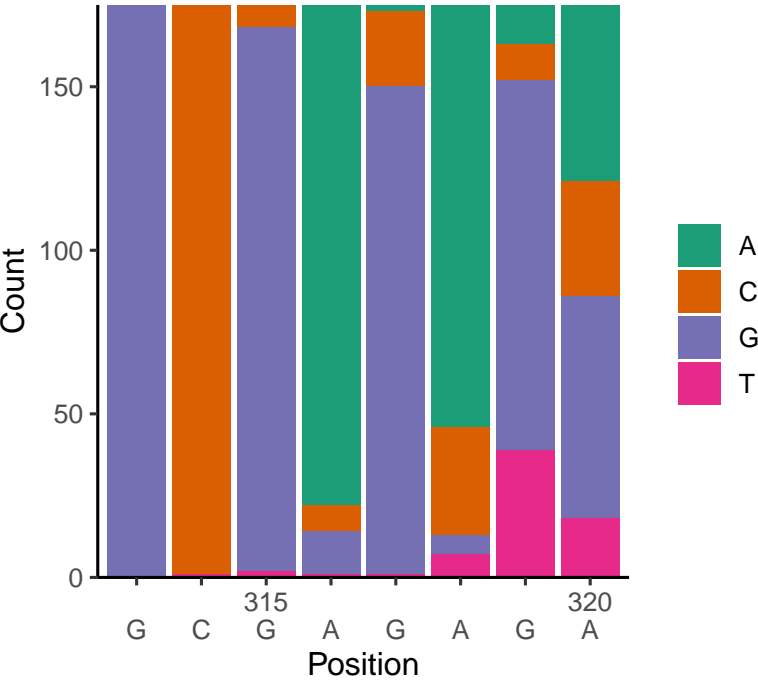
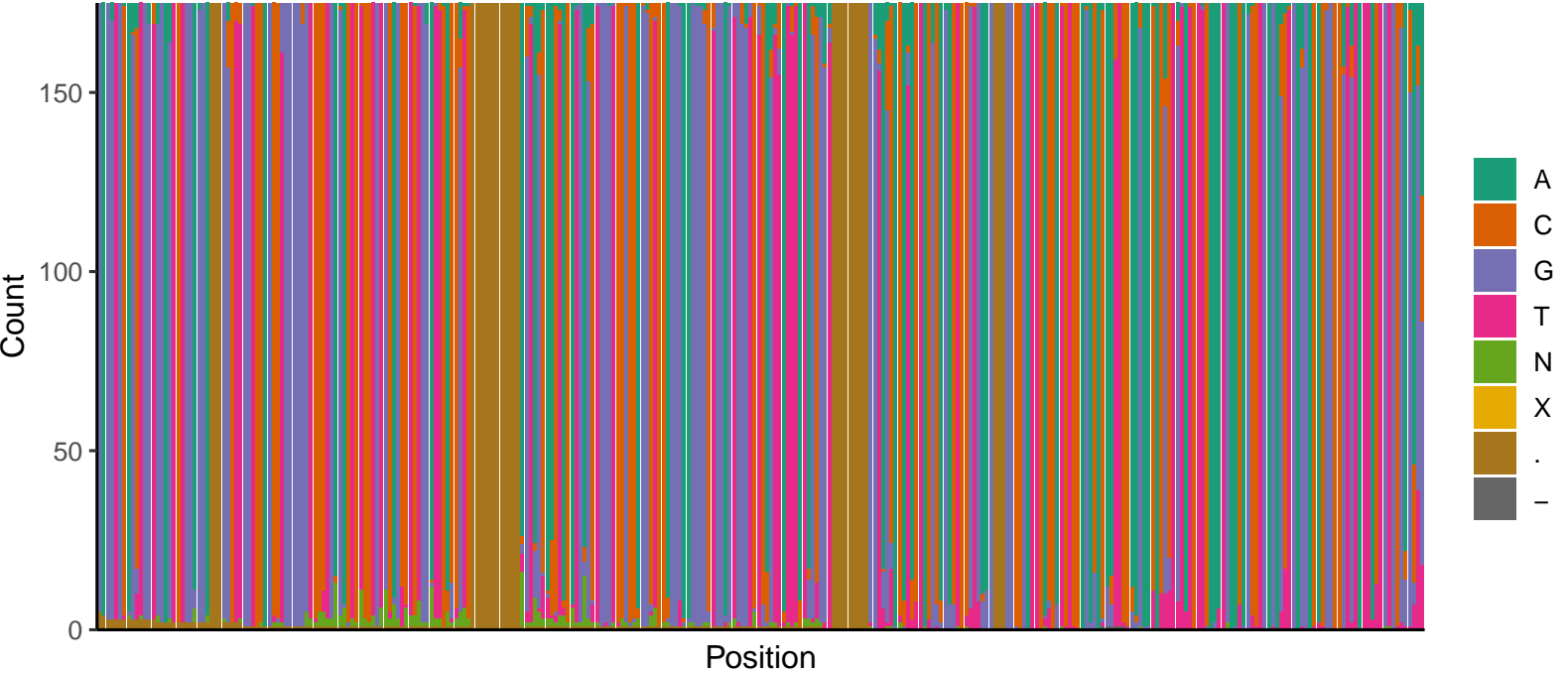


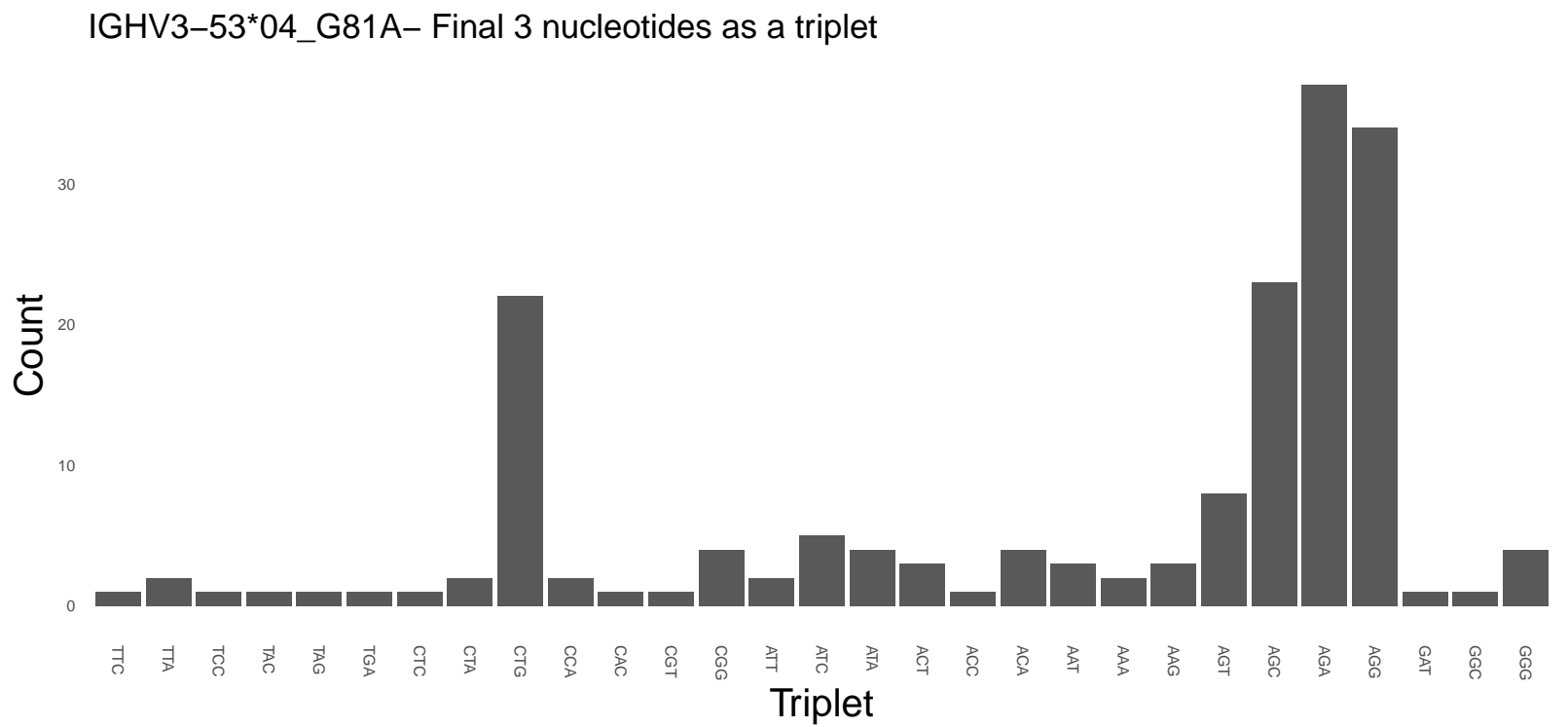
Gene IGHV3-53*04_G81A



Gene IGHV3-53*04_G81A

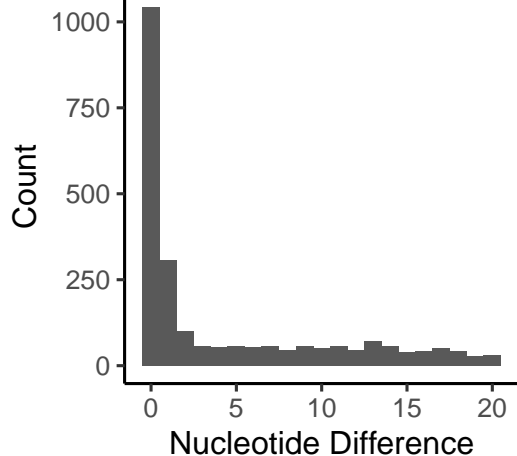


IGHV3-53*04_G81A- Final 3 nucleotides as a triplet



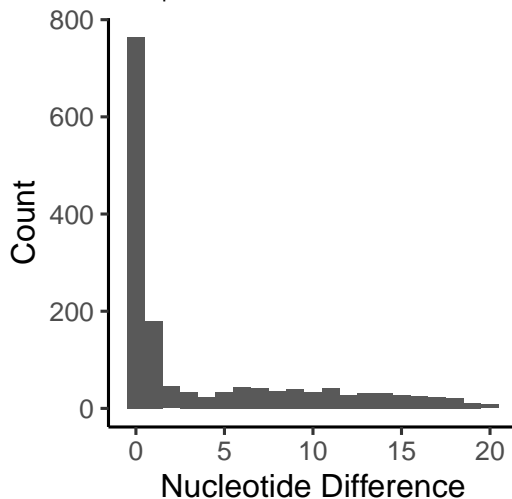
IGHV1-2*02

2582 sequences assigned
1042 (40.4%) exact matches, in which:
985 unique CDR3
6 unique J



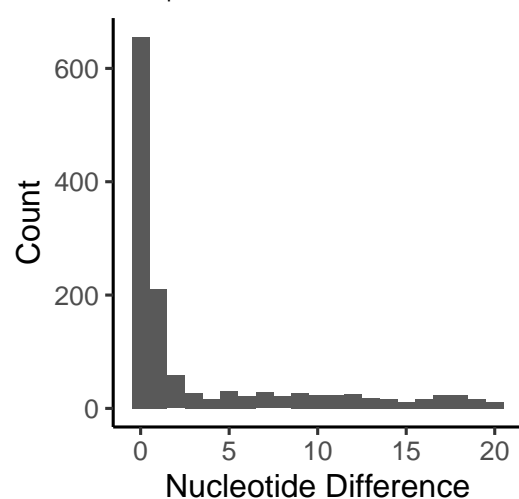
IGHV1-18*01

1707 sequences assigned
765 (44.8%) exact matches, in which:
728 unique CDR3
6 unique J



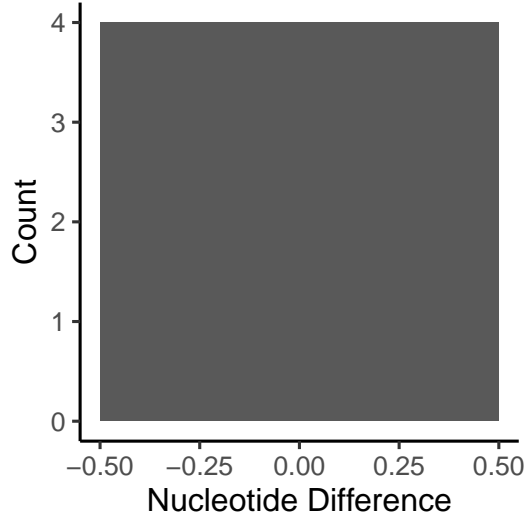
IGHV1-46*01

1432 sequences assigned
656 (45.8%) exact matches, in which:
614 unique CDR3
6 unique J



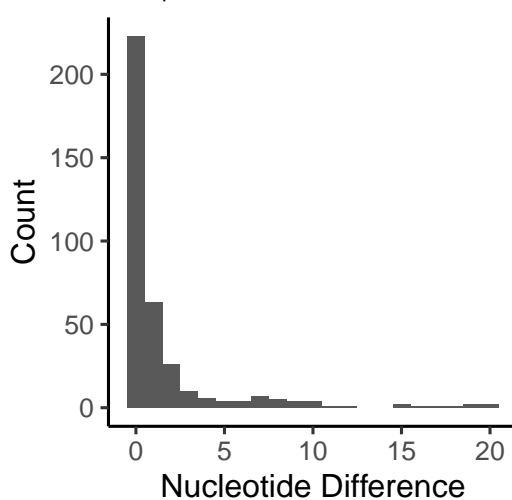
IGHV1-3*02

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



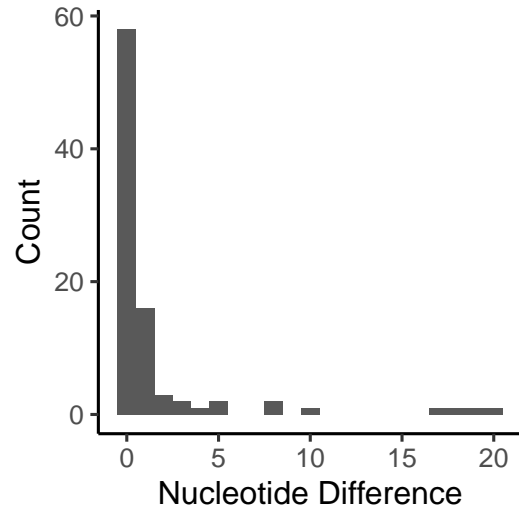
IGHV1-24*01

418 sequences assigned
223 (53.3%) exact matches, in which:
206 unique CDR3
6 unique J



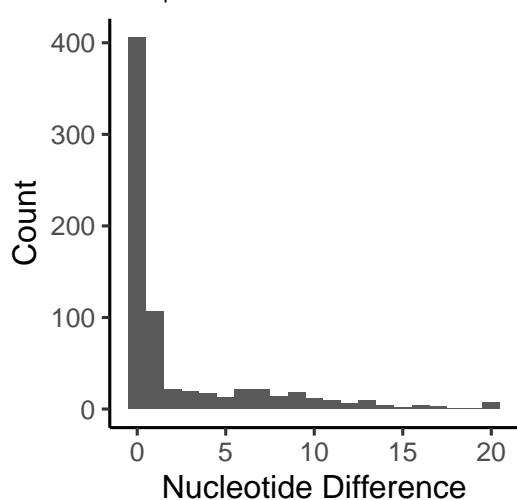
IGHV1-58*01

99 sequences assigned
58 (58.6%) exact matches, in which:
55 unique CDR3
4 unique J



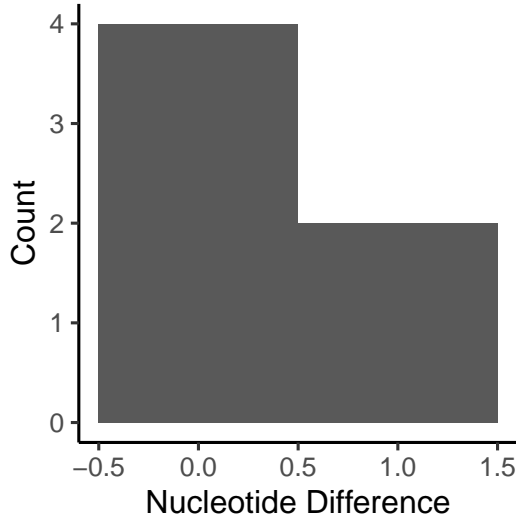
IGHV1-8*01

756 sequences assigned
406 (53.7%) exact matches, in which:
385 unique CDR3
6 unique J



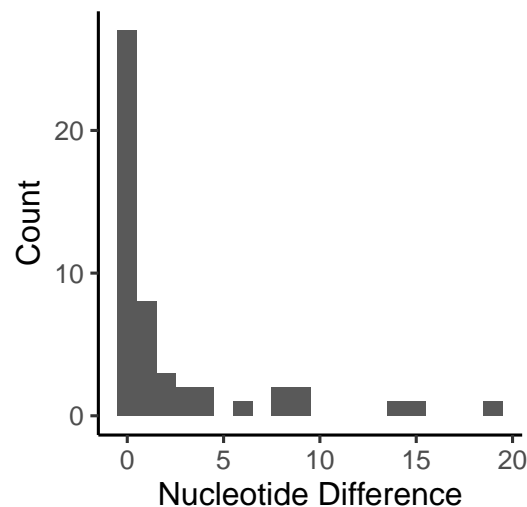
IGHV1-45*02

6 sequences assigned
4 (66.7%) exact matches, in which:
4 unique CDR3
2 unique J



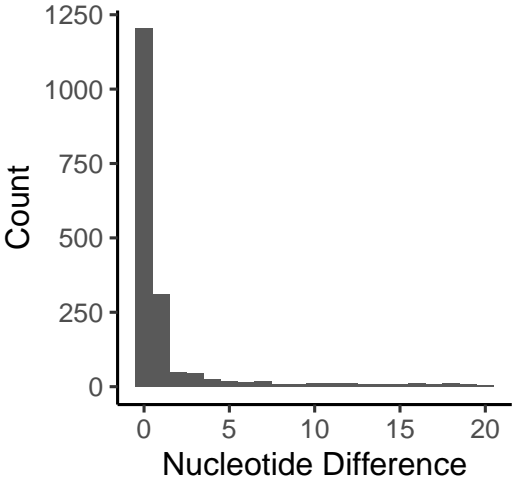
IGHV1-58*02

51 sequences assigned
27 (52.9%) exact matches, in which:
27 unique CDR3
5 unique J



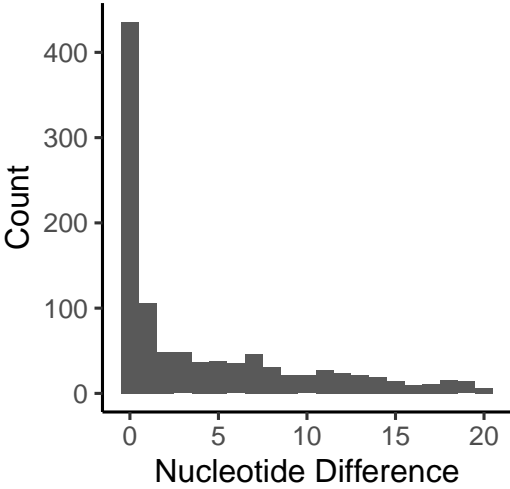
IGHV1-69*01

1949 sequences assigned
1204 (61.8%) exact matches, in which:
1097 unique CDR3
6 unique J



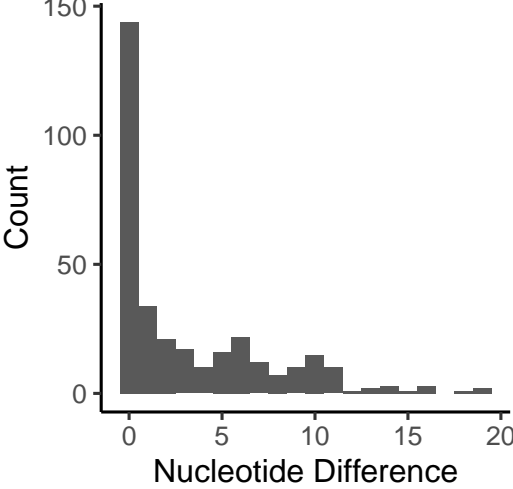
IGHV2-5*02

1099 sequences assigned
436 (39.7%) exact matches, in which:
414 unique CDR3
6 unique J



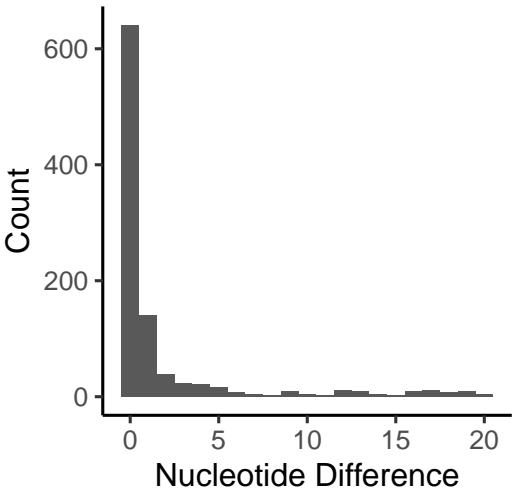
IGHV2-70*15

344 sequences assigned
144 (41.9%) exact matches, in which:
136 unique CDR3
5 unique J



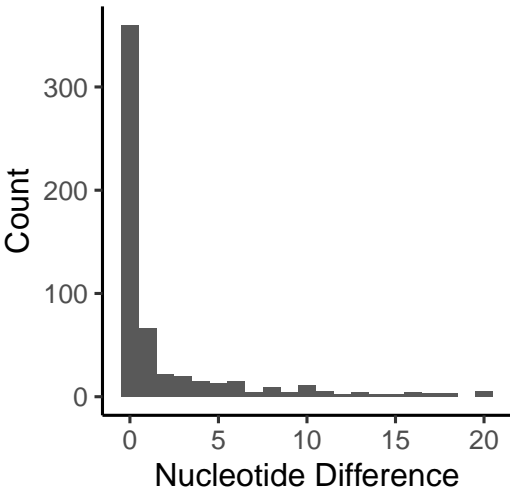
IGHV1-69*04

1045 sequences assigned
641 (61.3%) exact matches, in which:
579 unique CDR3
6 unique J



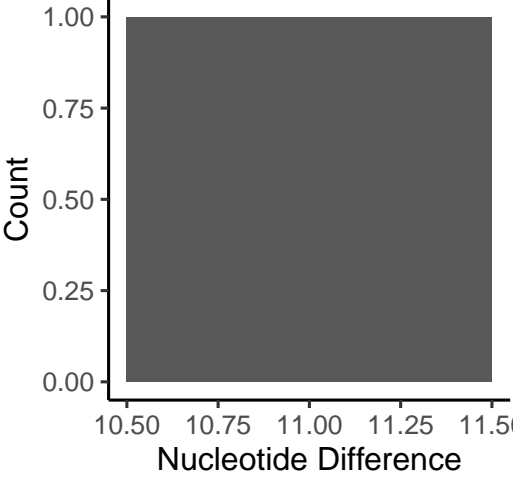
IGHV2-26*01

601 sequences assigned
360 (59.9%) exact matches, in which:
340 unique CDR3
6 unique J



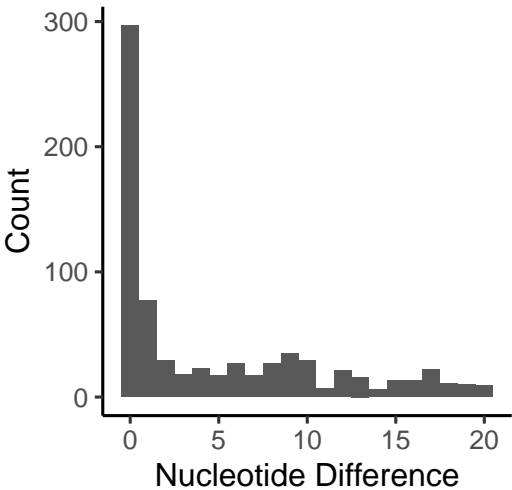
IGHV2-70D*14

1 sequences assigned
No exact matches.



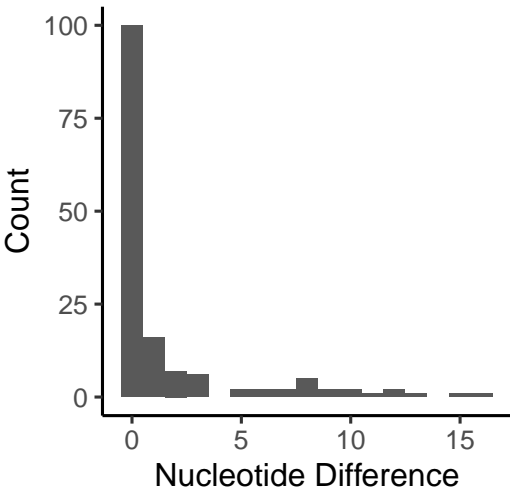
IGHV2-5*01

780 sequences assigned
297 (38.1%) exact matches, in which:
275 unique CDR3
6 unique J



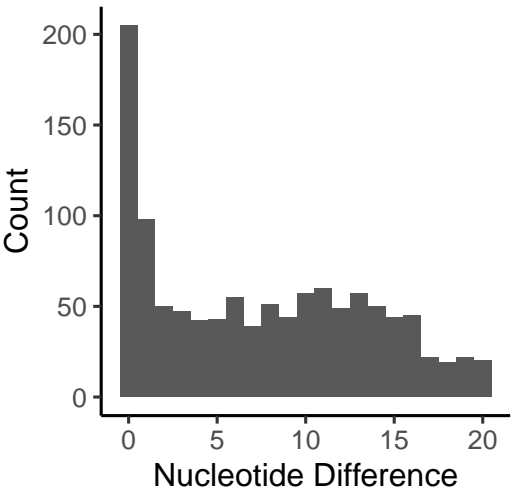
IGHV2-70*01

163 sequences assigned
100 (61.3%) exact matches, in which:
97 unique CDR3
6 unique J



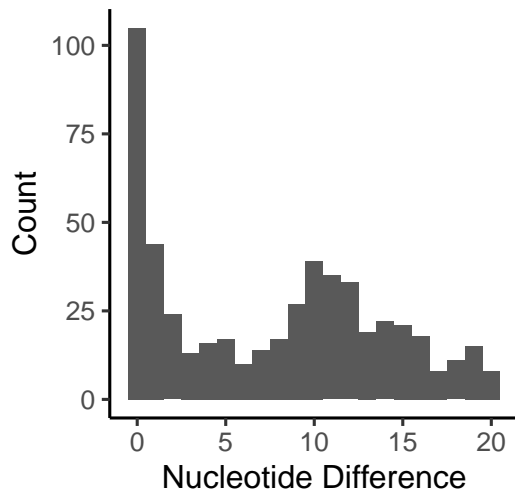
IGHV3-7*01

1273 sequences assigned
205 (16.1%) exact matches, in which:
189 unique CDR3
6 unique J



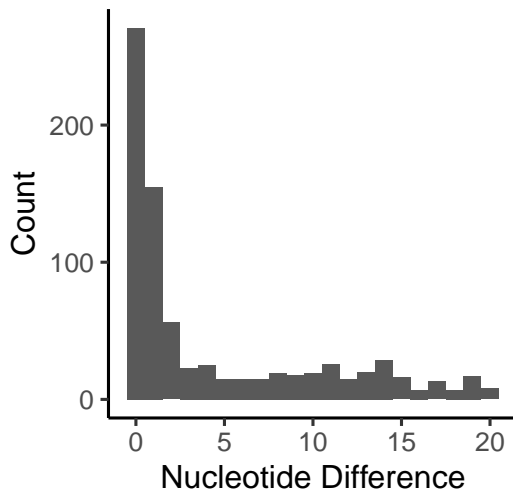
IGHV3-7*04

594 sequences assigned
105 (17.7%) exact matches, in which:
102 unique CDR3
5 unique J



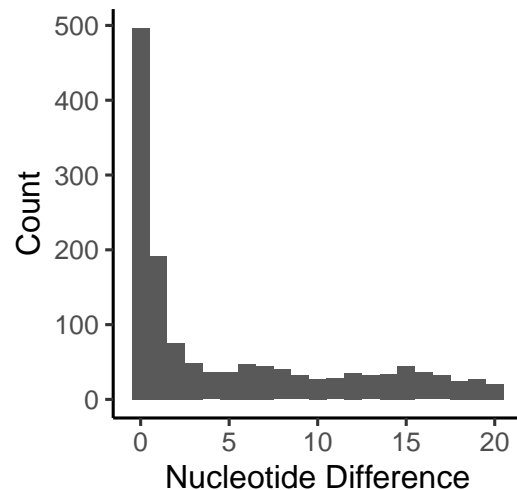
IGHV3-11*05

851 sequences assigned
271 (31.8%) exact matches, in which:
253 unique CDR3
6 unique J



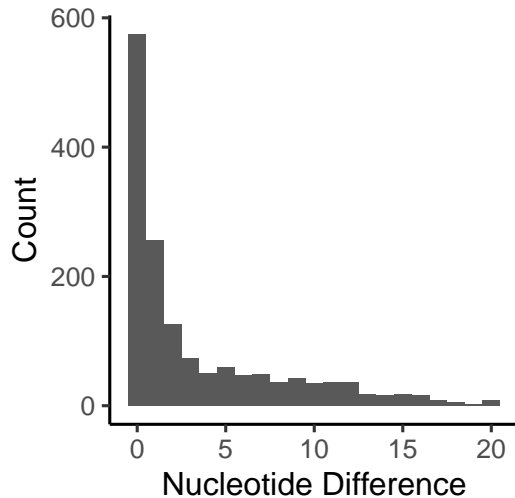
IGHV3-15*01

1560 sequences assigned
497 (31.9%) exact matches, in which:
475 unique CDR3
6 unique J



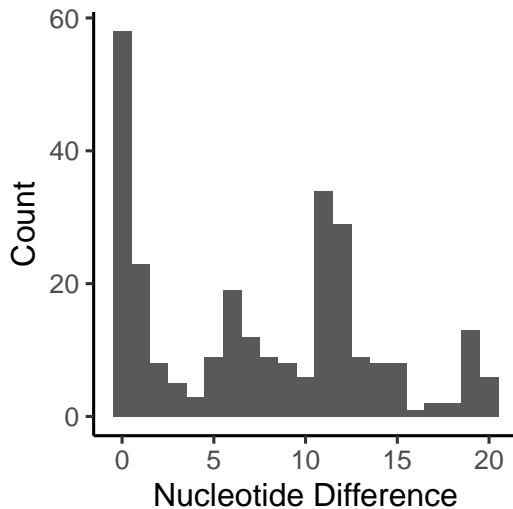
IGHV3-9*01

1594 sequences assigned
575 (36.1%) exact matches, in which:
527 unique CDR3
6 unique J



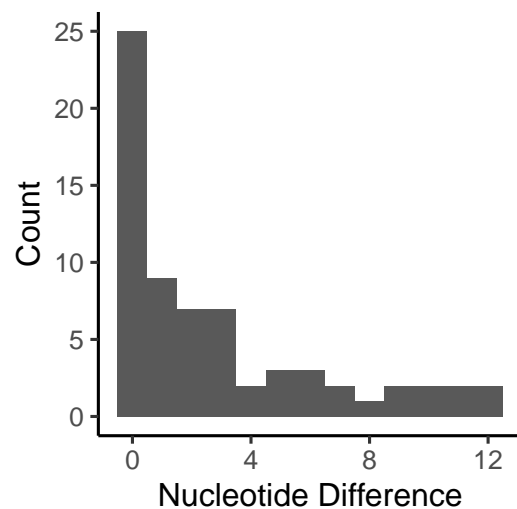
IGHV3-13*01

300 sequences assigned
58 (19.3%) exact matches, in which:
55 unique CDR3
6 unique J



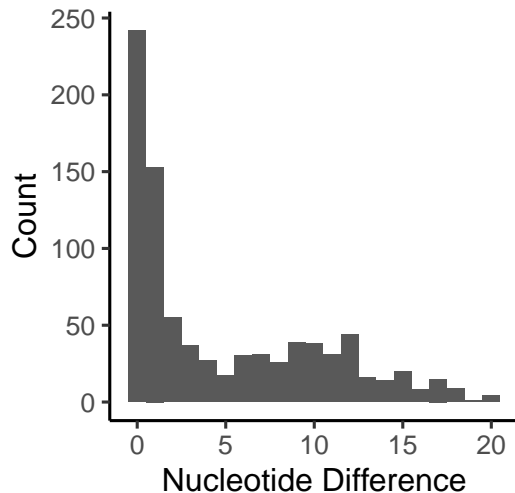
IGHV3-20*01

86 sequences assigned
25 (29.1%) exact matches, in which:
24 unique CDR3
5 unique J



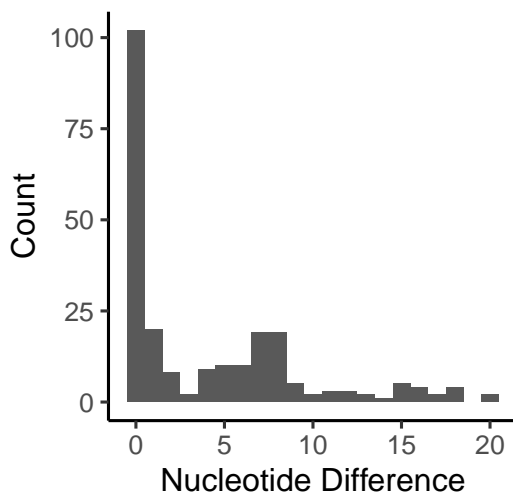
IGHV3-11*01

988 sequences assigned
242 (24.5%) exact matches, in which:
227 unique CDR3
6 unique J



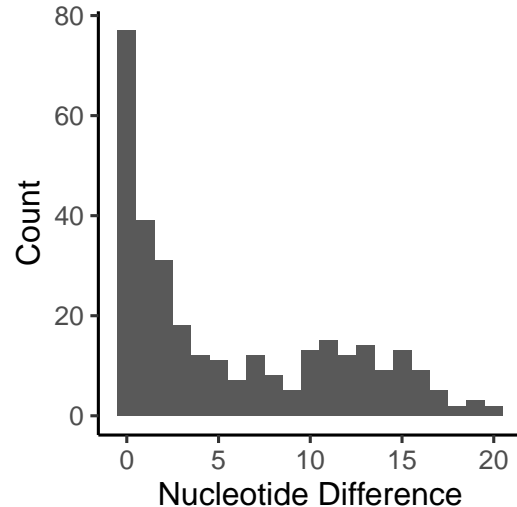
IGHV3-13*04

262 sequences assigned
102 (38.9%) exact matches, in which:
96 unique CDR3
5 unique J



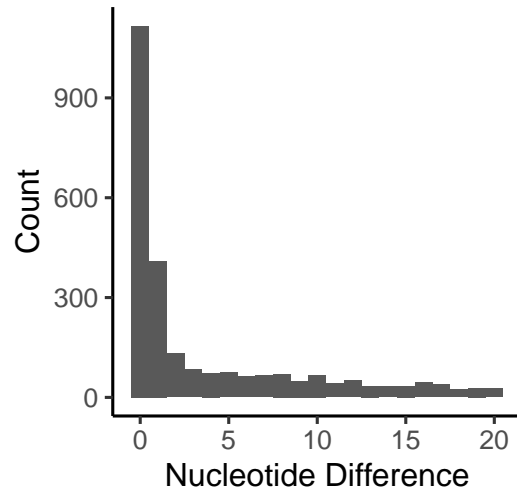
IGHV3-20*04

364 sequences assigned
77 (21.2%) exact matches, in which:
74 unique CDR3
5 unique J



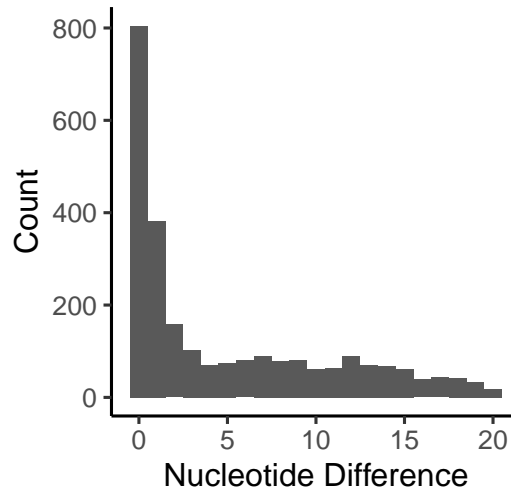
IGHV3-21*01

2839 sequences assigned
1117 (39.3%) exact matches, in which:
1007 unique CDR3
6 unique J



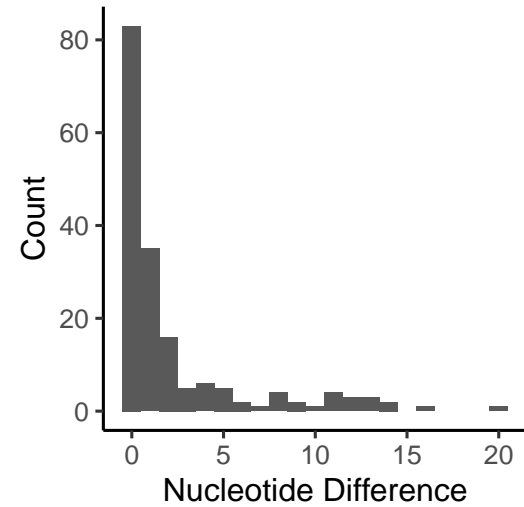
IGHV3-30*18

2825 sequences assigned
805 (28.5%) exact matches, in which:
757 unique CDR3
6 unique J



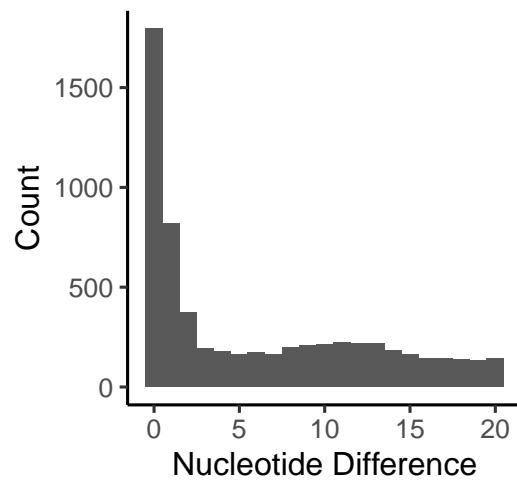
IGHV3-43*01

190 sequences assigned
83 (43.7%) exact matches, in which:
75 unique CDR3
5 unique J



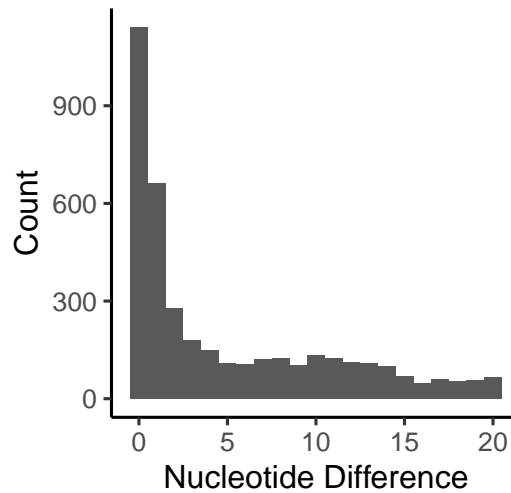
IGHV3-23*01

7208 sequences assigned
1795 (24.9%) exact matches, in which:
1664 unique CDR3
6 unique J



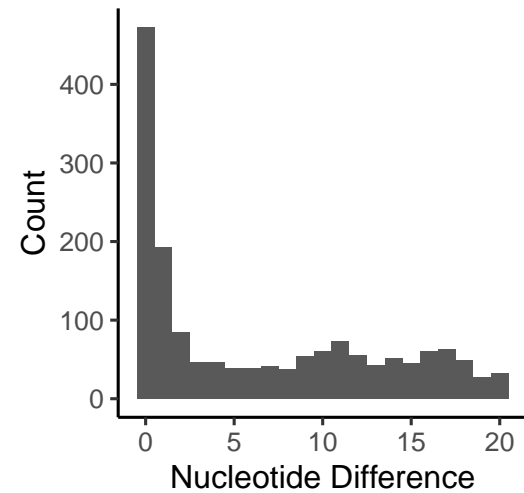
IGHV3-33*01

4198 sequences assigned
1142 (27.2%) exact matches, in which:
1068 unique CDR3
6 unique J



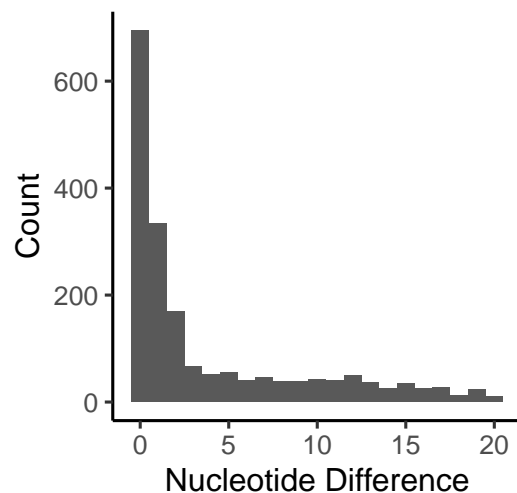
IGHV3-48*02

1901 sequences assigned
473 (24.9%) exact matches, in which:
445 unique CDR3
6 unique J



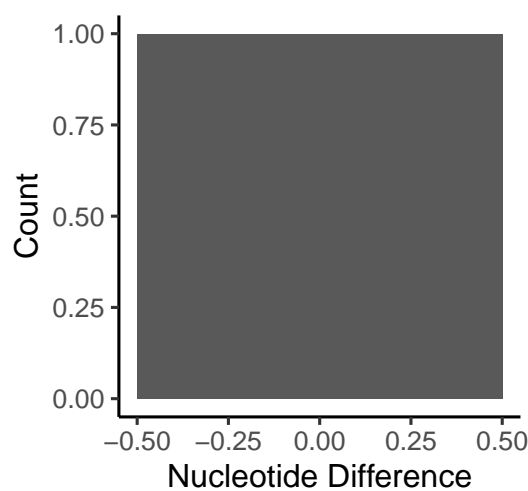
IGHV3-30-3*01

2084 sequences assigned
695 (33.3%) exact matches, in which:
640 unique CDR3
6 unique J



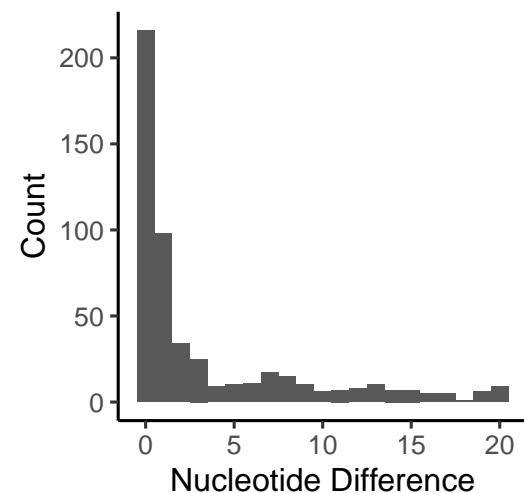
IGHV3-35*01

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



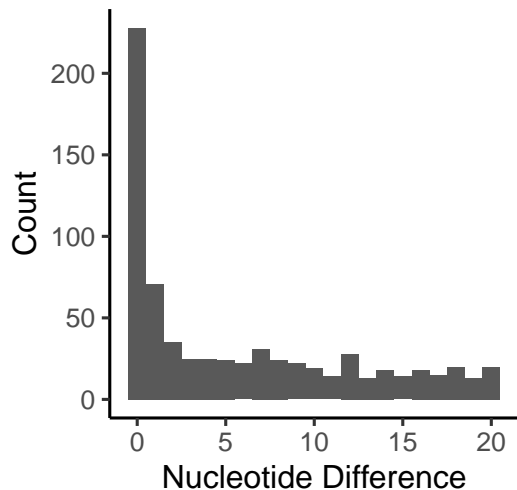
IGHV3-49*05

584 sequences assigned
216 (37%) exact matches, in which:
205 unique CDR3
6 unique J



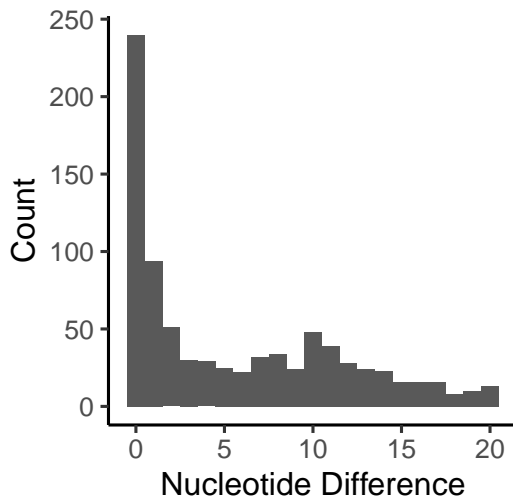
IGHV3–53*01

853 sequences assigned
228 (26.7%) exact matches, in which:
216 unique CDR3
6 unique J



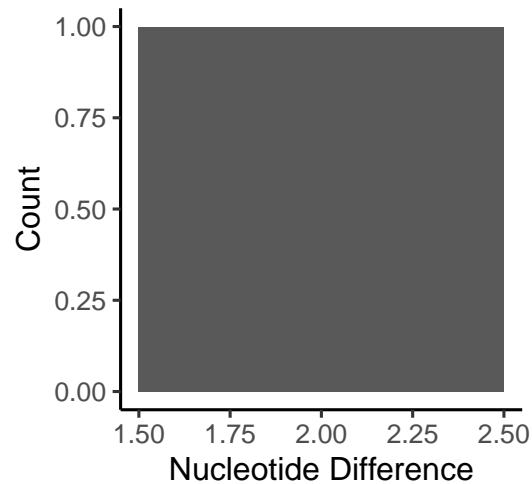
IGHV3–66*01

912 sequences assigned
240 (26.3%) exact matches, in which:
230 unique CDR3
6 unique J



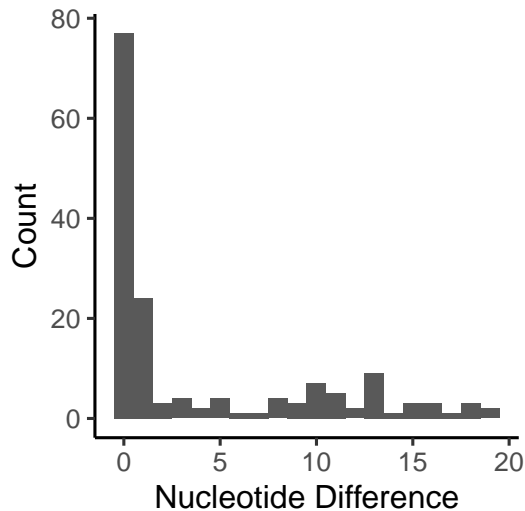
IGHV3–71*03

1 sequences assigned
No exact matches.



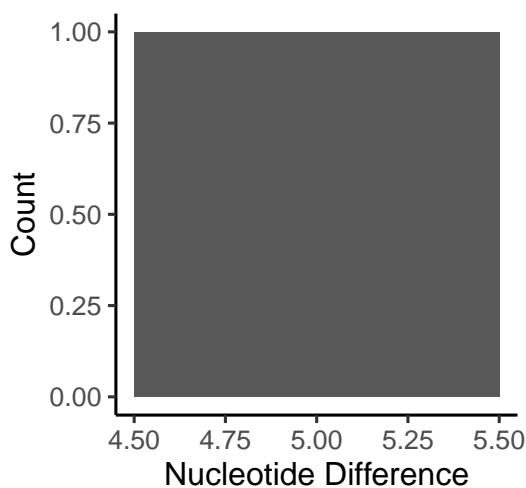
IGHV3–53*04_G81A

175 sequences assigned
77 (44%) exact matches, in which:
68 unique CDR3
5 unique J



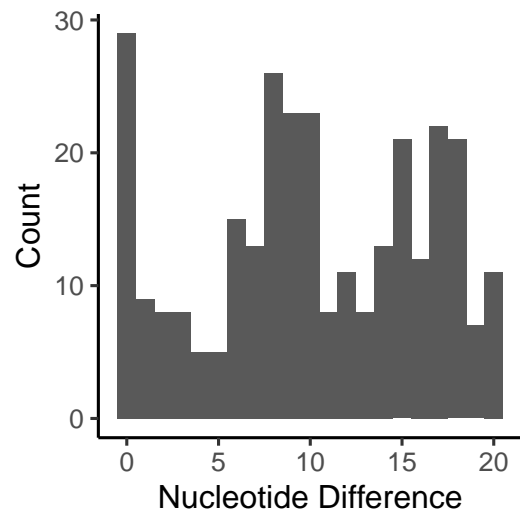
IGHV3–69–1*01

1 sequences assigned
No exact matches.



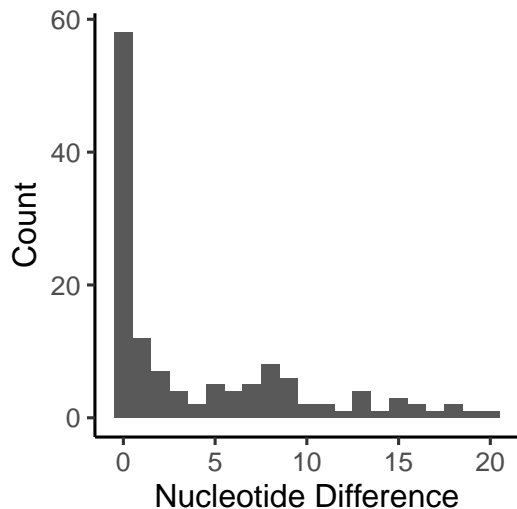
IGHV3–72*01

349 sequences assigned
29 (8.3%) exact matches, in which:
24 unique CDR3
6 unique J



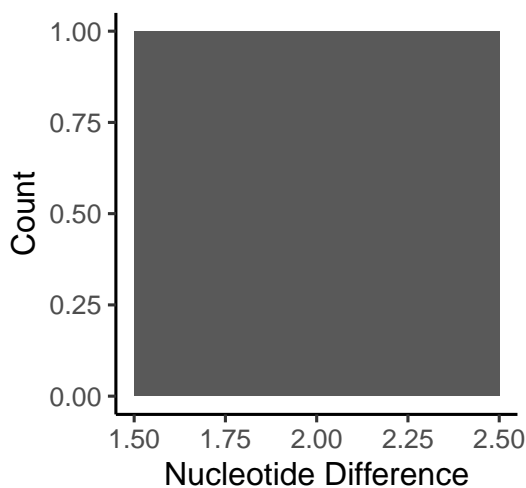
IGHV3–64*01

149 sequences assigned
58 (38.9%) exact matches, in which:
54 unique CDR3
6 unique J



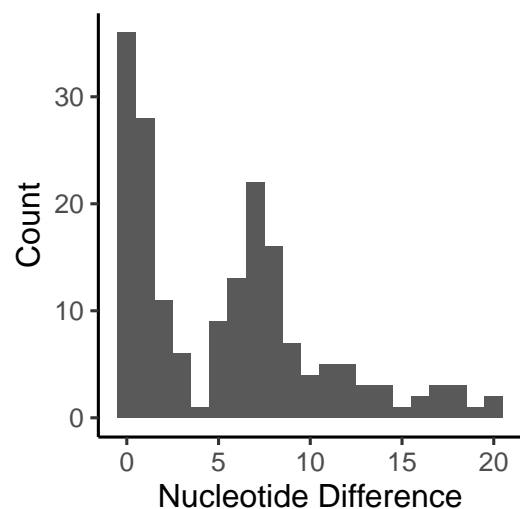
IGHV3–69–1*02

2 sequences assigned
No exact matches.



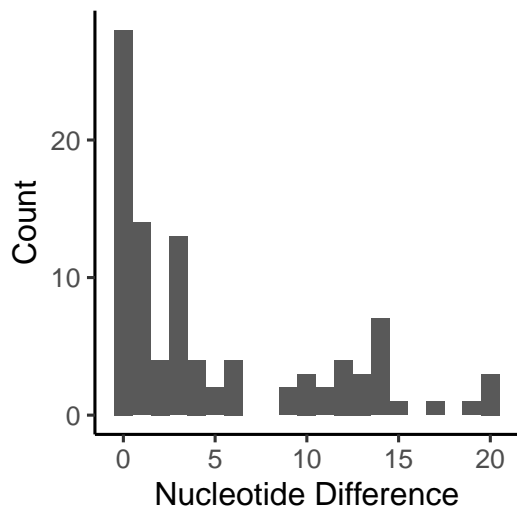
IGHV3–73*01

190 sequences assigned
36 (18.9%) exact matches, in which:
32 unique CDR3
6 unique J



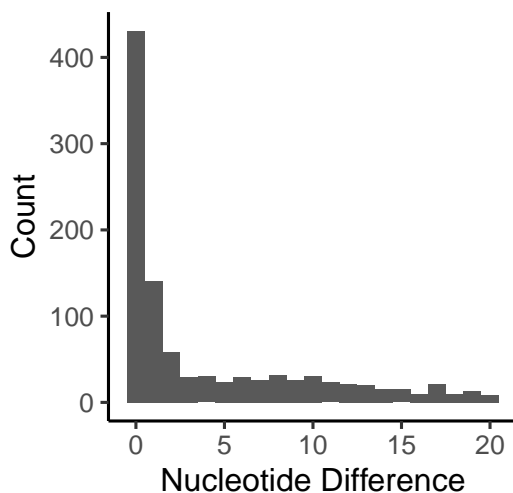
IGHV3-73*02

99 sequences assigned
28 (28.3%) exact matches, in which:
25 unique CDR3
5 unique J



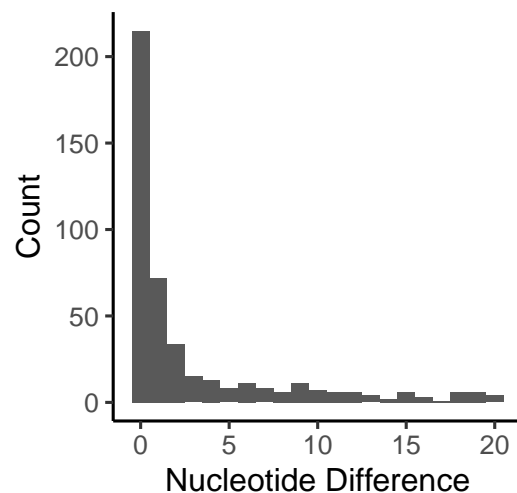
IGHV4-4*07

1081 sequences assigned
431 (39.9%) exact matches, in which:
410 unique CDR3
6 unique J



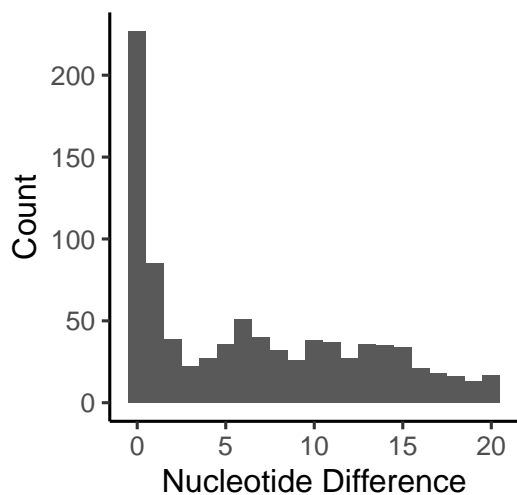
IGHV4-30-4*01

484 sequences assigned
215 (44.4%) exact matches, in which:
203 unique CDR3
6 unique J



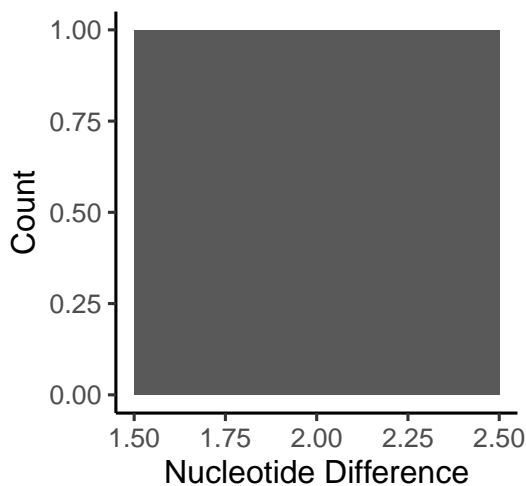
IGHV3-74*01

1016 sequences assigned
227 (22.3%) exact matches, in which:
208 unique CDR3
6 unique J



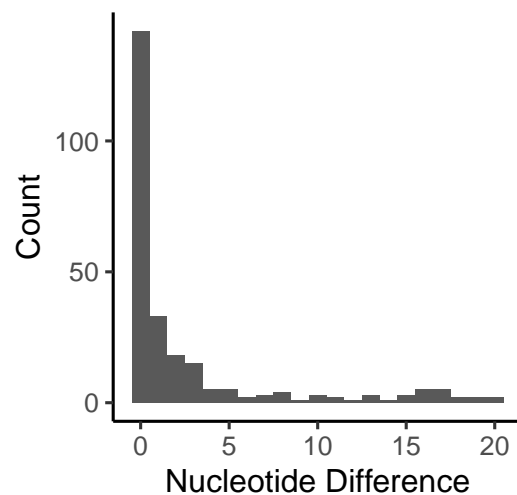
IGHV4-28*01

1 sequences assigned
No exact matches.



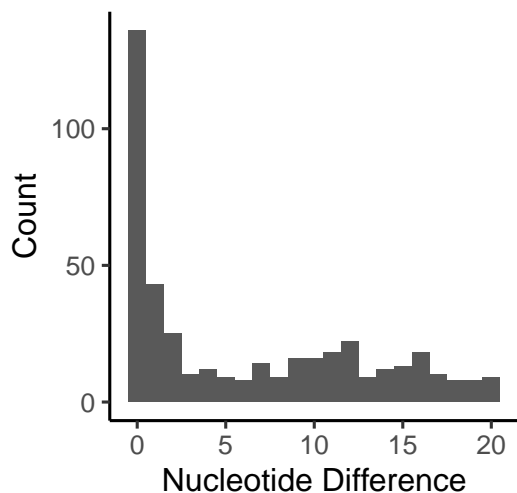
IGHV4-30-2*01

281 sequences assigned
142 (50.5%) exact matches, in which:
135 unique CDR3
6 unique J



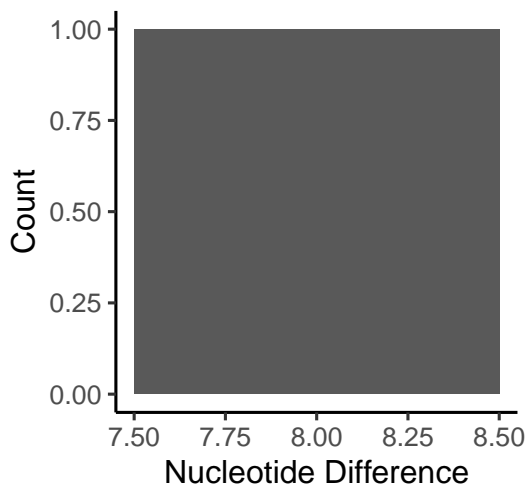
IGHV3-64D*06

473 sequences assigned
136 (28.8%) exact matches, in which:
124 unique CDR3
6 unique J



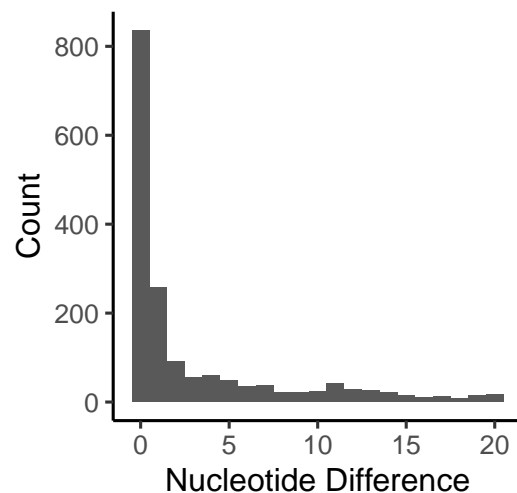
IGHV4-28*03

1 sequences assigned
No exact matches.



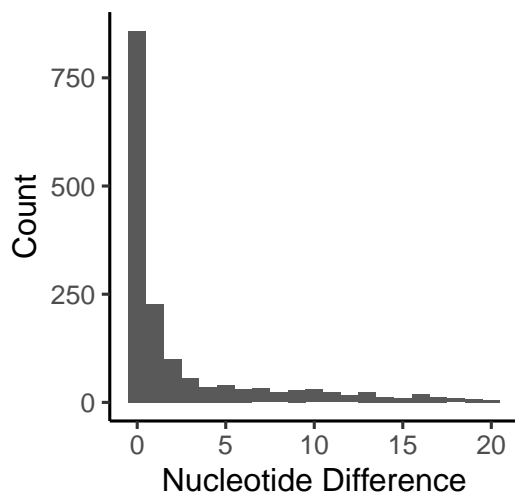
IGHV4-31*03

1878 sequences assigned
836 (44.5%) exact matches, in which:
776 unique CDR3
6 unique J



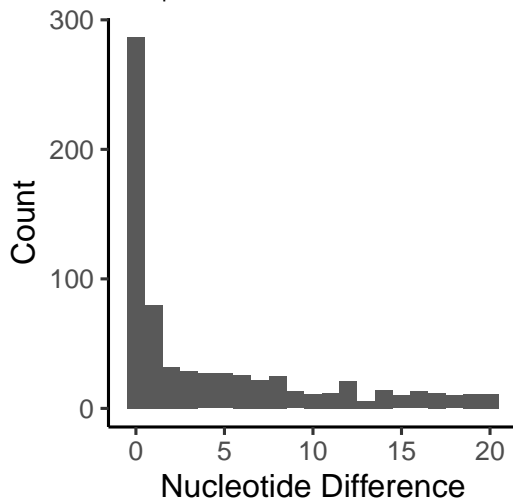
IGHV4-34*01

1676 sequences assigned
859 (51.3%) exact matches, in which:
802 unique CDR3
6 unique J



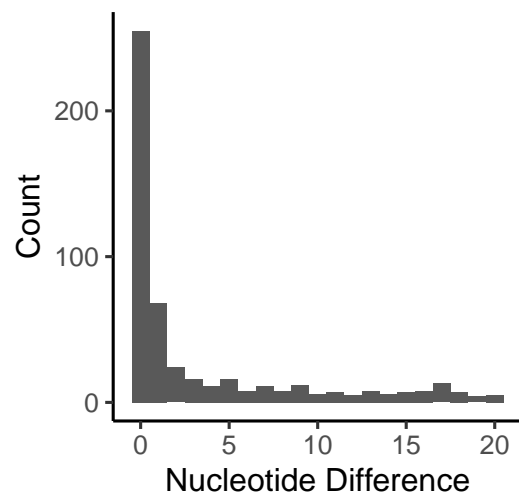
IGHV4-59*08

763 sequences assigned
287 (37.6%) exact matches, in which:
275 unique CDR3
6 unique J



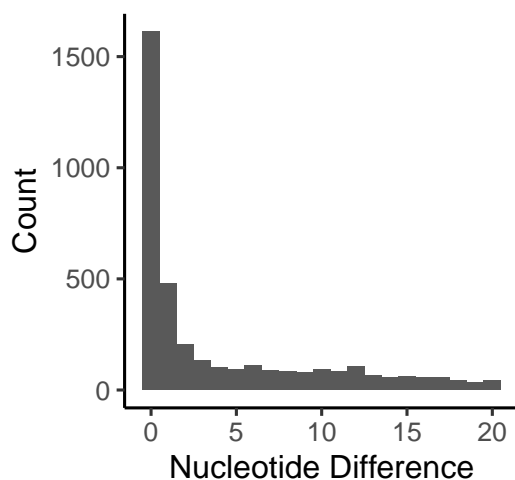
IGHV5-10-1*01

522 sequences assigned
255 (48.9%) exact matches, in which:
233 unique CDR3
6 unique J



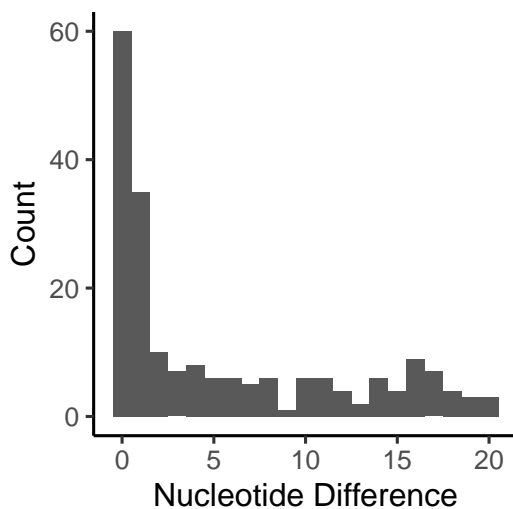
IGHV4-39*01

4393 sequences assigned
1612 (36.7%) exact matches, in which:
1487 unique CDR3
6 unique J



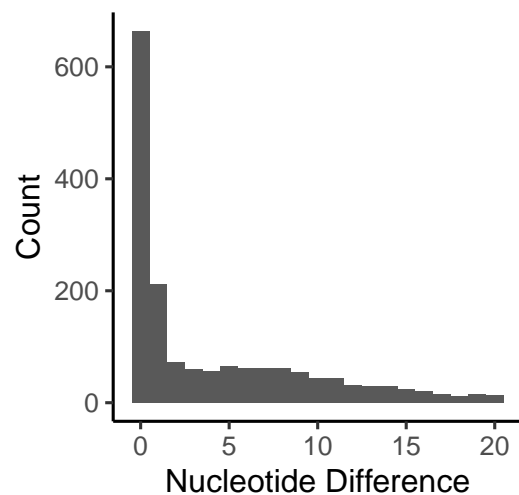
IGHV4-61*01

228 sequences assigned
60 (26.3%) exact matches, in which:
59 unique CDR3
5 unique J



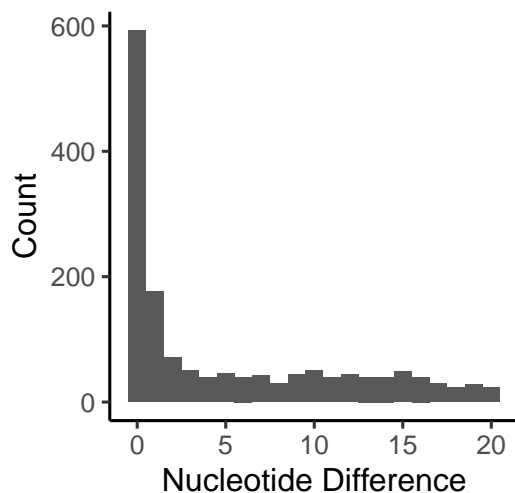
IGHV5-51*01

1783 sequences assigned
664 (37.2%) exact matches, in which:
621 unique CDR3
6 unique J



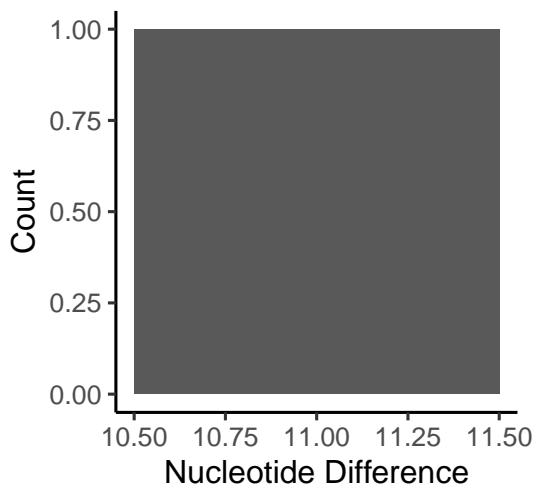
IGHV4-59*01

1731 sequences assigned
593 (34.3%) exact matches, in which:
566 unique CDR3
6 unique J



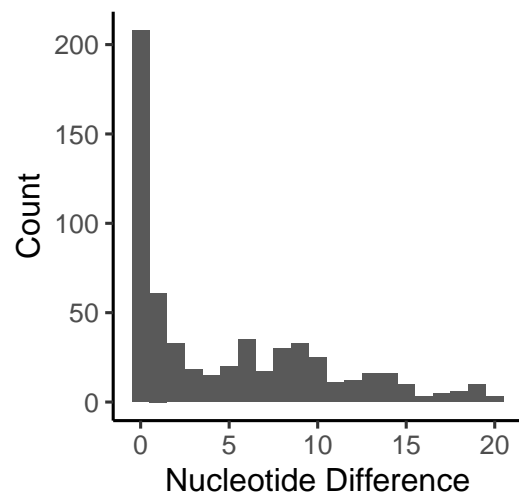
IGHV4/OR15-8*02

1 sequences assigned
No exact matches.



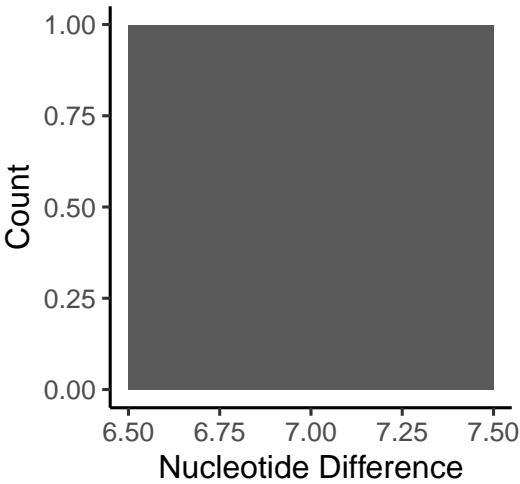
IGHV6-1*01

602 sequences assigned
208 (34.6%) exact matches, in which:
192 unique CDR3
5 unique J



IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



IGHV3-53*04_G81A

