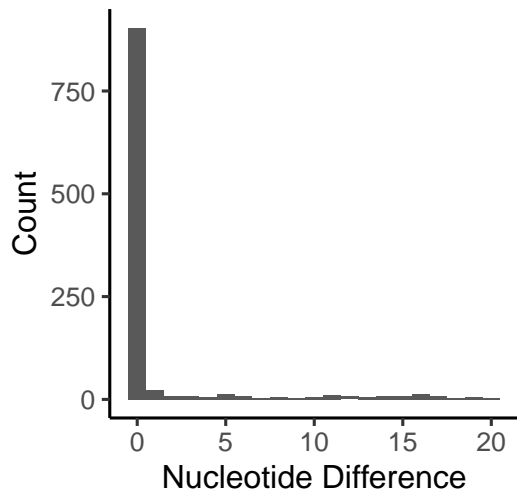


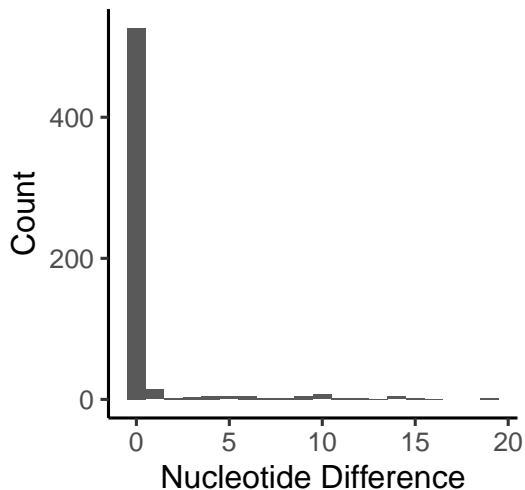
IGHV1-2*02

1118 sequences assigned
904 (80.9%) exact matches, in which:
904 unique CDR3
6 unique J



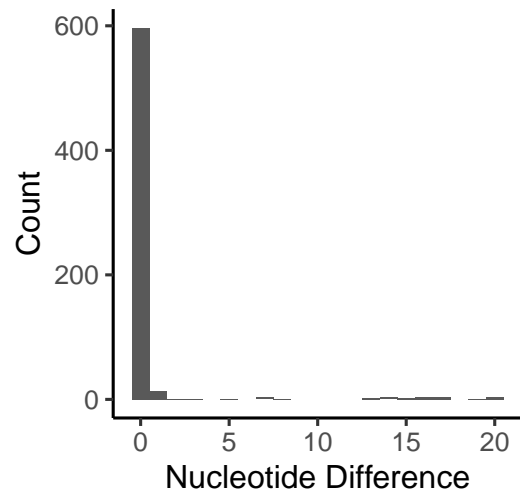
IGHV1-8*01

601 sequences assigned
527 (87.7%) exact matches, in which:
525 unique CDR3
6 unique J



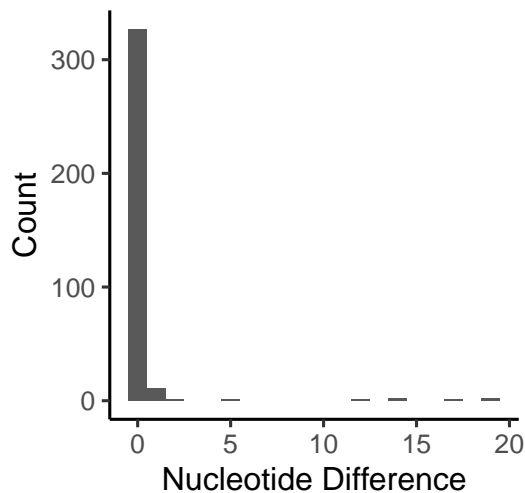
IGHV1-24*01

654 sequences assigned
597 (91.3%) exact matches, in which:
596 unique CDR3
6 unique J



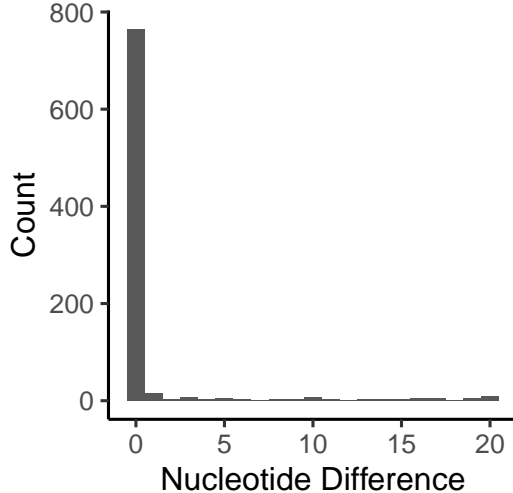
IGHV1-2*04

352 sequences assigned
327 (92.9%) exact matches, in which:
326 unique CDR3
5 unique J



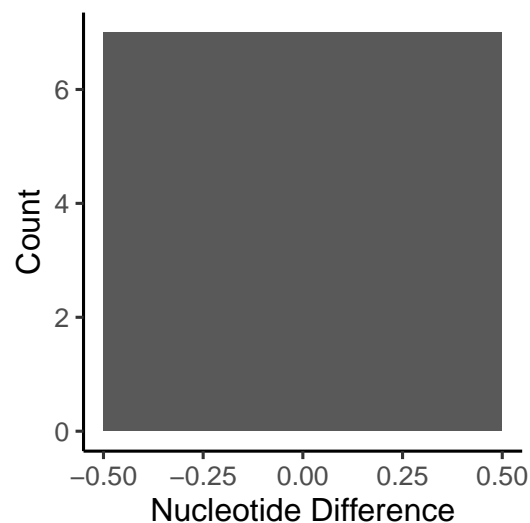
IGHV1-18*01

893 sequences assigned
765 (85.7%) exact matches, in which:
764 unique CDR3
6 unique J



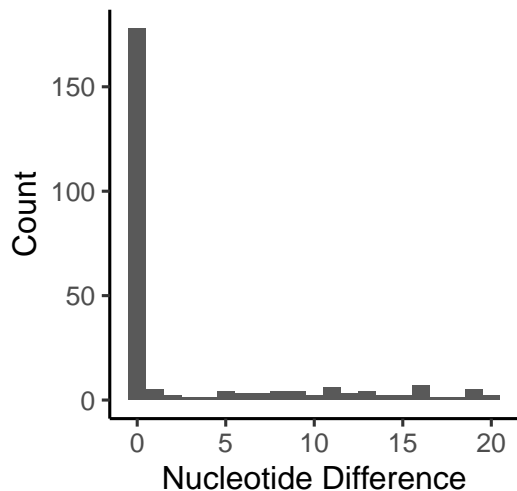
IGHV1-45*02

7 sequences assigned
7 (100%) exact matches, in which:
7 unique CDR3
3 unique J



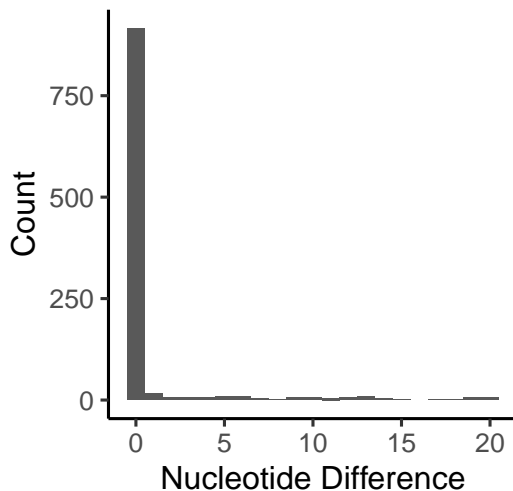
IGHV1-3*01_05

263 sequences assigned
178 (67.7%) exact matches, in which:
178 unique CDR3
6 unique J



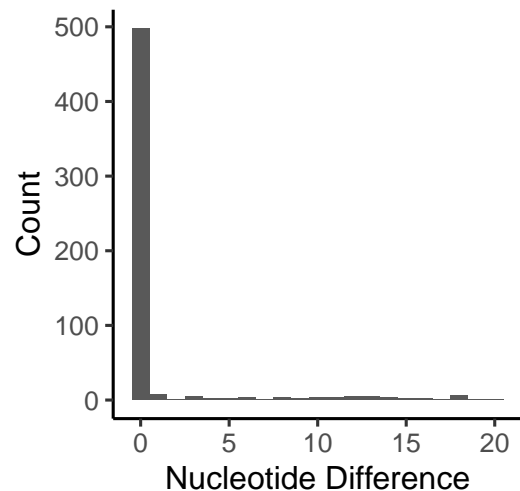
IGHV1-18*04

1056 sequences assigned
916 (86.7%) exact matches, in which:
910 unique CDR3
6 unique J



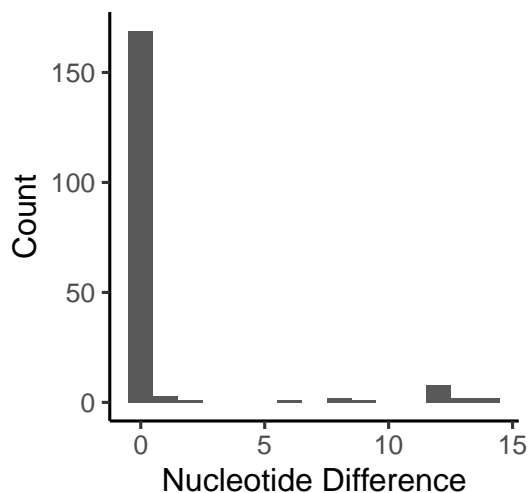
IGHV1-46*01

591 sequences assigned
498 (84.3%) exact matches, in which:
497 unique CDR3
6 unique J



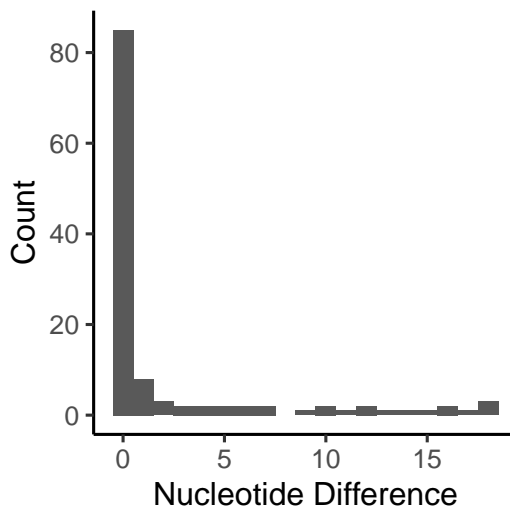
IGHV1–58*01_03

190 sequences assigned
169 (88.9%) exact matches, in which:
169 unique CDR3
5 unique J



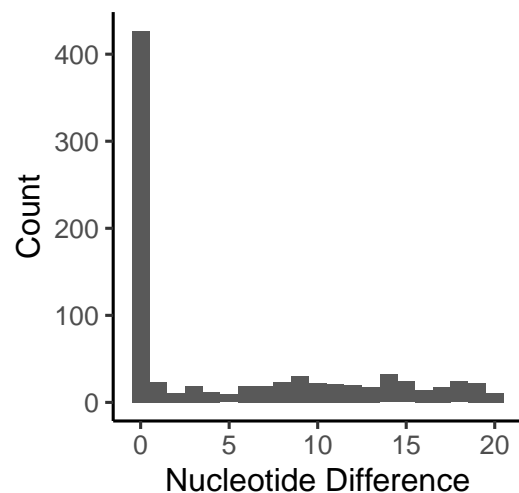
IGHV2–5*02

134 sequences assigned
85 (63.4%) exact matches, in which:
85 unique CDR3
6 unique J



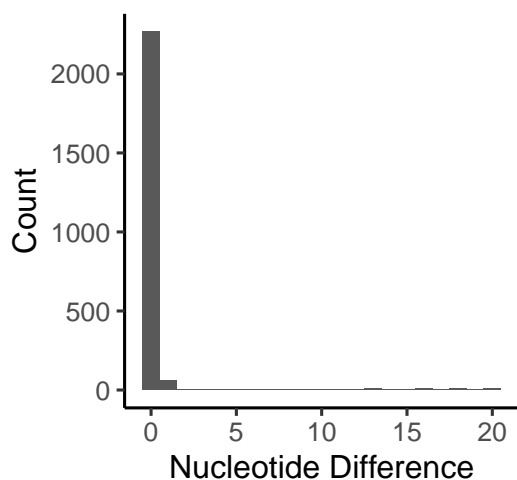
IGHV3–7*01

908 sequences assigned
427 (47%) exact matches, in which:
421 unique CDR3
6 unique J



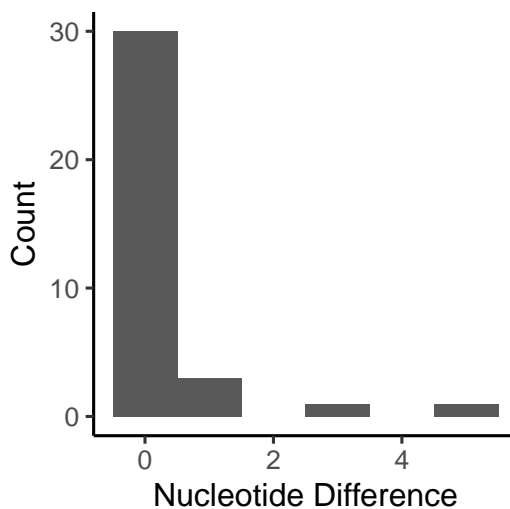
IGHV1–69*01_12_13

2487 sequences assigned
2267 (91.2%) exact matches, in which:
2263 unique CDR3
6 unique J



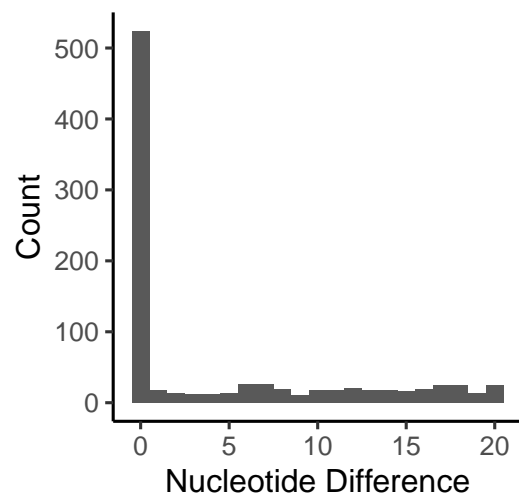
IGHV2–26*01

35 sequences assigned
30 (85.7%) exact matches, in which:
30 unique CDR3
5 unique J



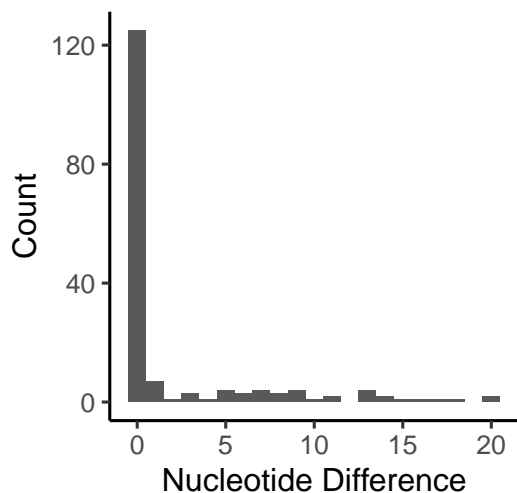
IGHV3–7*03

953 sequences assigned
524 (55%) exact matches, in which:
520 unique CDR3
6 unique J



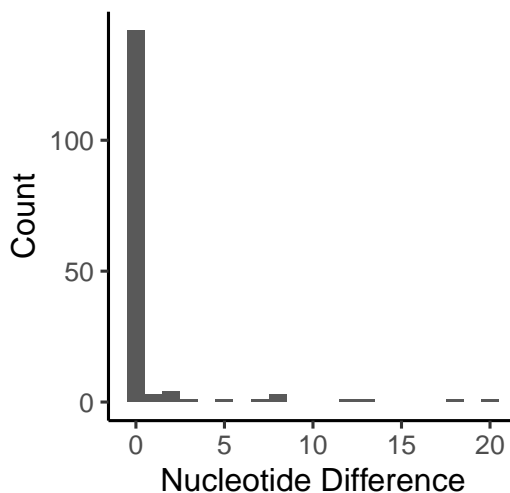
IGHV2–5*01

175 sequences assigned
125 (71.4%) exact matches, in which:
125 unique CDR3
6 unique J



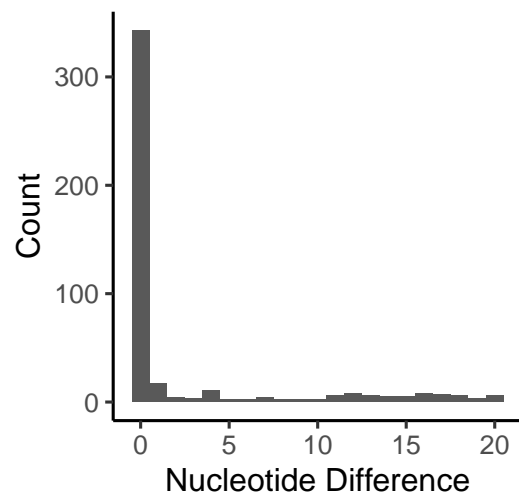
IGHV2–70*01

163 sequences assigned
142 (87.1%) exact matches, in which:
142 unique CDR3
5 unique J



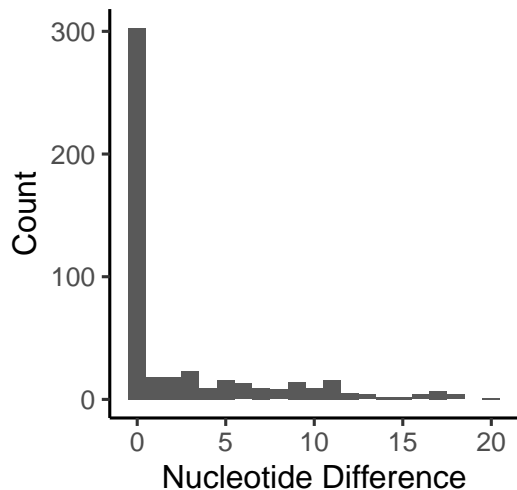
IGHV3–9*01

489 sequences assigned
343 (70.1%) exact matches, in which:
339 unique CDR3
6 unique J



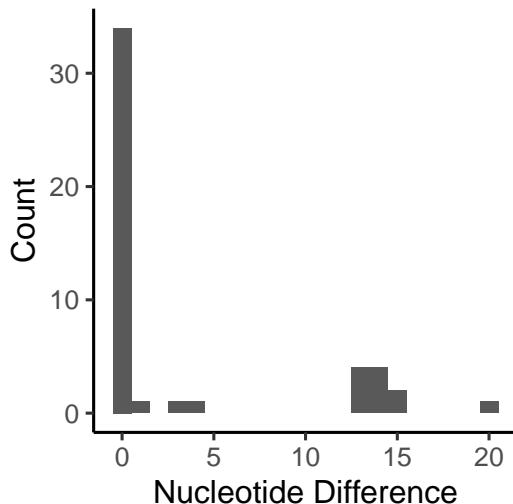
IGHV3-11*01

515 sequences assigned
303 (58.8%) exact matches, in which:
303 unique CDR3
6 unique J



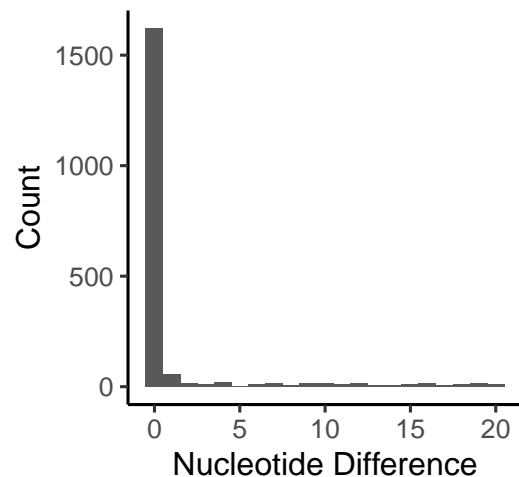
IGHV3-13*05

52 sequences assigned
34 (65.4%) exact matches, in which:
33 unique CDR3
5 unique J



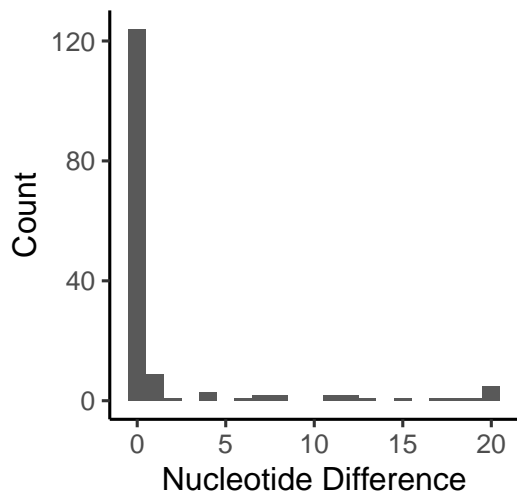
IGHV3-21*01_02

2021 sequences assigned
1621 (80.2%) exact matches, in which:
1600 unique CDR3
6 unique J



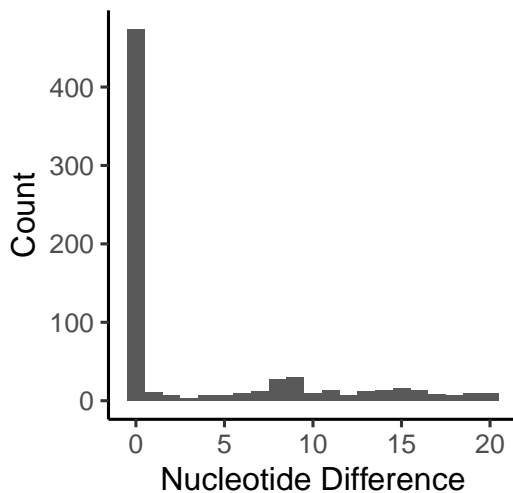
IGHV3-11*06

177 sequences assigned
124 (70.1%) exact matches, in which:
122 unique CDR3
5 unique J



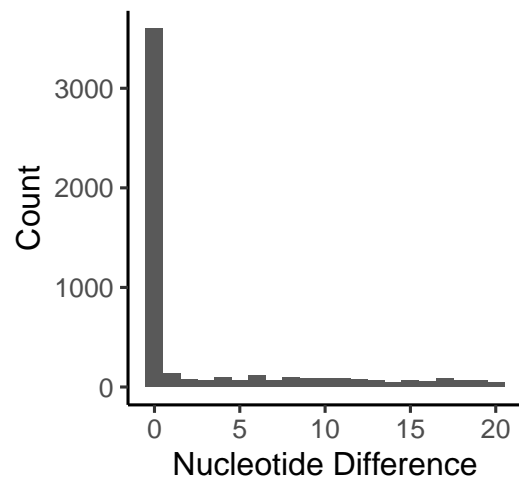
IGHV3-15*01_02

783 sequences assigned
474 (60.5%) exact matches, in which:
472 unique CDR3
6 unique J



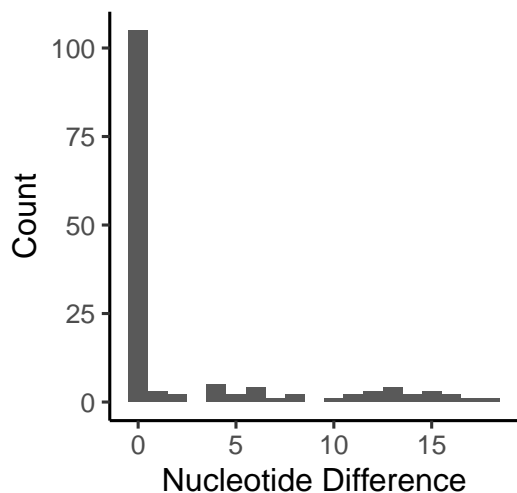
IGHV3-23*01_04

5594 sequences assigned
3598 (64.3%) exact matches, in which:
3563 unique CDR3
6 unique J



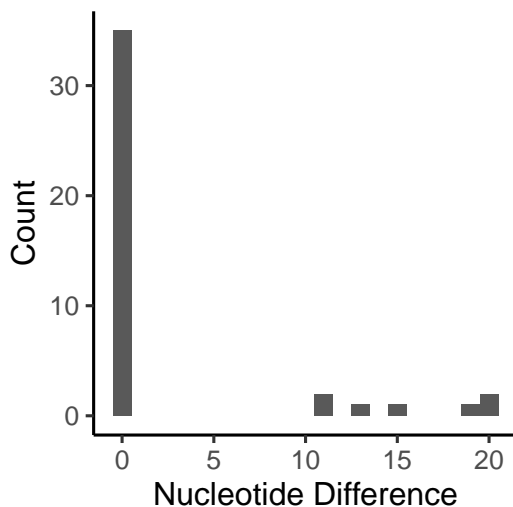
IGHV3-13*01

148 sequences assigned
105 (70.9%) exact matches, in which:
104 unique CDR3
6 unique J



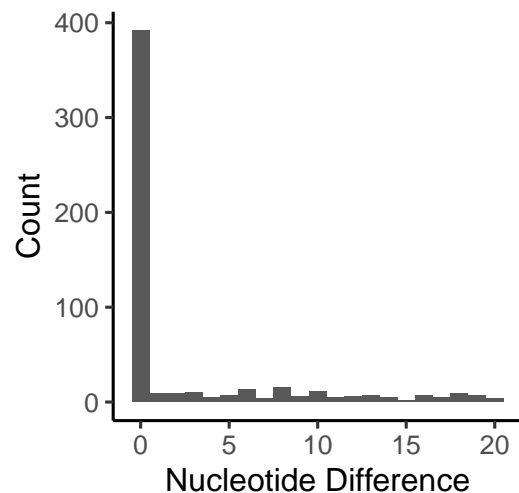
IGHV3-20*01_02

56 sequences assigned
35 (62.5%) exact matches, in which:
35 unique CDR3
5 unique J



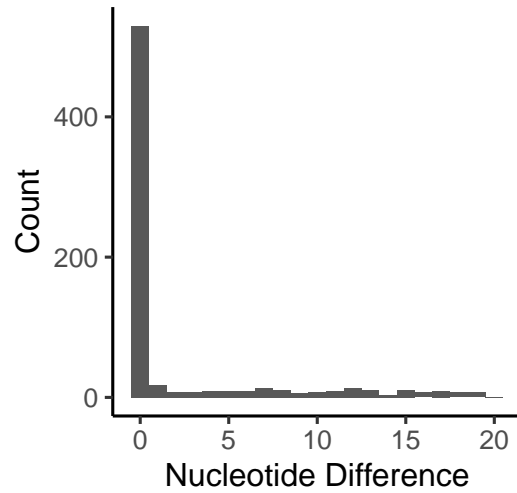
IGHV3-33*01

566 sequences assigned
392 (69.3%) exact matches, in which:
391 unique CDR3
6 unique J



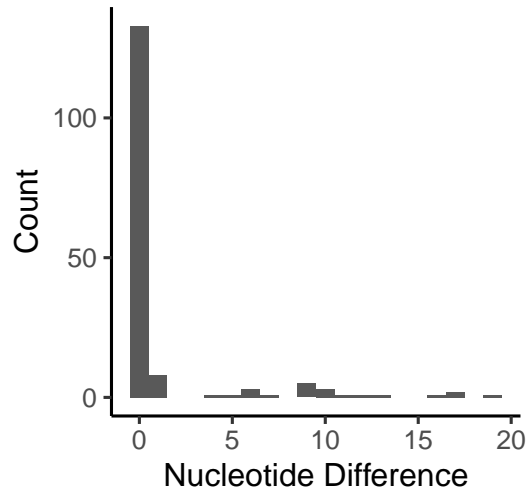
IGHV3–33*08

741 sequences assigned
530 (71.5%) exact matches, in which:
527 unique CDR3
6 unique J



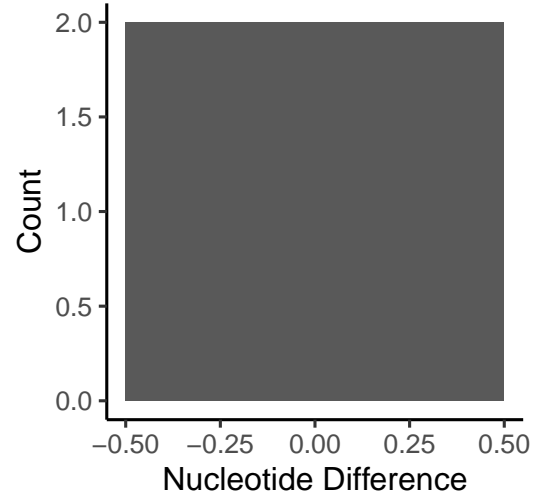
IGHV3–49*03_05

180 sequences assigned
133 (73.9%) exact matches, in which:
132 unique CDR3
6 unique J



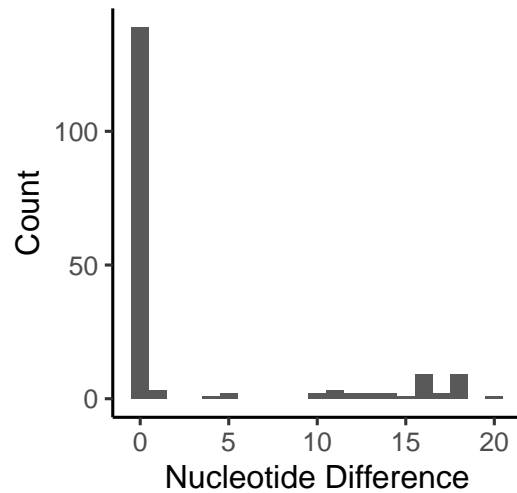
IGHV3–66*03

2 sequences assigned
2 (100%) exact matches, in which:
2 unique CDR3
2 unique J



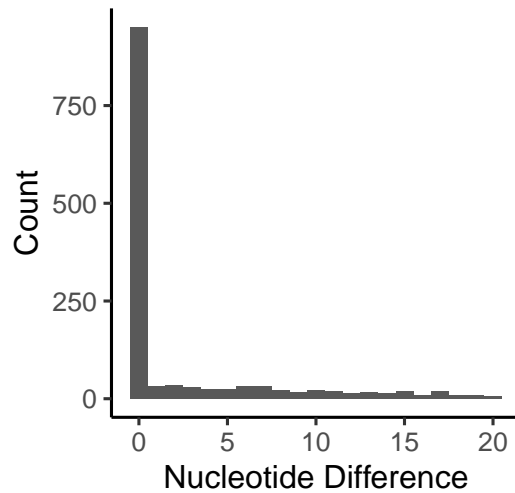
IGHV3–43*01

231 sequences assigned
139 (60.2%) exact matches, in which:
137 unique CDR3
6 unique J



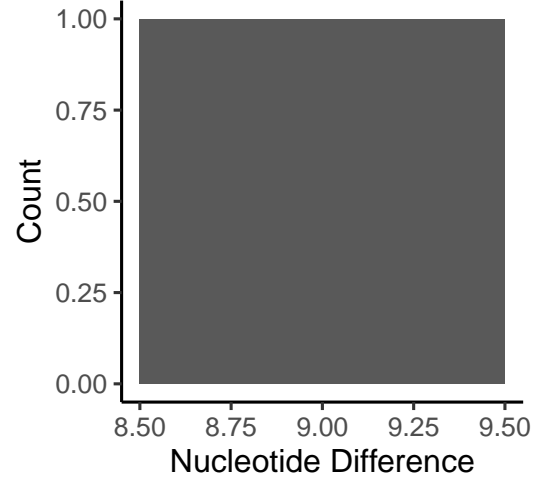
IGHV3–53*01_02

1436 sequences assigned
951 (66.2%) exact matches, in which:
931 unique CDR3
6 unique J



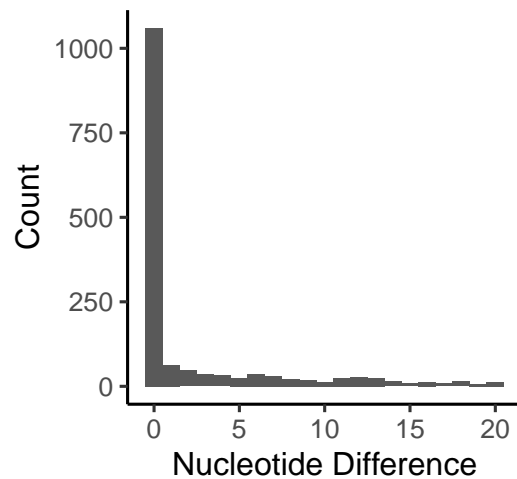
IGHV3–69–1*02

3 sequences assigned
No exact matches.



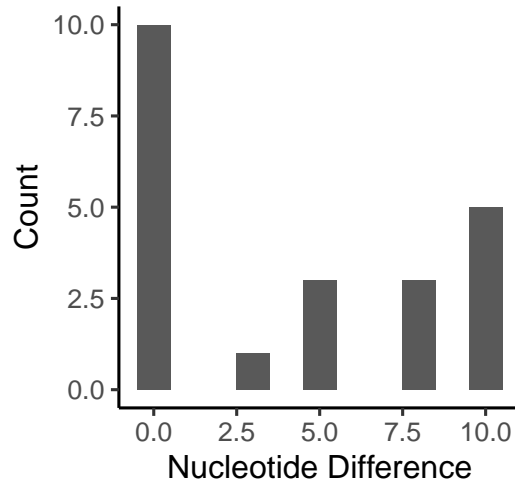
IGHV3–48*02

1622 sequences assigned
1060 (65.4%) exact matches, in which:
1047 unique CDR3
6 unique J



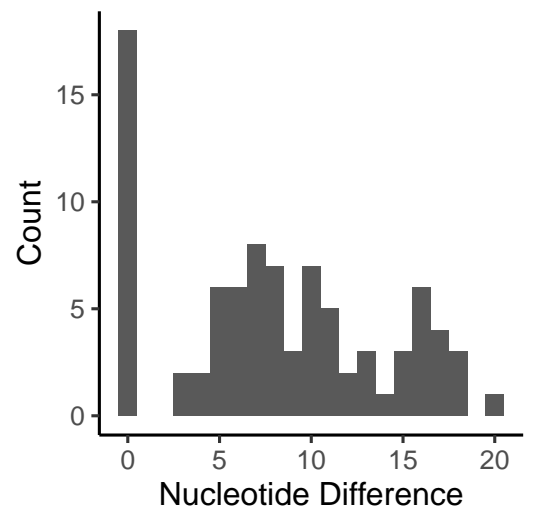
IGHV3–64*02_07

22 sequences assigned
10 (45.5%) exact matches, in which:
10 unique CDR3
4 unique J



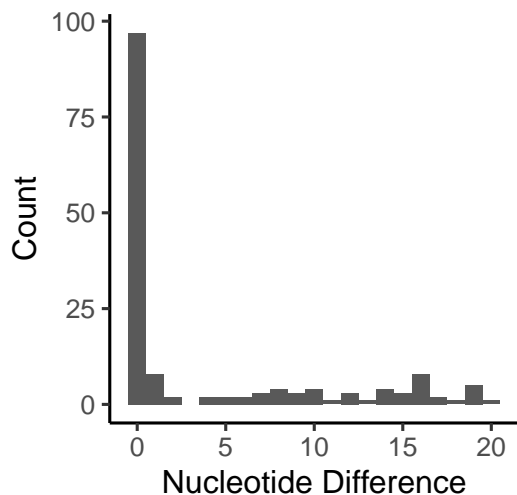
IGHV3–72*01

99 sequences assigned
18 (18.2%) exact matches, in which:
18 unique CDR3
5 unique J



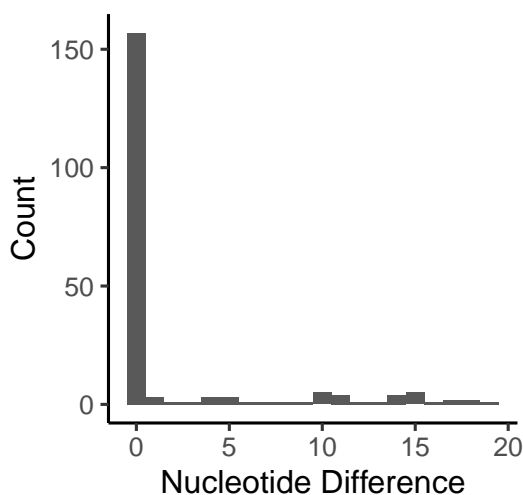
IGHV3-73*01_02

176 sequences assigned
97 (55.1%) exact matches, in which:
96 unique CDR3
5 unique J



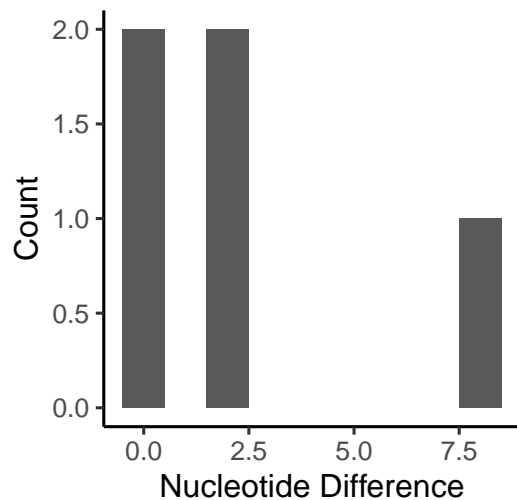
IGHV3-64D*06

206 sequences assigned
157 (76.2%) exact matches, in which:
156 unique CDR3
6 unique J



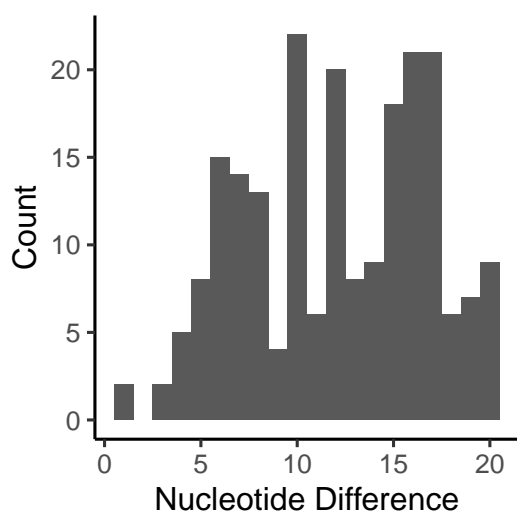
IGHV4-28*01_07

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



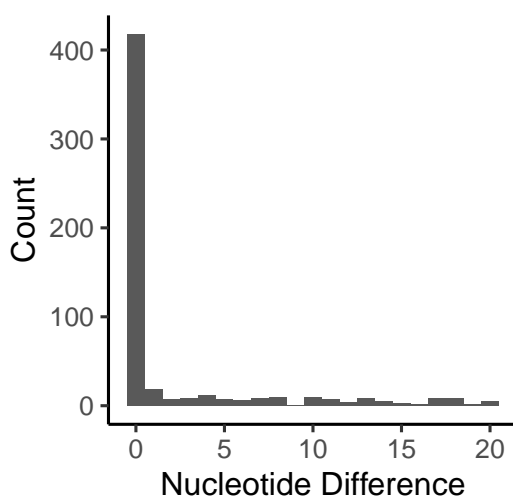
IGHV3-74*03

250 sequences assigned
No exact matches.



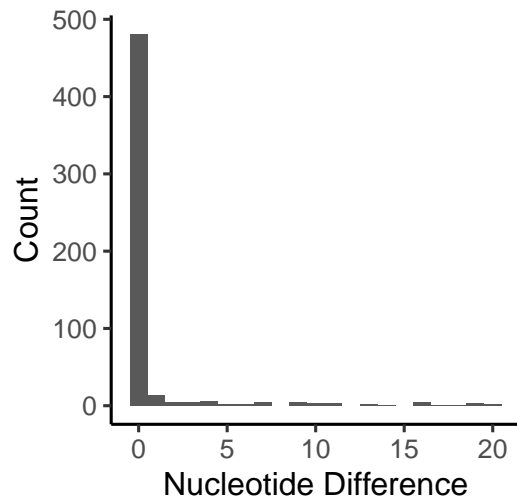
IGHV4-4*07

609 sequences assigned
418 (68.6%) exact matches, in which:
414 unique CDR3
6 unique J



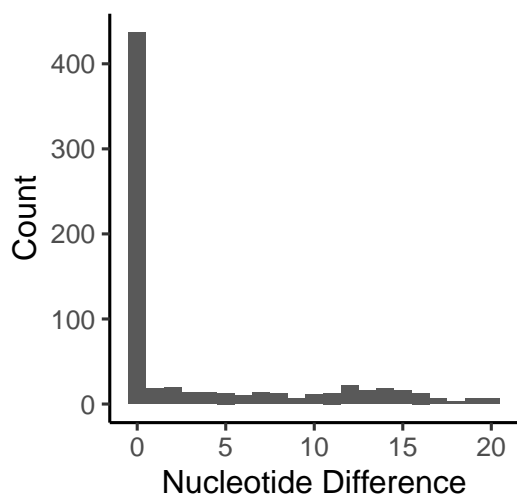
IGHV4-31*02

587 sequences assigned
481 (81.9%) exact matches, in which:
477 unique CDR3
6 unique J



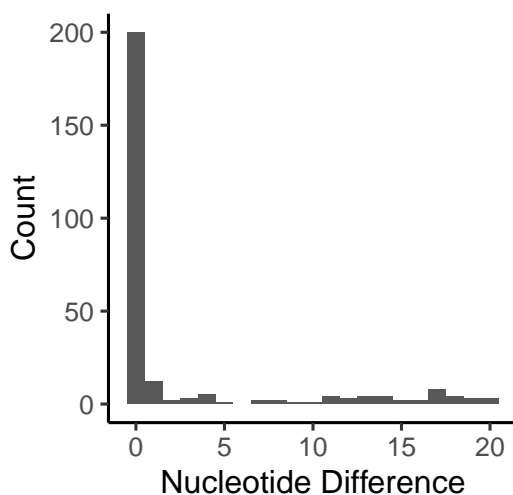
IGHV3-74*01_02

712 sequences assigned
437 (61.4%) exact matches, in which:
427 unique CDR3
6 unique J



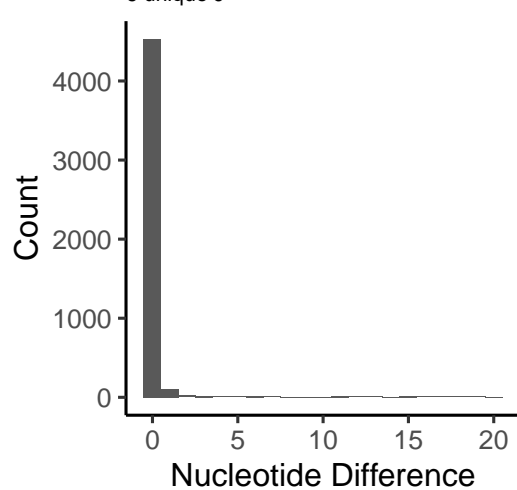
IGHV4-4*02_03

293 sequences assigned
200 (68.3%) exact matches, in which:
200 unique CDR3
6 unique J



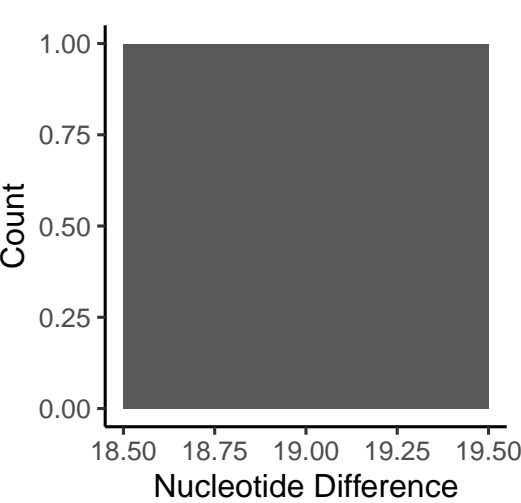
IGHV4-34*01_02

4892 sequences assigned
4530 (92.6%) exact matches, in which:
4488 unique CDR3
6 unique J



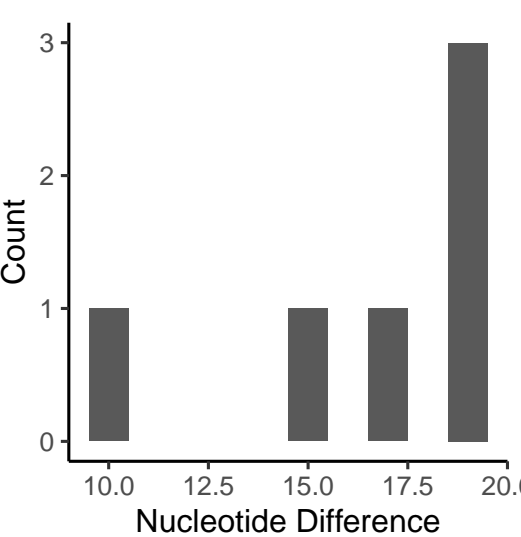
IGHV4-38-2*02

2 sequences assigned
No exact matches.



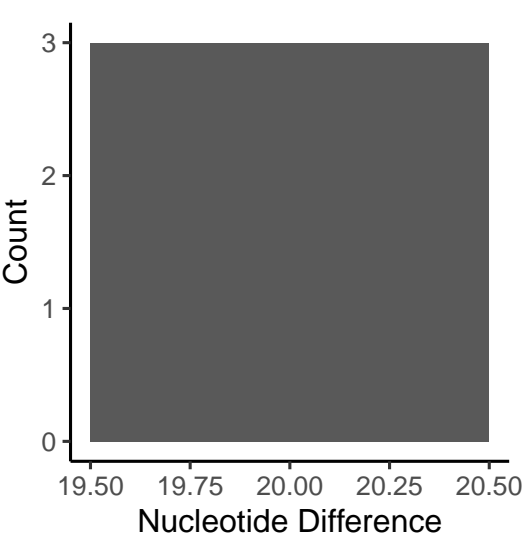
IGHV4-59*03

13 sequences assigned
No exact matches.



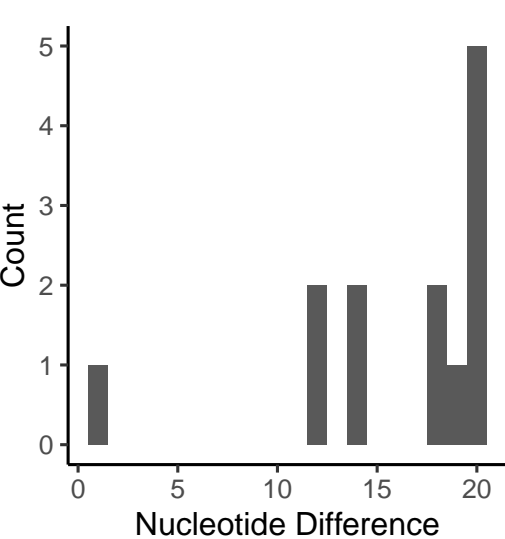
IGHV4/OR15-8*02

3 sequences assigned
No exact matches.



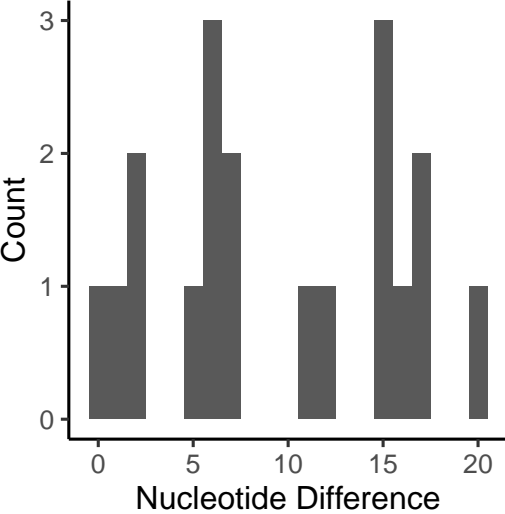
IGHV4-39*02

28 sequences assigned
No exact matches.



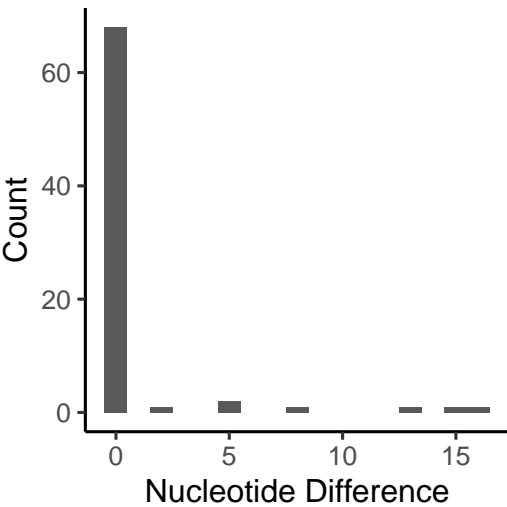
IGHV4-59*11

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



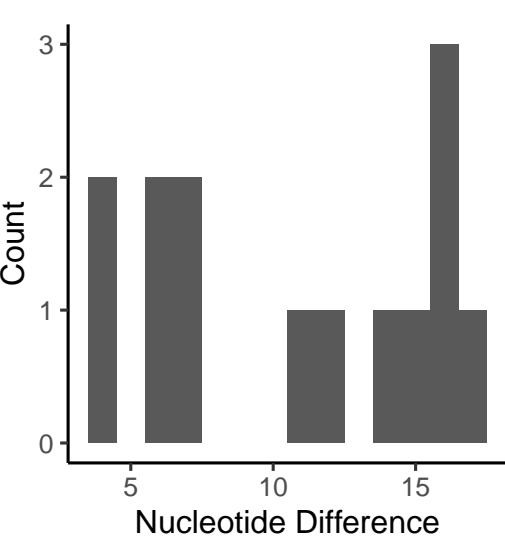
IGHV5-10-1*01_03

85 sequences assigned
68 (80%) exact matches, in which:
68 unique CDR3
5 unique J



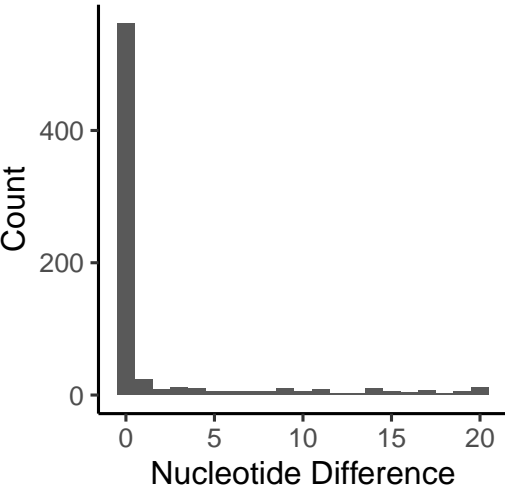
IGHV4-59*02

32 sequences assigned
No exact matches.



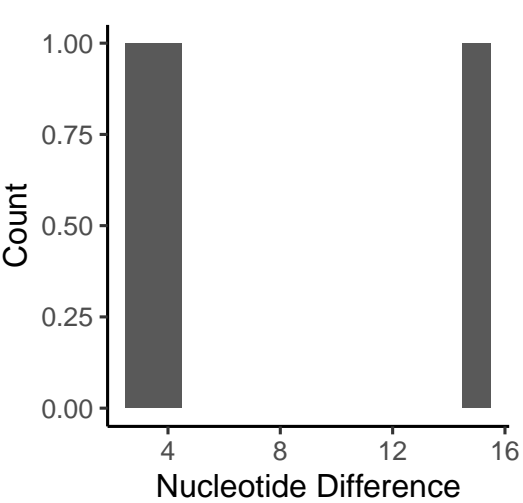
IGHV4-61*01

761 sequences assigned
562 (73.9%) exact matches, in which:
559 unique CDR3
6 unique J



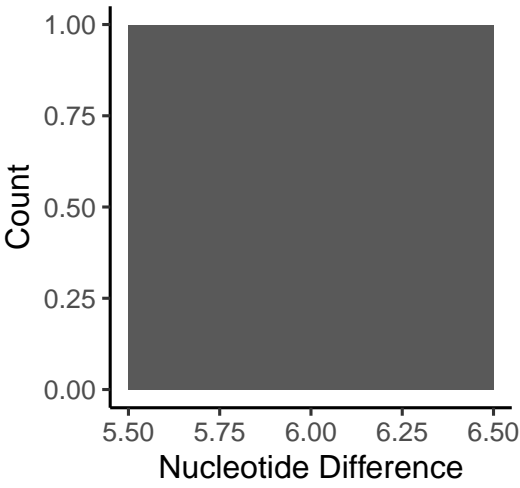
IGHV5-51*04

3 sequences assigned
No exact matches.



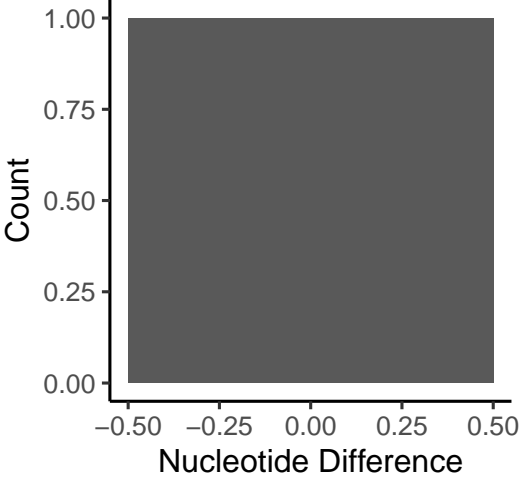
IGHV5-51*06

1 sequences assigned
No exact matches.



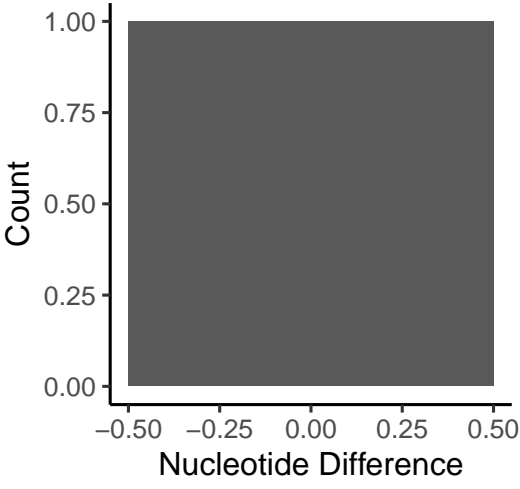
IGHV7-4-1*01

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



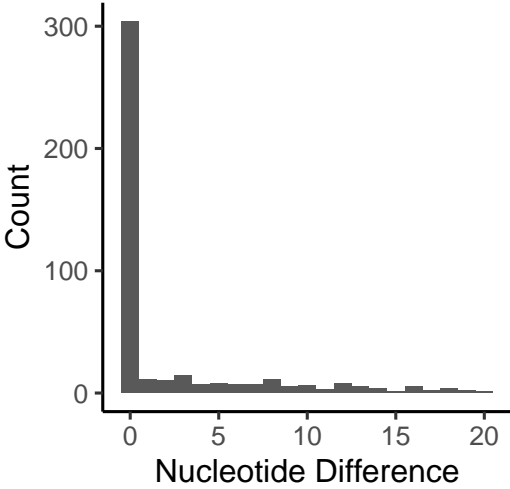
IGHV5-51*07

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



IGHV6-1*01_02

438 sequences assigned
304 (69.4%) exact matches, in which:
302 unique CDR3
6 unique J





[illegible]