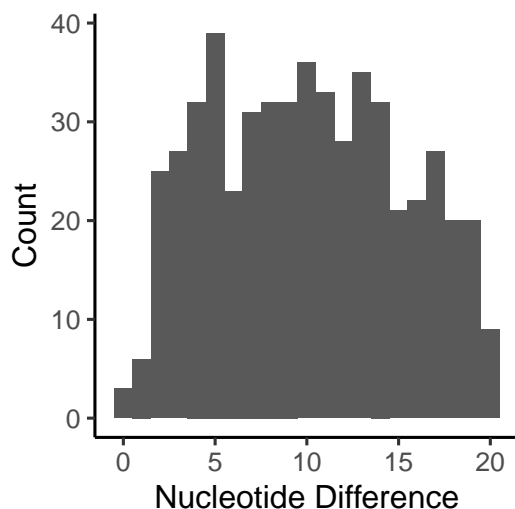


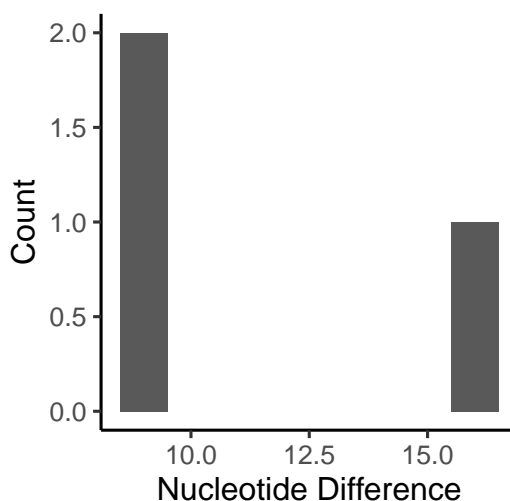
IGHV1-2*06

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



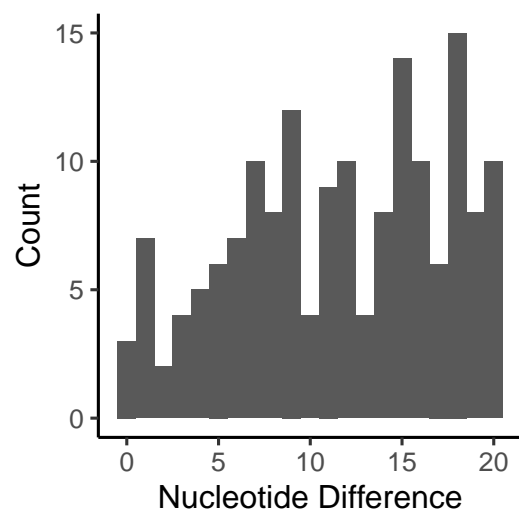
IGHV1-8*01

3 sequences assigned
No exact matches.



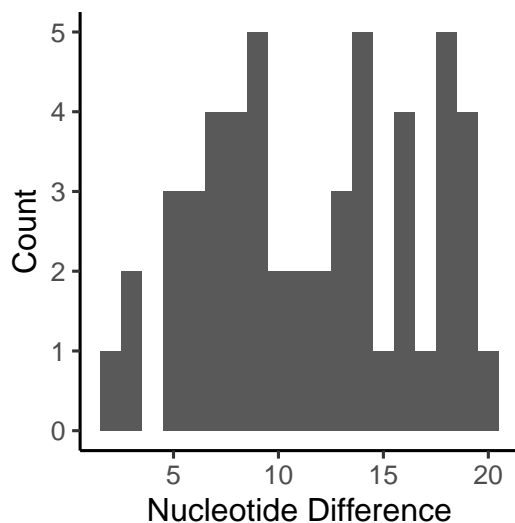
IGHV1-24*01

208 sequences assigned
3 (1.4%) exact matches, in which:
3 unique CDR3
2 unique J



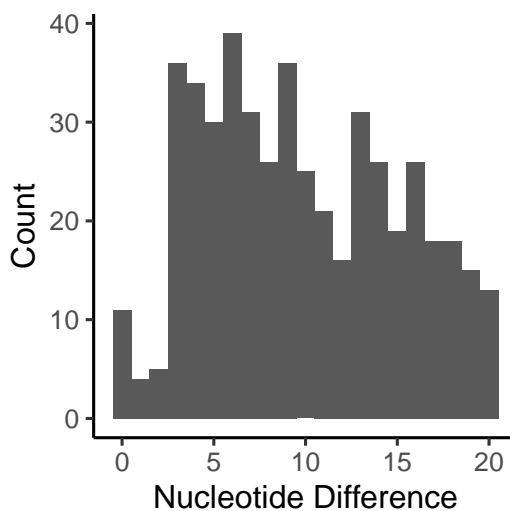
IGHV1-3*04

67 sequences assigned
No exact matches.



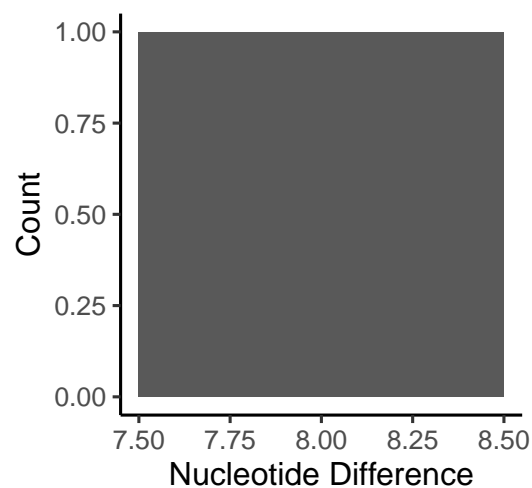
IGHV1-18*01

624 sequences assigned
11 (1.8%) exact matches, in which:
10 unique CDR3
3 unique J



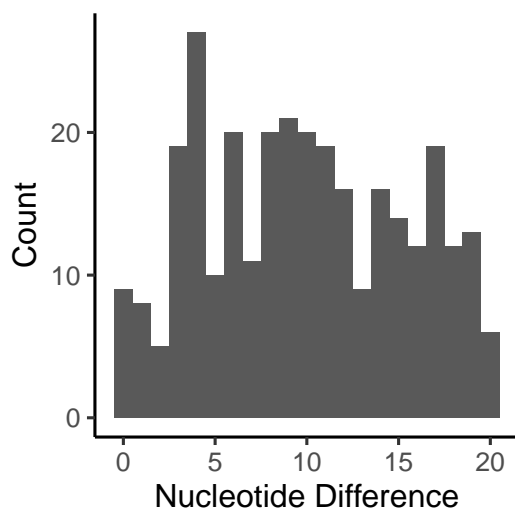
IGHV1-45*02

1 sequences assigned
No exact matches.



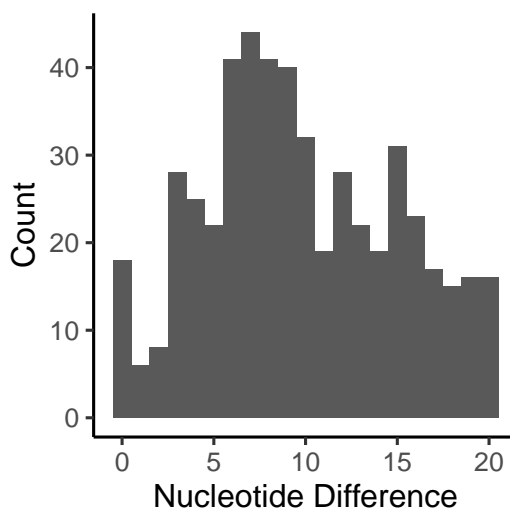
IGHV1-3*01_05

365 sequences assigned
9 (2.5%) exact matches, in which:
9 unique CDR3
3 unique J



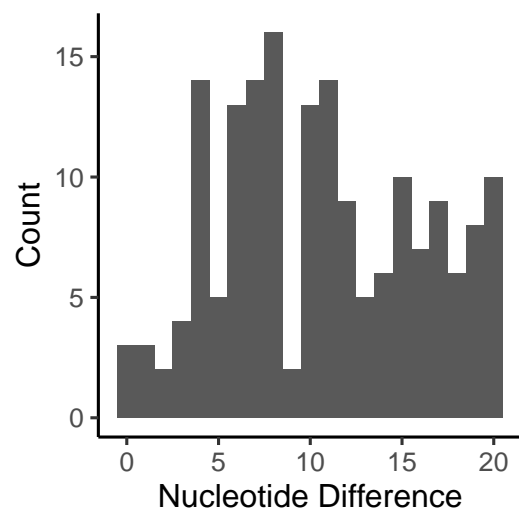
IGHV1-18*04

662 sequences assigned
18 (2.7%) exact matches, in which:
17 unique CDR3
5 unique J



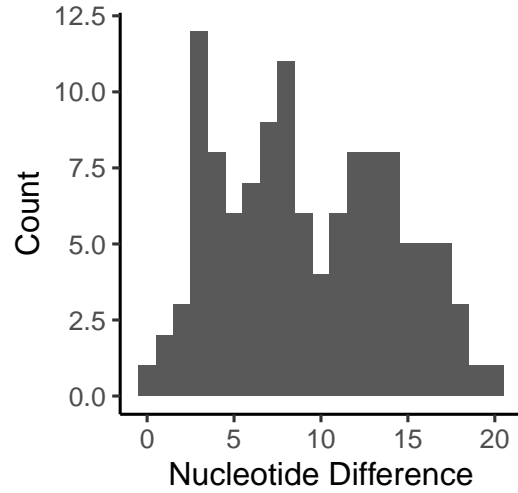
IGHV1-46*01

221 sequences assigned
3 (1.4%) exact matches, in which:
3 unique CDR3
2 unique J



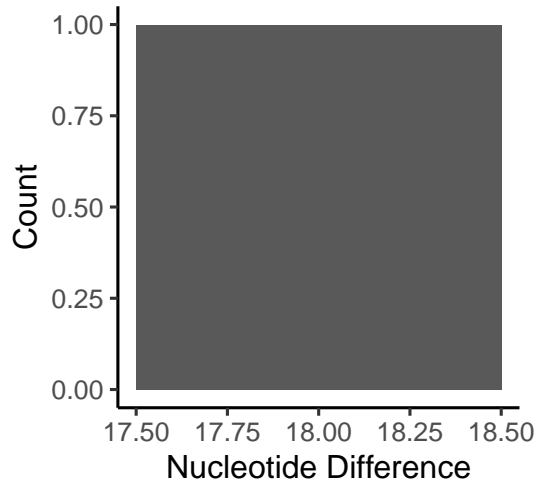
IGHV1-46*03

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



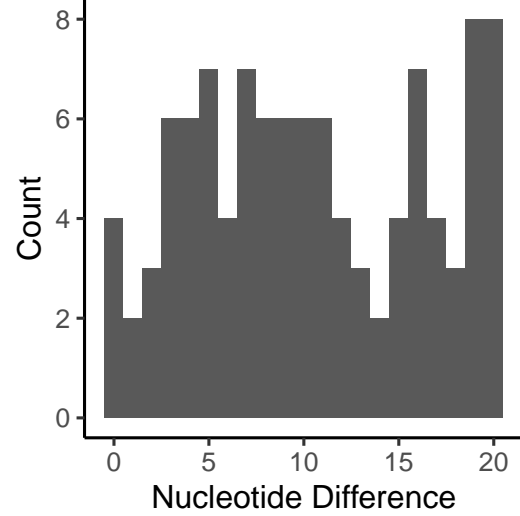
IGHV1-69-2*01

1 sequences assigned
No exact matches.



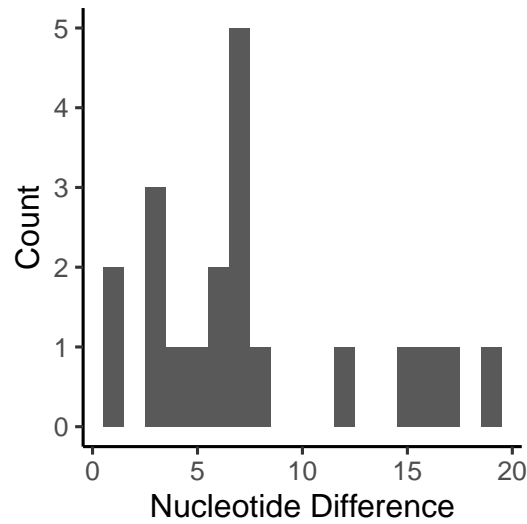
IGHV1-69*06_14

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



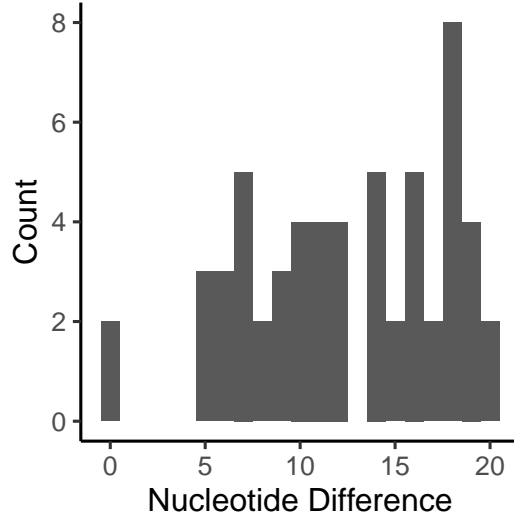
IGHV1-58*02

21 sequences assigned
No exact matches.



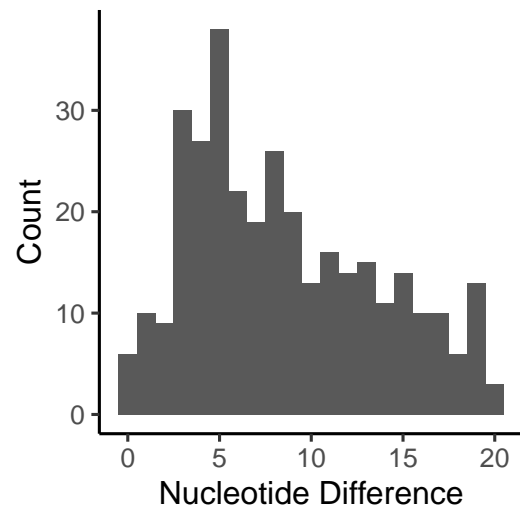
IGHV1-69*02

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



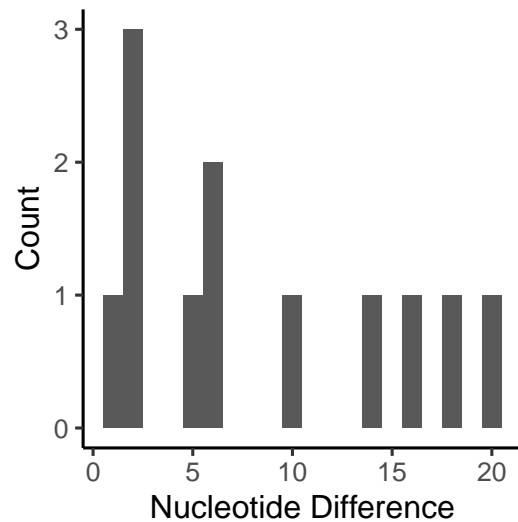
IGHV2-5*02

376 sequences assigned
6 (1.6%) exact matches, in which:
6 unique CDR3
3 unique J



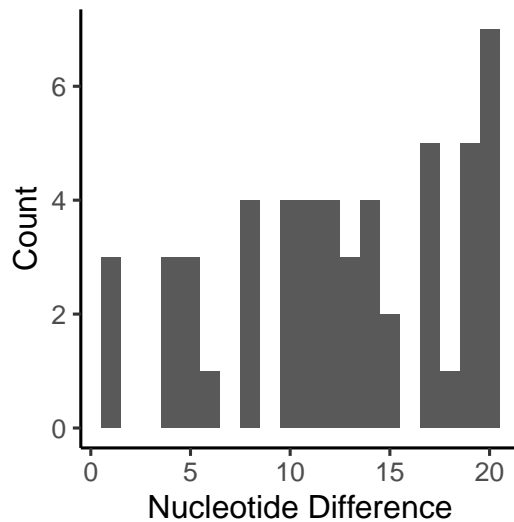
IGHV1-58*01_03

20 sequences assigned
No exact matches.



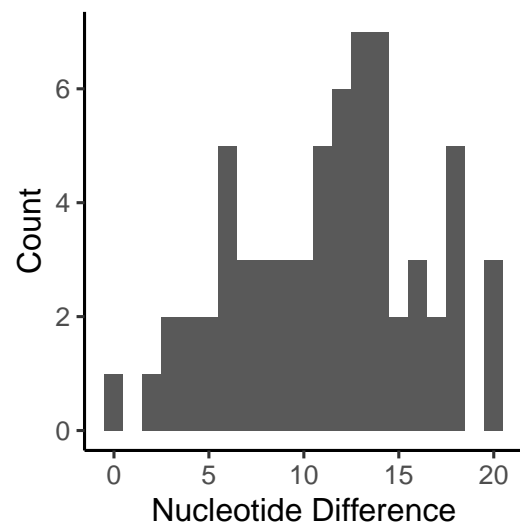
IGHV1-69*08

81 sequences assigned
No exact matches.



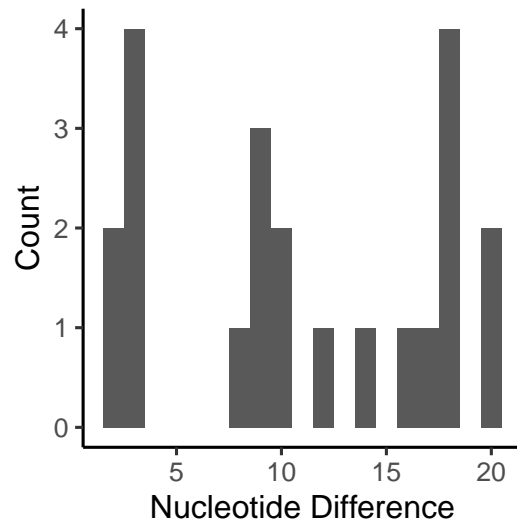
IGHV2-26*01

71 sequences assigned
1 (1.4%) exact matches, in which:
1 unique CDR3
1 unique J



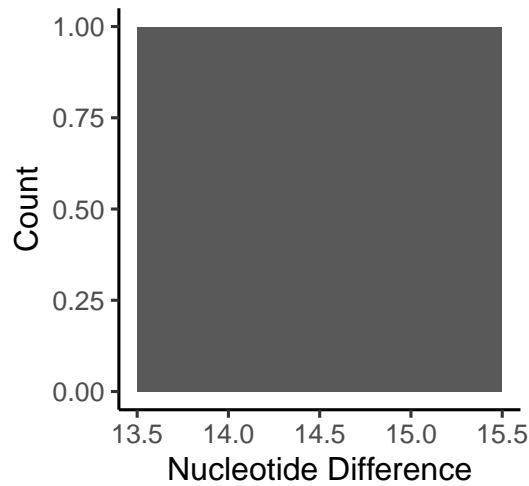
IGHV2-70*01

30 sequences assigned
No exact matches.



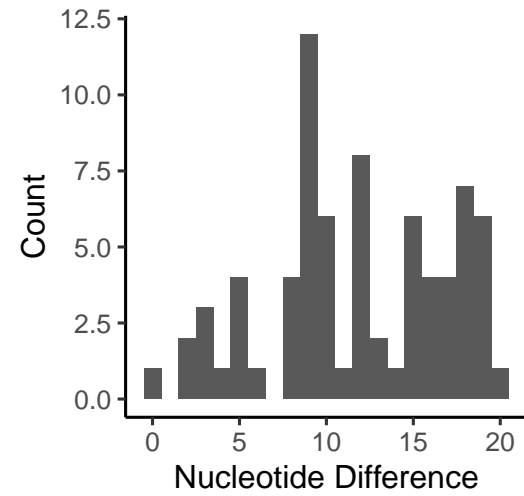
IGHV3-9*01

2 sequences assigned
No exact matches.



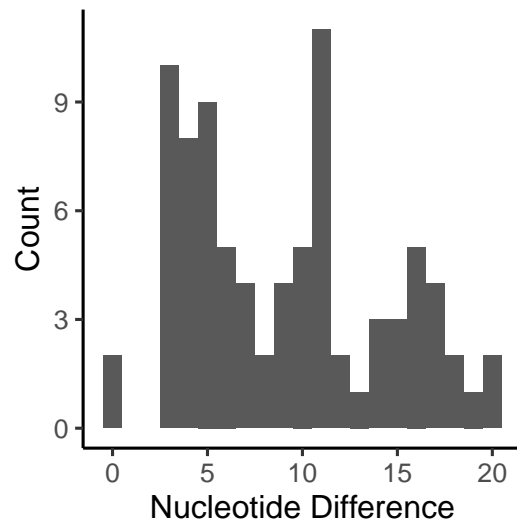
IGHV3-13*05

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



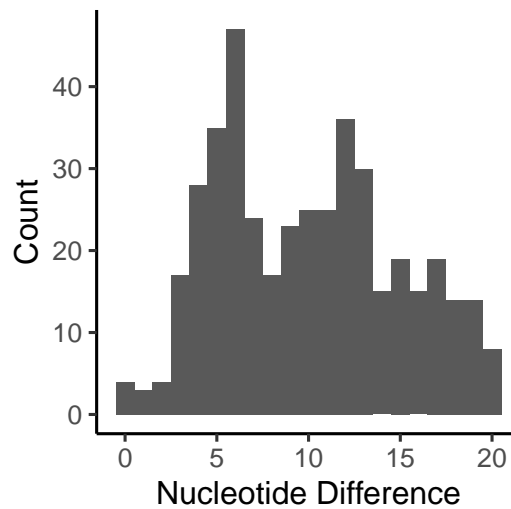
IGHV2-70*11_15

93 sequences assigned
2 (2.2%) exact matches, in which:
2 unique CDR3
1 unique J



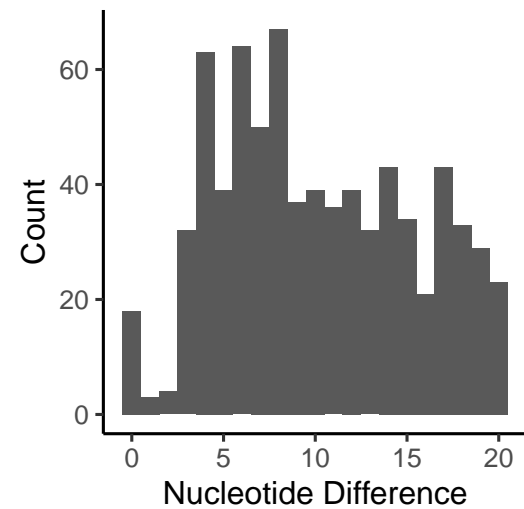
IGHV3-11*06

521 sequences assigned
4 (0.8%) exact matches, in which:
4 unique CDR3
2 unique J



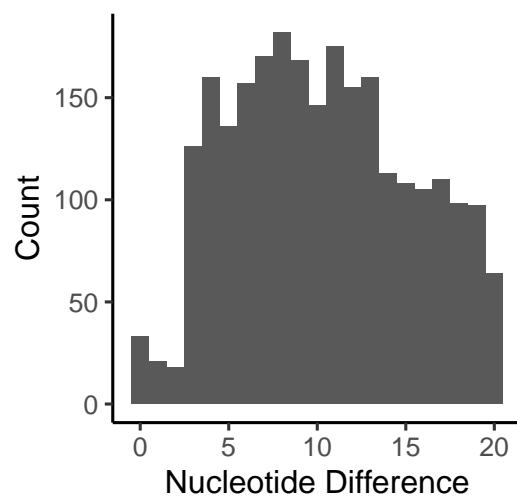
IGHV3-15*01_02

888 sequences assigned
18 (2%) exact matches, in which:
13 unique CDR3
4 unique J



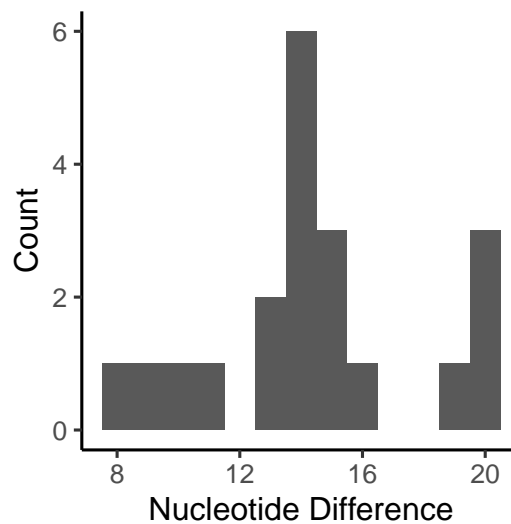
IGHV3-7*03

2801 sequences assigned
33 (1.2%) exact matches, in which:
25 unique CDR3
6 unique J



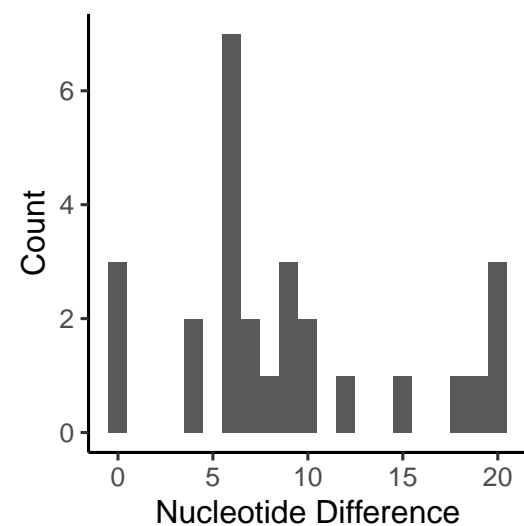
IGHV3-13*01

25 sequences assigned
No exact matches.



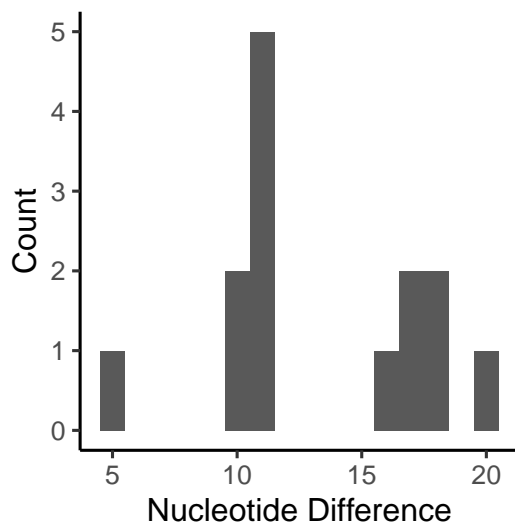
IGHV3-20*01_02

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



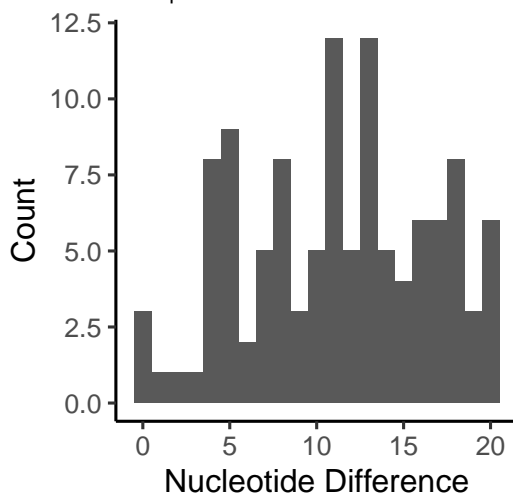
IGHV3-20*03_04

20 sequences assigned
No exact matches.



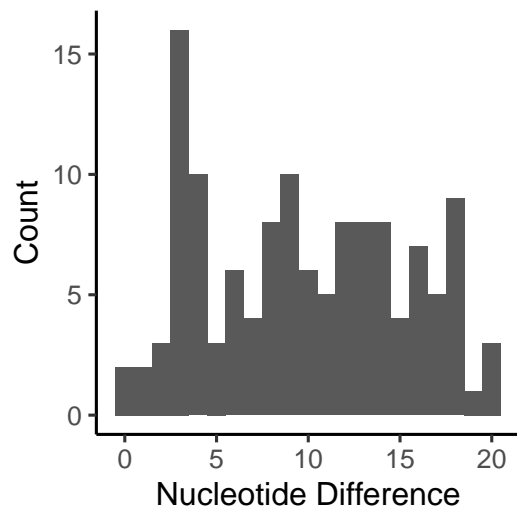
IGHV3-43*01

160 sequences assigned
3 (1.9%) exact matches, in which:
3 unique CDR3
2 unique J



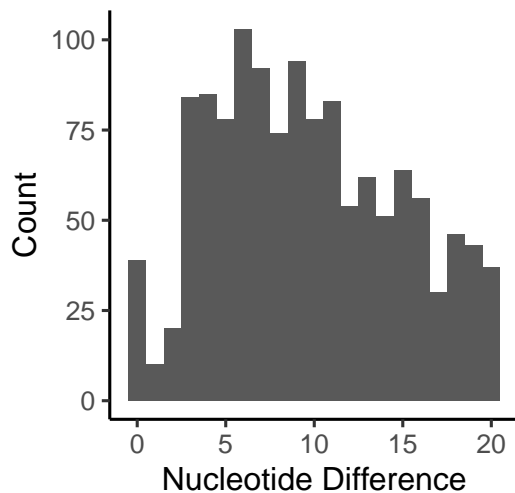
IGHV3-49*04

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



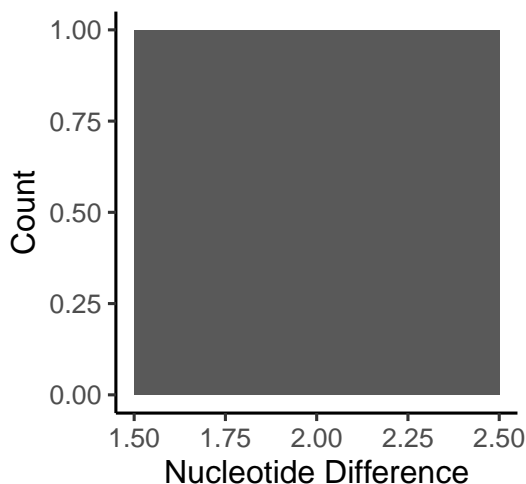
IGHV3-21*01_02

1650 sequences assigned
39 (2.4%) exact matches, in which:
29 unique CDR3
6 unique J



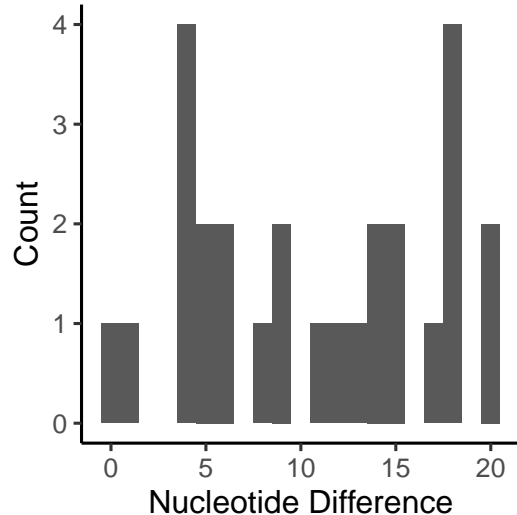
IGHV3-47*02

1 sequences assigned
No exact matches.



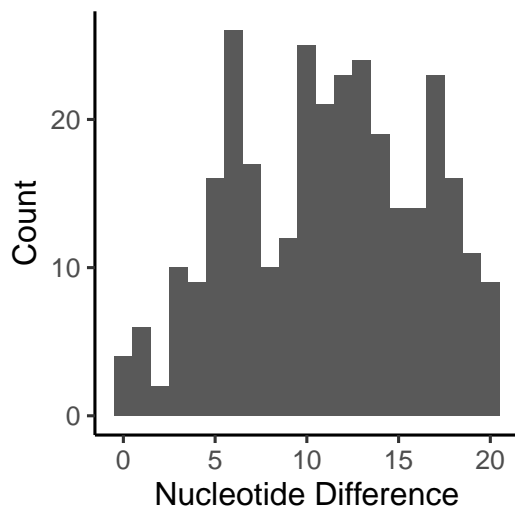
IGHV3-49*03_05

42 sequences assigned
1 (2.4%) exact matches, in which:
1 unique CDR3
1 unique J



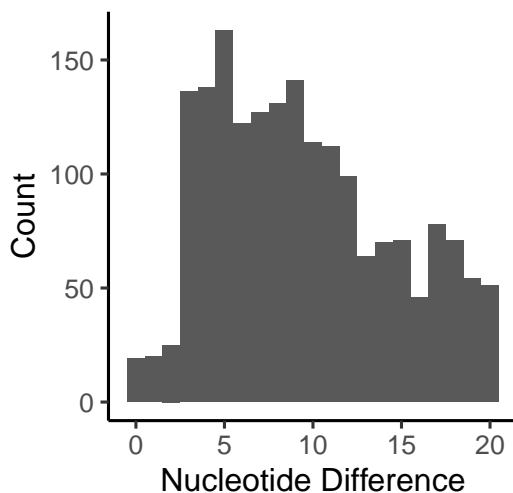
IGHV3-33*01

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



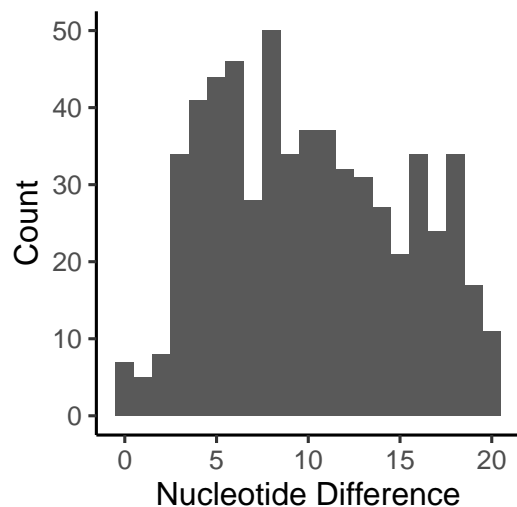
IGHV3-48*02

2161 sequences assigned
19 (0.9%) exact matches, in which:
14 unique CDR3
4 unique J



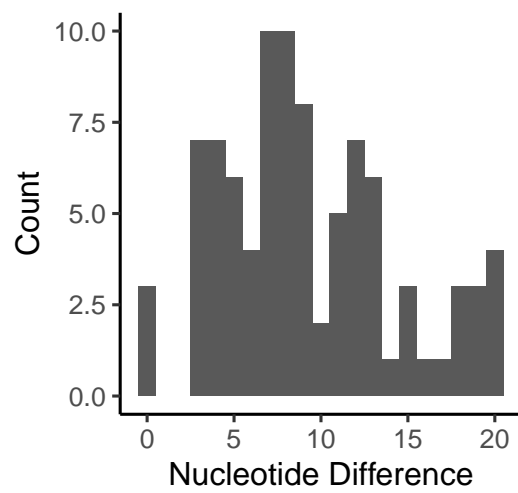
IGHV3-53*01_02

710 sequences assigned
7 (1%) exact matches, in which:
6 unique CDR3
2 unique J



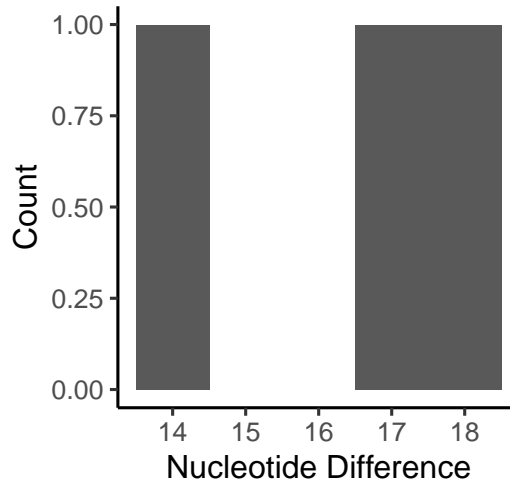
IGHV3-64*01

131 sequences assigned
3 (2.3%) exact matches, in which:
2 unique CDR3
2 unique J



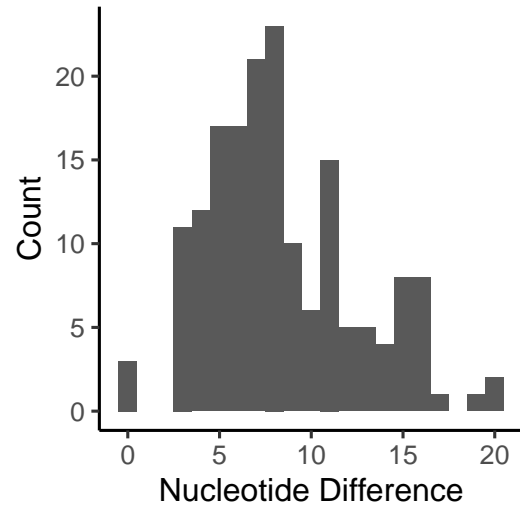
IGHV3-69-1*01

8 sequences assigned
No exact matches.



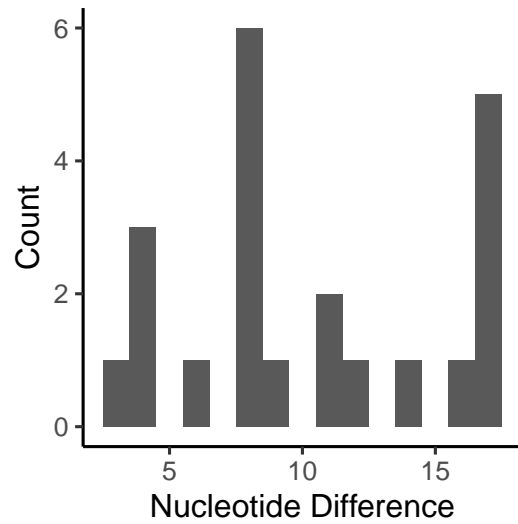
IGHV3-73*01_02

193 sequences assigned
3 (1.6%) exact matches, in which:
2 unique CDR3
1 unique J



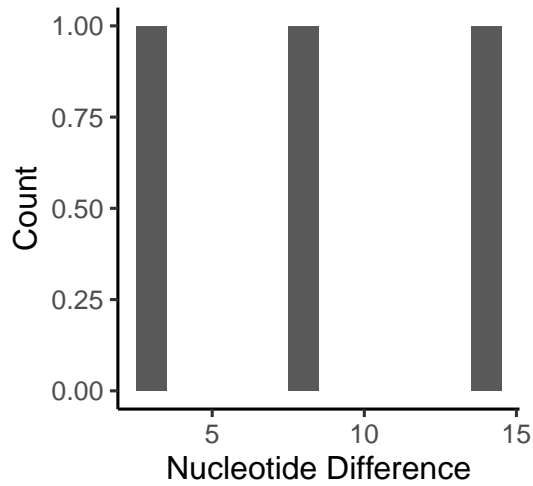
IGHV3-64*02_07

32 sequences assigned
No exact matches.



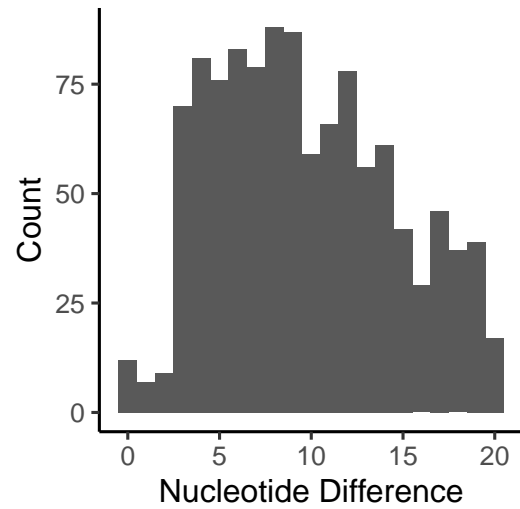
IGHV3-69-1*02

5 sequences assigned
No exact matches.



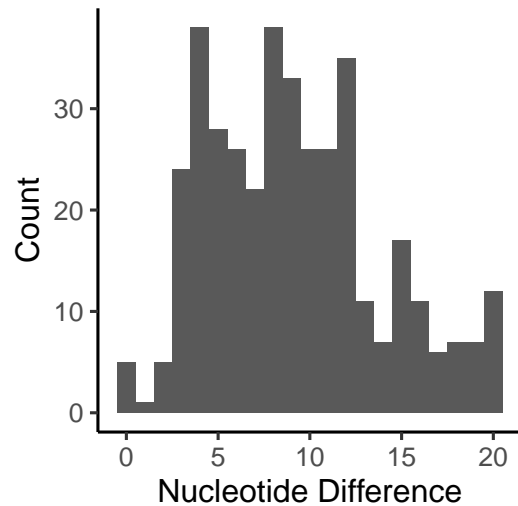
IGHV3-74*01_02

1268 sequences assigned
12 (0.9%) exact matches, in which:
9 unique CDR3
3 unique J



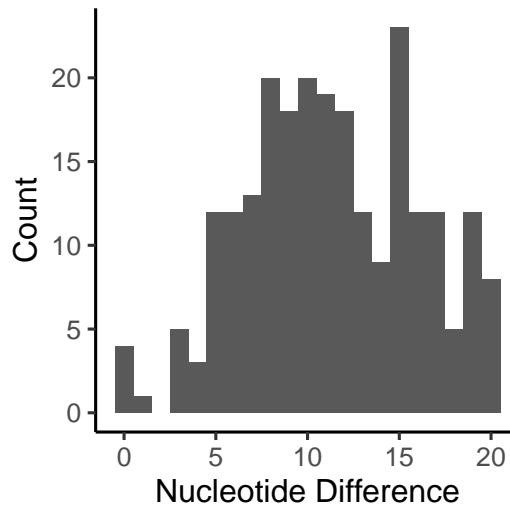
IGHV3-66*01

467 sequences assigned
5 (1.1%) exact matches, in which:
4 unique CDR3
3 unique J



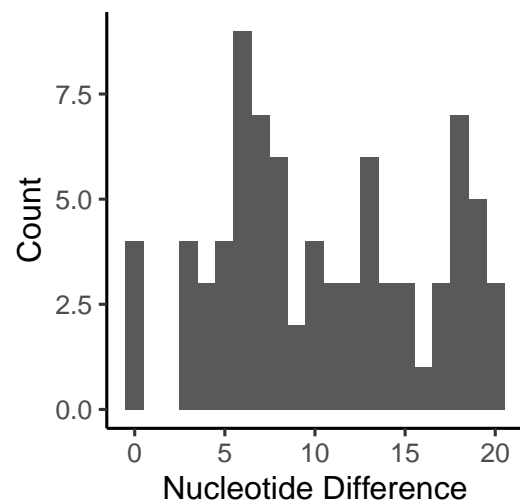
IGHV3-72*01

264 sequences assigned
4 (1.5%) exact matches, in which:
2 unique CDR3
2 unique J



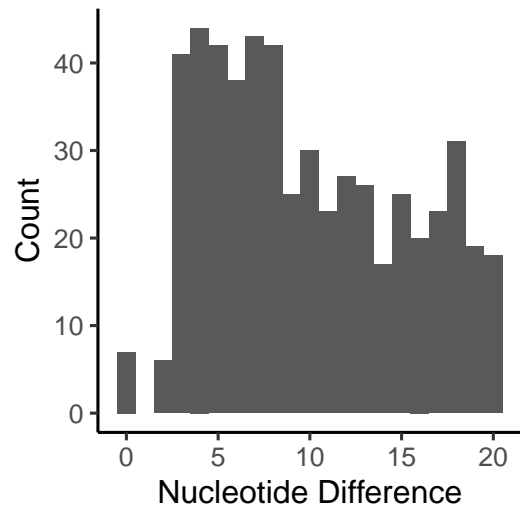
IGHV3-43D*03

97 sequences assigned
4 (4.1%) exact matches, in which:
4 unique CDR3
1 unique J



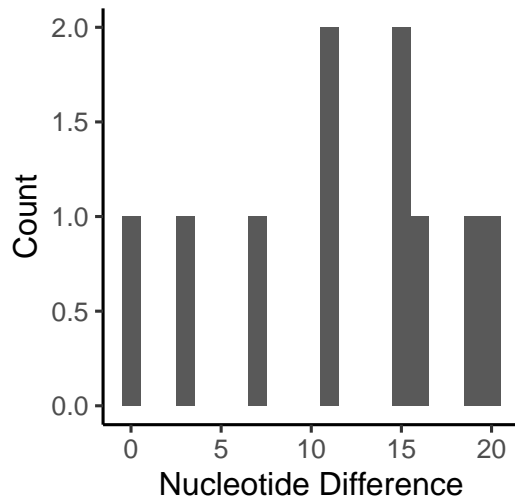
IGHV3-64D*06

657 sequences assigned
7 (1.1%) exact matches, in which:
7 unique CDR3
5 unique J



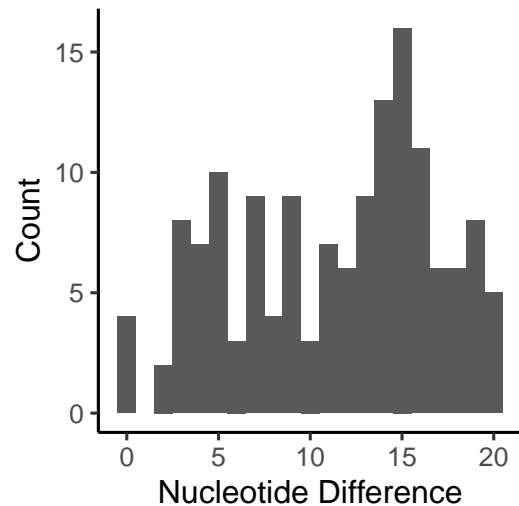
IGHV4-28*01_07

10 sequences assigned
1 (10%) exact matches, in which:
1 unique CDR3
1 unique J



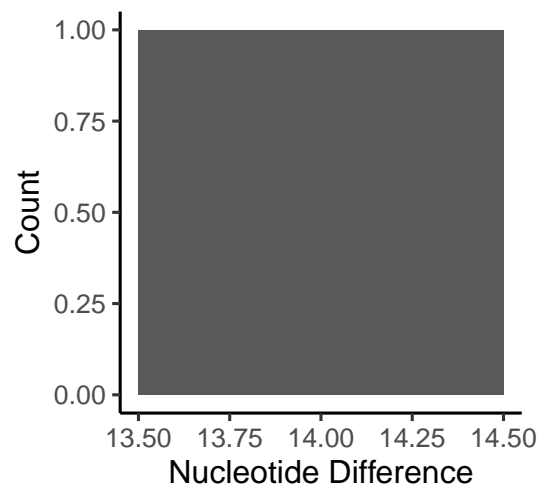
IGHV4-30-4*07

223 sequences assigned
4 (1.8%) exact matches, in which:
3 unique CDR3
3 unique J



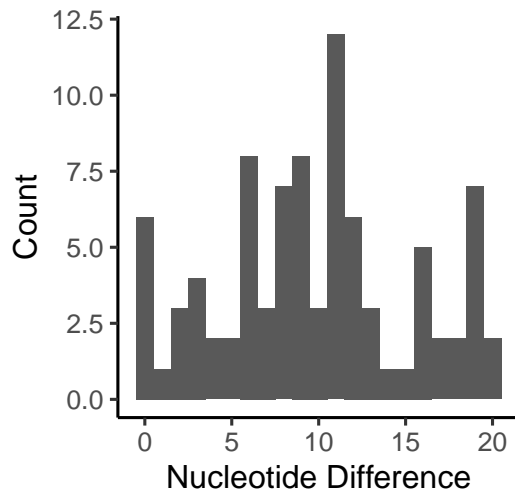
IGHV4-28*03

1 sequences assigned
No exact matches.



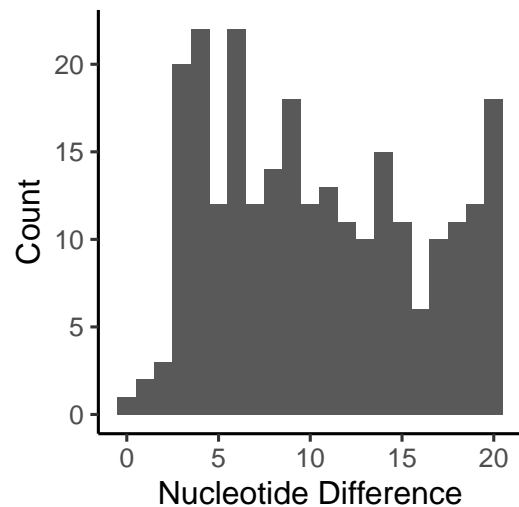
IGHV4-30-2*01

116 sequences assigned
6 (5.2%) exact matches, in which:
6 unique CDR3
4 unique J



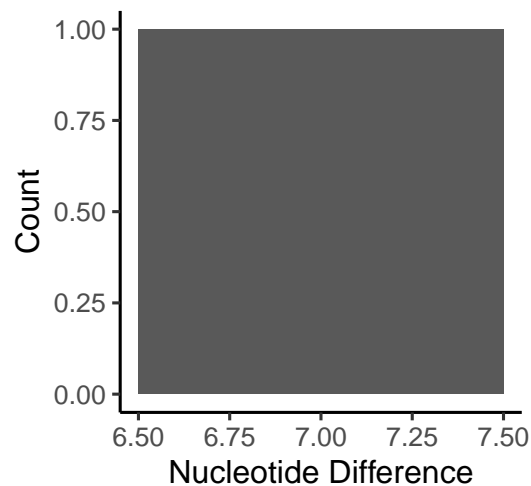
IGHV4-31*03_04

338 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



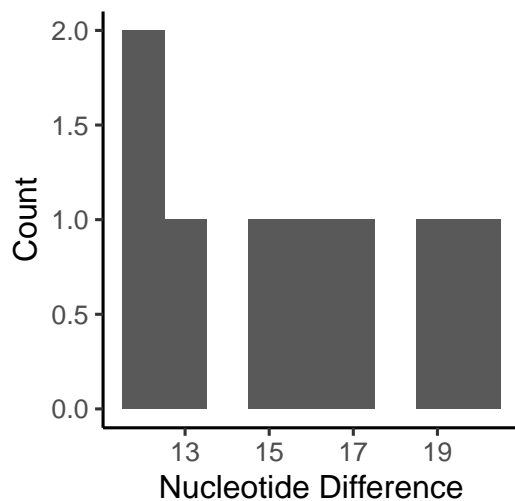
IGHV4-28*06

1 sequences assigned
No exact matches.



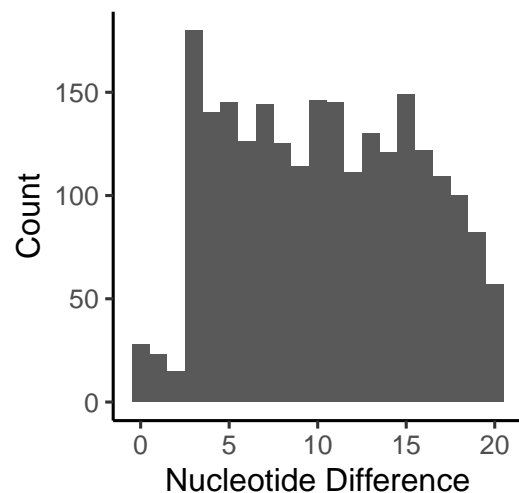
IGHV4-30-2*06

22 sequences assigned
No exact matches.



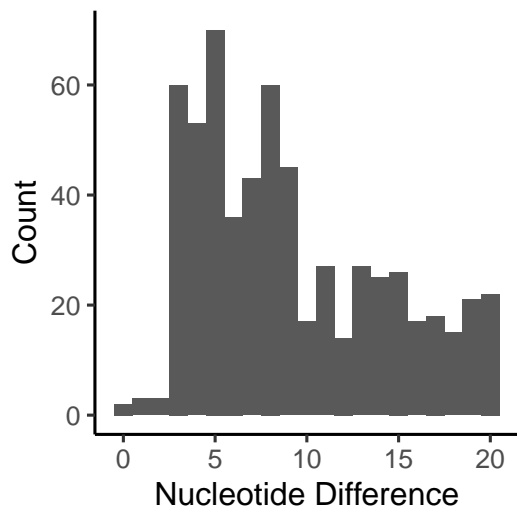
IGHV4-34*01_02

2899 sequences assigned
28 (1%) exact matches, in which:
24 unique CDR3
6 unique J



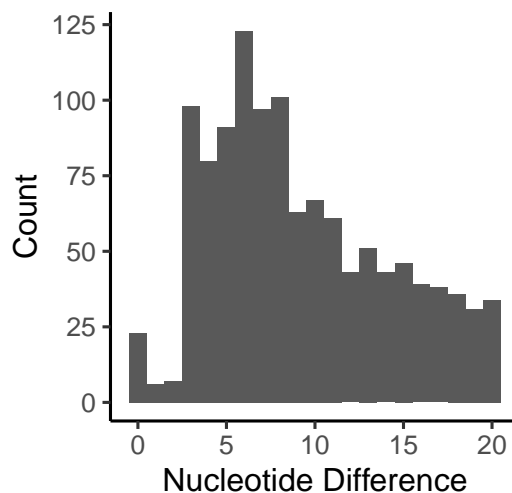
IGHV4-38-2*02

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



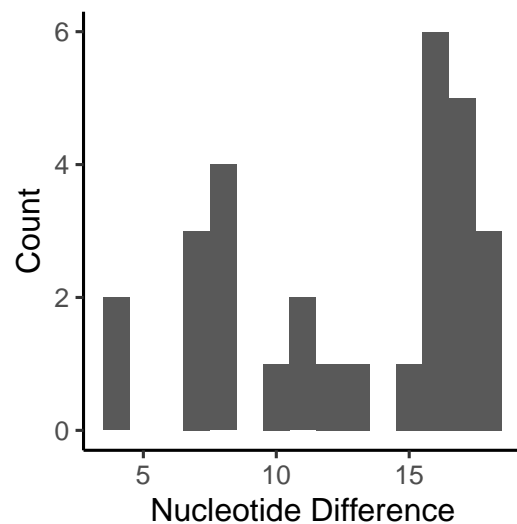
IGHV4-59*08

1407 sequences assigned
23 (1.6%) exact matches, in which:
19 unique CDR3
5 unique J



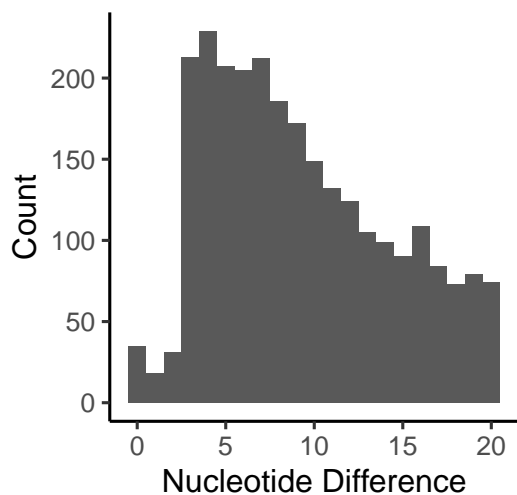
IGHV4-61*08

57 sequences assigned
No exact matches.



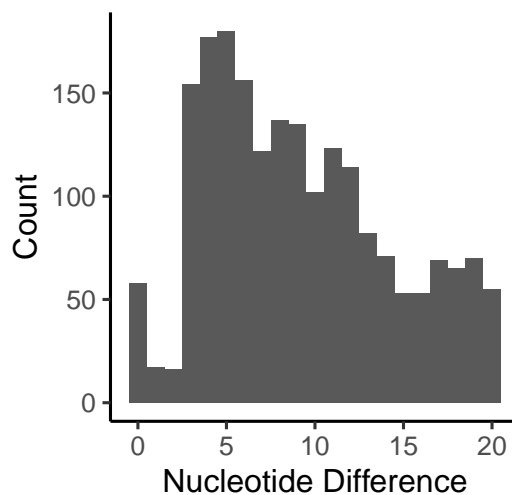
IGHV4-39*01_05

3448 sequences assigned
35 (1%) exact matches, in which:
28 unique CDR3
5 unique J



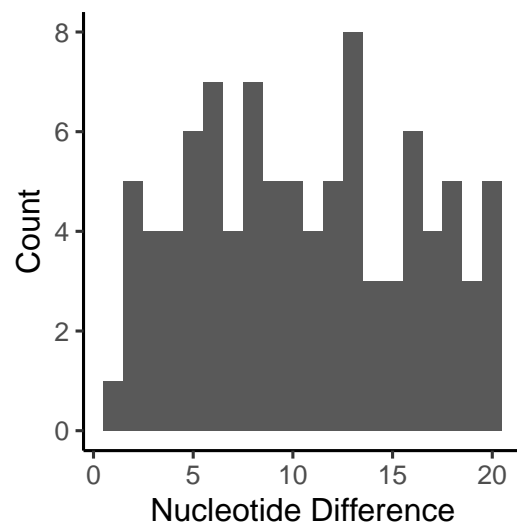
IGHV4-59*01_07

2487 sequences assigned
58 (2.3%) exact matches, in which:
36 unique CDR3
6 unique J



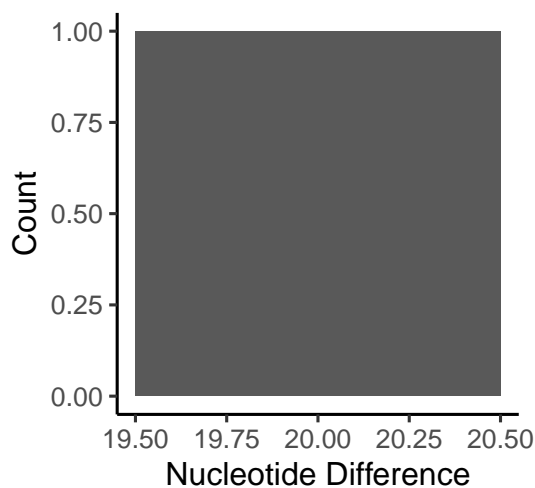
IGHV5-10-1*01_03

121 sequences assigned
No exact matches.



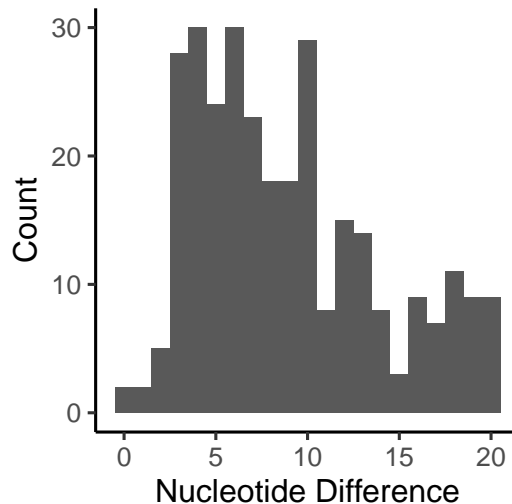
IGHV4-55*02_04_08

1 sequences assigned
No exact matches.



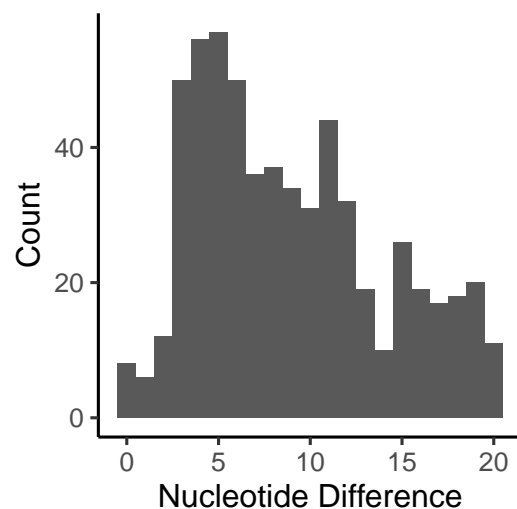
IGHV4-61*01

354 sequences assigned
2 (0.6%) exact matches, in which:
1 unique CDR3
1 unique J



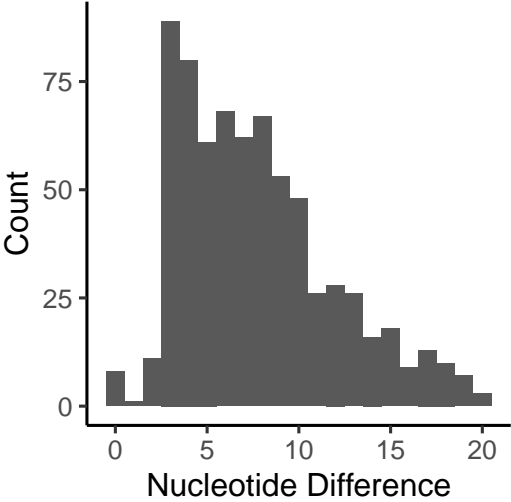
IGHV5-51*01_03

662 sequences assigned
8 (1.2%) exact matches, in which:
8 unique CDR3
3 unique J



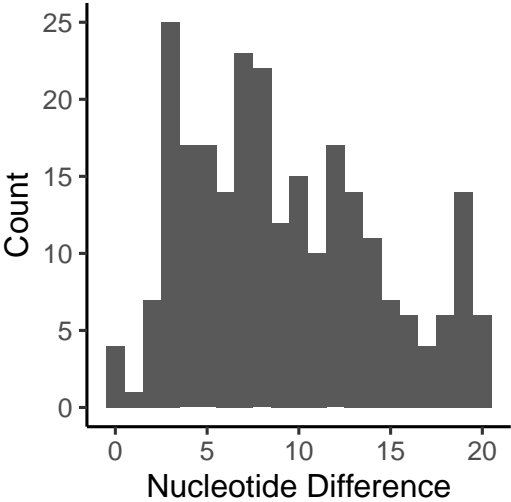
IGHV6-1*01_02

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

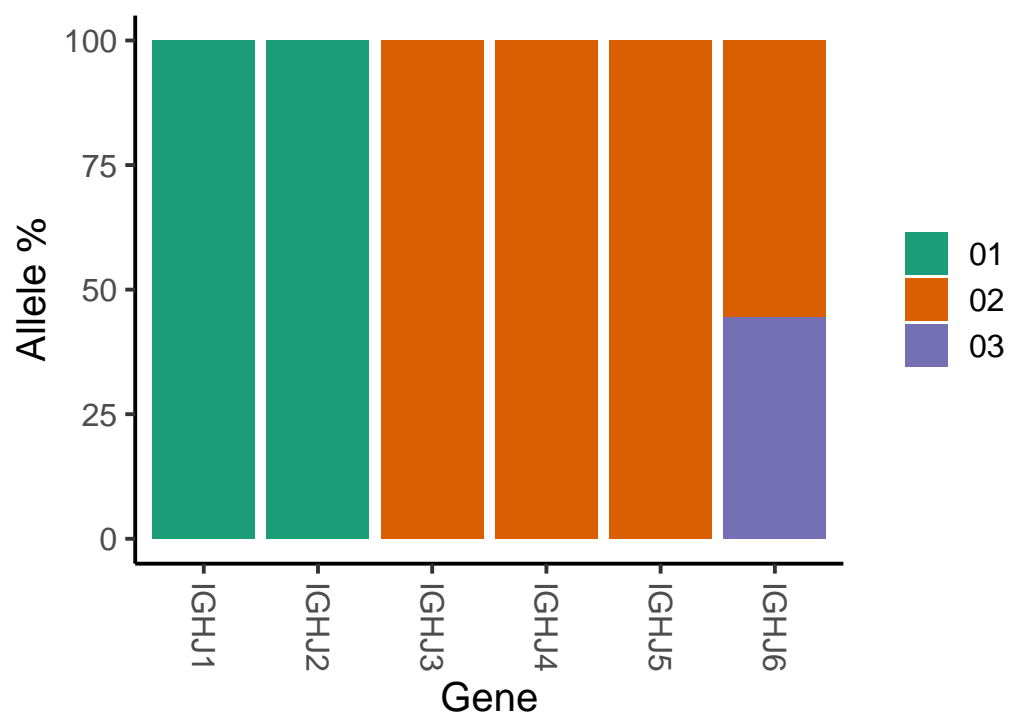


IGHV7-4-1*02

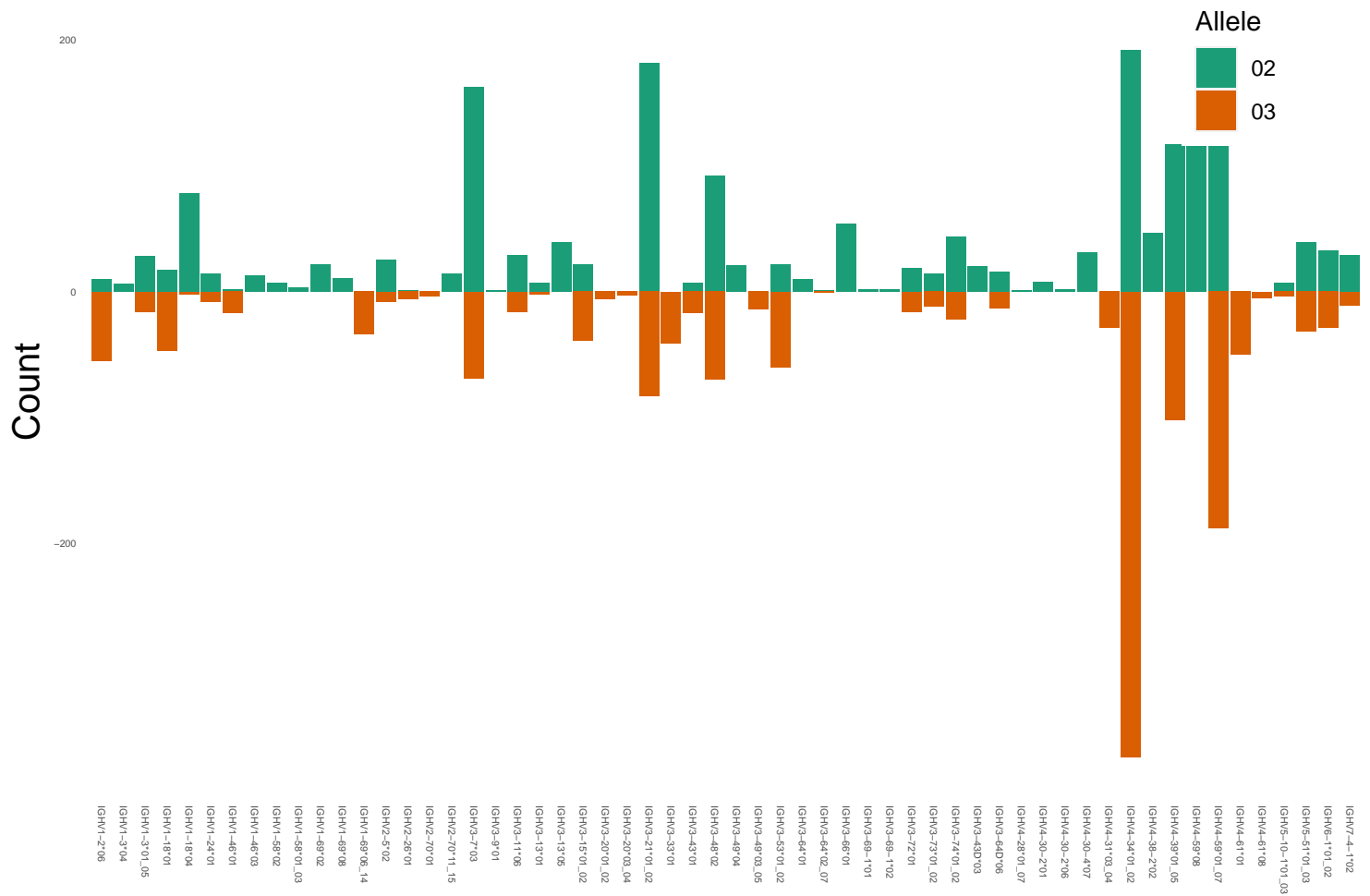
324 sequences assigned
4 (1.2%) exact matches, in which:
4 unique CDR3
2 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



Novel sequence(s)IGHV4-39*02_C258GIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

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)IGHV4-59*02_G88AIGHV5-51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

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

Warning – no inferred sequences found.

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

Novel sequence(s)IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

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

Warning – no inferred sequences found.

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)IGHV5-51*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)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.

Warning – no inferred sequences found.

Novel sequence(s)IGHV1-69*04_09_G112AIGHV4-59*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.

Warning – no inferred sequences found.

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

Novel sequence(s)IGHV4-59*02_G88A are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59*02_G88A 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)IGHV4-59*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.