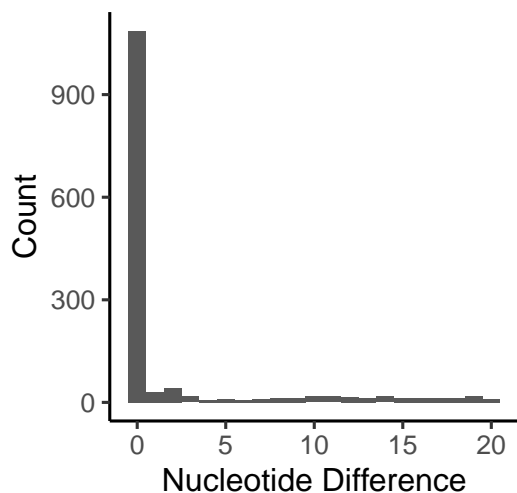


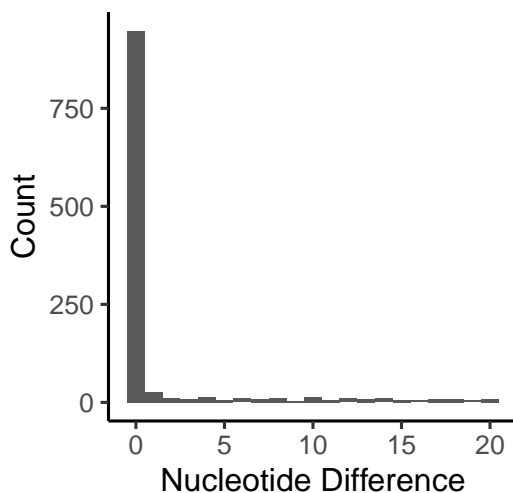
IGHV1-2*02

1469 sequences assigned
1087 (74%) exact matches, in which:
1082 unique CDR3
6 unique J



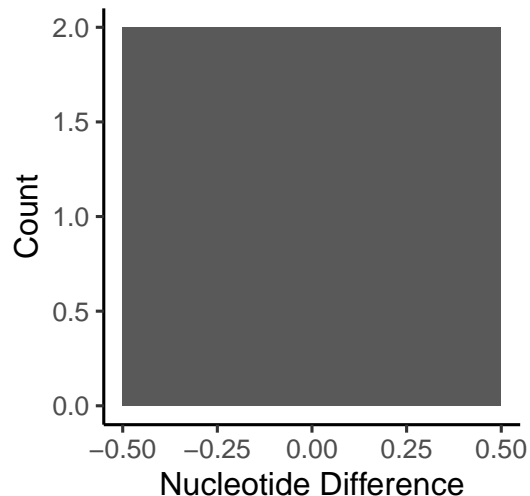
IGHV1-18*01

1197 sequences assigned
948 (79.2%) exact matches, in which:
932 unique CDR3
7 unique J



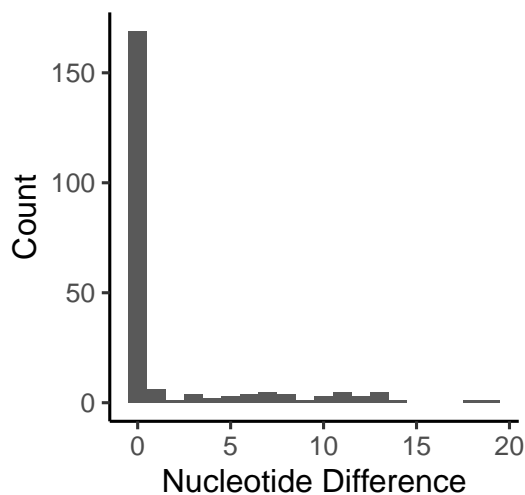
IGHV1-45*02

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



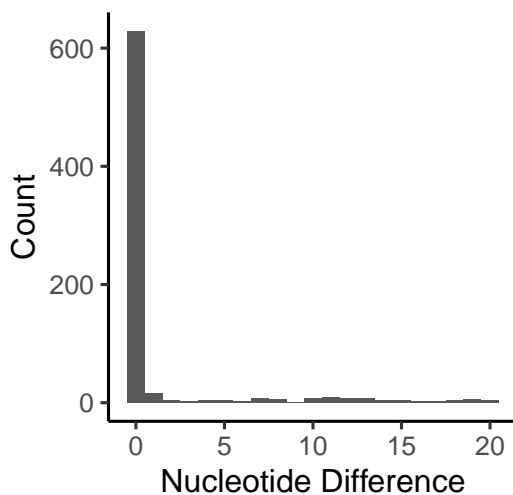
IGHV1-3*01_05

239 sequences assigned
169 (70.7%) exact matches, in which:
169 unique CDR3
6 unique J



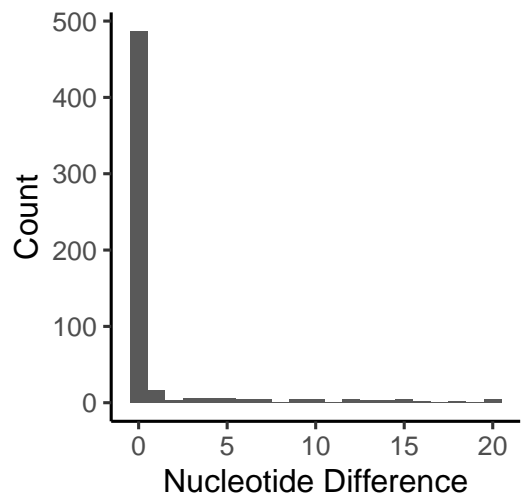
IGHV1-18*04

761 sequences assigned
629 (82.7%) exact matches, in which:
623 unique CDR3
6 unique J



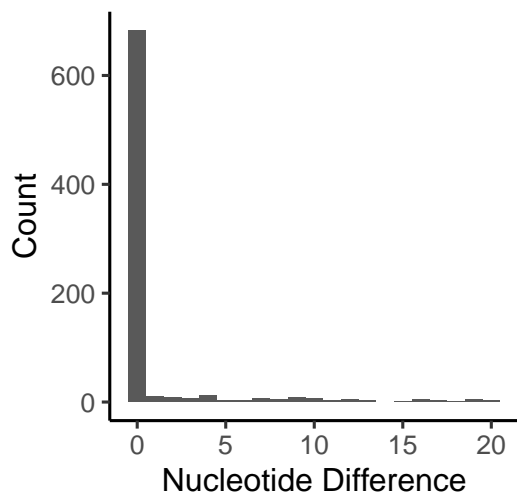
IGHV1-46*01

597 sequences assigned
487 (81.6%) exact matches, in which:
487 unique CDR3
7 unique J



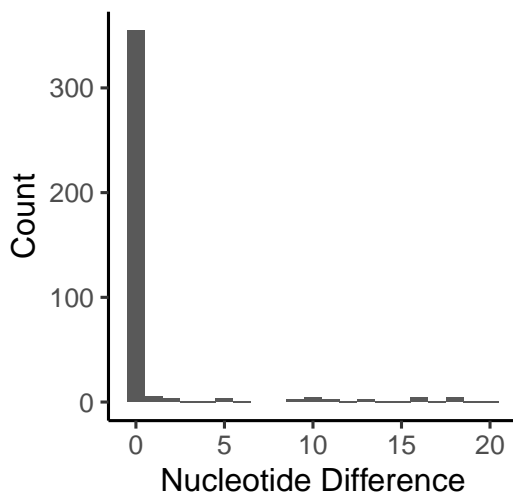
IGHV1-8*01

797 sequences assigned
683 (85.7%) exact matches, in which:
672 unique CDR3
7 unique J



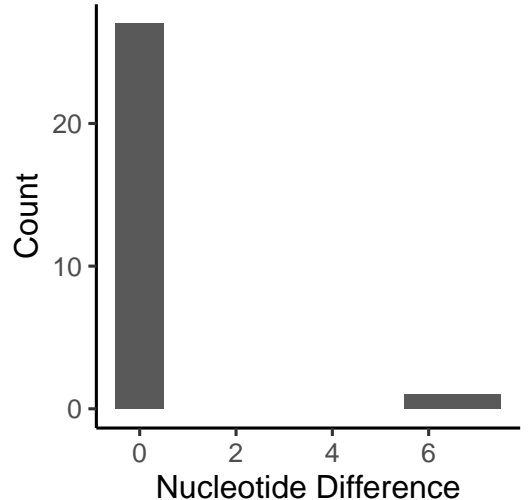
IGHV1-24*01

410 sequences assigned
355 (86.6%) exact matches, in which:
351 unique CDR3
7 unique J



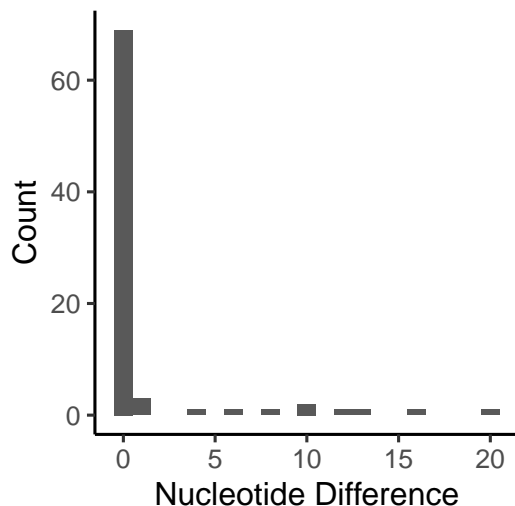
IGHV1-58*02

32 sequences assigned
27 (84.4%) exact matches, in which:
27 unique CDR3
5 unique J



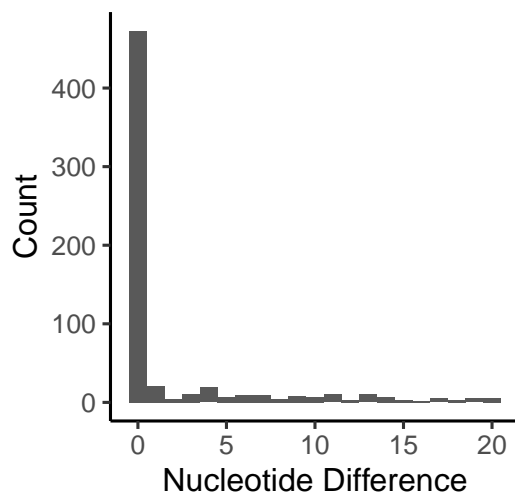
IGHV1–58*01_03

85 sequences assigned
69 (81.2%) exact matches, in which:
69 unique CDR3
5 unique J



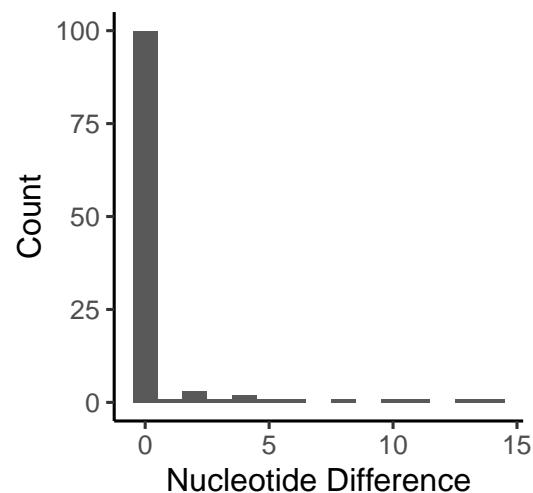
IGHV2–5*01

638 sequences assigned
473 (74.1%) exact matches, in which:
470 unique CDR3
7 unique J



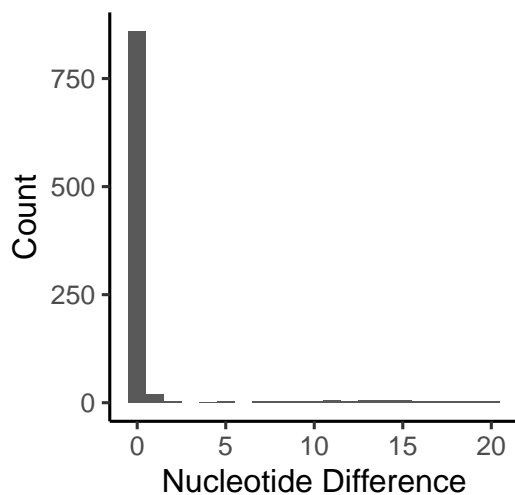
IGHV2–70*01

117 sequences assigned
100 (85.5%) exact matches, in which:
97 unique CDR3
6 unique J



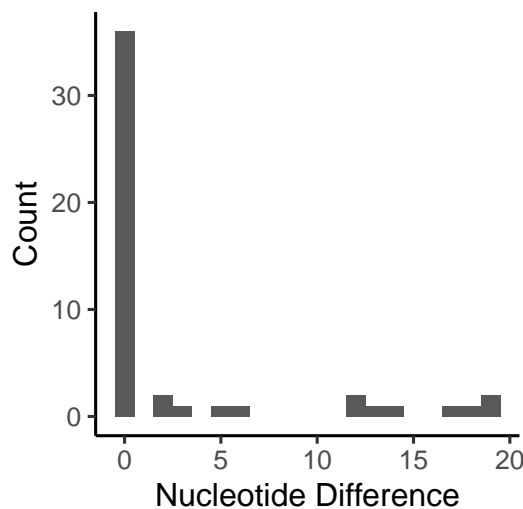
IGHV1–69*01_12_13

998 sequences assigned
860 (86.2%) exact matches, in which:
854 unique CDR3
7 unique J



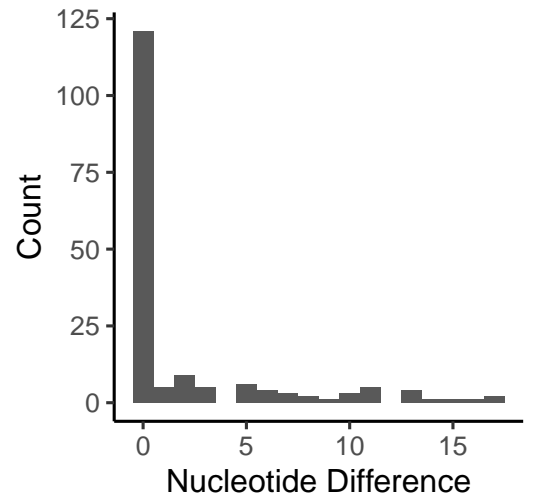
IGHV2–26*01

53 sequences assigned
36 (67.9%) exact matches, in which:
36 unique CDR3
5 unique J



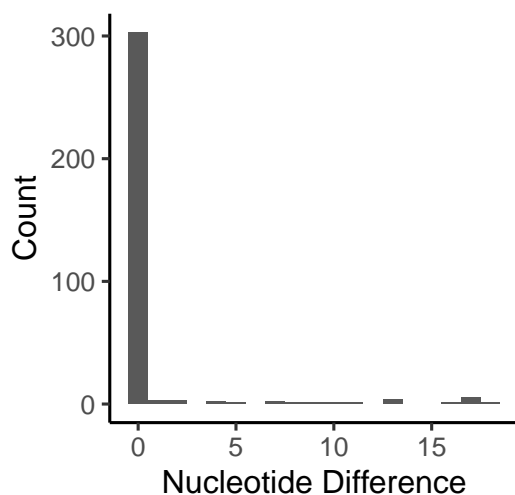
IGHV2–70*11_15

175 sequences assigned
121 (69.1%) exact matches, in which:
118 unique CDR3
4 unique J



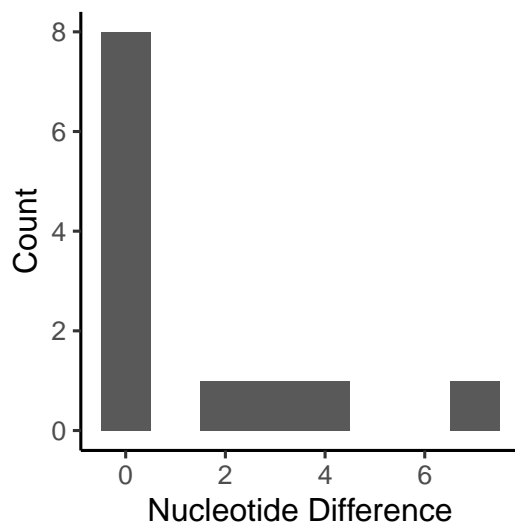
IGHV1–69*04_09

337 sequences assigned
303 (89.9%) exact matches, in which:
301 unique CDR3
6 unique J



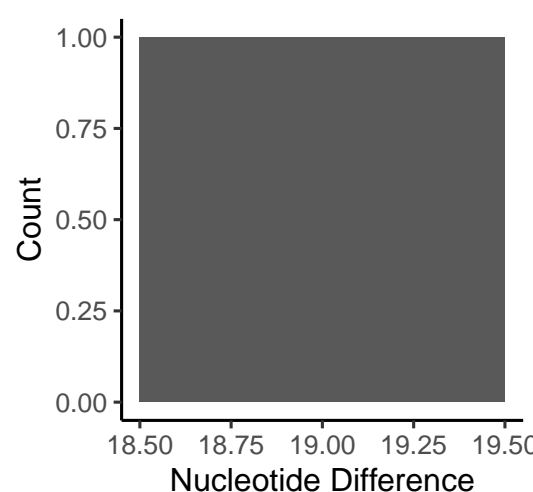
IGHV2–26*04

12 sequences assigned
8 (66.7%) exact matches, in which:
8 unique CDR3
5 unique J



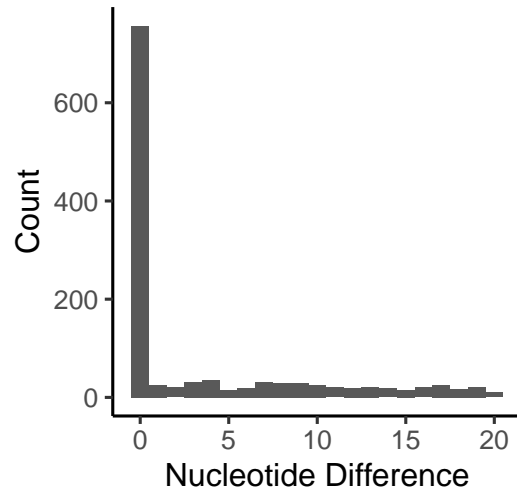
IGHV2–70D*14

1 sequences assigned
No exact matches.



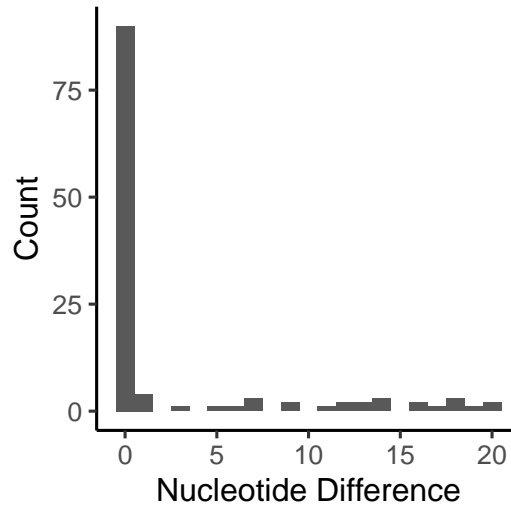
IGHV3-7*01

1279 sequences assigned
757 (59.2%) exact matches, in which:
743 unique CDR3
7 unique J



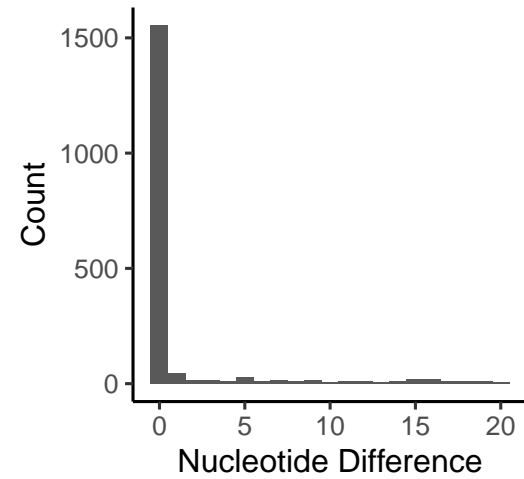
IGHV3-13*01

123 sequences assigned
90 (73.2%) exact matches, in which:
89 unique CDR3
5 unique J



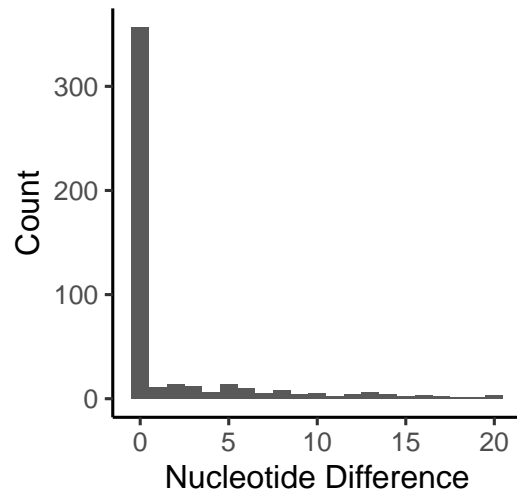
IGHV3-21*01_02

1885 sequences assigned
1554 (82.4%) exact matches, in which:
1502 unique CDR3
7 unique J



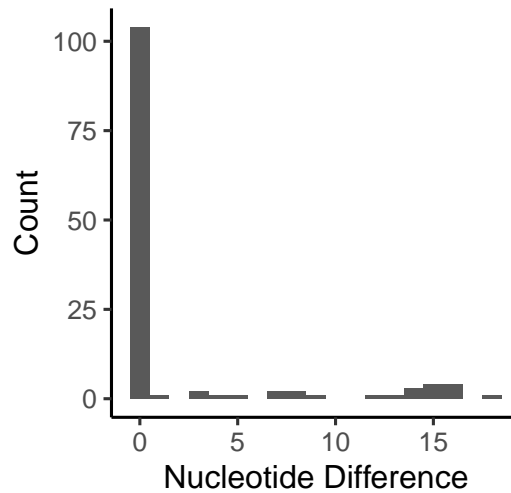
IGHV3-9*01

485 sequences assigned
357 (73.6%) exact matches, in which:
350 unique CDR3
6 unique J



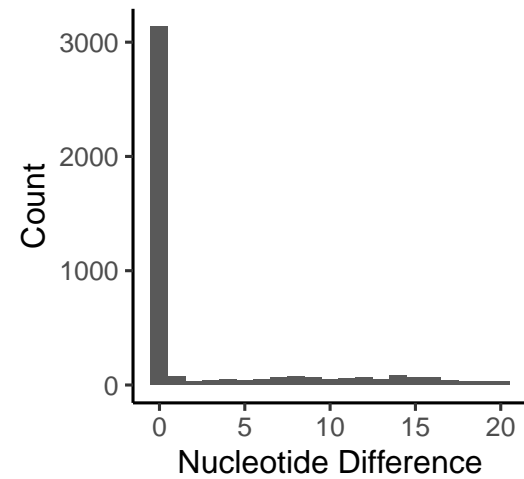
IGHV3-13*04

133 sequences assigned
104 (78.2%) exact matches, in which:
103 unique CDR3
5 unique J



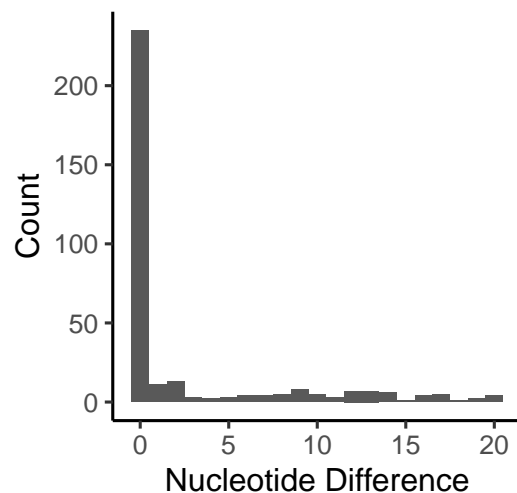
IGHV3-23*01_04

4395 sequences assigned
3135 (71.3%) exact matches, in which:
3045 unique CDR3
7 unique J



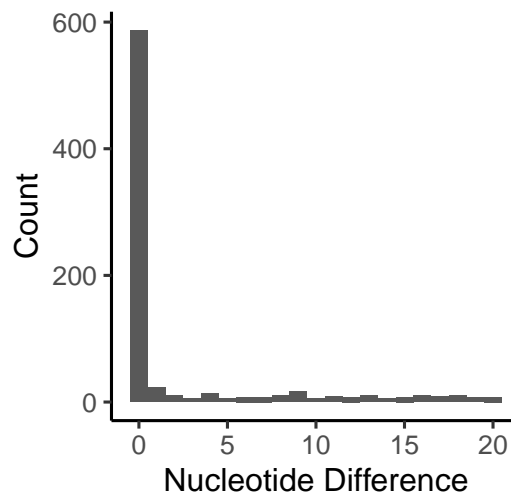
IGHV3-11*01

349 sequences assigned
235 (67.3%) exact matches, in which:
232 unique CDR3
6 unique J



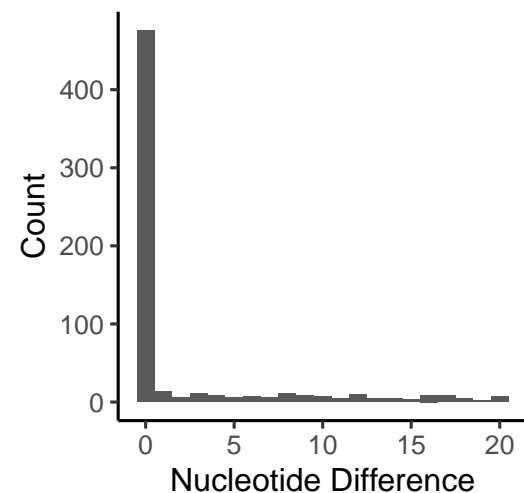
IGHV3-15*01_02

818 sequences assigned
587 (71.8%) exact matches, in which:
582 unique CDR3
7 unique J



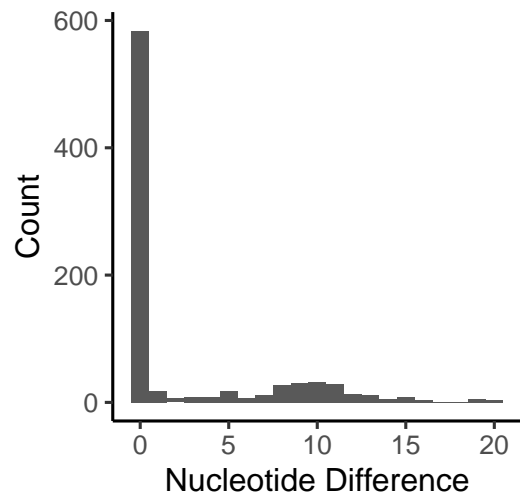
IGHV3-30-3*01

664 sequences assigned
476 (71.7%) exact matches, in which:
470 unique CDR3
6 unique J



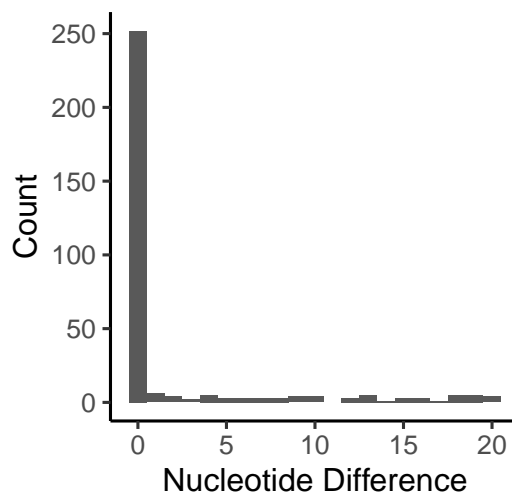
IGHV3–30*18

851 sequences assigned
584 (68.6%) exact matches, in which:
573 unique CDR3
6 unique J



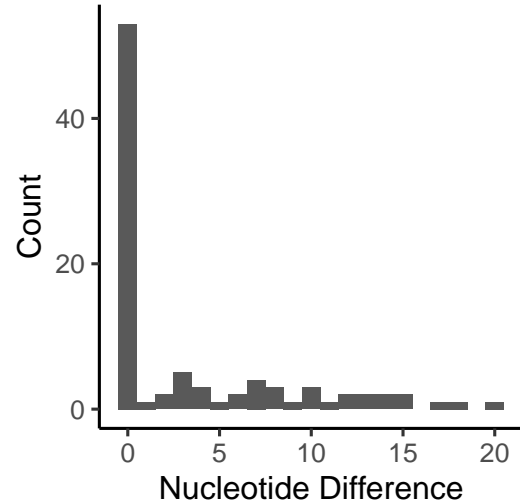
IGHV3–43*02

339 sequences assigned
252 (74.3%) exact matches, in which:
240 unique CDR3
6 unique J



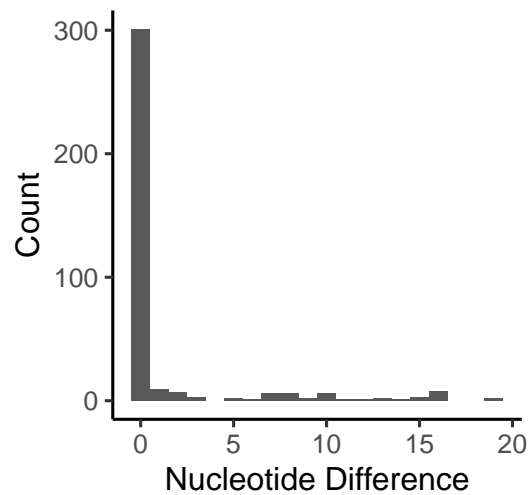
IGHV3–49*04

106 sequences assigned
53 (50%) exact matches, in which:
53 unique CDR3
5 unique J



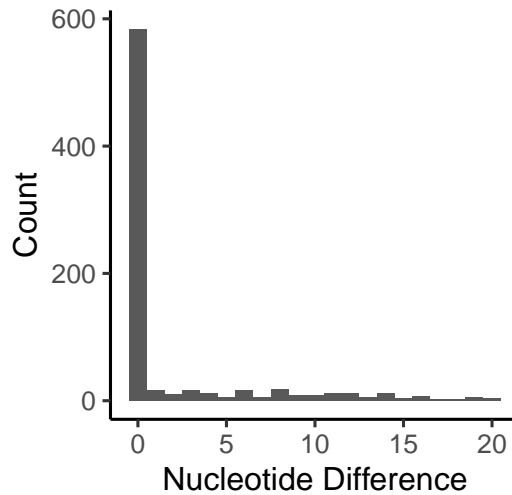
IGHV3–33*01

370 sequences assigned
301 (81.4%) exact matches, in which:
301 unique CDR3
7 unique J



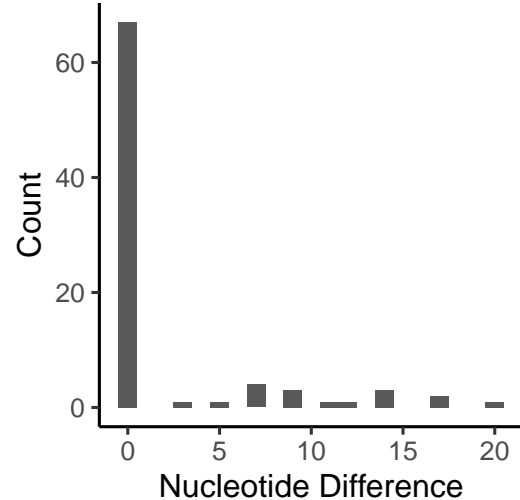
IGHV3–48*02

801 sequences assigned
584 (72.9%) exact matches, in which:
573 unique CDR3
6 unique J



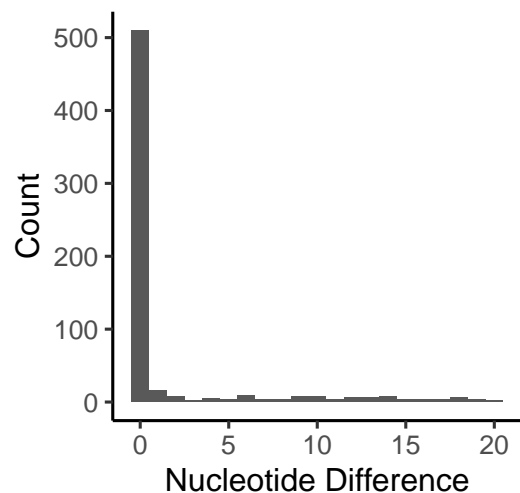
IGHV3–49*03_05

90 sequences assigned
67 (74.4%) exact matches, in which:
66 unique CDR3
5 unique J



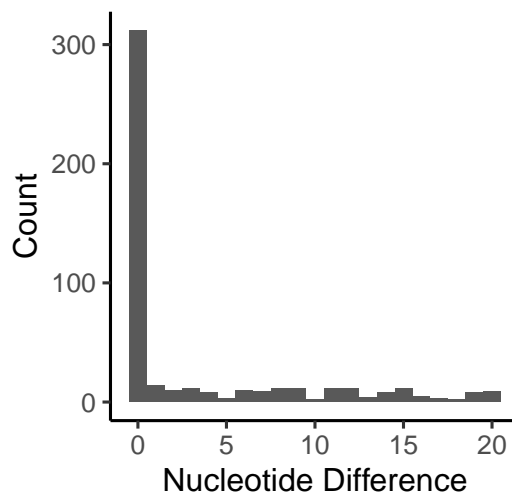
IGHV3–33*08

637 sequences assigned
510 (80.1%) exact matches, in which:
502 unique CDR3
6 unique J



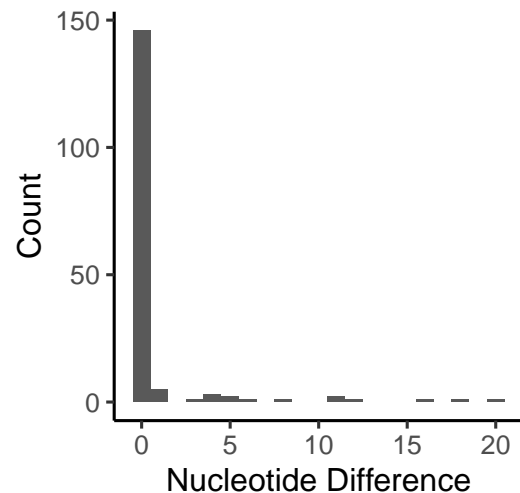
IGHV3–48*03

506 sequences assigned
312 (61.7%) exact matches, in which:
301 unique CDR3
6 unique J



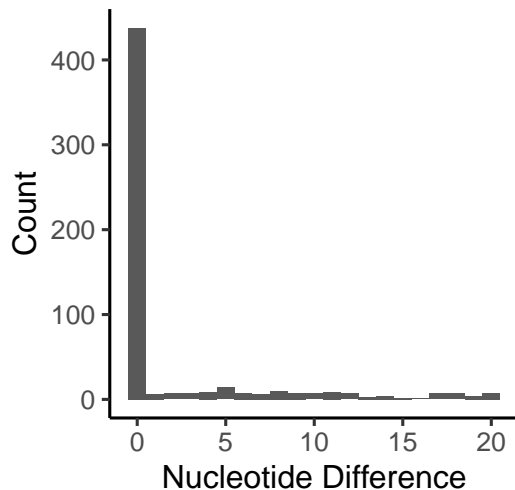
IGHV3–53*04

170 sequences assigned
146 (85.9%) exact matches, in which:
139 unique CDR3
6 unique J



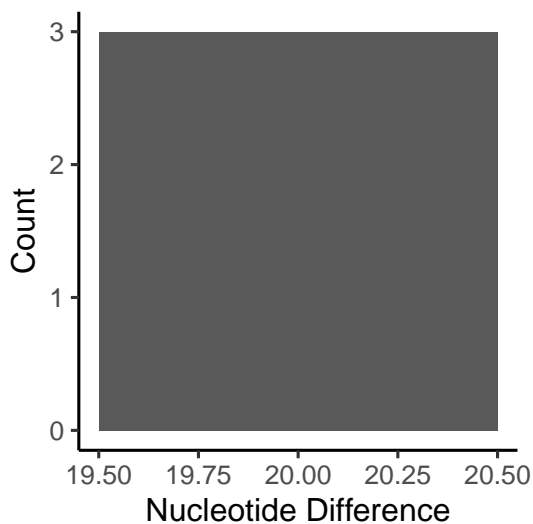
IGHV3-53*01_02

595 sequences assigned
438 (73.6%) exact matches, in which:
424 unique CDR3
6 unique J



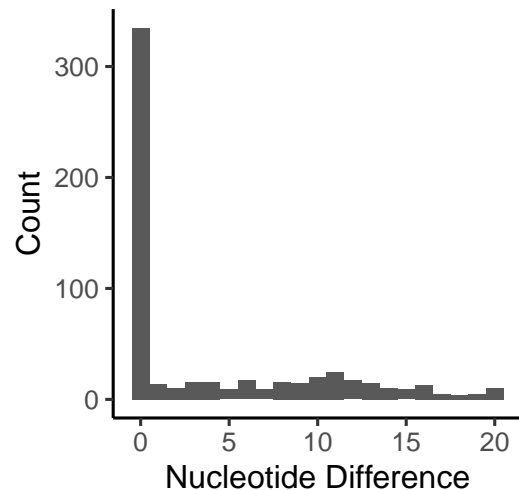
IGHV3-69-1*01

10 sequences assigned
No exact matches.



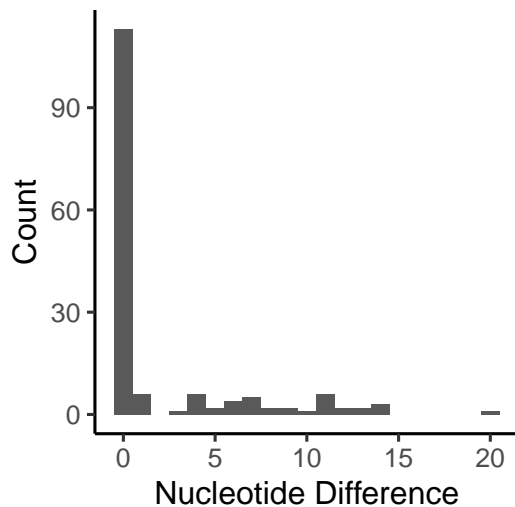
IGHV3-74*01_02

643 sequences assigned
335 (52.1%) exact matches, in which:
327 unique CDR3
7 unique J



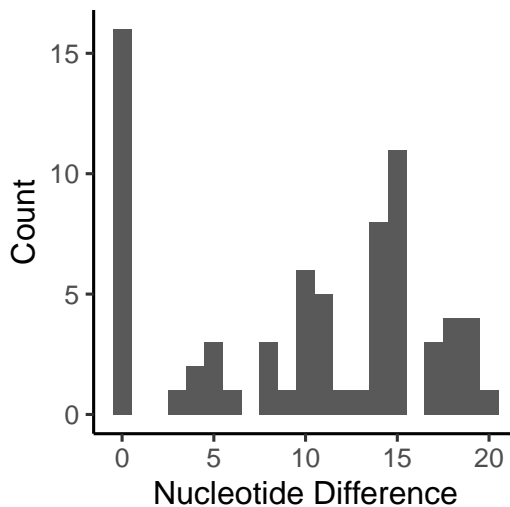
IGHV3-64*01

160 sequences assigned
113 (70.6%) exact matches, in which:
108 unique CDR3
6 unique J



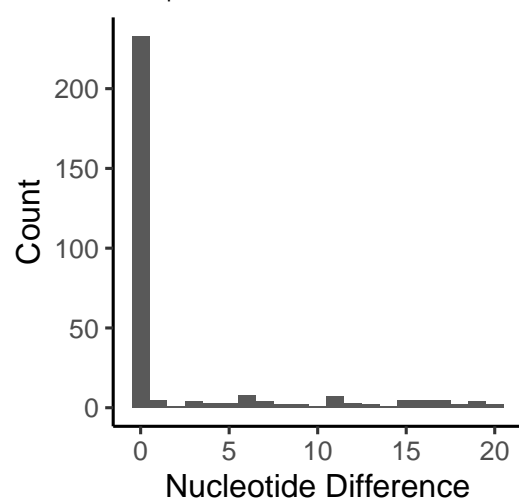
IGHV3-72*01

77 sequences assigned
16 (20.8%) exact matches, in which:
14 unique CDR3
5 unique J



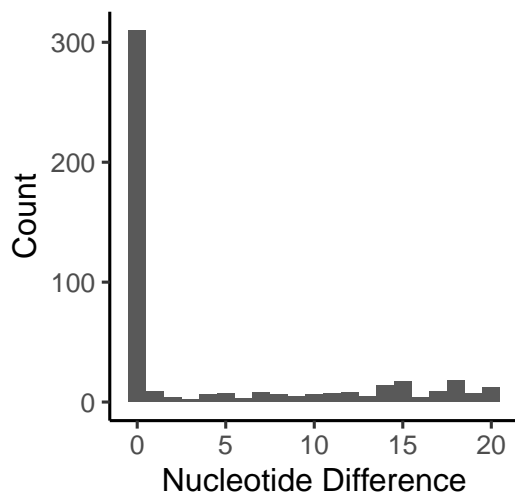
IGHV3-64D*09

322 sequences assigned
233 (72.4%) exact matches, in which:
231 unique CDR3
6 unique J



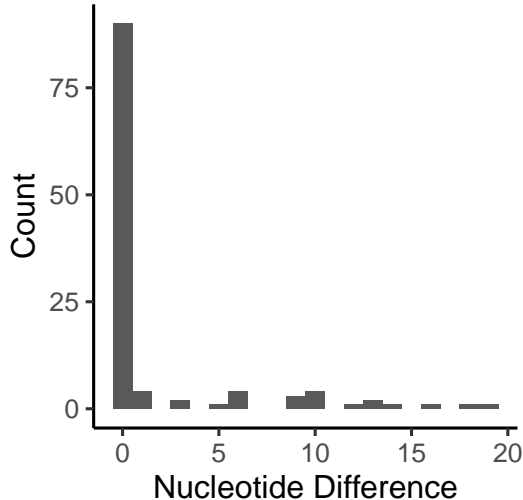
IGHV3-66*01

499 sequences assigned
310 (62.1%) exact matches, in which:
302 unique CDR3
6 unique J



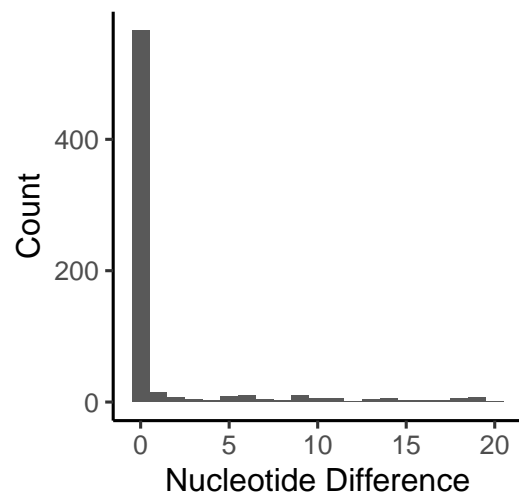
IGHV3-73*01_02

121 sequences assigned
90 (74.4%) exact matches, in which:
89 unique CDR3
6 unique J



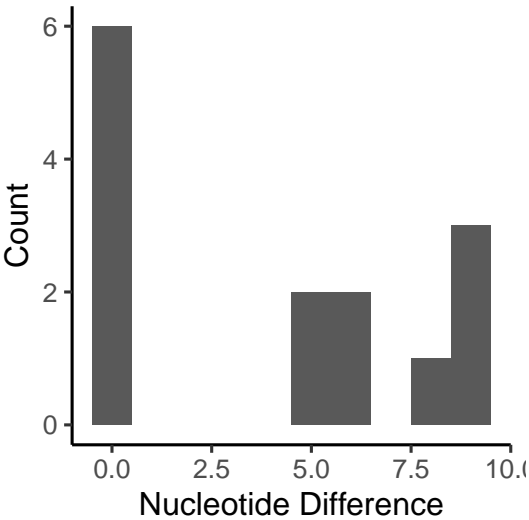
IGHV4-4*07

706 sequences assigned
566 (80.2%) exact matches, in which:
541 unique CDR3
6 unique J



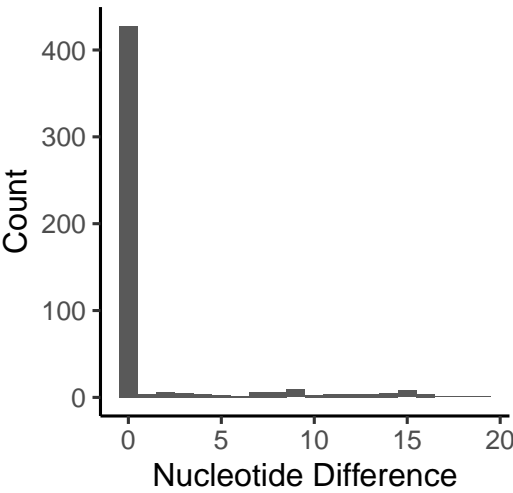
IGHV4-28*01_07

14 sequences assigned
6 (42.9%) exact matches, in which:
6 unique CDR3
4 unique J



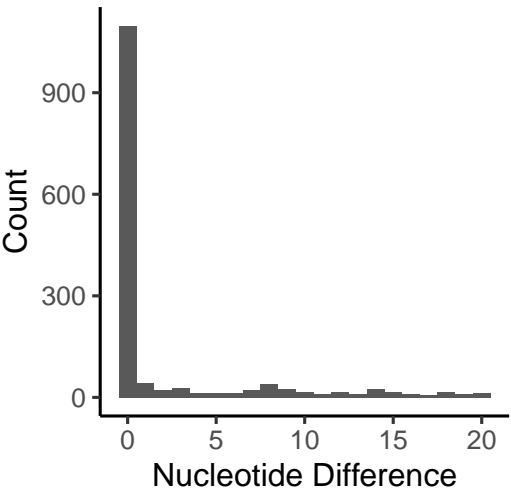
IGHV4-31*02

531 sequences assigned
428 (80.6%) exact matches, in which:
425 unique CDR3
7 unique J



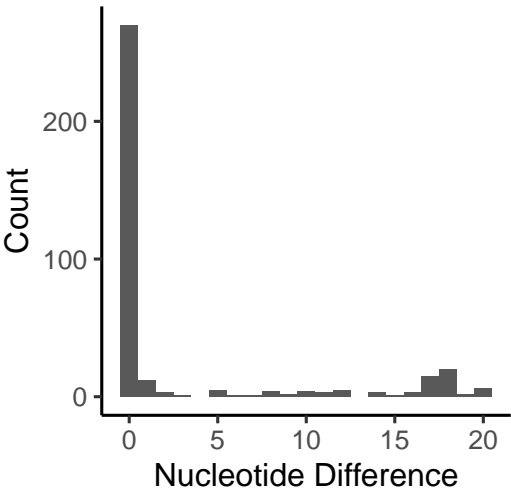
IGHV4-59*08

1535 sequences assigned
1098 (71.5%) exact matches, in which:
1068 unique CDR3
6 unique J



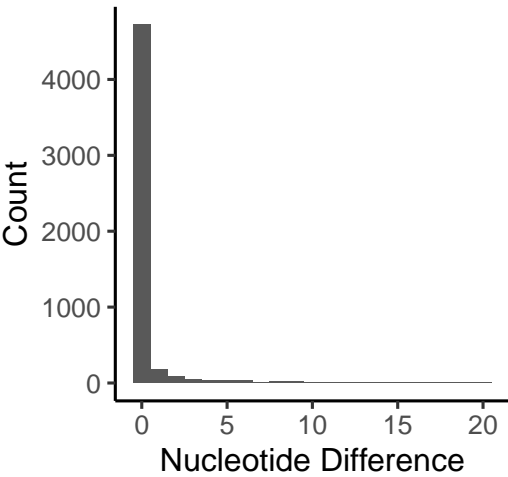
IGHV4-30-2*01

374 sequences assigned
270 (72.2%) exact matches, in which:
267 unique CDR3
6 unique J



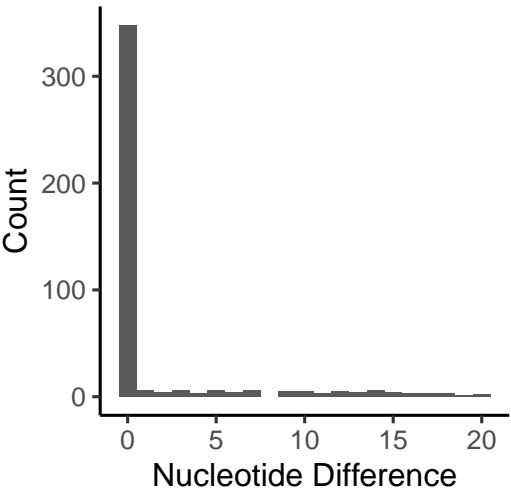
IGHV4-34*01_02

5311 sequences assigned
4721 (88.9%) exact matches, in which:
4560 unique CDR3
7 unique J



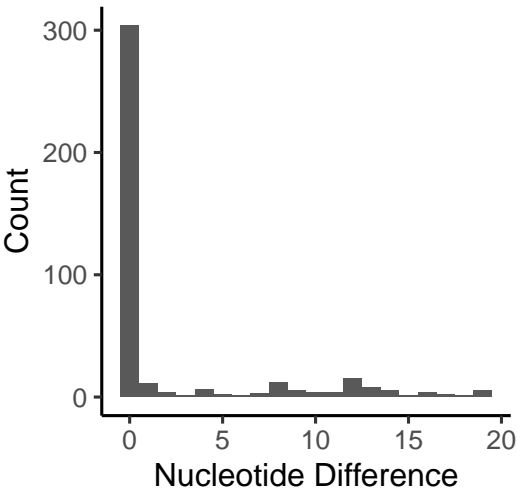
IGHV4-61*01

451 sequences assigned
348 (77.2%) exact matches, in which:
338 unique CDR3
6 unique J



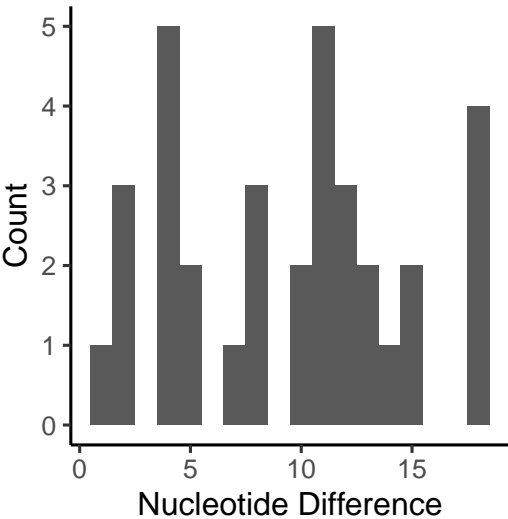
IGHV4-30-4*01

422 sequences assigned
304 (72%) exact matches, in which:
299 unique CDR3
6 unique J



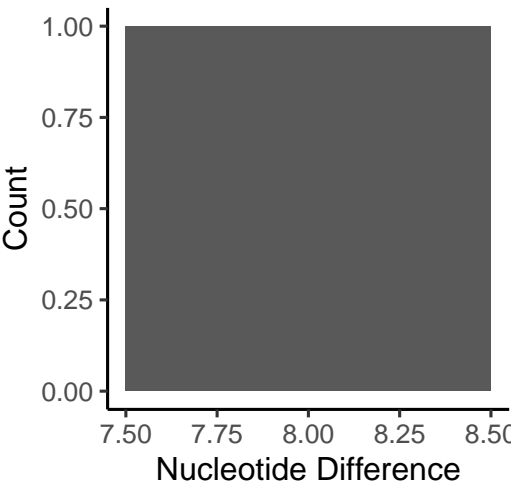
IGHV4-39*02

58 sequences assigned
No exact matches.



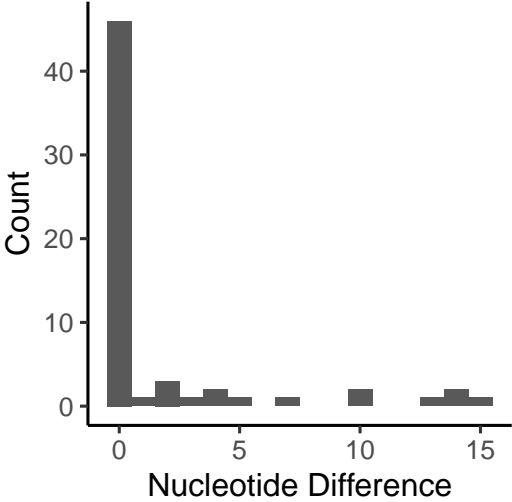
IGHV4/OR15-8*01

2 sequences assigned
No exact matches.



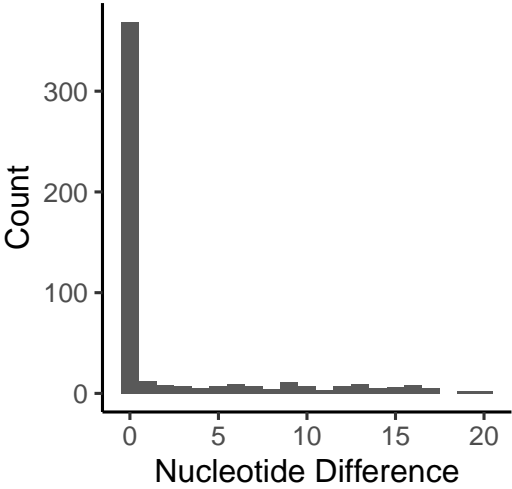
IGHV5-10-1*01_03

68 sequences assigned
46 (67.6%) exact matches, in which:
45 unique CDR3
5 unique J



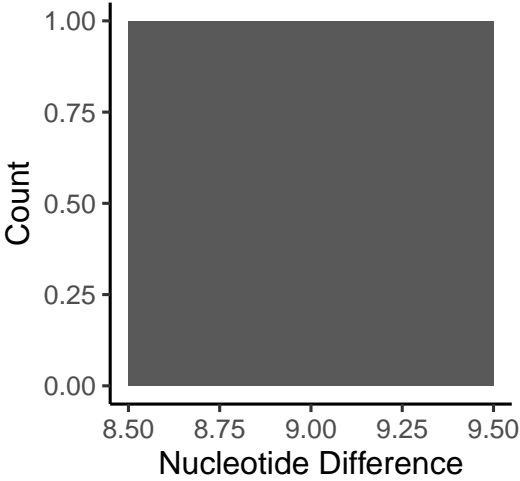
IGHV6-1*01_02

506 sequences assigned
369 (72.9%) exact matches, in which:
360 unique CDR3
7 unique J



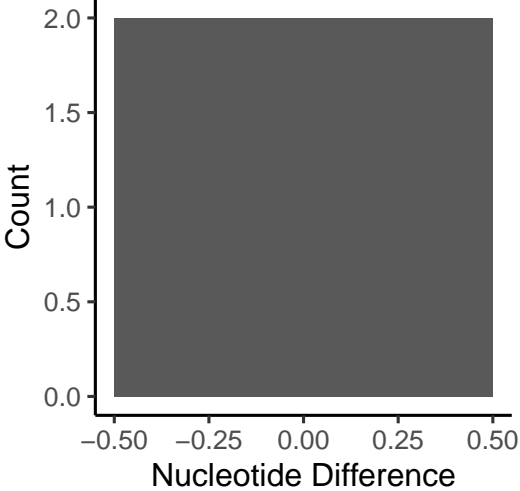
IGHV5-51*07

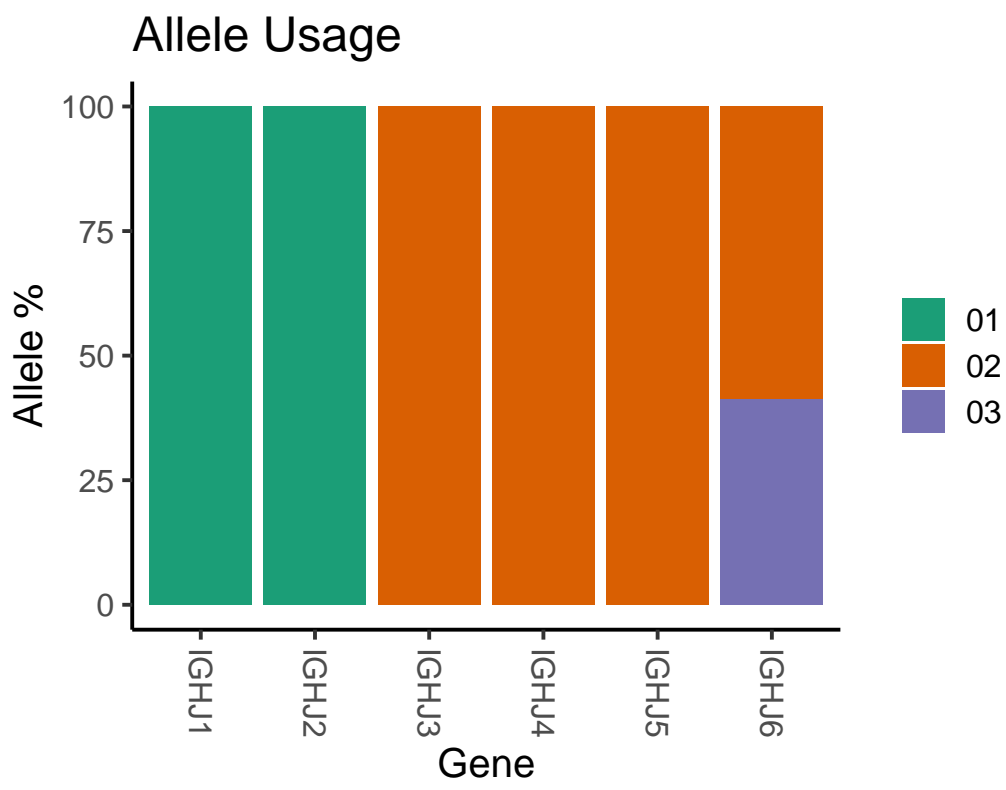
1 sequences assigned
No exact matches.



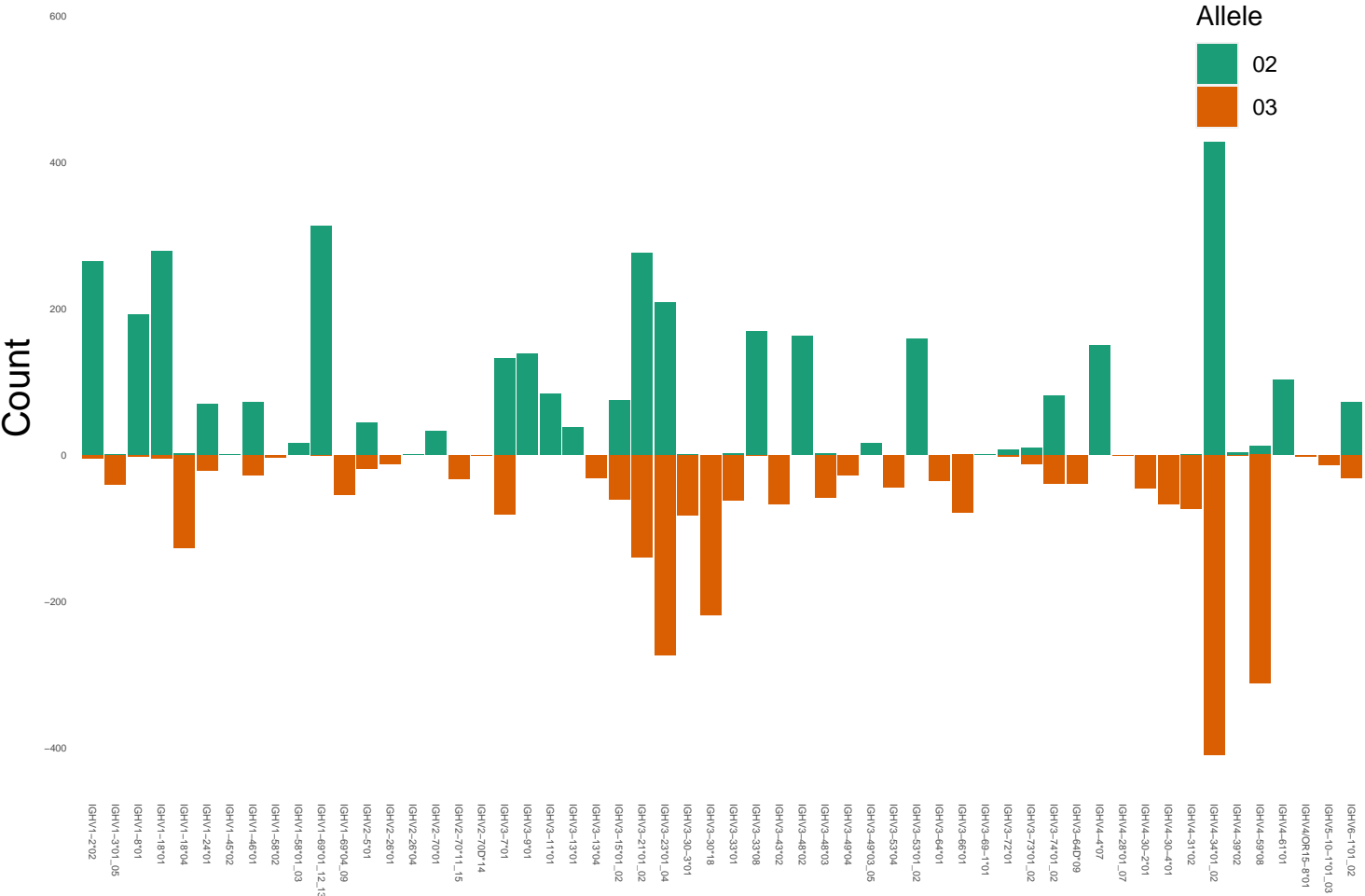
IGHV5-51*01_03

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





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.