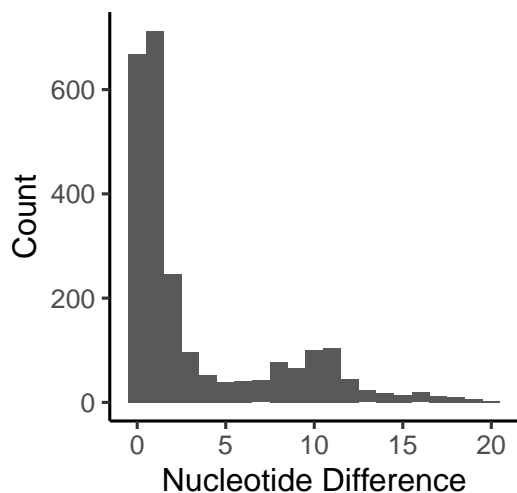


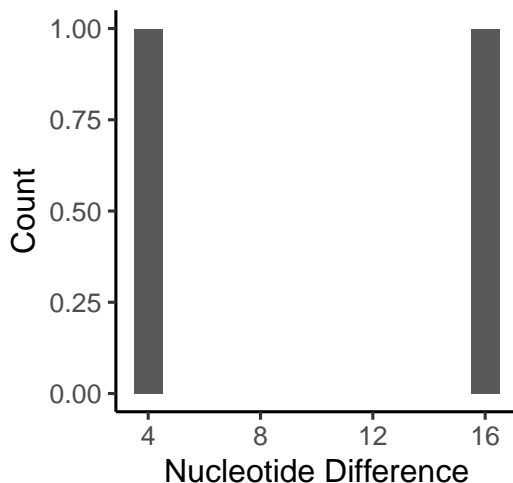
IGHV1-2*04

3259 sequences assigned
668 (20.5%) exact matches, in which:
570 unique CDR3
6 unique J



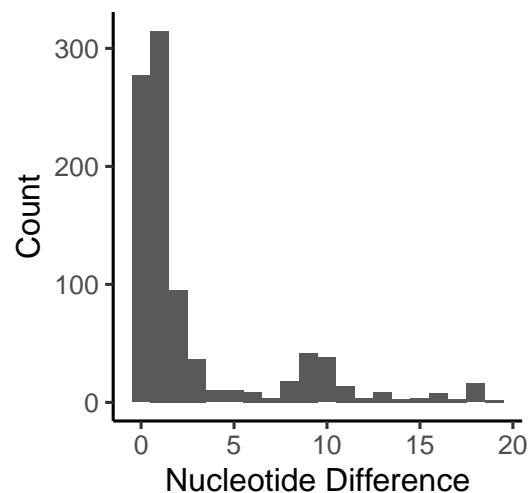
IGHV1-8*02

2 sequences assigned
No exact matches.



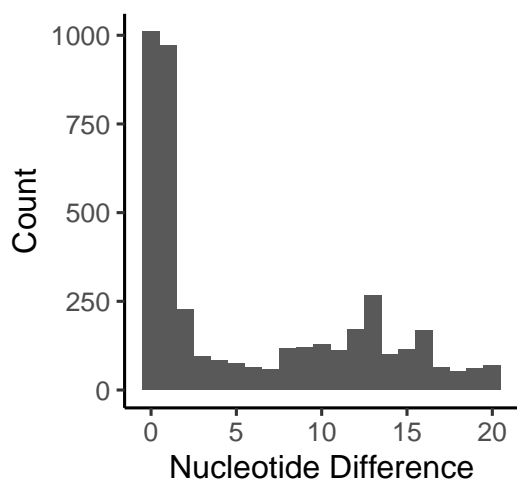
IGHV1-24*01

933 sequences assigned
277 (29.7%) exact matches, in which:
230 unique CDR3
6 unique J



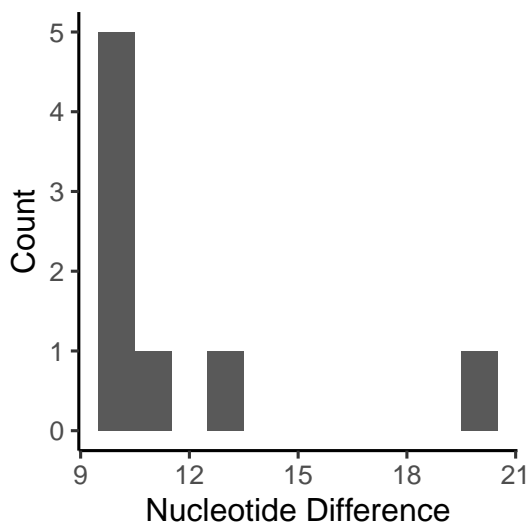
IGHV1-3*01_05

4474 sequences assigned
1010 (22.6%) exact matches, in which:
833 unique CDR3
6 unique J



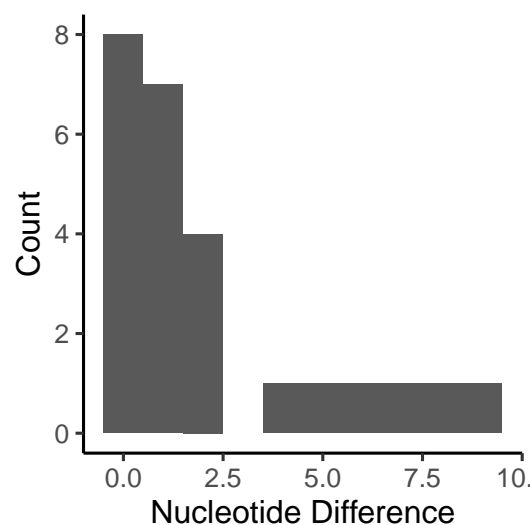
IGHV1-8*03

9 sequences assigned
No exact matches.



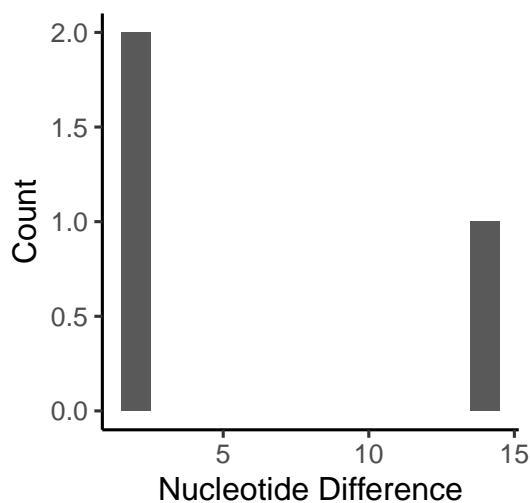
IGHV1-45*02

25 sequences assigned
8 (32%) exact matches, in which:
7 unique CDR3
4 unique J



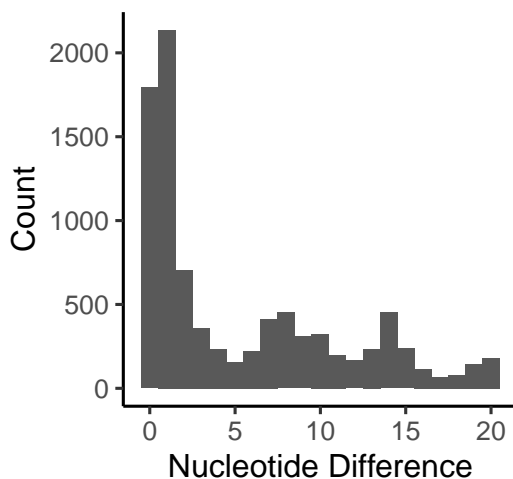
IGHV1-8*01

4 sequences assigned
No exact matches.



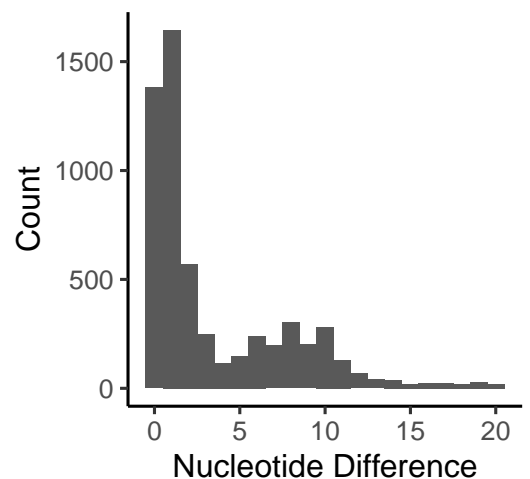
IGHV1-18*04

9495 sequences assigned
1793 (18.9%) exact matches, in which:
1460 unique CDR3
6 unique J



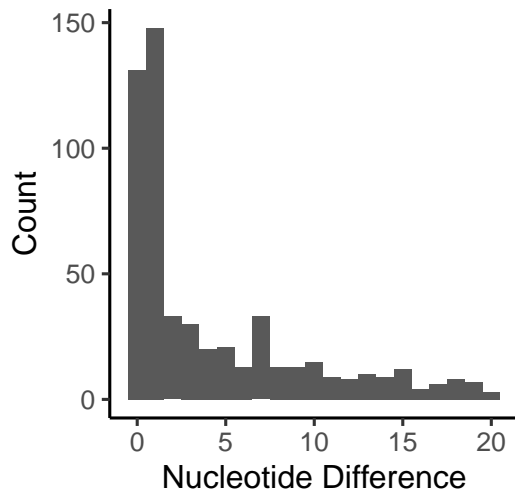
IGHV1-46*01

6684 sequences assigned
1382 (20.7%) exact matches, in which:
1142 unique CDR3
6 unique J



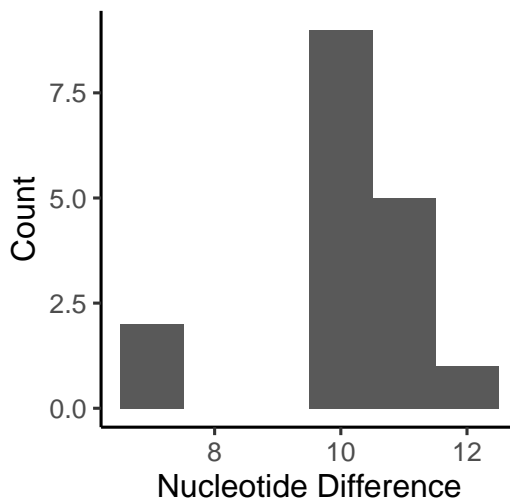
IGHV1–58*01_03

549 sequences assigned
131 (23.9%) exact matches, in which:
104 unique CDR3
5 unique J



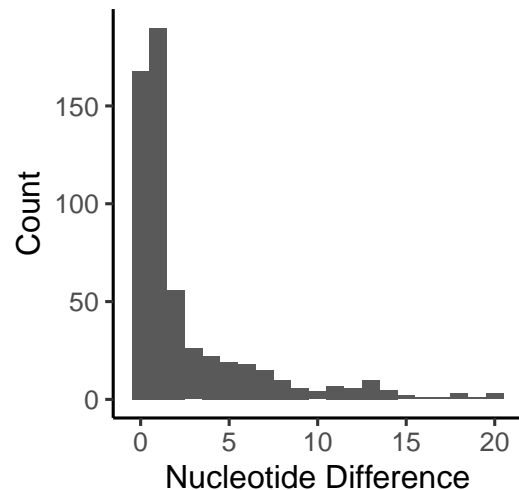
IGHV1–NL1*01

17 sequences assigned
No exact matches.



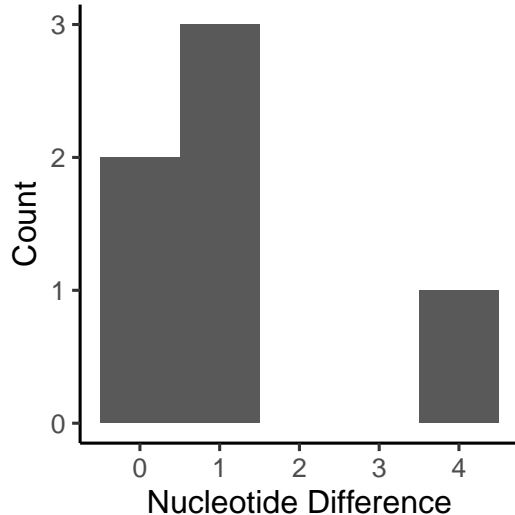
IGHV2–70*01

612 sequences assigned
168 (27.5%) exact matches, in which:
139 unique CDR3
5 unique J



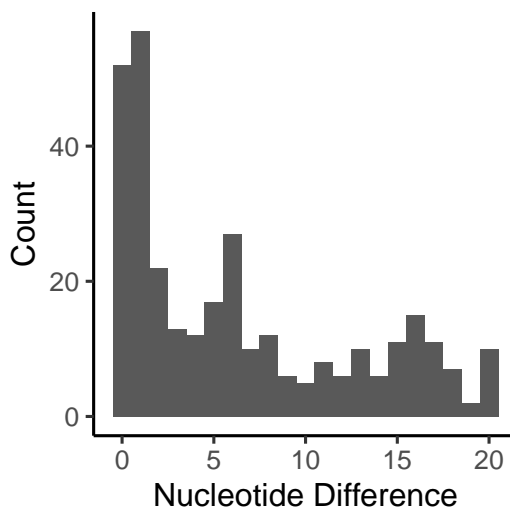
IGHV1–68*01

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



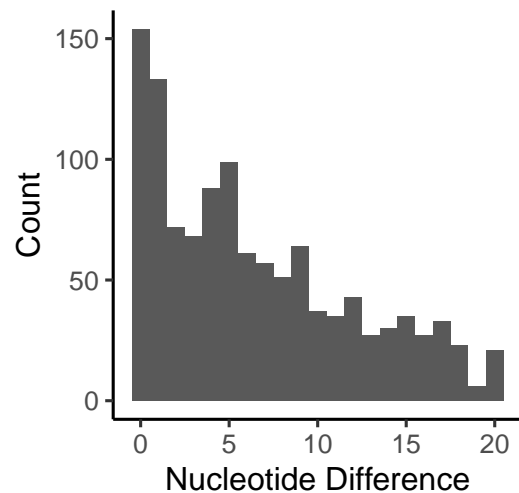
IGHV2–5*02

461 sequences assigned
52 (11.3%) exact matches, in which:
43 unique CDR3
5 unique J



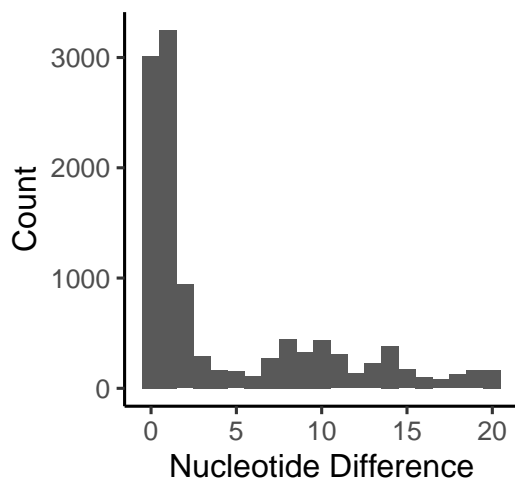
IGHV3–7*01

1289 sequences assigned
154 (11.9%) exact matches, in which:
142 unique CDR3
6 unique J



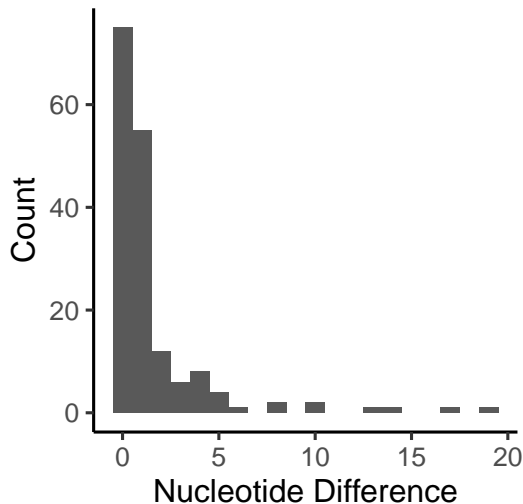
IGHV1–69*01_12_13

13224 sequences assigned
3012 (22.8%) exact matches, in which:
2605 unique CDR3
6 unique J



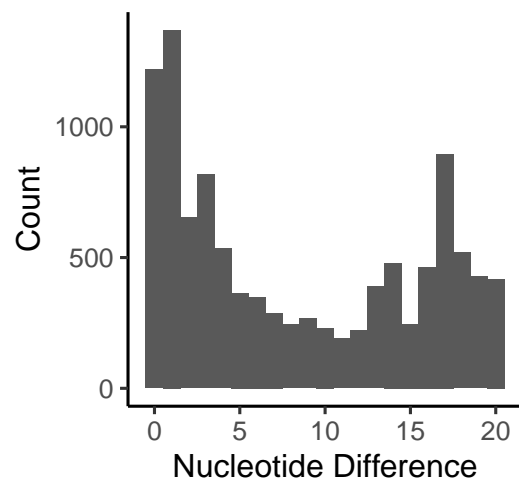
IGHV2–26*01

172 sequences assigned
75 (43.6%) exact matches, in which:
66 unique CDR3
5 unique J



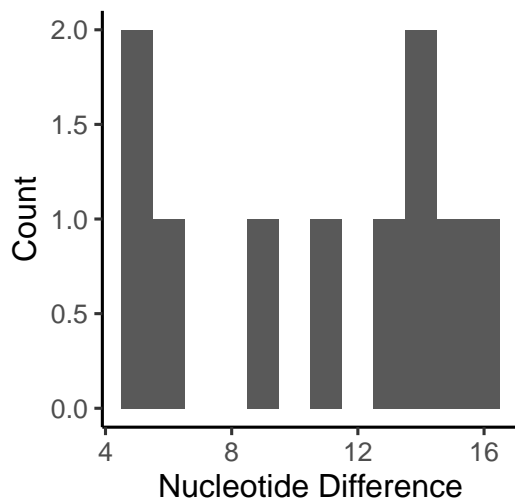
IGHV3–7*03

14829 sequences assigned
1219 (8.2%) exact matches, in which:
755 unique CDR3
6 unique J



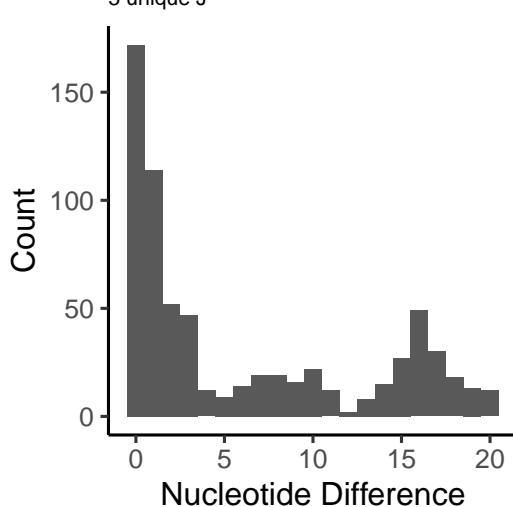
IGHV3-9*01

10 sequences assigned
No exact matches.



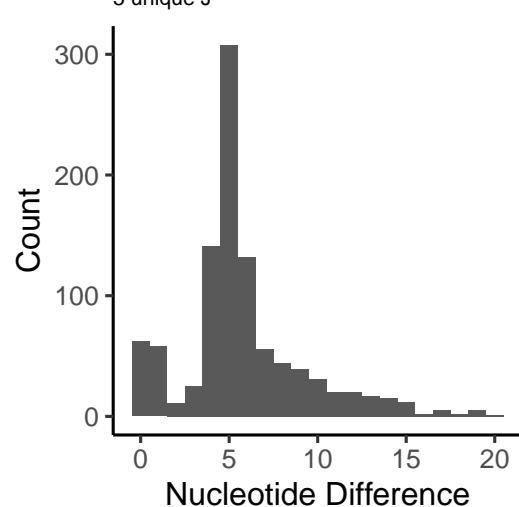
IGHV3-13*04

770 sequences assigned
172 (22.3%) exact matches, in which:
111 unique CDR3
5 unique J



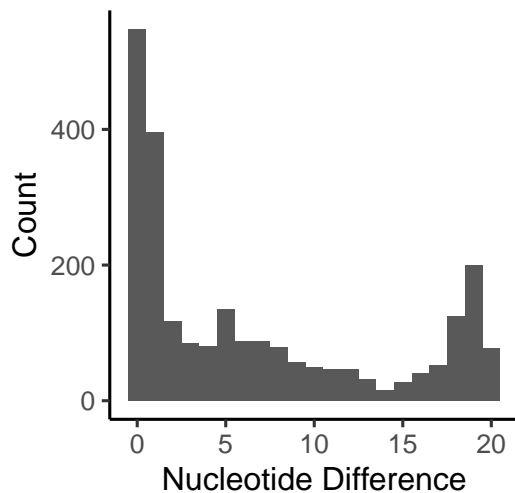
IGHV3-20*01_02

1010 sequences assigned
62 (6.1%) exact matches, in which:
39 unique CDR3
5 unique J



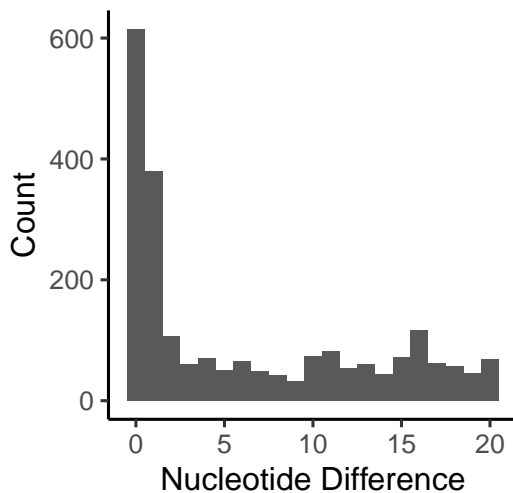
IGHV3-11*06

3191 sequences assigned
548 (17.2%) exact matches, in which:
364 unique CDR3
6 unique J



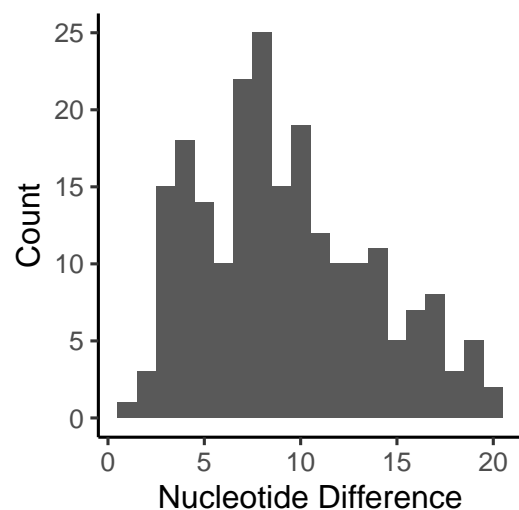
IGHV3-15*01_02

3259 sequences assigned
615 (18.9%) exact matches, in which:
376 unique CDR3
6 unique J



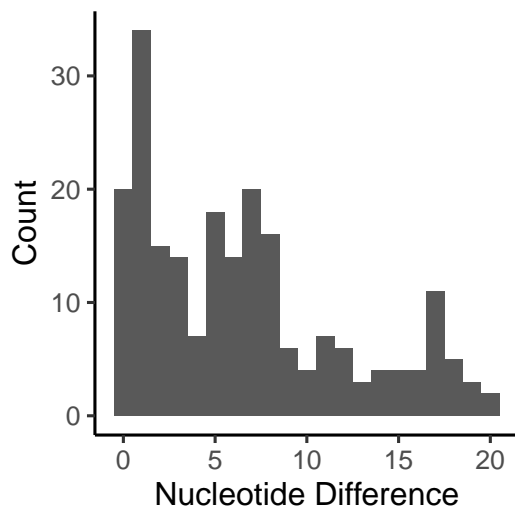
IGHV3-20*03_04

239 sequences assigned
No exact matches.



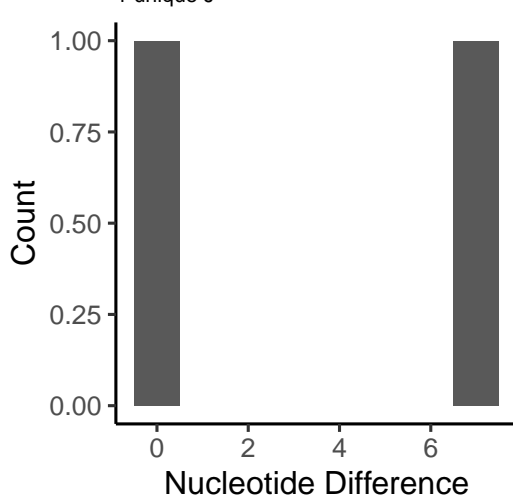
IGHV3-11*03_05

251 sequences assigned
20 (8%) exact matches, in which:
20 unique CDR3
5 unique J



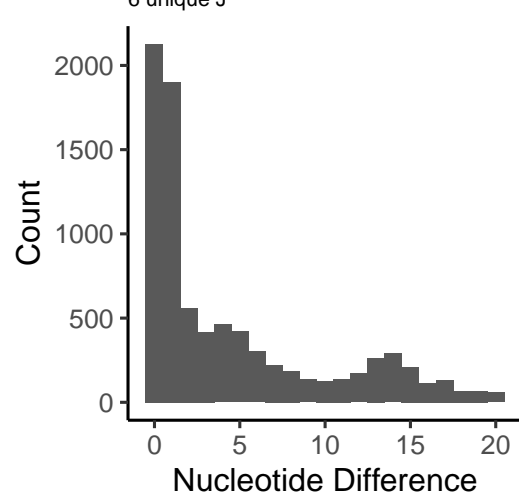
IGHV3-19*01

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



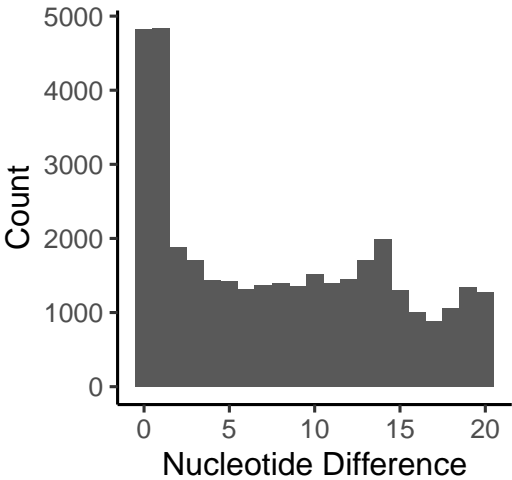
IGHV3-21*01_02

8721 sequences assigned
2127 (24.4%) exact matches, in which:
1326 unique CDR3
6 unique J



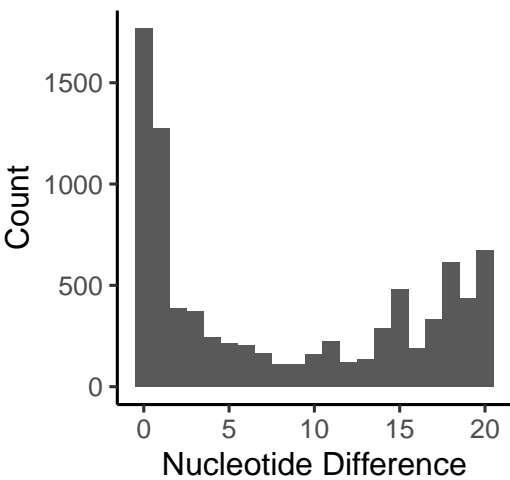
IGHV3-23*01_04

42095 sequences assigned
4828 (11.5%) exact matches, in which:
2764 unique CDR3
6 unique J



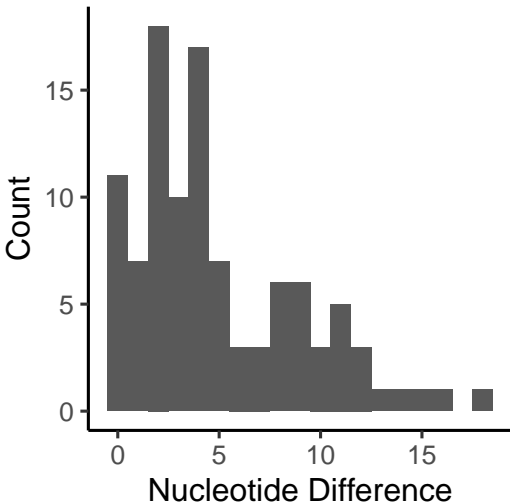
IGHV3-30*04

11787 sequences assigned
1768 (15%) exact matches, in which:
1211 unique CDR3
6 unique J



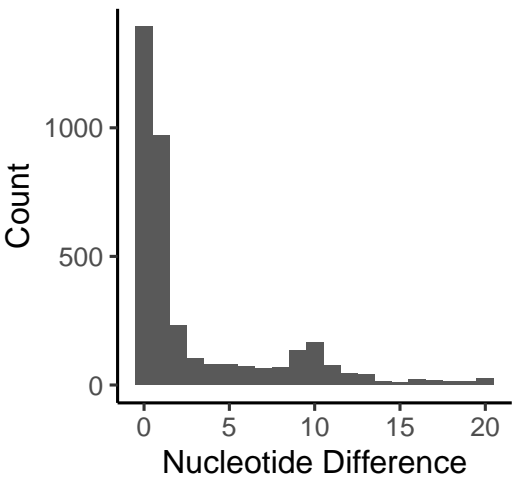
IGHV3-33*05

106 sequences assigned
11 (10.4%) exact matches, in which:
10 unique CDR3
4 unique J



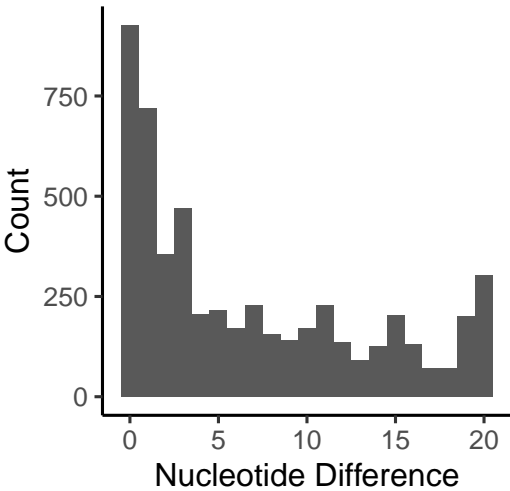
IGHV3-30-3*01

4005 sequences assigned
1393 (34.8%) exact matches, in which:
920 unique CDR3
6 unique J



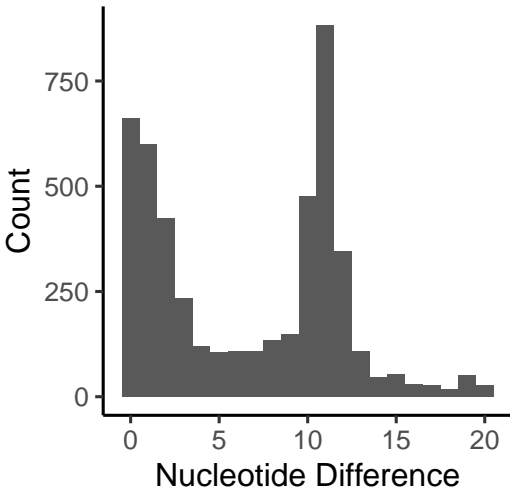
IGHV3-30*18

6469 sequences assigned
927 (14.3%) exact matches, in which:
577 unique CDR3
6 unique J



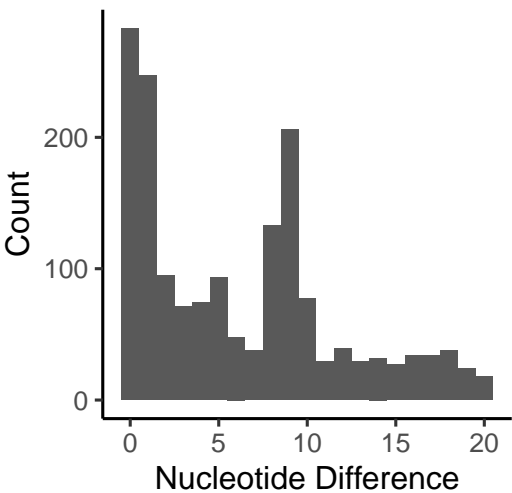
IGHV3-33*06

5687 sequences assigned
661 (11.6%) exact matches, in which:
414 unique CDR3
6 unique J



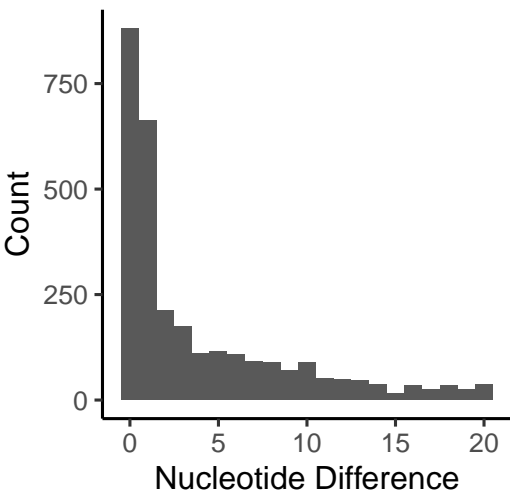
IGHV3-30*03

2060 sequences assigned
283 (13.7%) exact matches, in which:
261 unique CDR3
5 unique J



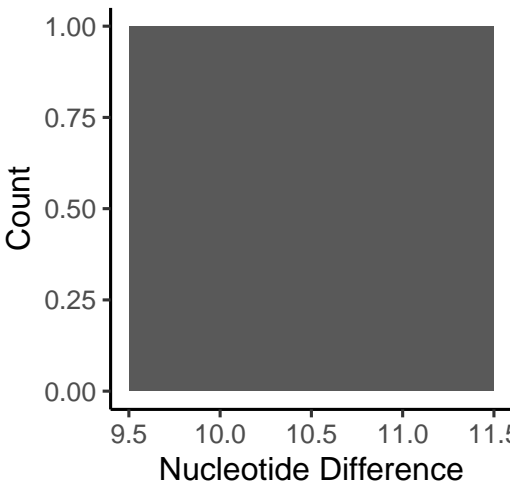
IGHV3-33*01

4175 sequences assigned
881 (21.1%) exact matches, in which:
616 unique CDR3
6 unique J



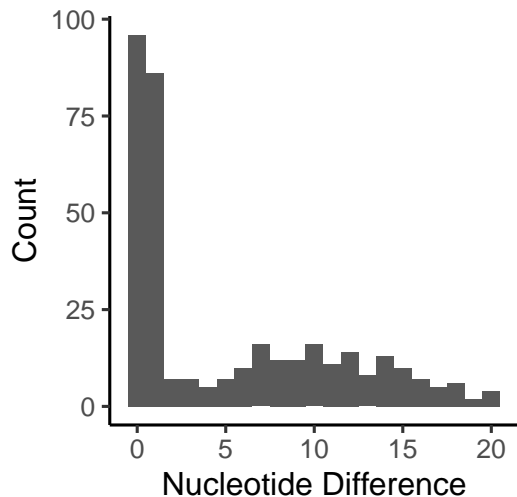
IGHV3-35*01

2 sequences assigned
No exact matches.



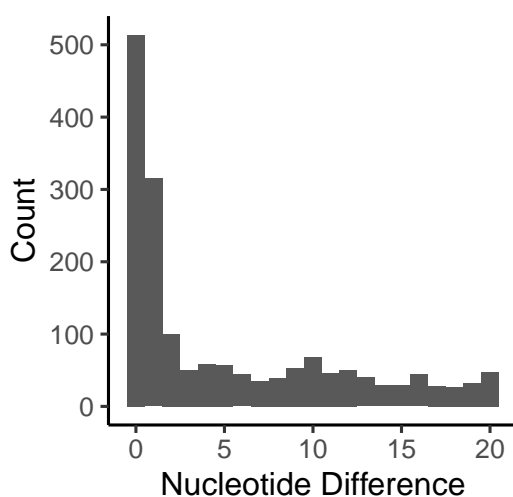
IGHV3-43*01

398 sequences assigned
96 (24.1%) exact matches, in which:
52 unique CDR3
3 unique J



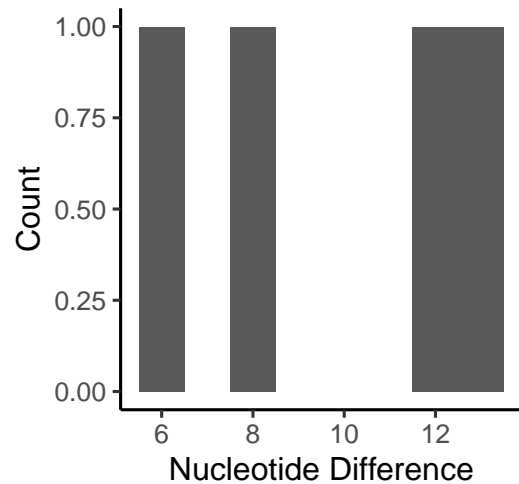
IGHV3-48*02

2260 sequences assigned
514 (22.7%) exact matches, in which:
320 unique CDR3
6 unique J



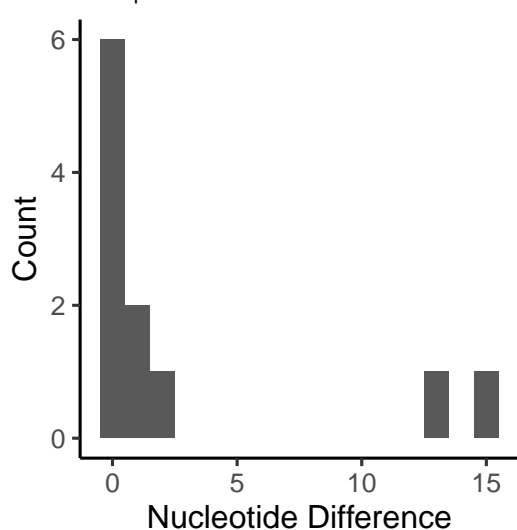
IGHV3-52*01_03

4 sequences assigned
No exact matches.



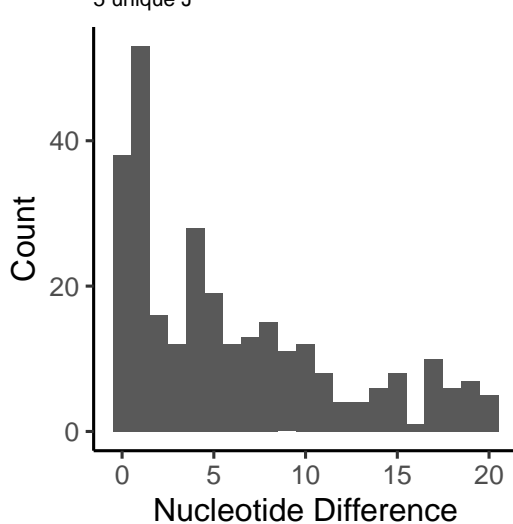
IGHV3-47*02

11 sequences assigned
6 (54.5%) exact matches, in which:
5 unique CDR3
1 unique J



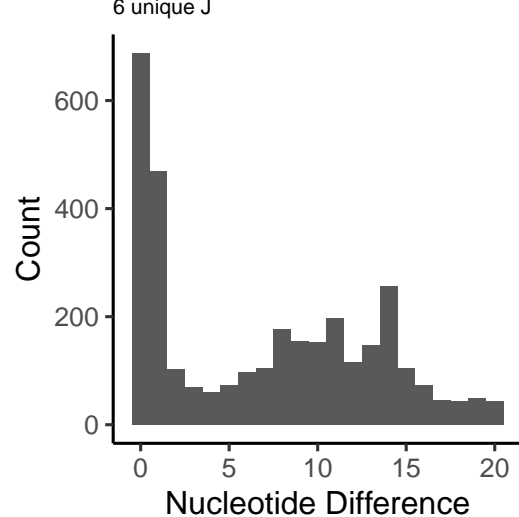
IGHV3-48*04

329 sequences assigned
38 (11.6%) exact matches, in which:
38 unique CDR3
5 unique J



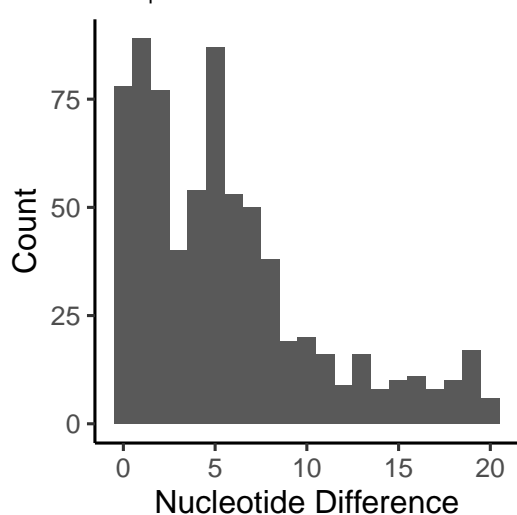
IGHV3-53*01_02

3822 sequences assigned
688 (18%) exact matches, in which:
447 unique CDR3
6 unique J



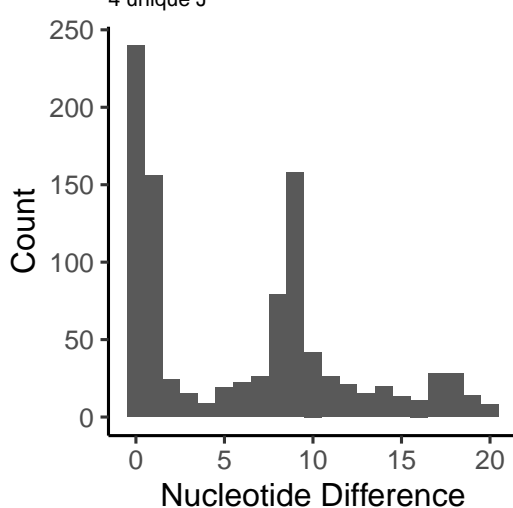
IGHV3-48*01

766 sequences assigned
78 (10.2%) exact matches, in which:
75 unique CDR3
4 unique J



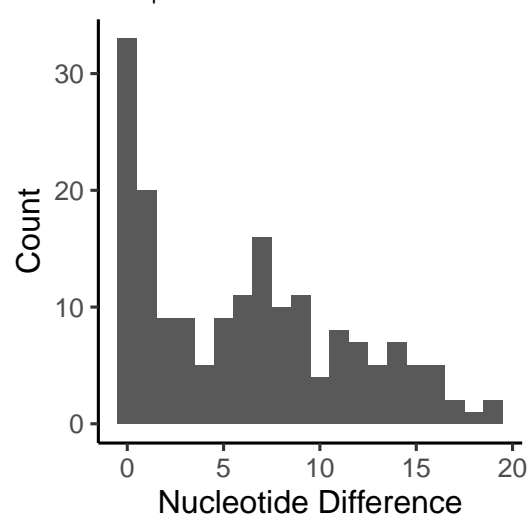
IGHV3-49*03_05

1115 sequences assigned
240 (21.5%) exact matches, in which:
145 unique CDR3
4 unique J



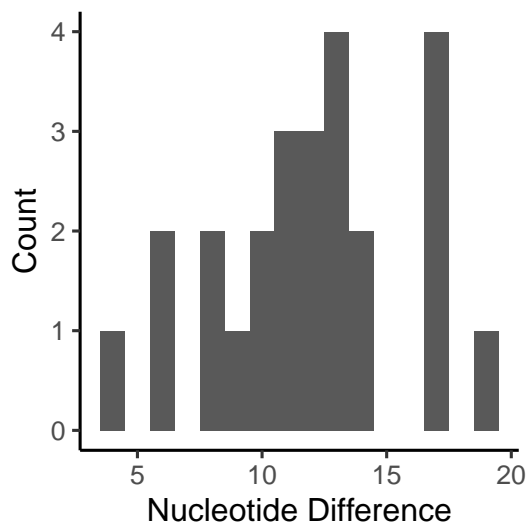
IGHV3-64*04

190 sequences assigned
33 (17.4%) exact matches, in which:
33 unique CDR3
3 unique J



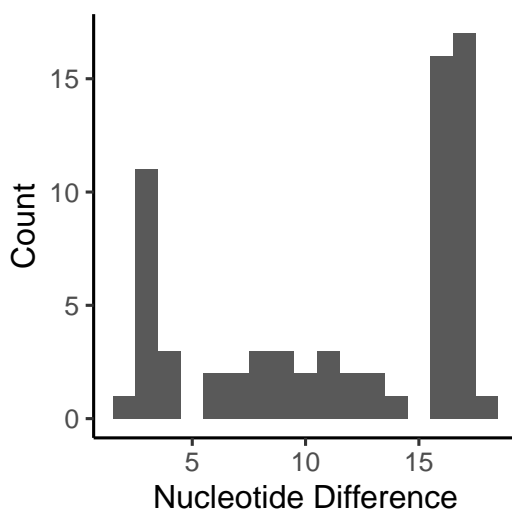
IGHV3-66*01

34 sequences assigned
No exact matches.



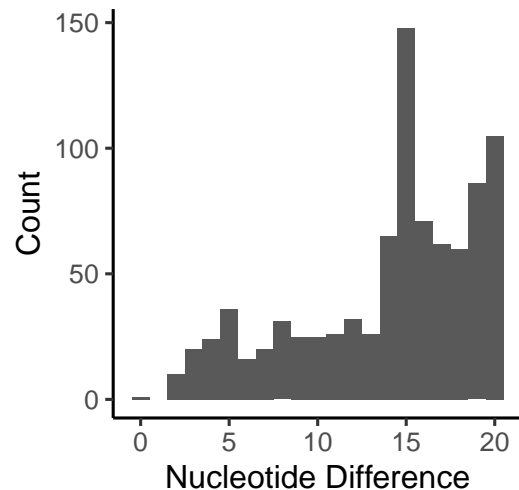
IGHV3-69-1*01

74 sequences assigned
No exact matches.



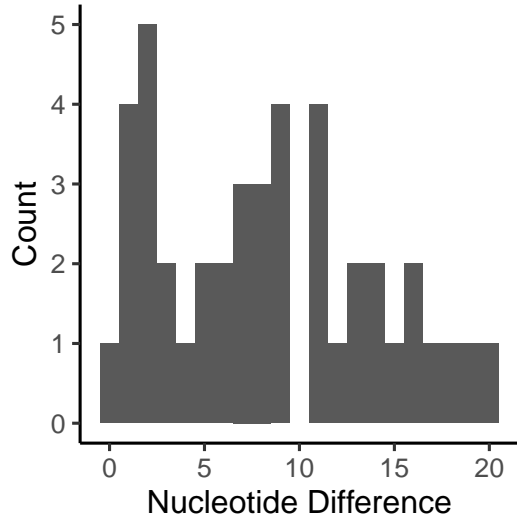
IGHV3-74*03

1771 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



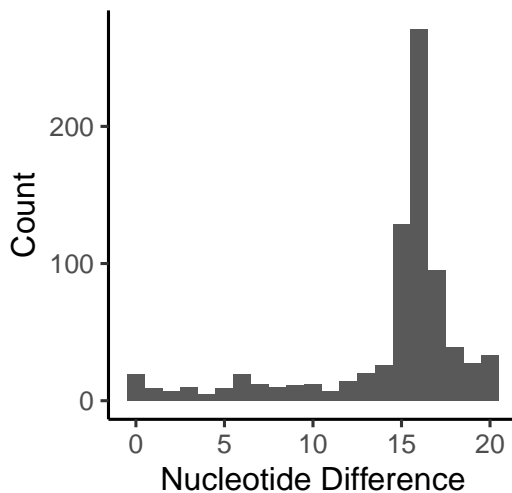
IGHV3-66*02

64 sequences assigned
1 (1.6%) exact matches, in which:
1 unique CDR3
1 unique J



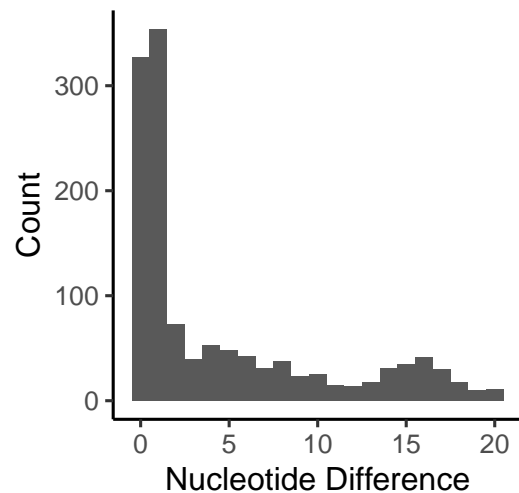
IGHV3-72*01

860 sequences assigned
19 (2.2%) exact matches, in which:
12 unique CDR3
2 unique J



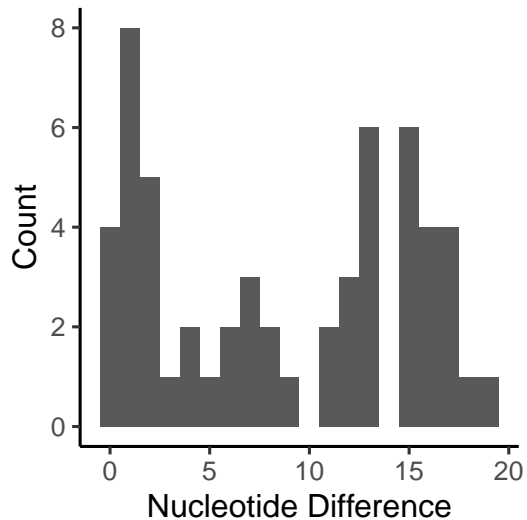
IGHV3-74*01_02

1932 sequences assigned
327 (16.9%) exact matches, in which:
178 unique CDR3
6 unique J



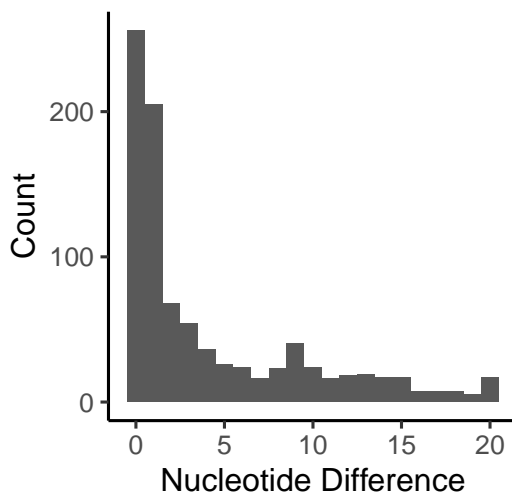
IGHV3-66*03

61 sequences assigned
4 (6.6%) exact matches, in which:
4 unique CDR3
4 unique J



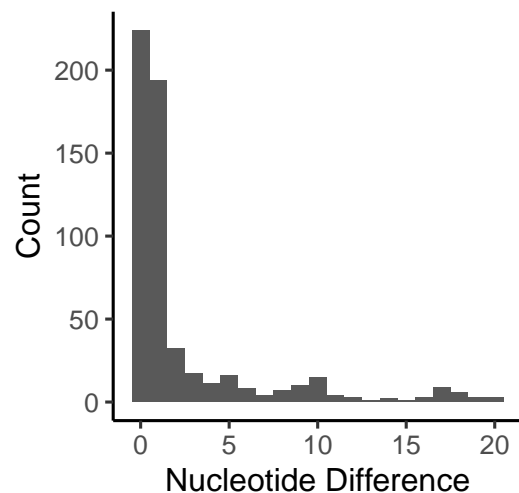
IGHV3-73*01_02

1204 sequences assigned
256 (21.3%) exact matches, in which:
158 unique CDR3
6 unique J



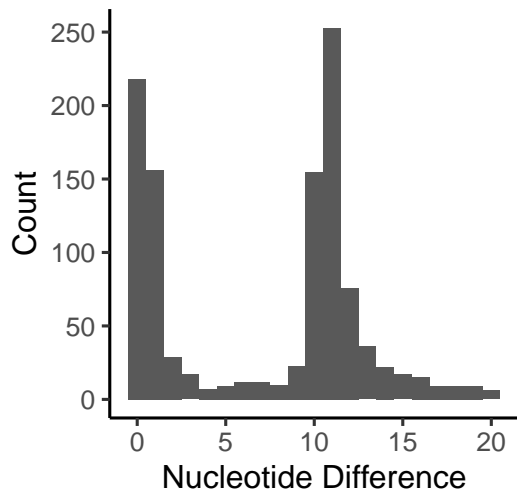
IGHV3-64D*06

579 sequences assigned
224 (38.7%) exact matches, in which:
110 unique CDR3
6 unique J



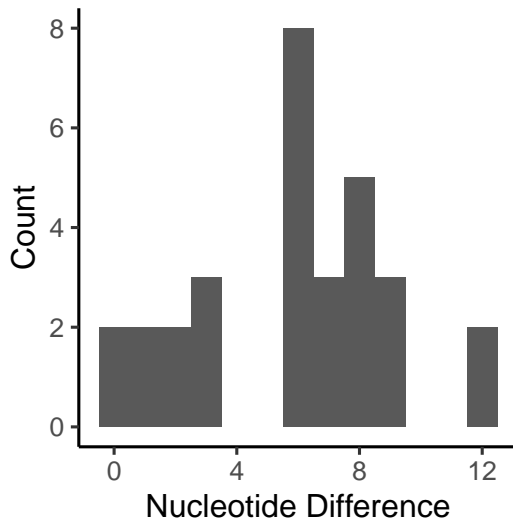
IGHV3-64D*09

1129 sequences assigned
218 (19.3%) exact matches, in which:
110 unique CDR3
5 unique J



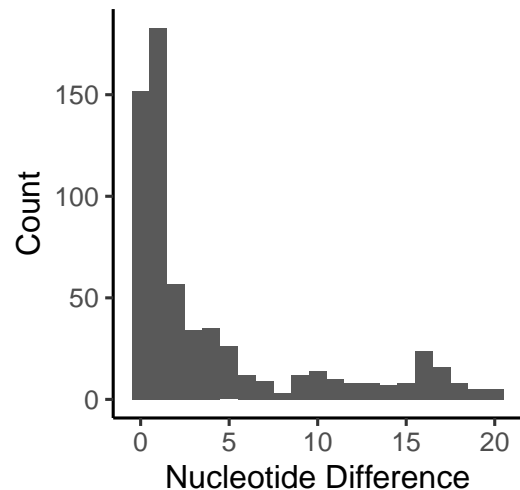
IGHV4-28*03

32 sequences assigned
2 (6.2%) exact matches, in which:
2 unique CDR3
2 unique J



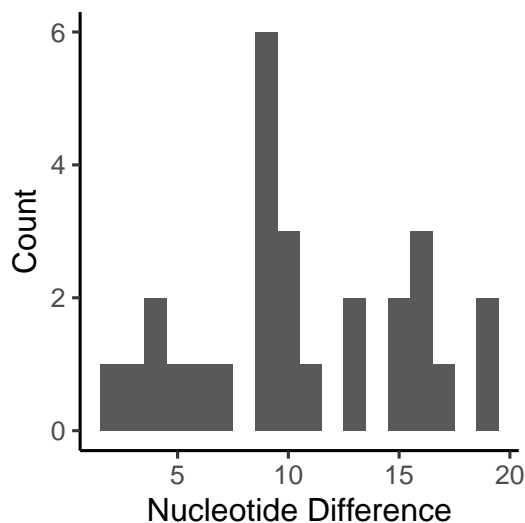
IGHV4-30-2*01

660 sequences assigned
152 (23%) exact matches, in which:
97 unique CDR3
6 unique J



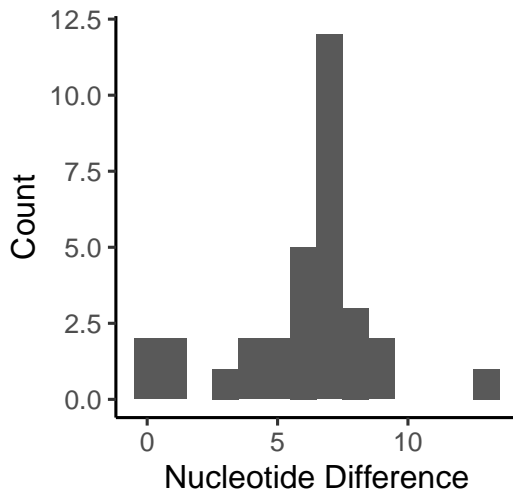
IGHV3-NL1*01

35 sequences assigned
No exact matches.



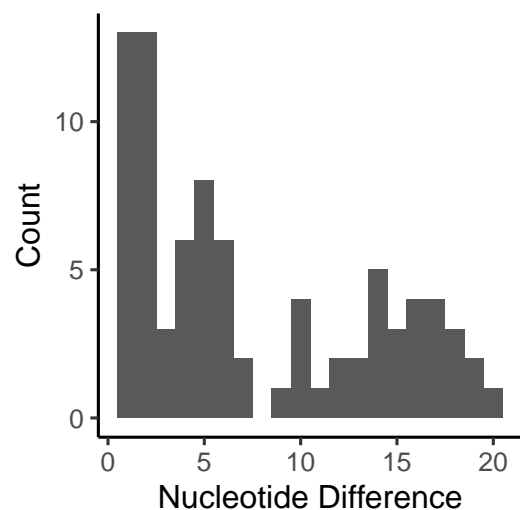
IGHV4-28*01_07

33 sequences assigned
2 (6.1%) exact matches, in which:
2 unique CDR3
2 unique J



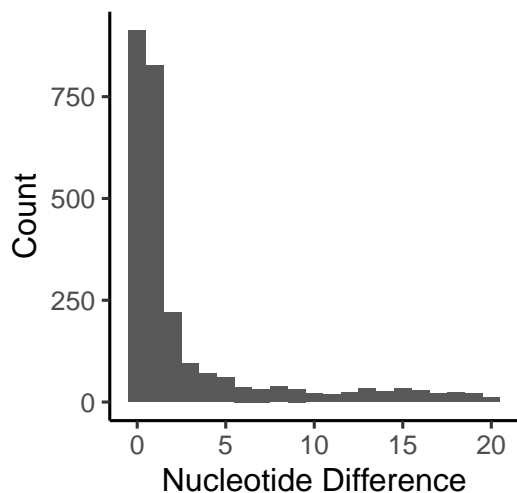
IGHV4-30-2*03

108 sequences assigned
No exact matches.



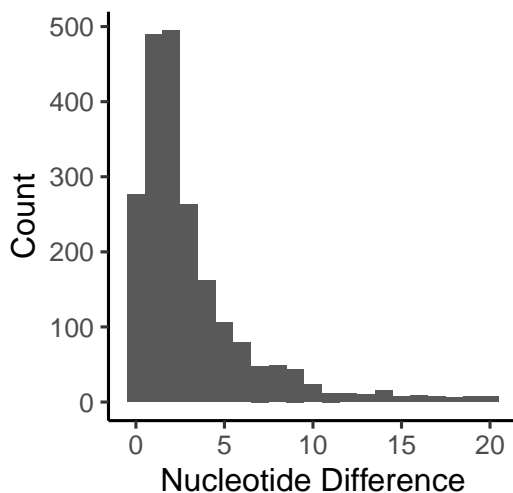
IGHV4-4*02_03

3317 sequences assigned
913 (27.5%) exact matches, in which:
696 unique CDR3
6 unique J



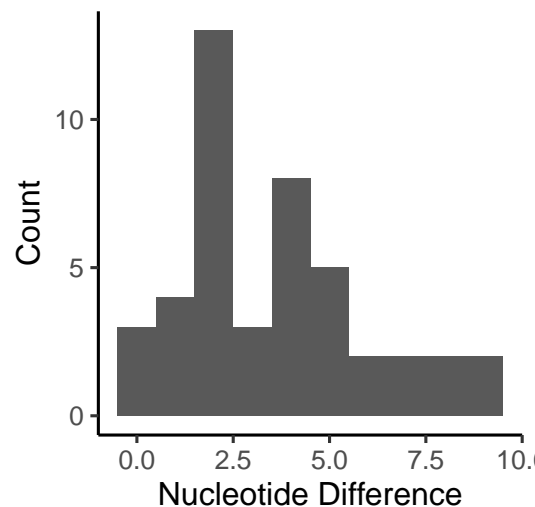
IGHV4-30-4*01

2544 sequences assigned
276 (10.8%) exact matches, in which:
201 unique CDR3
5 unique J



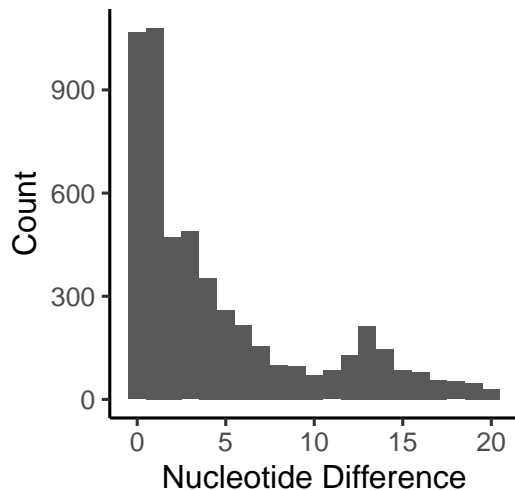
IGHV4-30-2*05

44 sequences assigned
3 (6.8%) exact matches, in which:
3 unique CDR3
2 unique J



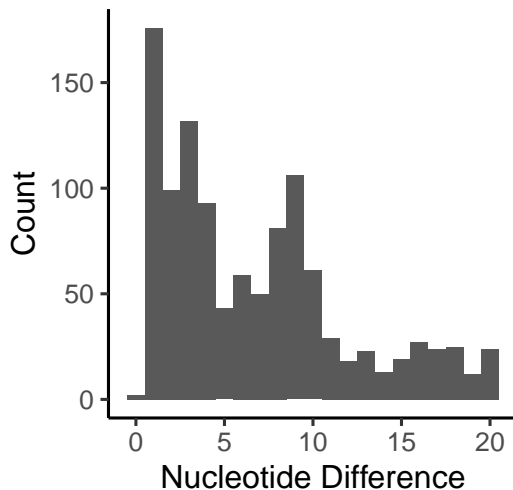
IGHV4-31*02

5835 sequences assigned
1067 (18.3%) exact matches, in which:
889 unique CDR3
6 unique J



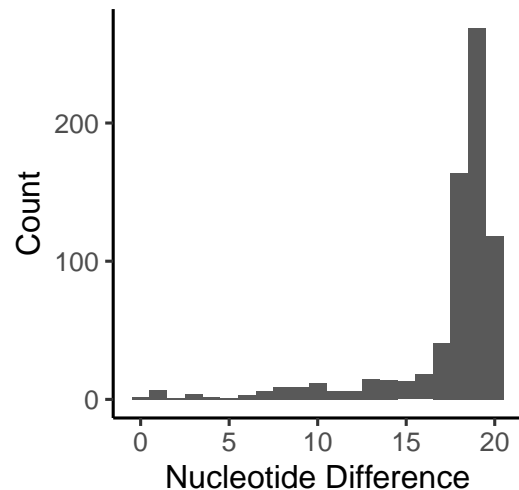
IGHV4-39*07

1260 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
1 unique J



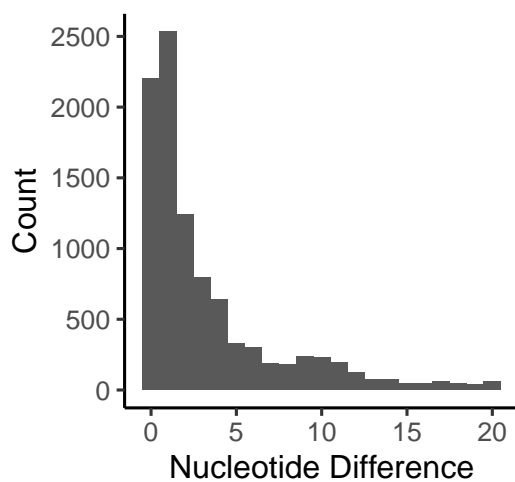
IGHV4-59*11

1233 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
2 unique J



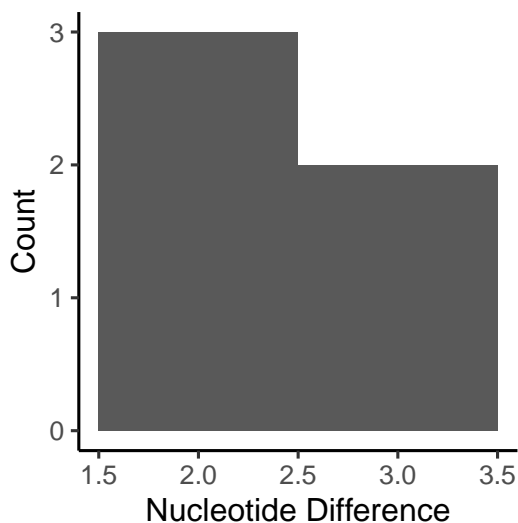
IGHV4-34*01_02

10722 sequences assigned
2204 (20.6%) exact matches, in which:
1646 unique CDR3
6 unique J



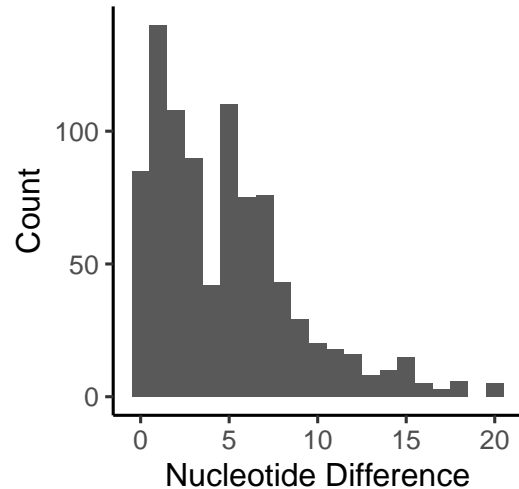
IGHV4-55*09

5 sequences assigned
No exact matches.



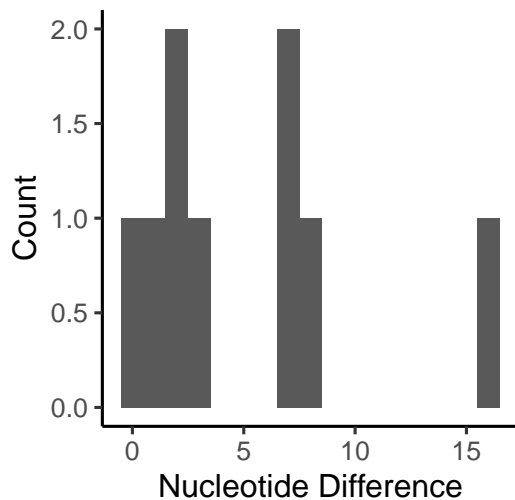
IGHV4-59*12

939 sequences assigned
85 (9.1%) exact matches, in which:
85 unique CDR3
5 unique J



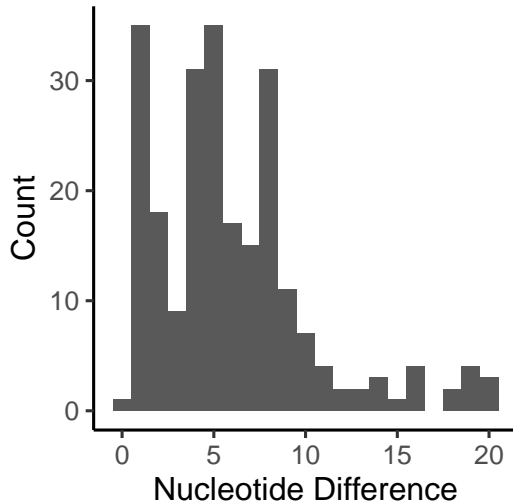
IGHV4-38-2*02

12 sequences assigned
1 (8.3%) exact matches, in which:
1 unique CDR3
1 unique J



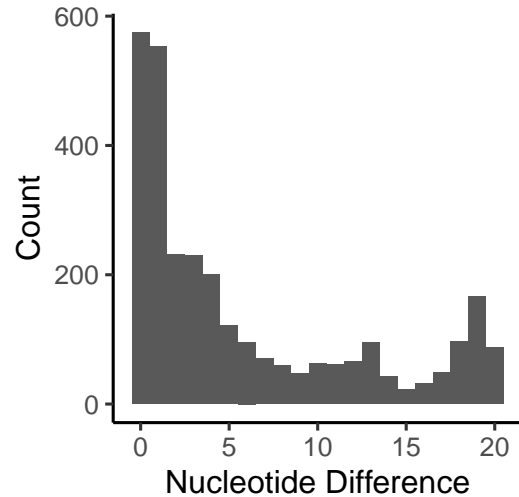
IGHV4-59*08

315 sequences assigned
1 (0.3%) exact matches, in which:
1 unique CDR3
1 unique J



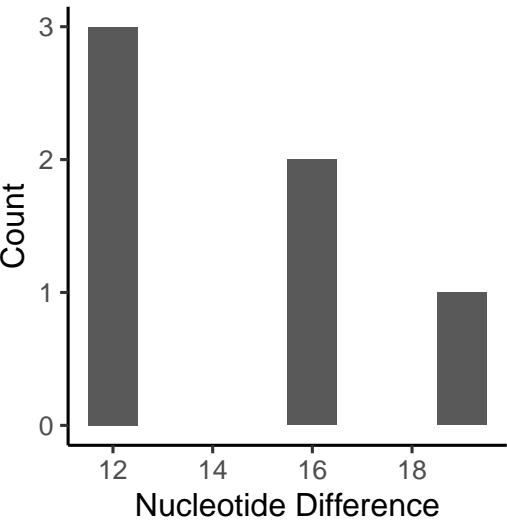
IGHV4-61*01

4037 sequences assigned
575 (14.2%) exact matches, in which:
513 unique CDR3
6 unique J



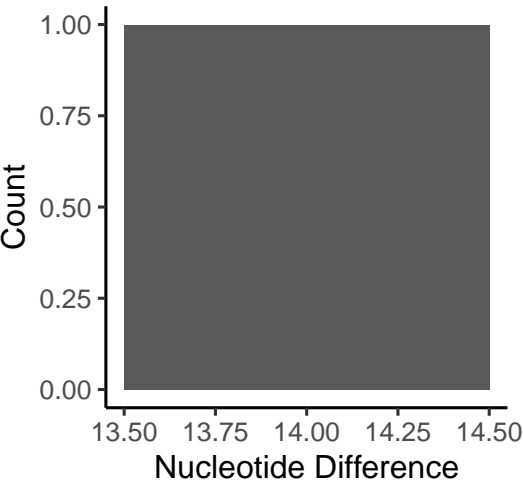
IGHV1/OR15-2*02_03

6 sequences assigned
No exact matches.



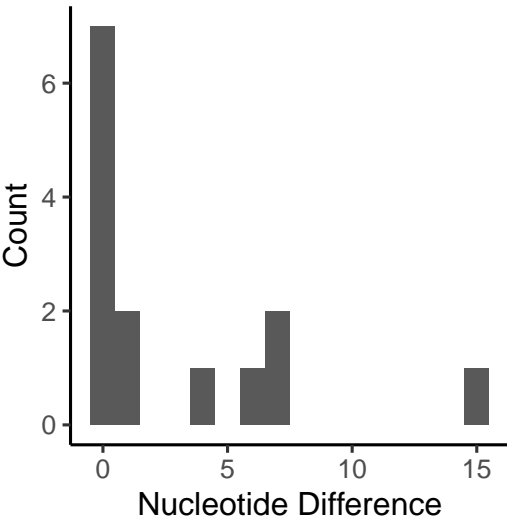
IGHV4/OR15-8*02

15 sequences assigned
No exact matches.



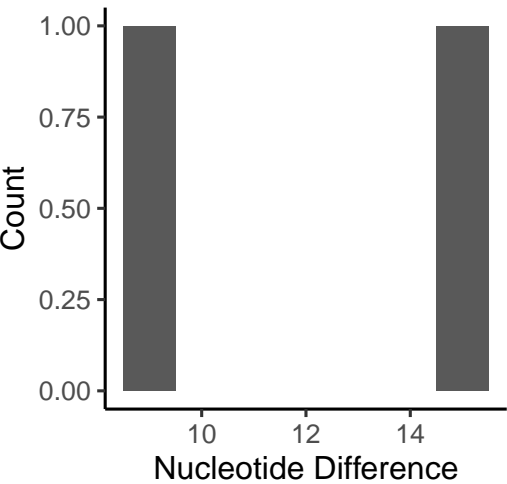
IGHV5-51*04

17 sequences assigned
7 (41.2%) exact matches, in which:
7 unique CDR3
3 unique J



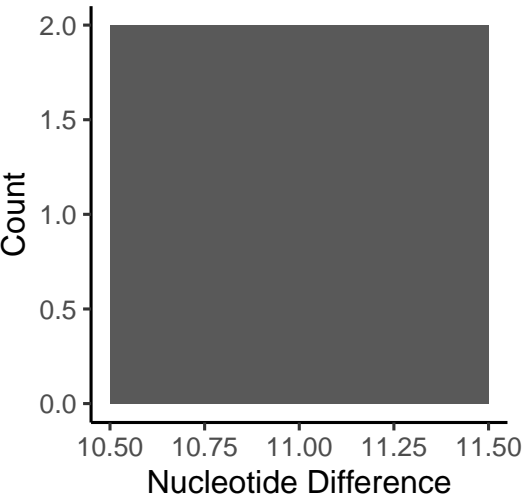
IGHV1/OR15-3*02

2 sequences assigned
No exact matches.



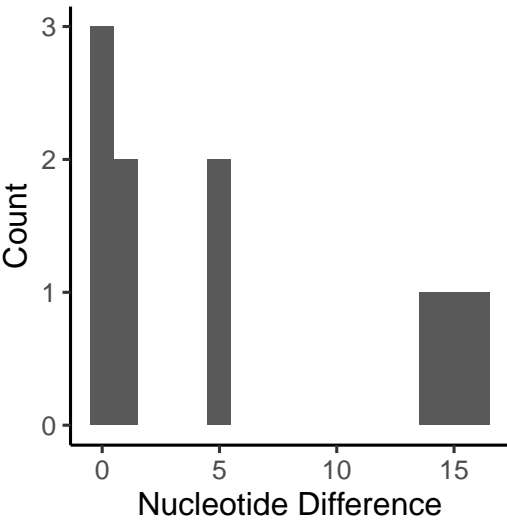
IGHV1/OR15-9*01

2 sequences assigned
No exact matches.



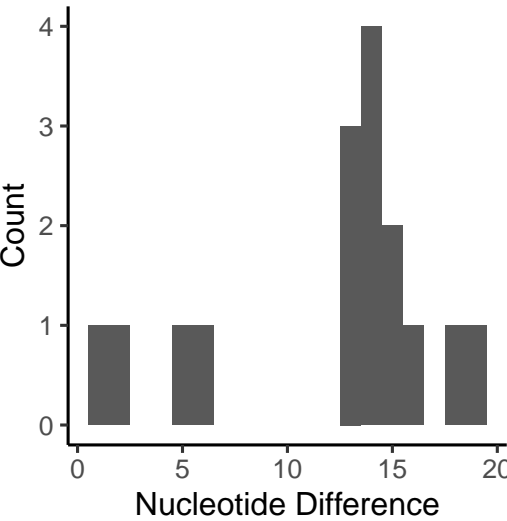
IGHV5-51*06

12 sequences assigned
3 (25%) exact matches, in which:
3 unique CDR3
3 unique J



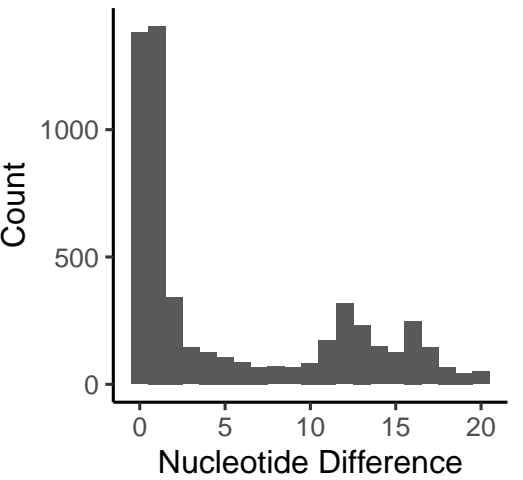
IGHV4/OR15-8*01

21 sequences assigned
No exact matches.



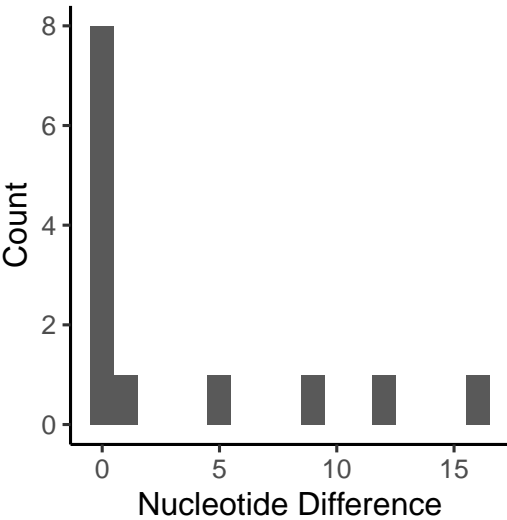
IGHV5-10-1*01_03

5751 sequences assigned
1382 (24%) exact matches, in which:
876 unique CDR3
6 unique J



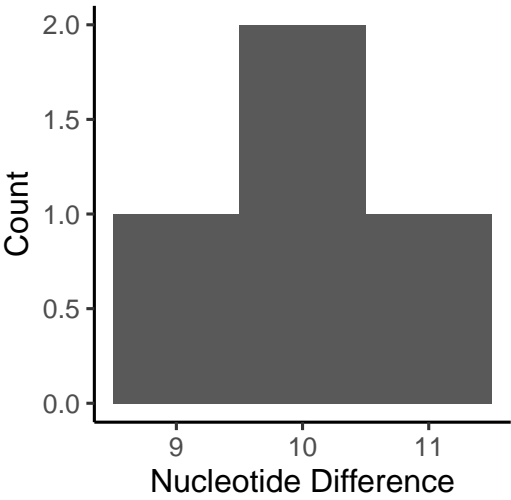
IGHV5-51*07

14 sequences assigned
8 (57.1%) exact matches, in which:
8 unique CDR3
4 unique J



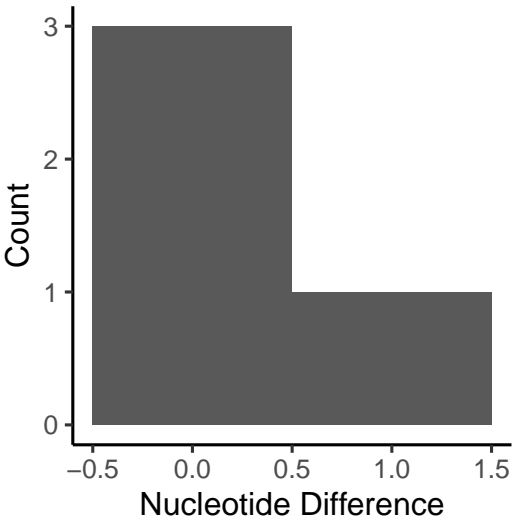
IGHV5-78*01

4 sequences assigned
No exact matches.



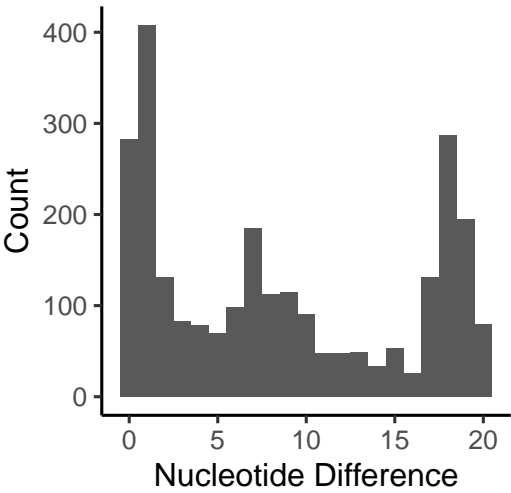
IGHV7-4-1*02

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
2 unique J



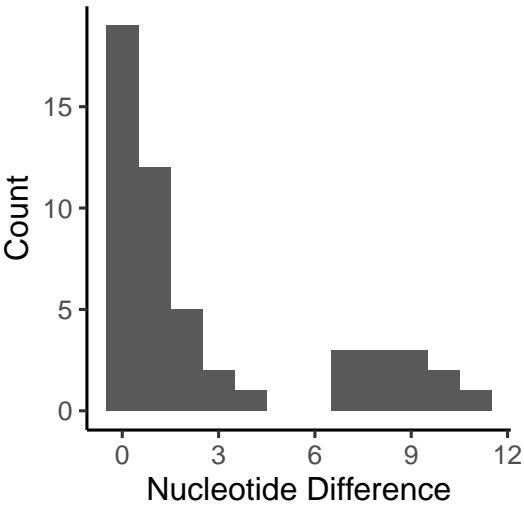
IGHV6-1*01_02

2891 sequences assigned
283 (9.8%) exact matches, in which:
248 unique CDR3
6 unique J



IGHV7-4-1*01

51 sequences assigned
19 (37.3%) exact matches, in which:
17 unique CDR3
4 unique J





Warning – no inferred sequences found.