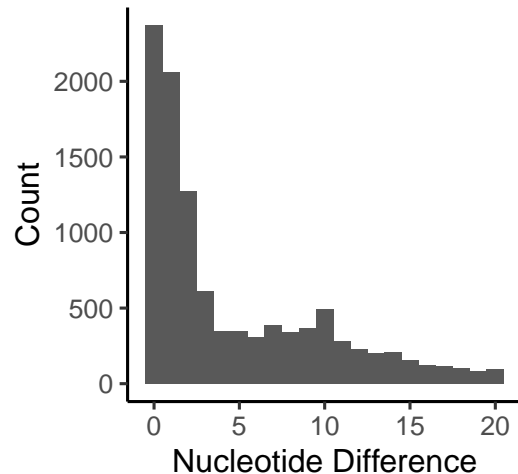


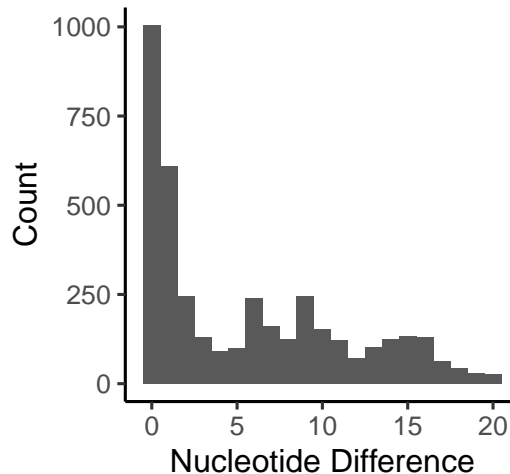
IGHV1-2*02

12599 sequences assigned
2370 (18.8%) exact matches, in which:
2092 unique CDR3
7 unique J



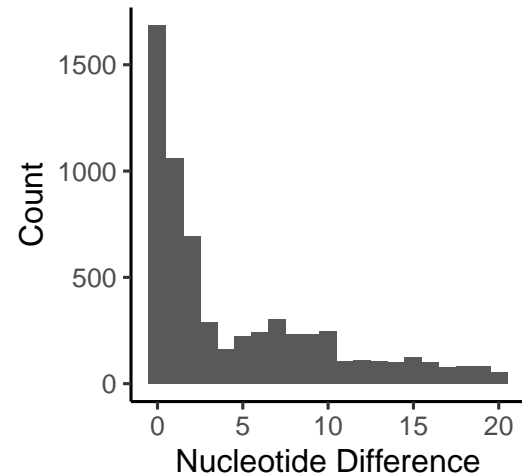
IGHV1-18*01

4969 sequences assigned
1004 (20.2%) exact matches, in which:
925 unique CDR3
7 unique J



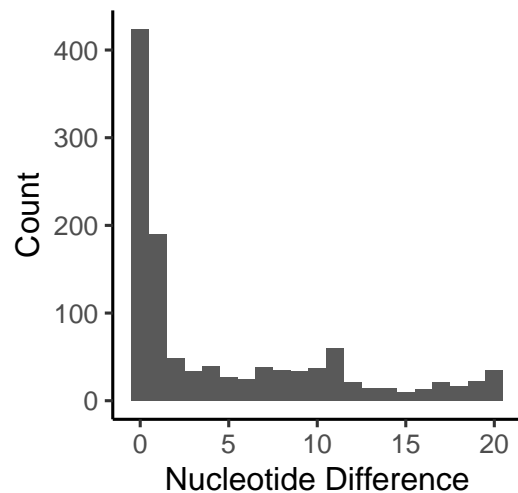
IGHV1-46*01

7045 sequences assigned
1685 (23.9%) exact matches, in which:
1554 unique CDR3
7 unique J



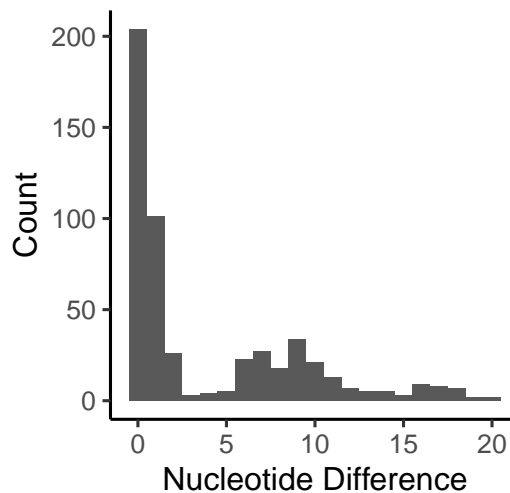
IGHV1-3*01_05

1365 sequences assigned
424 (31.1%) exact matches, in which:
376 unique CDR3
7 unique J



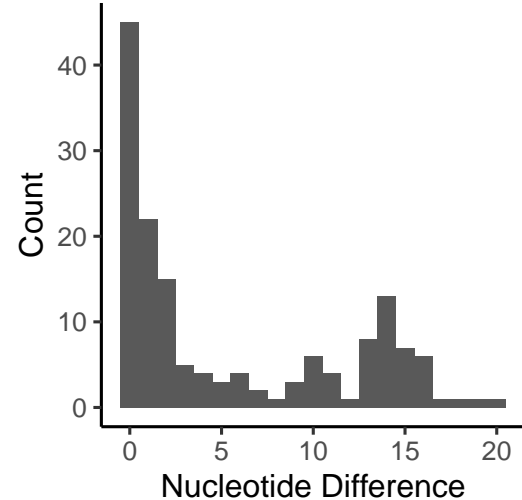
IGHV1-24*01

635 sequences assigned
204 (32.1%) exact matches, in which:
191 unique CDR3
7 unique J



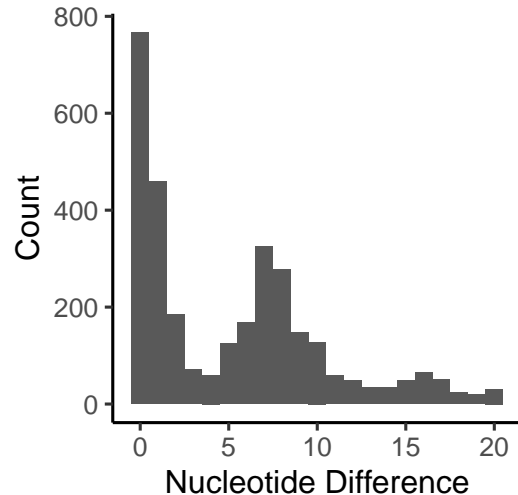
IGHV1-58*02

185 sequences assigned
45 (24.3%) exact matches, in which:
44 unique CDR3
7 unique J



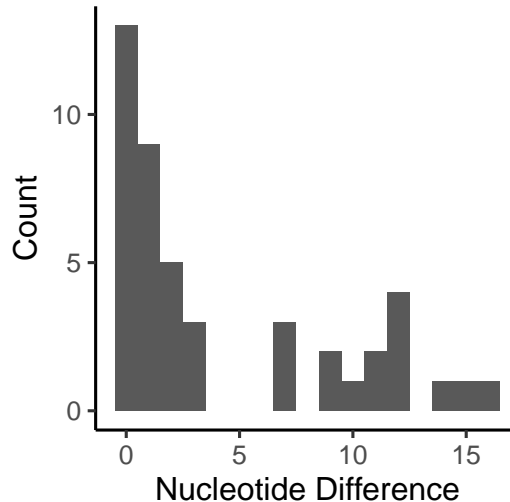
IGHV1-8*01

3465 sequences assigned
767 (22.1%) exact matches, in which:
708 unique CDR3
7 unique J



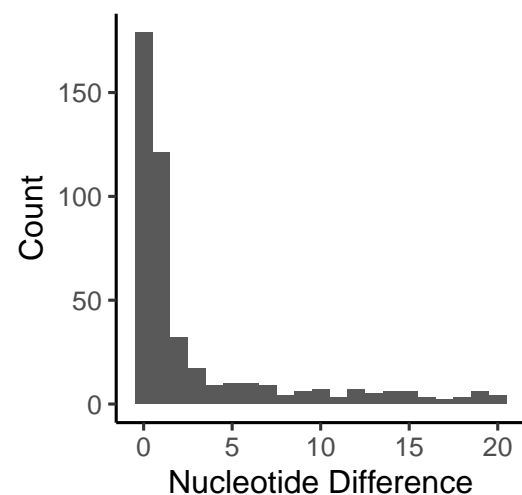
IGHV1-45*02

45 sequences assigned
13 (28.9%) exact matches, in which:
11 unique CDR3
2 unique J



IGHV1-58*01_03

463 sequences assigned
179 (38.7%) exact matches, in which:
169 unique CDR3
6 unique J



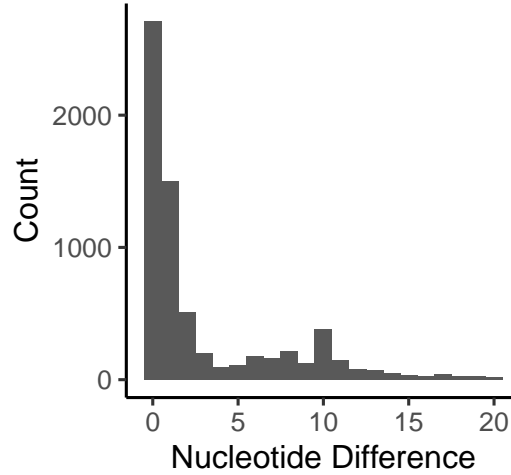
IGHV1-68*01

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



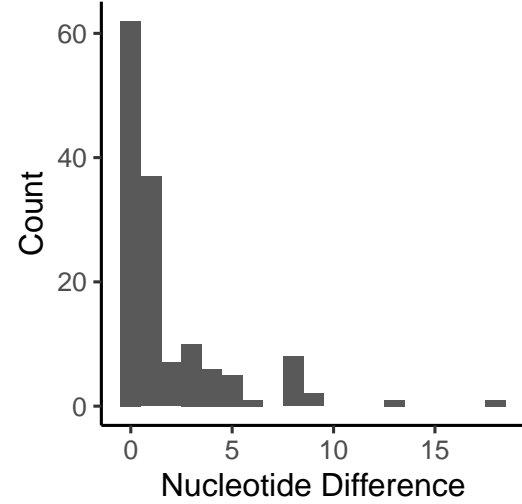
IGHV1-69*01_12_13

6865 sequences assigned
2709 (39.5%) exact matches, in which:
2537 unique CDR3
7 unique J



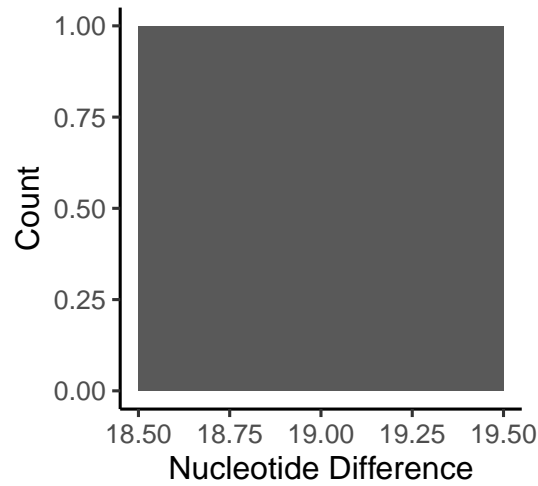
IGHV2-26*01

141 sequences assigned
62 (44%) exact matches, in which:
56 unique CDR3
6 unique J



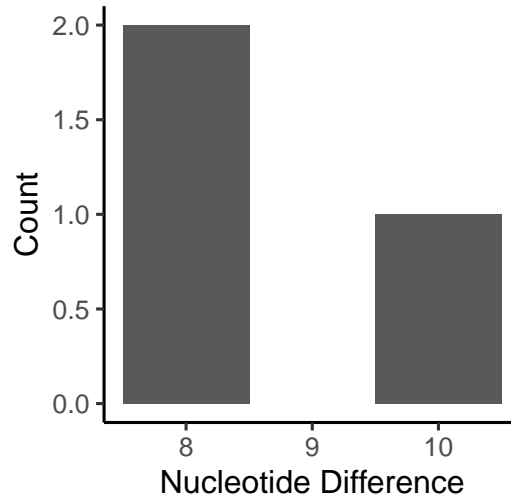
IGHV1-69-2*01

1 sequences assigned
No exact matches.



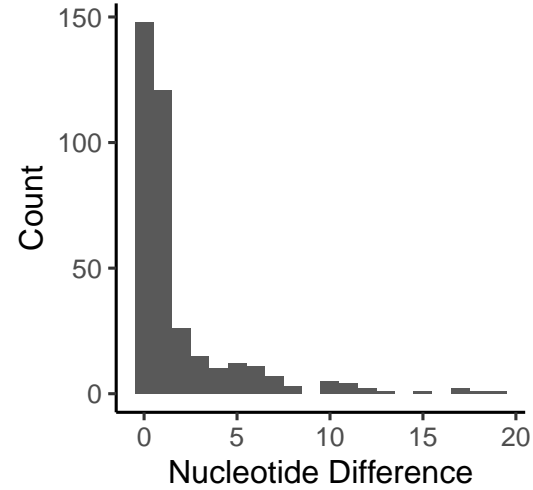
IGHV1-NL1*01

3 sequences assigned
No exact matches.



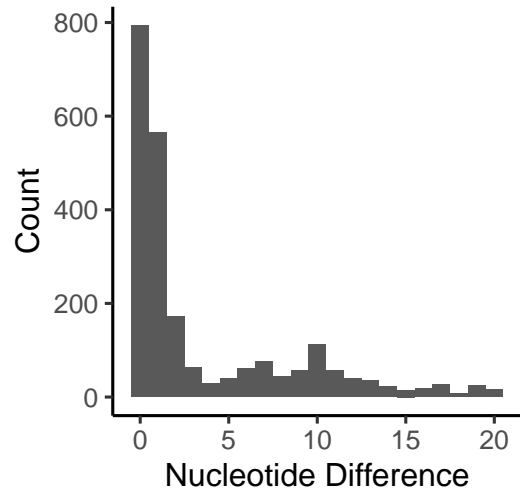
IGHV2-70*01

381 sequences assigned
148 (38.8%) exact matches, in which:
127 unique CDR3
6 unique J



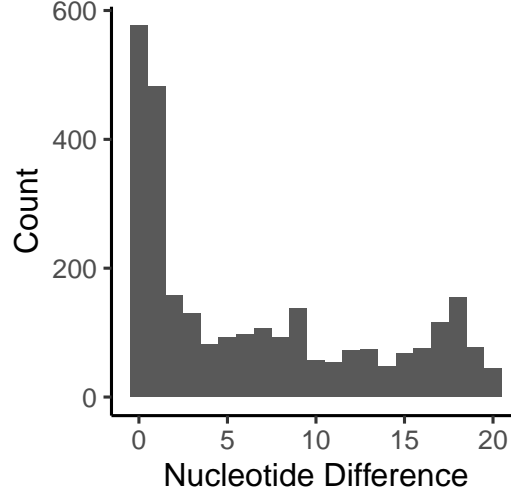
IGHV1-69*10

2445 sequences assigned
794 (32.5%) exact matches, in which:
741 unique CDR3
7 unique J



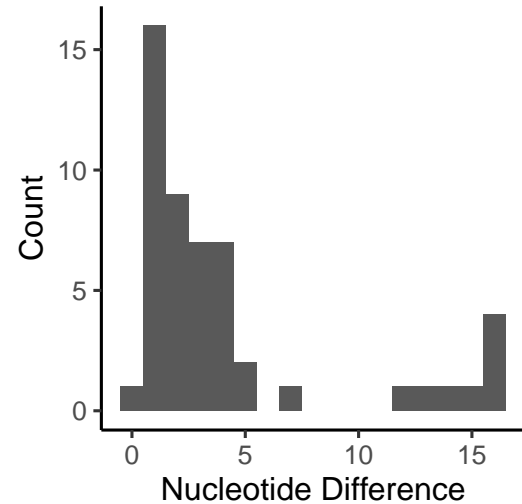
IGHV2-5*02

3105 sequences assigned
577 (18.6%) exact matches, in which:
517 unique CDR3
7 unique J



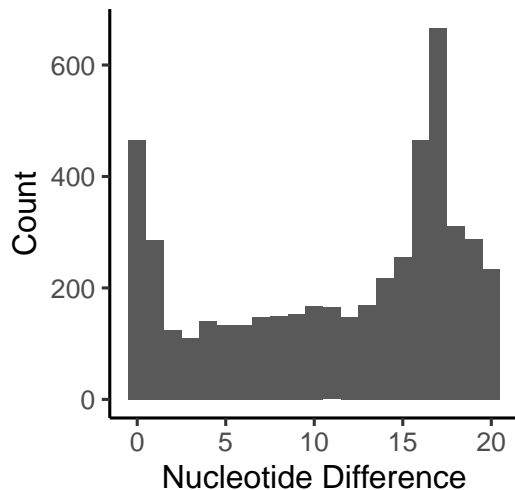
IGHV2-70*12

52 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



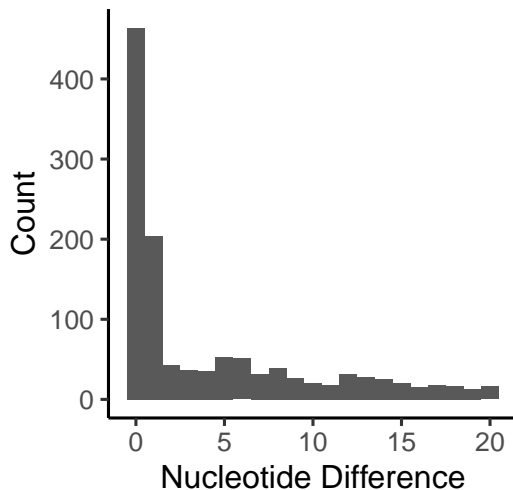
IGHV3-7*01

6402 sequences assigned
465 (7.3%) exact matches, in which:
354 unique CDR3
7 unique J



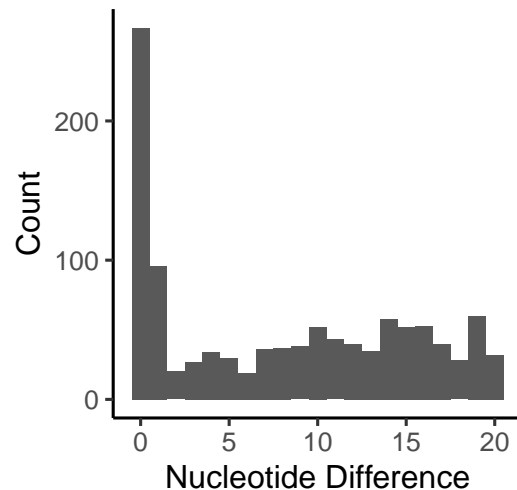
IGHV3-11*01

1397 sequences assigned
464 (33.2%) exact matches, in which:
343 unique CDR3
7 unique J



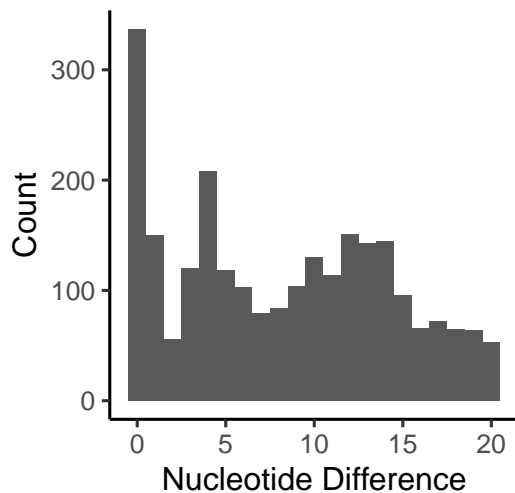
IGHV3-15*01_02

1793 sequences assigned
267 (14.9%) exact matches, in which:
195 unique CDR3
7 unique J



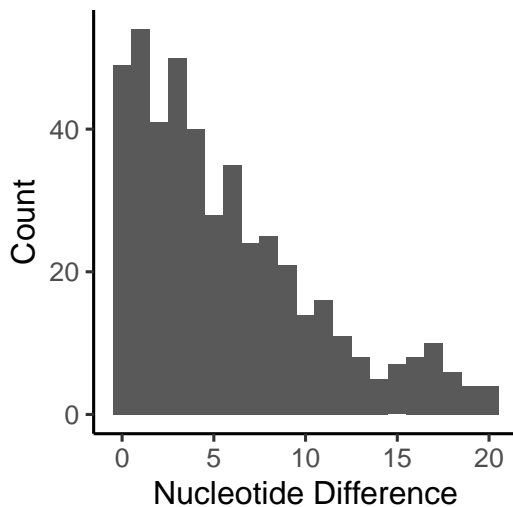
IGHV3-7*04

2982 sequences assigned
337 (11.3%) exact matches, in which:
247 unique CDR3
7 unique J



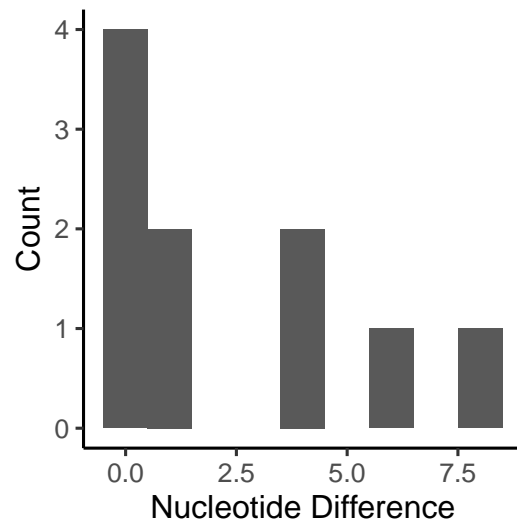
IGHV3-11*04

549 sequences assigned
49 (8.9%) exact matches, in which:
49 unique CDR3
5 unique J



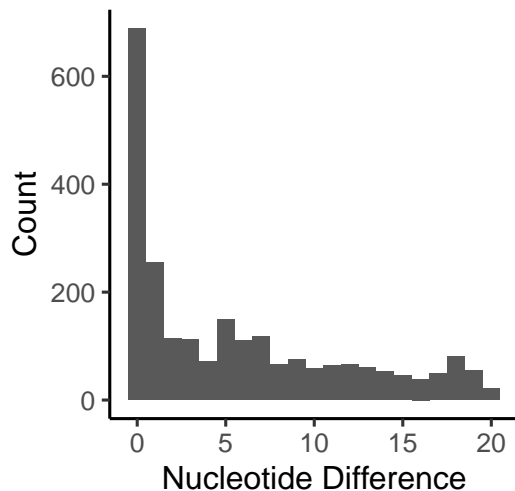
IGHV3-19*01

10 sequences assigned
4 (40%) exact matches, in which:
3 unique CDR3
2 unique J



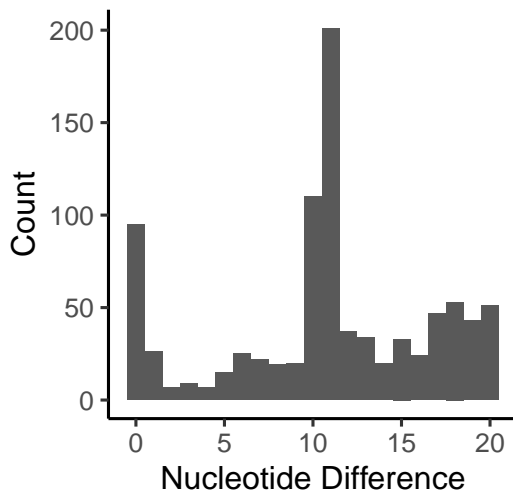
IGHV3-9*01

2568 sequences assigned
689 (26.8%) exact matches, in which:
483 unique CDR3
7 unique J



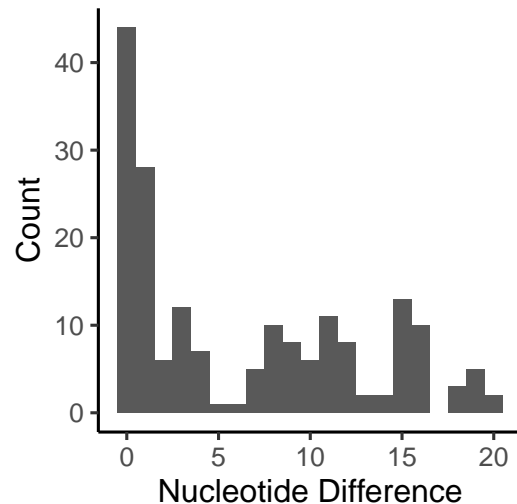
IGHV3-13*01

1311 sequences assigned
95 (7.2%) exact matches, in which:
66 unique CDR3
7 unique J



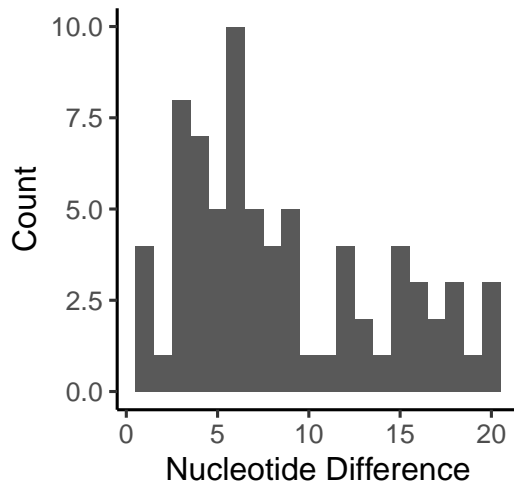
IGHV3-20*01_02

188 sequences assigned
44 (23.4%) exact matches, in which:
31 unique CDR3
5 unique J



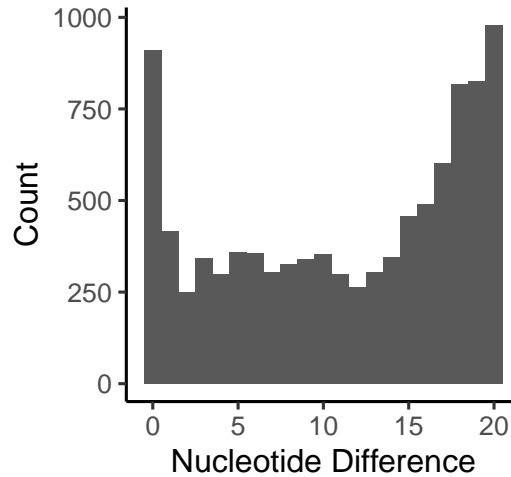
IGHV3-20*03_04

101 sequences assigned
No exact matches.



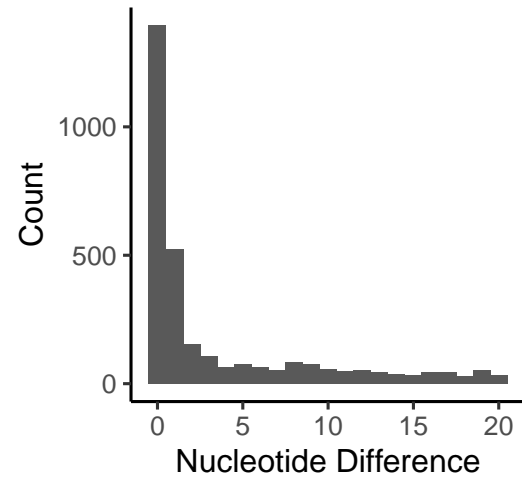
IGHV3-23*01_04

17256 sequences assigned
910 (5.3%) exact matches, in which:
620 unique CDR3
7 unique J



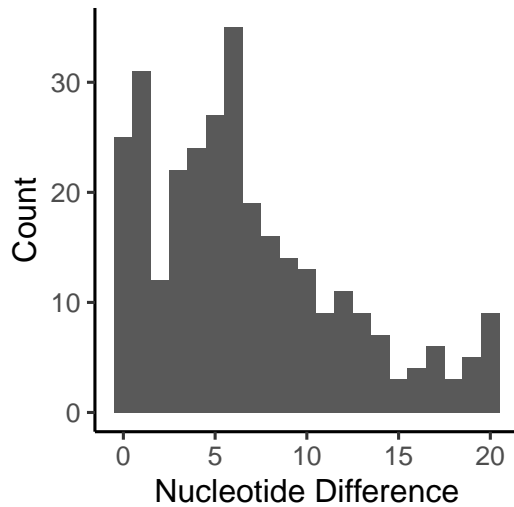
IGHV3-30*04

3536 sequences assigned
1395 (39.5%) exact matches, in which:
1067 unique CDR3
7 unique J



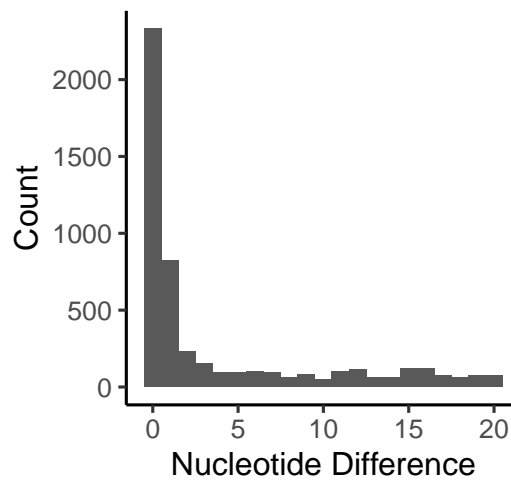
IGHV3-21*04

417 sequences assigned
25 (6%) exact matches, in which:
25 unique CDR3
6 unique J



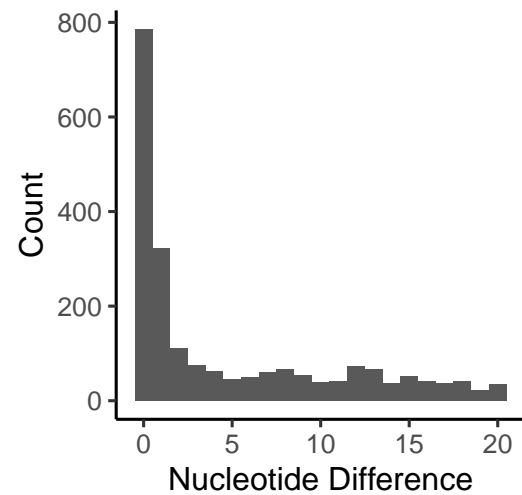
IGHV3-30-3*01

5372 sequences assigned
2331 (43.4%) exact matches, in which:
1768 unique CDR3
7 unique J



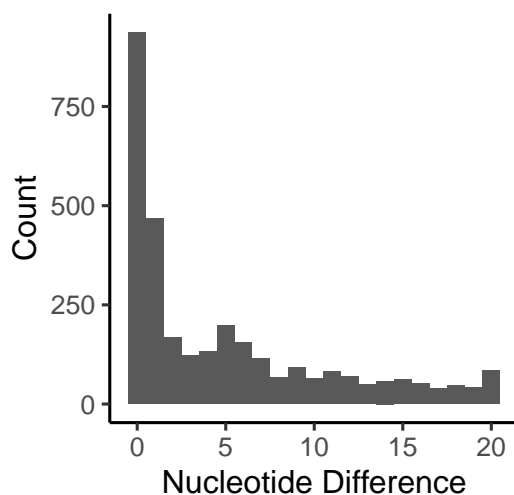
IGHV3-30*18

2535 sequences assigned
786 (31%) exact matches, in which:
581 unique CDR3
7 unique J



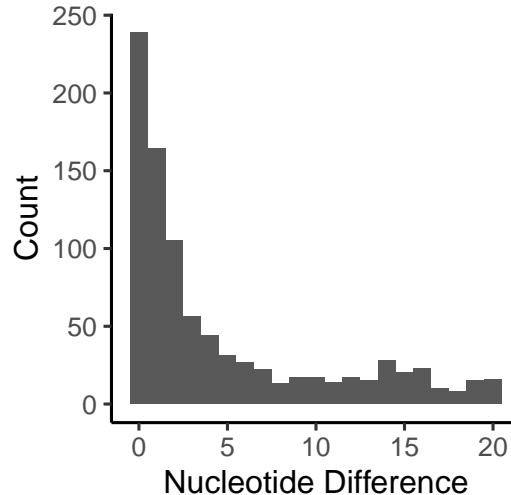
IGHV3-21*01_02

3958 sequences assigned
937 (23.7%) exact matches, in which:
698 unique CDR3
7 unique J



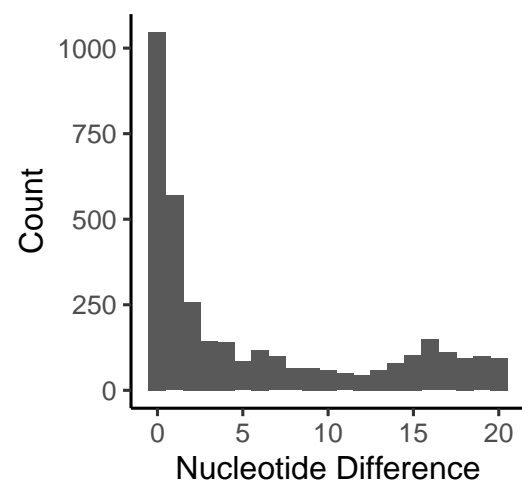
IGHV3-30*03

1037 sequences assigned
239 (23%) exact matches, in which:
229 unique CDR3
7 unique J



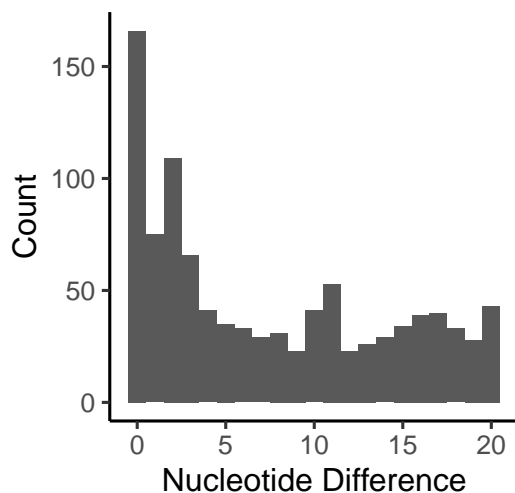
IGHV3-33*01

5411 sequences assigned
1047 (19.3%) exact matches, in which:
815 unique CDR3
7 unique J



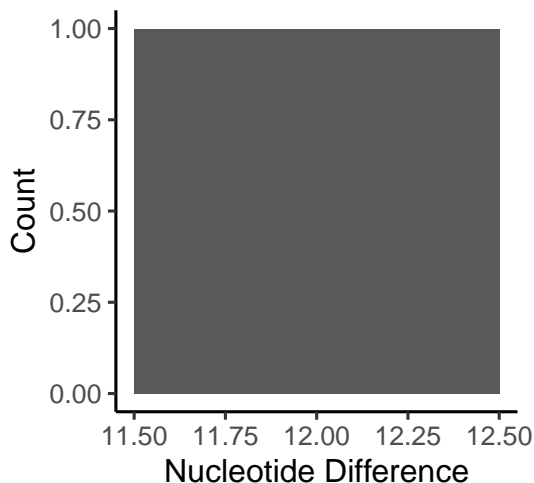
IGHV3–33*08

1290 sequences assigned
166 (12.9%) exact matches, in which:
156 unique CDR3
7 unique J



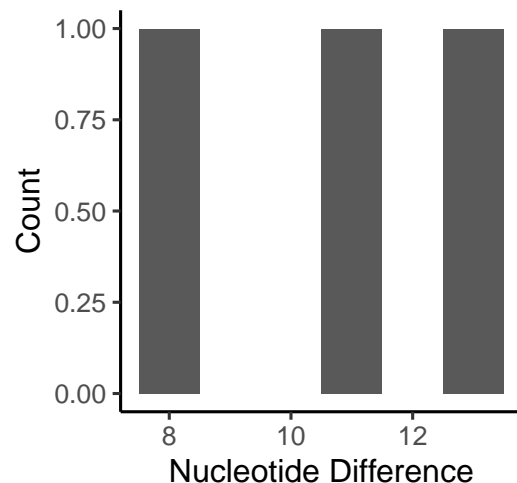
IGHV3–38*03

1 sequences assigned
No exact matches.



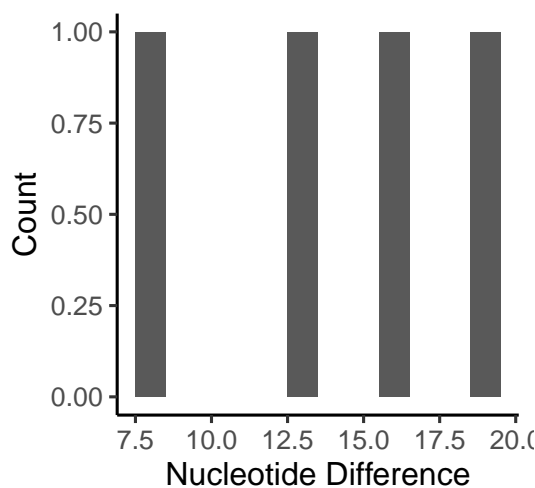
IGHV3–47*02

3 sequences assigned
No exact matches.



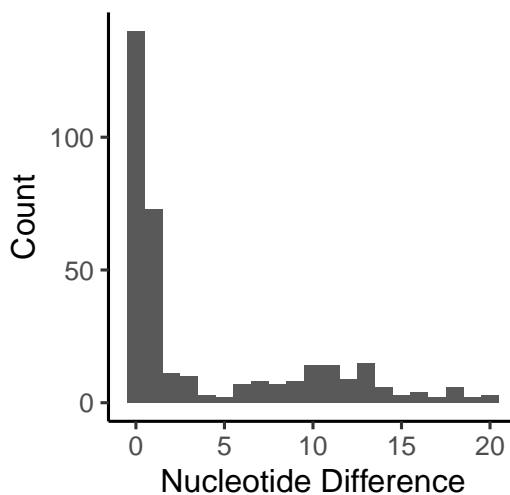
IGHV3–35*01

5 sequences assigned
No exact matches.



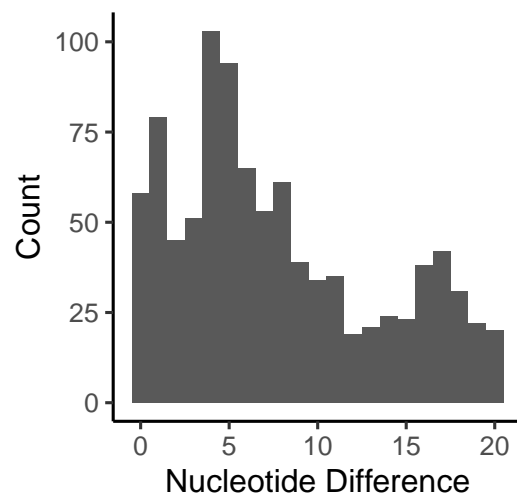
IGHV3–43*01

401 sequences assigned
140 (34.9%) exact matches, in which:
106 unique CDR3
7 unique J



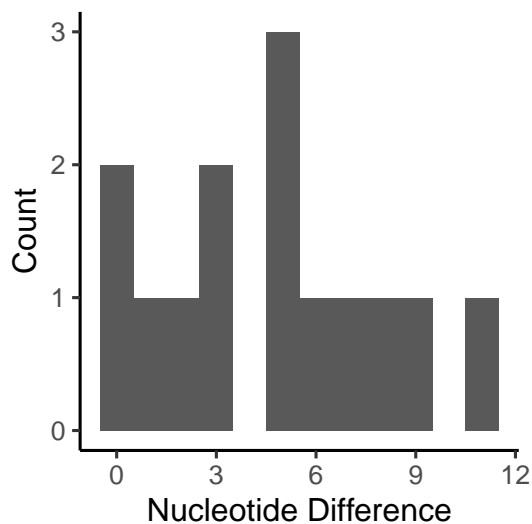
IGHV3–48*01

1113 sequences assigned
58 (5.2%) exact matches, in which:
57 unique CDR3
7 unique J



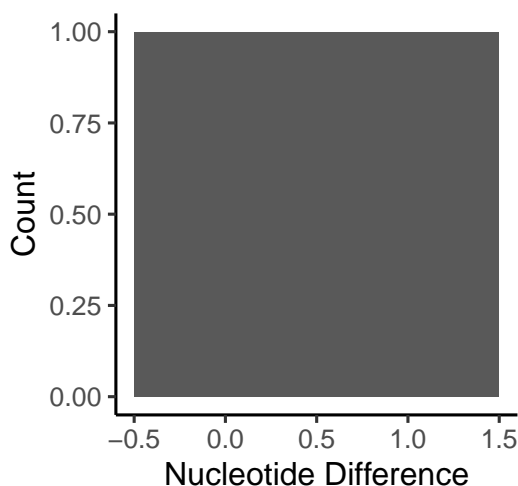
IGHV3–38–3*01

14 sequences assigned
2 (14.3%) exact matches, in which:
2 unique CDR3
2 unique J



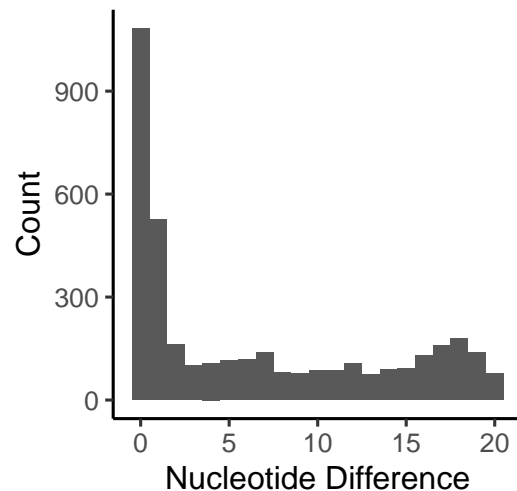
IGHV3–47*01

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



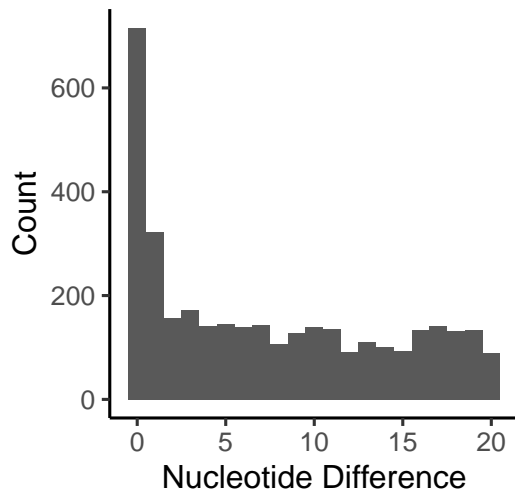
IGHV3–48*02

4458 sequences assigned
1083 (24.3%) exact matches, in which:
753 unique CDR3
7 unique J



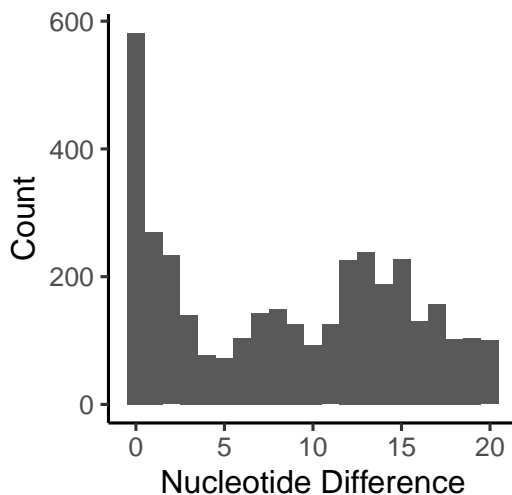
IGHV3-48*04

4520 sequences assigned
716 (15.8%) exact matches, in which:
526 unique CDR3
7 unique J



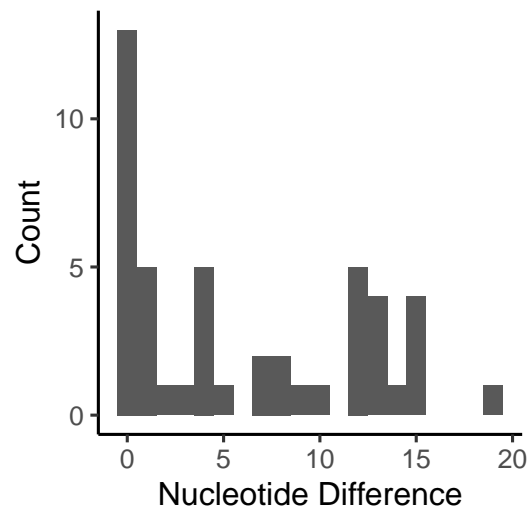
IGHV3-53*01_02

4533 sequences assigned
582 (12.8%) exact matches, in which:
454 unique CDR3
7 unique J



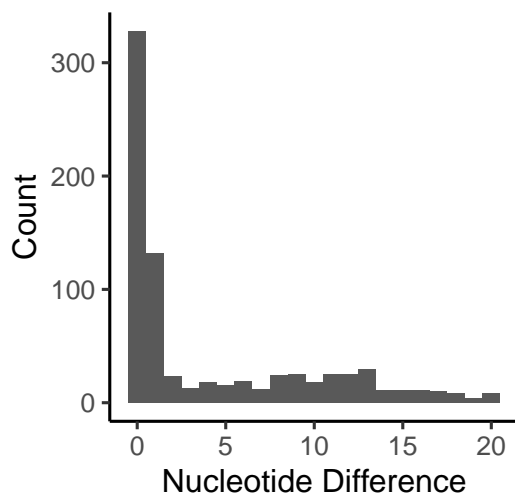
IGHV3-64*02_07

57 sequences assigned
13 (22.8%) exact matches, in which:
11 unique CDR3
5 unique J



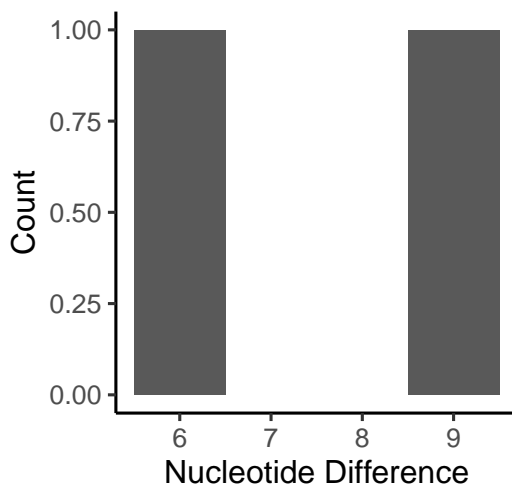
IGHV3-49*03_05

946 sequences assigned
328 (34.7%) exact matches, in which:
247 unique CDR3
7 unique J



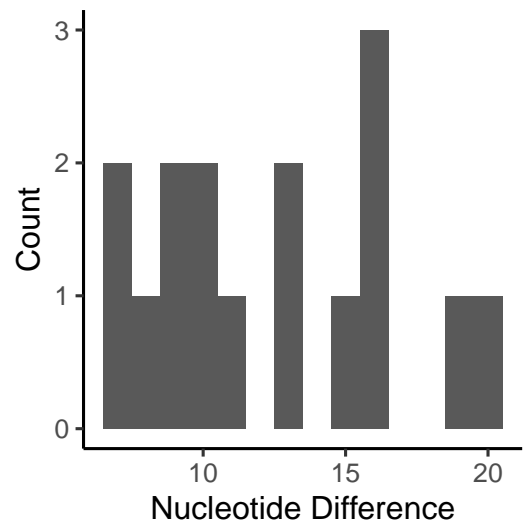
IGHV3-62*04

2 sequences assigned
No exact matches.



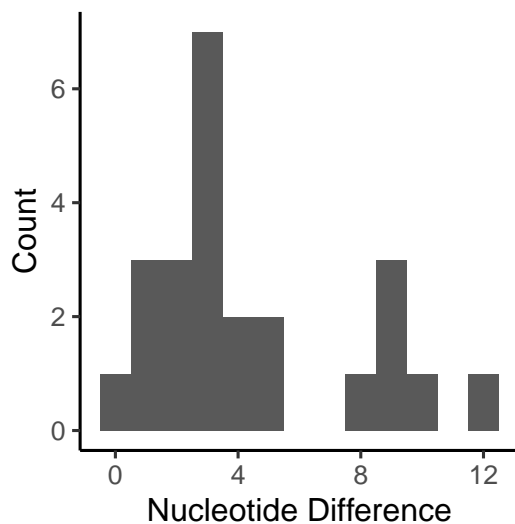
IGHV3-66*01

31 sequences assigned
No exact matches.



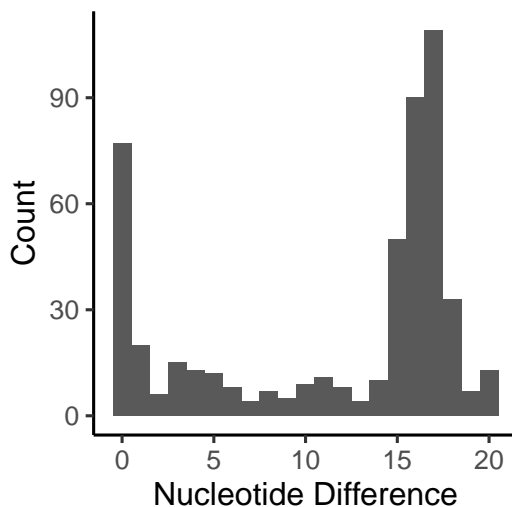
IGHV3-52*01_03

24 sequences assigned
1 (4.2%) exact matches, in which:
1 unique CDR3
1 unique J



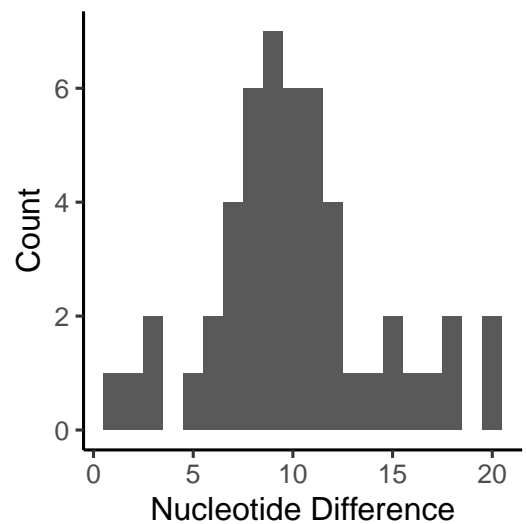
IGHV3-64*01

563 sequences assigned
77 (13.7%) exact matches, in which:
56 unique CDR3
5 unique J



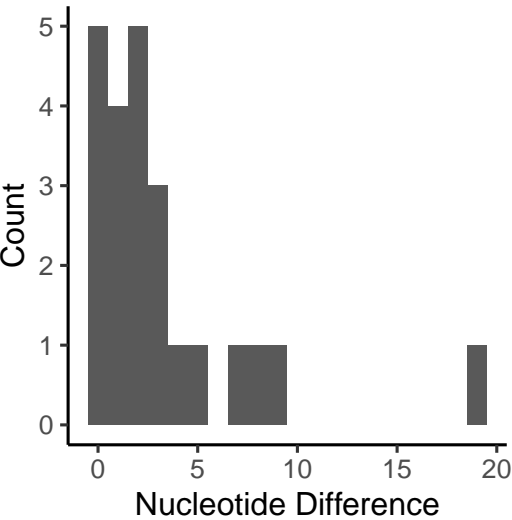
IGHV3-66*02

64 sequences assigned
No exact matches.



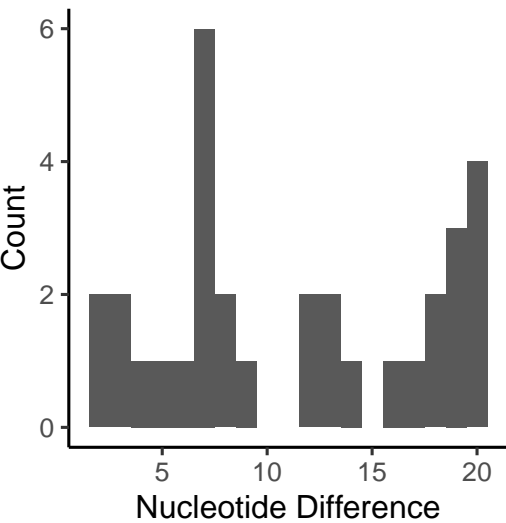
IGHV3-66*03

24 sequences assigned
5 (20.8%) exact matches, in which:
5 unique CDR3
4 unique J



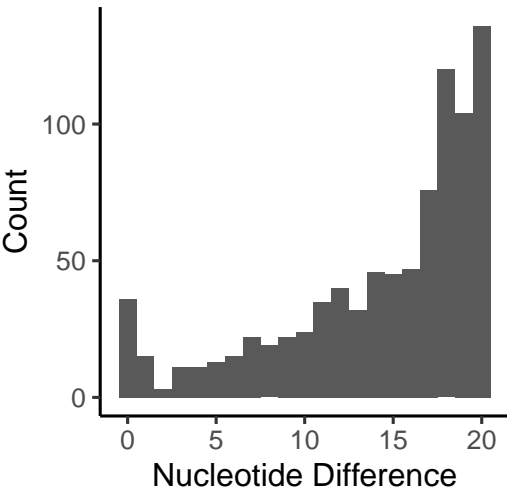
IGHV3-69-1*02

50 sequences assigned
No exact matches.



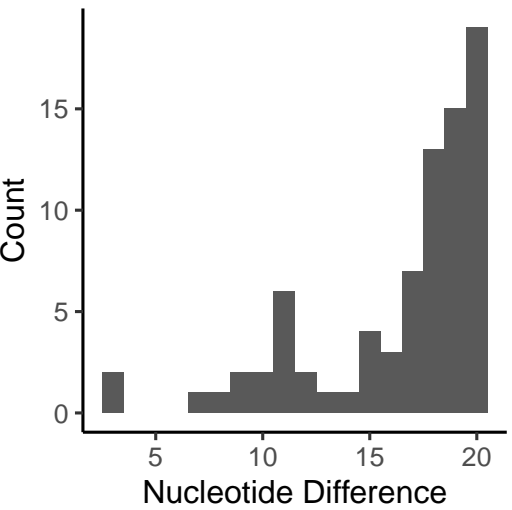
IGHV3-72*01

2201 sequences assigned
36 (1.6%) exact matches, in which:
29 unique CDR3
5 unique J



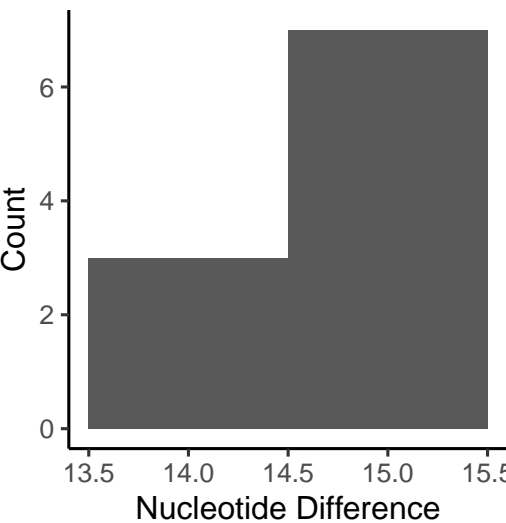
IGHV3-66*04

148 sequences assigned
No exact matches.



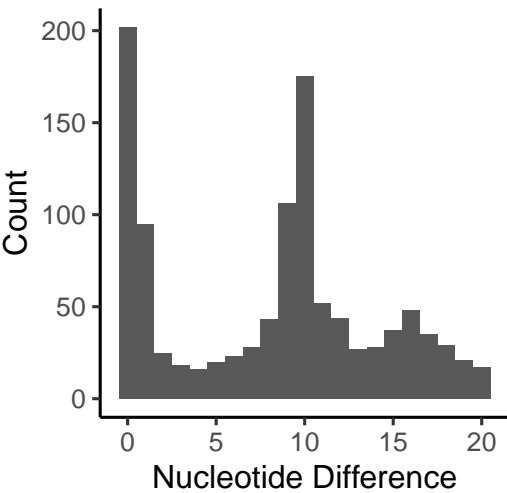
IGHV3-71*02

10 sequences assigned
No exact matches.



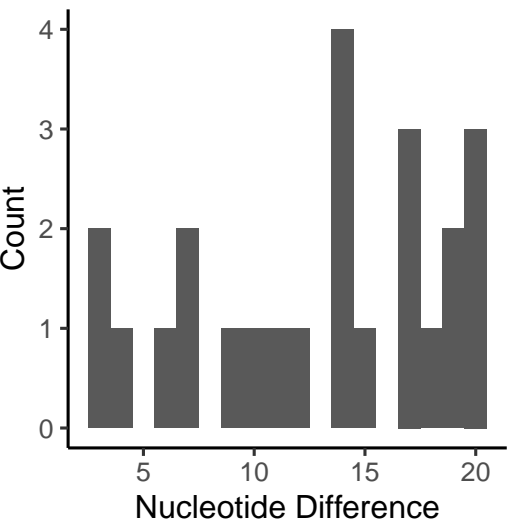
IGHV3-73*01_02

1273 sequences assigned
202 (15.9%) exact matches, in which:
162 unique CDR3
7 unique J



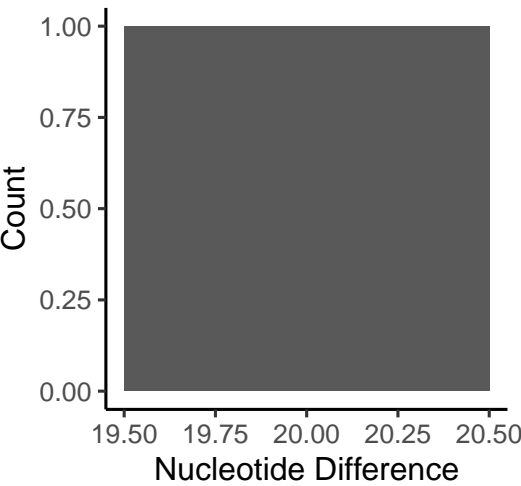
IGHV3-69-1*01

44 sequences assigned
No exact matches.



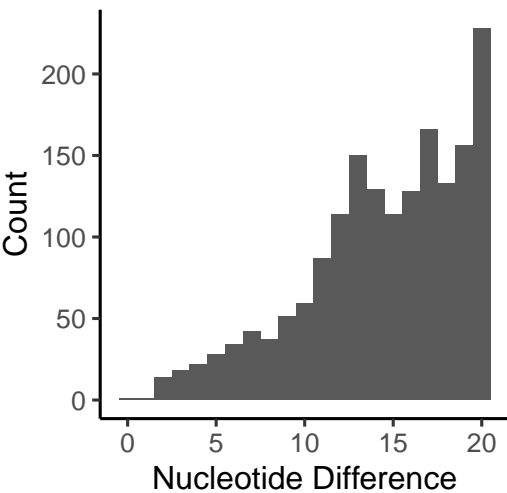
IGHV3-71*01_04

6 sequences assigned
No exact matches.



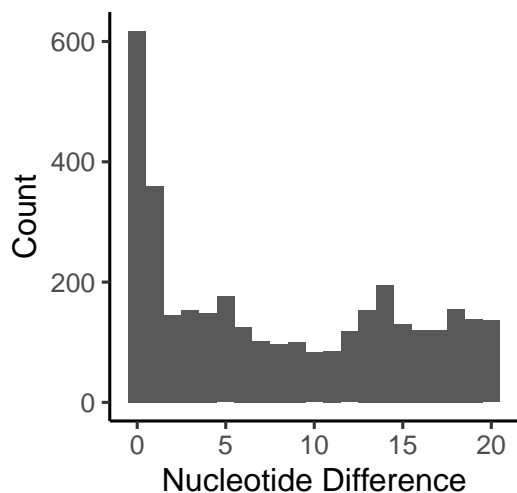
IGHV3-74*03

4657 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



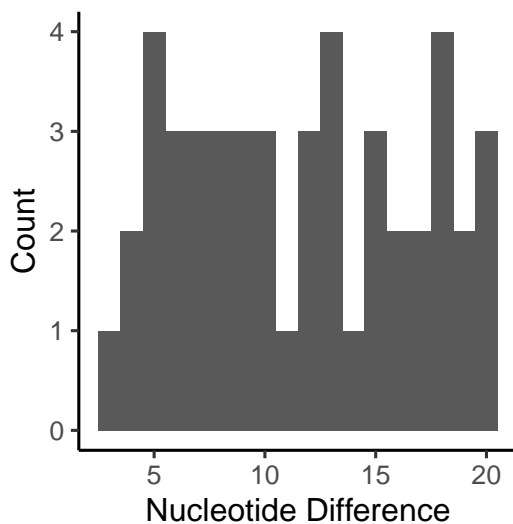
IGHV3-74*01_02

4497 sequences assigned
618 (13.7%) exact matches, in which:
438 unique CDR3
7 unique J



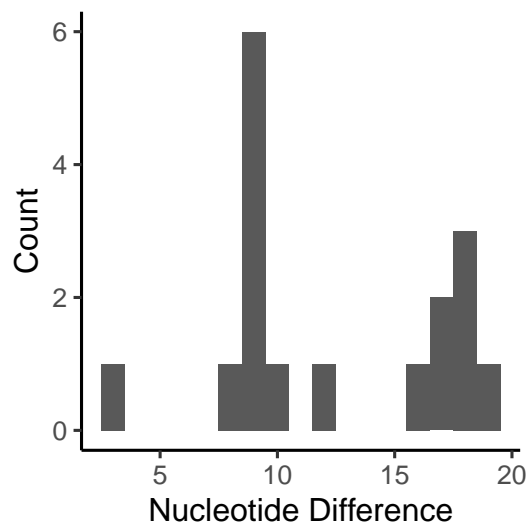
IGHV3-NL1*01

70 sequences assigned
No exact matches.



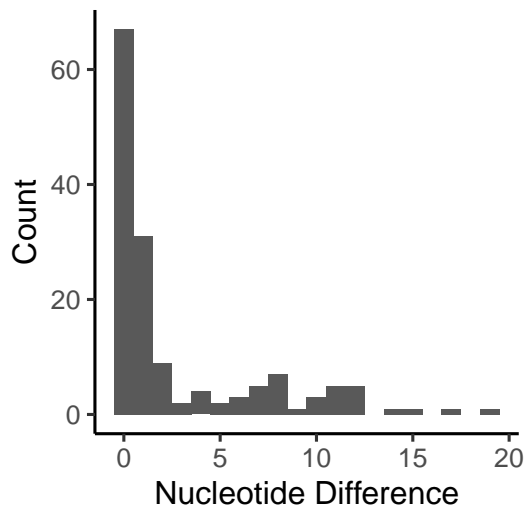
IGHV4-28*02_05

17 sequences assigned
No exact matches.



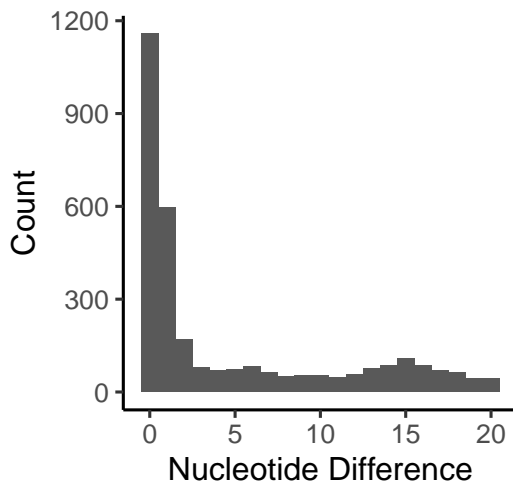
IGHV3-43D*03

149 sequences assigned
67 (45%) exact matches, in which:
52 unique CDR3
4 unique J



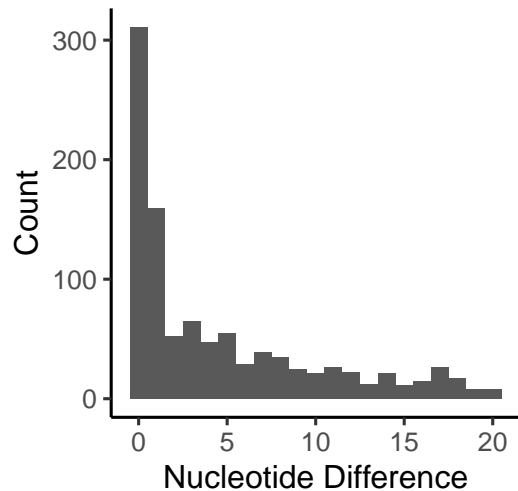
IGHV4-4*02_03

3641 sequences assigned
1158 (31.8%) exact matches, in which:
1006 unique CDR3
7 unique J



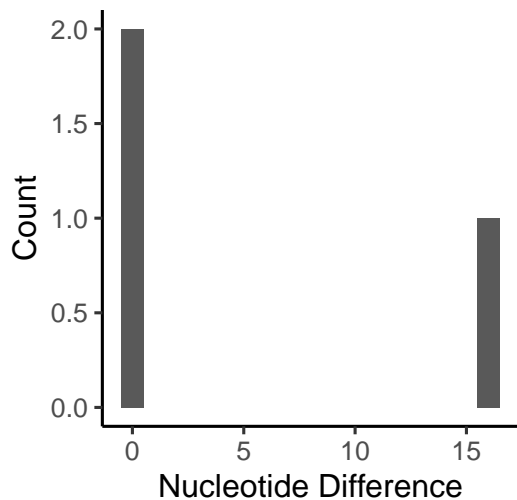
IGHV4-30-4*01

1230 sequences assigned
311 (25.3%) exact matches, in which:
284 unique CDR3
7 unique J



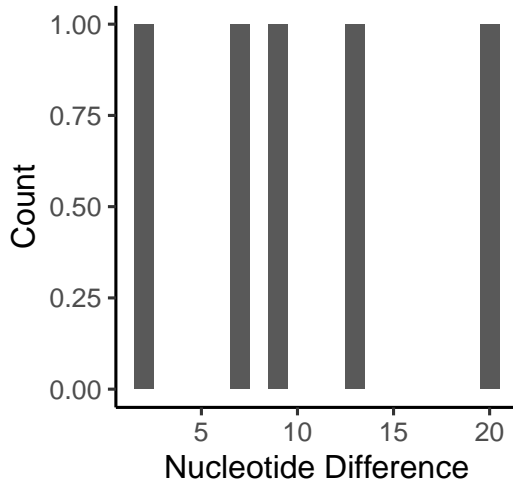
IGHV3-64D*06

56 sequences assigned
2 (3.6%) exact matches, in which:
2 unique CDR3
1 unique J



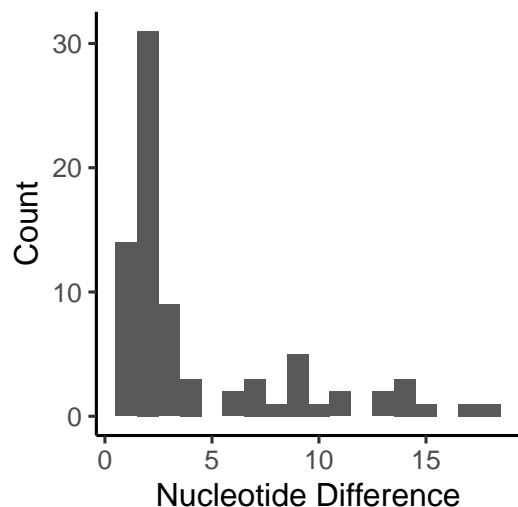
IGHV4-28*03

5 sequences assigned
No exact matches.



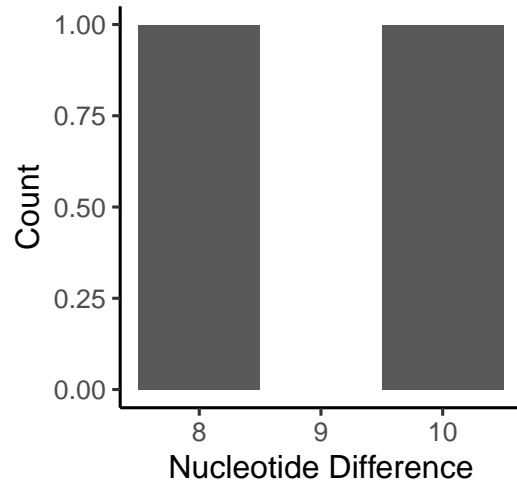
IGHV4-30-2*03

223 sequences assigned
No exact matches.



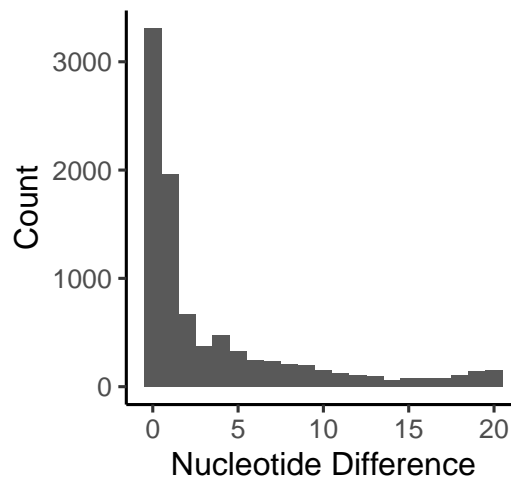
IGHV4-30-2*04

3 sequences assigned
No exact matches.



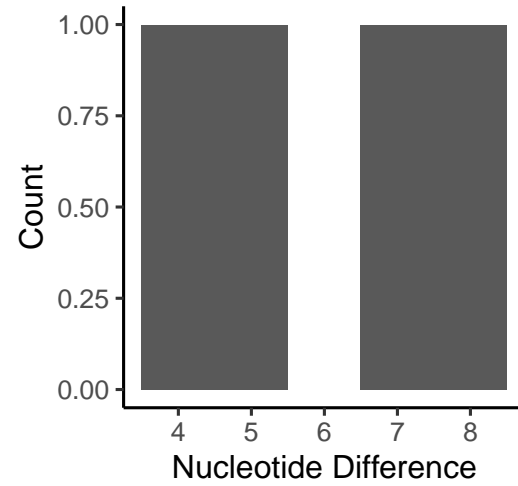
IGHV4-34*01_02

9908 sequences assigned
3308 (33.4%) exact matches, in which:
2859 unique CDR3
7 unique J



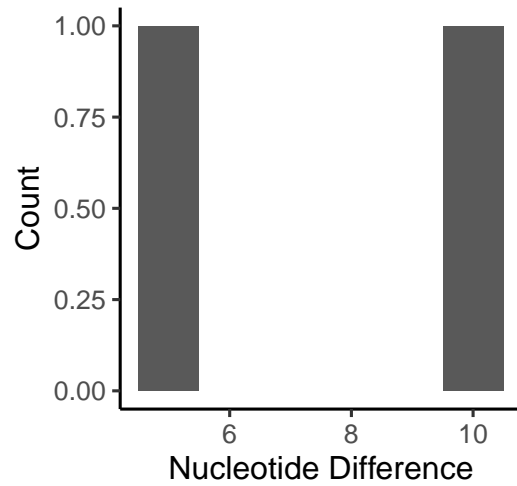
IGHV4-55*09

7 sequences assigned
No exact matches.



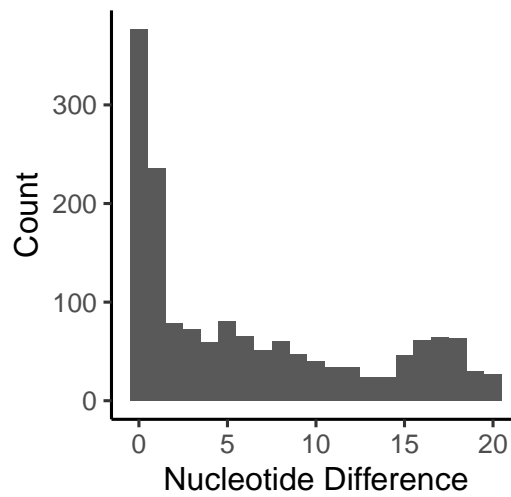
IGHV4-30-2*05

2 sequences assigned
No exact matches.



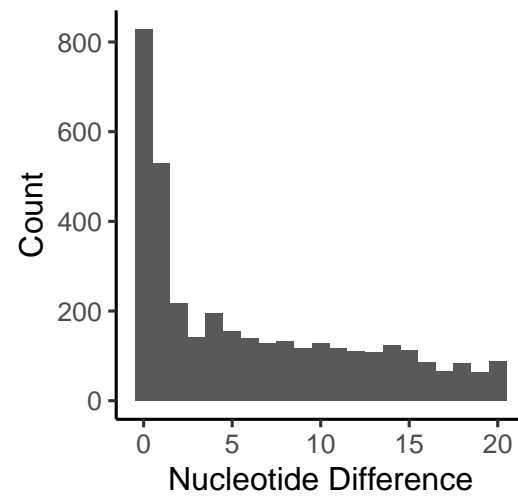
IGHV4-38-2*02

1980 sequences assigned
377 (19%) exact matches, in which:
347 unique CDR3
7 unique J



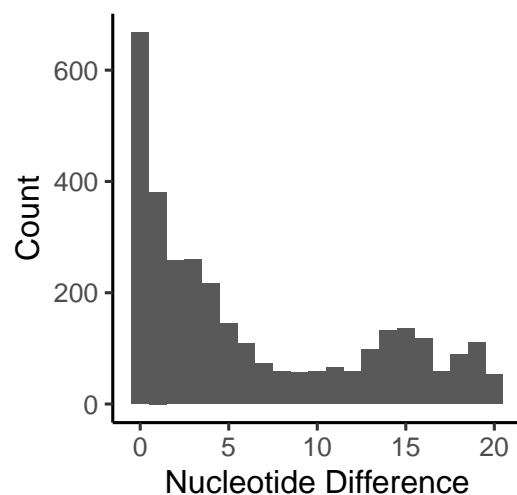
IGHV4-59*08

4560 sequences assigned
829 (18.2%) exact matches, in which:
746 unique CDR3
7 unique J



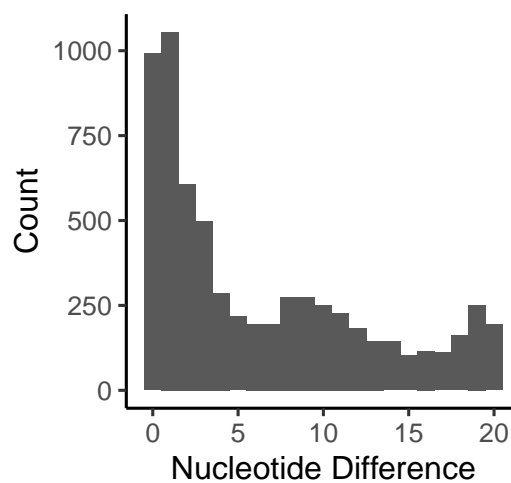
IGHV4-31*02

3430 sequences assigned
668 (19.5%) exact matches, in which:
621 unique CDR3
7 unique J



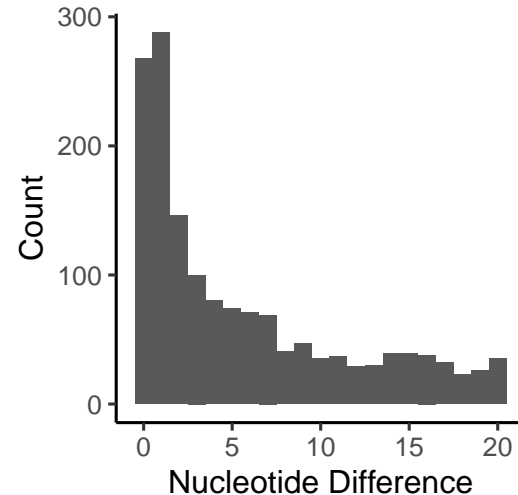
IGHV4-39*07

7948 sequences assigned
992 (12.5%) exact matches, in which:
894 unique CDR3
7 unique J



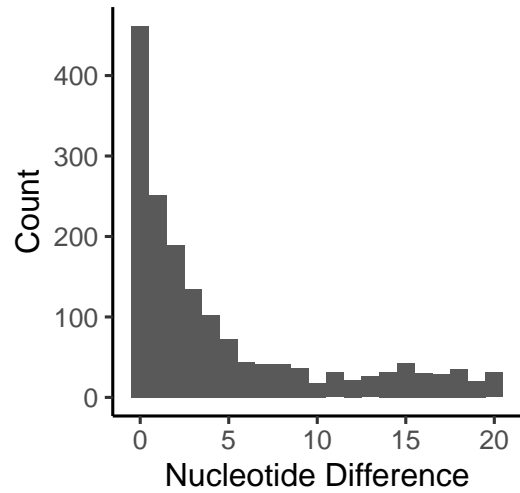
IGHV4-59*12

1917 sequences assigned
268 (14%) exact matches, in which:
266 unique CDR3
7 unique J



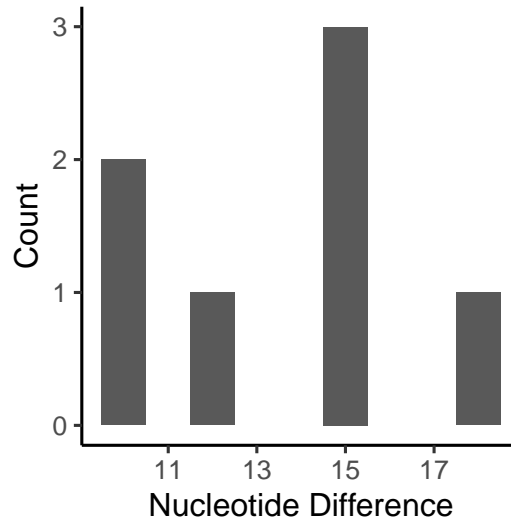
IGHV4–61*01

1992 sequences assigned
462 (23.2%) exact matches, in which:
434 unique CDR3
7 unique J



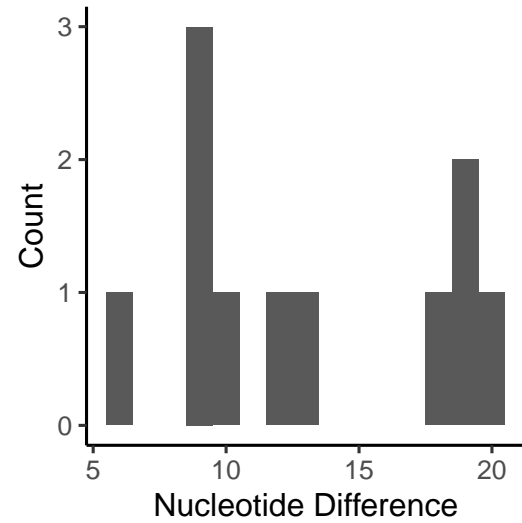
IGHV1/OR15–3*02

7 sequences assigned
No exact matches.



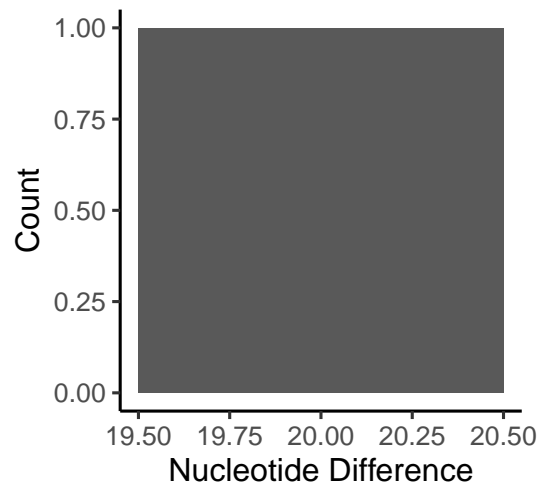
IGHV4/OR15–8*02

18 sequences assigned
No exact matches.



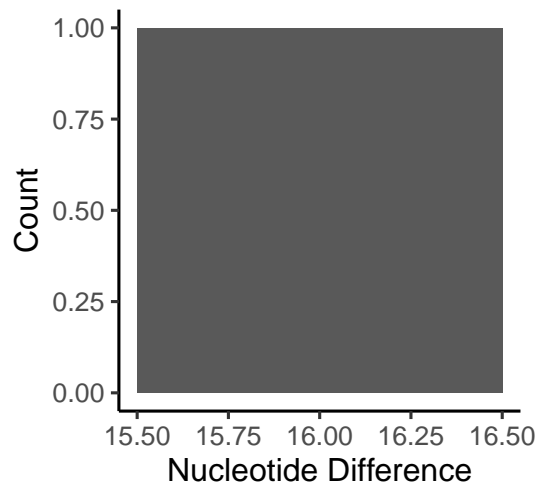
IGHV1/OR15–1*04

1 sequences assigned
No exact matches.



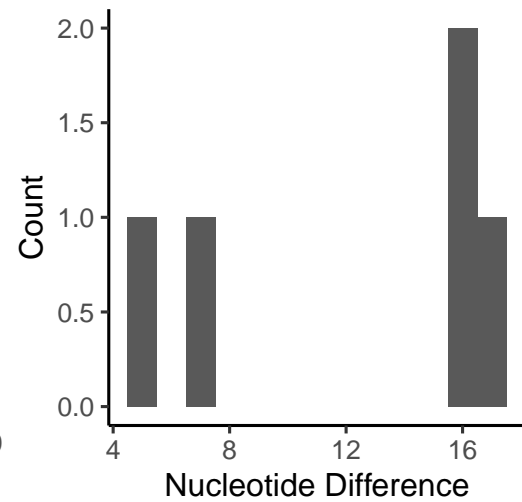
IGHV1/OR15–4*01

1 sequences assigned
No exact matches.



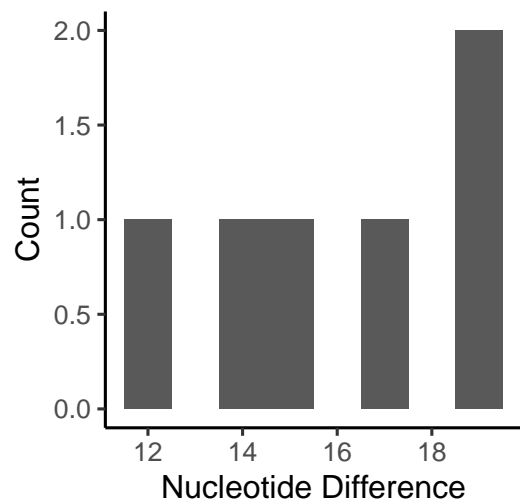
IGHV5–10–1*01_03

5 sequences assigned
No exact matches.



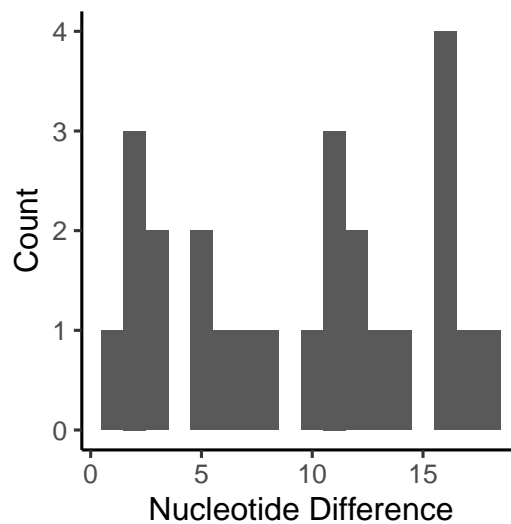
IGHV1/OR15–2*02_03

18 sequences assigned
No exact matches.



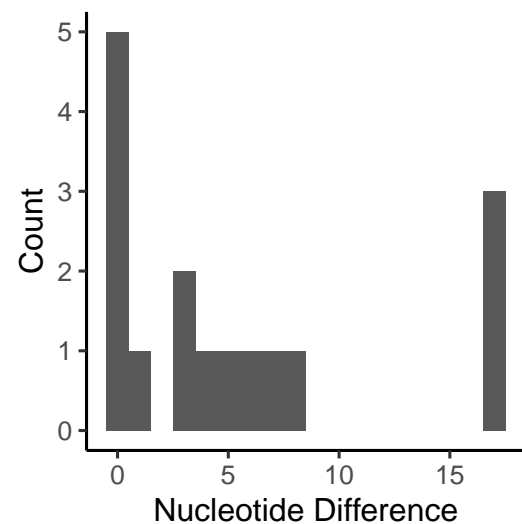
IGHV4/OR15–8*01

37 sequences assigned
No exact matches.



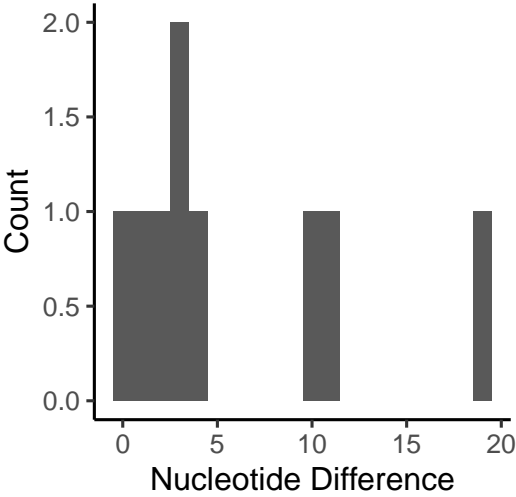
IGHV5–51*04

18 sequences assigned
5 (27.8%) exact matches, in which:
5 unique CDR3
3 unique J



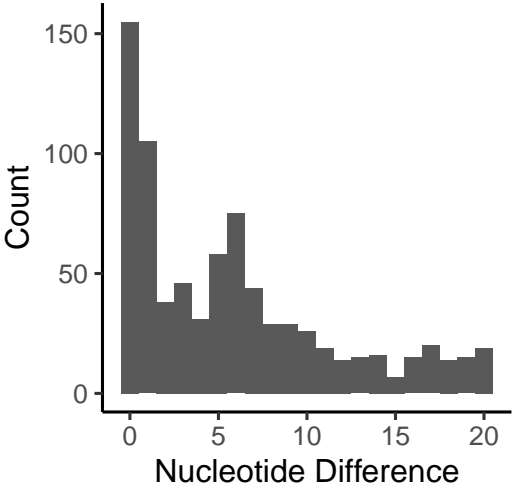
IGHV5-51*06

9 sequences assigned
1 (11.1%) exact matches, in which:
1 unique CDR3
1 unique J



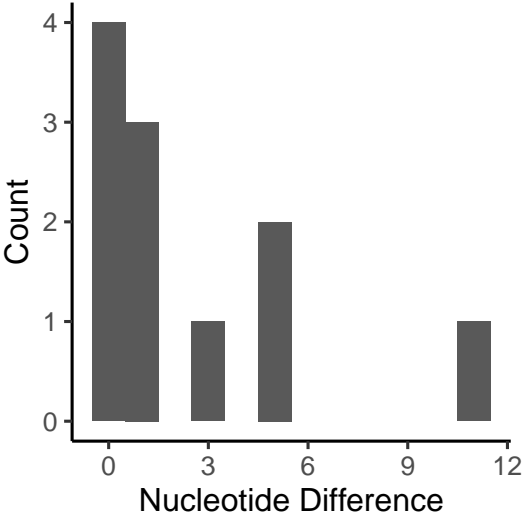
IGHV6-1*01_02

854 sequences assigned
155 (18.1%) exact matches, in which:
144 unique CDR3
7 unique J



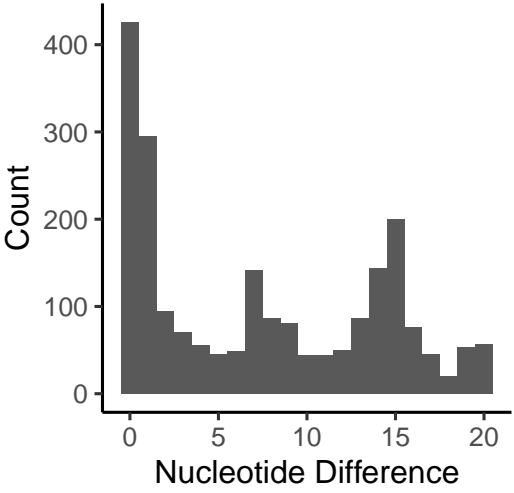
IGHV5-51*07

11 sequences assigned
4 (36.4%) exact matches, in which:
3 unique CDR3
2 unique J



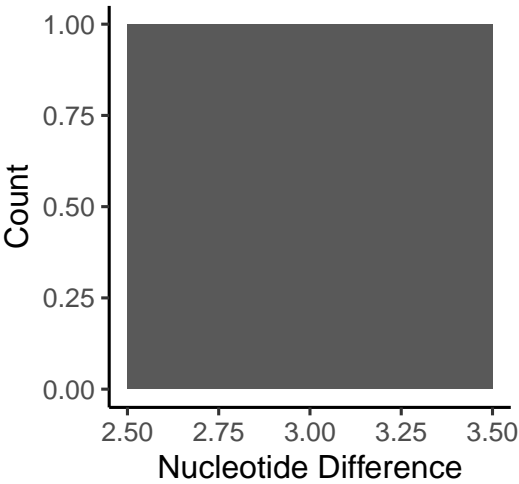
IGHV7-4-1*02

2498 sequences assigned
426 (17.1%) exact matches, in which:
388 unique CDR3
7 unique J

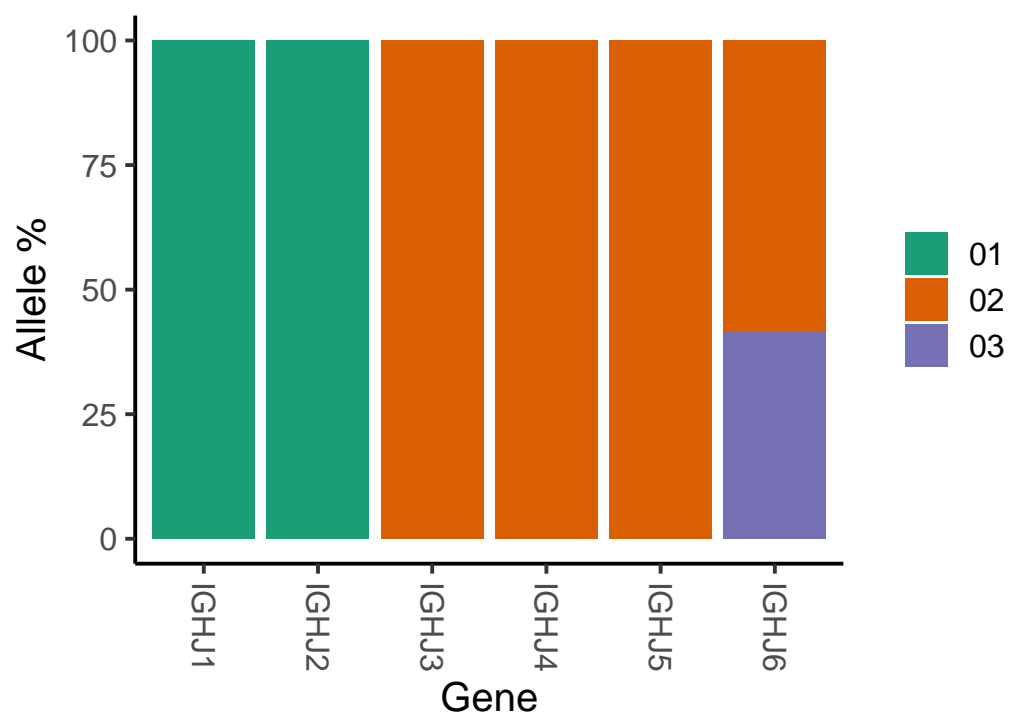


IGHV5-78*01

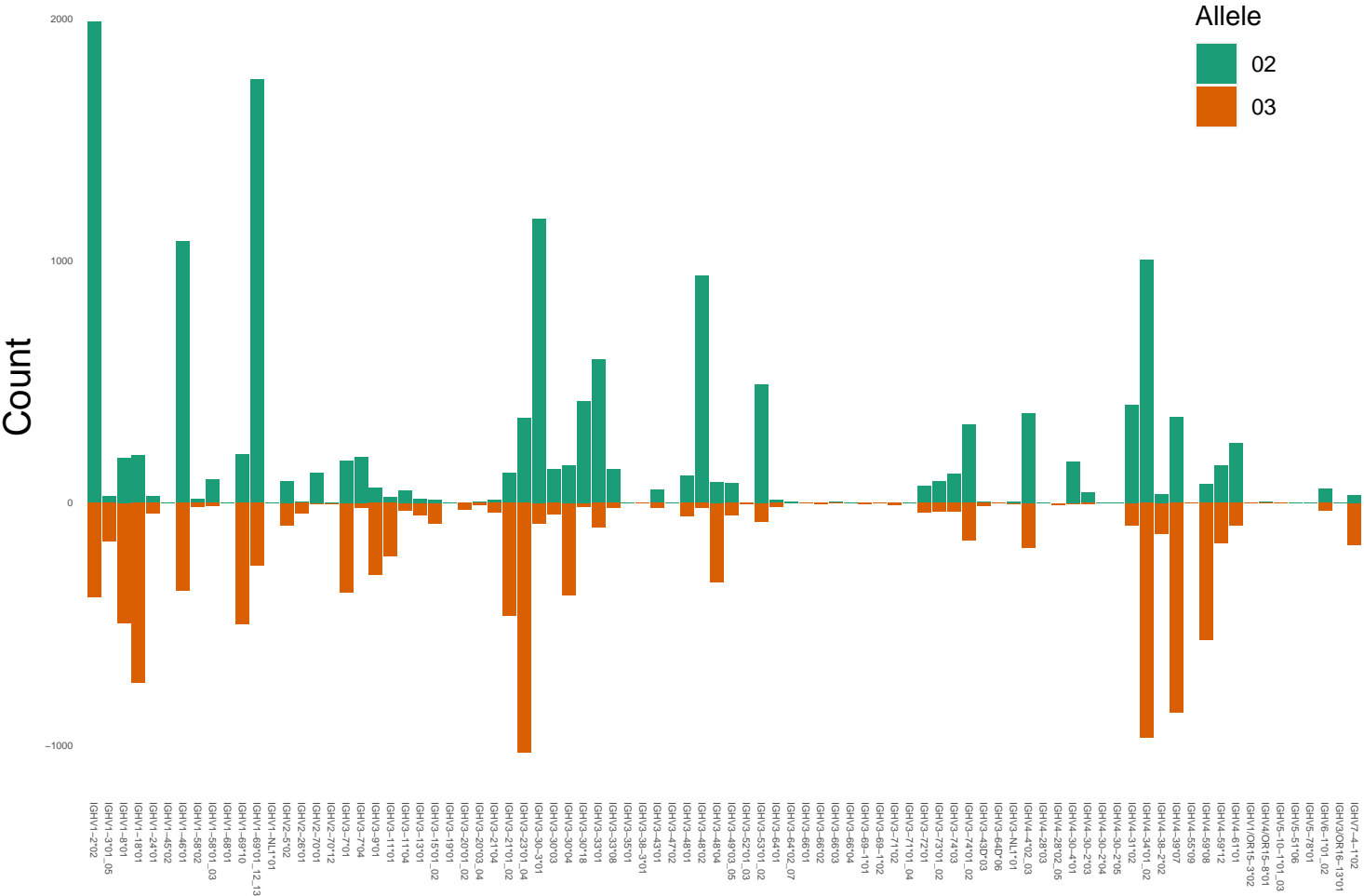
1 sequences assigned
No exact matches.



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.