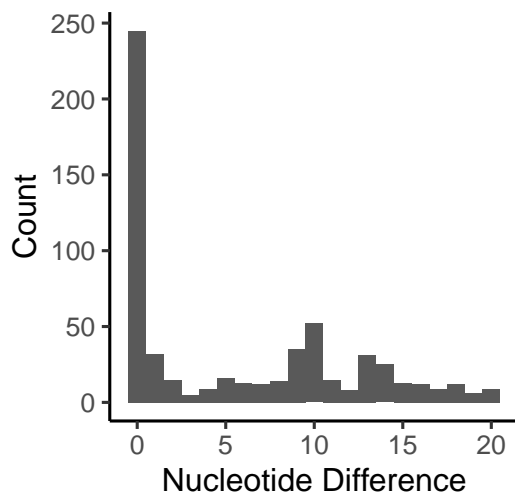


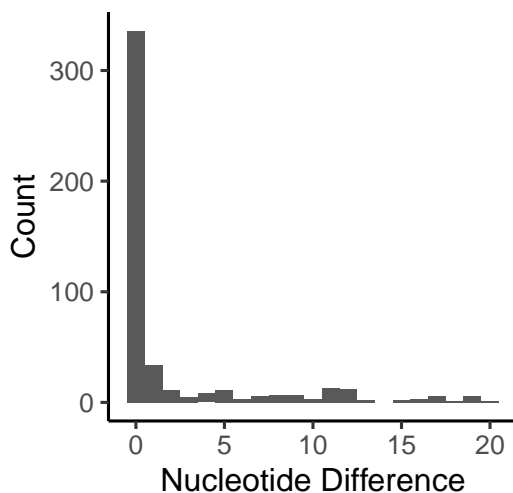
IGHV1-2*02

658 sequences assigned
245 (37.2%) exact matches, in which:
240 unique CDR3
6 unique J



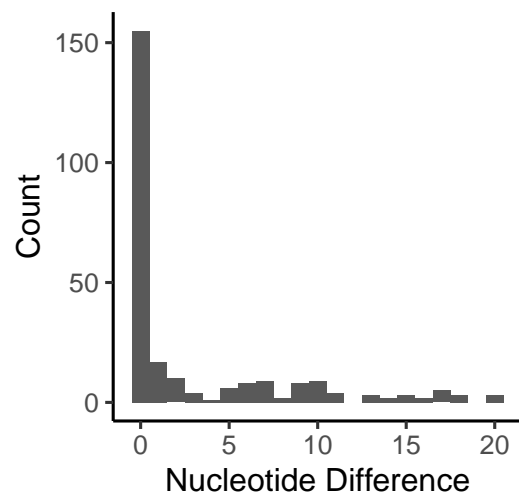
IGHV1-8*01

506 sequences assigned
336 (66.4%) exact matches, in which:
334 unique CDR3
6 unique J



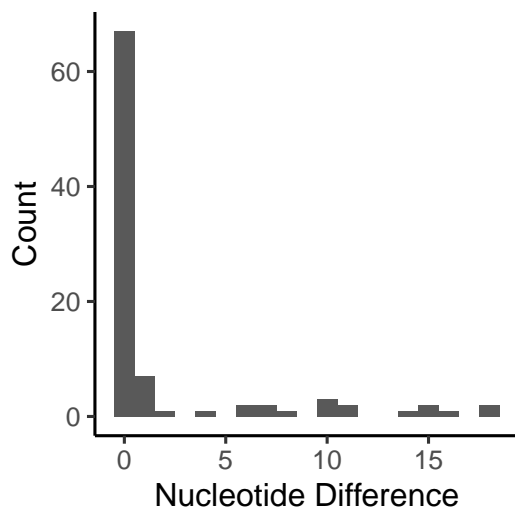
IGHV1-46*01

280 sequences assigned
155 (55.4%) exact matches, in which:
154 unique CDR3
5 unique J



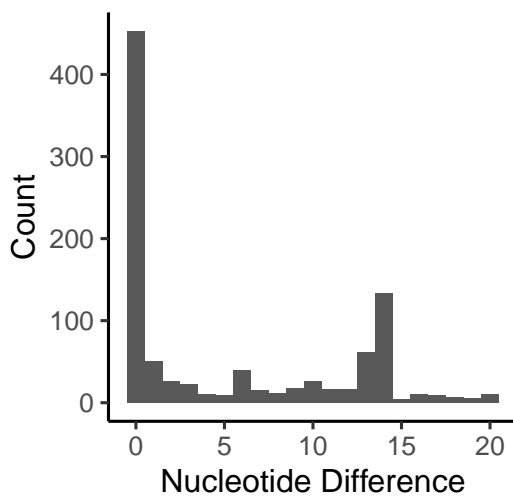
IGHV1-2*04

93 sequences assigned
67 (72%) exact matches, in which:
64 unique CDR3
5 unique J



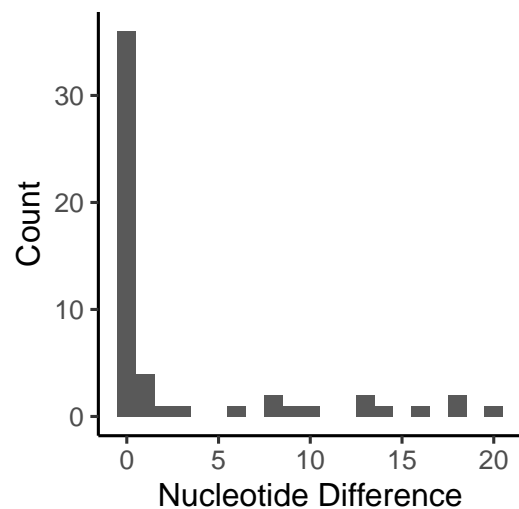
IGHV1-18*01

1013 sequences assigned
453 (44.7%) exact matches, in which:
442 unique CDR3
6 unique J



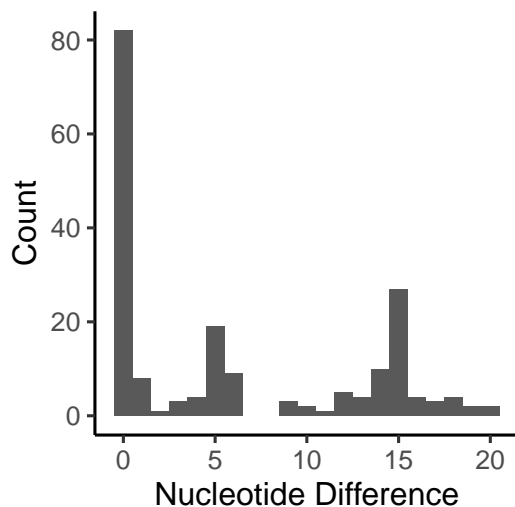
IGHV1-58*01_03

58 sequences assigned
36 (62.1%) exact matches, in which:
36 unique CDR3
4 unique J



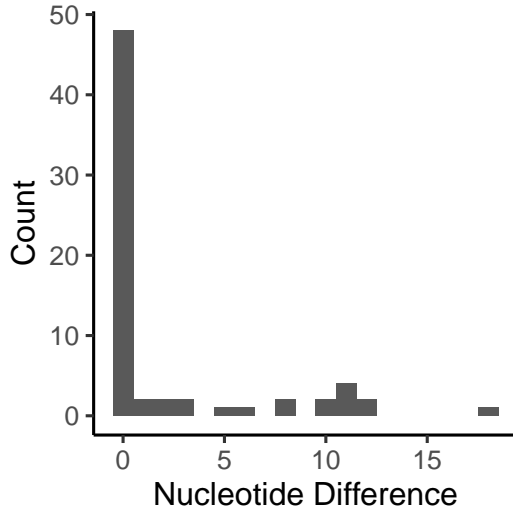
IGHV1-3*01_05

206 sequences assigned
82 (39.8%) exact matches, in which:
80 unique CDR3
5 unique J



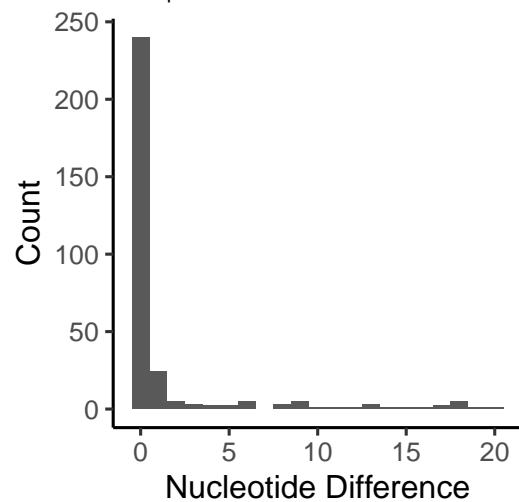
IGHV1-24*01

69 sequences assigned
48 (69.6%) exact matches, in which:
48 unique CDR3
5 unique J



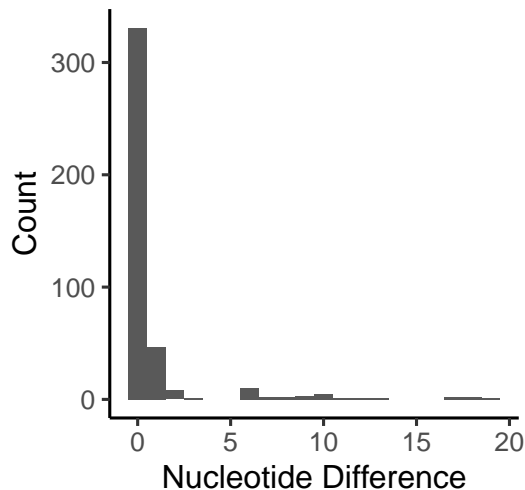
IGHV1-69*01_12_13

320 sequences assigned
240 (75%) exact matches, in which:
237 unique CDR3
5 unique J



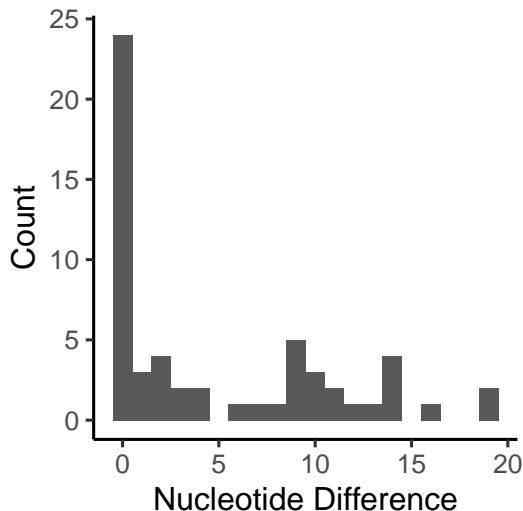
IGHV1-69*04_09

434 sequences assigned
331 (76.3%) exact matches, in which:
328 unique CDR3
5 unique J



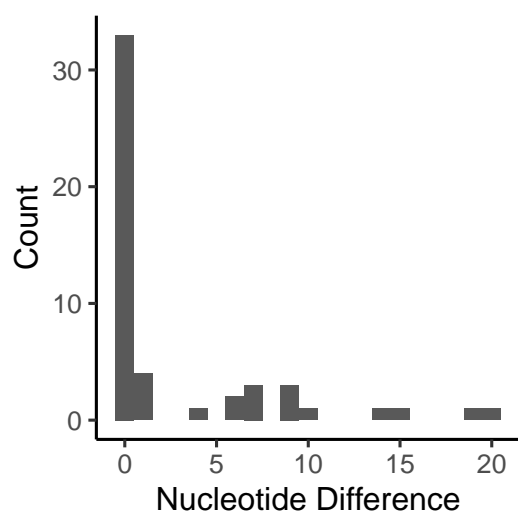
IGHV2-5*01

61 sequences assigned
24 (39.3%) exact matches, in which:
23 unique CDR3
5 unique J



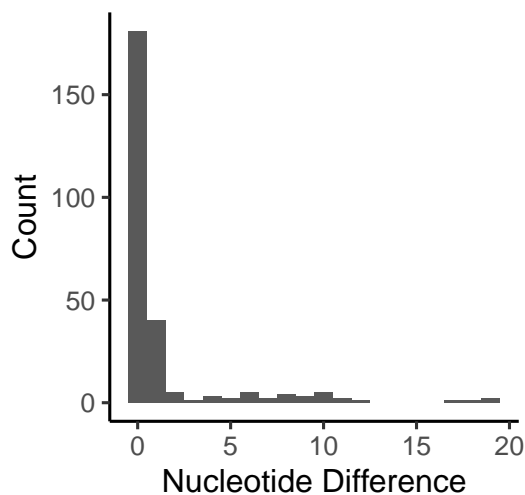
IGHV2-70*01

52 sequences assigned
33 (63.5%) exact matches, in which:
30 unique CDR3
5 unique J



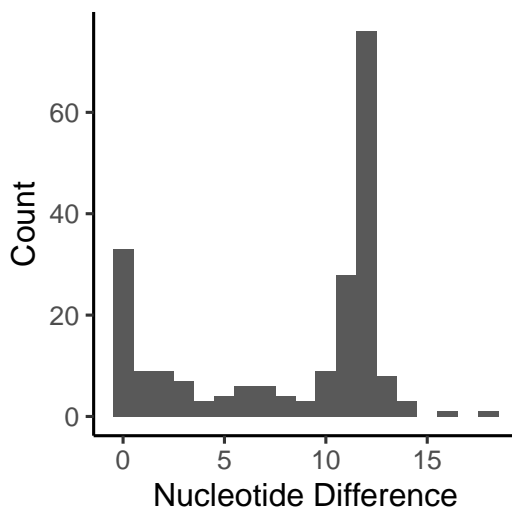
IGHV1-69*06_14

267 sequences assigned
181 (67.8%) exact matches, in which:
173 unique CDR3
5 unique J



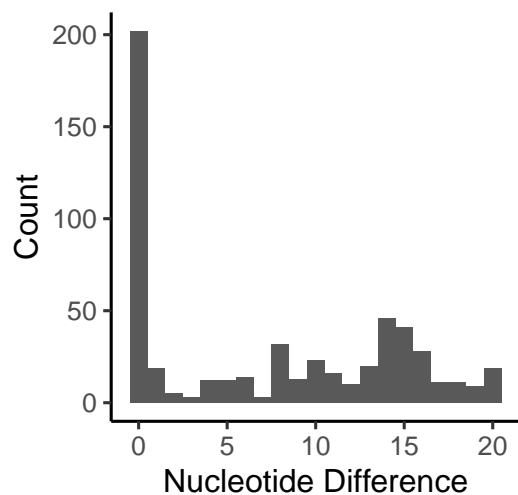
IGHV2-5*02

214 sequences assigned
33 (15.4%) exact matches, in which:
31 unique CDR3
5 unique J



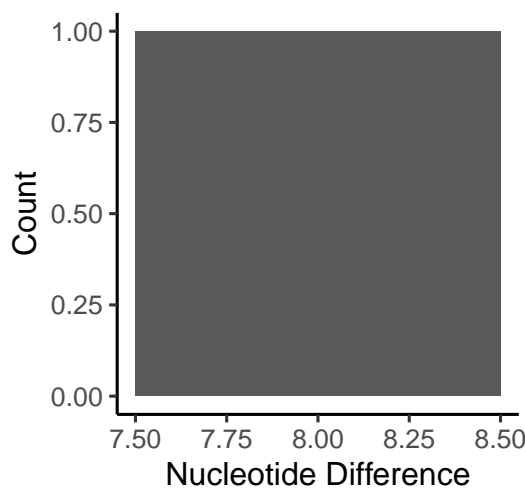
IGHV3-7*01

641 sequences assigned
202 (31.5%) exact matches, in which:
139 unique CDR3
5 unique J



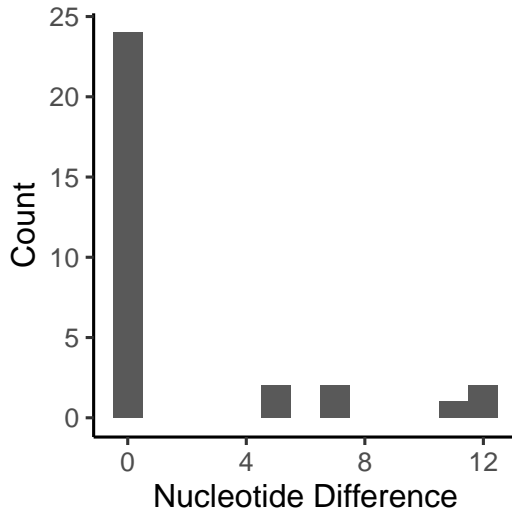
IGHV1-NL1*01

1 sequences assigned
No exact matches.



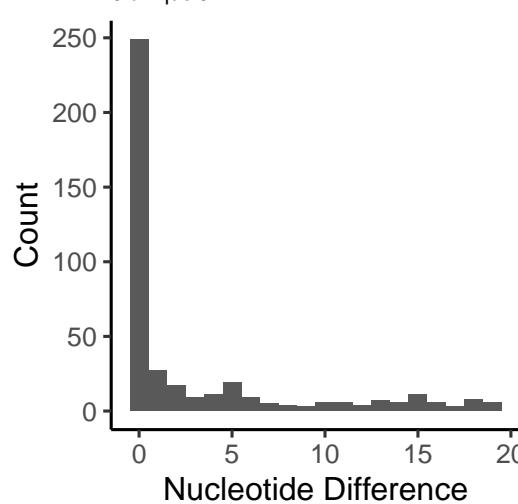
IGHV2-26*01

31 sequences assigned
24 (77.4%) exact matches, in which:
24 unique CDR3
4 unique J



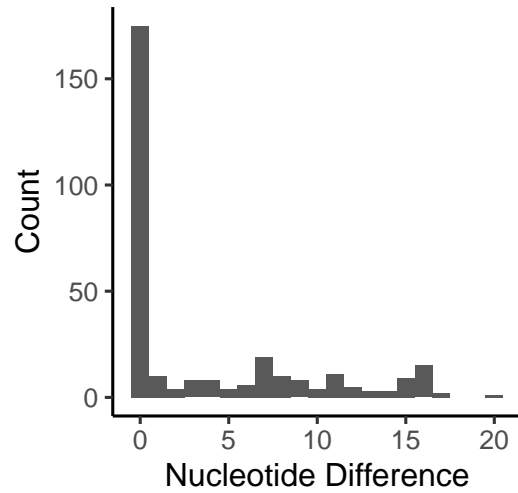
IGHV3-9*01

470 sequences assigned
249 (53%) exact matches, in which:
189 unique CDR3
6 unique J



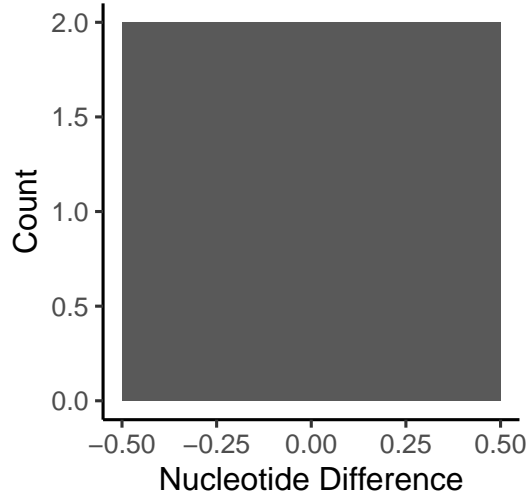
IGHV3-11*01

349 sequences assigned
175 (50.1%) exact matches, in which:
132 unique CDR3
6 unique J



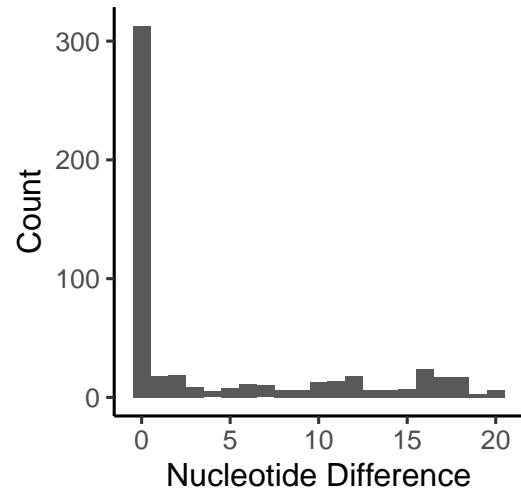
IGHV3-19*01

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



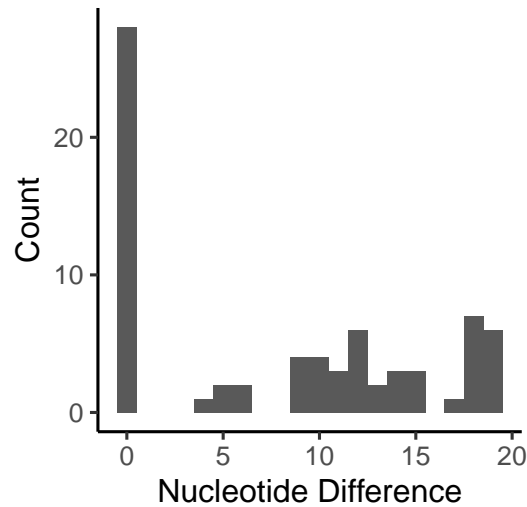
IGHV3-21*01_02

599 sequences assigned
313 (52.3%) exact matches, in which:
230 unique CDR3
5 unique J



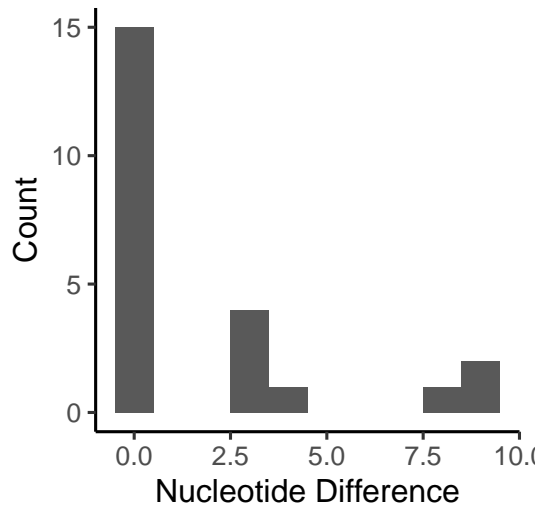
IGHV3-13*01

77 sequences assigned
28 (36.4%) exact matches, in which:
22 unique CDR3
3 unique J



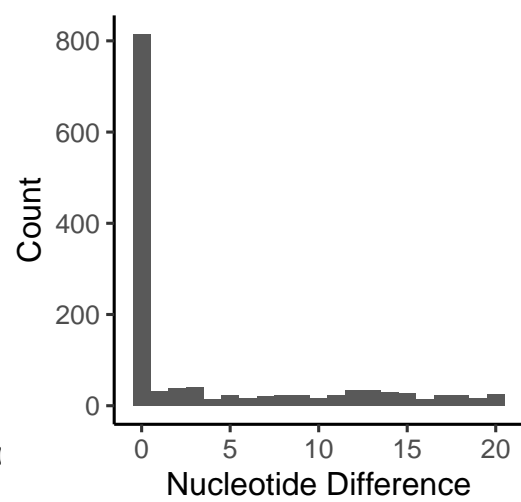
IGHV3-20*01_02

24 sequences assigned
15 (62.5%) exact matches, in which:
13 unique CDR3
4 unique J



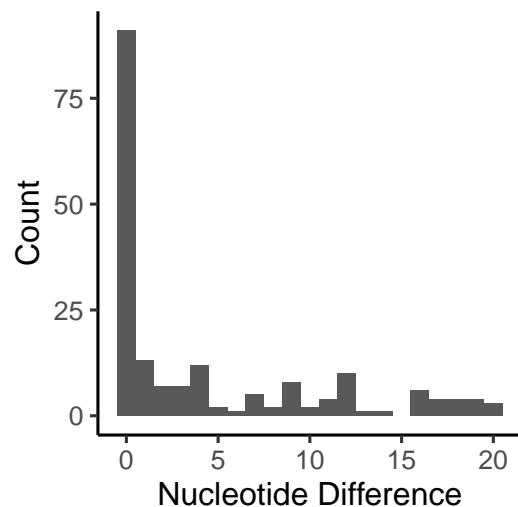
IGHV3-23*01_04

1505 sequences assigned
815 (54.2%) exact matches, in which:
605 unique CDR3
6 unique J



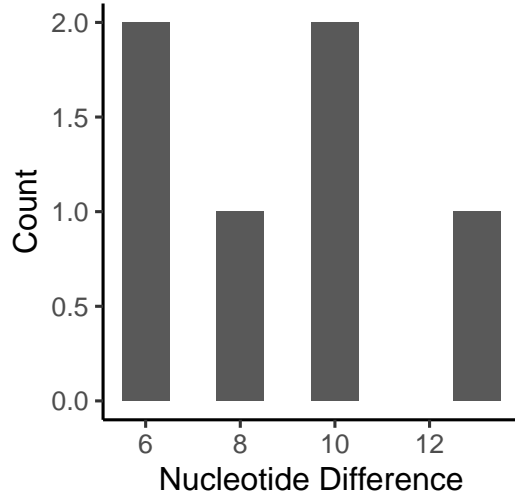
IGHV3-15*01_02

198 sequences assigned
91 (46%) exact matches, in which:
68 unique CDR3
5 unique J



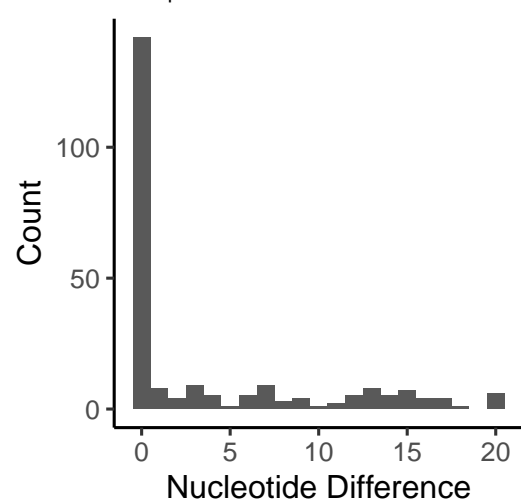
IGHV3-20*03_04

7 sequences assigned
No exact matches.



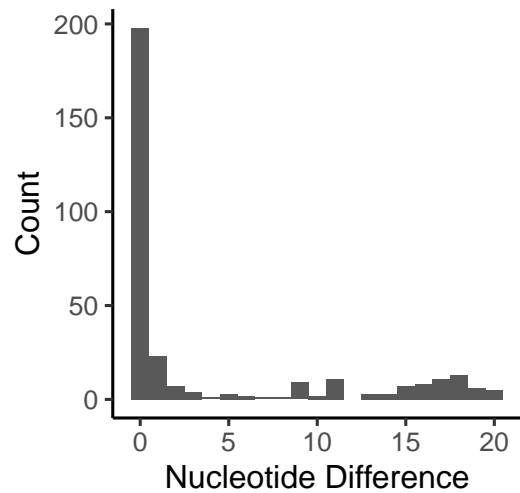
IGHV3-30-3*01

260 sequences assigned
142 (54.6%) exact matches, in which:
106 unique CDR3
5 unique J



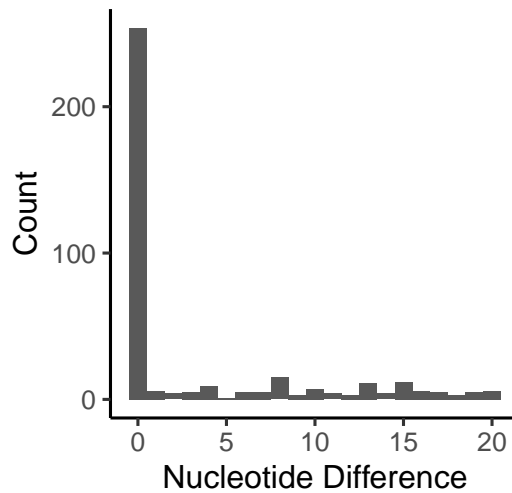
IGHV3–33*01

374 sequences assigned
198 (52.9%) exact matches, in which:
147 unique CDR3
6 unique J



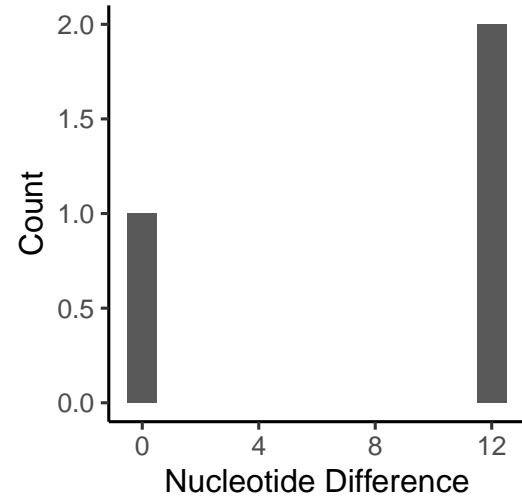
IGHV3–48*03

394 sequences assigned
254 (64.5%) exact matches, in which:
198 unique CDR3
6 unique J



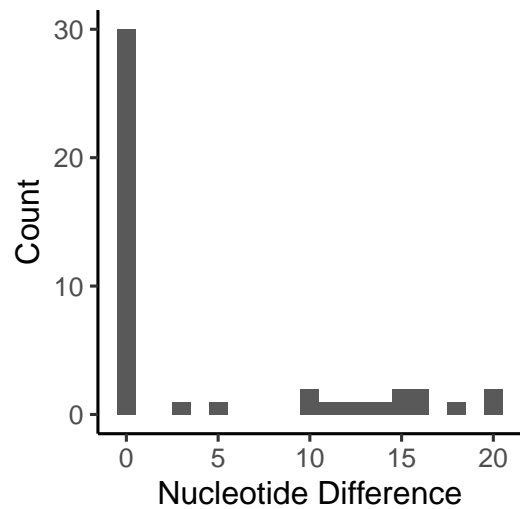
IGHV3–52*01_03

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



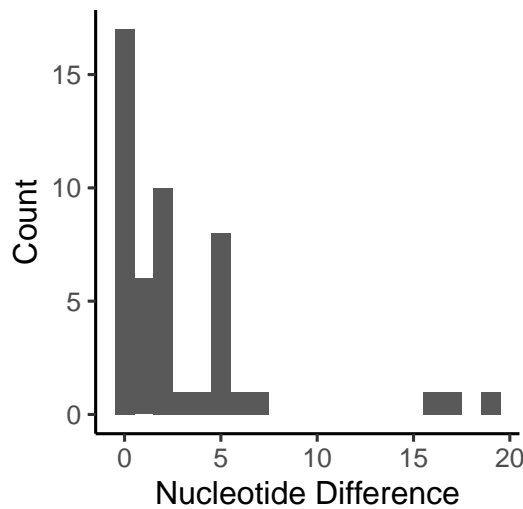
IGHV3–43*02

63 sequences assigned
30 (47.6%) exact matches, in which:
23 unique CDR3
4 unique J



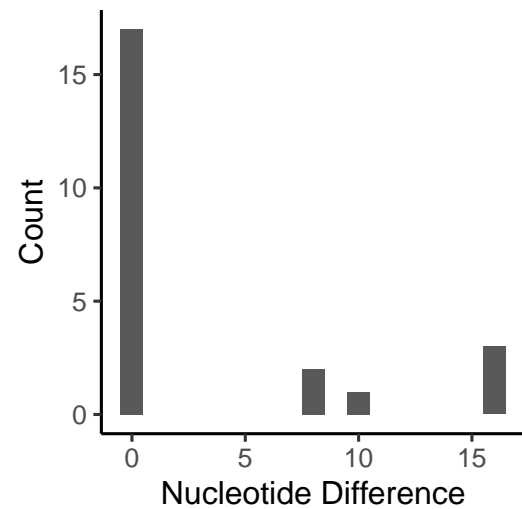
IGHV3–48*03_T303G

53 sequences assigned
17 (32.1%) exact matches, in which:
17 unique CDR3
5 unique J



IGHV3–53*04

32 sequences assigned
17 (53.1%) exact matches, in which:
13 unique CDR3
2 unique J



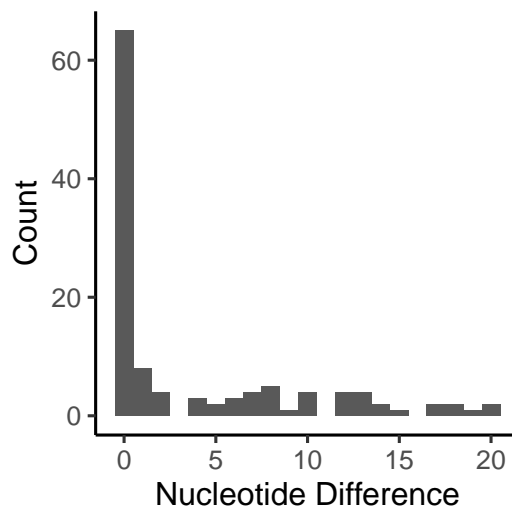
IGHV3–47*01

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



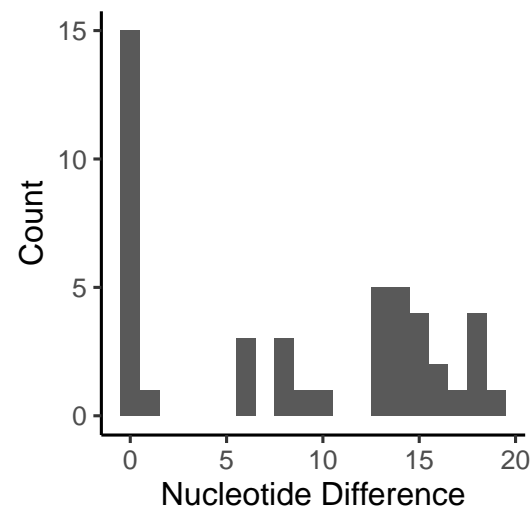
IGHV3–49*04

133 sequences assigned
65 (48.9%) exact matches, in which:
46 unique CDR3
5 unique J



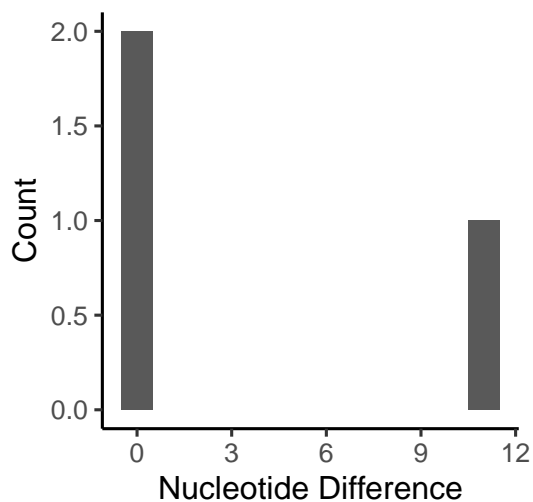
IGHV3–53*01_02

71 sequences assigned
15 (21.1%) exact matches, in which:
11 unique CDR3
3 unique J



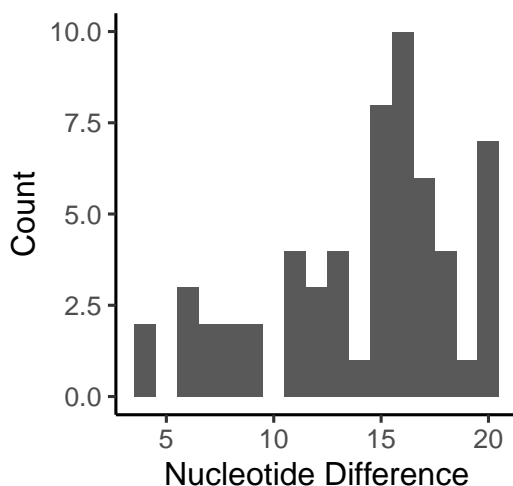
IGHV3-64*02_07

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



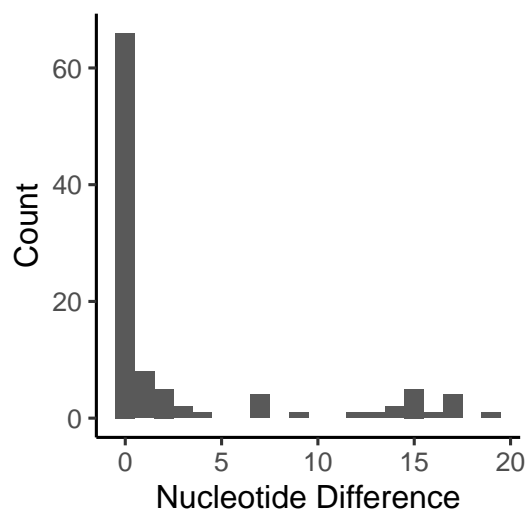
IGHV3-74*03

87 sequences assigned
No exact matches.



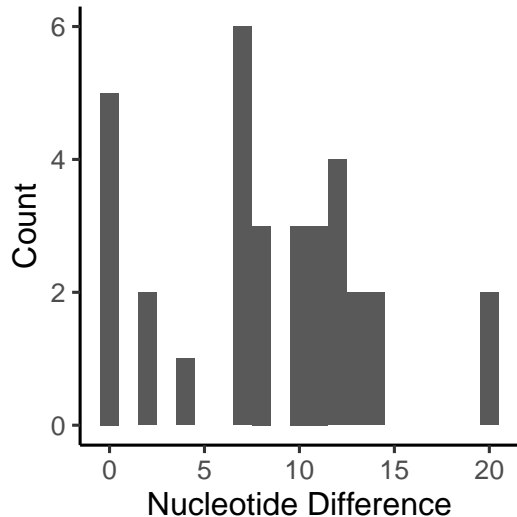
IGHV4-4*07

135 sequences assigned
66 (48.9%) exact matches, in which:
65 unique CDR3
5 unique J



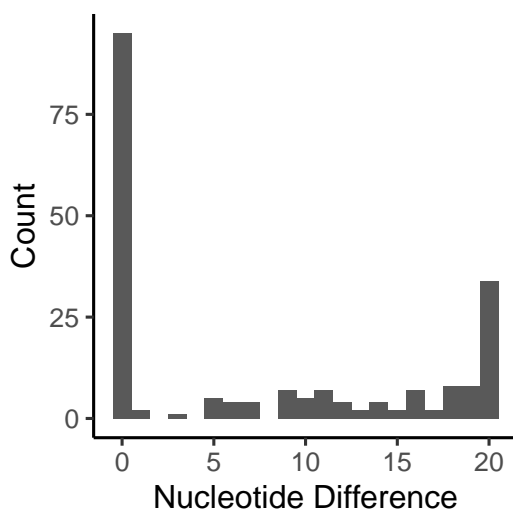
IGHV3-72*01

36 sequences assigned
5 (13.9%) exact matches, in which:
3 unique CDR3
3 unique J



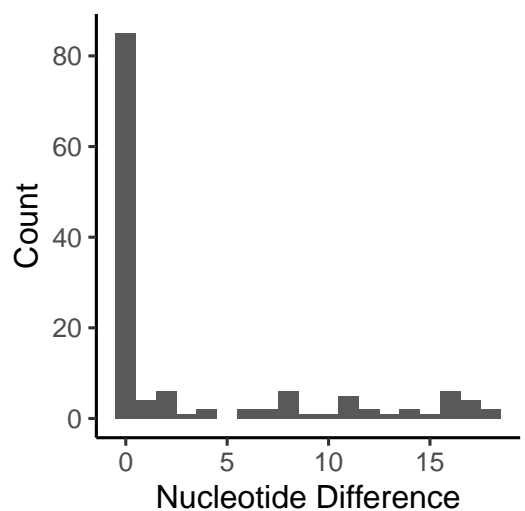
IGHV3-74*01_02

265 sequences assigned
95 (35.8%) exact matches, in which:
63 unique CDR3
5 unique J



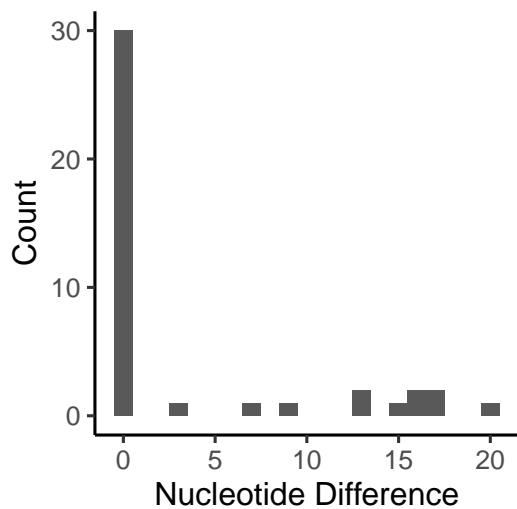
IGHV4-4*02_03

151 sequences assigned
85 (56.3%) exact matches, in which:
75 unique CDR3
4 unique J



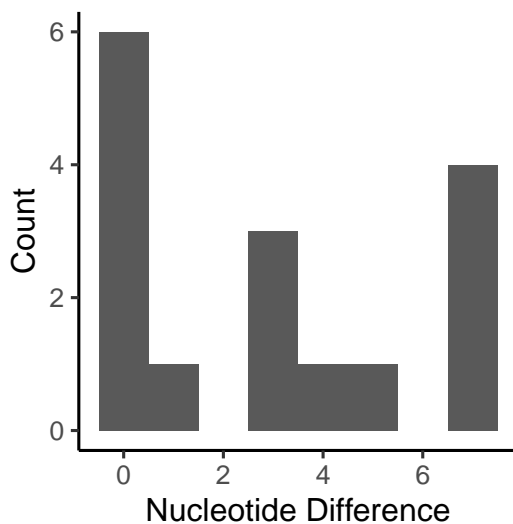
IGHV3-73*01_02

46 sequences assigned
30 (65.2%) exact matches, in which:
22 unique CDR3
4 unique J



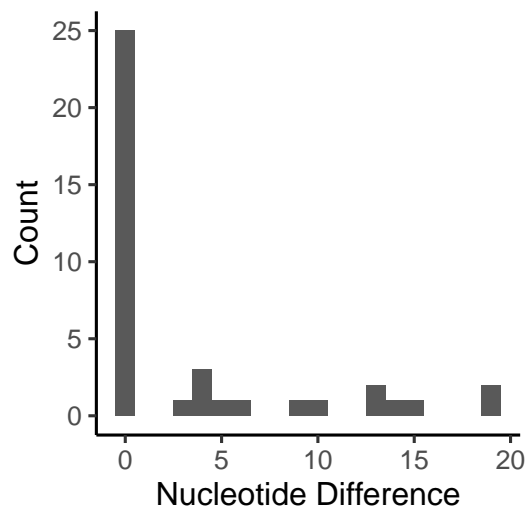
IGHV3-43D*04

16 sequences assigned
6 (37.5%) exact matches, in which:
5 unique CDR3
2 unique J



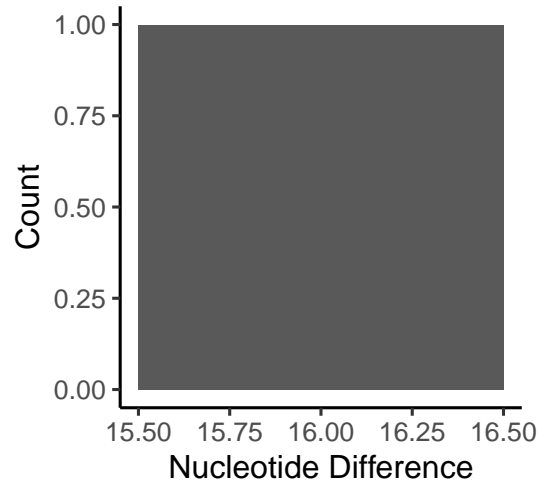
IGHV4-30-2*01

44 sequences assigned
25 (56.8%) exact matches, in which:
22 unique CDR3
5 unique J



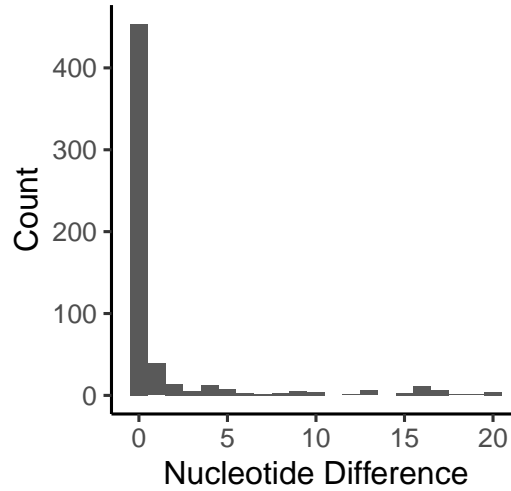
IGHV4-30-4*05

1 sequences assigned
No exact matches.



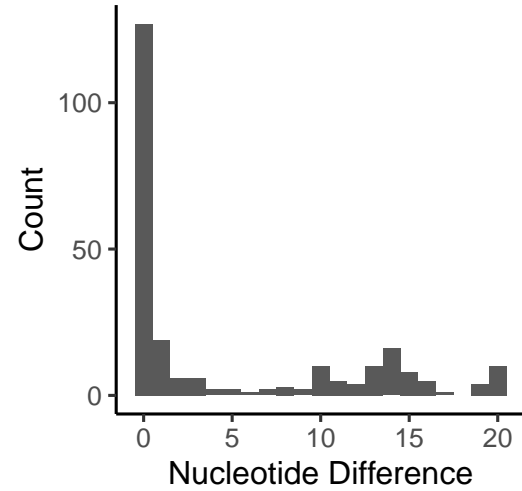
IGHV4-34*01_02

610 sequences assigned
454 (74.4%) exact matches, in which:
414 unique CDR3
6 unique J



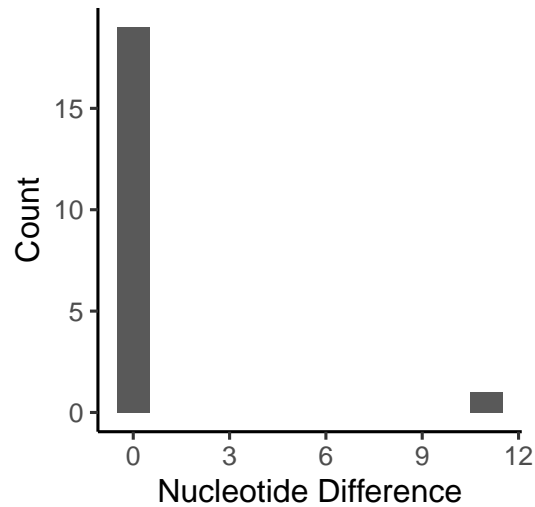
IGHV4-39*02_C258G

279 sequences assigned
127 (45.5%) exact matches, in which:
119 unique CDR3
5 unique J



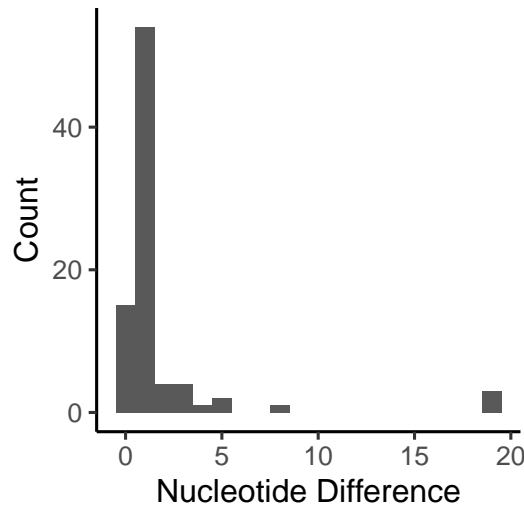
IGHV4-31*01

22 sequences assigned
19 (86.4%) exact matches, in which:
18 unique CDR3
4 unique J



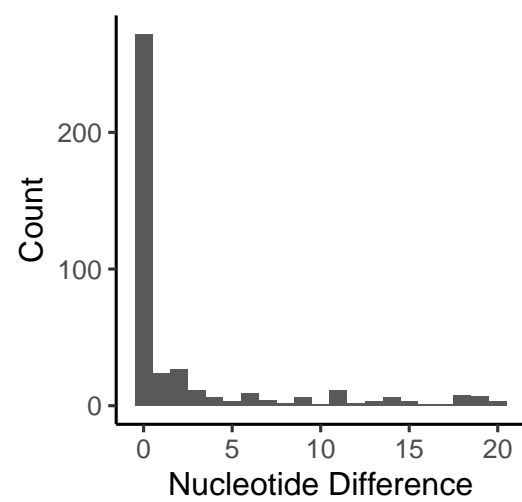
IGHV4-34*01_02_T300C

86 sequences assigned
15 (17.4%) exact matches, in which:
15 unique CDR3
5 unique J



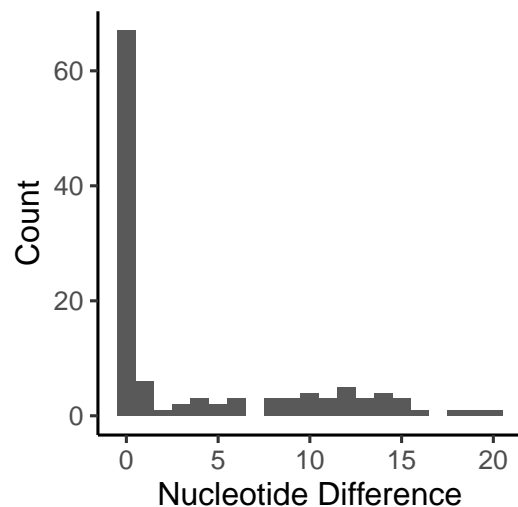
IGHV4-59*02_G88A

476 sequences assigned
272 (57.1%) exact matches, in which:
266 unique CDR3
6 unique J



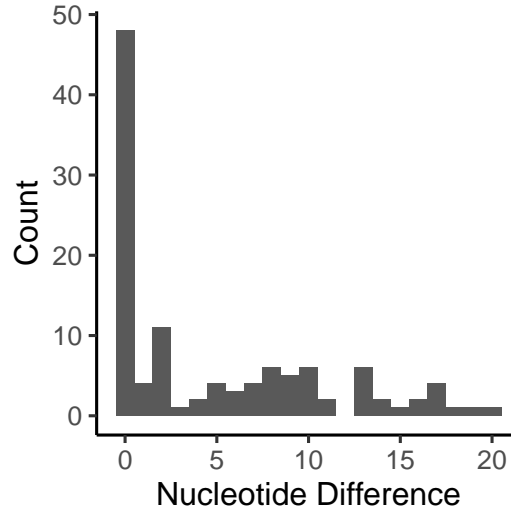
IGHV4-31*02

127 sequences assigned
67 (52.8%) exact matches, in which:
66 unique CDR3
4 unique J



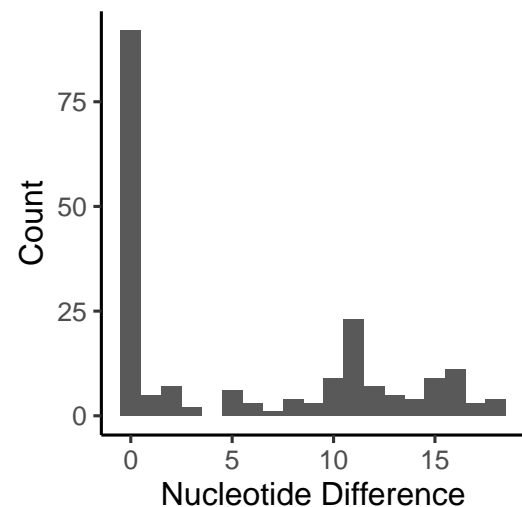
IGHV4-38-2*02_A70G

129 sequences assigned
48 (37.2%) exact matches, in which:
47 unique CDR3
4 unique J



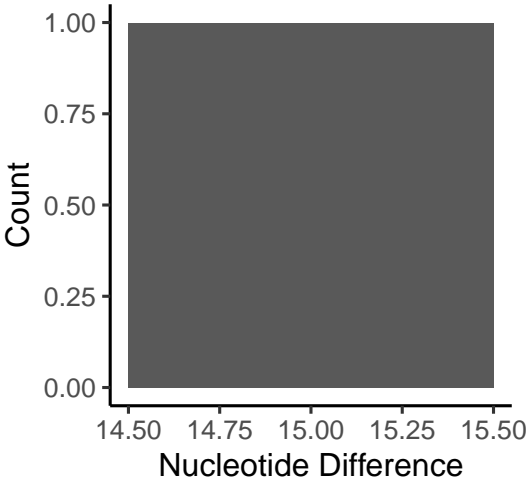
IGHV4-61*01

233 sequences assigned
92 (39.5%) exact matches, in which:
91 unique CDR3
5 unique J



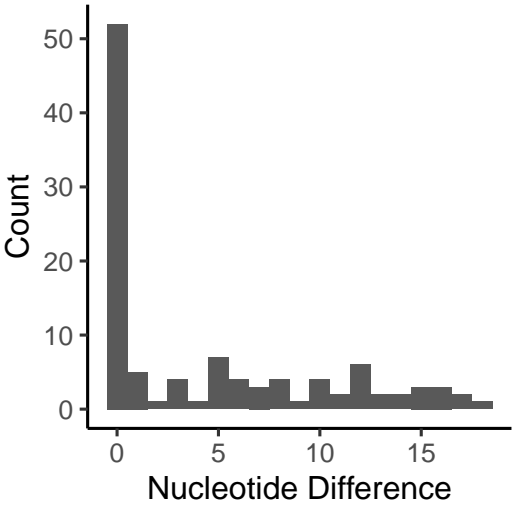
IGHV4/OR15-8*02

1 sequences assigned
No exact matches.



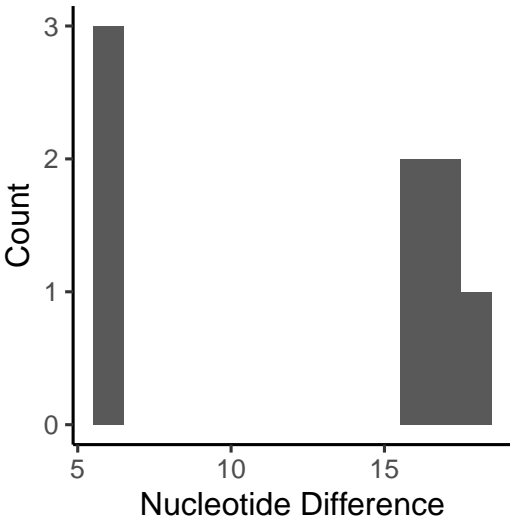
IGHV6-1*01_02

120 sequences assigned
52 (43.3%) exact matches, in which:
52 unique CDR3
6 unique J



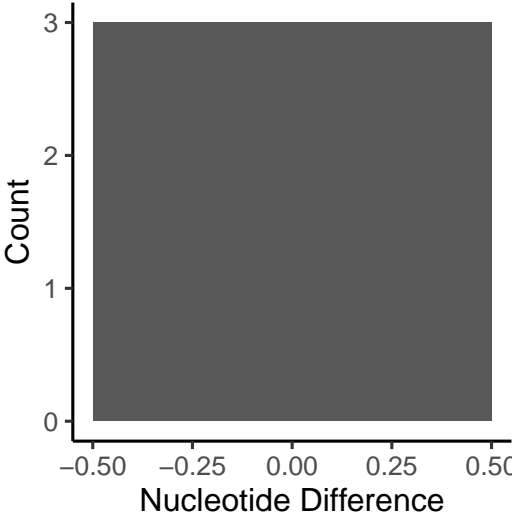
IGHV5-10-1*01_03

8 sequences assigned
No exact matches.



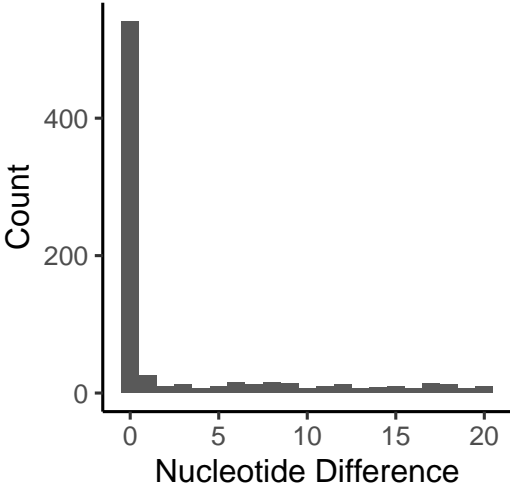
IGHV7-4-1*01

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



IGHV5-51*07_A128G

869 sequences assigned
541 (62.3%) exact matches, in which:
394 unique CDR3
6 unique J





Warning – no inferred sequences found.