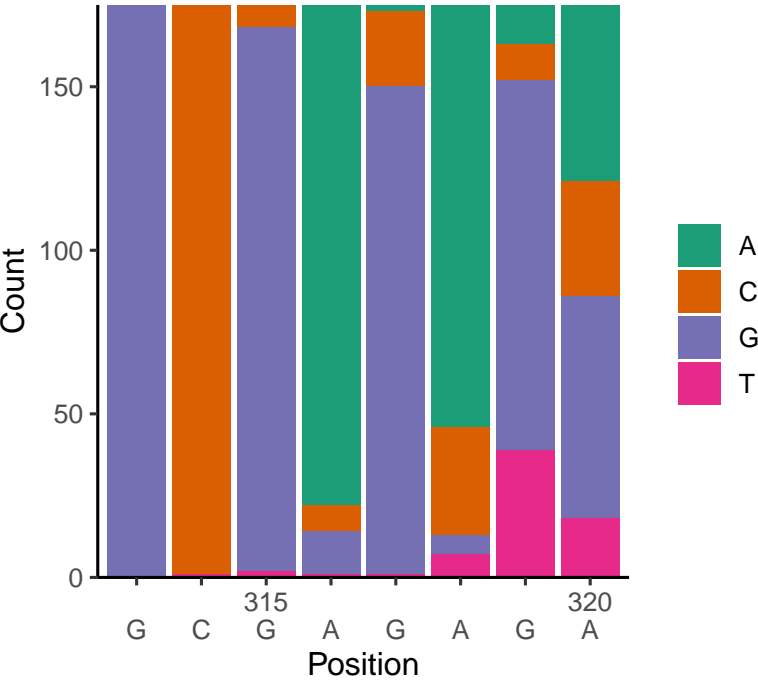
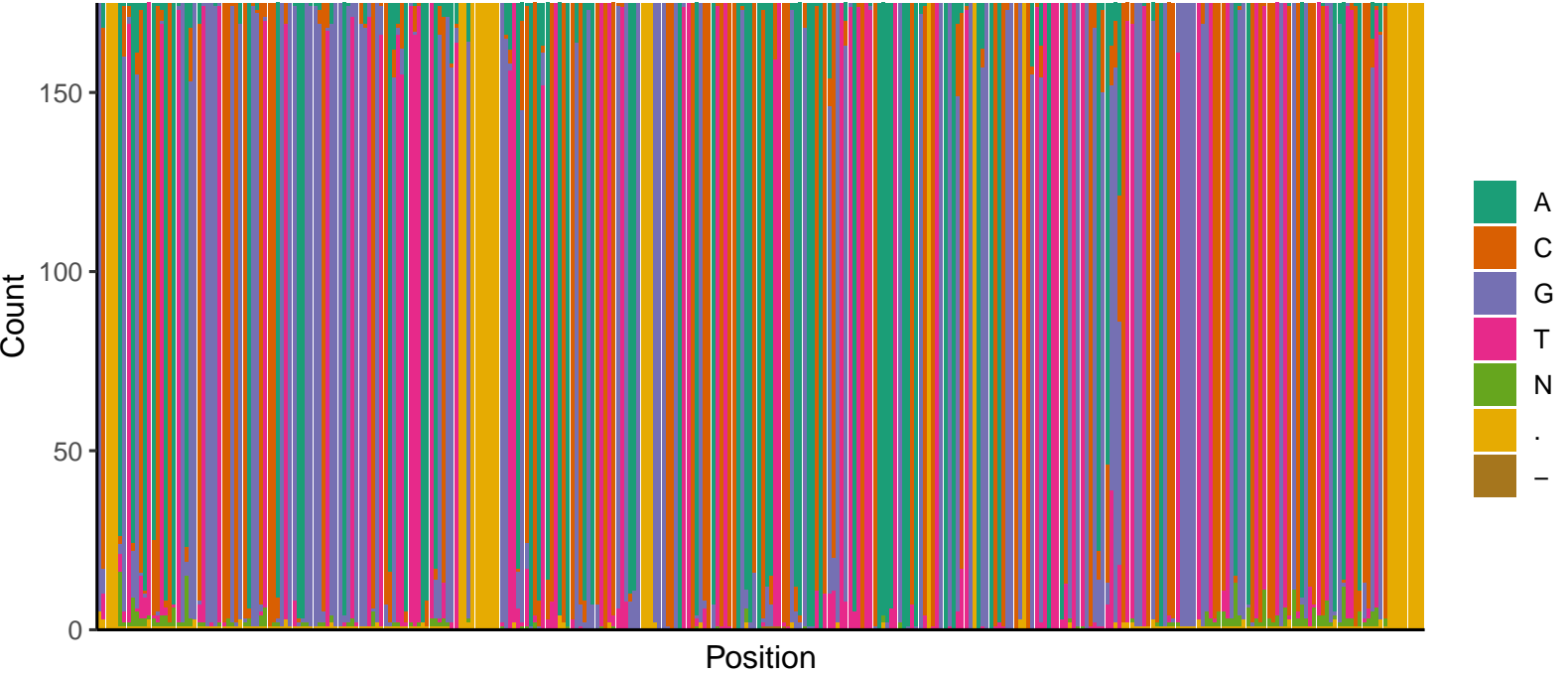


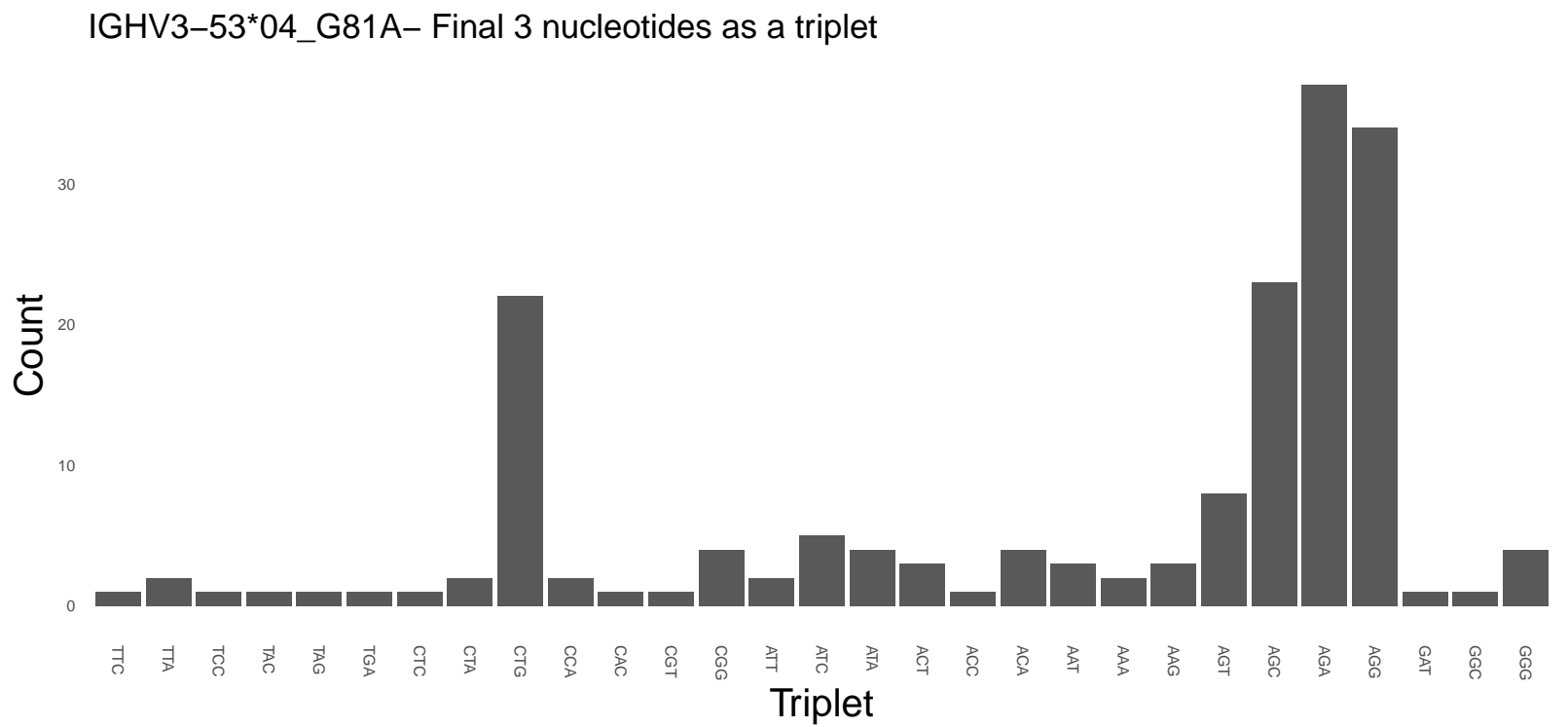
Gene IGHV3-53*04_G81A



Gene IGHV3-53*04_G81A

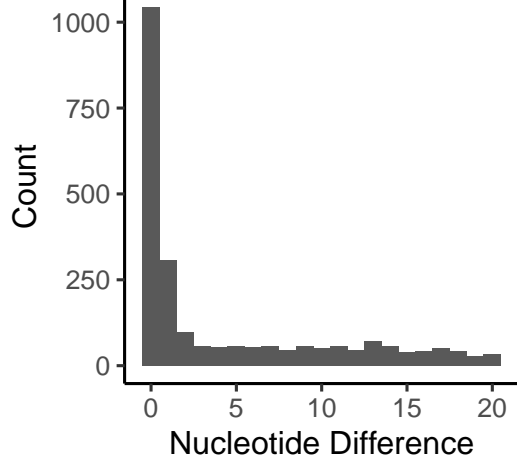


IGHV3-53*04_G81A- Final 3 nucleotides as a triplet



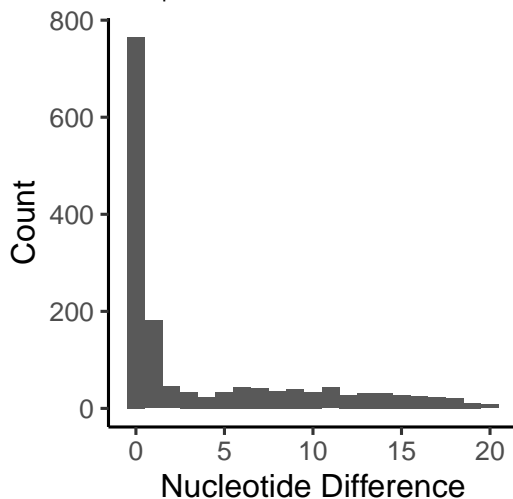
IGHV1-2*02

2585 sequences assigned
1043 (40.3%) exact matches, in which:
986 unique CDR3
6 unique J



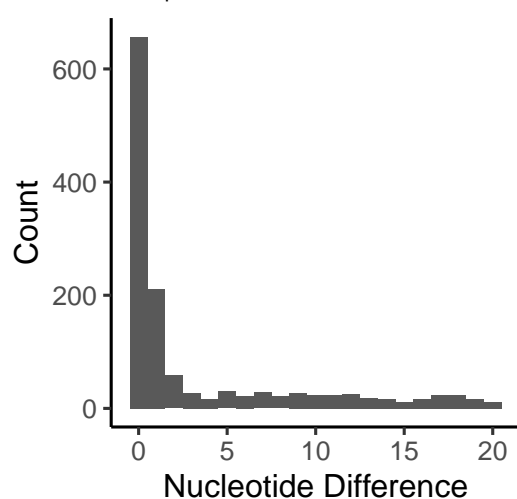
IGHV1-18*01

1712 sequences assigned
766 (44.7%) exact matches, in which:
729 unique CDR3
6 unique J



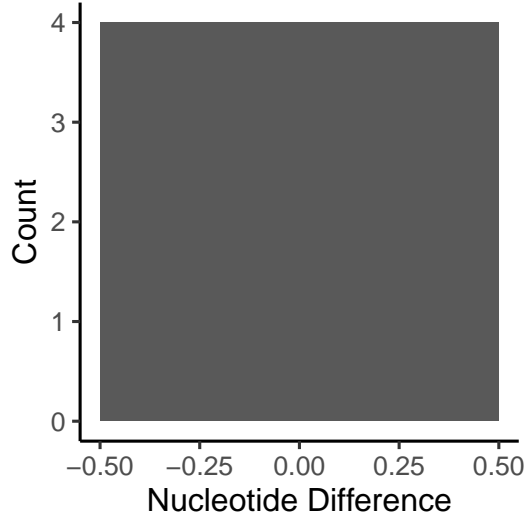
IGHV1-46*01

1435 sequences assigned
657 (45.8%) exact matches, in which:
614 unique CDR3
6 unique J



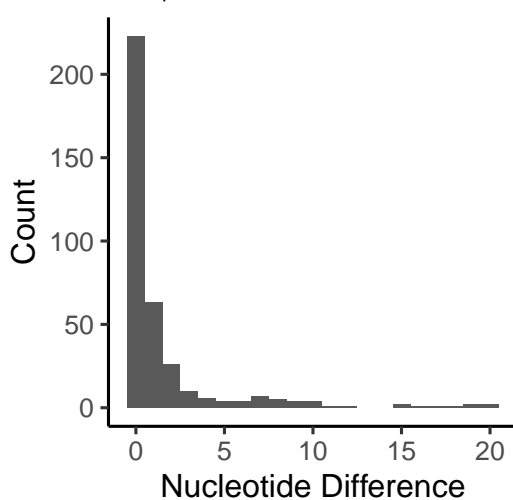
IGHV1-3*02

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



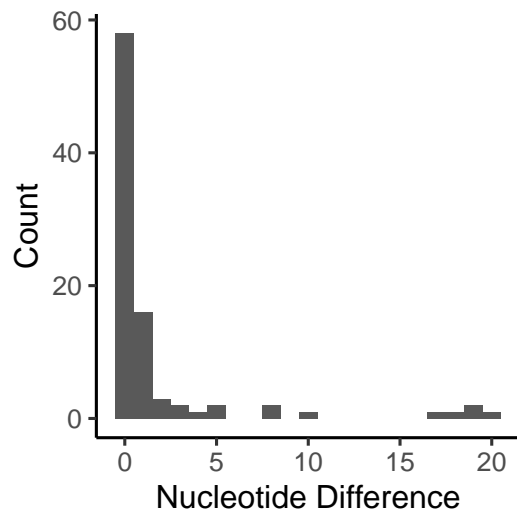
IGHV1-24*01

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



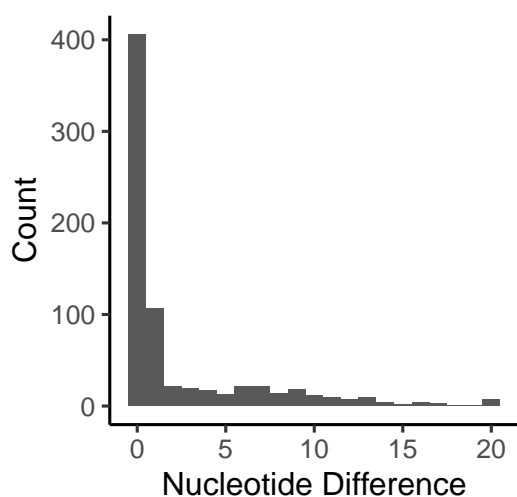
IGHV1-58*01

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



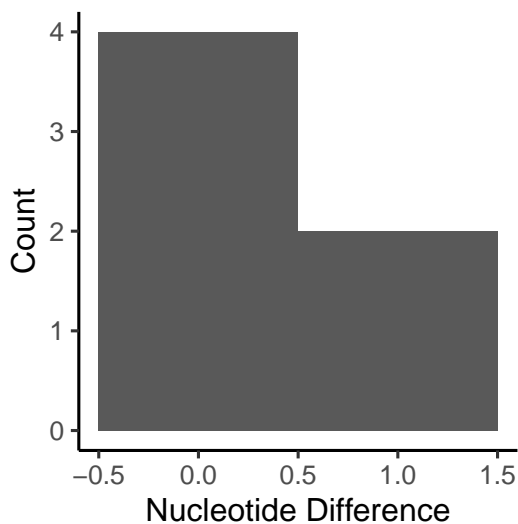
IGHV1-8*01

757 sequences assigned
406 (53.6%) exact matches, in which:
385 unique CDR3
6 unique J



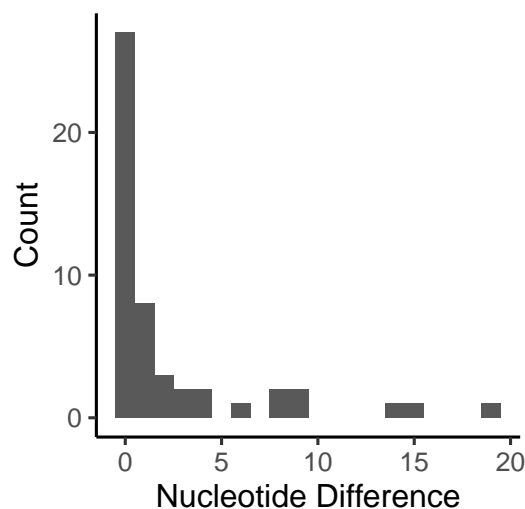
IGHV1-45*02

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



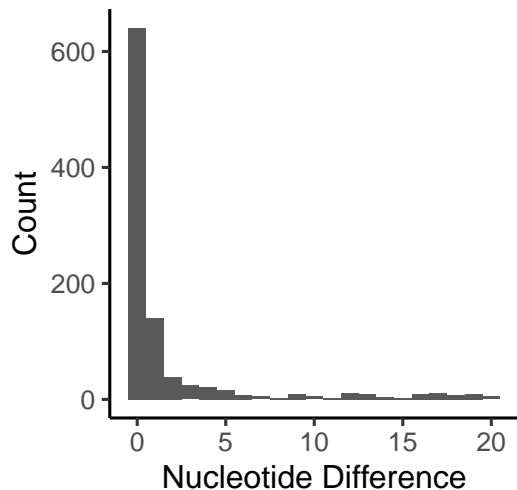
IGHV1-58*02

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



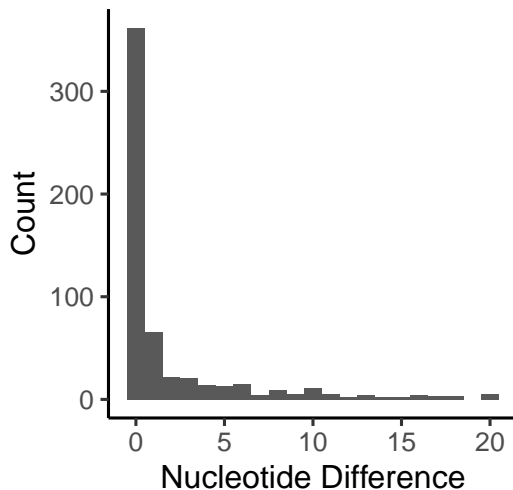
IGHV1–69*04

1046 sequences assigned
641 (61.3%) exact matches, in which:
579 unique CDR3
6 unique J



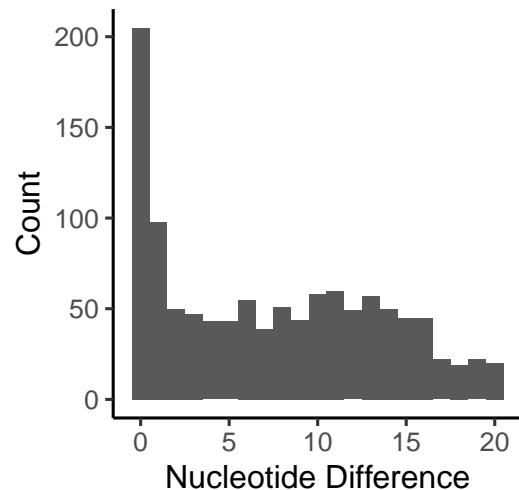
IGHV2–26*01

604 sequences assigned
362 (59.9%) exact matches, in which:
342 unique CDR3
6 unique J



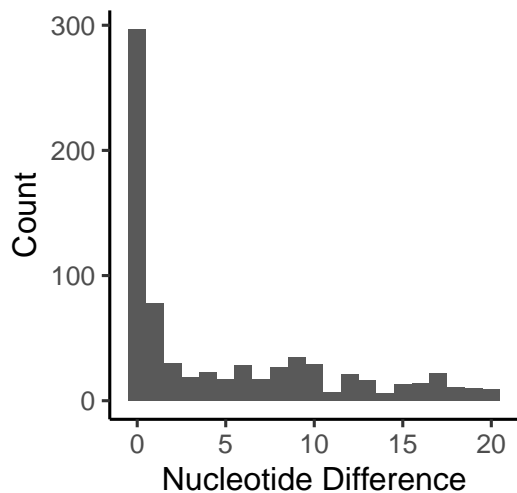
IGHV3–7*01

1276 sequences assigned
205 (16.1%) exact matches, in which:
189 unique CDR3
6 unique J



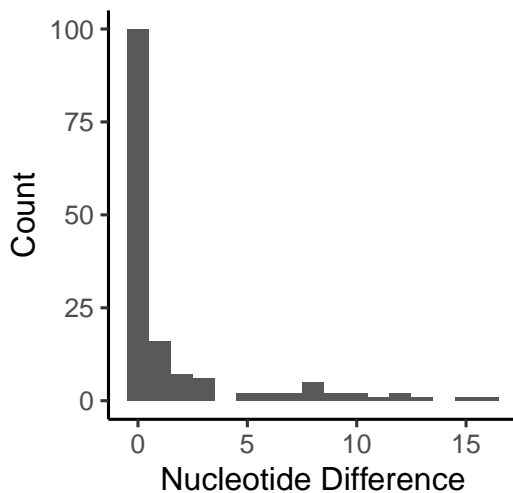
IGHV2–5*01

786 sequences assigned
297 (37.8%) exact matches, in which:
275 unique CDR3
6 unique J



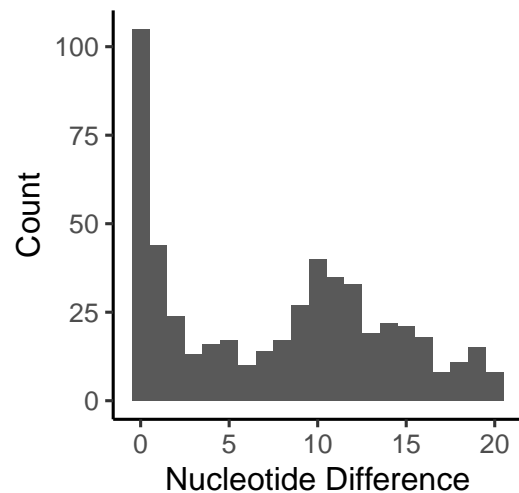
IGHV2–70*01

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



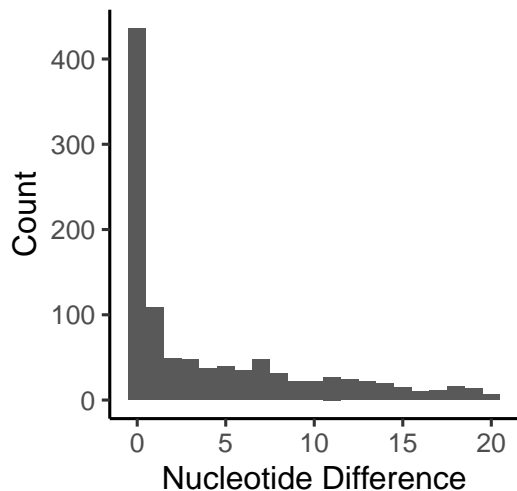
IGHV3–7*04

595 sequences assigned
105 (17.6%) exact matches, in which:
102 unique CDR3
5 unique J



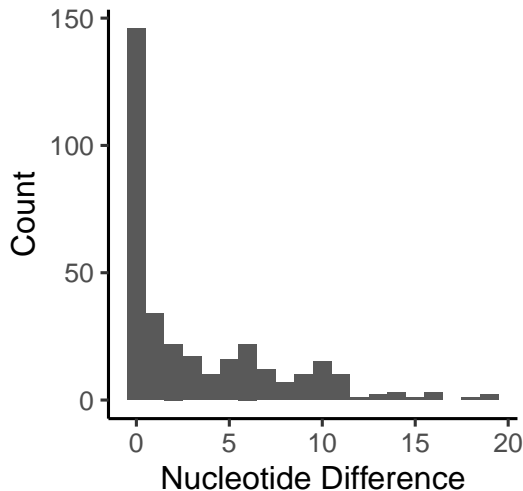
IGHV2–5*02

1106 sequences assigned
436 (39.4%) exact matches, in which:
413 unique CDR3
6 unique J



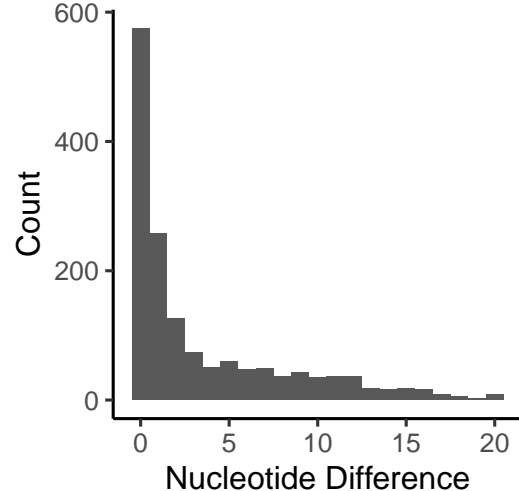
IGHV2–70*15

346 sequences assigned
146 (42.2%) exact matches, in which:
138 unique CDR3
5 unique J



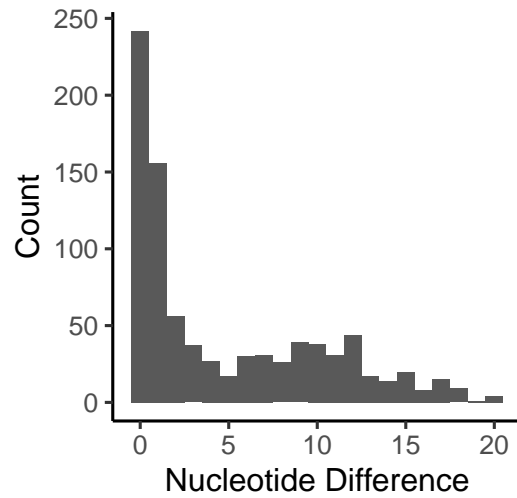
IGHV3–9*01

1600 sequences assigned
575 (35.9%) exact matches, in which:
527 unique CDR3
6 unique J



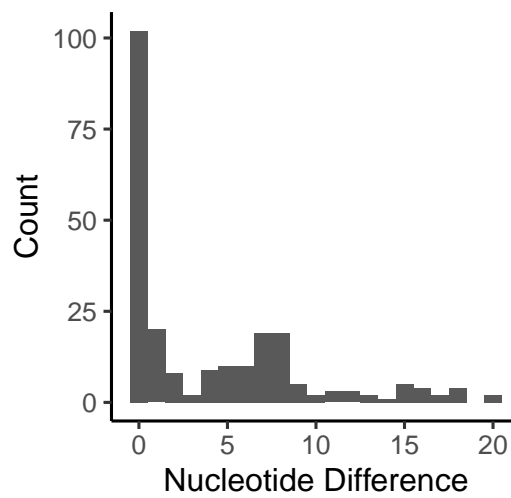
IGHV3-11*01

993 sequences assigned
242 (24.4%) exact matches, in which:
227 unique CDR3
6 unique J



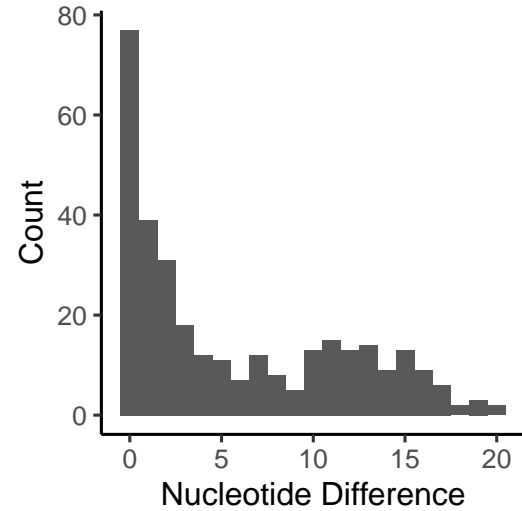
IGHV3-13*04

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



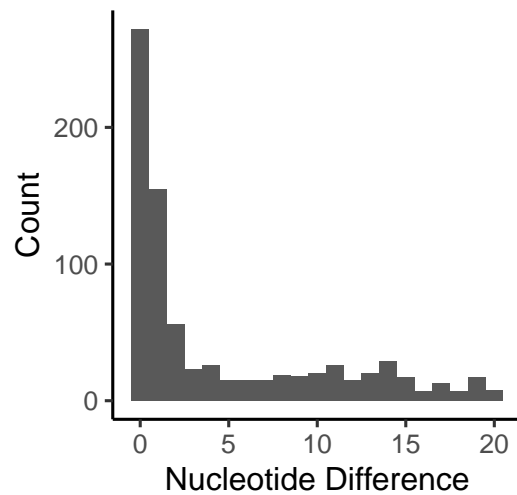
IGHV3-20*04

366 sequences assigned
77 (21%) exact matches, in which:
74 unique CDR3
5 unique J



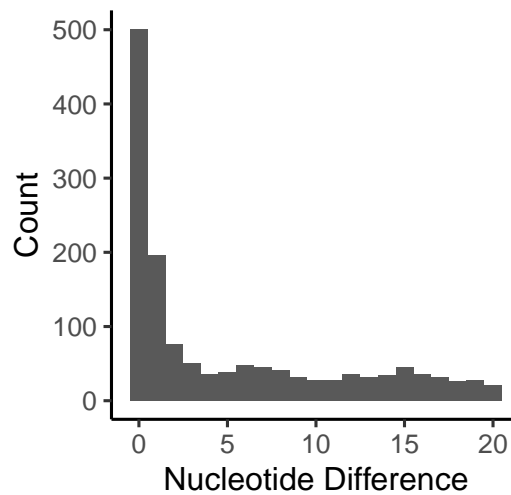
IGHV3-11*05

855 sequences assigned
272 (31.8%) exact matches, in which:
254 unique CDR3
6 unique J



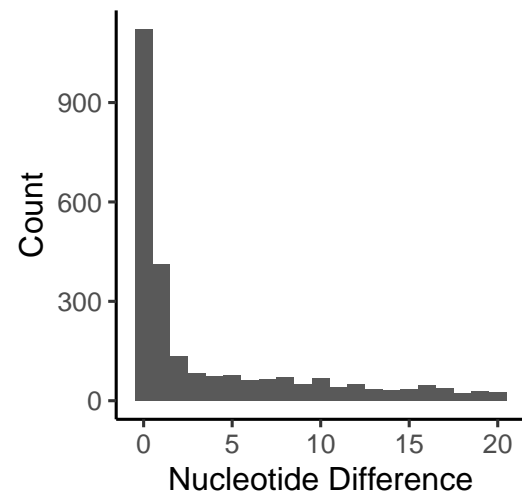
IGHV3-15*01

1578 sequences assigned
501 (31.7%) exact matches, in which:
479 unique CDR3
6 unique J



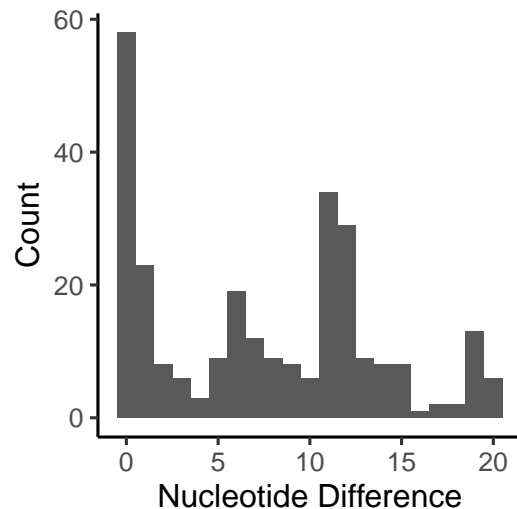
IGHV3-21*01

2850 sequences assigned
1122 (39.4%) exact matches, in which:
1011 unique CDR3
6 unique J



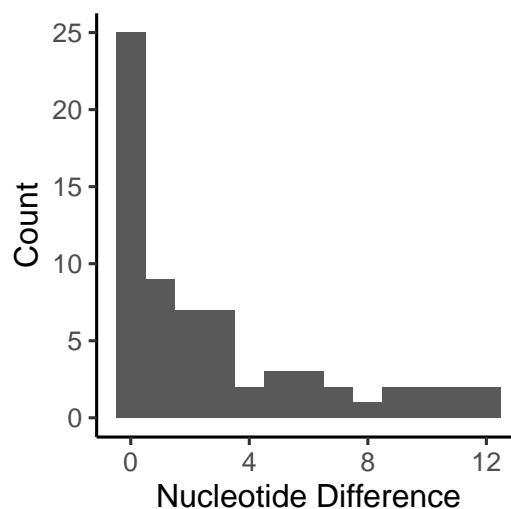
IGHV3-13*01

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



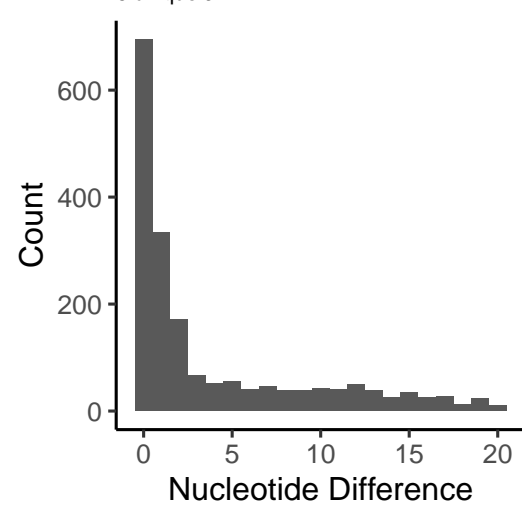
IGHV3-20*01

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



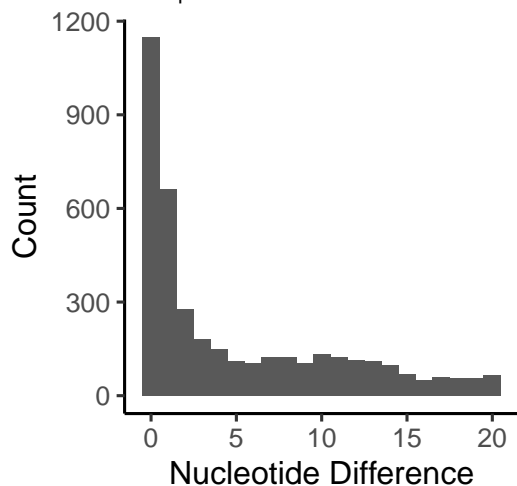
IGHV3-30-3*01

2088 sequences assigned
695 (33.3%) exact matches, in which:
640 unique CDR3
6 unique J



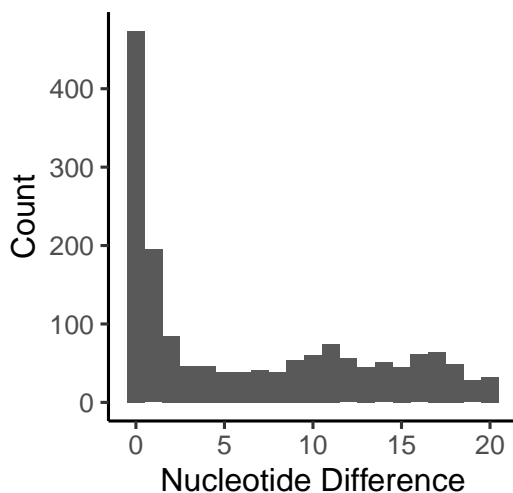
IGHV3-33*01

4211 sequences assigned
1148 (27.3%) exact matches, in which:
1074 unique CDR3
6 unique J



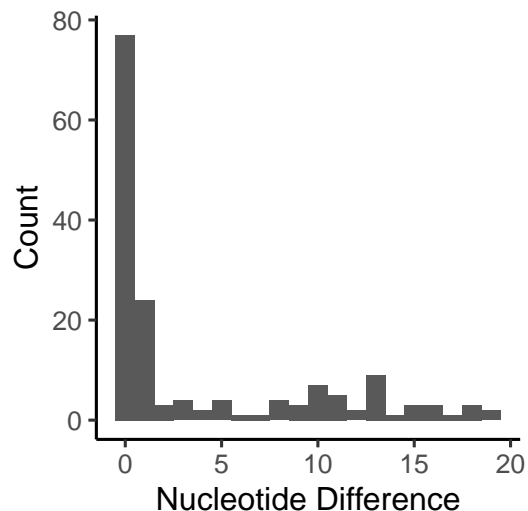
IGHV3-48*02

1909 sequences assigned
474 (24.8%) exact matches, in which:
446 unique CDR3
6 unique J



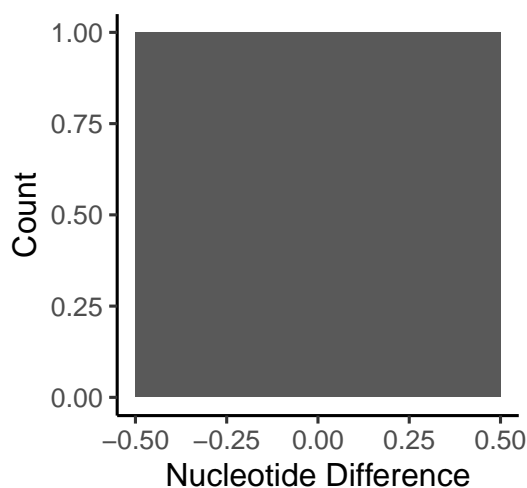
IGHV3-53*04_G81A

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



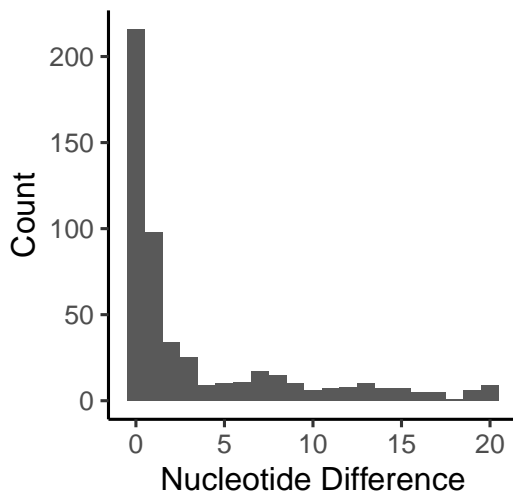
IGHV3-35*01

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



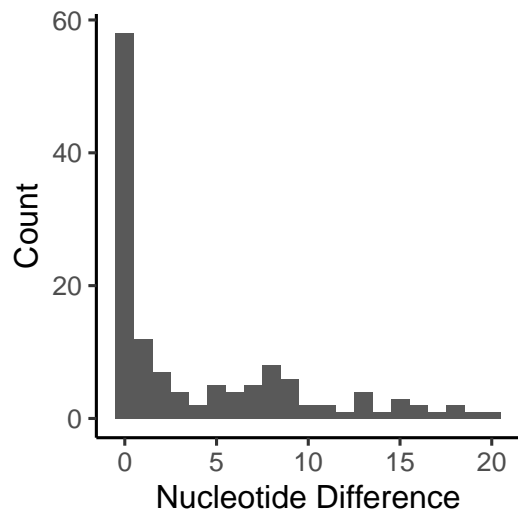
IGHV3-49*05

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



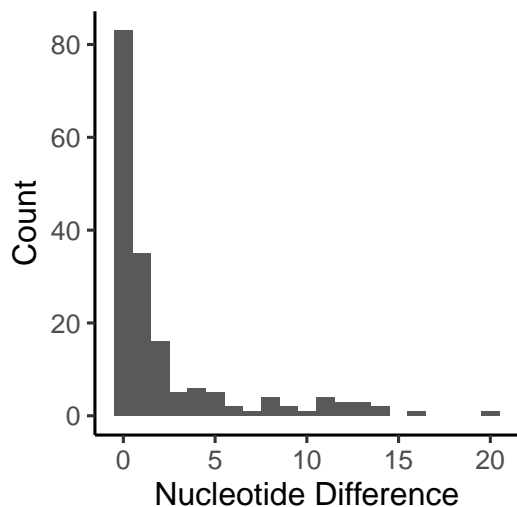
IGHV3-64*01

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



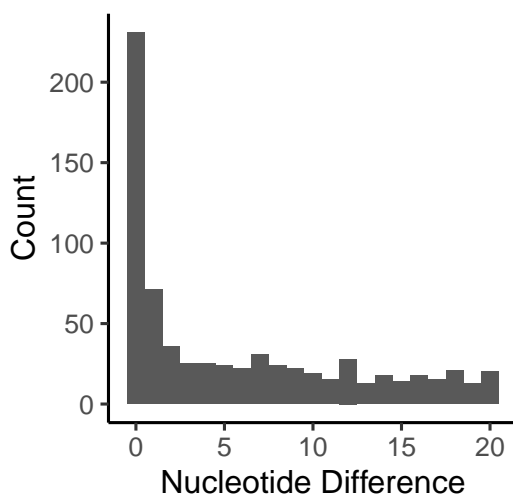
IGHV3-43*01

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



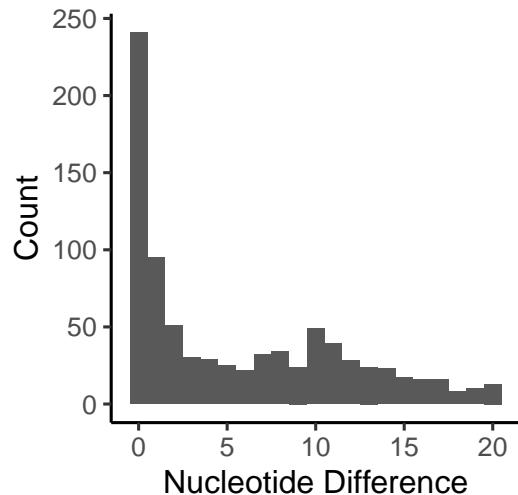
IGHV3-53*01

860 sequences assigned
231 (26.9%) exact matches, in which:
219 unique CDR3
6 unique J



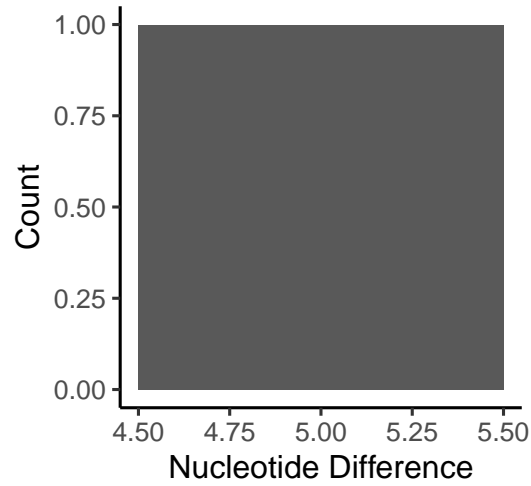
IGHV3-66*01

916 sequences assigned
241 (26.3%) exact matches, in which:
231 unique CDR3
6 unique J



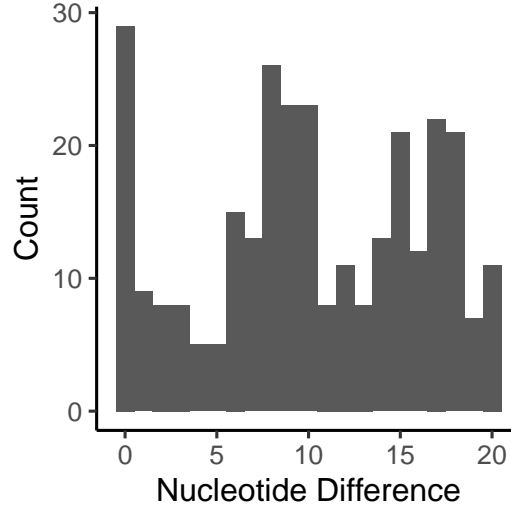
IGHV3-69-1*01

1 sequences assigned
No exact matches.



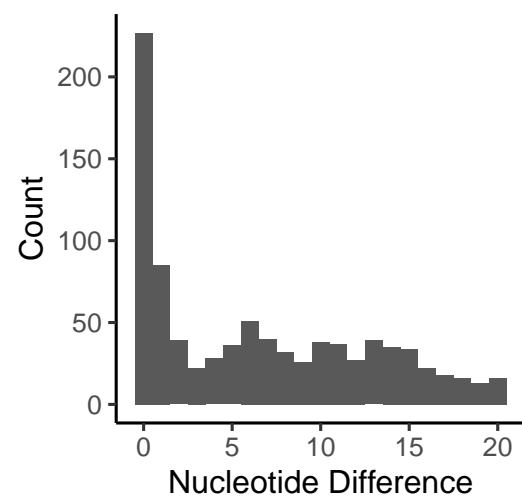
IGHV3-72*01

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



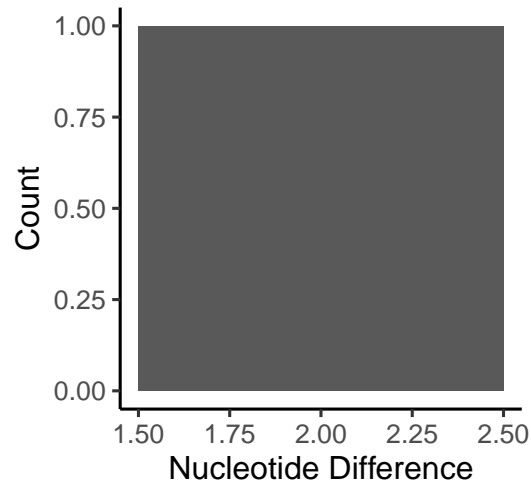
IGHV3-74*01

1021 sequences assigned
227 (22.2%) exact matches, in which:
208 unique CDR3
6 unique J



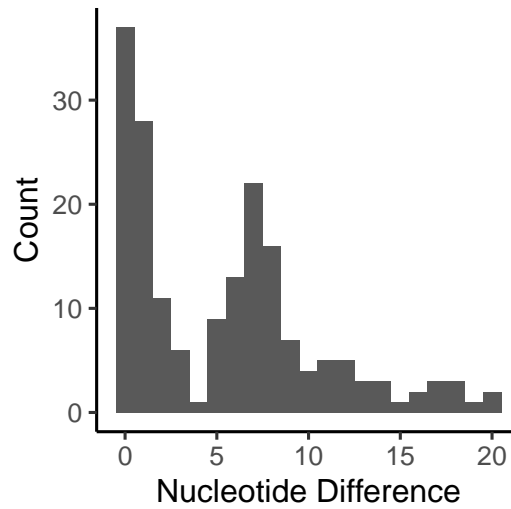
IGHV3-69-1*02

2 sequences assigned
No exact matches.



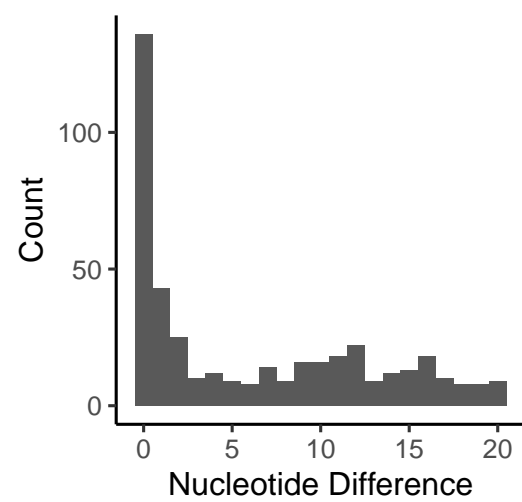
IGHV3-73*01

191 sequences assigned
37 (19.4%) exact matches, in which:
33 unique CDR3
6 unique J



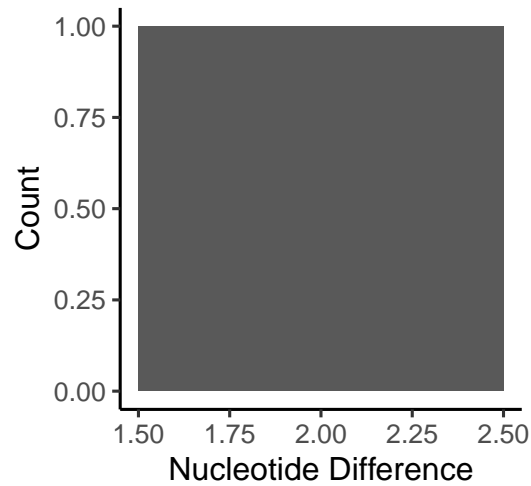
IGHV3-64D*06

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



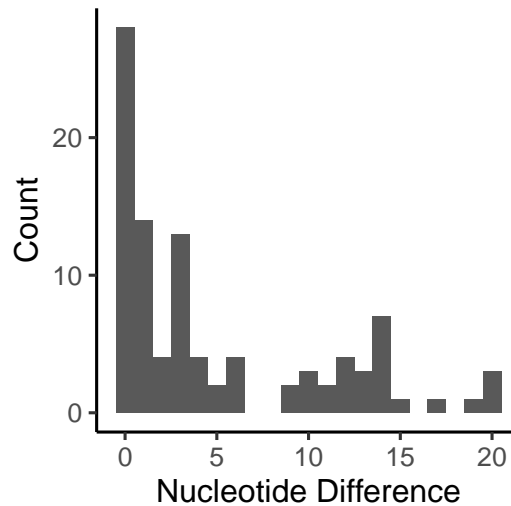
IGHV3-71*03

1 sequences assigned
No exact matches.



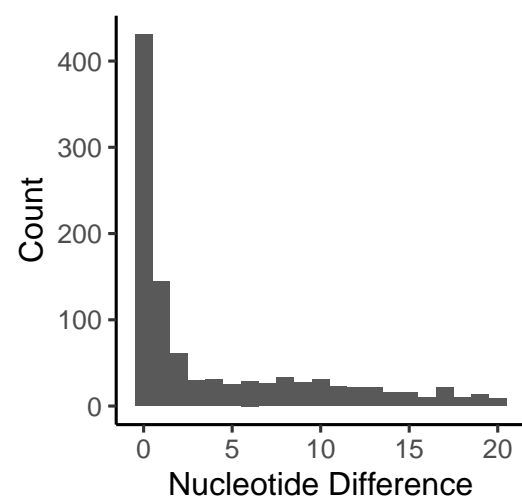
IGHV3-73*02

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



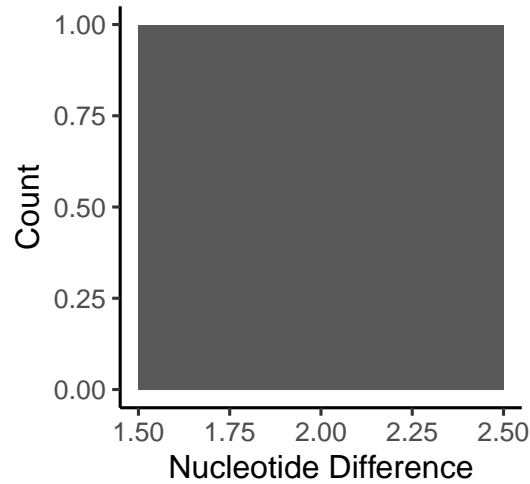
IGHV4-4*07

1095 sequences assigned
431 (39.4%) exact matches, in which:
410 unique CDR3
6 unique J



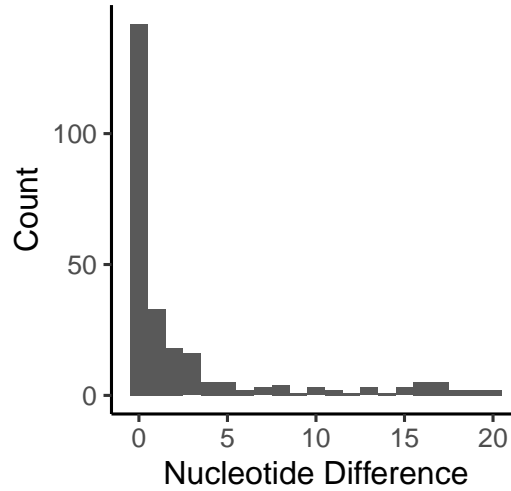
IGHV4-28*01

1 sequences assigned
No exact matches.



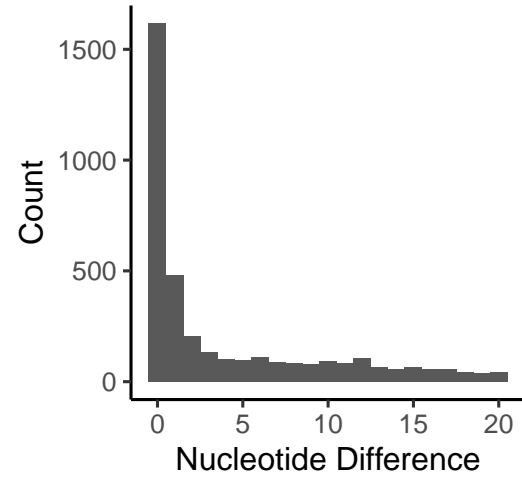
IGHV4-30-2*01

282 sequences assigned
142 (50.4%) exact matches, in which:
135 unique CDR3
6 unique J



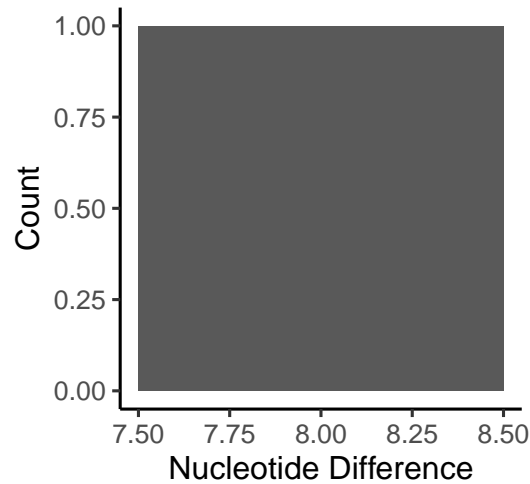
IGHV4-39*01

4417 sequences assigned
1617 (36.6%) exact matches, in which:
1491 unique CDR3
6 unique J



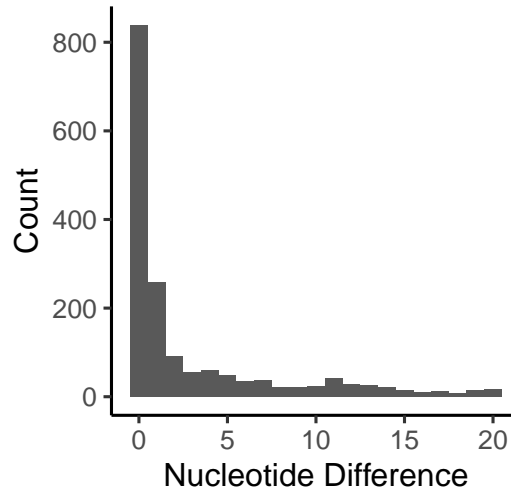
IGHV4-28*03

1 sequences assigned
No exact matches.



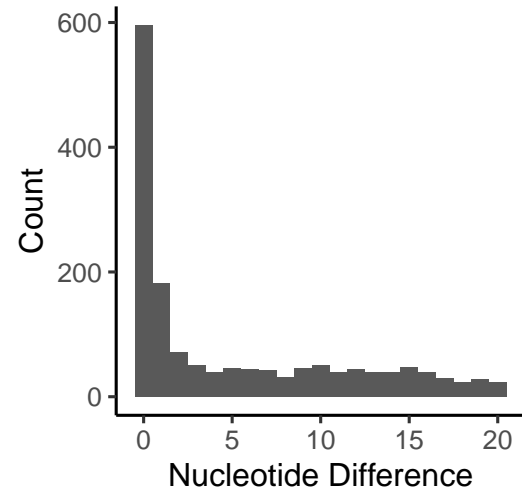
IGHV4-31*03

1887 sequences assigned
839 (44.5%) exact matches, in which:
778 unique CDR3
6 unique J



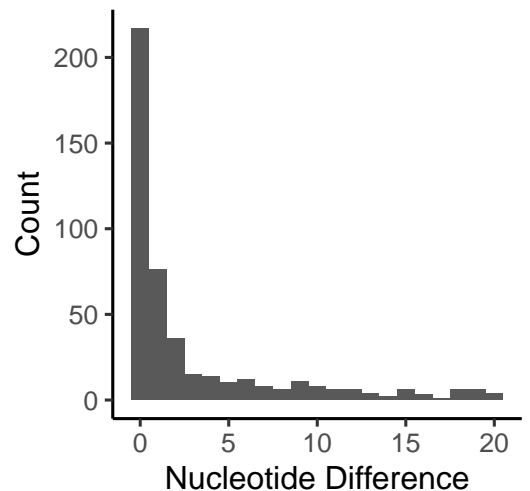
IGHV4-59*01

1753 sequences assigned
596 (34%) exact matches, in which:
569 unique CDR3
6 unique J



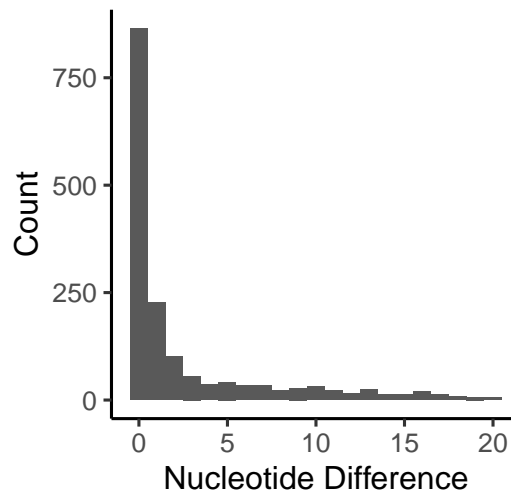
IGHV4-30-4*01

498 sequences assigned
217 (43.6%) exact matches, in which:
205 unique CDR3
6 unique J



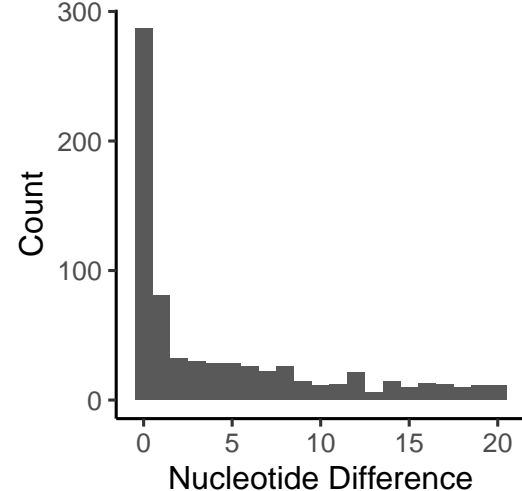
IGHV4-34*01

1690 sequences assigned
865 (51.2%) exact matches, in which:
807 unique CDR3
6 unique J



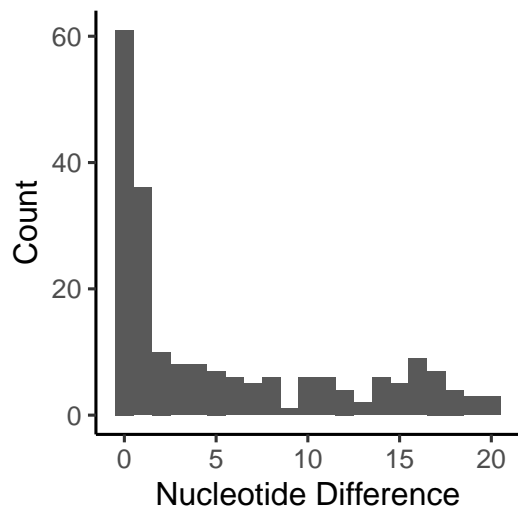
IGHV4-59*08

770 sequences assigned
287 (37.3%) exact matches, in which:
275 unique CDR3
6 unique J



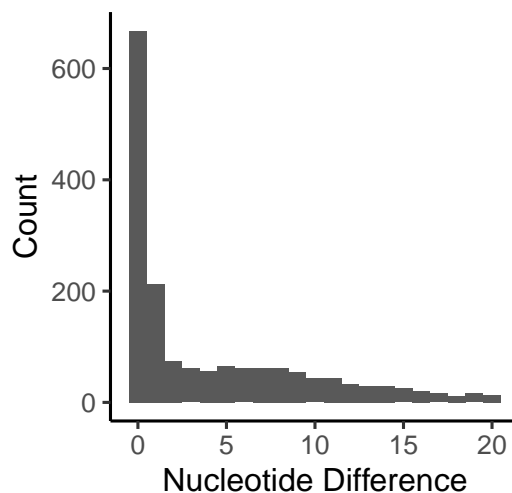
IGHV4-61*01

234 sequences assigned
61 (26.1%) exact matches, in which:
60 unique CDR3
5 unique J



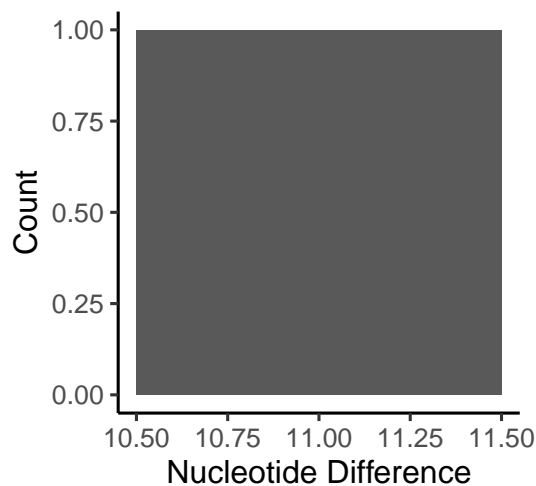
IGHV5-51*01

1796 sequences assigned
668 (37.2%) exact matches, in which:
624 unique CDR3
6 unique J



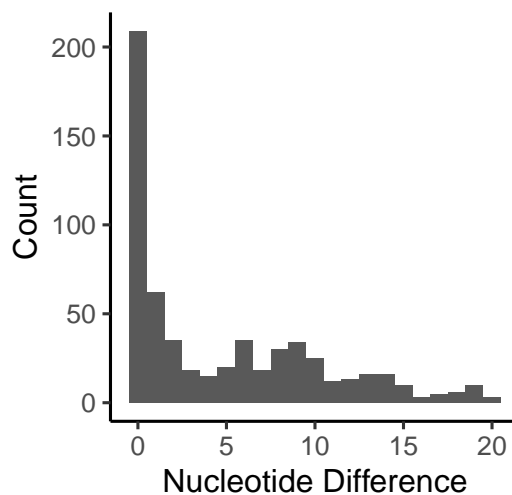
IGHV4/OR15-8*02

1 sequences assigned
No exact matches.



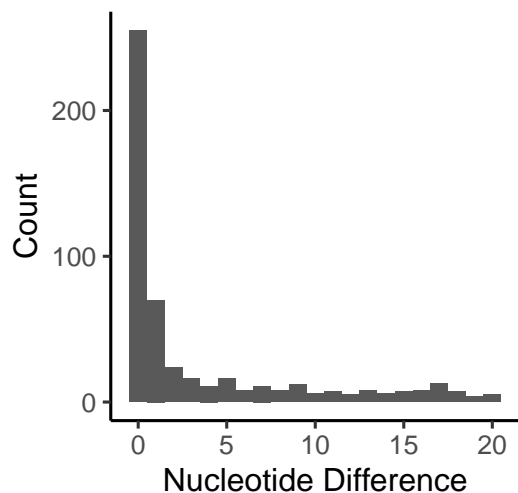
IGHV6-1*01

610 sequences assigned
209 (34.3%) exact matches, in which:
193 unique CDR3
5 unique J



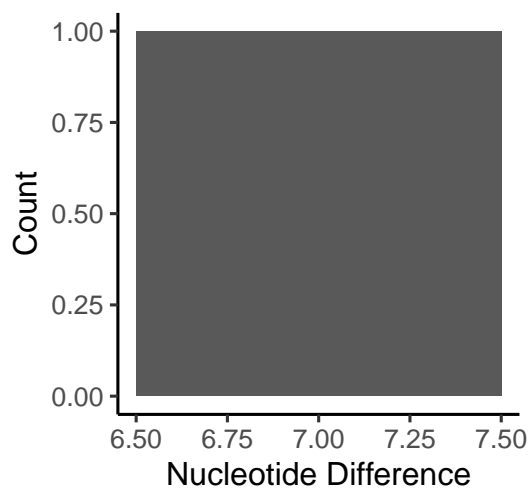
IGHV5-10-1*01

524 sequences assigned
255 (48.7%) exact matches, in which:
233 unique CDR3
6 unique J



IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



IGHV3-53*04_G81A

