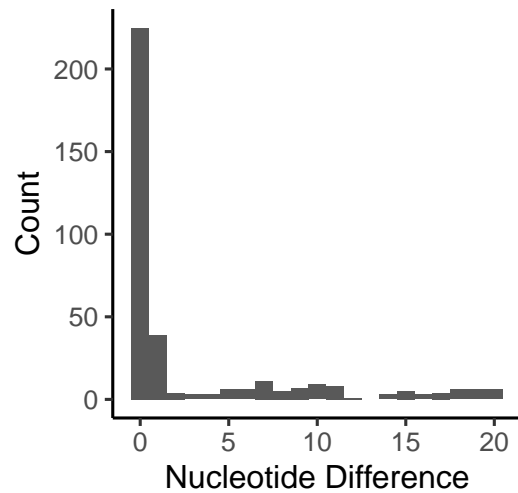


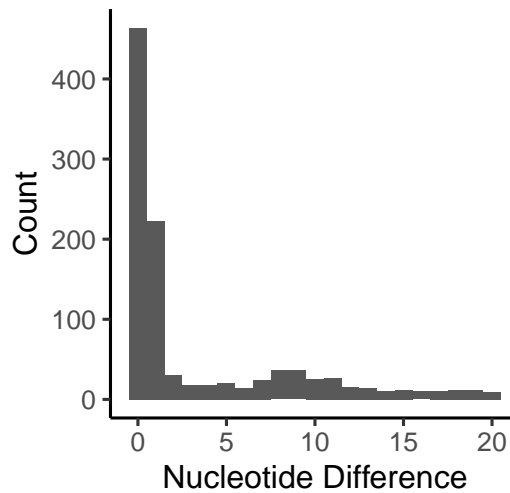
IGHV1-2*04

385 sequences assigned
225 (58.4%) exact matches, in which:
221 unique CDR3
6 unique J



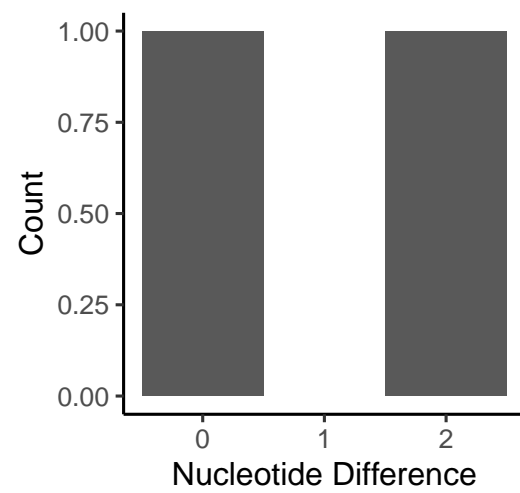
IGHV1-18*01

1106 sequences assigned
464 (42%) exact matches, in which:
400 unique CDR3
6 unique J



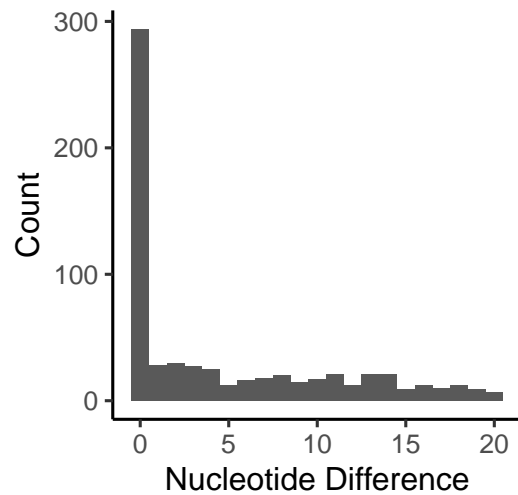
IGHV1-45*02

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



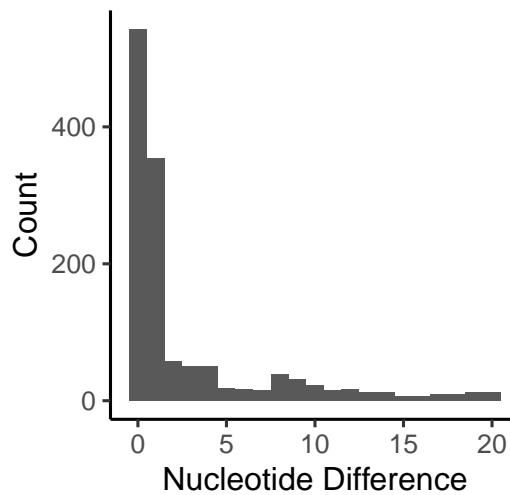
IGHV1-3*01_05

675 sequences assigned
294 (43.6%) exact matches, in which:
286 unique CDR3
6 unique J



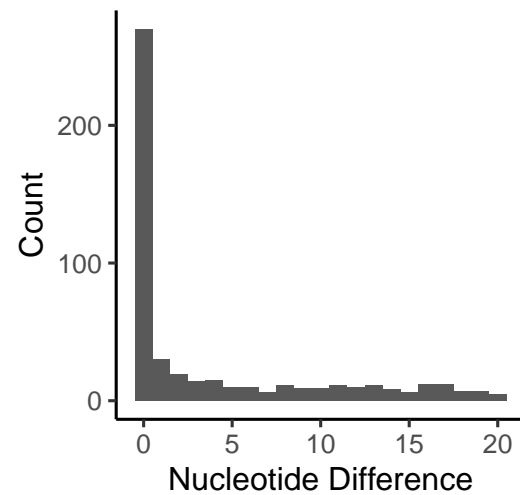
IGHV1-18*04

1381 sequences assigned
543 (39.3%) exact matches, in which:
479 unique CDR3
6 unique J



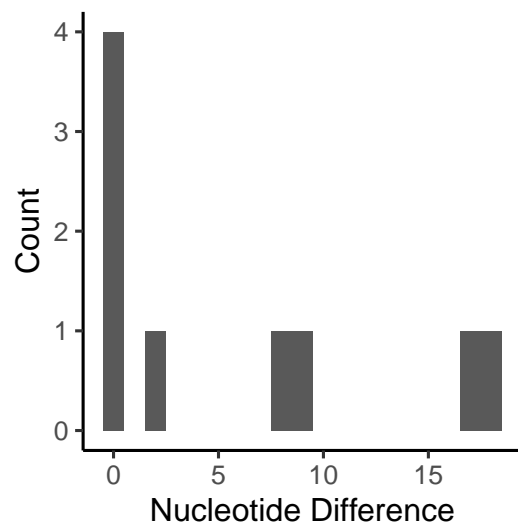
IGHV1-46*01

520 sequences assigned
270 (51.9%) exact matches, in which:
264 unique CDR3
6 unique J



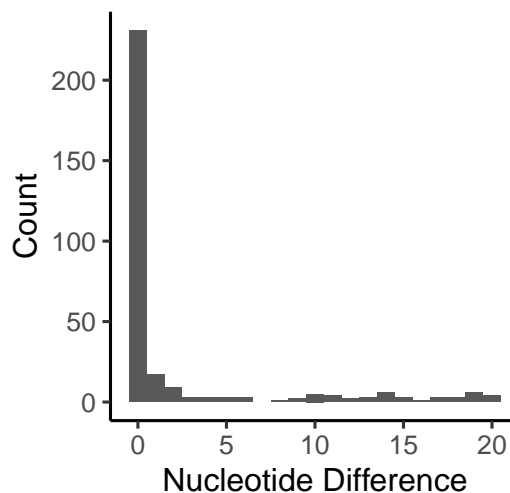
IGHV1-8*01

9 sequences assigned
4 (44.4%) exact matches, in which:
4 unique CDR3
2 unique J



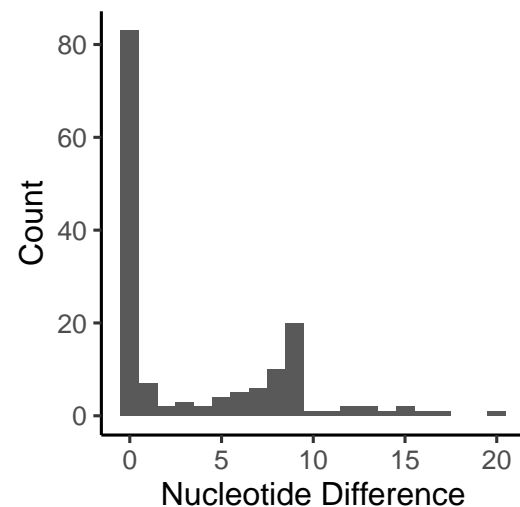
IGHV1-24*01

319 sequences assigned
231 (72.4%) exact matches, in which:
226 unique CDR3
6 unique J



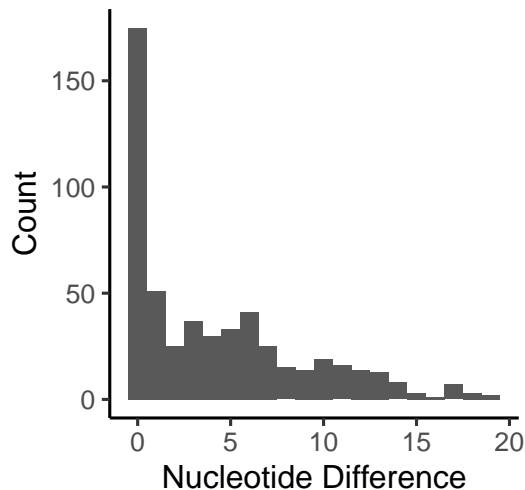
IGHV1-58*01_03

164 sequences assigned
83 (50.6%) exact matches, in which:
82 unique CDR3
6 unique J



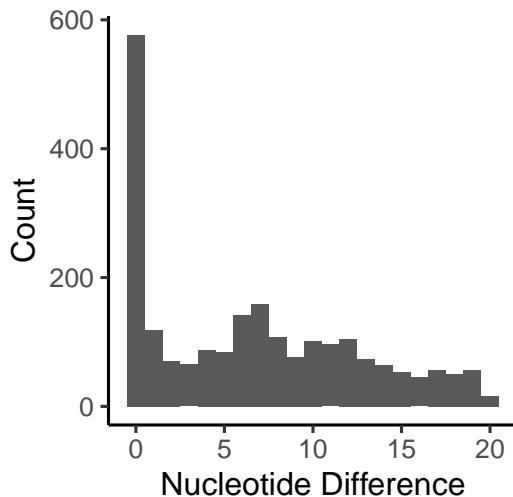
IGHV2-5*02

550 sequences assigned
175 (31.8%) exact matches, in which:
167 unique CDR3
5 unique J



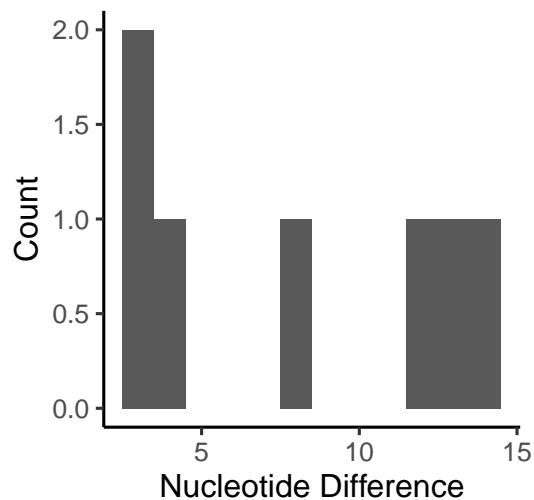
IGHV3-7*03

2376 sequences assigned
577 (24.3%) exact matches, in which:
453 unique CDR3
6 unique J



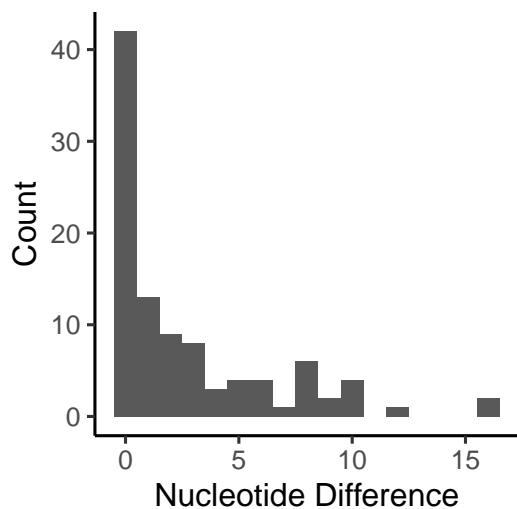
IGHV3-13*01

9 sequences assigned
No exact matches.



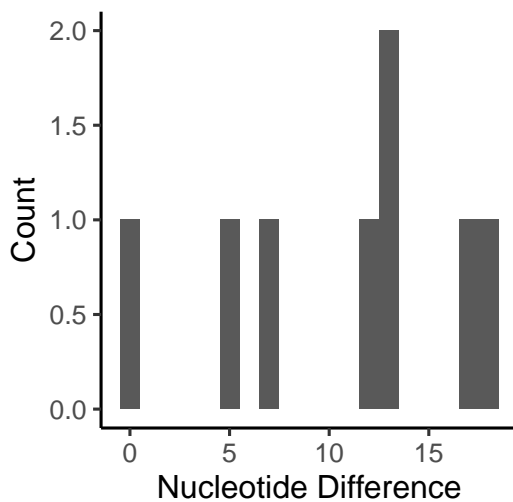
IGHV2-26*01

99 sequences assigned
42 (42.4%) exact matches, in which:
39 unique CDR3
4 unique J



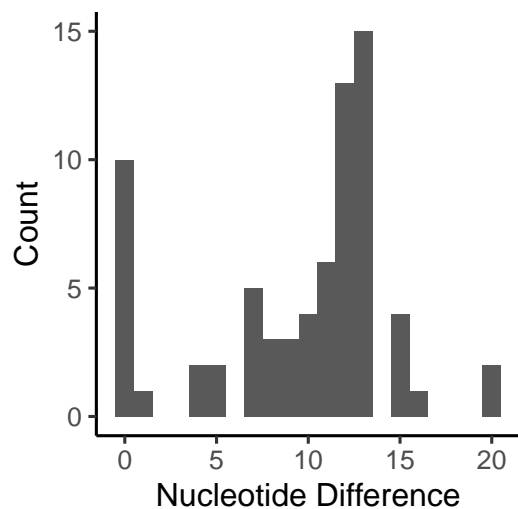
IGHV3-9*01

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



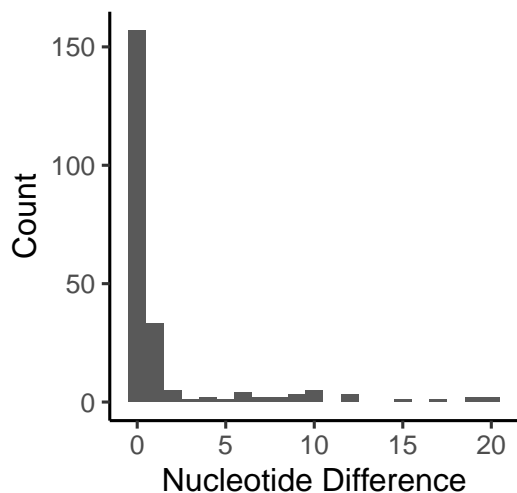
IGHV3-13*05

83 sequences assigned
10 (12%) exact matches, in which:
10 unique CDR3
3 unique J



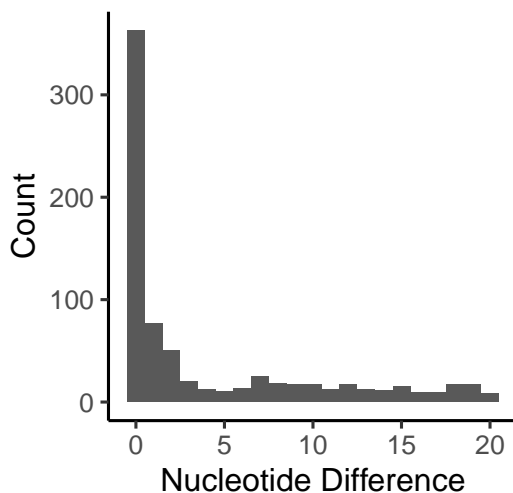
IGHV2-70*01

228 sequences assigned
157 (68.9%) exact matches, in which:
129 unique CDR3
5 unique J



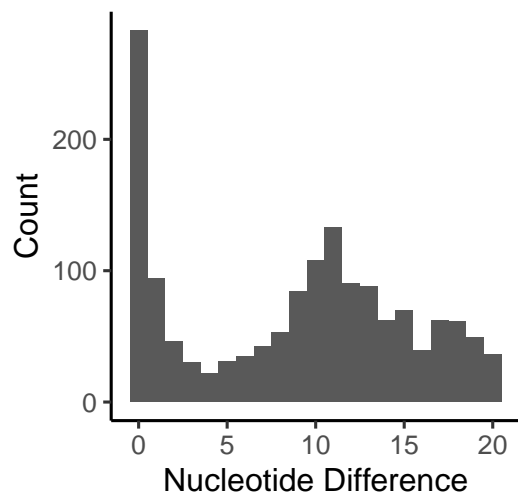
IGHV3-11*06

790 sequences assigned
363 (45.9%) exact matches, in which:
263 unique CDR3
6 unique J



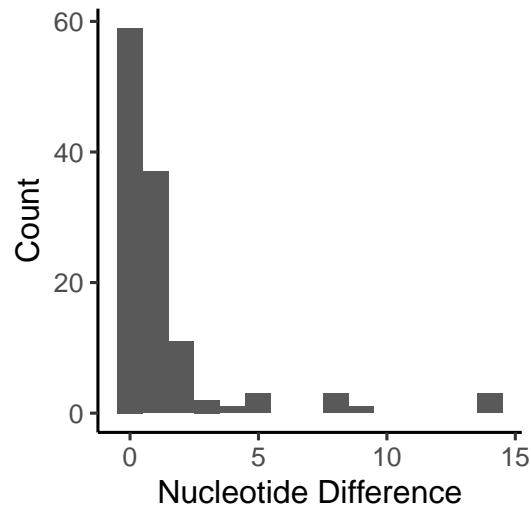
IGHV3-15*01_02

1687 sequences assigned
283 (16.8%) exact matches, in which:
173 unique CDR3
5 unique J



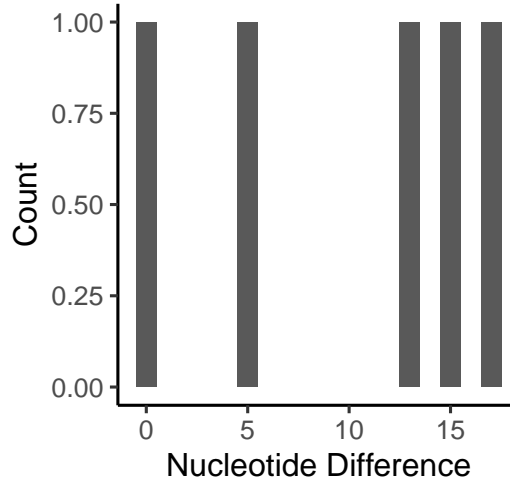
IGHV3-20*01_02

120 sequences assigned
59 (49.2%) exact matches, in which:
29 unique CDR3
5 unique J



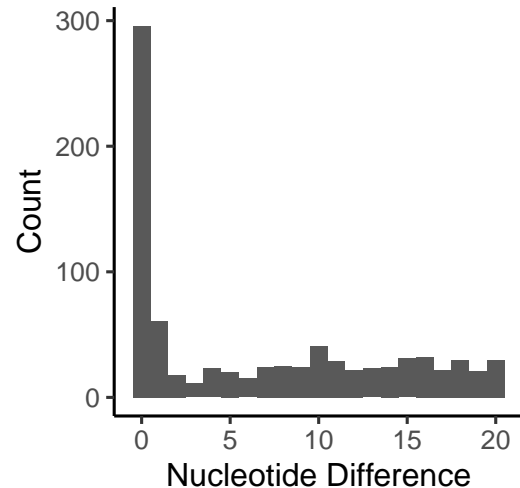
IGHV3-30-3*01

8 sequences assigned
1 (12.5%) exact matches, in which:
1 unique CDR3
1 unique J



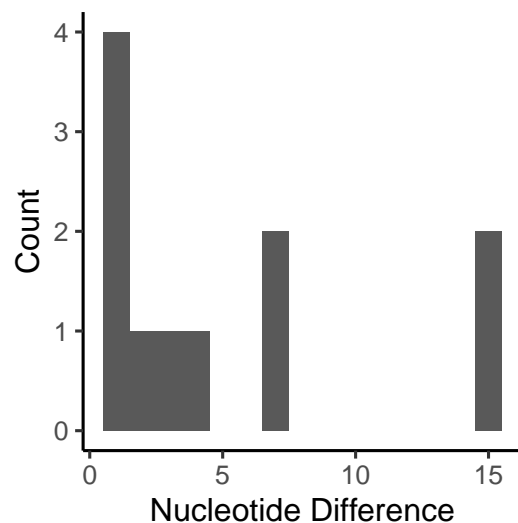
IGHV3-48*02

989 sequences assigned
296 (29.9%) exact matches, in which:
188 unique CDR3
6 unique J



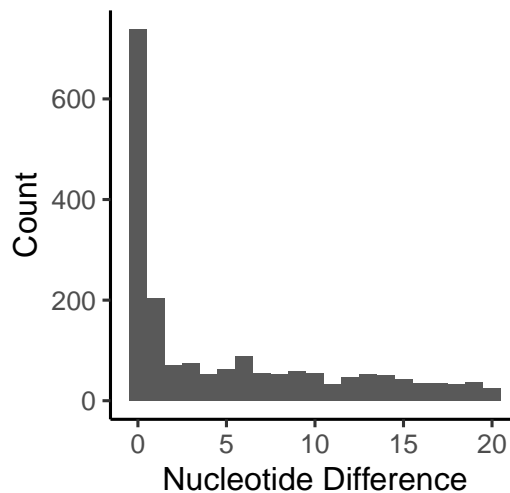
IGHV3-20*03_04

11 sequences assigned
No exact matches.



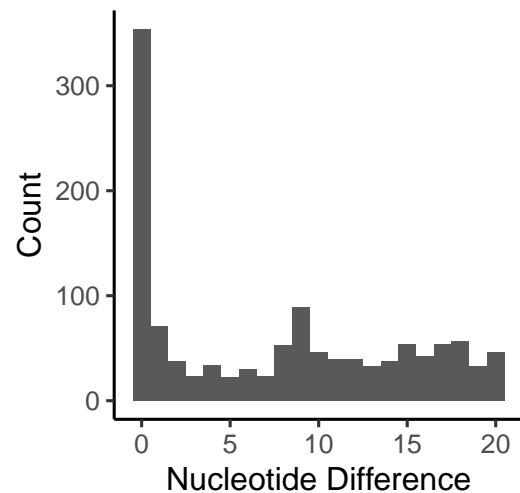
IGHV3-33*01

2055 sequences assigned
739 (36%) exact matches, in which:
500 unique CDR3
6 unique J



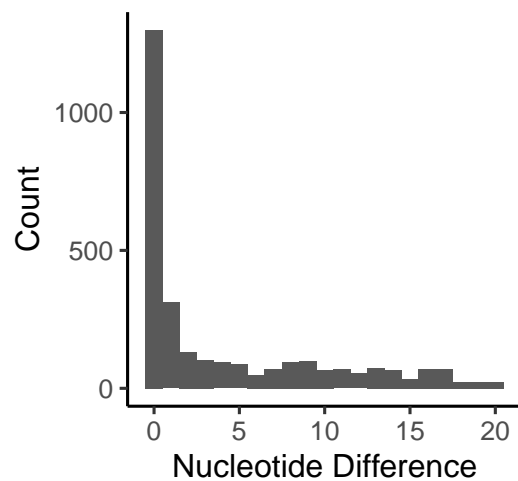
IGHV3-48*04

1459 sequences assigned
354 (24.3%) exact matches, in which:
261 unique CDR3
5 unique J



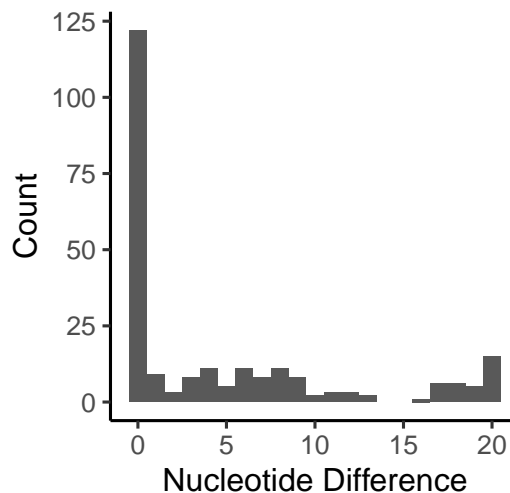
IGHV3-21*01_02

2977 sequences assigned
1299 (43.6%) exact matches, in which:
913 unique CDR3
6 unique J



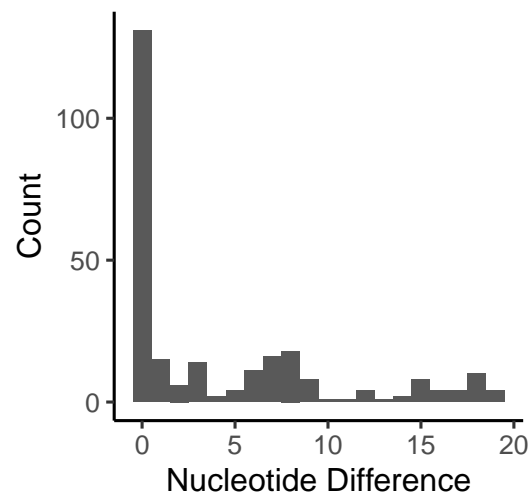
IGHV3-43*01

254 sequences assigned
122 (48%) exact matches, in which:
79 unique CDR3
5 unique J



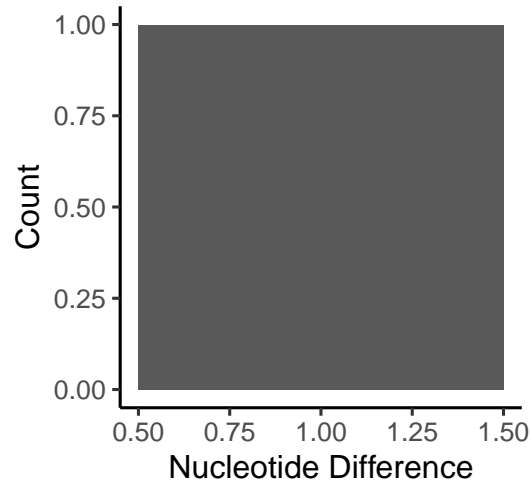
IGHV3-49*03_05

280 sequences assigned
131 (46.8%) exact matches, in which:
106 unique CDR3
5 unique J



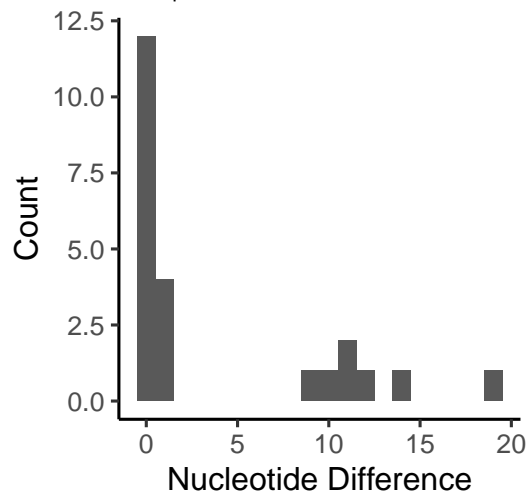
IGHV3-52*01_03

1 sequences assigned
No exact matches.



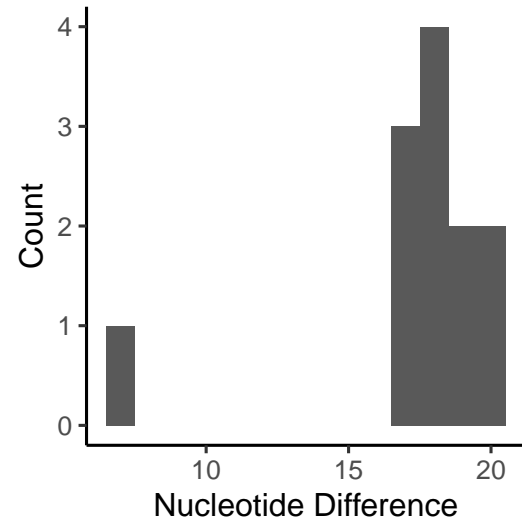
IGHV3-64*02_07

23 sequences assigned
12 (52.2%) exact matches, in which:
7 unique CDR3
2 unique J



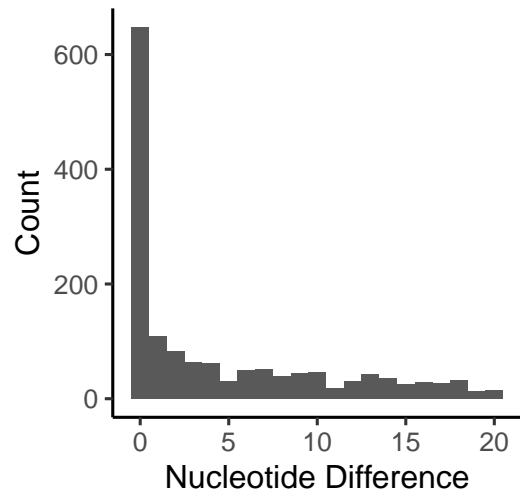
IGHV3-69-1*01

22 sequences assigned
No exact matches.



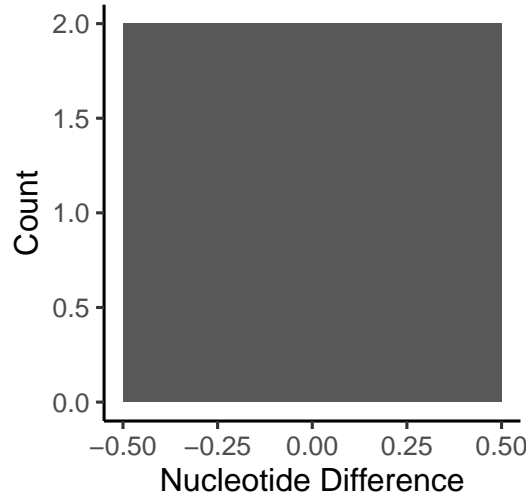
IGHV3-53*01_02

1585 sequences assigned
648 (40.9%) exact matches, in which:
523 unique CDR3
6 unique J



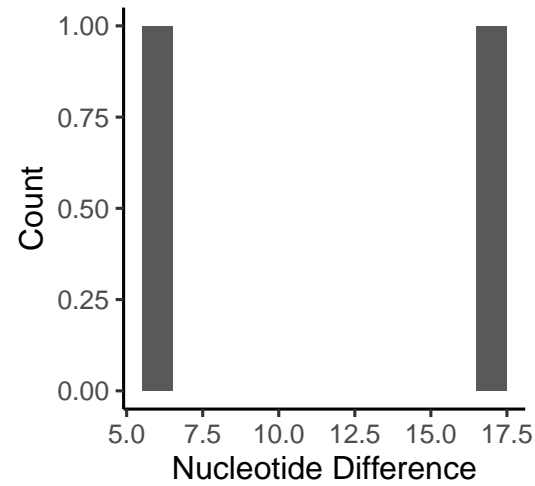
IGHV3-66*03

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



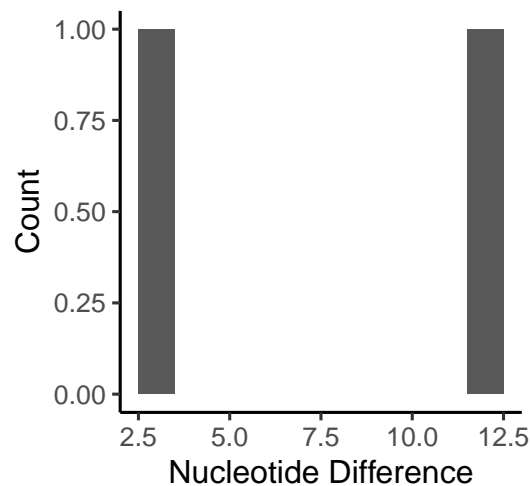
IGHV3-69-1*02

6 sequences assigned
No exact matches.



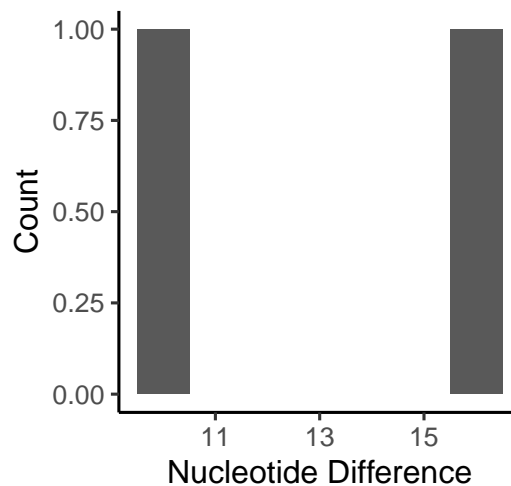
IGHV3-64*04

2 sequences assigned
No exact matches.



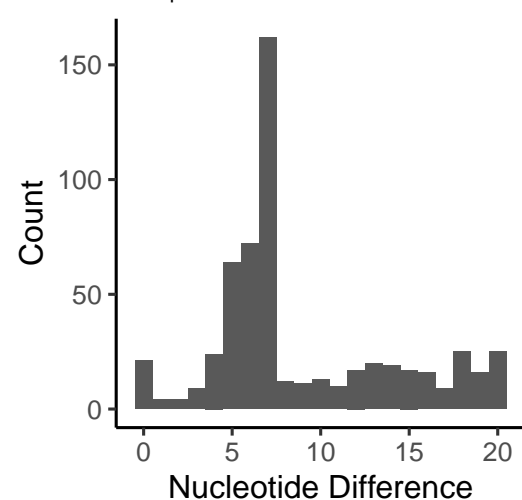
IGHV3-66*04

3 sequences assigned
No exact matches.



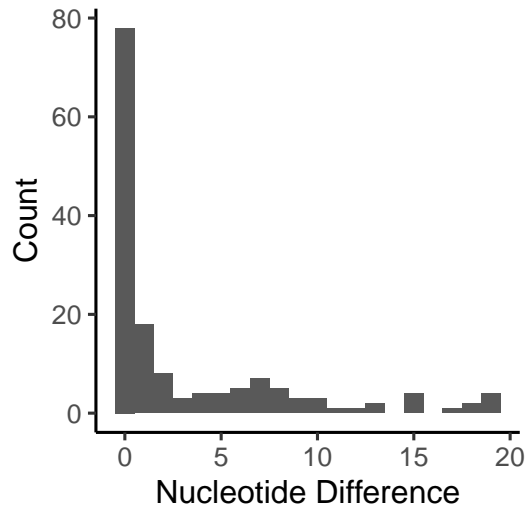
IGHV3-72*01

602 sequences assigned
21 (3.5%) exact matches, in which:
17 unique CDR3
4 unique J



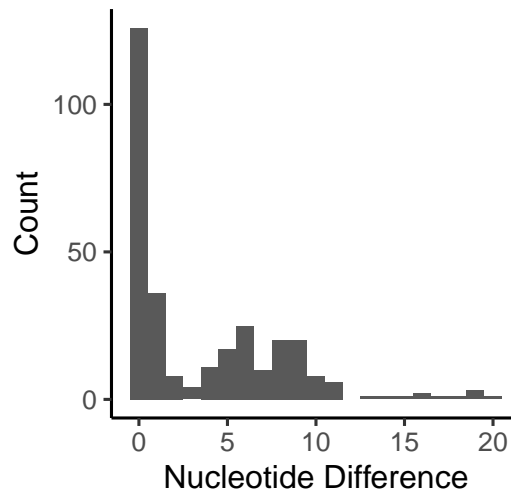
IGHV3-73*01_02

158 sequences assigned
78 (49.4%) exact matches, in which:
50 unique CDR3
4 unique J



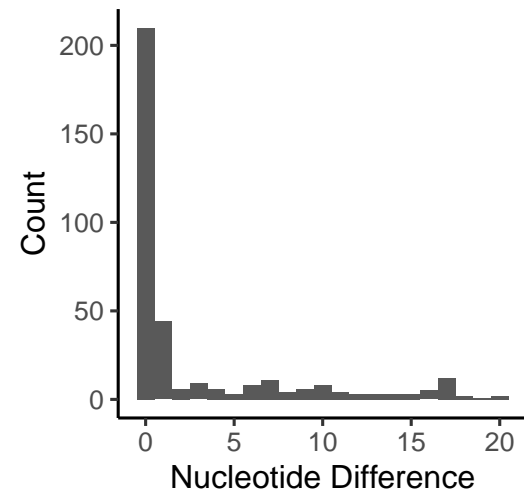
IGHV3-64D*06

316 sequences assigned
126 (39.9%) exact matches, in which:
99 unique CDR3
5 unique J



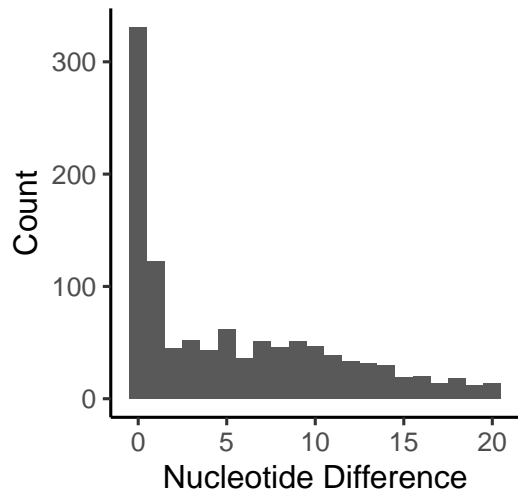
IGHV4-30-2*01

360 sequences assigned
210 (58.3%) exact matches, in which:
171 unique CDR3
6 unique J



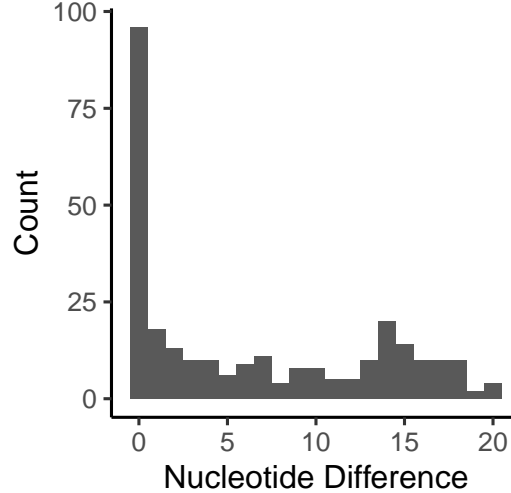
IGHV3-74*01_02

1196 sequences assigned
331 (27.7%) exact matches, in which:
224 unique CDR3
6 unique J



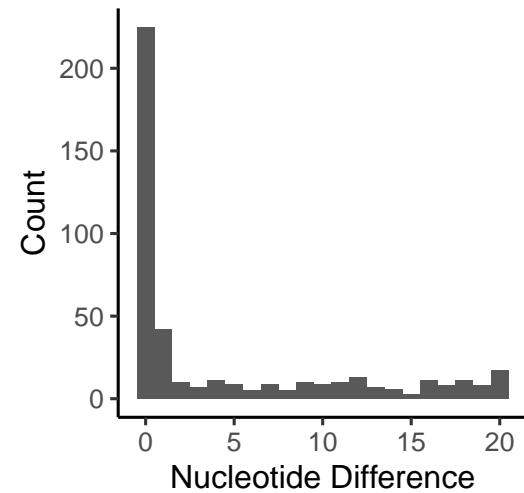
IGHV3-64D*08

296 sequences assigned
96 (32.4%) exact matches, in which:
73 unique CDR3
6 unique J



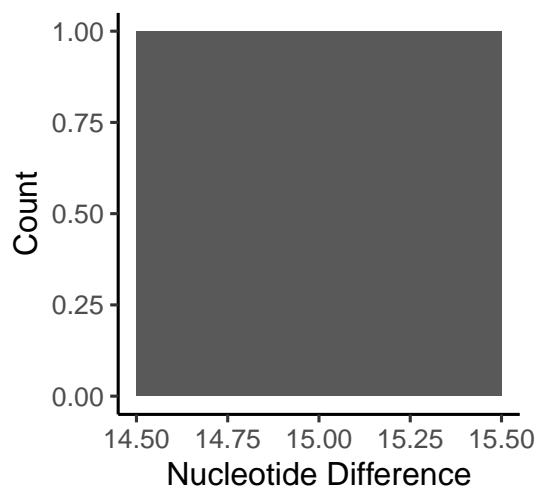
IGHV4-31*03_04

564 sequences assigned
225 (39.9%) exact matches, in which:
184 unique CDR3
6 unique J



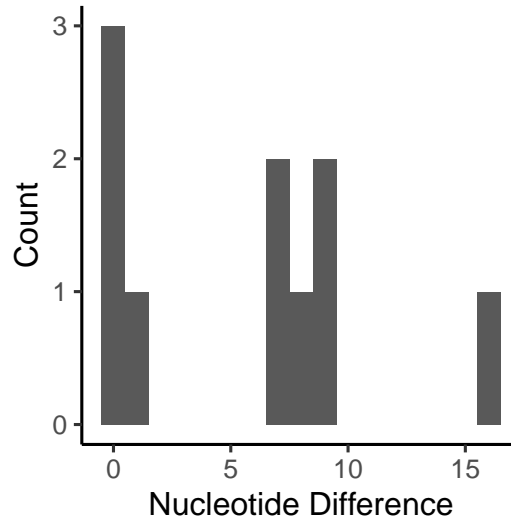
IGHV3-43D*03

1 sequences assigned
No exact matches.



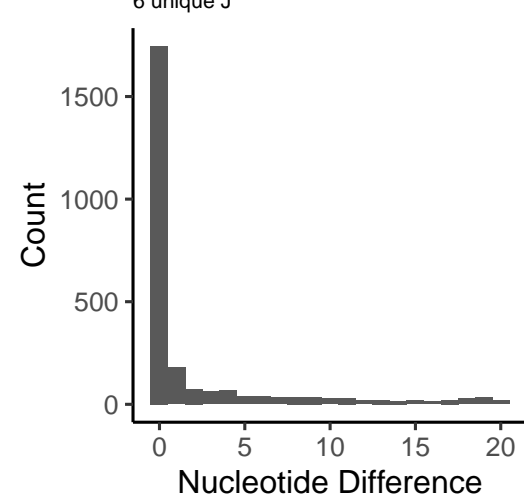
IGHV4-28*01_07

10 sequences assigned
3 (30%) exact matches, in which:
3 unique CDR3
2 unique J



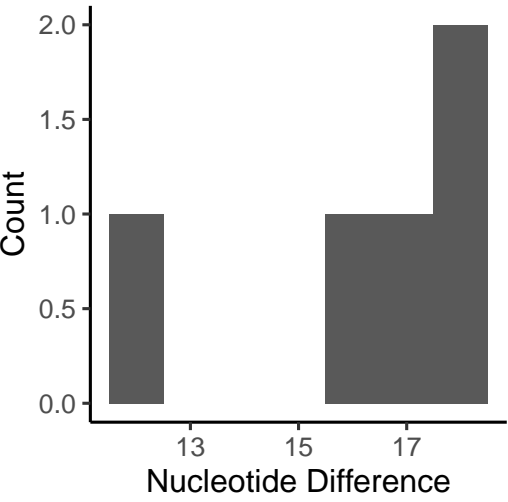
IGHV4-34*01_02

2767 sequences assigned
1746 (63.1%) exact matches, in which:
1560 unique CDR3
6 unique J



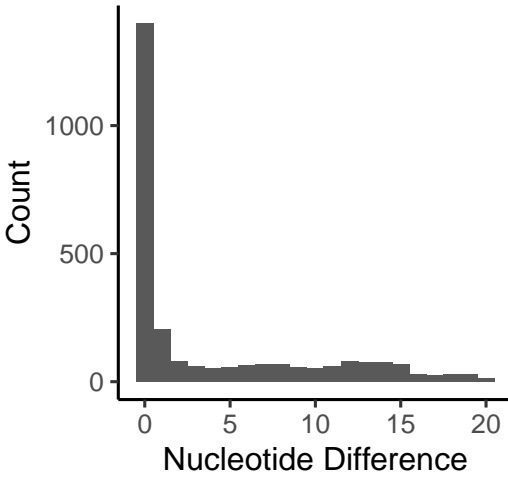
IGHV4-38-2*02

5 sequences assigned
No exact matches.



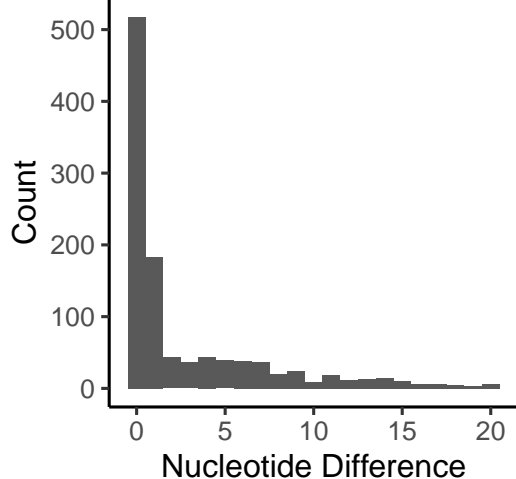
IGHV4-59*01_07

2803 sequences assigned
1399 (49.9%) exact matches, in which:
1246 unique CDR3
6 unique J



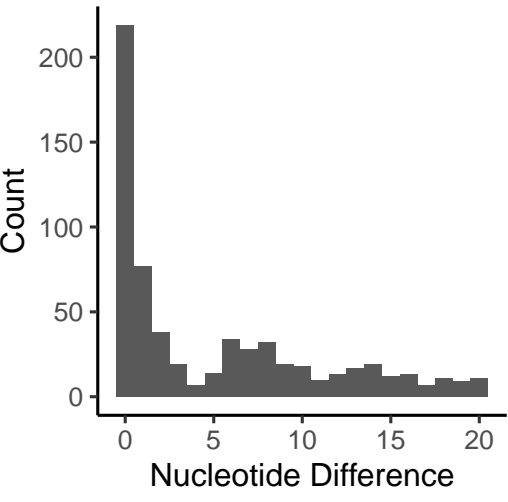
IGHV5-51*01_03

1125 sequences assigned
518 (46%) exact matches, in which:
483 unique CDR3
6 unique J



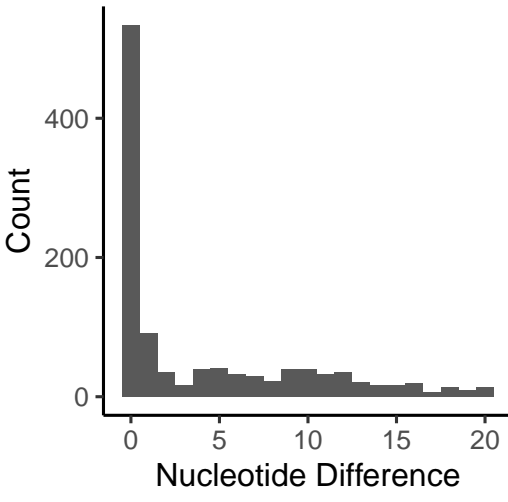
IGHV4-39*07

697 sequences assigned
219 (31.4%) exact matches, in which:
185 unique CDR3
6 unique J



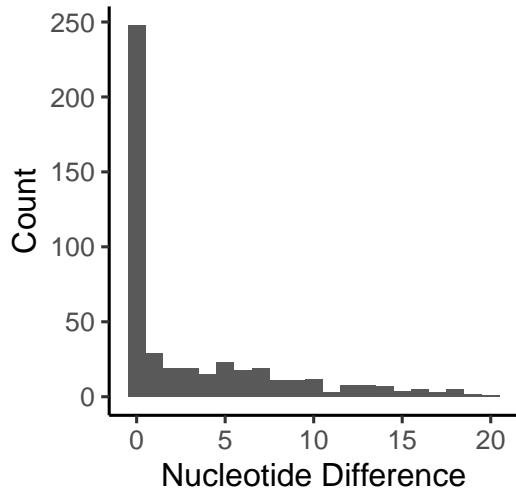
IGHV4-61*01

1199 sequences assigned
534 (44.5%) exact matches, in which:
478 unique CDR3
6 unique J



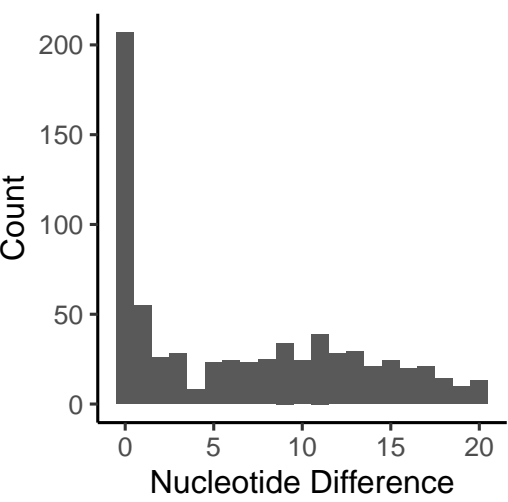
IGHV6-1*01_02

482 sequences assigned
248 (51.5%) exact matches, in which:
242 unique CDR3
6 unique J



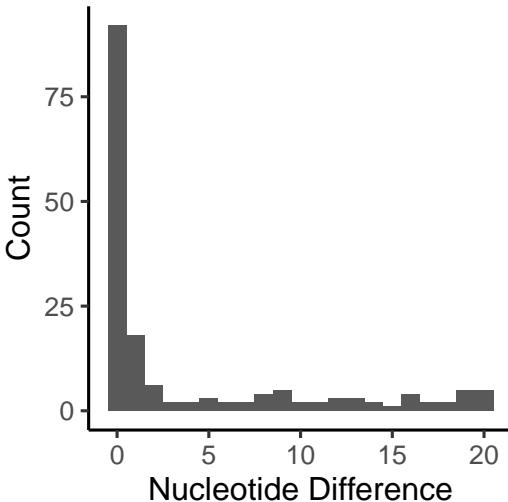
IGHV4-39*01_05

787 sequences assigned
207 (26.3%) exact matches, in which:
175 unique CDR3
6 unique J



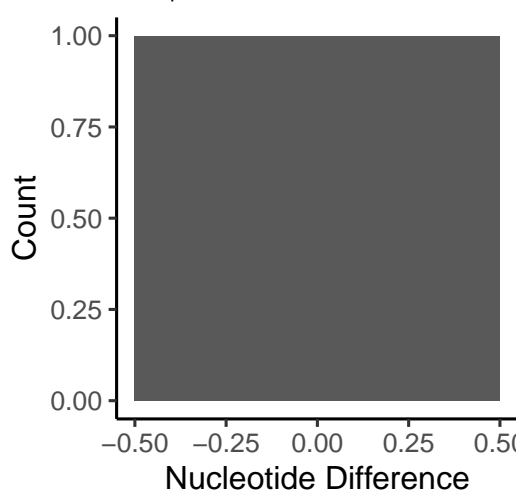
IGHV5-10-1*01_03

181 sequences assigned
92 (50.8%) exact matches, in which:
91 unique CDR3
6 unique J



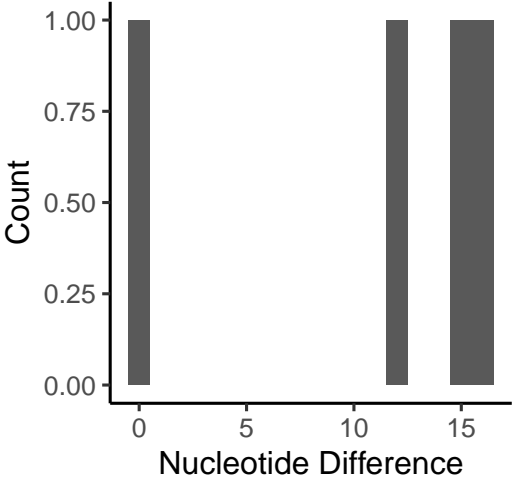
IGHV7-4-1*01

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



IGHV7-4-1*02

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J





Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV3–11*06_T300CIGHV4–38–2*02_A70GIGHV4–39*02_C258GIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–39*02_C258GIGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.