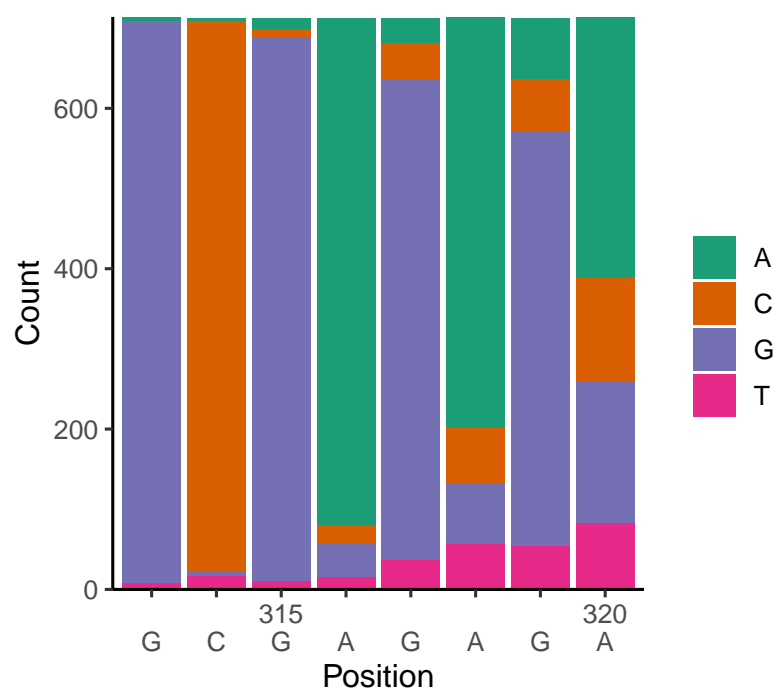
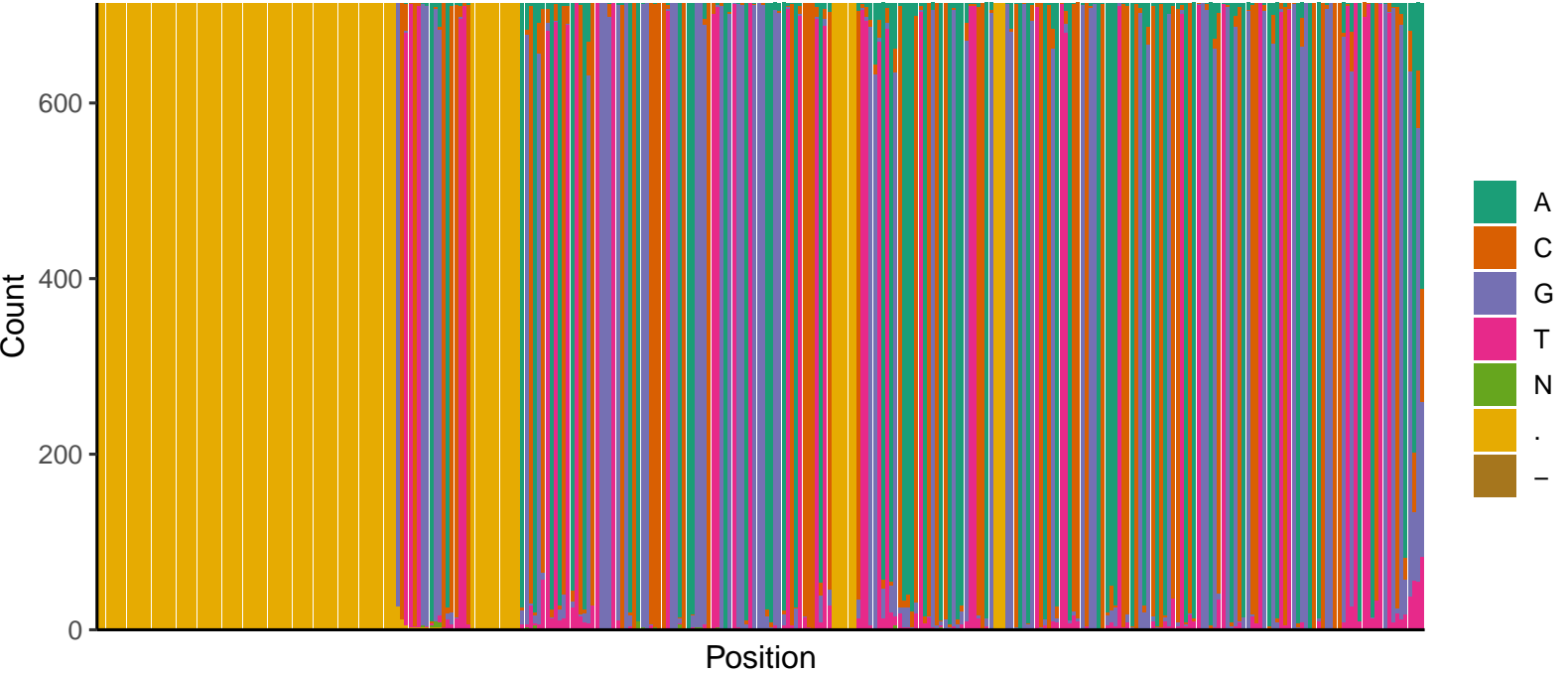


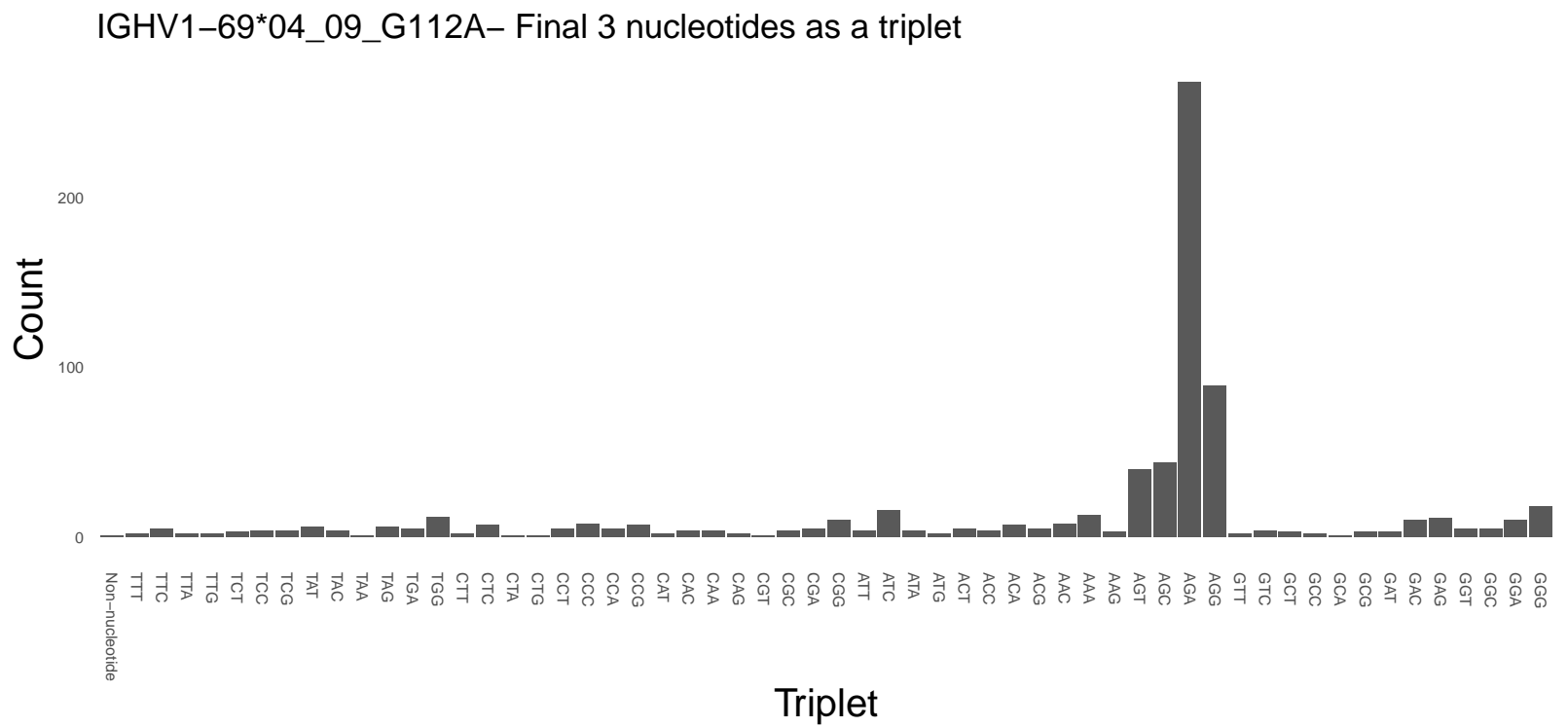
Gene IGHV1-69*04_09_G112A



Gene IGHV1-69*04_09_G112A

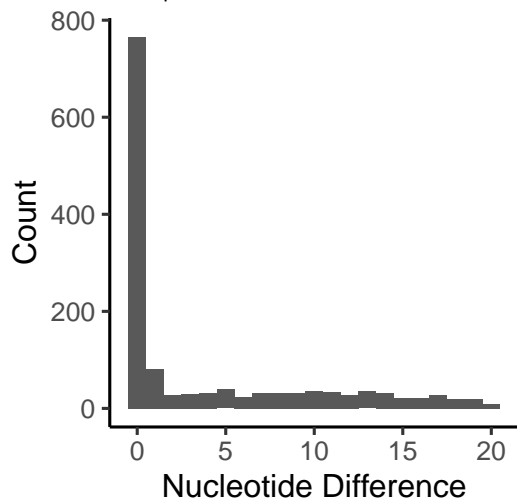


IGHV1-69*04_09_G112A- Final 3 nucleotides as a triplet



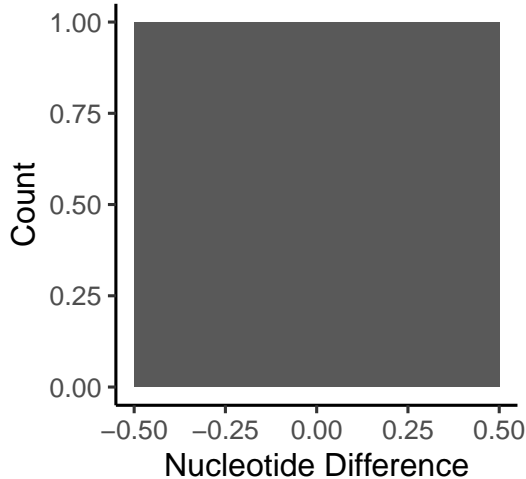
IGHV1-2*06

1526 sequences assigned
766 (50.2%) exact matches, in which:
764 unique CDR3
6 unique J



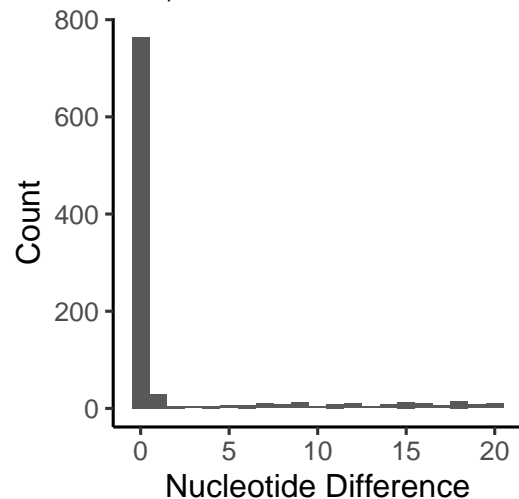
IGHV1-8*03

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



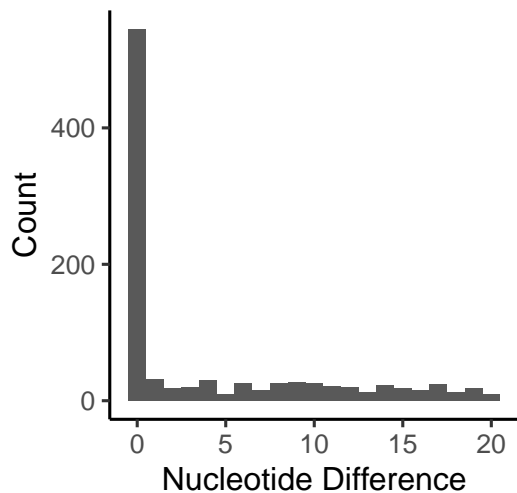
IGHV1-24*01

996 sequences assigned
765 (76.8%) exact matches, in which:
763 unique CDR3
7 unique J



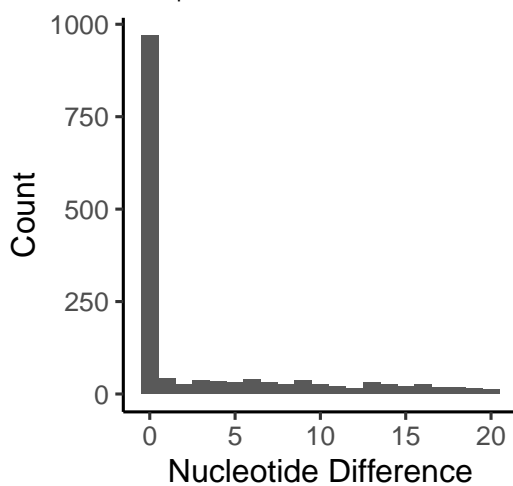
IGHV1-3*01_05

1041 sequences assigned
545 (52.4%) exact matches, in which:
545 unique CDR3
7 unique J



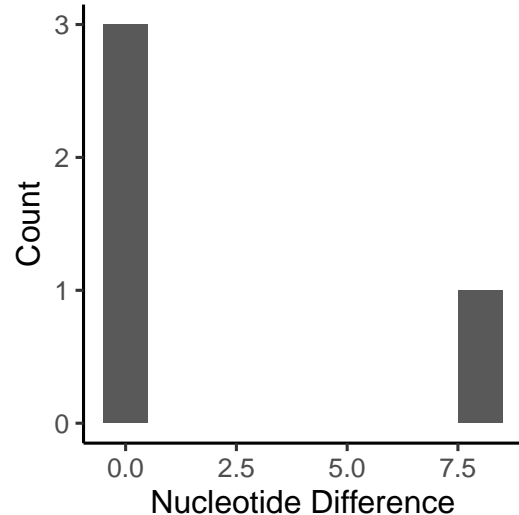
IGHV1-18*01

1641 sequences assigned
969 (59%) exact matches, in which:
967 unique CDR3
7 unique J



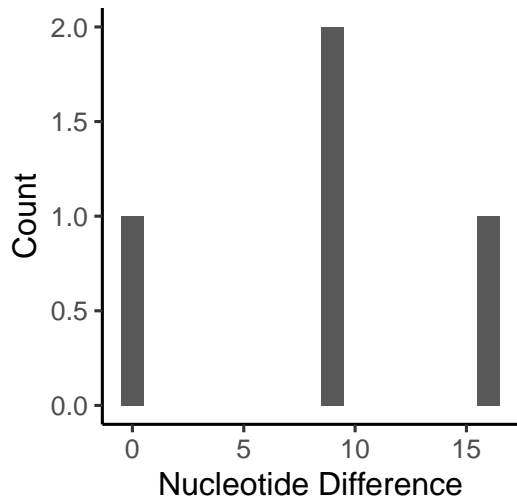
IGHV1-45*02

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



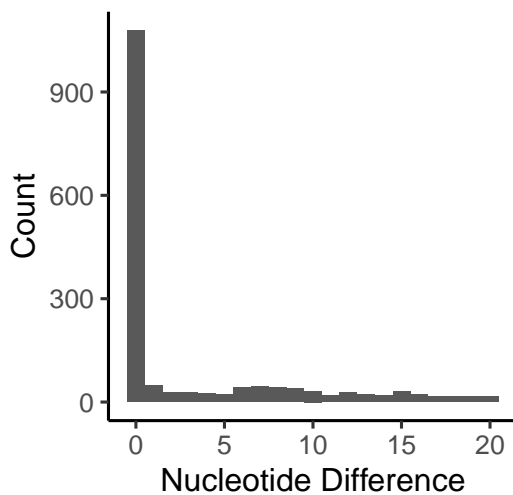
IGHV1-8*01

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



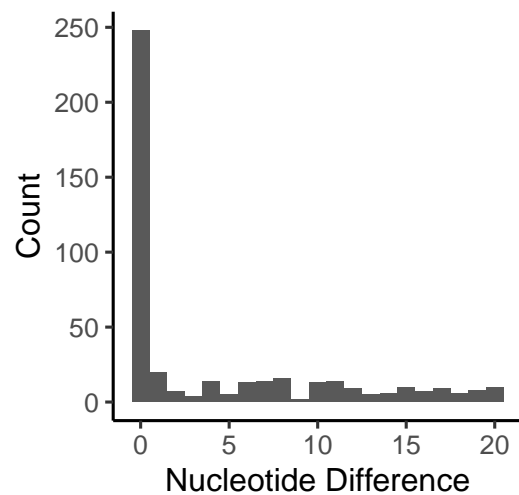
IGHV1-18*04

1786 sequences assigned
1079 (60.4%) exact matches, in which:
1075 unique CDR3
7 unique J



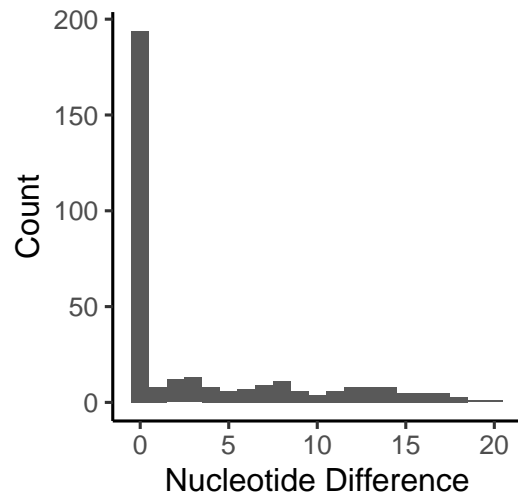
IGHV1-46*01

488 sequences assigned
248 (50.8%) exact matches, in which:
248 unique CDR3
7 unique J



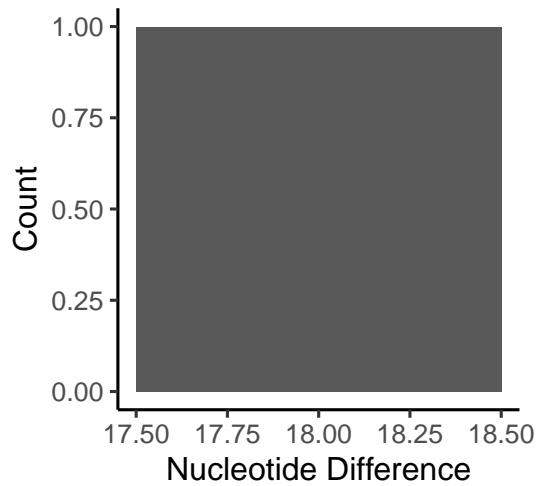
IGHV1-46*03

359 sequences assigned
194 (54%) exact matches, in which:
194 unique CDR3
6 unique J



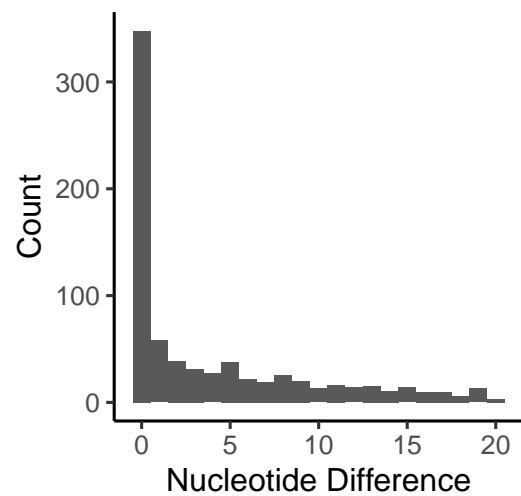
IGHV1-69-2*01

1 sequences assigned
No exact matches.



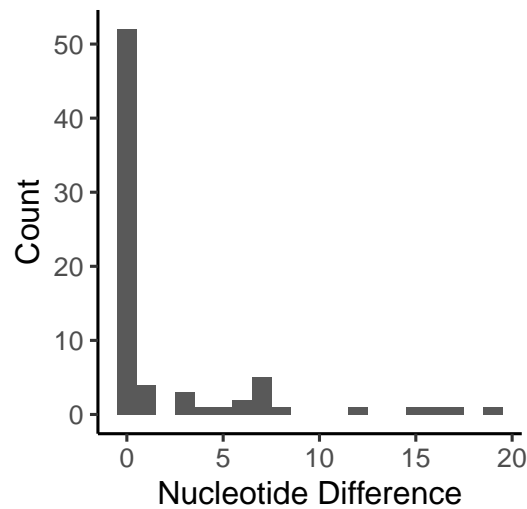
IGHV2-5*02

797 sequences assigned
348 (43.7%) exact matches, in which:
347 unique CDR3
7 unique J



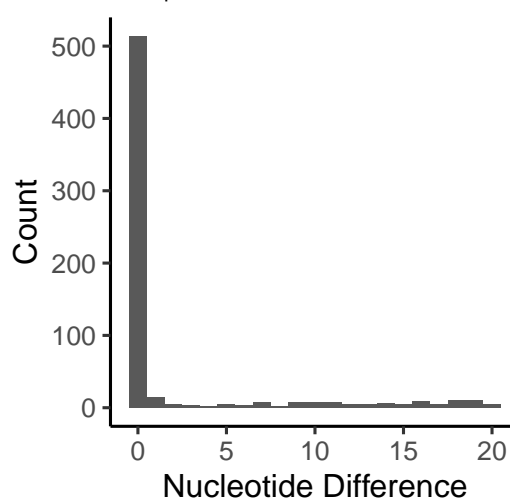
IGHV1-58*02

75 sequences assigned
52 (69.3%) exact matches, in which:
52 unique CDR3
6 unique J



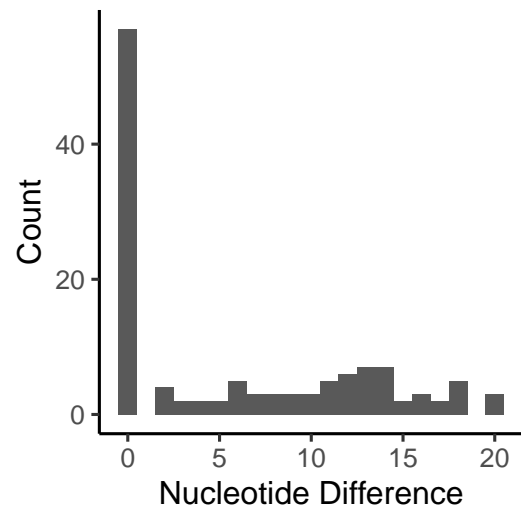
IGHV1-69*04_09_G112A

714 sequences assigned
514 (72%) exact matches, in which:
514 unique CDR3
6 unique J



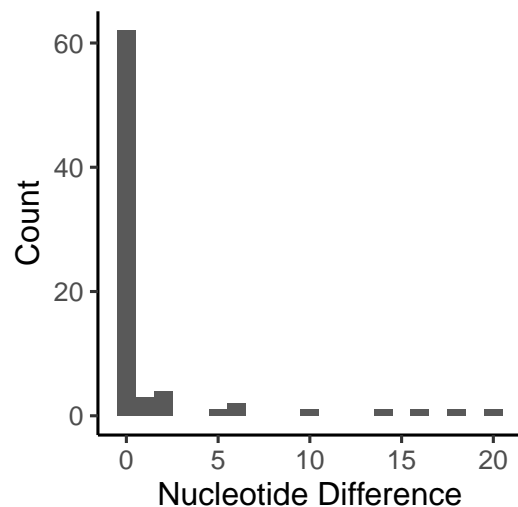
IGHV2-26*01

130 sequences assigned
57 (43.8%) exact matches, in which:
57 unique CDR3
7 unique J



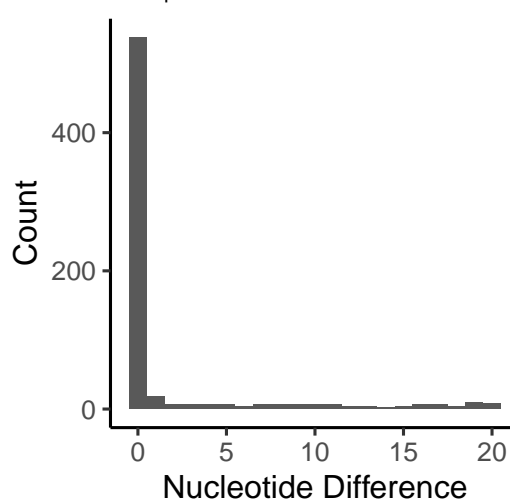
IGHV1-58*01_03

85 sequences assigned
62 (72.9%) exact matches, in which:
62 unique CDR3
6 unique J



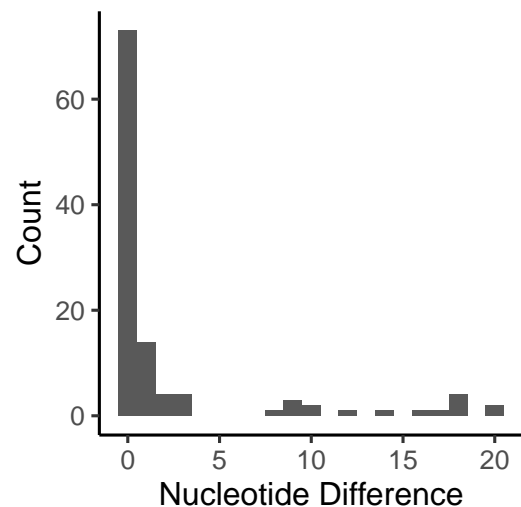
IGHV1-69*06_14

739 sequences assigned
538 (72.8%) exact matches, in which:
538 unique CDR3
7 unique J



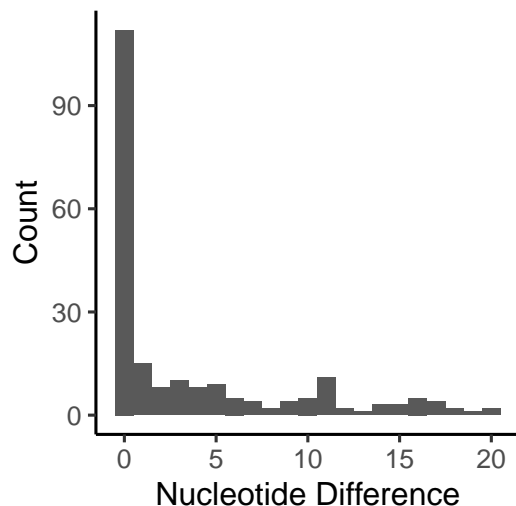
IGHV2-70*01

119 sequences assigned
73 (61.3%) exact matches, in which:
68 unique CDR3
5 unique J



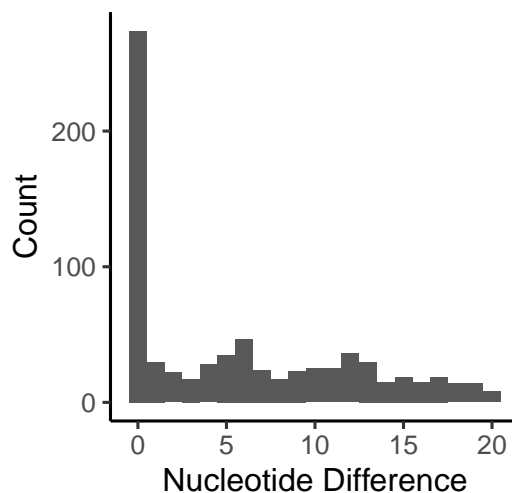
IGHV2-70*11_15

226 sequences assigned
112 (49.6%) exact matches, in which:
112 unique CDR3
6 unique J



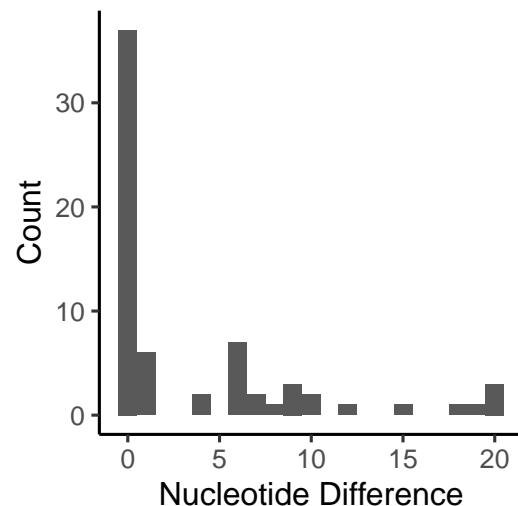
IGHV3-11*06

836 sequences assigned
274 (32.8%) exact matches, in which:
272 unique CDR3
7 unique J



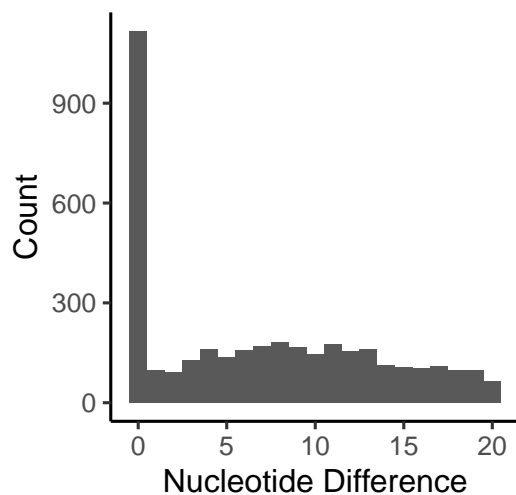
IGHV3-20*01_02

68 sequences assigned
37 (54.4%) exact matches, in which:
36 unique CDR3
5 unique J



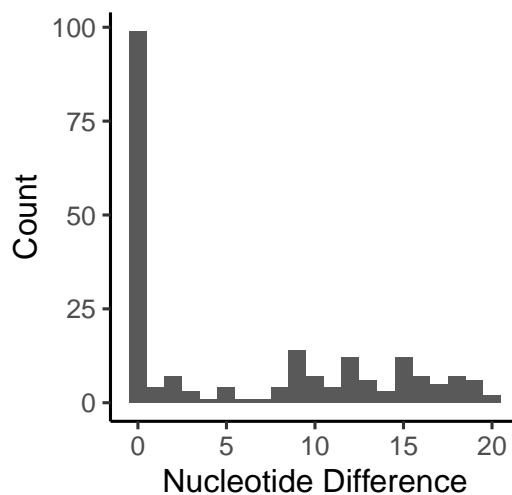
IGHV3-7*03

4039 sequences assigned
1117 (27.7%) exact matches, in which:
1089 unique CDR3
7 unique J



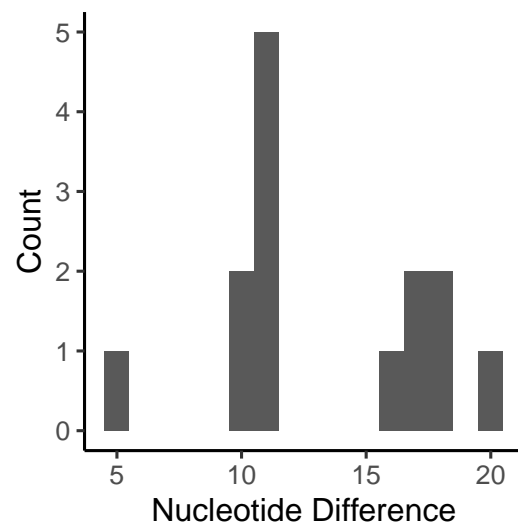
IGHV3-13*05

224 sequences assigned
99 (44.2%) exact matches, in which:
98 unique CDR3
6 unique J



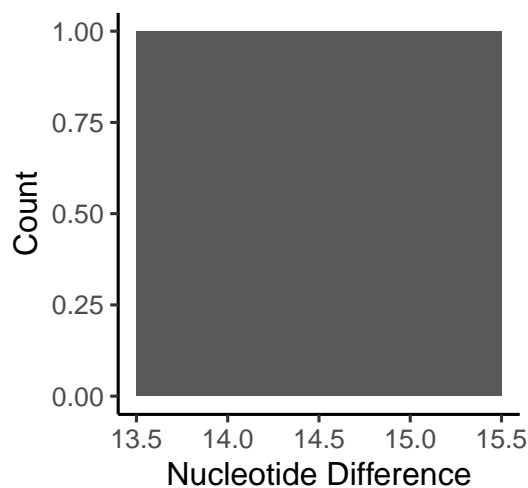
IGHV3-20*03_04

20 sequences assigned
No exact matches.



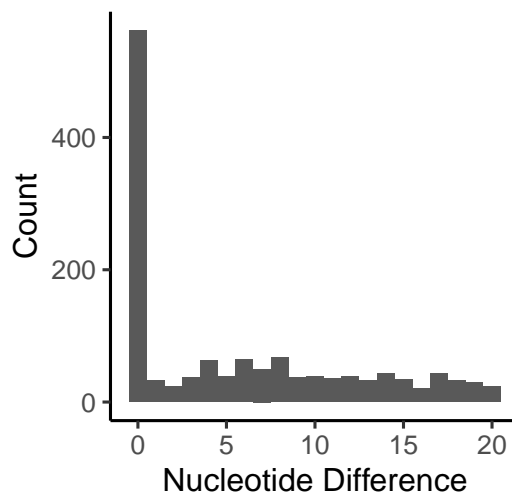
IGHV3-9*01

2 sequences assigned
No exact matches.



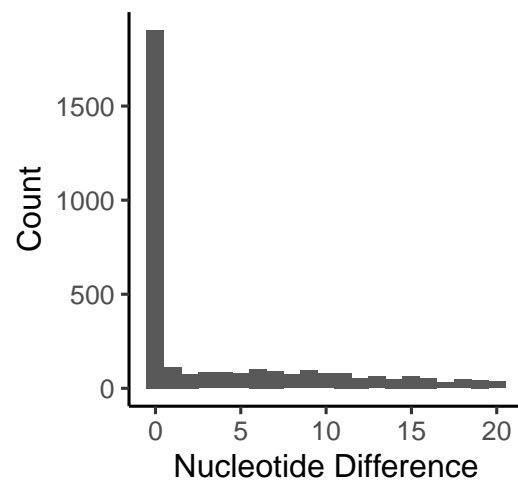
IGHV3-15*01_02

1485 sequences assigned
562 (37.8%) exact matches, in which:
551 unique CDR3
7 unique J



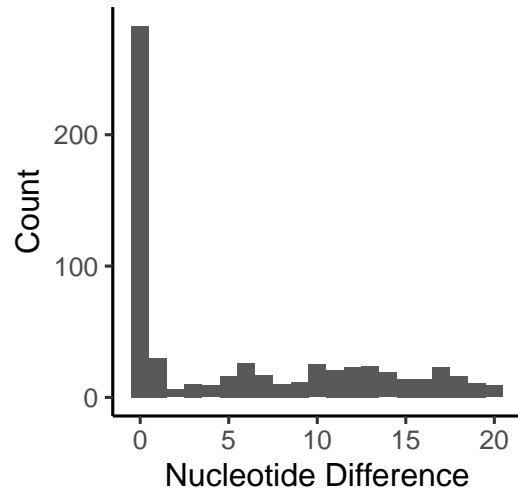
IGHV3-21*01_02

3672 sequences assigned
1904 (51.9%) exact matches, in which:
1861 unique CDR3
7 unique J



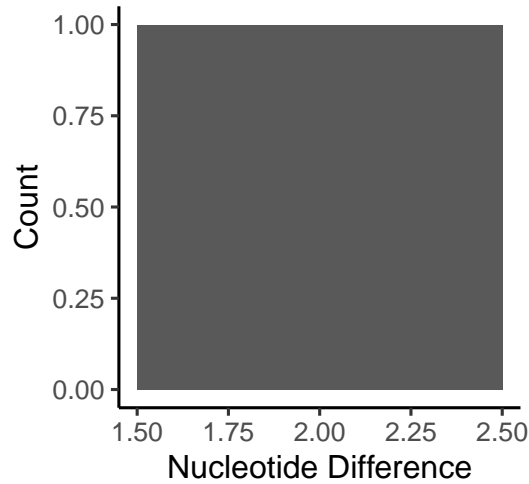
IGHV3–33*01

725 sequences assigned
283 (39%) exact matches, in which:
279 unique CDR3
7 unique J



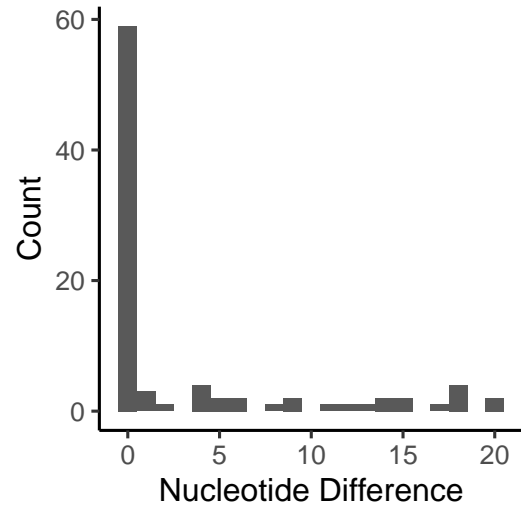
IGHV3–47*02

1 sequences assigned
No exact matches.



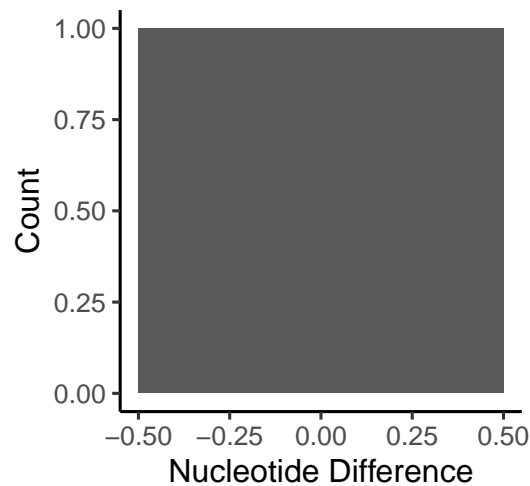
IGHV3–49*03_05

103 sequences assigned
59 (57.3%) exact matches, in which:
58 unique CDR3
6 unique J



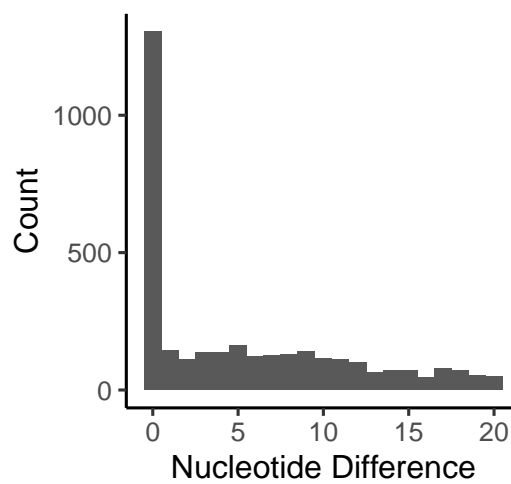
IGHV3–38–3*01

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



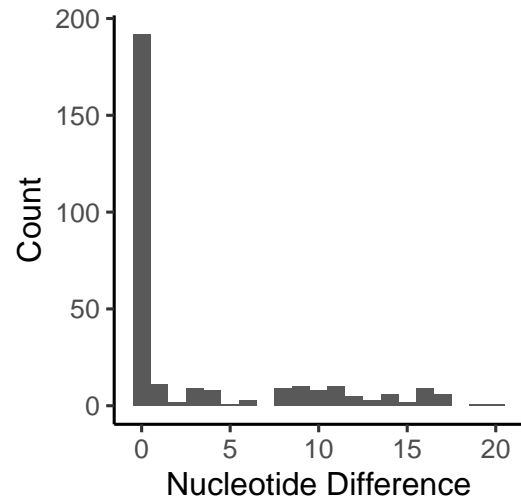
IGHV3–48*02

3655 sequences assigned
1304 (35.7%) exact matches, in which:
1281 unique CDR3
7 unique J



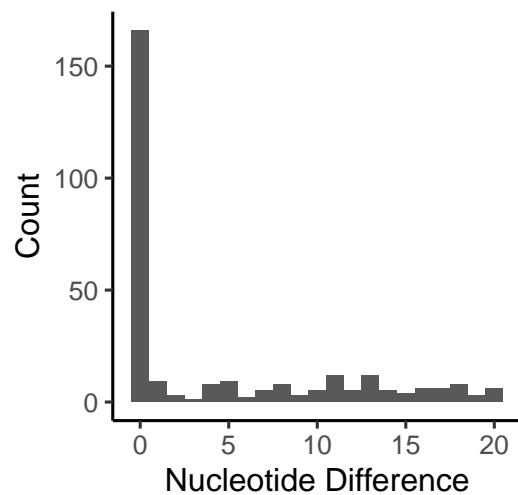
IGHV3–53*04

310 sequences assigned
192 (61.9%) exact matches, in which:
188 unique CDR3
6 unique J



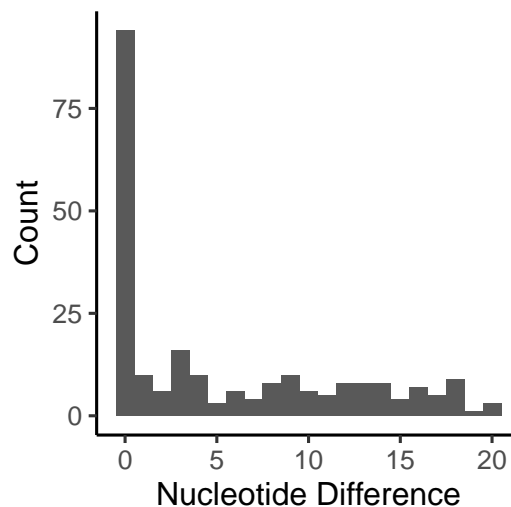
IGHV3–43*01

333 sequences assigned
166 (49.8%) exact matches, in which:
165 unique CDR3
7 unique J



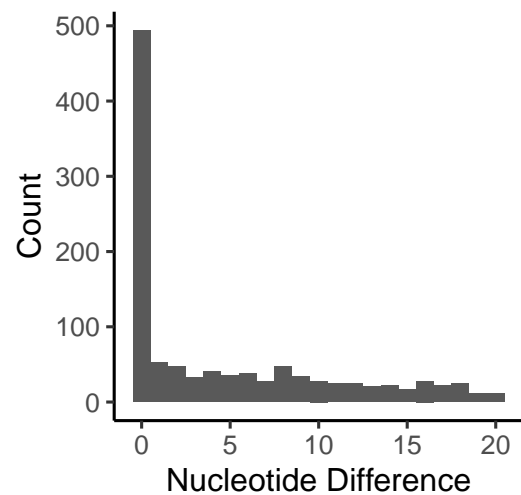
IGHV3–49*04

244 sequences assigned
94 (38.5%) exact matches, in which:
94 unique CDR3
6 unique J



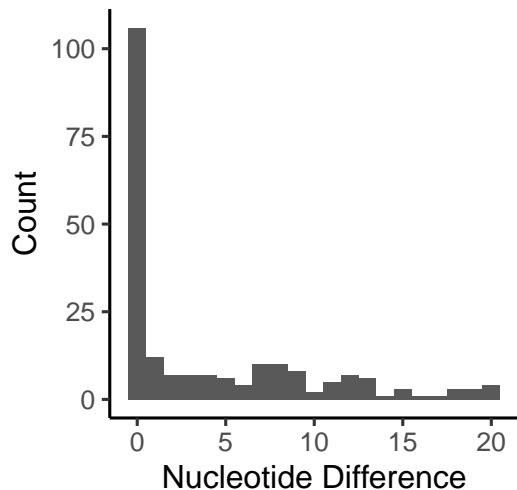
IGHV3–53*01_02

1171 sequences assigned
494 (42.2%) exact matches, in which:
485 unique CDR3
7 unique J



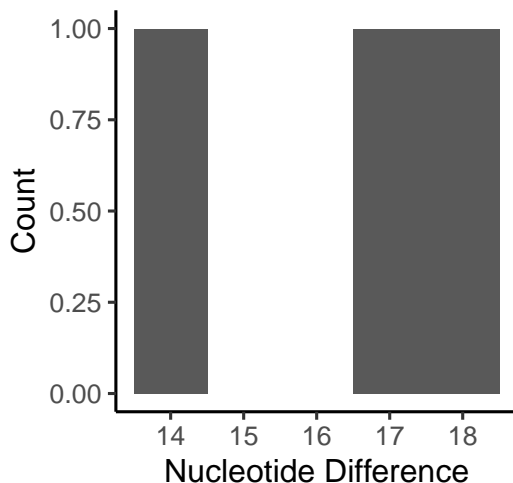
IGHV3-64*01

253 sequences assigned
106 (41.9%) exact matches, in which:
101 unique CDR3
6 unique J



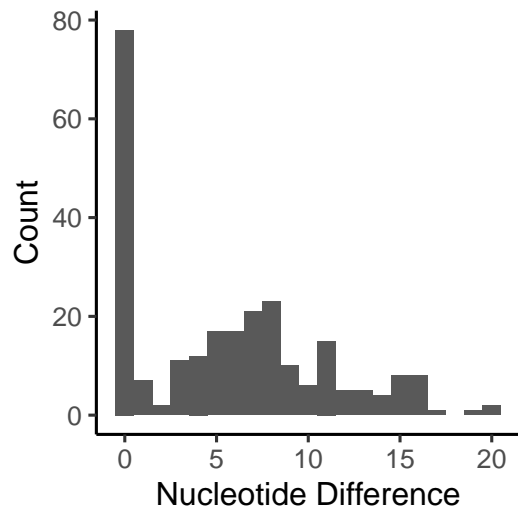
IGHV3-69-1*01

8 sequences assigned
No exact matches.



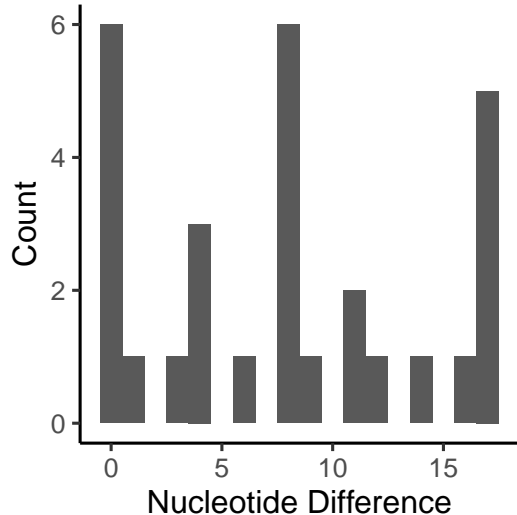
IGHV3-73*01_02

277 sequences assigned
78 (28.2%) exact matches, in which:
77 unique CDR3
6 unique J



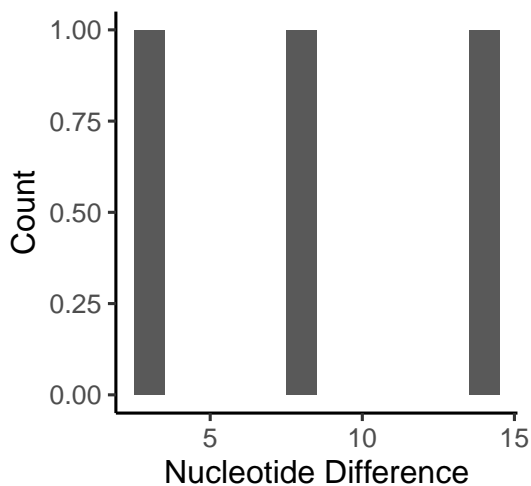
IGHV3-64*02_07

39 sequences assigned
6 (15.4%) exact matches, in which:
6 unique CDR3
3 unique J



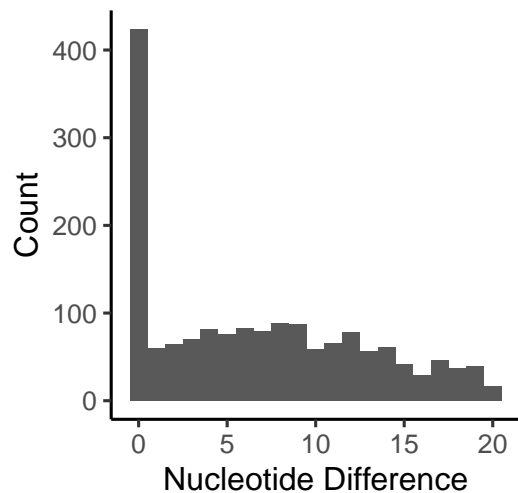
IGHV3-69-1*02

5 sequences assigned
No exact matches.



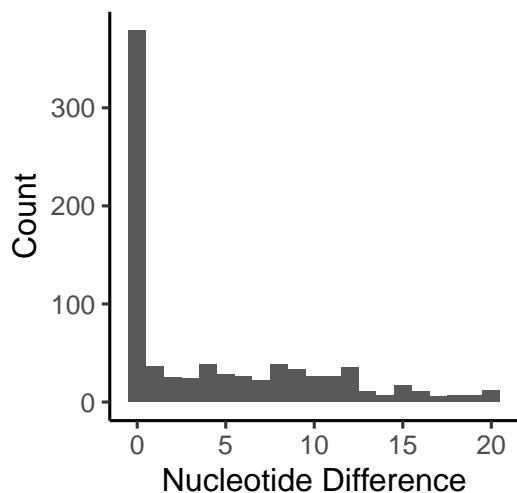
IGHV3-74*01_02

1789 sequences assigned
424 (23.7%) exact matches, in which:
414 unique CDR3
7 unique J



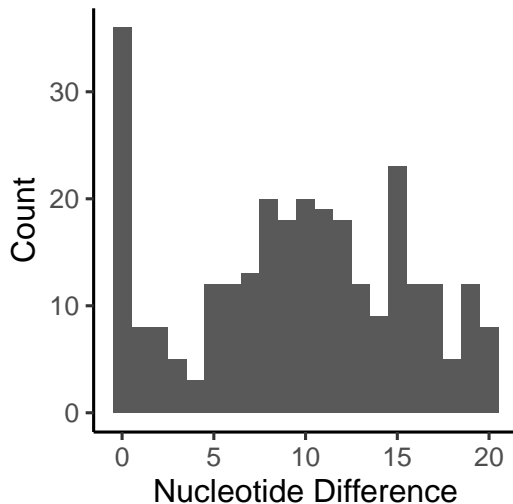
IGHV3-66*01

896 sequences assigned
379 (42.3%) exact matches, in which:
373 unique CDR3
7 unique J



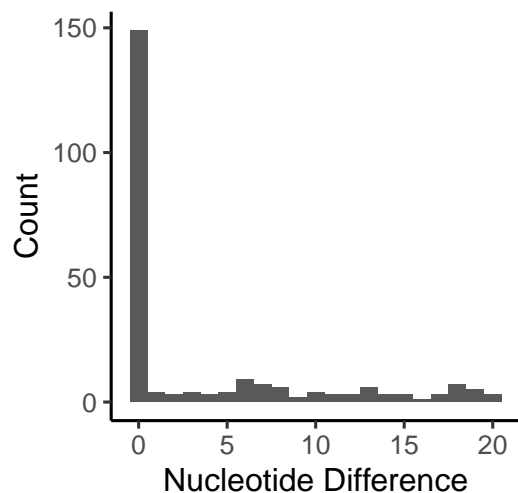
IGHV3-72*01

311 sequences assigned
36 (11.6%) exact matches, in which:
34 unique CDR3
4 unique J



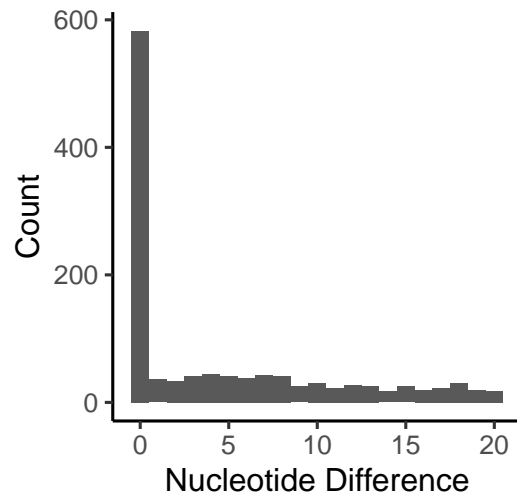
IGHV3-43D*03

249 sequences assigned
149 (59.8%) exact matches, in which:
145 unique CDR3
7 unique J



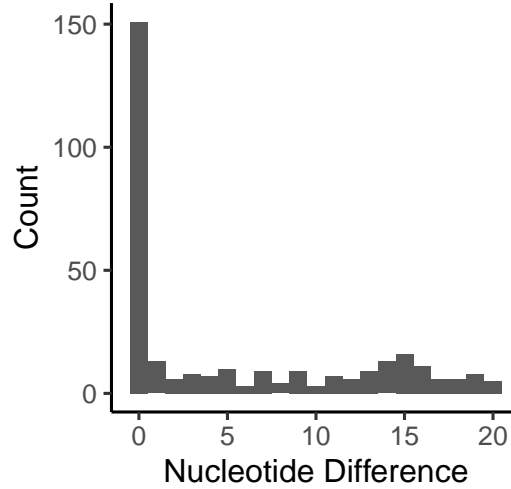
IGHV3-64D*06

1296 sequences assigned
583 (45%) exact matches, in which:
578 unique CDR3
7 unique J



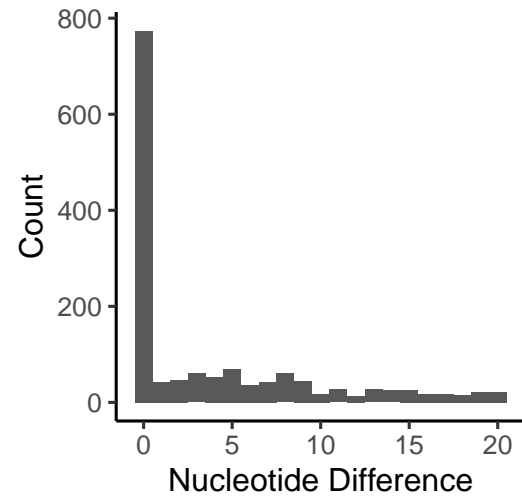
IGHV4-30-4*07

388 sequences assigned
151 (38.9%) exact matches, in which:
148 unique CDR3
6 unique J



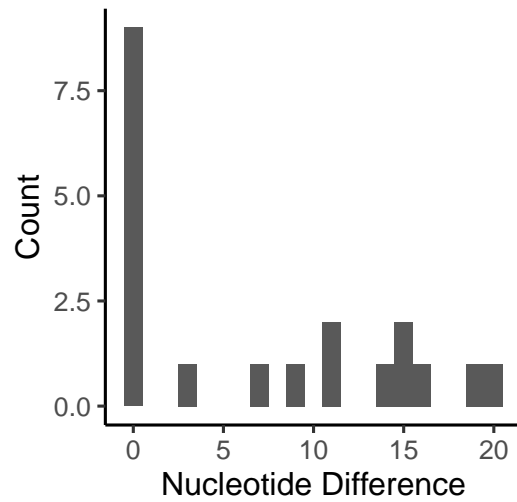
IGHV4-38-2*02

1590 sequences assigned
774 (48.7%) exact matches, in which:
765 unique CDR3
6 unique J



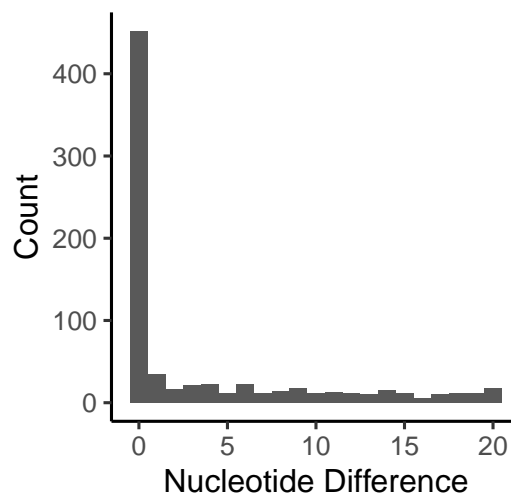
IGHV4-28*01_07

20 sequences assigned
9 (45%) exact matches, in which:
9 unique CDR3
4 unique J



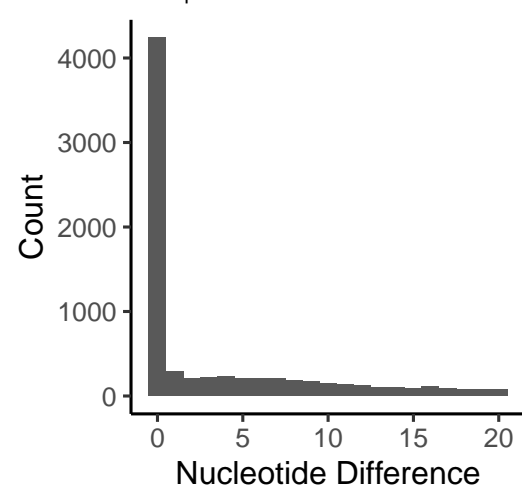
IGHV4-31*03_04

836 sequences assigned
452 (54.1%) exact matches, in which:
452 unique CDR3
6 unique J



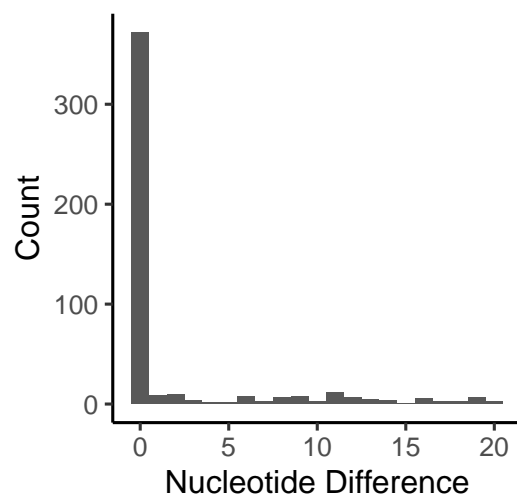
IGHV4-39*01_05

8105 sequences assigned
4240 (52.3%) exact matches, in which:
4180 unique CDR3
7 unique J



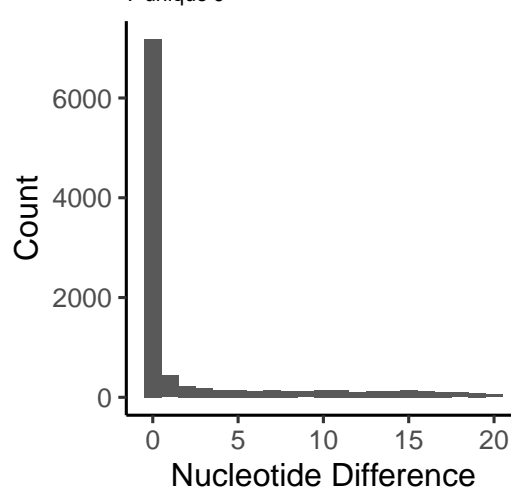
IGHV4-30-2*01

527 sequences assigned
372 (70.6%) exact matches, in which:
370 unique CDR3
6 unique J



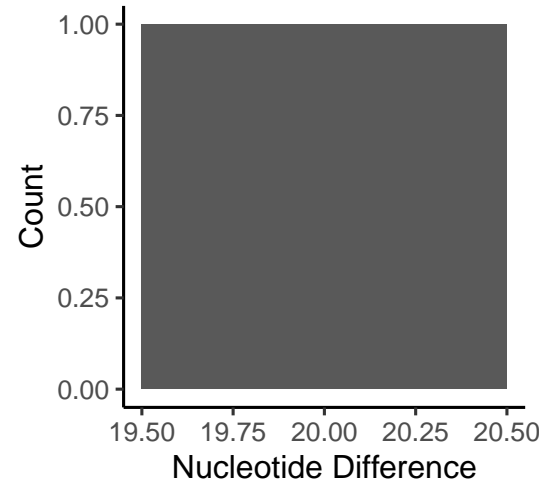
IGHV4-34*01_02

10680 sequences assigned
7181 (67.2%) exact matches, in which:
7093 unique CDR3
7 unique J



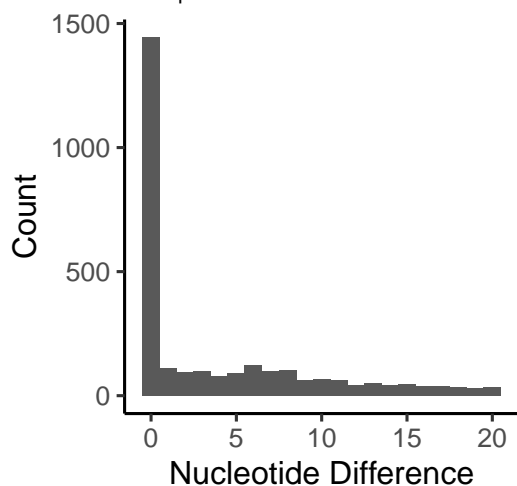
IGHV4-55*02_04_08

1 sequences assigned
No exact matches.



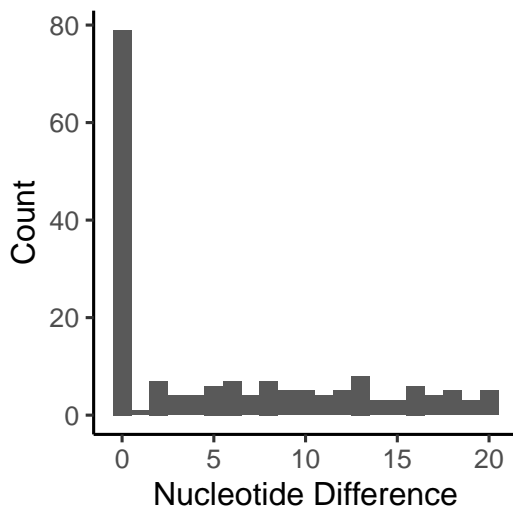
IGHV4-59*08

3020 sequences assigned
1444 (47.8%) exact matches, in which:
1429 unique CDR3
7 unique J



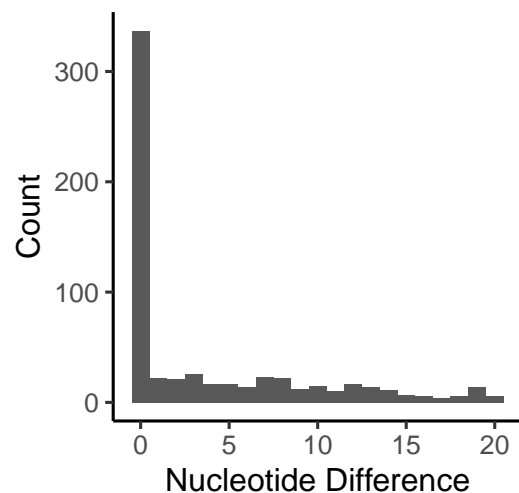
IGHV5-10-1*01_03

202 sequences assigned
79 (39.1%) exact matches, in which:
79 unique CDR3
7 unique J



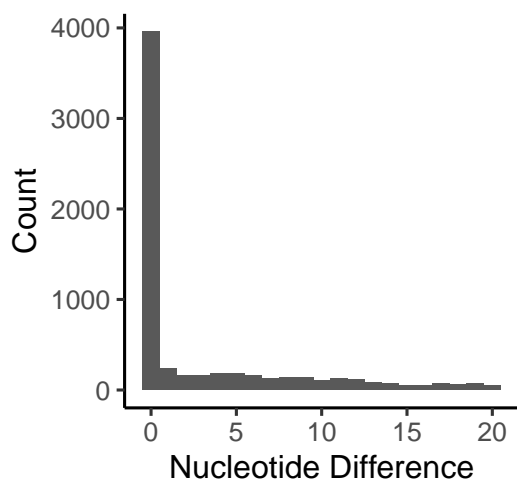
IGHV7-4-1*02

693 sequences assigned
337 (48.6%) exact matches, in which:
337 unique CDR3
7 unique J



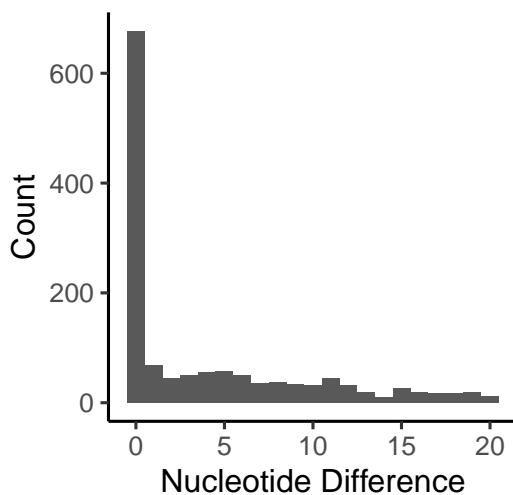
IGHV4-59*01_07

6765 sequences assigned
3958 (58.5%) exact matches, in which:
3893 unique CDR3
7 unique J



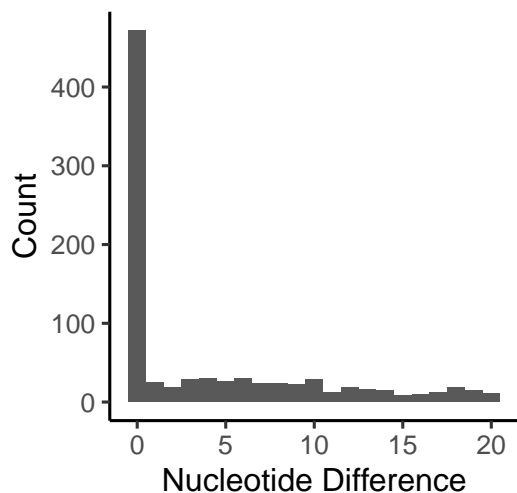
IGHV5-51*01_03

1425 sequences assigned
677 (47.5%) exact matches, in which:
677 unique CDR3
7 unique J



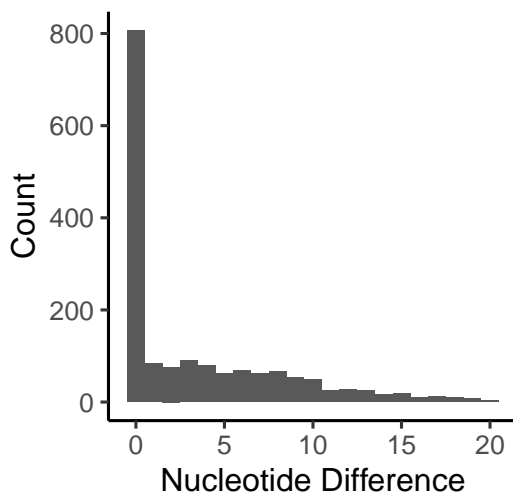
IGHV4-61*01

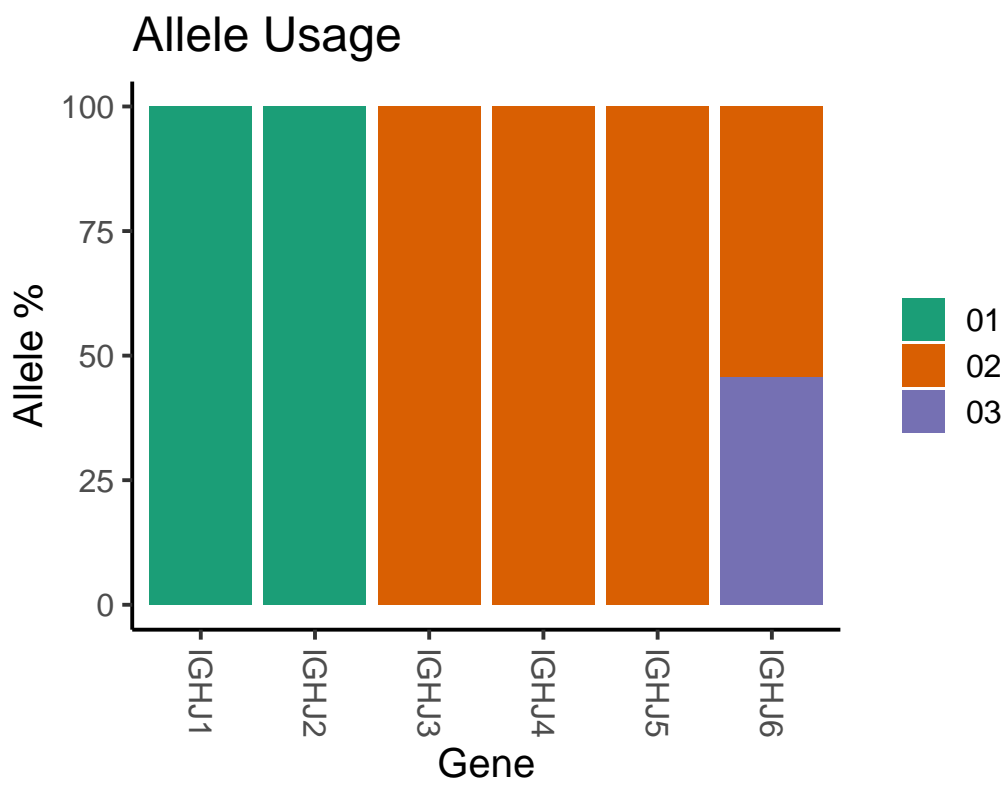
956 sequences assigned
472 (49.4%) exact matches, in which:
469 unique CDR3
6 unique J



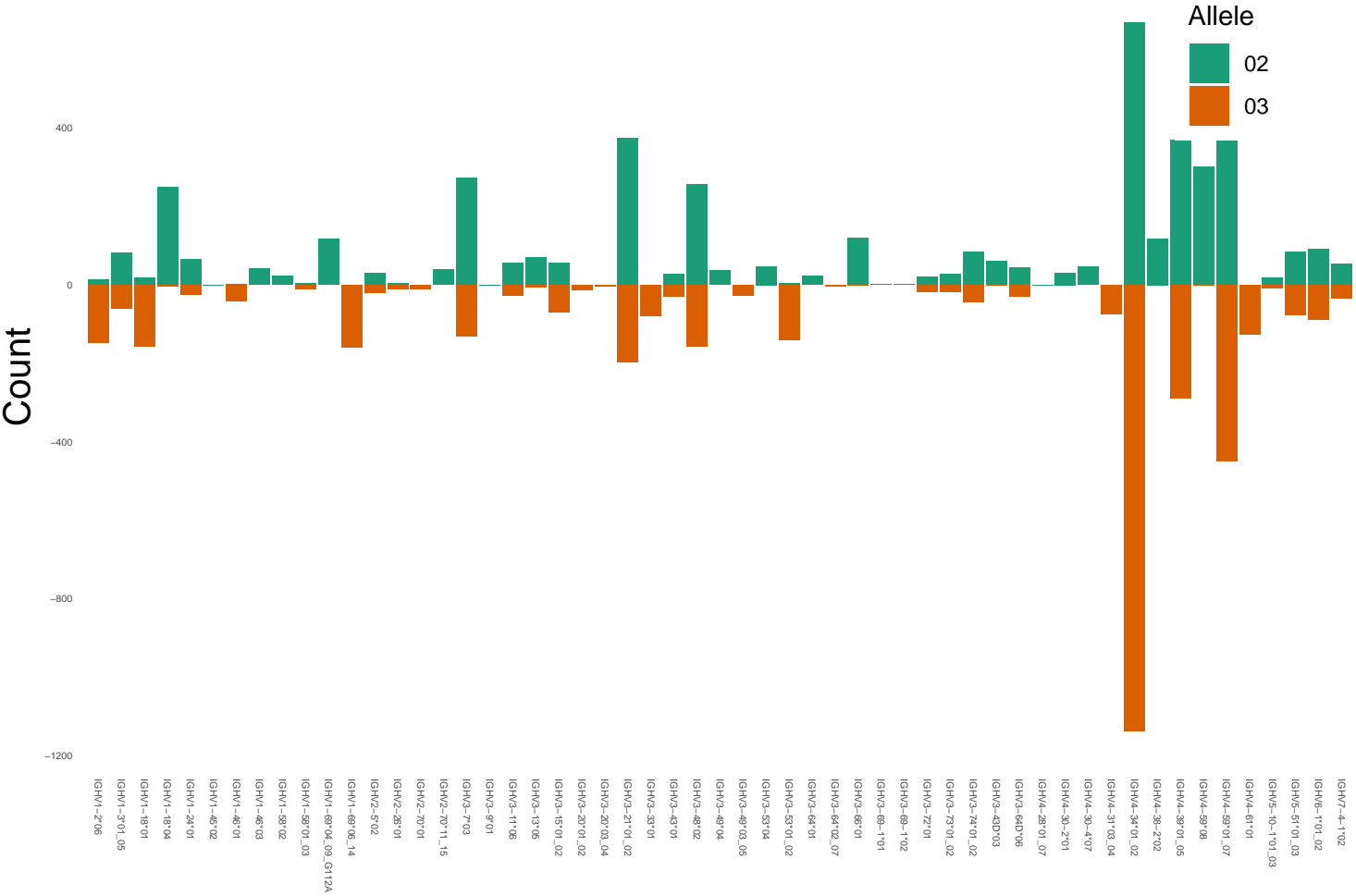
IGHV6-1*01_02

1721 sequences assigned
807 (46.9%) exact matches, in which:
803 unique CDR3
7 unique J





Sequence Count by IGHJ6 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.

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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.

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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.

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