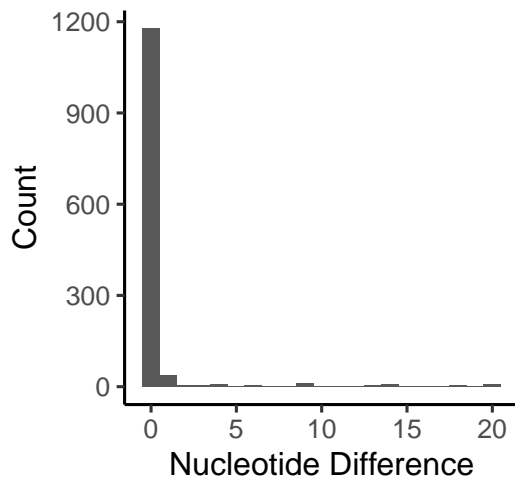


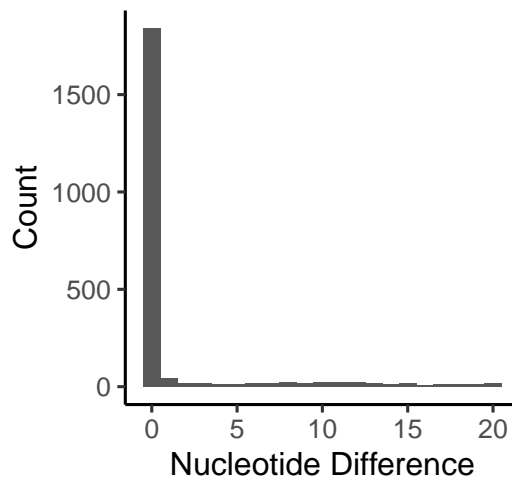
IGHV1-2*04

1320 sequences assigned
1178 (89.2%) exact matches, in which:
1176 unique CDR3
7 unique J



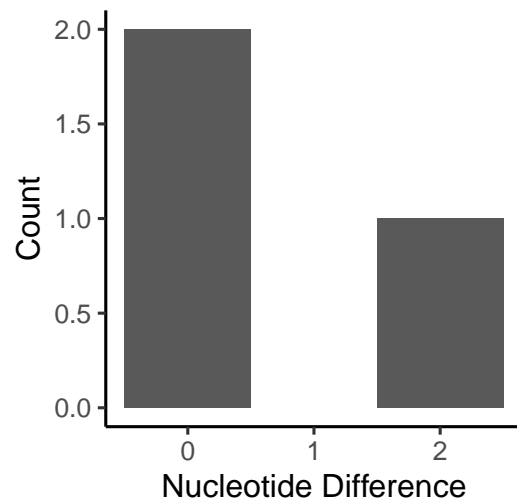
IGHV1-18*01

2341 sequences assigned
1840 (78.6%) exact matches, in which:
1839 unique CDR3
7 unique J



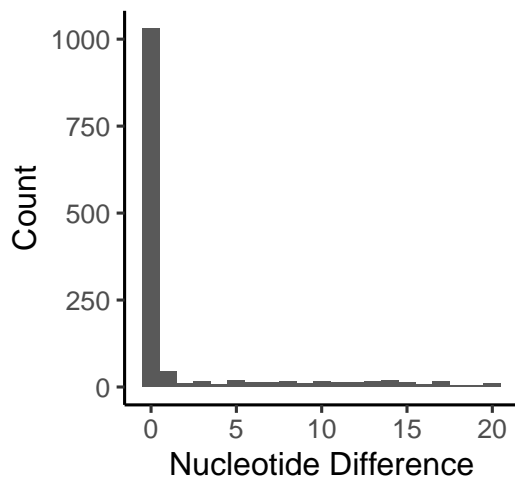
IGHV1-45*02

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



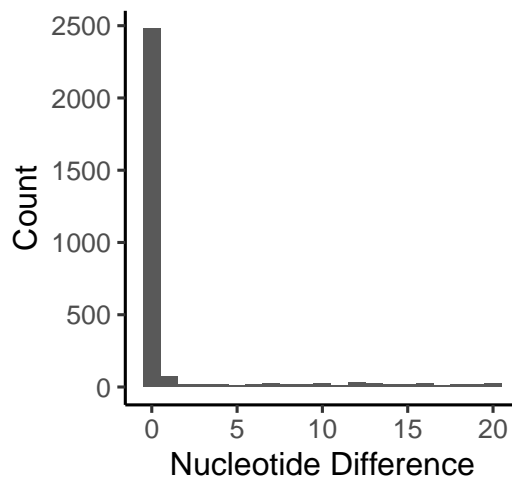
IGHV1-3*01_05

1377 sequences assigned
1030 (74.8%) exact matches, in which:
1028 unique CDR3
7 unique J



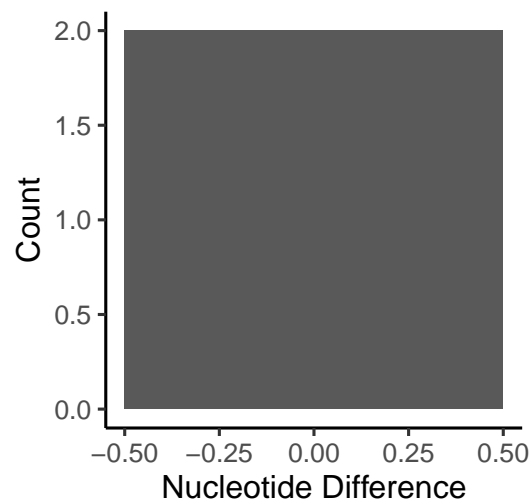
IGHV1-18*04

3034 sequences assigned
2479 (81.7%) exact matches, in which:
2474 unique CDR3
7 unique J



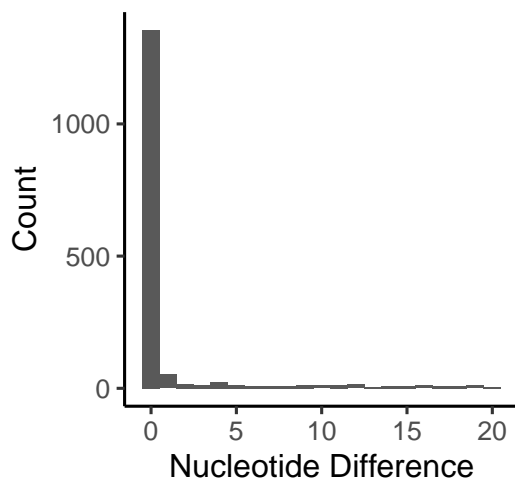
IGHV1-45*03

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



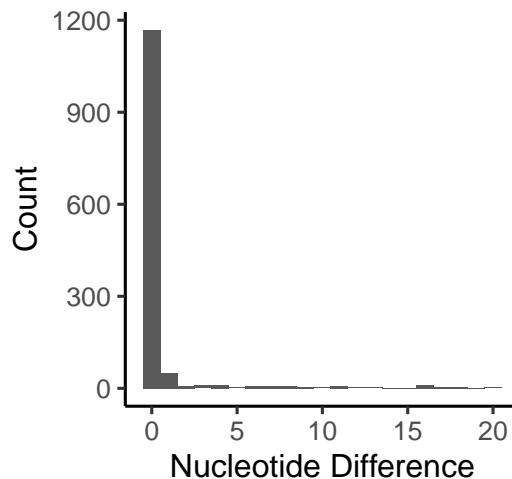
IGHV1-8*01

1682 sequences assigned
1355 (80.6%) exact matches, in which:
1353 unique CDR3
7 unique J



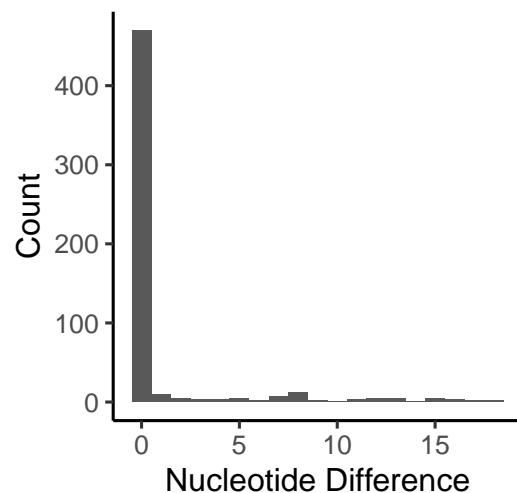
IGHV1-24*01

1363 sequences assigned
1168 (85.7%) exact matches, in which:
1159 unique CDR3
7 unique J



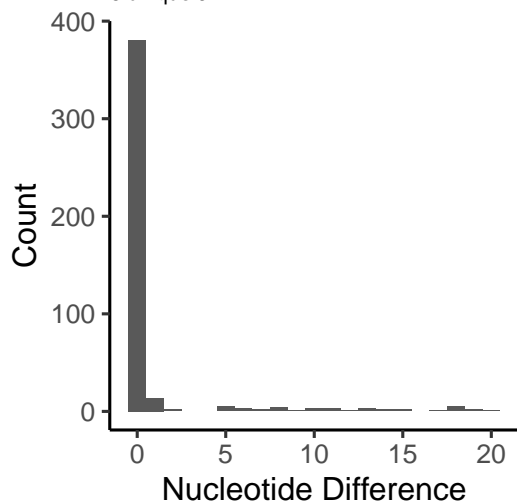
IGHV1-46*01

572 sequences assigned
470 (82.2%) exact matches, in which:
469 unique CDR3
7 unique J



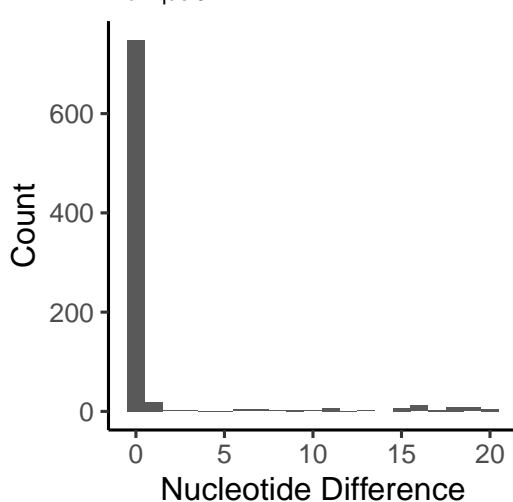
IGHV1–46*03

455 sequences assigned
381 (83.7%) exact matches, in which:
380 unique CDR3
6 unique J



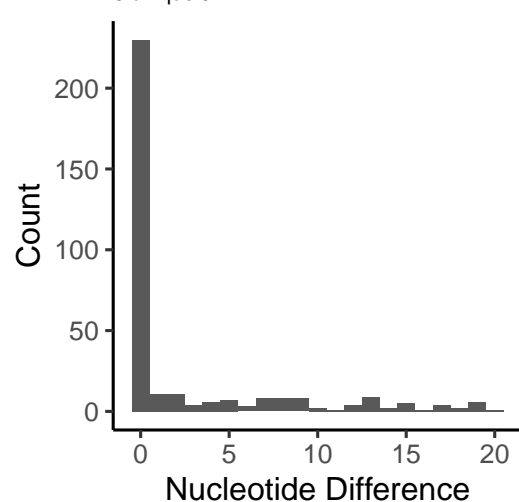
IGHV1–69*04_09_G112A

883 sequences assigned
749 (84.8%) exact matches, in which:
746 unique CDR3
7 unique J



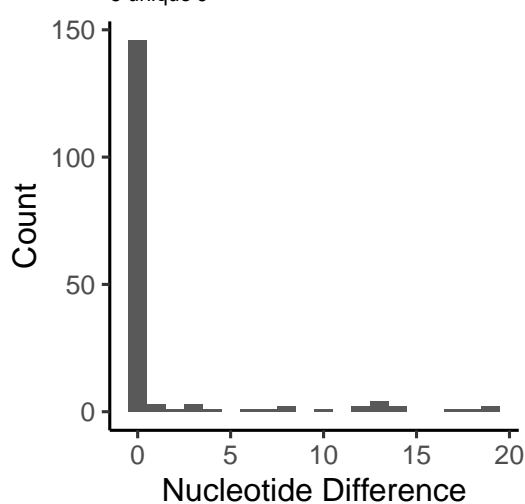
IGHV2–70*11_15

343 sequences assigned
230 (67.1%) exact matches, in which:
228 unique CDR3
6 unique J



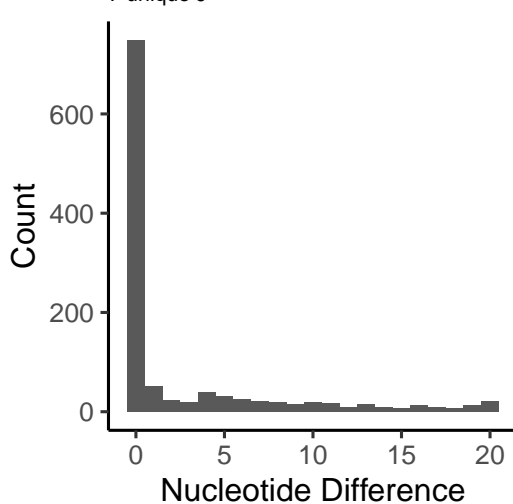
IGHV1–58*02

177 sequences assigned
146 (82.5%) exact matches, in which:
146 unique CDR3
6 unique J



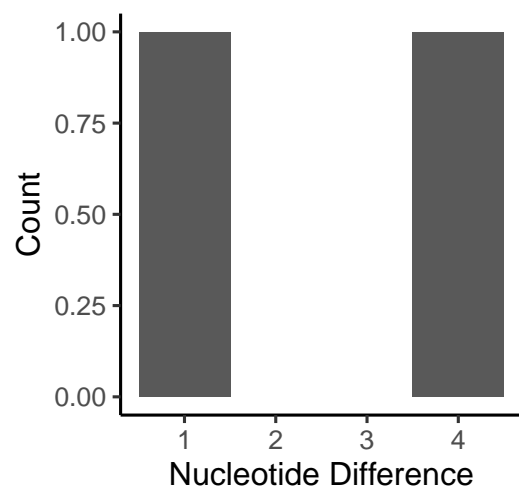
IGHV2–5*02

1223 sequences assigned
749 (61.2%) exact matches, in which:
744 unique CDR3
7 unique J



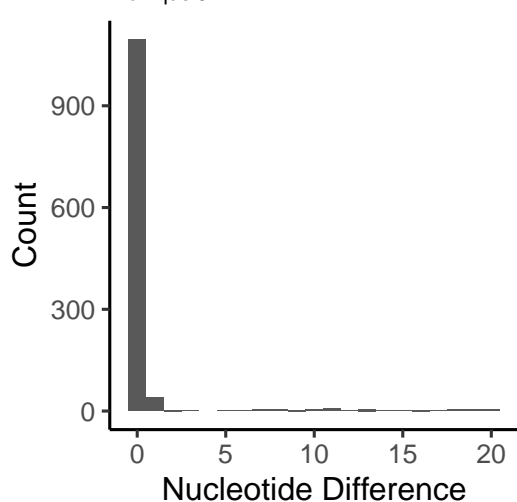
IGHV2–70D*04

2 sequences assigned
No exact matches.



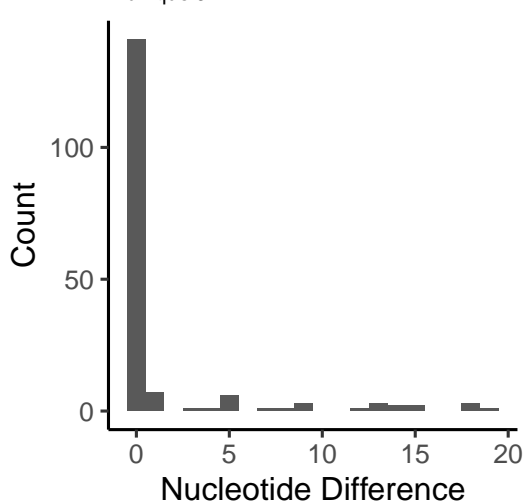
IGHV1–69*04_09

1248 sequences assigned
1096 (87.8%) exact matches, in which:
1092 unique CDR3
7 unique J



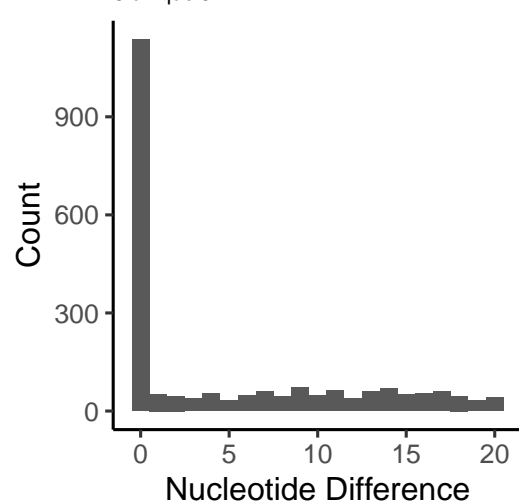
IGHV2–26*01

179 sequences assigned
141 (78.8%) exact matches, in which:
141 unique CDR3
7 unique J



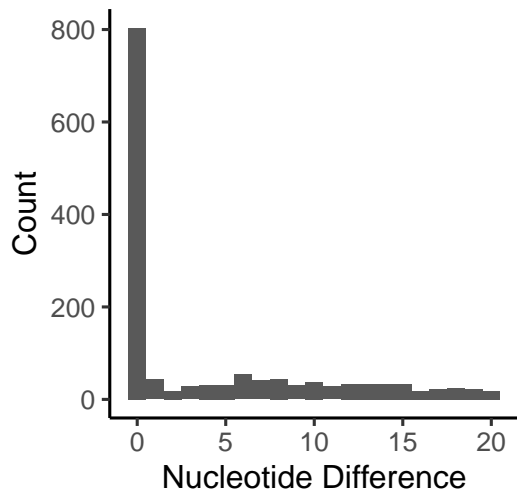
IGHV3–7*01

2459 sequences assigned
1137 (46.2%) exact matches, in which:
1118 unique CDR3
6 unique J



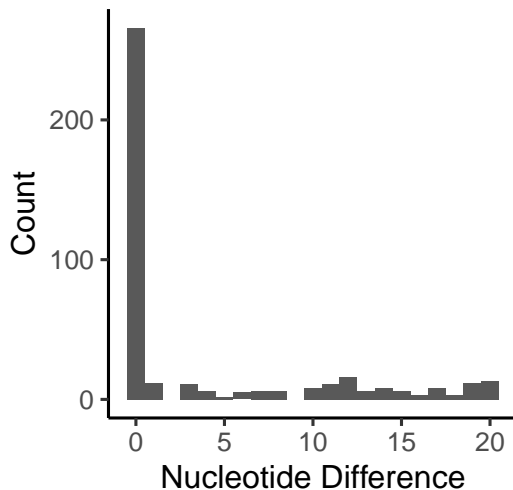
IGHV3-7*03

1640 sequences assigned
804 (49%) exact matches, in which:
787 unique CDR3
7 unique J



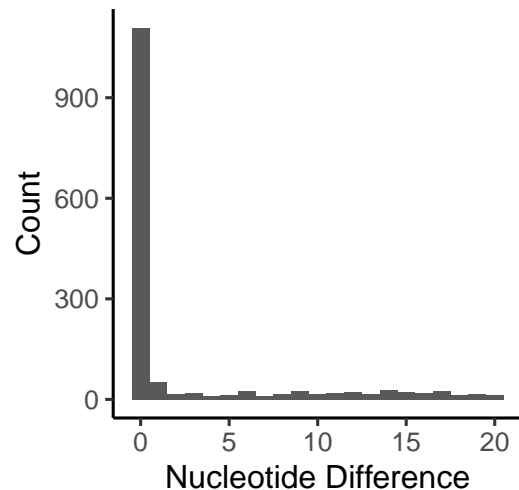
IGHV3-11*06

465 sequences assigned
266 (57.2%) exact matches, in which:
257 unique CDR3
7 unique J



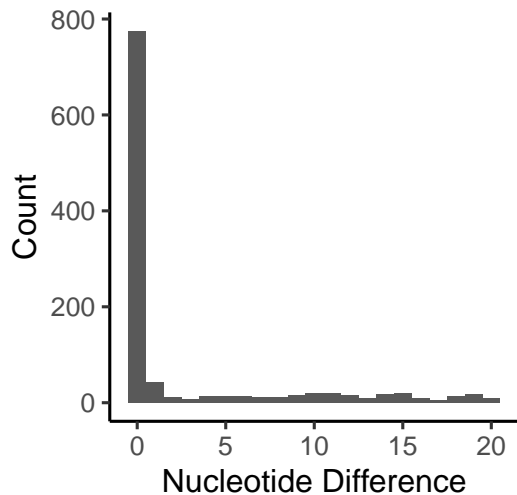
IGHV3-15*01_02

1636 sequences assigned
1109 (67.8%) exact matches, in which:
1095 unique CDR3
7 unique J



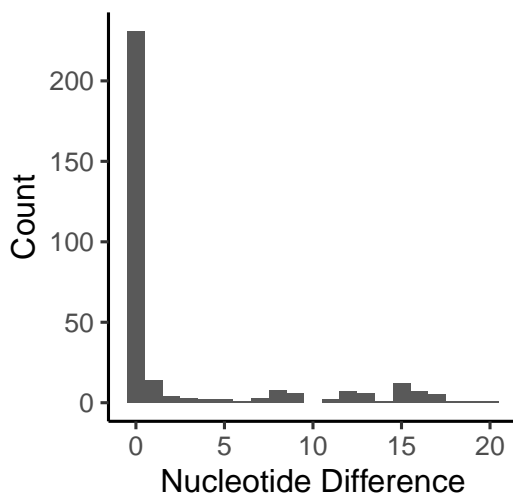
IGHV3-9*01

1178 sequences assigned
775 (65.8%) exact matches, in which:
765 unique CDR3
6 unique J



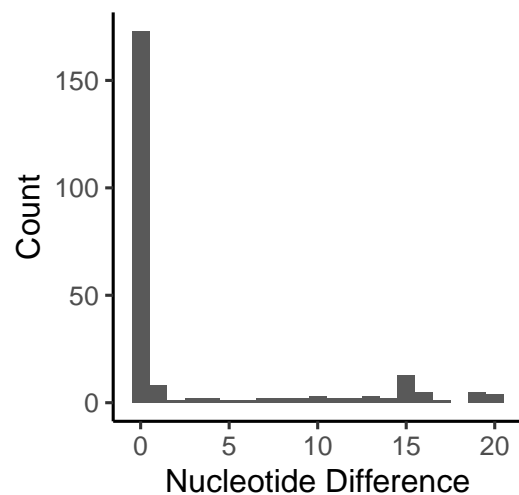
IGHV3-13*01

328 sequences assigned
231 (70.4%) exact matches, in which:
228 unique CDR3
6 unique J



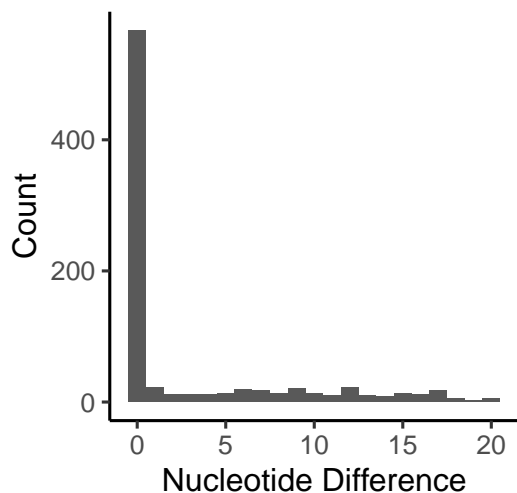
IGHV3-20*01_02

268 sequences assigned
173 (64.6%) exact matches, in which:
171 unique CDR3
6 unique J



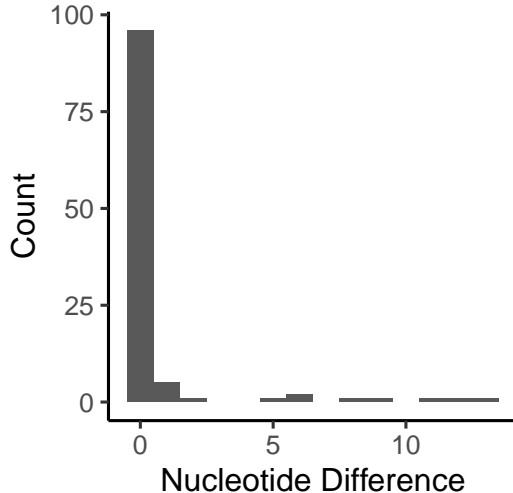
IGHV3-11*01

918 sequences assigned
567 (61.8%) exact matches, in which:
561 unique CDR3
7 unique J



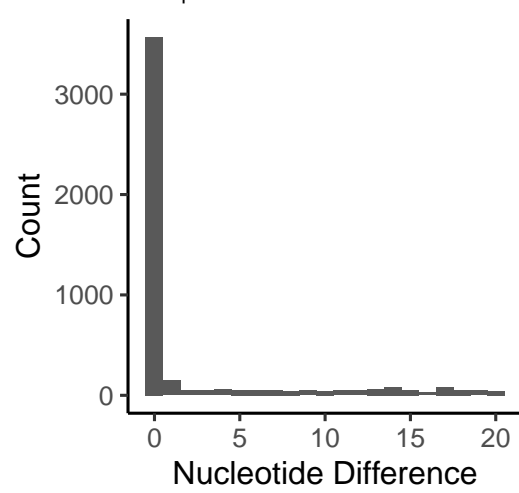
IGHV3-13*05

115 sequences assigned
96 (83.5%) exact matches, in which:
95 unique CDR3
5 unique J



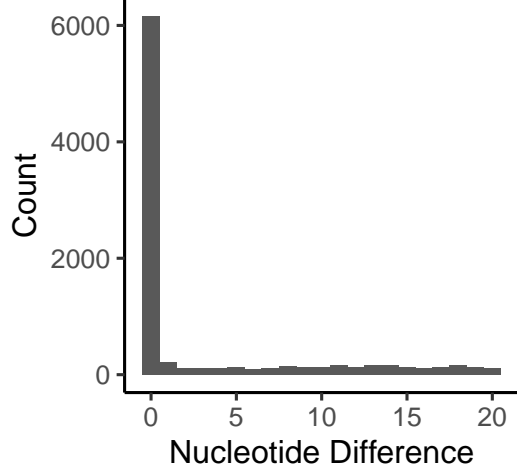
IGHV3-21*01_02

5105 sequences assigned
3569 (69.9%) exact matches, in which:
3516 unique CDR3
7 unique J



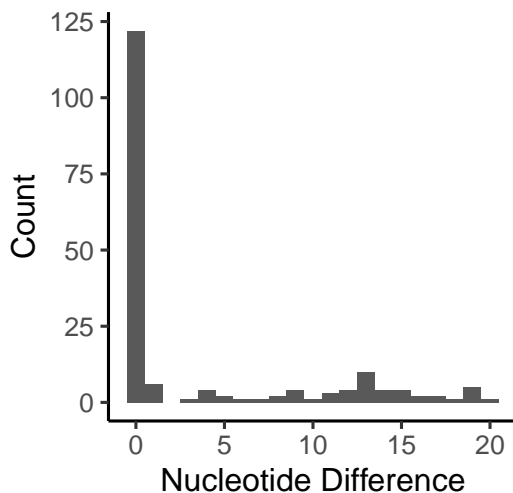
IGHV3-23*01_04

9763 sequences assigned
6155 (63%) exact matches, in which:
6066 unique CDR3
7 unique J



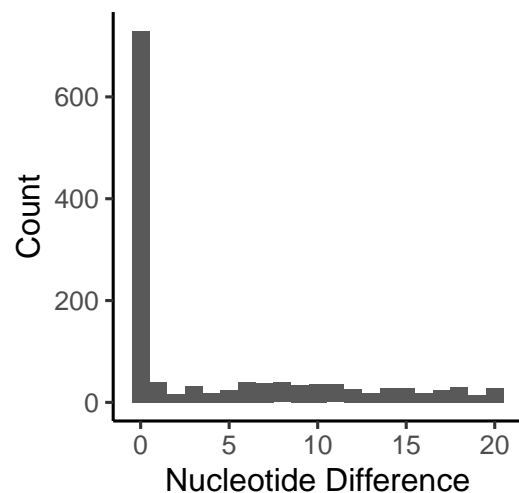
IGHV3-43*01

191 sequences assigned
122 (63.9%) exact matches, in which:
118 unique CDR3
5 unique J



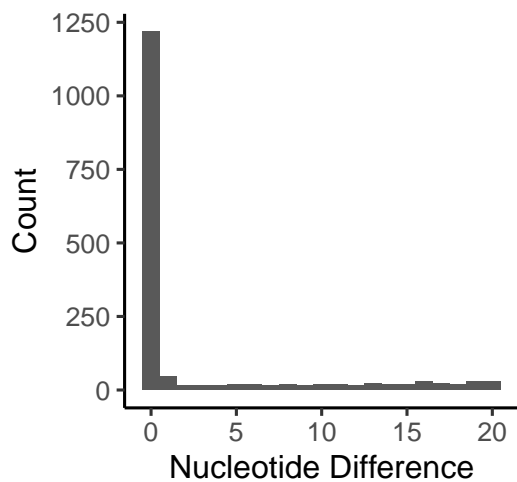
IGHV3-48*03

1469 sequences assigned
730 (49.7%) exact matches, in which:
720 unique CDR3
7 unique J



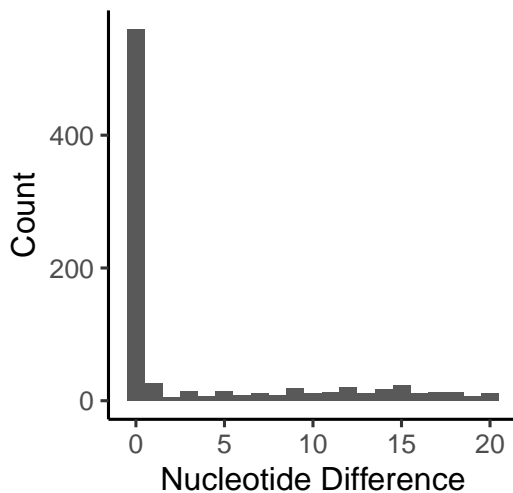
IGHV3-30-3*01

1891 sequences assigned
1218 (64.4%) exact matches, in which:
1201 unique CDR3
7 unique J



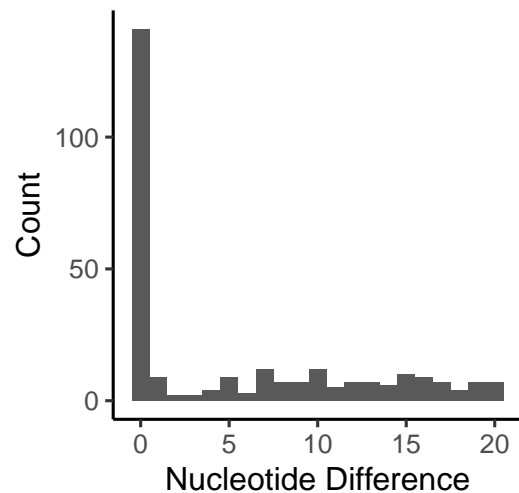
IGHV3-43*02

895 sequences assigned
560 (62.6%) exact matches, in which:
549 unique CDR3
6 unique J



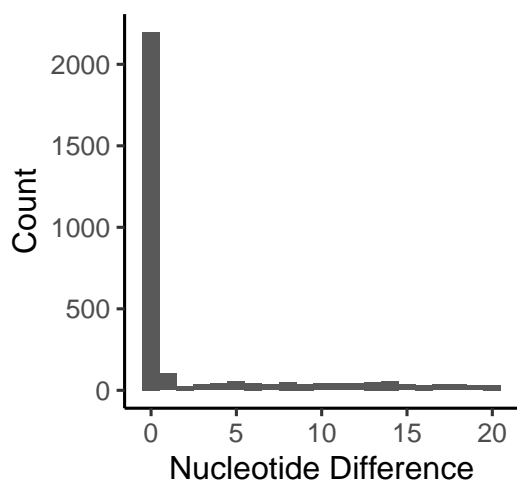
IGHV3-49*04

374 sequences assigned
141 (37.7%) exact matches, in which:
139 unique CDR3
5 unique J



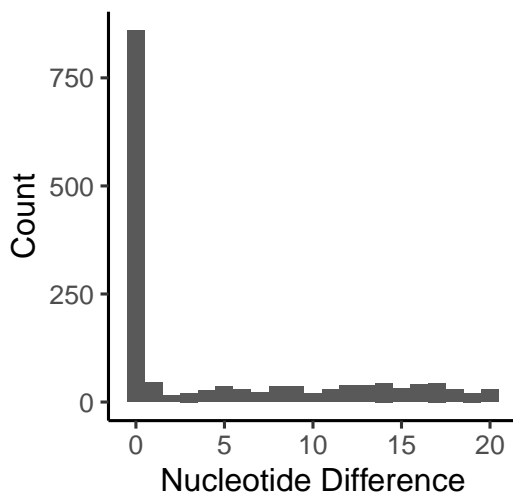
IGHV3-33*01

3265 sequences assigned
2198 (67.3%) exact matches, in which:
2150 unique CDR3
7 unique J



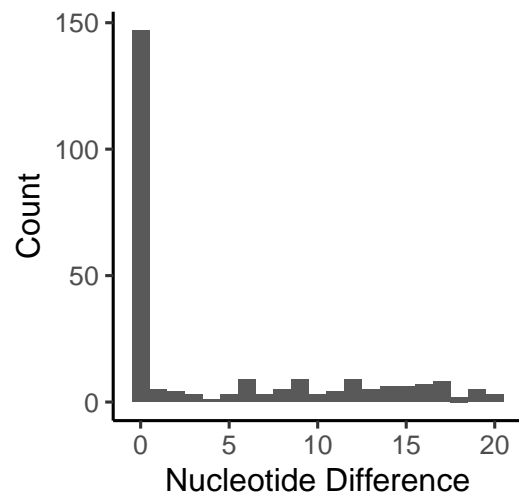
IGHV3-48*01

1665 sequences assigned
860 (51.7%) exact matches, in which:
847 unique CDR3
7 unique J



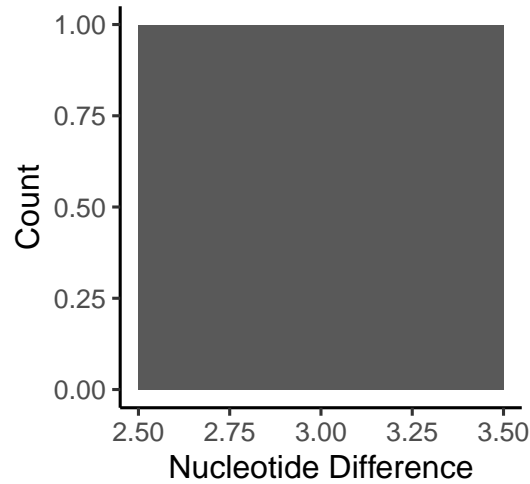
IGHV3-49*03_05

274 sequences assigned
147 (53.6%) exact matches, in which:
144 unique CDR3
4 unique J



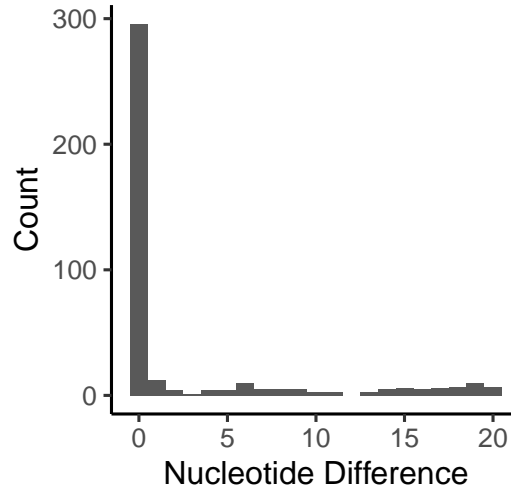
IGHV3-52*01_03

1 sequences assigned
No exact matches.



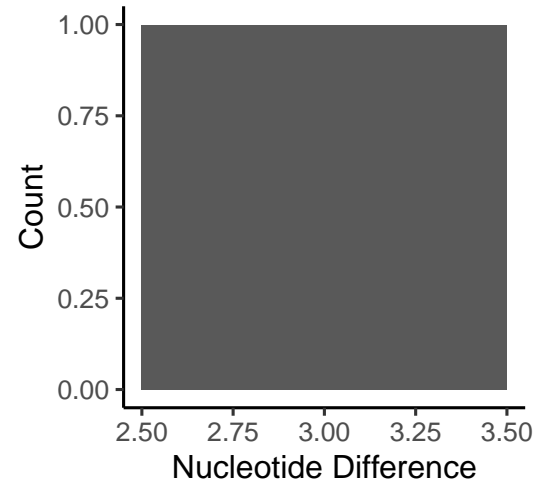
IGHV3-64*01

451 sequences assigned
296 (65.6%) exact matches, in which:
292 unique CDR3
7 unique J



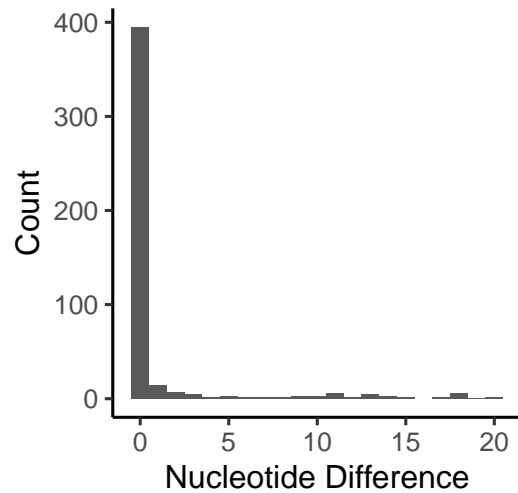
IGHV3-69-1*01

5 sequences assigned
No exact matches.



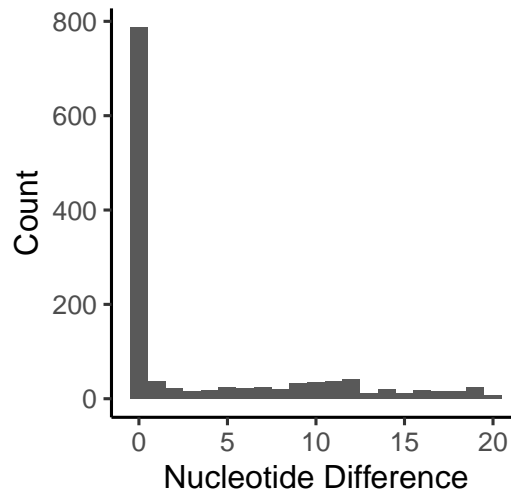
IGHV3-53*04

483 sequences assigned
395 (81.8%) exact matches, in which:
392 unique CDR3
7 unique J



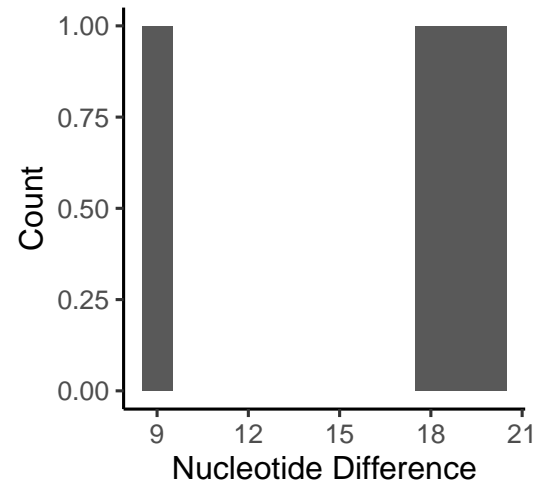
IGHV3-66*01

1320 sequences assigned
788 (59.7%) exact matches, in which:
772 unique CDR3
7 unique J



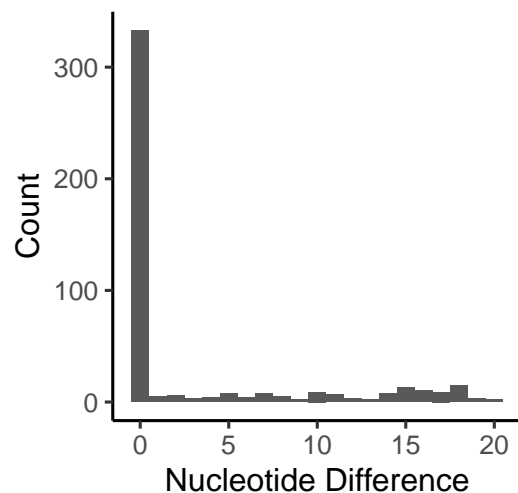
IGHV3-69-1*02

5 sequences assigned
No exact matches.



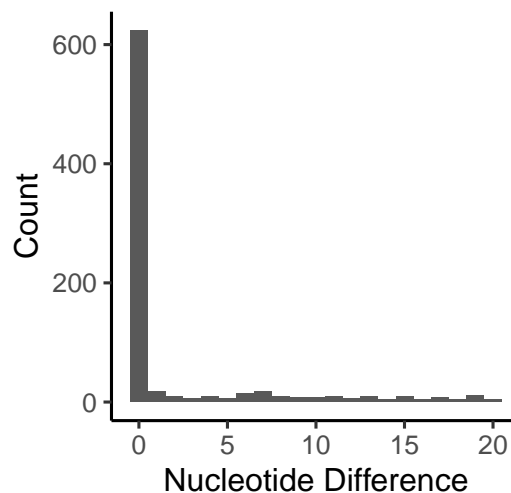
IGHV3-53*01_02

526 sequences assigned
333 (63.3%) exact matches, in which:
329 unique CDR3
6 unique J



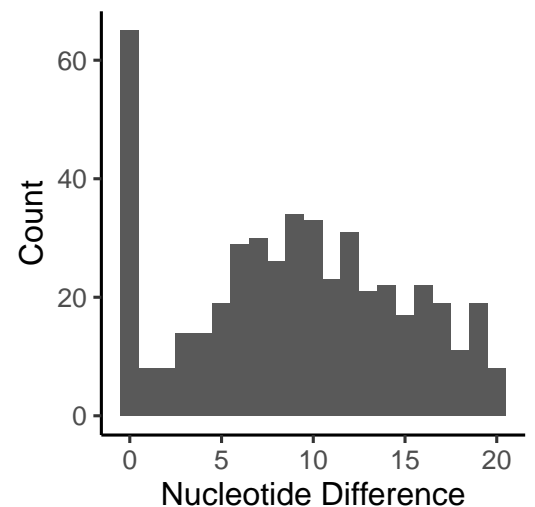
IGHV3-66*02

894 sequences assigned
624 (69.8%) exact matches, in which:
618 unique CDR3
7 unique J



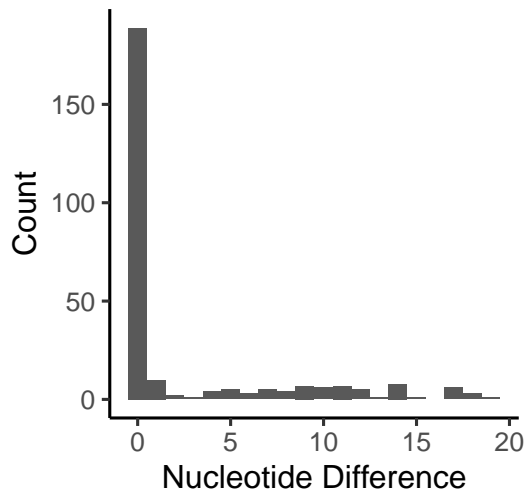
IGHV3-72*01

527 sequences assigned
65 (12.3%) exact matches, in which:
63 unique CDR3
7 unique J



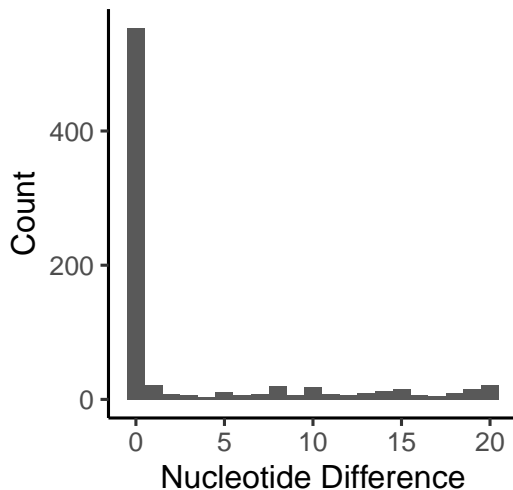
IGHV3–73*01_02

299 sequences assigned
189 (63.2%) exact matches, in which:
188 unique CDR3
6 unique J



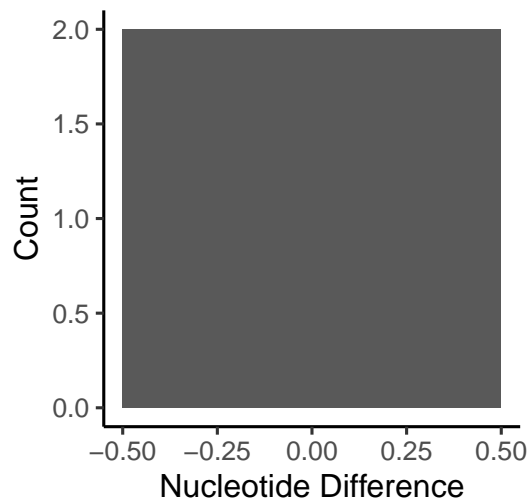
IGHV3–64D*09

914 sequences assigned
554 (60.6%) exact matches, in which:
544 unique CDR3
6 unique J



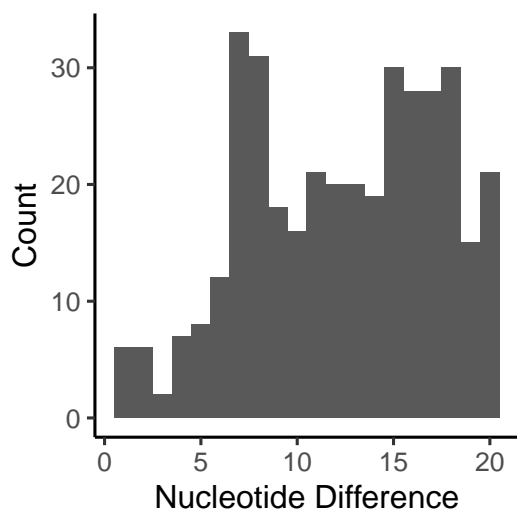
IGHV4–28*03

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



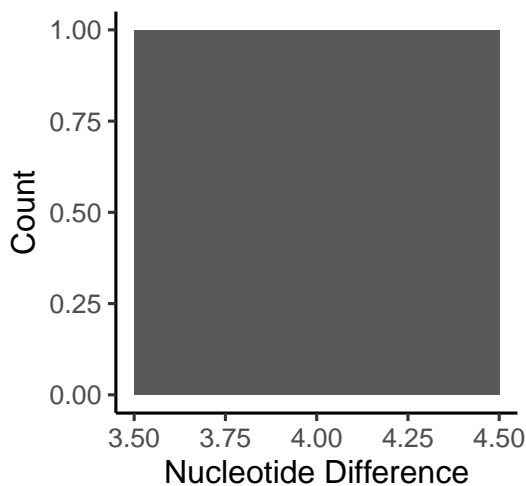
IGHV3–74*03

596 sequences assigned
No exact matches.



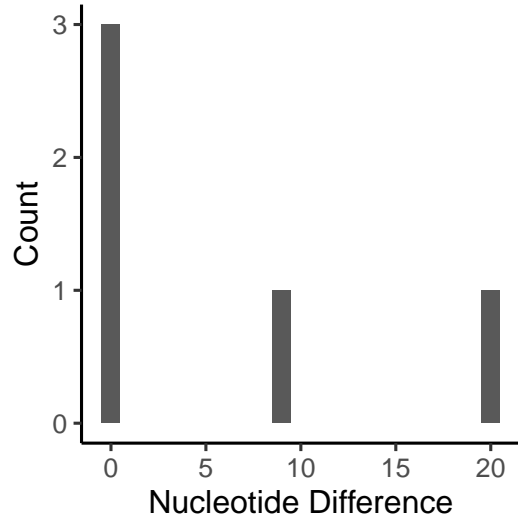
IGHV3–NL1*01

1 sequences assigned
No exact matches.



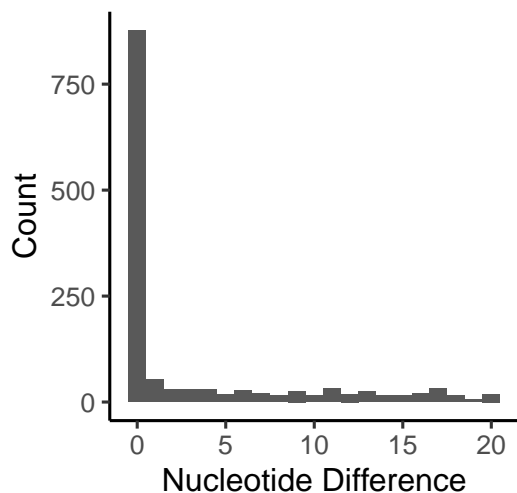
IGHV4–28*01_07

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



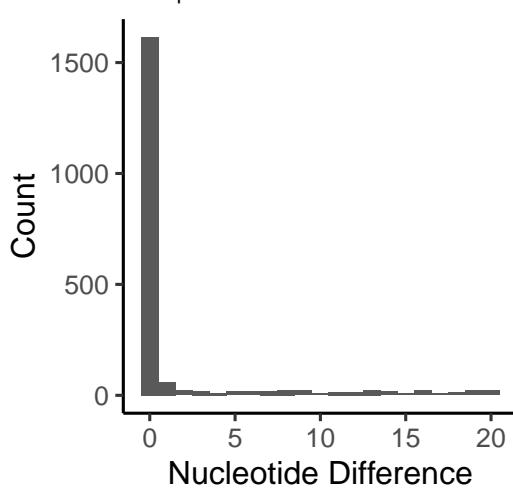
IGHV3–74*01_02

1437 sequences assigned
877 (61%) exact matches, in which:
848 unique CDR3
7 unique J



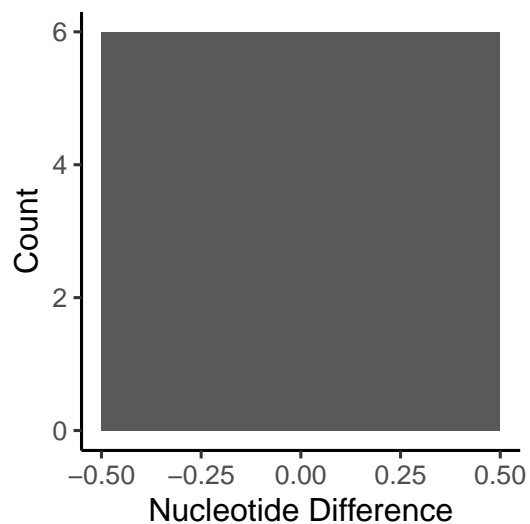
IGHV4–4*02_03

2228 sequences assigned
1615 (72.5%) exact matches, in which:
1591 unique CDR3
7 unique J



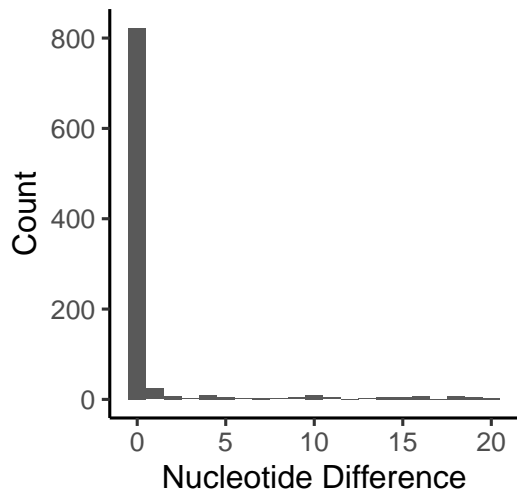
IGHV4–28*02_05

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



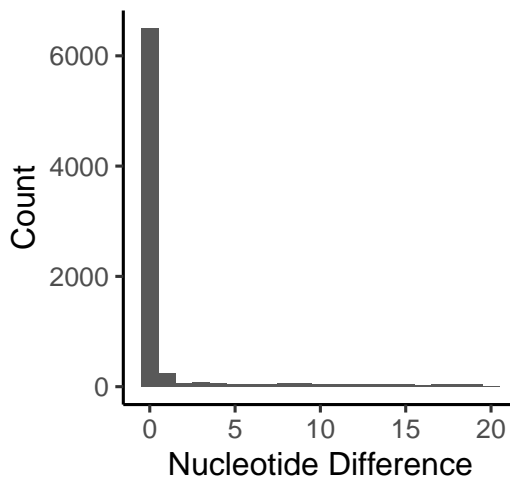
IGHV4-30-2*01

969 sequences assigned
823 (84.9%) exact matches, in which:
804 unique CDR3
6 unique J



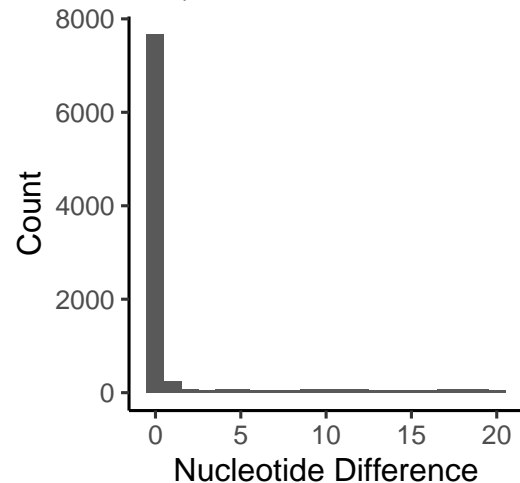
IGHV4-34*01_02

7981 sequences assigned
6497 (81.4%) exact matches, in which:
6402 unique CDR3
7 unique J



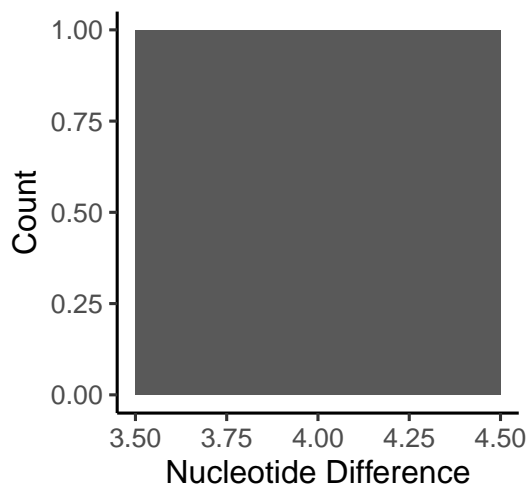
IGHV4-59*02_G88A

9750 sequences assigned
7667 (78.6%) exact matches, in which:
7553 unique CDR3
7 unique J



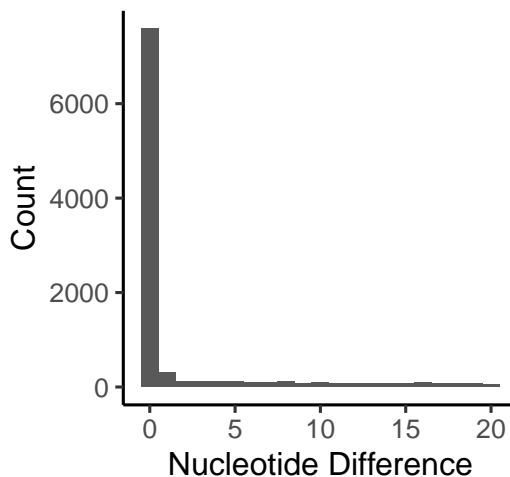
IGHV4-30-4*08

1 sequences assigned
No exact matches.



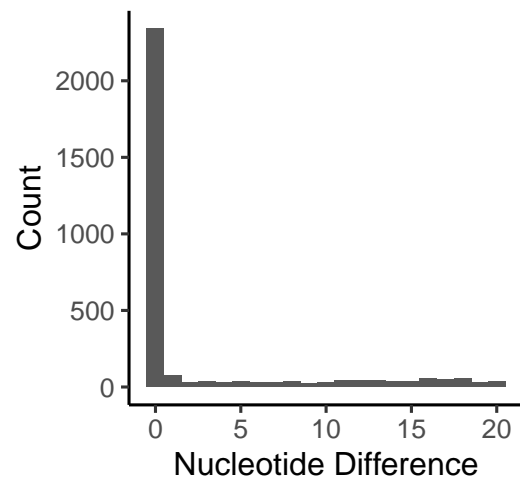
IGHV4-39*02_C258G

10114 sequences assigned
7587 (75%) exact matches, in which:
7448 unique CDR3
7 unique J



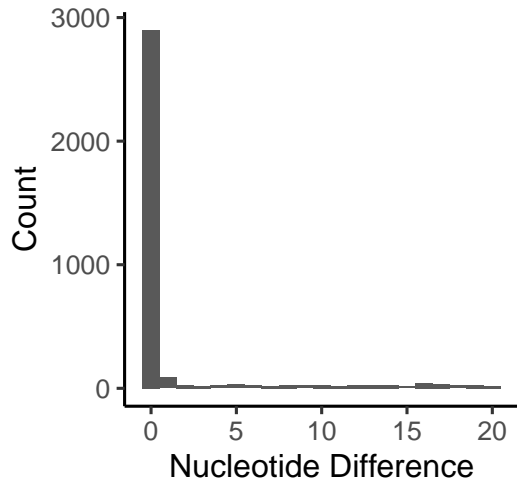
IGHV4-61*02

3497 sequences assigned
2340 (66.9%) exact matches, in which:
2322 unique CDR3
7 unique J



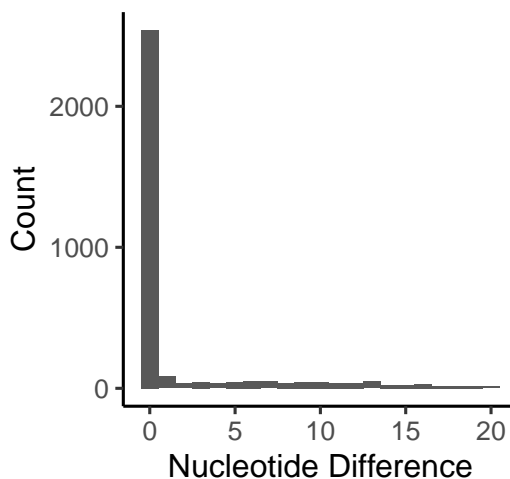
IGHV4-31*02

3722 sequences assigned
2899 (77.9%) exact matches, in which:
2878 unique CDR3
7 unique J



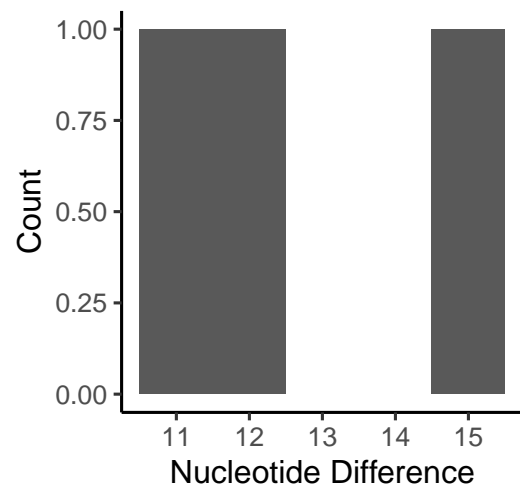
IGHV4-59*08

3478 sequences assigned
2541 (73.1%) exact matches, in which:
2516 unique CDR3
7 unique J



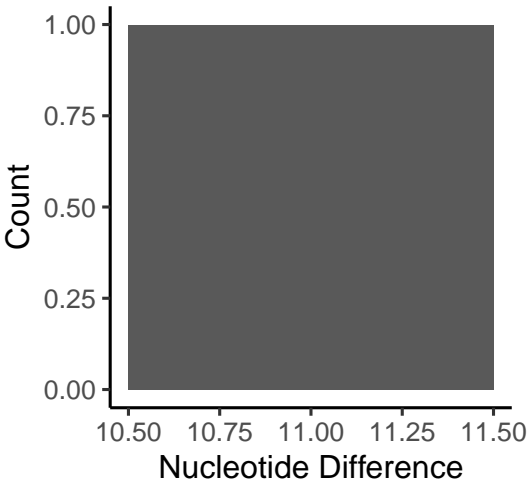
IGHV4/OR15-8*01

6 sequences assigned
No exact matches.



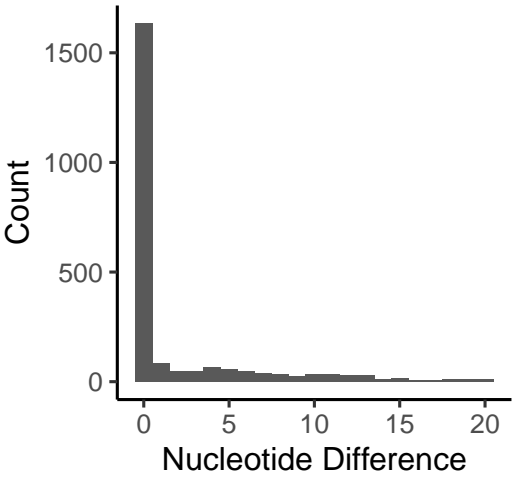
IGHV4/OR15-8*02

11 sequences assigned
No exact matches.



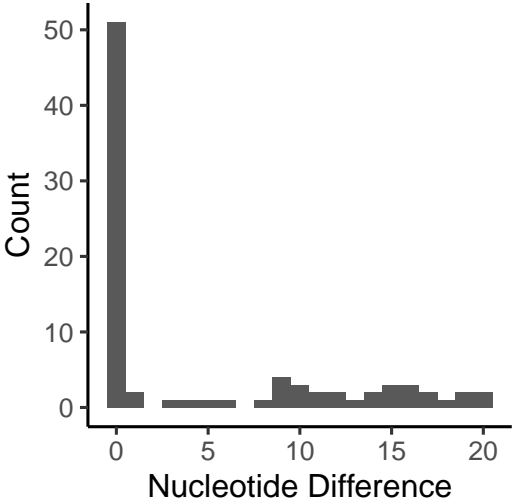
IGHV6-1*01_02

2324 sequences assigned
1634 (70.3%) exact matches, in which:
1630 unique CDR3
7 unique J



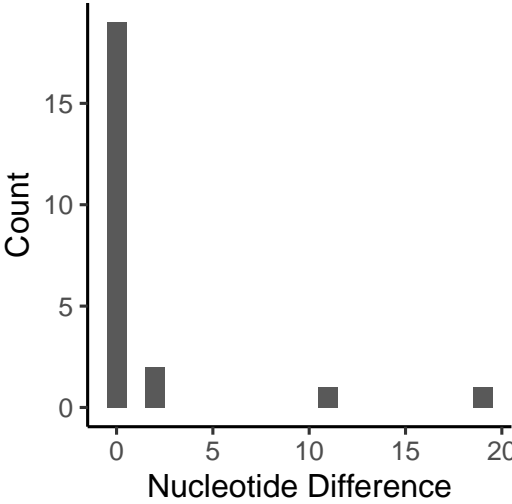
IGHV5-10-1*01_03

101 sequences assigned
51 (50.5%) exact matches, in which:
50 unique CDR3
4 unique J



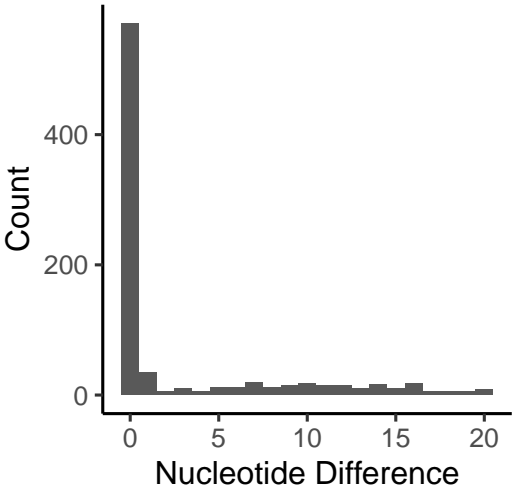
IGHV7-4-1*01

24 sequences assigned
19 (79.2%) exact matches, in which:
19 unique CDR3
5 unique J

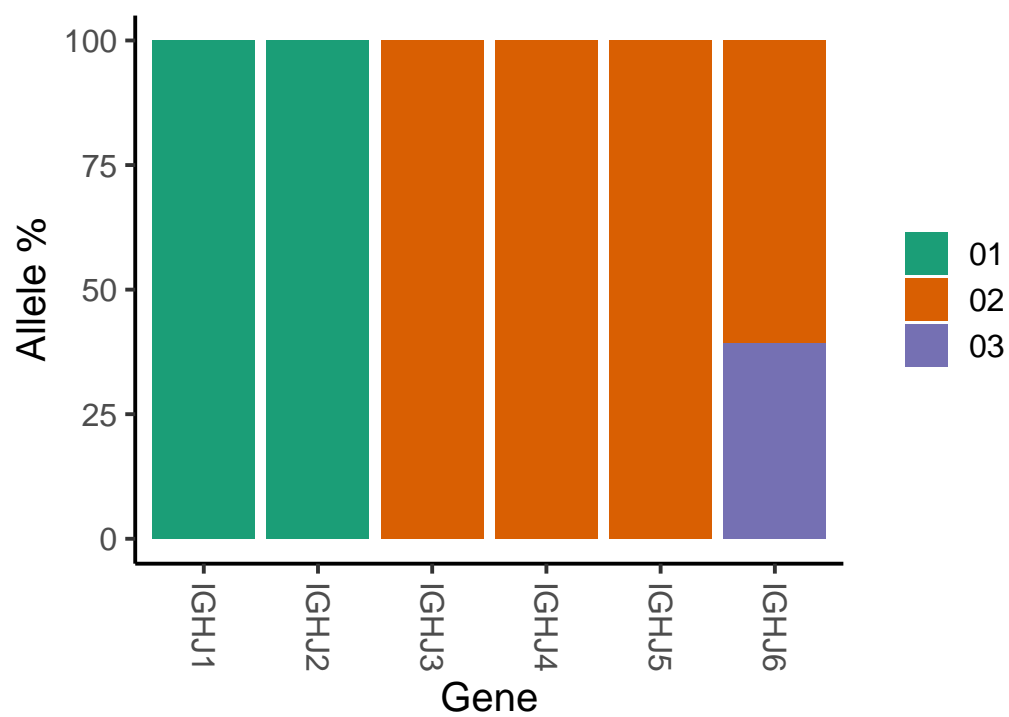


IGHV5-51*07_A128G

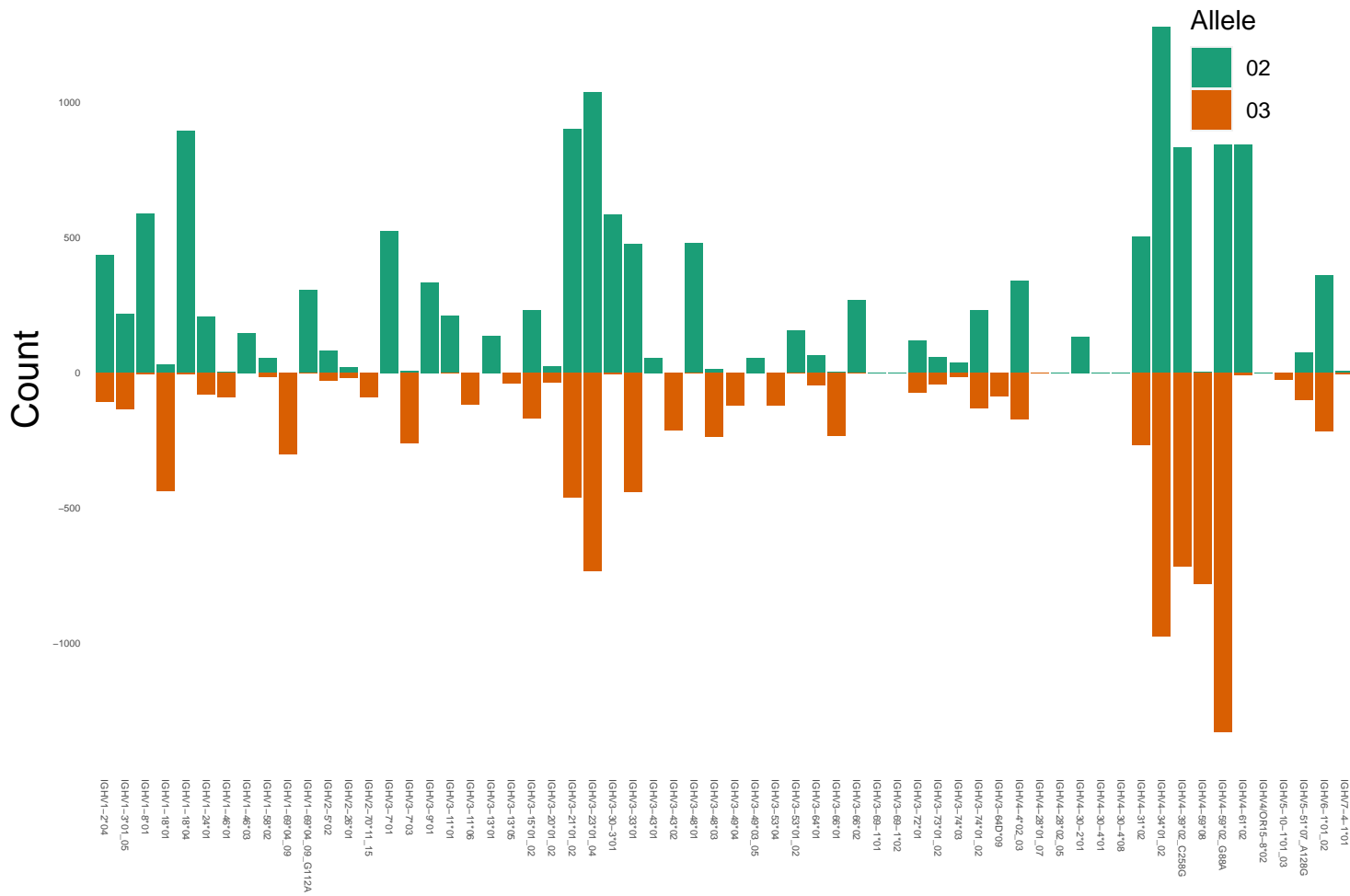
867 sequences assigned
571 (65.9%) exact matches, in which:
571 unique CDR3
7 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.