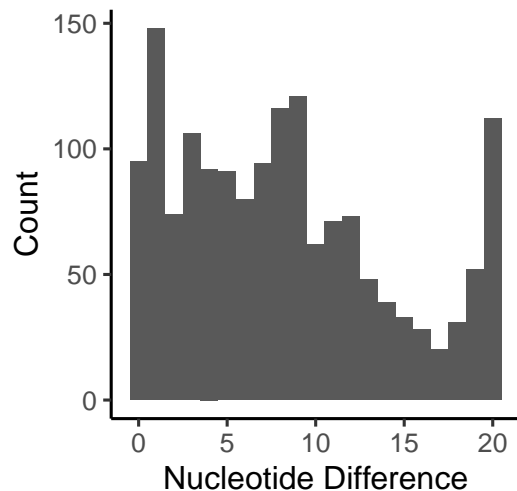
IGHV1-45*01

2 sequences assigned
No exact matches.



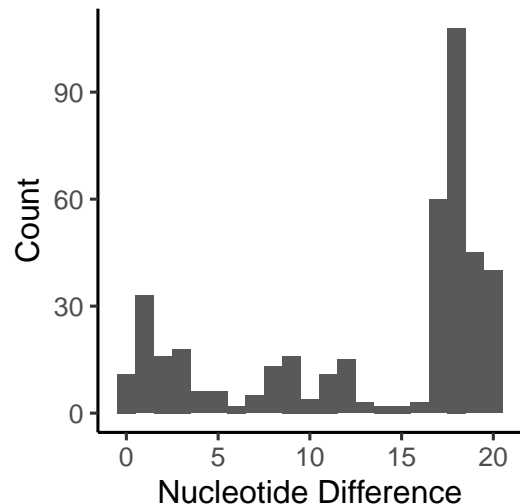
IGHV1-46*03

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



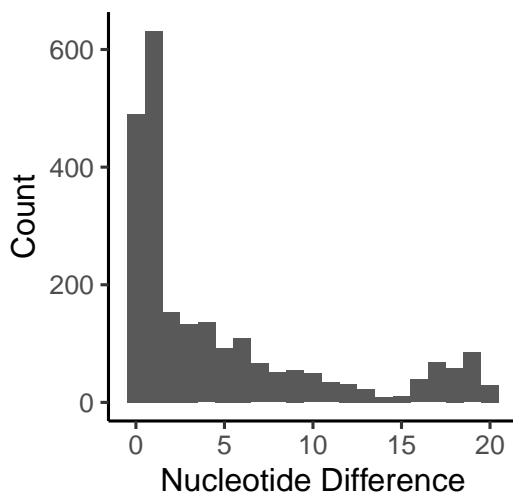
IGHV1-58*02

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



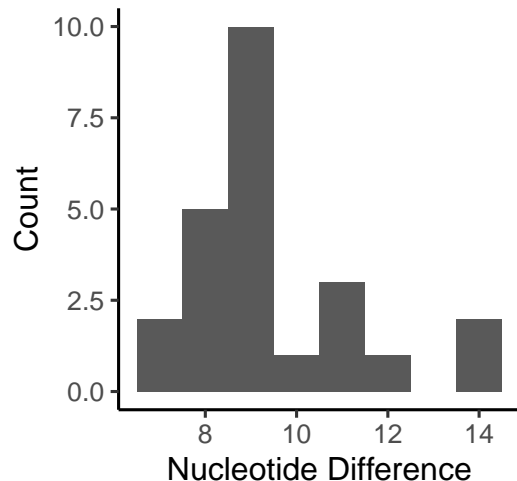
IGHV1-69*01_12_13

3402 sequences assigned
490 (14.4%) exact matches, in which:
393 unique CDR3
7 unique J



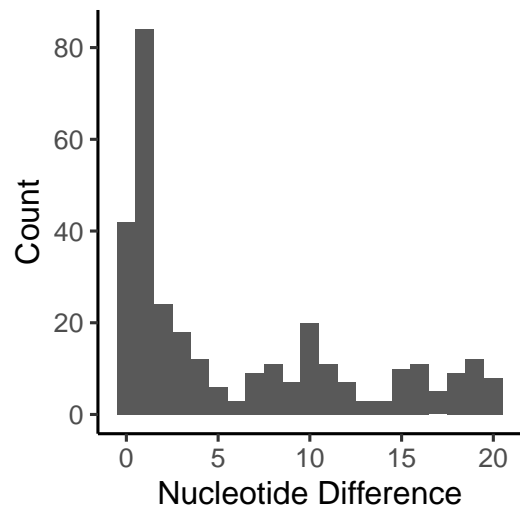
IGHV1-NL1*01

24 sequences assigned
No exact matches.



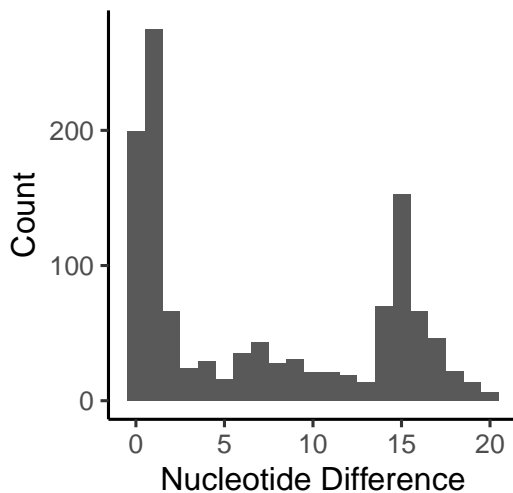
IGHV1-58*01_03

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



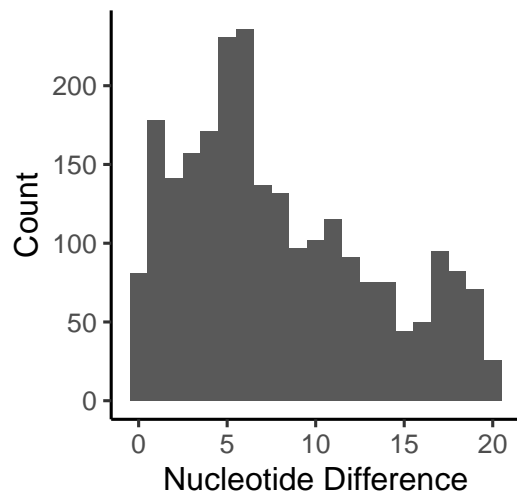
IGHV1-69*04_09

1266 sequences assigned
199 (15.7%) exact matches, in which:
163 unique CDR3
7 unique J



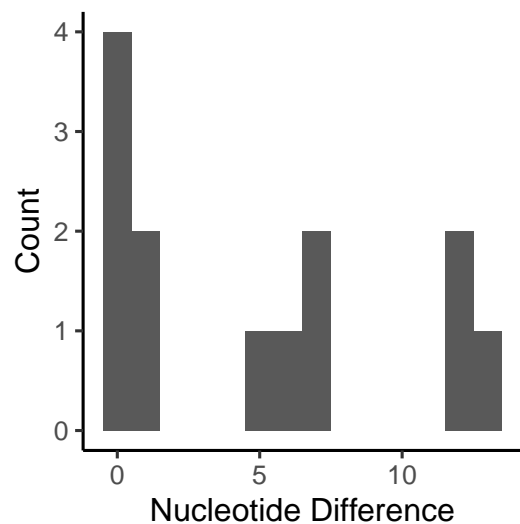
IGHV2-5*02

2700 sequences assigned
81 (3%) exact matches, in which:
61 unique CDR3
5 unique J



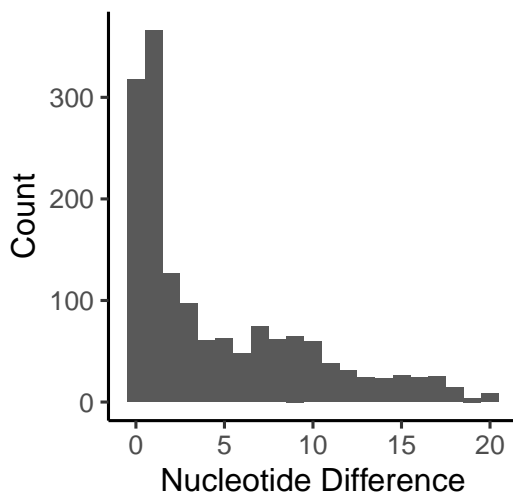
IGHV1-69-2*01

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



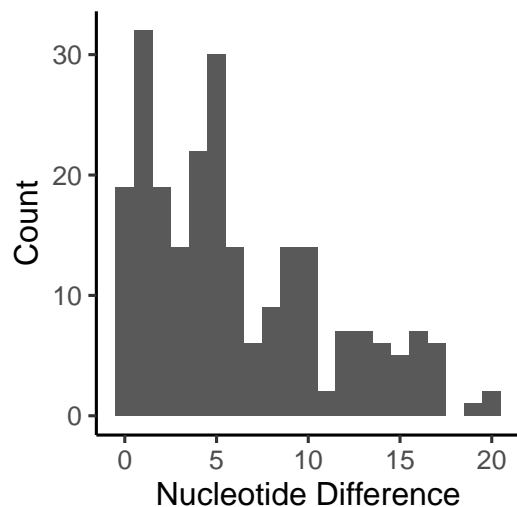
IGHV1-69*06_14

1637 sequences assigned
318 (19.4%) exact matches, in which:
250 unique CDR3
7 unique J



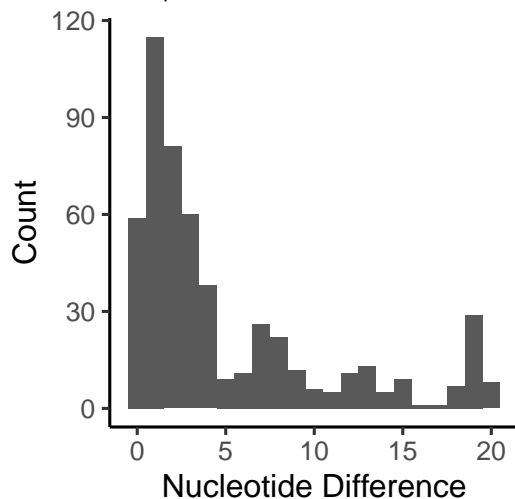
IGHV2-26*01

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



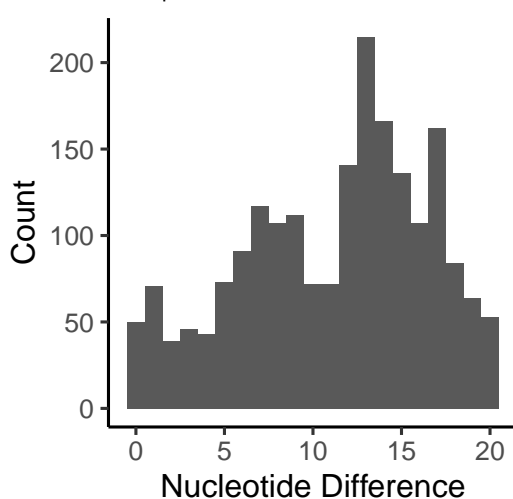
IGHV2-70*01

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



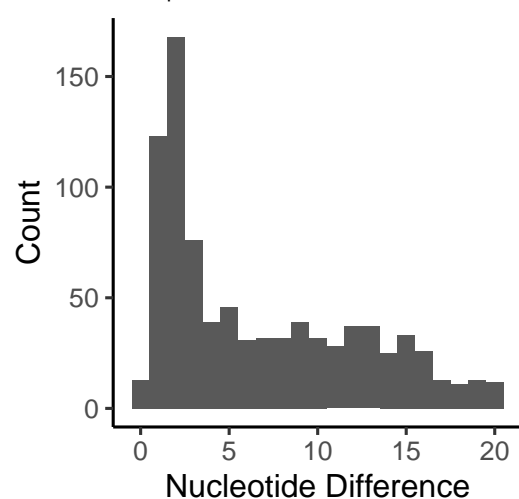
IGHV3-7*04

2776 sequences assigned
50 (1.8%) exact matches, in which:
28 unique CDR3
4 unique J



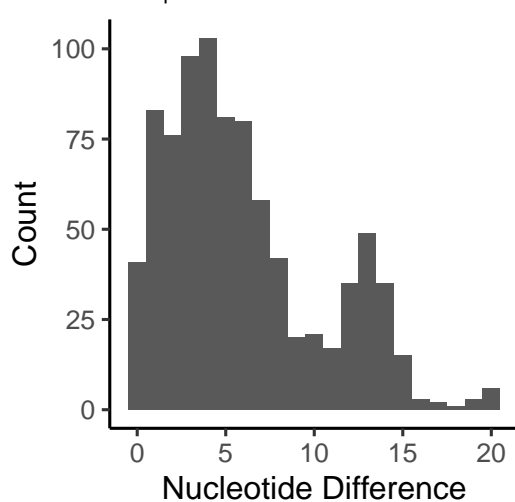
IGHV3-11*06

1352 sequences assigned
13 (1%) exact matches, in which:
13 unique CDR3
5 unique J



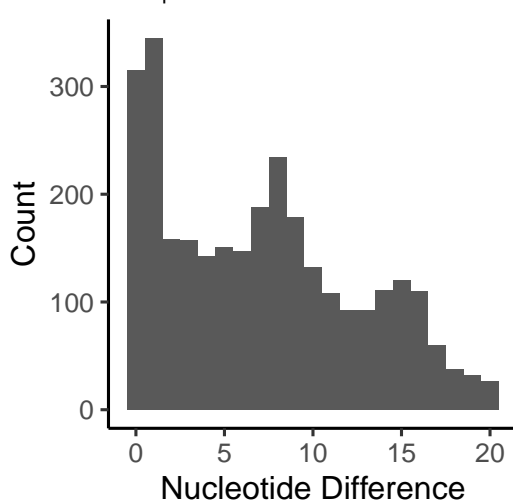
IGHV2-70*11_15

1114 sequences assigned
41 (3.7%) exact matches, in which:
34 unique CDR3
6 unique J



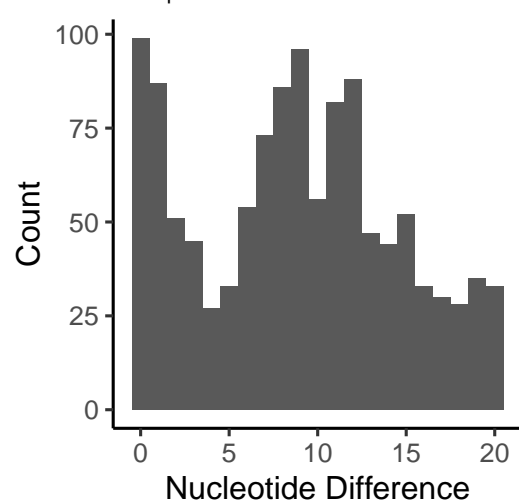
IGHV3-9*01

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



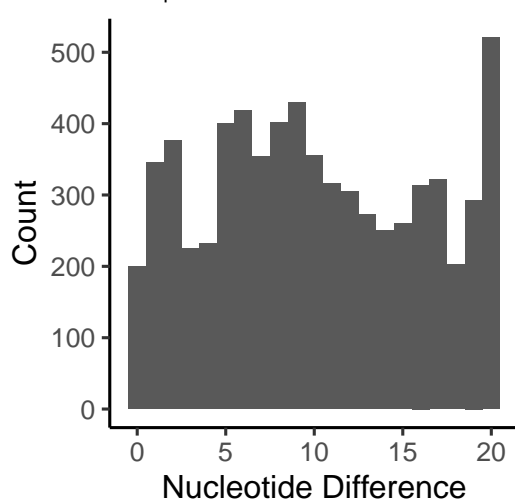
IGHV3-11*03_05

1541 sequences assigned
99 (6.4%) exact matches, in which:
61 unique CDR3
5 unique J



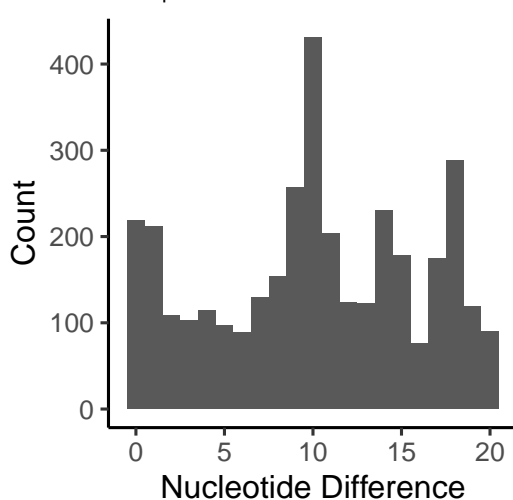
IGHV3-7*01

8108 sequences assigned
200 (2.5%) exact matches, in which:
122 unique CDR3
7 unique J



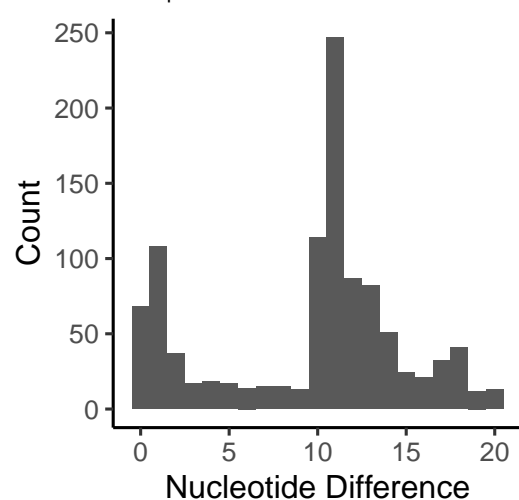
IGHV3-11*01

4305 sequences assigned
219 (5.1%) exact matches, in which:
133 unique CDR3
6 unique J



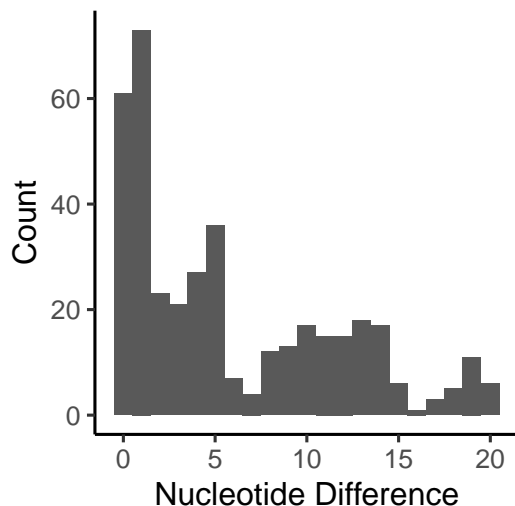
IGHV3-13*01

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



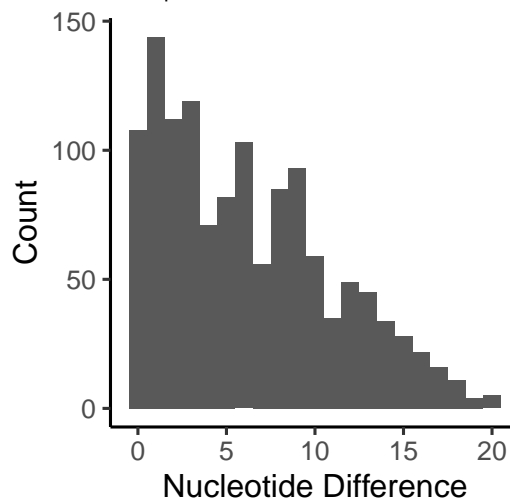
IGHV3-13*04

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



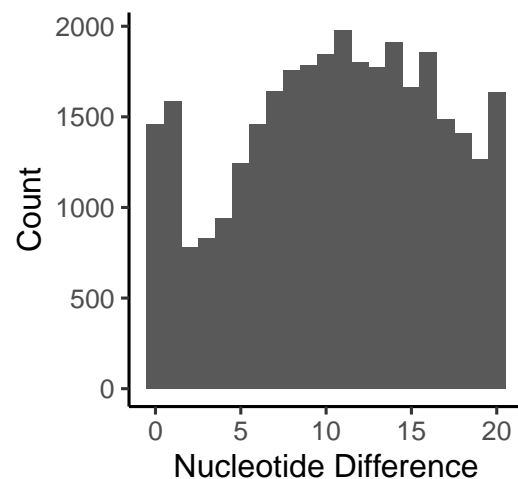
IGHV3-20*03_04

1475 sequences assigned
108 (7.3%) exact matches, in which:
65 unique CDR3
5 unique J



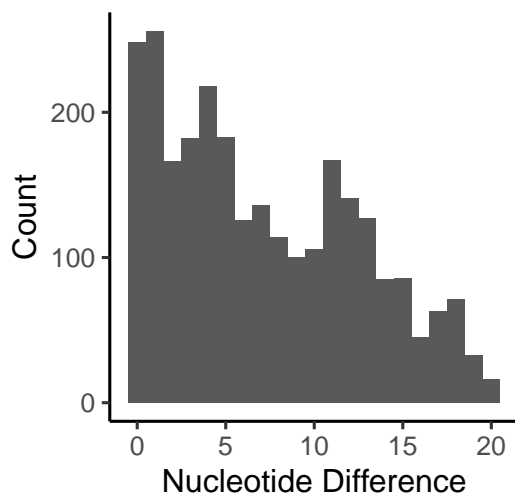
IGHV3-23*01_04

45975 sequences assigned
1459 (3.2%) exact matches, in which:
865 unique CDR3
6 unique J



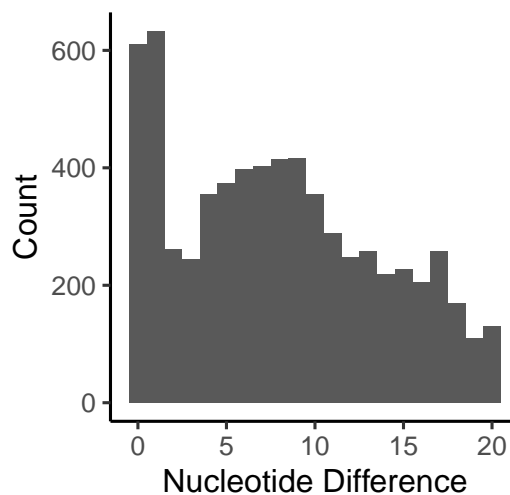
IGHV3-15*07

3853 sequences assigned
248 (6.4%) exact matches, in which:
151 unique CDR3
7 unique J



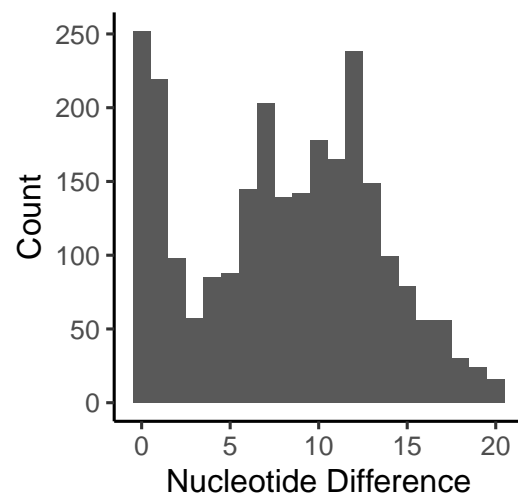
IGHV3-21*01_02

7967 sequences assigned
610 (7.7%) exact matches, in which:
367 unique CDR3
7 unique J



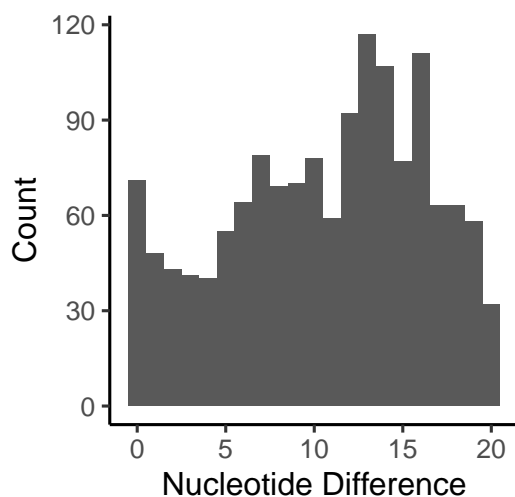
IGHV3-30*01

3554 sequences assigned
252 (7.1%) exact matches, in which:
151 unique CDR3
6 unique J



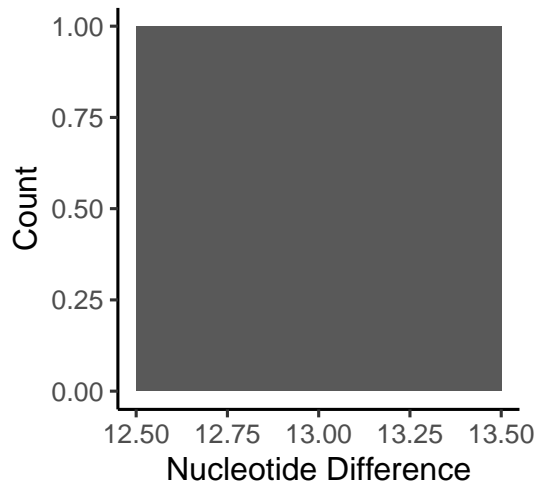
IGHV3-15*01_02

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



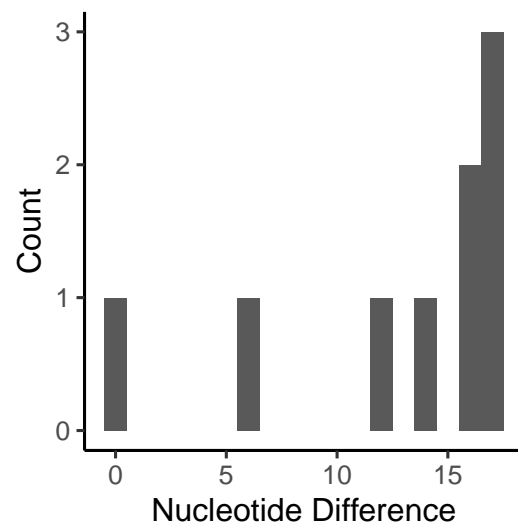
IGHV3-22*01_02

1 sequences assigned
No exact matches.



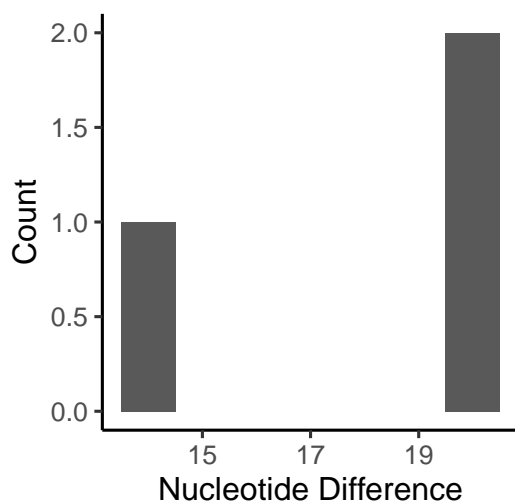
IGHV3-30-3*01

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



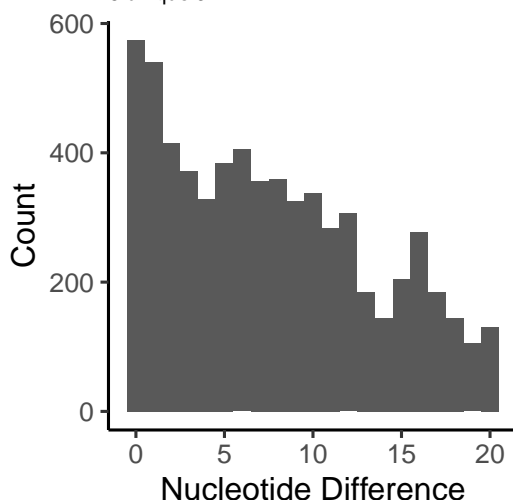
IGHV3-30-3*02

9 sequences assigned
No exact matches.



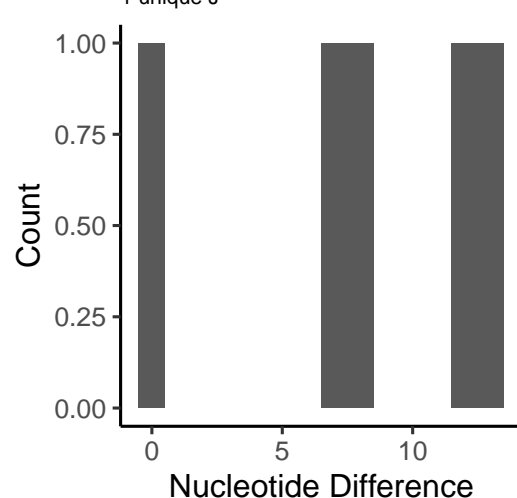
IGHV3-33*01

8644 sequences assigned
575 (6.7%) exact matches, in which:
352 unique CDR3
6 unique J



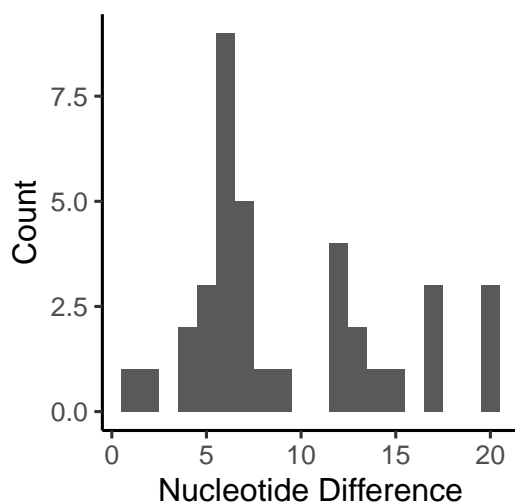
IGHV3-47*02

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



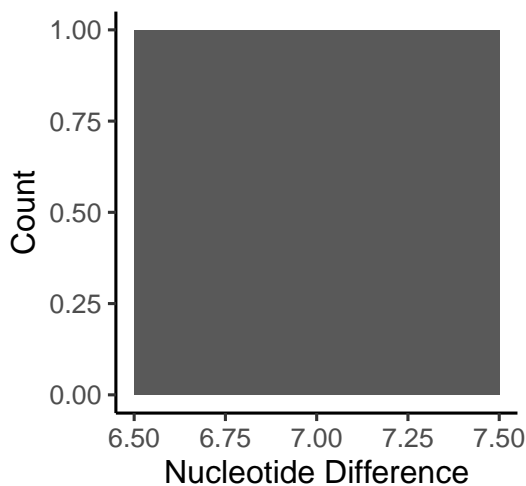
IGHV3-30-3*03

146 sequences assigned
No exact matches.



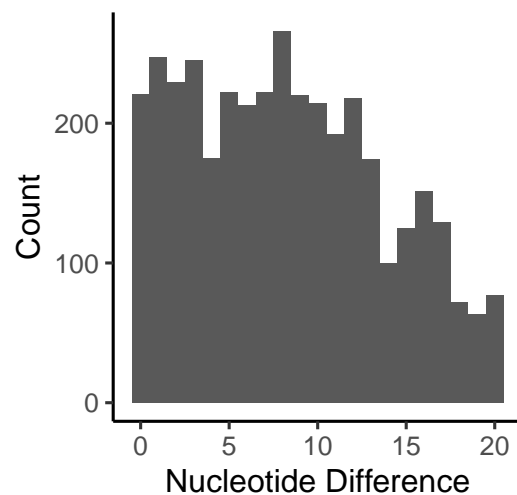
IGHV3-35*01

1 sequences assigned
No exact matches.



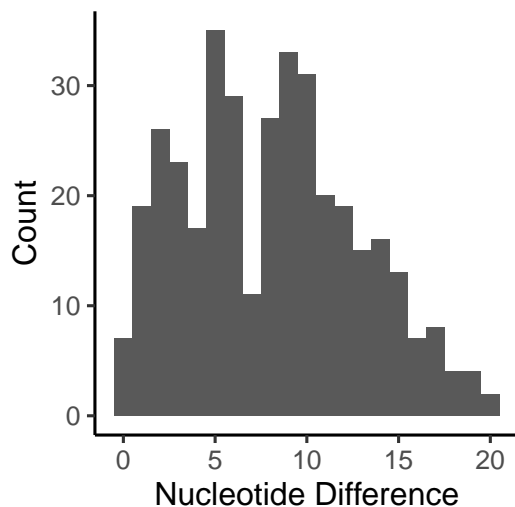
IGHV3-48*01

4116 sequences assigned
221 (5.4%) exact matches, in which:
141 unique CDR3
7 unique J



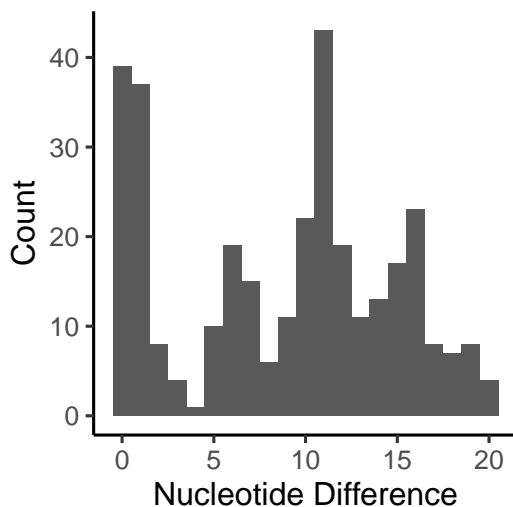
IGHV3-30*07

389 sequences assigned
7 (1.8%) exact matches, in which:
7 unique CDR3
3 unique J



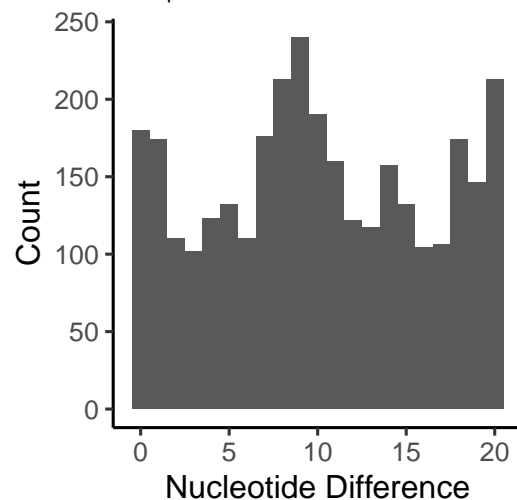
IGHV3-43*01

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



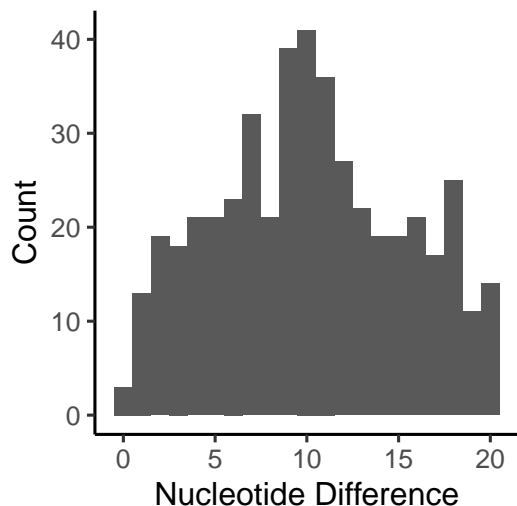
IGHV3-48*02

4279 sequences assigned
180 (4.2%) exact matches, in which:
103 unique CDR3
6 unique J



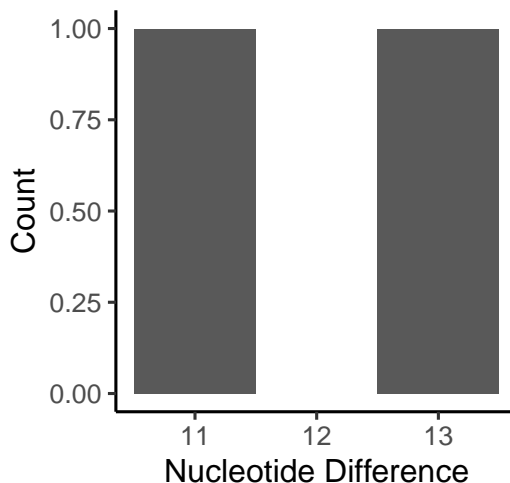
IGHV3-48*04

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



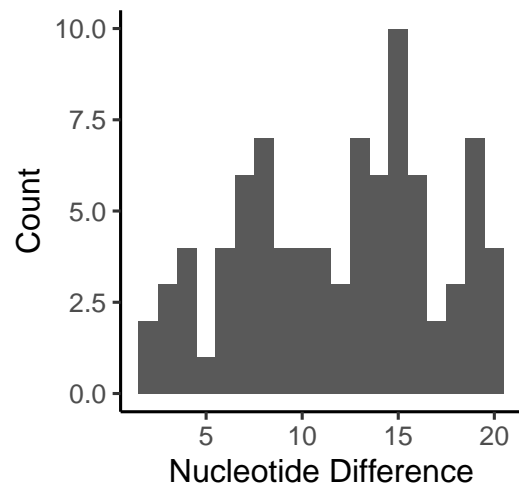
IGHV3-52*01_03

2 sequences assigned
No exact matches.



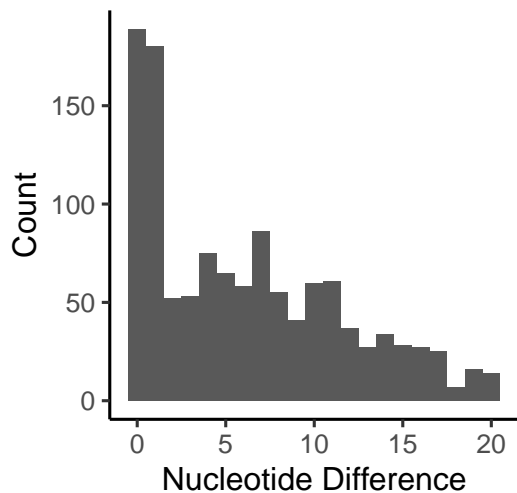
IGHV3-64*04

114 sequences assigned
No exact matches.



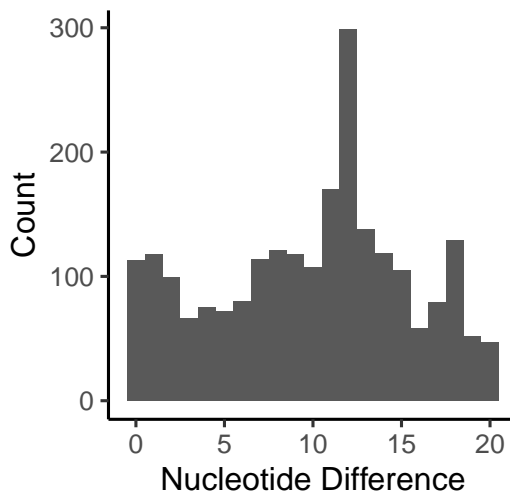
IGHV3-49*03_05

1332 sequences assigned
189 (14.2%) exact matches, in which:
98 unique CDR3
6 unique J



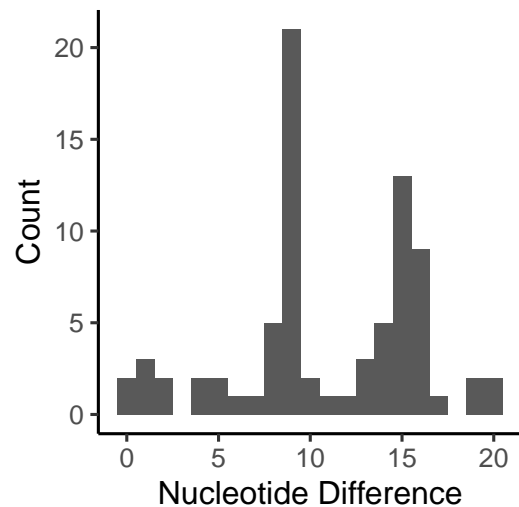
IGHV3-53*01_02

2585 sequences assigned
113 (4.4%) exact matches, in which:
68 unique CDR3
7 unique J



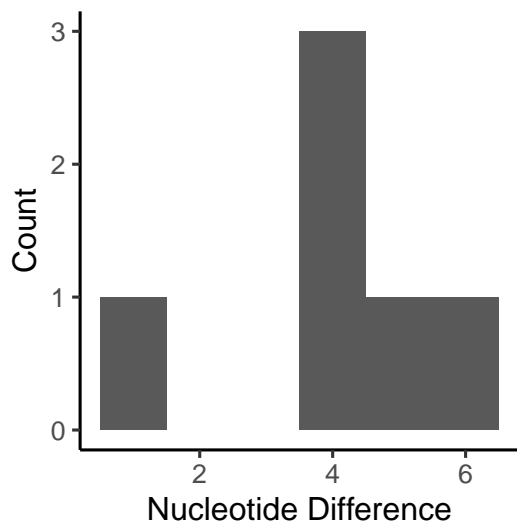
IGHV3-64*02_07

86 sequences assigned
2 (2.3%) exact matches, in which:
1 unique CDR3
1 unique J



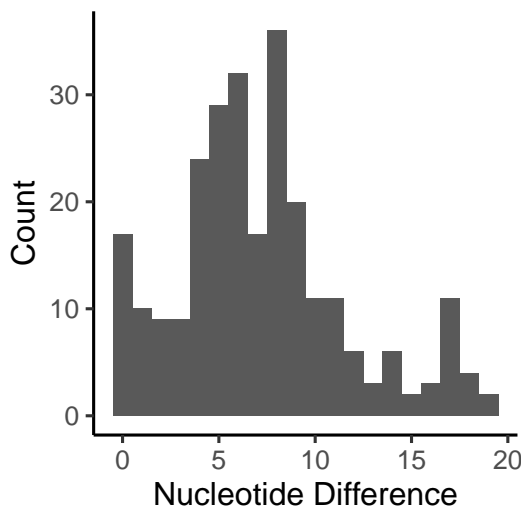
IGHV3-52*02

6 sequences assigned
No exact matches.



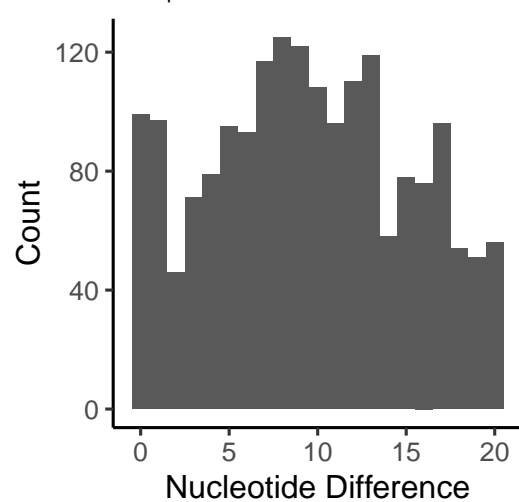
IGHV3-64*01

299 sequences assigned
17 (5.7%) exact matches, in which:
10 unique CDR3
3 unique J



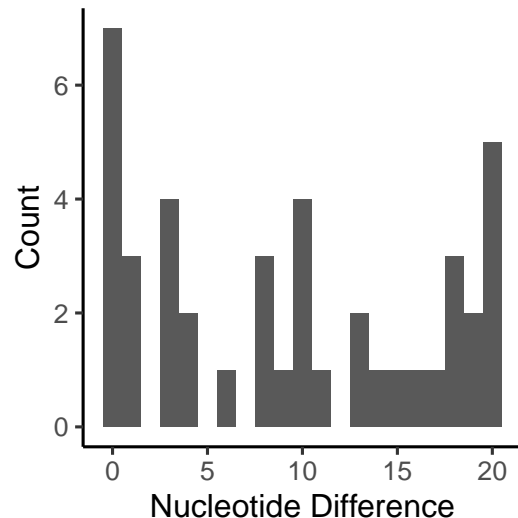
IGHV3-66*01

3107 sequences assigned
99 (3.2%) exact matches, in which:
62 unique CDR3
6 unique J



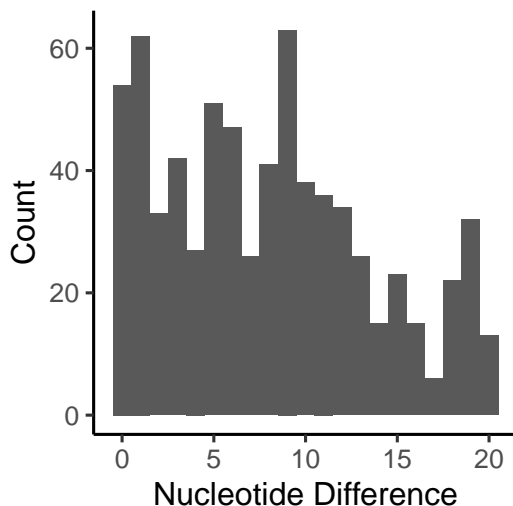
IGHV3-69-1*01

265 sequences assigned
7 (2.6%) exact matches, in which:
5 unique CDR3
3 unique J



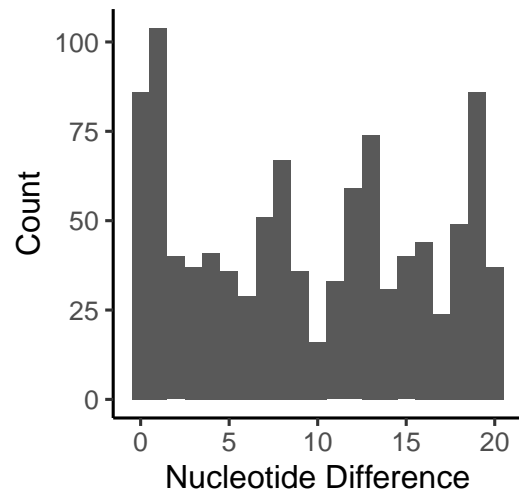
IGHV3-73*01_02

1255 sequences assigned
54 (4.3%) exact matches, in which:
29 unique CDR3
4 unique J



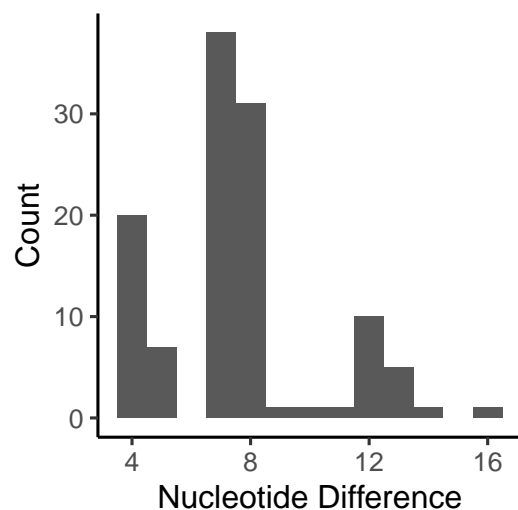
IGHV3-64D*06

1901 sequences assigned
86 (4.5%) exact matches, in which:
52 unique CDR3
5 unique J



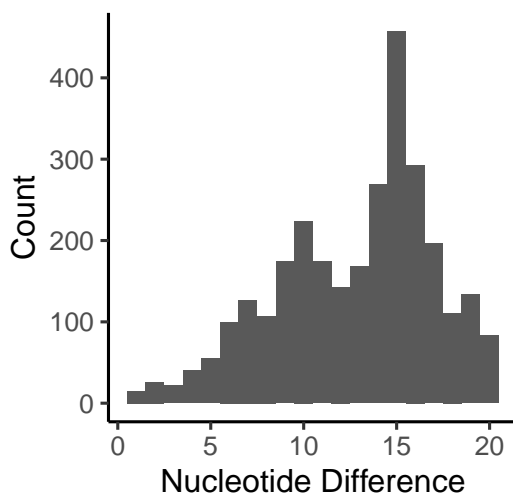
IGHV3-69-1*02

192 sequences assigned
No exact matches.



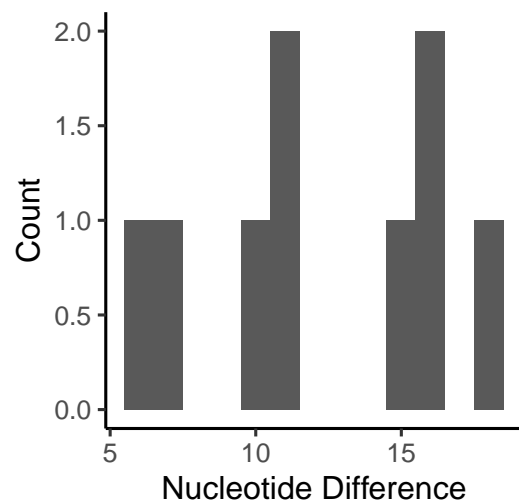
IGHV3-74*03

3606 sequences assigned
No exact matches.



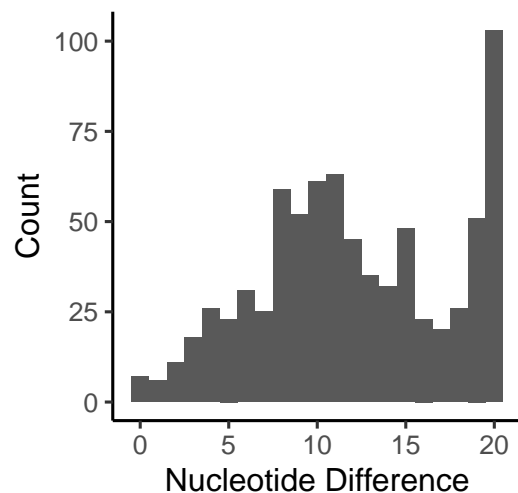
IGHV3-NL1*01

17 sequences assigned
No exact matches.



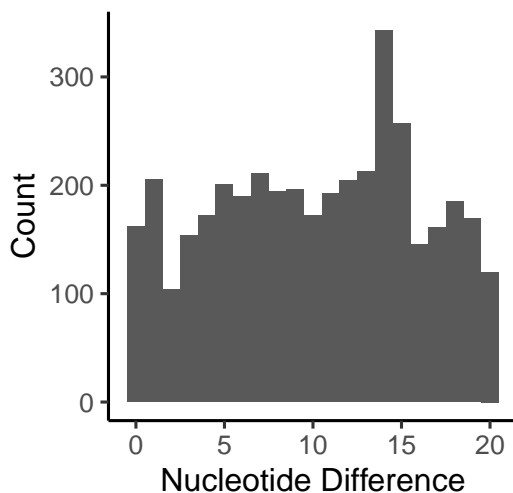
IGHV3-72*01

1311 sequences assigned
7 (0.5%) exact matches, in which:
3 unique CDR3
2 unique J



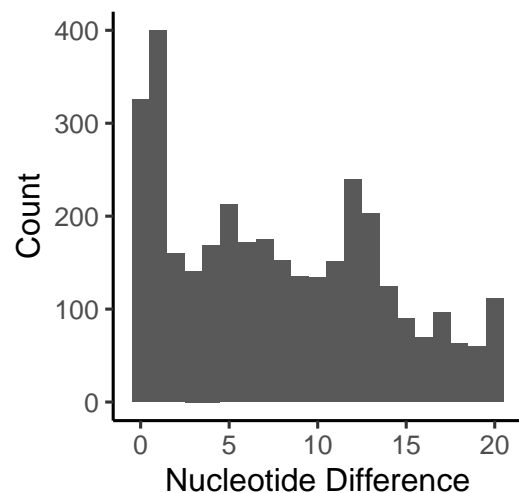
IGHV3-74*01_02

5053 sequences assigned
162 (3.2%) exact matches, in which:
96 unique CDR3
6 unique J



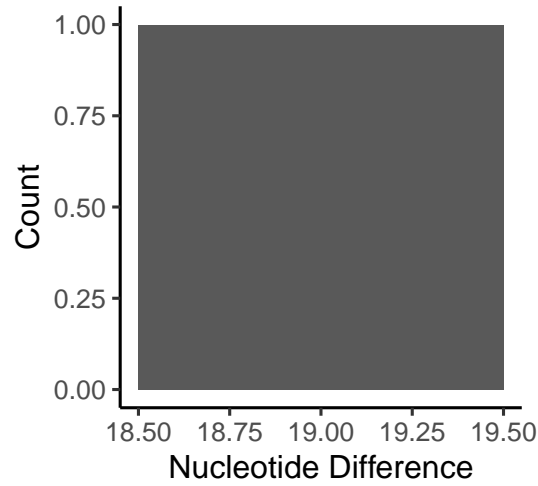
IGHV4-4*02_03

4515 sequences assigned
326 (7.2%) exact matches, in which:
246 unique CDR3
7 unique J



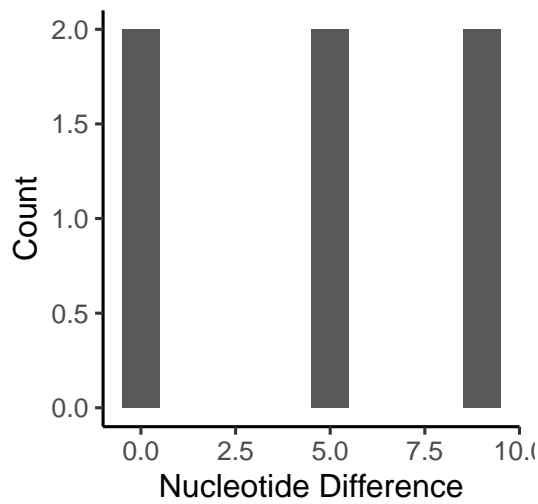
IGHV4-28*03

1 sequences assigned
No exact matches.



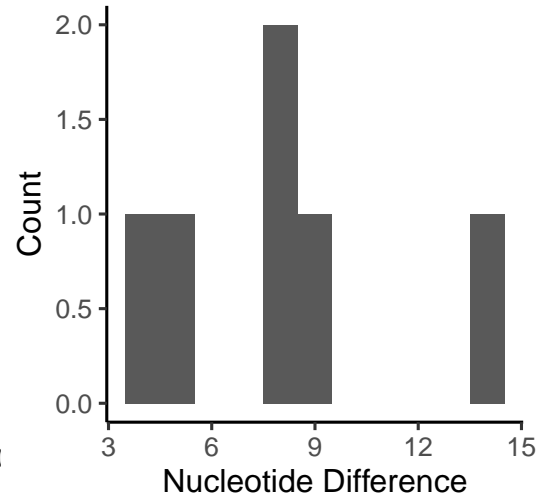
IGHV4-30-4*01

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



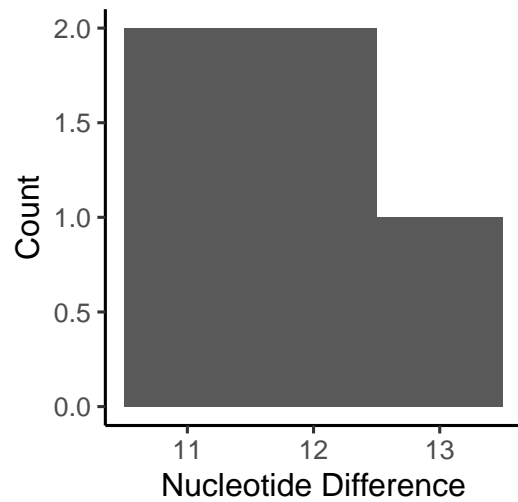
IGHV4-30-2*04

6 sequences assigned
No exact matches.



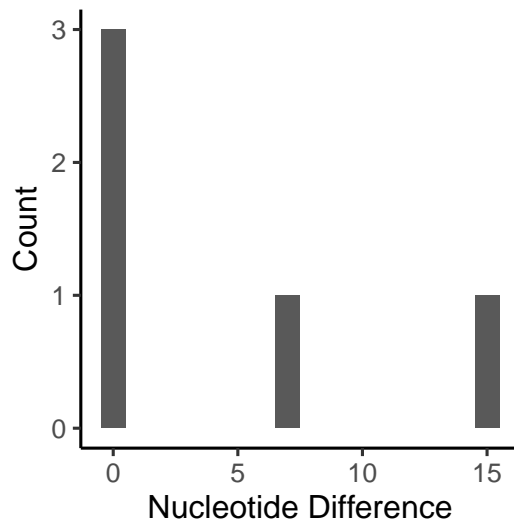
IGHV4-28*01_07

5 sequences assigned
No exact matches.



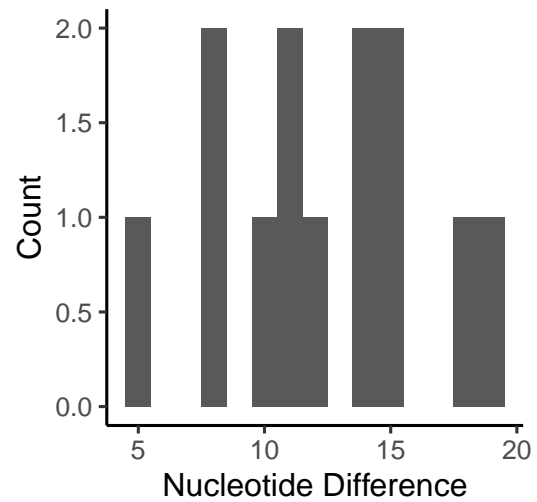
IGHV4-30-2*01

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



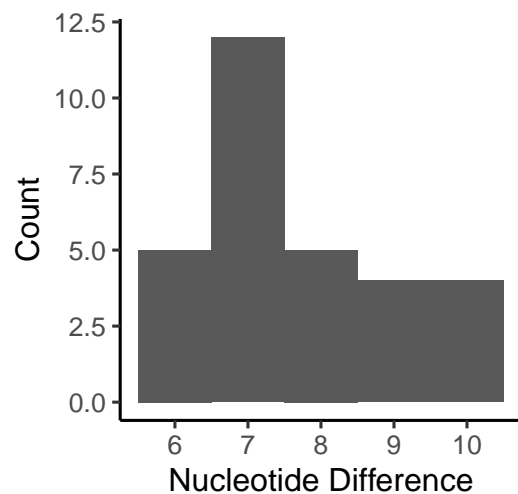
IGHV4-30-4*08

14 sequences assigned
No exact matches.



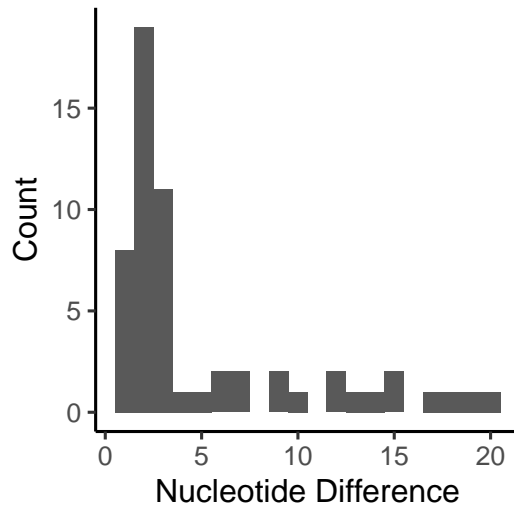
IGHV4-28*02_05

30 sequences assigned
No exact matches.



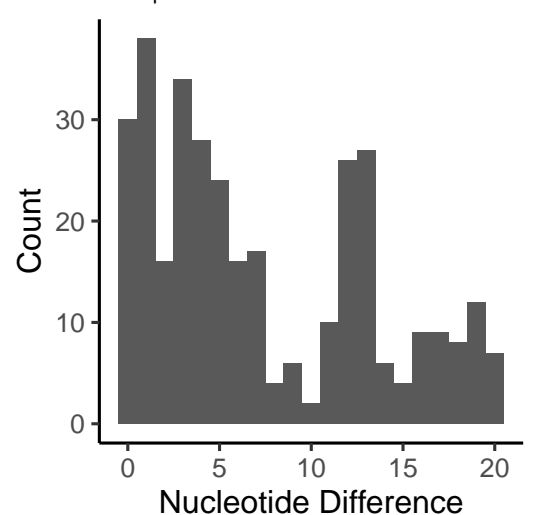
IGHV4-30-2*03

66 sequences assigned
No exact matches.



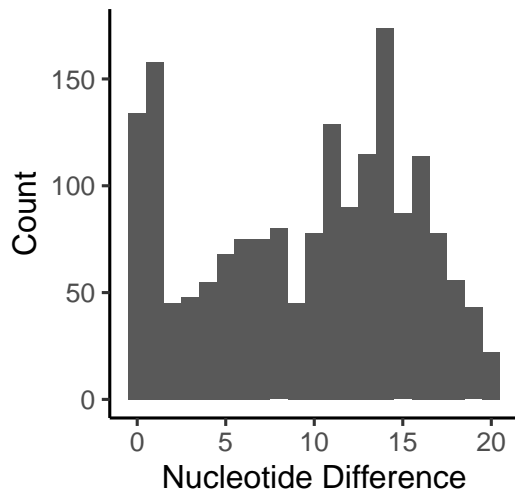
IGHV4-31*01

1270 sequences assigned
30 (2.4%) exact matches, in which:
23 unique CDR3
5 unique J



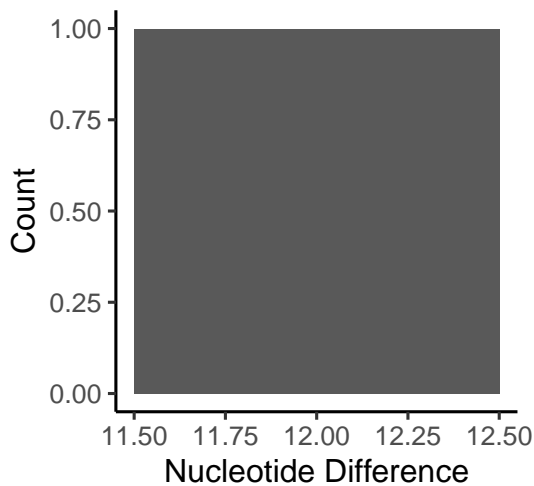
IGHV4-31*02

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



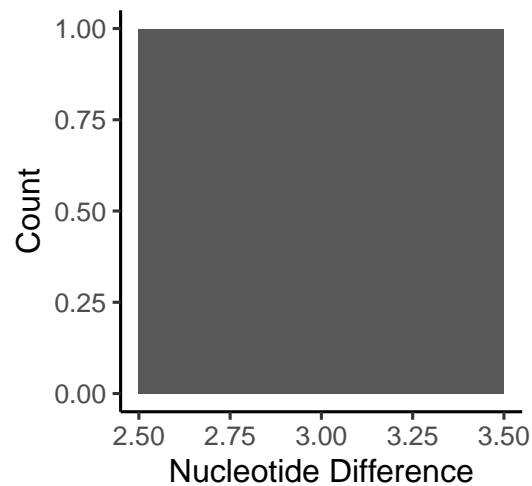
IGHV4-38-2*02

6 sequences assigned
No exact matches.



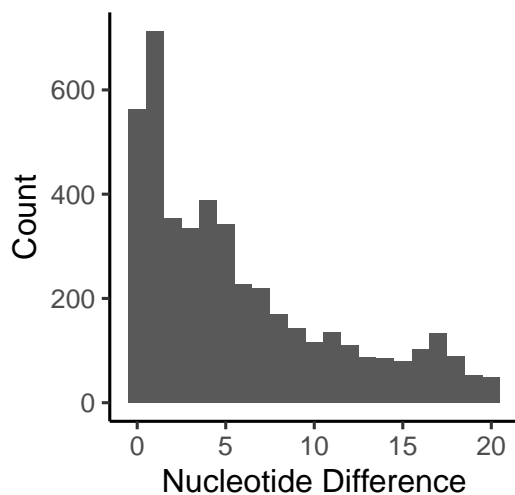
IGHV4-55*09

1 sequences assigned
No exact matches.



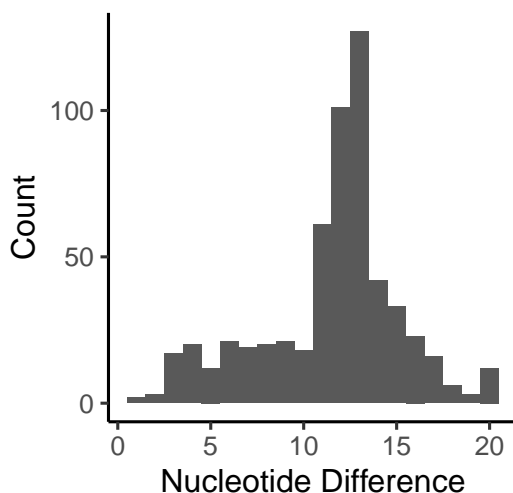
IGHV4-34*01_02

5028 sequences assigned
563 (11.2%) exact matches, in which:
411 unique CDR3
7 unique J



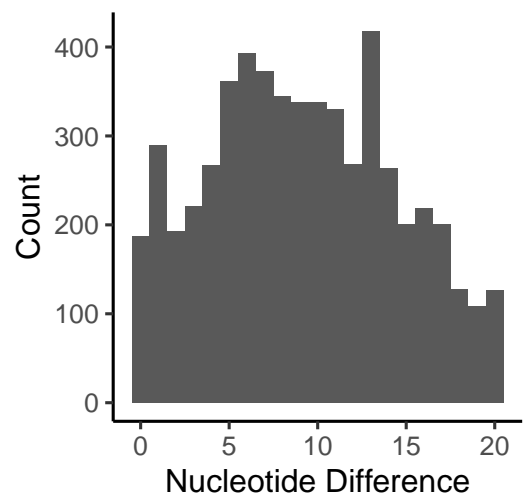
IGHV4-39*02

1596 sequences assigned
No exact matches.



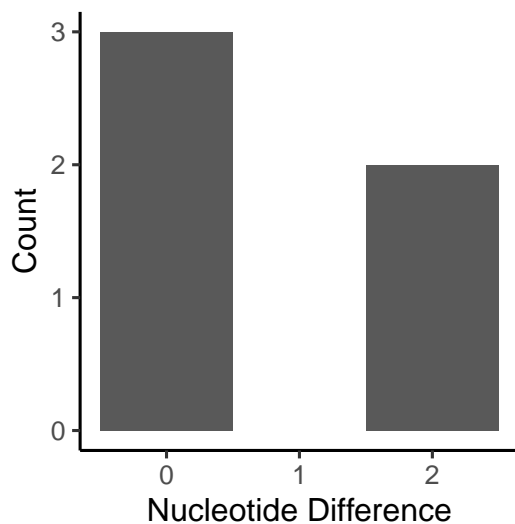
IGHV4-59*08

7590 sequences assigned
187 (2.5%) exact matches, in which:
149 unique CDR3
7 unique J



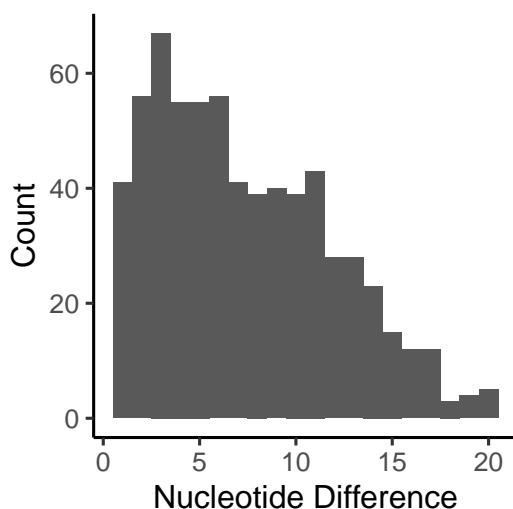
IGHV4-38-2*01

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



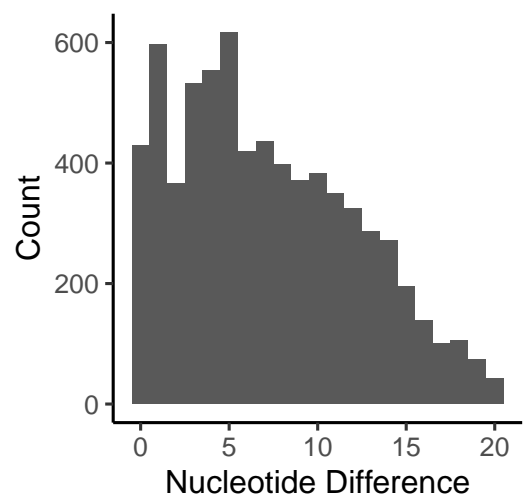
IGHV4-39*07

690 sequences assigned
No exact matches.



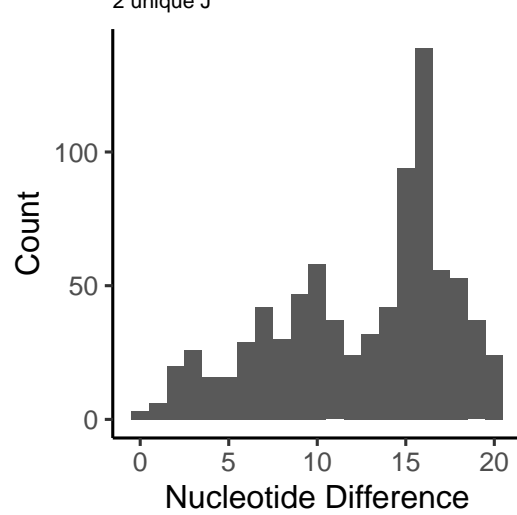
IGHV4-59*01_07

8140 sequences assigned
429 (5.3%) exact matches, in which:
337 unique CDR3
7 unique J



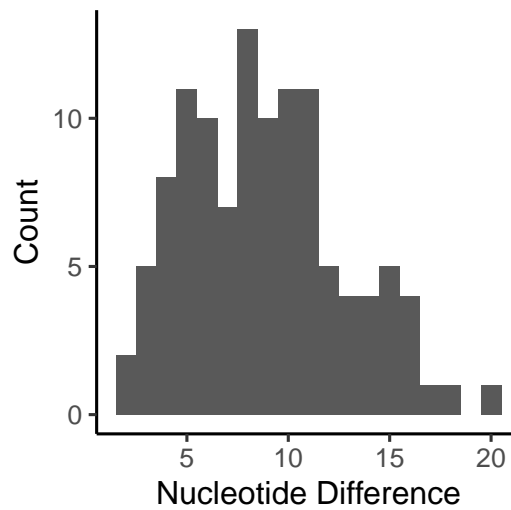
IGHV4–59*11

1183 sequences assigned
3 (0.3%) exact matches, in which:
3 unique CDR3
2 unique J



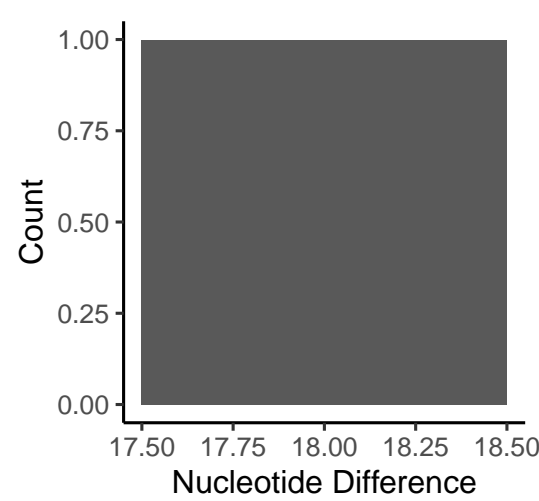
IGHV4–61*05

126 sequences assigned
No exact matches.



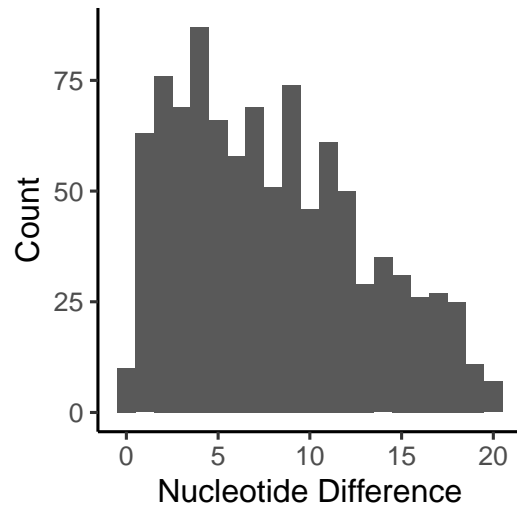
IGHV1/OR15–3*02

1 sequences assigned
No exact matches.



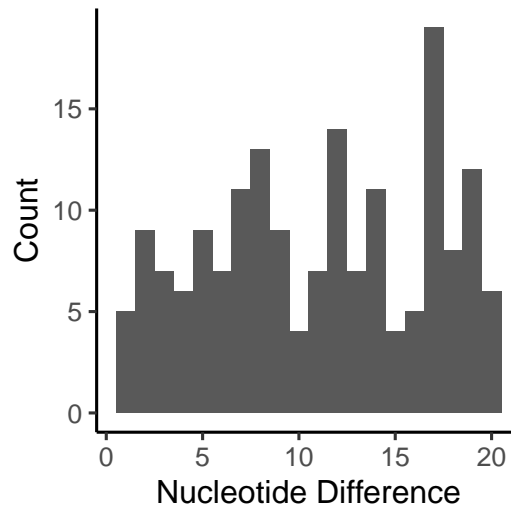
IGHV4–59*12

1096 sequences assigned
10 (0.9%) exact matches, in which:
10 unique CDR3
4 unique J



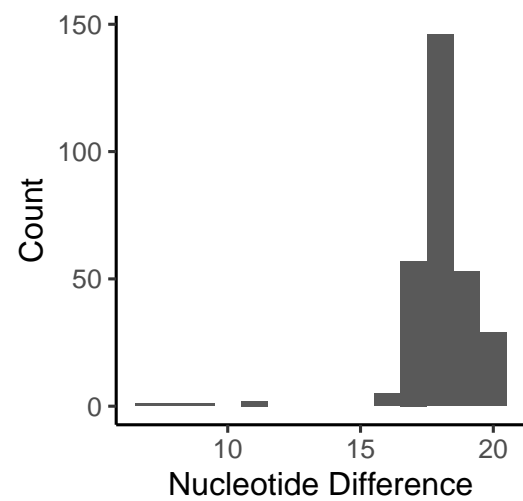
IGHV4–61*08

374 sequences assigned
No exact matches.



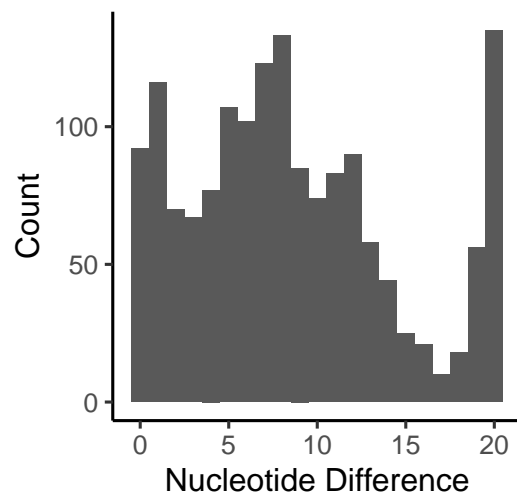
IGHV4/OR15–8*01

343 sequences assigned
No exact matches.



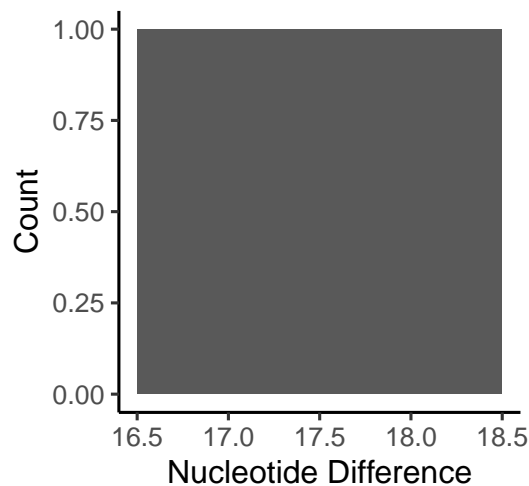
IGHV4–61*01

2379 sequences assigned
92 (3.9%) exact matches, in which:
72 unique CDR3
6 unique J



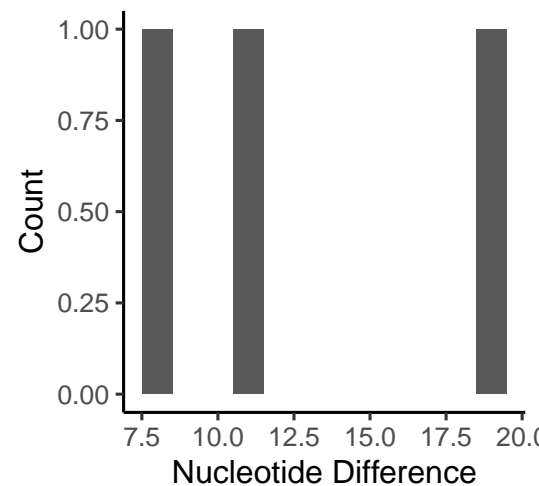
IGHV1/OR15–2*02_03

2 sequences assigned
No exact matches.



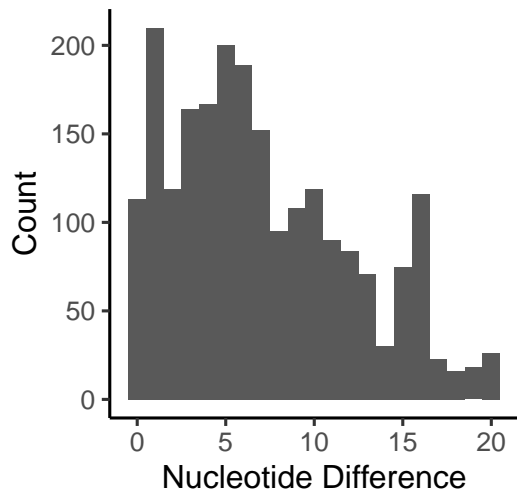
IGHV4/OR15–8*02

5 sequences assigned
No exact matches.



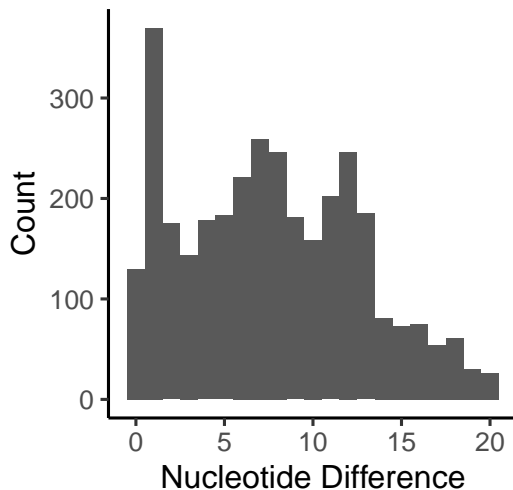
IGHV5-10-1*01_03

2499 sequences assigned
113 (4.5%) exact matches, in which:
72 unique CDR3
6 unique J



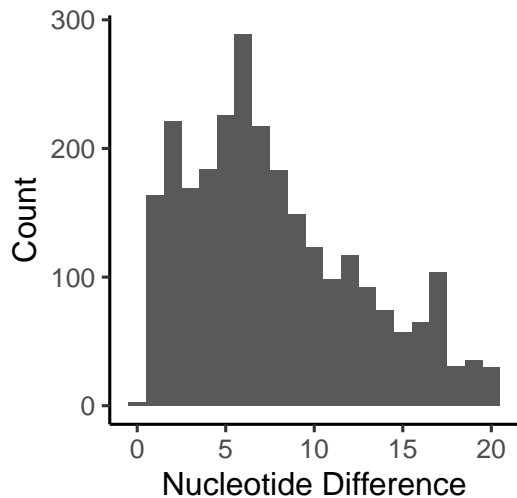
IGHV6-1*01_02

3528 sequences assigned
130 (3.7%) exact matches, in which:
91 unique CDR3
5 unique J



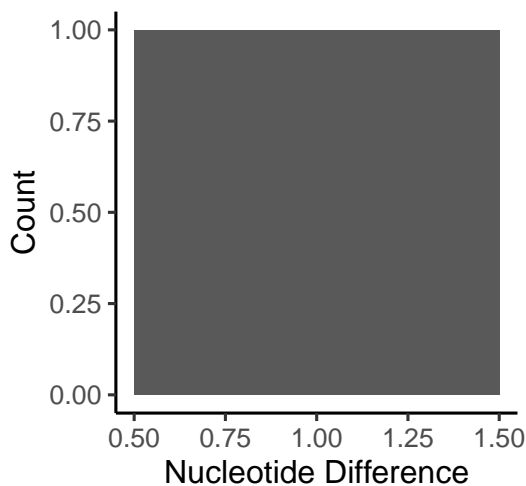
IGHV5-51*07

3354 sequences assigned
3 (0.1%) exact matches, in which:
3 unique CDR3
2 unique J



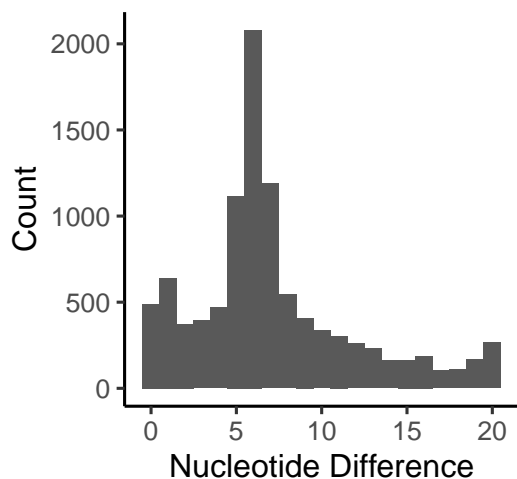
IGHV7-4-1*01

1 sequences assigned
No exact matches.



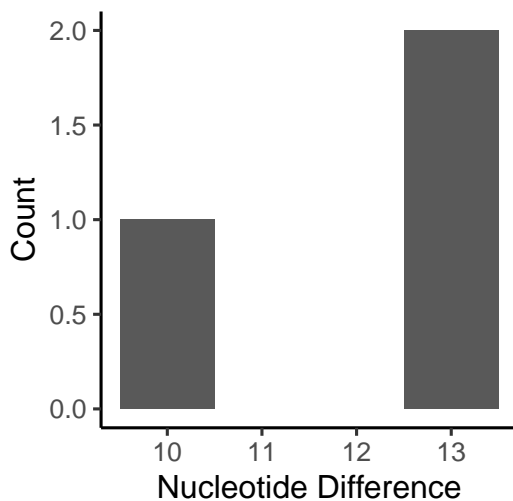
IGHV5-51*01_03

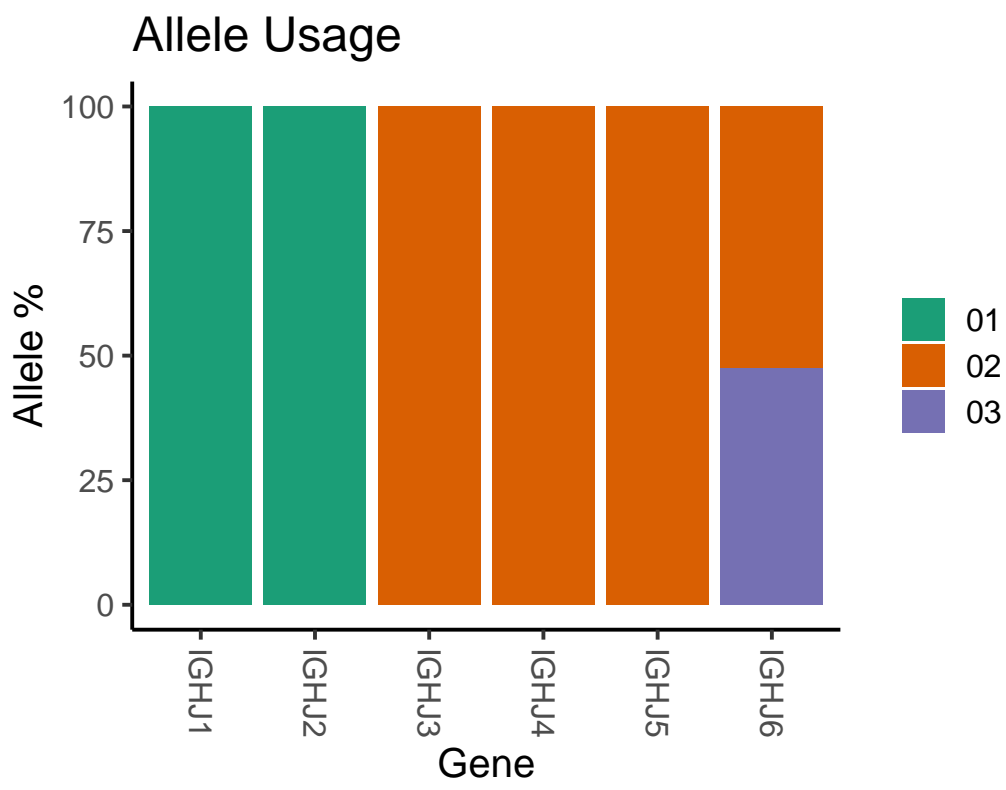
11451 sequences assigned
491 (4.3%) exact matches, in which:
288 unique CDR3
7 unique J



IGHV7-4-1*02

3 sequences assigned
No exact matches.





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.