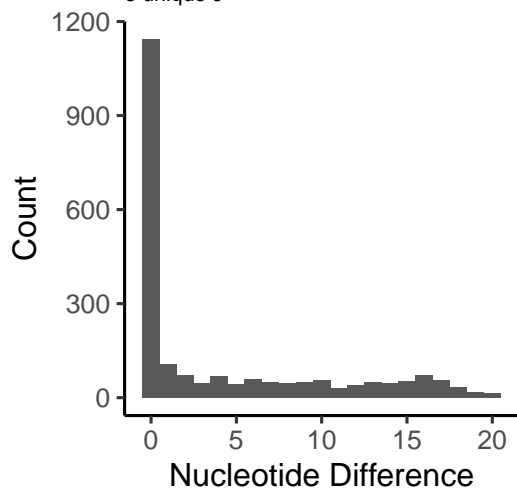


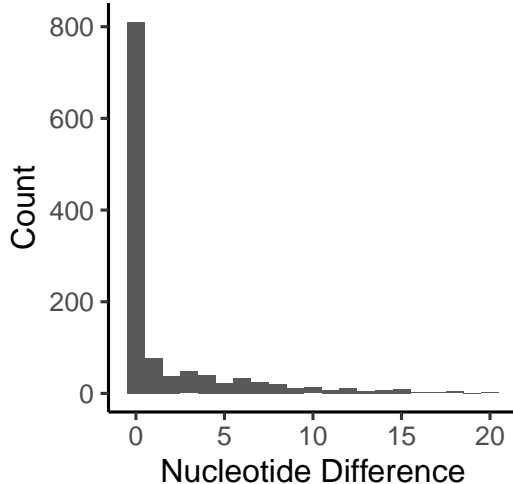
IGHV1-2*02

2203 sequences assigned
1143 (51.9%) exact matches, in which:
1138 unique CDR3
6 unique J



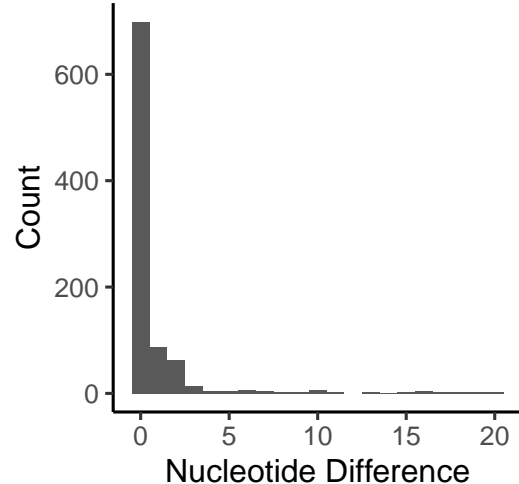
IGHV1-8*01

1205 sequences assigned
811 (67.3%) exact matches, in which:
809 unique CDR3
6 unique J



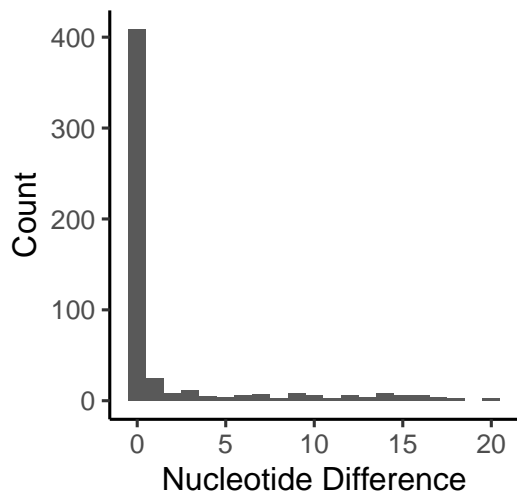
IGHV1-24*01

925 sequences assigned
699 (75.6%) exact matches, in which:
694 unique CDR3
6 unique J



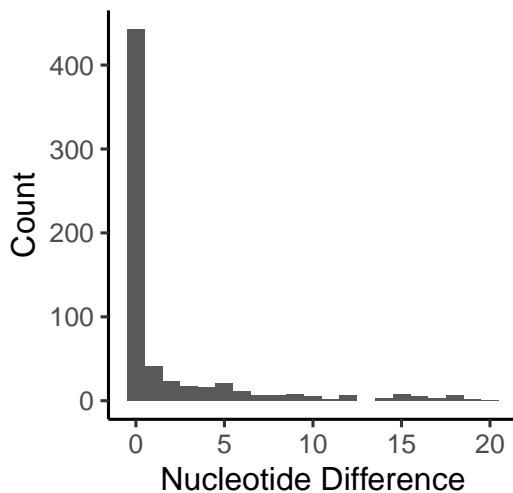
IGHV1-2*04

545 sequences assigned
409 (75%) exact matches, in which:
406 unique CDR3
6 unique J



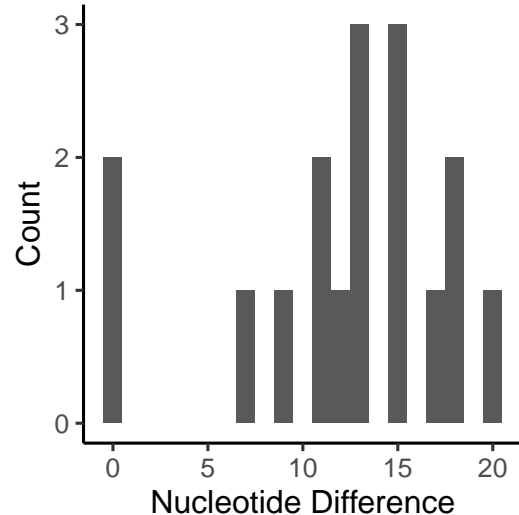
IGHV1-8*03

641 sequences assigned
443 (69.1%) exact matches, in which:
442 unique CDR3
6 unique J



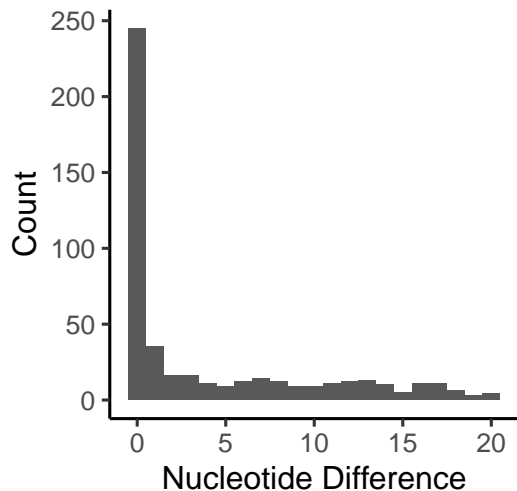
IGHV1-45*02

30 sequences assigned
2 (6.7%) exact matches, in which:
2 unique CDR3
2 unique J



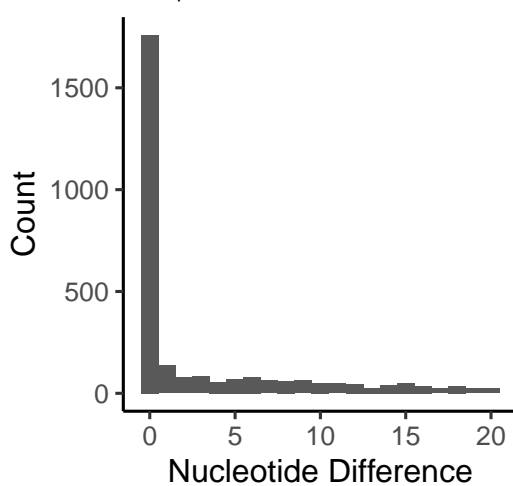
IGHV1-3*01_05

493 sequences assigned
245 (49.7%) exact matches, in which:
239 unique CDR3
6 unique J



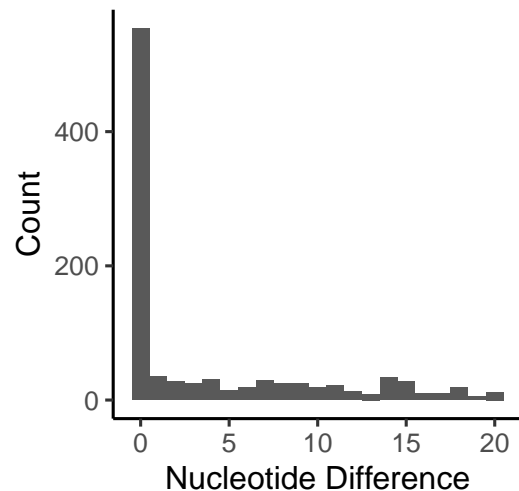
IGHV1-18*04

2972 sequences assigned
1759 (59.2%) exact matches, in which:
1753 unique CDR3
6 unique J



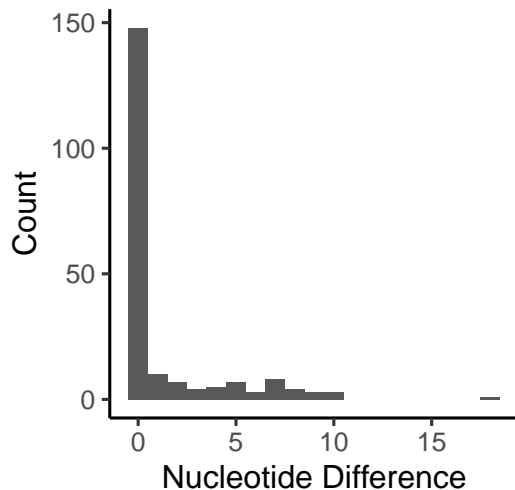
IGHV1-46*01

1039 sequences assigned
554 (53.3%) exact matches, in which:
549 unique CDR3
6 unique J



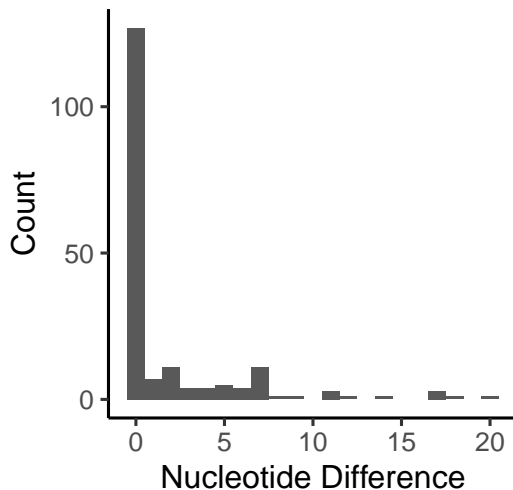
IGHV1–58*01_03

204 sequences assigned
148 (72.5%) exact matches, in which:
148 unique CDR3
6 unique J



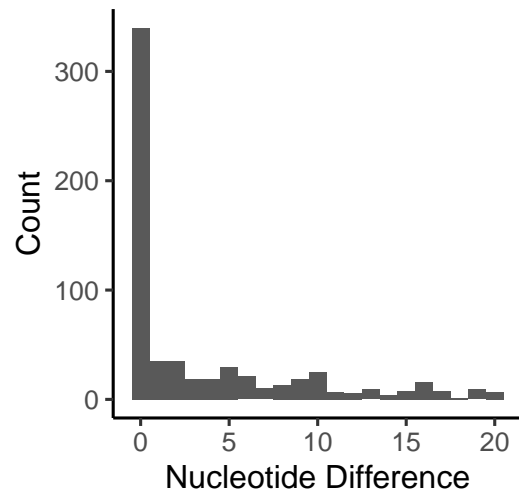
IGHV2–70*01

185 sequences assigned
127 (68.6%) exact matches, in which:
117 unique CDR3
5 unique J



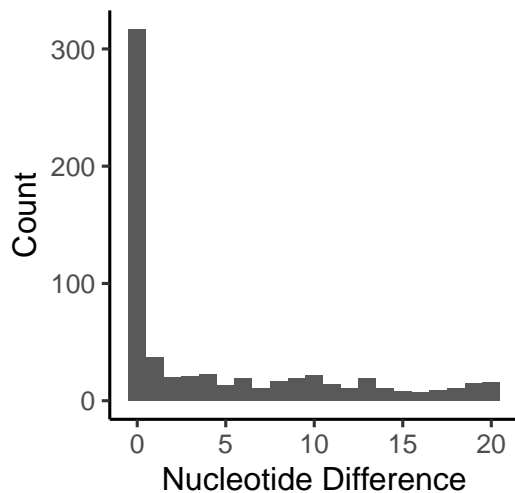
IGHV3–9*01

657 sequences assigned
340 (51.8%) exact matches, in which:
324 unique CDR3
6 unique J



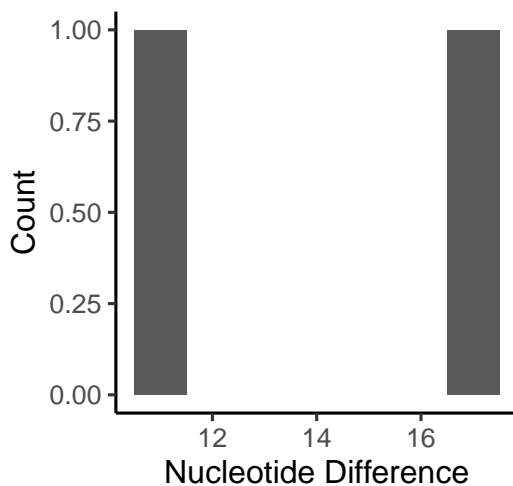
IGHV2–5*01

688 sequences assigned
317 (46.1%) exact matches, in which:
314 unique CDR3
6 unique J



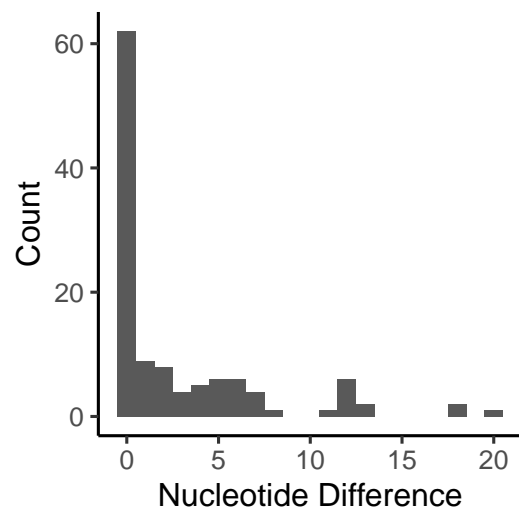
IGHV2–70D*04

2 sequences assigned
No exact matches.



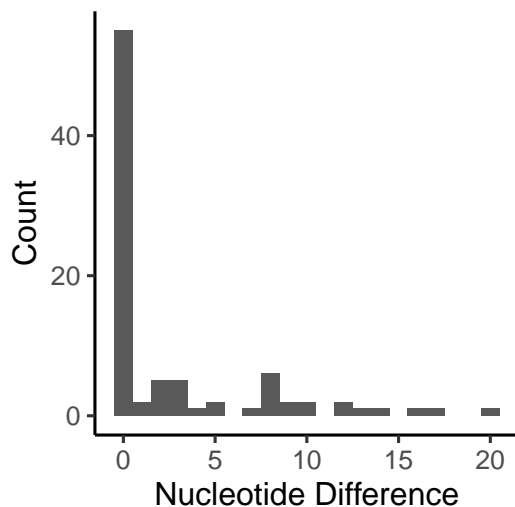
IGHV3–9*03

118 sequences assigned
62 (52.5%) exact matches, in which:
61 unique CDR3
5 unique J



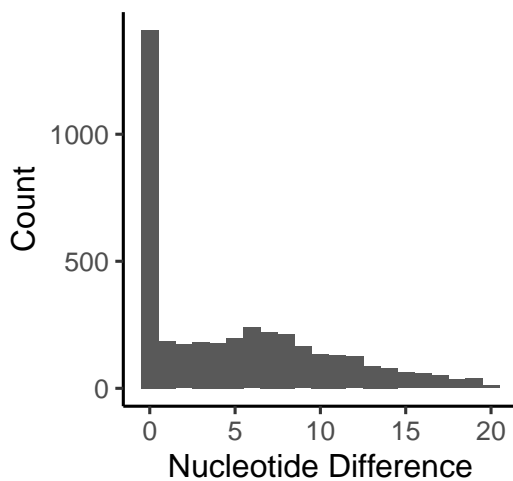
IGHV2–26*01

91 sequences assigned
55 (60.4%) exact matches, in which:
55 unique CDR3
6 unique J



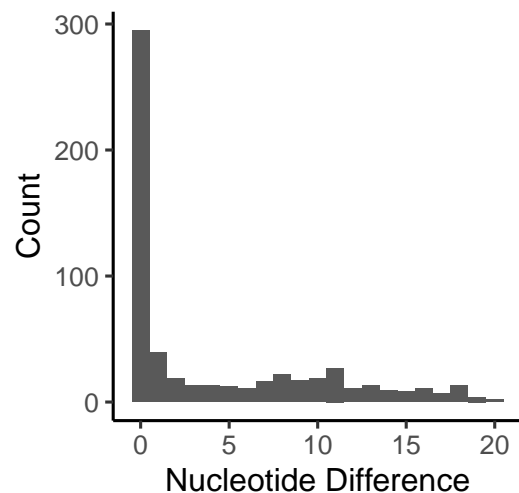
IGHV3–7*01

4046 sequences assigned
1410 (34.8%) exact matches, in which:
1351 unique CDR3
6 unique J



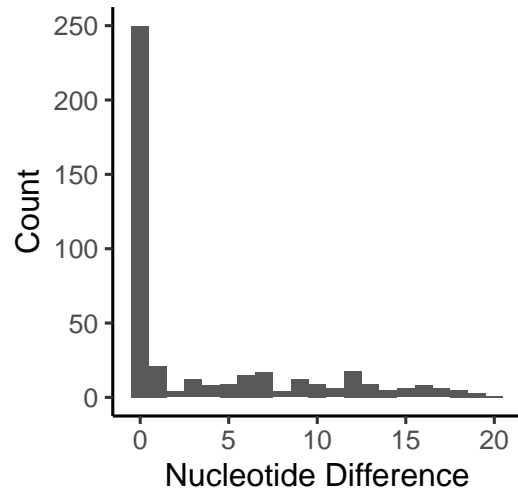
IGHV3–11*01

605 sequences assigned
295 (48.8%) exact matches, in which:
268 unique CDR3
6 unique J



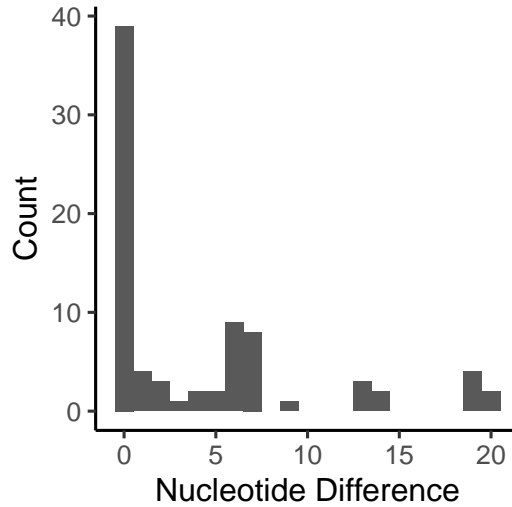
IGHV3-11*04

455 sequences assigned
250 (54.9%) exact matches, in which:
229 unique CDR3
6 unique J



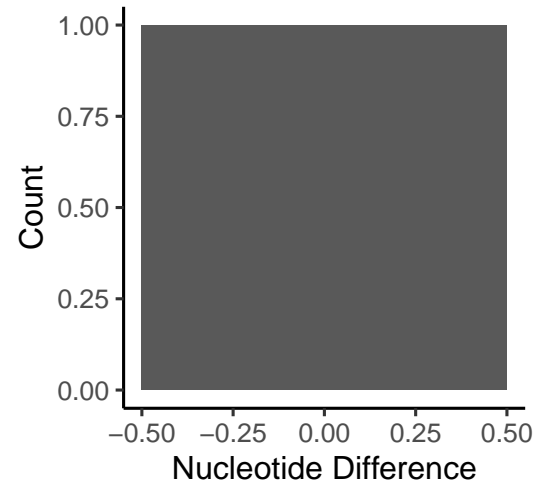
IGHV3-20*01_02

80 sequences assigned
39 (48.8%) exact matches, in which:
36 unique CDR3
5 unique J



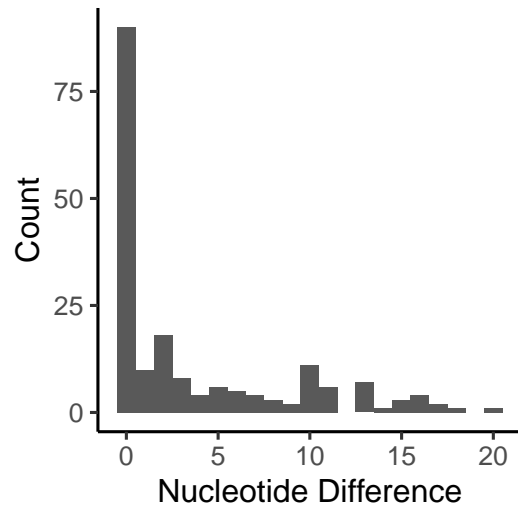
IGHV3-30-3*01

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



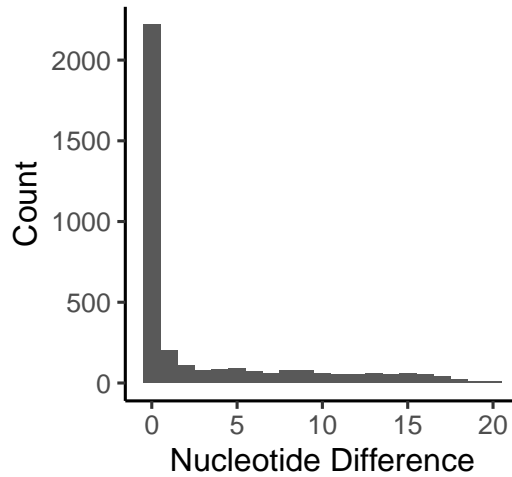
IGHV3-13*01

189 sequences assigned
90 (47.6%) exact matches, in which:
88 unique CDR3
5 unique J



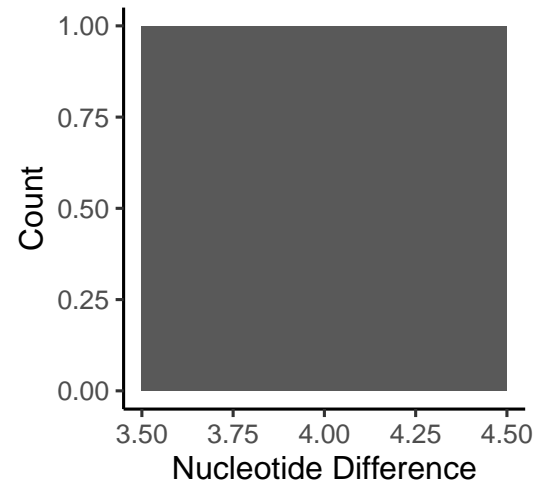
IGHV3-21*01_02

3801 sequences assigned
2219 (58.4%) exact matches, in which:
2139 unique CDR3
6 unique J



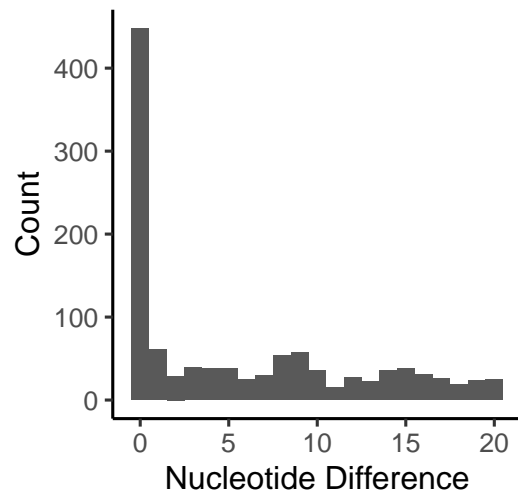
IGHV3-30-3*03

2 sequences assigned
No exact matches.



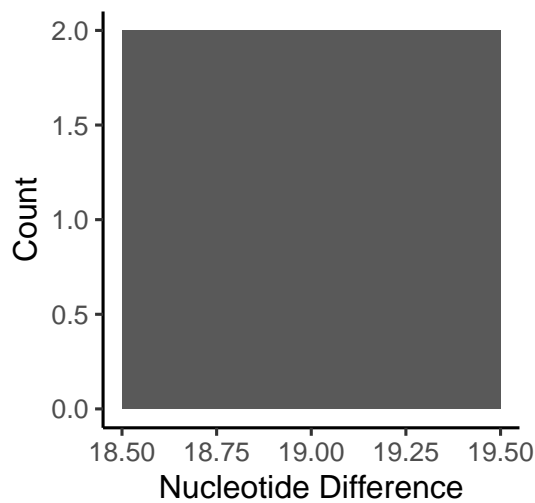
IGHV3-15*01_02

1218 sequences assigned
448 (36.8%) exact matches, in which:
413 unique CDR3
6 unique J



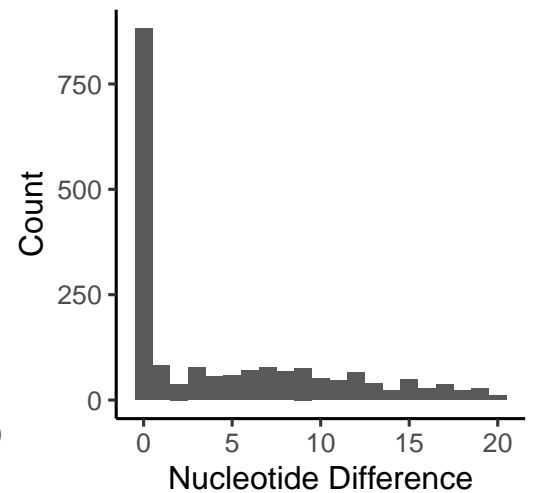
IGHV3-22*01_02

2 sequences assigned
No exact matches.



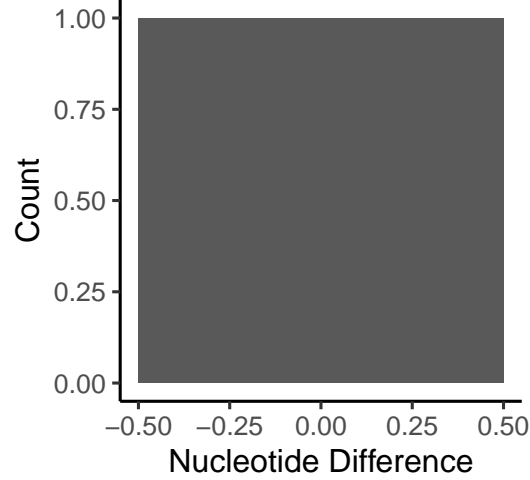
IGHV3-33*01

1987 sequences assigned
882 (44.4%) exact matches, in which:
851 unique CDR3
6 unique J



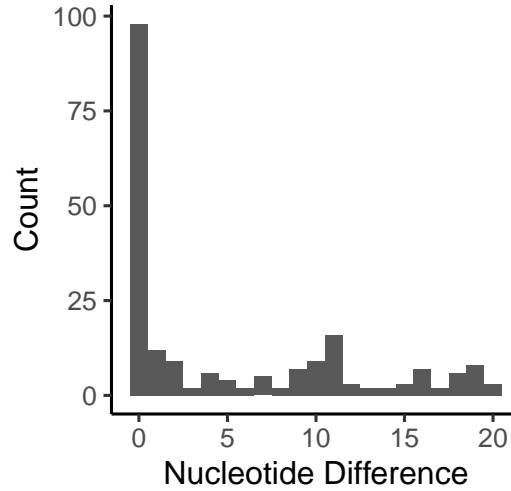
IGHV3–35*01

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



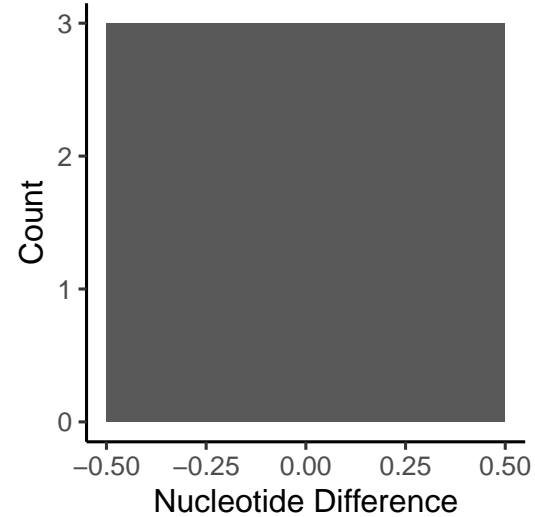
IGHV3–49*03_05

230 sequences assigned
98 (42.6%) exact matches, in which:
91 unique CDR3
5 unique J



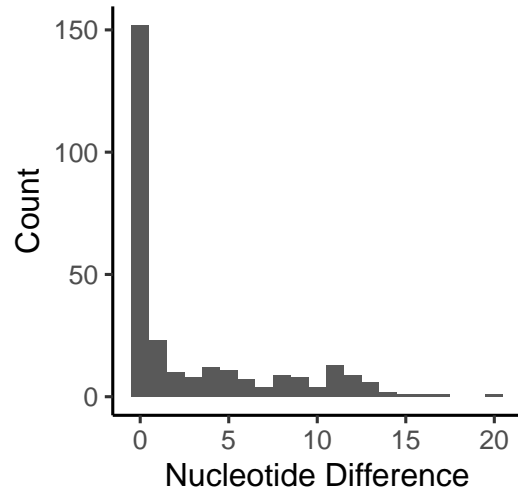
IGHV3–66*03

3 sequences assigned
3 (100%) exact matches, in which:
3 unique CDR3
2 unique J



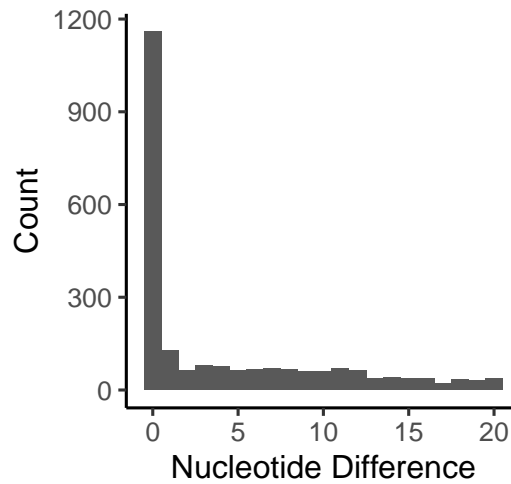
IGHV3–43*01

284 sequences assigned
152 (53.5%) exact matches, in which:
138 unique CDR3
6 unique J



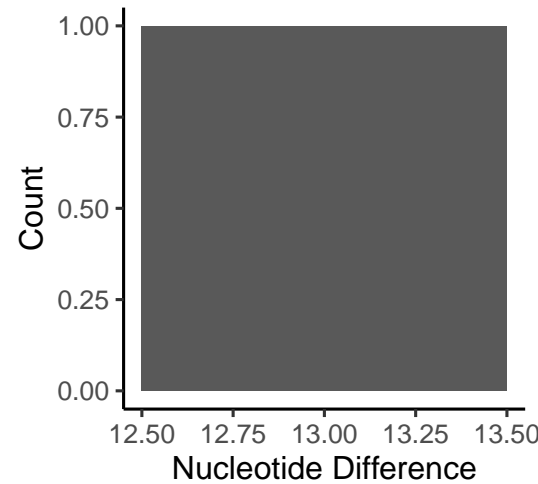
IGHV3–53*01_02

2415 sequences assigned
1159 (48%) exact matches, in which:
1116 unique CDR3
6 unique J



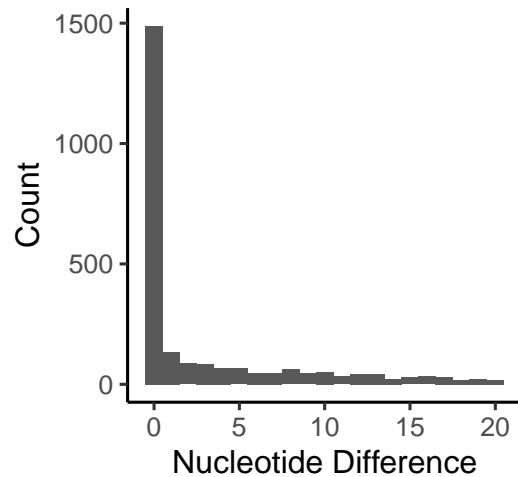
IGHV3–66*04

1 sequences assigned
No exact matches.



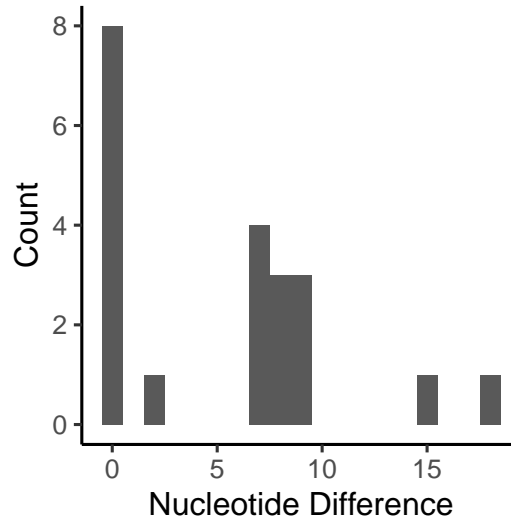
IGHV3–48*02

2526 sequences assigned
1488 (58.9%) exact matches, in which:
1398 unique CDR3
6 unique J



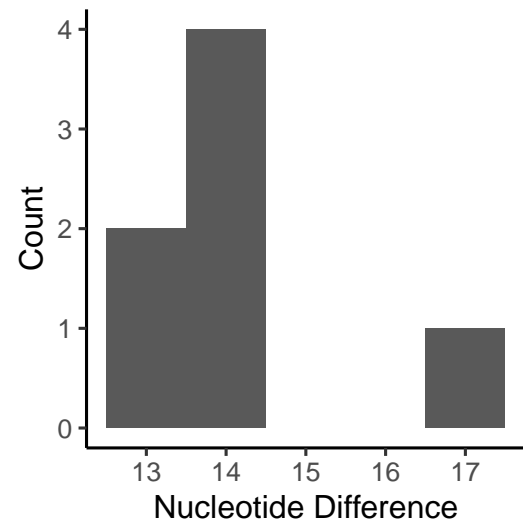
IGHV3–64*02_07

21 sequences assigned
8 (38.1%) exact matches, in which:
8 unique CDR3
3 unique J



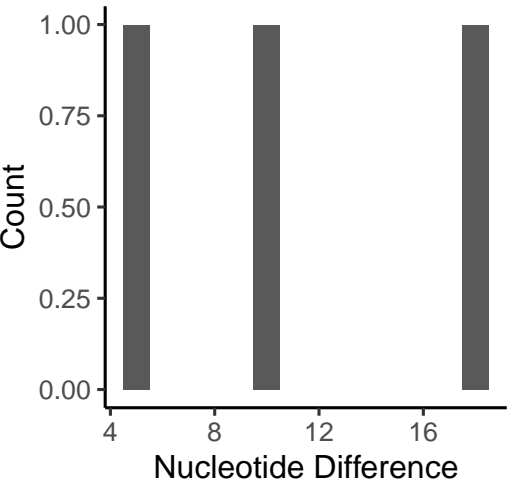
IGHV3–69–1*01

21 sequences assigned
No exact matches.



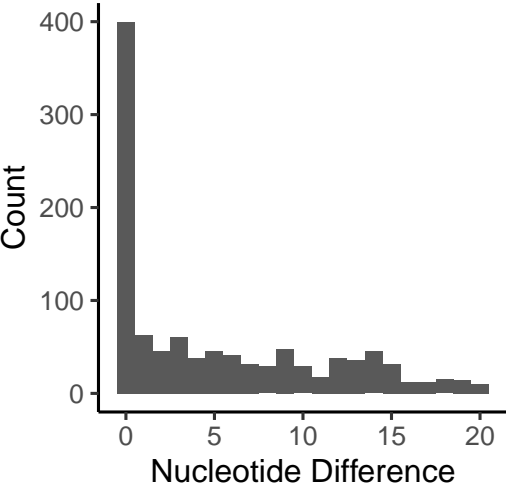
IGHV3-69-1*02

4 sequences assigned
No exact matches.



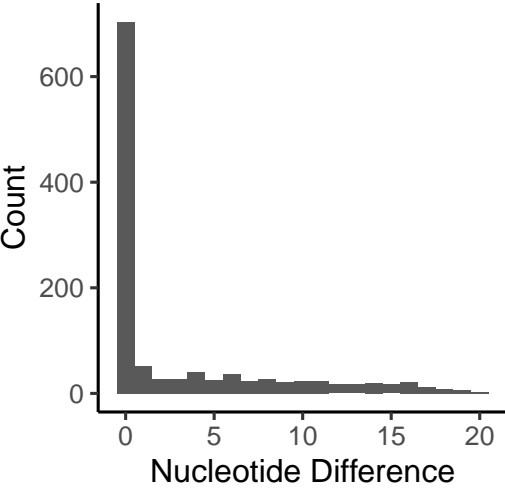
IGHV3-74*01_02

1133 sequences assigned
400 (35.3%) exact matches, in which:
380 unique CDR3
6 unique J



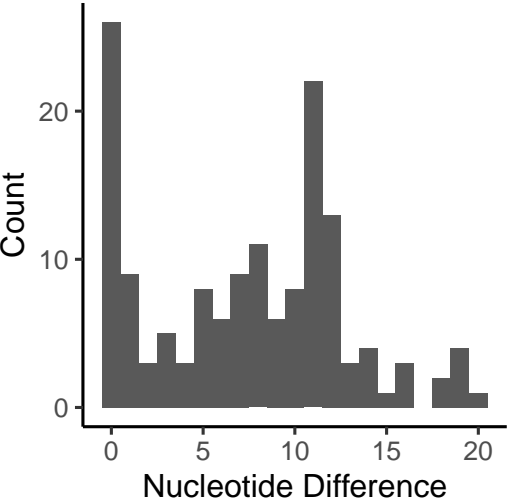
IGHV4-4*07

1193 sequences assigned
704 (59%) exact matches, in which:
676 unique CDR3
6 unique J



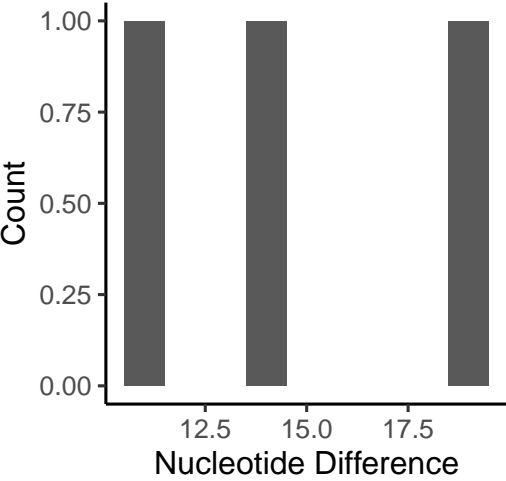
IGHV3-72*01

152 sequences assigned
26 (17.1%) exact matches, in which:
22 unique CDR3
5 unique J



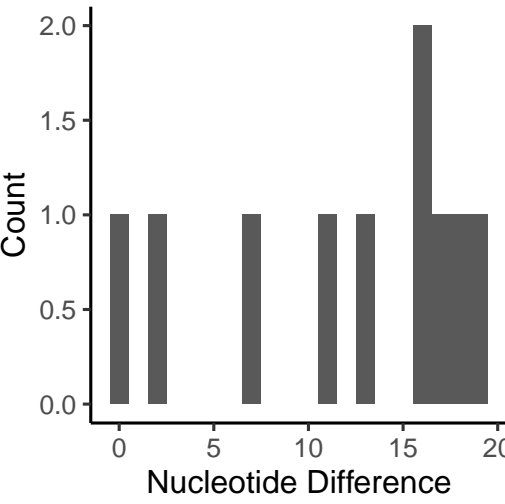
IGHV3-64D*06

3 sequences assigned
No exact matches.



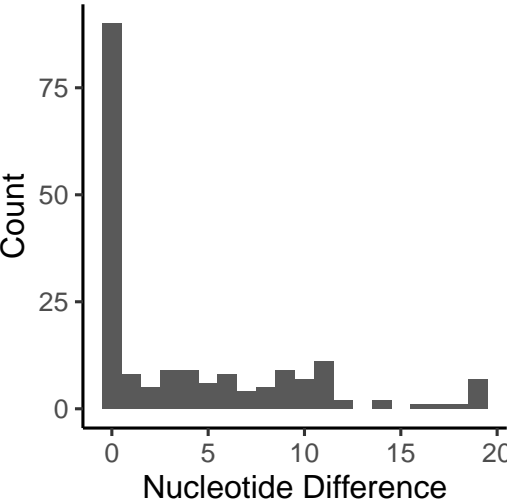
IGHV4-28*01_07

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



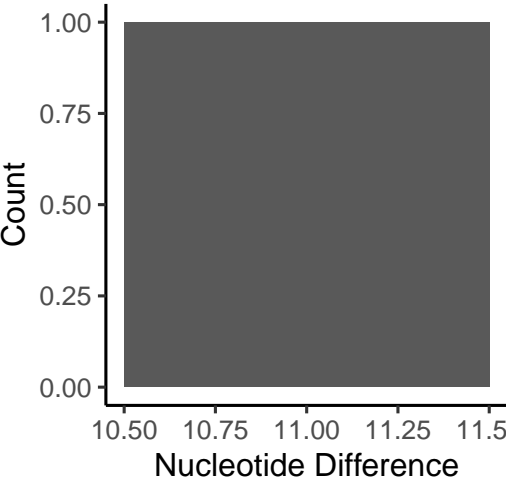
IGHV3-73*01_02

188 sequences assigned
90 (47.9%) exact matches, in which:
89 unique CDR3
6 unique J



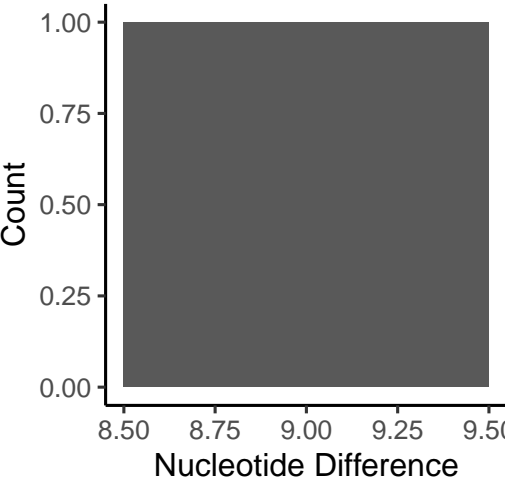
IGHV3-64D*09

1 sequences assigned
No exact matches.



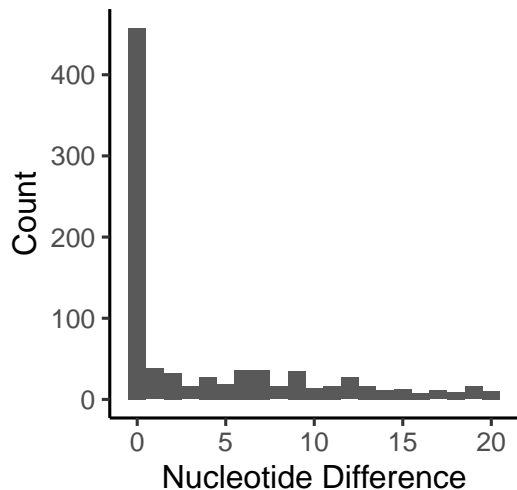
IGHV4-30-4*01

1 sequences assigned
No exact matches.



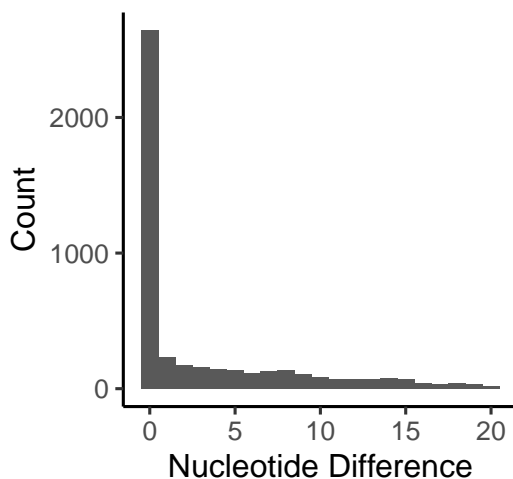
IGHV4-31*03_04

919 sequences assigned
458 (49.8%) exact matches, in which:
449 unique CDR3
6 unique J



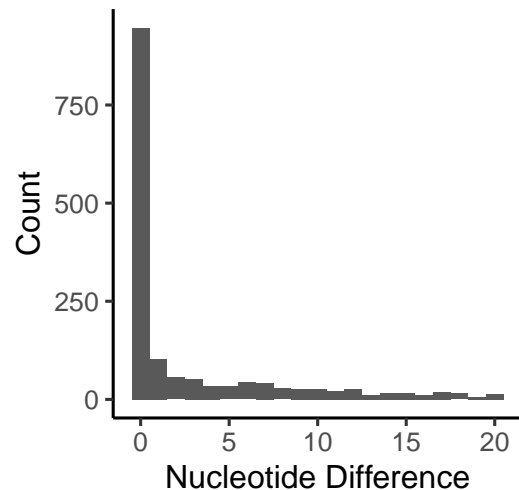
IGHV4-39*01_05

4811 sequences assigned
2642 (54.9%) exact matches, in which:
2597 unique CDR3
6 unique J



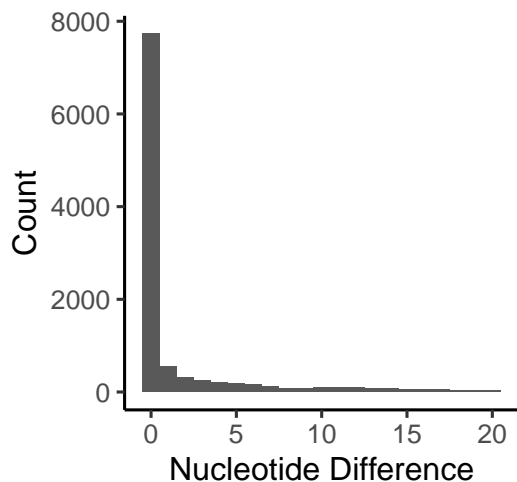
IGHV4-61*01

1617 sequences assigned
947 (58.6%) exact matches, in which:
919 unique CDR3
6 unique J



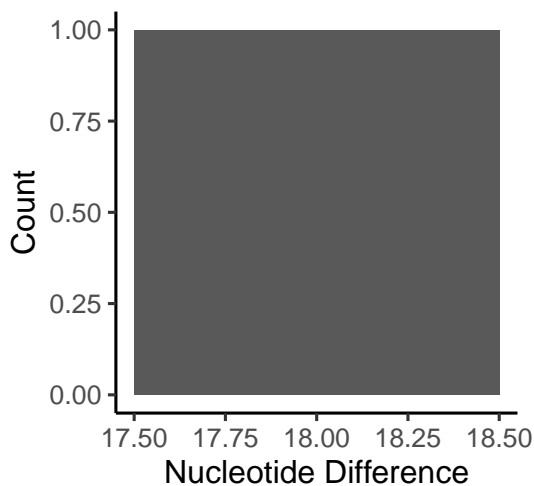
IGHV4-34*01_02

10564 sequences assigned
7731 (73.2%) exact matches, in which:
7602 unique CDR3
6 unique J



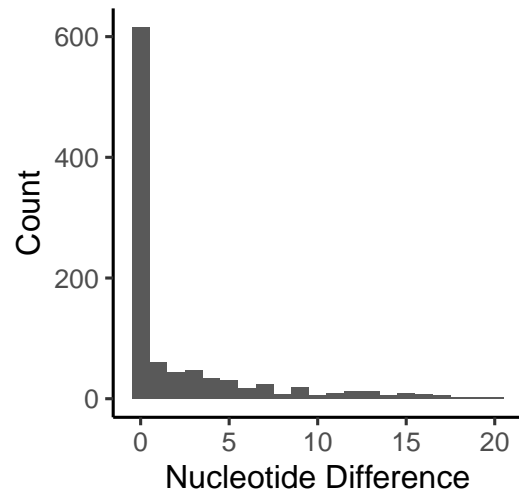
IGHV4-55*07

1 sequences assigned
No exact matches.



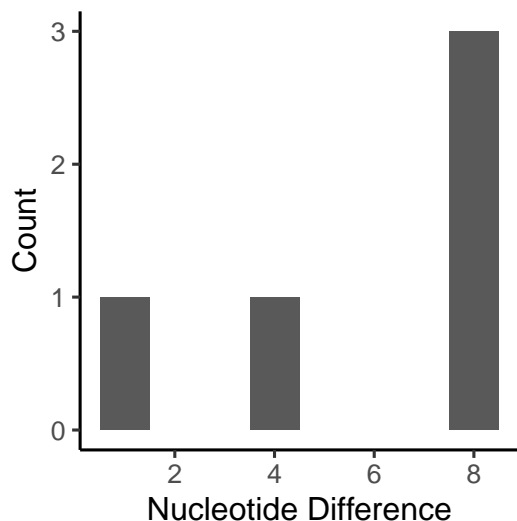
IGHV5-51*01_03

982 sequences assigned
616 (62.7%) exact matches, in which:
616 unique CDR3
6 unique J



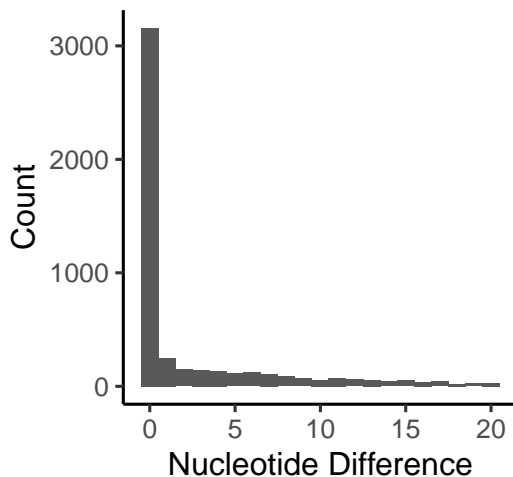
IGHV4-38-2*02

6 sequences assigned
No exact matches.



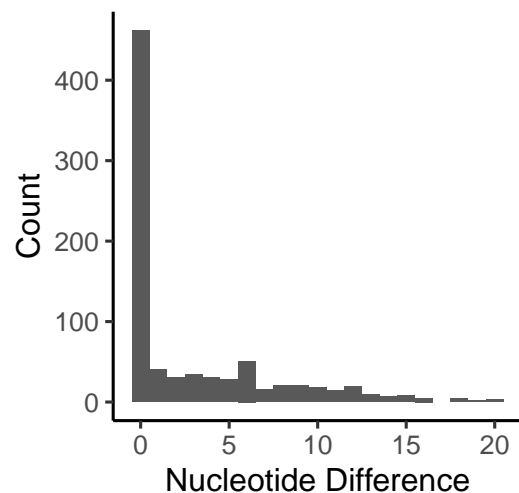
IGHV4-59*01_07

4970 sequences assigned
3157 (63.5%) exact matches, in which:
3094 unique CDR3
6 unique J



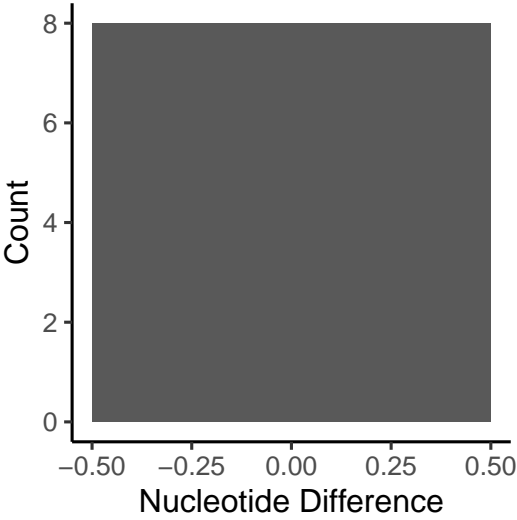
IGHV6-1*01_02

846 sequences assigned
462 (54.6%) exact matches, in which:
460 unique CDR3
6 unique J



IGHV7-4-1*01

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
4 unique J





Warning – no inferred sequences found.

Warning – no inferred sequences found.

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.