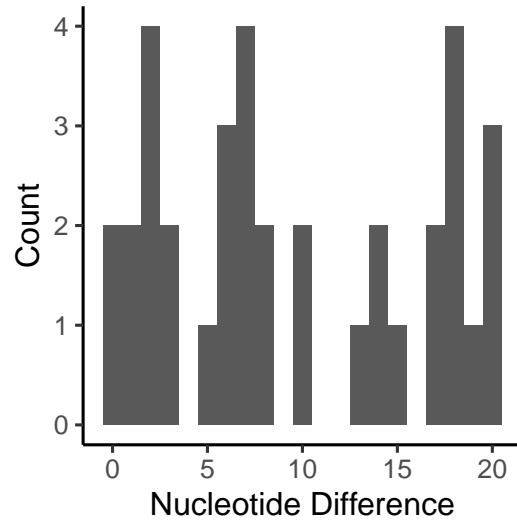


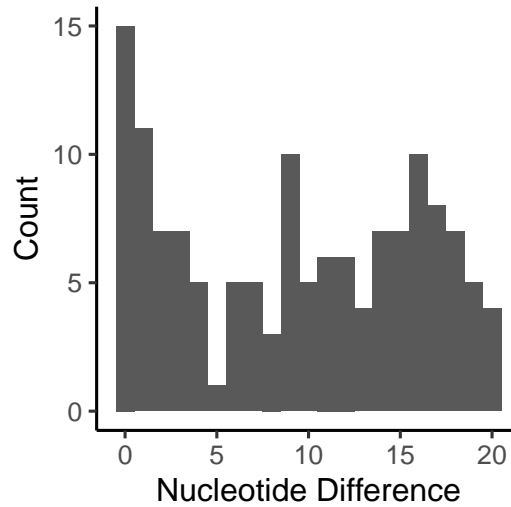
IGHV1-2*04

43 sequences assigned
2 (4.7%) exact matches, in which:
2 unique CDR3
2 unique J



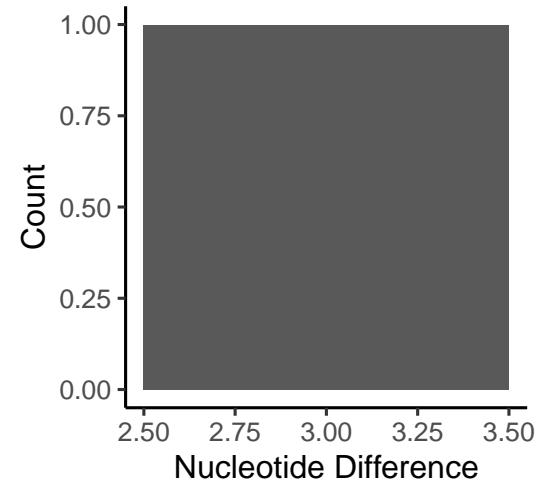
IGHV1-8*01

168 sequences assigned
15 (8.9%) exact matches, in which:
15 unique CDR3
6 unique J



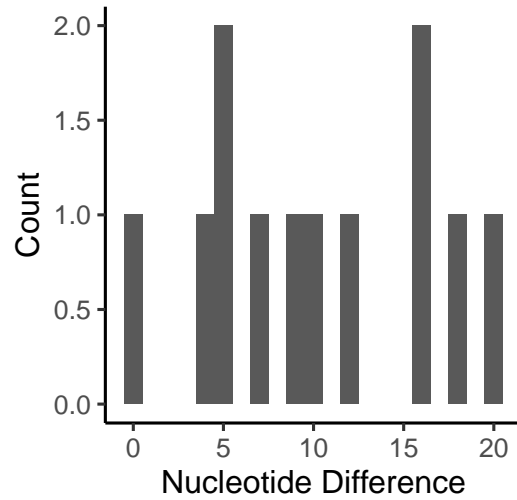
IGHV1-45*02

1 sequences assigned
No exact matches.



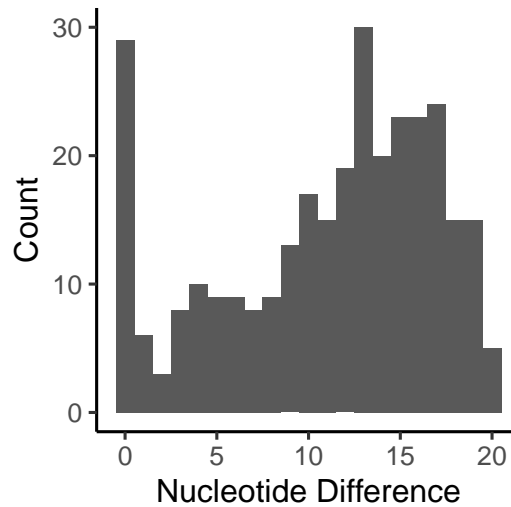
IGHV1-2*05

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



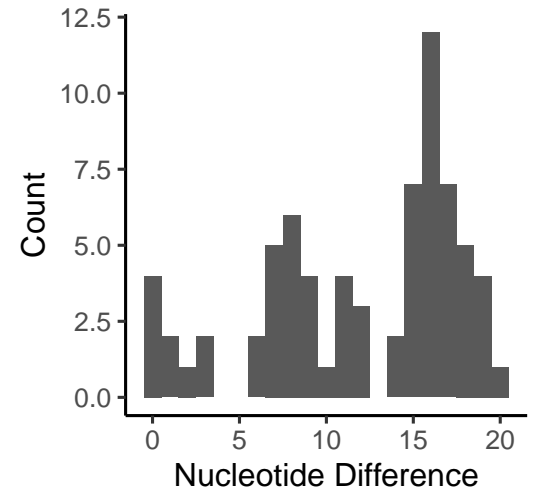
IGHV1-18*01

405 sequences assigned
29 (7.2%) exact matches, in which:
27 unique CDR3
6 unique J



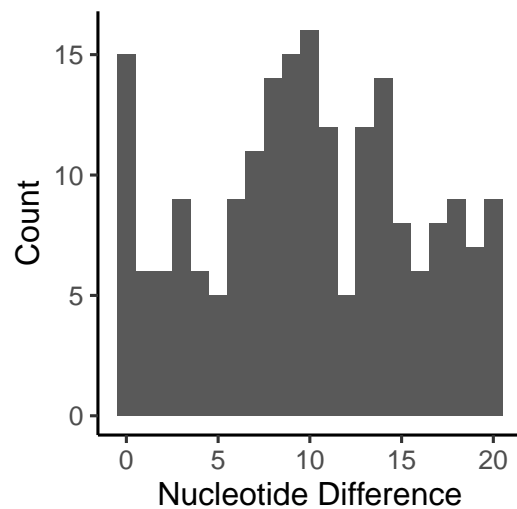
IGHV1-46*01

127 sequences assigned
4 (3.1%) exact matches, in which:
4 unique CDR3
3 unique J



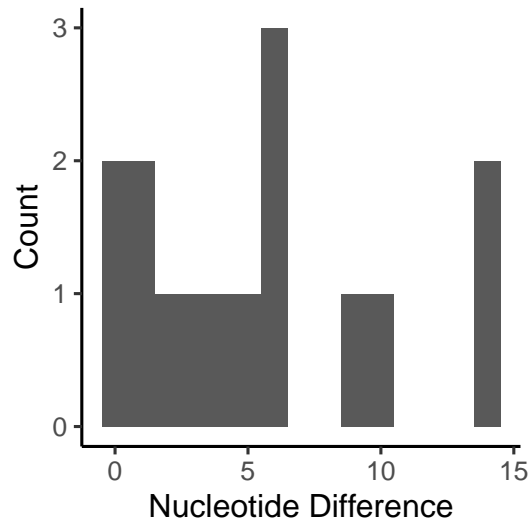
IGHV1-3*01

277 sequences assigned
15 (5.4%) exact matches, in which:
13 unique CDR3
5 unique J



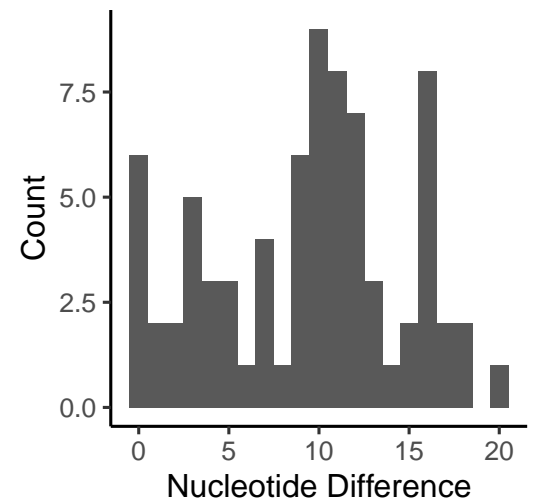
IGHV1-24*01

27 sequences assigned
2 (7.4%) exact matches, in which:
2 unique CDR3
2 unique J



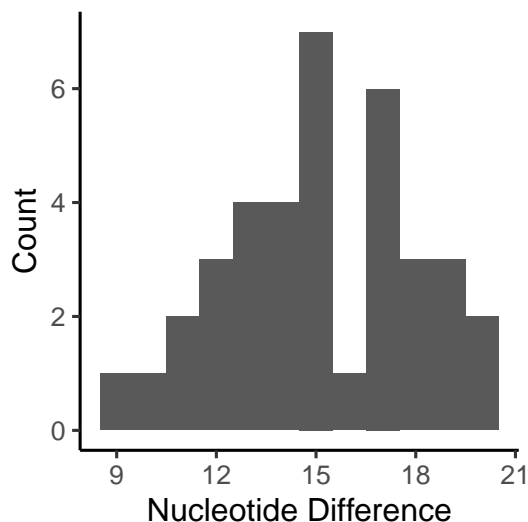
IGHV1-46*04

106 sequences assigned
6 (5.7%) exact matches, in which:
4 unique CDR3
3 unique J



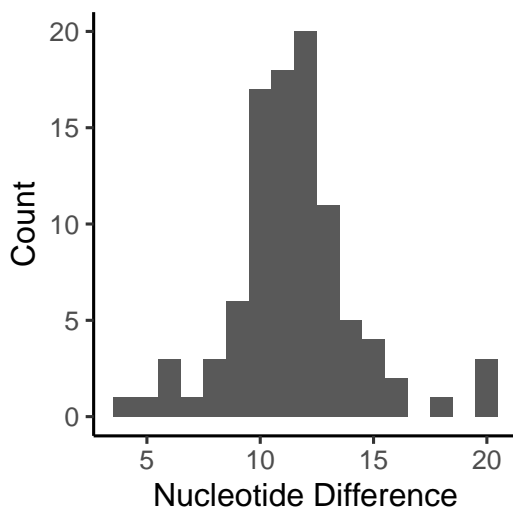
IGHV1–58*01

50 sequences assigned
No exact matches.



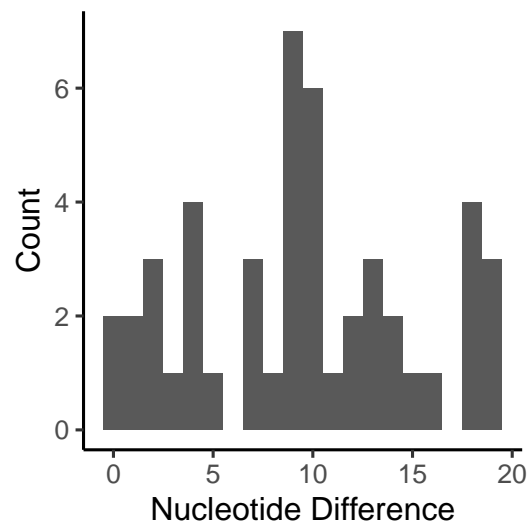
IGHV1–69*04

134 sequences assigned
No exact matches.



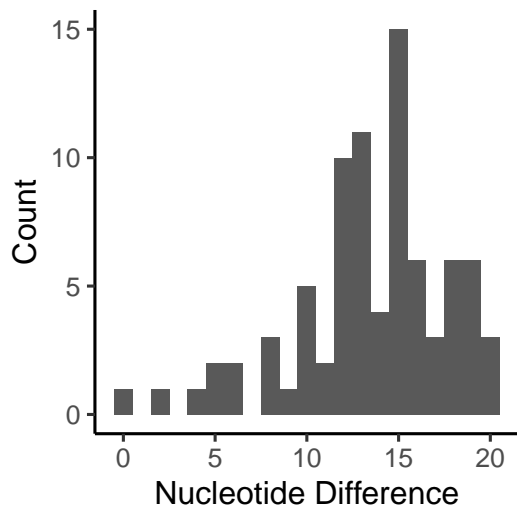
IGHV2–26*01

58 sequences assigned
2 (3.4%) exact matches, in which:
2 unique CDR3
1 unique J



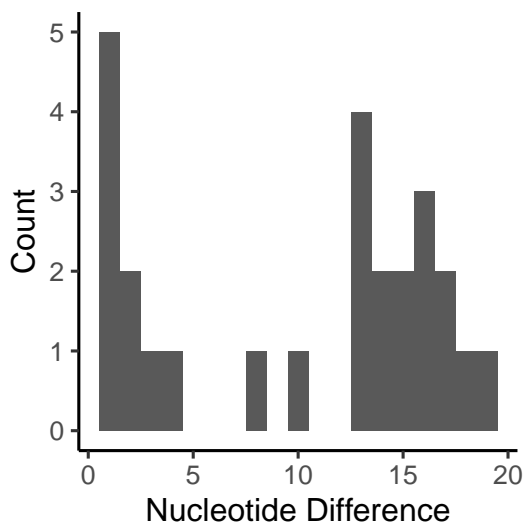
IGHV1–58*02

108 sequences assigned
1 (0.9%) exact matches, in which:
1 unique CDR3
1 unique J



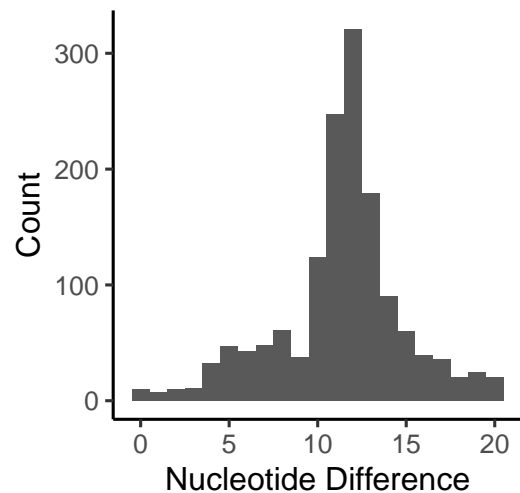
IGHV1–69*08

41 sequences assigned
No exact matches.



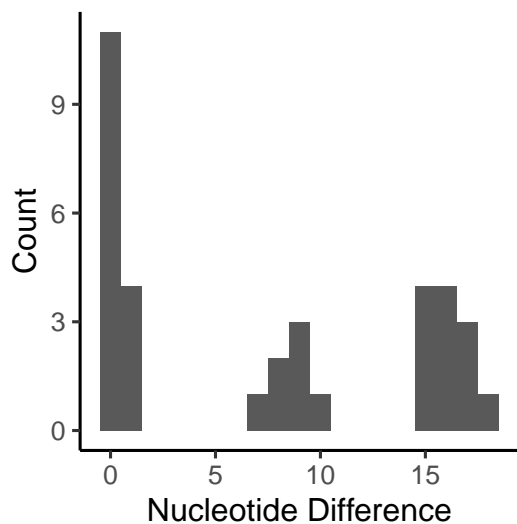
IGHV3–7*01

1594 sequences assigned
10 (0.6%) exact matches, in which:
8 unique CDR3
5 unique J



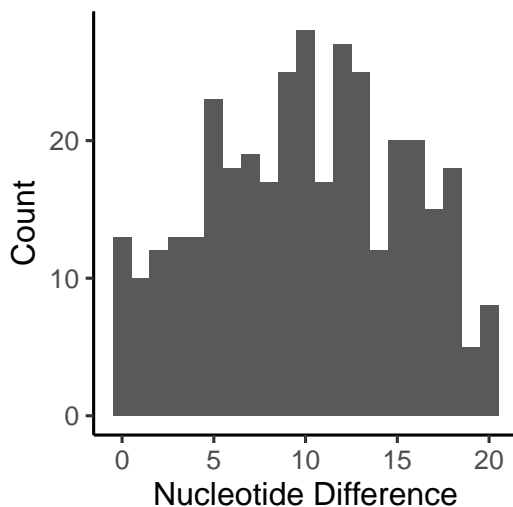
IGHV1–69*02

56 sequences assigned
11 (19.6%) exact matches, in which:
10 unique CDR3
4 unique J



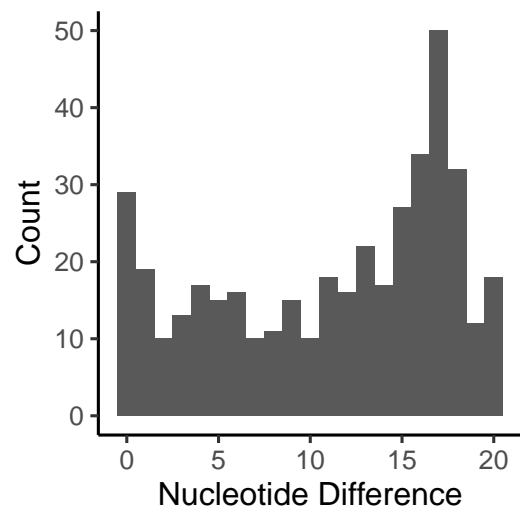
IGHV2–5*02

384 sequences assigned
13 (3.4%) exact matches, in which:
12 unique CDR3
3 unique J



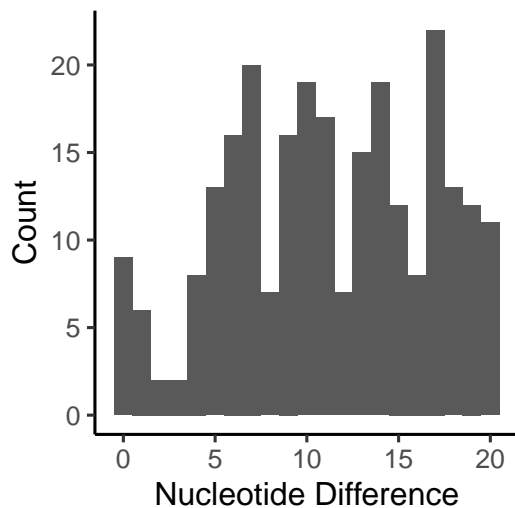
IGHV3–9*01

641 sequences assigned
29 (4.5%) exact matches, in which:
27 unique CDR3
4 unique J



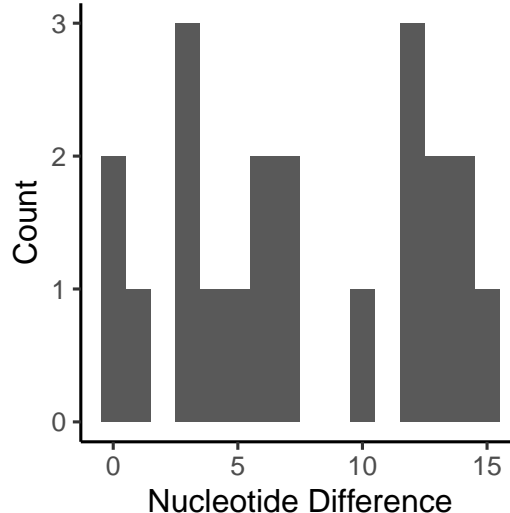
IGHV3-11*01

375 sequences assigned
9 (2.4%) exact matches, in which:
9 unique CDR3
3 unique J



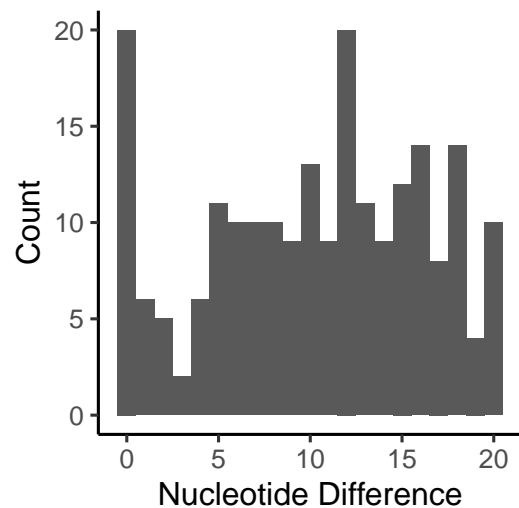
IGHV3-20*01

21 sequences assigned
2 (9.5%) exact matches, in which:
2 unique CDR3
2 unique J



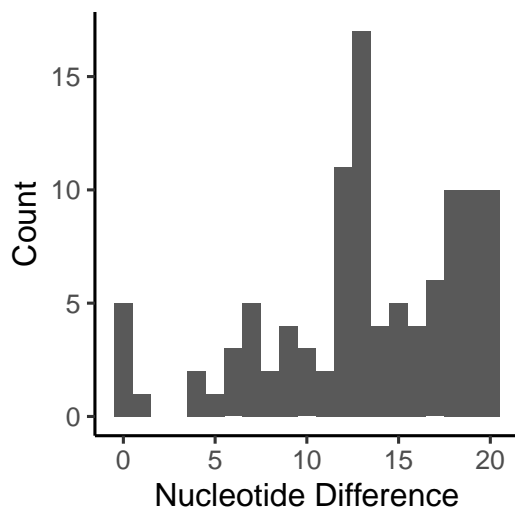
IGHV3-30-3*01

342 sequences assigned
20 (5.8%) exact matches, in which:
19 unique CDR3
5 unique J



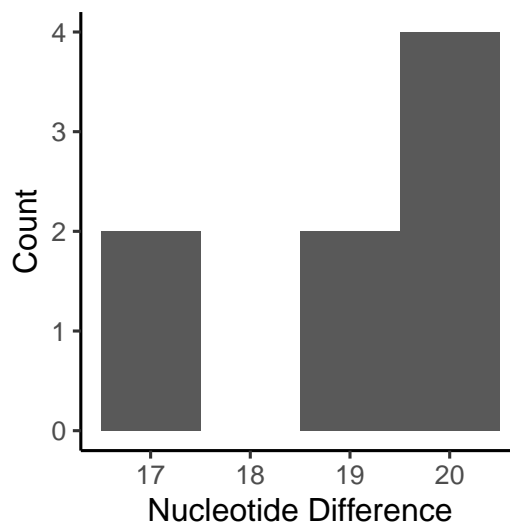
IGHV3-13*01

172 sequences assigned
5 (2.9%) exact matches, in which:
5 unique CDR3
3 unique J



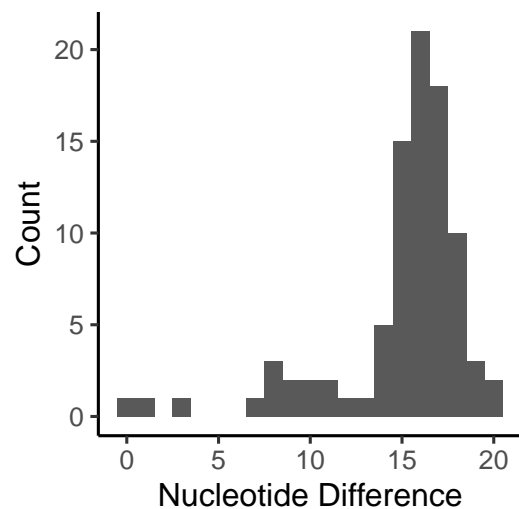
IGHV3-20*04

15 sequences assigned
No exact matches.



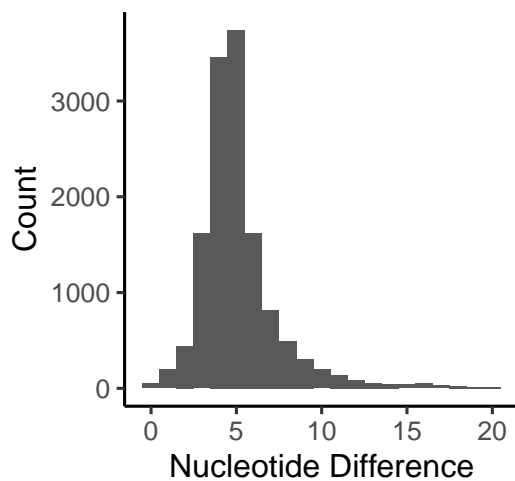
IGHV3-30*03

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



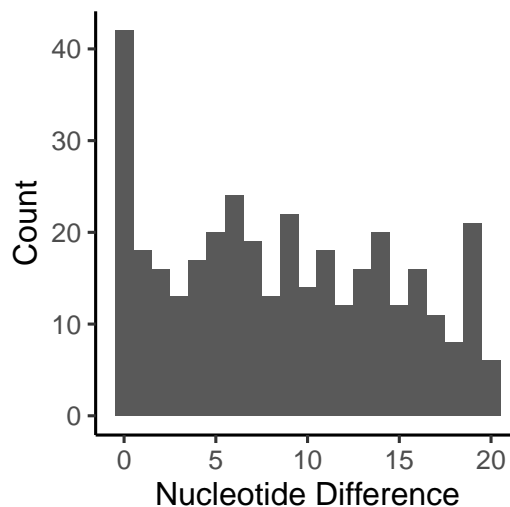
IGHV3-15*01

13984 sequences assigned
51 (0.4%) exact matches, in which:
19 unique CDR3
5 unique J



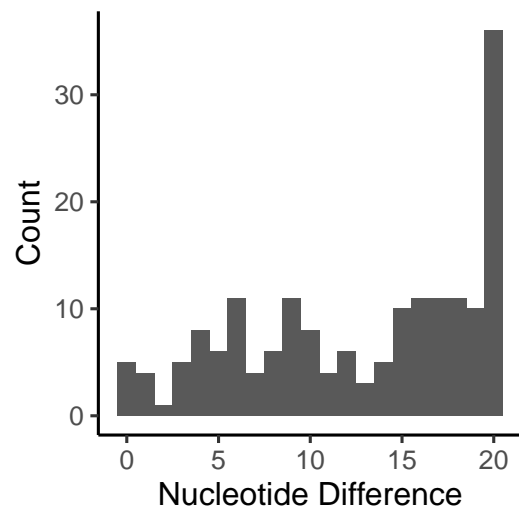
IGHV3-21*01

671 sequences assigned
42 (6.3%) exact matches, in which:
35 unique CDR3
5 unique J



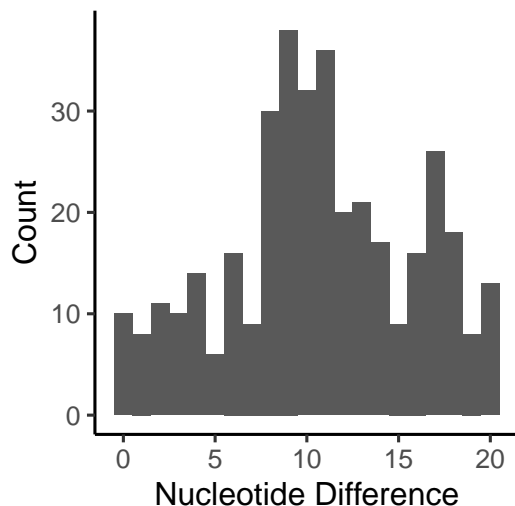
IGHV3-33*01

600 sequences assigned
5 (0.8%) exact matches, in which:
5 unique CDR3
3 unique J



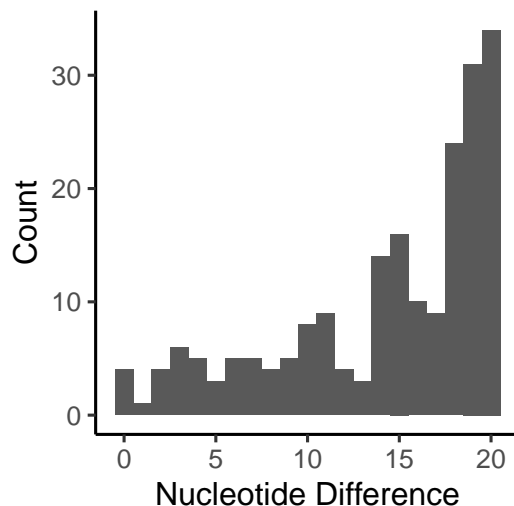
IGHV3-33*08

459 sequences assigned
10 (2.2%) exact matches, in which:
10 unique CDR3
3 unique J



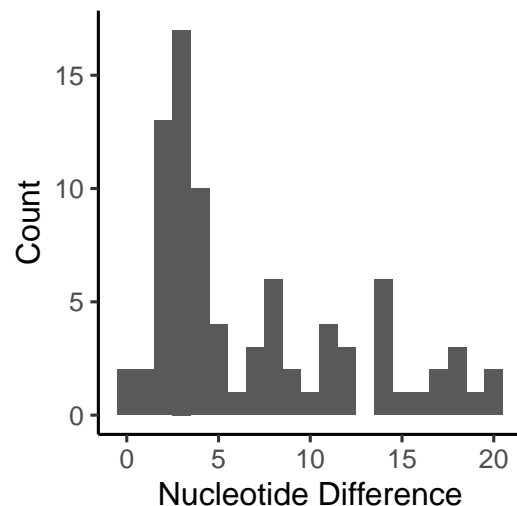
IGHV3-48*01

853 sequences assigned
4 (0.5%) exact matches, in which:
3 unique CDR3
1 unique J



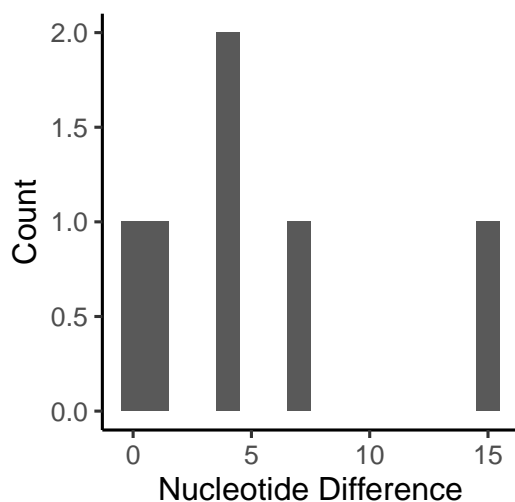
IGHV3-49*04

152 sequences assigned
2 (1.3%) exact matches, in which:
2 unique CDR3
2 unique J



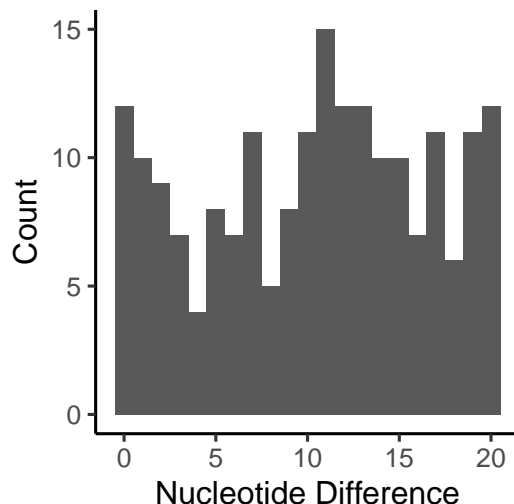
IGHV3-43*01

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



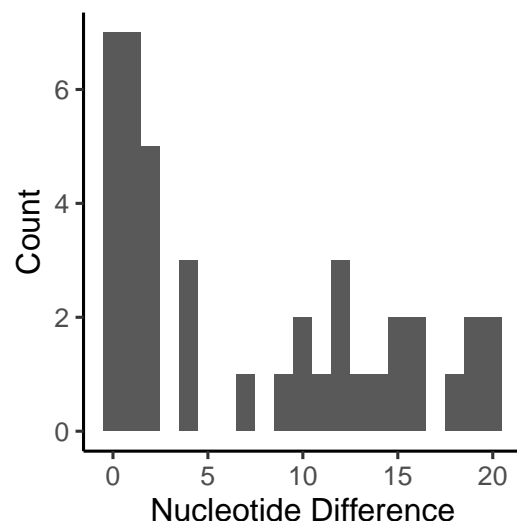
IGHV3-48*03

266 sequences assigned
12 (4.5%) exact matches, in which:
12 unique CDR3
4 unique J



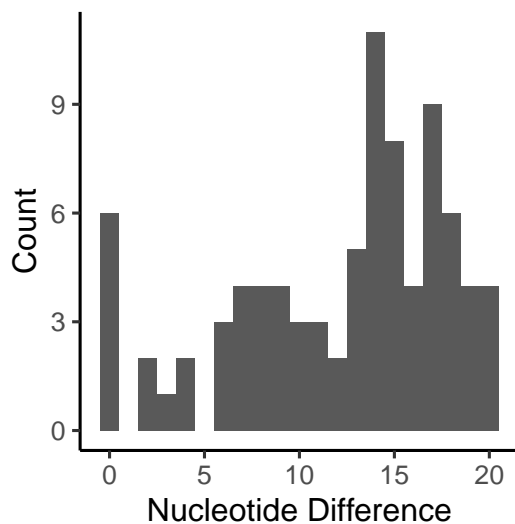
IGHV3-53*02

50 sequences assigned
7 (14%) exact matches, in which:
4 unique CDR3
2 unique J



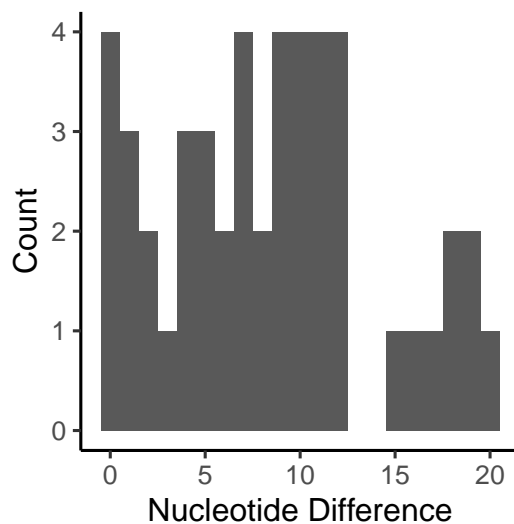
IGHV3-43*02

176 sequences assigned
6 (3.4%) exact matches, in which:
4 unique CDR3
2 unique J



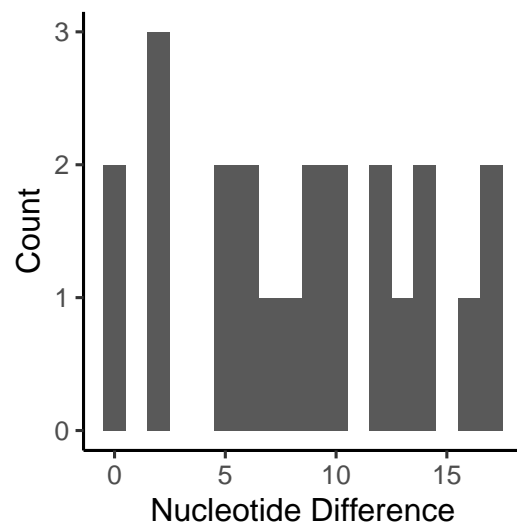
IGHV3-49*03

55 sequences assigned
4 (7.3%) exact matches, in which:
4 unique CDR3
2 unique J



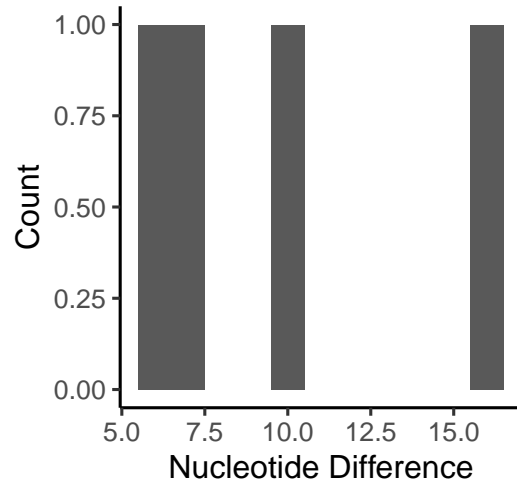
IGHV3-53*04

29 sequences assigned
2 (6.9%) exact matches, in which:
2 unique CDR3
2 unique J



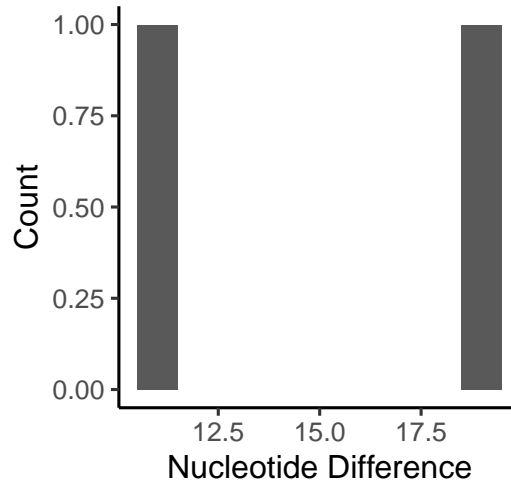
IGHV3-53*05

5 sequences assigned
No exact matches.



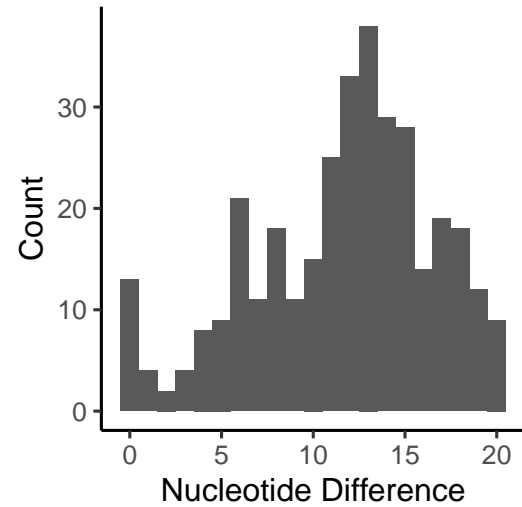
IGHV3-69-1*01

2 sequences assigned
No exact matches.



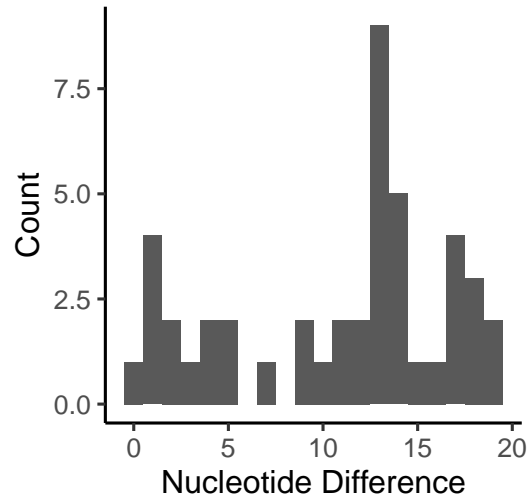
IGHV3-74*01

535 sequences assigned
13 (2.4%) exact matches, in which:
11 unique CDR3
4 unique J



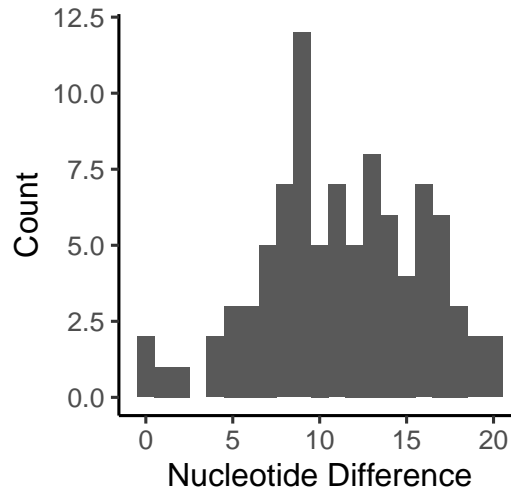
IGHV3-64*01

53 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



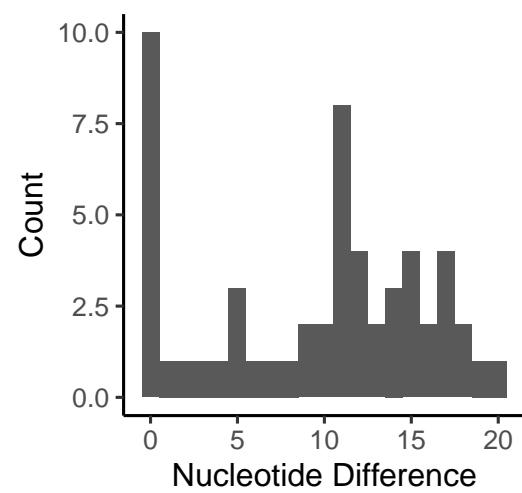
IGHV3-72*01

107 sequences assigned
2 (1.9%) exact matches, in which:
2 unique CDR3
2 unique J



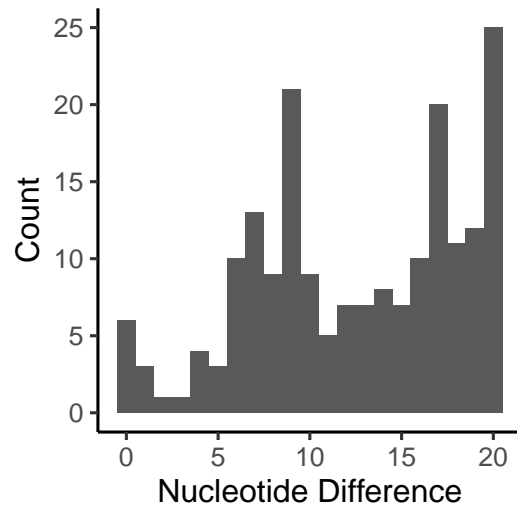
IGHV4-4*02

128 sequences assigned
10 (7.8%) exact matches, in which:
9 unique CDR3
3 unique J



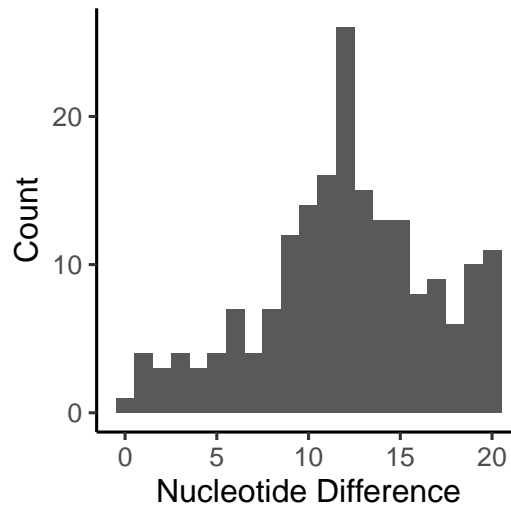
IGHV3-66*02

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



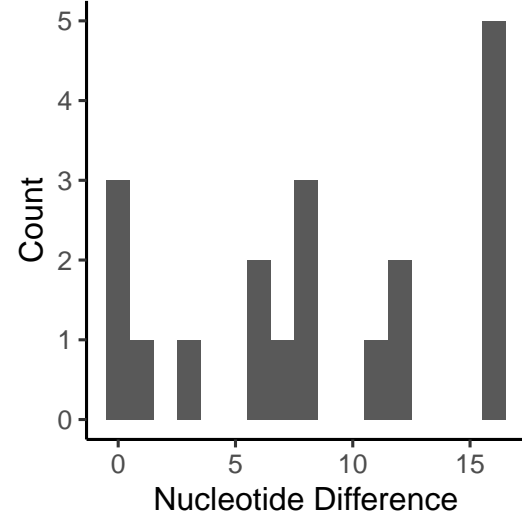
IGHV3-73*01

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



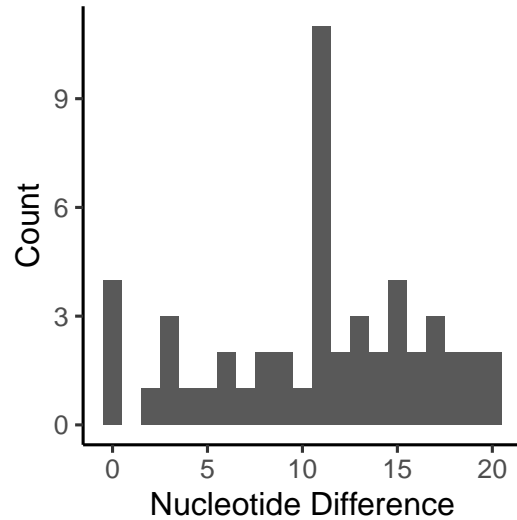
IGHV4-30-2*01

28 sequences assigned
3 (10.7%) exact matches, in which:
3 unique CDR3
3 unique J



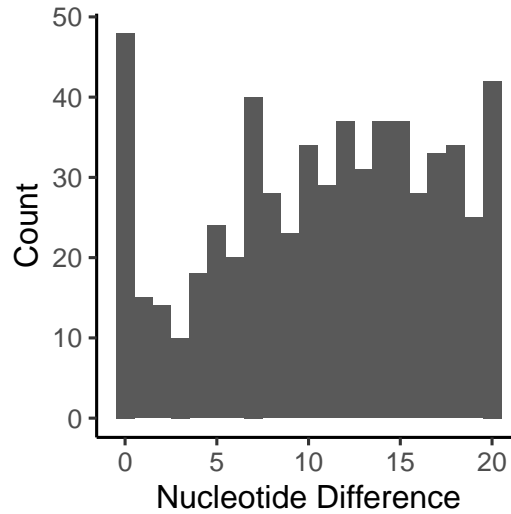
IGHV4-30-4*01

118 sequences assigned
4 (3.4%) exact matches, in which:
4 unique CDR3
2 unique J



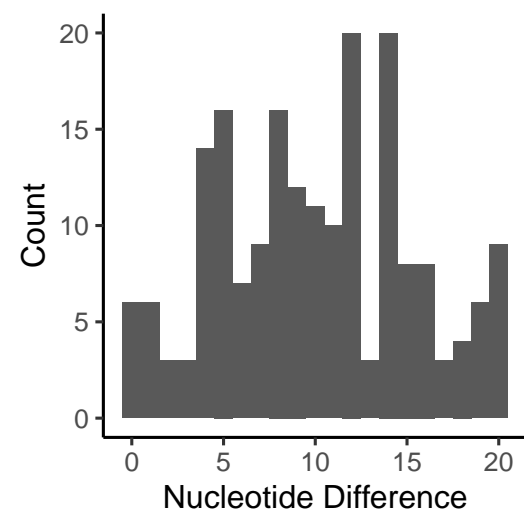
IGHV4-39*01

934 sequences assigned
48 (5.1%) exact matches, in which:
43 unique CDR3
6 unique J



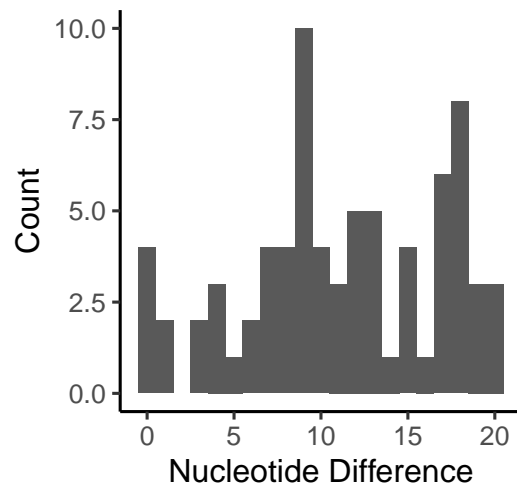
IGHV5-51*01

289 sequences assigned
6 (2.1%) exact matches, in which:
5 unique CDR3
3 unique J



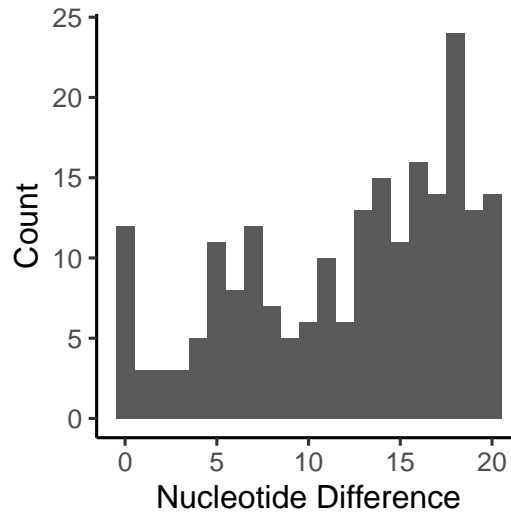
IGHV4-31*03

129 sequences assigned
4 (3.1%) exact matches, in which:
4 unique CDR3
3 unique J



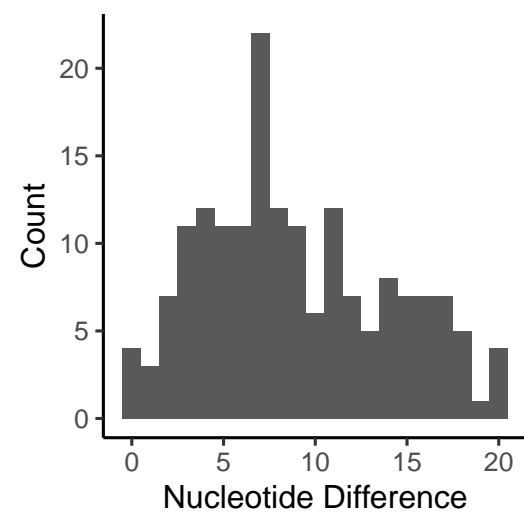
IGHV4-59*01

283 sequences assigned
12 (4.2%) exact matches, in which:
12 unique CDR3
5 unique J



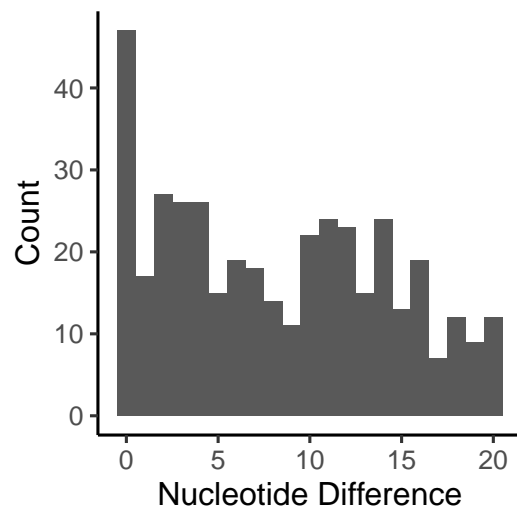
IGHV6-1*01

181 sequences assigned
4 (2.2%) exact matches, in which:
4 unique CDR3
1 unique J



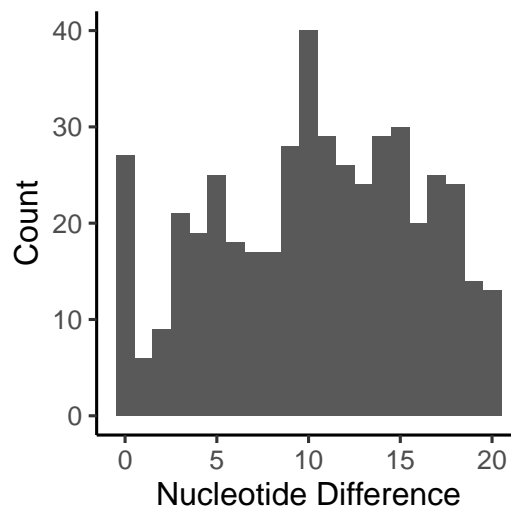
IGHV4-34*01

598 sequences assigned
47 (7.9%) exact matches, in which:
42 unique CDR3
5 unique J



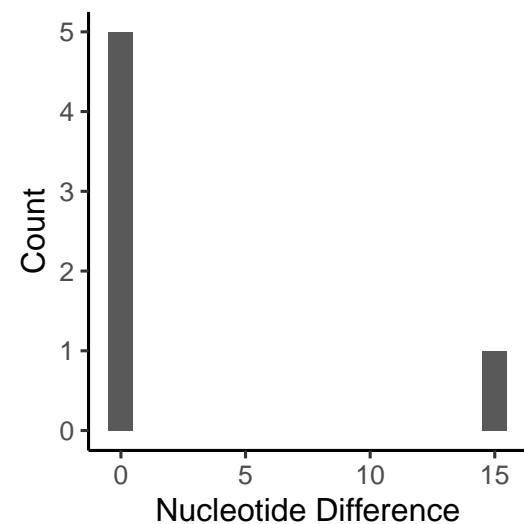
IGHV4-61*02

780 sequences assigned
27 (3.5%) exact matches, in which:
25 unique CDR3
6 unique J



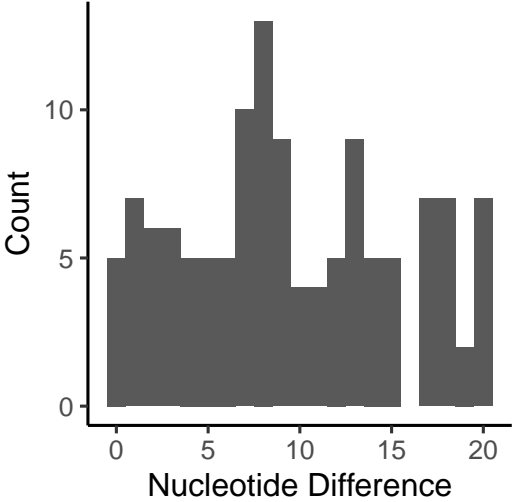
IGHV3/OR16-6*02

6 sequences assigned
5 (83.3%) exact matches, in which:
1 unique CDR3
1 unique J



IGHV7-4-1*02

152 sequences assigned
5 (3.3%) exact matches, in which:
5 unique CDR3
3 unique J



Allele Usage

