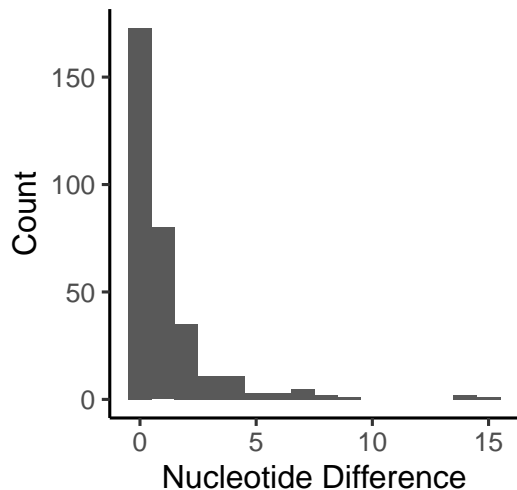


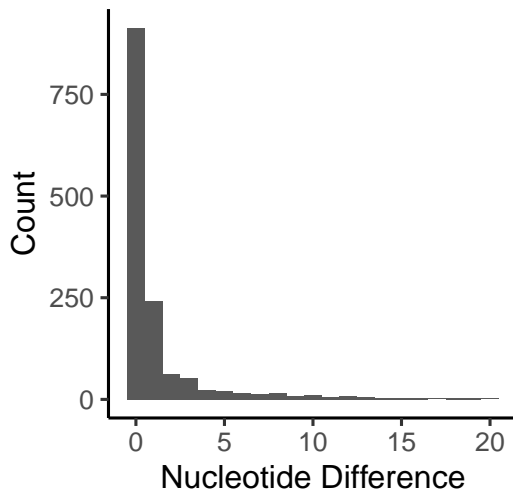
IGHV1-2*04

327 sequences assigned
173 (52.9%) exact matches, in which:
162 unique CDR3
5 unique J



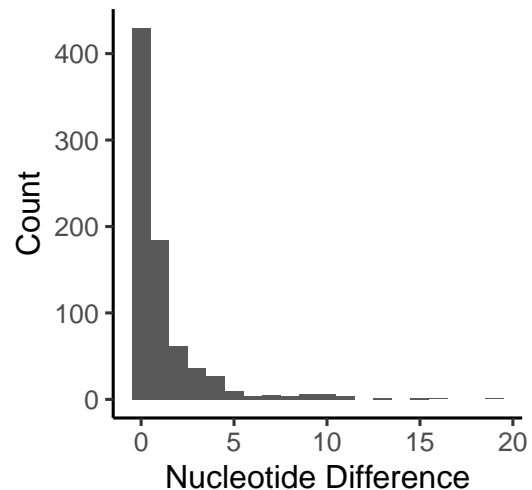
IGHV1-18*01

1426 sequences assigned
914 (64.1%) exact matches, in which:
871 unique CDR3
6 unique J



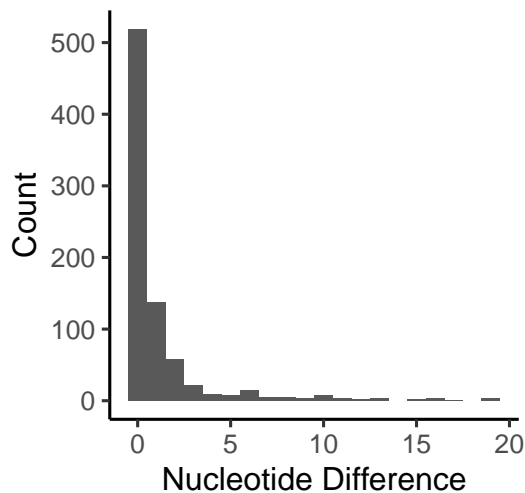
IGHV1-46*01

787 sequences assigned
430 (54.6%) exact matches, in which:
404 unique CDR3
6 unique J



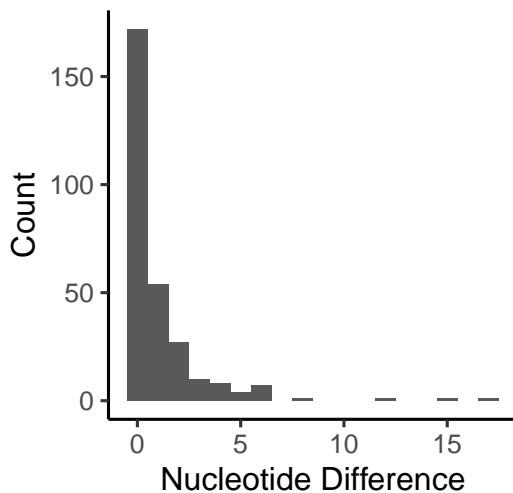
IGHV1-3*01

807 sequences assigned
519 (64.3%) exact matches, in which:
499 unique CDR3
6 unique J



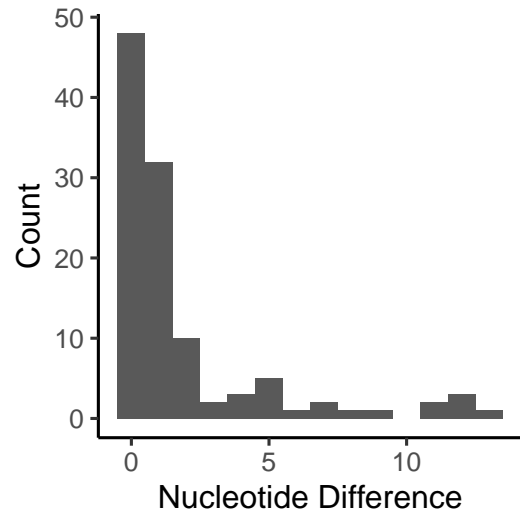
IGHV1-24*01

286 sequences assigned
172 (60.1%) exact matches, in which:
164 unique CDR3
6 unique J



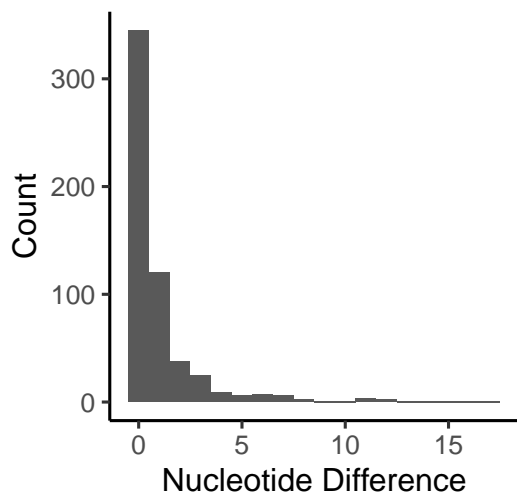
IGHV1-58*01

111 sequences assigned
48 (43.2%) exact matches, in which:
45 unique CDR3
6 unique J



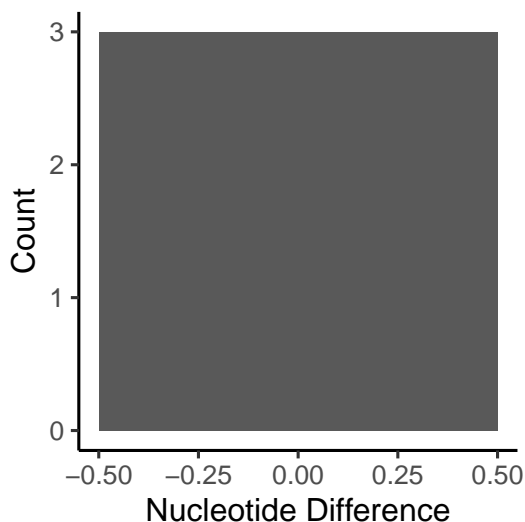
IGHV1-8*01

570 sequences assigned
345 (60.5%) exact matches, in which:
314 unique CDR3
6 unique J



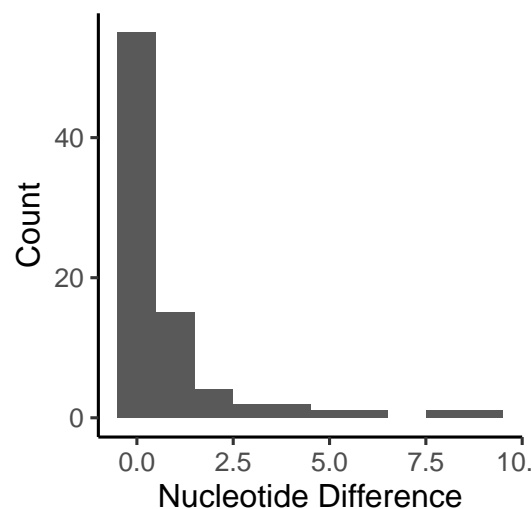
IGHV1-45*02

3 sequences assigned
3 (100%) exact matches, in which:
3 unique CDR3
3 unique J



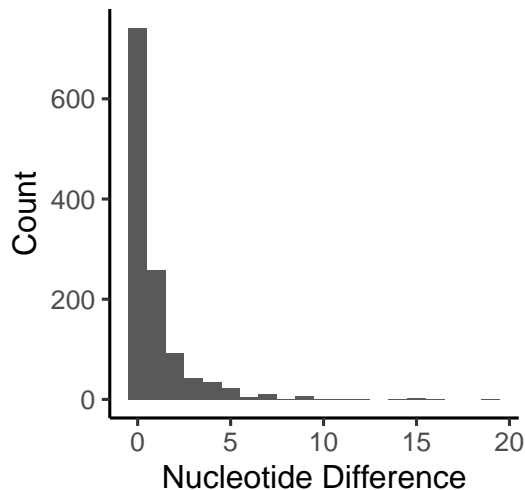
IGHV1-69-2*01

82 sequences assigned
55 (67.1%) exact matches, in which:
53 unique CDR3
5 unique J



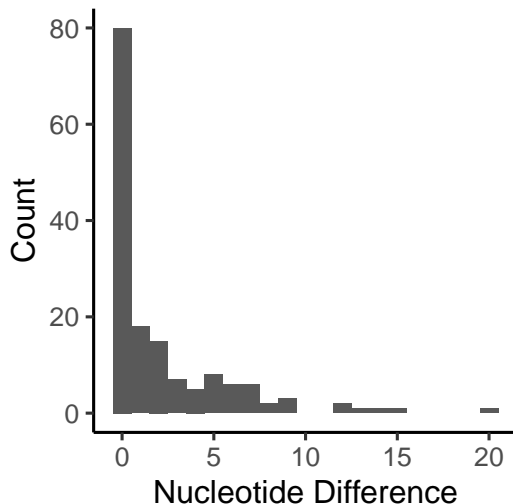
IGHV1–69*06

1224 sequences assigned
742 (60.6%) exact matches, in which:
673 unique CDR3
6 unique J



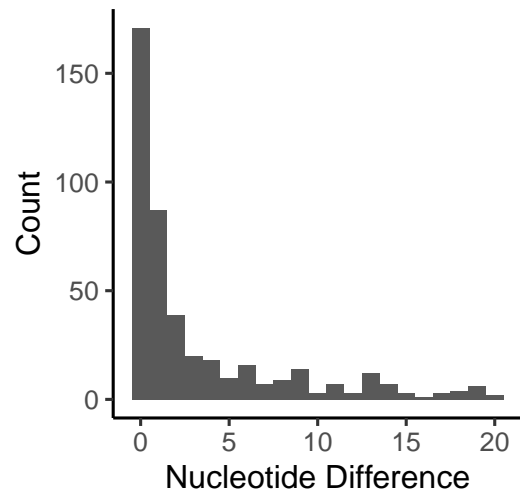
IGHV2–5*02

157 sequences assigned
80 (51%) exact matches, in which:
79 unique CDR3
5 unique J



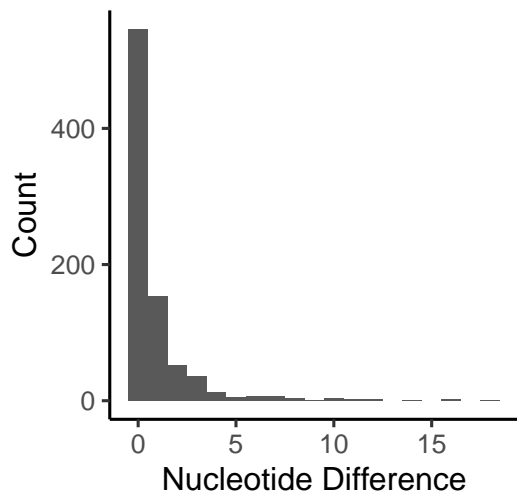
IGHV3–7*01

448 sequences assigned
171 (38.2%) exact matches, in which:
158 unique CDR3
6 unique J



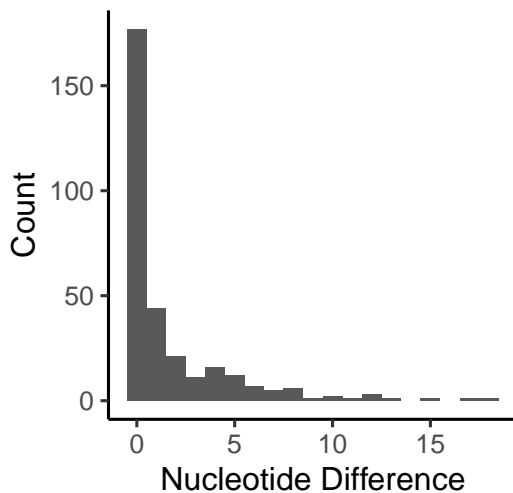
IGHV1–69*09

834 sequences assigned
546 (65.5%) exact matches, in which:
487 unique CDR3
6 unique J



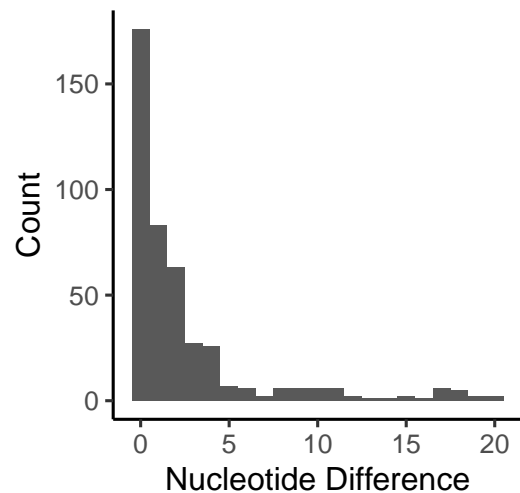
IGHV2–26*01

310 sequences assigned
177 (57.1%) exact matches, in which:
173 unique CDR3
5 unique J



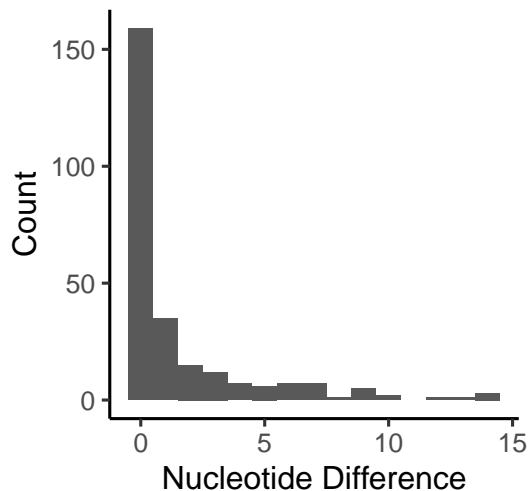
IGHV3–7*03

443 sequences assigned
176 (39.7%) exact matches, in which:
170 unique CDR3
6 unique J



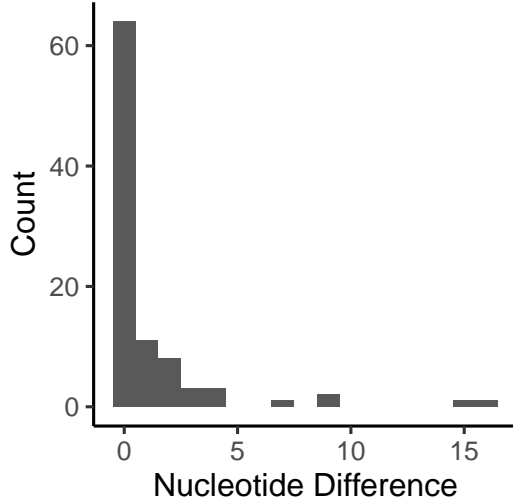
IGHV2–5*01

261 sequences assigned
159 (60.9%) exact matches, in which:
153 unique CDR3
6 unique J



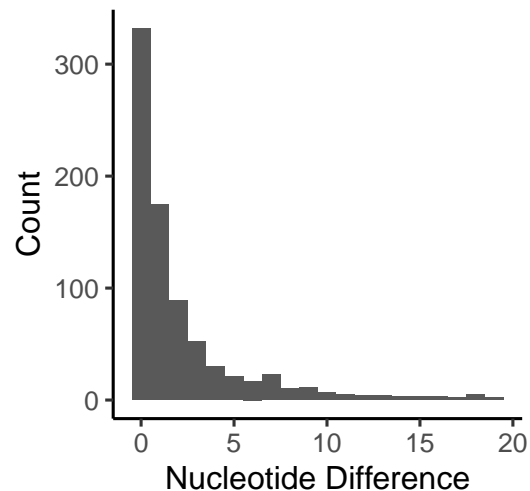
IGHV2–70*01

94 sequences assigned
64 (68.1%) exact matches, in which:
62 unique CDR3
6 unique J



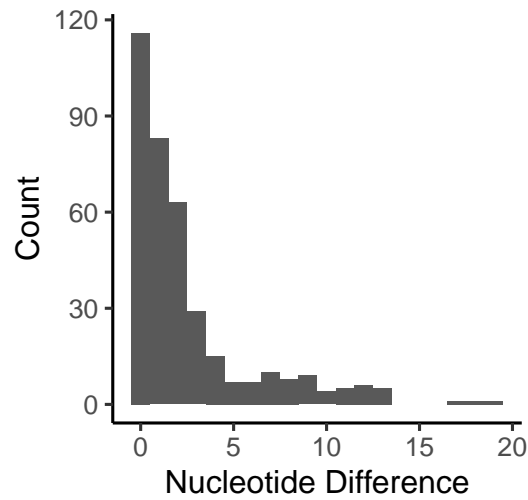
IGHV3–9*01

799 sequences assigned
332 (41.6%) exact matches, in which:
301 unique CDR3
6 unique J



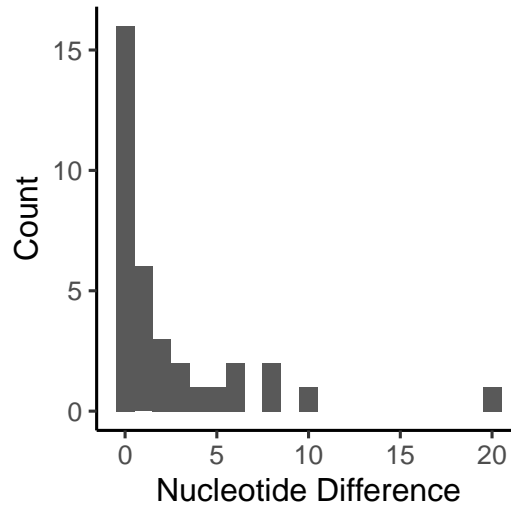
IGHV3-11*01

372 sequences assigned
116 (31.2%) exact matches, in which:
112 unique CDR3
6 unique J



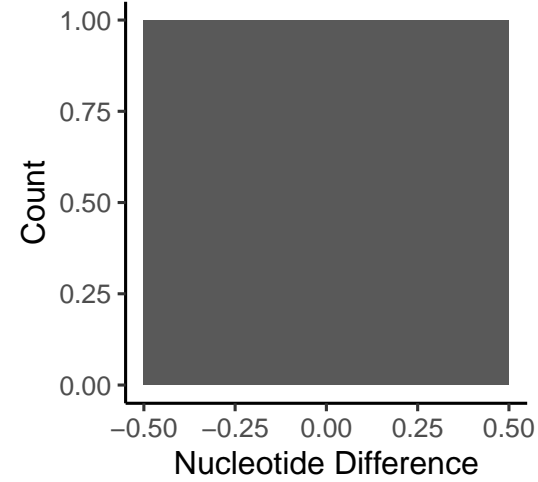
IGHV3-13*05

35 sequences assigned
16 (45.7%) exact matches, in which:
16 unique CDR3
4 unique J



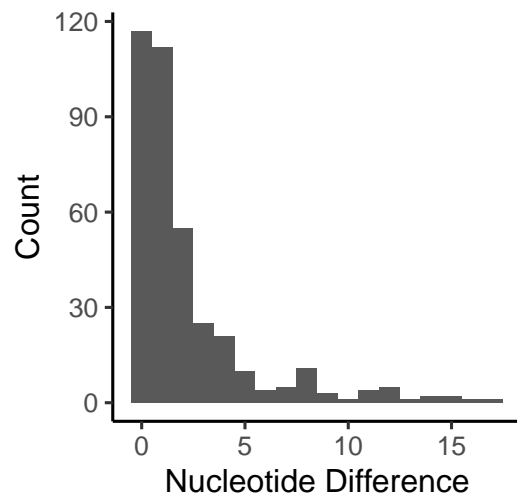
IGHV3-19*01

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



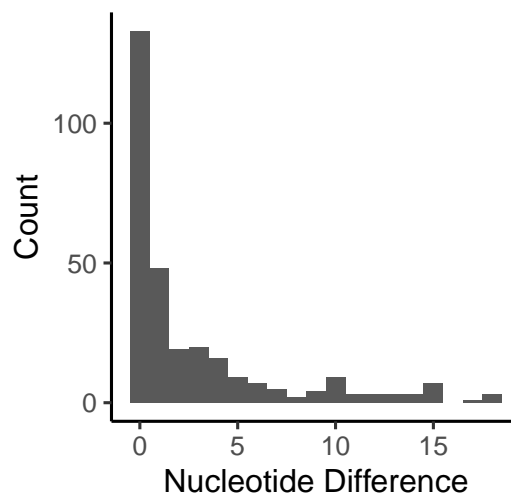
IGHV3-11*06

380 sequences assigned
117 (30.8%) exact matches, in which:
114 unique CDR3
6 unique J



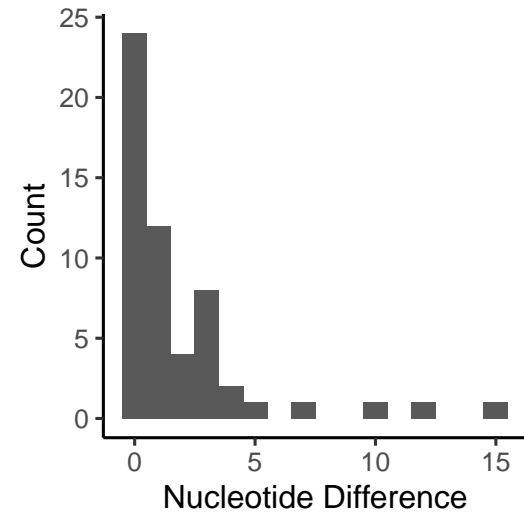
IGHV3-15*01

299 sequences assigned
133 (44.5%) exact matches, in which:
130 unique CDR3
6 unique J



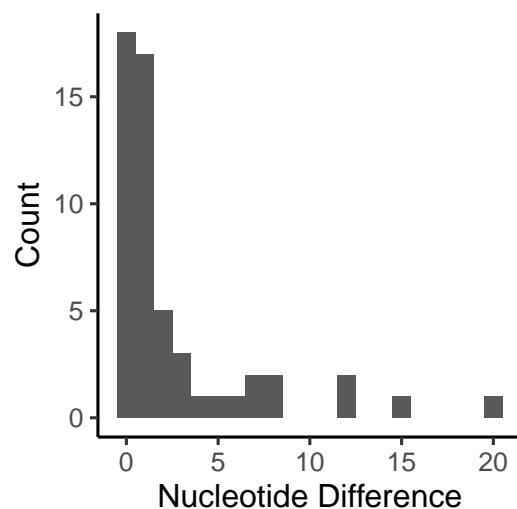
IGHV3-20*01

55 sequences assigned
24 (43.6%) exact matches, in which:
23 unique CDR3
5 unique J



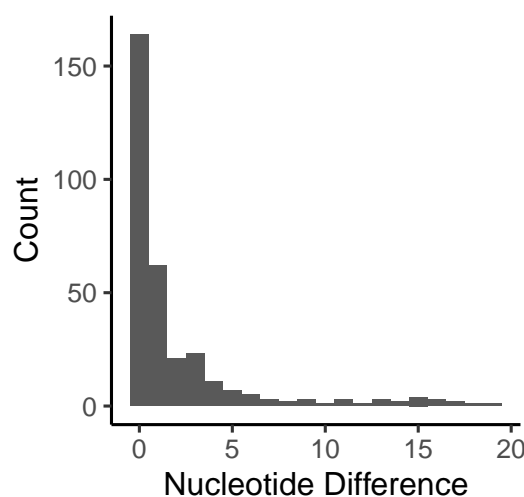
IGHV3-13*01

56 sequences assigned
18 (32.1%) exact matches, in which:
18 unique CDR3
5 unique J



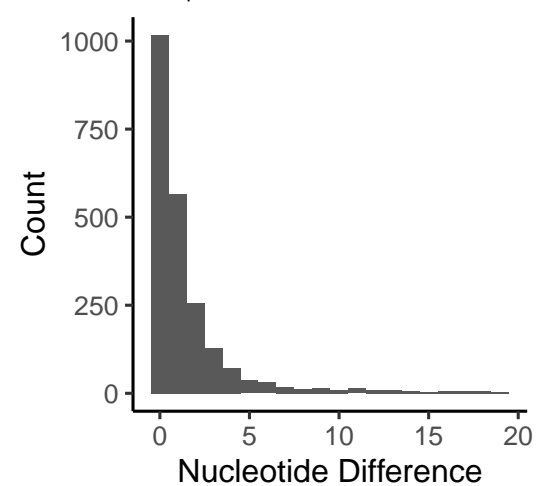
IGHV3-15*07

323 sequences assigned
164 (50.8%) exact matches, in which:
161 unique CDR3
5 unique J



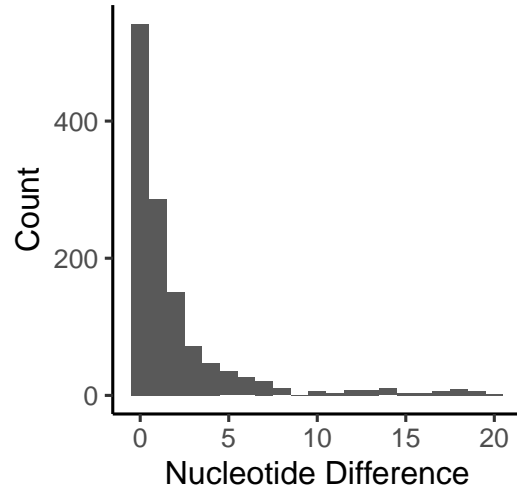
IGHV3-21*01

2232 sequences assigned
1017 (45.6%) exact matches, in which:
941 unique CDR3
6 unique J



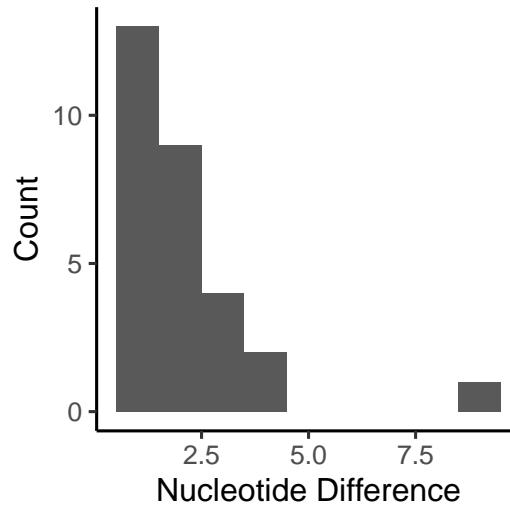
IGHV3–23*04

1268 sequences assigned
542 (42.7%) exact matches, in which:
514 unique CDR3
6 unique J



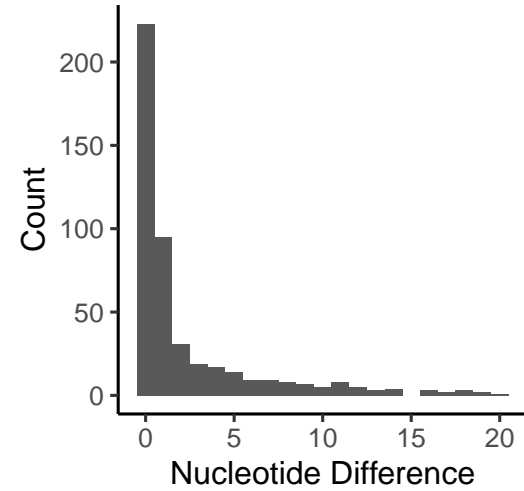
IGHV3–43*01

29 sequences assigned
No exact matches.



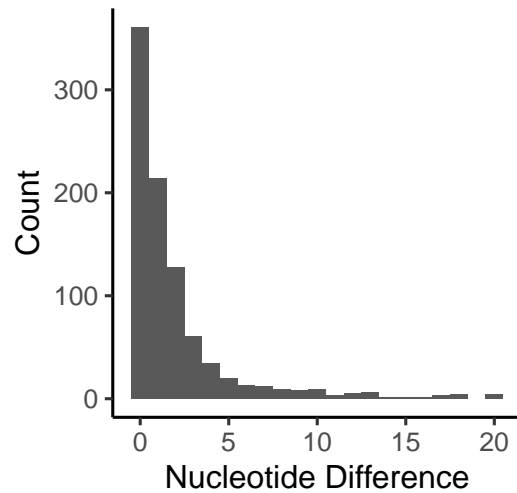
IGHV3–48*03

470 sequences assigned
223 (47.4%) exact matches, in which:
210 unique CDR3
6 unique J



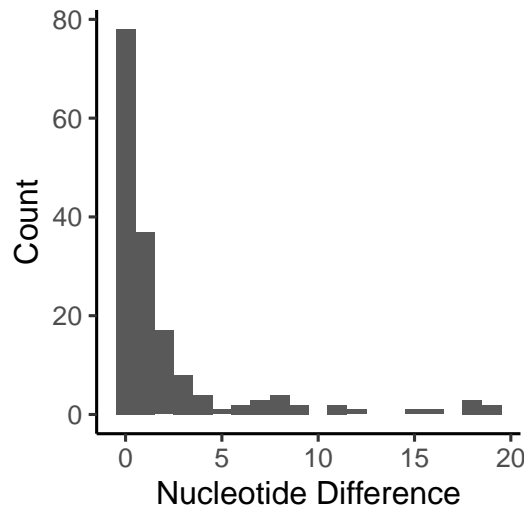
IGHV3–30–3*01

899 sequences assigned
361 (40.2%) exact matches, in which:
346 unique CDR3
6 unique J



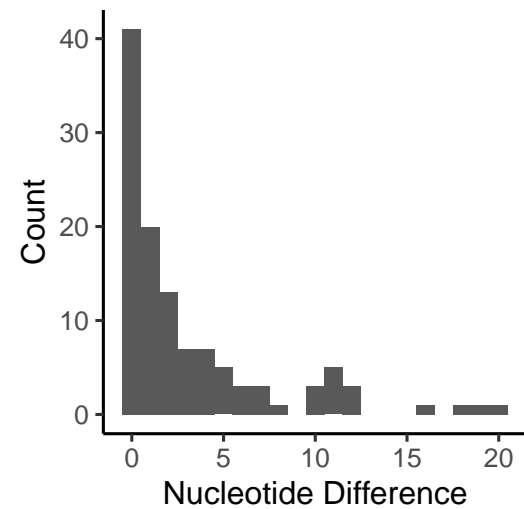
IGHV3–43*02

166 sequences assigned
78 (47%) exact matches, in which:
73 unique CDR3
5 unique J



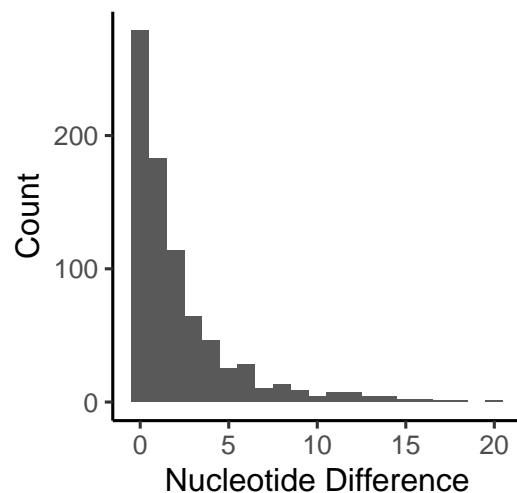
IGHV3–49*04

117 sequences assigned
41 (35%) exact matches, in which:
37 unique CDR3
4 unique J



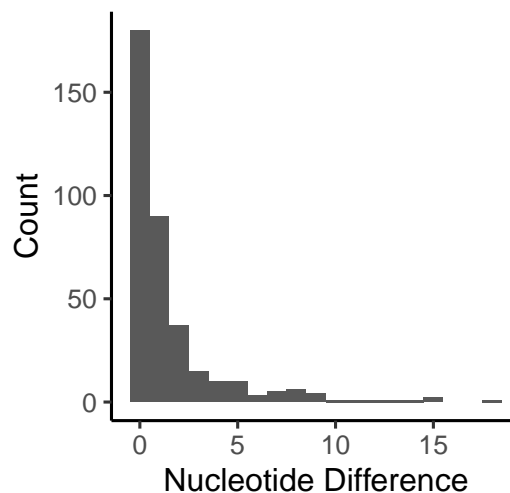
IGHV3–33*01

806 sequences assigned
279 (34.6%) exact matches, in which:
264 unique CDR3
6 unique J



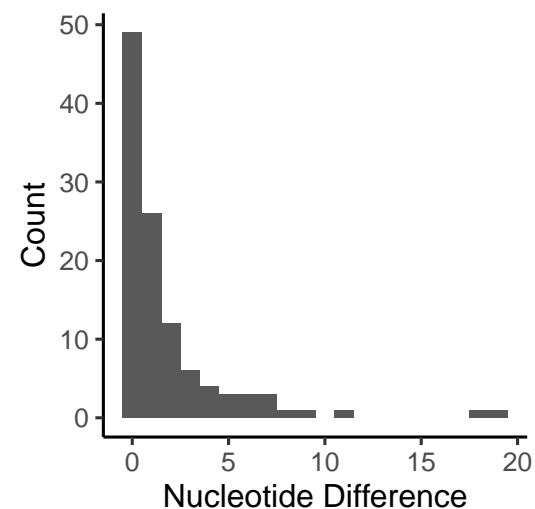
IGHV3–48*02

372 sequences assigned
180 (48.4%) exact matches, in which:
173 unique CDR3
5 unique J



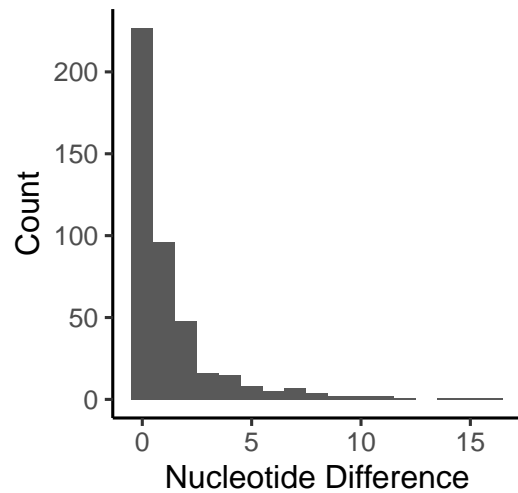
IGHV3–49*05

111 sequences assigned
49 (44.1%) exact matches, in which:
48 unique CDR3
5 unique J



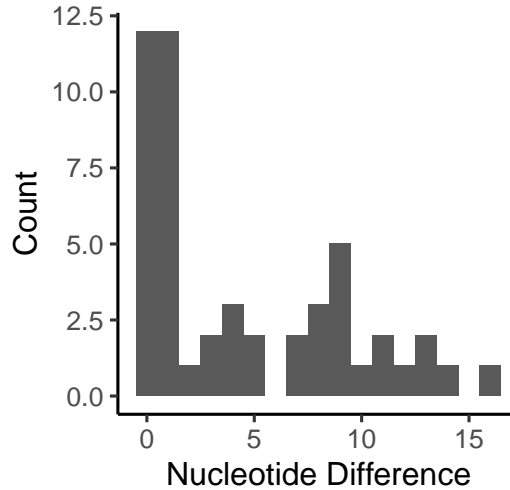
IGHV3-53*01

436 sequences assigned
227 (52.1%) exact matches, in which:
211 unique CDR3
5 unique J



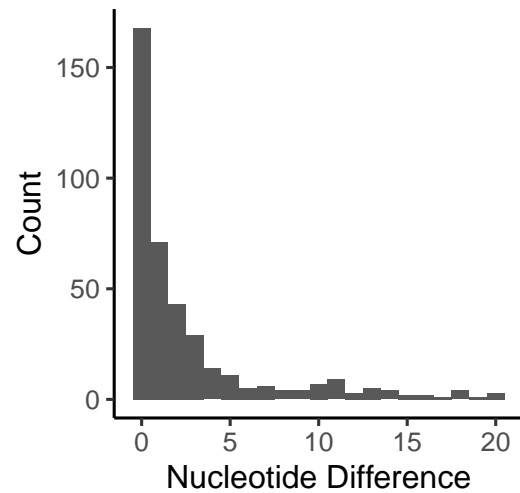
IGHV3-72*01

50 sequences assigned
12 (24%) exact matches, in which:
12 unique CDR3
3 unique J



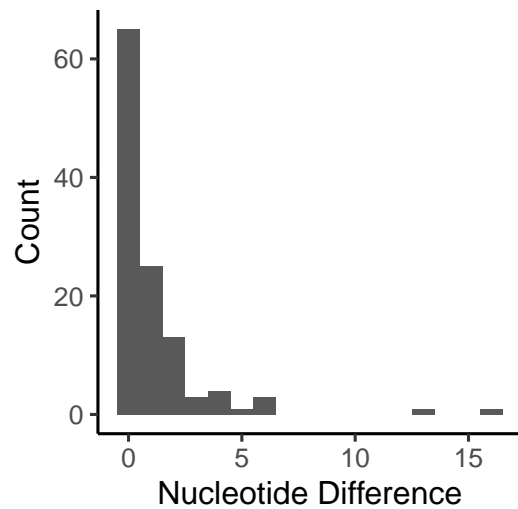
IGHV3-64D*06

401 sequences assigned
168 (41.9%) exact matches, in which:
158 unique CDR3
6 unique J



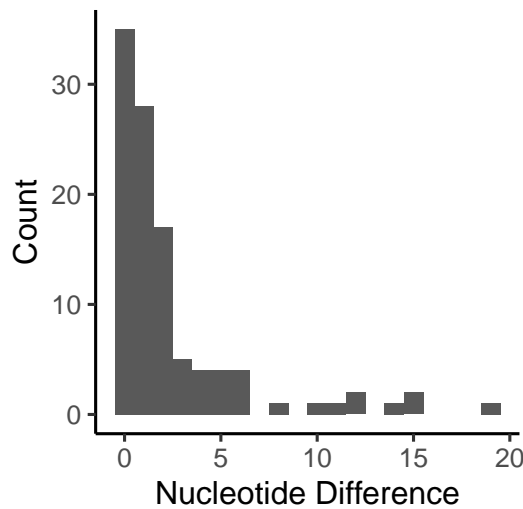
IGHV3-53*04

116 sequences assigned
65 (56%) exact matches, in which:
59 unique CDR3
5 unique J



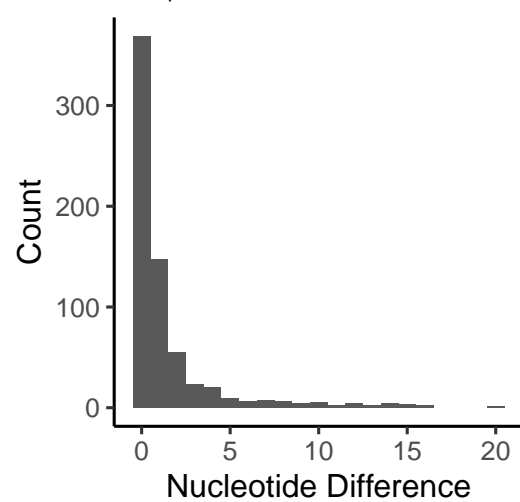
IGHV3-73*02

106 sequences assigned
35 (33%) exact matches, in which:
34 unique CDR3
4 unique J



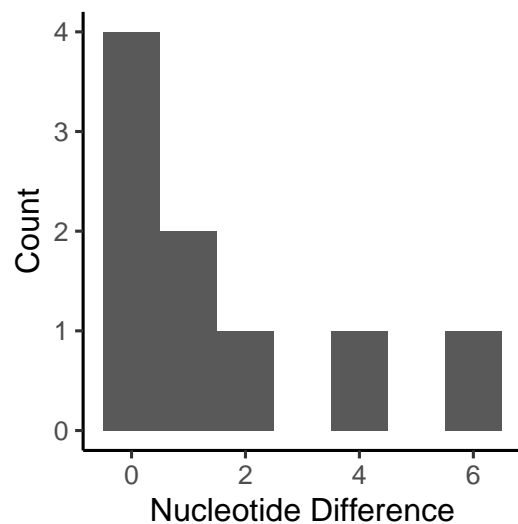
IGHV4-4*02

671 sequences assigned
369 (55%) exact matches, in which:
358 unique CDR3
6 unique J



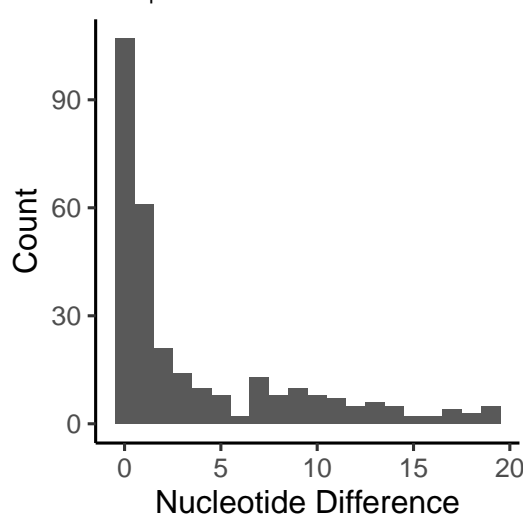
IGHV3-64*02

9 sequences assigned
4 (44.4%) exact matches, in which:
4 unique CDR3
3 unique J



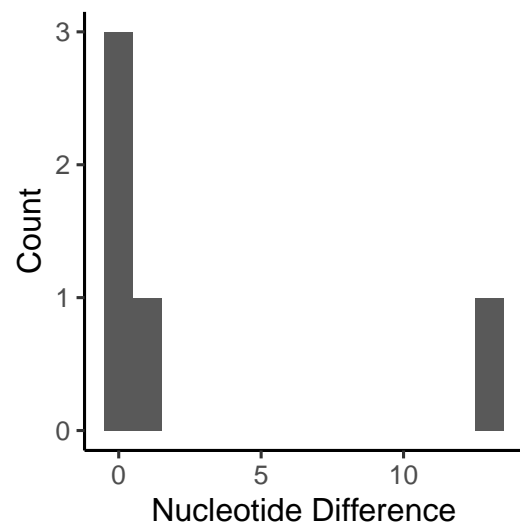
IGHV3-74*01

306 sequences assigned
107 (35%) exact matches, in which:
104 unique CDR3
5 unique J



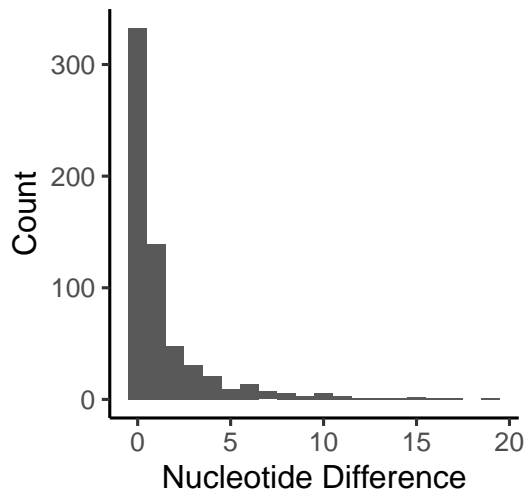
IGHV4-28*01

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
3 unique J



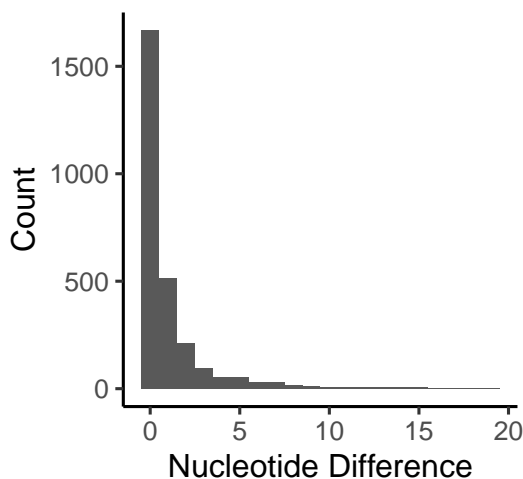
IGHV4-30-2*01

628 sequences assigned
333 (53%) exact matches, in which:
307 unique CDR3
6 unique J



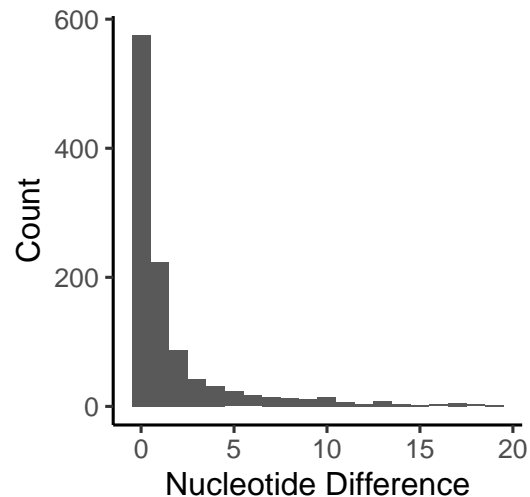
IGHV4-34*01

2734 sequences assigned
1667 (61%) exact matches, in which:
1491 unique CDR3
6 unique J



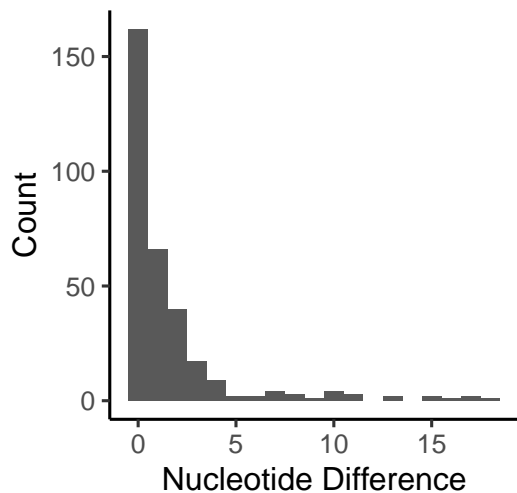
IGHV4-59*01

1105 sequences assigned
576 (52.1%) exact matches, in which:
543 unique CDR3
6 unique J



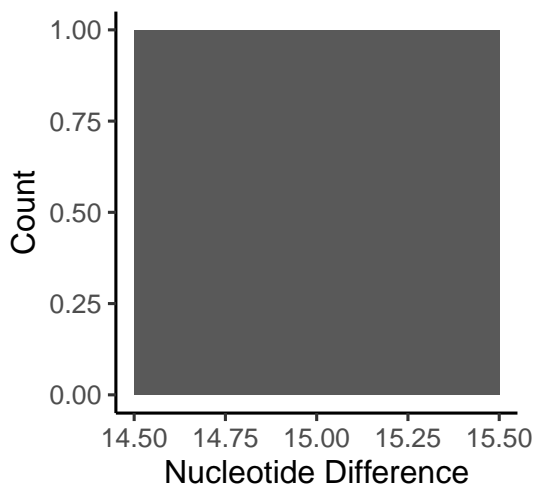
IGHV4-30-4*01

323 sequences assigned
162 (50.2%) exact matches, in which:
154 unique CDR3
6 unique J



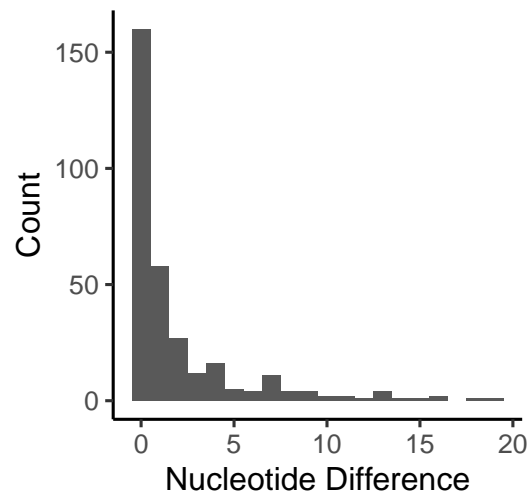
IGHV4-38-2*02

1 sequences assigned
No exact matches.



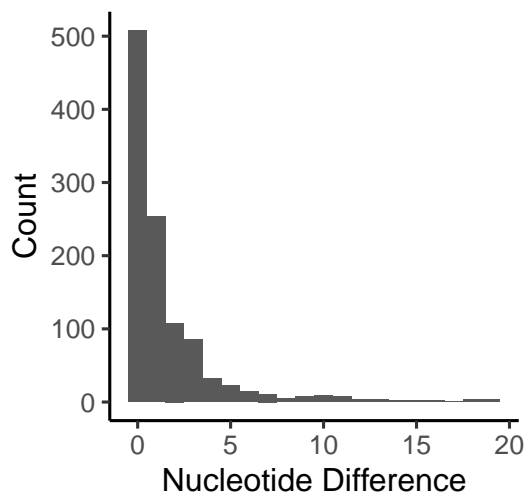
IGHV4-61*01

316 sequences assigned
160 (50.6%) exact matches, in which:
153 unique CDR3
6 unique J



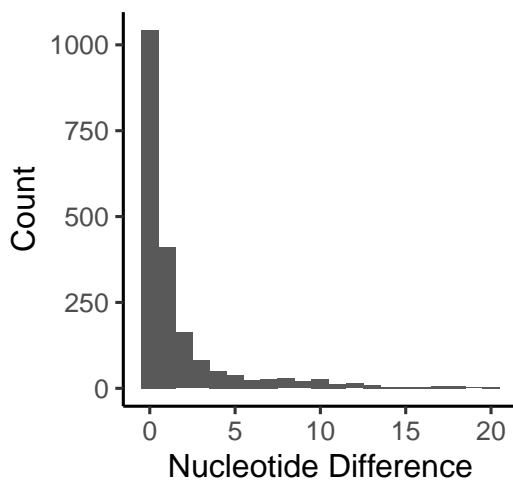
IGHV4-31*03

1086 sequences assigned
508 (46.8%) exact matches, in which:
477 unique CDR3
6 unique J



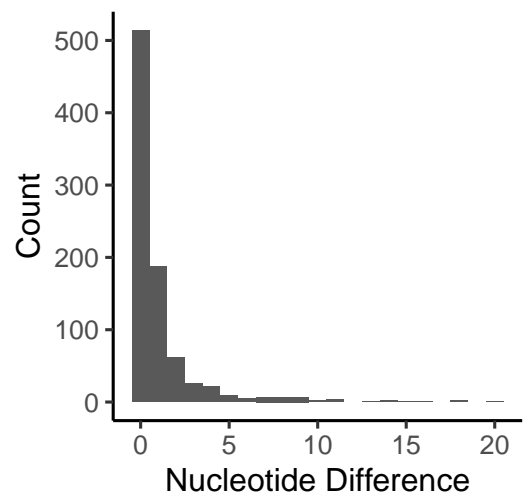
IGHV4-39*01

1987 sequences assigned
1043 (52.5%) exact matches, in which:
949 unique CDR3
6 unique J



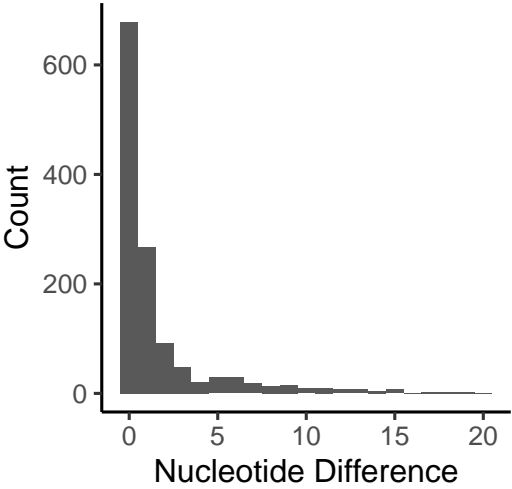
IGHV5-10-1*03

858 sequences assigned
514 (59.9%) exact matches, in which:
475 unique CDR3
6 unique J



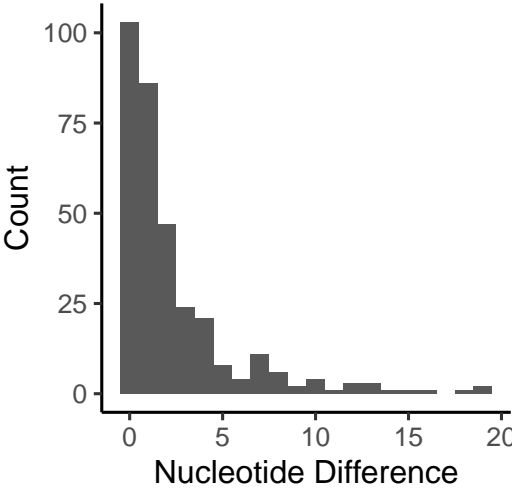
IGHV5–51*01

1269 sequences assigned
679 (53.5%) exact matches, in which:
611 unique CDR3
6 unique J



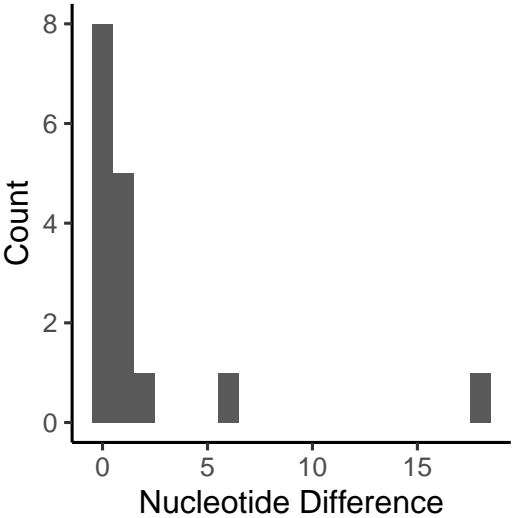
IGHV6–1*01

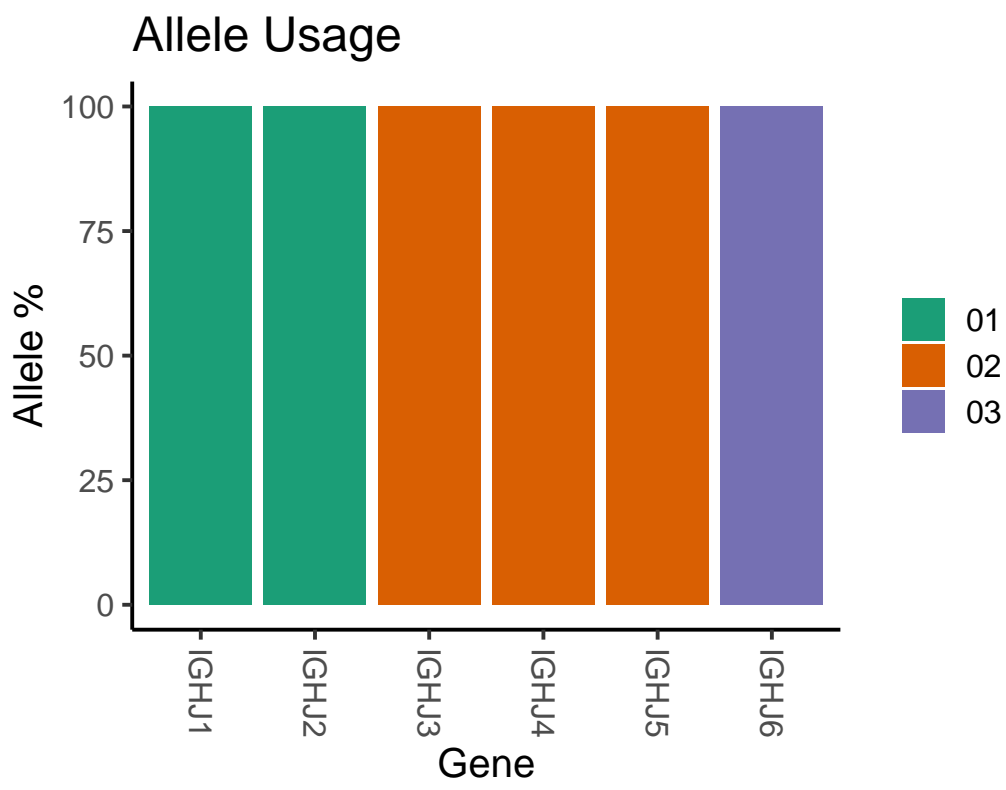
329 sequences assigned
103 (31.3%) exact matches, in which:
99 unique CDR3
5 unique J



IGHV7–4–1*01

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





Novel sequence(s) IGHV6-1*01_T91C are not listed in the genotype and will be ignored.