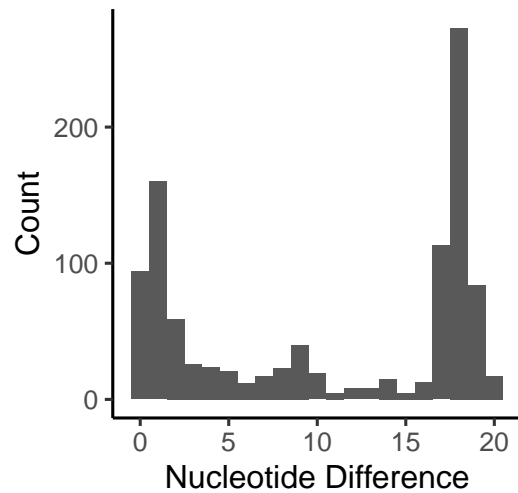


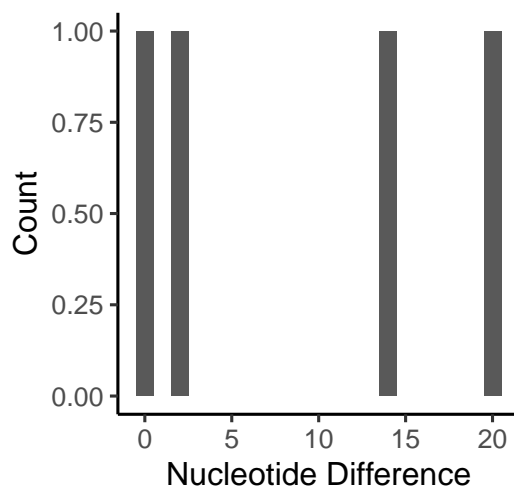
IGHV1-2*02

1064 sequences assigned
94 (8.8%) exact matches, in which:
81 unique CDR3
5 unique J



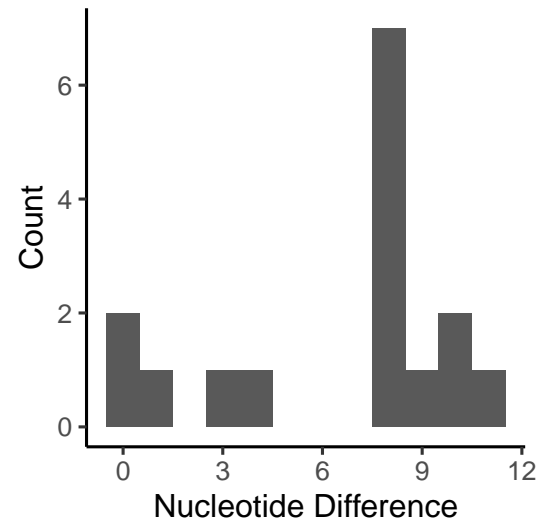
IGHV1-3*01_05

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



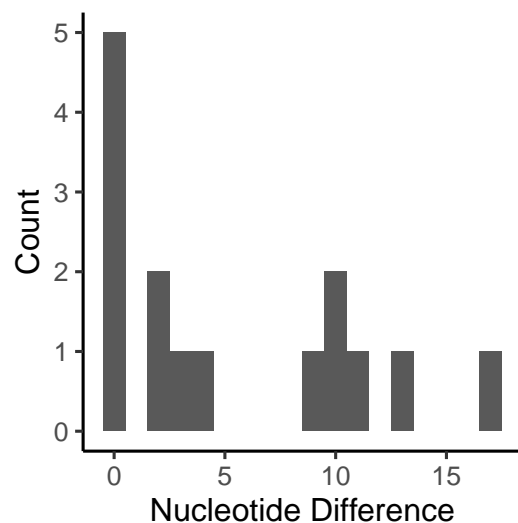
IGHV1-18*04

925 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
2 unique J



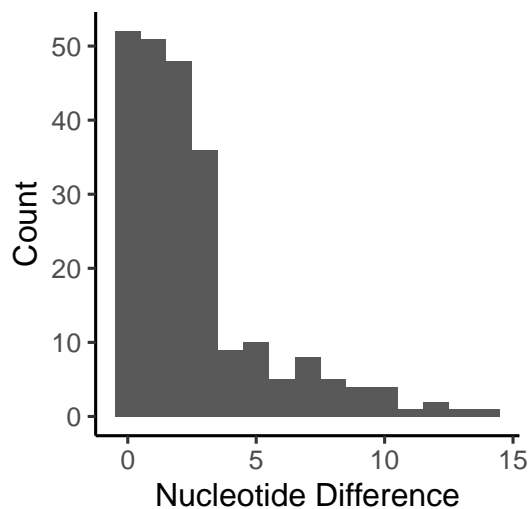
IGHV1-3*02

15 sequences assigned
5 (33.3%) exact matches, in which:
4 unique CDR3
2 unique J



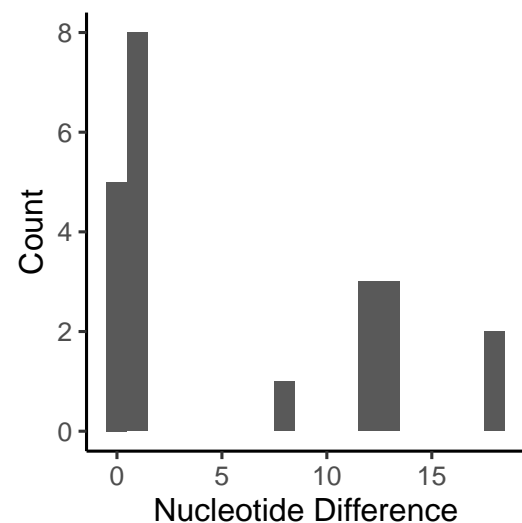
IGHV1-8*01

238 sequences assigned
52 (21.8%) exact matches, in which:
49 unique CDR3
4 unique J



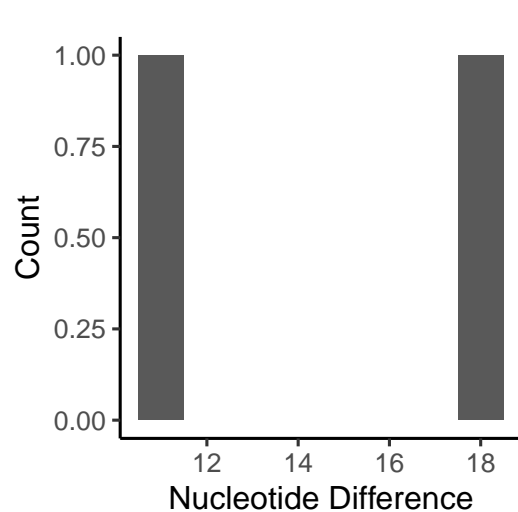
IGHV1-24*01

22 sequences assigned
5 (22.7%) exact matches, in which:
5 unique CDR3
3 unique J



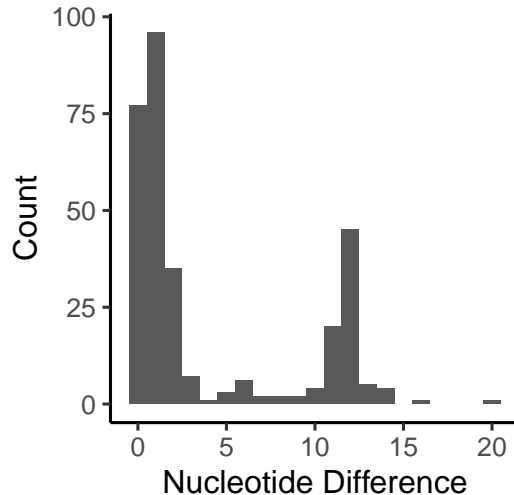
IGHV1-3*04

2 sequences assigned
No exact matches.



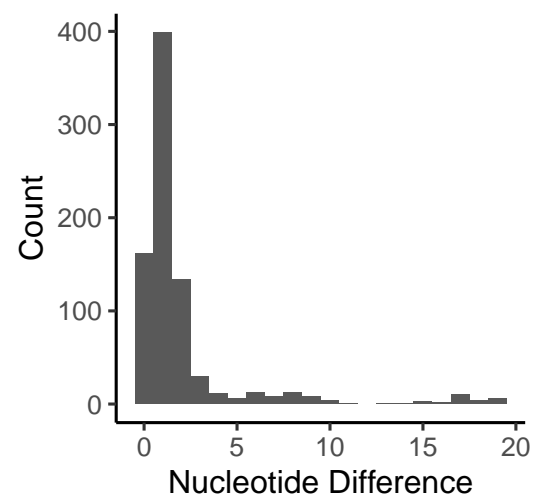
IGHV1-18*01

334 sequences assigned
77 (23.1%) exact matches, in which:
64 unique CDR3
7 unique J



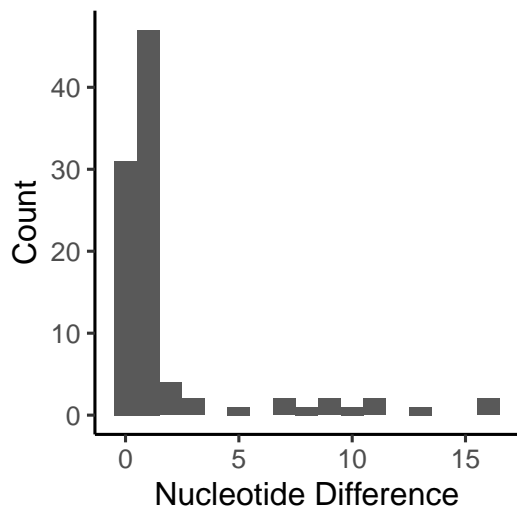
IGHV1-46*01

823 sequences assigned
162 (19.7%) exact matches, in which:
97 unique CDR3
6 unique J



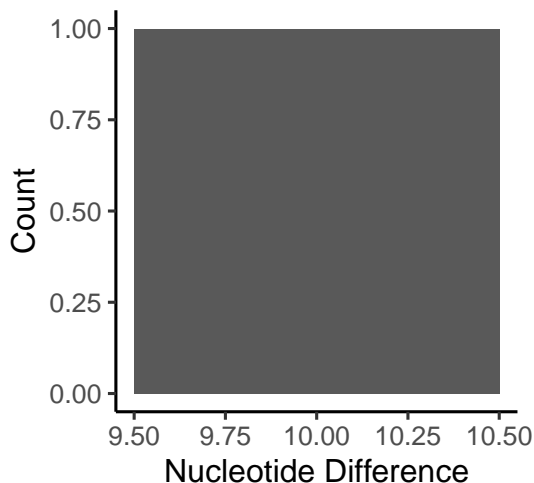
IGHV1-46*03

98 sequences assigned
31 (31.6%) exact matches, in which:
20 unique CDR3
4 unique J



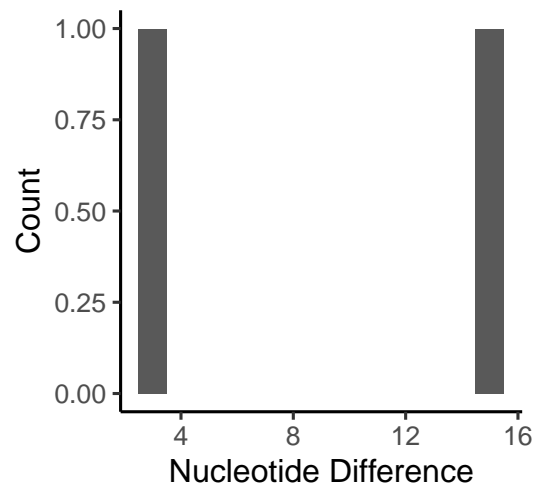
IGHV1-NL1*01

1 sequences assigned
No exact matches.



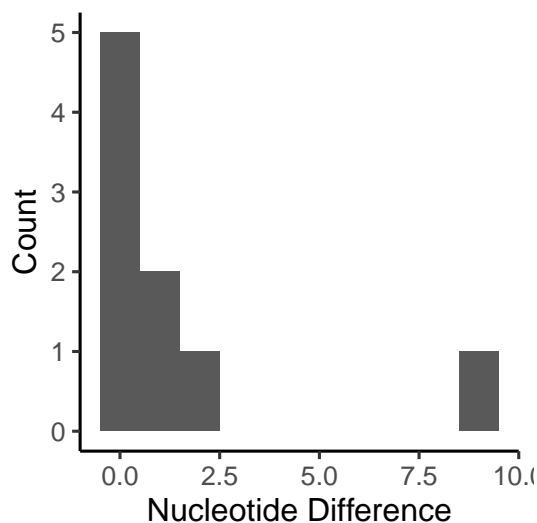
IGHV2-26*01

2 sequences assigned
No exact matches.



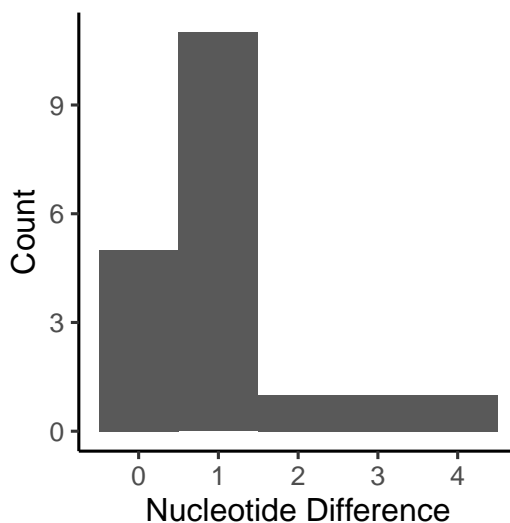
IGHV1-58*02

10 sequences assigned
5 (50%) exact matches, in which:
4 unique CDR3
2 unique J



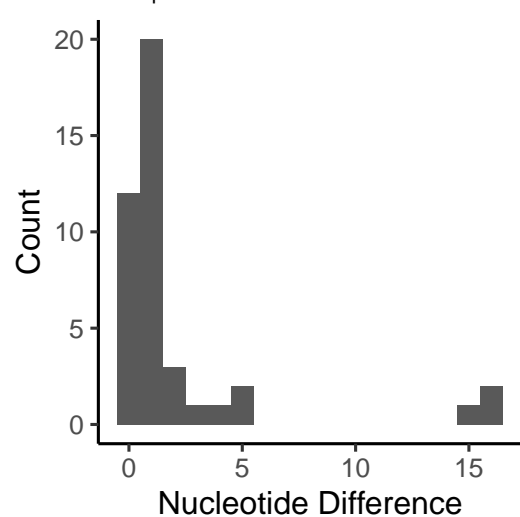
IGHV2-5*01

19 sequences assigned
5 (26.3%) exact matches, in which:
3 unique CDR3
3 unique J



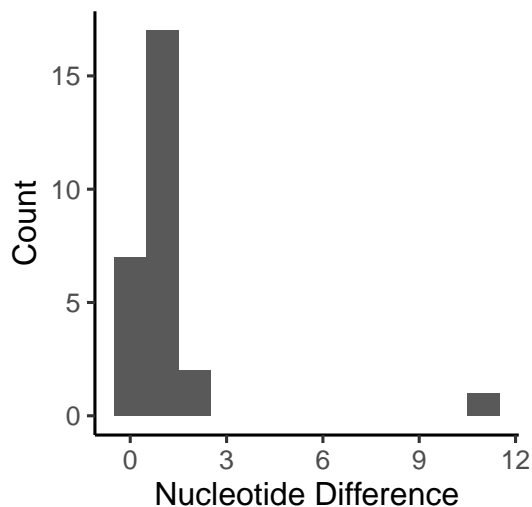
IGHV2-70*01

42 sequences assigned
12 (28.6%) exact matches, in which:
10 unique CDR3
2 unique J



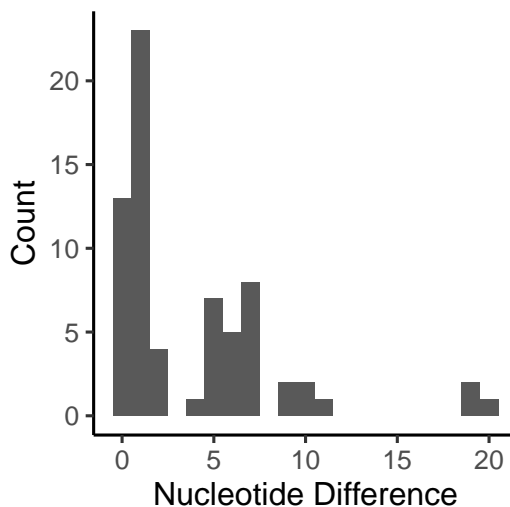
IGHV1-58*01_03

27 sequences assigned
7 (25.9%) exact matches, in which:
7 unique CDR3
4 unique J



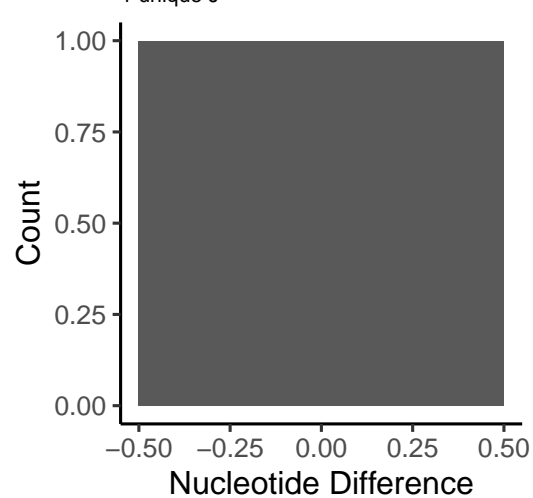
IGHV2-5*02

78 sequences assigned
13 (16.7%) exact matches, in which:
11 unique CDR3
2 unique J



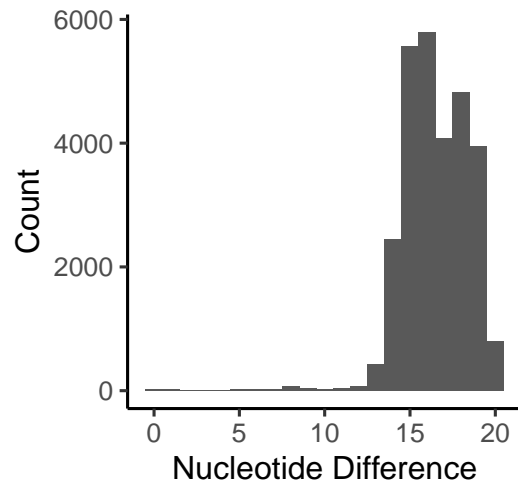
IGHV2-70*12

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J



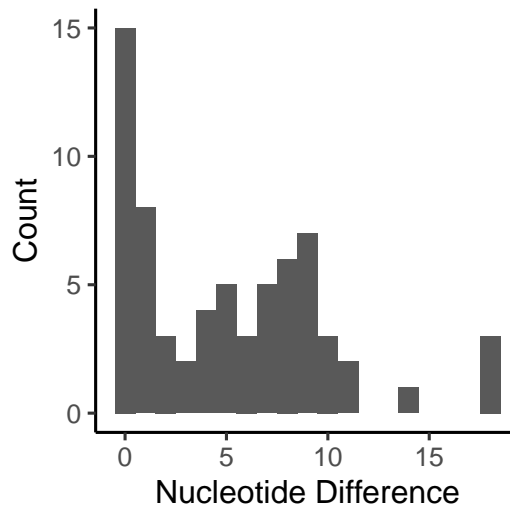
IGHV3-7*01

28988 sequences assigned
19 (0.1%) exact matches, in which:
12 unique CDR3
4 unique J



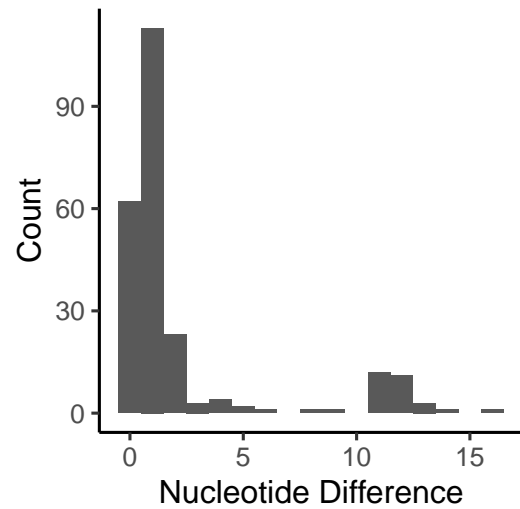
IGHV3-9*01

69 sequences assigned
15 (21.7%) exact matches, in which:
8 unique CDR3
4 unique J



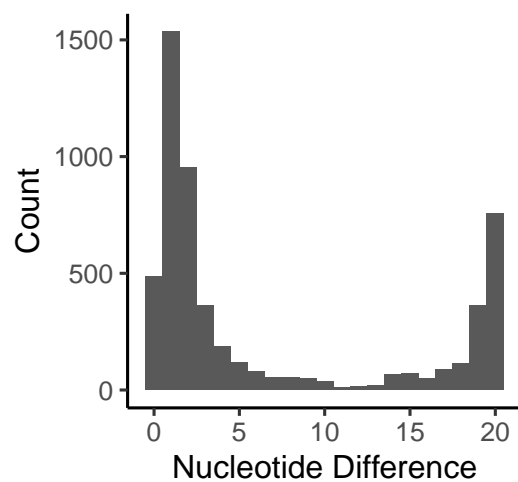
IGHV3-11*03_05

238 sequences assigned
62 (26.1%) exact matches, in which:
31 unique CDR3
6 unique J



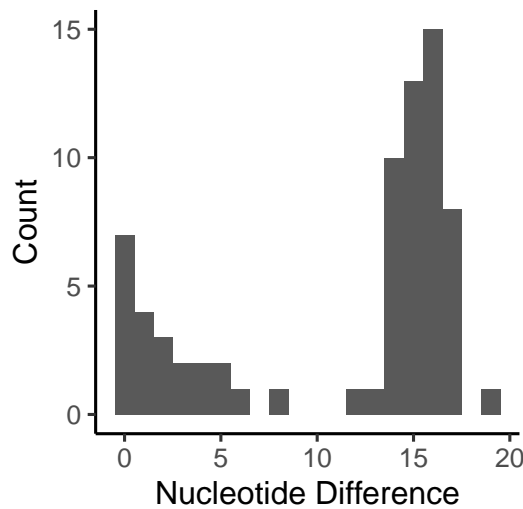
IGHV3-7*03

11487 sequences assigned
485 (4.2%) exact matches, in which:
210 unique CDR3
3 unique J



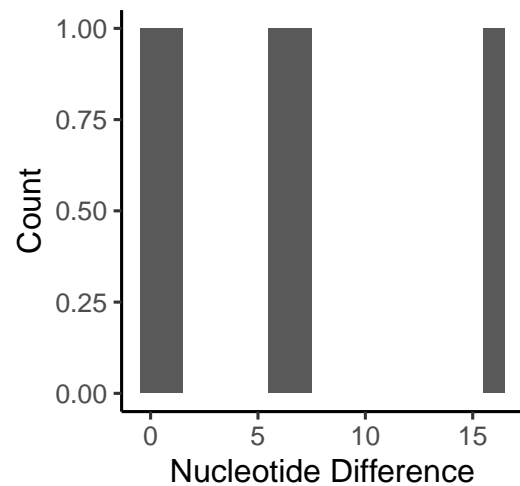
IGHV3-11*01

74 sequences assigned
7 (9.5%) exact matches, in which:
6 unique CDR3
2 unique J



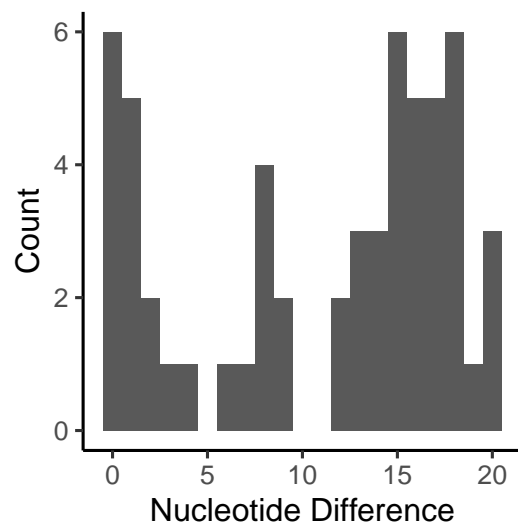
IGHV3-13*01

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



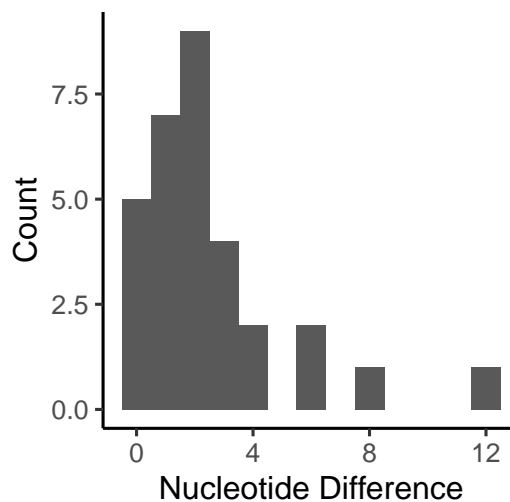
IGHV3-7*04

136 sequences assigned
6 (4.4%) exact matches, in which:
3 unique CDR3
2 unique J



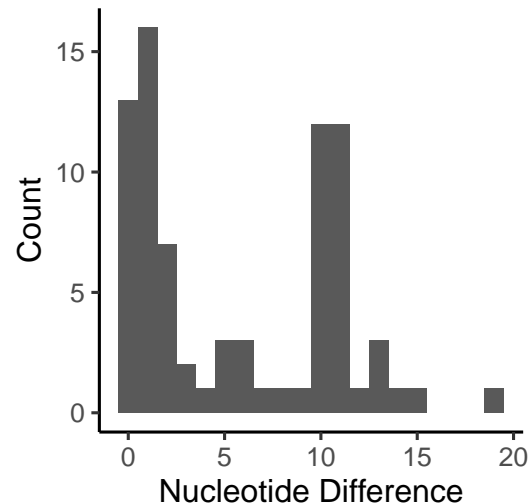
IGHV3-11*06

31 sequences assigned
5 (16.1%) exact matches, in which:
5 unique CDR3
2 unique J



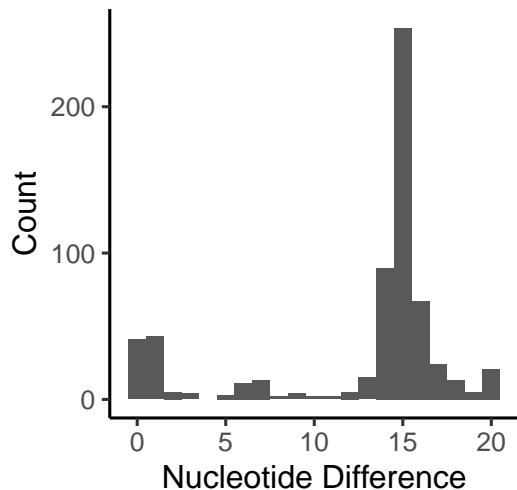
IGHV3-13*04

80 sequences assigned
13 (16.2%) exact matches, in which:
8 unique CDR3
4 unique J



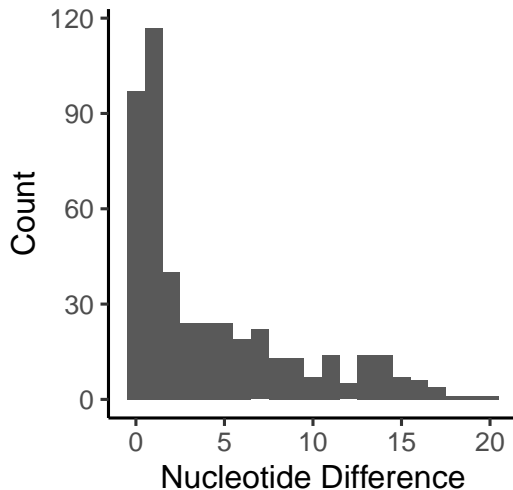
IGHV3-15*01_02

2515 sequences assigned
41 (1.6%) exact matches, in which:
27 unique CDR3
4 unique J



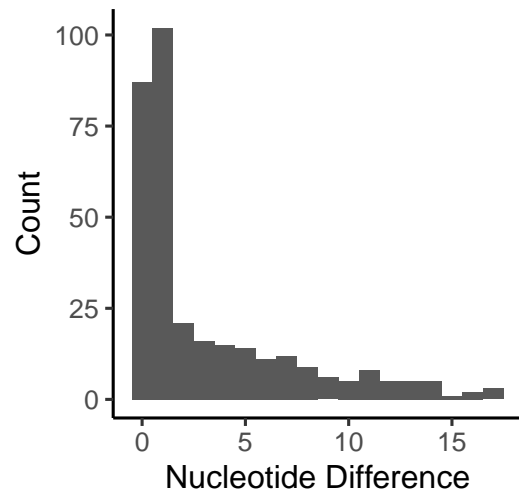
IGHV3-21*01_02

944 sequences assigned
97 (10.3%) exact matches, in which:
57 unique CDR3
5 unique J



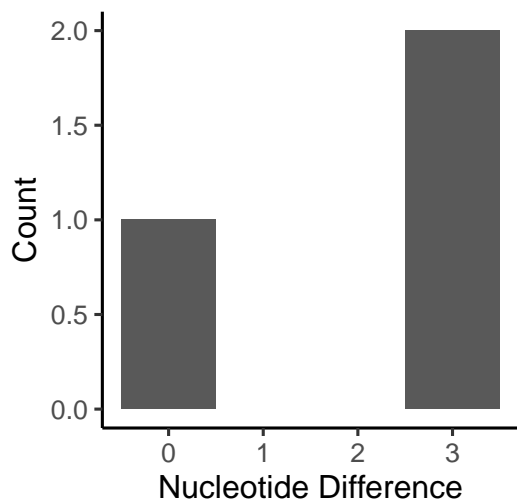
IGHV3-33*01

334 sequences assigned
87 (26%) exact matches, in which:
53 unique CDR3
5 unique J



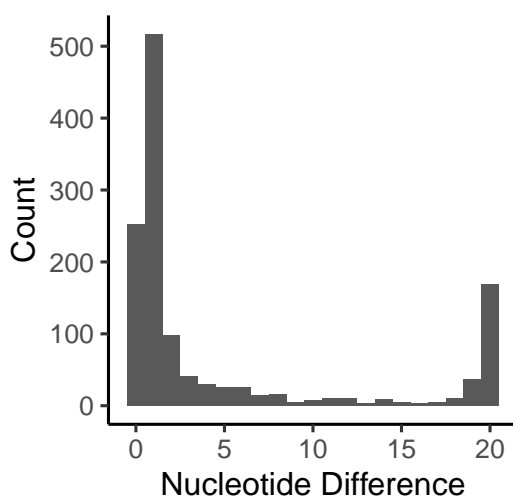
IGHV3-20*01_02

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



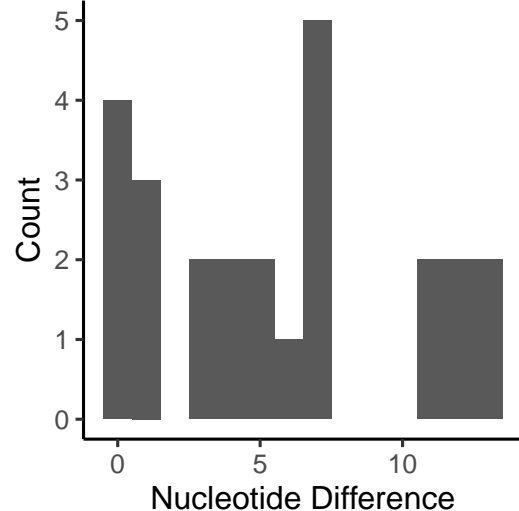
IGHV3-30-3*01

3831 sequences assigned
252 (6.6%) exact matches, in which:
118 unique CDR3
6 unique J



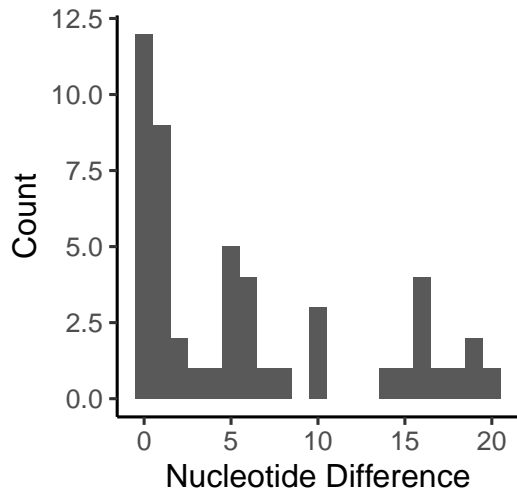
IGHV3-33*05

26 sequences assigned
4 (15.4%) exact matches, in which:
4 unique CDR3
2 unique J



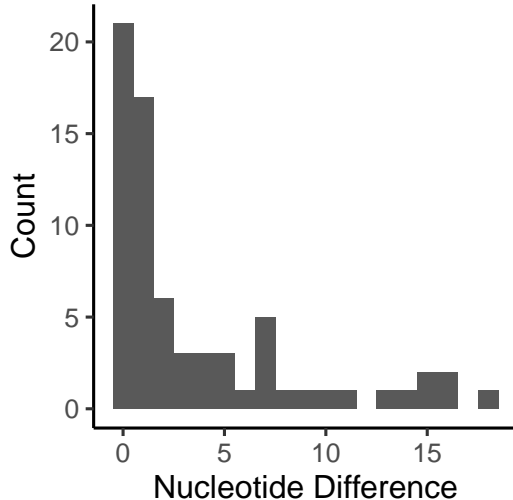
IGHV3-20*03_04

51 sequences assigned
12 (23.5%) exact matches, in which:
6 unique CDR3
2 unique J



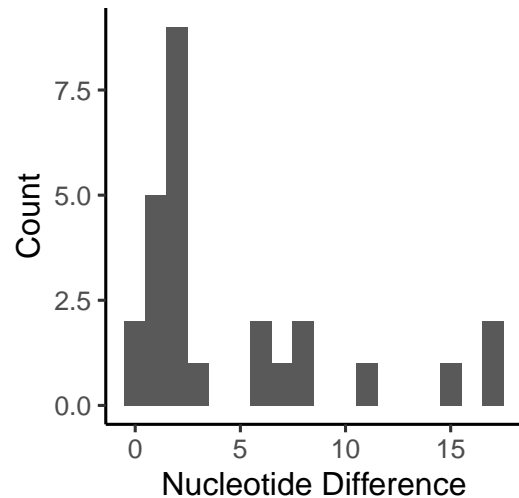
IGHV3-30*03

86 sequences assigned
21 (24.4%) exact matches, in which:
17 unique CDR3
5 unique J



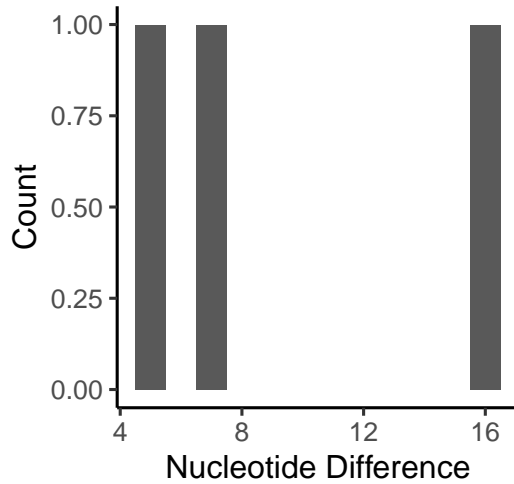
IGHV3-33*06

26 sequences assigned
2 (7.7%) exact matches, in which:
2 unique CDR3
1 unique J



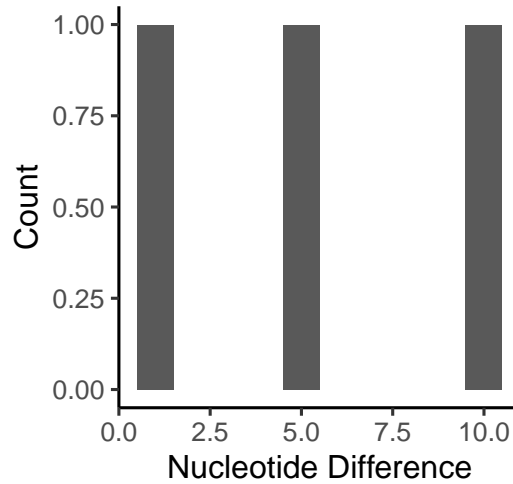
IGHV3-43*01

14 sequences assigned
No exact matches.



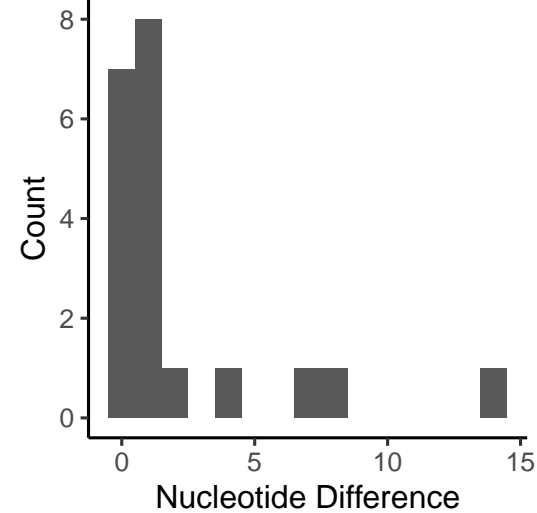
IGHV3-48*03

5 sequences assigned
No exact matches.



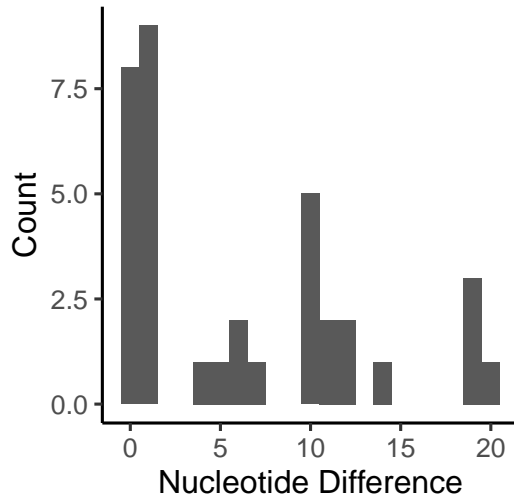
IGHV3-49*03_05

20 sequences assigned
7 (35%) exact matches, in which:
5 unique CDR3
2 unique J



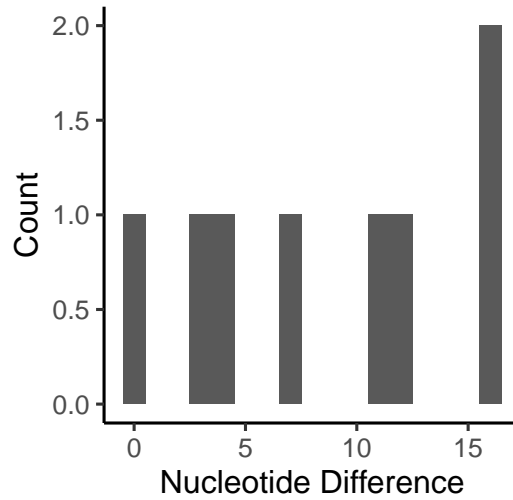
IGHV3-48*01

604 sequences assigned
8 (1.3%) exact matches, in which:
5 unique CDR3
1 unique J



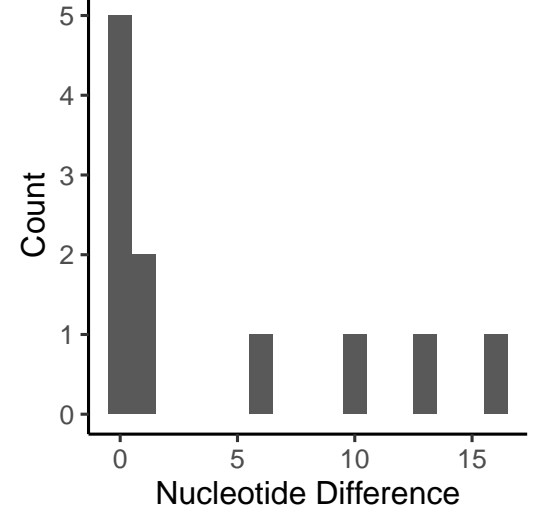
IGHV3-48*04

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



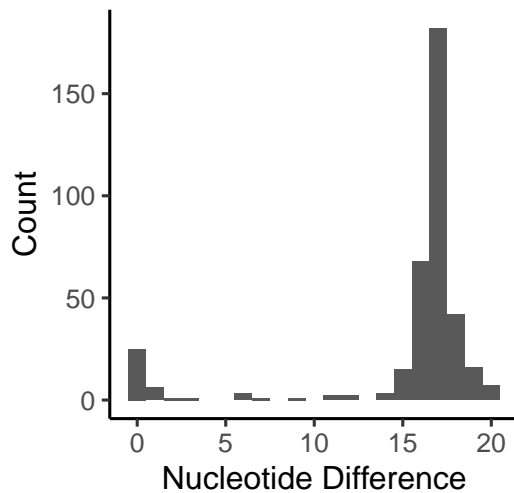
IGHV3-52*01_03

11 sequences assigned
5 (45.5%) exact matches, in which:
4 unique CDR3
2 unique J



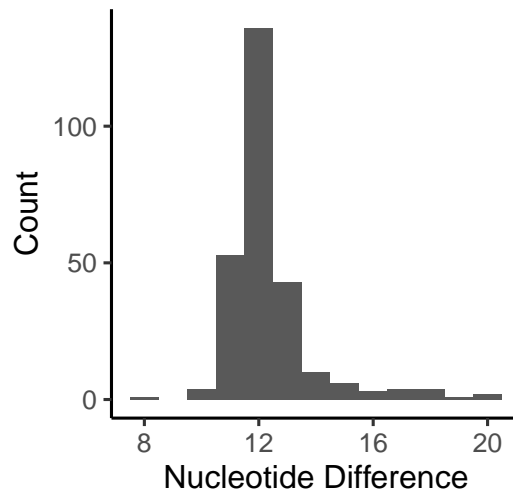
IGHV3-48*02

392 sequences assigned
25 (6.4%) exact matches, in which:
15 unique CDR3
4 unique J



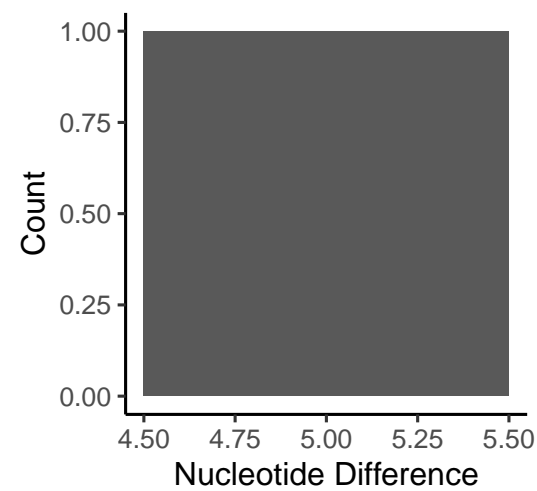
IGHV3-49*04

271 sequences assigned
No exact matches.



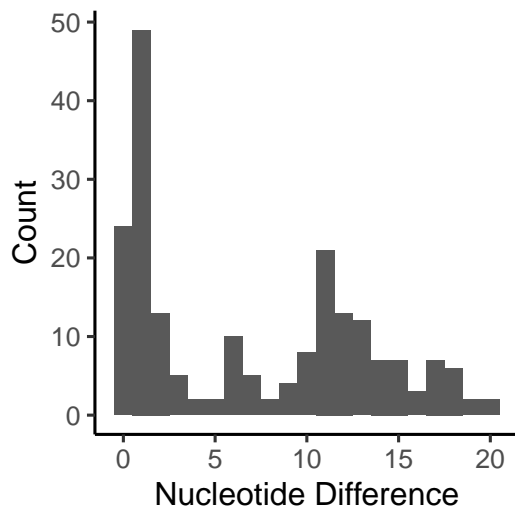
IGHV3-53*05

1 sequences assigned
No exact matches.



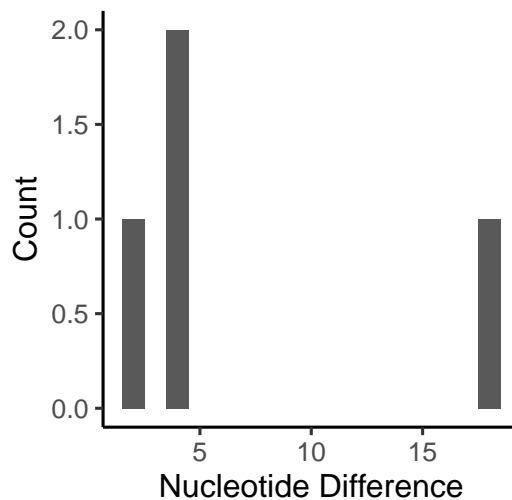
IGHV3-53*01_02

219 sequences assigned
24 (11%) exact matches, in which:
11 unique CDR3
3 unique J



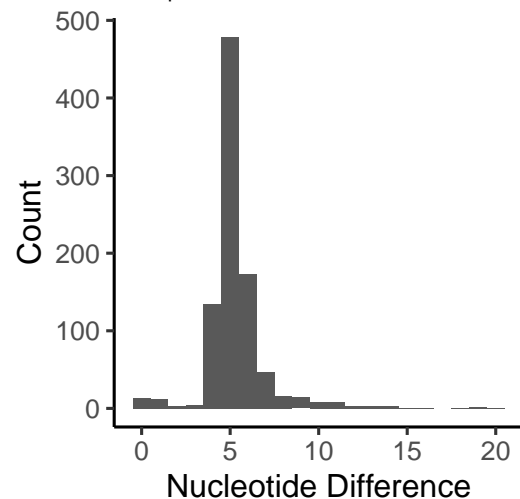
IGHV3-66*02

5 sequences assigned
No exact matches.



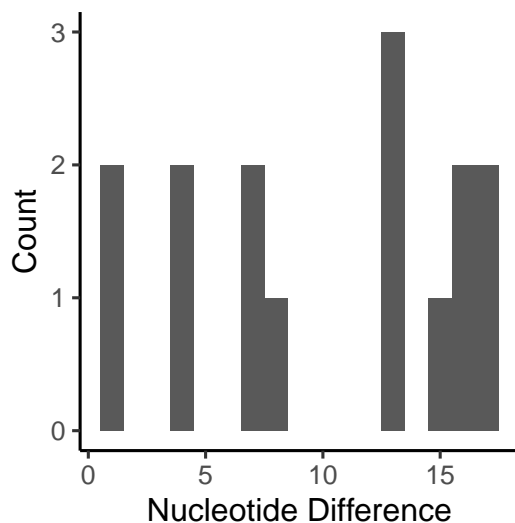
IGHV3-72*01

938 sequences assigned
13 (1.4%) exact matches, in which:
7 unique CDR3
2 unique J



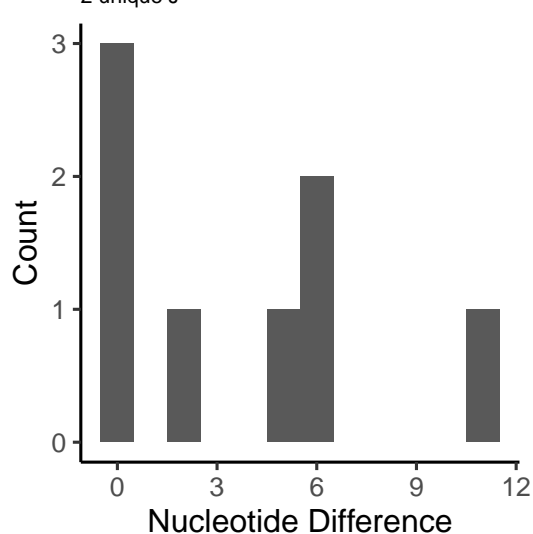
IGHV3-64*04

16 sequences assigned
No exact matches.



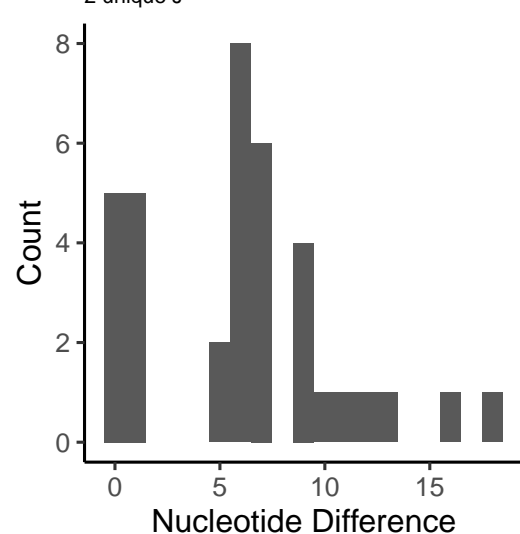
IGHV3-66*03

8 sequences assigned
3 (37.5%) exact matches, in which:
3 unique CDR3
2 unique J



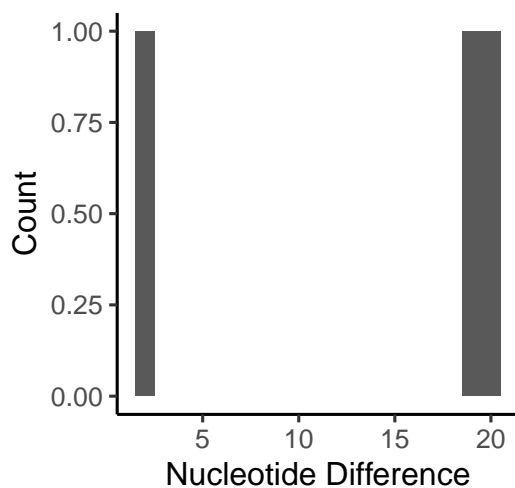
IGHV3-73*01_02

413 sequences assigned
5 (1.2%) exact matches, in which:
2 unique CDR3
2 unique J



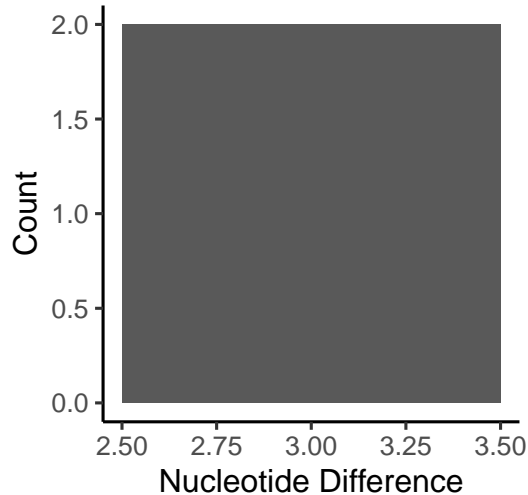
IGHV3-66*01

4 sequences assigned
No exact matches.



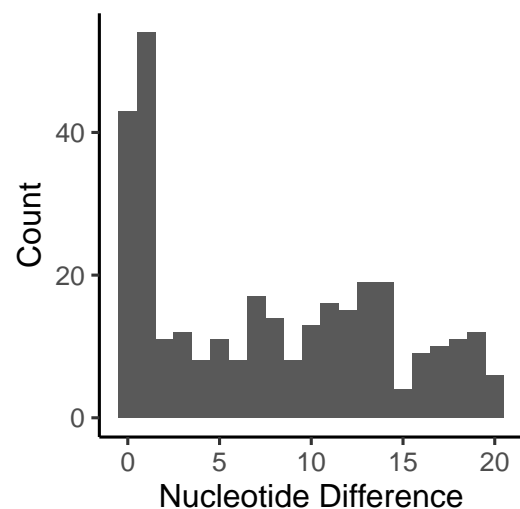
IGHV3-69-1*01

33 sequences assigned
No exact matches.



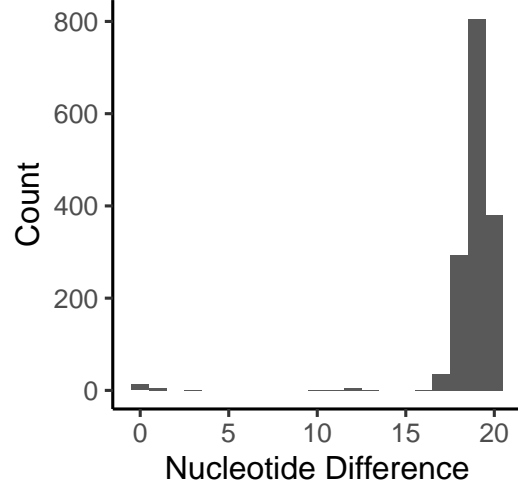
IGHV3-74*01_02

379 sequences assigned
43 (11.3%) exact matches, in which:
27 unique CDR3
4 unique J



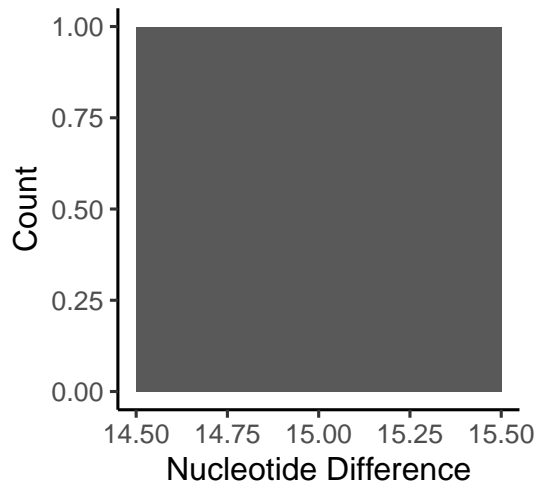
IGHV3-64D*06

2414 sequences assigned
13 (0.5%) exact matches, in which:
8 unique CDR3
3 unique J



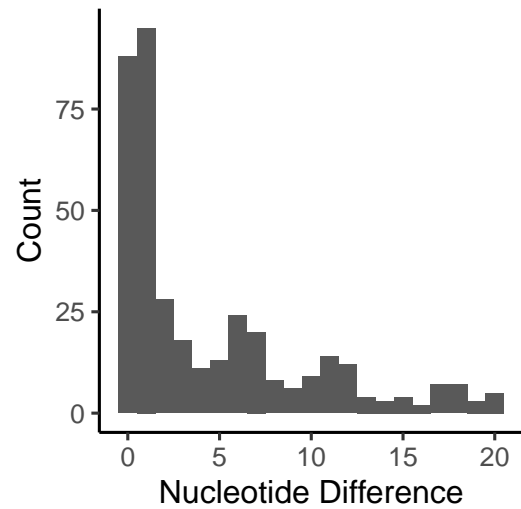
IGHV4-28*01_07

2 sequences assigned
No exact matches.



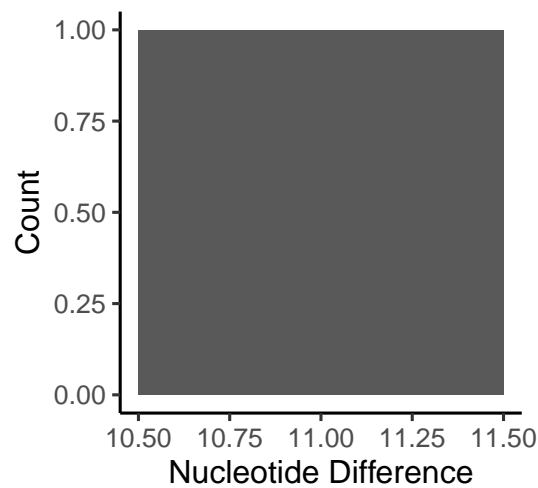
IGHV4-31*03_04

2137 sequences assigned
88 (4.1%) exact matches, in which:
66 unique CDR3
5 unique J



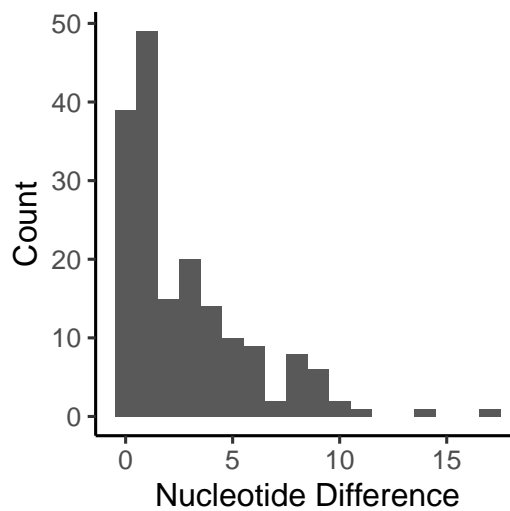
IGHV3-NL1*01

1 sequences assigned
No exact matches.



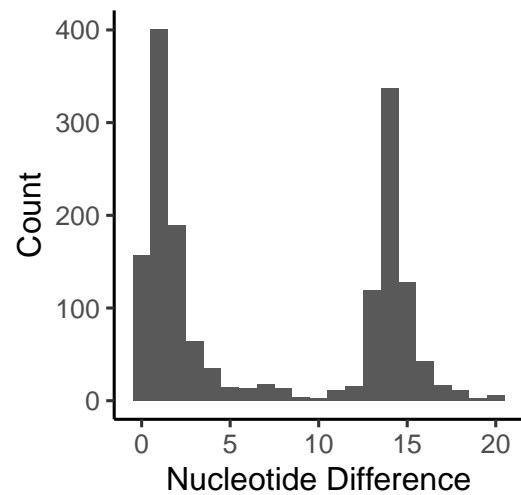
IGHV4-30-2*01

178 sequences assigned
39 (21.9%) exact matches, in which:
24 unique CDR3
7 unique J



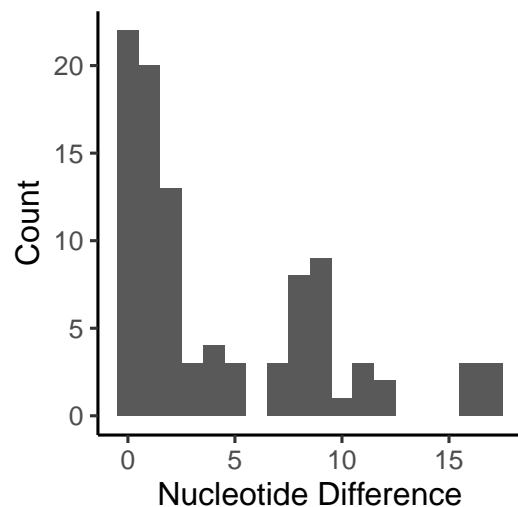
IGHV4-34*01_02

1628 sequences assigned
157 (9.6%) exact matches, in which:
88 unique CDR3
6 unique J



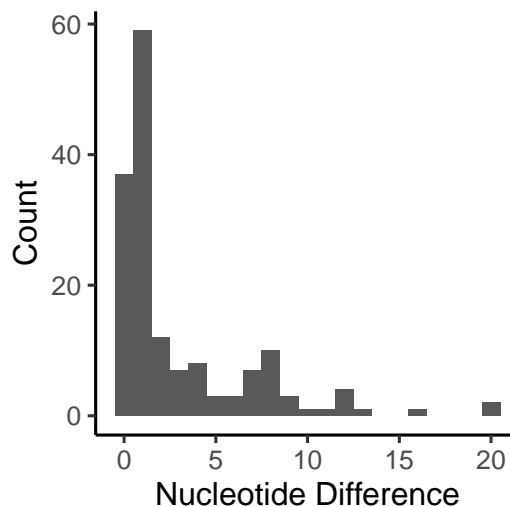
IGHV4-4*07

99 sequences assigned
22 (22.2%) exact matches, in which:
20 unique CDR3
4 unique J



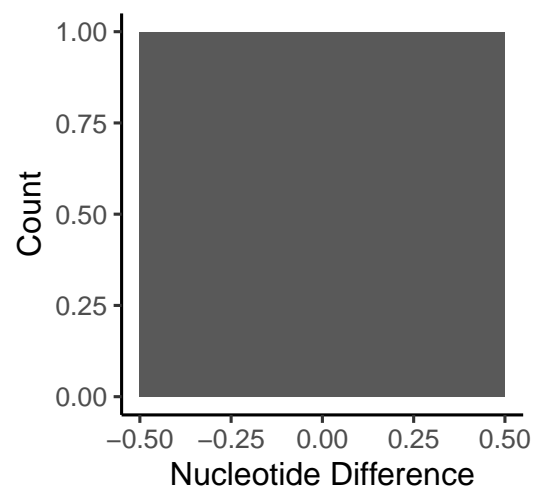
IGHV4-30-4*01

167 sequences assigned
37 (22.2%) exact matches, in which:
25 unique CDR3
5 unique J



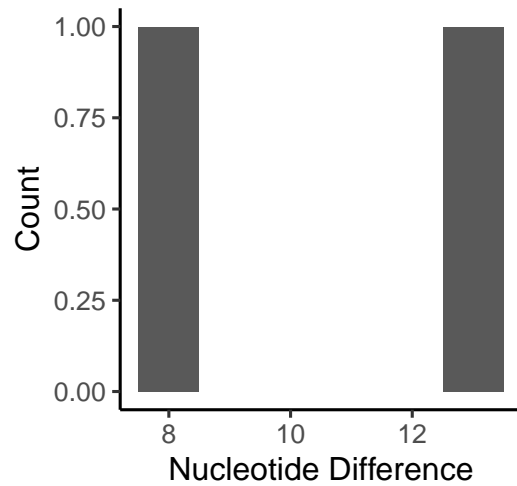
IGHV4-38-2*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



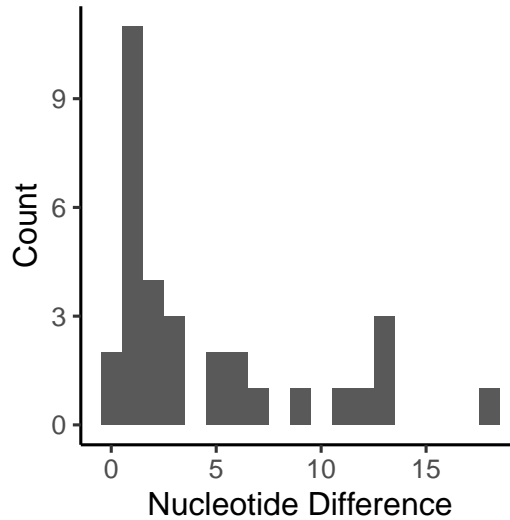
IGHV4-38-2*02

11 sequences assigned
No exact matches.



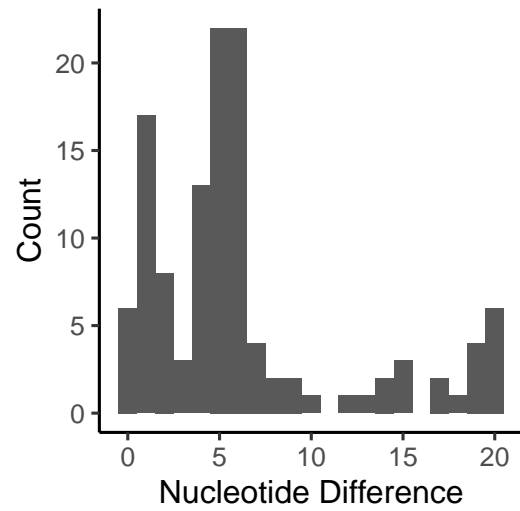
IGHV4-59*08

34 sequences assigned
2 (5.9%) exact matches, in which:
2 unique CDR3
1 unique J



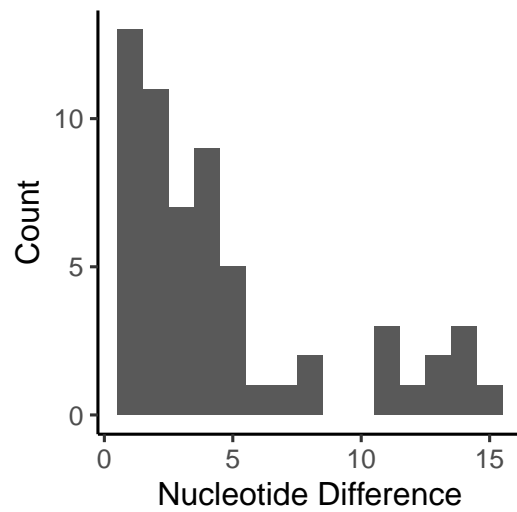
IGHV4-61*01

123 sequences assigned
6 (4.9%) exact matches, in which:
4 unique CDR3
2 unique J



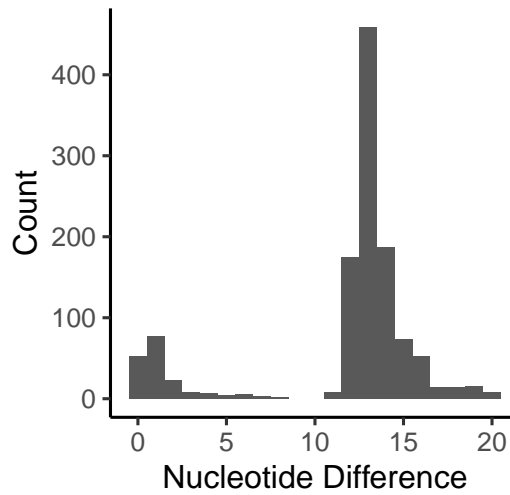
IGHV4-39*07

60 sequences assigned
No exact matches.



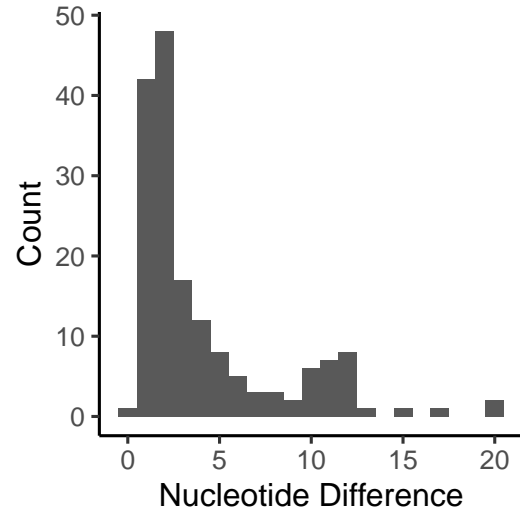
IGHV4-59*01_07

1702 sequences assigned
53 (3.1%) exact matches, in which:
36 unique CDR3
6 unique J



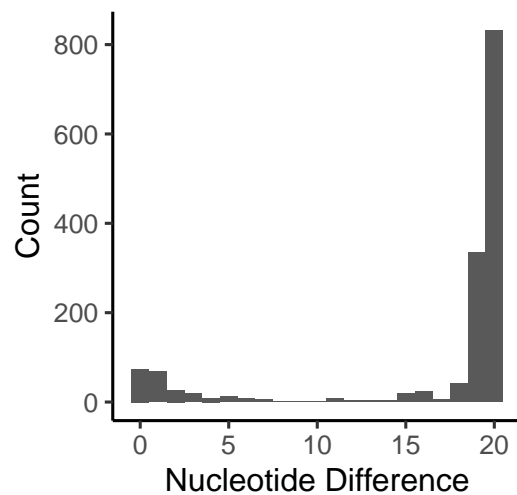
IGHV4-61*02

1392 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



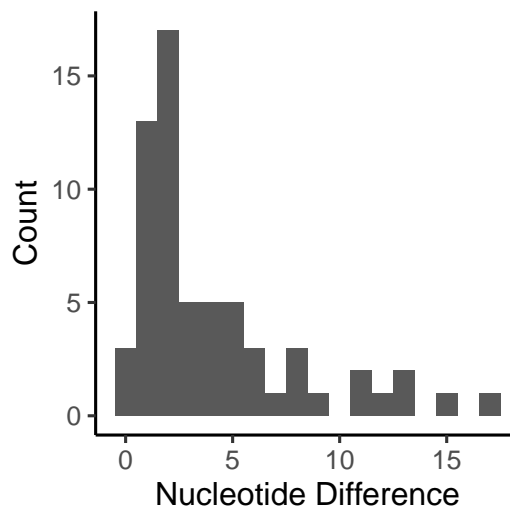
IGHV4-39*01_05

4743 sequences assigned
74 (1.6%) exact matches, in which:
60 unique CDR3
5 unique J



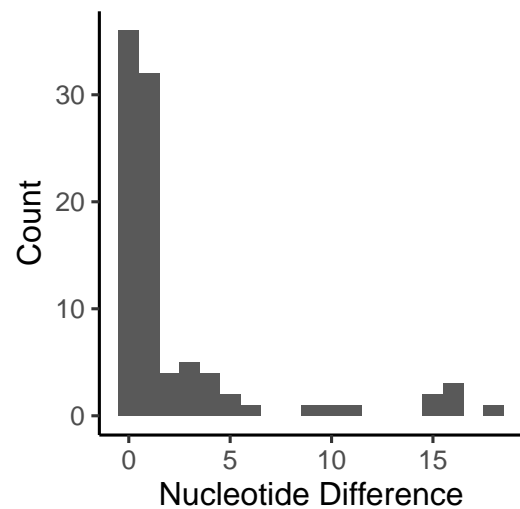
IGHV4-59*12

68 sequences assigned
3 (4.4%) exact matches, in which:
3 unique CDR3
2 unique J



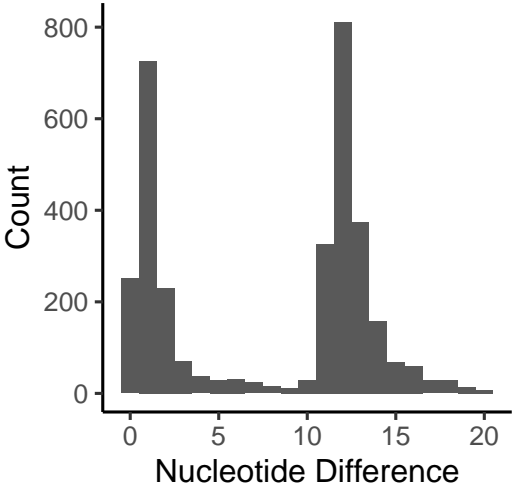
IGHV5-10-1*01_03

93 sequences assigned
36 (38.7%) exact matches, in which:
25 unique CDR3
5 unique J



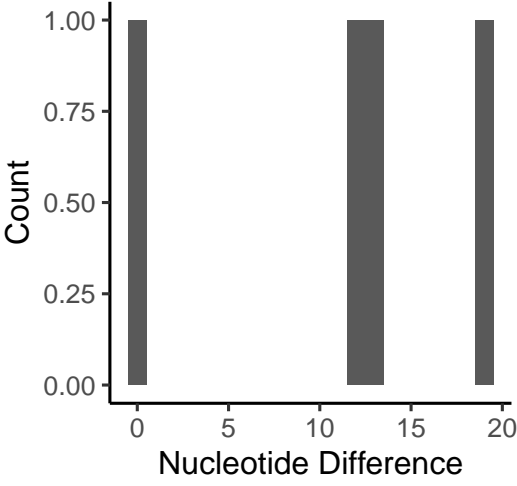
IGHV5–51*01_03

3419 sequences assigned
251 (7.3%) exact matches, in which:
91 unique CDR3
6 unique J



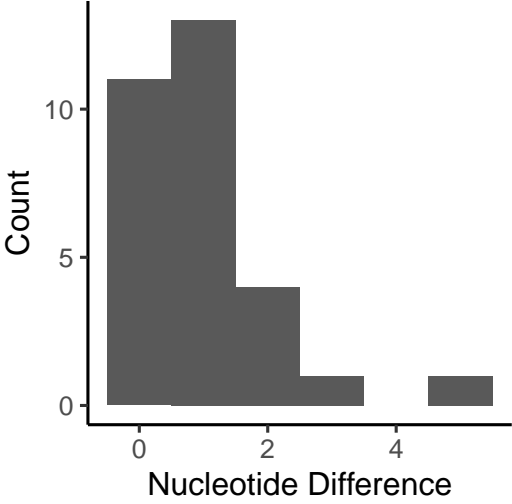
IGHV7–4–1*02

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



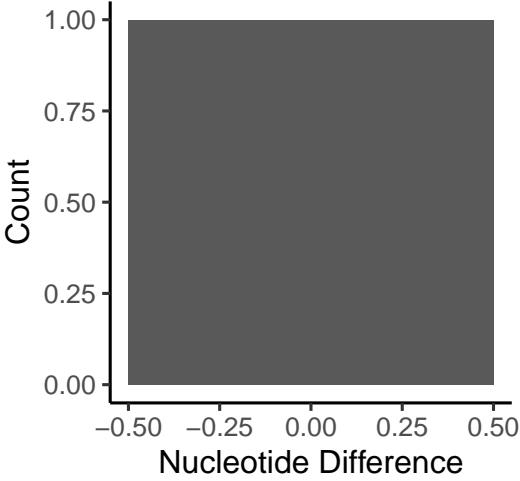
IGHV6–1*01_02

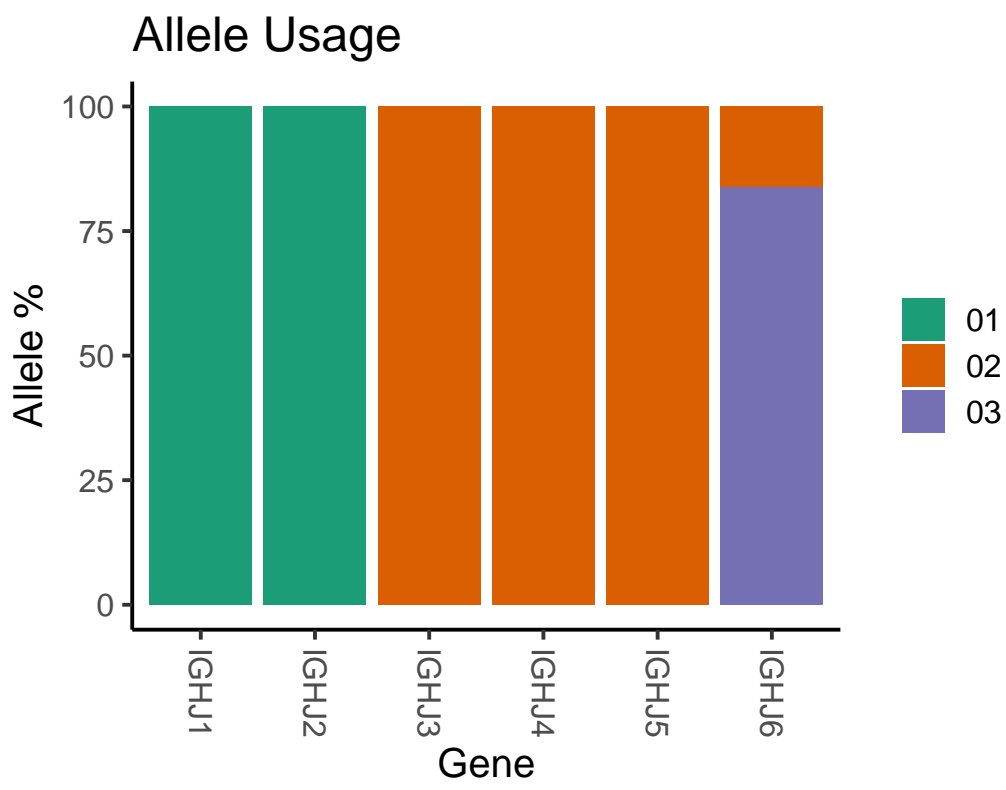
41 sequences assigned
11 (26.8%) exact matches, in which:
11 unique CDR3
4 unique J



IGHV7–4–1*01

1 sequences assigned
1 (100%) exact matches, in which:
1 unique CDR3
1 unique J





Novel sequence(s)IGHV3–33*01_G75CIGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s)IGHV1–69*04_09_G112AIGHV4–59*02_G88AIGHV5–10–1*01_03_T258CIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV1–69*08_C191TIGHV3–48*03_T303GIGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s)IGHV3–30*03_T288CIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning:IGHV4–31*02,IGHV4–31*03_04 have identical germline sequences.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV1–69*04_09_G112A are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV1–69*08_C191TIGHV3–30*03_T288CIGHV3–30–3*02_G75CIGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–4*02_03_C300TIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.