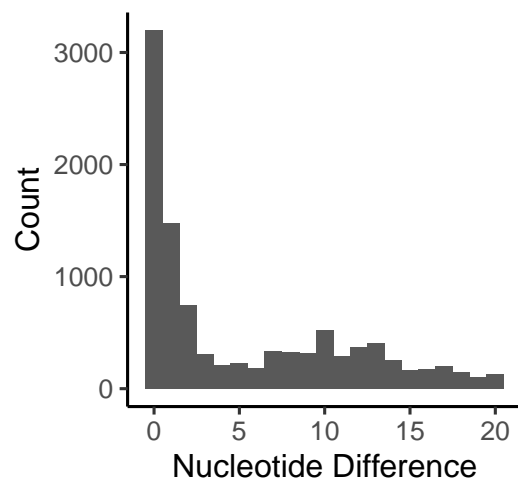


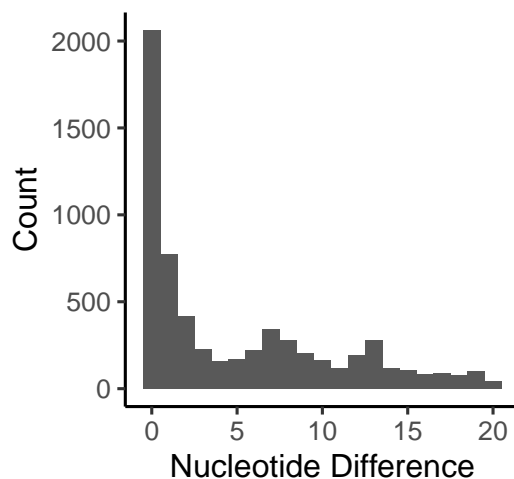
IGHV1-2*02

12442 sequences assigned
3197 (25.7%) exact matches, in which:
2998 unique CDR3
6 unique J



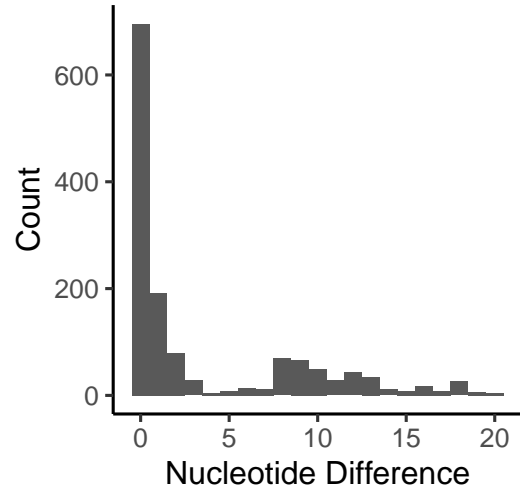
IGHV1-8*01

6484 sequences assigned
2061 (31.8%) exact matches, in which:
1985 unique CDR3
6 unique J



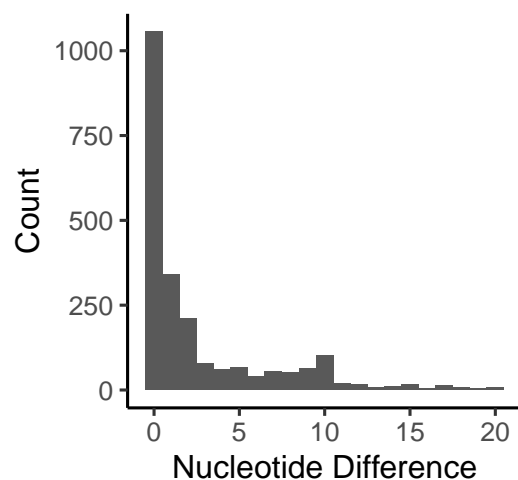
IGHV1-24*01

1468 sequences assigned
696 (47.4%) exact matches, in which:
662 unique CDR3
6 unique J



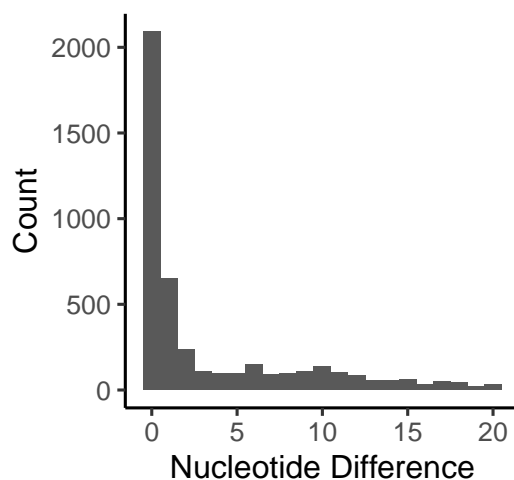
IGHV1-2*04

2251 sequences assigned
1056 (46.9%) exact matches, in which:
1028 unique CDR3
6 unique J



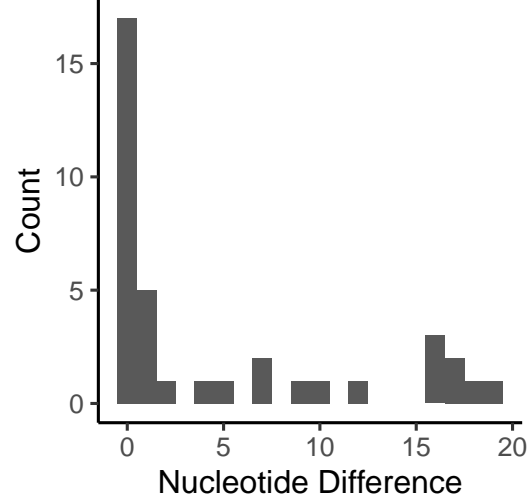
IGHV1-18*01

4809 sequences assigned
2091 (43.5%) exact matches, in which:
2026 unique CDR3
6 unique J



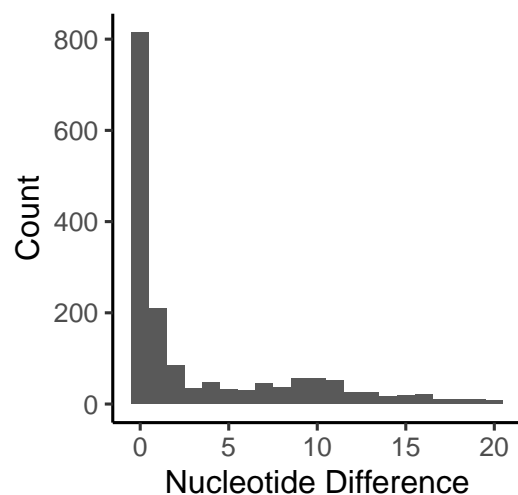
IGHV1-45*02

43 sequences assigned
17 (39.5%) exact matches, in which:
14 unique CDR3
5 unique J



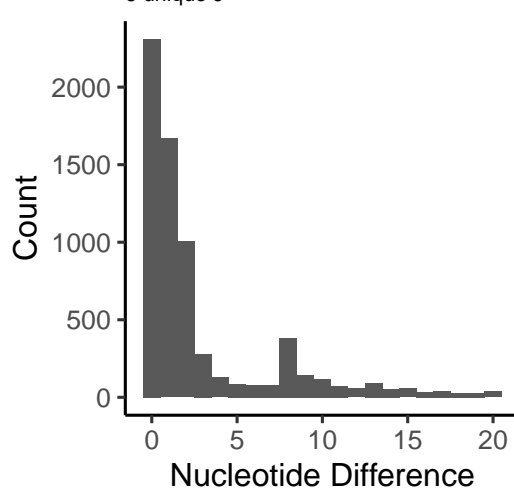
IGHV1-3*01_05

2336 sequences assigned
815 (34.9%) exact matches, in which:
775 unique CDR3
6 unique J



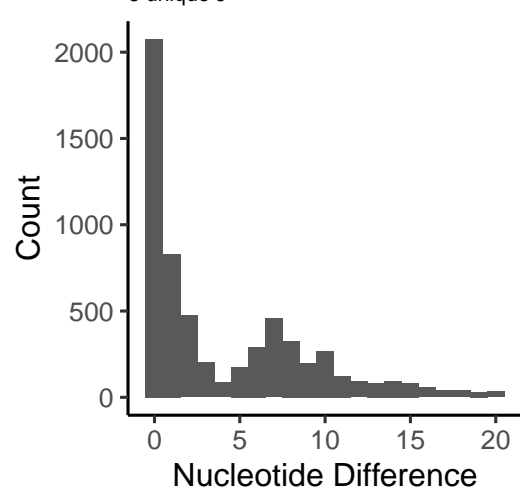
IGHV1-18*04

6975 sequences assigned
2310 (33.1%) exact matches, in which:
2076 unique CDR3
6 unique J



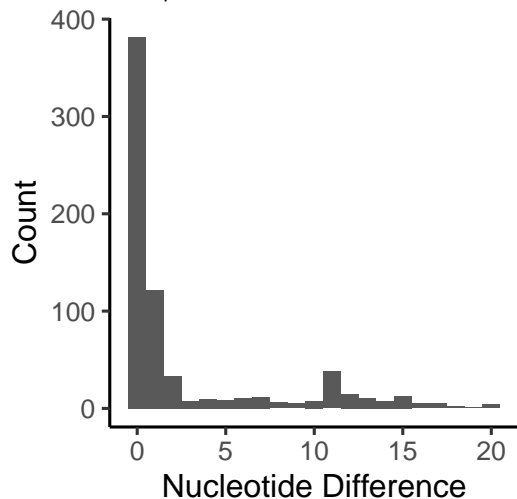
IGHV1-46*01

6265 sequences assigned
2076 (33.1%) exact matches, in which:
1989 unique CDR3
6 unique J



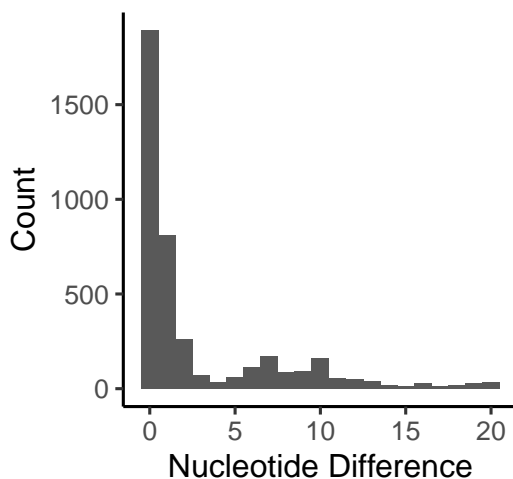
IGHV1-58*01_03

743 sequences assigned
382 (51.4%) exact matches, in which:
372 unique CDR3
6 unique J



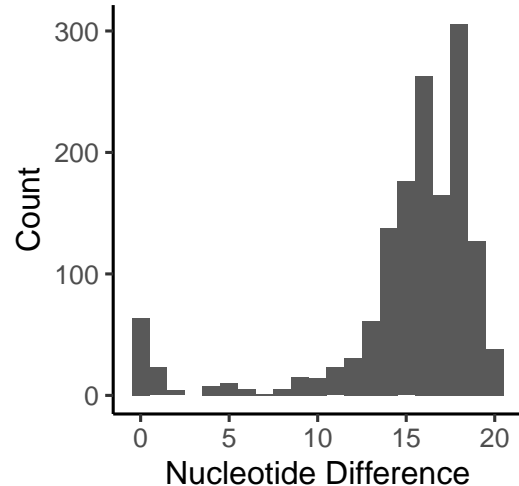
IGHV1-69*04_09

4297 sequences assigned
1892 (44%) exact matches, in which:
1854 unique CDR3
6 unique J



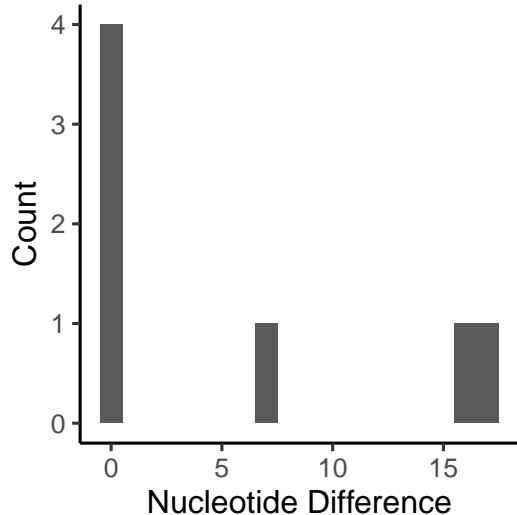
IGHV2-5*02

2371 sequences assigned
64 (2.7%) exact matches, in which:
63 unique CDR3
6 unique J



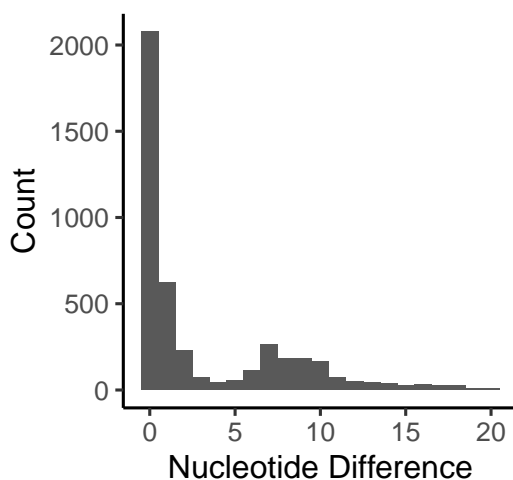
IGHV1-69-2*01

8 sequences assigned
4 (50%) exact matches, in which:
4 unique CDR3
3 unique J



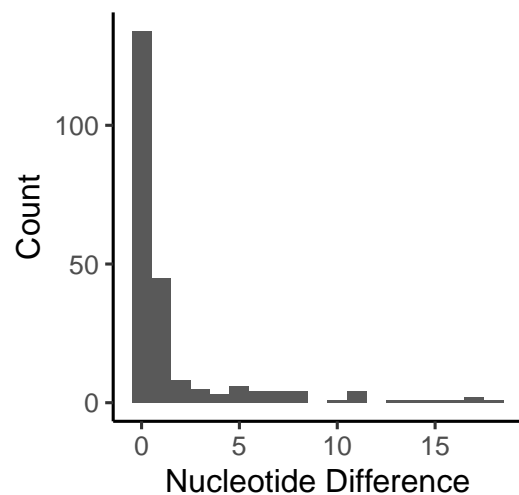
IGHV1-69*06_14

4503 sequences assigned
2077 (46.1%) exact matches, in which:
2037 unique CDR3
6 unique J



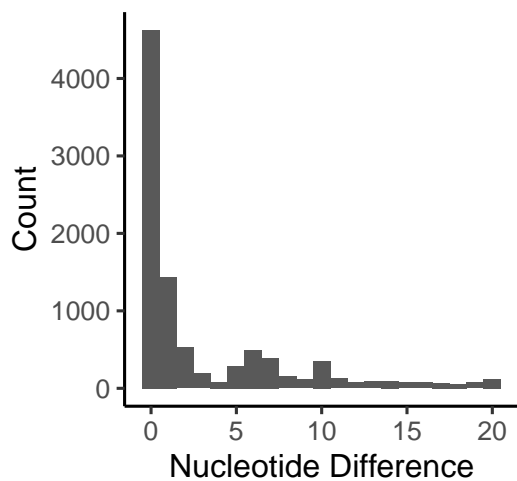
IGHV2-26*01

232 sequences assigned
134 (57.8%) exact matches, in which:
132 unique CDR3
6 unique J



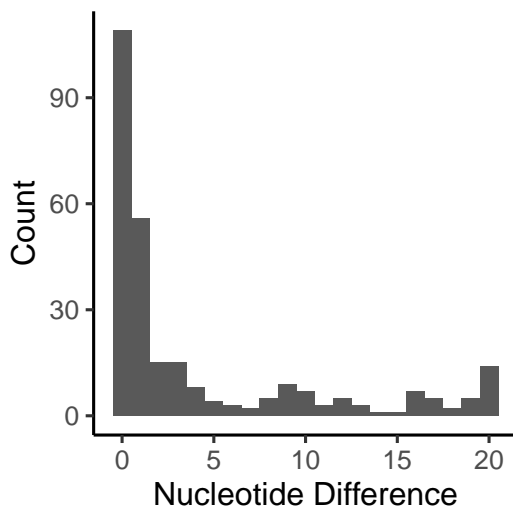
IGHV1-69*01_12_13

10032 sequences assigned
4625 (46.1%) exact matches, in which:
4515 unique CDR3
6 unique J



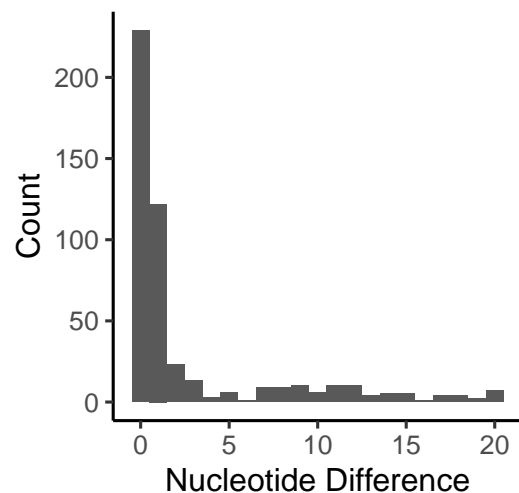
IGHV2-5*01

307 sequences assigned
109 (35.5%) exact matches, in which:
106 unique CDR3
6 unique J



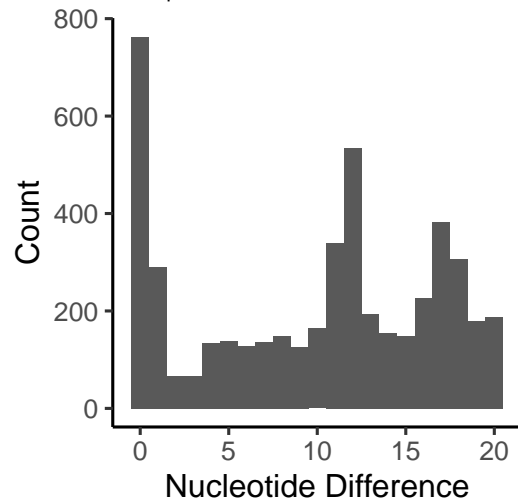
IGHV2-70*01

562 sequences assigned
229 (40.7%) exact matches, in which:
224 unique CDR3
6 unique J



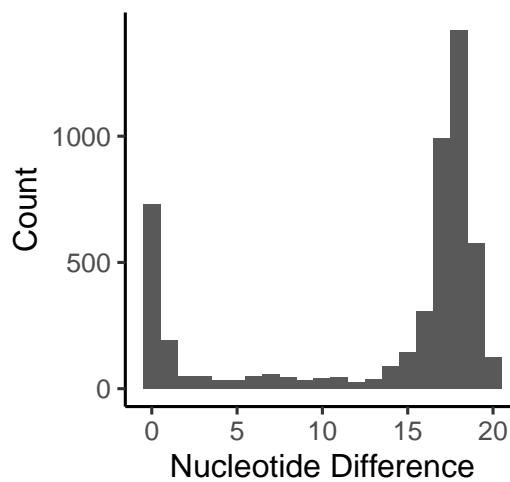
IGHV3-7*01

5454 sequences assigned
763 (14%) exact matches, in which:
686 unique CDR3
6 unique J



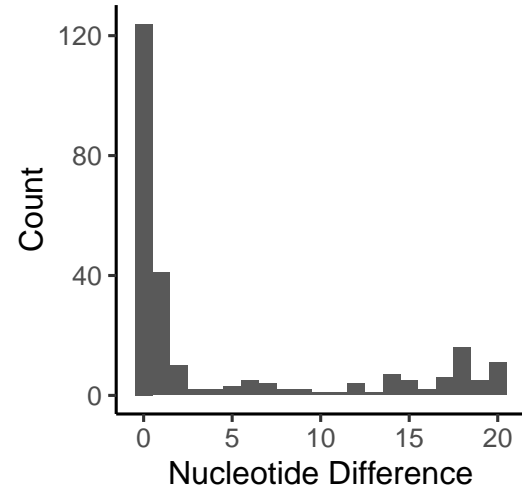
IGHV3-11*01

5899 sequences assigned
730 (12.4%) exact matches, in which:
646 unique CDR3
6 unique J



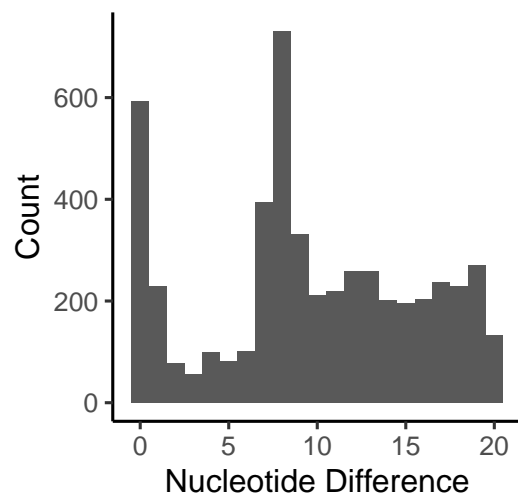
IGHV3-13*01

267 sequences assigned
124 (46.4%) exact matches, in which:
108 unique CDR3
6 unique J



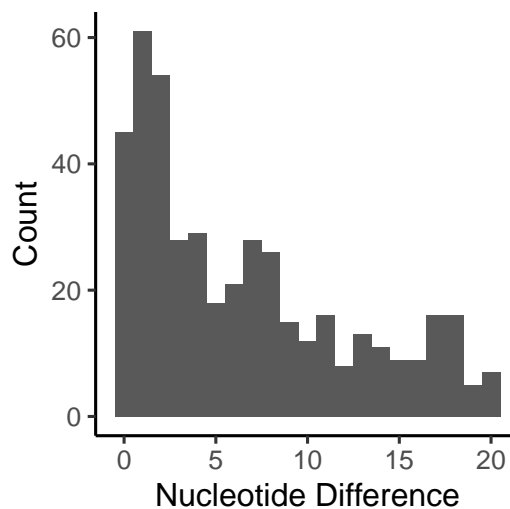
IGHV3-7*03

5547 sequences assigned
592 (10.7%) exact matches, in which:
507 unique CDR3
6 unique J



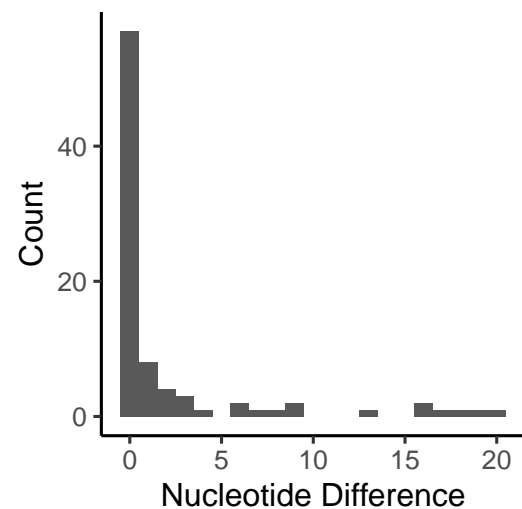
IGHV3-11*04

484 sequences assigned
45 (9.3%) exact matches, in which:
45 unique CDR3
5 unique J



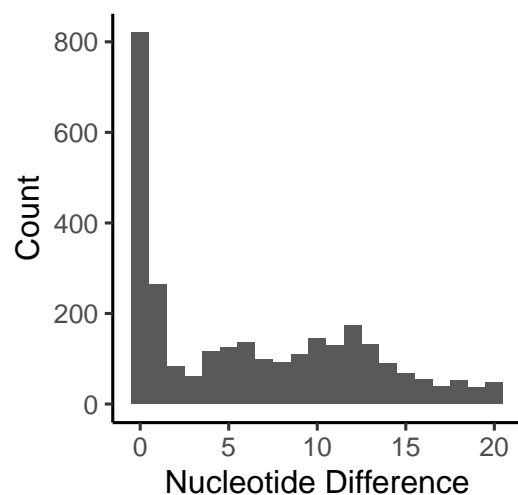
IGHV3-13*05

89 sequences assigned
57 (64%) exact matches, in which:
45 unique CDR3
5 unique J



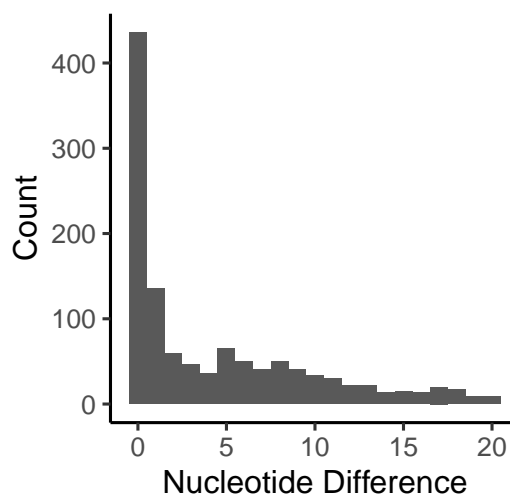
IGHV3-9*01

3438 sequences assigned
821 (23.9%) exact matches, in which:
707 unique CDR3
6 unique J



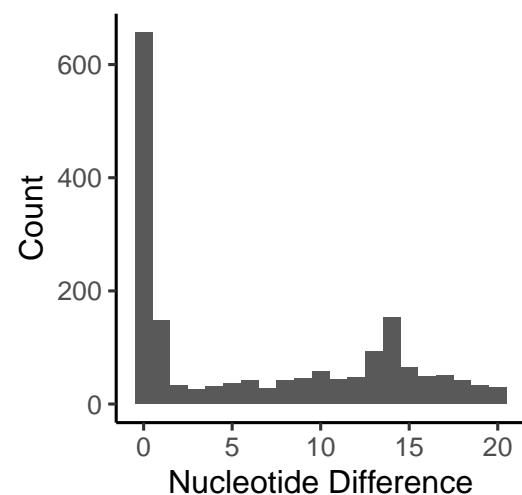
IGHV3-11*06

1398 sequences assigned
436 (31.2%) exact matches, in which:
381 unique CDR3
6 unique J



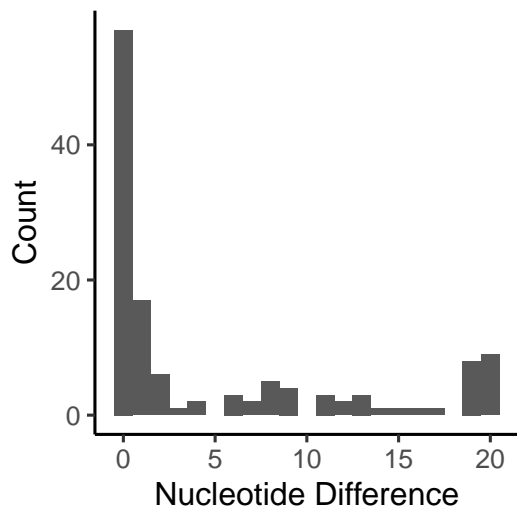
IGHV3-15*01_02

2211 sequences assigned
657 (29.7%) exact matches, in which:
575 unique CDR3
6 unique J



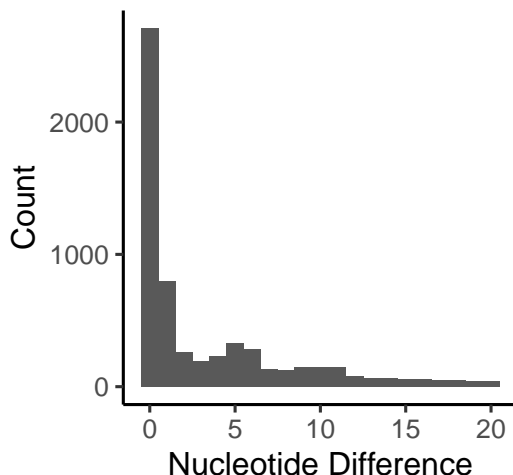
IGHV3-20*01_02

139 sequences assigned
57 (41%) exact matches, in which:
52 unique CDR3
5 unique J



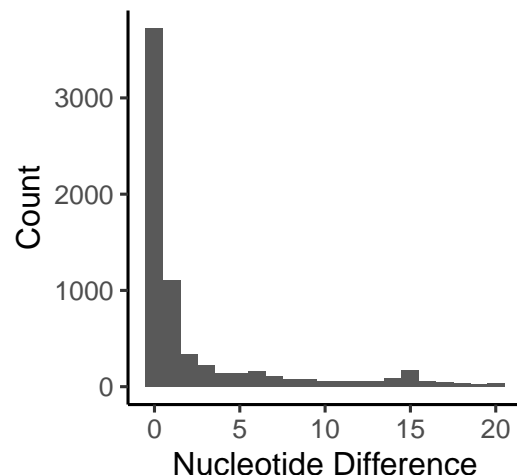
IGHV3-21*01_02

6481 sequences assigned
2708 (41.8%) exact matches, in which:
2286 unique CDR3
6 unique J



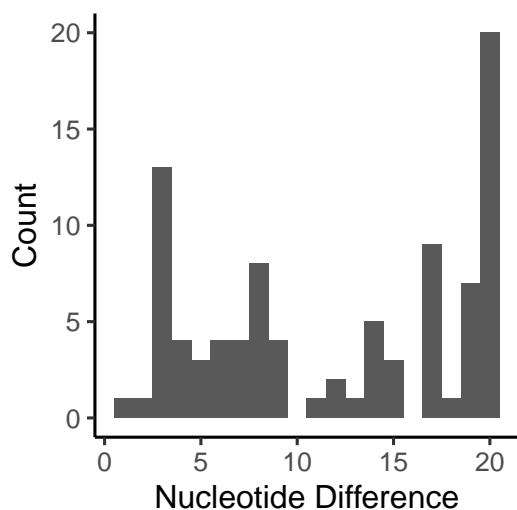
IGHV3-30-3*01

7235 sequences assigned
3722 (51.4%) exact matches, in which:
3217 unique CDR3
6 unique J



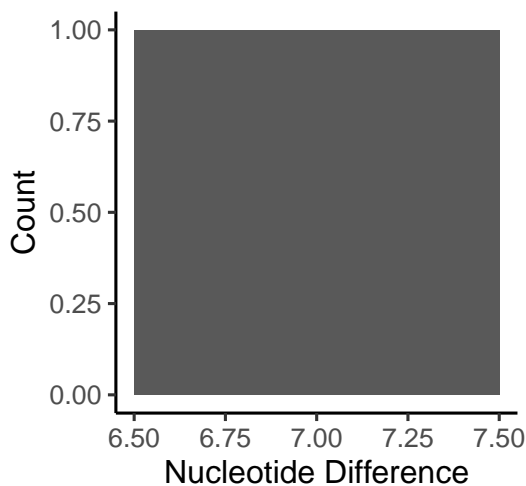
IGHV3-20*03_04

423 sequences assigned
No exact matches.



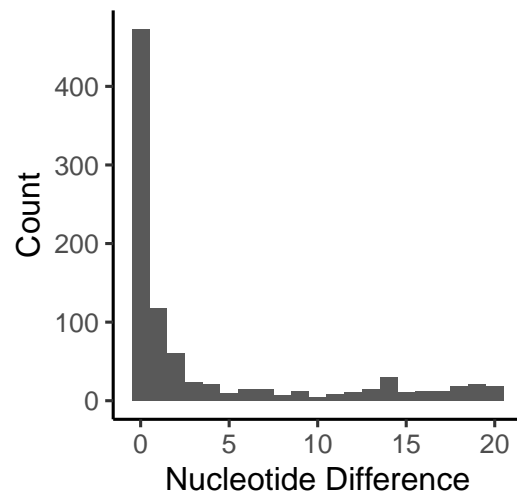
IGHV3-22*01_02

1 sequences assigned
No exact matches.



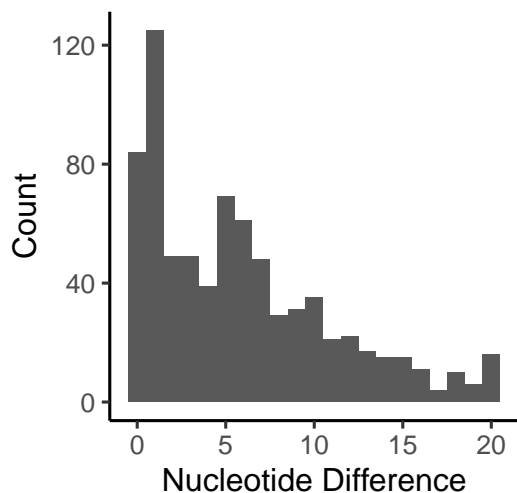
IGHV3-30*03

1026 sequences assigned
473 (46.1%) exact matches, in which:
460 unique CDR3
6 unique J



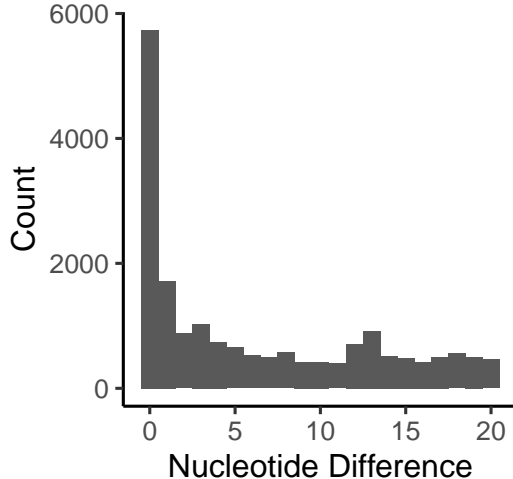
IGHV3-21*04

797 sequences assigned
84 (10.5%) exact matches, in which:
84 unique CDR3
6 unique J



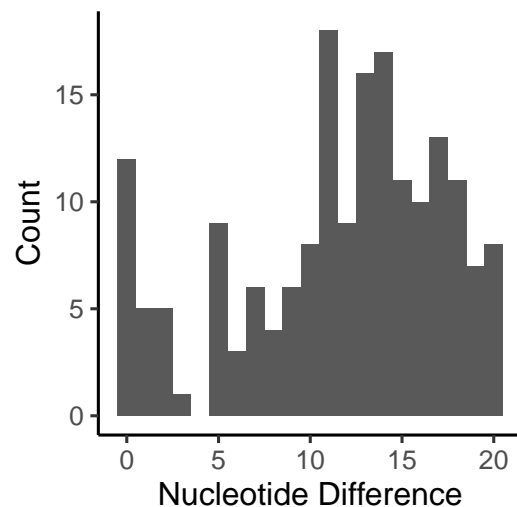
IGHV3-23*01_04

22387 sequences assigned
5735 (25.6%) exact matches, in which:
4805 unique CDR3
6 unique J



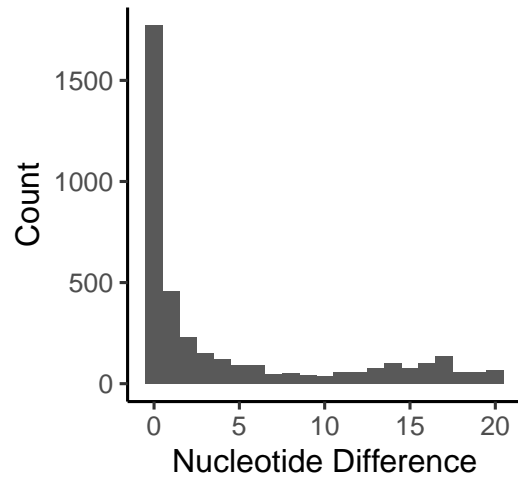
IGHV3-30*04

356 sequences assigned
12 (3.4%) exact matches, in which:
12 unique CDR3
4 unique J



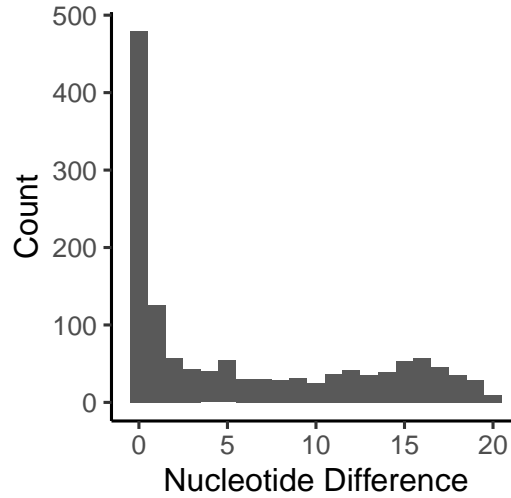
IGHV3–33*01

4247 sequences assigned
1772 (41.7%) exact matches, in which:
1585 unique CDR3
6 unique J



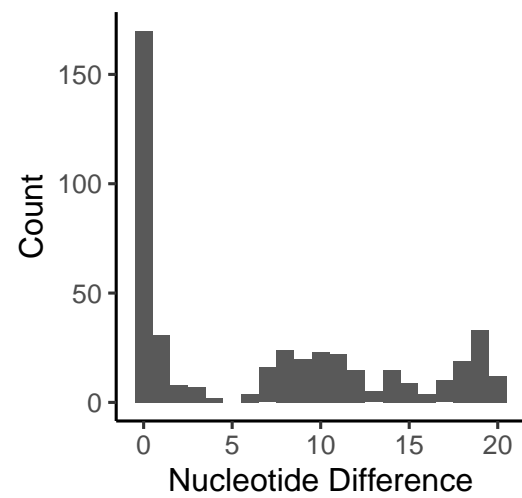
IGHV3–48*02

1758 sequences assigned
480 (27.3%) exact matches, in which:
407 unique CDR3
6 unique J



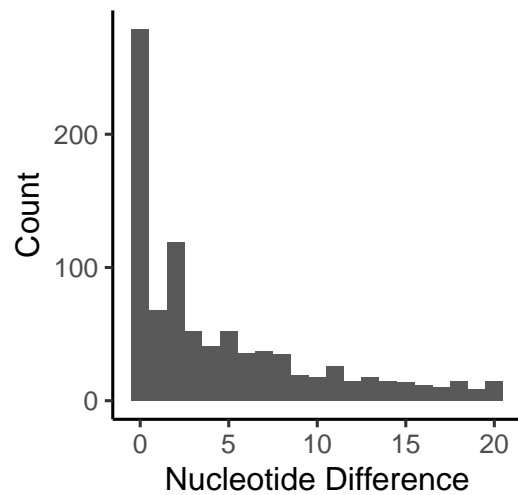
IGHV3–49*04

544 sequences assigned
170 (31.2%) exact matches, in which:
148 unique CDR3
5 unique J



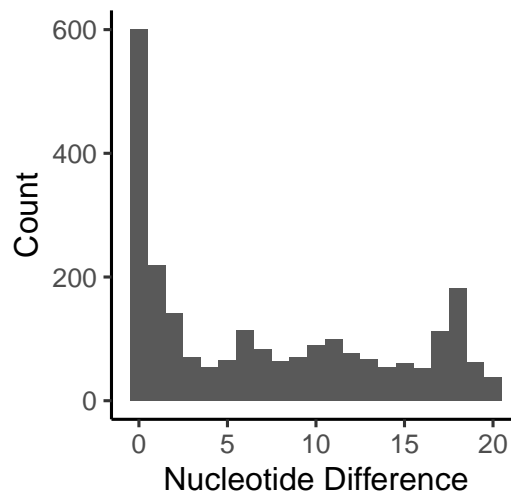
IGHV3–33*08

987 sequences assigned
279 (28.3%) exact matches, in which:
273 unique CDR3
6 unique J



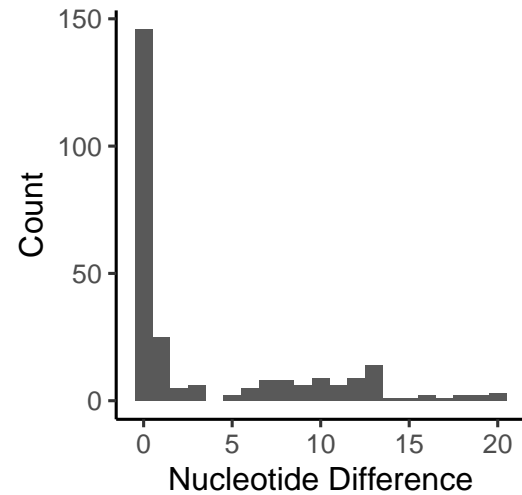
IGHV3–48*03

2575 sequences assigned
601 (23.3%) exact matches, in which:
521 unique CDR3
6 unique J



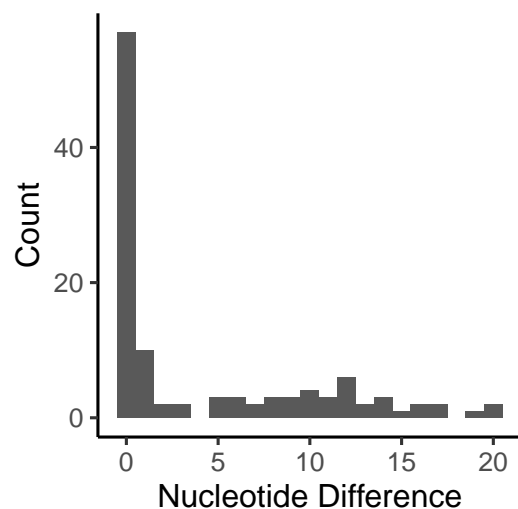
IGHV3–49*03_05

283 sequences assigned
146 (51.6%) exact matches, in which:
129 unique CDR3
6 unique J



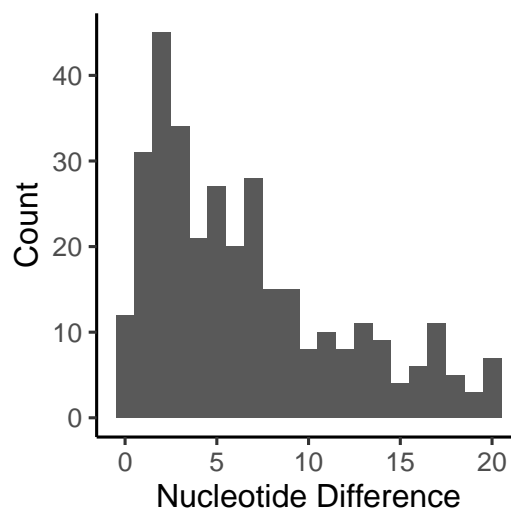
IGHV3–43*01

118 sequences assigned
57 (48.3%) exact matches, in which:
50 unique CDR3
5 unique J



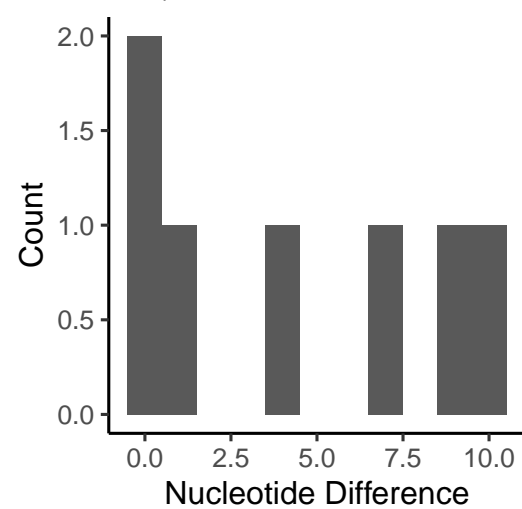
IGHV3–48*04

381 sequences assigned
12 (3.1%) exact matches, in which:
11 unique CDR3
3 unique J



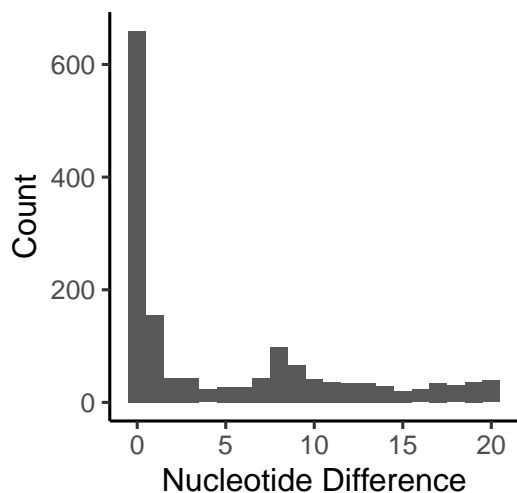
IGHV3–52*01_03

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
2 unique J



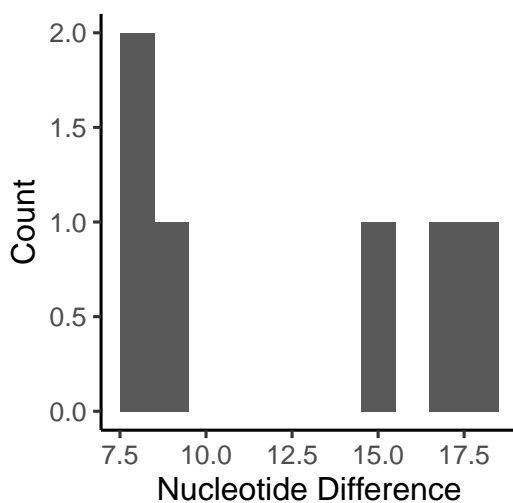
IGHV3–53*01_02

2216 sequences assigned
660 (29.8%) exact matches, in which:
579 unique CDR3
6 unique J



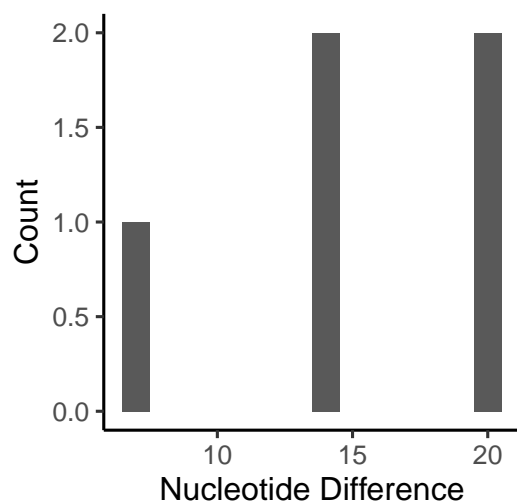
IGHV3–66*01

9 sequences assigned
No exact matches.



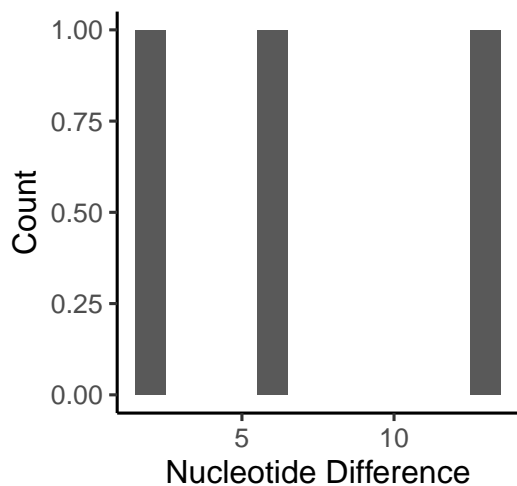
IGHV3–66*04

14 sequences assigned
No exact matches.



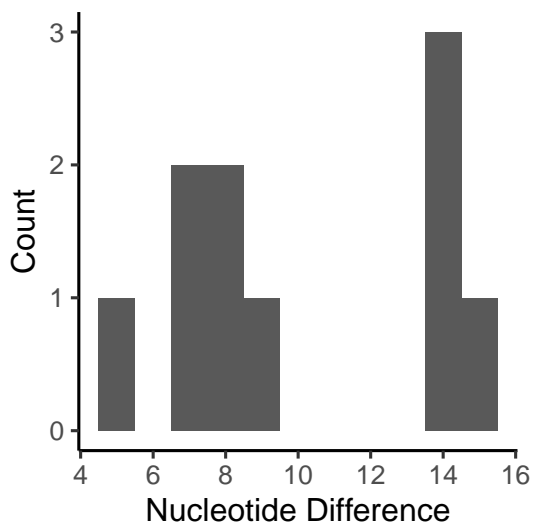
IGHV3–64*04

4 sequences assigned
No exact matches.



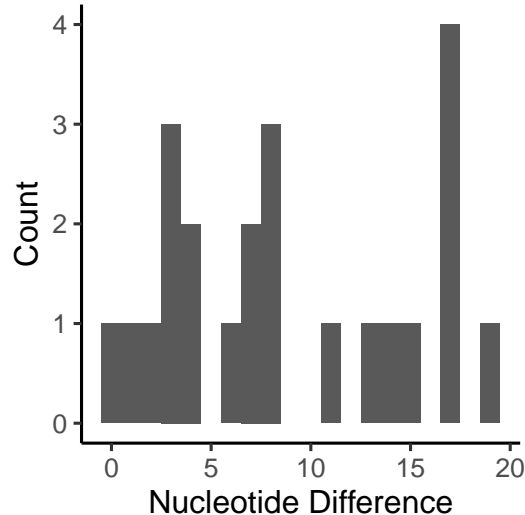
IGHV3–66*02

14 sequences assigned
No exact matches.



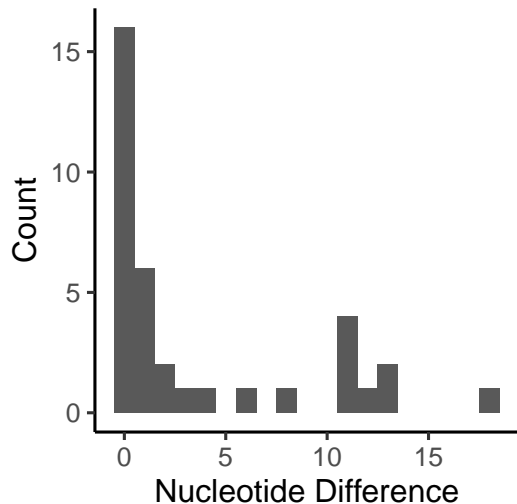
IGHV3–69–1*01

35 sequences assigned
1 (2.9%) exact matches, in which:
1 unique CDR3
1 unique J



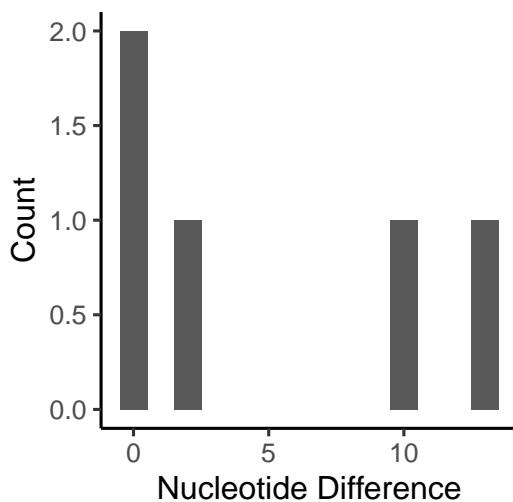
IGHV3–64*02_07

52 sequences assigned
16 (30.8%) exact matches, in which:
15 unique CDR3
3 unique J



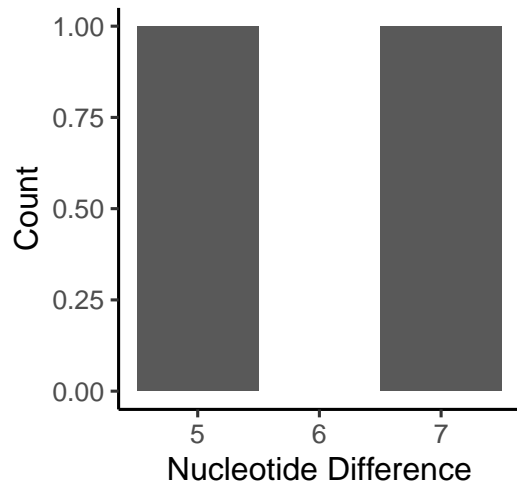
IGHV3–66*03

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



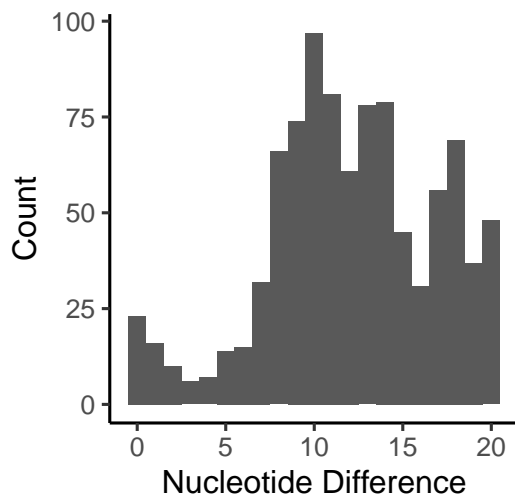
IGHV3–69–1*02

3 sequences assigned
No exact matches.



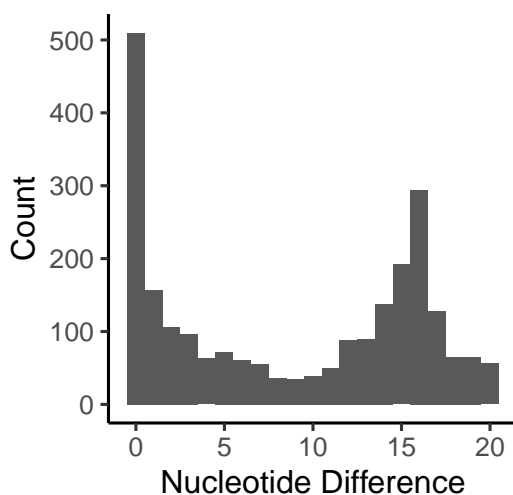
IGHV3-72*01

1065 sequences assigned
23 (2.2%) exact matches, in which:
21 unique CDR3
4 unique J



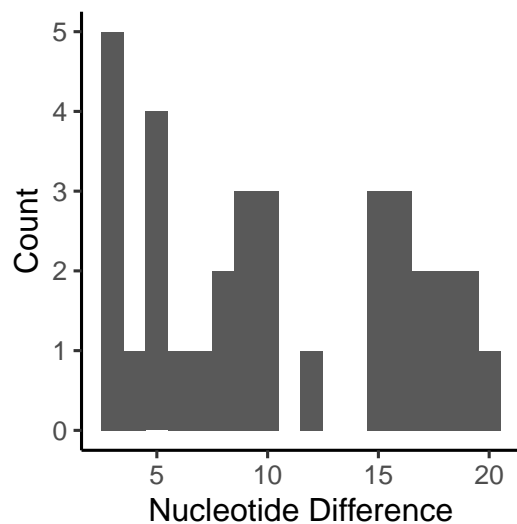
IGHV3-74*01_02

2763 sequences assigned
510 (18.5%) exact matches, in which:
441 unique CDR3
6 unique J



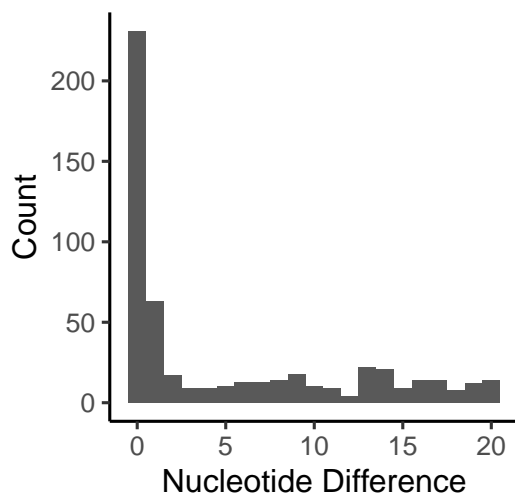
IGHV3-NL1*01

63 sequences assigned
No exact matches.



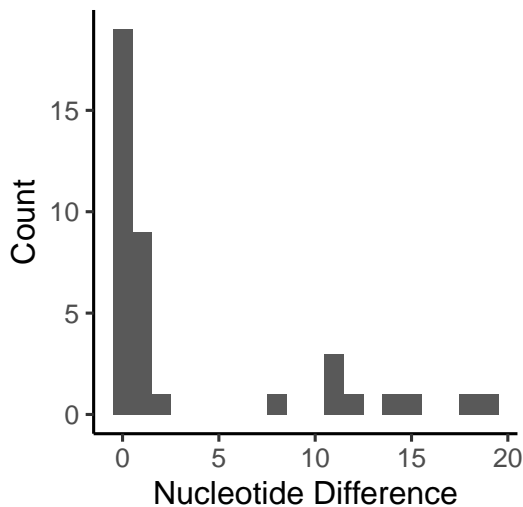
IGHV3-73*01_02

558 sequences assigned
231 (41.4%) exact matches, in which:
206 unique CDR3
6 unique J



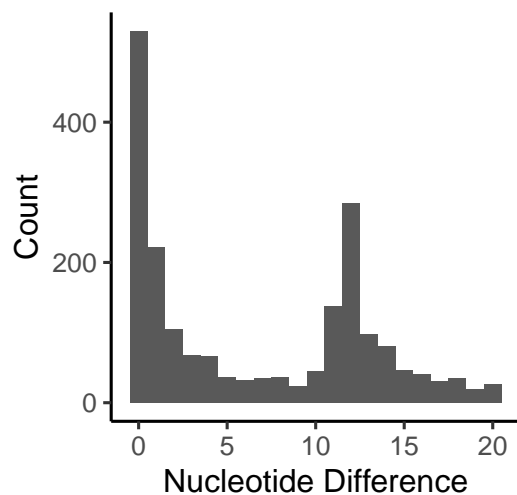
IGHV3-43D*04

58 sequences assigned
19 (32.8%) exact matches, in which:
16 unique CDR3
4 unique J



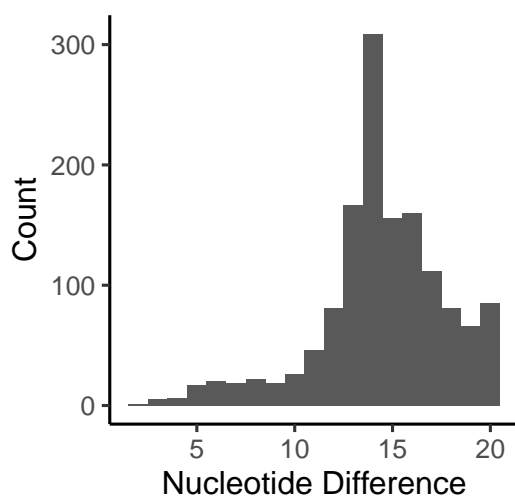
IGHV4-4*07

2235 sequences assigned
530 (23.7%) exact matches, in which:
514 unique CDR3
6 unique J



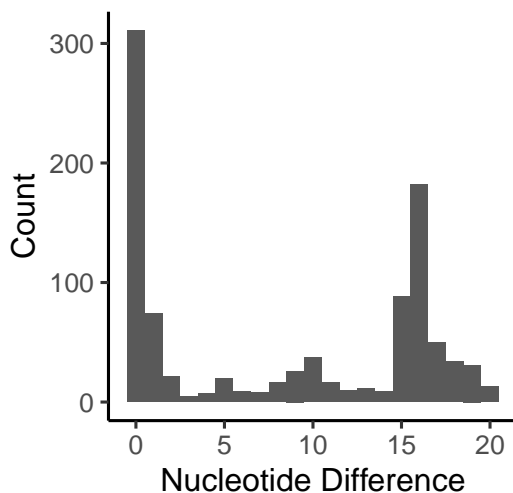
IGHV3-74*03

1913 sequences assigned
No exact matches.



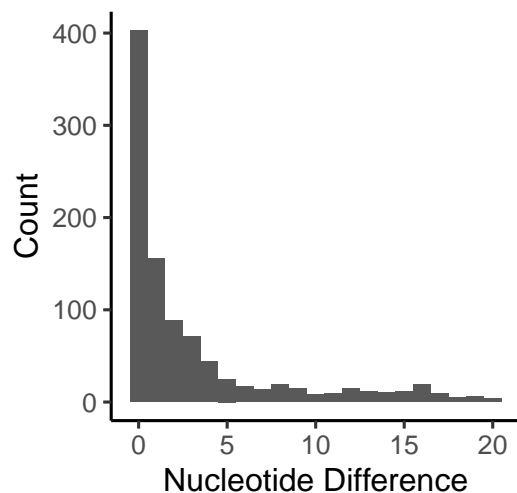
IGHV3-64D*06

1078 sequences assigned
311 (28.8%) exact matches, in which:
255 unique CDR3
6 unique J



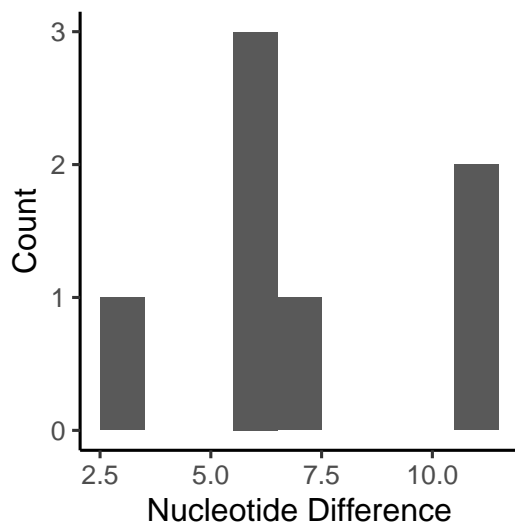
IGHV4-4*02_03

1425 sequences assigned
403 (28.3%) exact matches, in which:
387 unique CDR3
6 unique J



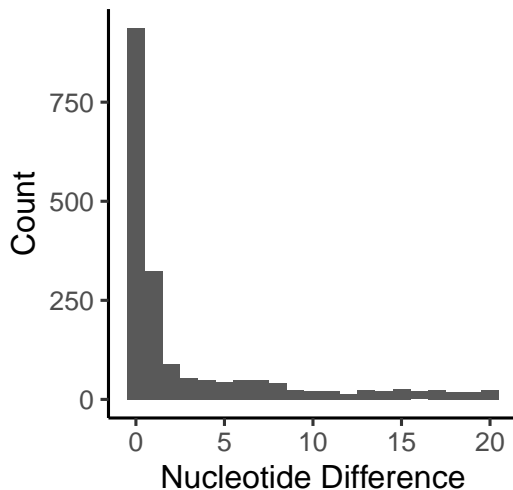
IGHV4-28*03

8 sequences assigned
No exact matches.



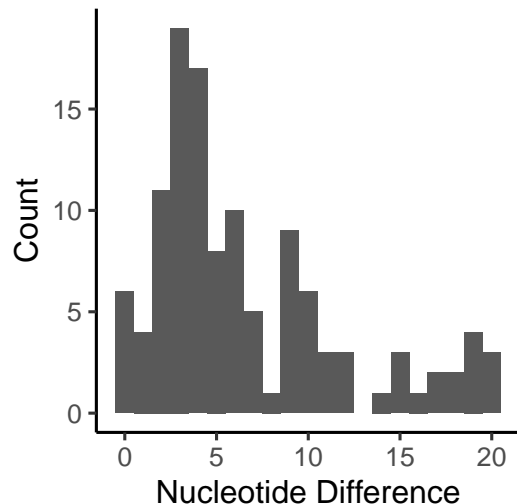
IGHV4-30-4*01

2094 sequences assigned
938 (44.8%) exact matches, in which:
907 unique CDR3
6 unique J



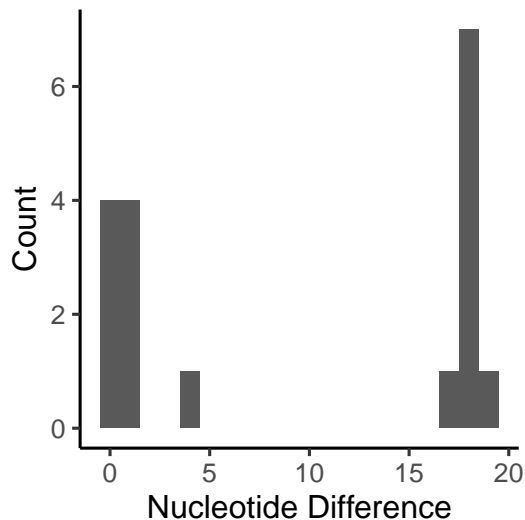
IGHV4-38-2*02

142 sequences assigned
6 (4.2%) exact matches, in which:
6 unique CDR3
3 unique J



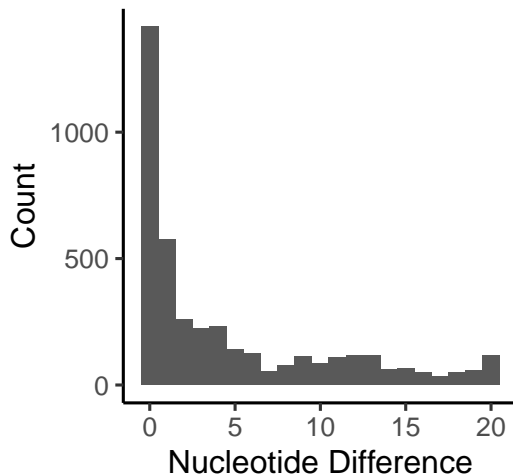
IGHV4-28*01_07

18 sequences assigned
4 (22.2%) exact matches, in which:
4 unique CDR3
3 unique J



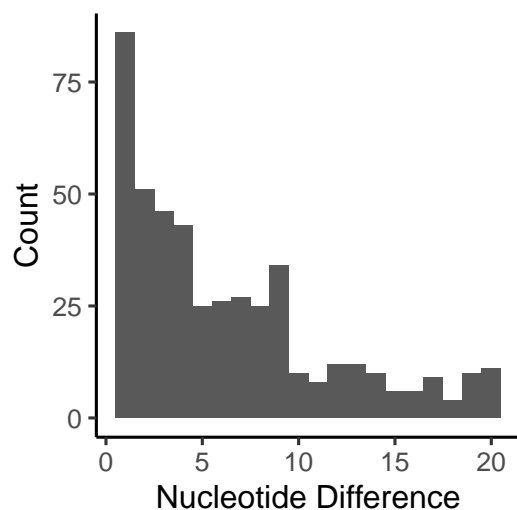
IGHV4-31*02

4770 sequences assigned
1417 (29.7%) exact matches, in which:
1368 unique CDR3
6 unique J



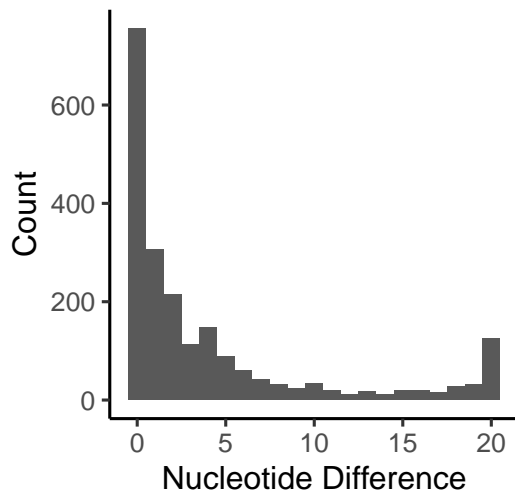
IGHV4-39*07

563 sequences assigned
No exact matches.



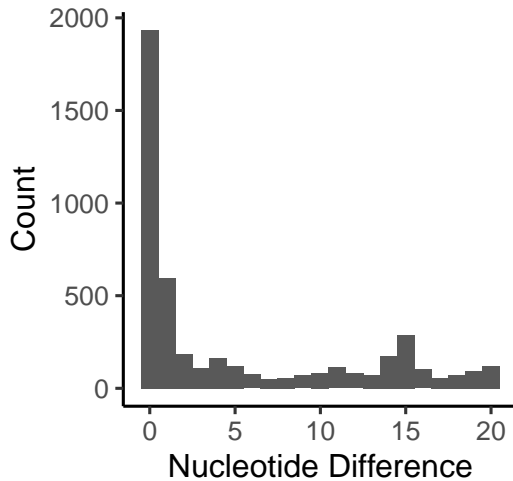
IGHV4-30-2*01

2796 sequences assigned
756 (27%) exact matches, in which:
708 unique CDR3
6 unique J



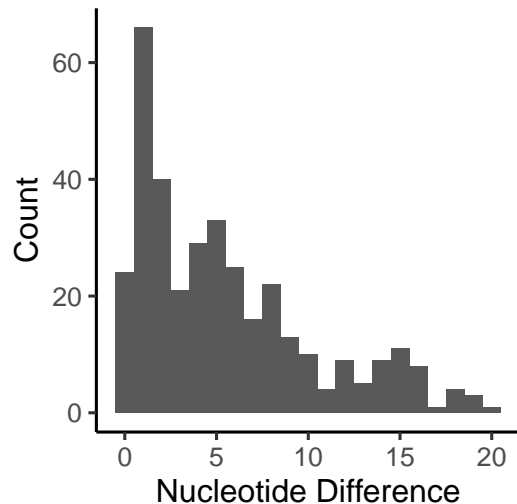
IGHV4-34*01_02

5161 sequences assigned
1934 (37.5%) exact matches, in which:
1847 unique CDR3
6 unique J



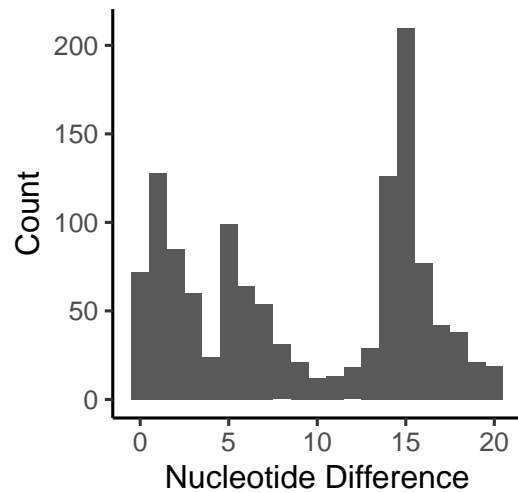
IGHV4-59*08

417 sequences assigned
24 (5.8%) exact matches, in which:
24 unique CDR3
5 unique J



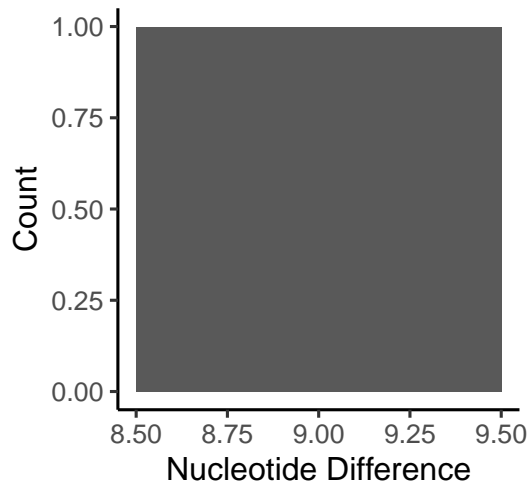
IGHV4–59*12

1599 sequences assigned
72 (4.5%) exact matches, in which:
72 unique CDR3
6 unique J



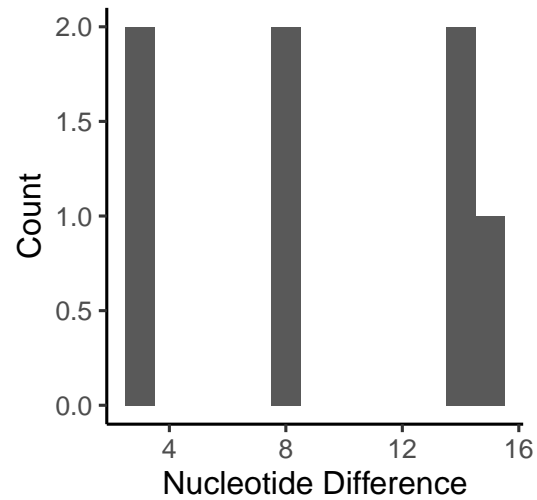
IGHV1/OR15–1*04

1 sequences assigned
No exact matches.



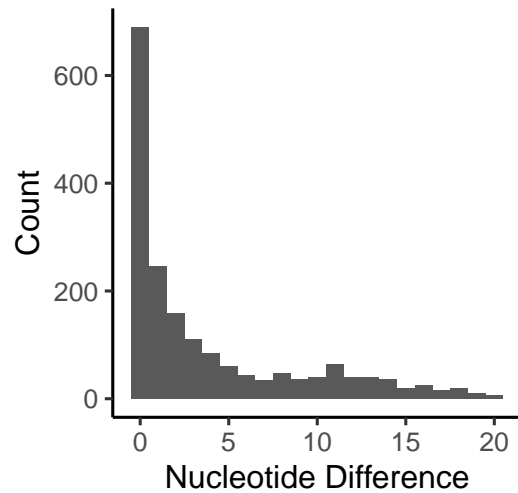
IGHV4/OR15–8*01

31 sequences assigned
No exact matches.



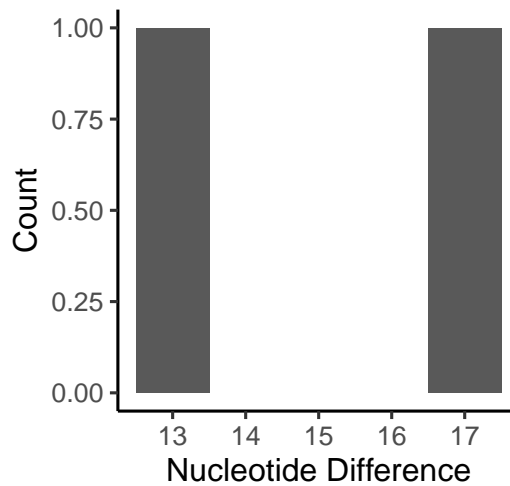
IGHV4–61*01

1999 sequences assigned
690 (34.5%) exact matches, in which:
677 unique CDR3
6 unique J



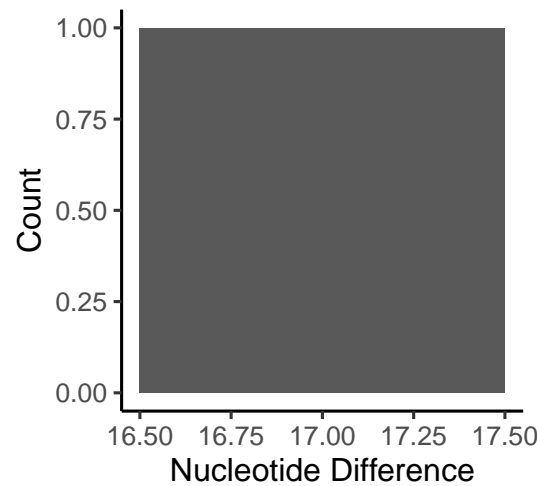
IGHV1/OR15–2*02_03

2 sequences assigned
No exact matches.



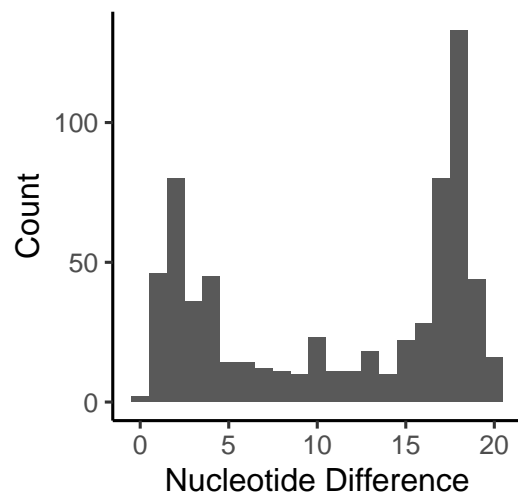
IGHV4/OR15–8*02

4 sequences assigned
No exact matches.



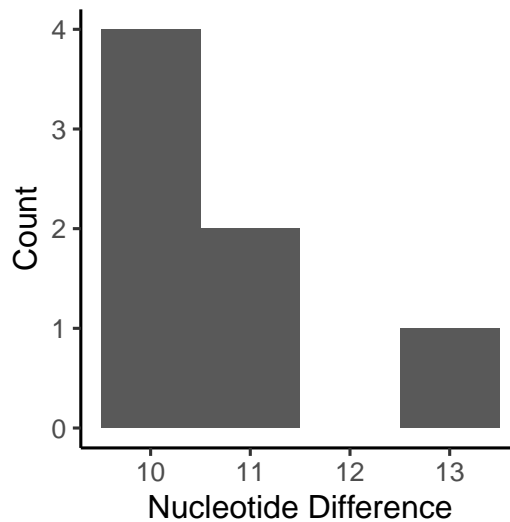
IGHV4–61*08

883 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
2 unique J



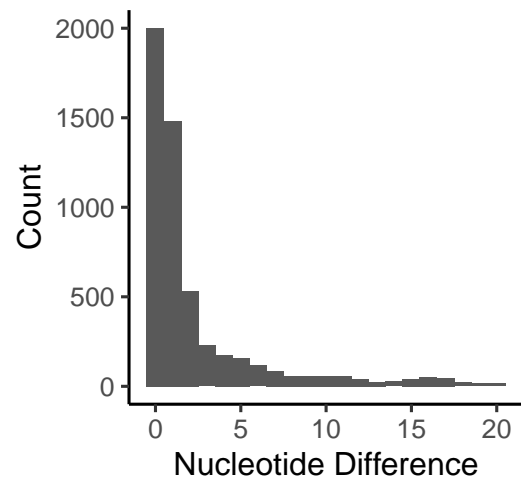
IGHV1/OR15–3*02

7 sequences assigned
No exact matches.



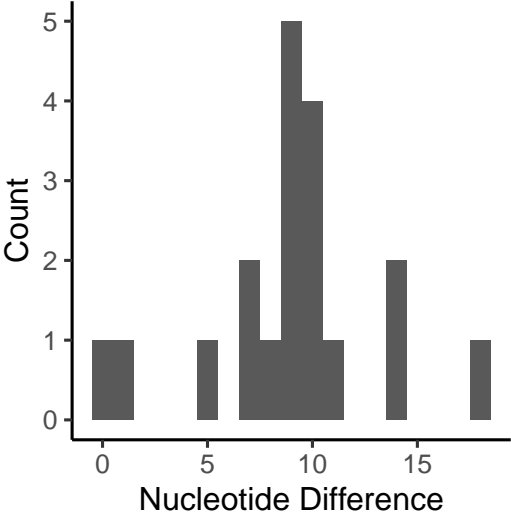
IGHV5–10–1*01_03

5435 sequences assigned
2001 (36.8%) exact matches, in which:
1685 unique CDR3
6 unique J



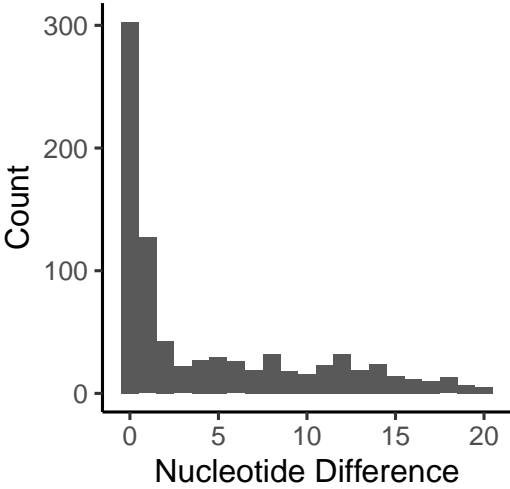
IGHV5-51*04

26 sequences assigned
1 (3.8%) exact matches, in which:
1 unique CDR3
1 unique J



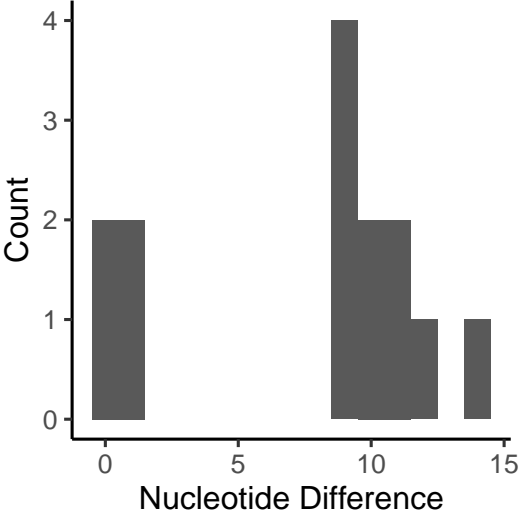
IGHV6-1*01_02

1133 sequences assigned
303 (26.7%) exact matches, in which:
292 unique CDR3
6 unique J



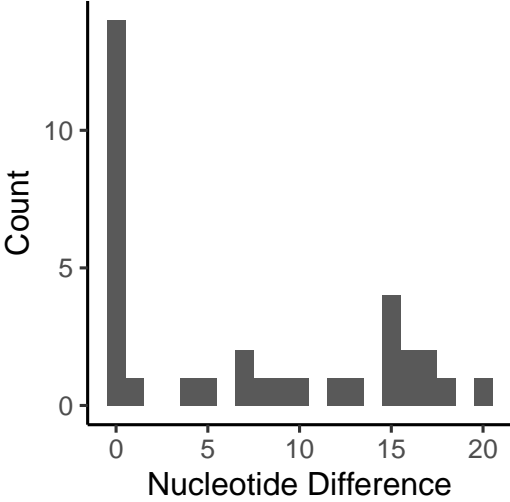
IGHV5-51*06

18 sequences assigned
2 (11.1%) exact matches, in which:
2 unique CDR3
2 unique J



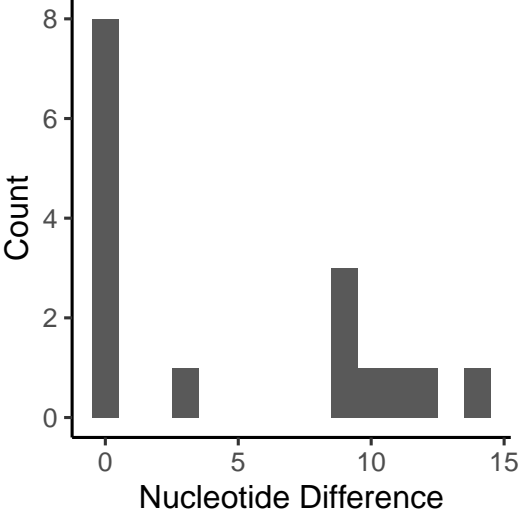
IGHV7-4-1*01

35 sequences assigned
14 (40%) exact matches, in which:
14 unique CDR3
3 unique J



IGHV5-51*07

17 sequences assigned
8 (47.1%) exact matches, in which:
8 unique CDR3
4 unique J





Warning – no inferred sequences found.