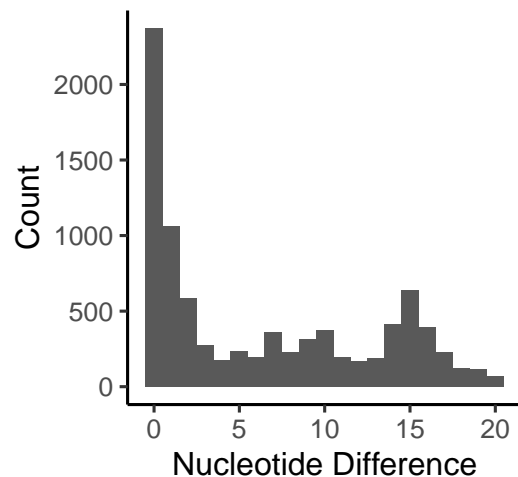


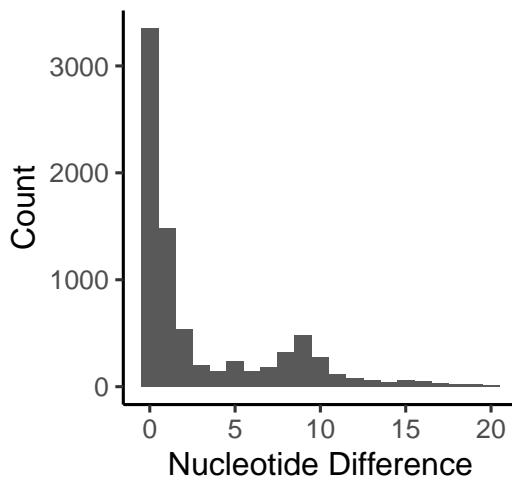
IGHV1-2*02

9171 sequences assigned
2371 (25.9%) exact matches, in which:
2250 unique CDR3
6 unique J



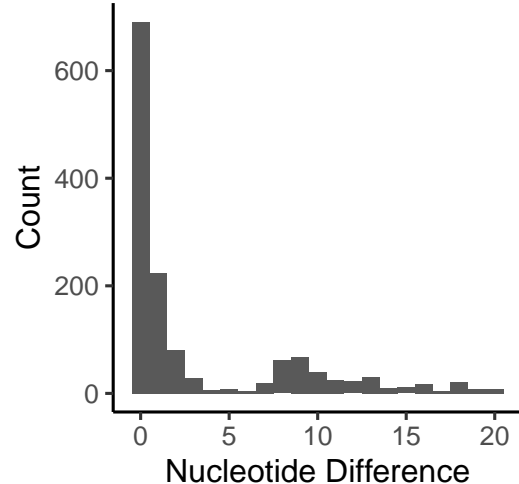
IGHV1-8*01

7973 sequences assigned
3351 (42%) exact matches, in which:
3154 unique CDR3
6 unique J



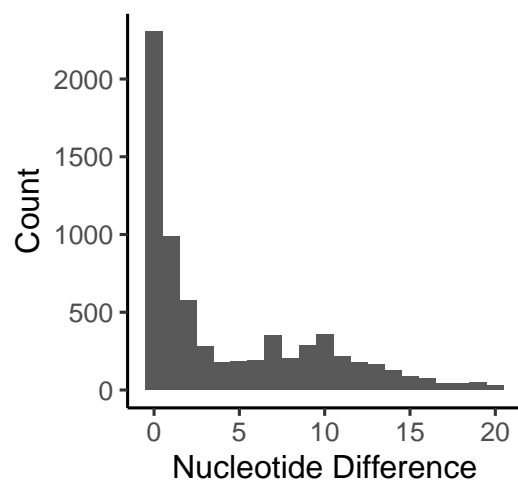
IGHV1-24*01

1486 sequences assigned
691 (46.5%) exact matches, in which:
645 unique CDR3
6 unique J



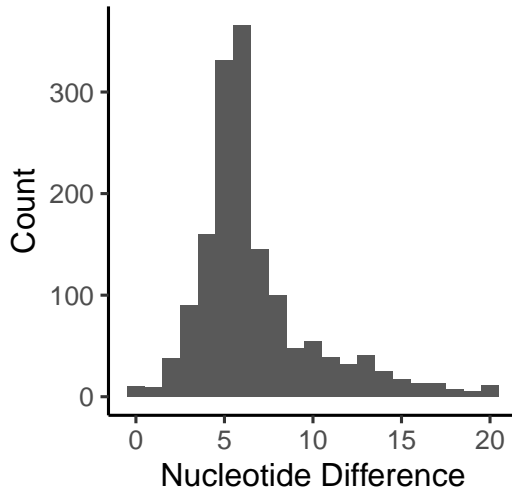
IGHV1-2*06

7108 sequences assigned
2304 (32.4%) exact matches, in which:
2184 unique CDR3
6 unique J



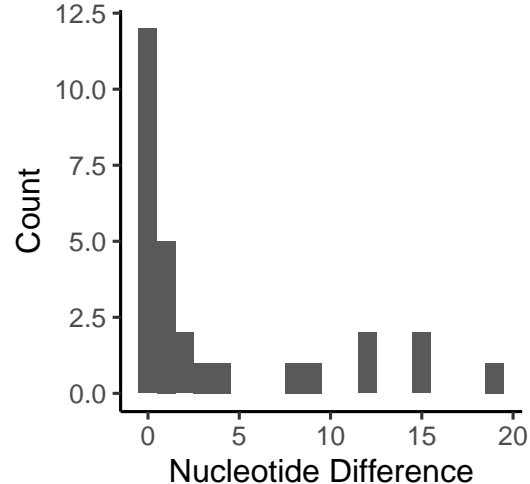
IGHV1-8*02

1590 sequences assigned
10 (0.6%) exact matches, in which:
10 unique CDR3
4 unique J



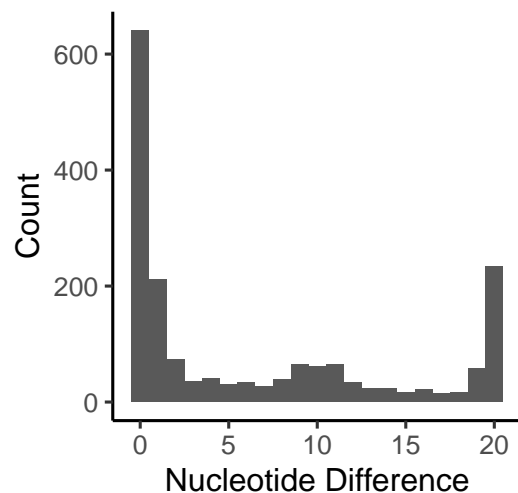
IGHV1-45*02

28 sequences assigned
12 (42.9%) exact matches, in which:
11 unique CDR3
4 unique J



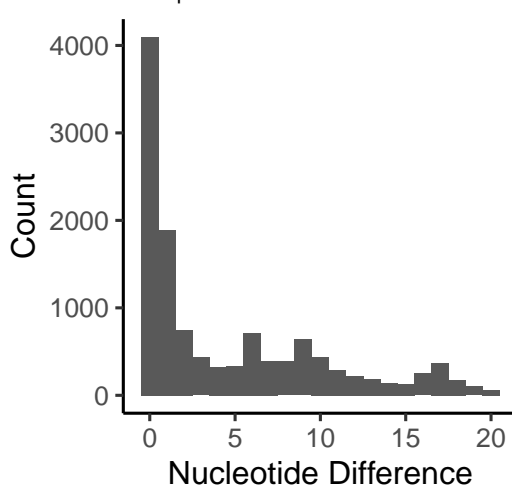
IGHV1-3*01_05

2703 sequences assigned
641 (23.7%) exact matches, in which:
596 unique CDR3
6 unique J



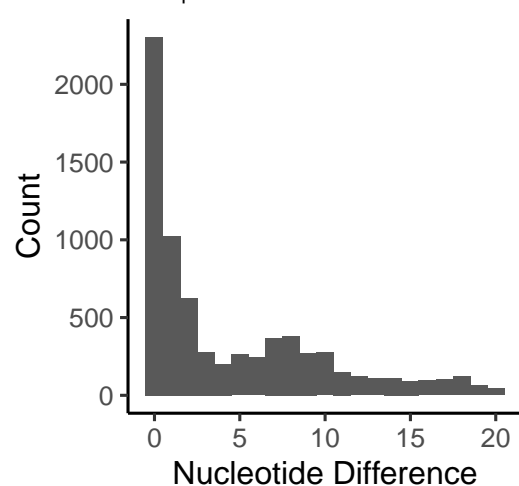
IGHV1-18*01

12771 sequences assigned
4096 (32.1%) exact matches, in which:
3831 unique CDR3
6 unique J



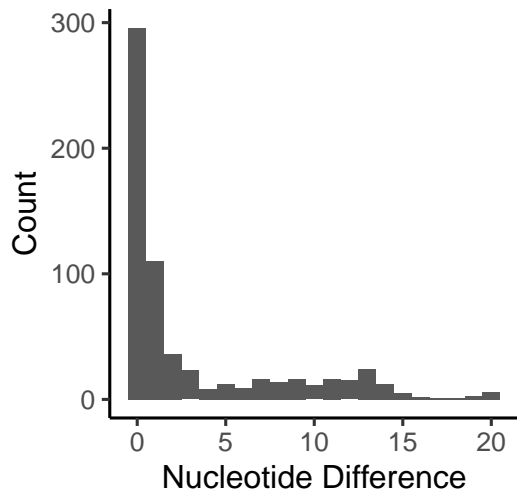
IGHV1-46*01

7719 sequences assigned
2304 (29.8%) exact matches, in which:
2180 unique CDR3
6 unique J



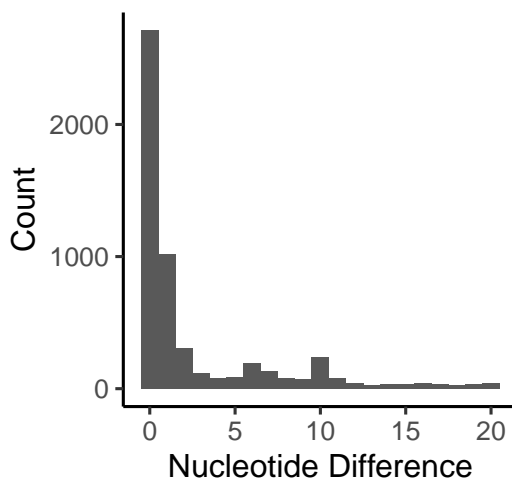
IGHV1–58*01_03

648 sequences assigned
296 (45.7%) exact matches, in which:
279 unique CDR3
6 unique J



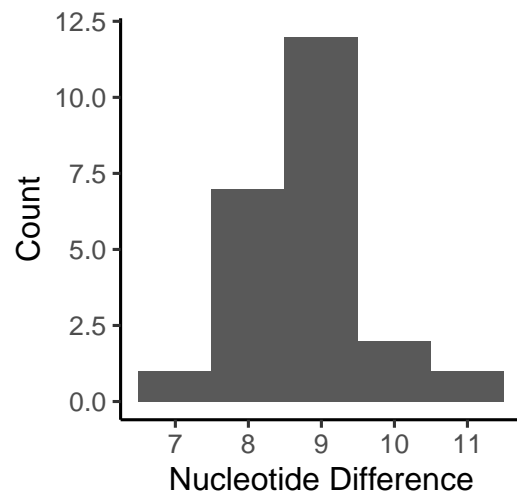
IGHV1–69*01_12_13

5574 sequences assigned
2712 (48.7%) exact matches, in which:
2606 unique CDR3
6 unique J



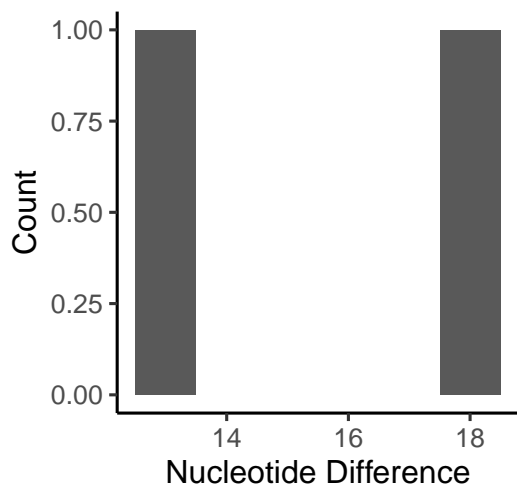
IGHV1–NL1*01

23 sequences assigned
No exact matches.



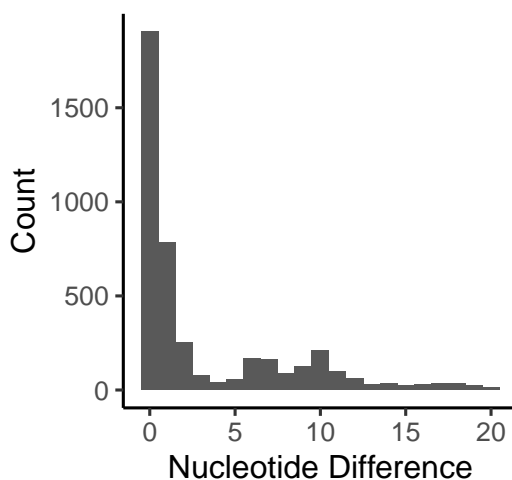
IGHV1–68*02_03

2 sequences assigned
No exact matches.



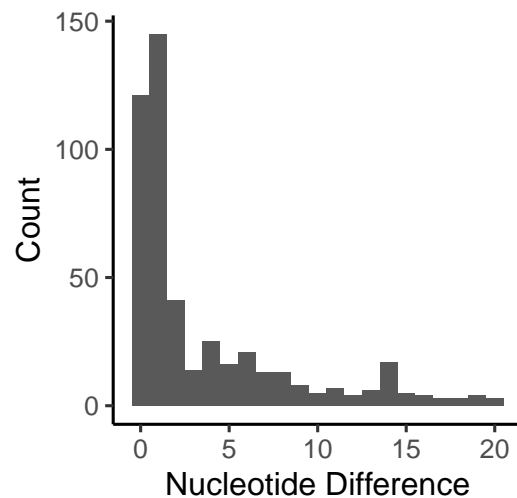
IGHV1–69*04_09

4425 sequences assigned
1904 (43%) exact matches, in which:
1834 unique CDR3
6 unique J



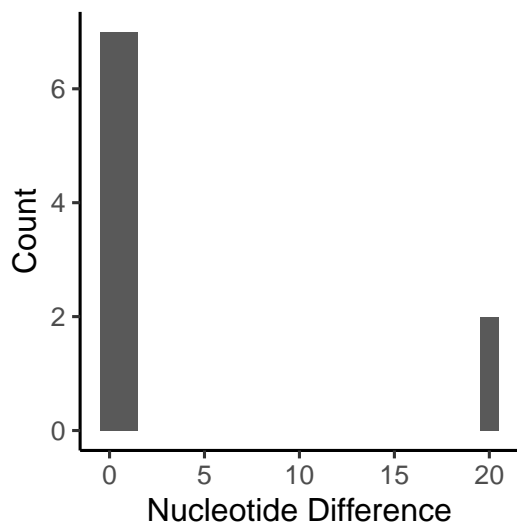
IGHV2–5*01

498 sequences assigned
121 (24.3%) exact matches, in which:
108 unique CDR3
5 unique J



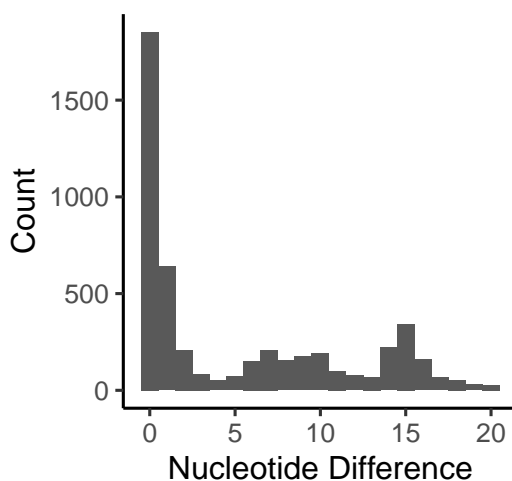
IGHV1–69–2*01

19 sequences assigned
7 (36.8%) exact matches, in which:
7 unique CDR3
2 unique J



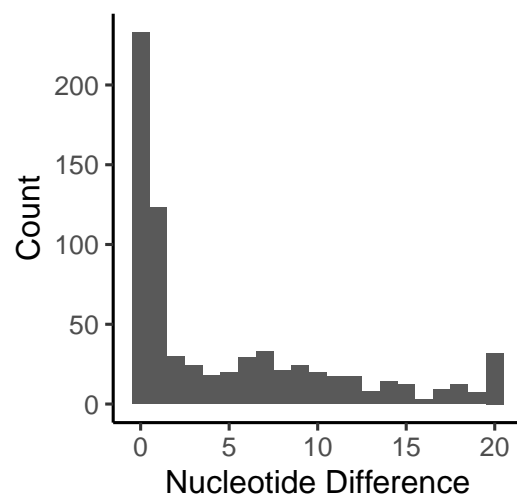
IGHV1–69*06_14

5048 sequences assigned
1852 (36.7%) exact matches, in which:
1801 unique CDR3
6 unique J



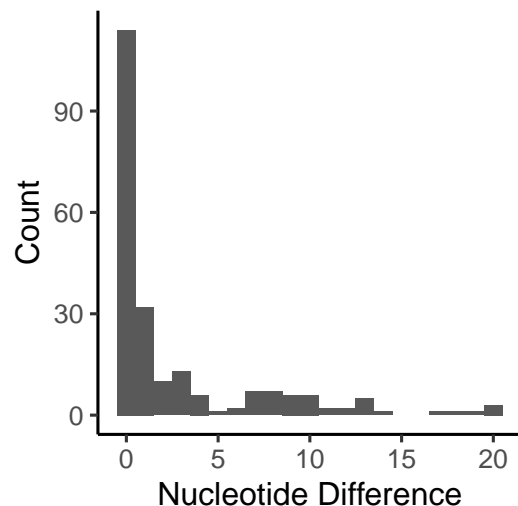
IGHV2–5*02

826 sequences assigned
233 (28.2%) exact matches, in which:
222 unique CDR3
6 unique J



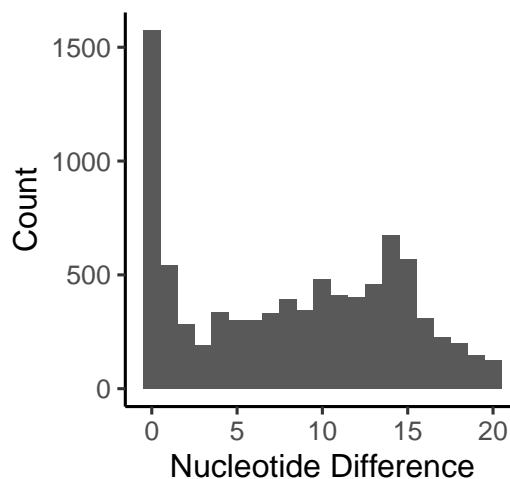
IGHV2-26*01

228 sequences assigned
114 (50%) exact matches, in which:
107 unique CDR3
5 unique J



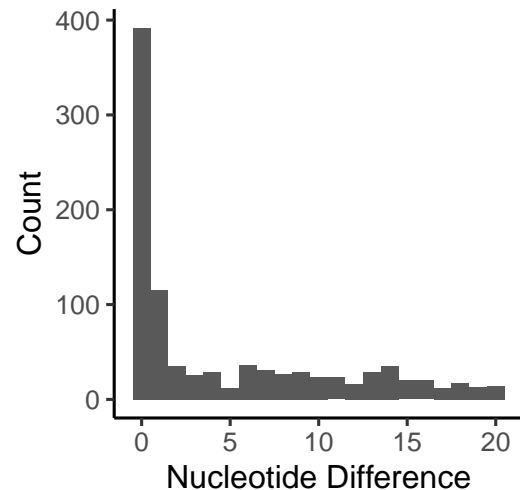
IGHV3-7*01

9013 sequences assigned
1574 (17.5%) exact matches, in which:
1266 unique CDR3
6 unique J



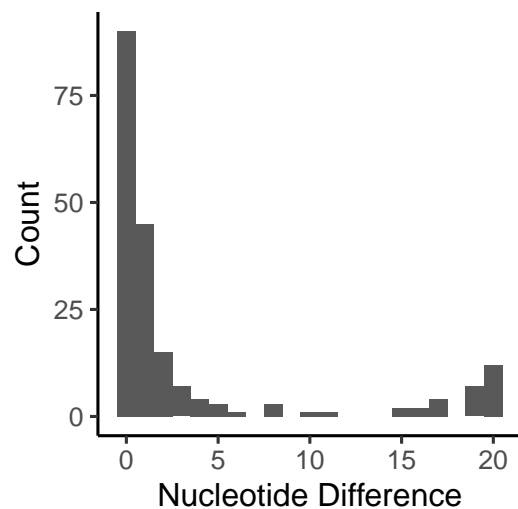
IGHV3-13*01

1067 sequences assigned
392 (36.7%) exact matches, in which:
304 unique CDR3
5 unique J



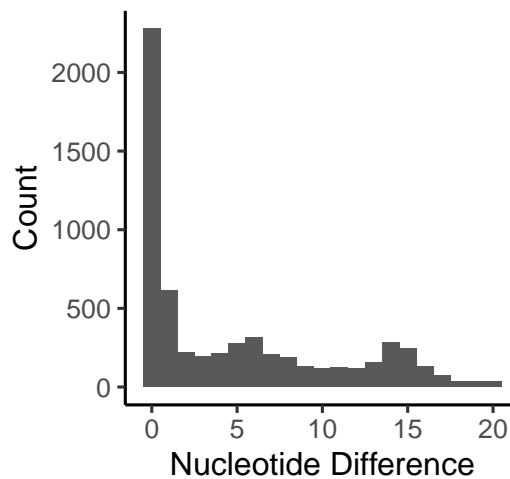
IGHV2-70*01

201 sequences assigned
90 (44.8%) exact matches, in which:
85 unique CDR3
4 unique J



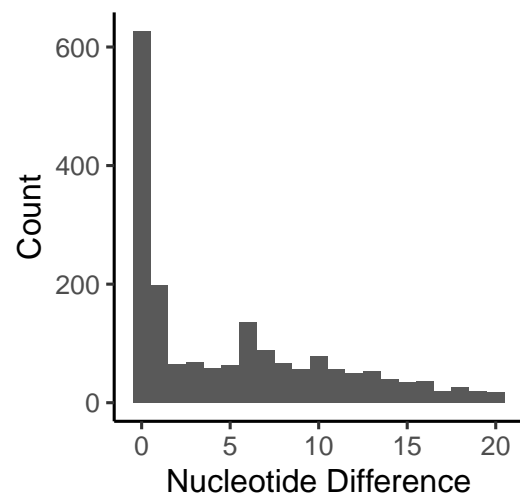
IGHV3-9*01

6152 sequences assigned
2278 (37%) exact matches, in which:
1833 unique CDR3
6 unique J



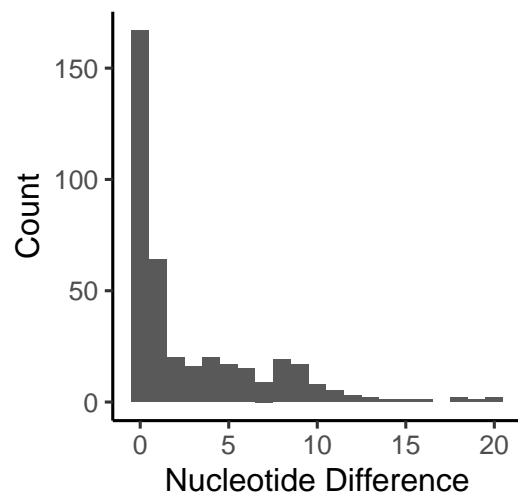
IGHV3-15*01_02

2028 sequences assigned
627 (30.9%) exact matches, in which:
526 unique CDR3
6 unique J



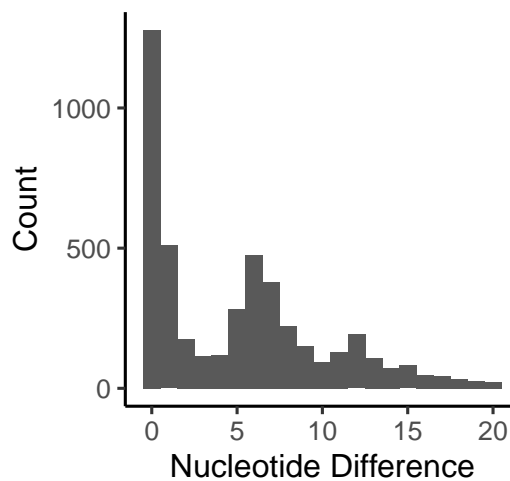
IGHV2-70*11_15

403 sequences assigned
167 (41.4%) exact matches, in which:
159 unique CDR3
5 unique J



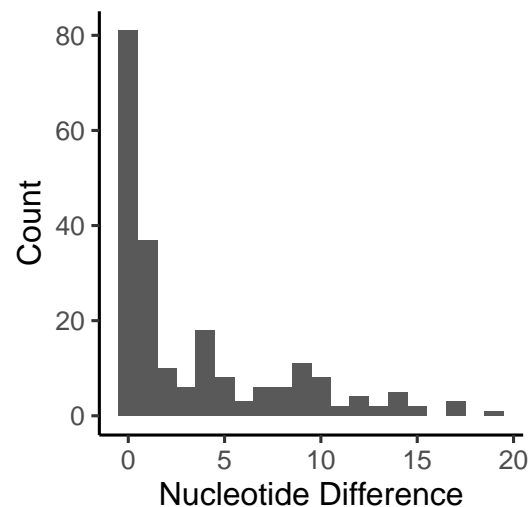
IGHV3-11*01

4772 sequences assigned
1278 (26.8%) exact matches, in which:
1046 unique CDR3
6 unique J



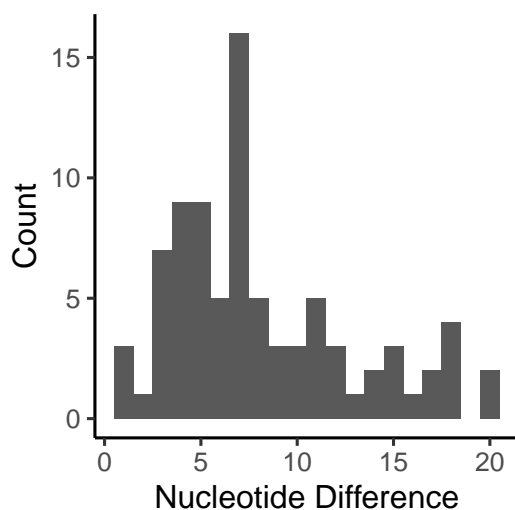
IGHV3-20*01_02

236 sequences assigned
81 (34.3%) exact matches, in which:
69 unique CDR3
5 unique J



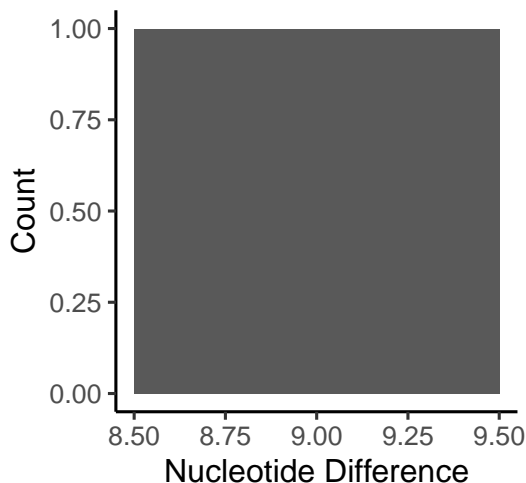
IGHV3-20*03_04

103 sequences assigned
No exact matches.



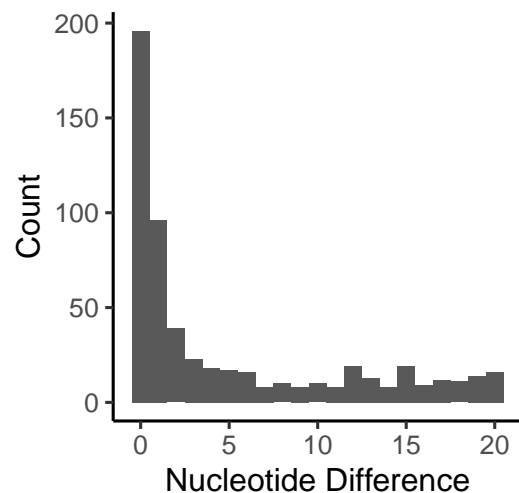
IGHV3-22*01_02

1 sequences assigned
No exact matches.



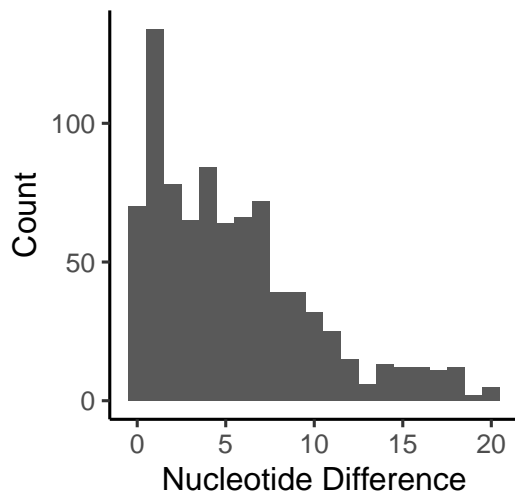
IGHV3-30*03

773 sequences assigned
196 (25.4%) exact matches, in which:
192 unique CDR3
6 unique J



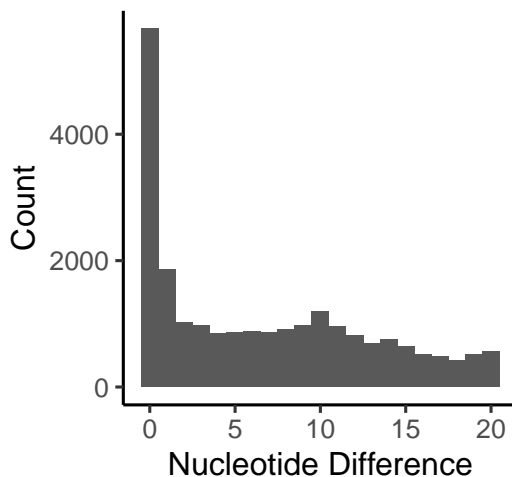
IGHV3-21*04

918 sequences assigned
70 (7.6%) exact matches, in which:
70 unique CDR3
5 unique J



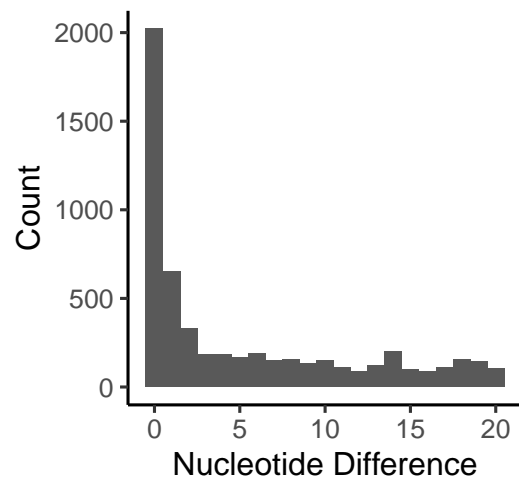
IGHV3-23*01_04

27139 sequences assigned
5670 (20.9%) exact matches, in which:
4470 unique CDR3
6 unique J



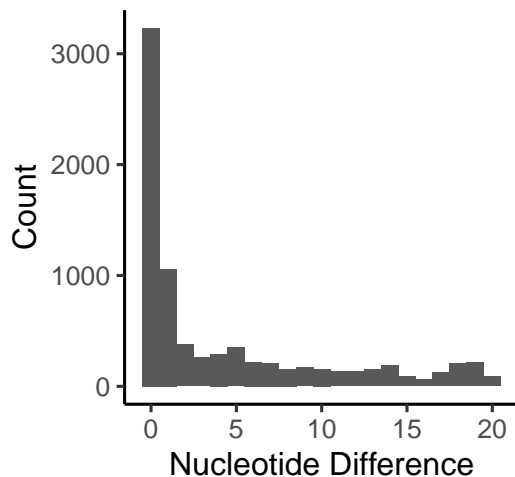
IGHV3-33*01

7638 sequences assigned
2022 (26.5%) exact matches, in which:
1713 unique CDR3
6 unique J



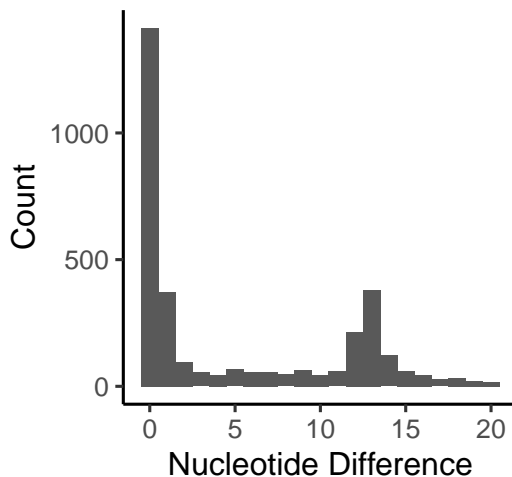
IGHV3-21*01_02

10952 sequences assigned
3232 (29.5%) exact matches, in which:
2590 unique CDR3
6 unique J



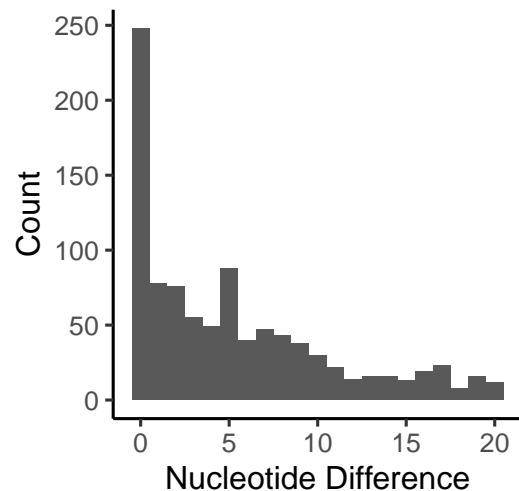
IGHV3-30-3*01

3445 sequences assigned
1414 (41%) exact matches, in which:
1162 unique CDR3
6 unique J



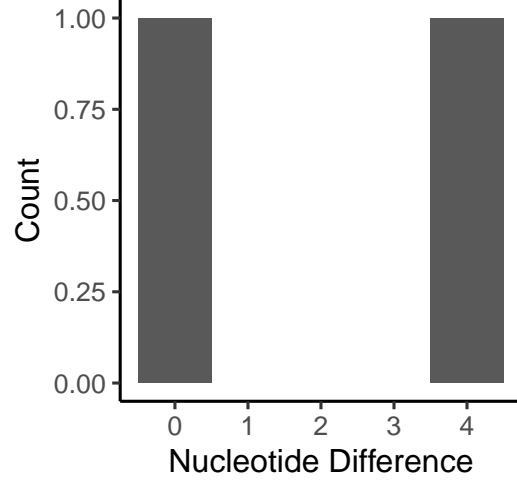
IGHV3-33*08

1329 sequences assigned
248 (18.7%) exact matches, in which:
246 unique CDR3
6 unique J



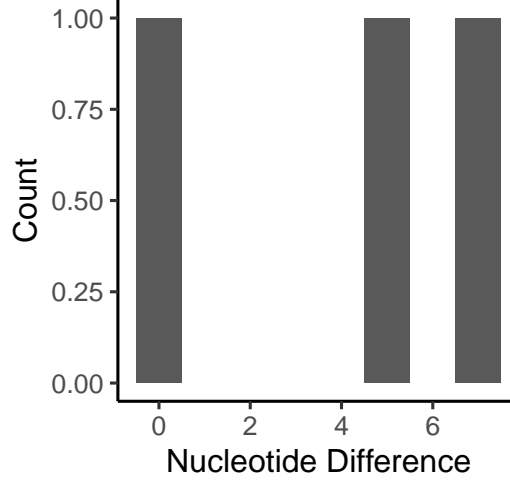
IGHV3-35*01

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



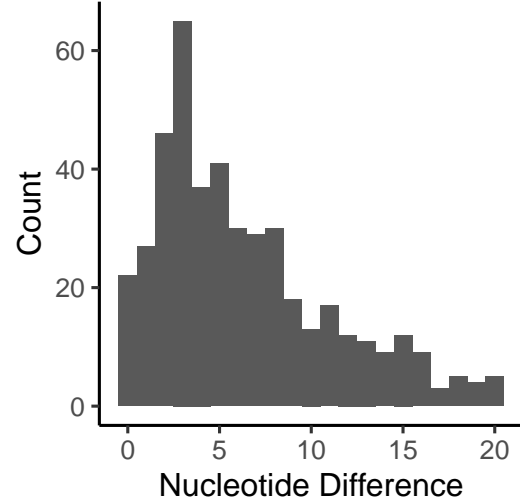
IGHV3-47*02

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J



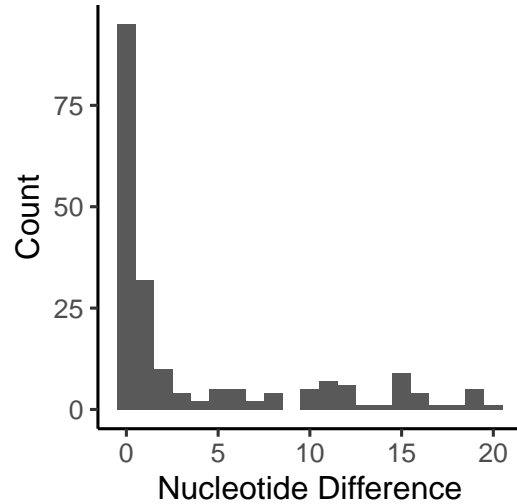
IGHV3-48*04

455 sequences assigned
22 (4.8%) exact matches, in which:
22 unique CDR3
4 unique J



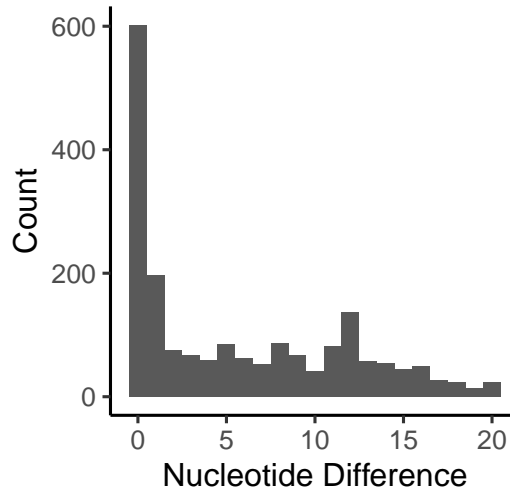
IGHV3-43*01

210 sequences assigned
95 (45.2%) exact matches, in which:
81 unique CDR3
6 unique J



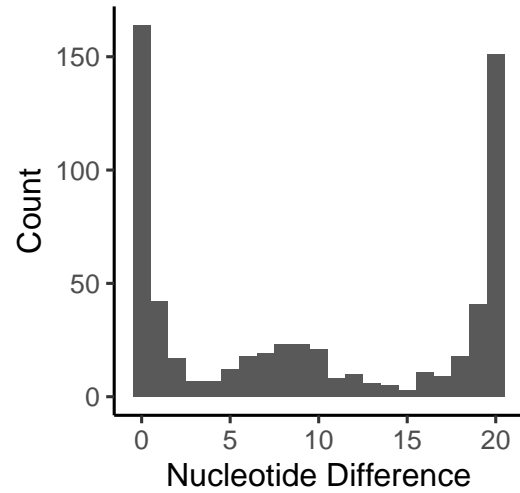
IGHV3-48*02

2048 sequences assigned
602 (29.4%) exact matches, in which:
498 unique CDR3
6 unique J



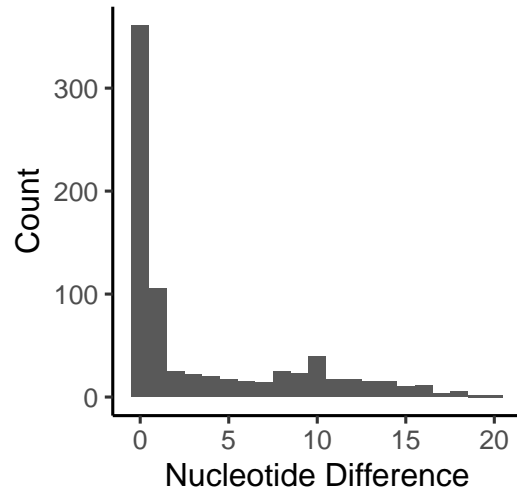
IGHV3-49*04

1189 sequences assigned
164 (13.8%) exact matches, in which:
137 unique CDR3
6 unique J



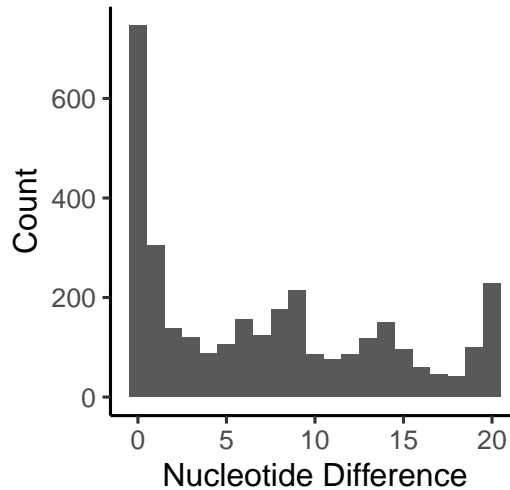
IGHV3-43*02

793 sequences assigned
361 (45.5%) exact matches, in which:
297 unique CDR3
6 unique J



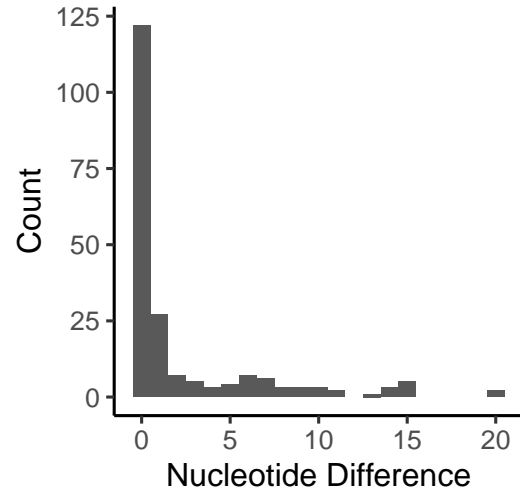
IGHV3-48*03

3532 sequences assigned
747 (21.1%) exact matches, in which:
611 unique CDR3
6 unique J



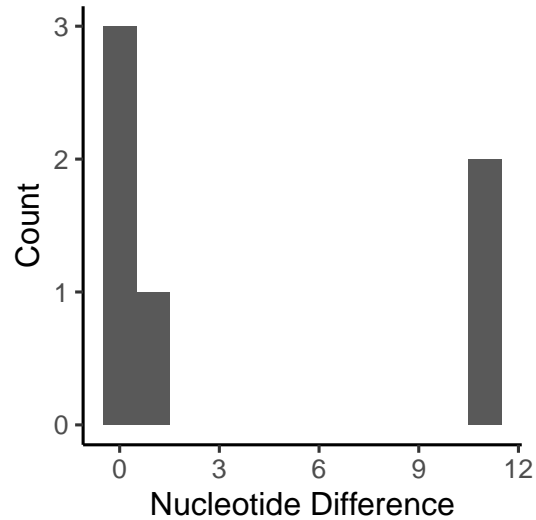
IGHV3-49*03_05

207 sequences assigned
122 (58.9%) exact matches, in which:
105 unique CDR3
4 unique J



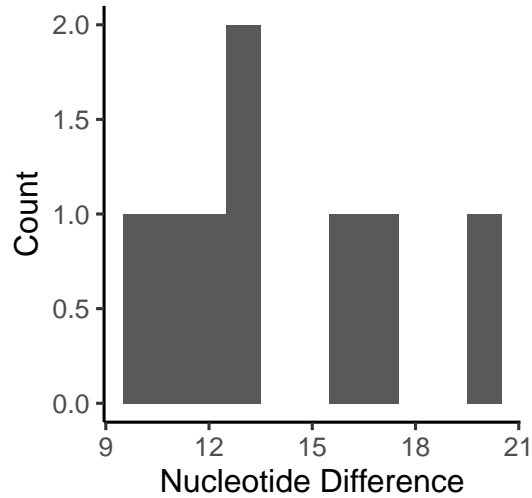
IGHV3-52*01_03

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



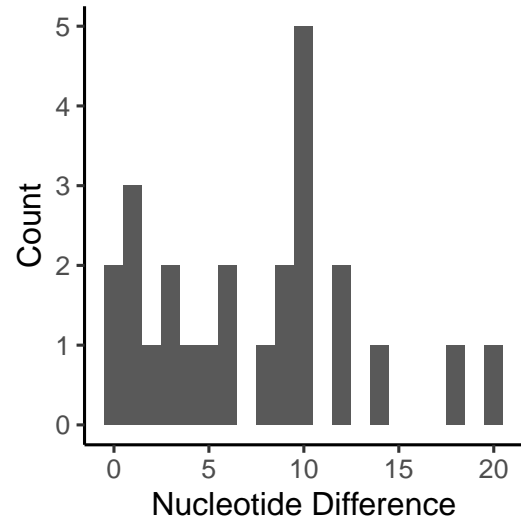
IGHV3-64*04

8 sequences assigned
No exact matches.



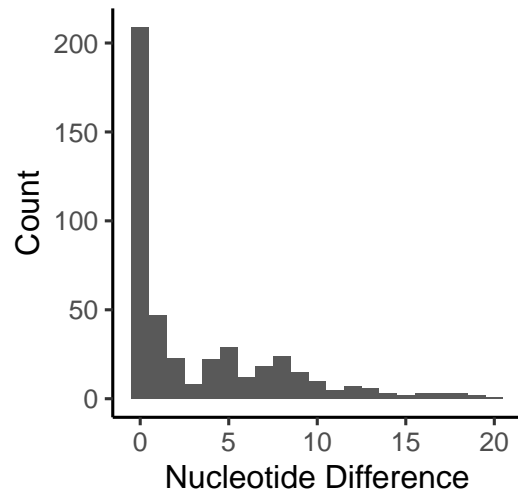
IGHV3-69-1*01

31 sequences assigned
2 (6.5%) exact matches, in which:
2 unique CDR3
2 unique J



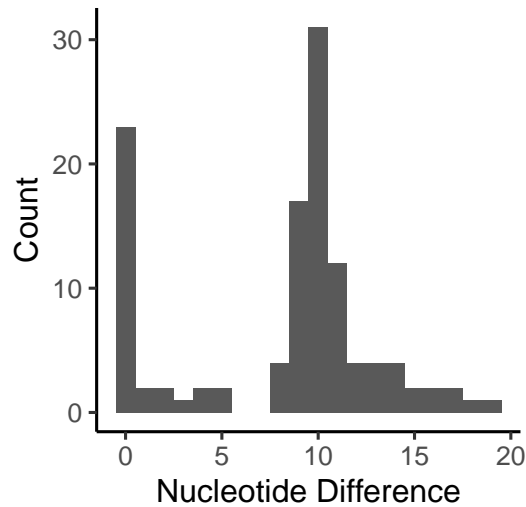
IGHV3-53*04

466 sequences assigned
209 (44.8%) exact matches, in which:
169 unique CDR3
5 unique J



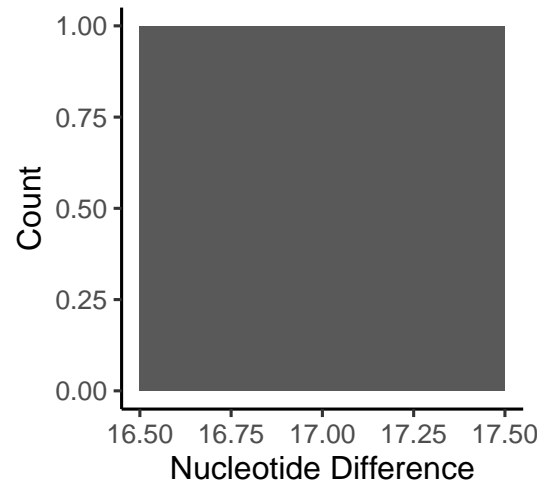
IGHV3-64*02_07

119 sequences assigned
23 (19.3%) exact matches, in which:
18 unique CDR3
5 unique J



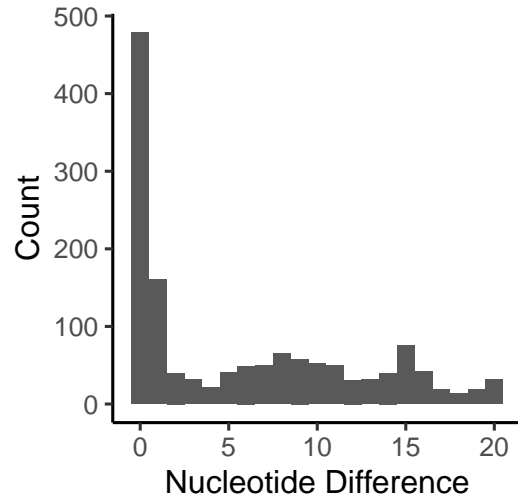
IGHV3-69-1*02

17 sequences assigned
No exact matches.



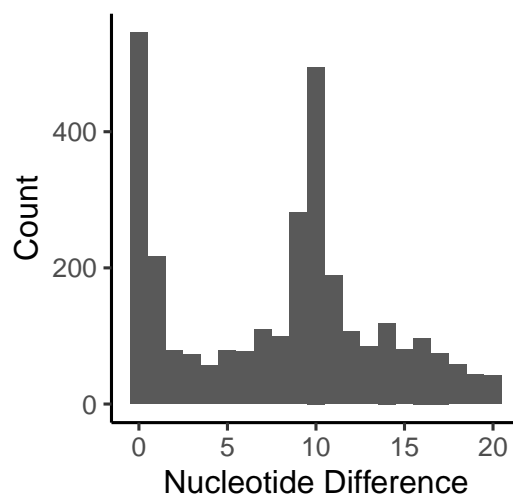
IGHV3-53*01_02

2821 sequences assigned
479 (17%) exact matches, in which:
397 unique CDR3
5 unique J



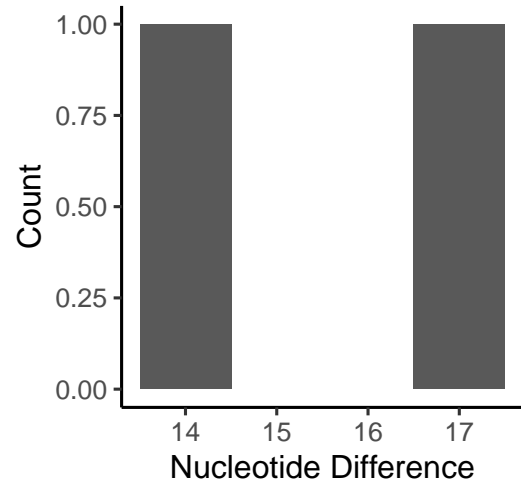
IGHV3-66*01

3445 sequences assigned
546 (15.8%) exact matches, in which:
440 unique CDR3
6 unique J

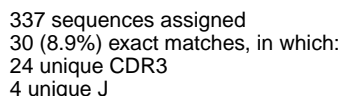


IGHV3-71*01_04

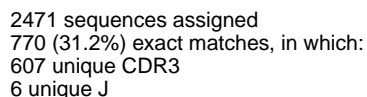
8 sequences assigned
No exact matches.



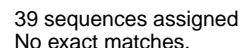
337 sequences assigned
30 (8.9%) exact matches, in which:
24 unique CDR3
4 unique J



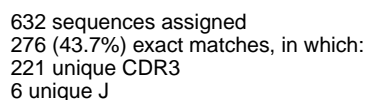
2471 sequences assigned
770 (31.2%) exact matches, in which:
607 unique CDR3
6 unique J



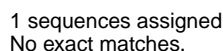
39 sequences assigned
No exact matches.



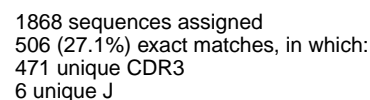
632 sequences assigned
276 (43.7%) exact matches, in which:
221 unique CDR3
6 unique J



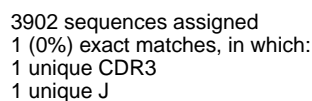
1 sequences assigned
No exact matches.



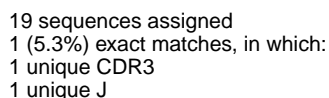
1868 sequences assigned
506 (27.1%) exact matches, in which:
471 unique CDR3
6 unique J



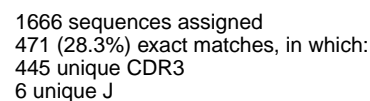
3902 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



19 sequences assigned
1 (5.3%) exact matches, in which:
1 unique CDR3
1 unique J

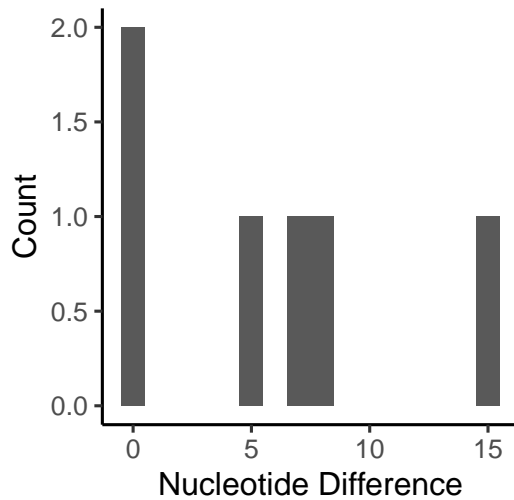


1666 sequences assigned
471 (28.3%) exact matches, in which:
445 unique CDR3
6 unique J



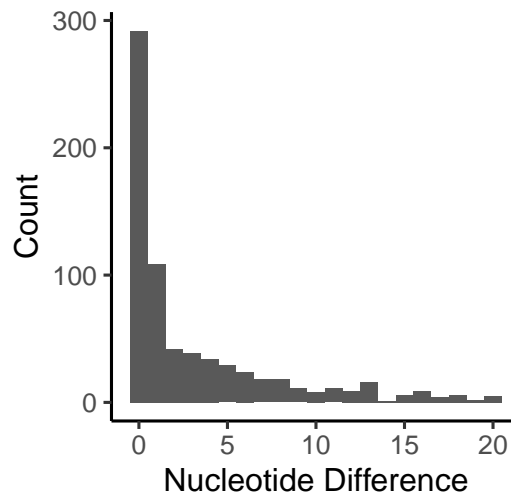
IGHV4-28*03

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
2 unique J



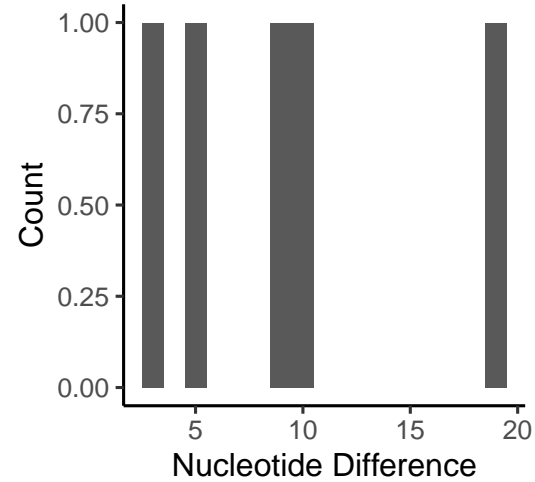
IGHV4-30-4*01

924 sequences assigned
292 (31.6%) exact matches, in which:
277 unique CDR3
6 unique J



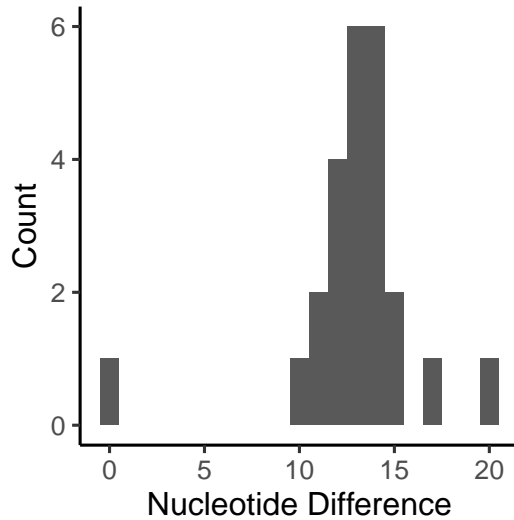
IGHV4-38-2*01

6 sequences assigned
No exact matches.



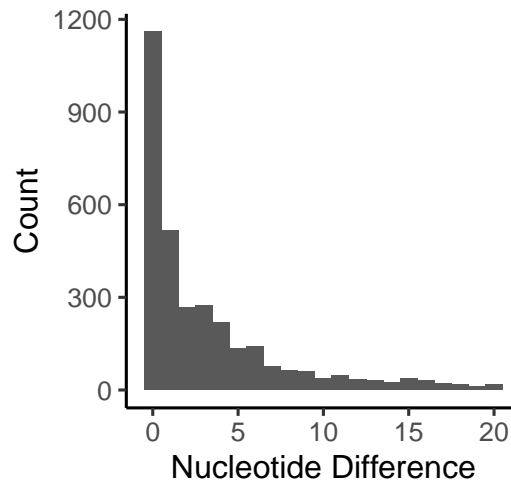
IGHV4-28*01_07

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



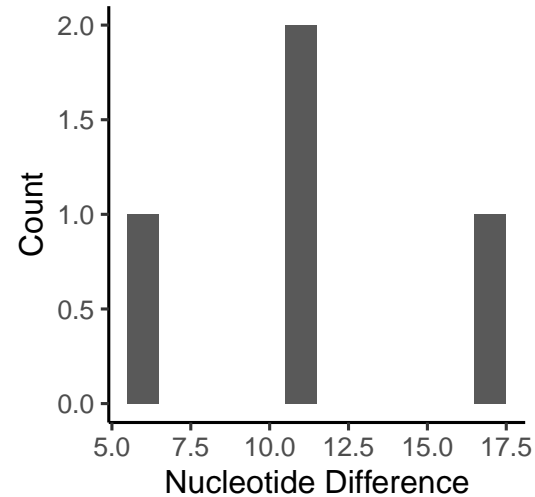
IGHV4-31*02

3588 sequences assigned
1160 (32.3%) exact matches, in which:
1114 unique CDR3
6 unique J



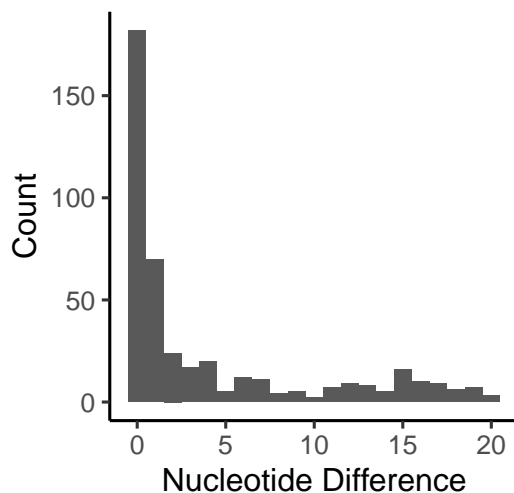
IGHV4-38-2*02

9 sequences assigned
No exact matches.



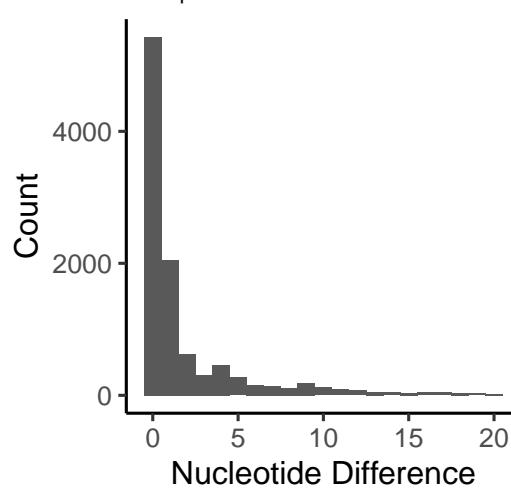
IGHV4-30-2*01

476 sequences assigned
182 (38.2%) exact matches, in which:
166 unique CDR3
6 unique J



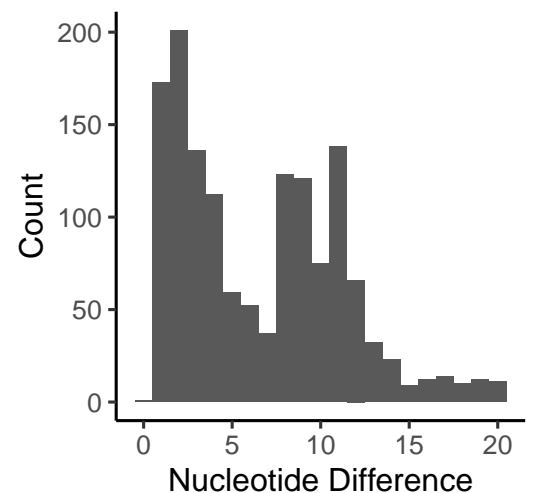
IGHV4-34*01_02

10489 sequences assigned
5429 (51.8%) exact matches, in which:
5038 unique CDR3
6 unique J



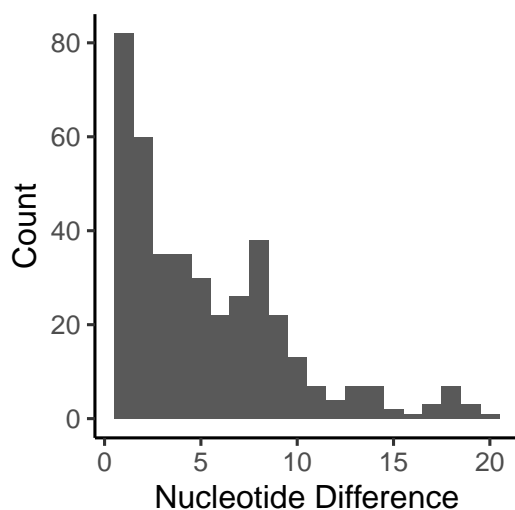
IGHV4-39*07

1476 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



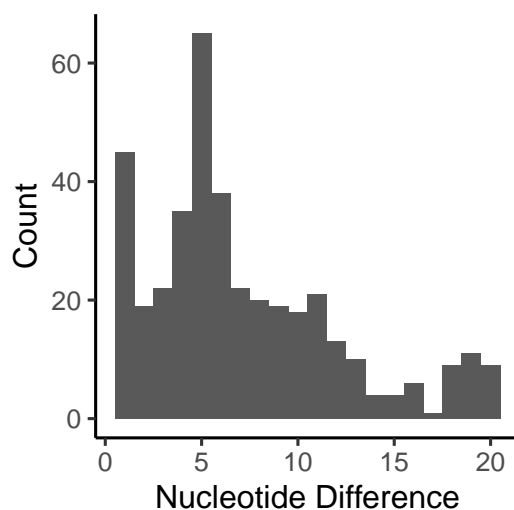
IGHV4–59*08

449 sequences assigned
No exact matches.



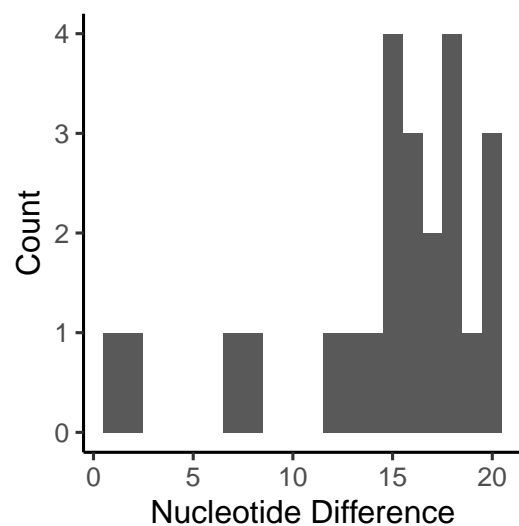
IGHV4–61*08

435 sequences assigned
No exact matches.



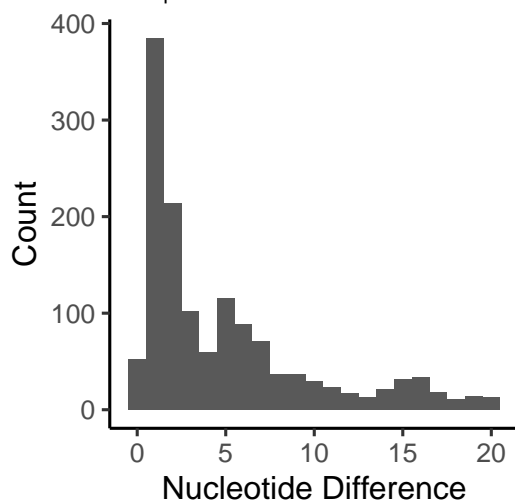
IGHV4/OR15–8*01

34 sequences assigned
No exact matches.



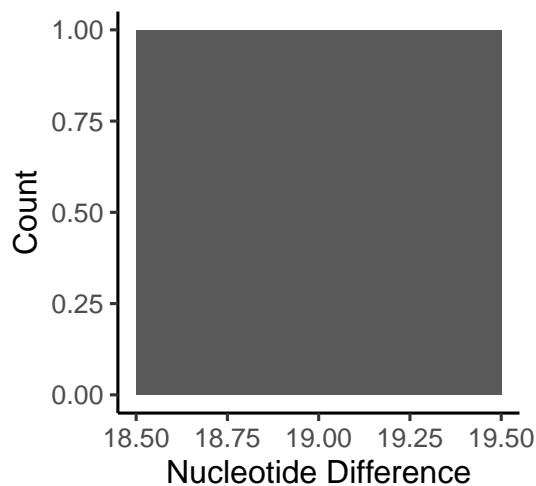
IGHV4–59*12

1584 sequences assigned
52 (3.3%) exact matches, in which:
52 unique CDR3
4 unique J



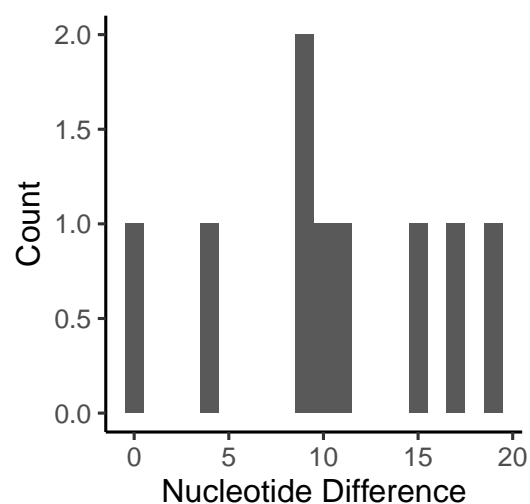
IGHV1/OR15–1*04

1 sequences assigned
No exact matches.



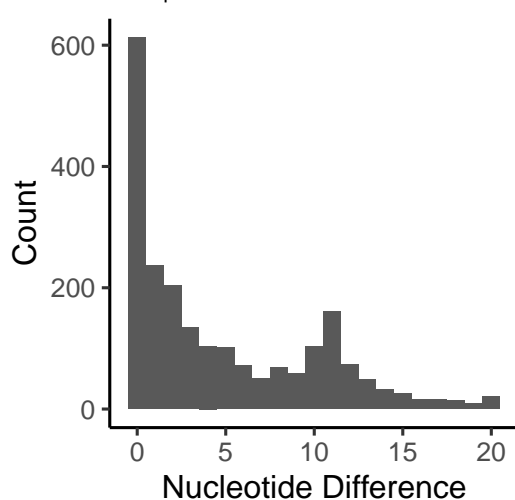
IGHV5–10–1*01_03

11 sequences assigned
1 (9.1%) exact matches, in which:
1 unique CDR3
1 unique J



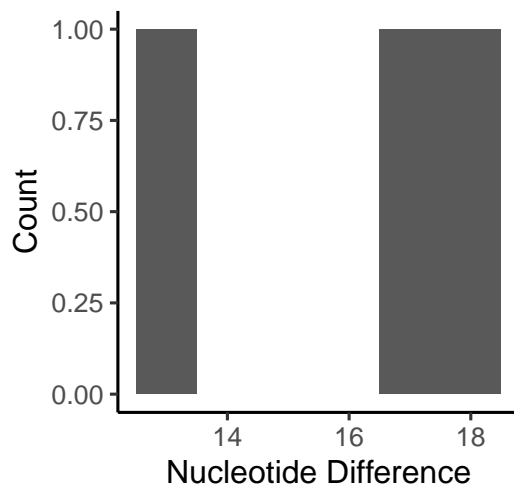
IGHV4–61*01

2303 sequences assigned
613 (26.6%) exact matches, in which:
594 unique CDR3
6 unique J



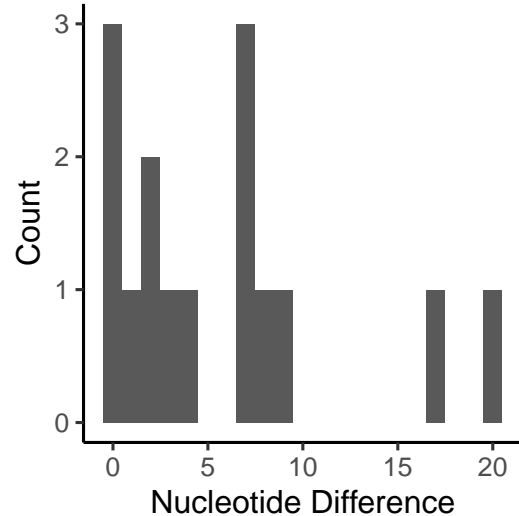
IGHV1/OR15–2*02_03

3 sequences assigned
No exact matches.



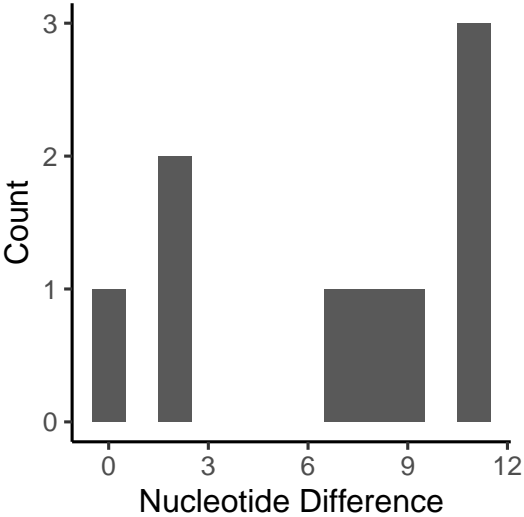
IGHV5–51*04

21 sequences assigned
3 (14.3%) exact matches, in which:
3 unique CDR3
2 unique J



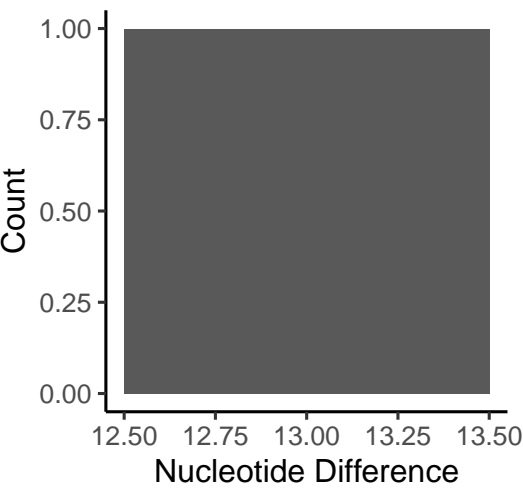
IGHV5-51*06

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



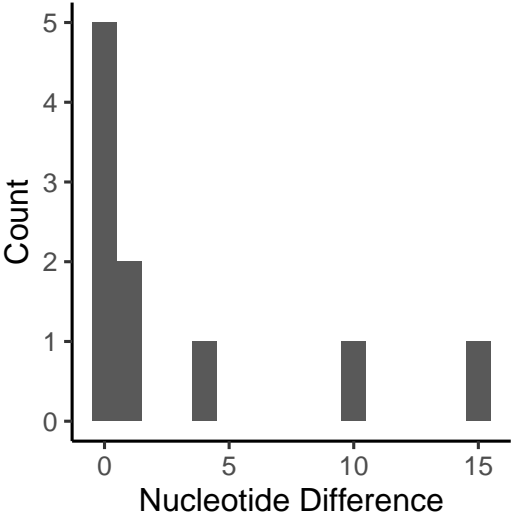
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



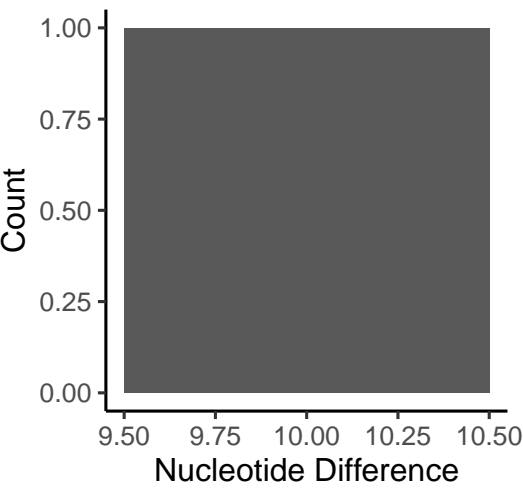
IGHV5-51*07

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



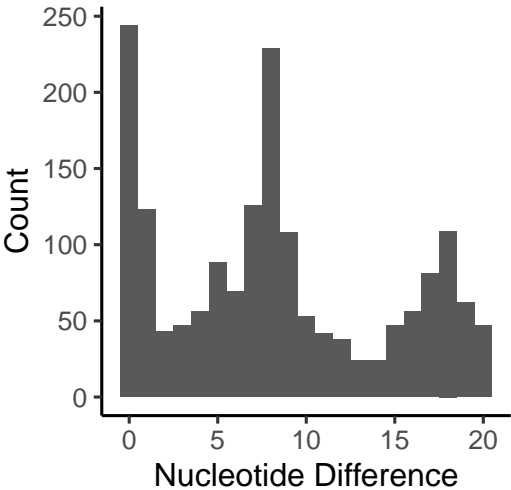
IGHV3/OR16-10*01_03

1 sequences assigned
No exact matches.



IGHV6-1*01_02

4439 sequences assigned
244 (5.5%) exact matches, in which:
233 unique CDR3
6 unique J



IGHV7-4-1*02

3086 sequences assigned
908 (29.4%) exact matches, in which:
858 unique CDR3
6 unique J

