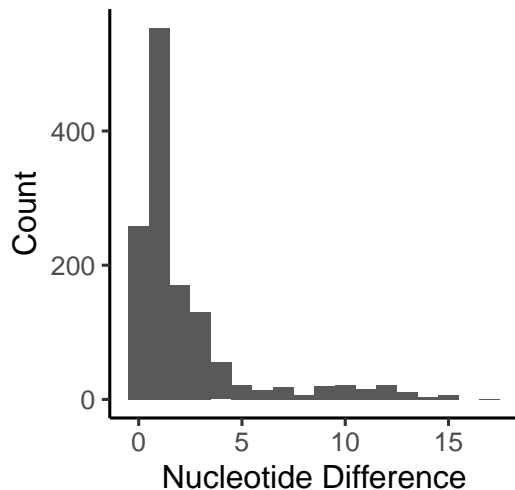


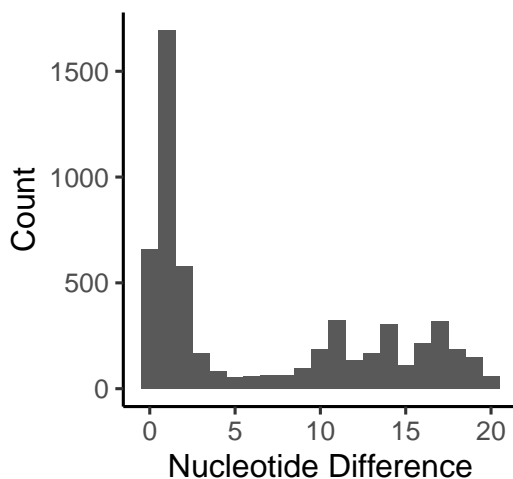
IGHV1-2*04

1334 sequences assigned
259 (19.4%) exact matches, in which:
187 unique CDR3
6 unique J



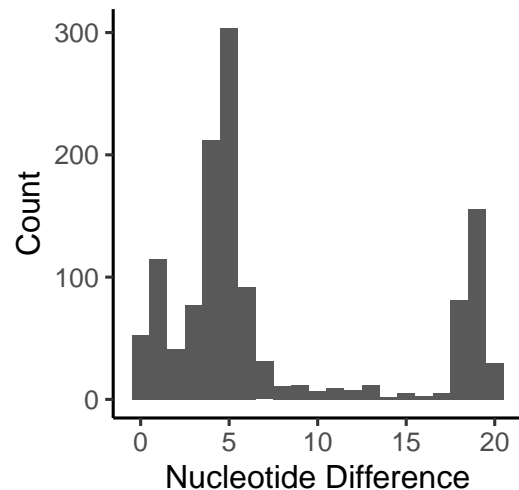
IGHV1-18*01

12617 sequences assigned
658 (5.2%) exact matches, in which:
434 unique CDR3
6 unique J



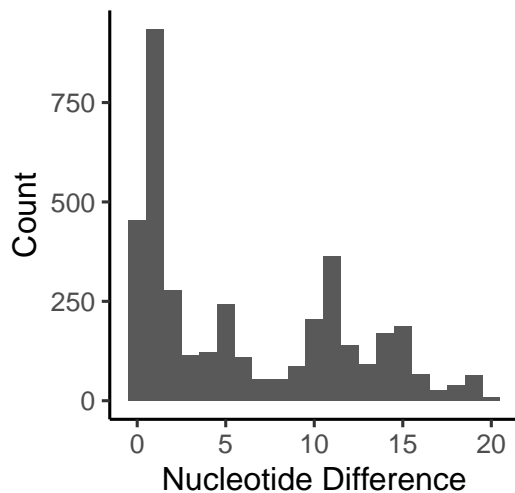
IGHV1-46*03

1399 sequences assigned
53 (3.8%) exact matches, in which:
39 unique CDR3
4 unique J



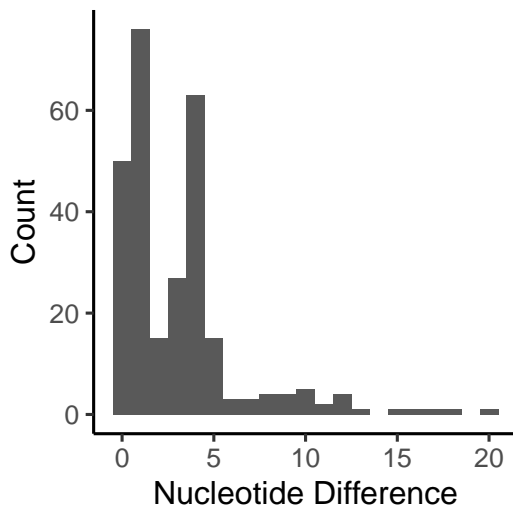
IGHV1-3*01_05

3966 sequences assigned
454 (11.4%) exact matches, in which:
226 unique CDR3
6 unique J



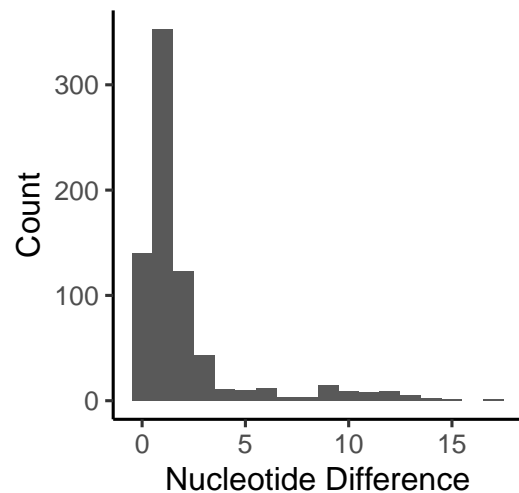
IGHV1-24*01

321 sequences assigned
50 (15.6%) exact matches, in which:
37 unique CDR3
4 unique J



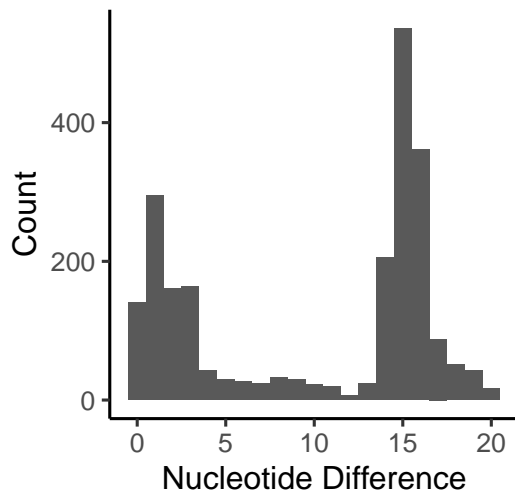
IGHV1-58*02

933 sequences assigned
140 (15%) exact matches, in which:
86 unique CDR3
6 unique J



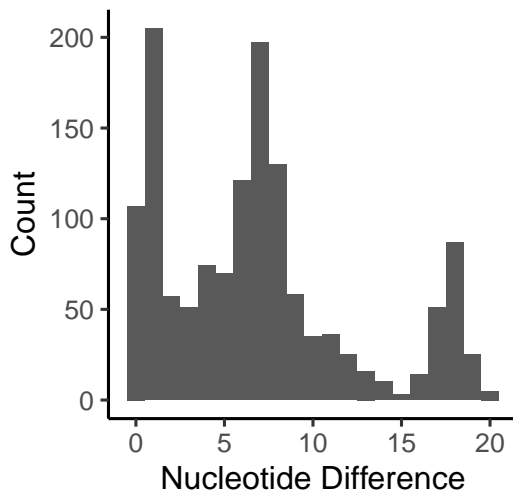
IGHV1-8*01

2369 sequences assigned
141 (6%) exact matches, in which:
99 unique CDR3
6 unique J



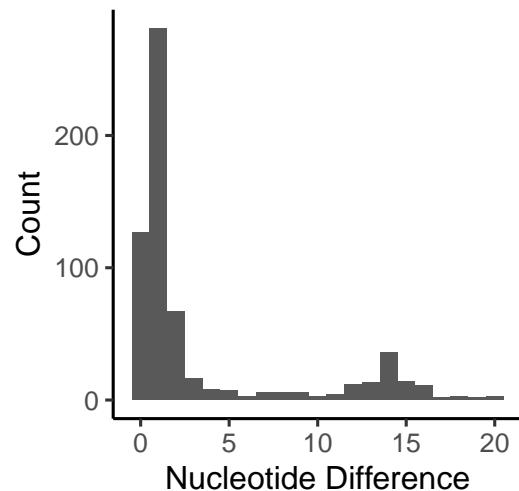
IGHV1-46*01

1398 sequences assigned
107 (7.7%) exact matches, in which:
69 unique CDR3
6 unique J



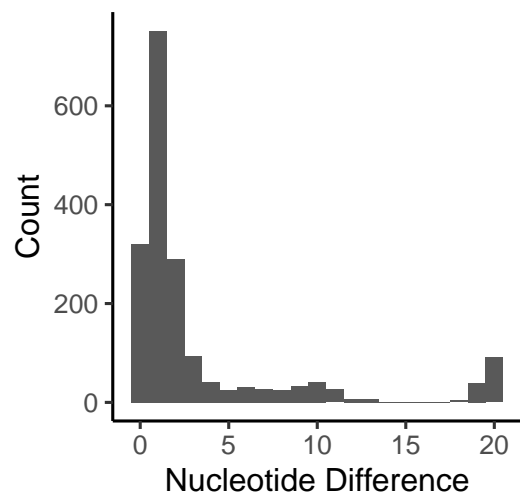
IGHV1-69*02

632 sequences assigned
127 (20.1%) exact matches, in which:
79 unique CDR3
7 unique J



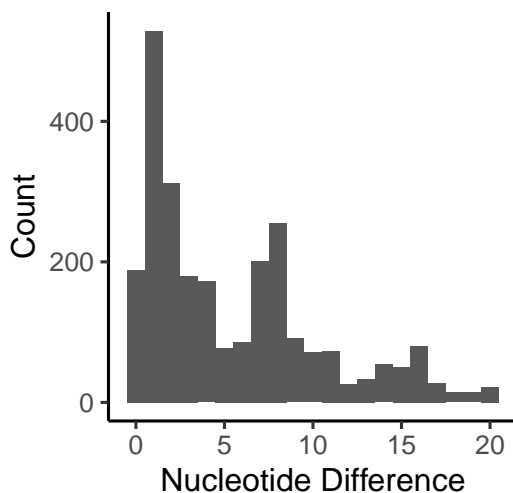
IGHV1-69*01_12_13

2010 sequences assigned
321 (16%) exact matches, in which:
202 unique CDR3
6 unique J



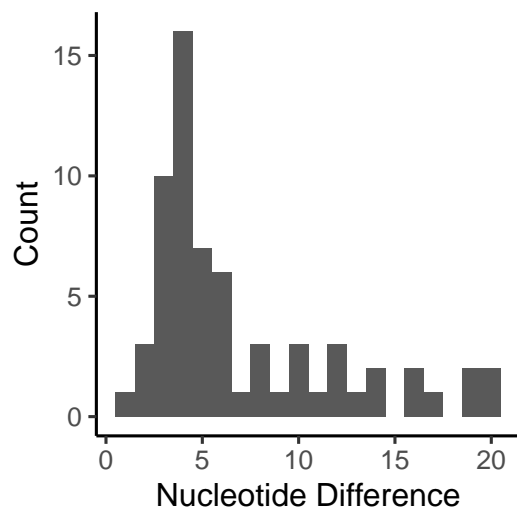
IGHV2-5*02

10392 sequences assigned
188 (1.8%) exact matches, in which:
113 unique CDR3
4 unique J



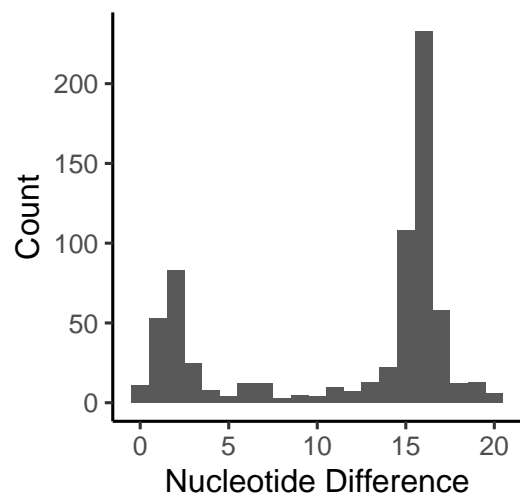
IGHV2-70*12

68 sequences assigned
No exact matches.



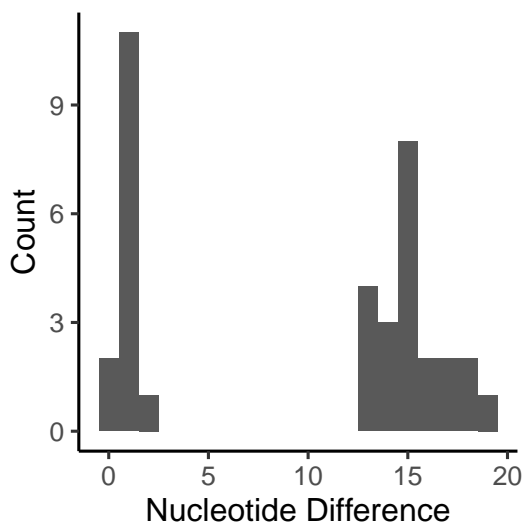
IGHV1-69*04_09

708 sequences assigned
11 (1.6%) exact matches, in which:
9 unique CDR3
3 unique J



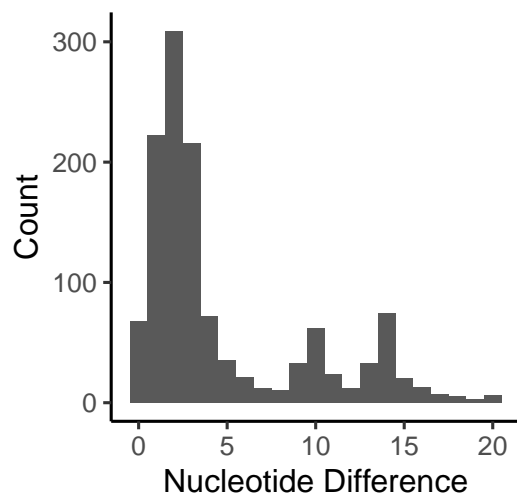
IGHV2-26*01

36 sequences assigned
2 (5.6%) exact matches, in which:
2 unique CDR3
1 unique J



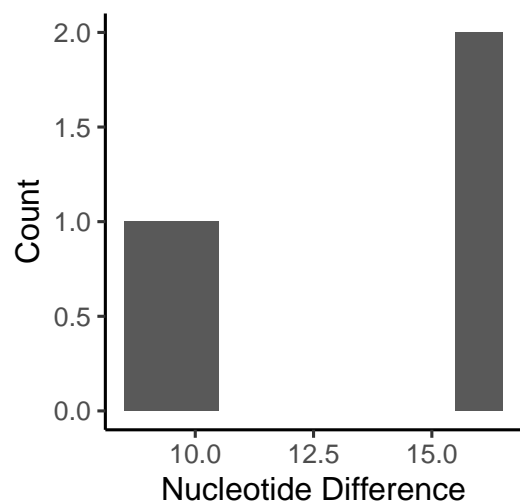
IGHV2-70*11_15

1262 sequences assigned
68 (5.4%) exact matches, in which:
36 unique CDR3
5 unique J



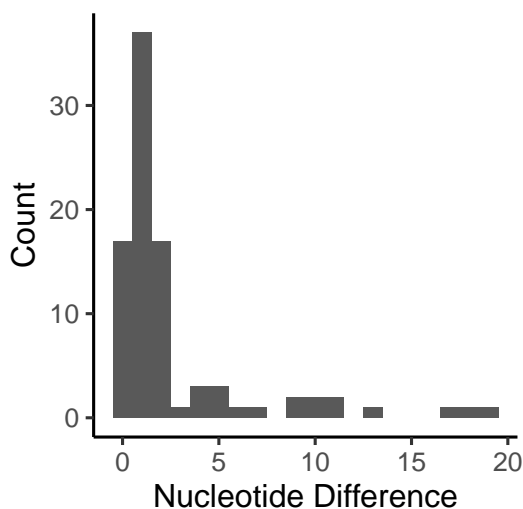
IGHV1-NL1*01

4 sequences assigned
No exact matches.



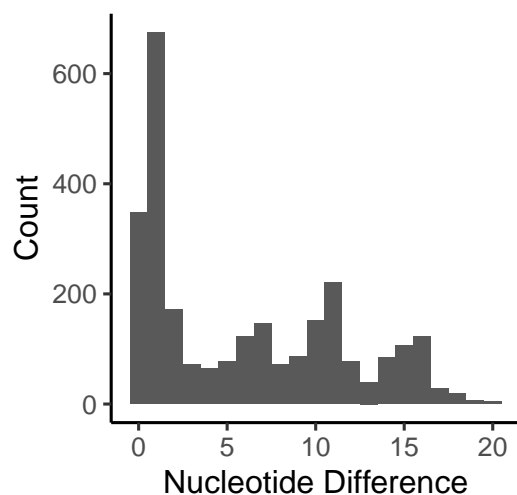
IGHV2-70*01

90 sequences assigned
17 (18.9%) exact matches, in which:
10 unique CDR3
2 unique J



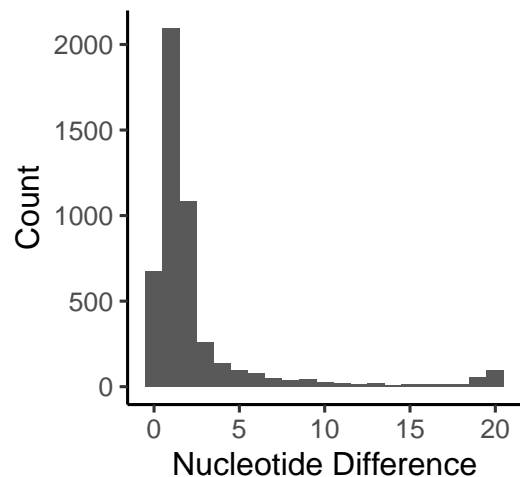
IGHV3-7*01

2711 sequences assigned
348 (12.8%) exact matches, in which:
210 unique CDR3
6 unique J



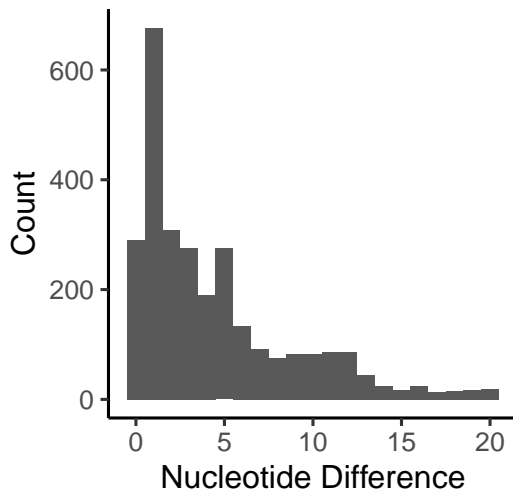
IGHV3-7*03

5911 sequences assigned
678 (11.5%) exact matches, in which:
273 unique CDR3
6 unique J



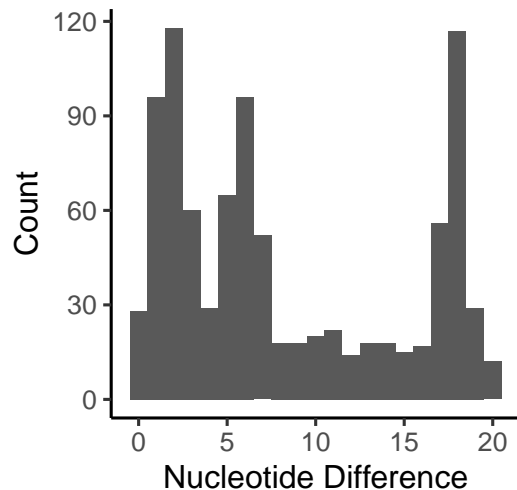
IGHV3-9*01

2870 sequences assigned
291 (10.1%) exact matches, in which:
157 unique CDR3
6 unique J



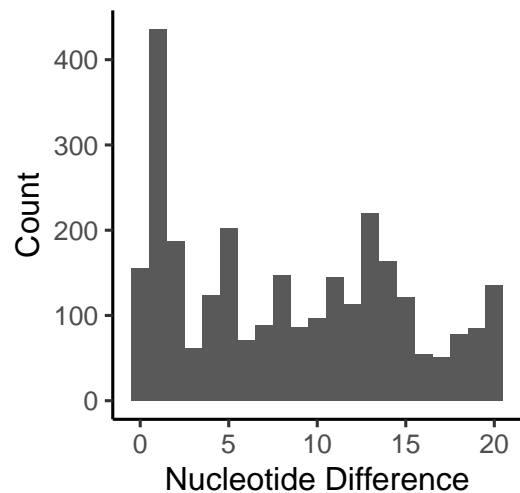
IGHV3-11*06

945 sequences assigned
28 (3%) exact matches, in which:
20 unique CDR3
5 unique J



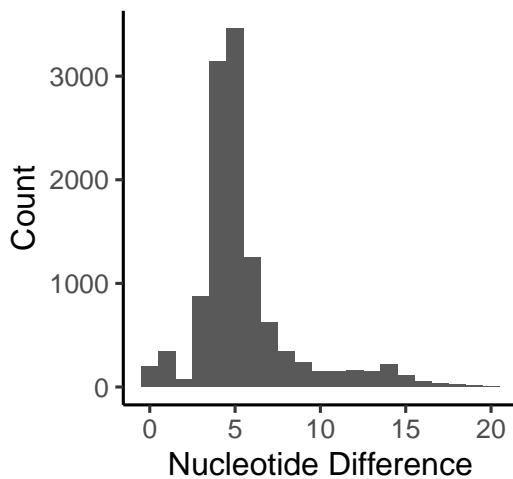
IGHV3-7*04

3043 sequences assigned
155 (5.1%) exact matches, in which:
85 unique CDR3
7 unique J



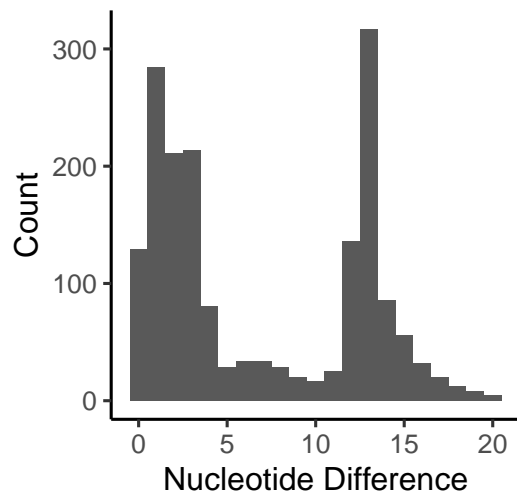
IGHV3-11*01

11670 sequences assigned
196 (1.7%) exact matches, in which:
123 unique CDR3
6 unique J



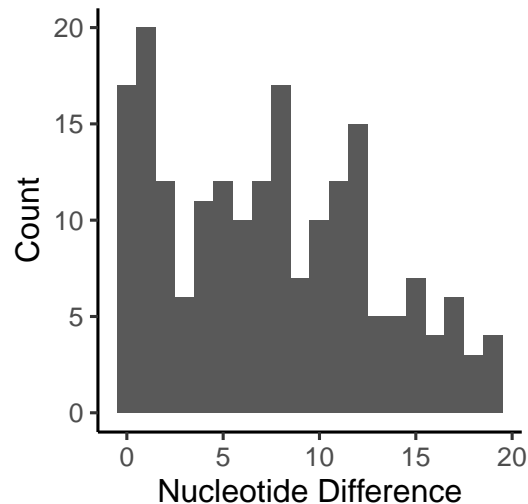
IGHV3-11*03_05

1923 sequences assigned
129 (6.7%) exact matches, in which:
81 unique CDR3
7 unique J



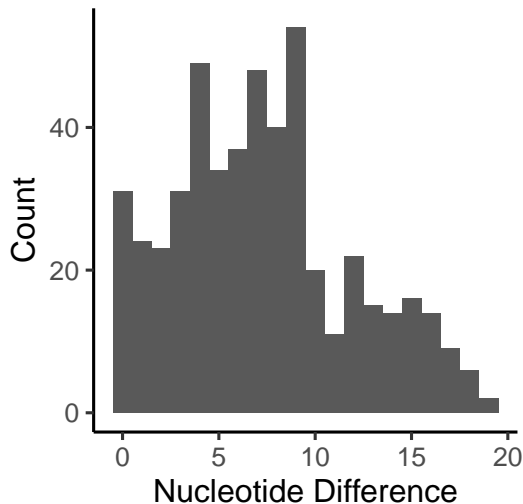
IGHV3-7*05

208 sequences assigned
17 (8.2%) exact matches, in which:
11 unique CDR3
5 unique J



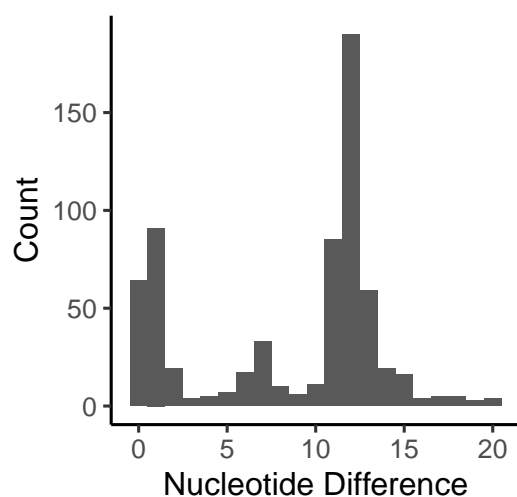
IGHV3-11*04

500 sequences assigned
31 (6.2%) exact matches, in which:
27 unique CDR3
5 unique J



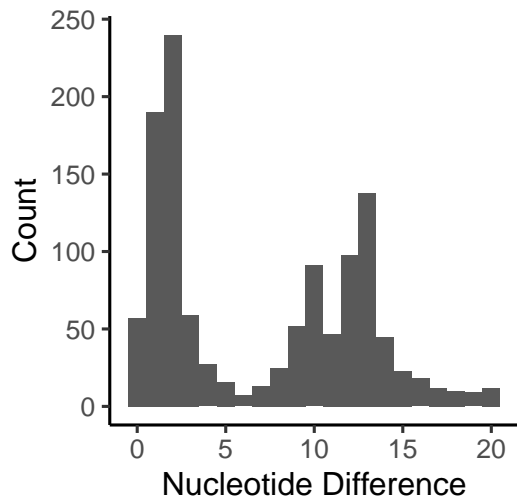
IGHV3-13*04

668 sequences assigned
64 (9.6%) exact matches, in which:
43 unique CDR3
4 unique J



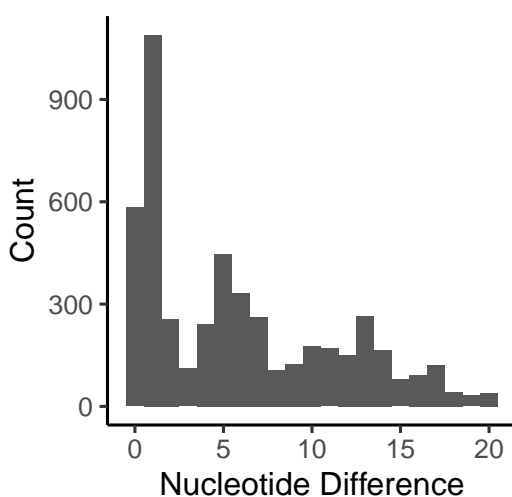
IGHV3-15*01_02

1707 sequences assigned
57 (3.3%) exact matches, in which:
36 unique CDR3
3 unique J



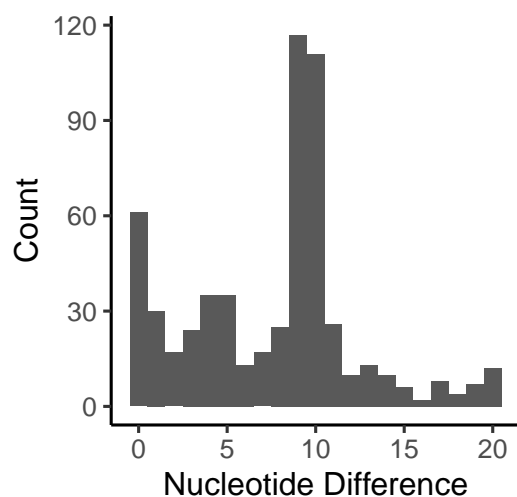
IGHV3-21*01_02

5040 sequences assigned
583 (11.6%) exact matches, in which:
352 unique CDR3
6 unique J



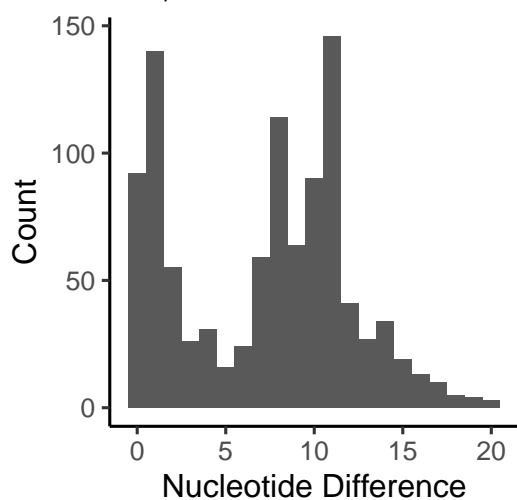
IGHV3-30*03

615 sequences assigned
61 (9.9%) exact matches, in which:
53 unique CDR3
6 unique J



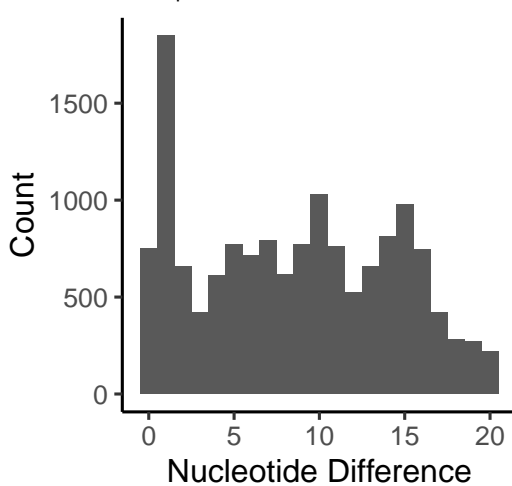
IGHV3-20*03_04

1022 sequences assigned
92 (9%) exact matches, in which:
57 unique CDR3
6 unique J



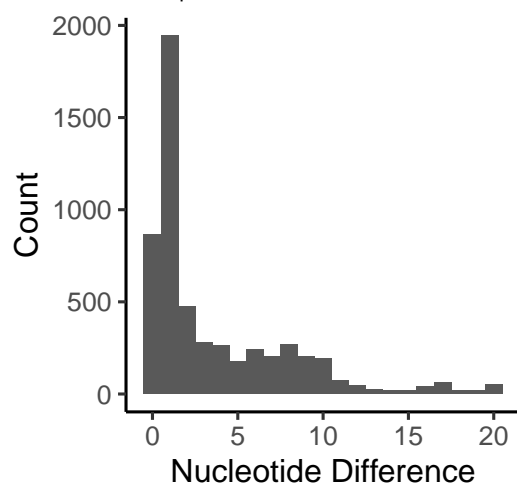
IGHV3-23*01_04

30402 sequences assigned
750 (2.5%) exact matches, in which:
402 unique CDR3
7 unique J



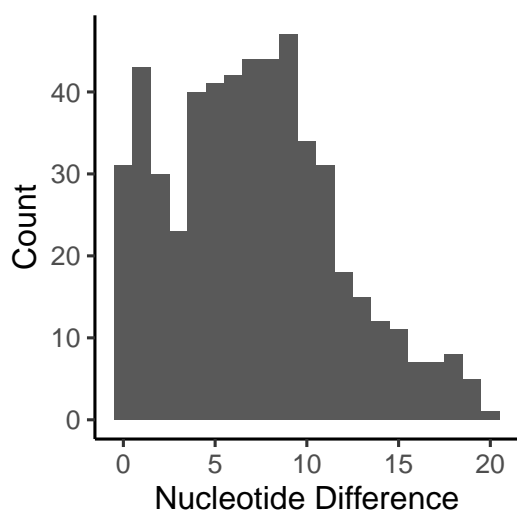
IGHV3-33*01

5781 sequences assigned
863 (14.9%) exact matches, in which:
463 unique CDR3
7 unique J



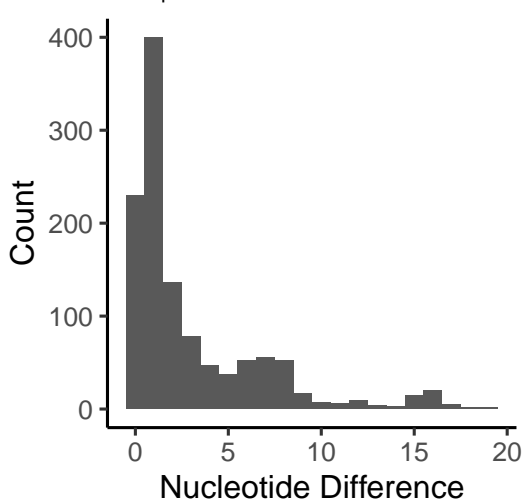
IGHV3-21*04

543 sequences assigned
31 (5.7%) exact matches, in which:
24 unique CDR3
6 unique J



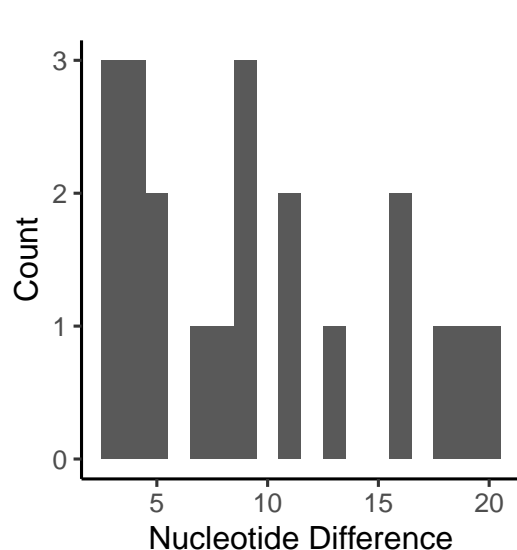
IGHV3-30-3*01

1280 sequences assigned
230 (18%) exact matches, in which:
148 unique CDR3
6 unique J



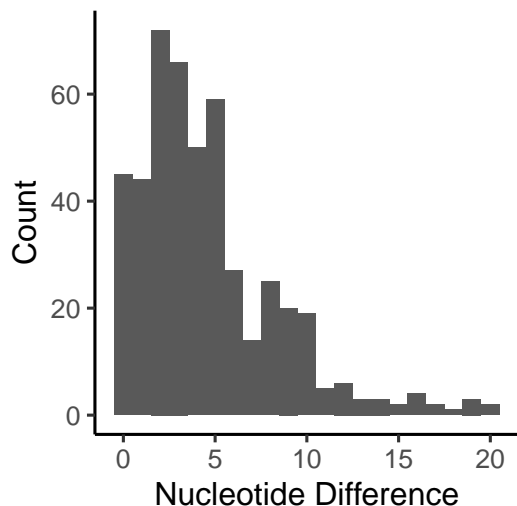
IGHV3-33*05

32 sequences assigned
No exact matches.



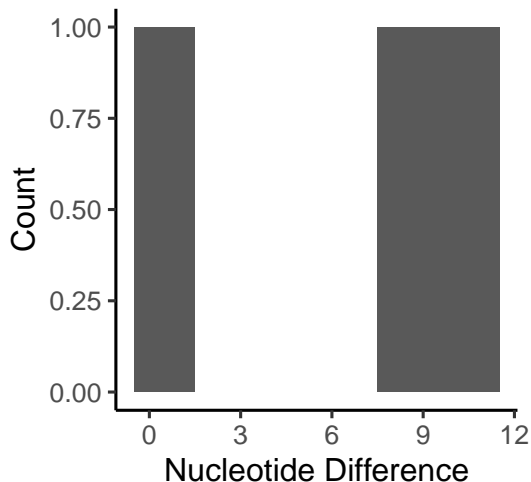
IGHV3-33*06

490 sequences assigned
45 (9.2%) exact matches, in which:
38 unique CDR3
6 unique J



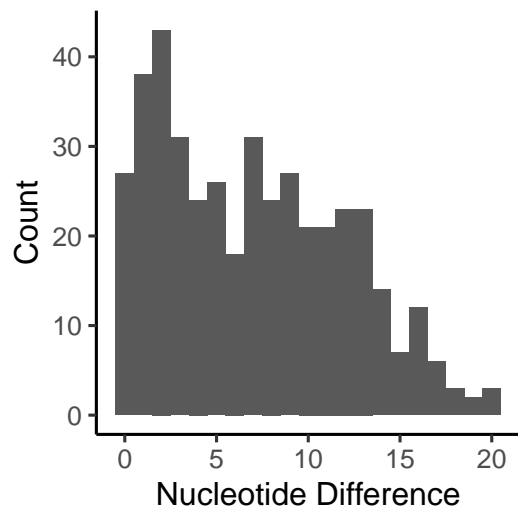
IGHV3-47*02

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



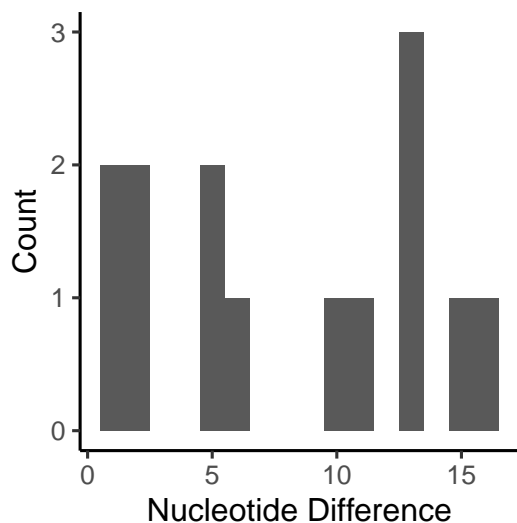
IGHV3-48*04

435 sequences assigned
27 (6.2%) exact matches, in which:
21 unique CDR3
5 unique J



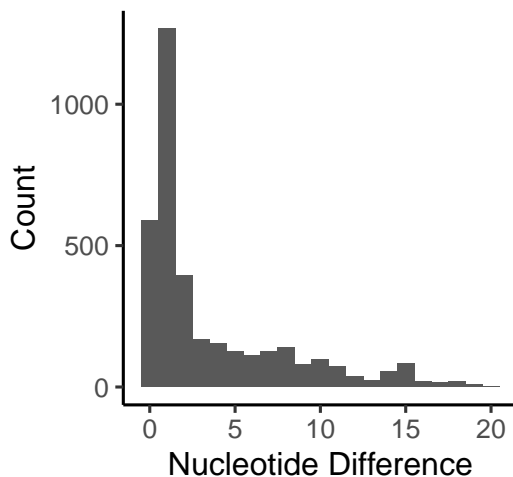
IGHV3-43*01

14 sequences assigned
No exact matches.



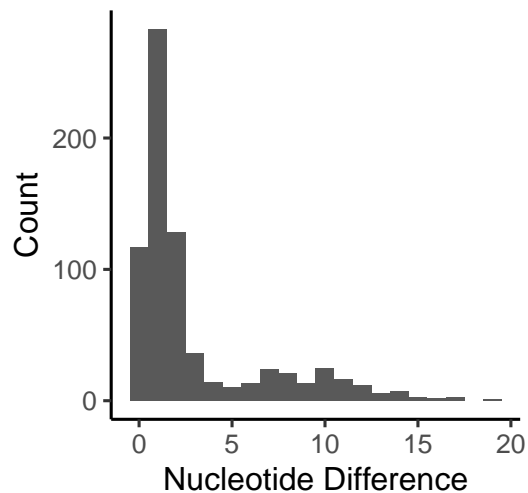
IGHV3-48*01

3851 sequences assigned
589 (15.3%) exact matches, in which:
302 unique CDR3
7 unique J



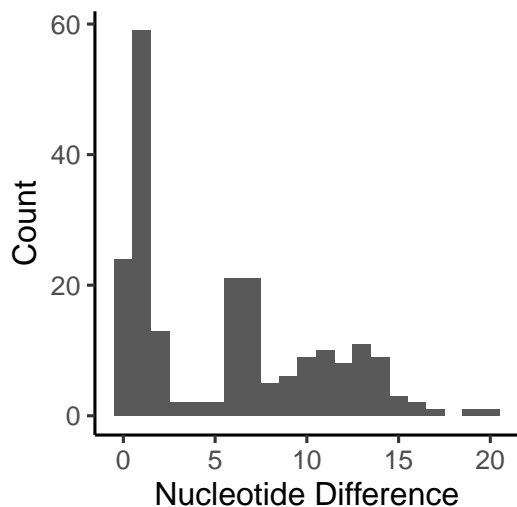
IGHV3-49*04

734 sequences assigned
117 (15.9%) exact matches, in which:
62 unique CDR3
3 unique J



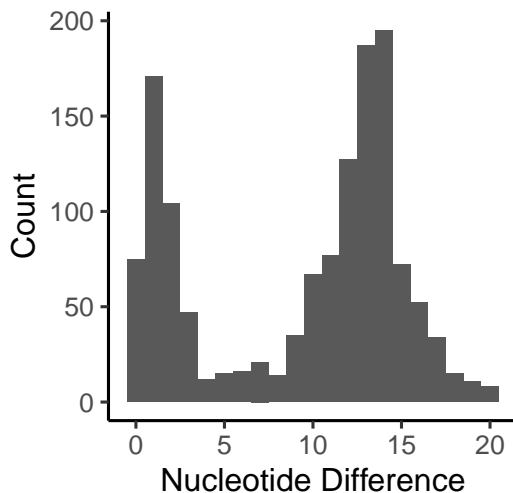
IGHV3-43*02

210 sequences assigned
24 (11.4%) exact matches, in which:
14 unique CDR3
2 unique J



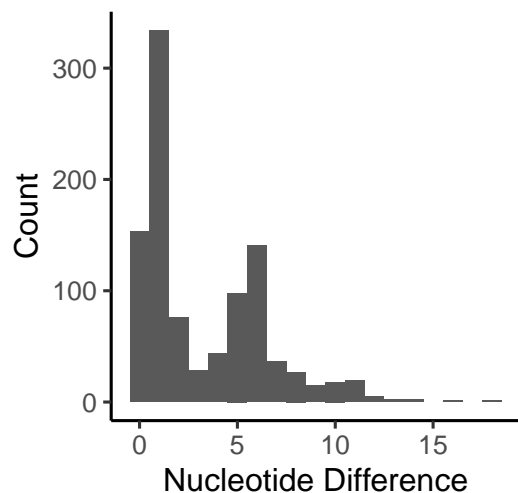
IGHV3-48*03

1378 sequences assigned
75 (5.4%) exact matches, in which:
49 unique CDR3
5 unique J



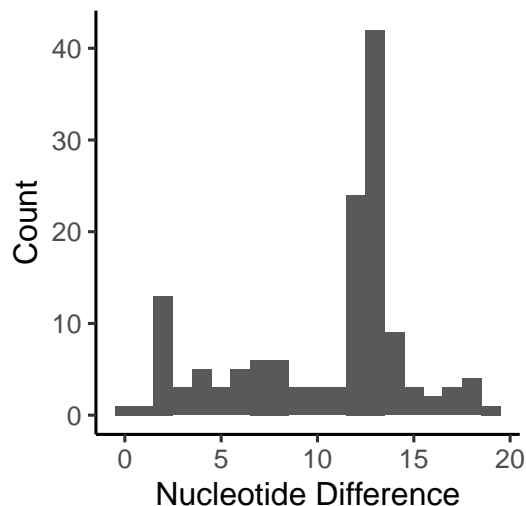
IGHV3-49*03_05

1004 sequences assigned
153 (15.2%) exact matches, in which:
87 unique CDR3
4 unique J



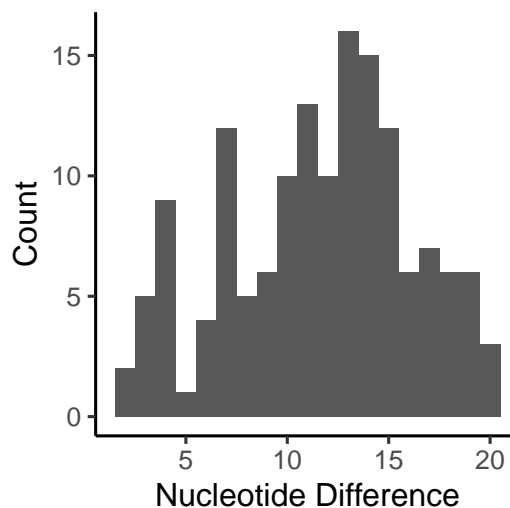
IGHV3-53*05

152 sequences assigned
1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J



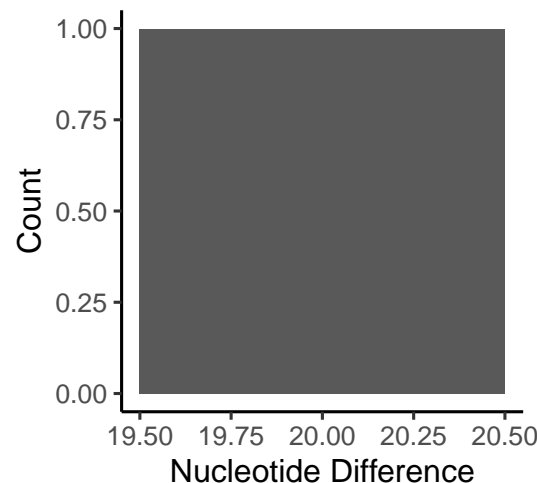
IGHV3-64*04

184 sequences assigned
No exact matches.



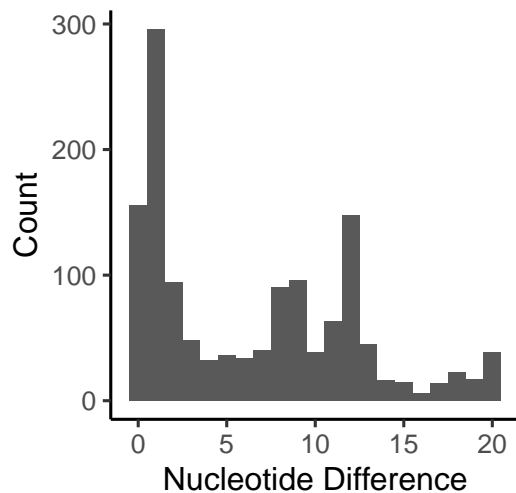
IGHV3-69-1*02

1 sequences assigned
No exact matches.



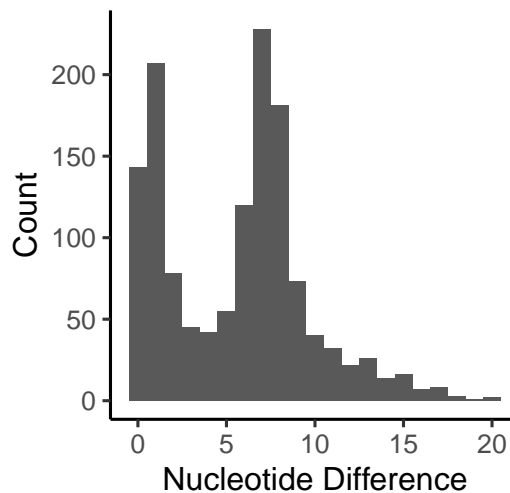
IGHV3-53*01_02

1673 sequences assigned
156 (9.3%) exact matches, in which:
94 unique CDR3
6 unique J



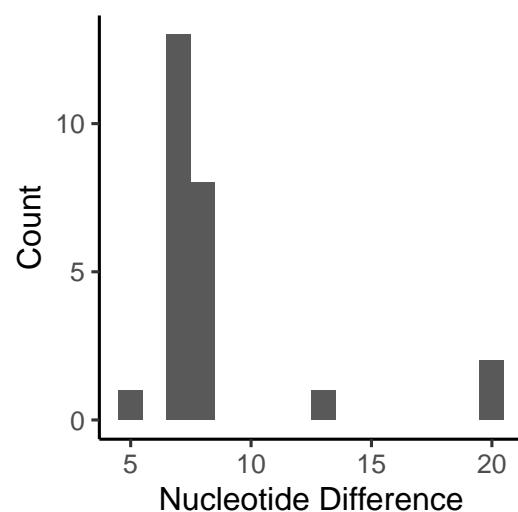
IGHV3-66*01

1436 sequences assigned
143 (10%) exact matches, in which:
104 unique CDR3
7 unique J



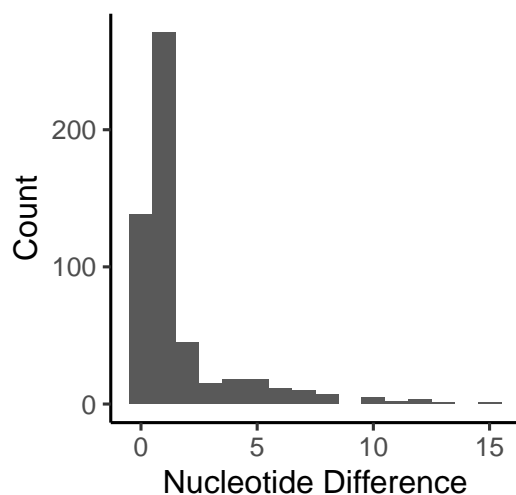
IGHV3-72*01

114 sequences assigned
No exact matches.



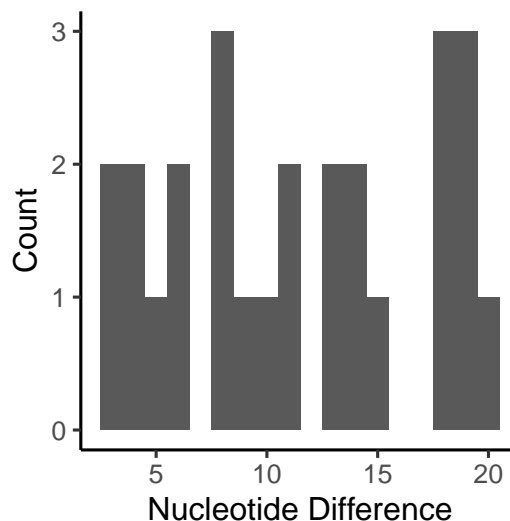
IGHV3-64*01

545 sequences assigned
138 (25.3%) exact matches, in which:
84 unique CDR3
5 unique J



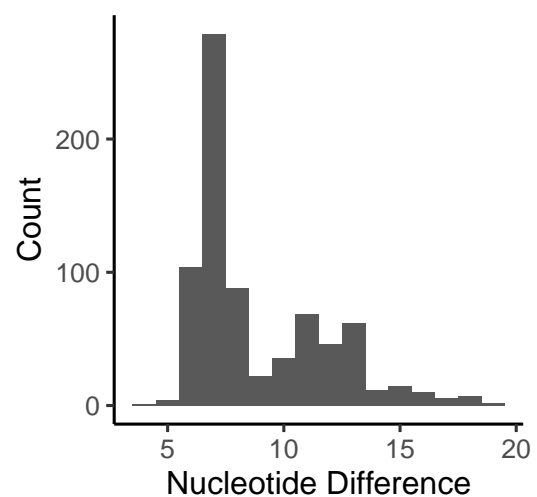
IGHV3-69-1*01

27 sequences assigned
No exact matches.



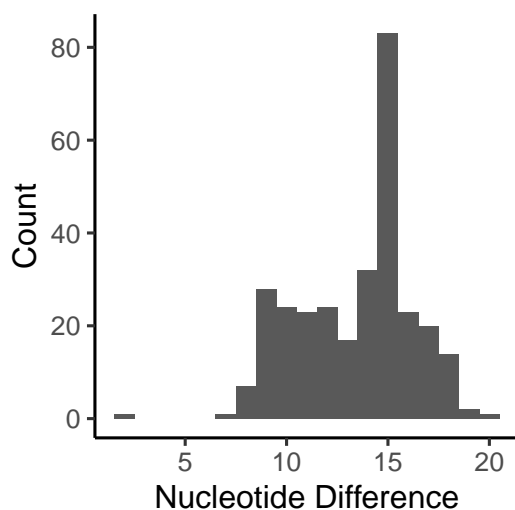
IGHV3-73*01_02

789 sequences assigned
No exact matches.



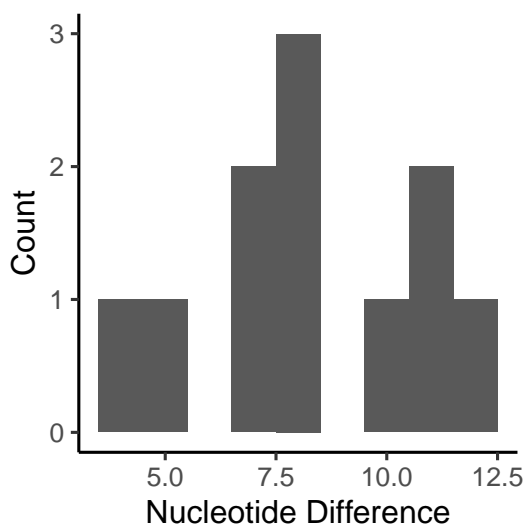
IGHV3-74*03

541 sequences assigned
No exact matches.



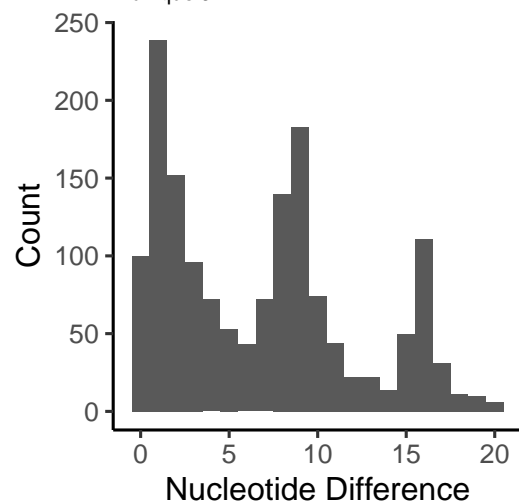
IGHV3-NL1*01

12 sequences assigned
No exact matches.



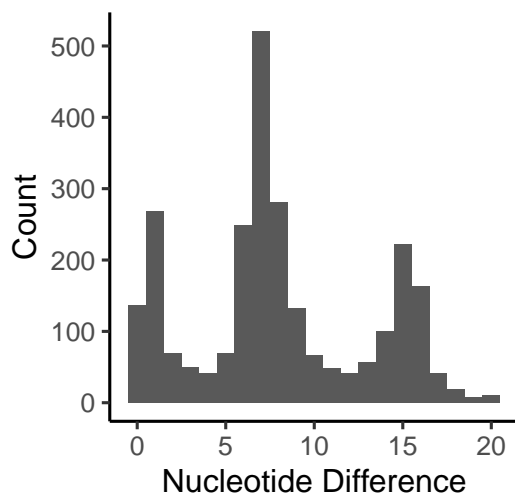
IGHV4-30-4*01

1572 sequences assigned
100 (6.4%) exact matches, in which:
63 unique CDR3
7 unique J



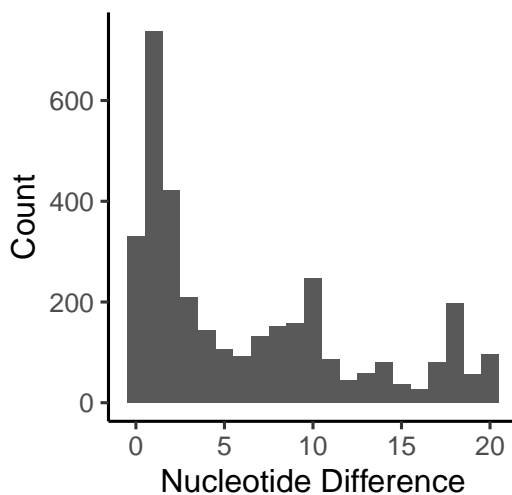
IGHV3-74*01_02

2652 sequences assigned
137 (5.2%) exact matches, in which:
86 unique CDR3
6 unique J



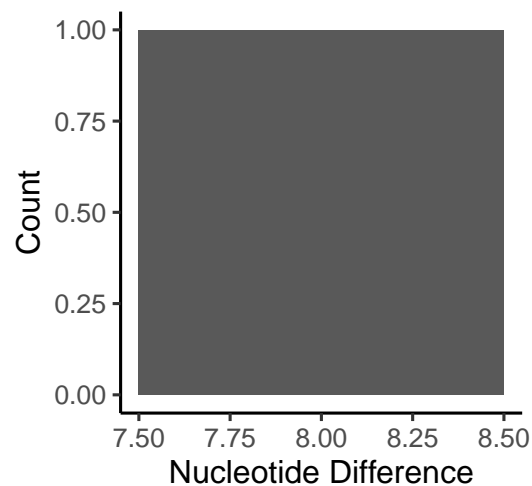
IGHV4-4*02_03

4264 sequences assigned
331 (7.8%) exact matches, in which:
189 unique CDR3
7 unique J



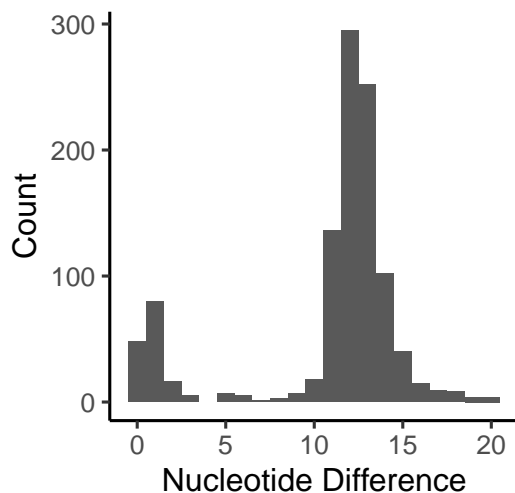
IGHV4-30-2*01

37 sequences assigned
No exact matches.



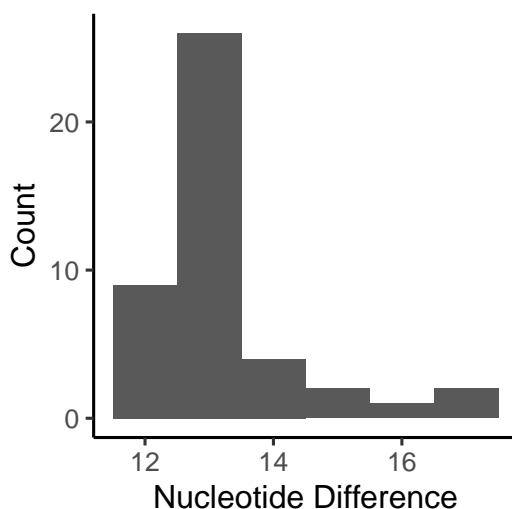
IGHV3-64D*06

2019 sequences assigned
48 (2.4%) exact matches, in which:
30 unique CDR3
4 unique J



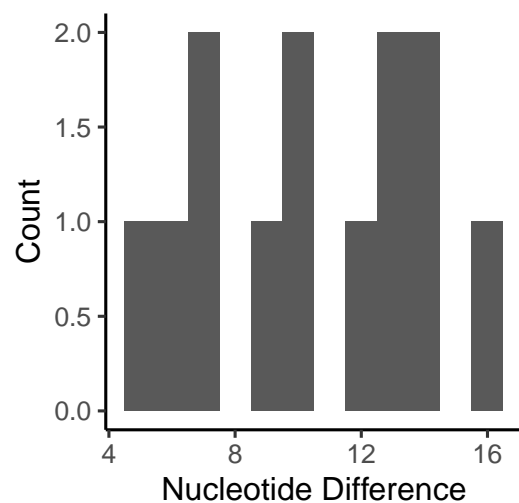
IGHV4-28*03

44 sequences assigned
No exact matches.



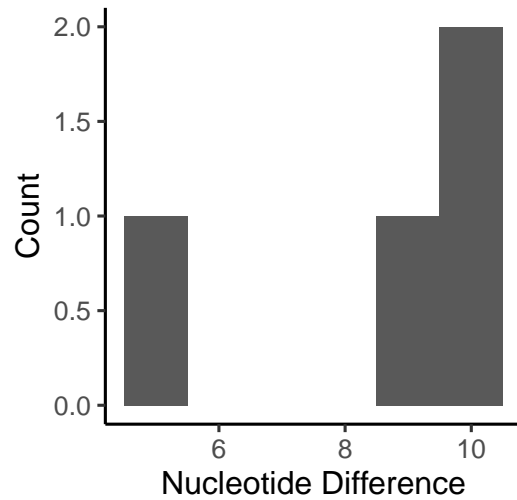
IGHV4-30-2*03

21 sequences assigned
No exact matches.



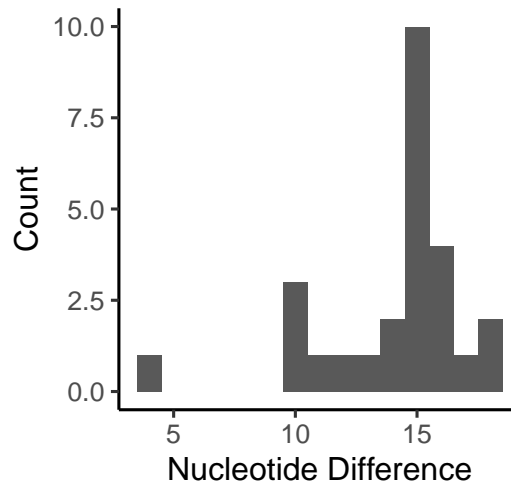
IGHV4-30-2*04

4 sequences assigned
No exact matches.



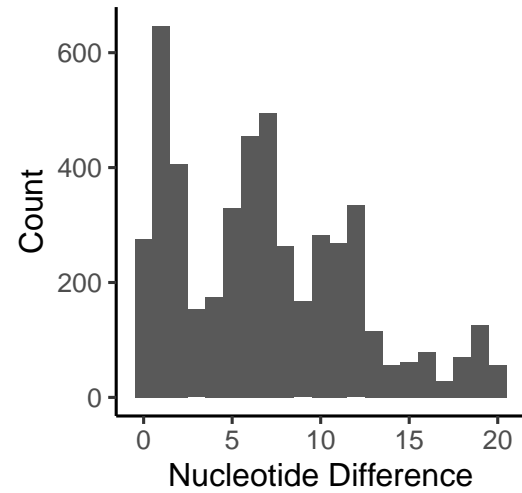
IGHV4-38-2*02

30 sequences assigned
No exact matches.



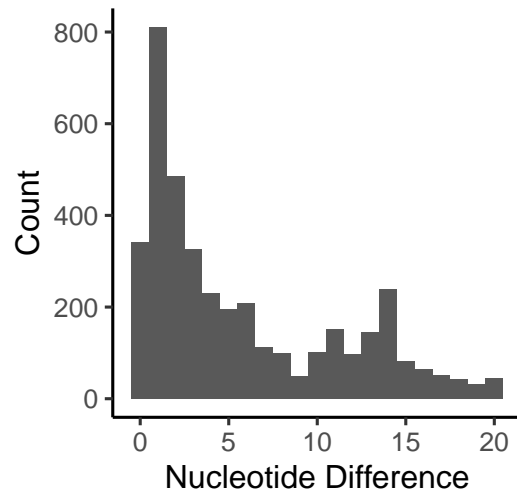
IGHV4-59*01_07

5107 sequences assigned
276 (5.4%) exact matches, in which:
187 unique CDR3
7 unique J



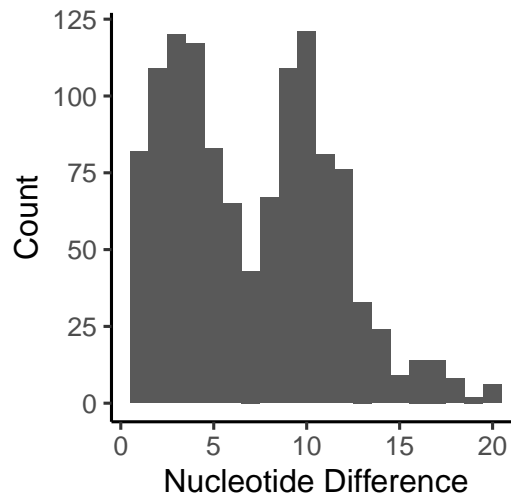
IGHV4-31*02

8186 sequences assigned
342 (4.2%) exact matches, in which:
232 unique CDR3
7 unique J



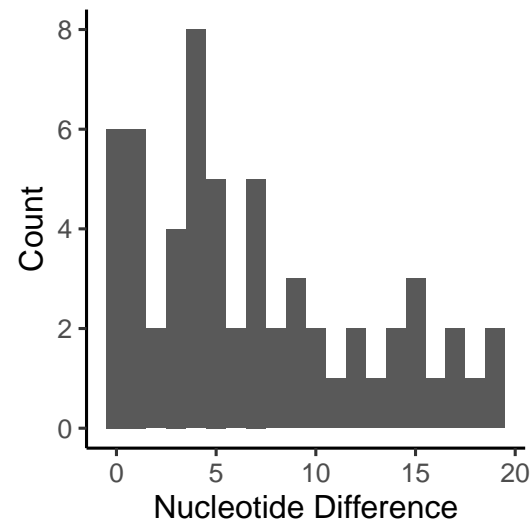
IGHV4-39*07

1260 sequences assigned
No exact matches.



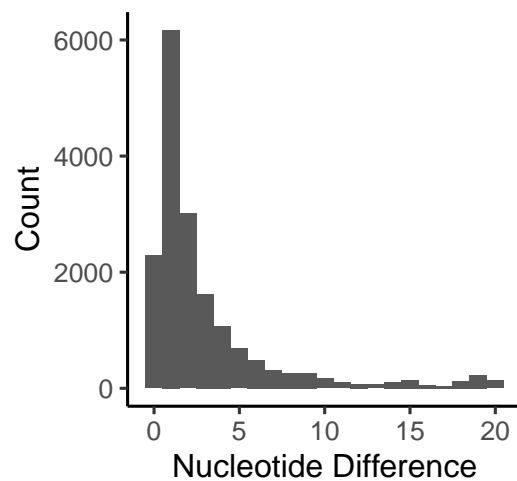
IGHV4-59*11

129 sequences assigned
6 (4.7%) exact matches, in which:
6 unique CDR3
3 unique J



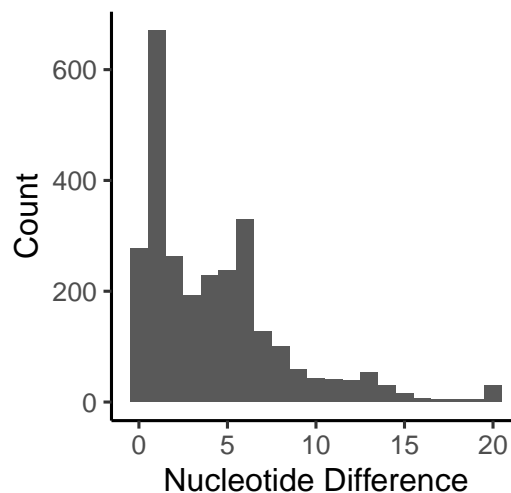
IGHV4-34*01_02

17624 sequences assigned
2288 (13%) exact matches, in which:
1281 unique CDR3
7 unique J



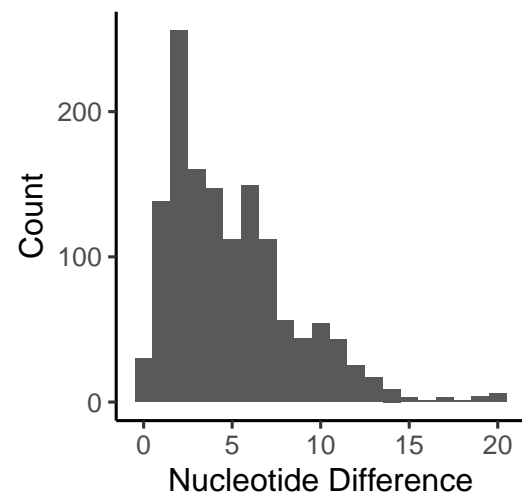
IGHV4-59*08

3633 sequences assigned
277 (7.6%) exact matches, in which:
173 unique CDR3
7 unique J



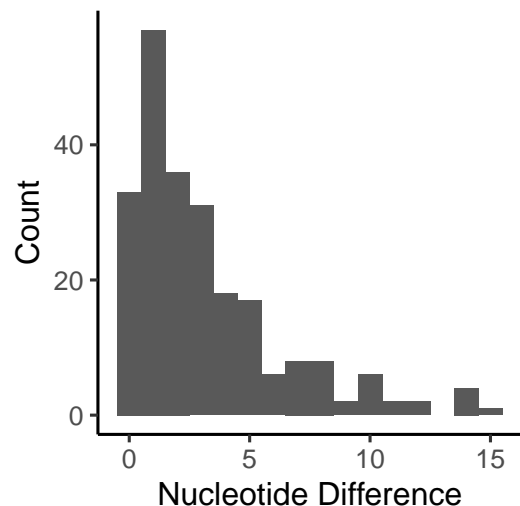
IGHV4-59*12

1549 sequences assigned
30 (1.9%) exact matches, in which:
26 unique CDR3
6 unique J



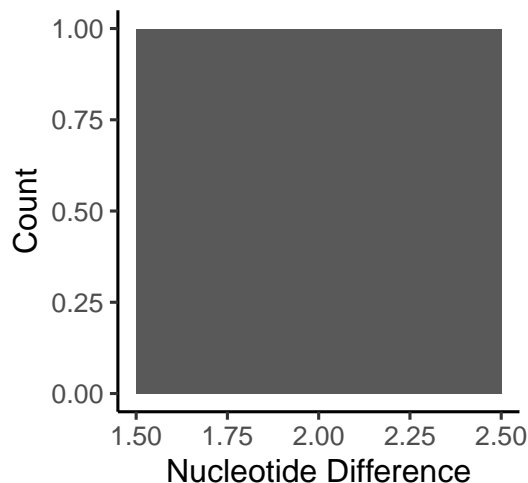
IGHV4-61*01

233 sequences assigned
33 (14.2%) exact matches, in which:
25 unique CDR3
5 unique J



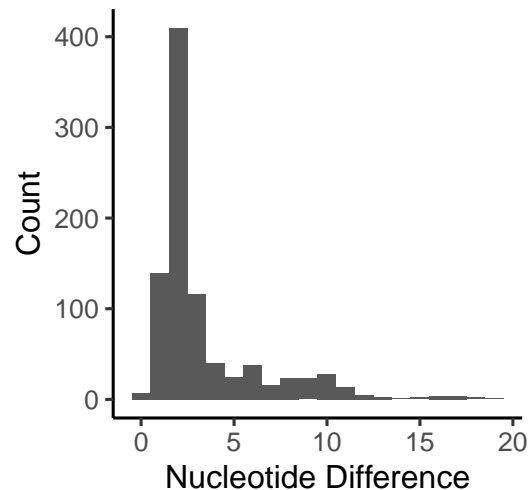
IGHV1/OR15-3*02

2 sequences assigned
No exact matches.



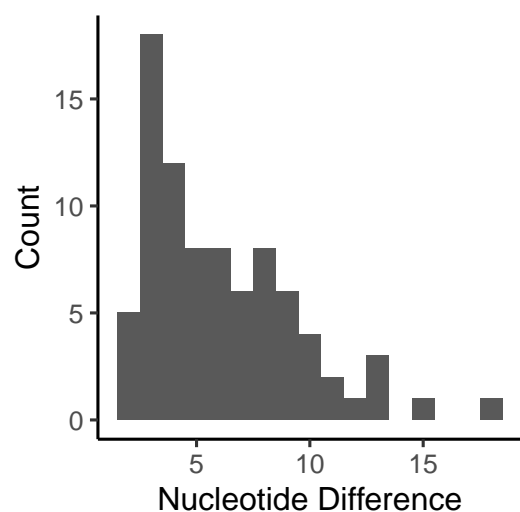
IGHV5-51*07

929 sequences assigned
7 (0.8%) exact matches, in which:
6 unique CDR3
2 unique J



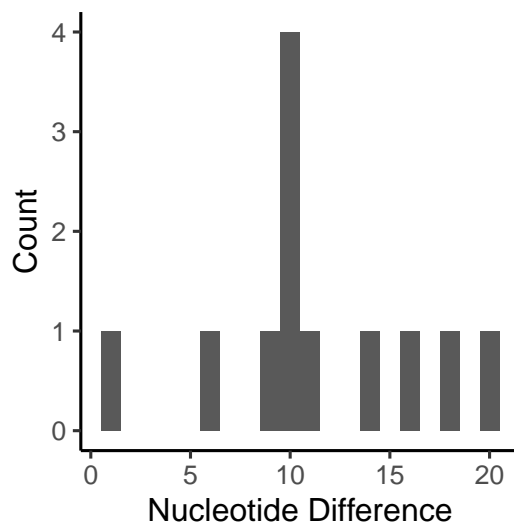
IGHV4-61*05

86 sequences assigned
No exact matches.



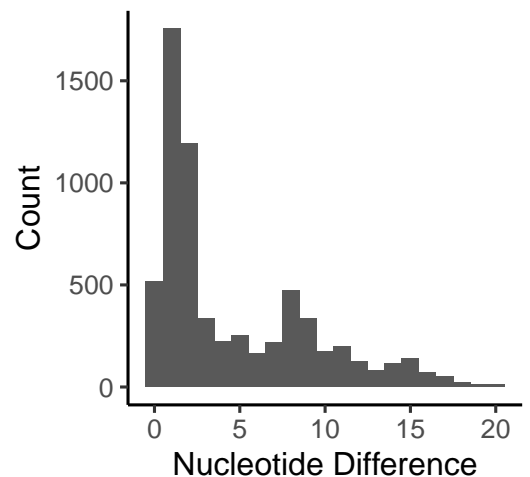
IGHV4/OR15-8*01

26 sequences assigned
No exact matches.



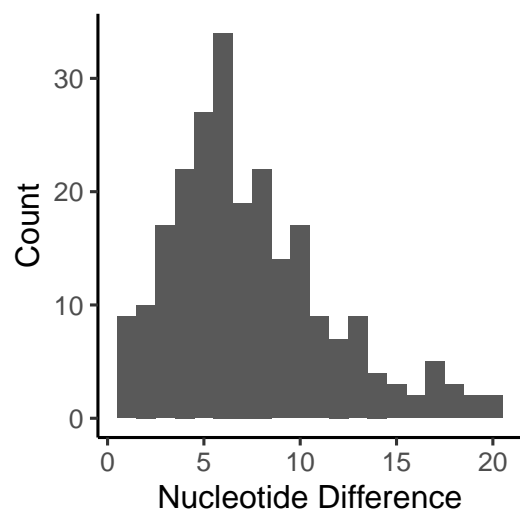
IGHV5-51*01_03

7424 sequences assigned
518 (7%) exact matches, in which:
274 unique CDR3
6 unique J



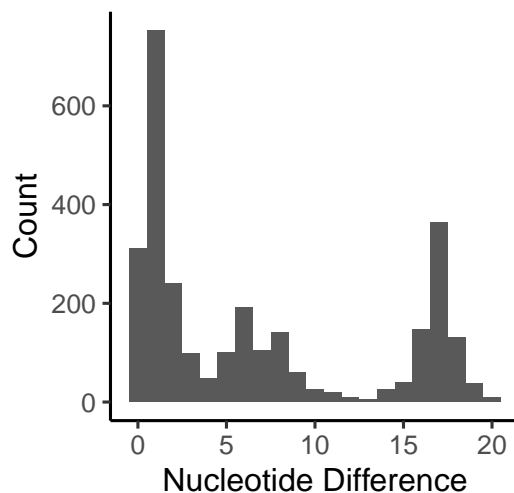
IGHV4-61*08

250 sequences assigned
No exact matches.



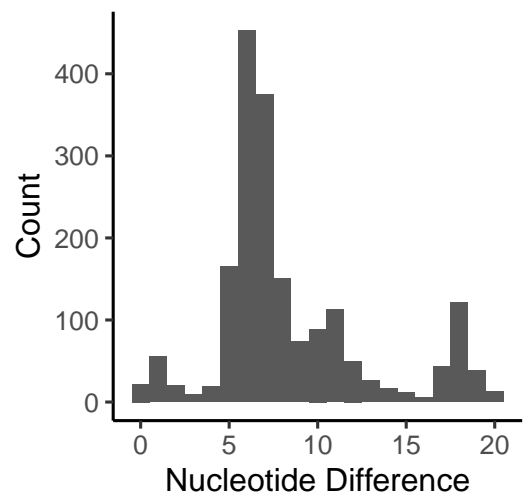
IGHV5-10-1*01_03

2936 sequences assigned
311 (10.6%) exact matches, in which:
165 unique CDR3
6 unique J



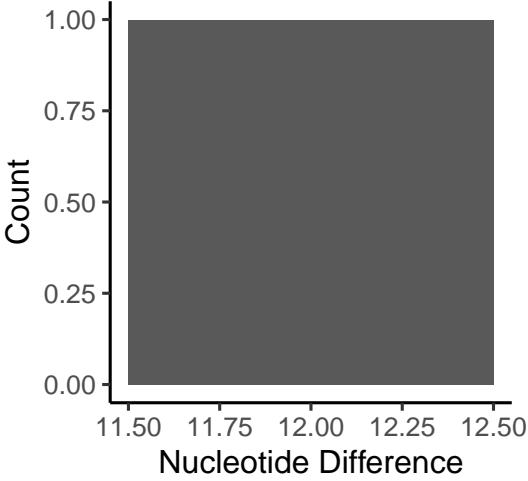
IGHV6-1*01_02

1892 sequences assigned
22 (1.2%) exact matches, in which:
17 unique CDR3
4 unique J

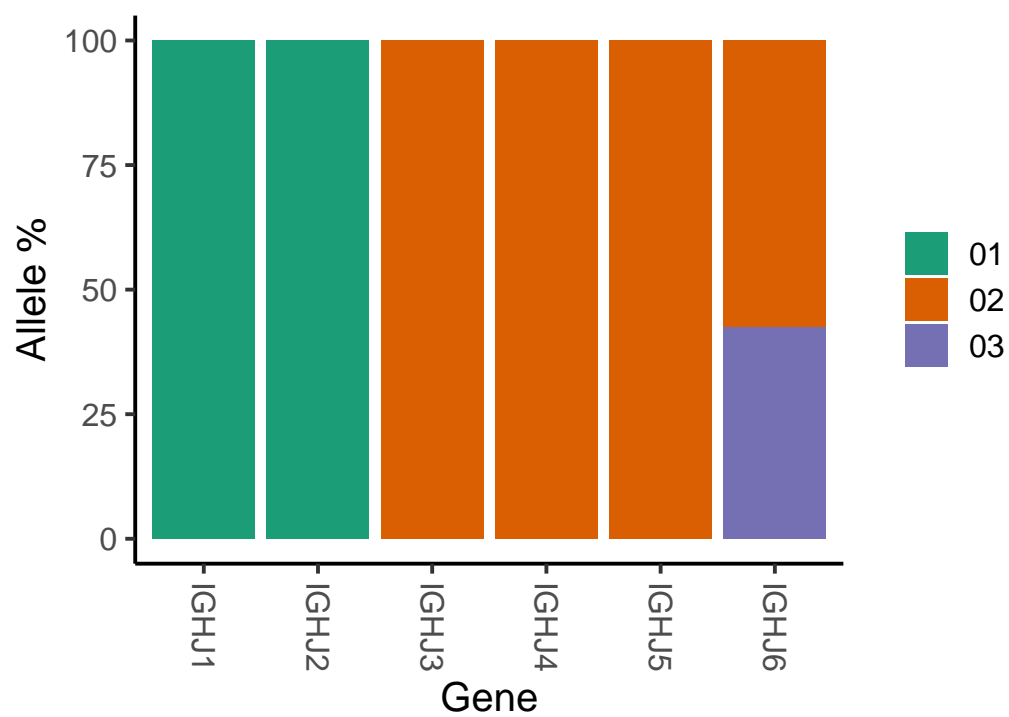


IGHV7-4-1*02

1 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ6 allele usage

