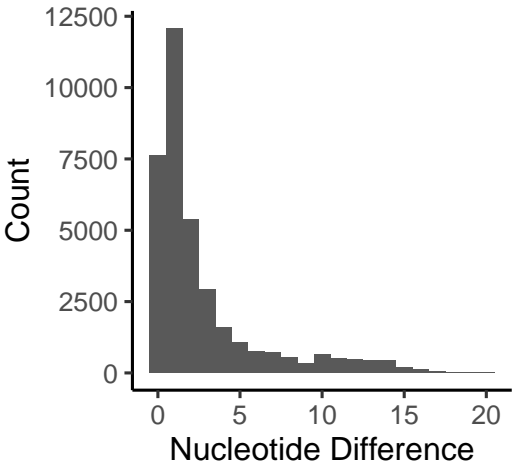


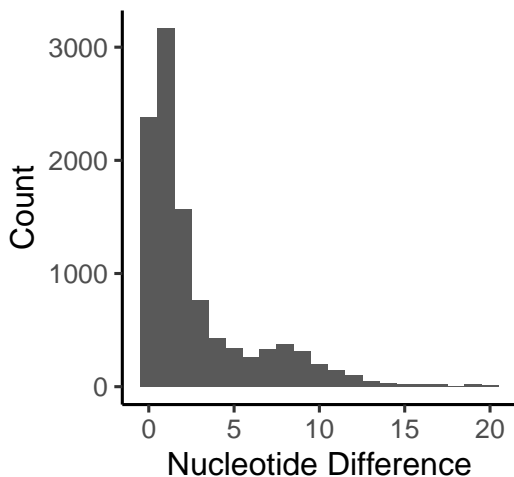
IGHV1-2*02

36270 sequences assigned
7631 (21%) exact matches, in which:
6108 unique CDR3
7 unique J



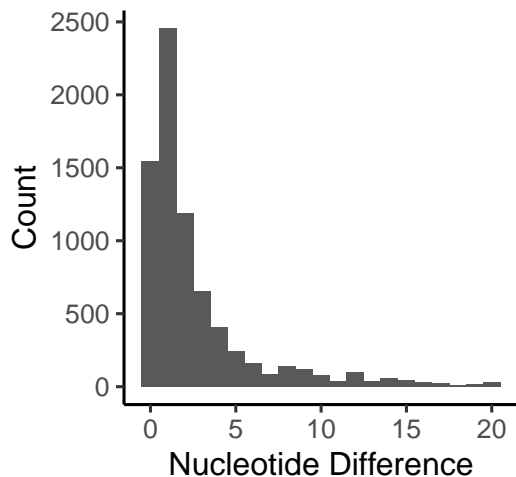
IGHV1-8*01

10610 sequences assigned
2381 (22.4%) exact matches, in which:
1997 unique CDR3
7 unique J



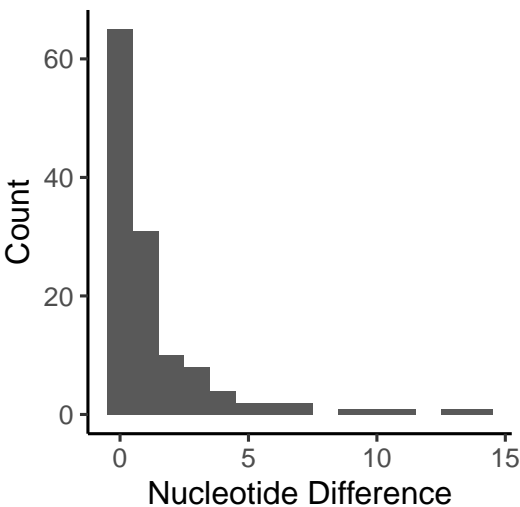
IGHV1-24*01

7689 sequences assigned
1545 (20.1%) exact matches, in which:
1251 unique CDR3
7 unique J



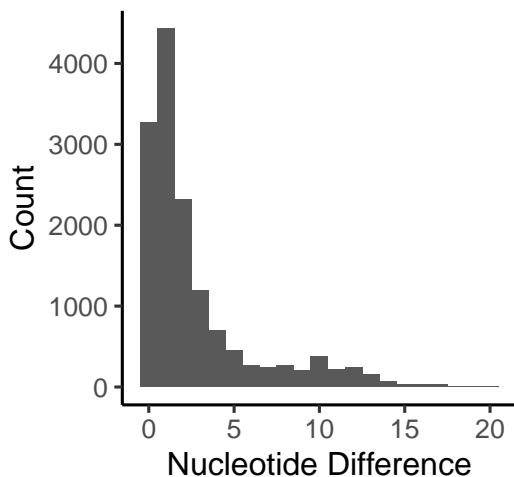
IGHV1-3*02

130 sequences assigned
65 (50%) exact matches, in which:
64 unique CDR3
6 unique J



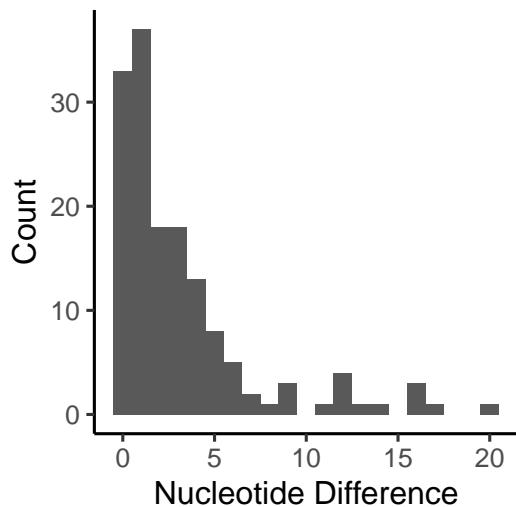
IGHV1-18*01

14569 sequences assigned
3268 (22.4%) exact matches, in which:
2729 unique CDR3
7 unique J



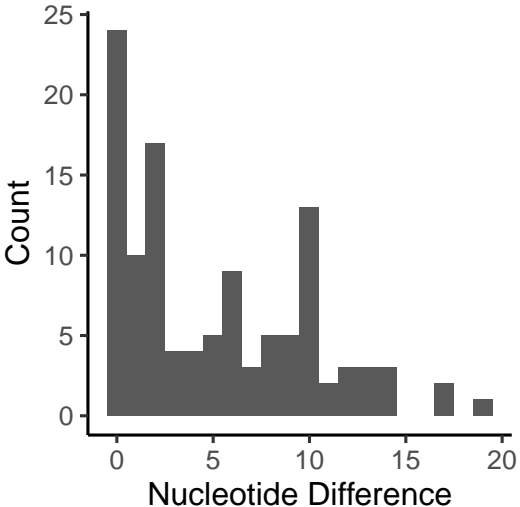
IGHV1-45*02

157 sequences assigned
33 (21%) exact matches, in which:
31 unique CDR3
6 unique J



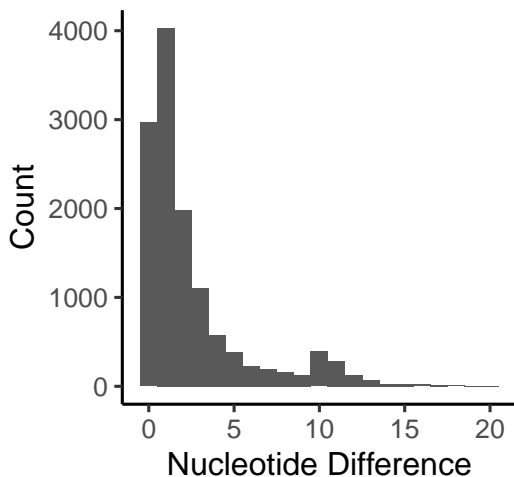
IGHV1-3*02_T296C_T300C

113 sequences assigned
24 (21.2%) exact matches, in which:
24 unique CDR3
5 unique J



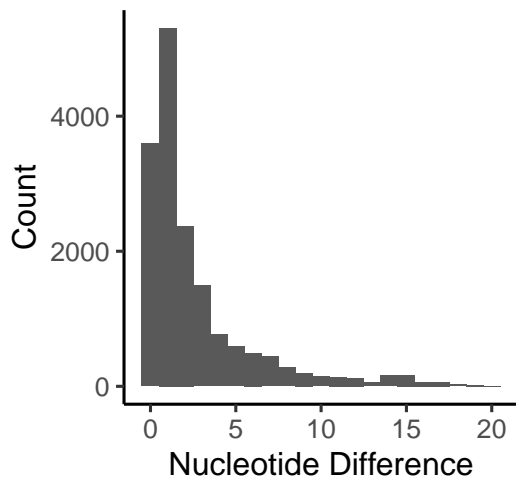
IGHV1-18*04

12810 sequences assigned
2966 (23.2%) exact matches, in which:
2451 unique CDR3
7 unique J



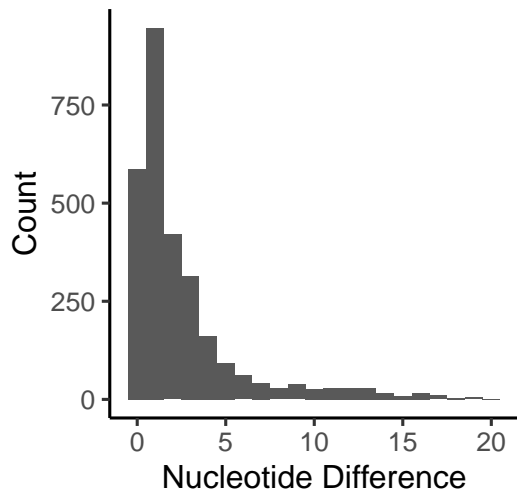
IGHV1-46*01

16695 sequences assigned
3594 (21.5%) exact matches, in which:
2978 unique CDR3
7 unique J



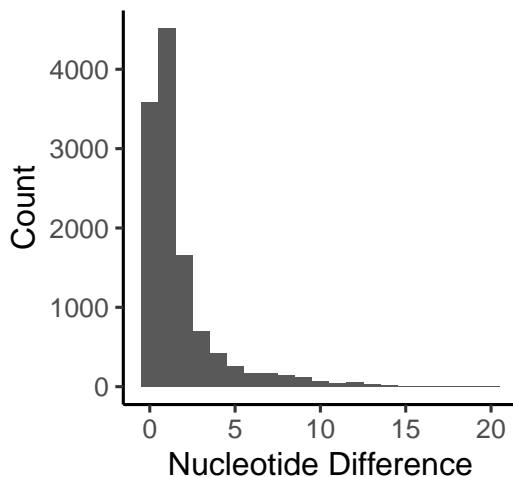
IGHV1–58*02

2896 sequences assigned
587 (20.3%) exact matches, in which:
461 unique CDR3
7 unique J



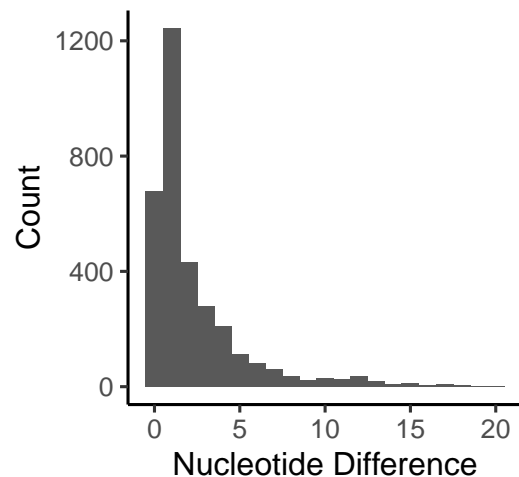
IGHV1–69*08_C191T

12013 sequences assigned
3581 (29.8%) exact matches, in which:
3045 unique CDR3
7 unique J



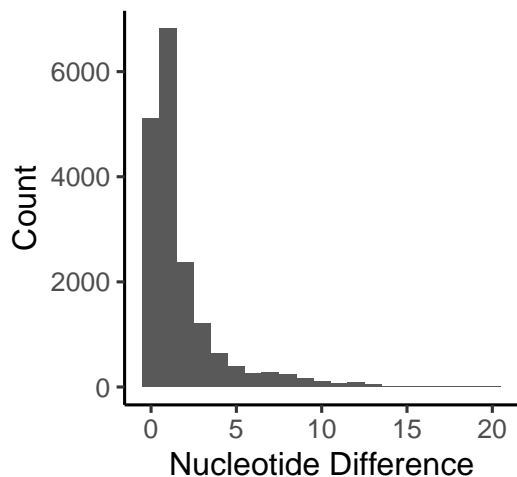
IGHV2–5*02

3380 sequences assigned
678 (20.1%) exact matches, in which:
559 unique CDR3
7 unique J



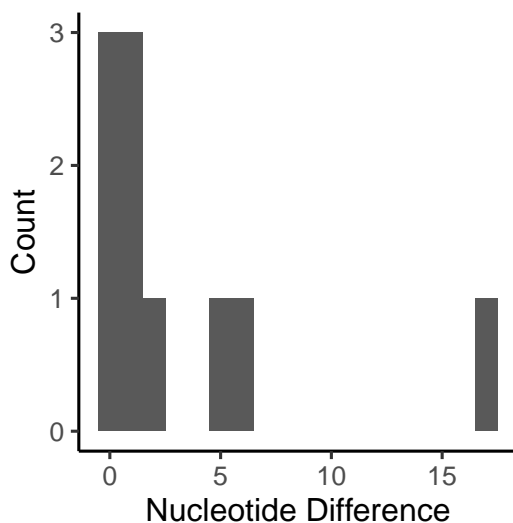
IGHV1–69*04

17911 sequences assigned
5102 (28.5%) exact matches, in which:
4207 unique CDR3
7 unique J



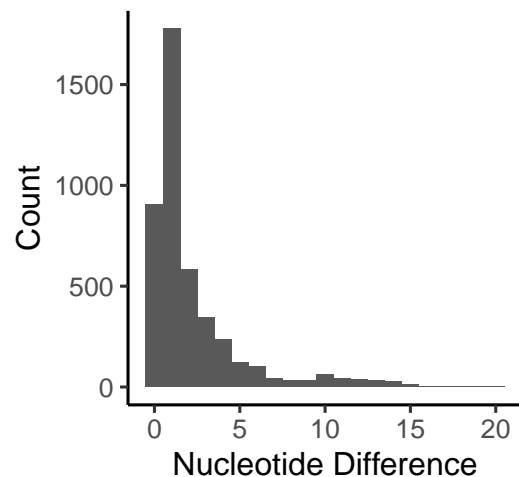
IGHV1–69D*01

11 sequences assigned
3 (27.3%) exact matches, in which:
3 unique CDR3
1 unique J



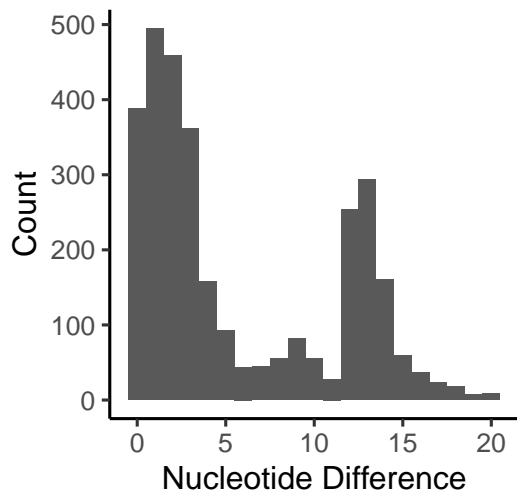
IGHV2–26*01

4551 sequences assigned
905 (19.9%) exact matches, in which:
726 unique CDR3
7 unique J



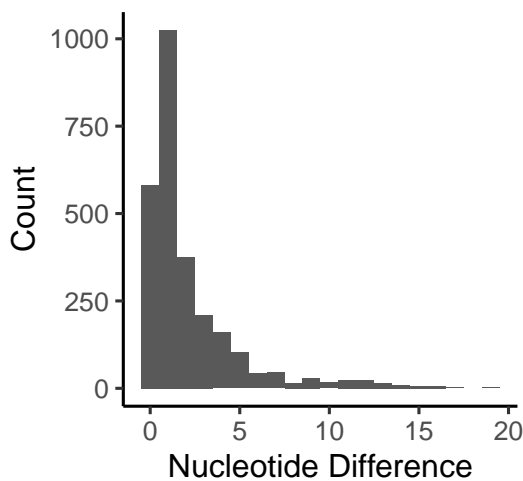
IGHV1–69*09

3342 sequences assigned
388 (11.6%) exact matches, in which:
346 unique CDR3
7 unique J



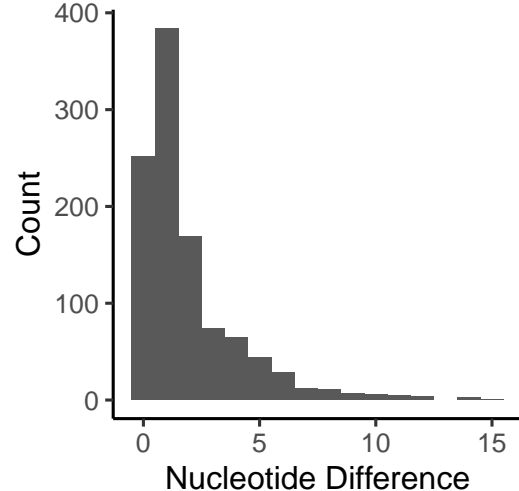
IGHV2–5*01

2731 sequences assigned
581 (21.3%) exact matches, in which:
472 unique CDR3
7 unique J



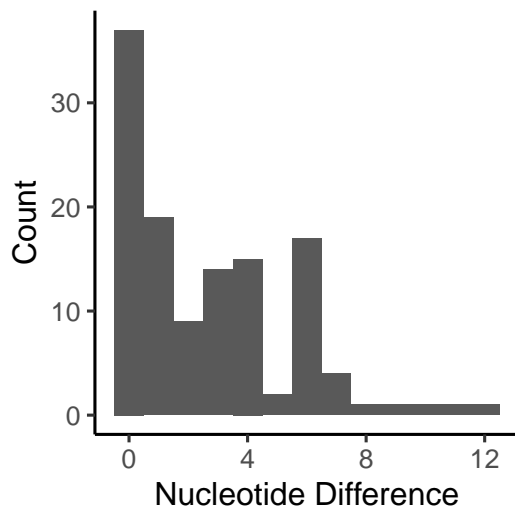
IGHV2–70*15

1102 sequences assigned
252 (22.9%) exact matches, in which:
197 unique CDR3
7 unique J



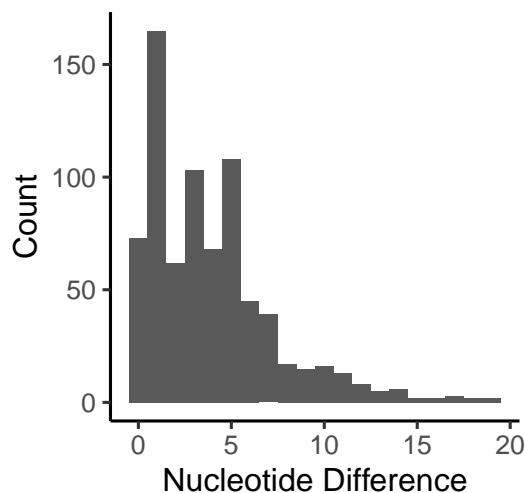
IGHV2-70*15_G303A

122 sequences assigned
37 (30.3%) exact matches, in which:
37 unique CDR3
6 unique J



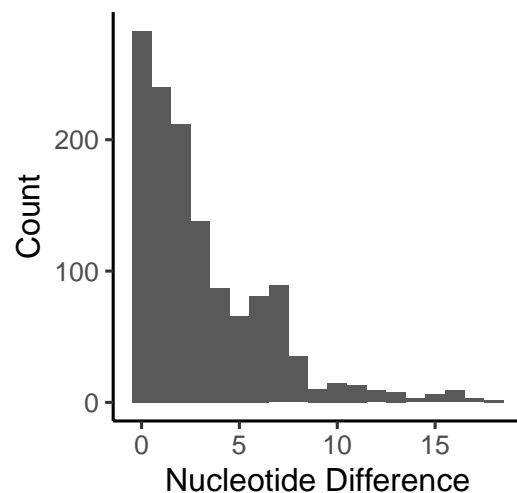
IGHV3-7*03

762 sequences assigned
73 (9.6%) exact matches, in which:
72 unique CDR3
7 unique J



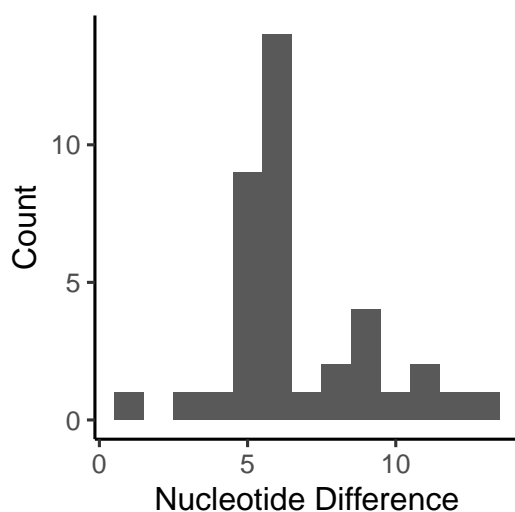
IGHV3-11*04

1355 sequences assigned
283 (20.9%) exact matches, in which:
281 unique CDR3
7 unique J



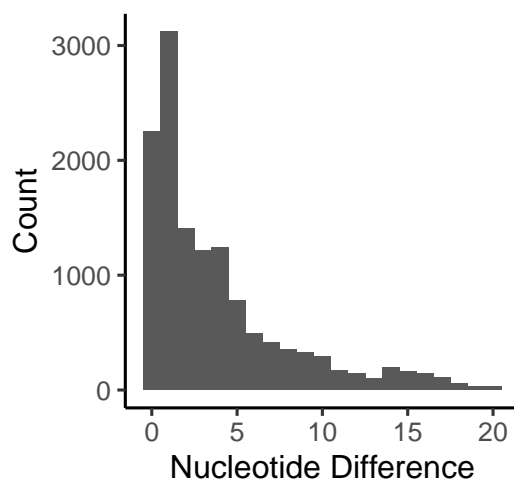
IGHV2-70D*04

40 sequences assigned
No exact matches.



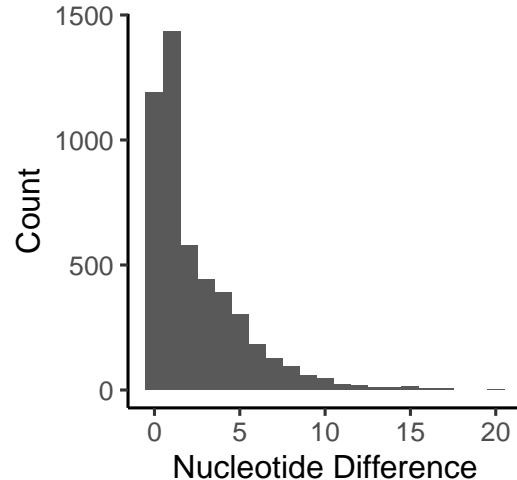
IGHV3-9*01

13195 sequences assigned
2253 (17.1%) exact matches, in which:
1792 unique CDR3
7 unique J



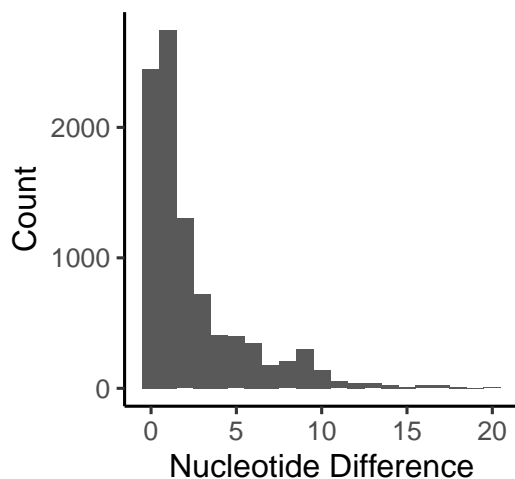
IGHV3-11*06

4989 sequences assigned
1191 (23.9%) exact matches, in which:
945 unique CDR3
7 unique J



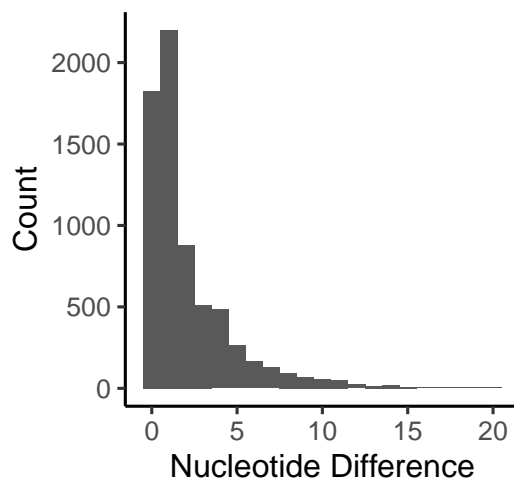
IGHV3-7*01

9480 sequences assigned
2448 (25.8%) exact matches, in which:
2046 unique CDR3
7 unique J



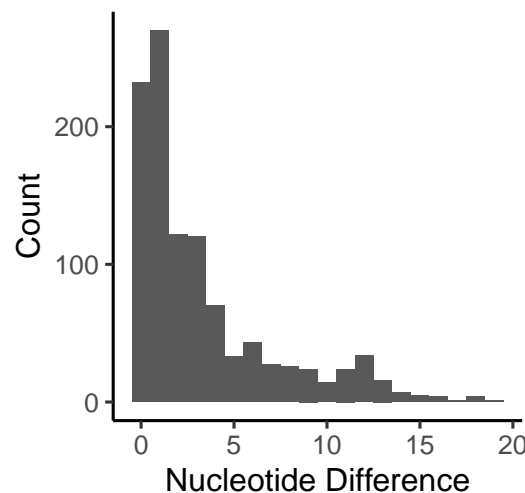
IGHV3-11*01

6928 sequences assigned
1827 (26.4%) exact matches, in which:
1456 unique CDR3
7 unique J



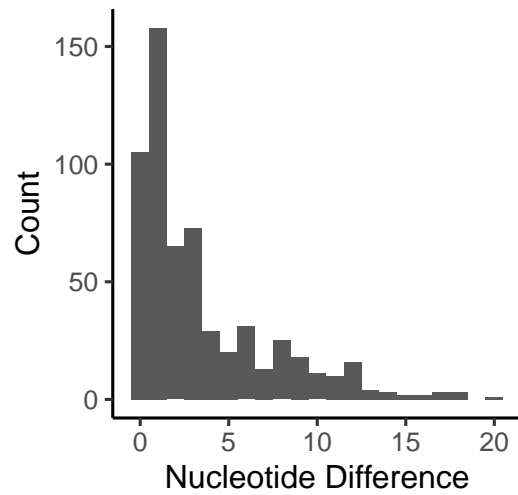
IGHV3-13*01

1080 sequences assigned
232 (21.5%) exact matches, in which:
188 unique CDR3
7 unique J



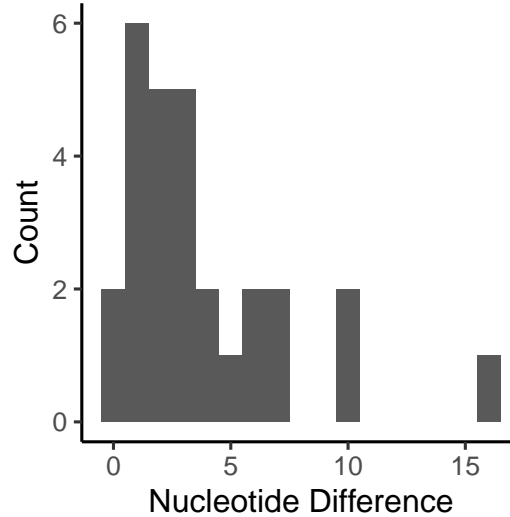
IGHV3-13*05

593 sequences assigned
105 (17.7%) exact matches, in which:
79 unique CDR3
6 unique J



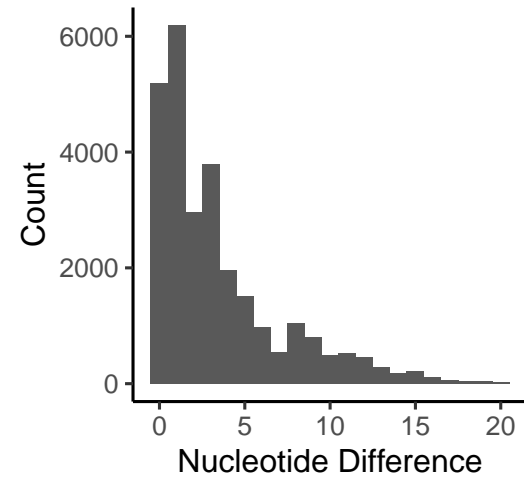
IGHV3-20*04

28 sequences assigned
2 (7.1%) exact matches, in which:
2 unique CDR3
2 unique J



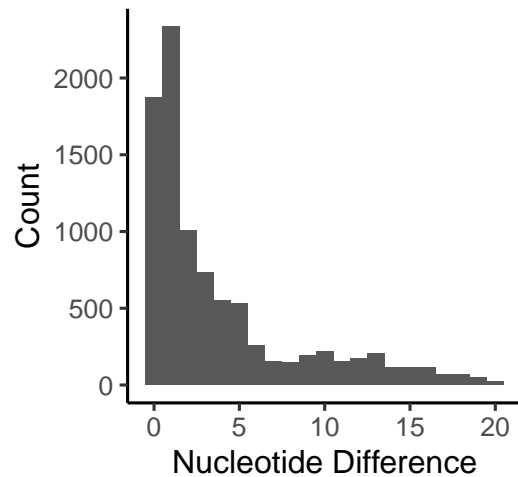
IGHV3-23*04

27675 sequences assigned
5186 (18.7%) exact matches, in which:
4153 unique CDR3
7 unique J



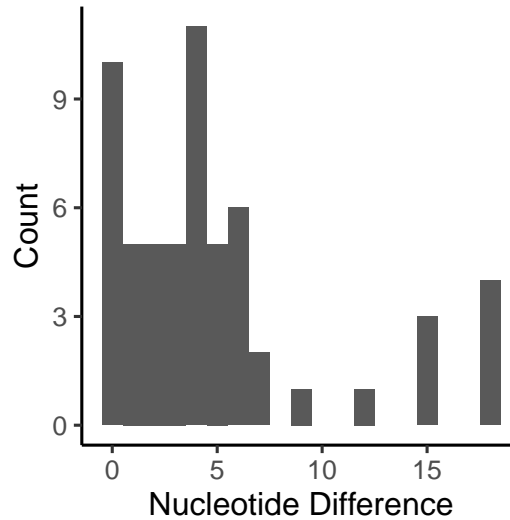
IGHV3-15*01

9245 sequences assigned
1872 (20.2%) exact matches, in which:
1460 unique CDR3
7 unique J



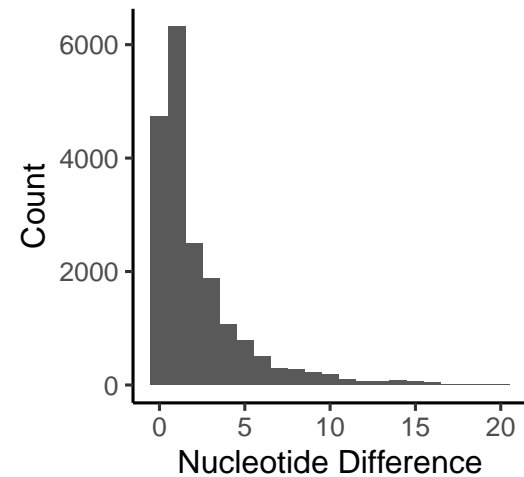
IGHV3-20*04_T279C_C280T_C281G_C282T_T283C

60 sequences assigned
10 (16.7%) exact matches, in which:
10 unique CDR3
4 unique J



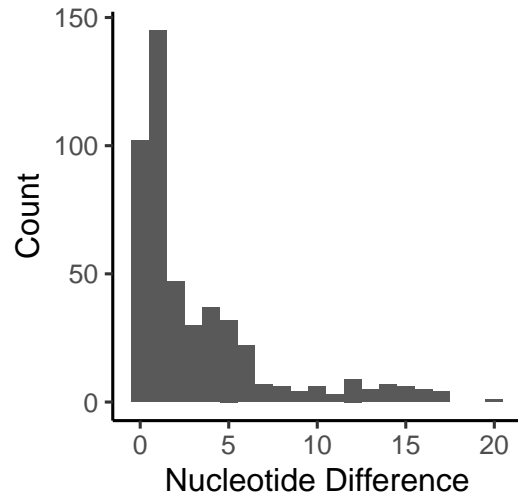
IGHV3-30-3*01

19299 sequences assigned
4733 (24.5%) exact matches, in which:
3631 unique CDR3
7 unique J



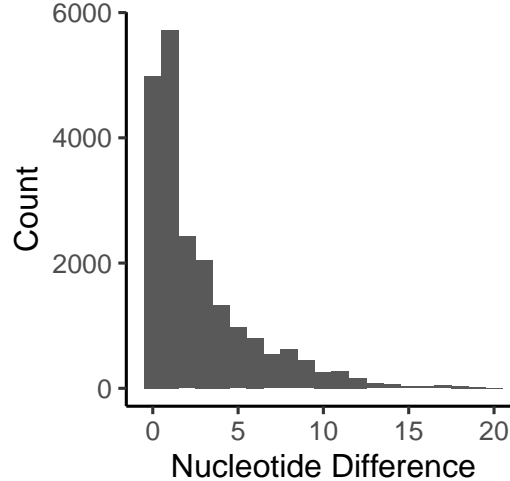
IGHV3-20*01

482 sequences assigned
102 (21.2%) exact matches, in which:
68 unique CDR3
4 unique J



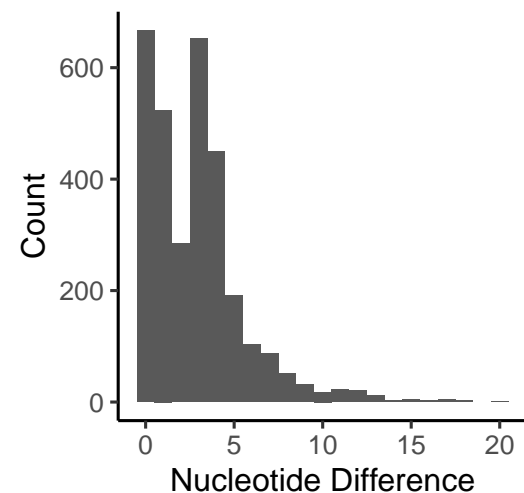
IGHV3-21*01

21035 sequences assigned
4984 (23.7%) exact matches, in which:
3732 unique CDR3
7 unique J



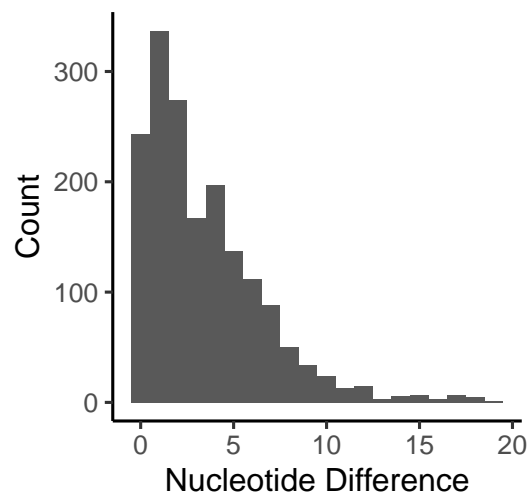
IGHV3-30-3*02_G75C

3137 sequences assigned
667 (21.3%) exact matches, in which:
640 unique CDR3
7 unique J



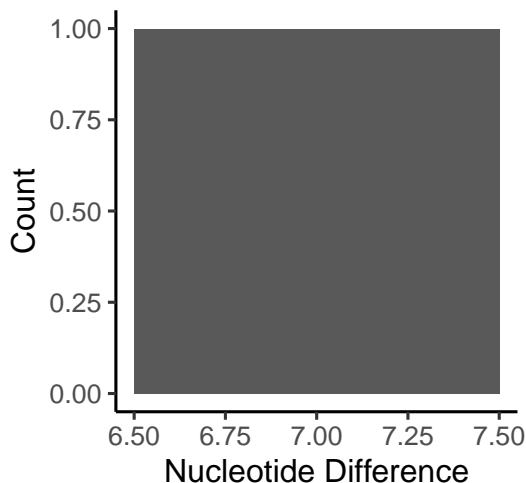
IGHV3–30*03_T288C

1728 sequences assigned
243 (14.1%) exact matches, in which:
238 unique CDR3
7 unique J



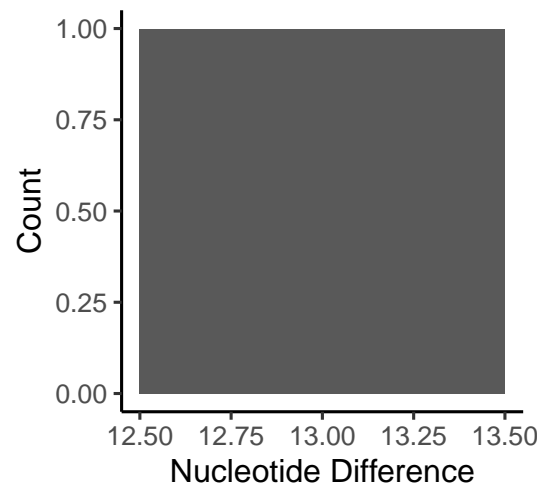
IGHV3–35*01

1 sequences assigned
No exact matches.



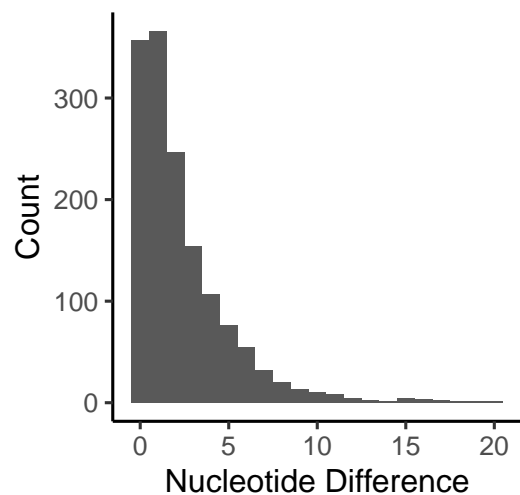
IGHV3–47*01

1 sequences assigned
No exact matches.



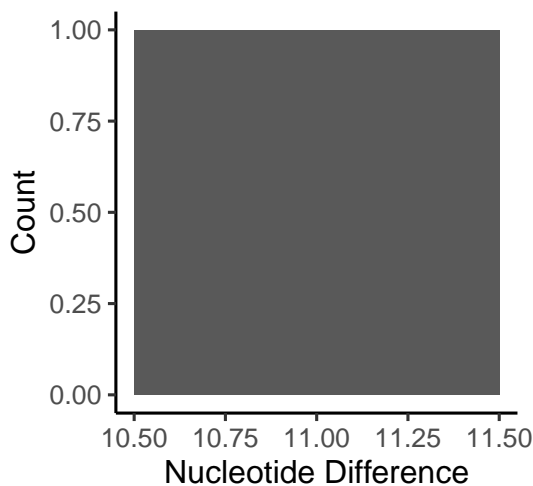
IGHV3–33*01

1472 sequences assigned
357 (24.3%) exact matches, in which:
347 unique CDR3
7 unique J



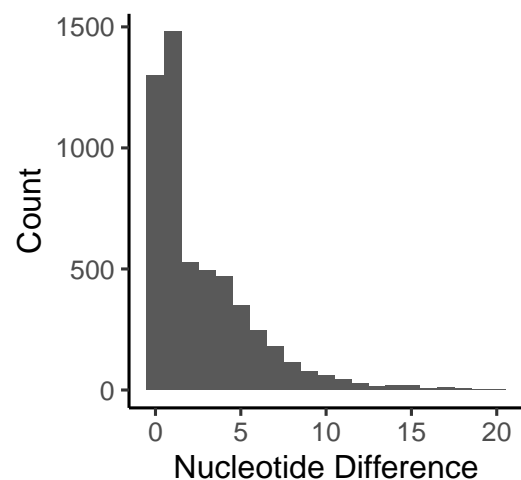
IGHV3–41*02

1 sequences assigned
No exact matches.



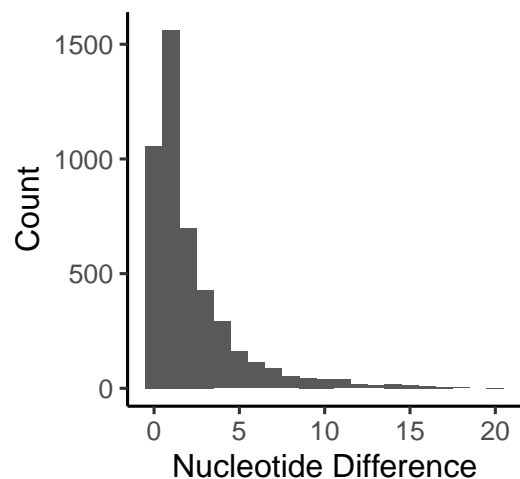
IGHV3–48*01

5447 sequences assigned
1300 (23.9%) exact matches, in which:
1062 unique CDR3
7 unique J



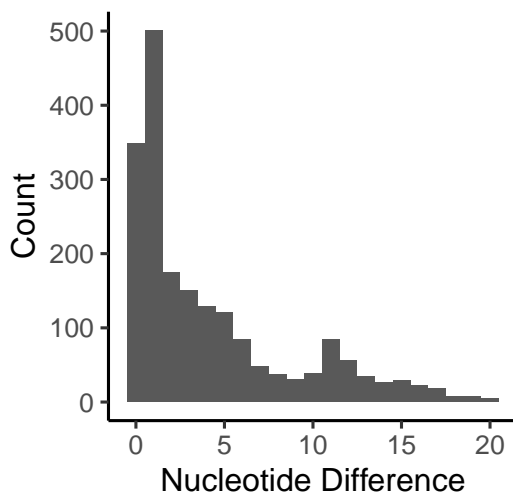
IGHV3–33*06

4665 sequences assigned
1056 (22.6%) exact matches, in which:
793 unique CDR3
7 unique J



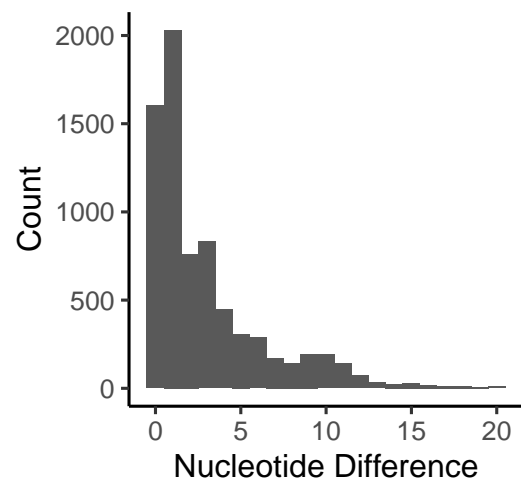
IGHV3–43*01

1968 sequences assigned
348 (17.7%) exact matches, in which:
287 unique CDR3
7 unique J



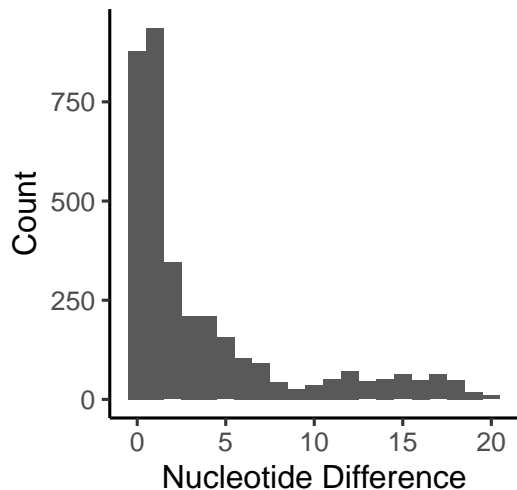
IGHV3–48*04

7359 sequences assigned
1603 (21.8%) exact matches, in which:
1271 unique CDR3
7 unique J



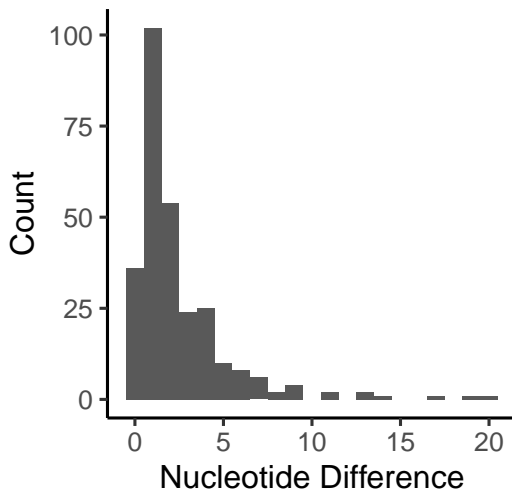
IGHV3-49*03

3585 sequences assigned
879 (24.5%) exact matches, in which:
736 unique CDR3
7 unique J



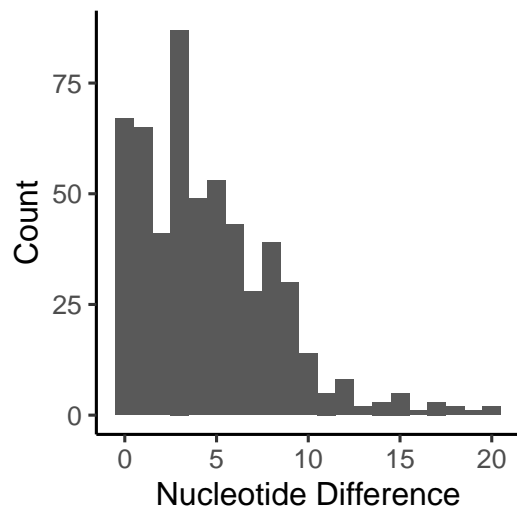
IGHV3-53*04_C300T

292 sequences assigned
36 (12.3%) exact matches, in which:
36 unique CDR3
7 unique J



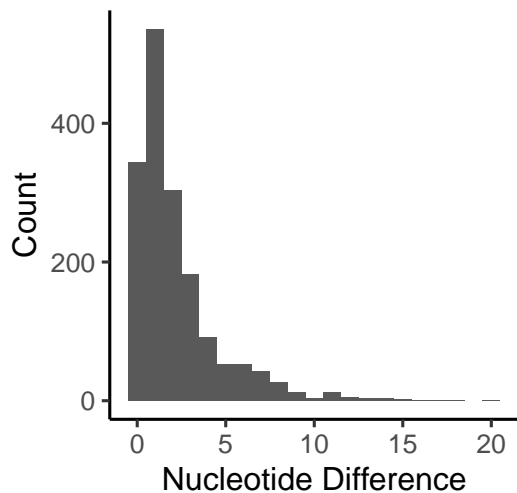
IGHV3-64*04_A210C

558 sequences assigned
67 (12%) exact matches, in which:
67 unique CDR3
7 unique J



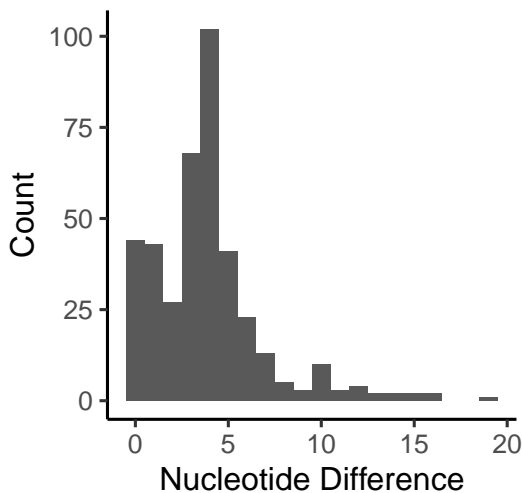
IGHV3-53*02

1687 sequences assigned
344 (20.4%) exact matches, in which:
275 unique CDR3
6 unique J



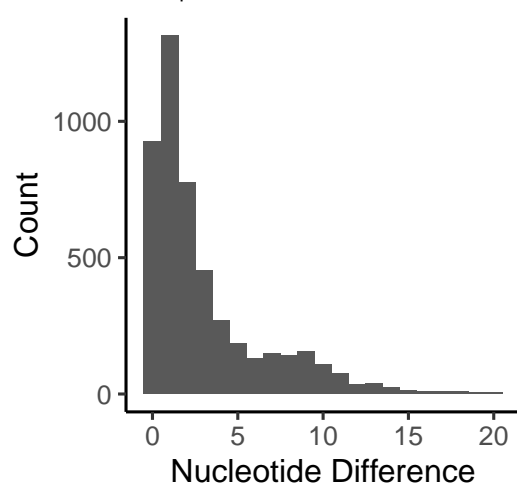
IGHV3-53*04_T267G_T2

396 sequences assigned
44 (11.1%) exact matches, in which:
44 unique CDR3
6 unique J



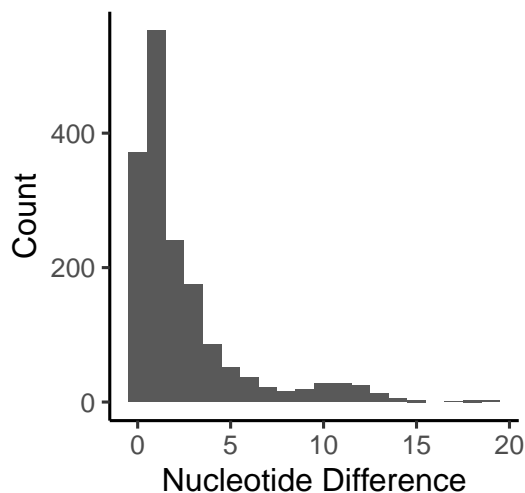
IGHV3-66*01

4890 sequences assigned
926 (18.9%) exact matches, in which:
723 unique CDR3
7 unique J



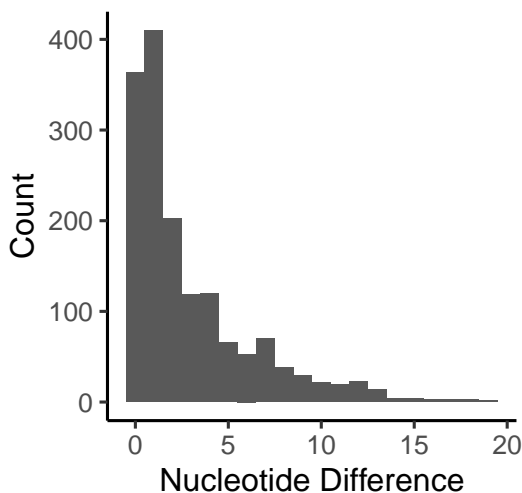
IGHV3-53*04

1692 sequences assigned
371 (21.9%) exact matches, in which:
298 unique CDR3
7 unique J



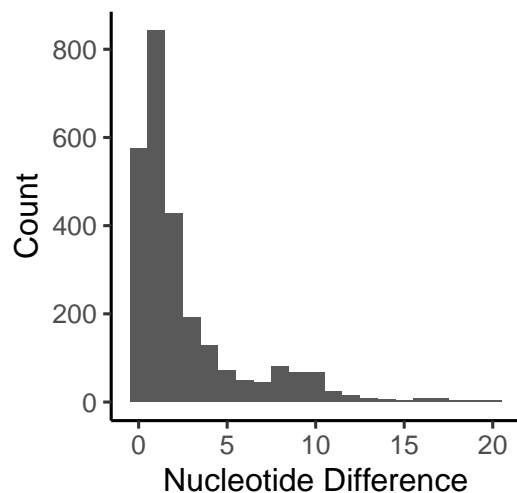
IGHV3-64*01

1578 sequences assigned
363 (23%) exact matches, in which:
311 unique CDR3
7 unique J



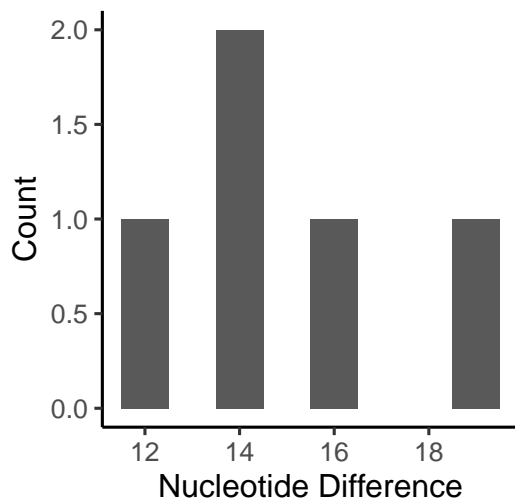
IGHV3-66*02

2644 sequences assigned
575 (21.7%) exact matches, in which:
472 unique CDR3
7 unique J



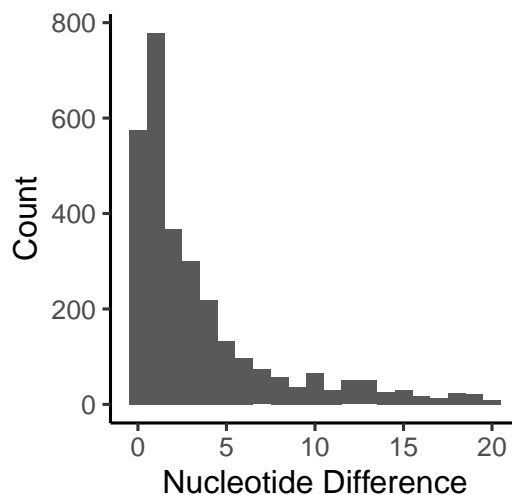
IGHV3-69-1*01

9 sequences assigned
No exact matches.



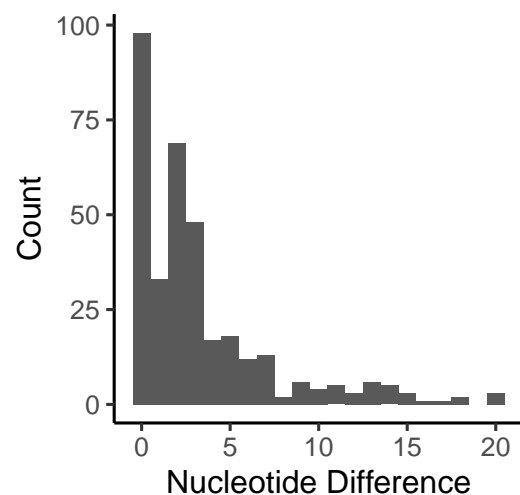
IGHV3-73*01

3018 sequences assigned
575 (19.1%) exact matches, in which:
465 unique CDR3
7 unique J



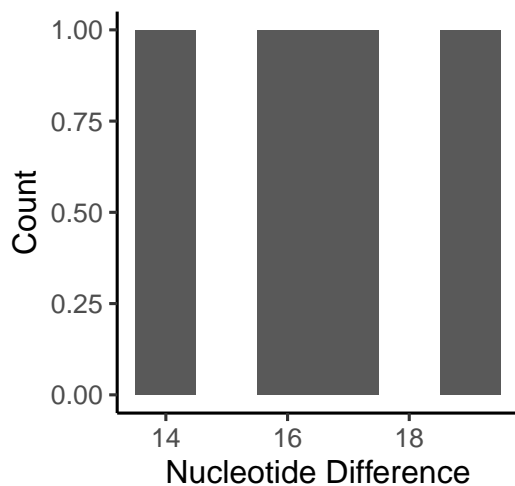
IGHV3-74*01_T279C_C2

350 sequences assigned
98 (28%) exact matches, in which:
98 unique CDR3
7 unique J



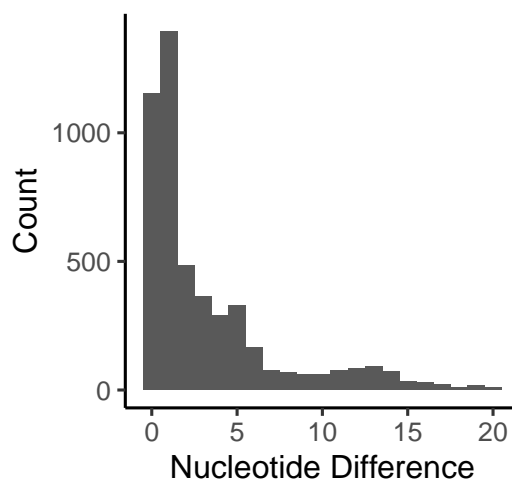
IGHV3-71*04

4 sequences assigned
No exact matches.



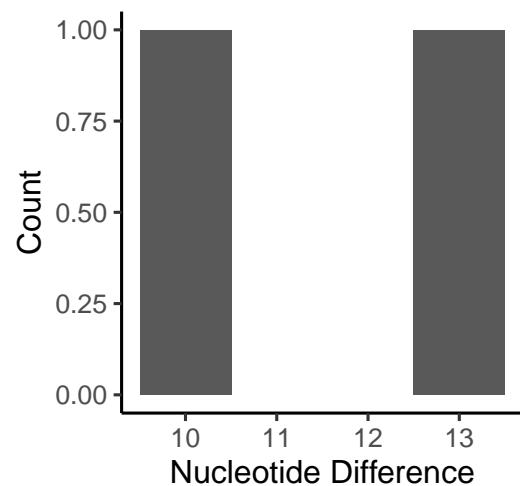
IGHV3-74*01

4957 sequences assigned
1153 (23.3%) exact matches, in which:
965 unique CDR3
7 unique J



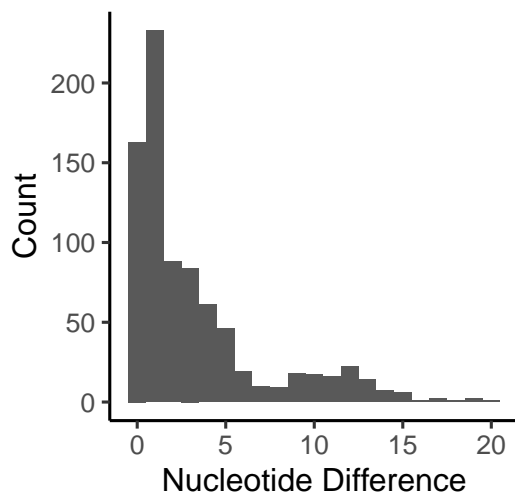
IGHV3-43D*04

2 sequences assigned
No exact matches.



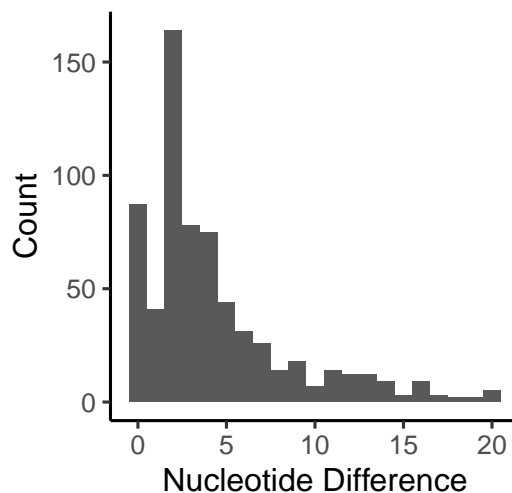
IGHV3-72*01

836 sequences assigned
163 (19.5%) exact matches, in which:
119 unique CDR3
7 unique J



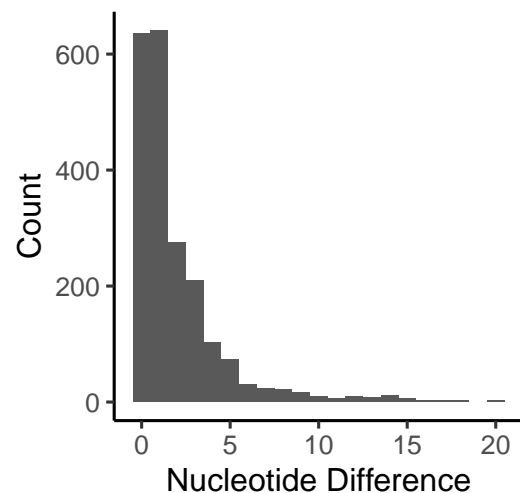
IGHV3-74*01_T279C

659 sequences assigned
87 (13.2%) exact matches, in which:
87 unique CDR3
7 unique J



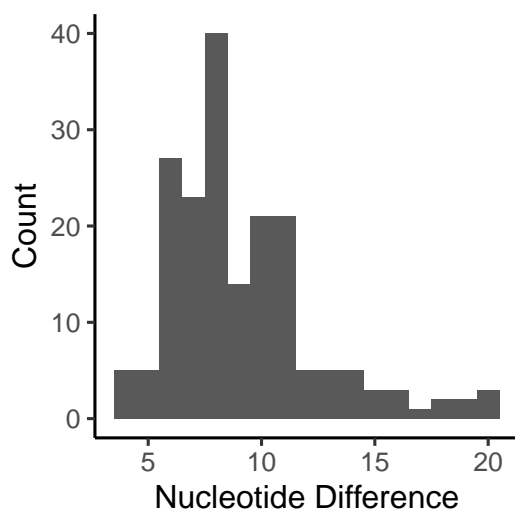
IGHV3-64D*06

2142 sequences assigned
636 (29.7%) exact matches, in which:
511 unique CDR3
7 unique J



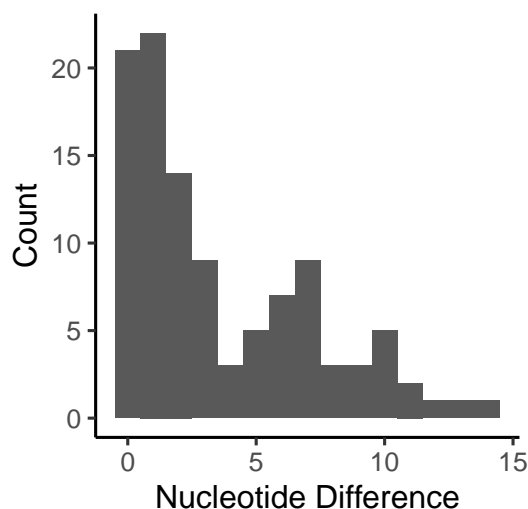
IGHV3–NL1*01

187 sequences assigned
No exact matches.



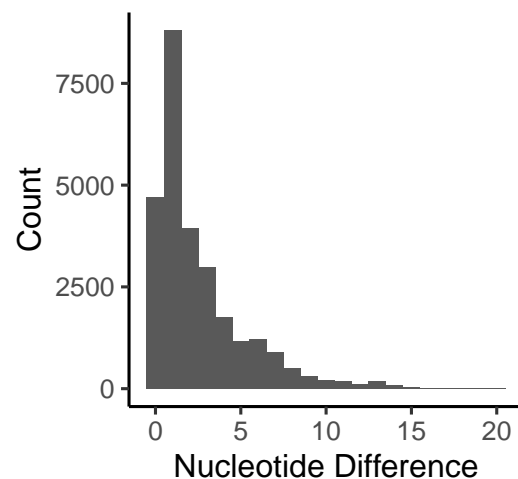
IGHV4–28*03

106 sequences assigned
21 (19.8%) exact matches, in which:
19 unique CDR3
5 unique J



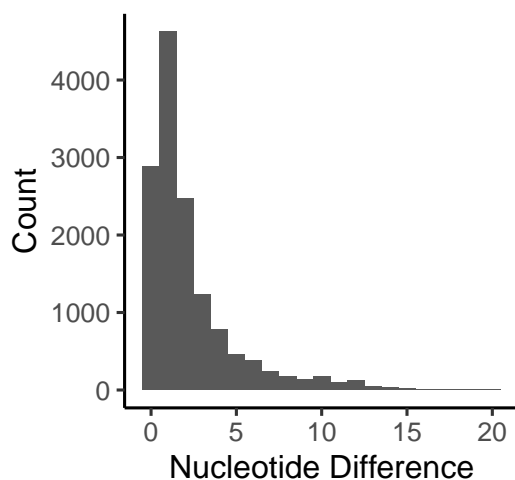
IGHV4–31*03

27369 sequences assigned
4709 (17.2%) exact matches, in which:
3809 unique CDR3
7 unique J



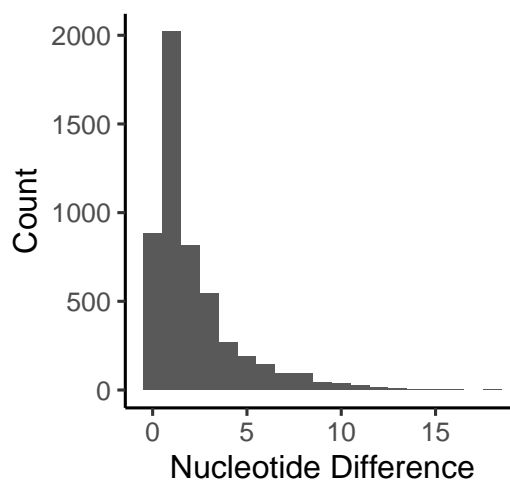
IGHV4–4*07

13959 sequences assigned
2887 (20.7%) exact matches, in which:
2419 unique CDR3
7 unique J



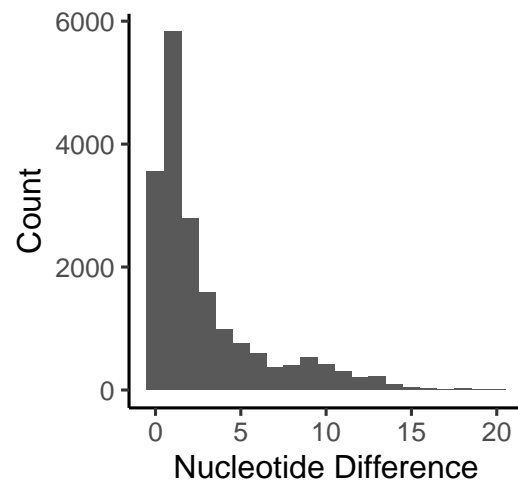
IGHV4–30–4*01

5215 sequences assigned
881 (16.9%) exact matches, in which:
652 unique CDR3
7 unique J



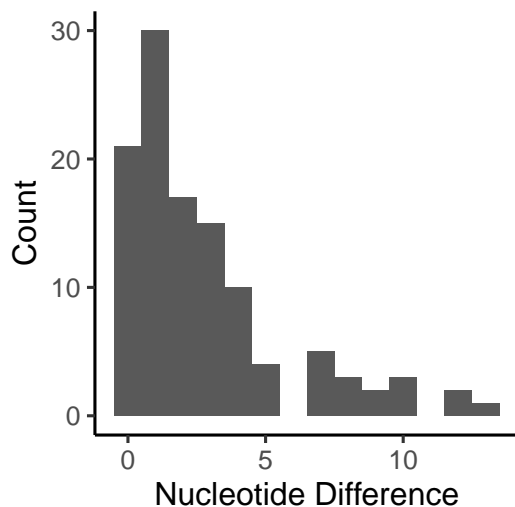
IGHV4–34*01

18923 sequences assigned
3552 (18.8%) exact matches, in which:
2977 unique CDR3
7 unique J



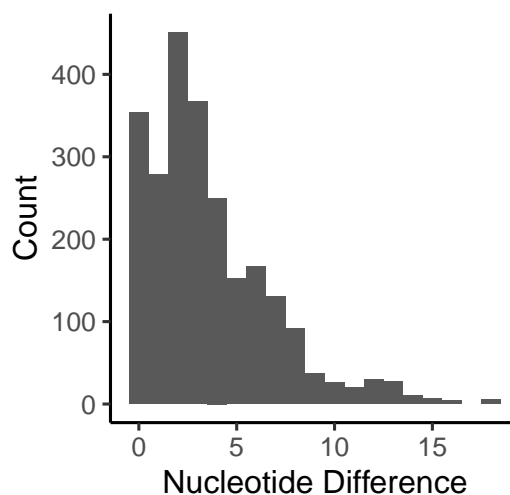
IGHV4–28*02

117 sequences assigned
21 (17.9%) exact matches, in which:
15 unique CDR3
5 unique J



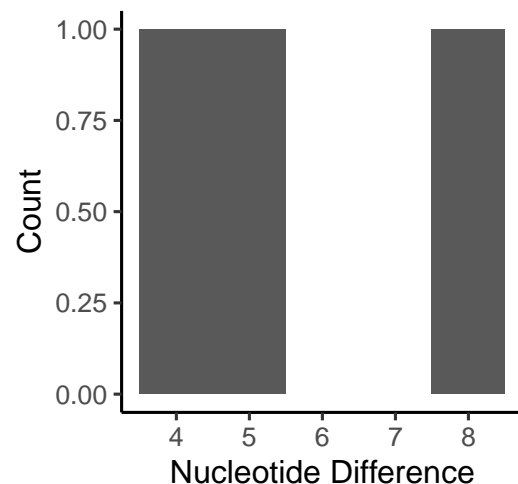
IGHV4–30–4*01_C315G

2427 sequences assigned
354 (14.6%) exact matches, in which:
352 unique CDR3
7 unique J



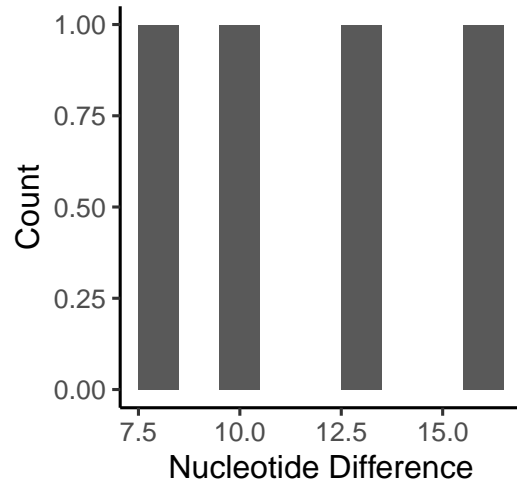
IGHV4–38–2*01

88 sequences assigned
No exact matches.



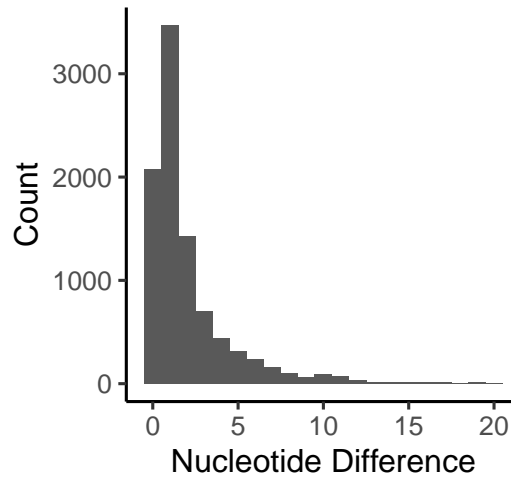
IGHV4-38-2*02

48 sequences assigned
No exact matches.



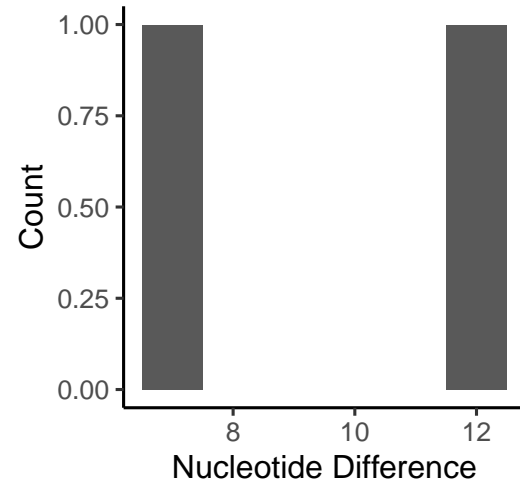
IGHV4-59*08

9340 sequences assigned
2075 (22.2%) exact matches, in which:
1621 unique CDR3
7 unique J



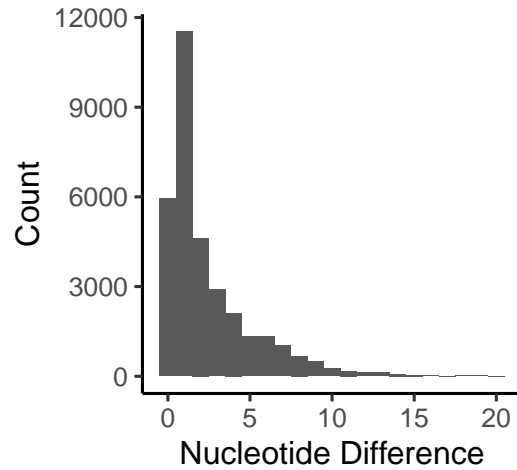
IGHV4/OR15-8*01

10 sequences assigned
No exact matches.



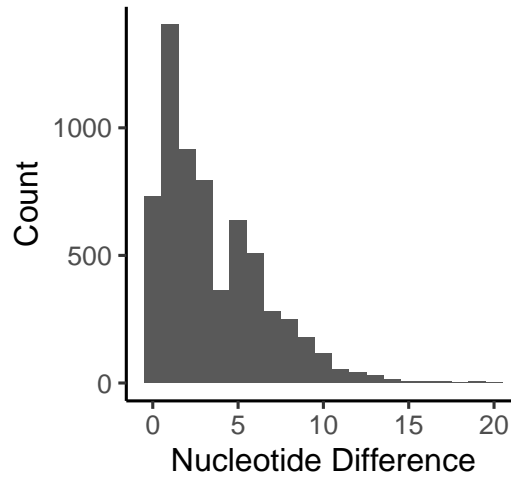
IGHV4-39*07

33011 sequences assigned
5948 (18%) exact matches, in which:
4986 unique CDR3
7 unique J



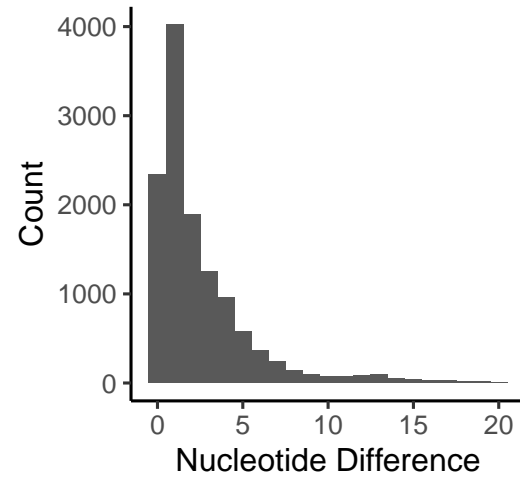
IGHV4-59*12

6410 sequences assigned
732 (11.4%) exact matches, in which:
721 unique CDR3
7 unique J



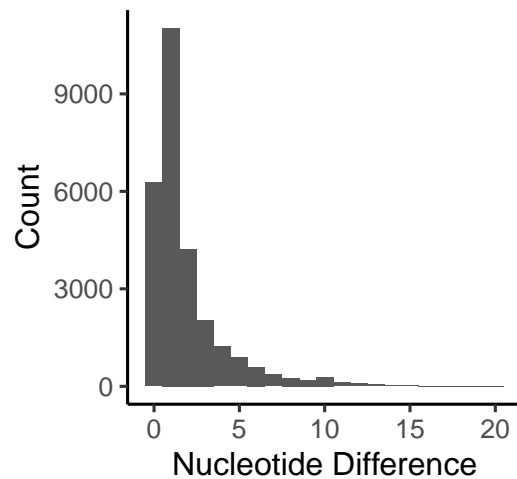
IGHV5-10-1*03

12515 sequences assigned
2342 (18.7%) exact matches, in which:
1866 unique CDR3
7 unique J



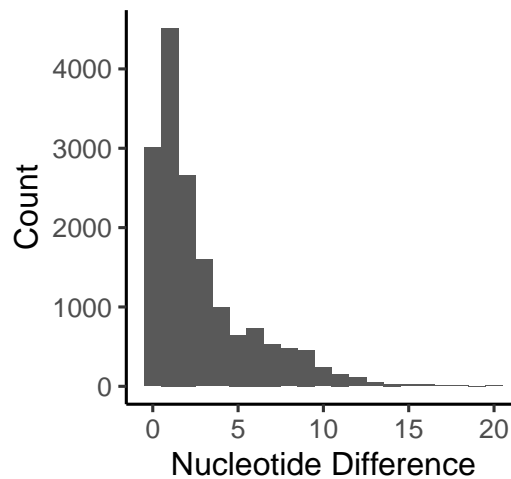
IGHV4-59*01

27876 sequences assigned
6269 (22.5%) exact matches, in which:
4970 unique CDR3
7 unique J



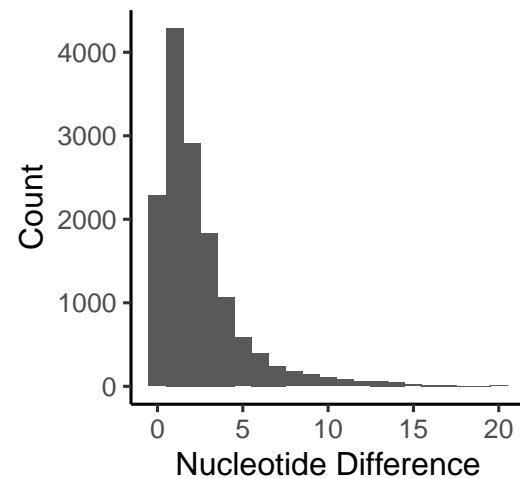
IGHV4-61*02

16325 sequences assigned
3009 (18.4%) exact matches, in which:
2534 unique CDR3
7 unique J



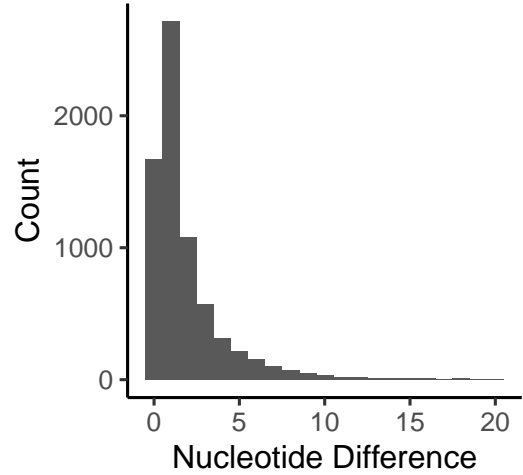
IGHV5-51*01

14458 sequences assigned
2284 (15.8%) exact matches, in which:
1882 unique CDR3
7 unique J



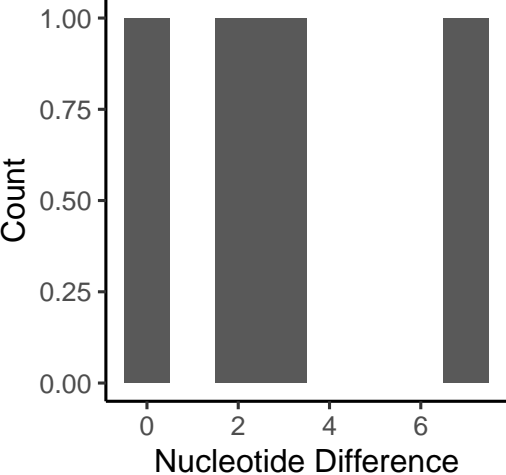
IGHV5–51*03

7112 sequences assigned
1670 (23.5%) exact matches, in which:
1368 unique CDR3
7 unique J



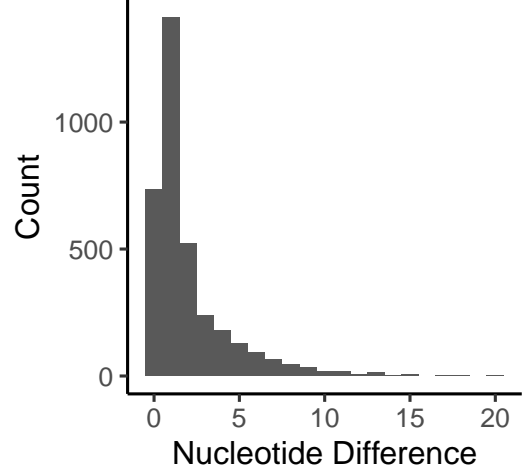
IGHV7–81*01

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



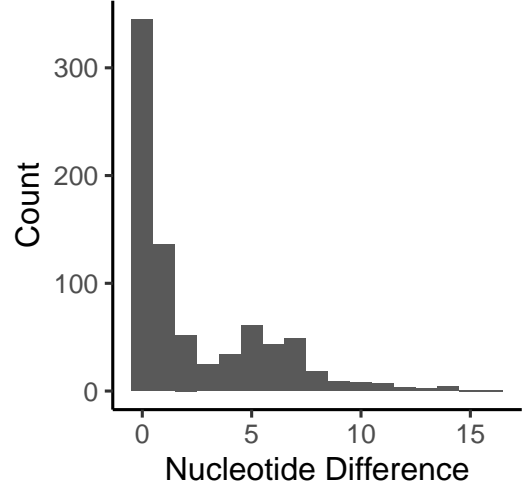
IGHV6–1*01

3529 sequences assigned
736 (20.9%) exact matches, in which:
538 unique CDR3
7 unique J

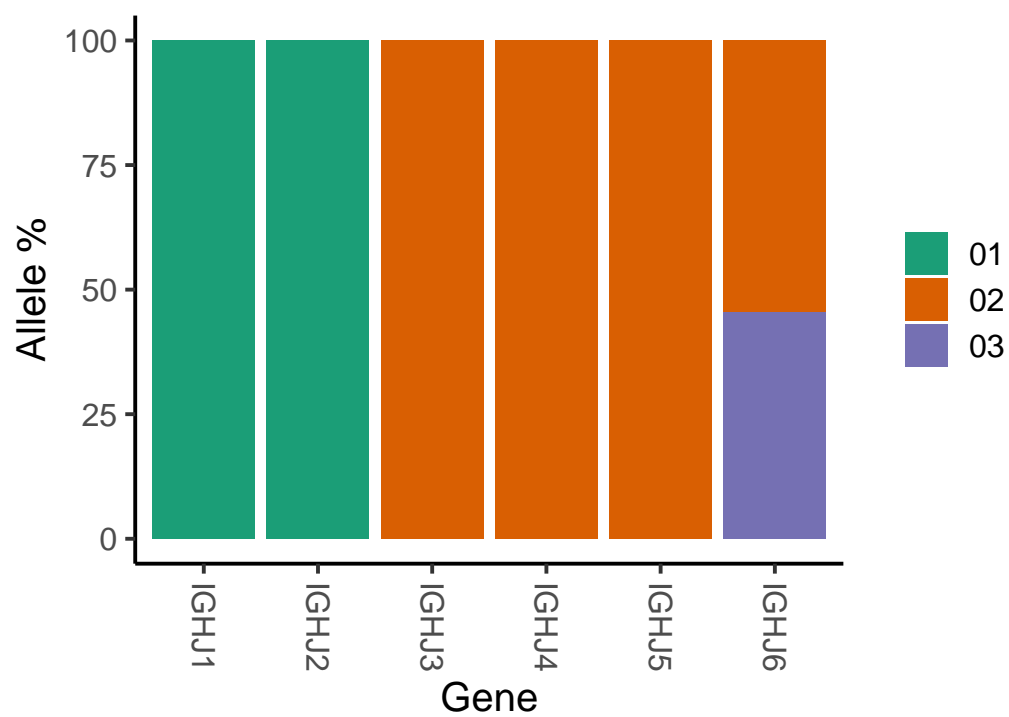


IGHV6–1*01_A315G

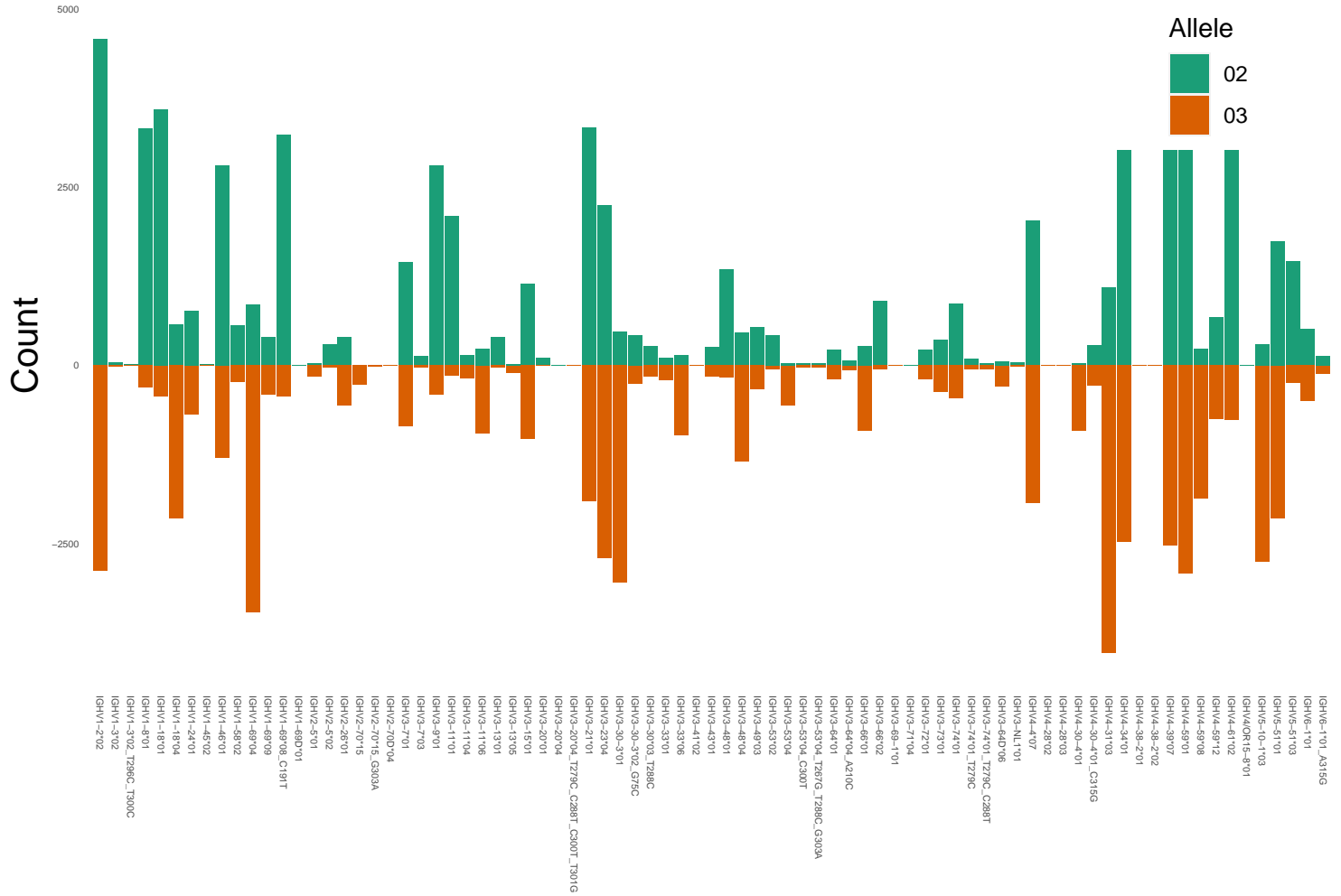
803 sequences assigned
345 (43%) exact matches, in which:
340 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.