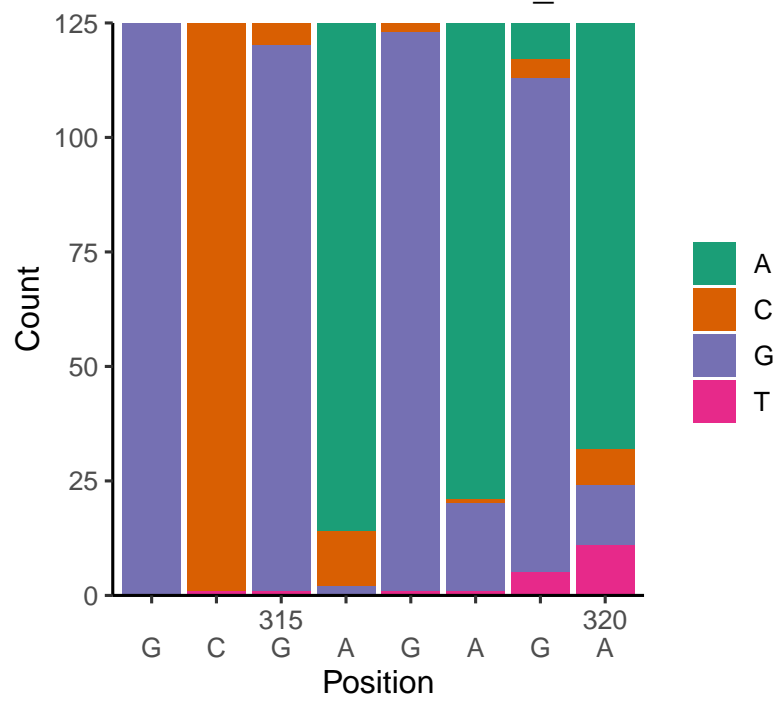
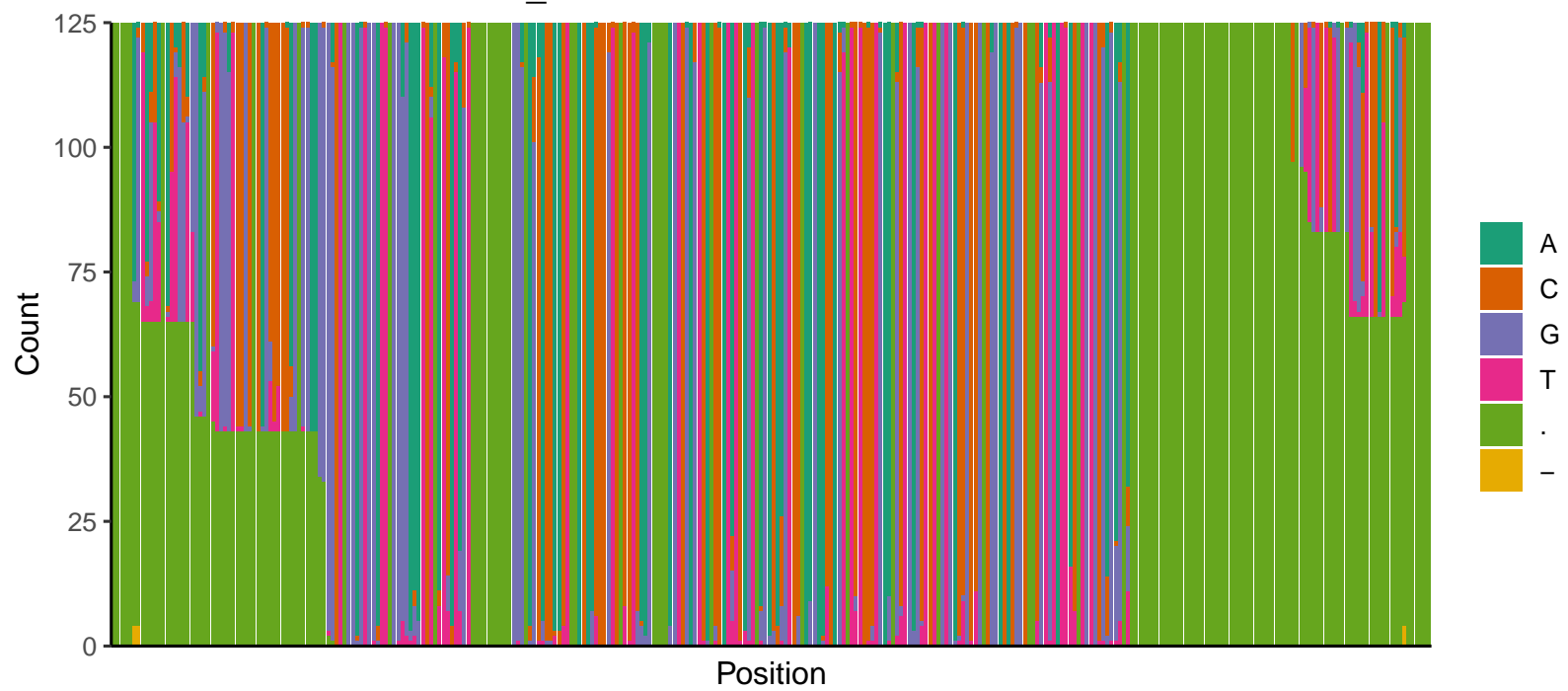


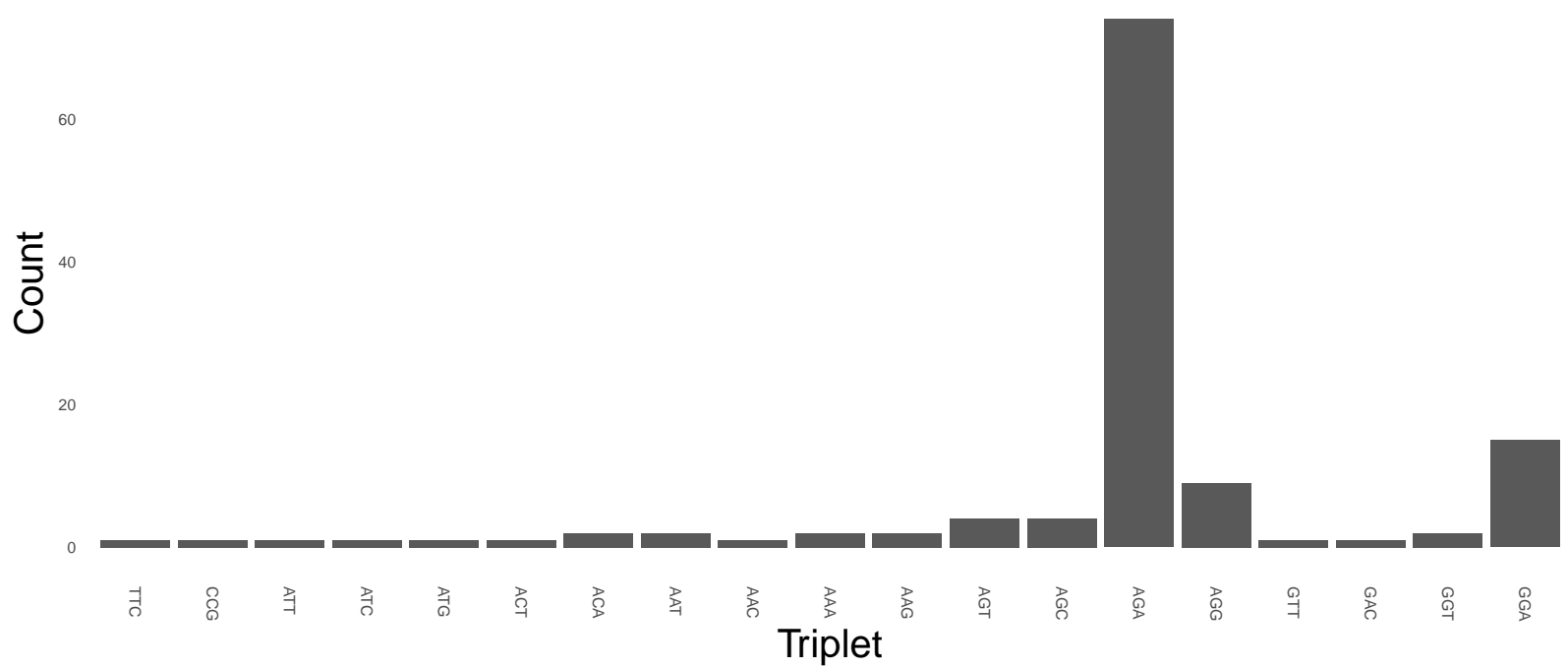
Gene IGHV4/OR15-8*01_C193A



Gene IGHV4/OR15-8*01_C193A

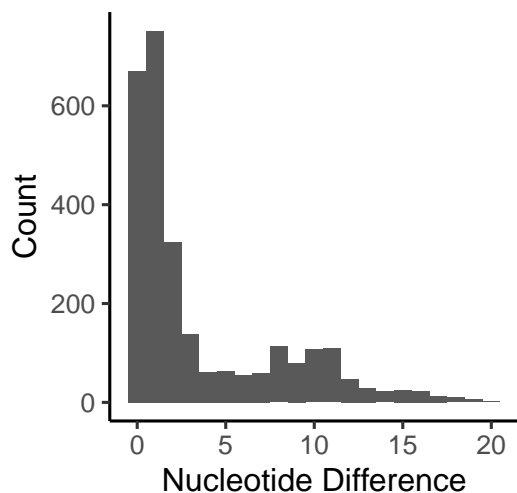


IGHV4/OR15-8*01_C193A- Final 3 nucleotides as a triplet



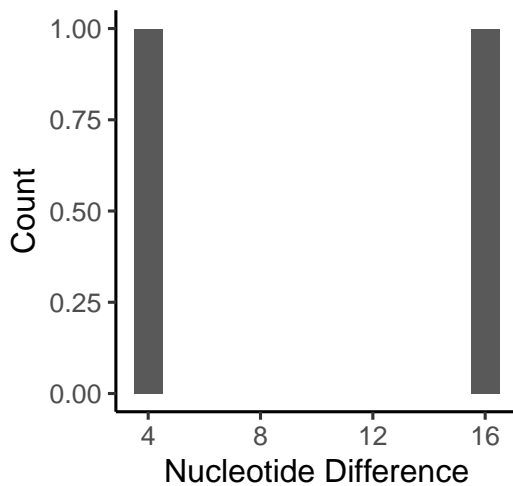
IGHV1-2*04

3597 sequences assigned
670 (18.6%) exact matches, in which:
570 unique CDR3
6 unique J



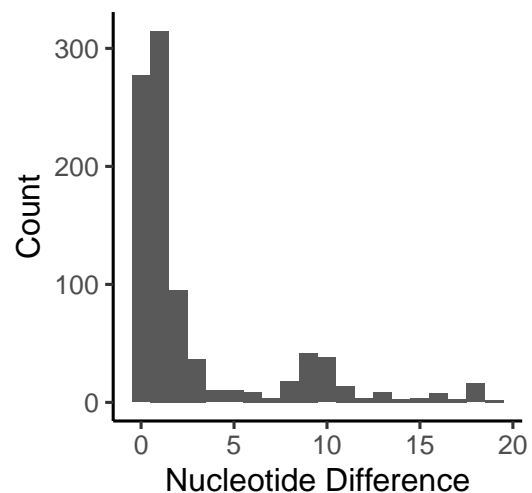
IGHV1-8*02

2 sequences assigned
No exact matches.



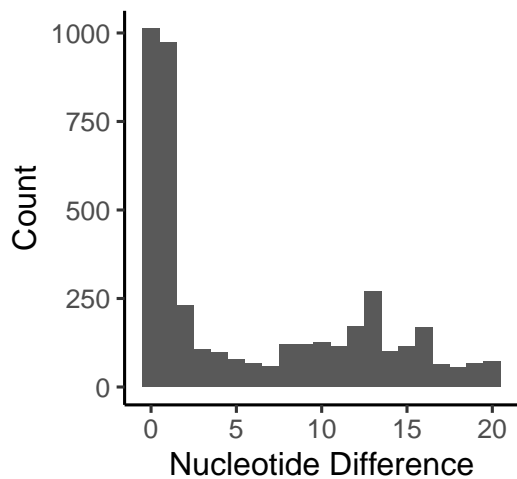
IGHV1-24*01

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



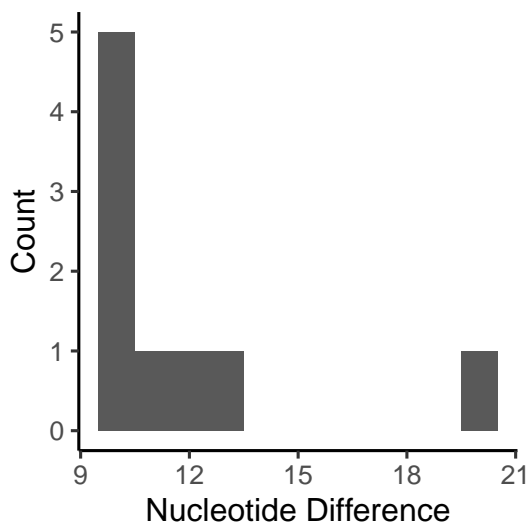
IGHV1-3*01_05

4545 sequences assigned
1012 (22.3%) exact matches, in which:
833 unique CDR3
6 unique J



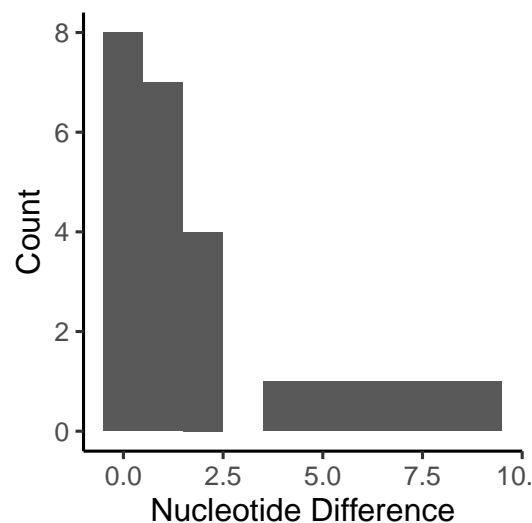
IGHV1-8*03

10 sequences assigned
No exact matches.



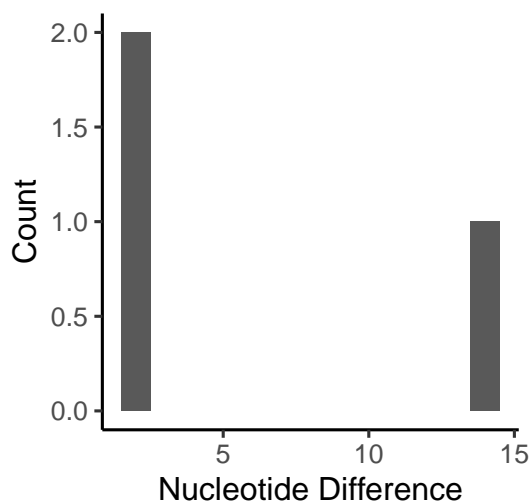
IGHV1-45*02

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



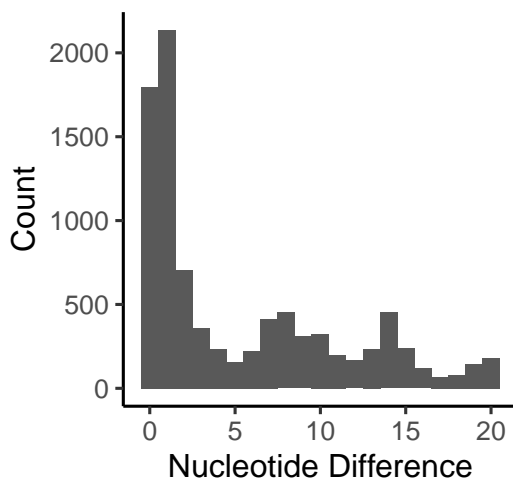
IGHV1-8*01

4 sequences assigned
No exact matches.



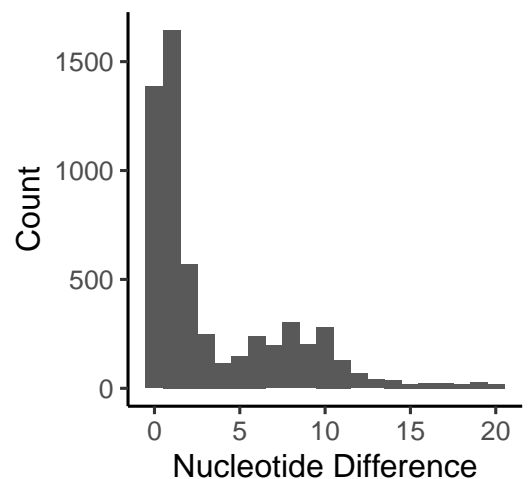
IGHV1-18*04

9505 sequences assigned
1797 (18.9%) exact matches, in which:
1461 unique CDR3
6 unique J



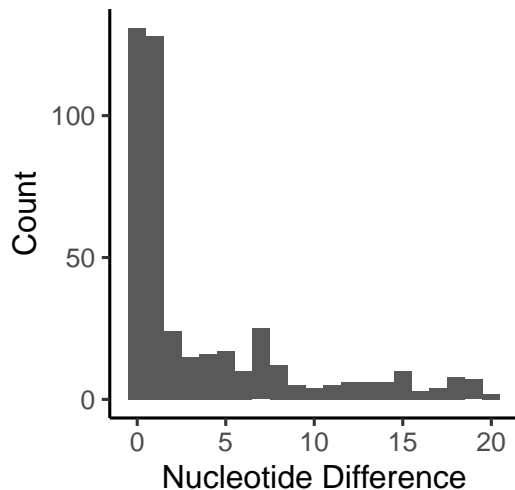
IGHV1-46*01

6692 sequences assigned
1386 (20.7%) exact matches, in which:
1142 unique CDR3
6 unique J



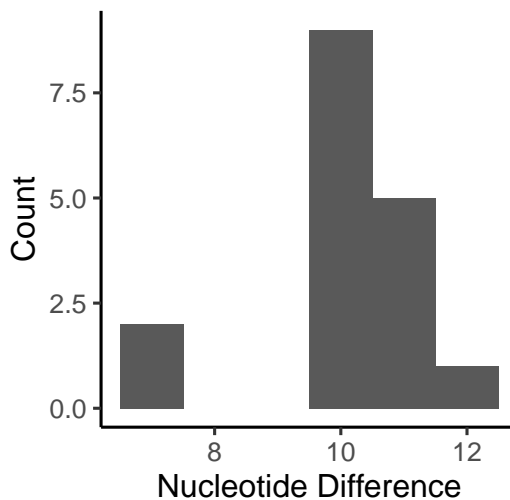
IGHV1–58*01_03

447 sequences assigned
131 (29.3%) exact matches, in which:
104 unique CDR3
5 unique J



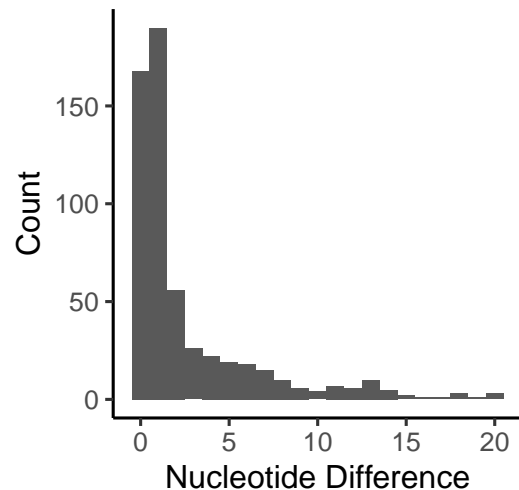
IGHV1–NL1*01

17 sequences assigned
No exact matches.



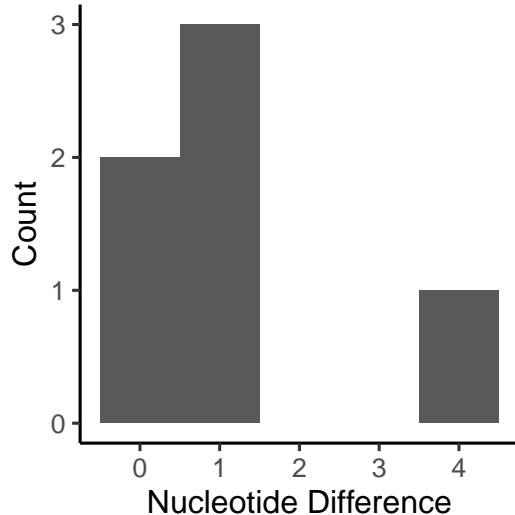
IGHV2–70*01

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



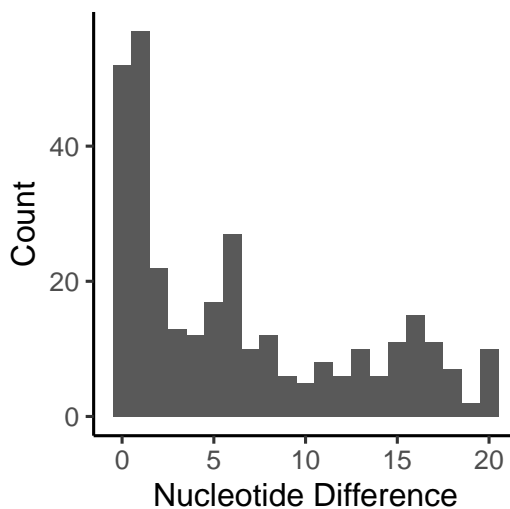
IGHV1–68*01

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



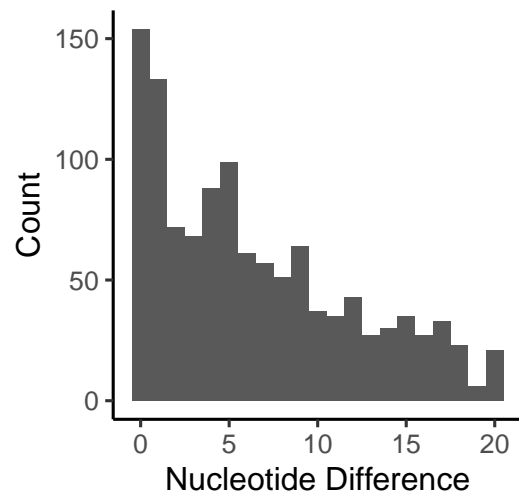
IGHV2–5*02

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



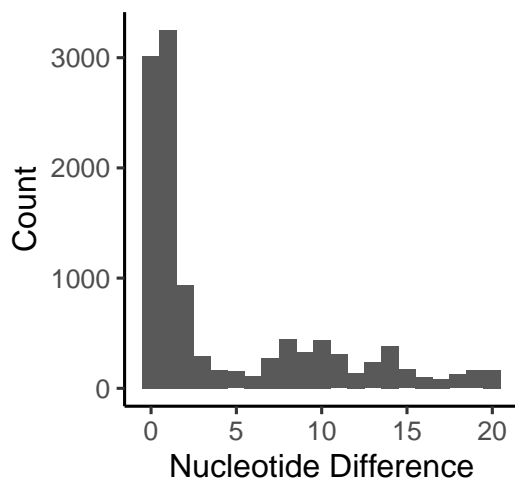
IGHV3–7*01

1288 sequences assigned
154 (12%) exact matches, in which:
142 unique CDR3
6 unique J



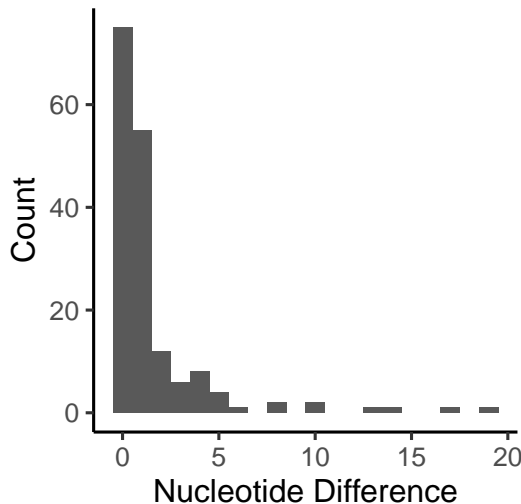
IGHV1–69*01_12_13

13252 sequences assigned
3013 (22.7%) exact matches, in which:
2605 unique CDR3
6 unique J



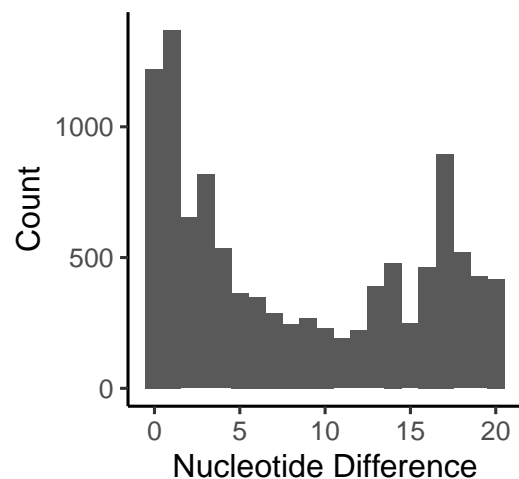
IGHV2–26*01

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



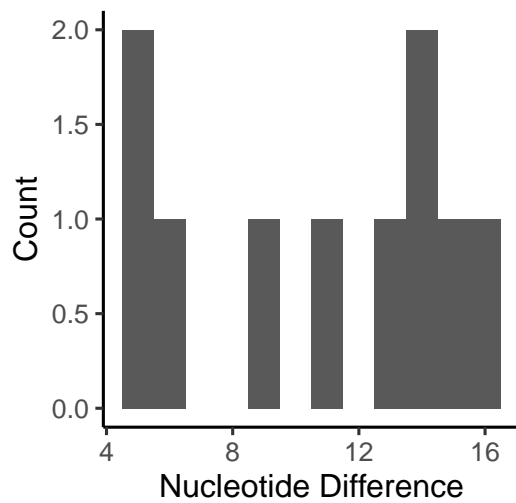
IGHV3–7*03

14848 sequences assigned
1222 (8.2%) exact matches, in which:
756 unique CDR3
6 unique J



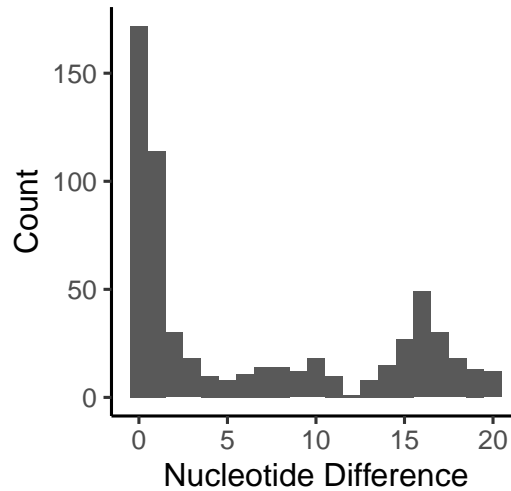
IGHV3-9*01

10 sequences assigned
No exact matches.



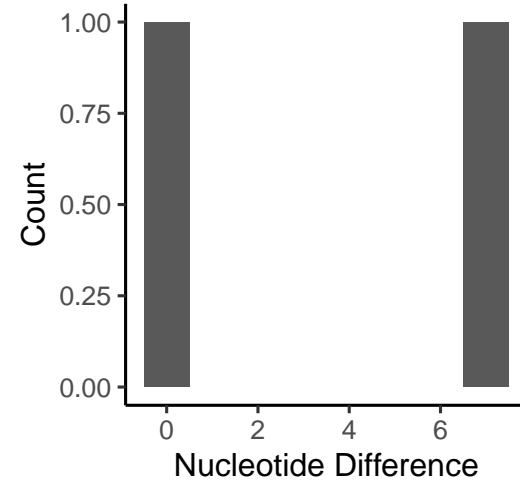
IGHV3-13*04

691 sequences assigned
172 (24.9%) exact matches, in which:
111 unique CDR3
5 unique J



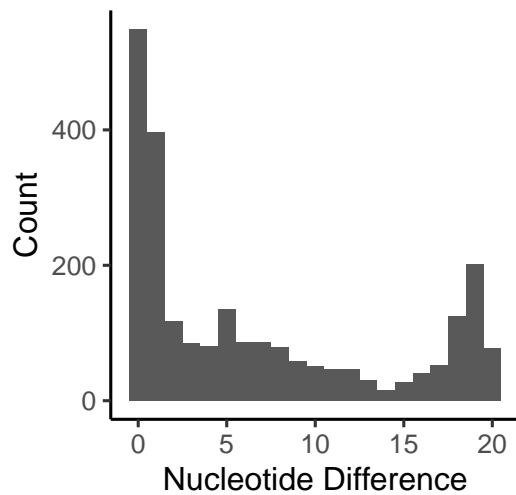
IGHV3-19*01

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



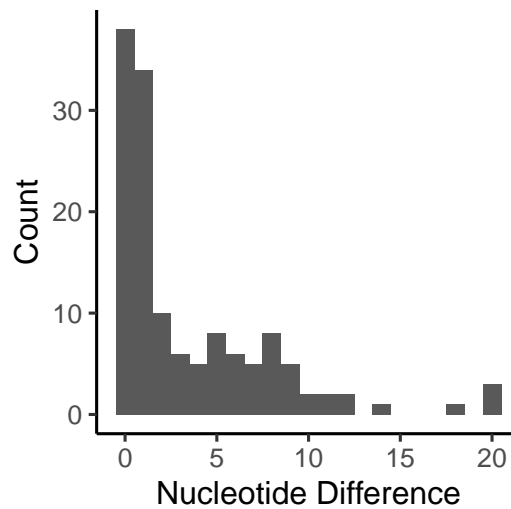
IGHV3-11*06

3211 sequences assigned
549 (17.1%) exact matches, in which:
365 unique CDR3
6 unique J



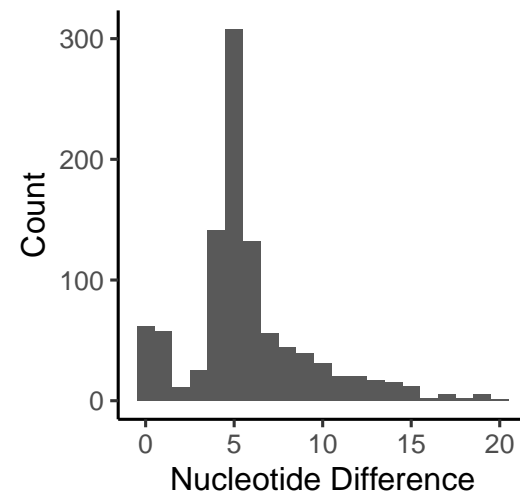
IGHV3-13*05

155 sequences assigned
38 (24.5%) exact matches, in which:
24 unique CDR3
5 unique J



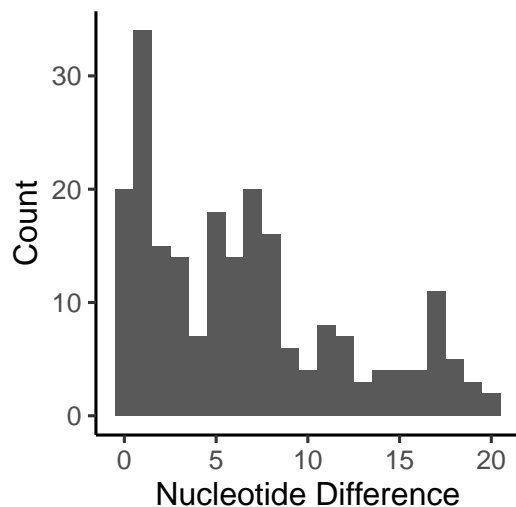
IGHV3-20*01_02

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



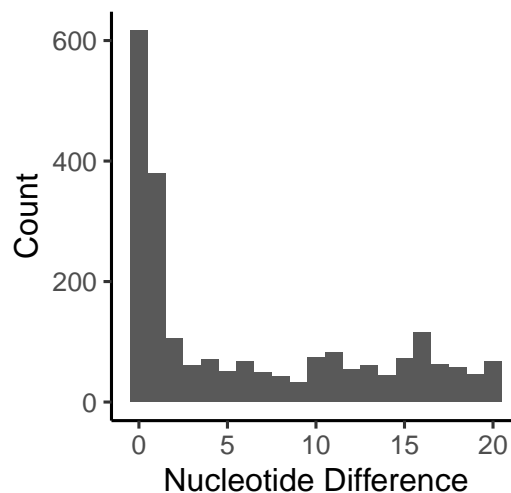
IGHV3-11*03_05

253 sequences assigned
20 (7.9%) exact matches, in which:
20 unique CDR3
5 unique J



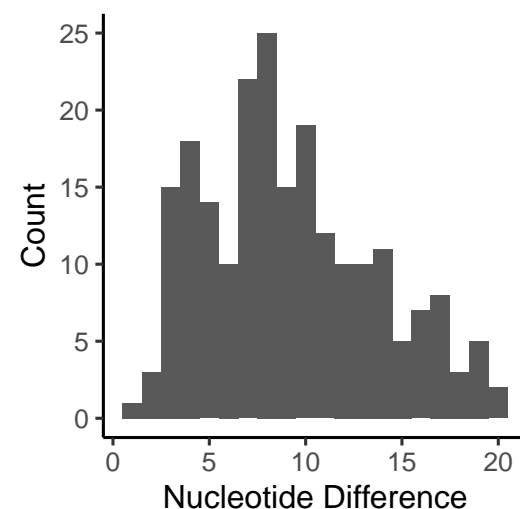
IGHV3-15*01_02

3261 sequences assigned
617 (18.9%) exact matches, in which:
376 unique CDR3
6 unique J



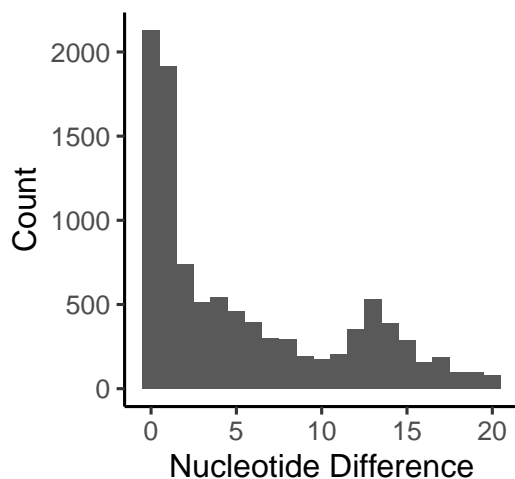
IGHV3-20*03_04

239 sequences assigned
No exact matches.



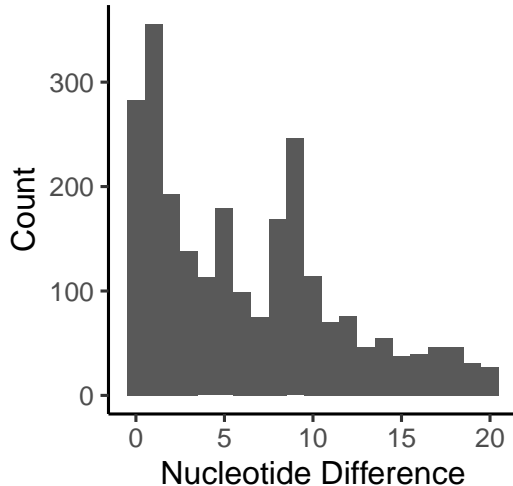
IGHV3–21*01_02

10474 sequences assigned
2128 (20.3%) exact matches, in which:
1326 unique CDR3
6 unique J



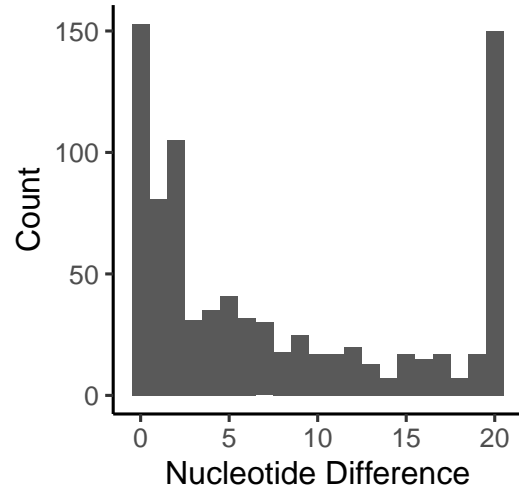
IGHV3–30*03

2931 sequences assigned
283 (9.7%) exact matches, in which:
261 unique CDR3
5 unique J



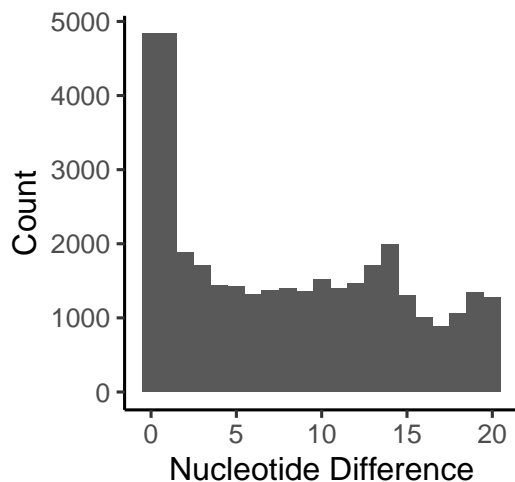
IGHV3–33*08

1520 sequences assigned
153 (10.1%) exact matches, in which:
126 unique CDR3
6 unique J



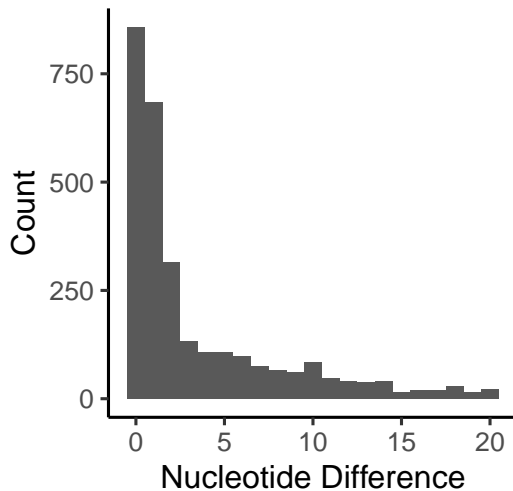
IGHV3–23*01_04

42171 sequences assigned
4832 (11.5%) exact matches, in which:
2765 unique CDR3
6 unique J



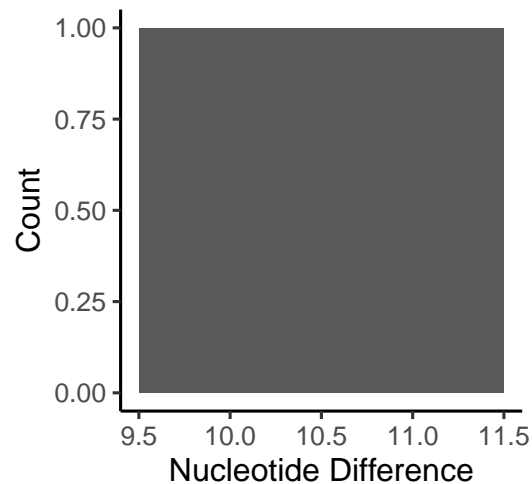
IGHV3–33*01

3311 sequences assigned
858 (25.9%) exact matches, in which:
596 unique CDR3
6 unique J



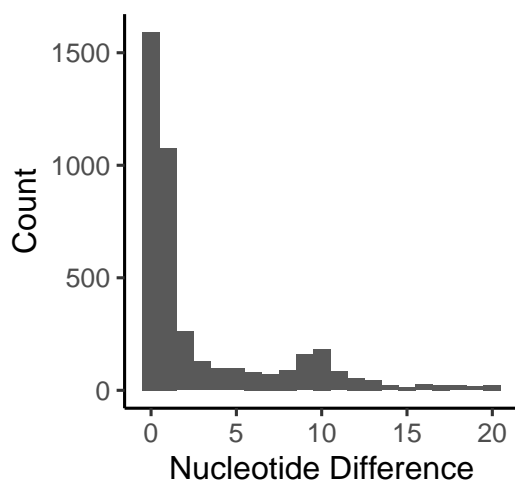
IGHV3–35*01

2 sequences assigned
No exact matches.



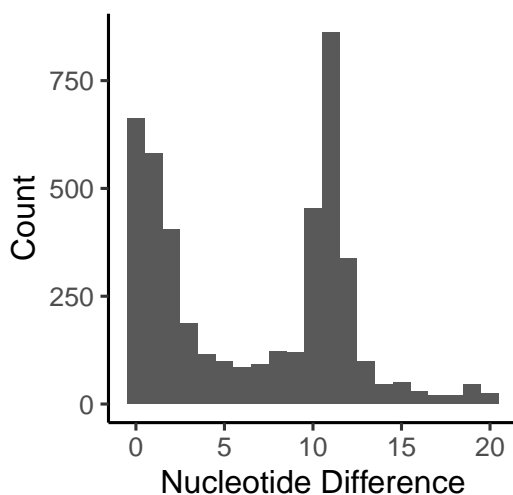
IGHV3–30–3*01

4549 sequences assigned
1592 (35%) exact matches, in which:
1083 unique CDR3
6 unique J



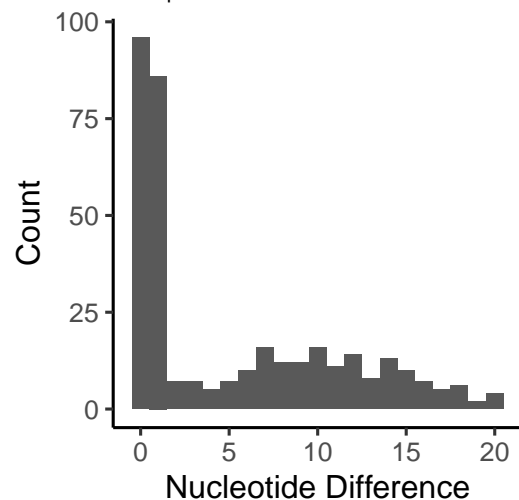
IGHV3–33*06

5423 sequences assigned
662 (12.2%) exact matches, in which:
414 unique CDR3
6 unique J



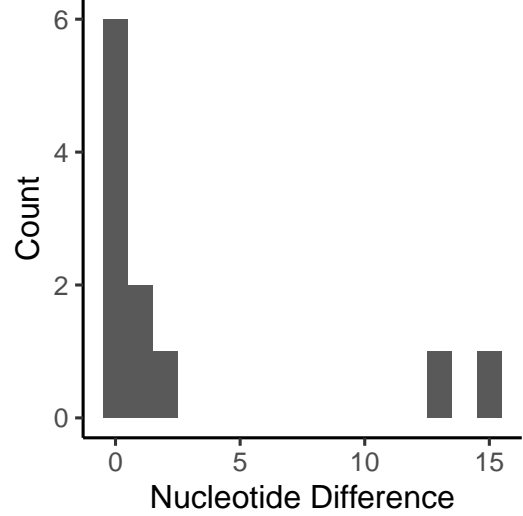
IGHV3–43*01

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



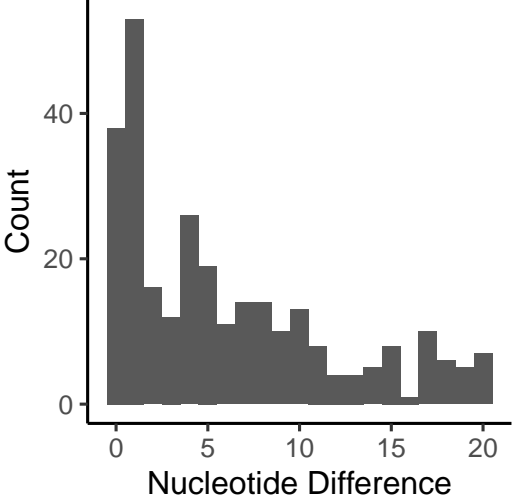
IGHV3-47*02

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



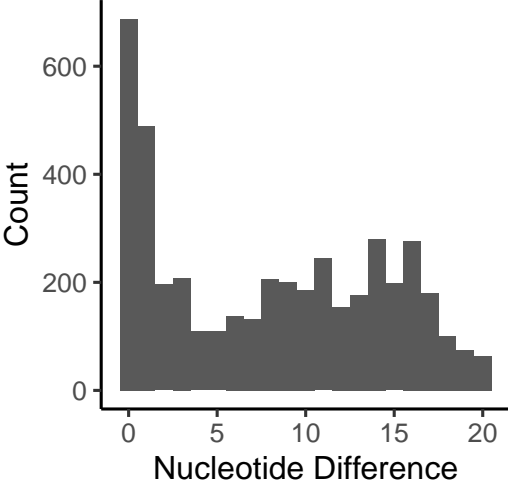
IGHV3-48*04

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



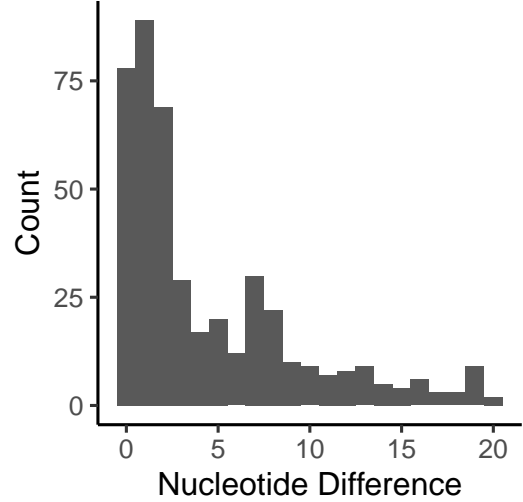
IGHV3-53*01_02

5757 sequences assigned
688 (12%) exact matches, in which:
447 unique CDR3
6 unique J



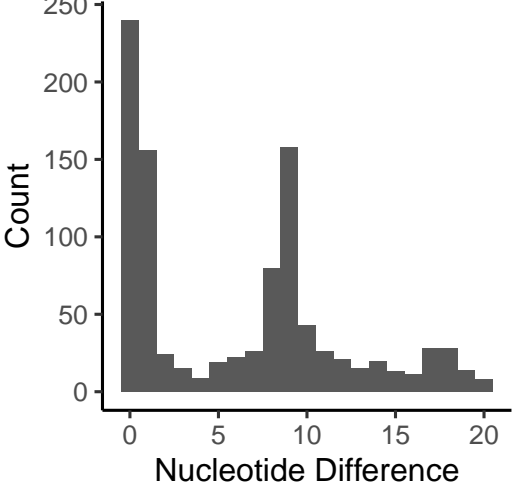
IGHV3-48*01

468 sequences assigned
78 (16.7%) exact matches, in which:
75 unique CDR3
4 unique J



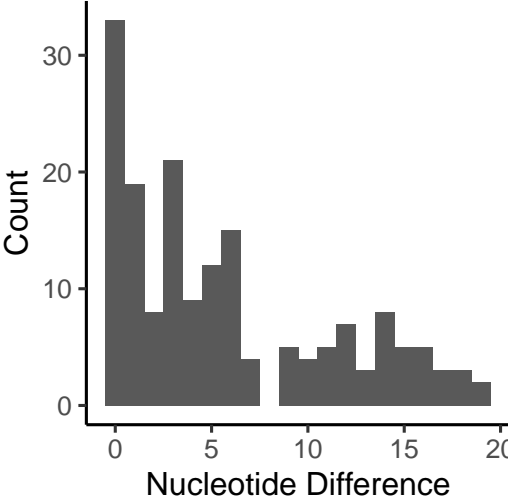
IGHV3-49*03_05

1117 sequences assigned
240 (21.5%) exact matches, in which:
145 unique CDR3
4 unique J



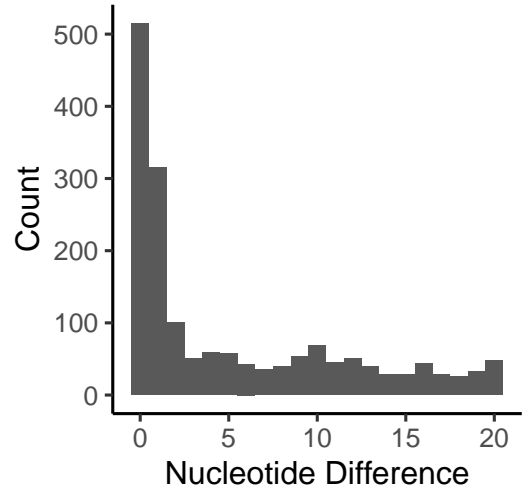
IGHV3-64*04

171 sequences assigned
33 (19.3%) exact matches, in which:
33 unique CDR3
3 unique J



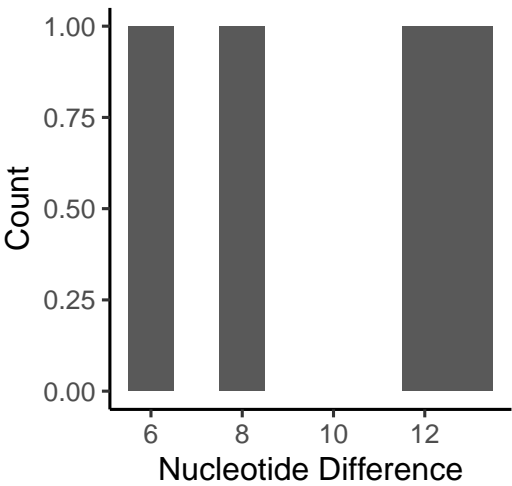
IGHV3-48*02

2257 sequences assigned
515 (22.8%) exact matches, in which:
321 unique CDR3
6 unique J



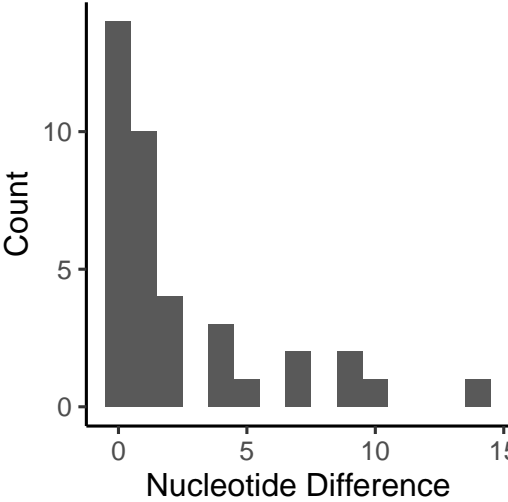
IGHV3-52*01_03

4 sequences assigned
No exact matches.



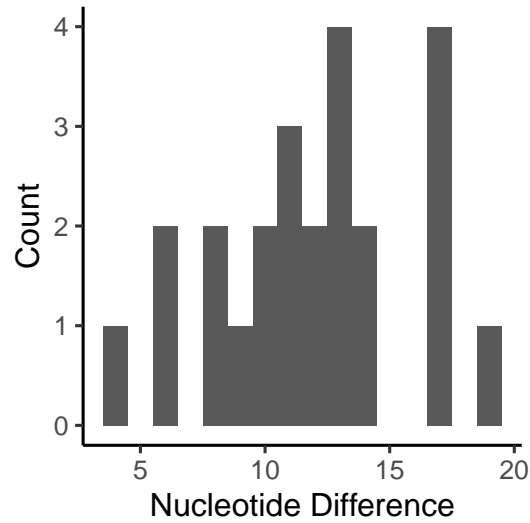
IGHV3-64*02_07

49 sequences assigned
14 (28.6%) exact matches, in which:
7 unique CDR3
3 unique J



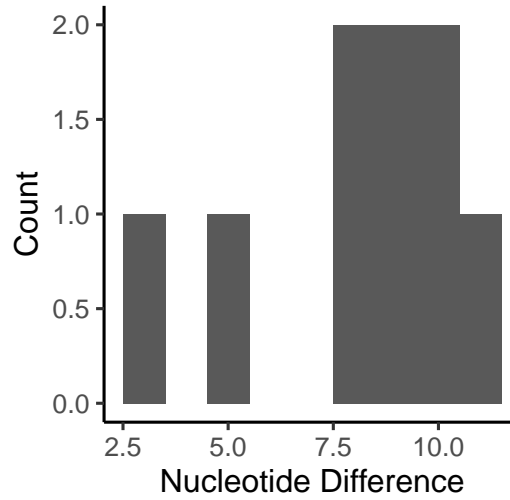
IGHV3-66*01

33 sequences assigned
No exact matches.



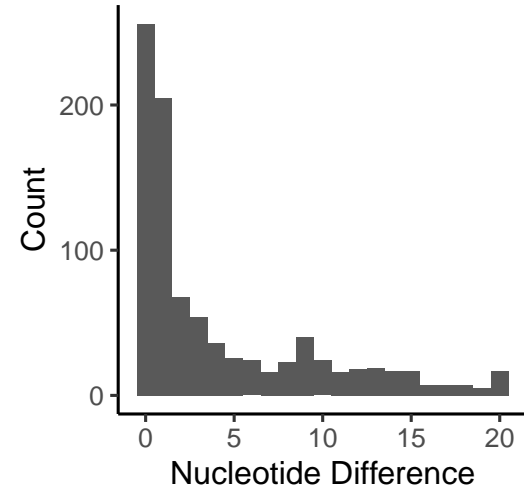
IGHV3-66*04

13 sequences assigned
No exact matches.



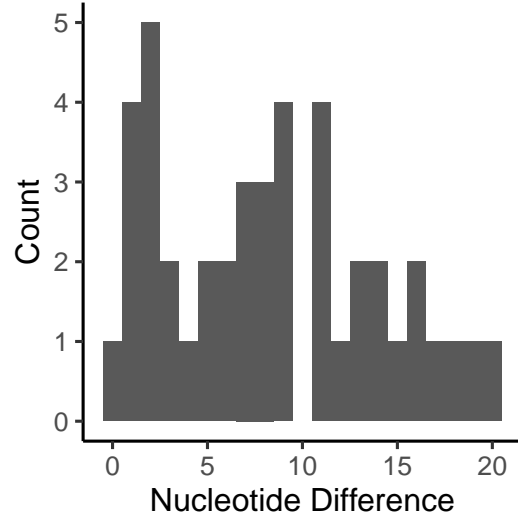
IGHV3-73*01_02

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



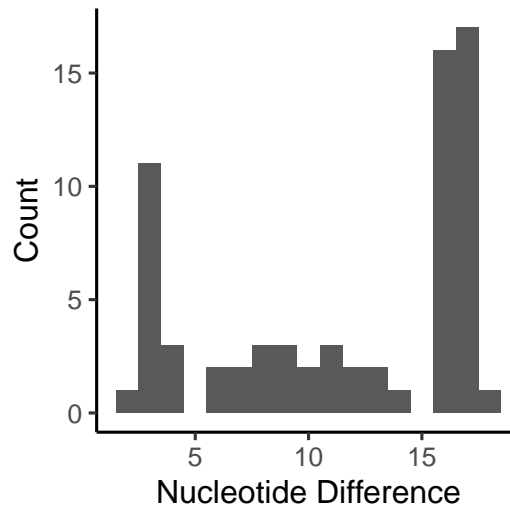
IGHV3-66*02

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



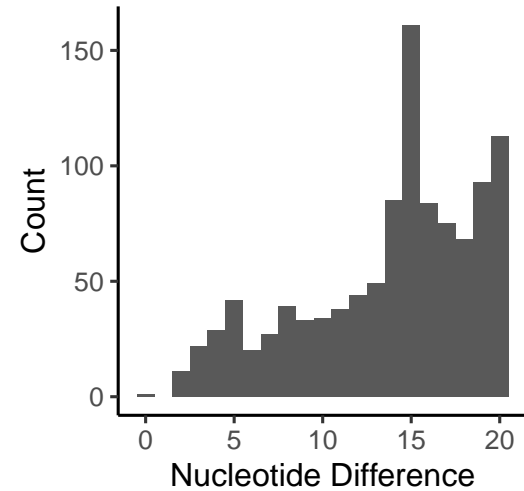
IGHV3-69-1*01

74 sequences assigned
No exact matches.



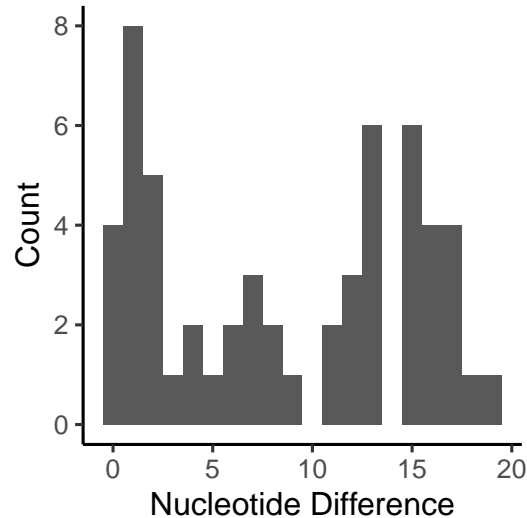
IGHV3-74*03

2011 sequences assigned
1 (0%) exact matches, in which:
1 unique CDR3
1 unique J



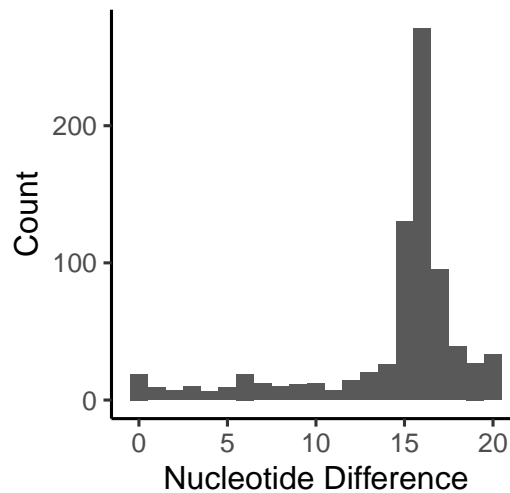
IGHV3-66*03

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



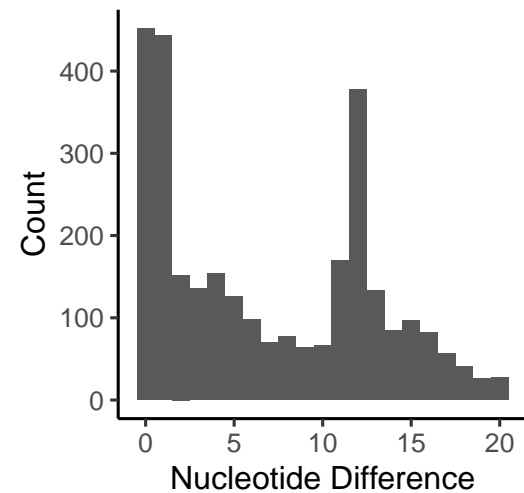
IGHV3-72*01

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



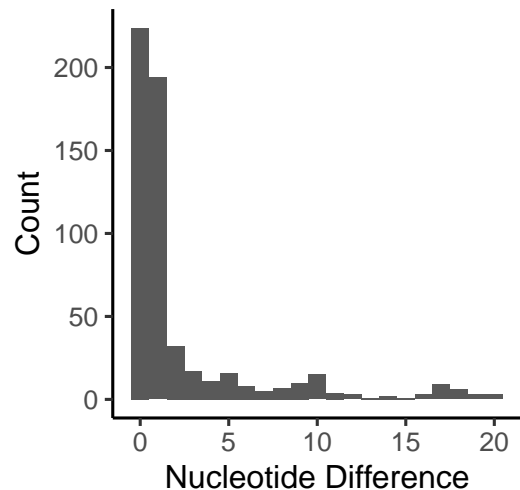
IGHV3-74*01_02

3689 sequences assigned
452 (12.3%) exact matches, in which:
296 unique CDR3
6 unique J



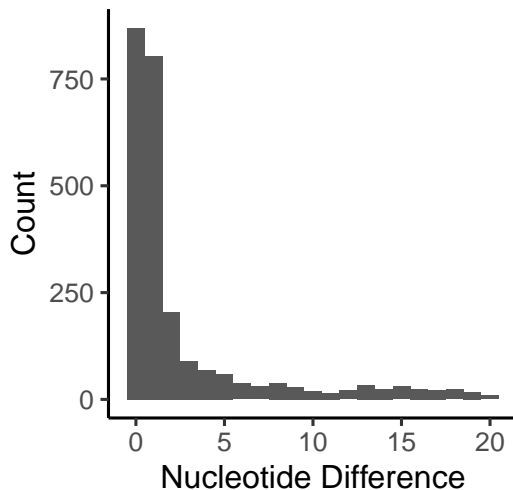
IGHV3-64D*06

580 sequences assigned
224 (38.6%) exact matches, in which:
110 unique CDR3
6 unique J



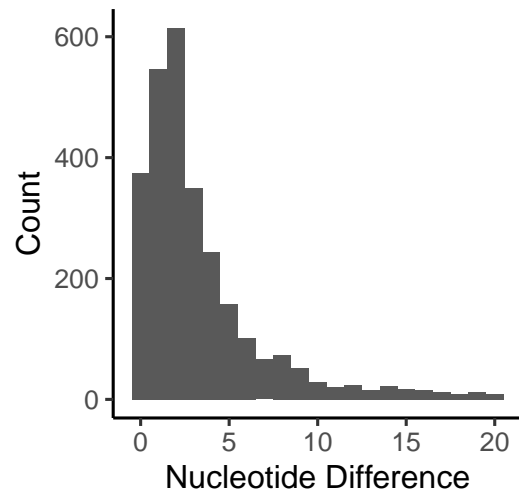
IGHV4-4*02_03

3189 sequences assigned
870 (27.3%) exact matches, in which:
663 unique CDR3
6 unique J



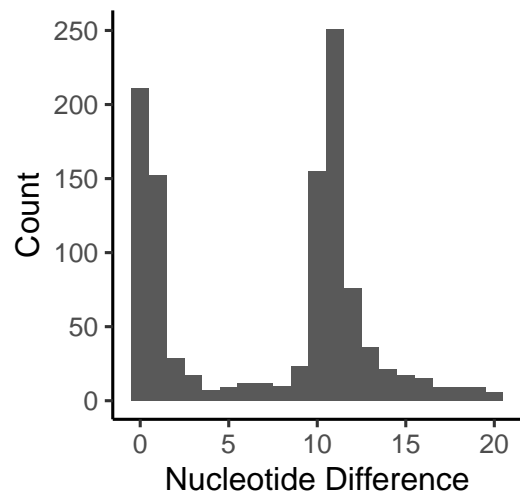
IGHV4-30-4*01

3212 sequences assigned
374 (11.6%) exact matches, in which:
299 unique CDR3
6 unique J



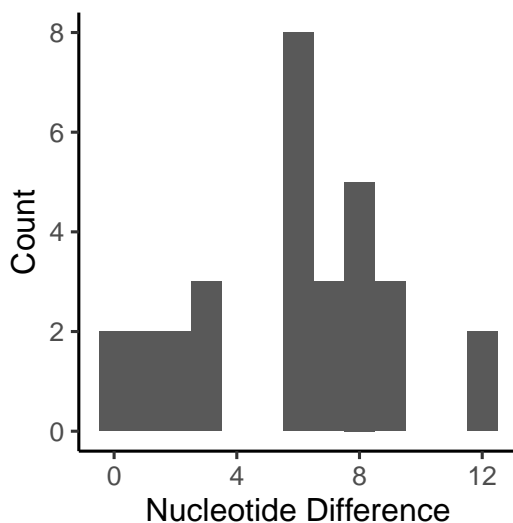
IGHV3-64D*09

1114 sequences assigned
211 (18.9%) exact matches, in which:
105 unique CDR3
5 unique J



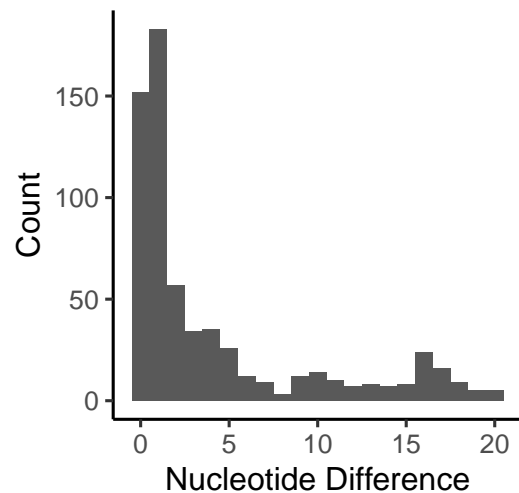
IGHV4-28*03

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



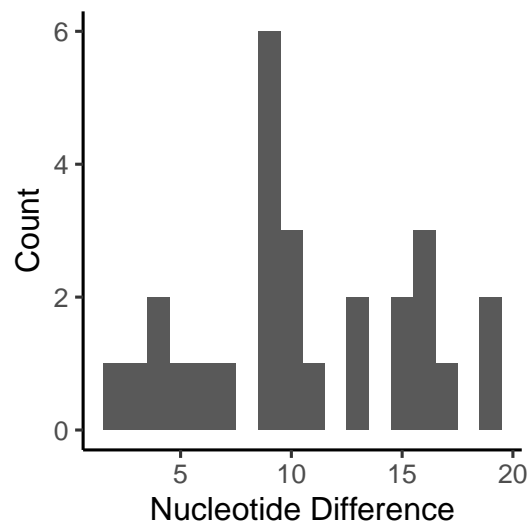
IGHV4-30-2*01

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



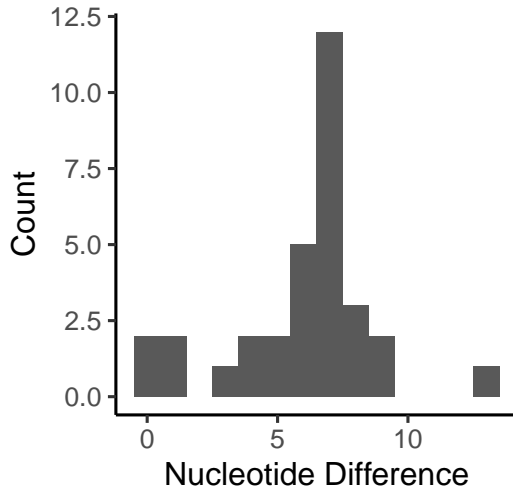
IGHV3-NL1*01

35 sequences assigned
No exact matches.



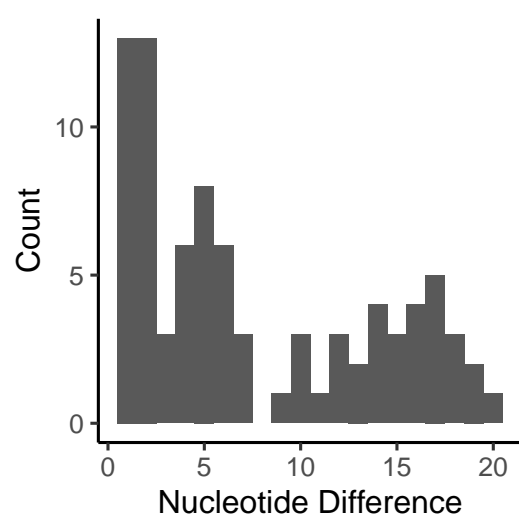
IGHV4-28*01_07

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



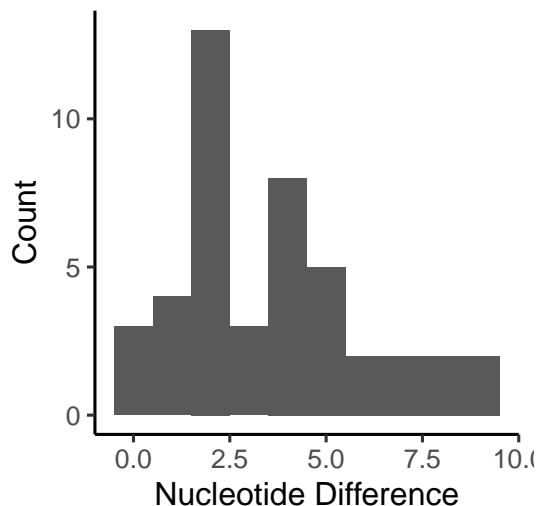
IGHV4-30-2*03

109 sequences assigned
No exact matches.



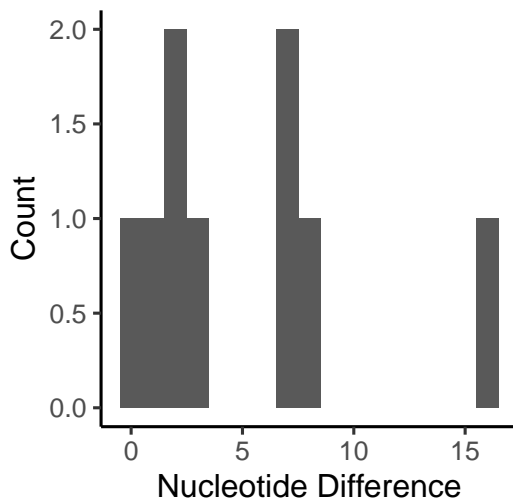
IGHV4-30-2*05

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



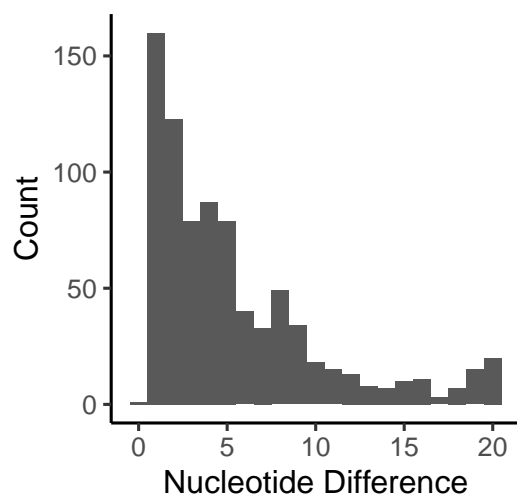
IGHV4-38-2*02

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



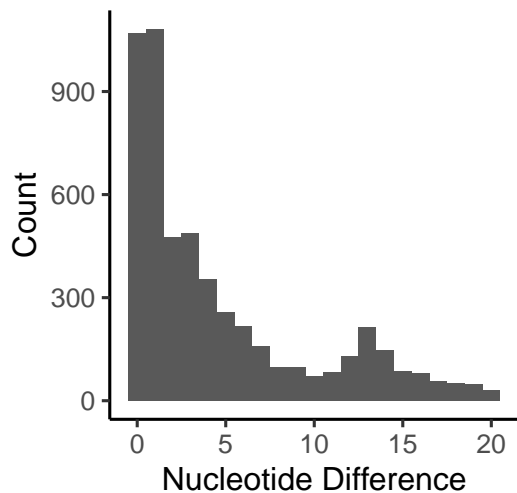
IGHV4-59*08

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



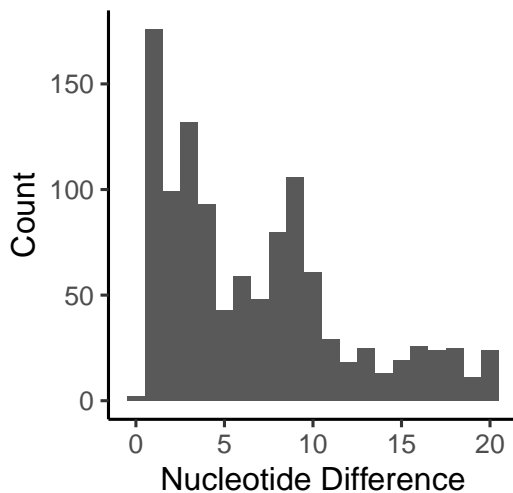
IGHV4-31*02

5852 sequences assigned
1069 (18.3%) exact matches, in which:
890 unique CDR3
6 unique J



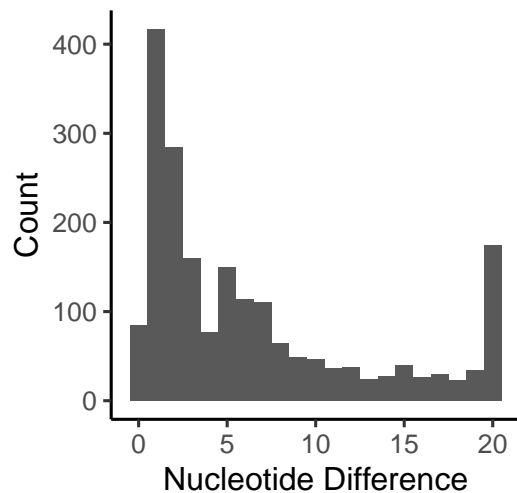
IGHV4-39*07

1261 sequences assigned
2 (0.2%) exact matches, in which:
2 unique CDR3
1 unique J



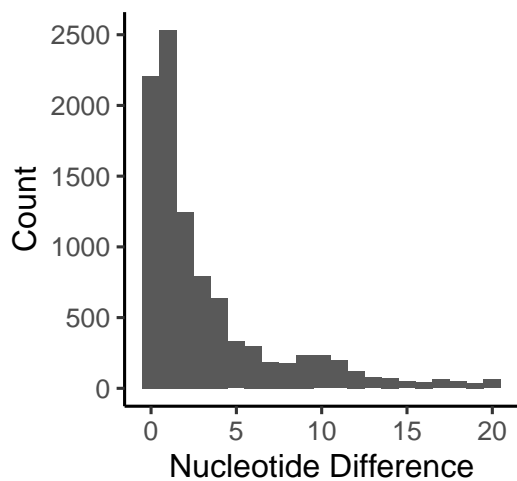
IGHV4-59*12

3019 sequences assigned
85 (2.8%) exact matches, in which:
85 unique CDR3
5 unique J



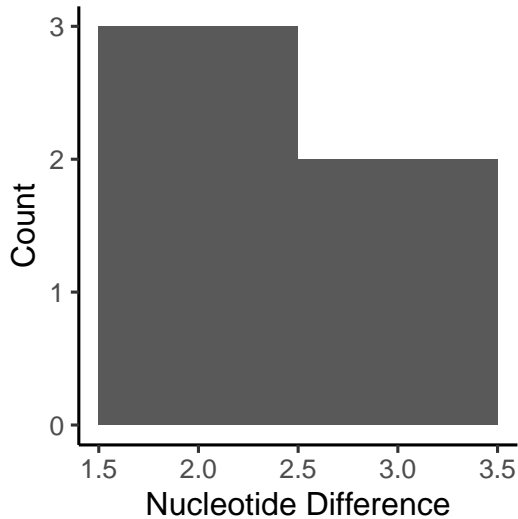
IGHV4-34*01_02

10728 sequences assigned
2206 (20.6%) exact matches, in which:
1646 unique CDR3
6 unique J



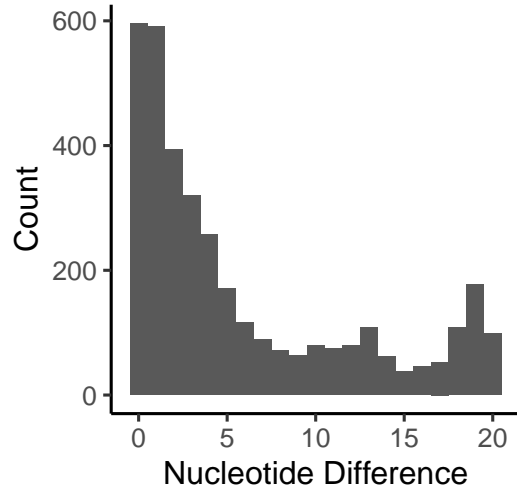
IGHV4-55*09

5 sequences assigned
No exact matches.



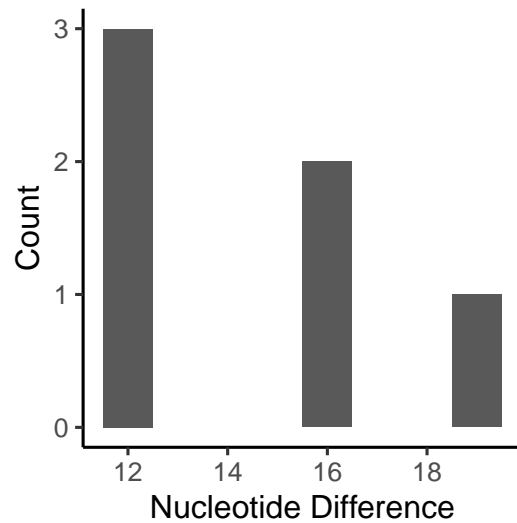
IGHV4-61*01

4788 sequences assigned
596 (12.4%) exact matches, in which:
533 unique CDR3
6 unique J



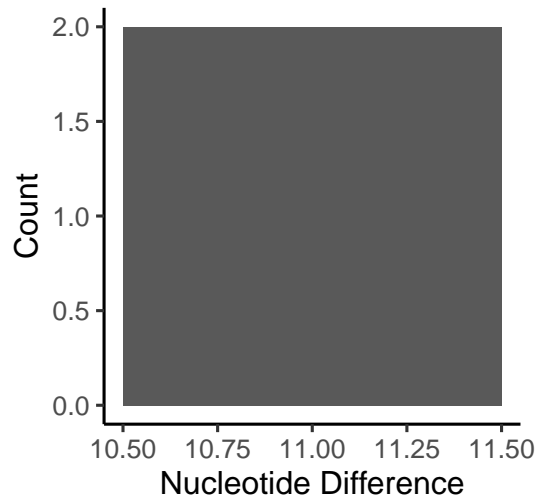
IGHV1/OR15-2*02_03

6 sequences assigned
No exact matches.



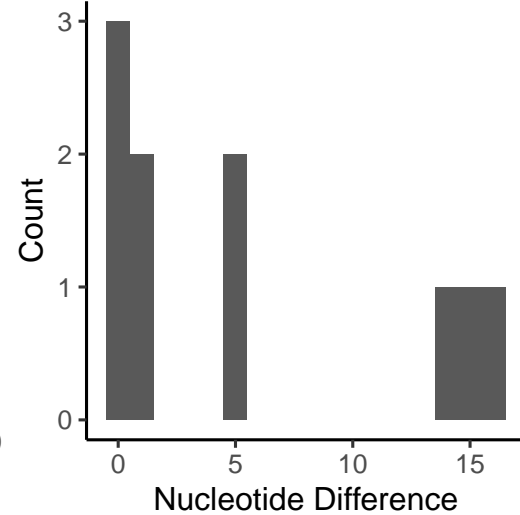
IGHV1/OR15-9*01

2 sequences assigned
No exact matches.



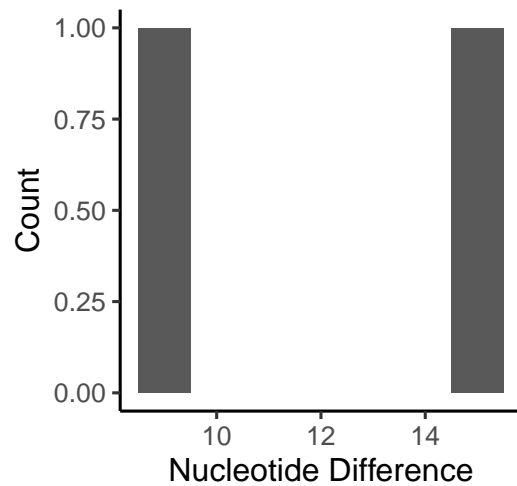
IGHV5-51*06

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



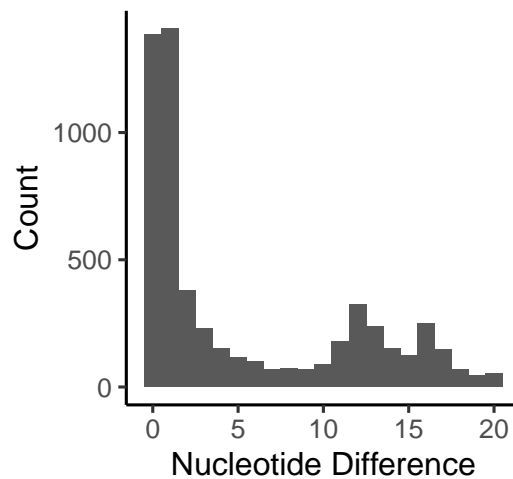
IGHV1/OR15-3*02

2 sequences assigned
No exact matches.



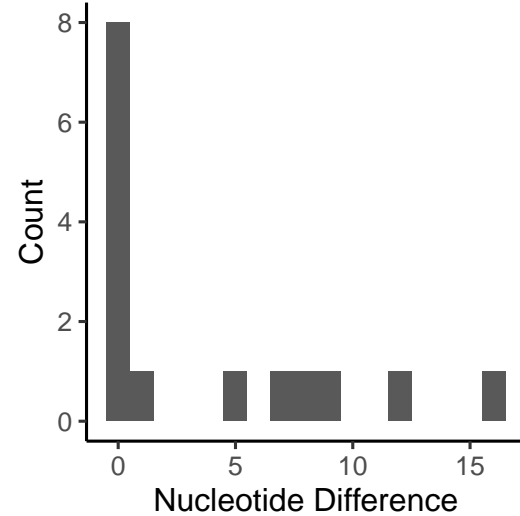
IGHV5-10-1*01_03

5976 sequences assigned
1384 (23.2%) exact matches, in which:
876 unique CDR3
6 unique J



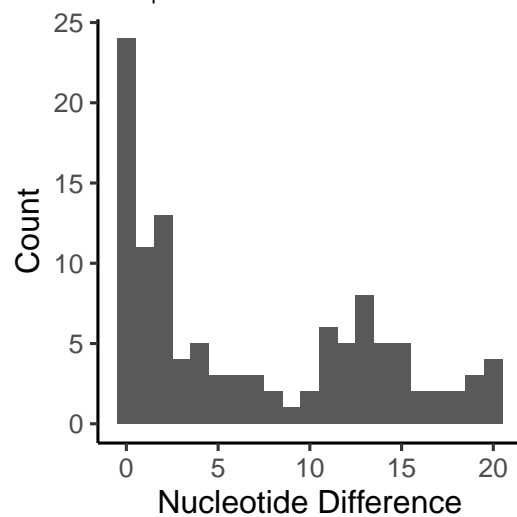
IGHV5-51*07

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



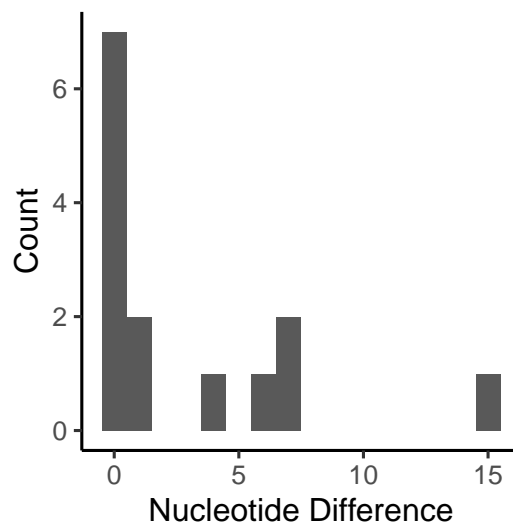
IGHV4/OR15-8*01_C193/

125 sequences assigned
24 (19.2%) exact matches, in which:
19 unique CDR3
4 unique J



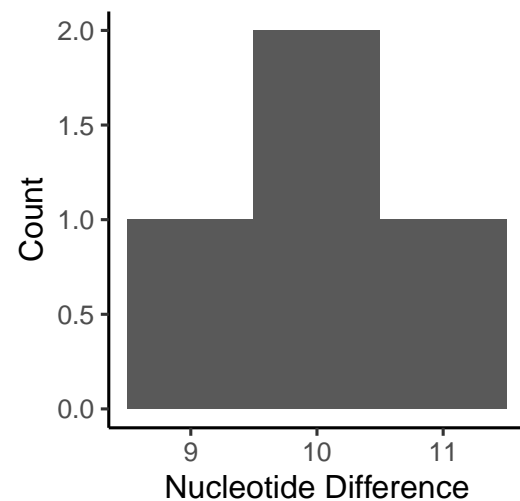
IGHV5-51*04

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



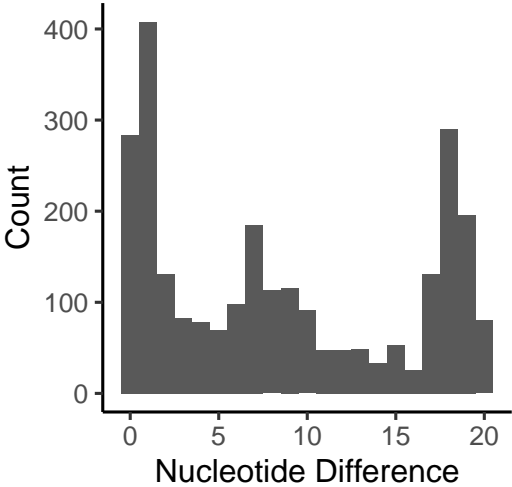
IGHV5-78*01

4 sequences assigned
No exact matches.



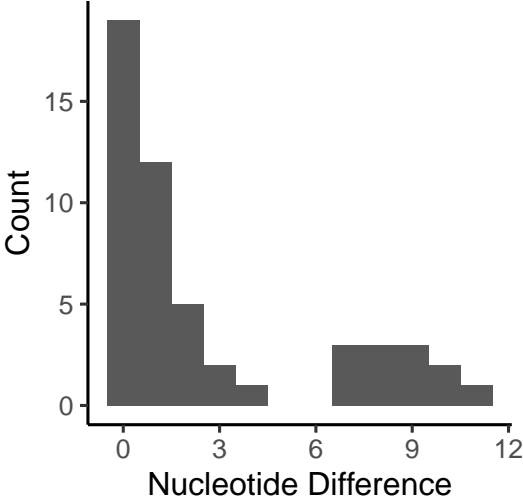
IGHV6-1*01_02

2898 sequences assigned
284 (9.8%) exact matches, in which:
248 unique CDR3
6 unique J



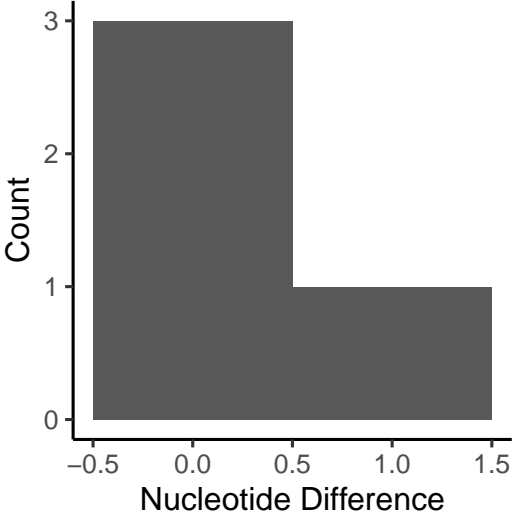
IGHV7-4-1*01

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

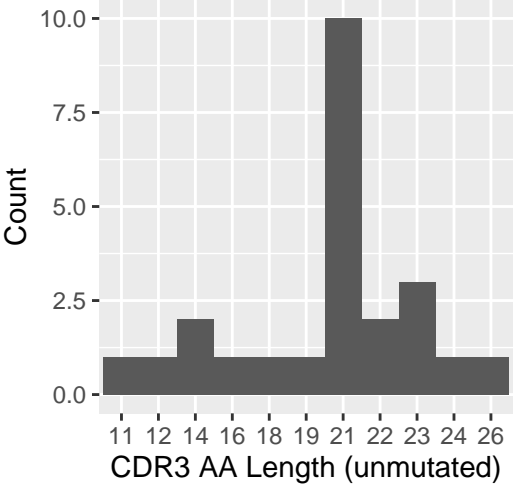


IGHV7-4-1*02

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



IGHV4/OR15-8*01_C193A





[illegible]