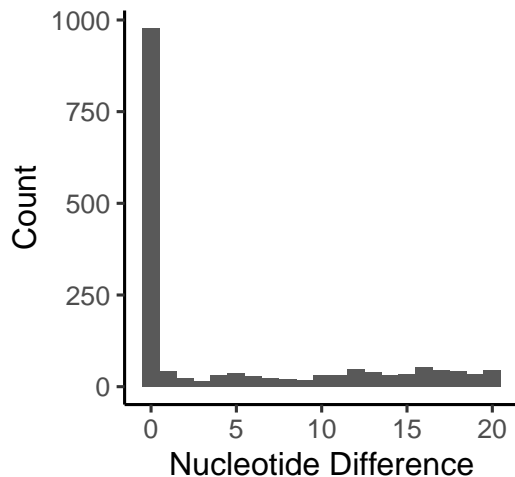


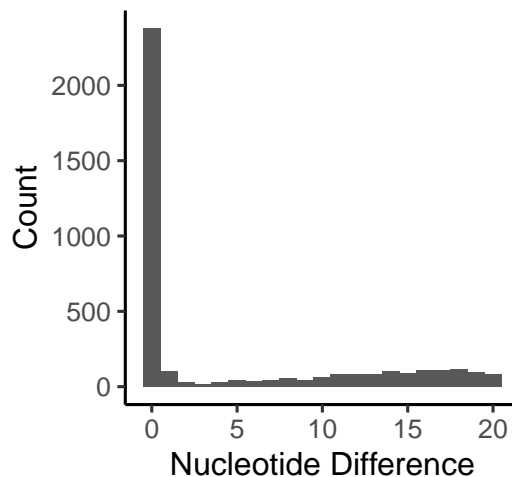
IGHV1-2*04

1888 sequences assigned
977 (51.7%) exact matches, in which:
809 unique CDR3
6 unique J



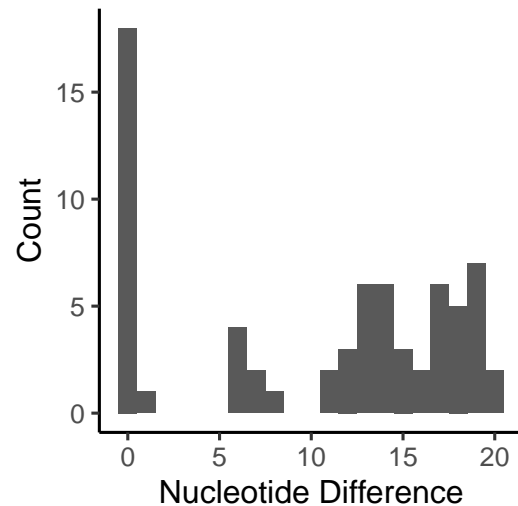
IGHV1-18*01

4582 sequences assigned
2378 (51.9%) exact matches, in which:
1934 unique CDR3
6 unique J



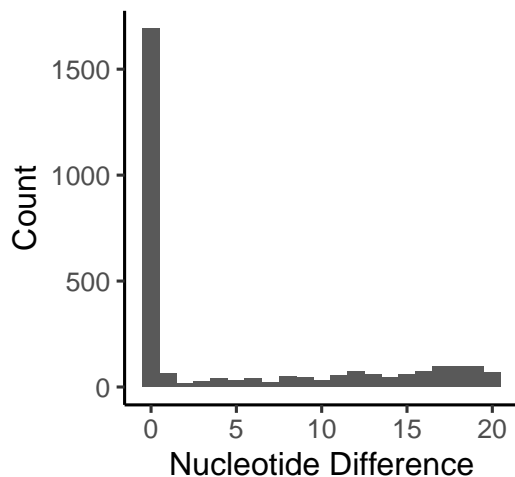
IGHV1-45*02

164 sequences assigned
18 (11%) exact matches, in which:
14 unique CDR3
5 unique J



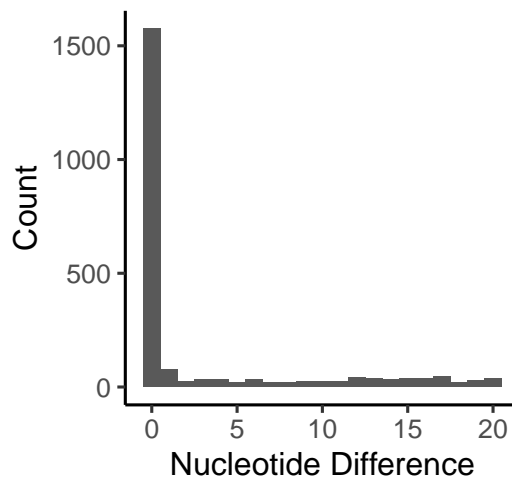
IGHV1-3*01

3571 sequences assigned
1691 (47.4%) exact matches, in which:
1431 unique CDR3
6 unique J



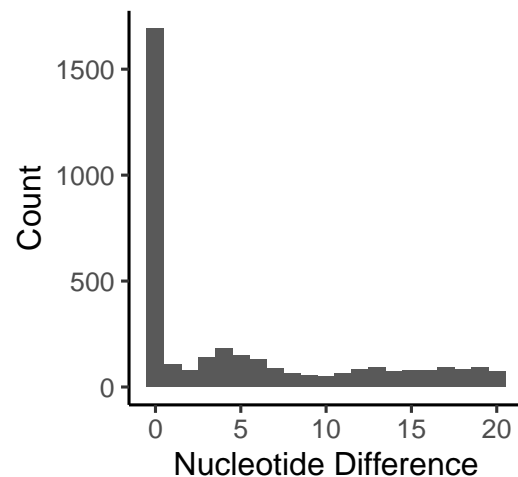
IGHV1-18*04

2537 sequences assigned
1575 (62.1%) exact matches, in which:
1283 unique CDR3
6 unique J



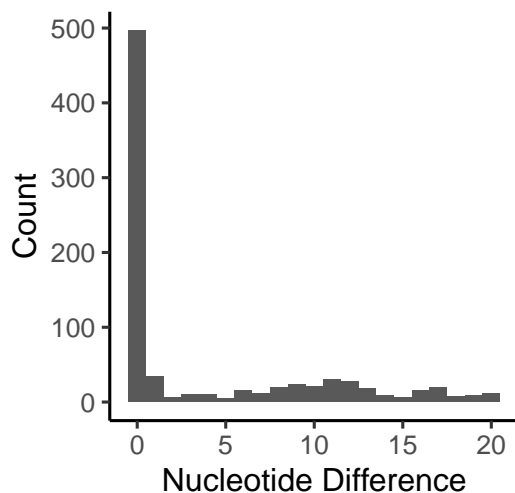
IGHV1-46*01

4458 sequences assigned
1691 (37.9%) exact matches, in which:
1311 unique CDR3
6 unique J



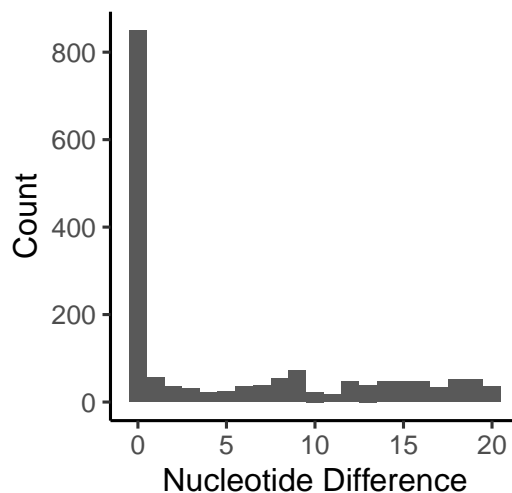
IGHV1-8*01

950 sequences assigned
497 (52.3%) exact matches, in which:
410 unique CDR3
6 unique J



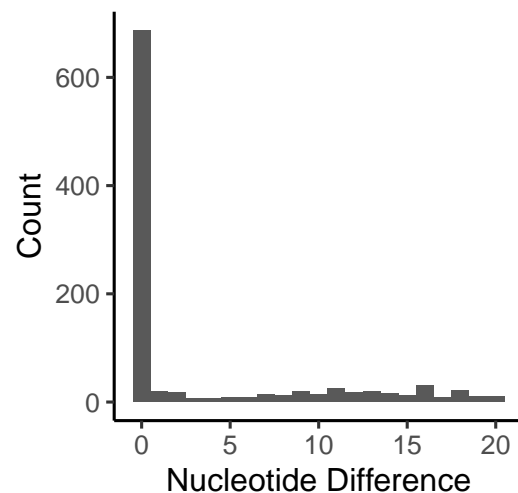
IGHV1-24*01

2081 sequences assigned
850 (40.8%) exact matches, in which:
712 unique CDR3
6 unique J



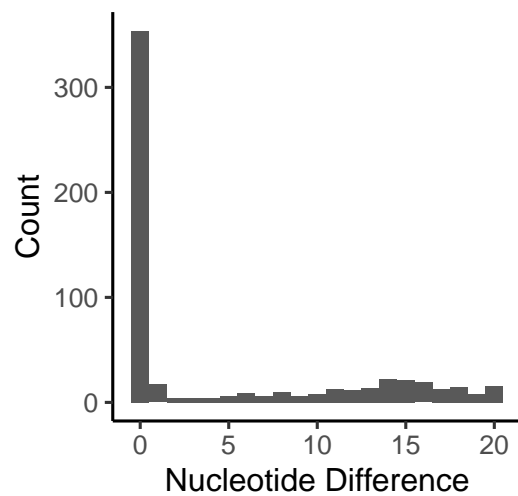
IGHV1-46*03

1104 sequences assigned
687 (62.2%) exact matches, in which:
556 unique CDR3
6 unique J



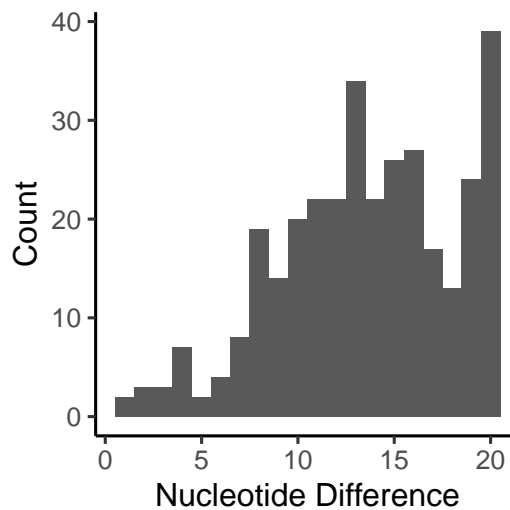
IGHV1–58*01

667 sequences assigned
354 (53.1%) exact matches, in which:
260 unique CDR3
6 unique J



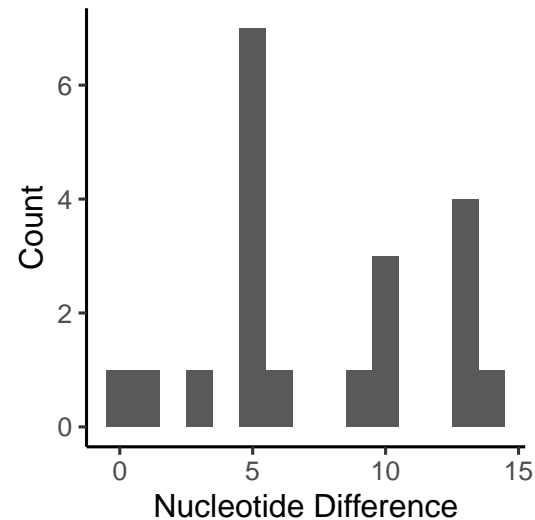
IGHV2–5*02

529 sequences assigned
No exact matches.



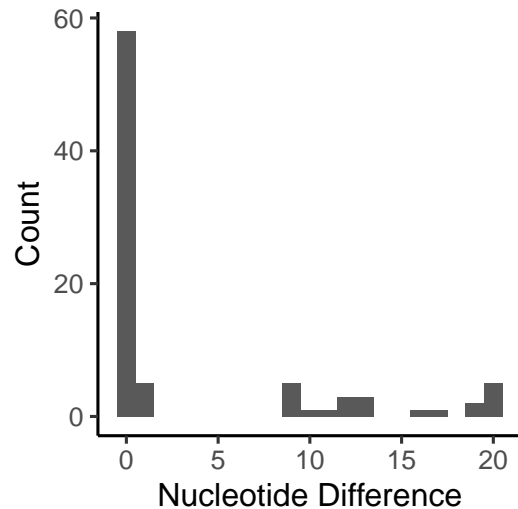
IGHV2–70D*04

21 sequences assigned
1 (4.8%) exact matches, in which:
1 unique CDR3
1 unique J



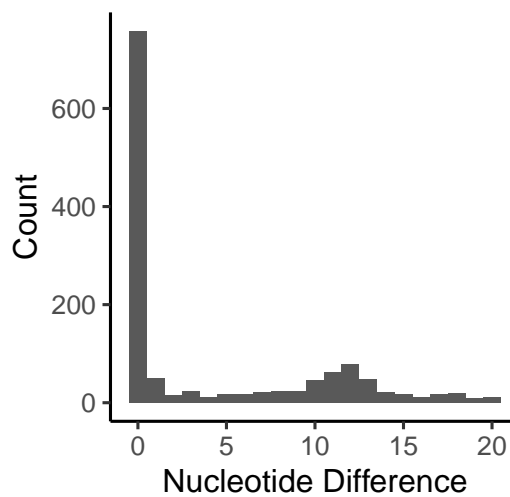
IGHV1–58*02

139 sequences assigned
58 (41.7%) exact matches, in which:
50 unique CDR3
5 unique J



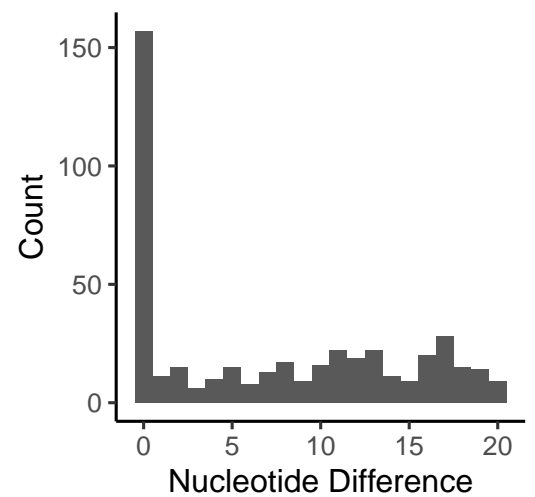
IGHV2–26*01

1386 sequences assigned
758 (54.7%) exact matches, in which:
640 unique CDR3
6 unique J



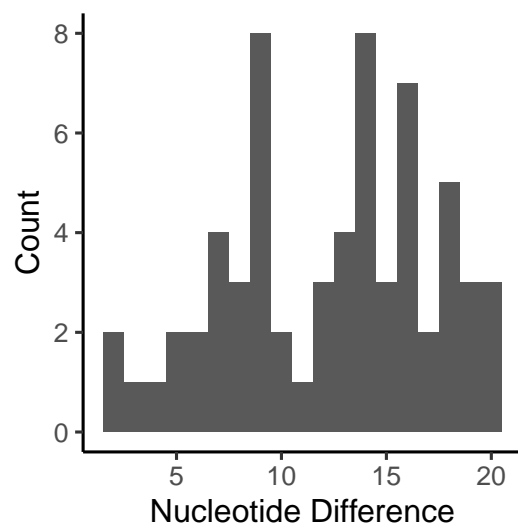
IGHV3–7*01

525 sequences assigned
157 (29.9%) exact matches, in which:
146 unique CDR3
4 unique J



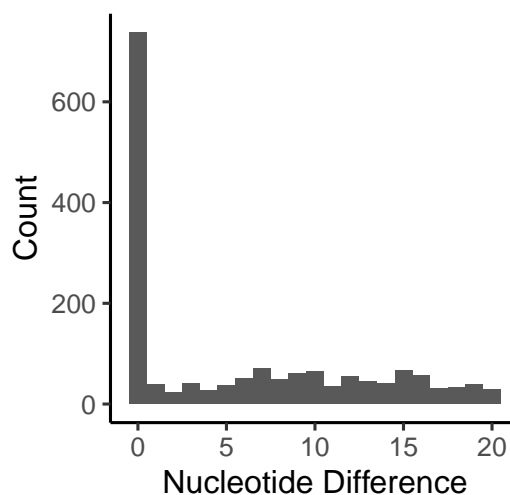
IGHV2–5*01

135 sequences assigned
No exact matches.



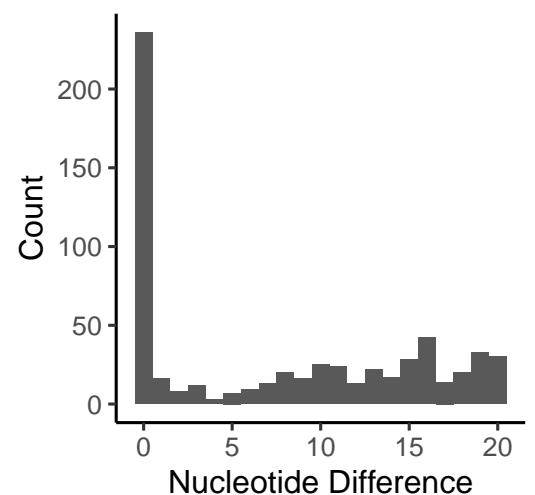
IGHV2–70*01

1851 sequences assigned
738 (39.9%) exact matches, in which:
555 unique CDR3
5 unique J



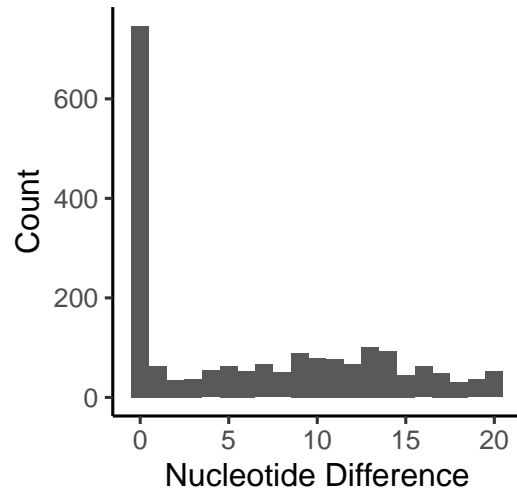
IGHV3–7*03

736 sequences assigned
236 (32.1%) exact matches, in which:
219 unique CDR3
6 unique J



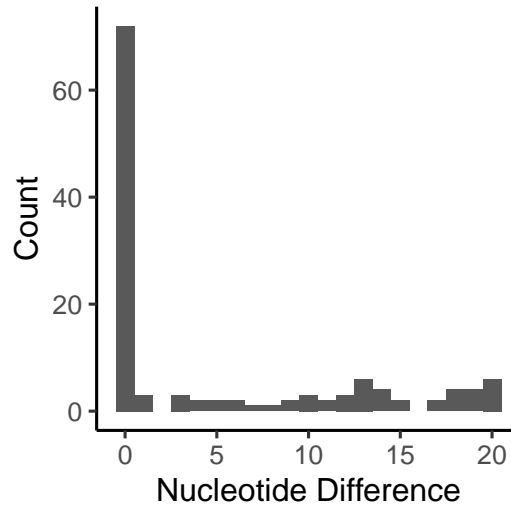
IGHV3-9*01

2162 sequences assigned
747 (34.6%) exact matches, in which:
675 unique CDR3
6 unique J



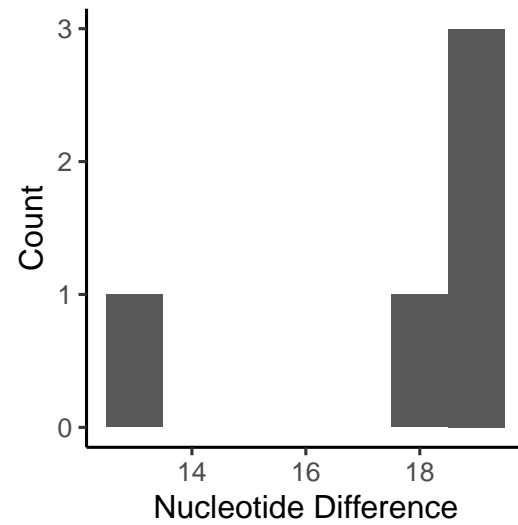
IGHV3-13*01

140 sequences assigned
72 (51.4%) exact matches, in which:
65 unique CDR3
5 unique J



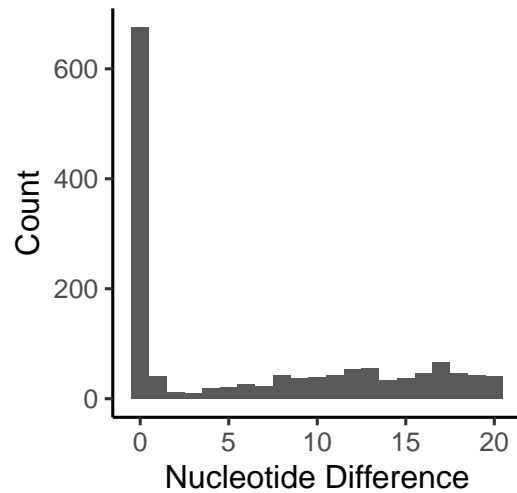
IGHV3-20*01

5 sequences assigned
No exact matches.



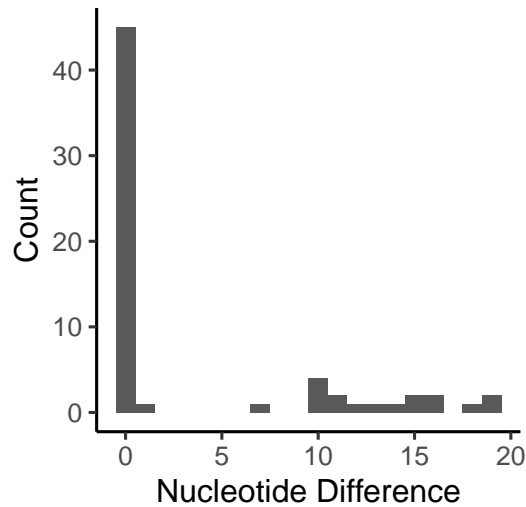
IGHV3-11*01

1596 sequences assigned
676 (42.4%) exact matches, in which:
604 unique CDR3
6 unique J



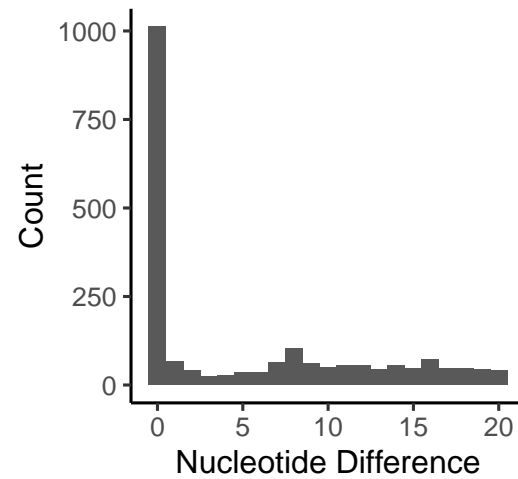
IGHV3-13*05

70 sequences assigned
45 (64.3%) exact matches, in which:
41 unique CDR3
4 unique J



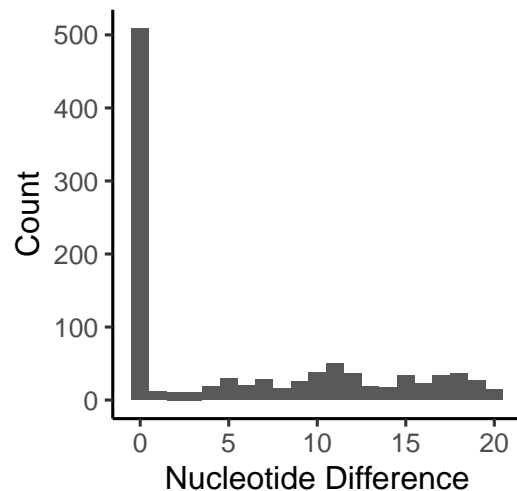
IGHV3-30*01

2315 sequences assigned
1012 (43.7%) exact matches, in which:
917 unique CDR3
6 unique J



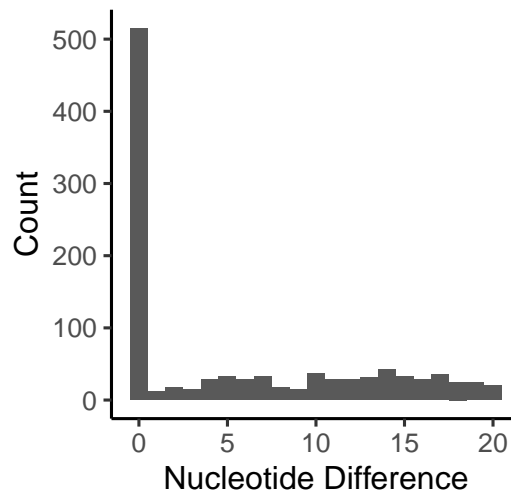
IGHV3-11*06

1256 sequences assigned
509 (40.5%) exact matches, in which:
446 unique CDR3
6 unique J



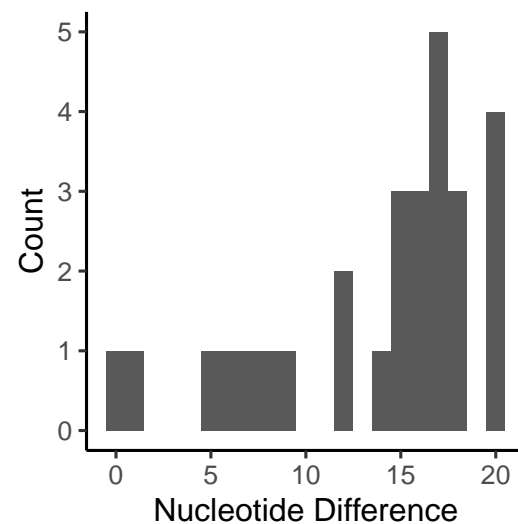
IGHV3-15*01

1344 sequences assigned
515 (38.3%) exact matches, in which:
488 unique CDR3
5 unique J



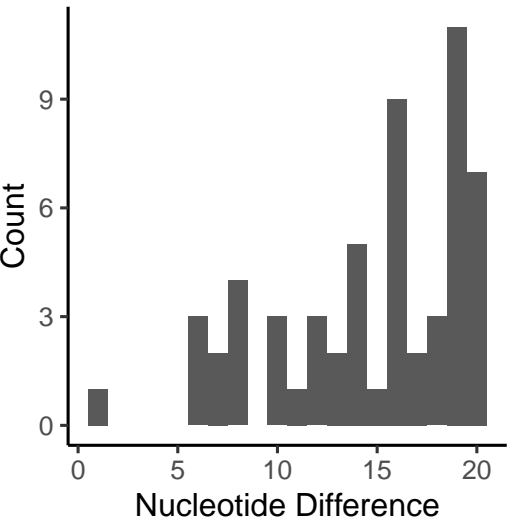
IGHV3-30-3*01

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



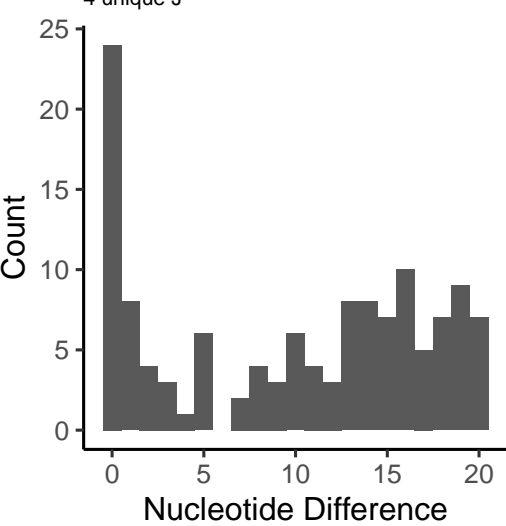
IGHV3-30-3*03

112 sequences assigned
No exact matches.



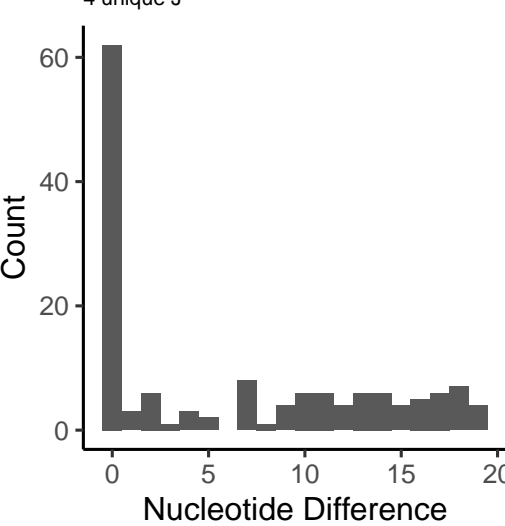
IGHV3-43*01

207 sequences assigned
24 (11.6%) exact matches, in which:
20 unique CDR3
4 unique J



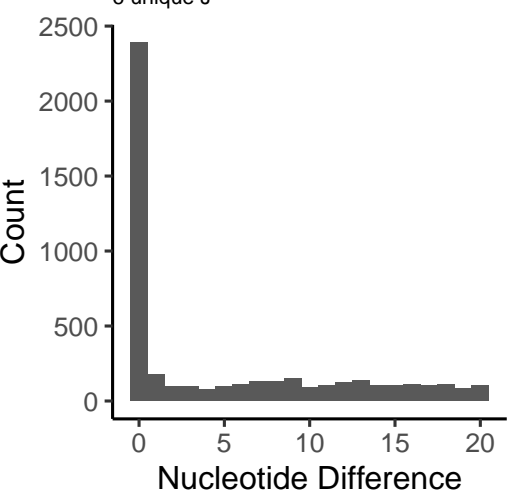
IGHV3-49*04

236 sequences assigned
62 (26.3%) exact matches, in which:
55 unique CDR3
4 unique J



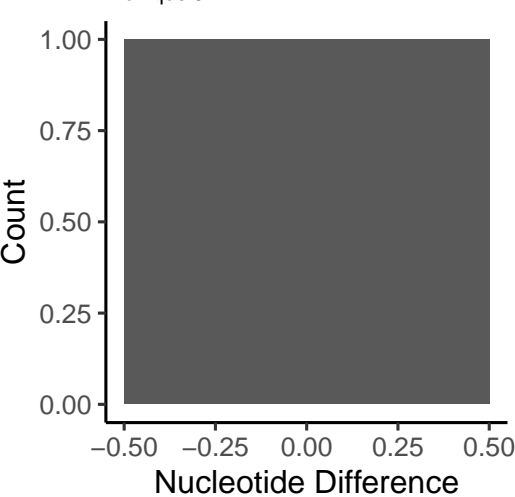
IGHV3-33*01

5450 sequences assigned
2389 (43.8%) exact matches, in which:
2121 unique CDR3
6 unique J



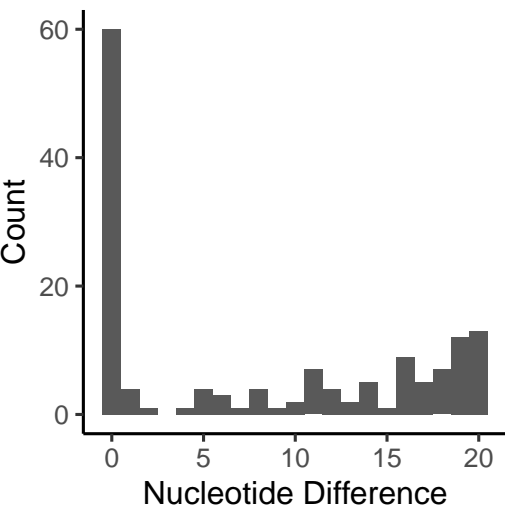
IGHV3-47*02

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



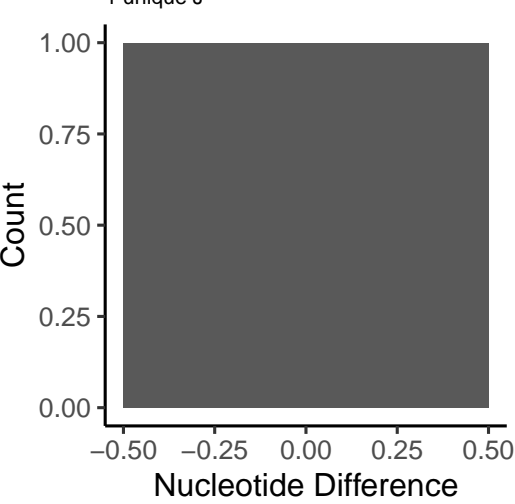
IGHV3-49*05

214 sequences assigned
60 (28%) exact matches, in which:
55 unique CDR3
5 unique J



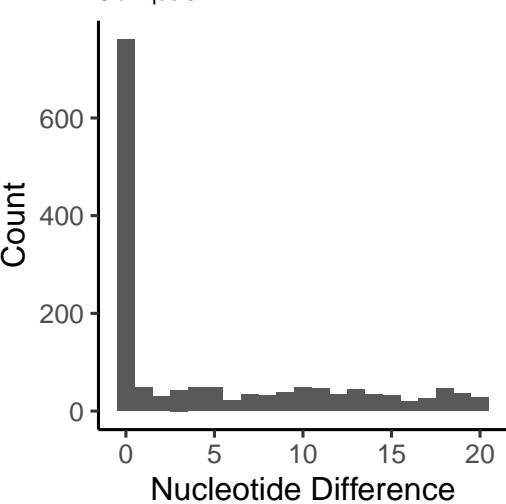
IGHV3-35*01

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



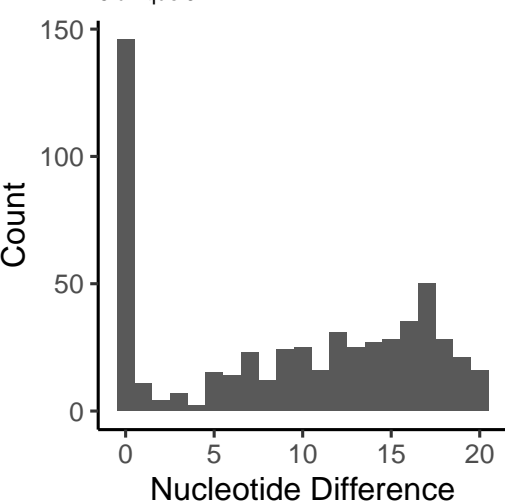
IGHV3-48*02

1795 sequences assigned
761 (42.4%) exact matches, in which:
691 unique CDR3
6 unique J



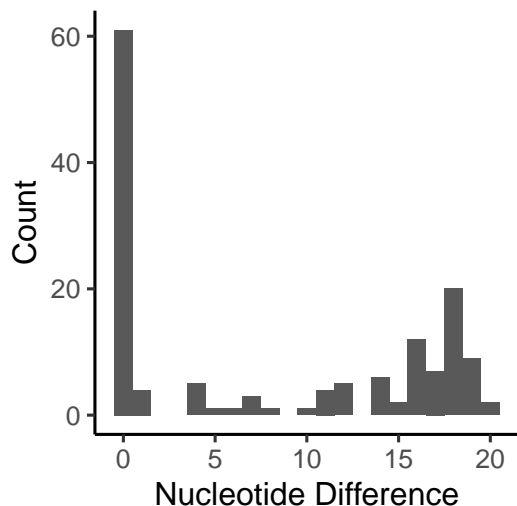
IGHV3-53*01

759 sequences assigned
146 (19.2%) exact matches, in which:
136 unique CDR3
6 unique J



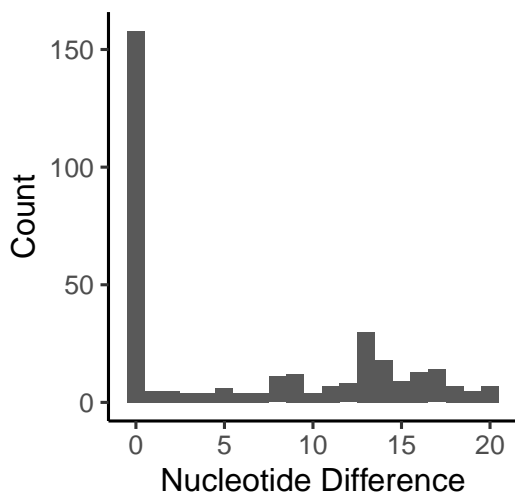
IGHV3-53*04

164 sequences assigned
61 (37.2%) exact matches, in which:
54 unique CDR3
5 unique J



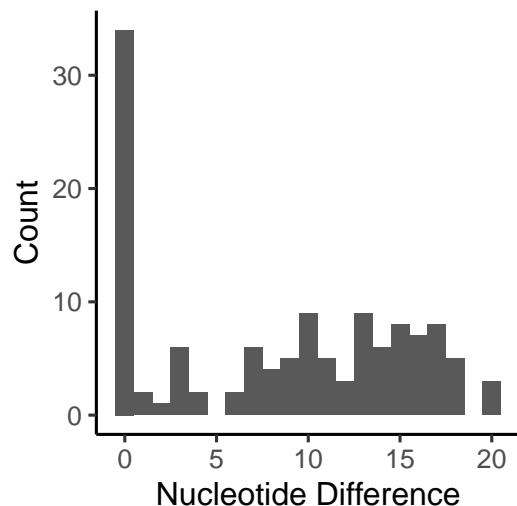
IGHV3-66*02

458 sequences assigned
158 (34.5%) exact matches, in which:
144 unique CDR3
6 unique J



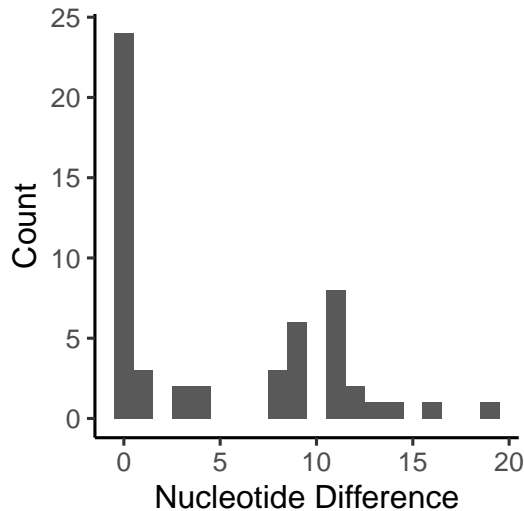
IGHV3-73*01

189 sequences assigned
34 (18%) exact matches, in which:
32 unique CDR3
4 unique J



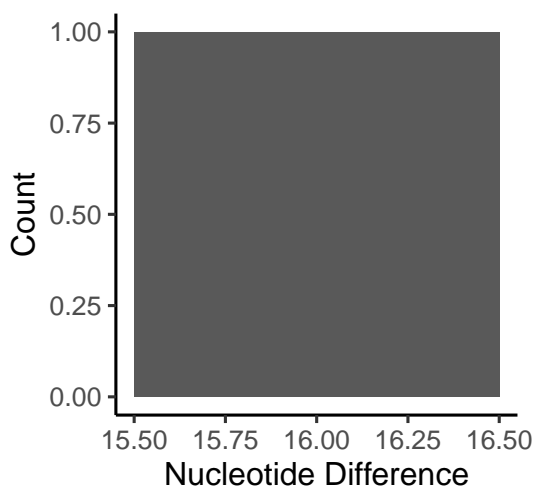
IGHV3-64*01

56 sequences assigned
24 (42.9%) exact matches, in which:
22 unique CDR3
5 unique J



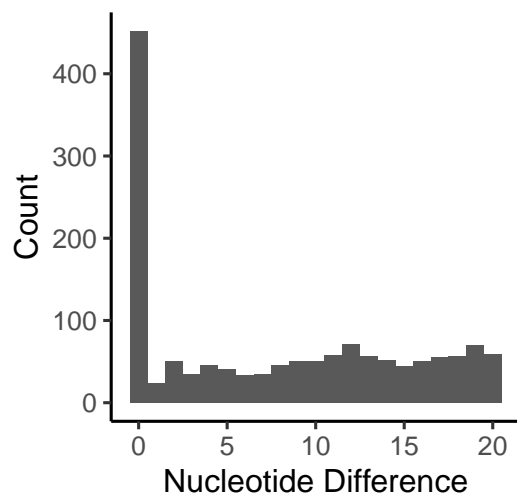
IGHV3-69-1*02

1 sequences assigned
No exact matches.



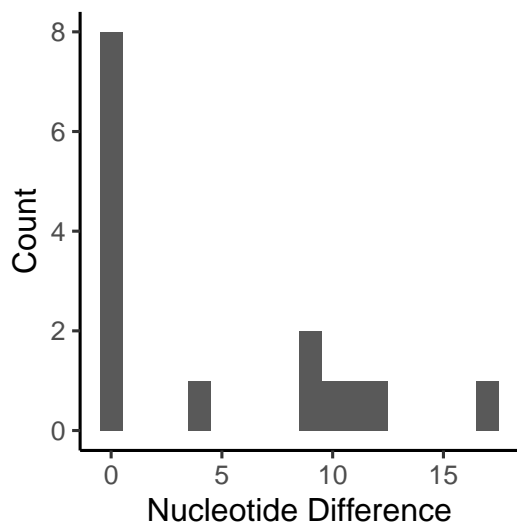
IGHV3-74*01

1973 sequences assigned
452 (22.9%) exact matches, in which:
419 unique CDR3
6 unique J



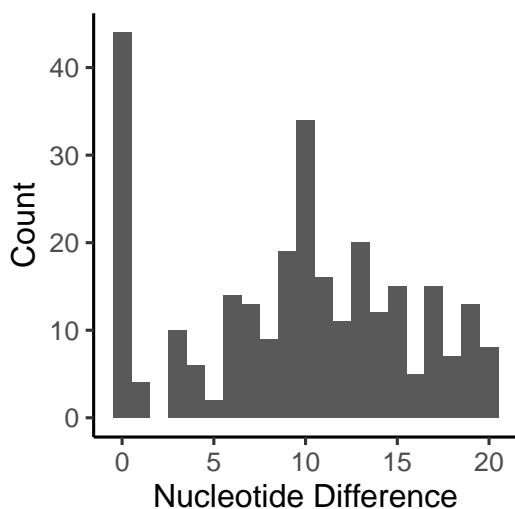
IGHV3-64*02

16 sequences assigned
8 (50%) exact matches, in which:
8 unique CDR3
3 unique J



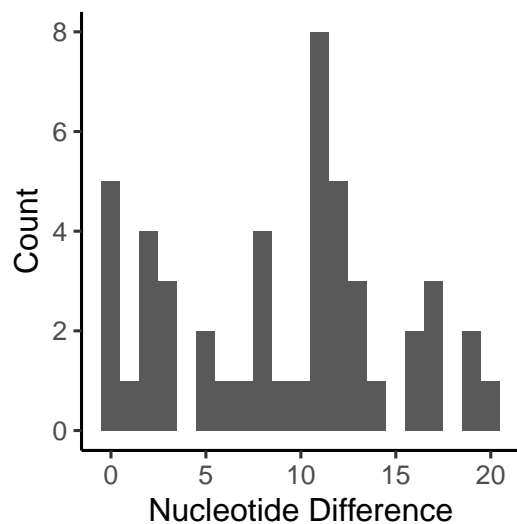
IGHV3-72*01

319 sequences assigned
44 (13.8%) exact matches, in which:
32 unique CDR3
4 unique J



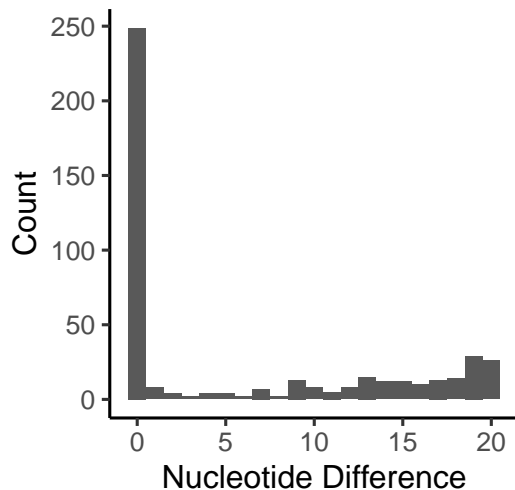
IGHV3-43D*03

59 sequences assigned
5 (8.5%) exact matches, in which:
5 unique CDR3
2 unique J



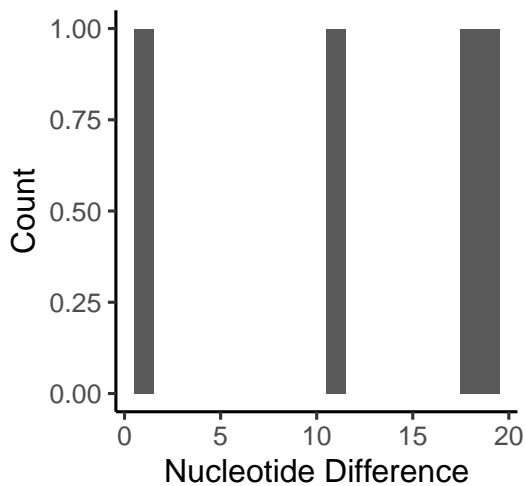
IGHV3-64D*06

573 sequences assigned
249 (43.5%) exact matches, in which:
224 unique CDR3
6 unique J



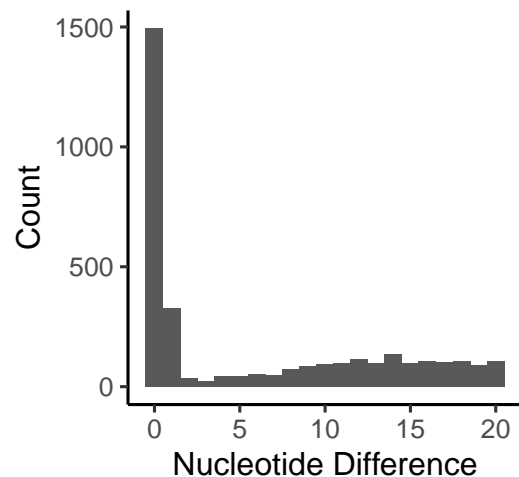
IGHV4-30-2*01

5 sequences assigned
No exact matches.



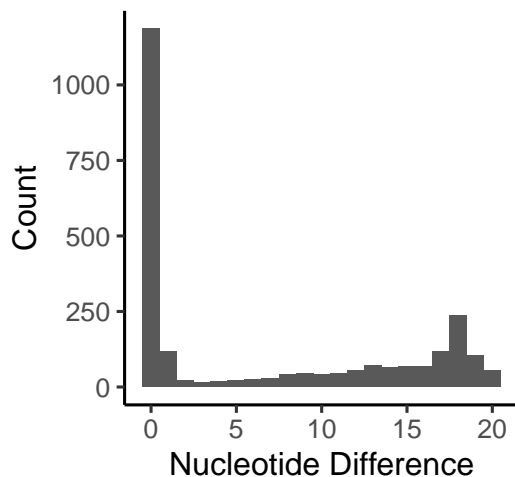
IGHV4-31*03

4108 sequences assigned
1494 (36.4%) exact matches, in which:
1445 unique CDR3
6 unique J



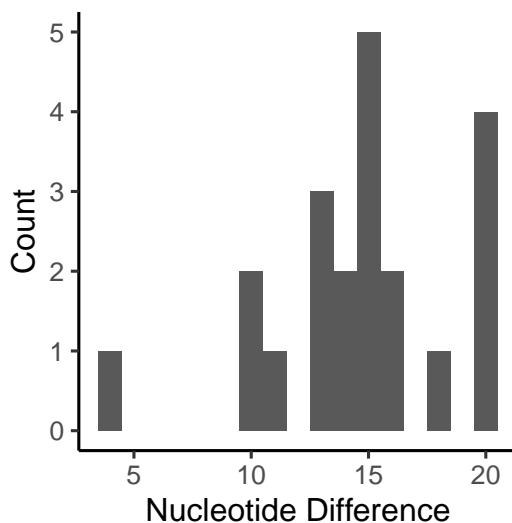
IGHV4-4*02

2851 sequences assigned
1186 (41.6%) exact matches, in which:
1145 unique CDR3
6 unique J



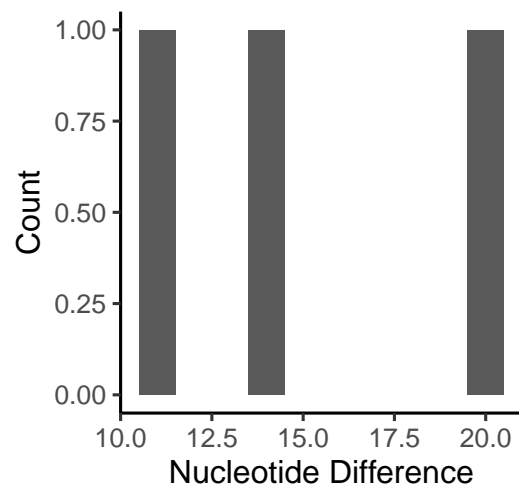
IGHV4-30-4*01

33 sequences assigned
No exact matches.



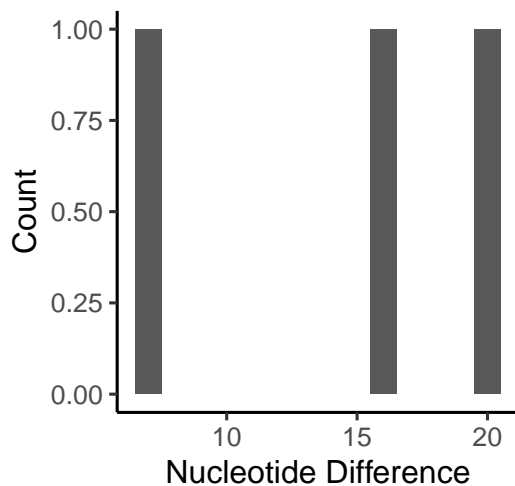
IGHV4-38-2*02

6 sequences assigned
No exact matches.



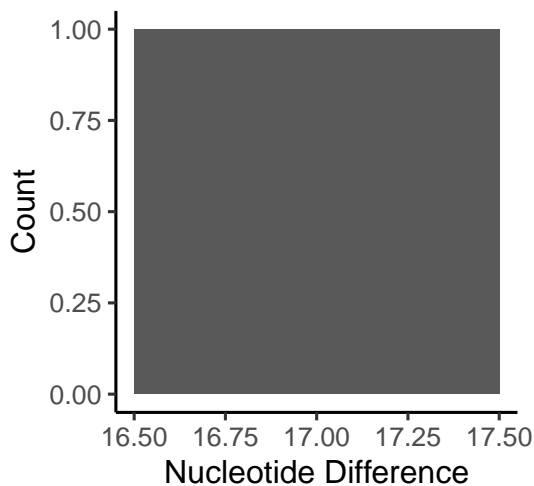
IGHV4-28*03

3 sequences assigned
No exact matches.



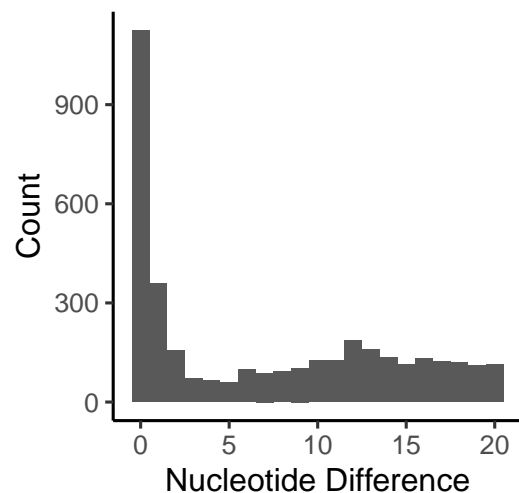
IGHV4-30-4*08

4 sequences assigned
No exact matches.



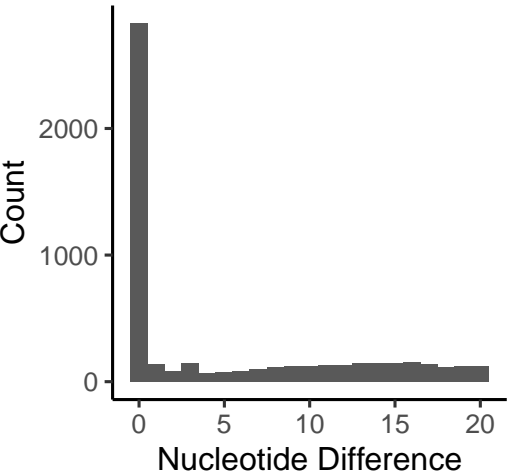
IGHV4-39*01

4849 sequences assigned
1125 (23.2%) exact matches, in which:
1103 unique CDR3
6 unique J



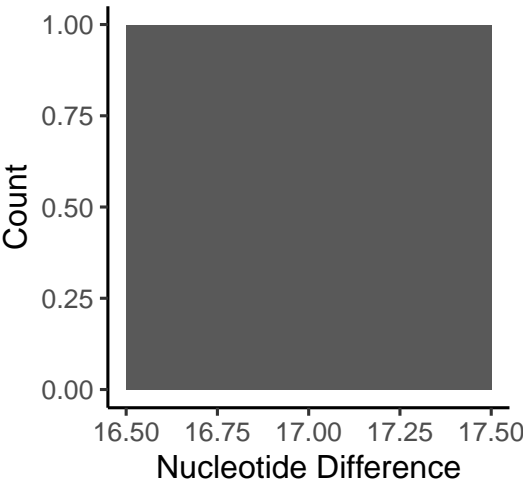
IGHV4–59*01

6262 sequences assigned
2830 (45.2%) exact matches, in which:
2727 unique CDR3
6 unique J



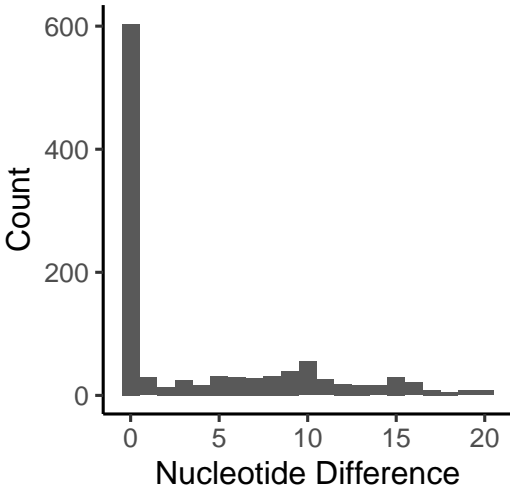
IGHV4/OR15–8*02

2 sequences assigned
No exact matches.



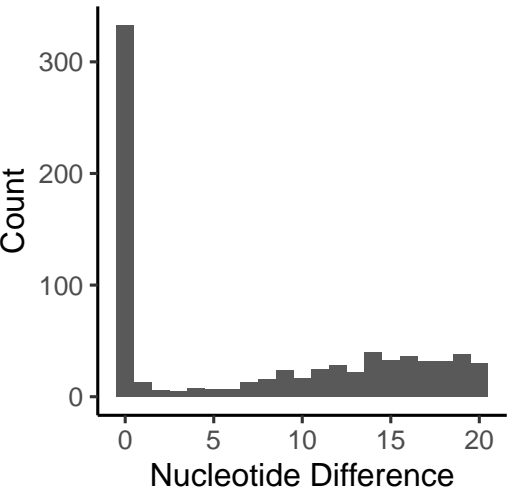
IGHV6–1*01

1102 sequences assigned
604 (54.8%) exact matches, in which:
504 unique CDR3
6 unique J



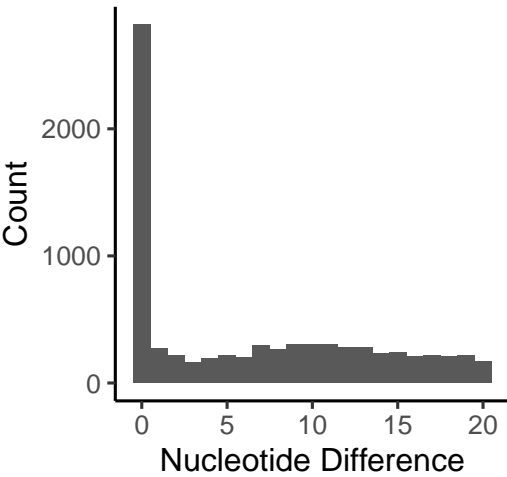
IGHV4–61*01

1061 sequences assigned
333 (31.4%) exact matches, in which:
325 unique CDR3
6 unique J



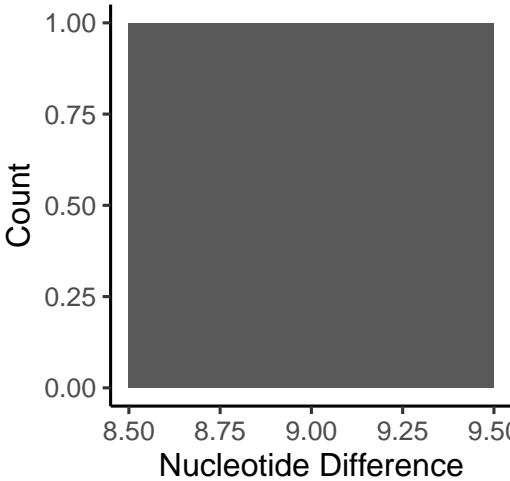
IGHV5–51*01

8672 sequences assigned
2819 (32.5%) exact matches, in which:
2377 unique CDR3
6 unique J



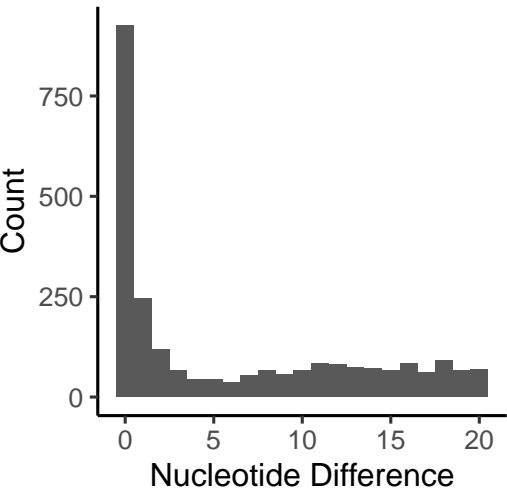
IGHV3/OR16–9*01

1 sequences assigned
No exact matches.



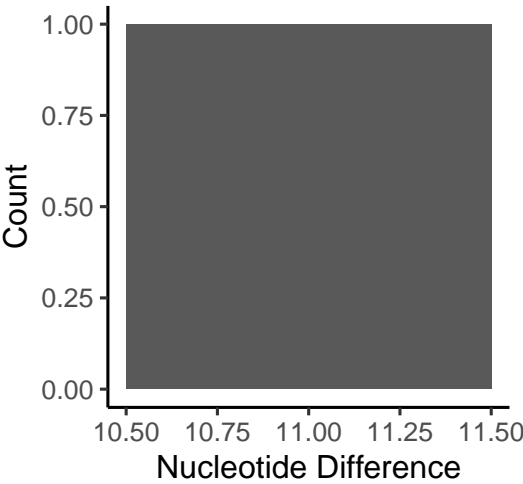
IGHV4–61*02

2918 sequences assigned
926 (31.7%) exact matches, in which:
906 unique CDR3
6 unique J



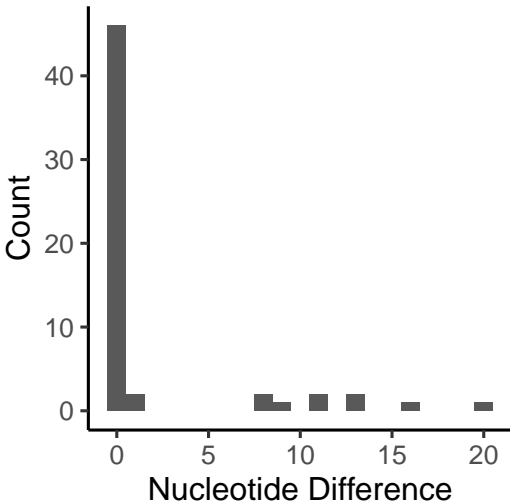
IGHV5–78*01

1 sequences assigned
No exact matches.



IGHV7–4–1*01

59 sequences assigned
46 (78%) exact matches, in which:
38 unique CDR3
5 unique J



IGHV7-4-1*02

19 sequences assigned
1 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J

