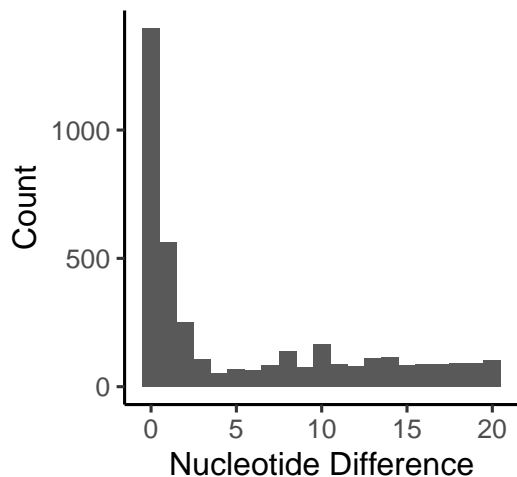


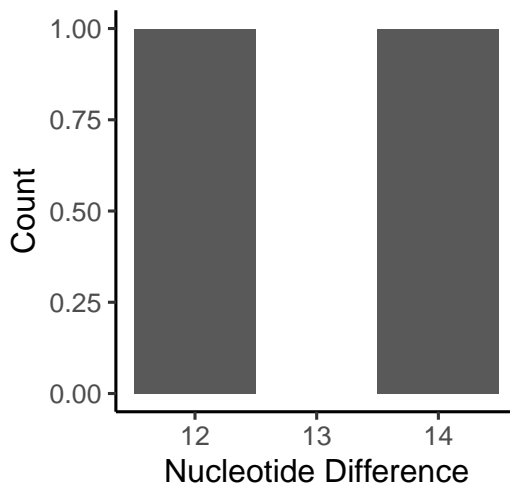
IGHV1-2*02

4495 sequences assigned
1396 (31.1%) exact matches, in which:
1332 unique CDR3
6 unique J



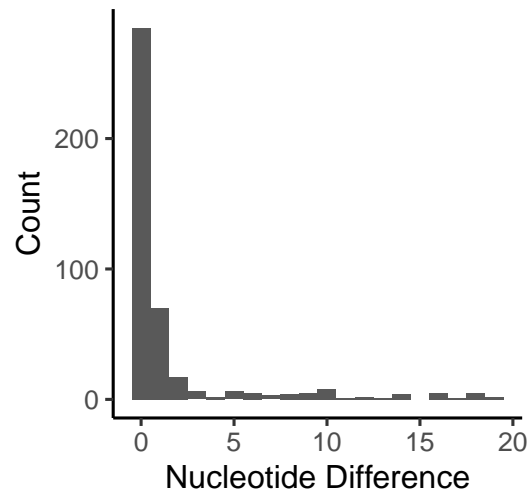
IGHV1-3*01_05

3 sequences assigned
No exact matches.



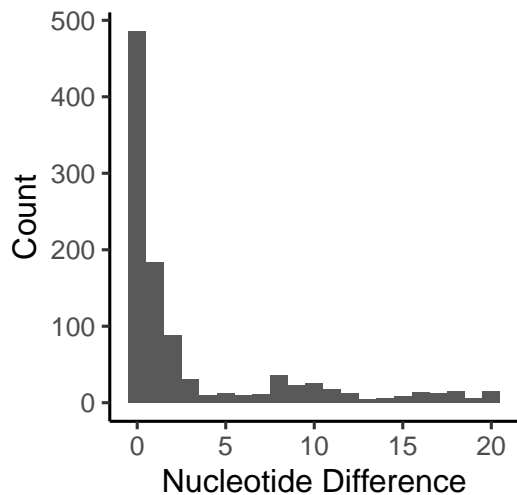
IGHV1-24*01

442 sequences assigned
285 (64.5%) exact matches, in which:
281 unique CDR3
6 unique J



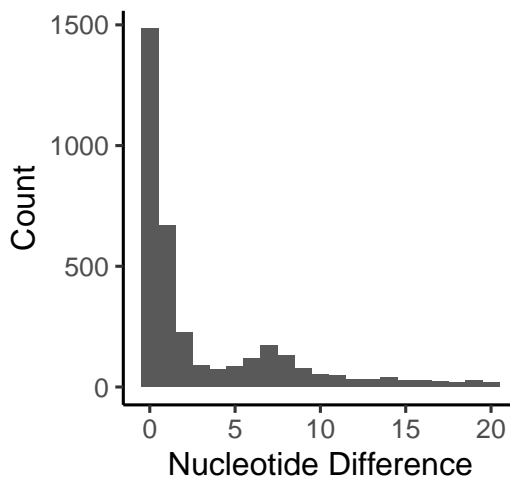
IGHV1-2*04

1061 sequences assigned
486 (45.8%) exact matches, in which:
462 unique CDR3
6 unique J



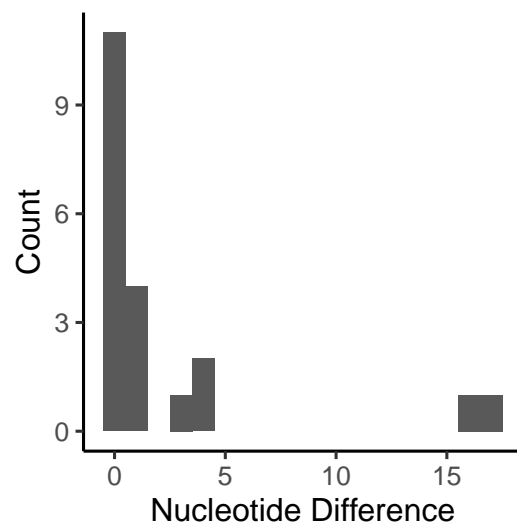
IGHV1-8*01

3604 sequences assigned
1484 (41.2%) exact matches, in which:
1413 unique CDR3
6 unique J



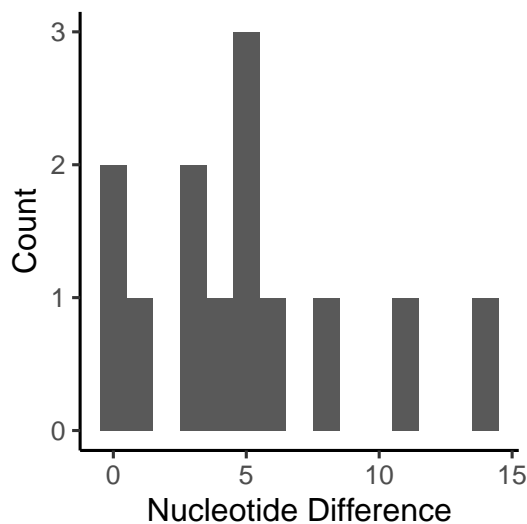
IGHV1-45*02

22 sequences assigned
11 (50%) exact matches, in which:
11 unique CDR3
4 unique J



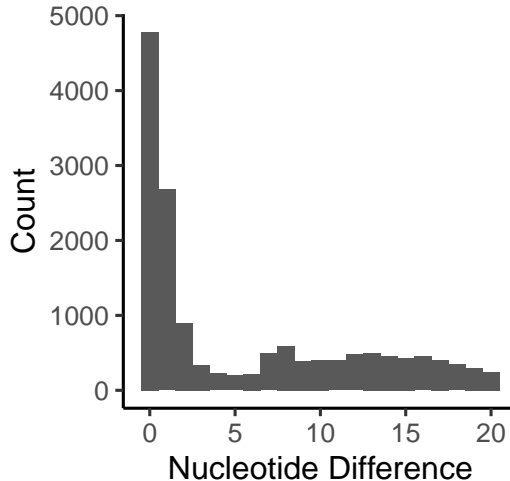
IGHV1-3*02

14 sequences assigned
2 (14.3%) exact matches, in which:
2 unique CDR3
1 unique J



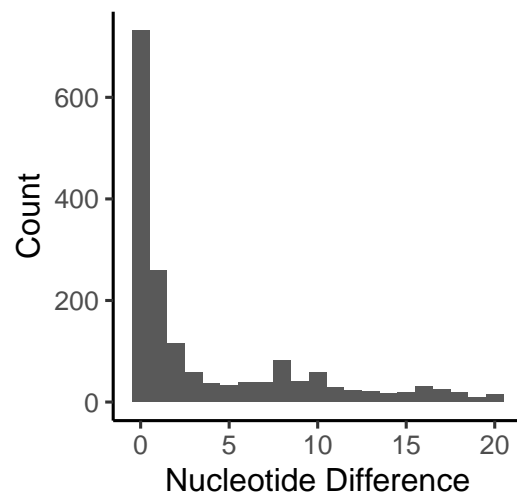
IGHV1-18*04

16363 sequences assigned
4781 (29.2%) exact matches, in which:
4378 unique CDR3
6 unique J



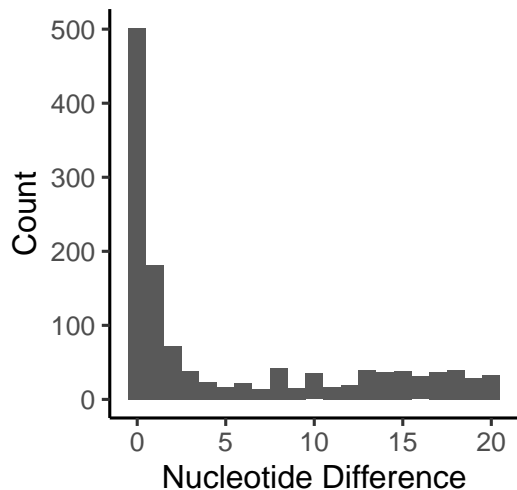
IGHV1-46*01

1788 sequences assigned
732 (40.9%) exact matches, in which:
708 unique CDR3
6 unique J



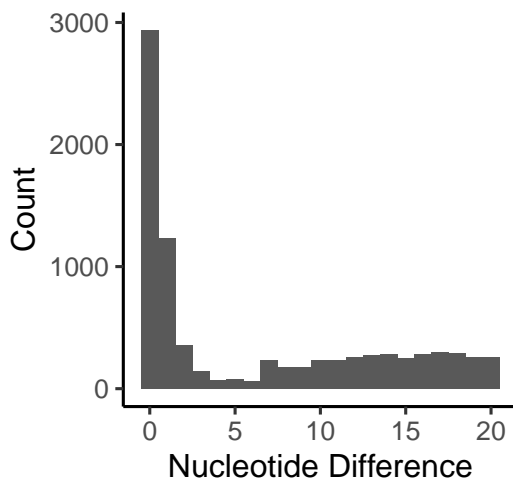
IGHV1–46*04

1828 sequences assigned
502 (27.5%) exact matches, in which:
482 unique CDR3
6 unique J



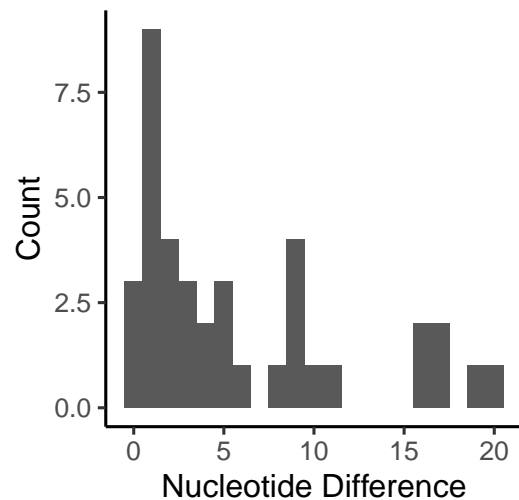
IGHV1–69*01_12_13

10450 sequences assigned
2935 (28.1%) exact matches, in which:
2825 unique CDR3
6 unique J



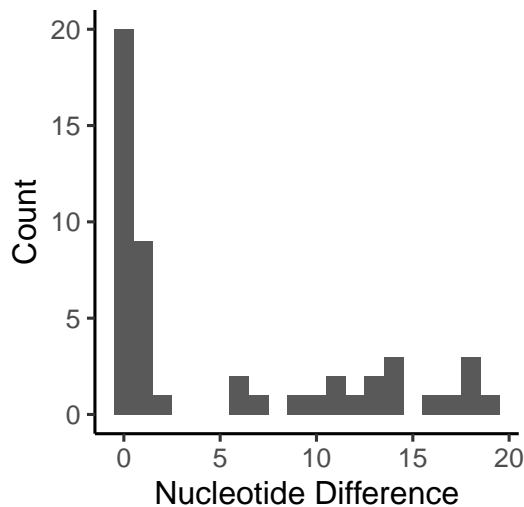
IGHV2–5*02

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



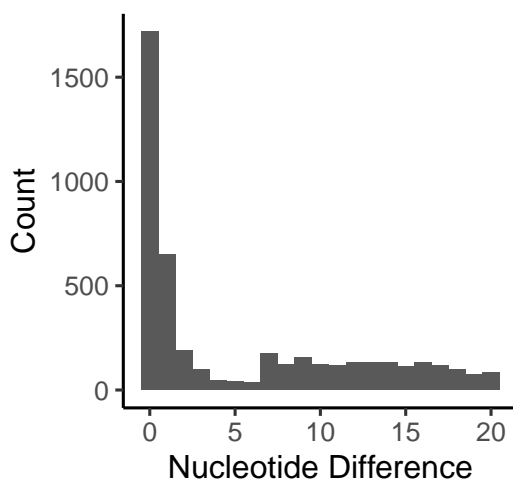
IGHV1–58*02

51 sequences assigned
20 (39.2%) exact matches, in which:
19 unique CDR3
4 unique J



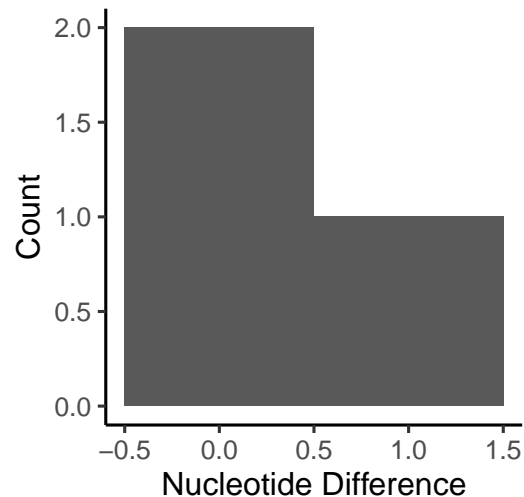
IGHV1–69*06_14

5010 sequences assigned
1718 (34.3%) exact matches, in which:
1653 unique CDR3
6 unique J



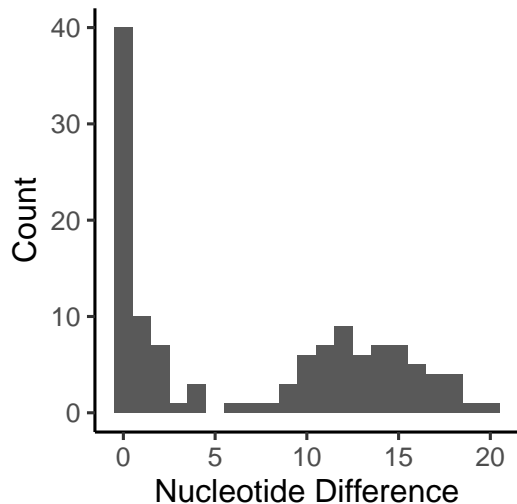
IGHV2–26*01

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



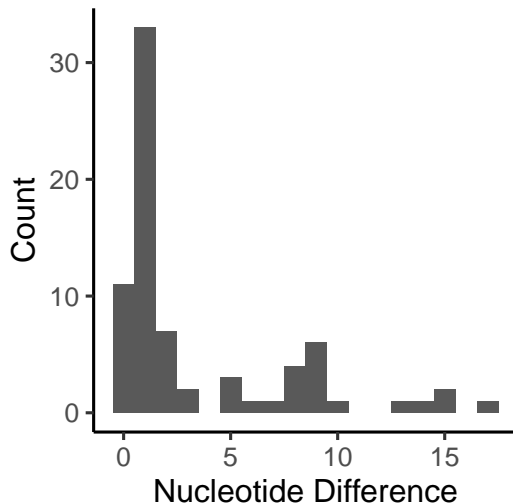
IGHV1–58*01_03

147 sequences assigned
40 (27.2%) exact matches, in which:
40 unique CDR3
5 unique J



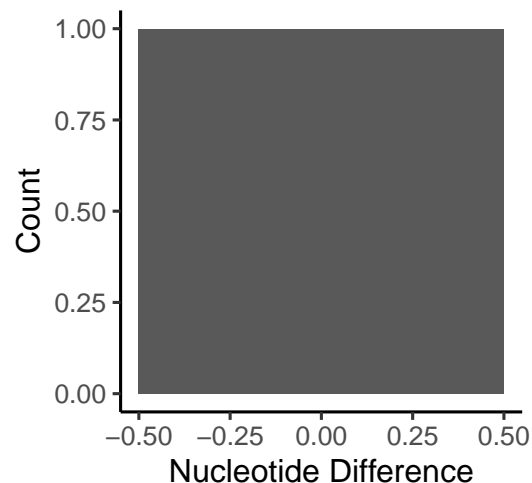
IGHV2–5*01

80 sequences assigned
11 (13.8%) exact matches, in which:
11 unique CDR3
6 unique J



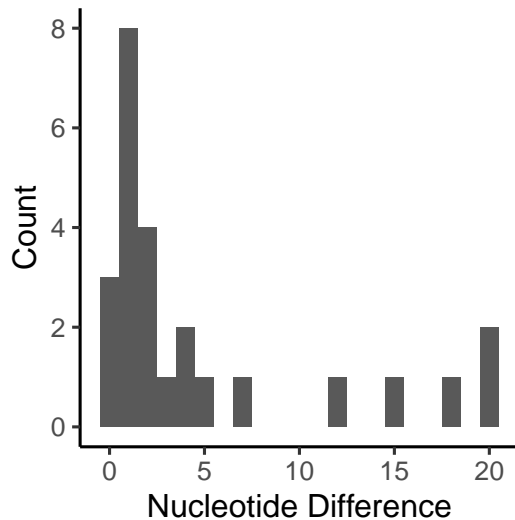
IGHV2–26*04

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



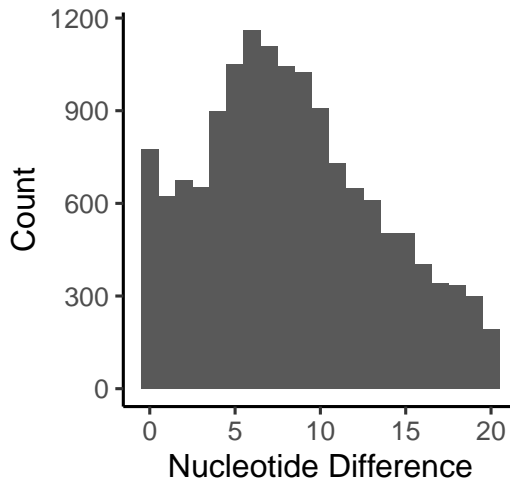
IGHV2-70*01

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



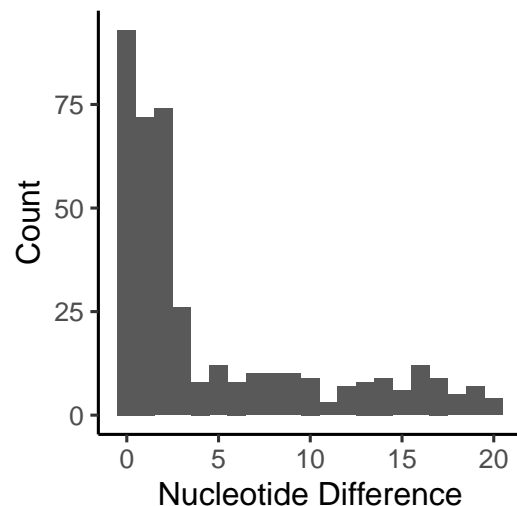
IGHV3-7*03

15182 sequences assigned
777 (5.1%) exact matches, in which:
758 unique CDR3
6 unique J



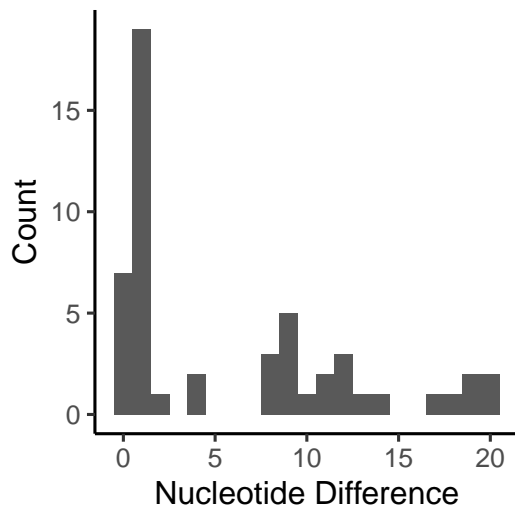
IGHV3-11*04

424 sequences assigned
93 (21.9%) exact matches, in which:
93 unique CDR3
6 unique J



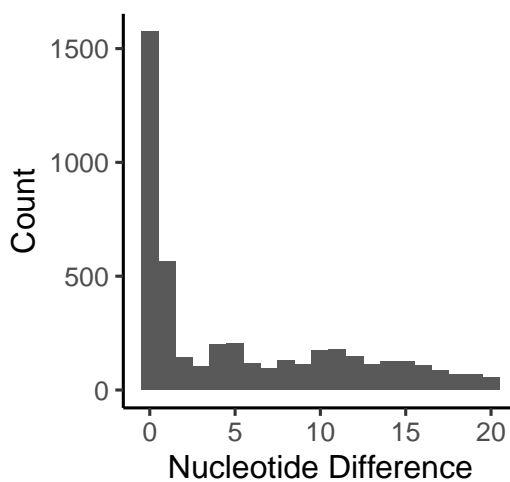
IGHV2-70*11_15

52 sequences assigned
7 (13.5%) exact matches, in which:
7 unique CDR3
3 unique J



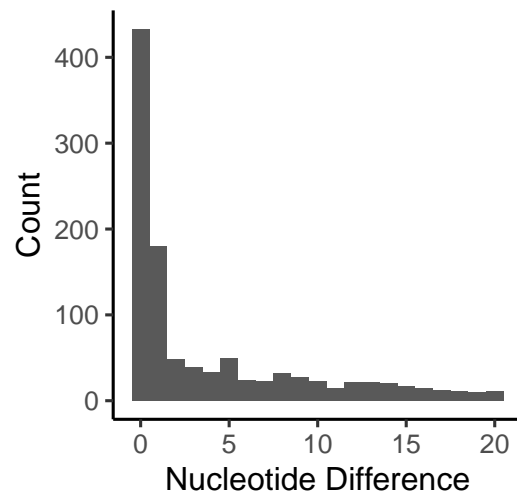
IGHV3-9*01

4884 sequences assigned
1574 (32.2%) exact matches, in which:
1505 unique CDR3
6 unique J



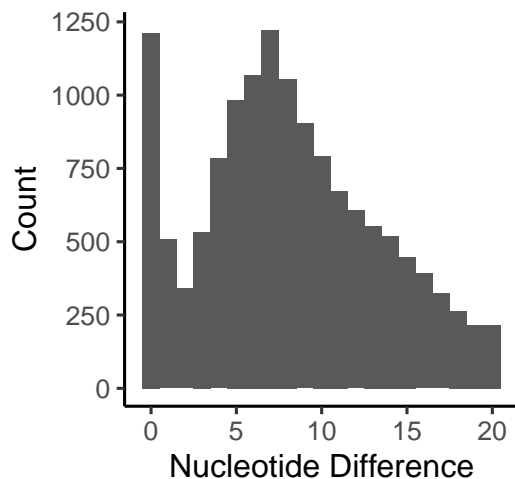
IGHV3-11*06

1160 sequences assigned
433 (37.3%) exact matches, in which:
411 unique CDR3
6 unique J



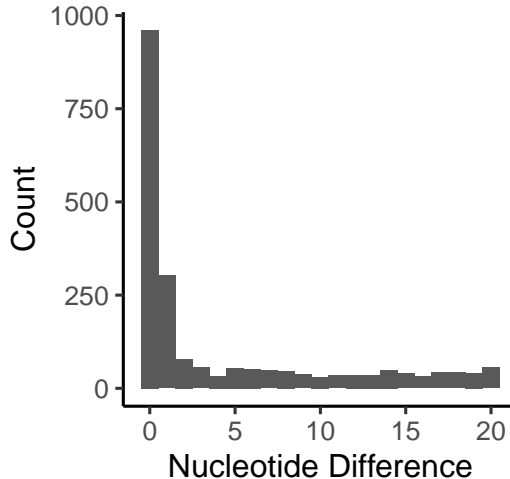
IGHV3-7*01

14212 sequences assigned
1211 (8.5%) exact matches, in which:
1169 unique CDR3
6 unique J



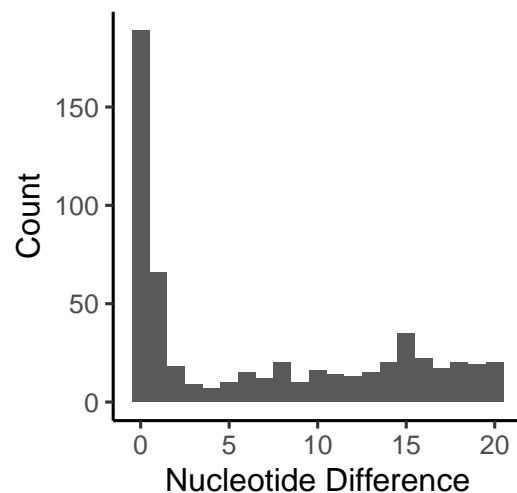
IGHV3-11*01

2435 sequences assigned
961 (39.5%) exact matches, in which:
928 unique CDR3
6 unique J



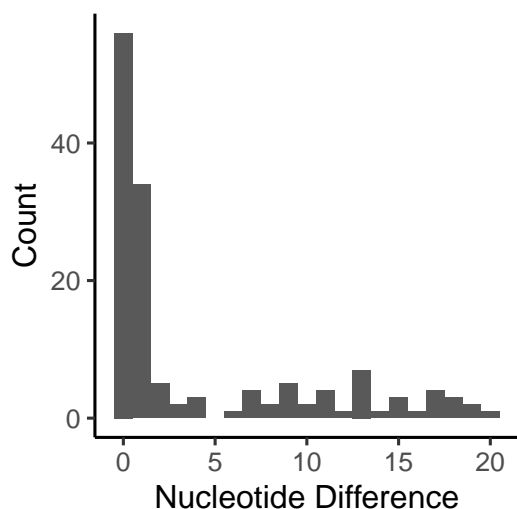
IGHV3-13*01

668 sequences assigned
189 (28.3%) exact matches, in which:
181 unique CDR3
5 unique J



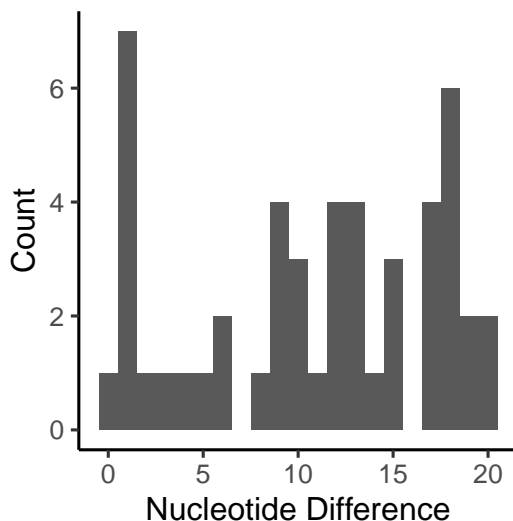
IGHV3-13*05

155 sequences assigned
56 (36.1%) exact matches, in which:
54 unique CDR3
4 unique J



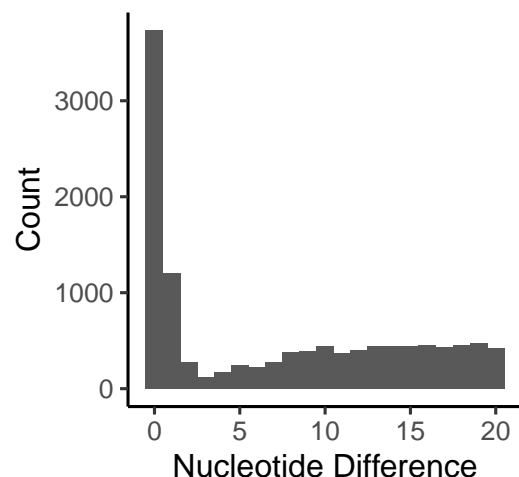
IGHV3-20*03_04

65 sequences assigned
1 (1.5%) exact matches, in which:
1 unique CDR3
1 unique J



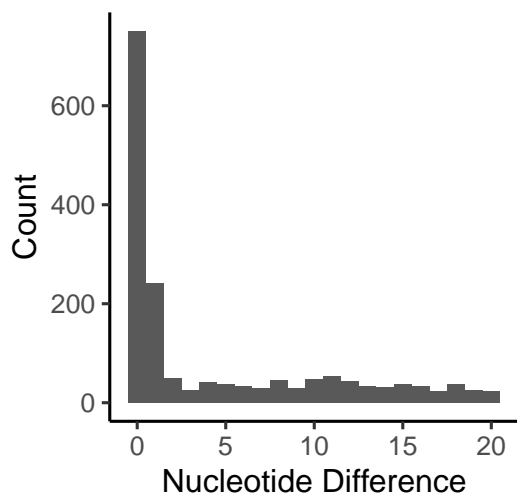
IGHV3-23*01_04

14390 sequences assigned
3733 (25.9%) exact matches, in which:
3573 unique CDR3
6 unique J



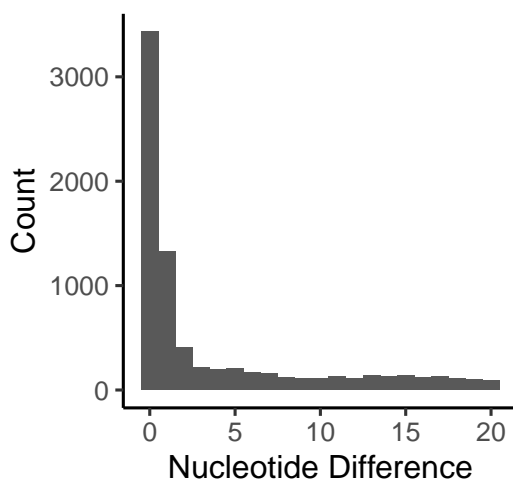
IGHV3-15*01_02

1869 sequences assigned
751 (40.2%) exact matches, in which:
736 unique CDR3
6 unique J



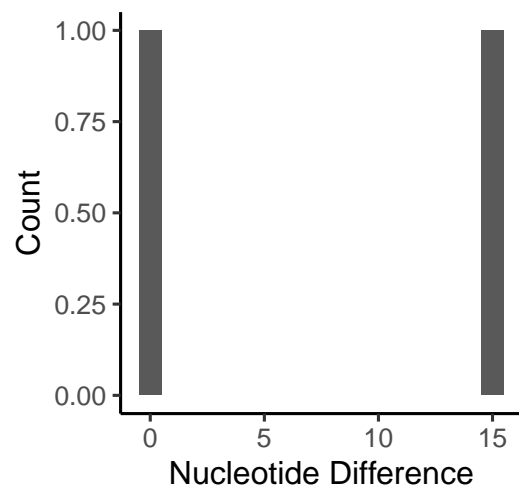
IGHV3-21*01_02

8380 sequences assigned
3432 (41%) exact matches, in which:
3262 unique CDR3
6 unique J



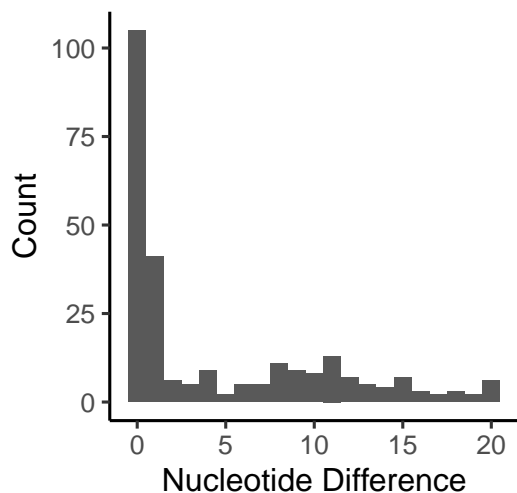
IGHV3-30-3*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



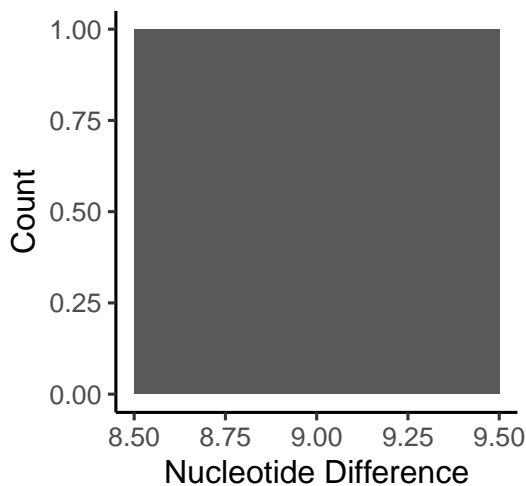
IGHV3-20*01_02

284 sequences assigned
105 (37%) exact matches, in which:
99 unique CDR3
6 unique J



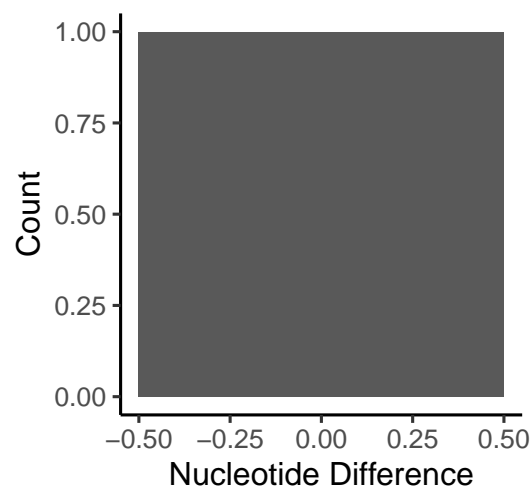
IGHV3-22*01_02

1 sequences assigned
No exact matches.



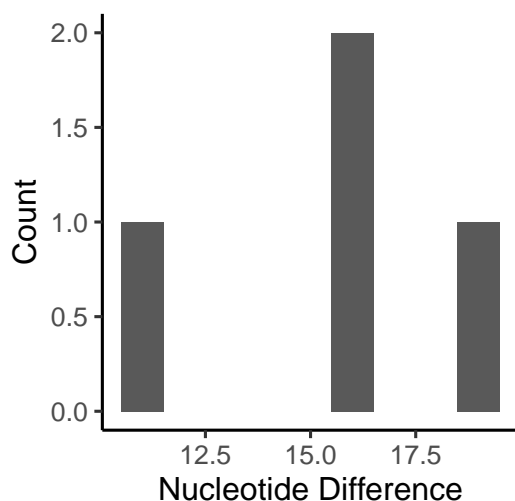
IGHV3-30-3*03

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



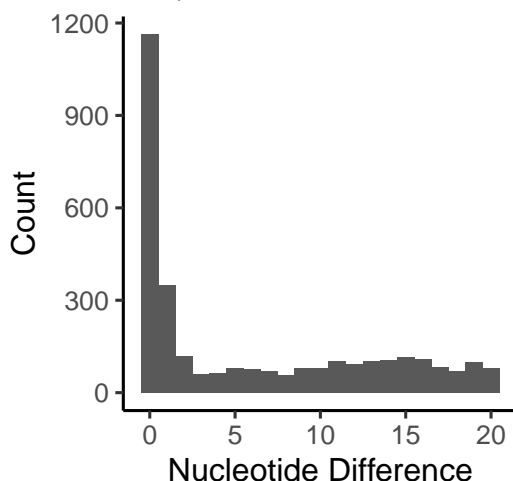
IGHV3-30*03

7 sequences assigned
No exact matches.



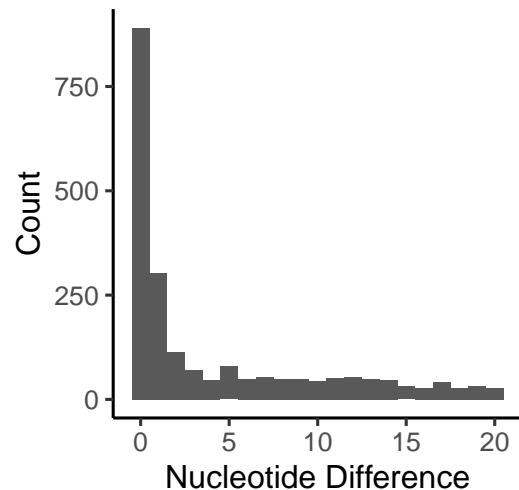
IGHV3-33*08

3633 sequences assigned
1163 (32%) exact matches, in which:
1129 unique CDR3
6 unique J



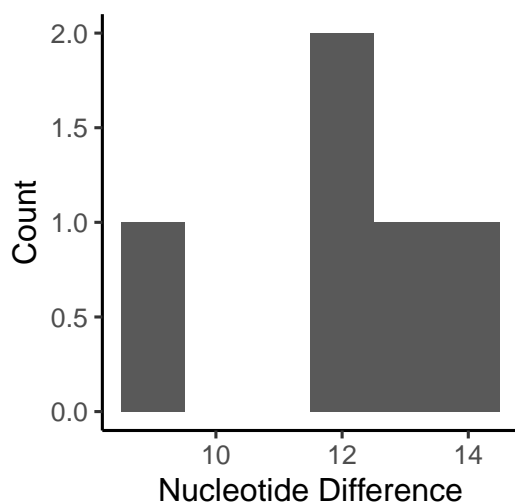
IGHV3-48*01

2340 sequences assigned
891 (38.1%) exact matches, in which:
854 unique CDR3
6 unique J



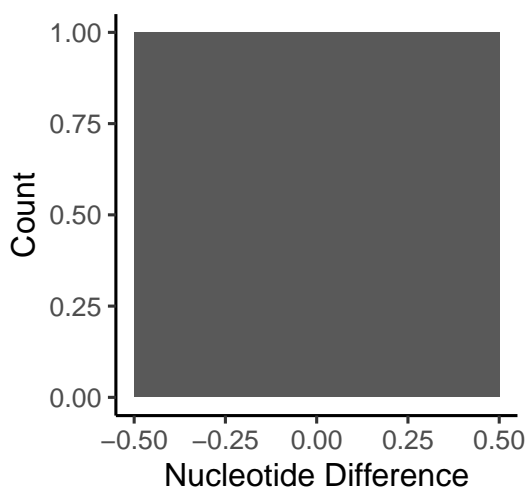
IGHV3-30*19

6 sequences assigned
No exact matches.



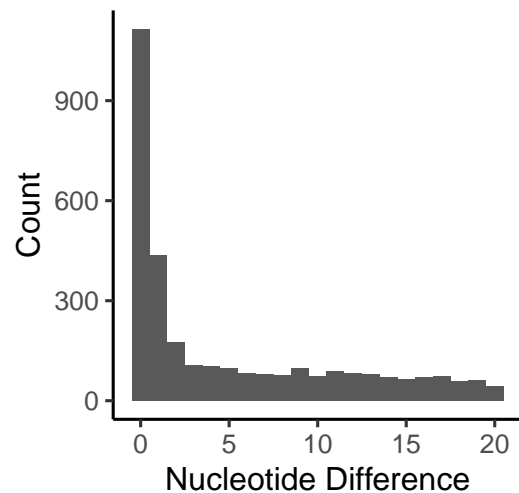
IGHV3-35*01

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



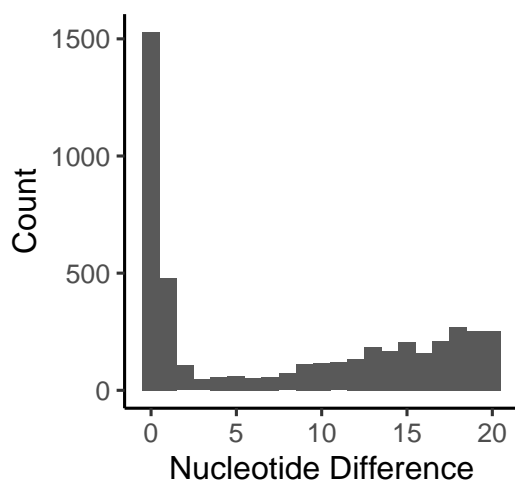
IGHV3-48*04

3422 sequences assigned
1115 (32.6%) exact matches, in which:
1063 unique CDR3
6 unique J



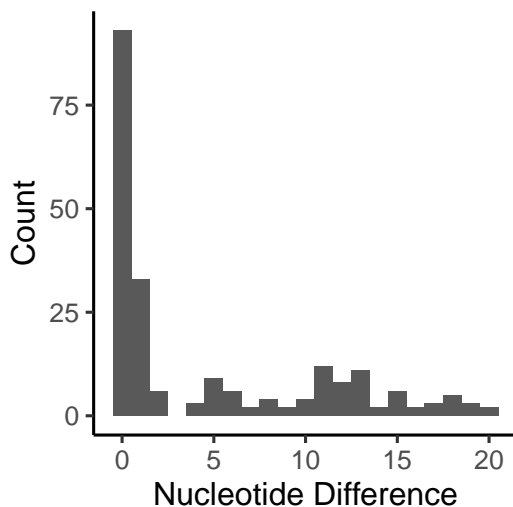
IGHV3-33*01

5505 sequences assigned
1529 (27.8%) exact matches, in which:
1474 unique CDR3
6 unique J



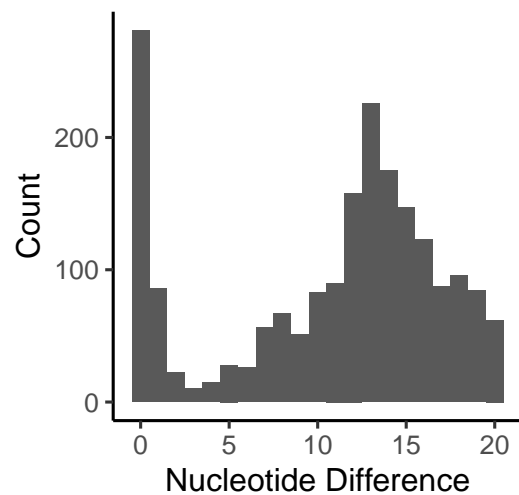
IGHV3-43*01

263 sequences assigned
93 (35.4%) exact matches, in which:
93 unique CDR3
5 unique J



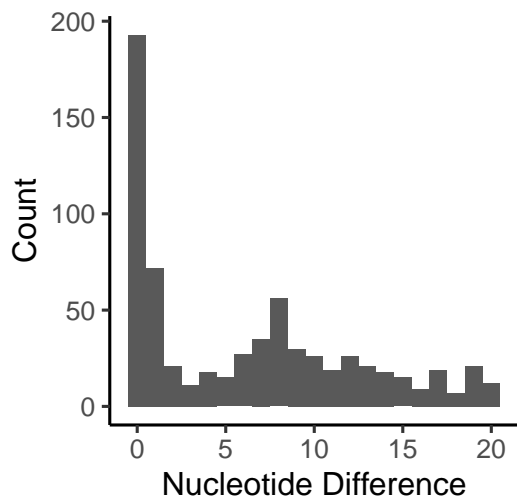
IGHV3-49*04

2257 sequences assigned
281 (12.5%) exact matches, in which:
265 unique CDR3
6 unique J



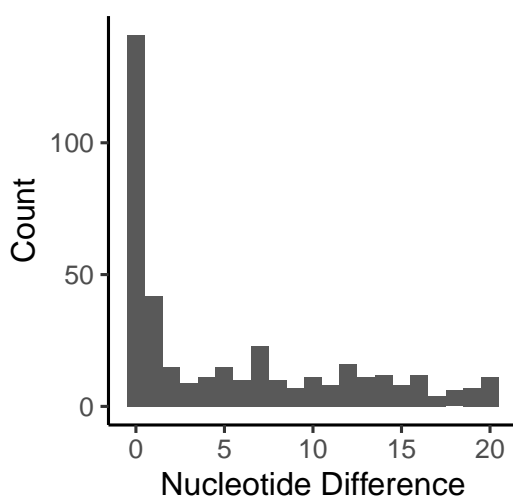
IGHV3-49*03_05

702 sequences assigned
193 (27.5%) exact matches, in which:
186 unique CDR3
5 unique J



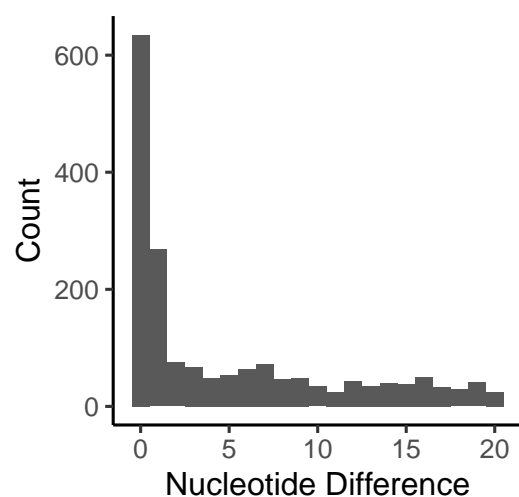
IGHV3-64*01

508 sequences assigned
141 (27.8%) exact matches, in which:
135 unique CDR3
6 unique J



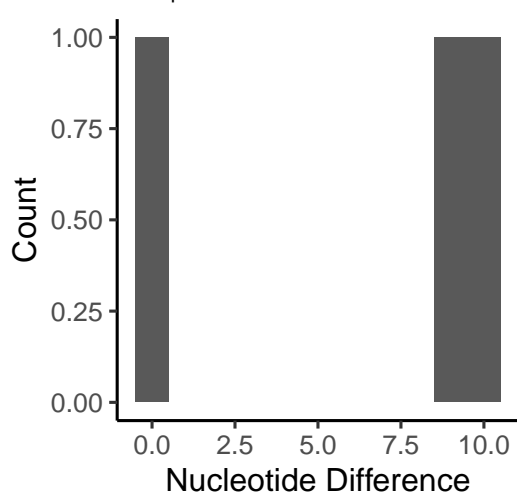
IGHV3-66*01

1951 sequences assigned
635 (32.5%) exact matches, in which:
608 unique CDR3
6 unique J



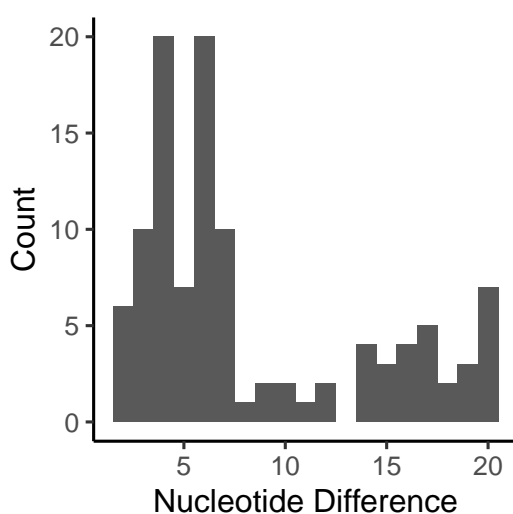
IGHV3-52*01_03

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



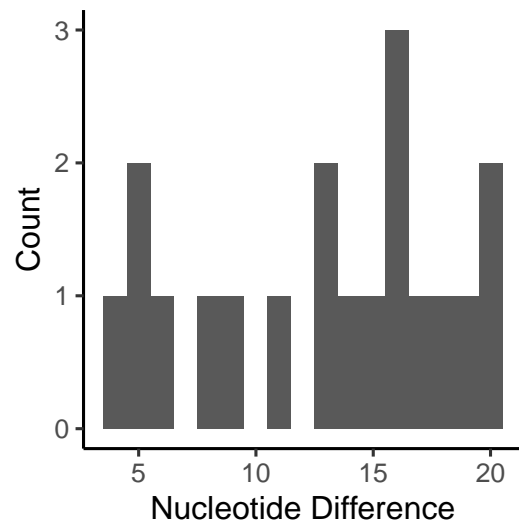
IGHV3-64*04

126 sequences assigned
No exact matches.



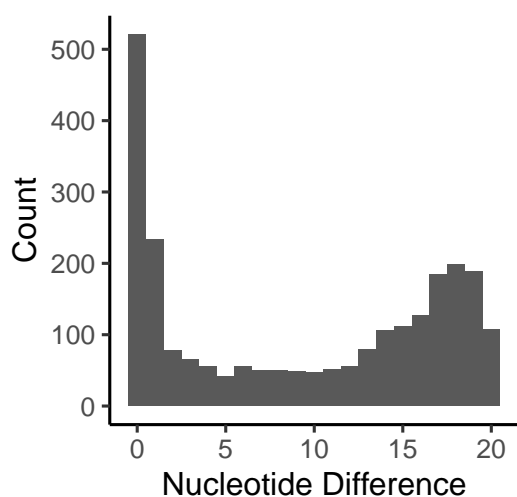
IGHV3-69-1*01

38 sequences assigned
No exact matches.



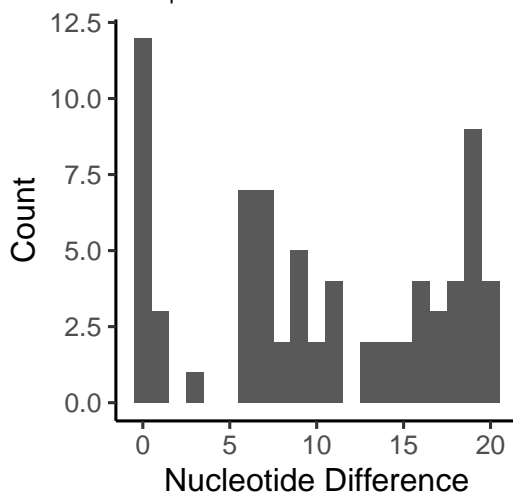
IGHV3-53*01_02

2824 sequences assigned
521 (18.4%) exact matches, in which:
500 unique CDR3
6 unique J



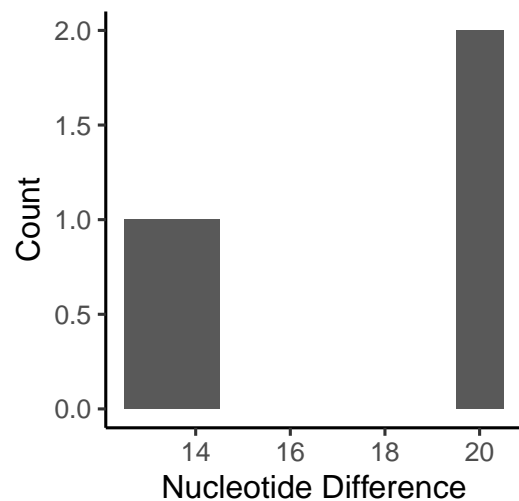
IGHV3-64*02_07

140 sequences assigned
12 (8.6%) exact matches, in which:
12 unique CDR3
3 unique J



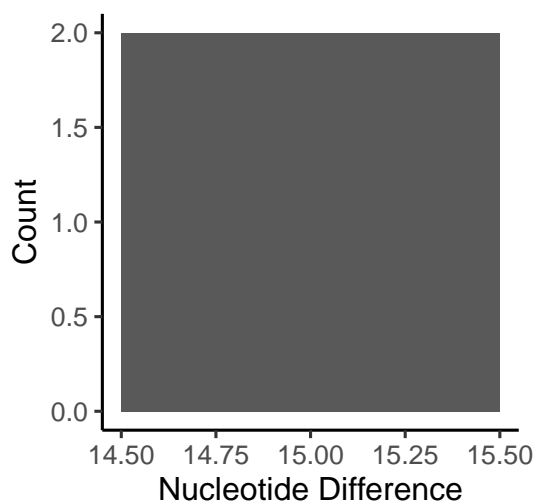
IGHV3-69-1*02

10 sequences assigned
No exact matches.



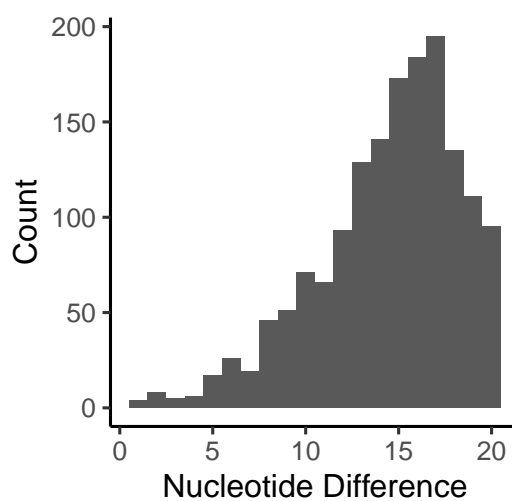
IGHV3-71*01_04

6 sequences assigned
No exact matches.



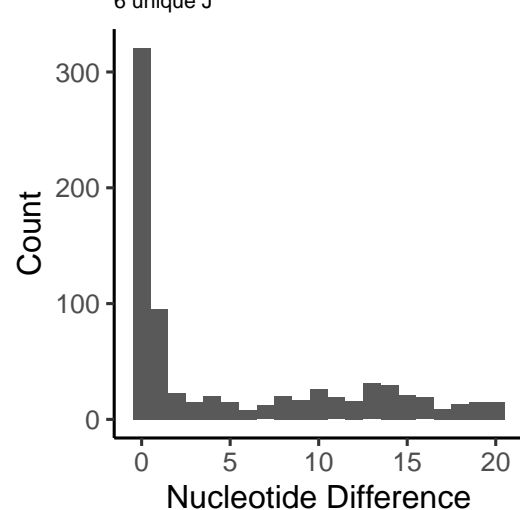
IGHV3-74*03

2131 sequences assigned
No exact matches.



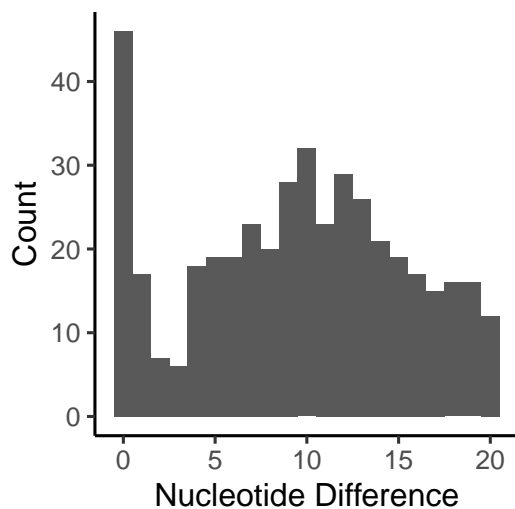
IGHV3-64D*06

850 sequences assigned
321 (37.8%) exact matches, in which:
302 unique CDR3
6 unique J



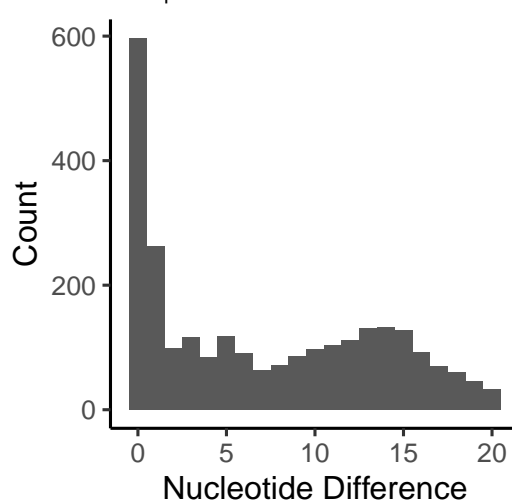
IGHV3-72*01

504 sequences assigned
46 (9.1%) exact matches, in which:
46 unique CDR3
5 unique J



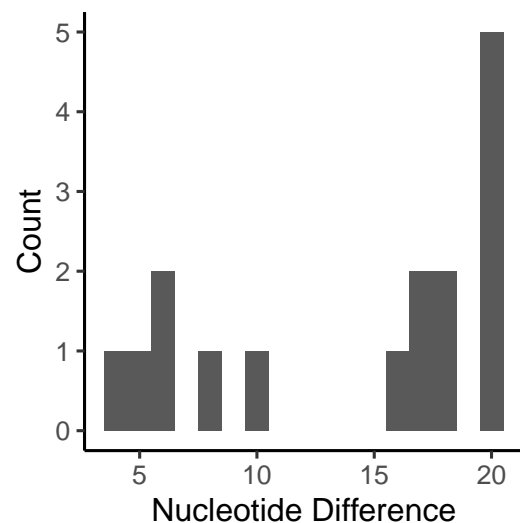
IGHV3-74*01_02

2803 sequences assigned
597 (21.3%) exact matches, in which:
580 unique CDR3
6 unique J



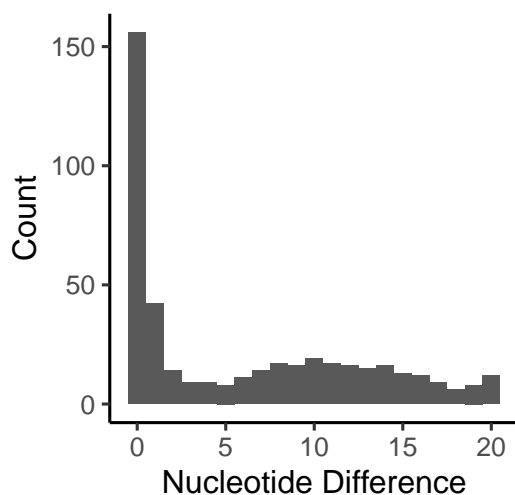
IGHV3-NL1*01

28 sequences assigned
No exact matches.



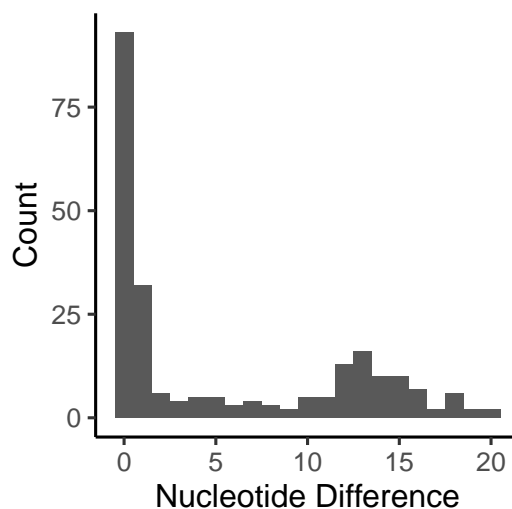
IGHV3-73*01_02

472 sequences assigned
156 (33.1%) exact matches, in which:
151 unique CDR3
6 unique J



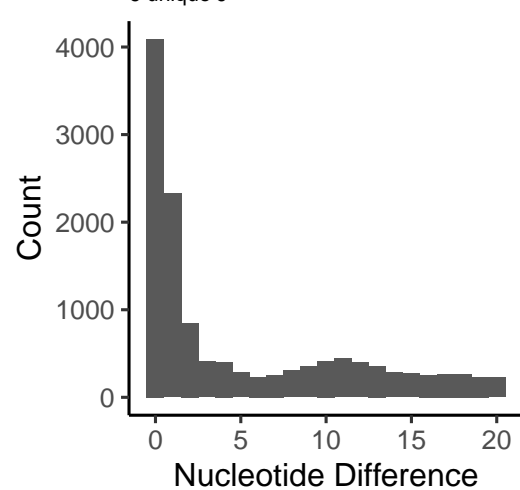
IGHV3-43D*04

254 sequences assigned
93 (36.6%) exact matches, in which:
89 unique CDR3
5 unique J



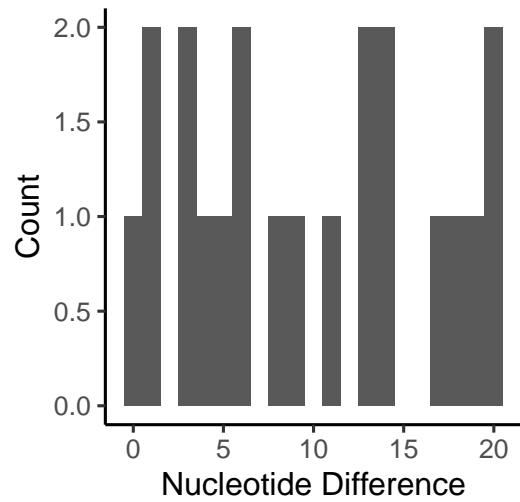
IGHV4-4*07

14134 sequences assigned
4091 (28.9%) exact matches, in which:
3566 unique CDR3
6 unique J



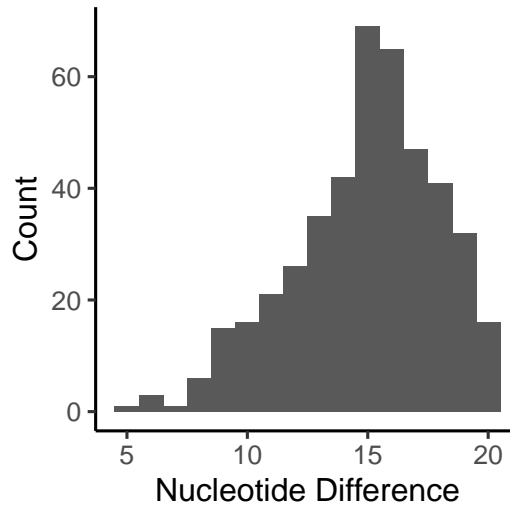
IGHV4-28*03

29 sequences assigned
1 (3.4%) exact matches, in which:
1 unique CDR3
1 unique J



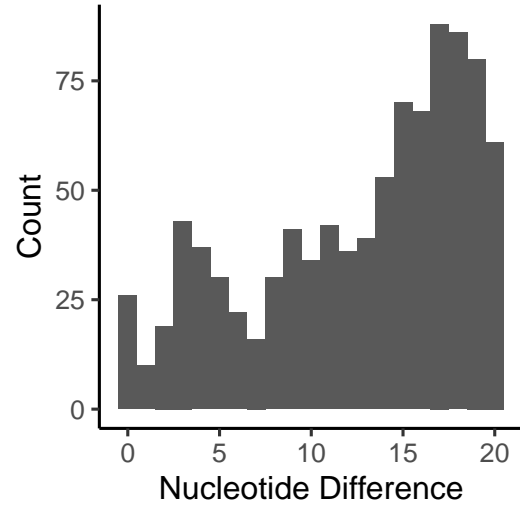
IGHV4-30-2*03

507 sequences assigned
No exact matches.



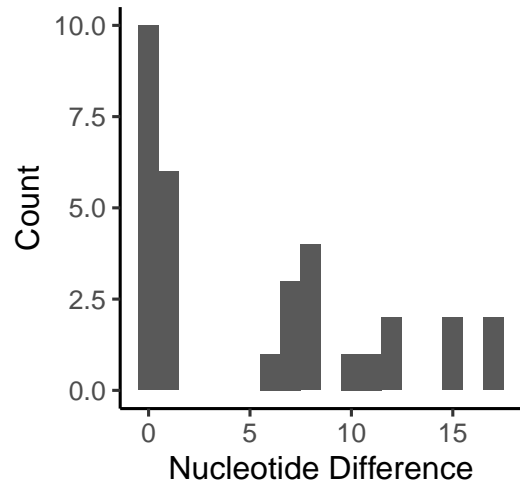
IGHV4-38-2*02

1438 sequences assigned
26 (1.8%) exact matches, in which:
26 unique CDR3
5 unique J



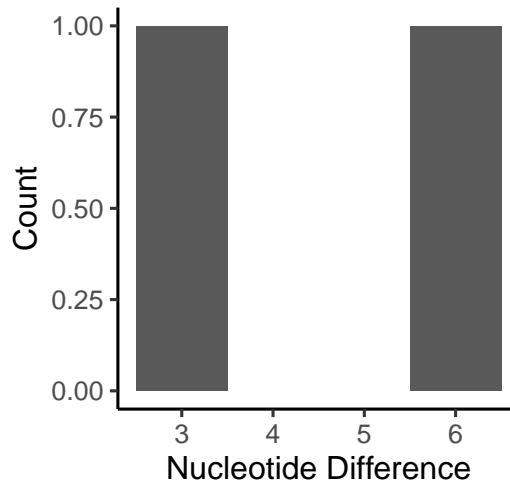
IGHV4-28*01_07

50 sequences assigned
10 (20%) exact matches, in which:
9 unique CDR3
3 unique J



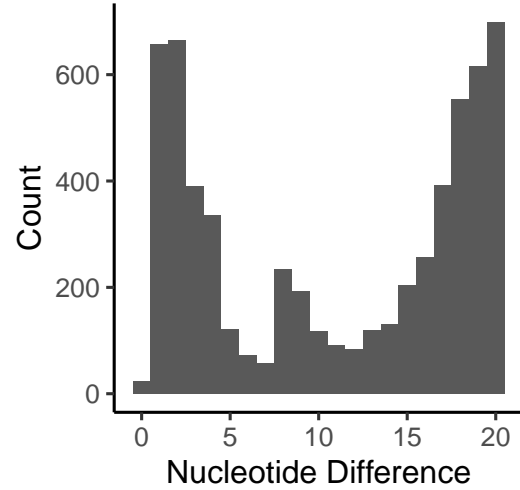
IGHV4-31*02

3 sequences assigned
No exact matches.



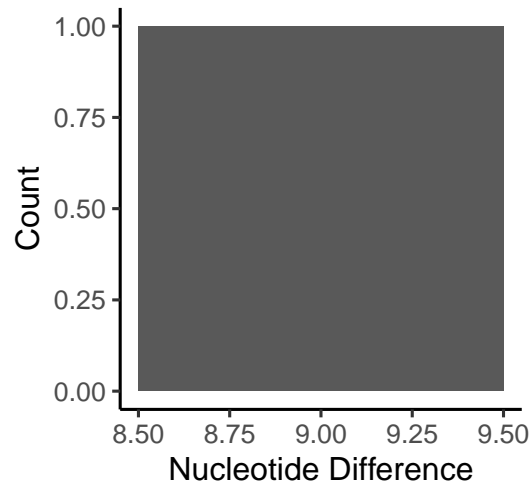
IGHV4-39*07

8252 sequences assigned
24 (0.3%) exact matches, in which:
24 unique CDR3
3 unique J



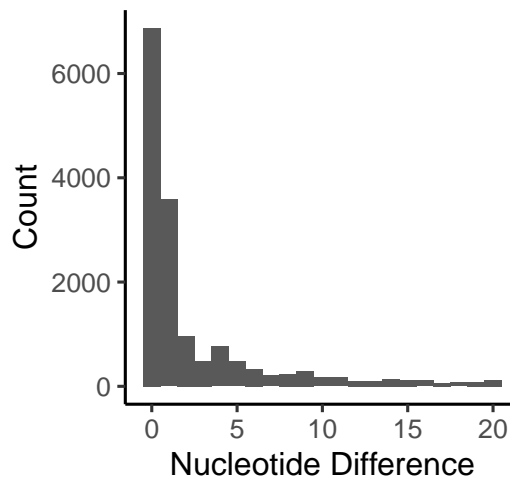
IGHV4-30-4*01

3 sequences assigned
No exact matches.



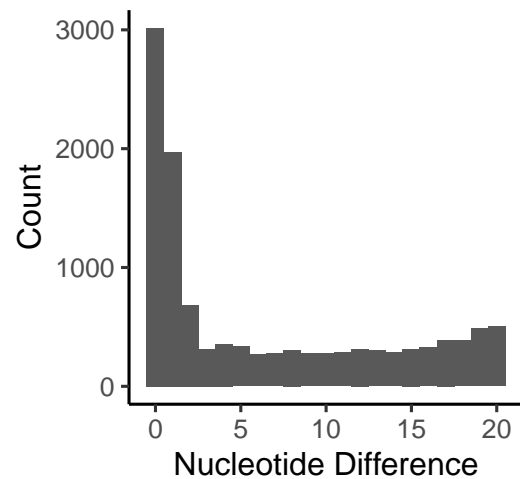
IGHV4-34*01_02

16139 sequences assigned
6872 (42.6%) exact matches, in which:
6075 unique CDR3
6 unique J



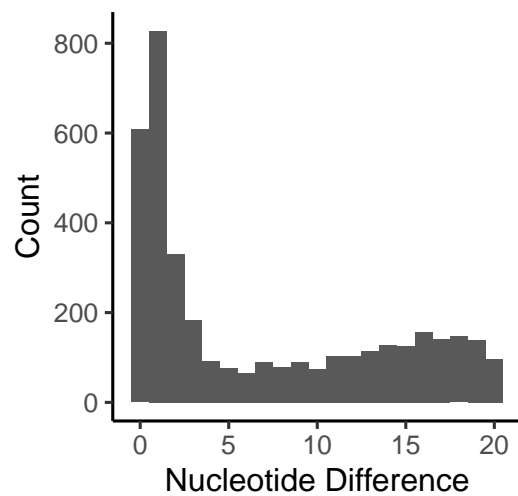
IGHV4-59*08

15182 sequences assigned
3015 (19.9%) exact matches, in which:
2598 unique CDR3
6 unique J



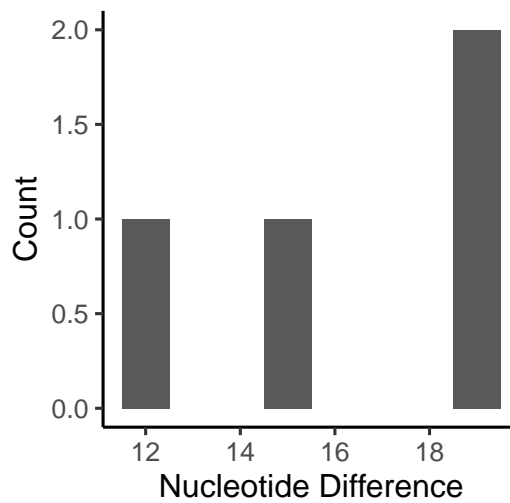
IGHV4–59*12

4571 sequences assigned
608 (13.3%) exact matches, in which:
596 unique CDR3
6 unique J



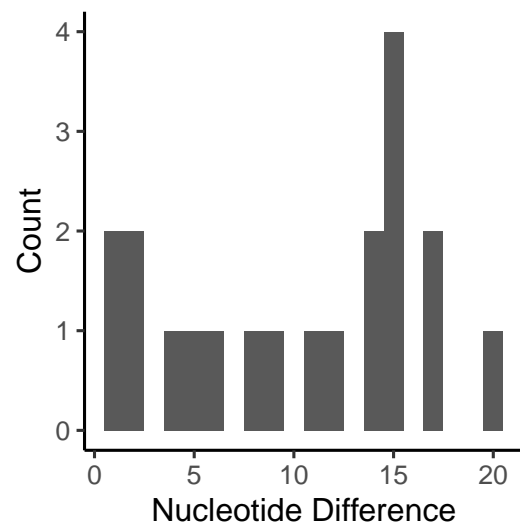
IGHV4/OR15–8*01

10 sequences assigned
No exact matches.



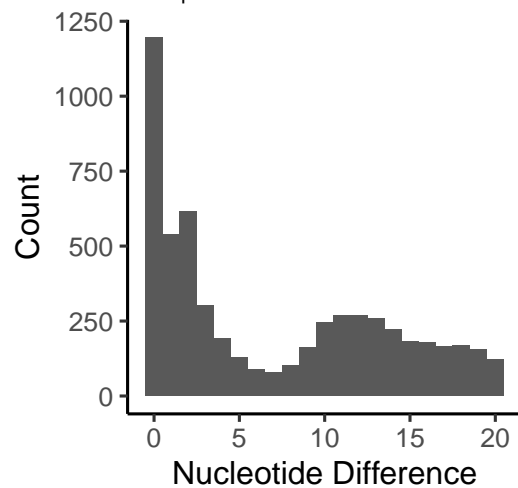
IGHV5–51*06

23 sequences assigned
No exact matches.



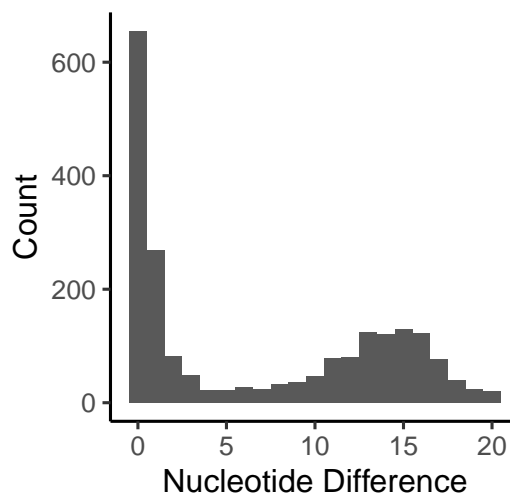
IGHV4–61*01

6251 sequences assigned
1195 (19.1%) exact matches, in which:
1110 unique CDR3
6 unique J



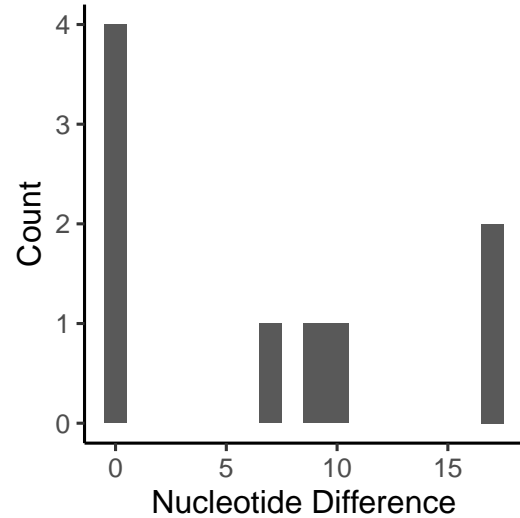
IGHV5–10–1*01_03

2156 sequences assigned
655 (30.4%) exact matches, in which:
636 unique CDR3
6 unique J



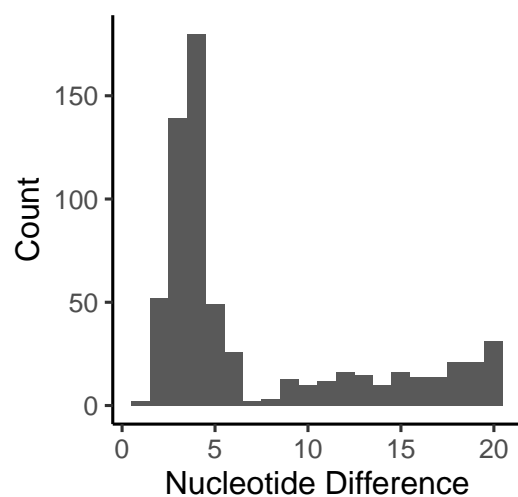
IGHV5–51*07

10 sequences assigned
4 (40%) exact matches, in which:
4 unique CDR3
3 unique J



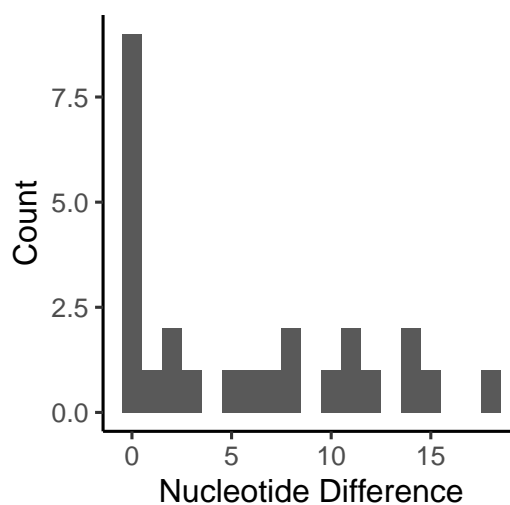
IGHV4–61*05

795 sequences assigned
No exact matches.



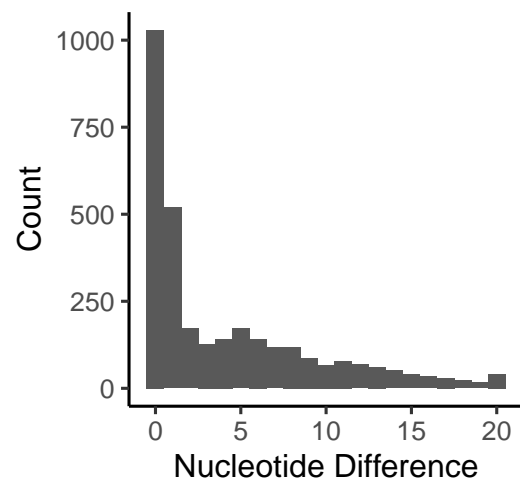
IGHV5–51*04

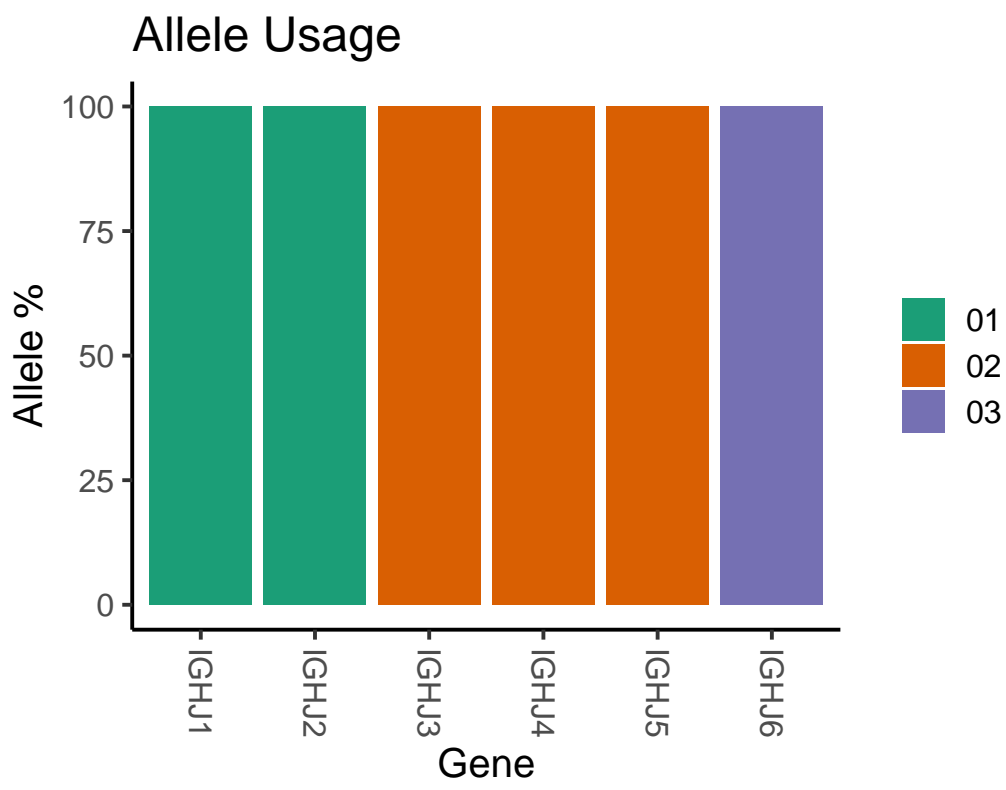
31 sequences assigned
9 (29%) exact matches, in which:
9 unique CDR3
5 unique J



IGHV6–1*01_02

3216 sequences assigned
1029 (32%) exact matches, in which:
930 unique CDR3
6 unique J





Warning – no inferred sequences found.