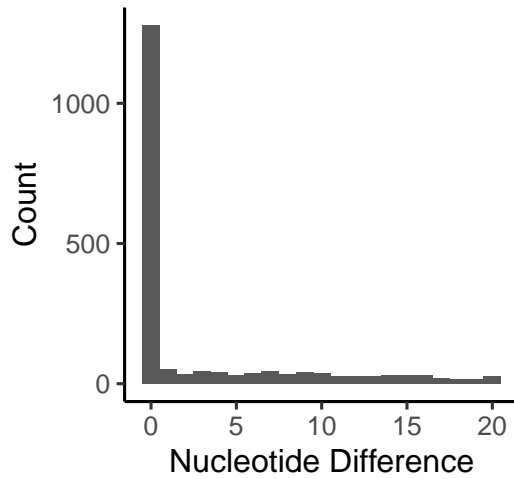


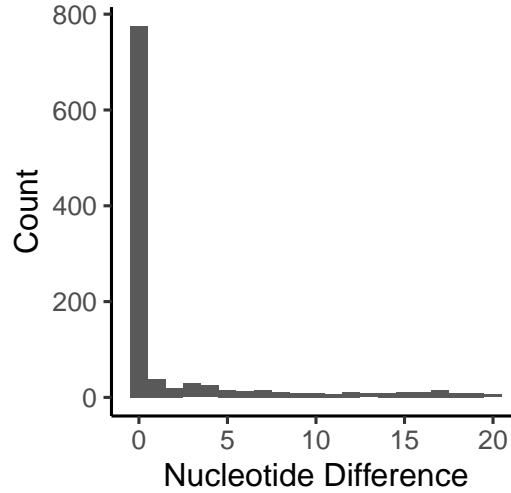
IGHV1-2*02

2124 sequences assigned
1278 (60.2%) exact matches, in which:
1274 unique CDR3
6 unique J



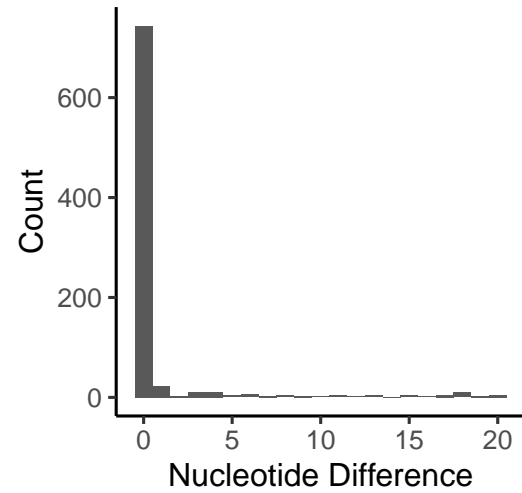
IGHV1-8*01

1126 sequences assigned
776 (68.9%) exact matches, in which:
772 unique CDR3
6 unique J



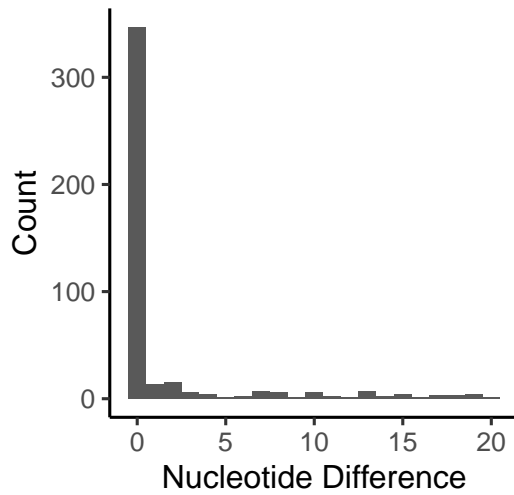
IGHV1-24*01

890 sequences assigned
744 (83.6%) exact matches, in which:
743 unique CDR3
6 unique J



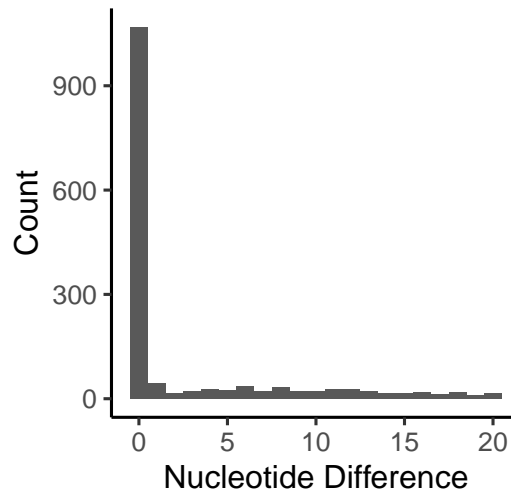
IGHV1-2*04

469 sequences assigned
347 (74%) exact matches, in which:
347 unique CDR3
6 unique J



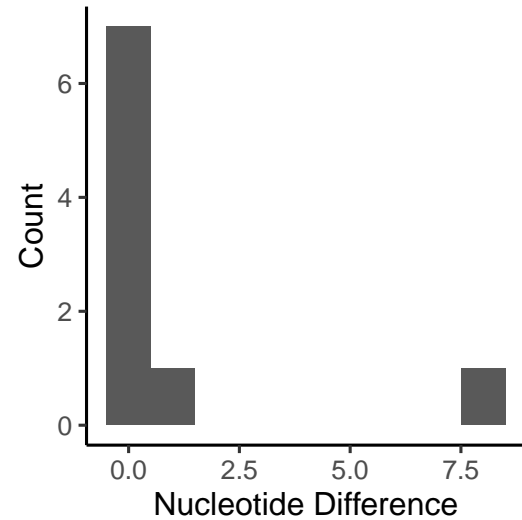
IGHV1-18*01

1691 sequences assigned
1069 (63.2%) exact matches, in which:
1066 unique CDR3
6 unique J



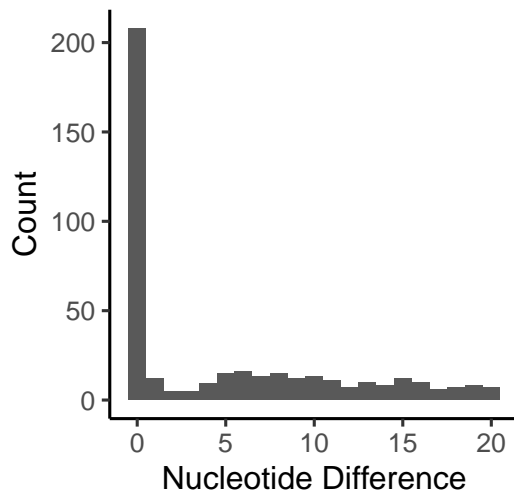
IGHV1-45*02

11 sequences assigned
7 (63.6%) exact matches, in which:
7 unique CDR3
3 unique J



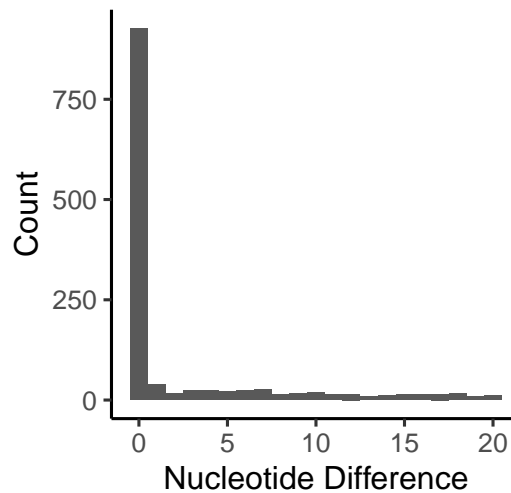
IGHV1-3*01_05

473 sequences assigned
208 (44%) exact matches, in which:
208 unique CDR3
6 unique J



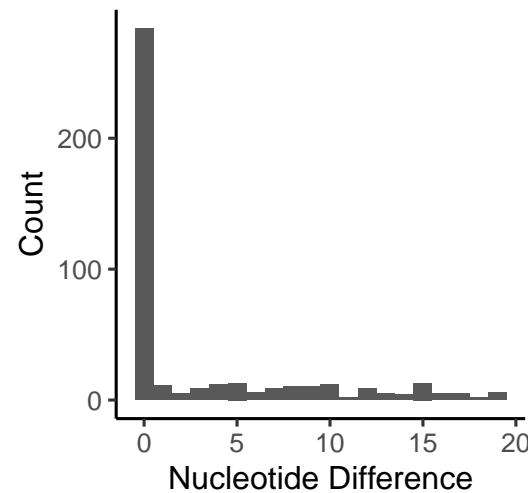
IGHV1-18*04

1387 sequences assigned
927 (66.8%) exact matches, in which:
925 unique CDR3
6 unique J



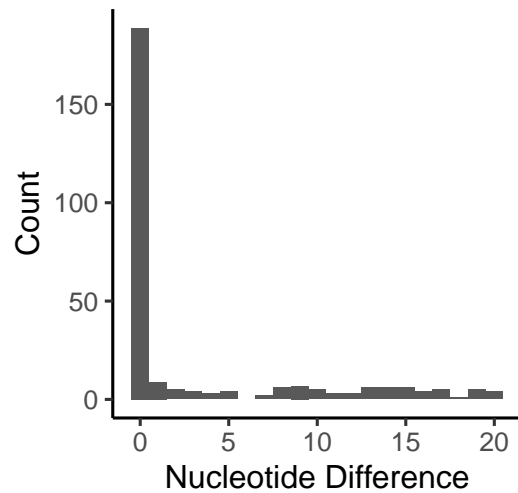
IGHV1-46*01

491 sequences assigned
284 (57.8%) exact matches, in which:
283 unique CDR3
6 unique J



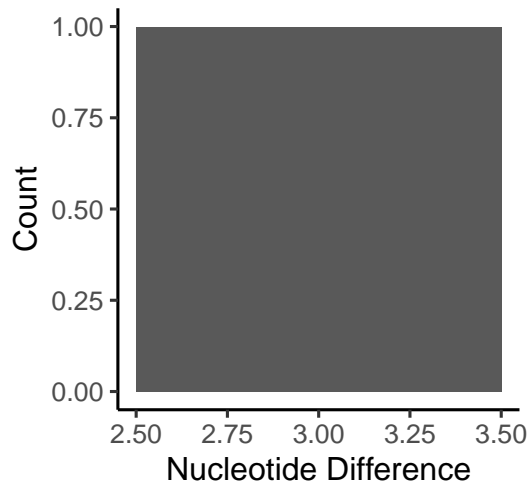
IGHV1-46*03

321 sequences assigned
189 (58.9%) exact matches, in which:
189 unique CDR3
6 unique J



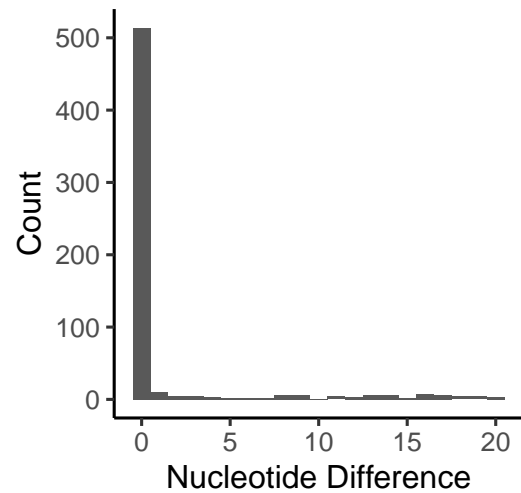
IGHV1-68*02_03

2 sequences assigned
No exact matches.



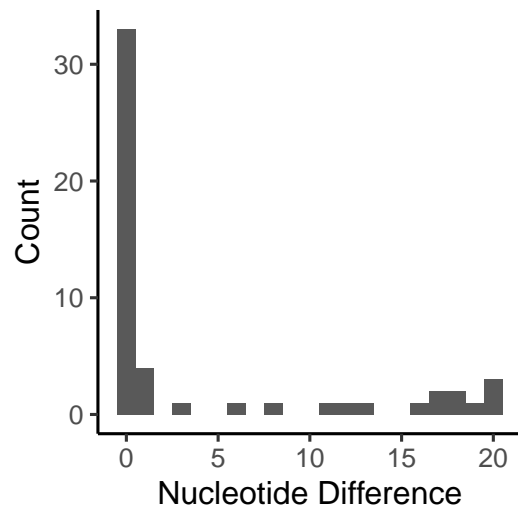
IGHV1-69*06_14

673 sequences assigned
514 (76.4%) exact matches, in which:
512 unique CDR3
6 unique J



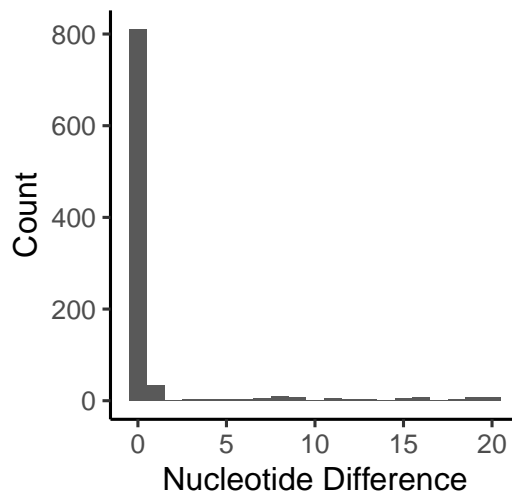
IGHV1-58*02

79 sequences assigned
33 (41.8%) exact matches, in which:
33 unique CDR3
5 unique J



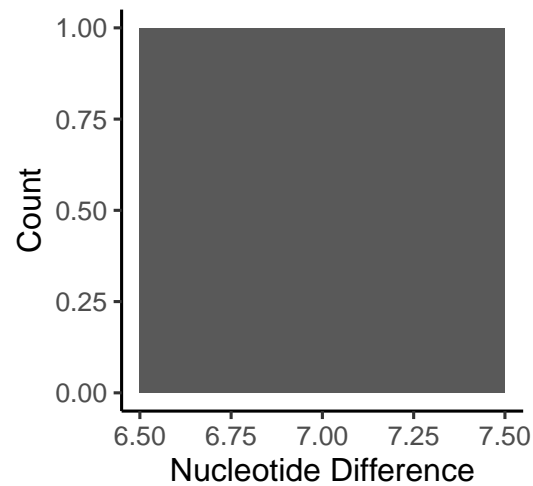
IGHV1-69*01_12_13

1037 sequences assigned
811 (78.2%) exact matches, in which:
811 unique CDR3
6 unique J



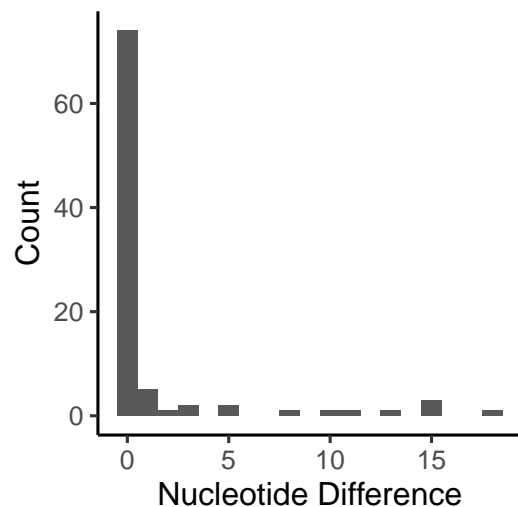
IGHV1-NL1*01

1 sequences assigned
No exact matches.



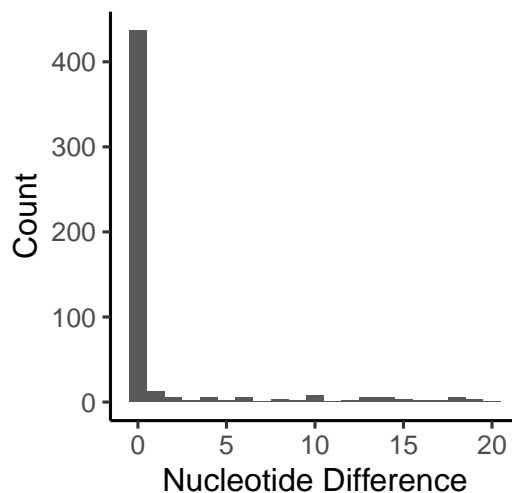
IGHV1-58*01_03

98 sequences assigned
74 (75.5%) exact matches, in which:
74 unique CDR3
6 unique J



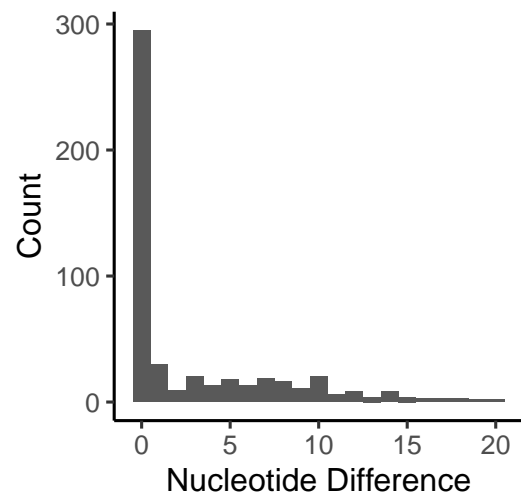
IGHV1-69*04_09

568 sequences assigned
437 (76.9%) exact matches, in which:
436 unique CDR3
6 unique J



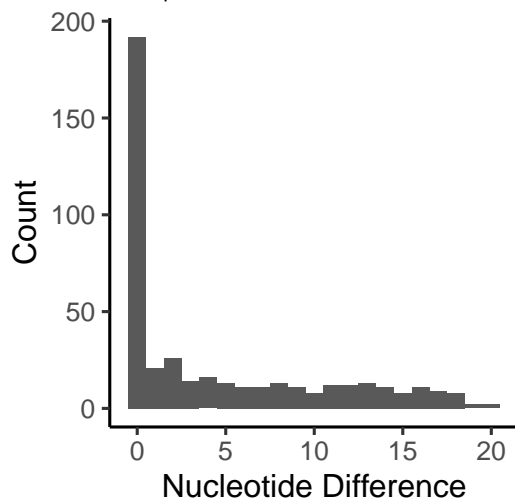
IGHV2-5*01

551 sequences assigned
295 (53.5%) exact matches, in which:
294 unique CDR3
6 unique J



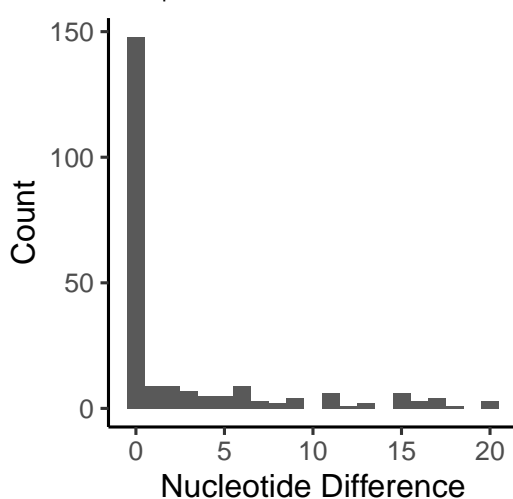
IGHV2-5*02

486 sequences assigned
192 (39.5%) exact matches, in which:
192 unique CDR3
6 unique J



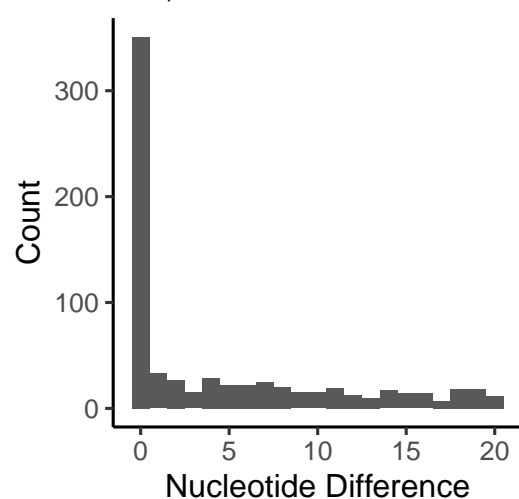
IGHV2-70*11_15

234 sequences assigned
148 (63.2%) exact matches, in which:
147 unique CDR3
5 unique J



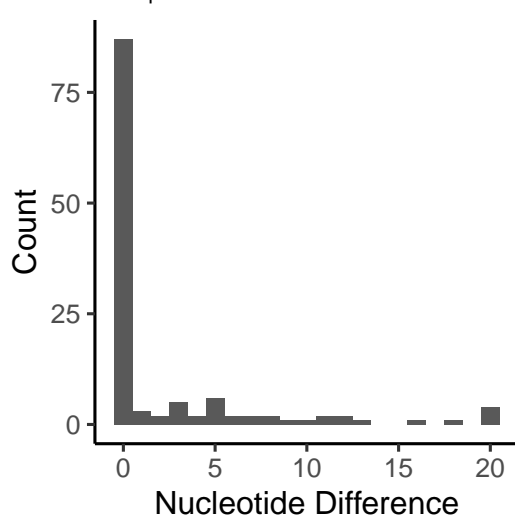
IGHV3-9*01

846 sequences assigned
351 (41.5%) exact matches, in which:
346 unique CDR3
6 unique J



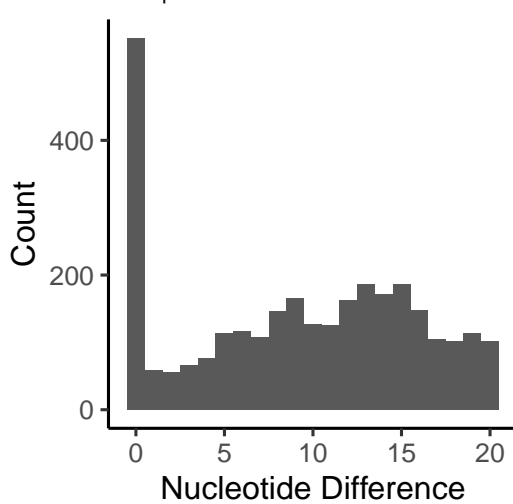
IGHV2-26*01

145 sequences assigned
87 (60%) exact matches, in which:
87 unique CDR3
6 unique J



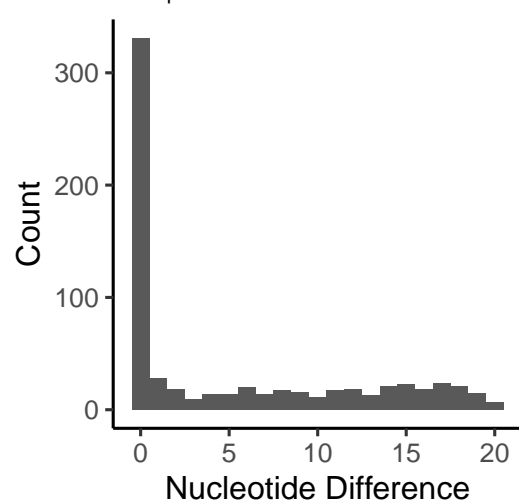
IGHV3-7*01

3466 sequences assigned
552 (15.9%) exact matches, in which:
534 unique CDR3
6 unique J



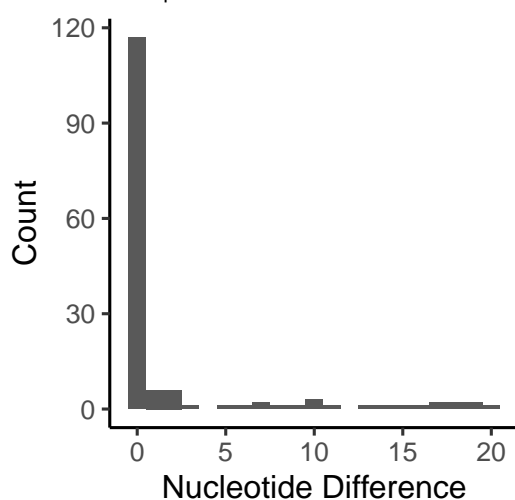
IGHV3-11*01

773 sequences assigned
331 (42.8%) exact matches, in which:
327 unique CDR3
6 unique J



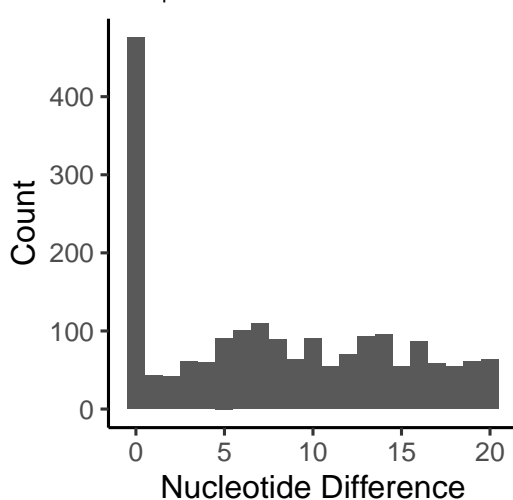
IGHV2-70*01

154 sequences assigned
117 (76%) exact matches, in which:
116 unique CDR3
6 unique J



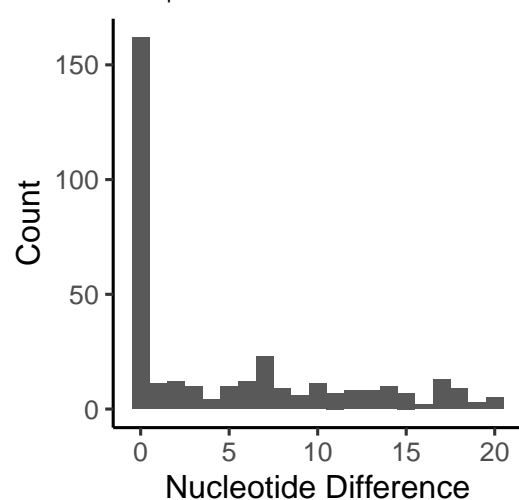
IGHV3-7*03

2159 sequences assigned
476 (22%) exact matches, in which:
451 unique CDR3
6 unique J



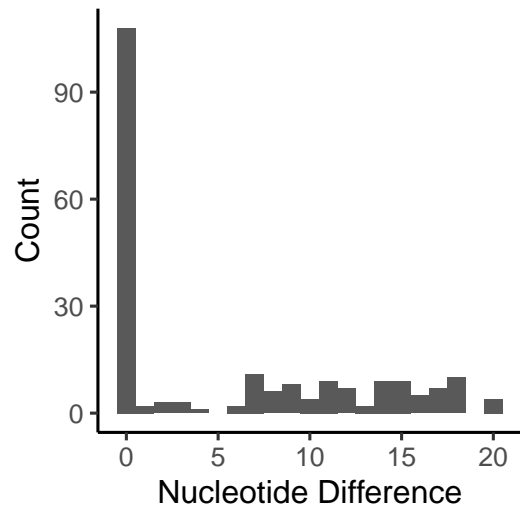
IGHV3-11*06

401 sequences assigned
162 (40.4%) exact matches, in which:
159 unique CDR3
6 unique J



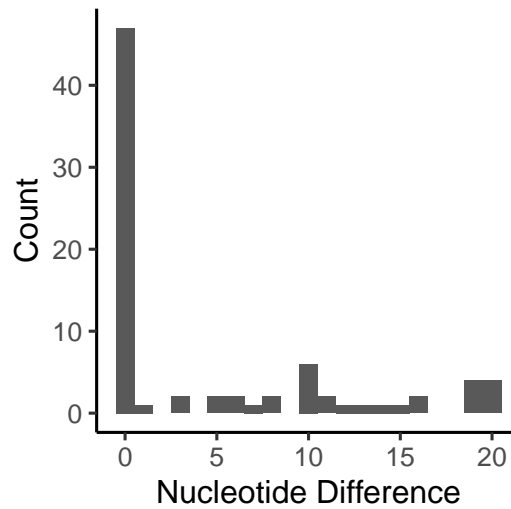
IGHV3-13*01

233 sequences assigned
108 (46.4%) exact matches, in which:
106 unique CDR3
5 unique J



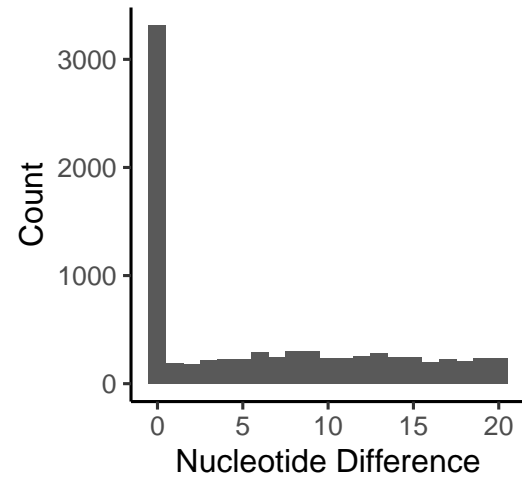
IGHV3-20*01_02

87 sequences assigned
47 (54%) exact matches, in which:
45 unique CDR3
5 unique J



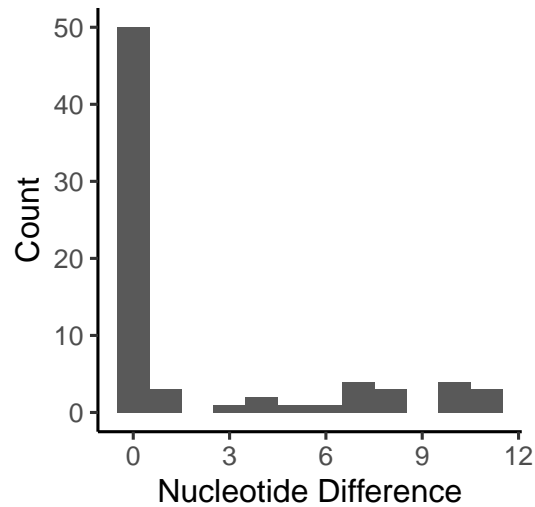
IGHV3-23*01_04

10004 sequences assigned
3314 (33.1%) exact matches, in which:
3209 unique CDR3
6 unique J



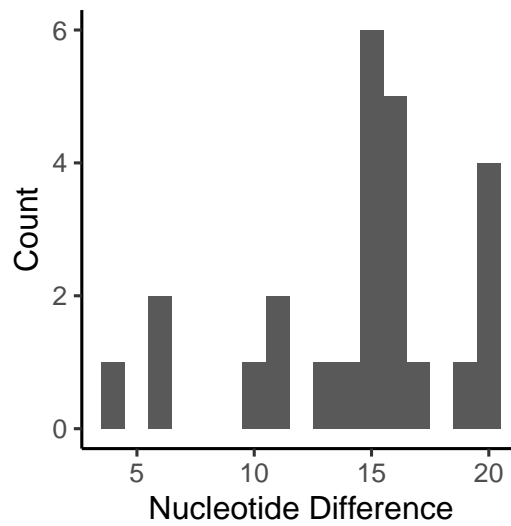
IGHV3-13*05

74 sequences assigned
50 (67.6%) exact matches, in which:
48 unique CDR3
4 unique J



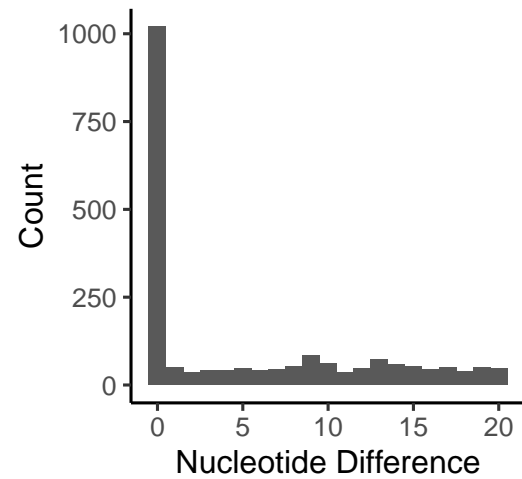
IGHV3-20*03_04

53 sequences assigned
No exact matches.



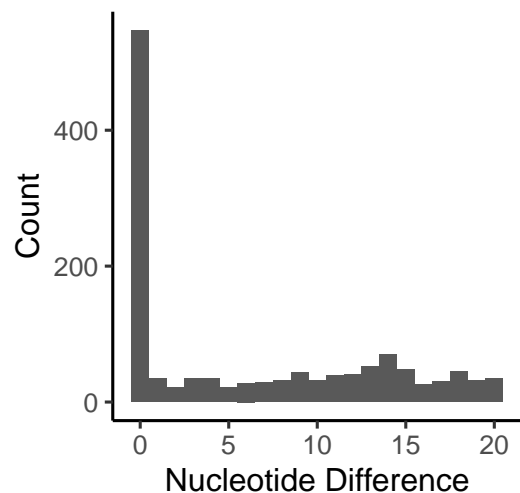
IGHV3-30-3*01

2402 sequences assigned
1020 (42.5%) exact matches, in which:
1002 unique CDR3
6 unique J



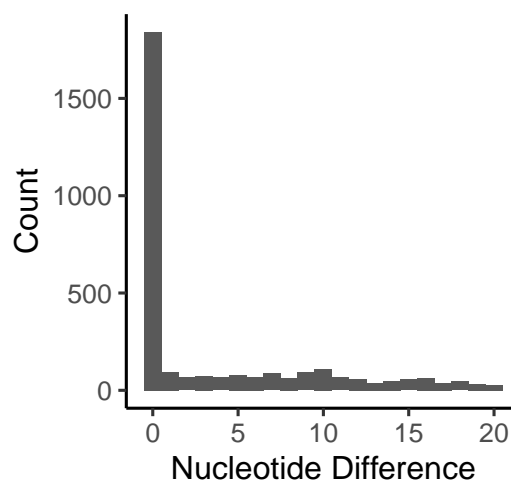
IGHV3-15*01_02

1505 sequences assigned
547 (36.3%) exact matches, in which:
535 unique CDR3
6 unique J



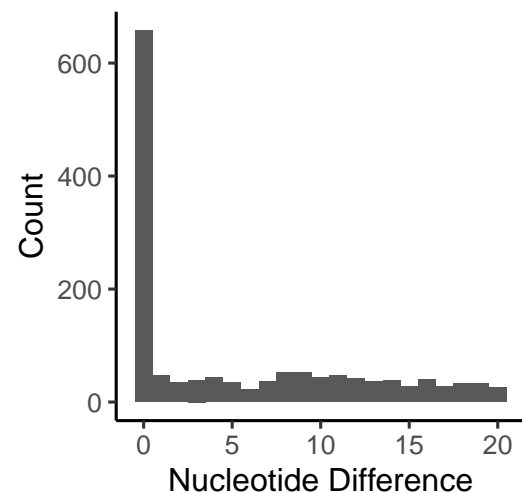
IGHV3-21*01_02

3516 sequences assigned
1841 (52.4%) exact matches, in which:
1767 unique CDR3
6 unique J



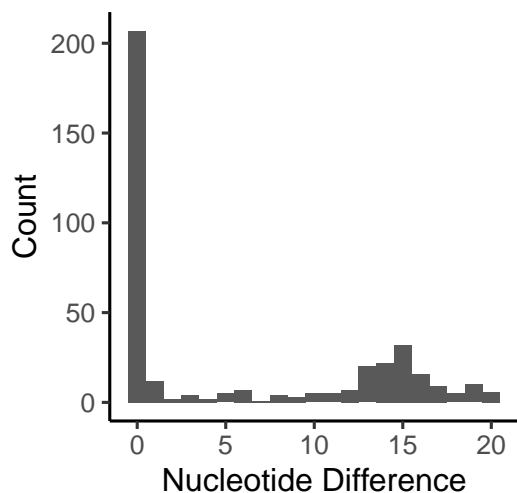
IGHV3-33*01

1713 sequences assigned
658 (38.4%) exact matches, in which:
651 unique CDR3
6 unique J



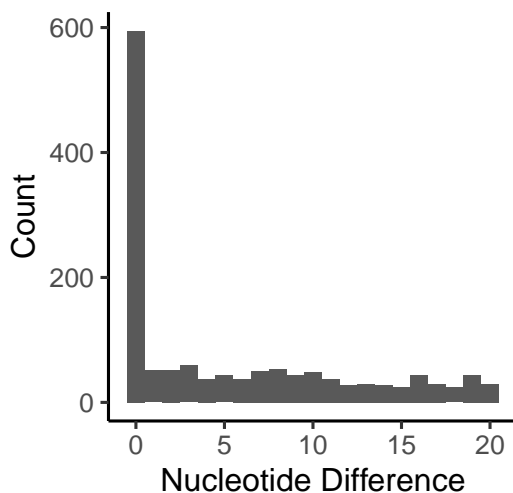
IGHV3-43*01

453 sequences assigned
207 (45.7%) exact matches, in which:
201 unique CDR3
6 unique J



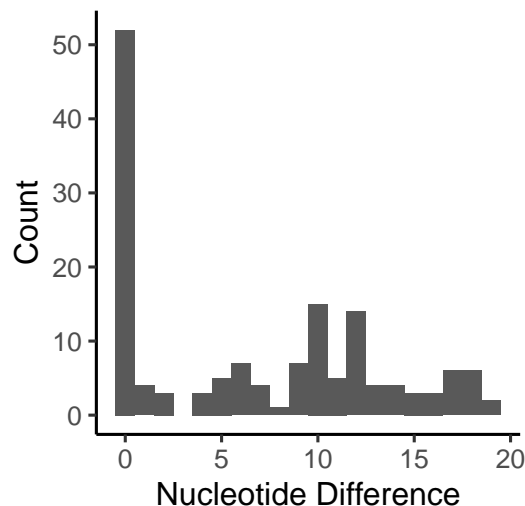
IGHV3-48*02

1572 sequences assigned
595 (37.8%) exact matches, in which:
555 unique CDR3
6 unique J



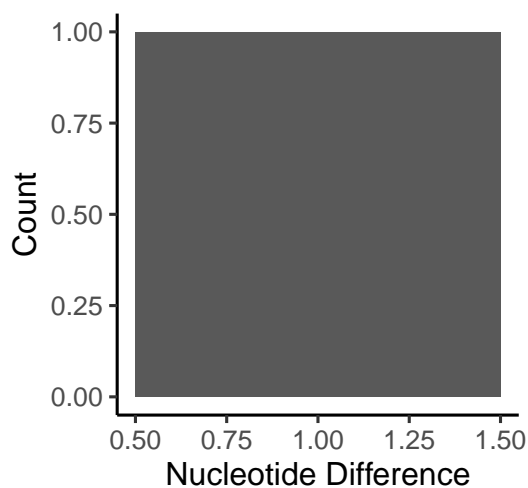
IGHV3-64*01

162 sequences assigned
52 (32.1%) exact matches, in which:
51 unique CDR3
6 unique J



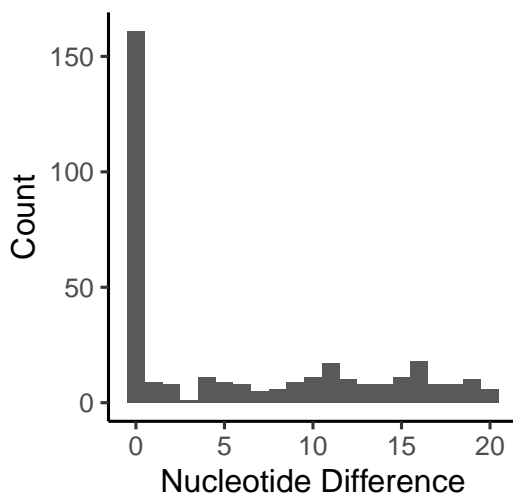
IGHV3-47*02

1 sequences assigned
No exact matches.



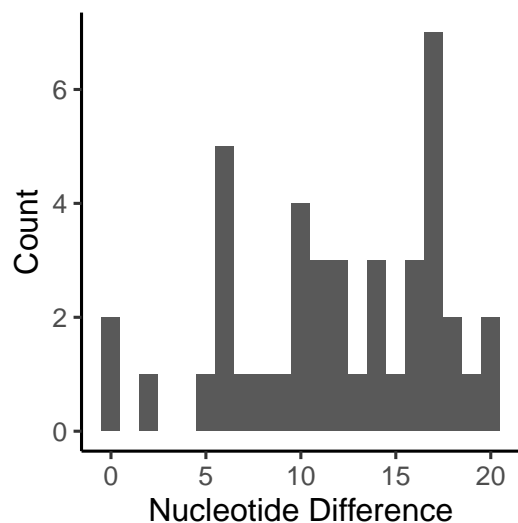
IGHV3-49*03_05

413 sequences assigned
161 (39%) exact matches, in which:
160 unique CDR3
6 unique J



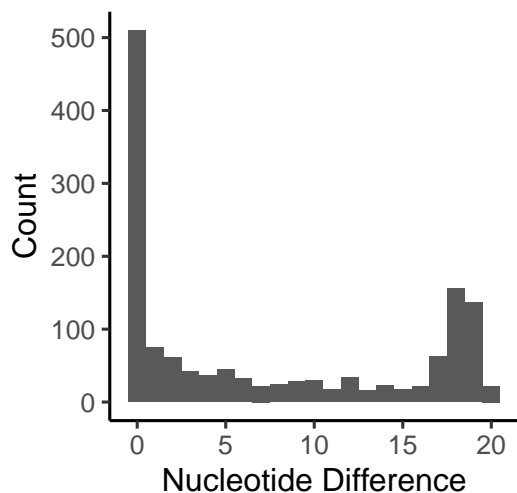
IGHV3-64*02_07

58 sequences assigned
2 (3.4%) exact matches, in which:
2 unique CDR3
2 unique J



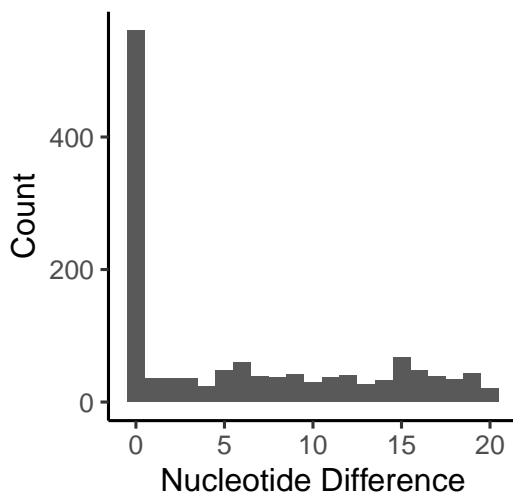
IGHV3-48*01

1554 sequences assigned
510 (32.8%) exact matches, in which:
461 unique CDR3
6 unique J



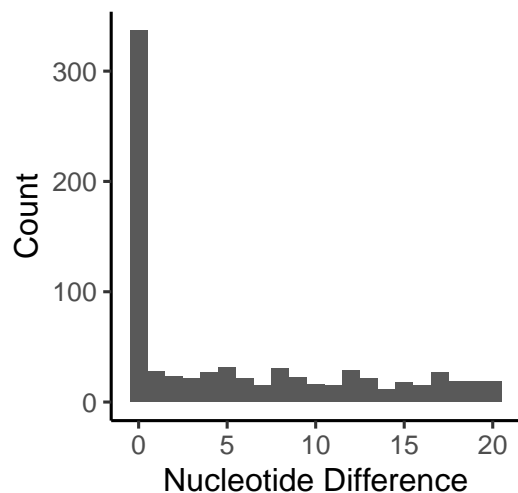
IGHV3-53*01_02

1533 sequences assigned
561 (36.6%) exact matches, in which:
549 unique CDR3
6 unique J



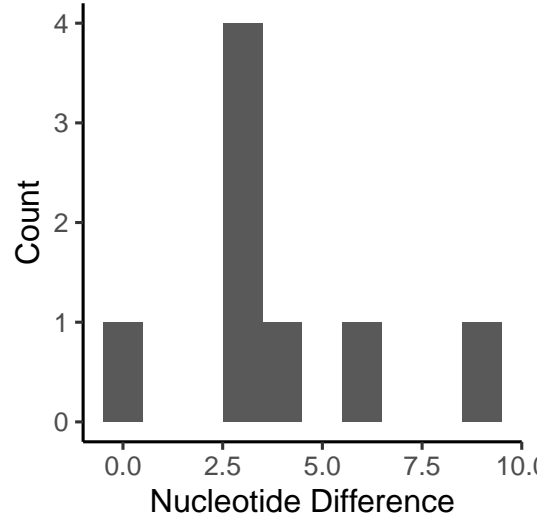
IGHV3-66*01

901 sequences assigned
337 (37.4%) exact matches, in which:
326 unique CDR3
6 unique J



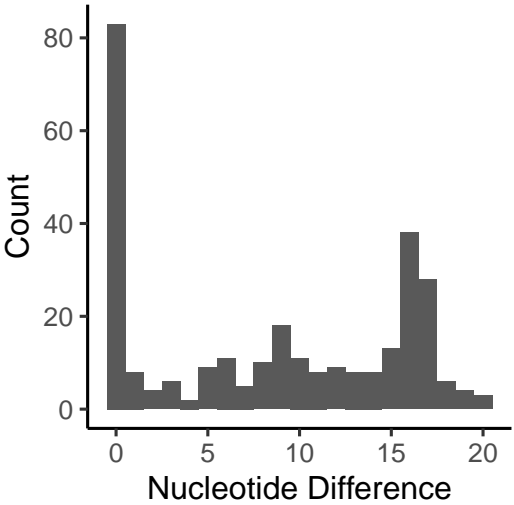
IGHV3-69-1*01

14 sequences assigned
1 (7.1%) exact matches, in which:
1 unique CDR3
1 unique J



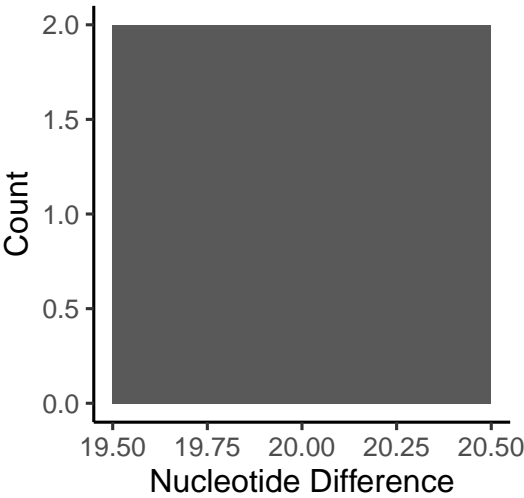
IGHV3-73*01_02

340 sequences assigned
83 (24.4%) exact matches, in which:
83 unique CDR3
6 unique J



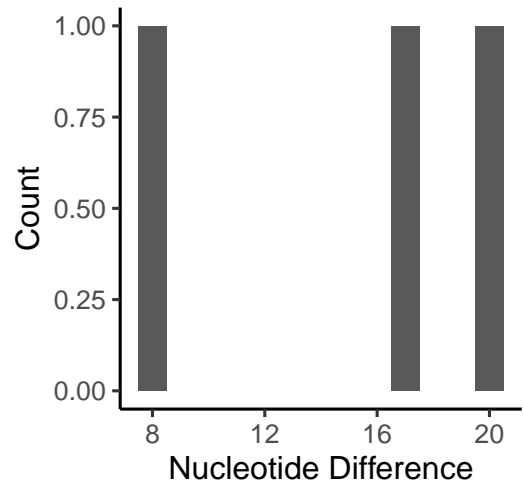
IGHV3-43D*04

3 sequences assigned
No exact matches.



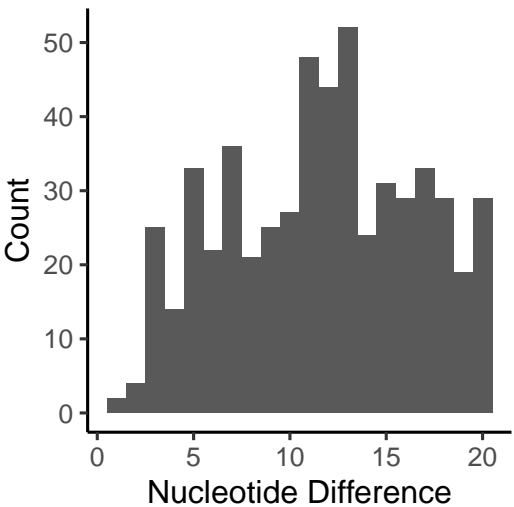
IGHV3-69-1*02

15 sequences assigned
No exact matches.



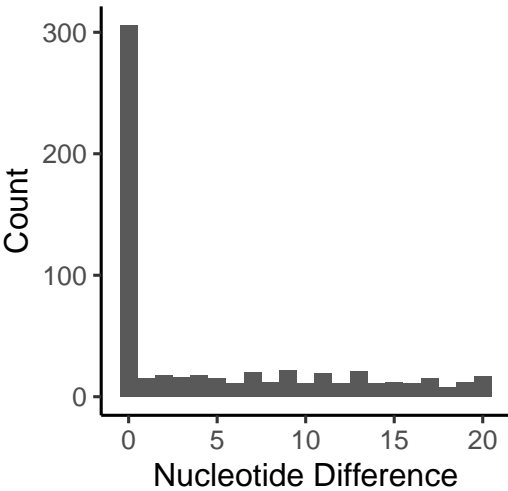
IGHV3-74*03

725 sequences assigned
No exact matches.



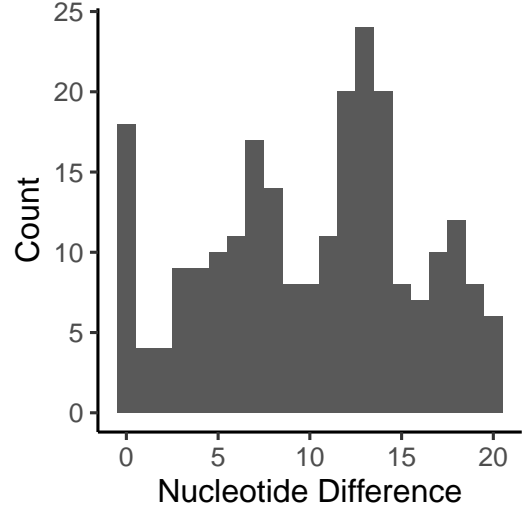
IGHV3-64D*06

711 sequences assigned
306 (43%) exact matches, in which:
300 unique CDR3
6 unique J



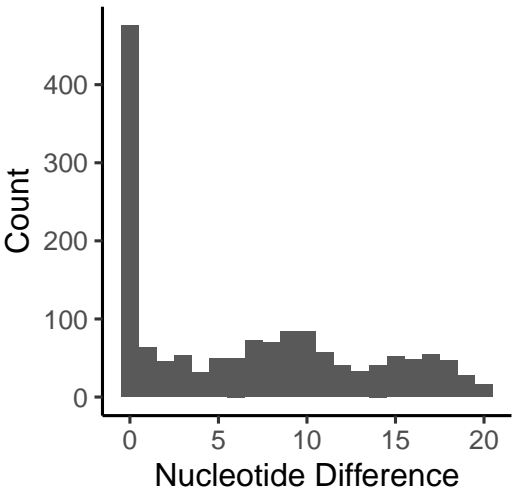
IGHV3-72*01

341 sequences assigned
18 (5.3%) exact matches, in which:
18 unique CDR3
5 unique J



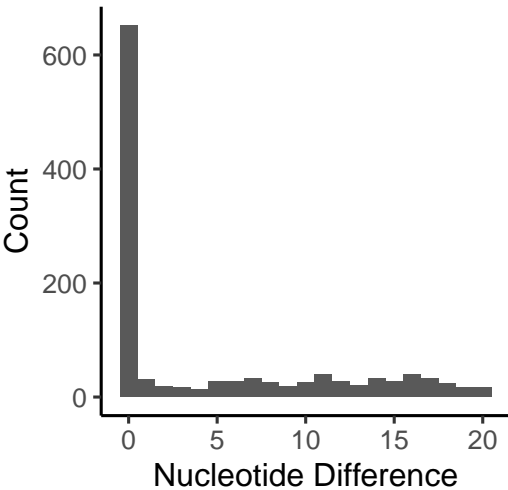
IGHV3-74*01_02

1656 sequences assigned
476 (28.7%) exact matches, in which:
452 unique CDR3
6 unique J



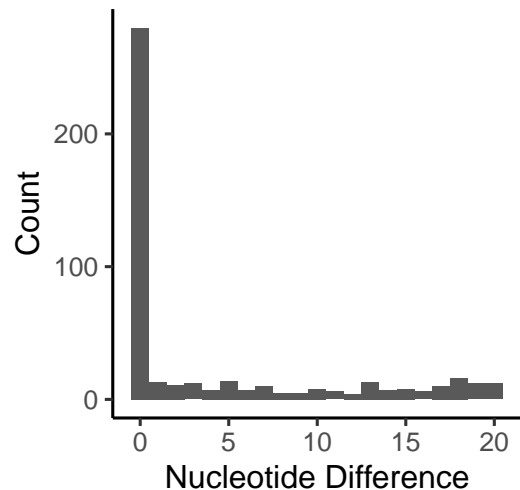
IGHV4-4*07

1323 sequences assigned
652 (49.3%) exact matches, in which:
632 unique CDR3
6 unique J



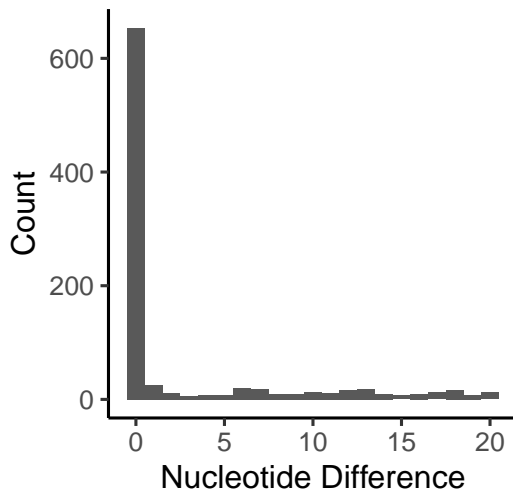
IGHV4-4*02_03

649 sequences assigned
280 (43.1%) exact matches, in which:
275 unique CDR3
6 unique J



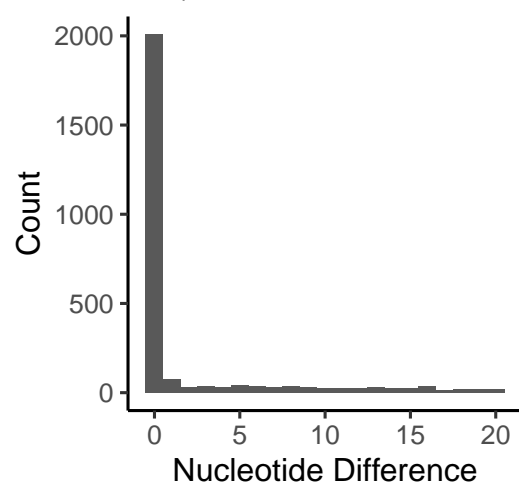
IGHV4-30-2*01

1030 sequences assigned
654 (63.5%) exact matches, in which:
644 unique CDR3
6 unique J



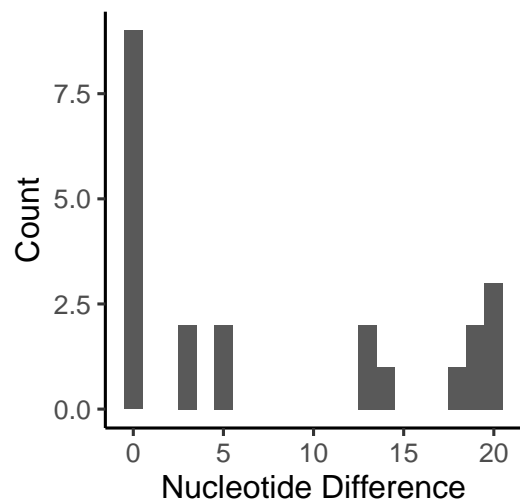
IGHV4-34*01_02

2839 sequences assigned
2008 (70.7%) exact matches, in which:
1982 unique CDR3
6 unique J



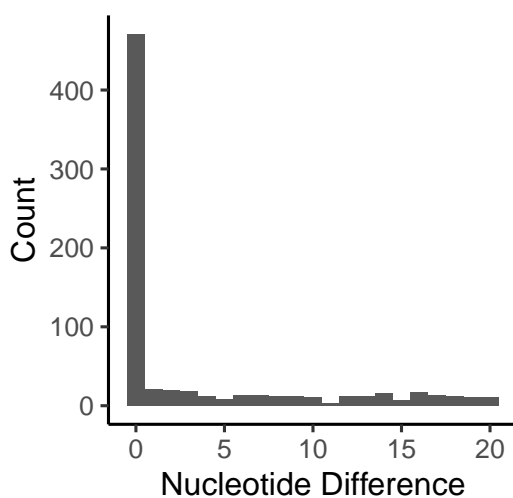
IGHV4-28*01_07

31 sequences assigned
9 (29%) exact matches, in which:
9 unique CDR3
3 unique J



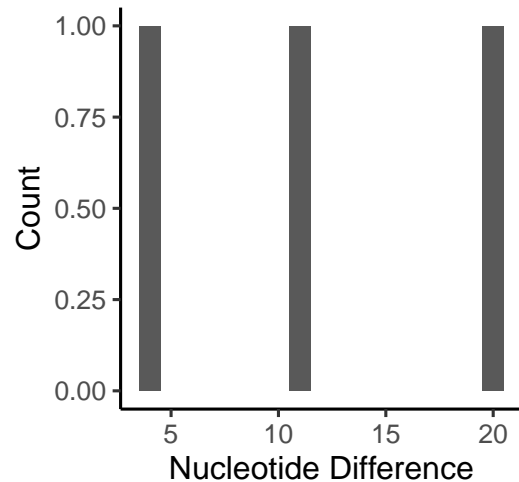
IGHV4-30-4*01

868 sequences assigned
471 (54.3%) exact matches, in which:
464 unique CDR3
6 unique J



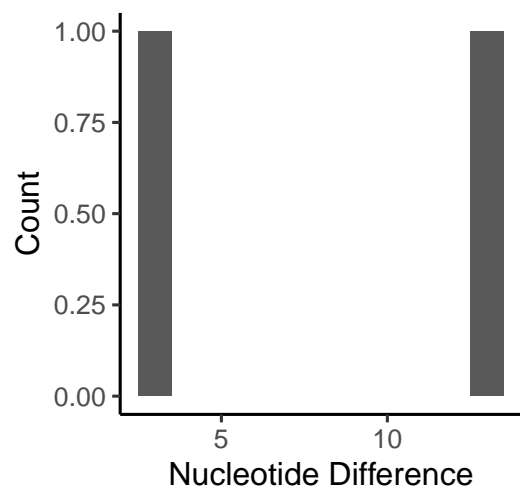
IGHV4-38-2*02

7 sequences assigned
No exact matches.



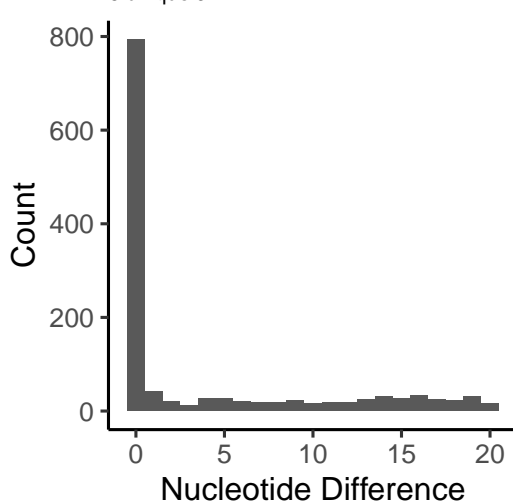
IGHV4-28*02_05

2 sequences assigned
No exact matches.



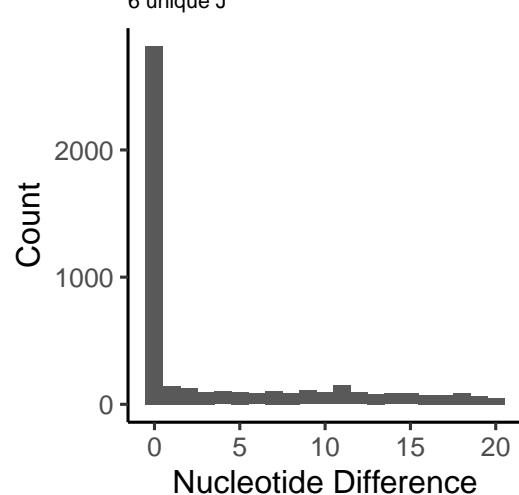
IGHV4-31*02

1495 sequences assigned
794 (53.1%) exact matches, in which:
788 unique CDR3
6 unique J



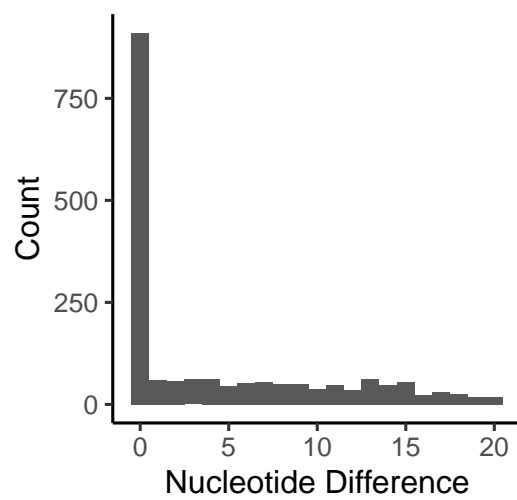
IGHV4-39*02_C258G

5435 sequences assigned
2817 (51.8%) exact matches, in which:
2739 unique CDR3
6 unique J



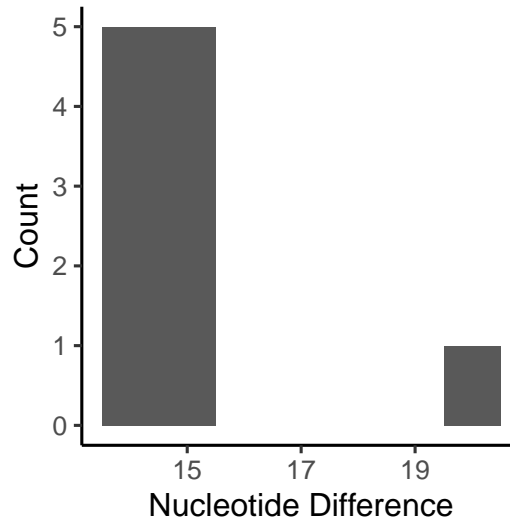
IGHV4–59*08

2013 sequences assigned
911 (45.3%) exact matches, in which:
889 unique CDR3
6 unique J



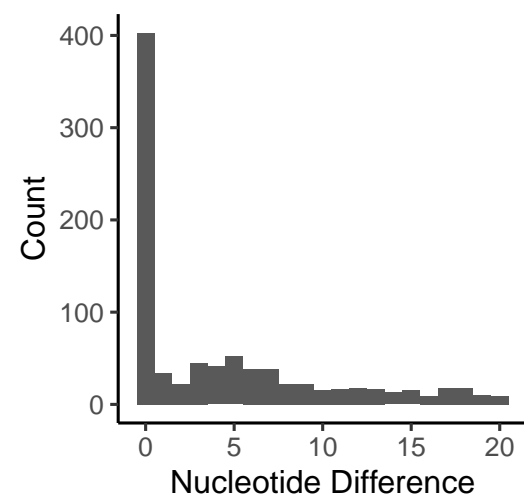
IGHV4/OR15–8*01

12 sequences assigned
No exact matches.



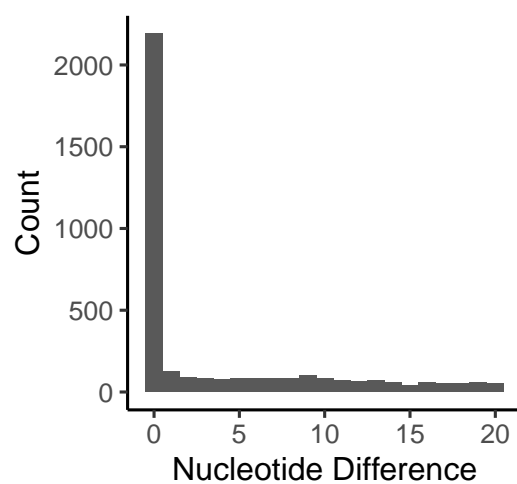
IGHV5–51*07_A128G

947 sequences assigned
403 (42.6%) exact matches, in which:
402 unique CDR3
6 unique J



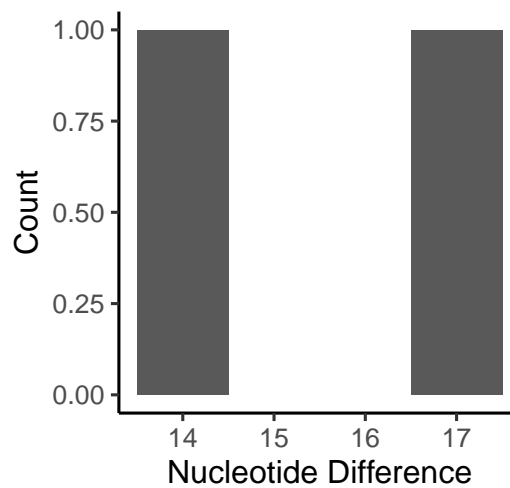
IGHV4–59*02_G88A

4206 sequences assigned
2191 (52.1%) exact matches, in which:
2138 unique CDR3
6 unique J



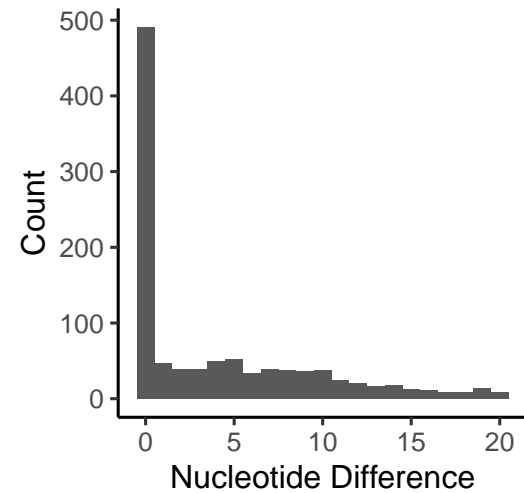
IGHV4/OR15–8*02

24 sequences assigned
No exact matches.



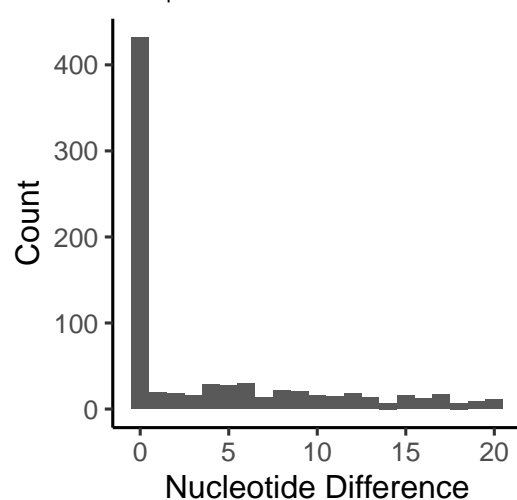
IGHV6–1*01_02

1084 sequences assigned
491 (45.3%) exact matches, in which:
489 unique CDR3
6 unique J



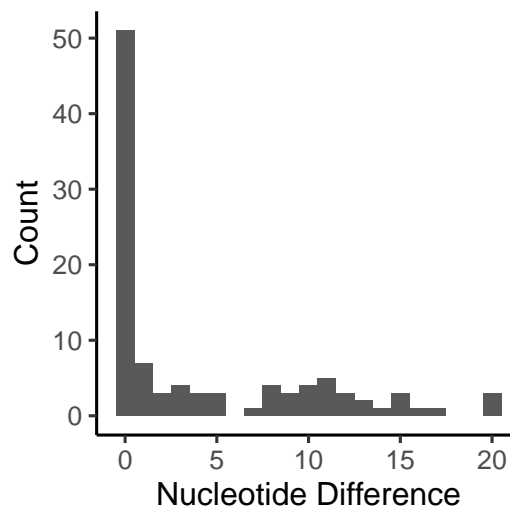
IGHV4–61*01

874 sequences assigned
432 (49.4%) exact matches, in which:
421 unique CDR3
6 unique J



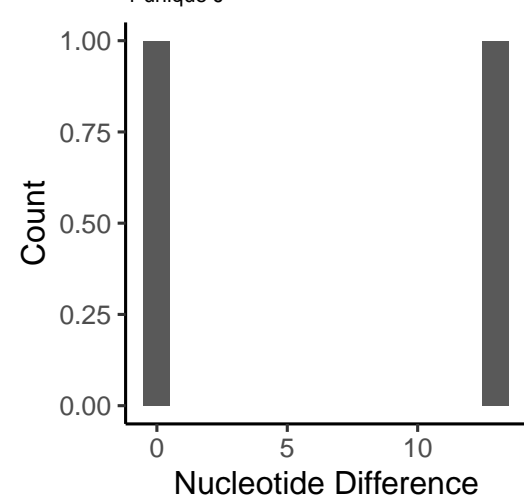
IGHV5–10–1*01_03

118 sequences assigned
51 (43.2%) exact matches, in which:
51 unique CDR3
5 unique J



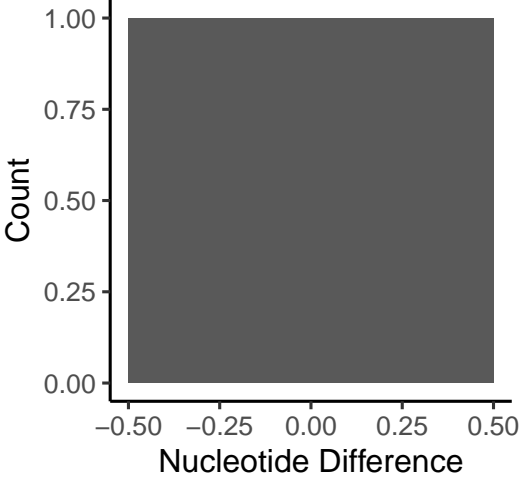
IGHV7–4–1*01

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



IGHV7-81*01

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





Warning – no inferred sequences found.