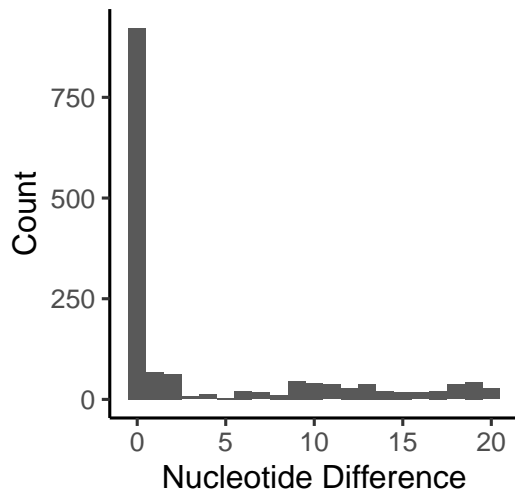


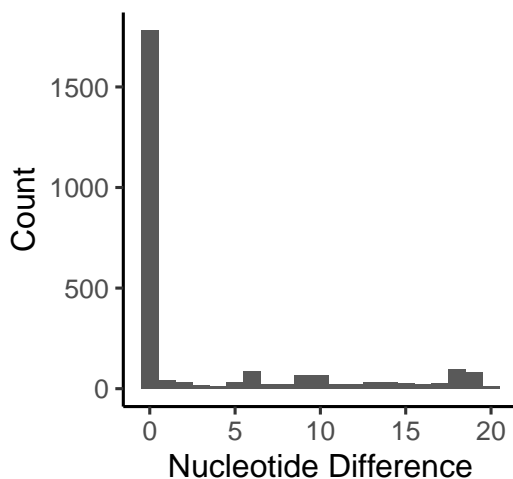
IGHV1-2*02

1593 sequences assigned
923 (57.9%) exact matches, in which:
919 unique CDR3
7 unique J



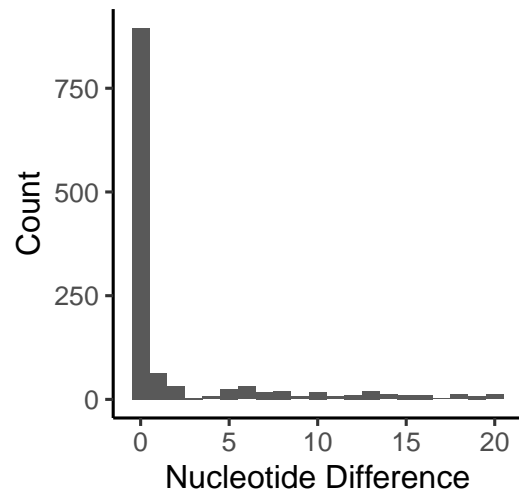
IGHV1-18*01

3639 sequences assigned
1781 (48.9%) exact matches, in which:
1770 unique CDR3
7 unique J



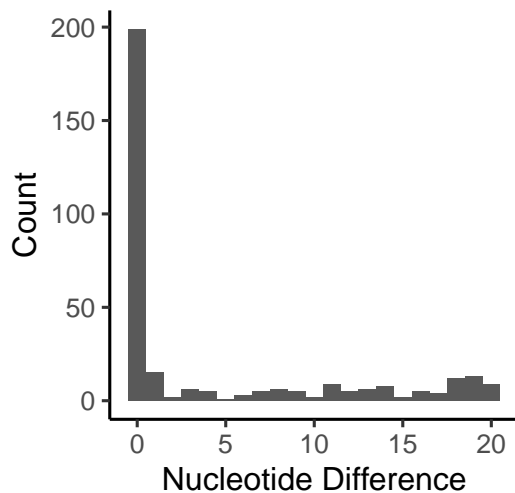
IGHV1-46*01

1517 sequences assigned
896 (59.1%) exact matches, in which:
893 unique CDR3
7 unique J



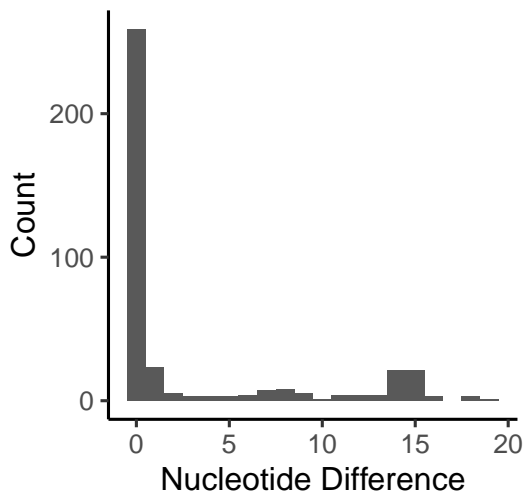
IGHV1-3*01_05

446 sequences assigned
199 (44.6%) exact matches, in which:
198 unique CDR3
6 unique J



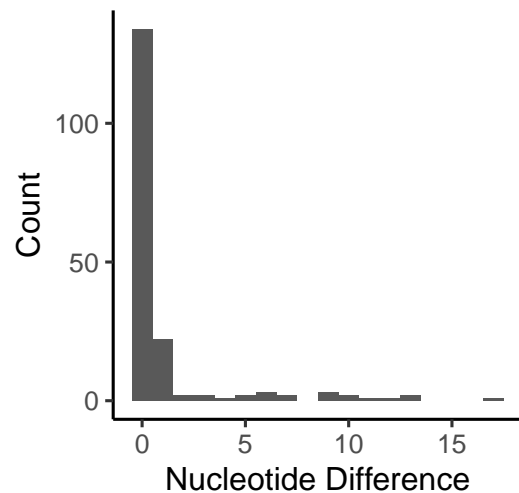
IGHV1-24*01

387 sequences assigned
259 (66.9%) exact matches, in which:
258 unique CDR3
7 unique J



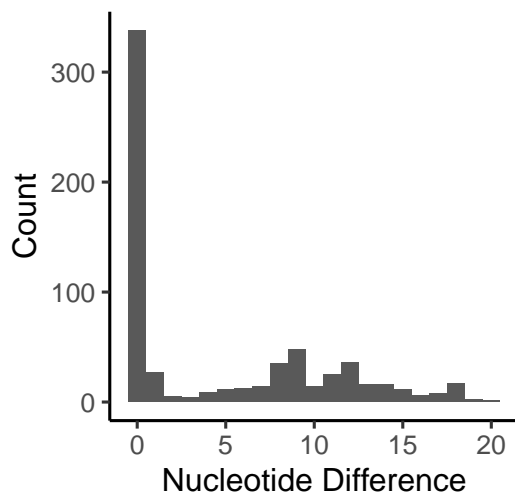
IGHV1-58*01_03

182 sequences assigned
134 (73.6%) exact matches, in which:
129 unique CDR3
7 unique J



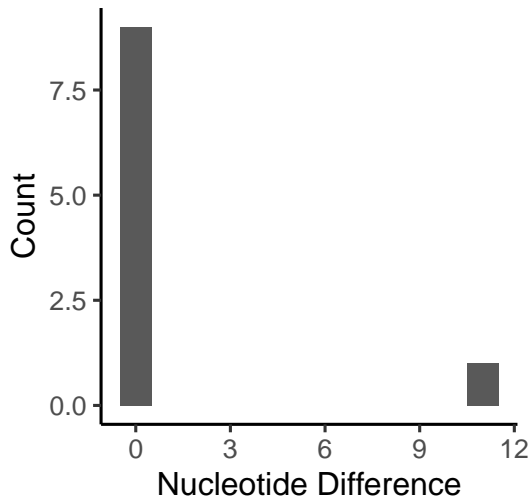
IGHV1-8*01

764 sequences assigned
338 (44.2%) exact matches, in which:
336 unique CDR3
7 unique J



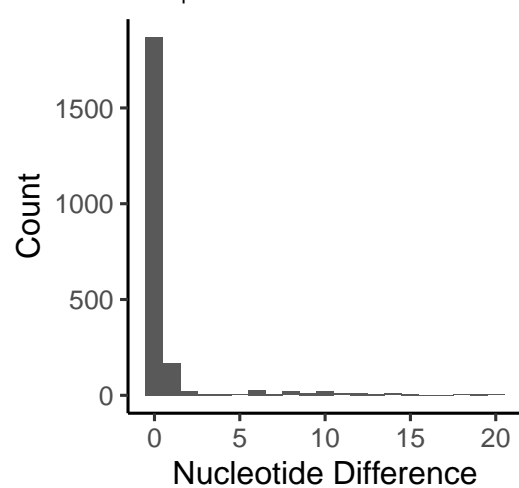
IGHV1-45*02

10 sequences assigned
9 (90%) exact matches, in which:
9 unique CDR3
4 unique J



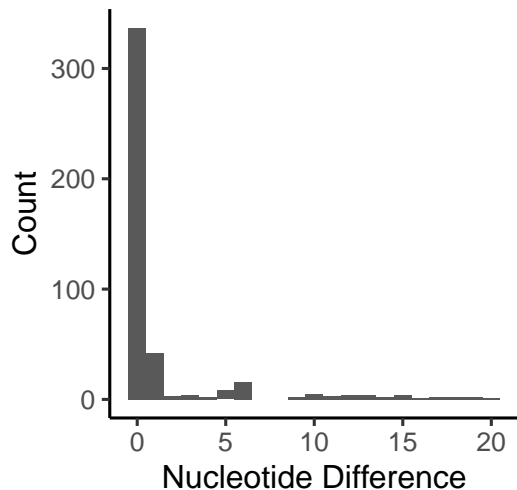
IGHV1-69*01_12_13

2289 sequences assigned
1870 (81.7%) exact matches, in which:
1849 unique CDR3
7 unique J



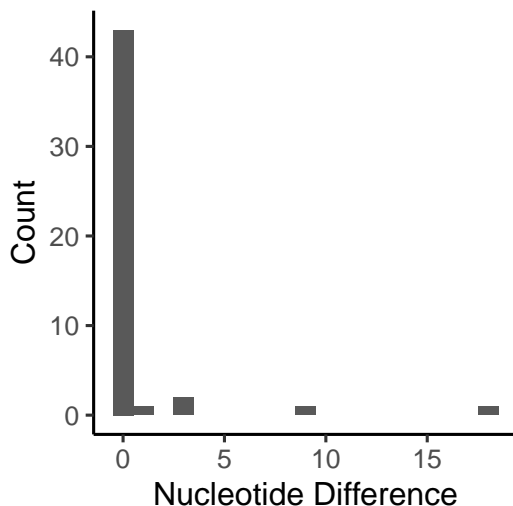
IGHV1–69*04_09

456 sequences assigned
337 (73.9%) exact matches, in which:
335 unique CDR3
7 unique J



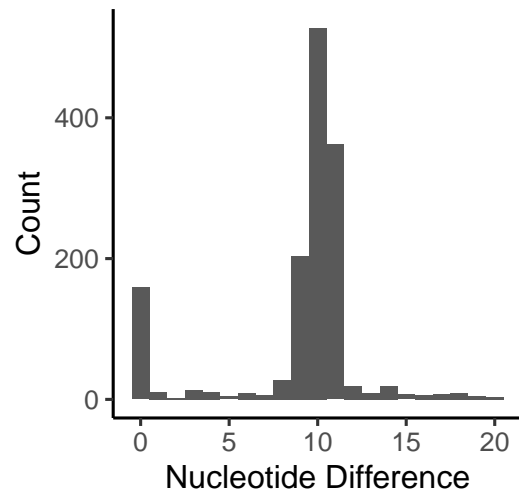
IGHV2–26*01

49 sequences assigned
43 (87.8%) exact matches, in which:
41 unique CDR3
6 unique J



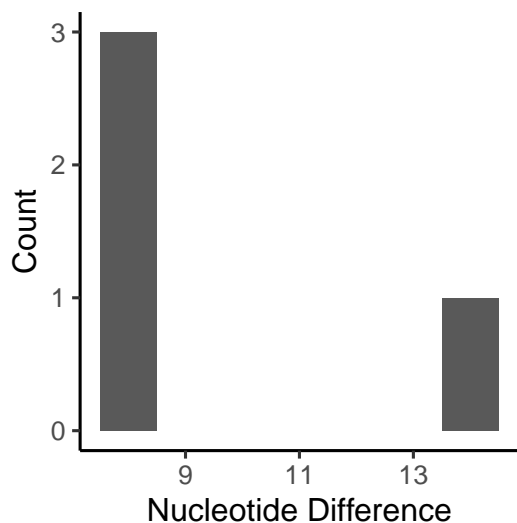
IGHV3–7*01

1455 sequences assigned
159 (10.9%) exact matches, in which:
123 unique CDR3
6 unique J



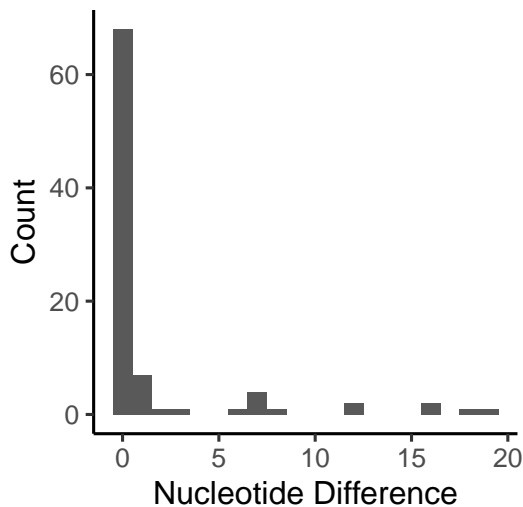
IGHV1–NL1*01

4 sequences assigned
No exact matches.



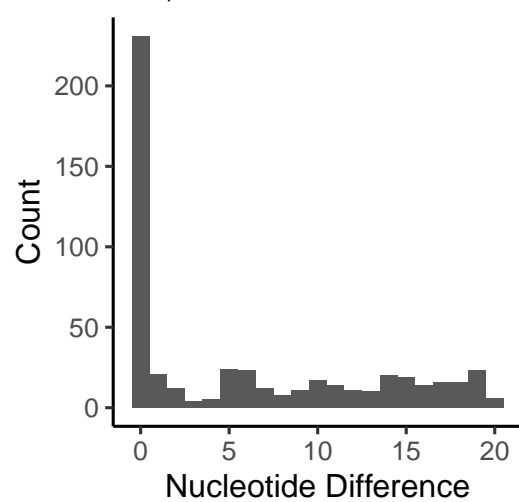
IGHV2–70*01

89 sequences assigned
68 (76.4%) exact matches, in which:
64 unique CDR3
5 unique J



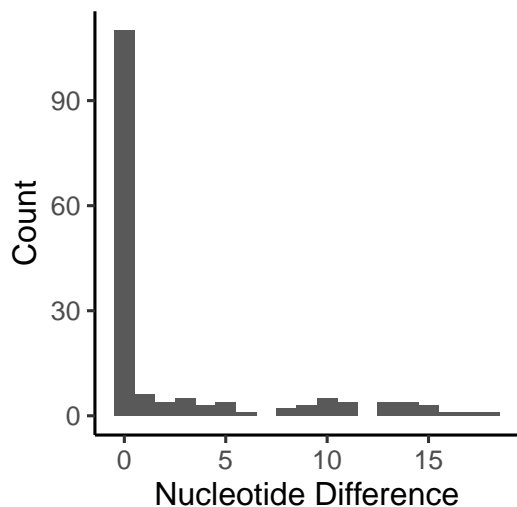
IGHV3–7*03

566 sequences assigned
231 (40.8%) exact matches, in which:
167 unique CDR3
5 unique J



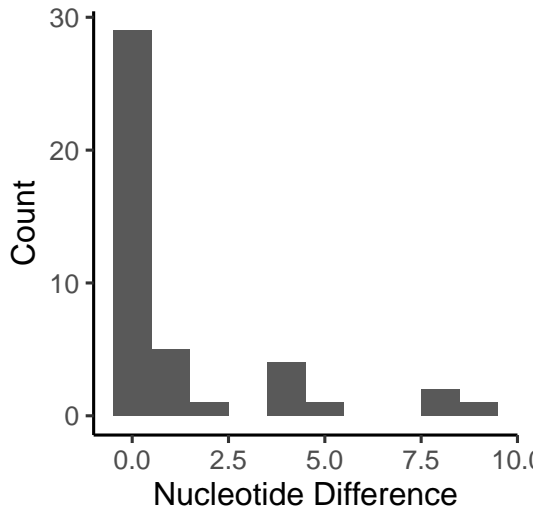
IGHV2–5*02

175 sequences assigned
110 (62.9%) exact matches, in which:
108 unique CDR3
6 unique J



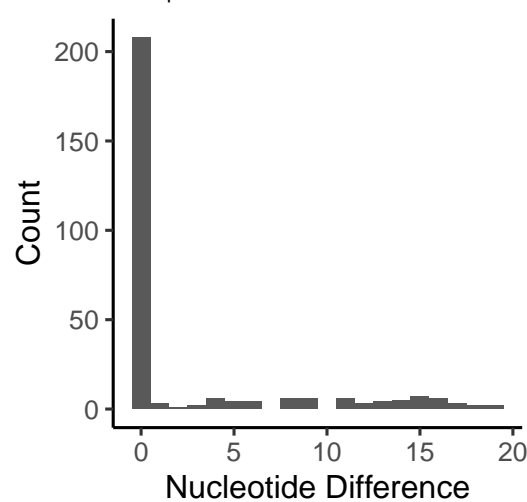
IGHV2–70*11_15

43 sequences assigned
29 (67.4%) exact matches, in which:
28 unique CDR3
5 unique J



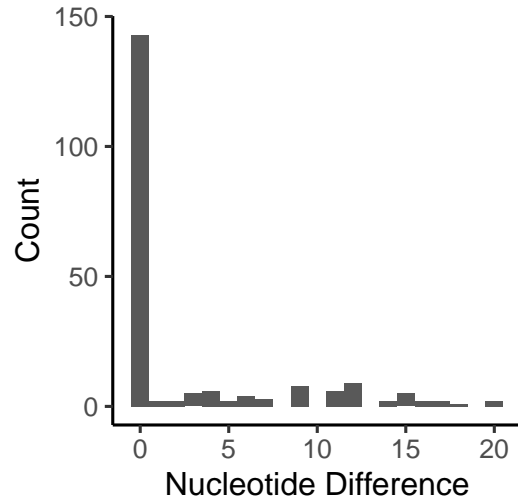
IGHV3–9*01

316 sequences assigned
208 (65.8%) exact matches, in which:
158 unique CDR3
6 unique J



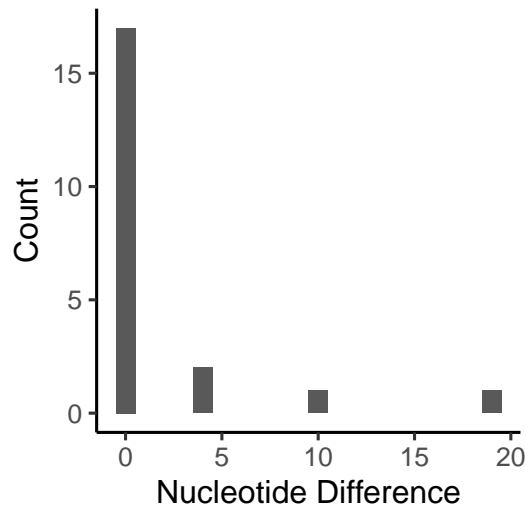
IGHV3-11*01

219 sequences assigned
143 (65.3%) exact matches, in which:
102 unique CDR3
6 unique J



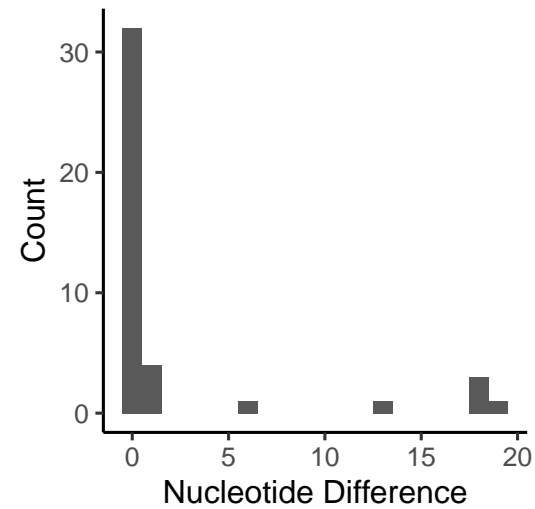
IGHV3-13*05

23 sequences assigned
17 (73.9%) exact matches, in which:
12 unique CDR3
4 unique J



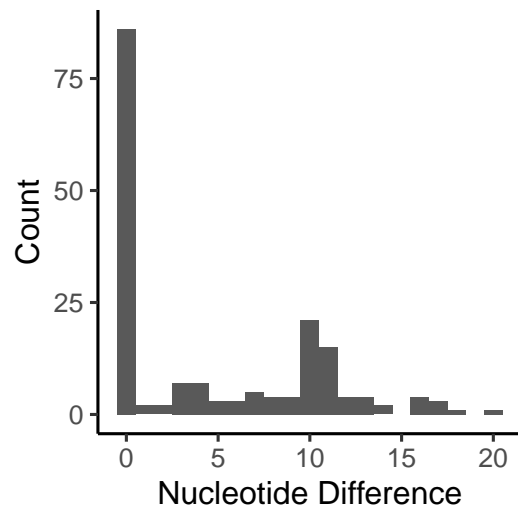
IGHV3-20*01_02

46 sequences assigned
32 (69.6%) exact matches, in which:
22 unique CDR3
4 unique J



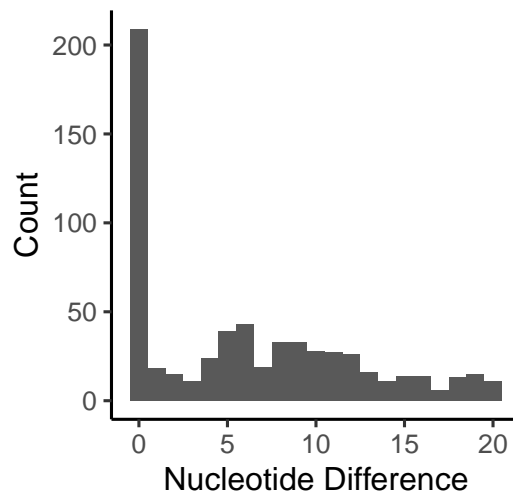
IGHV3-11*06

210 sequences assigned
86 (41%) exact matches, in which:
59 unique CDR3
4 unique J



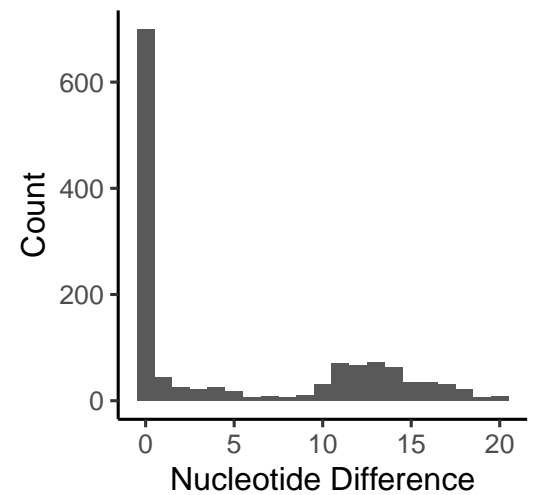
IGHV3-15*01_02

680 sequences assigned
209 (30.7%) exact matches, in which:
155 unique CDR3
7 unique J



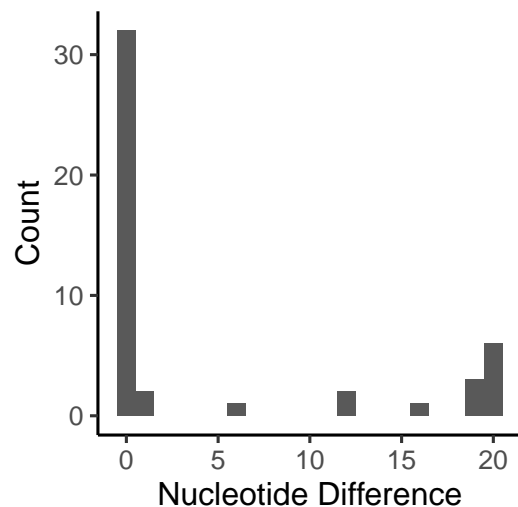
IGHV3-21*01_02

1375 sequences assigned
700 (50.9%) exact matches, in which:
523 unique CDR3
7 unique J



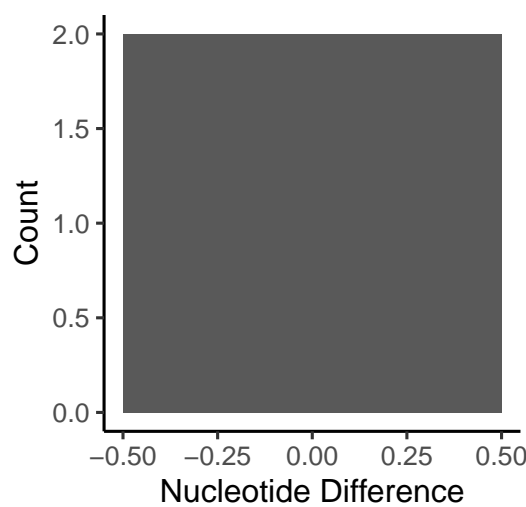
IGHV3-13*01

54 sequences assigned
32 (59.3%) exact matches, in which:
22 unique CDR3
5 unique J



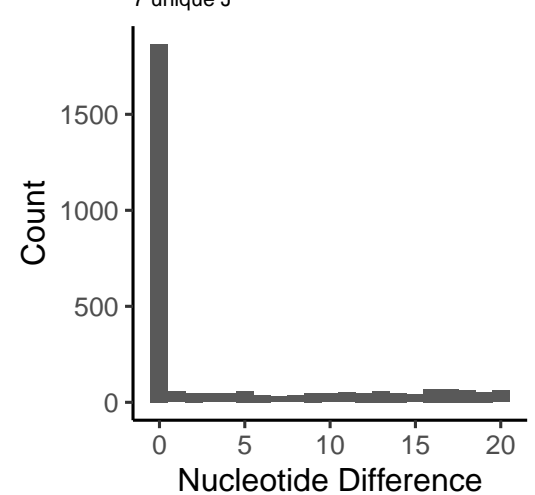
IGHV3-19*01

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



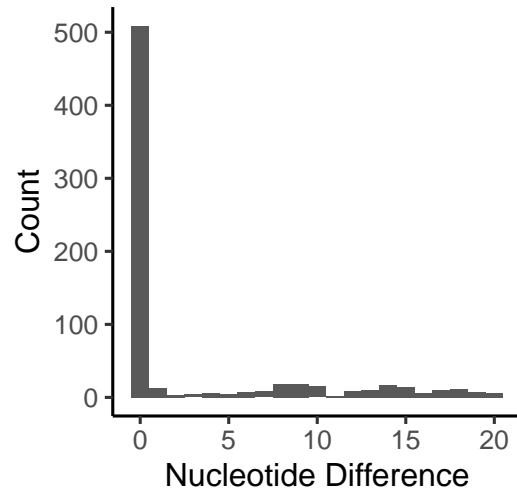
IGHV3-23*01_04

3296 sequences assigned
1866 (56.6%) exact matches, in which:
1416 unique CDR3
7 unique J



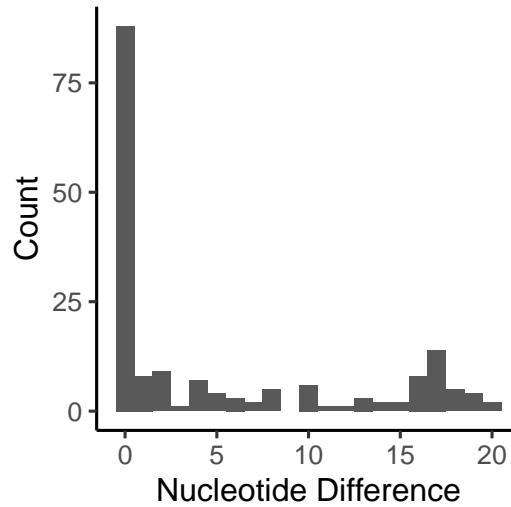
IGHV3-30-3*01

764 sequences assigned
509 (66.6%) exact matches, in which:
371 unique CDR3
7 unique J



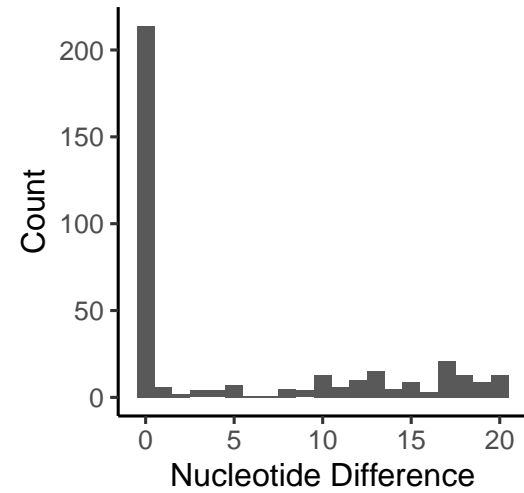
IGHV3-48*01

201 sequences assigned
88 (43.8%) exact matches, in which:
58 unique CDR3
5 unique J



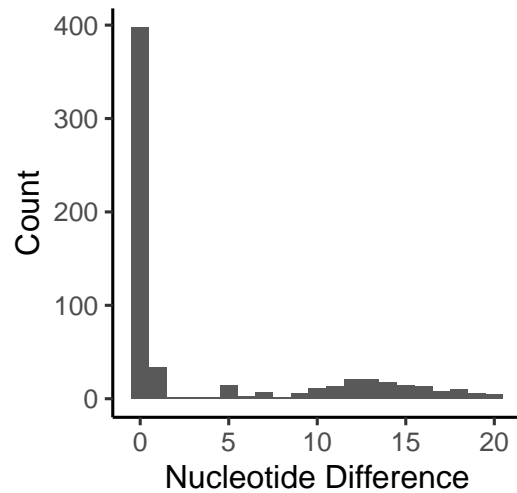
IGHV3-53*01_02

455 sequences assigned
214 (47%) exact matches, in which:
157 unique CDR3
6 unique J



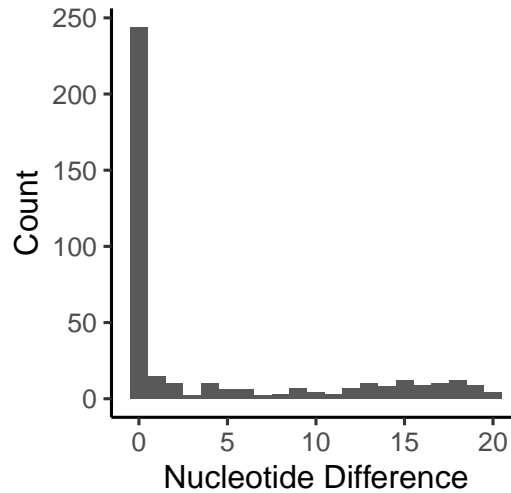
IGHV3-33*01

671 sequences assigned
398 (59.3%) exact matches, in which:
286 unique CDR3
7 unique J



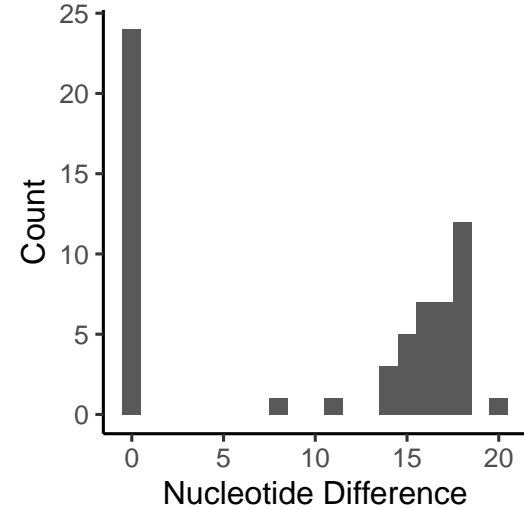
IGHV3-48*02

486 sequences assigned
244 (50.2%) exact matches, in which:
174 unique CDR3
6 unique J



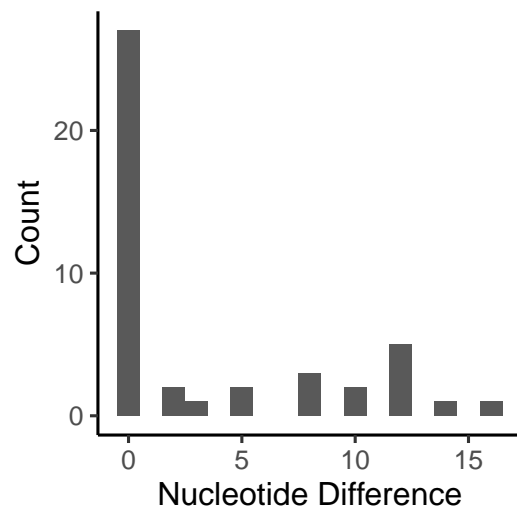
IGHV3-64*01

62 sequences assigned
24 (38.7%) exact matches, in which:
15 unique CDR3
5 unique J



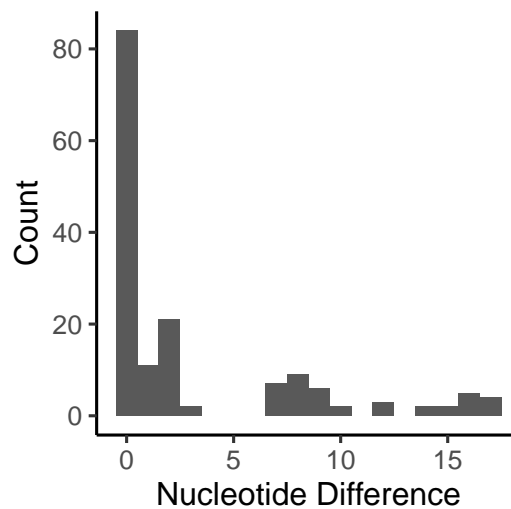
IGHV3-43*01

48 sequences assigned
27 (56.2%) exact matches, in which:
22 unique CDR3
6 unique J



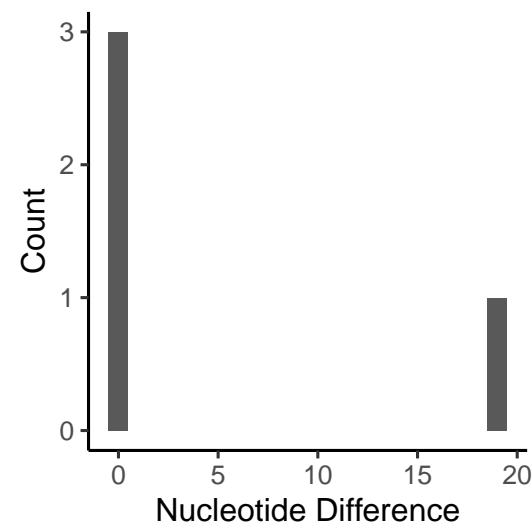
IGHV3-49*03_05

167 sequences assigned
84 (50.3%) exact matches, in which:
59 unique CDR3
6 unique J



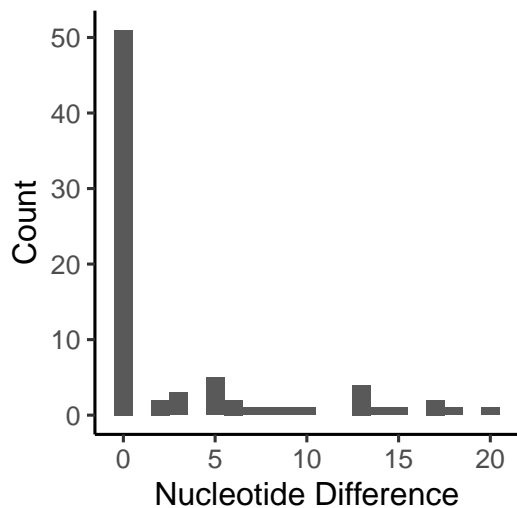
IGHV3-64*02_07

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



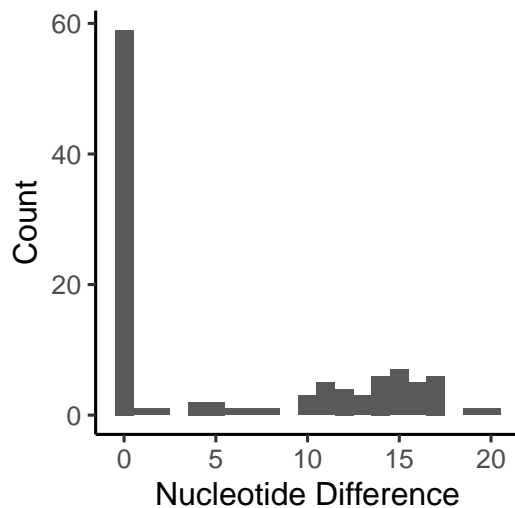
IGHV3-66*01

87 sequences assigned
51 (58.6%) exact matches, in which:
36 unique CDR3
6 unique J



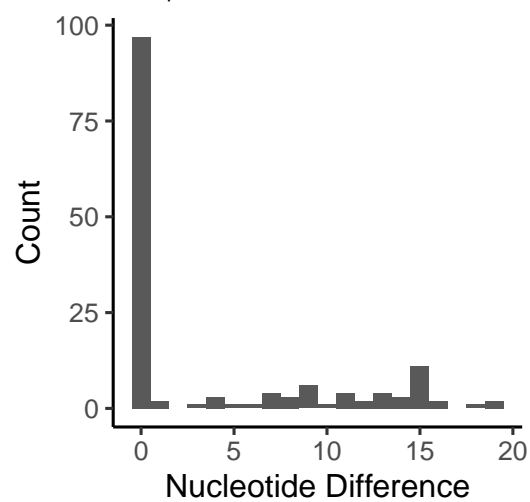
IGHV3-73*01_02

111 sequences assigned
59 (53.2%) exact matches, in which:
45 unique CDR3
5 unique J



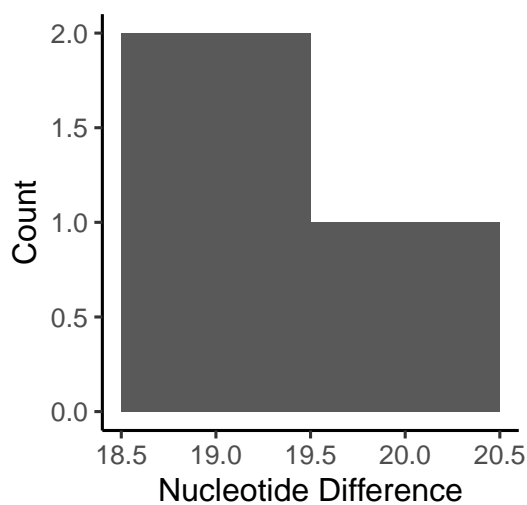
IGHV3-64D*06

164 sequences assigned
97 (59.1%) exact matches, in which:
70 unique CDR3
6 unique J



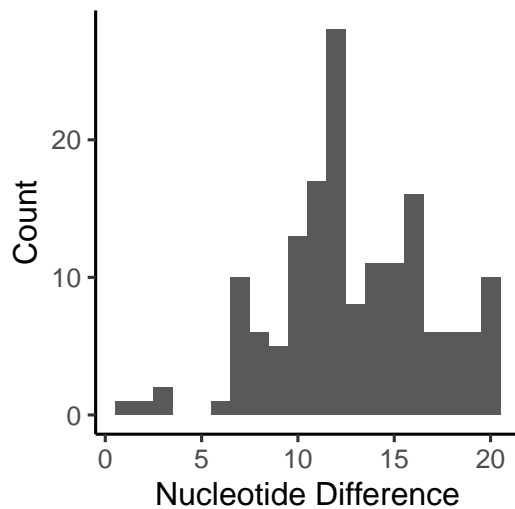
IGHV3-69-1*01

5 sequences assigned
No exact matches.



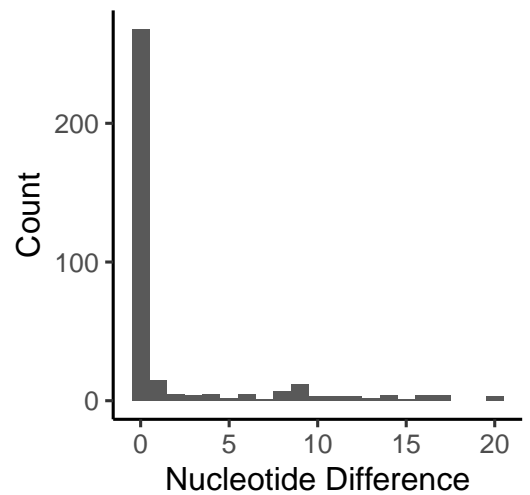
IGHV3-74*03

215 sequences assigned
No exact matches.



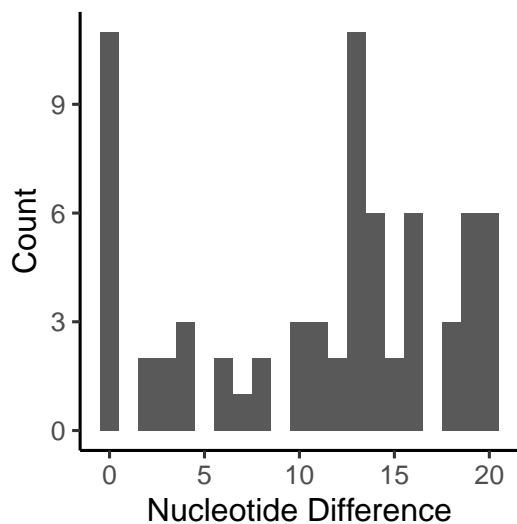
IGHV4-4*07

404 sequences assigned
268 (66.3%) exact matches, in which:
263 unique CDR3
6 unique J



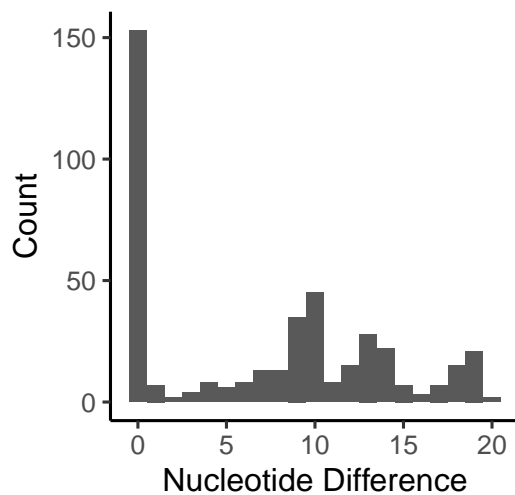
IGHV3-72*01

90 sequences assigned
11 (12.2%) exact matches, in which:
7 unique CDR3
3 unique J



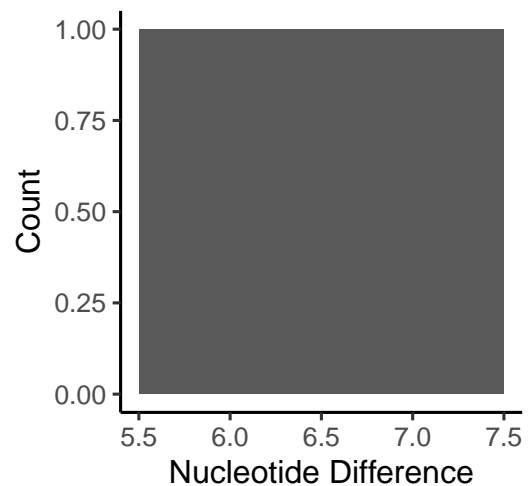
IGHV3-74*01_02

452 sequences assigned
153 (33.8%) exact matches, in which:
107 unique CDR3
5 unique J



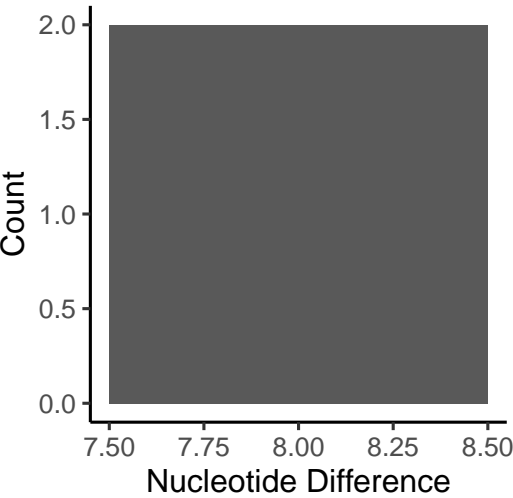
IGHV4-28*03

2 sequences assigned
No exact matches.



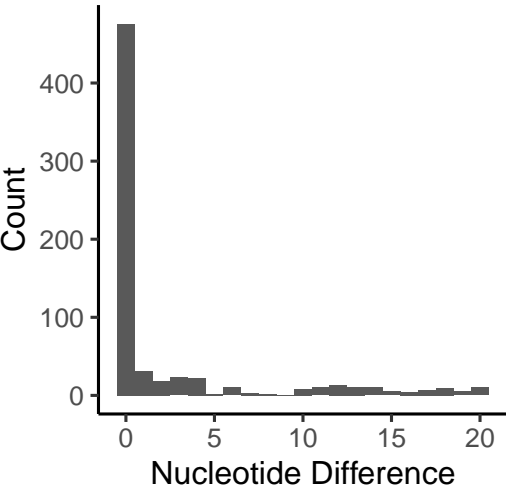
IGHV4-28*01_07

2 sequences assigned
No exact matches.



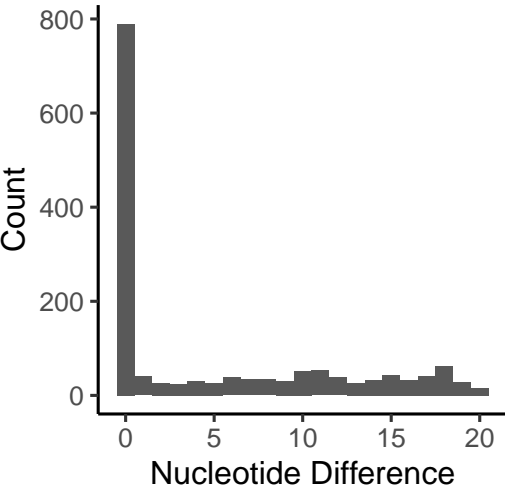
IGHV4-31*02

788 sequences assigned
476 (60.4%) exact matches, in which:
464 unique CDR3
7 unique J



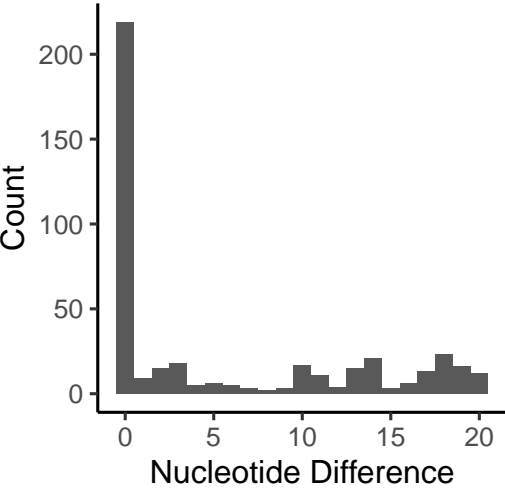
IGHV4-39*02_C258G

1780 sequences assigned
790 (44.4%) exact matches, in which:
764 unique CDR3
7 unique J



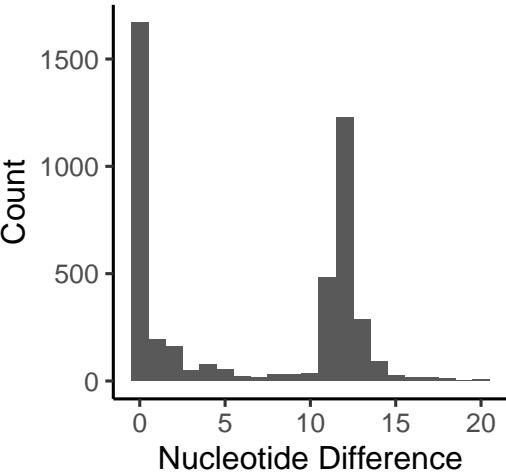
IGHV4-30-4*01

468 sequences assigned
219 (46.8%) exact matches, in which:
207 unique CDR3
6 unique J



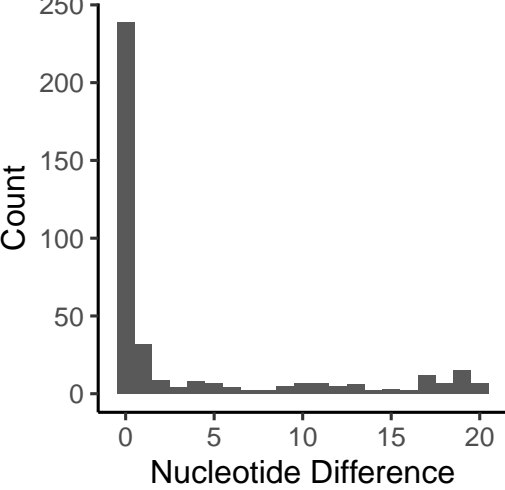
IGHV4-34*01_02

4564 sequences assigned
1669 (36.6%) exact matches, in which:
1630 unique CDR3
7 unique J



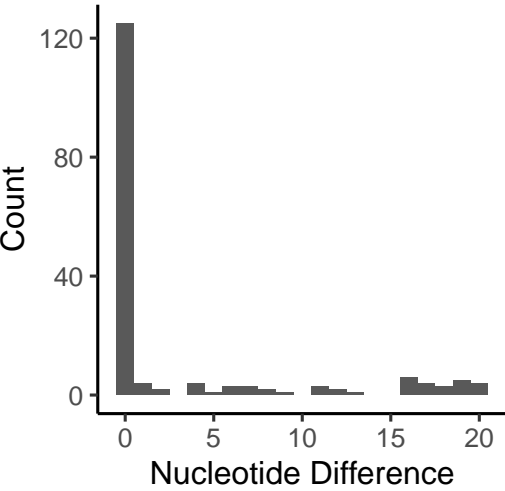
IGHV4-59*08

425 sequences assigned
239 (56.2%) exact matches, in which:
234 unique CDR3
6 unique J



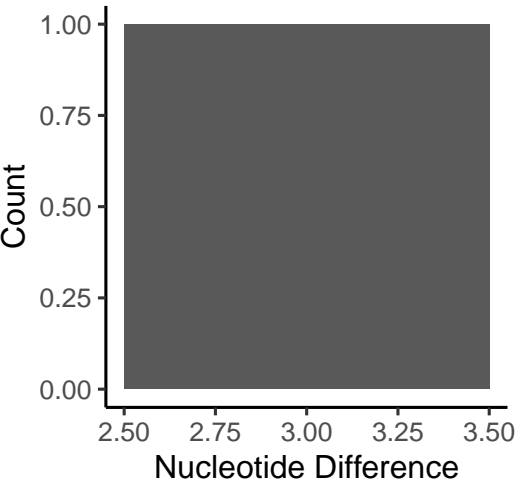
IGHV4-30-2*01

229 sequences assigned
125 (54.6%) exact matches, in which:
118 unique CDR3
7 unique J



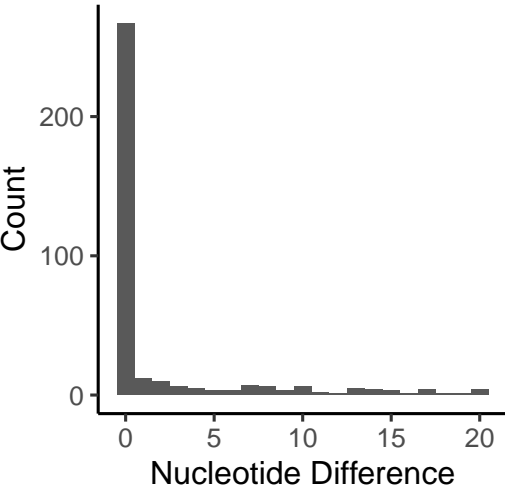
IGHV4-38-2*02

2 sequences assigned
No exact matches.



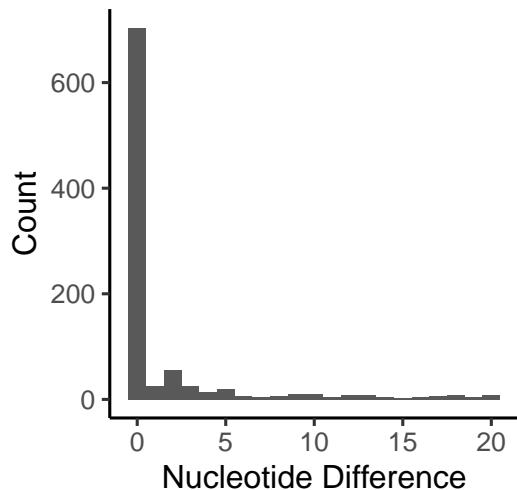
IGHV4-59*13

444 sequences assigned
267 (60.1%) exact matches, in which:
267 unique CDR3
7 unique J



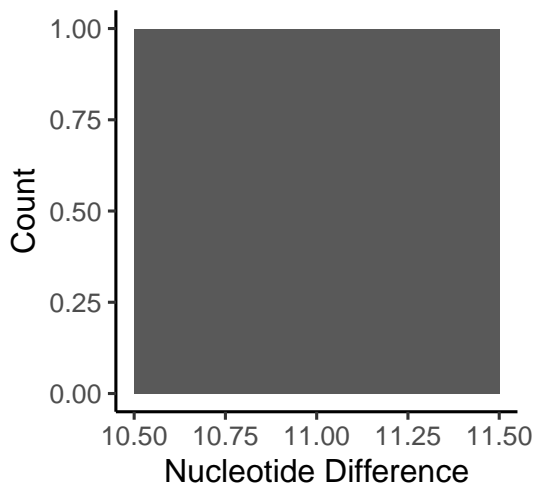
IGHV4–59*02_G88A

1056 sequences assigned
704 (66.7%) exact matches, in which:
698 unique CDR3
7 unique J



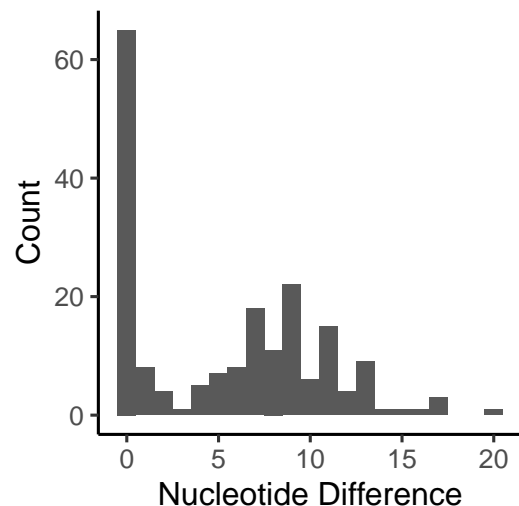
IGHV1/OR15–9*01

1 sequences assigned
No exact matches.



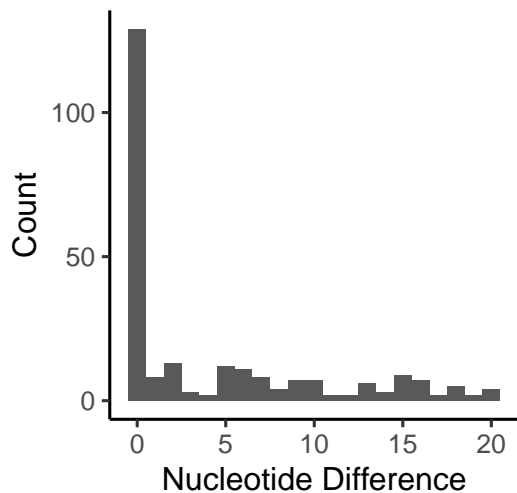
IGHV6–1*01_02

198 sequences assigned
65 (32.8%) exact matches, in which:
65 unique CDR3
5 unique J



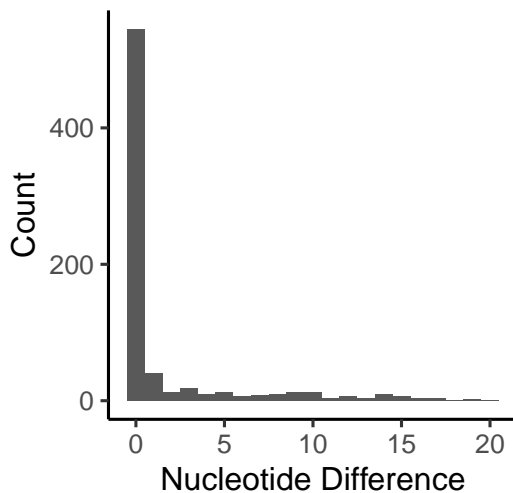
IGHV4–61*01

308 sequences assigned
129 (41.9%) exact matches, in which:
129 unique CDR3
7 unique J



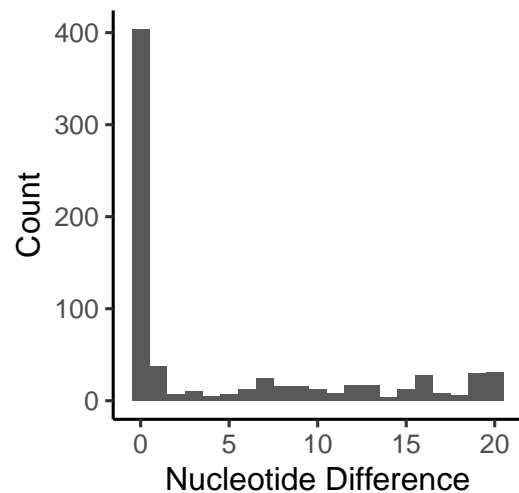
IGHV5–10–1*01_03

742 sequences assigned
545 (73.5%) exact matches, in which:
466 unique CDR3
6 unique J



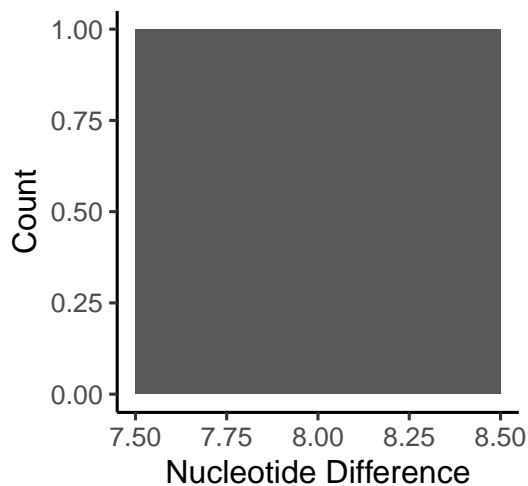
IGHV7–4–1*02

748 sequences assigned
404 (54%) exact matches, in which:
398 unique CDR3
6 unique J



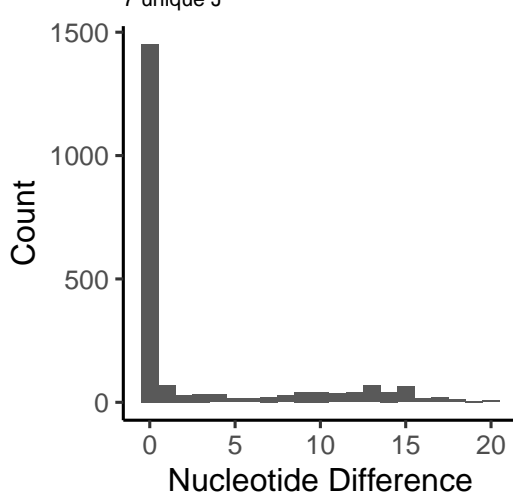
IGHV4/OR15–8*02

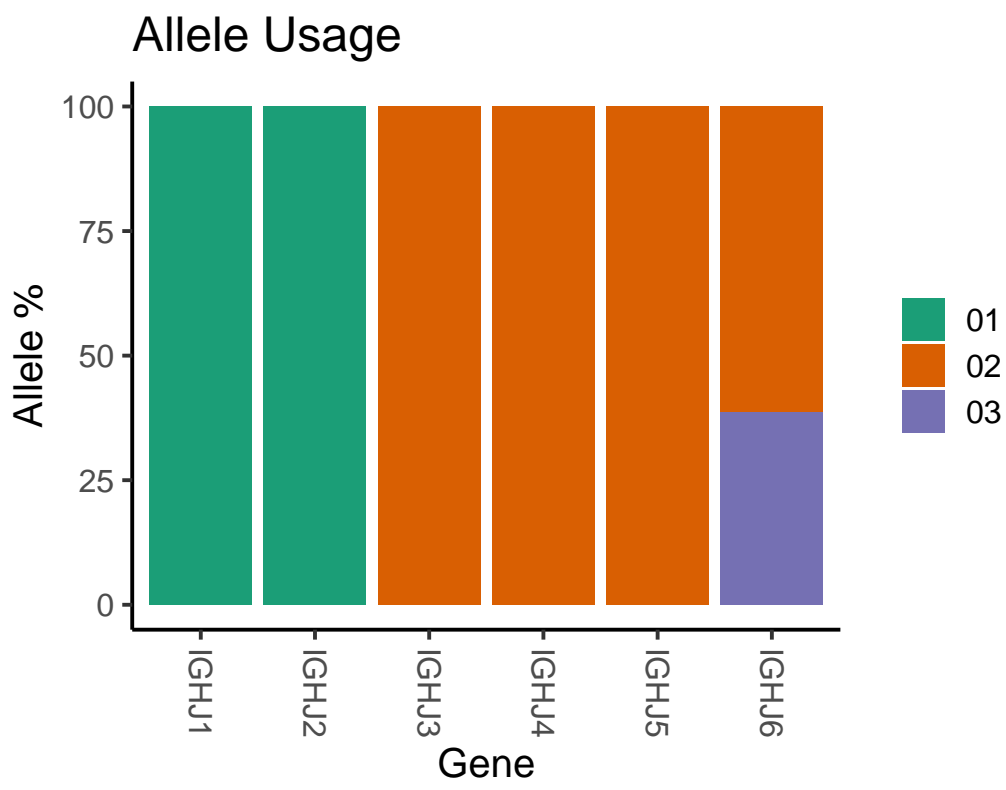
1 sequences assigned
No exact matches.



IGHV5–51*07_A128G

2130 sequences assigned
1452 (68.2%) exact matches, in which:
1249 unique CDR3
7 unique J





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.