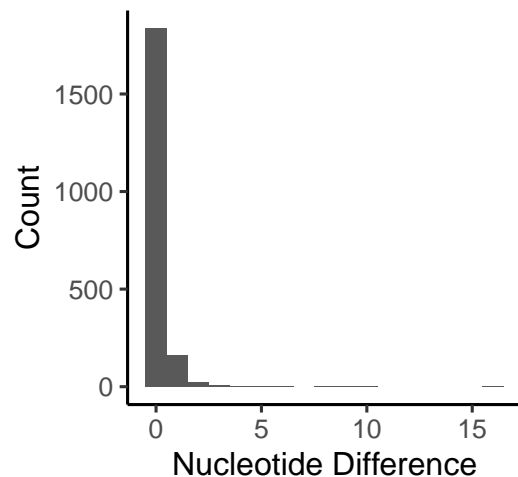


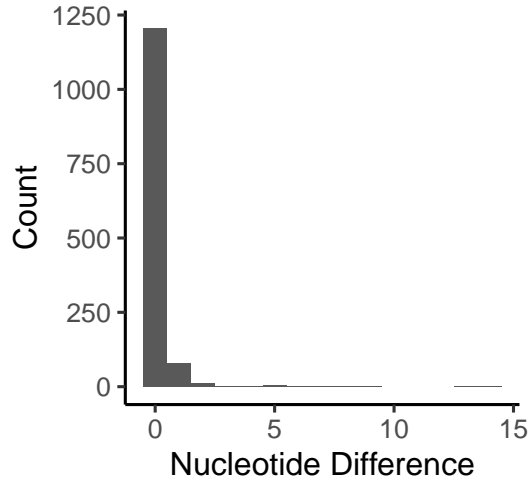
IGHV1-2*02

2045 sequences assigned
1836 (89.8%) exact matches, in which:
1729 unique CDR3
6 unique J



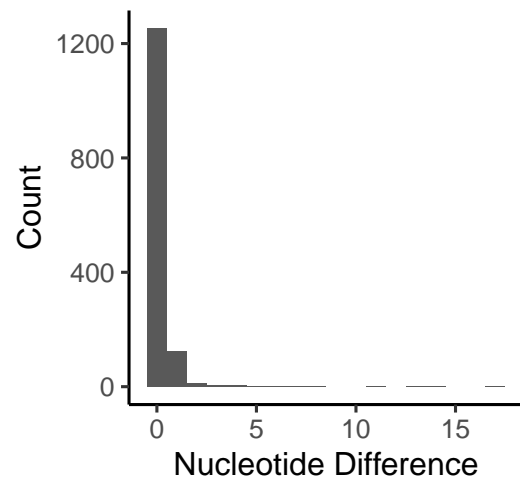
IGHV1-18*01

1315 sequences assigned
1205 (91.6%) exact matches, in which:
1149 unique CDR3
6 unique J



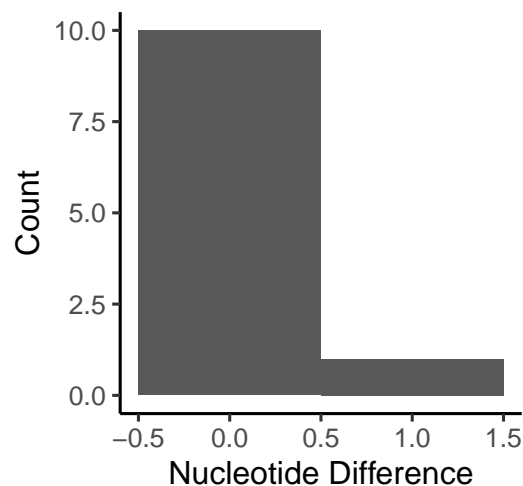
IGHV1-46*01

1412 sequences assigned
1253 (88.7%) exact matches, in which:
1178 unique CDR3
6 unique J



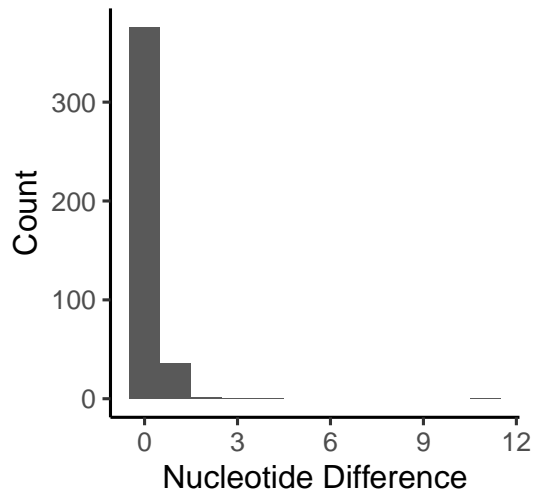
IGHV1-3*02

11 sequences assigned
10 (90.9%) exact matches, in which:
9 unique CDR3
3 unique J



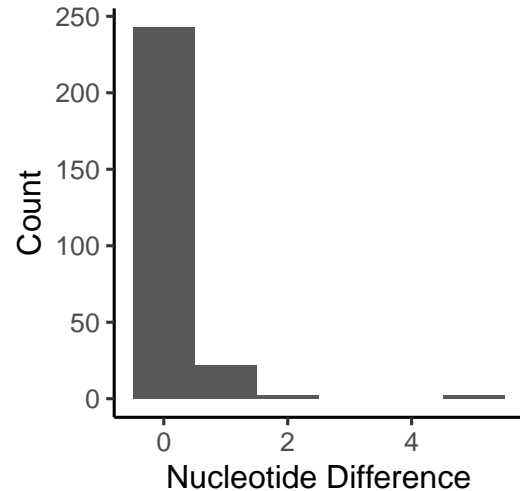
IGHV1-24*01

418 sequences assigned
376 (90%) exact matches, in which:
358 unique CDR3
6 unique J



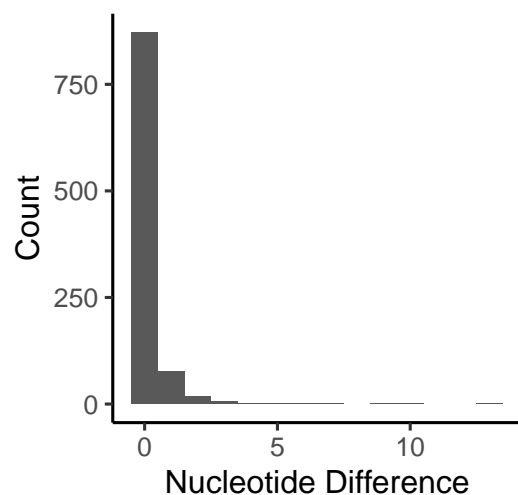
IGHV1-58*01

269 sequences assigned
243 (90.3%) exact matches, in which:
230 unique CDR3
6 unique J



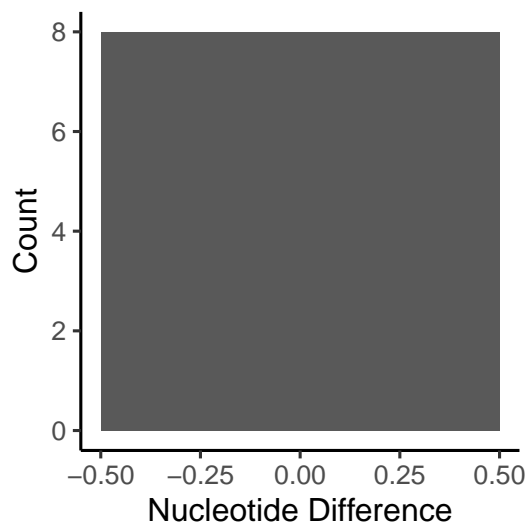
IGHV1-8*01

983 sequences assigned
872 (88.7%) exact matches, in which:
819 unique CDR3
6 unique J



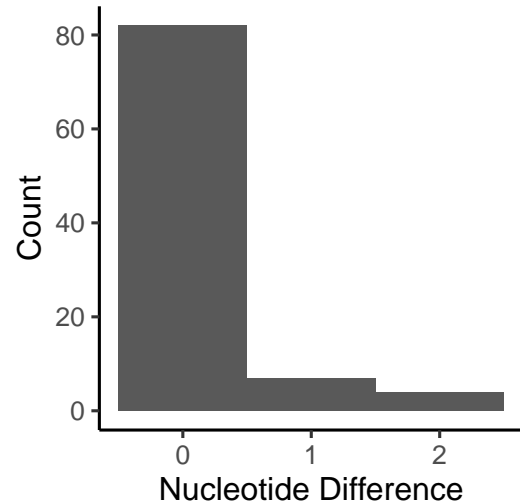
IGHV1-45*02

8 sequences assigned
8 (100%) exact matches, in which:
7 unique CDR3
3 unique J



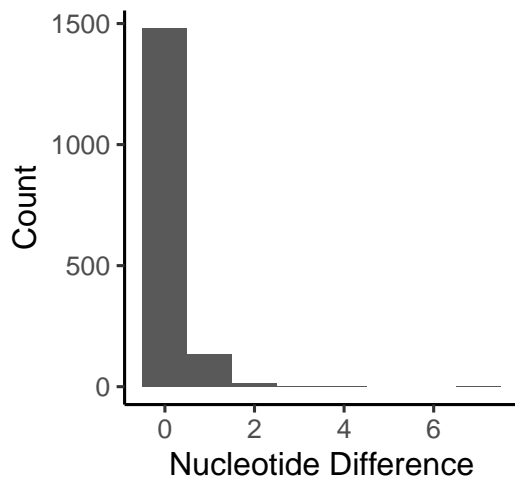
IGHV1-69-2*01

93 sequences assigned
82 (88.2%) exact matches, in which:
79 unique CDR3
4 unique J



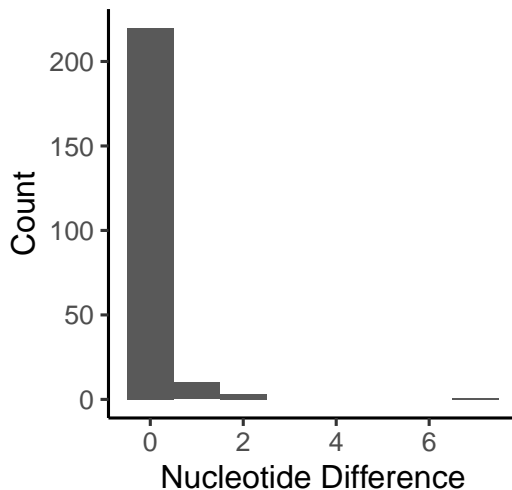
IGHV1-69*09

1640 sequences assigned
1480 (90.2%) exact matches, in which:
1368 unique CDR3
6 unique J



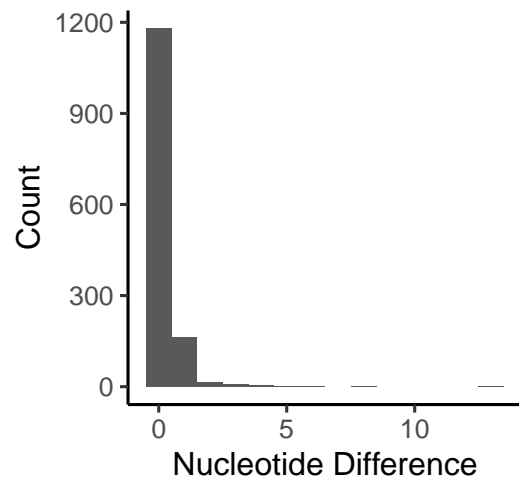
IGHV2-70*01

234 sequences assigned
220 (94%) exact matches, in which:
214 unique CDR3
5 unique J



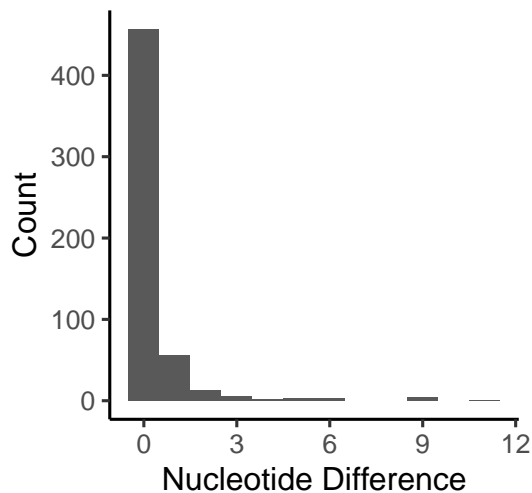
IGHV3-9*01

1378 sequences assigned
1180 (85.6%) exact matches, in which:
1054 unique CDR3
6 unique J



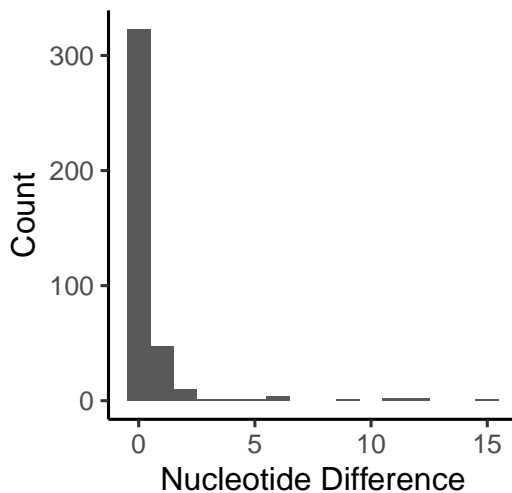
IGHV2-5*02

544 sequences assigned
457 (84%) exact matches, in which:
441 unique CDR3
6 unique J



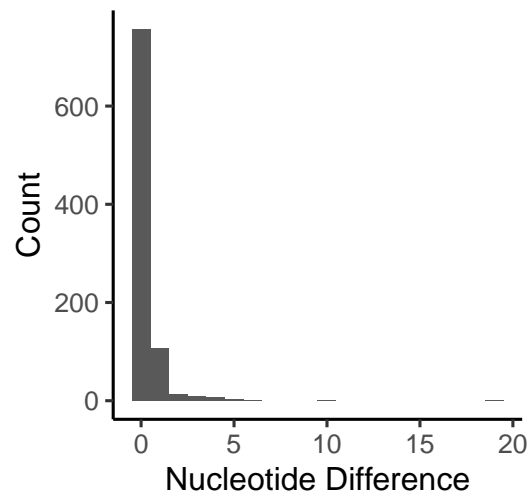
IGHV3-7*01

393 sequences assigned
323 (82.2%) exact matches, in which:
300 unique CDR3
6 unique J



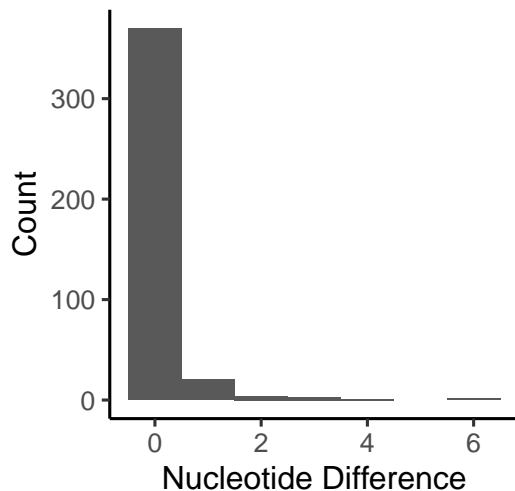
IGHV3-11*01

900 sequences assigned
757 (84.1%) exact matches, in which:
712 unique CDR3
6 unique J



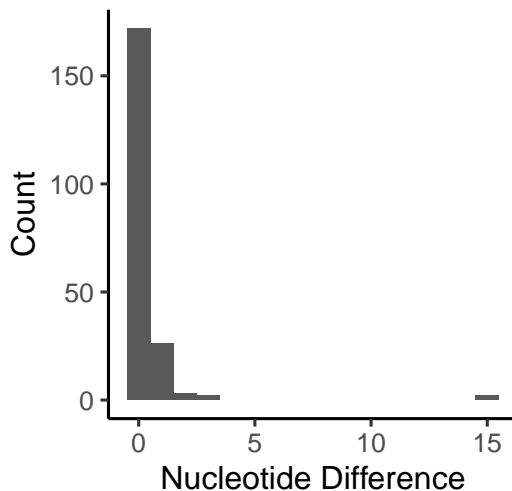
IGHV2-26*01

400 sequences assigned
370 (92.5%) exact matches, in which:
360 unique CDR3
6 unique J



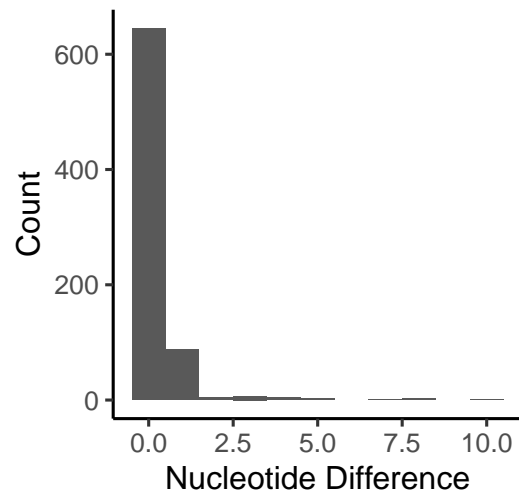
IGHV3-7*04

205 sequences assigned
172 (83.9%) exact matches, in which:
159 unique CDR3
6 unique J



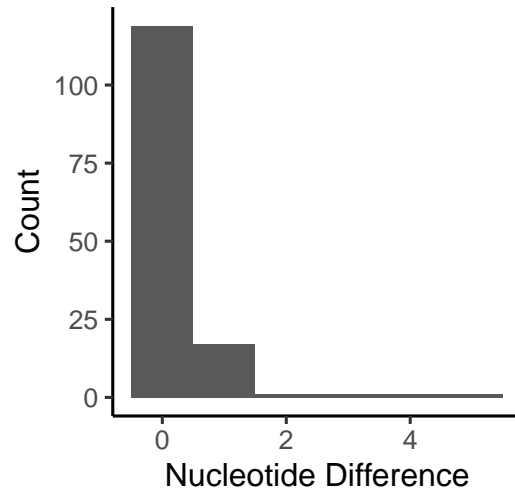
IGHV3-11*05

754 sequences assigned
645 (85.5%) exact matches, in which:
605 unique CDR3
6 unique J



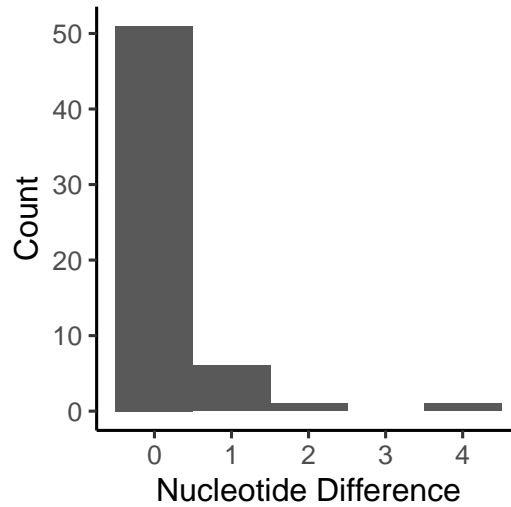
IGHV3-13*01

140 sequences assigned
119 (85%) exact matches, in which:
110 unique CDR3
5 unique J



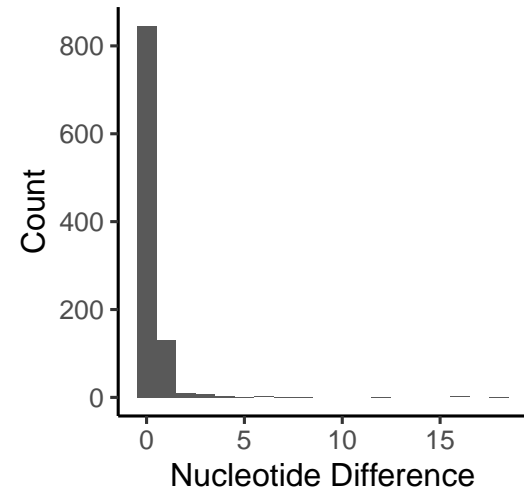
IGHV3-20*01

59 sequences assigned
51 (86.4%) exact matches, in which:
46 unique CDR3
5 unique J



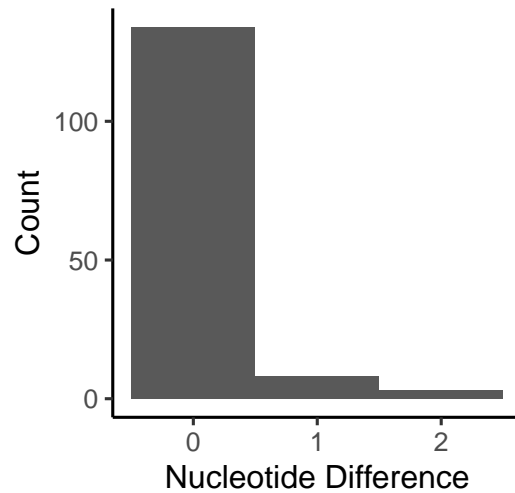
IGHV3-30-3*01

1006 sequences assigned
846 (84.1%) exact matches, in which:
770 unique CDR3
6 unique J



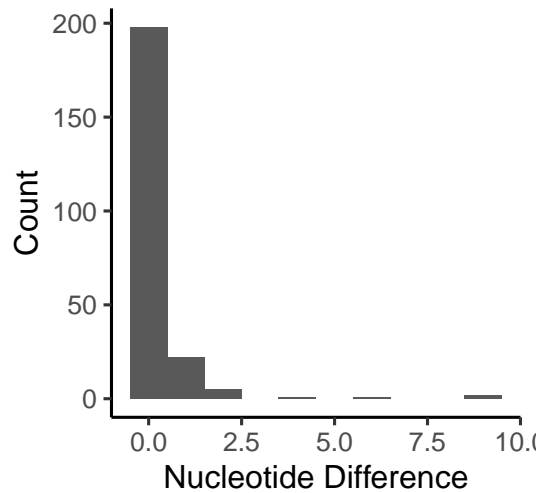
IGHV3-13*04

145 sequences assigned
134 (92.4%) exact matches, in which:
129 unique CDR3
5 unique J



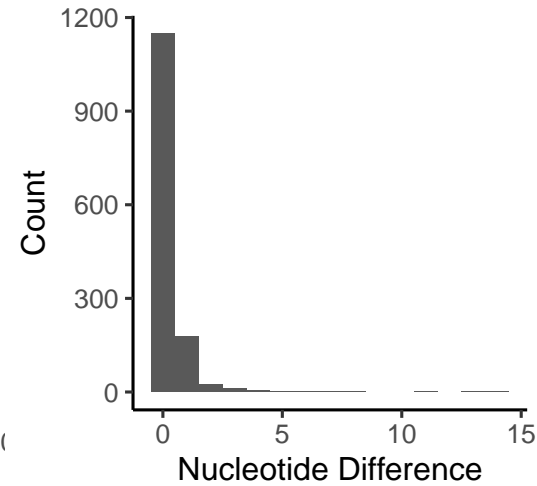
IGHV3-20*04

229 sequences assigned
198 (86.5%) exact matches, in which:
181 unique CDR3
6 unique J



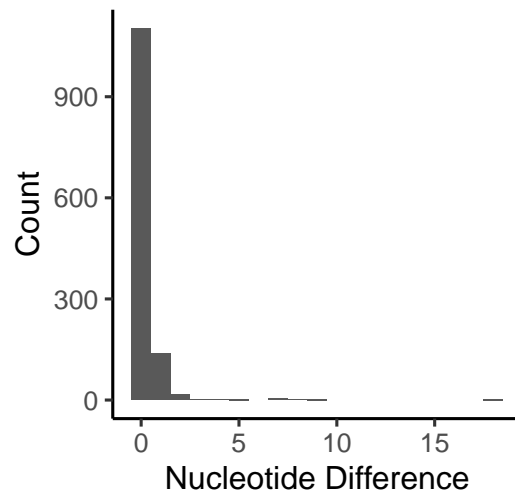
IGHV3-33*01

1380 sequences assigned
1148 (83.2%) exact matches, in which:
1040 unique CDR3
6 unique J



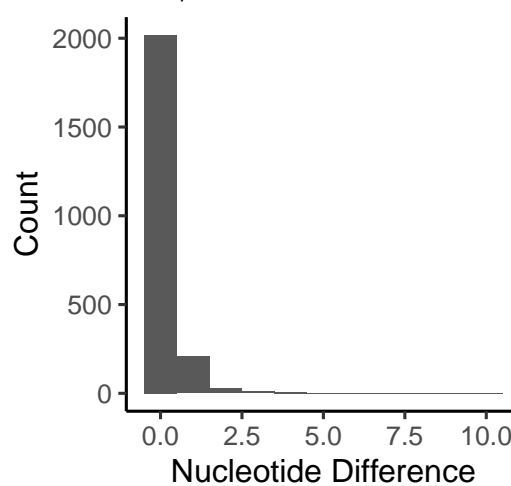
IGHV3-15*01

1277 sequences assigned
1103 (86.4%) exact matches, in which:
1034 unique CDR3
6 unique J



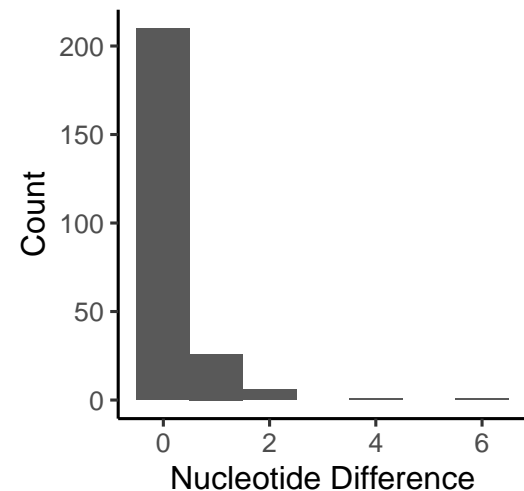
IGHV3-21*01

2283 sequences assigned
2018 (88.4%) exact matches, in which:
1839 unique CDR3
6 unique J



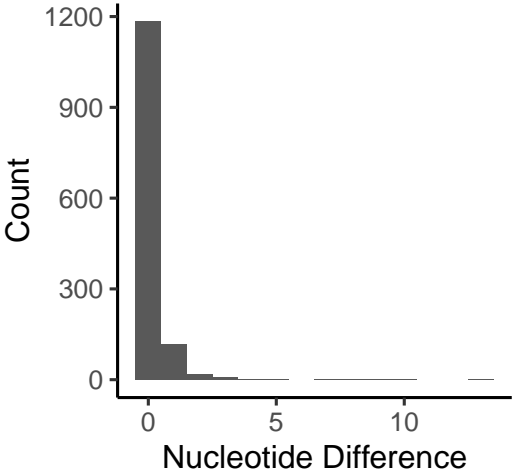
IGHV3-43*01

244 sequences assigned
210 (86.1%) exact matches, in which:
186 unique CDR3
6 unique J



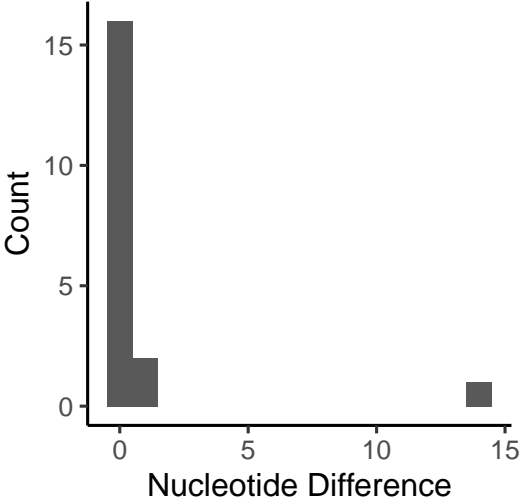
IGHV3-48*02

1341 sequences assigned
1184 (88.3%) exact matches, in which:
1092 unique CDR3
6 unique J



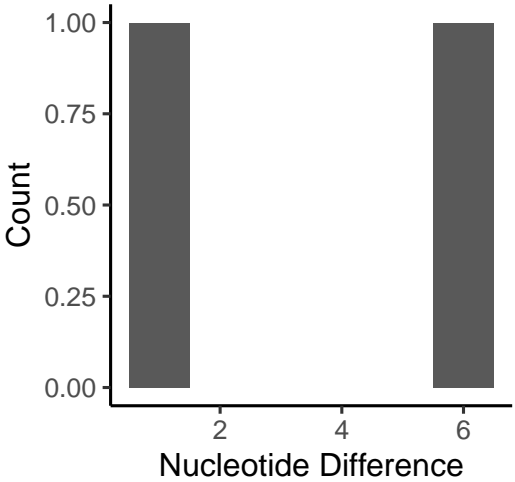
IGHV3-64*02

20 sequences assigned
16 (80%) exact matches, in which:
15 unique CDR3
4 unique J



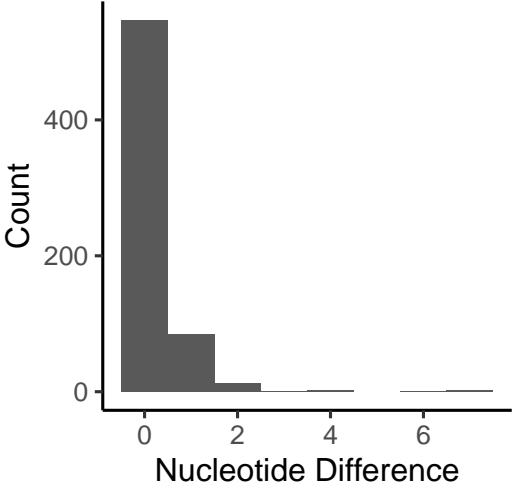
IGHV3-69-1*01

2 sequences assigned
No exact matches.



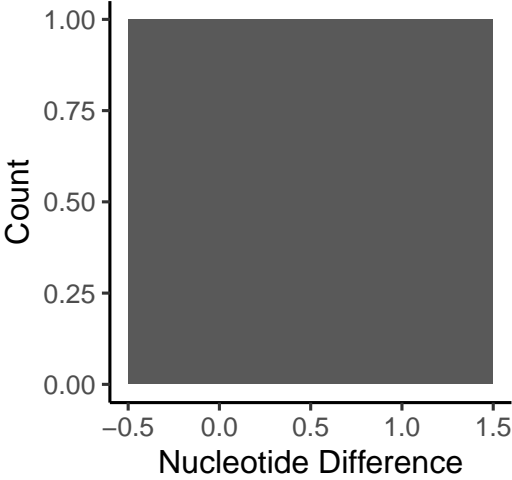
IGHV3-49*05

651 sequences assigned
547 (84%) exact matches, in which:
503 unique CDR3
6 unique J



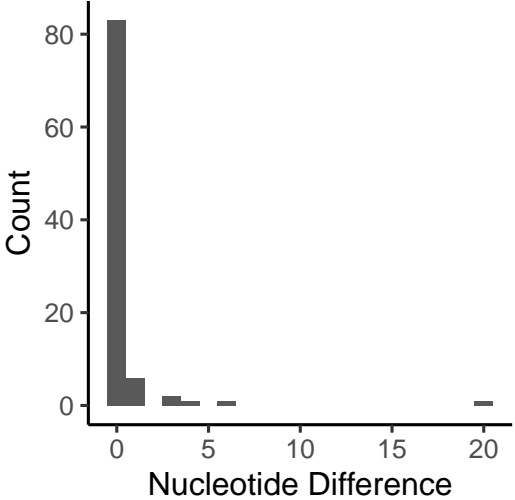
IGHV3-66*03

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



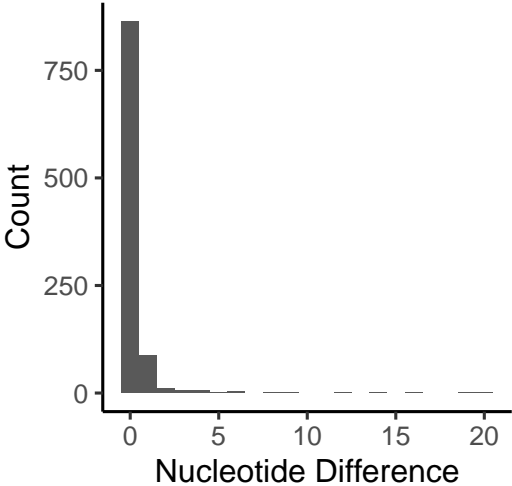
IGHV3-72*01

94 sequences assigned
83 (88.3%) exact matches, in which:
74 unique CDR3
5 unique J



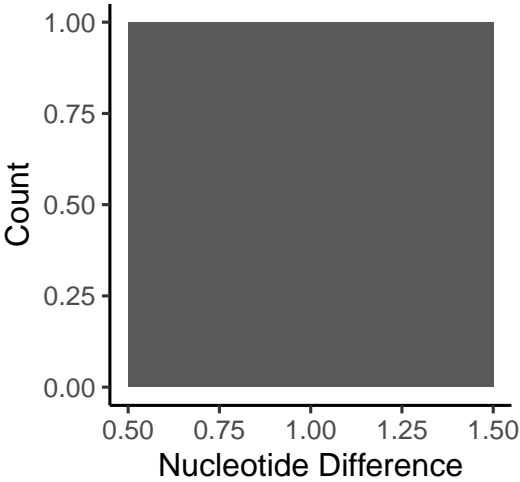
IGHV3-53*01

985 sequences assigned
864 (87.7%) exact matches, in which:
791 unique CDR3
6 unique J



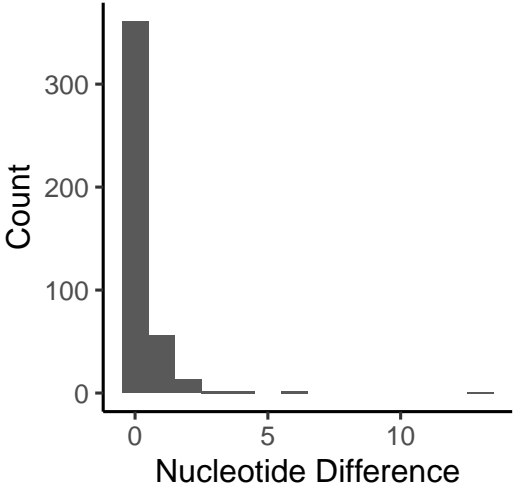
IGHV3-66*04

1 sequences assigned
No exact matches.



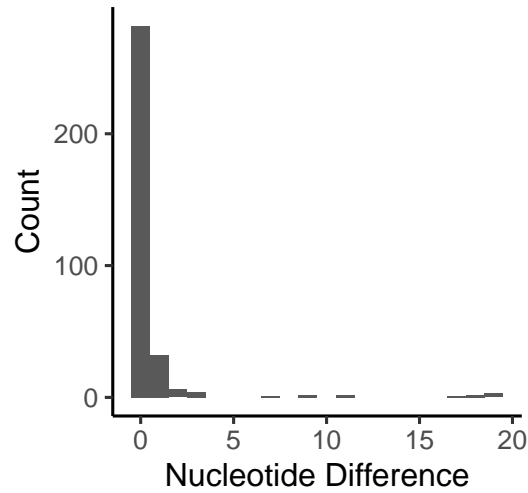
IGHV3-73*02

438 sequences assigned
361 (82.4%) exact matches, in which:
323 unique CDR3
6 unique J



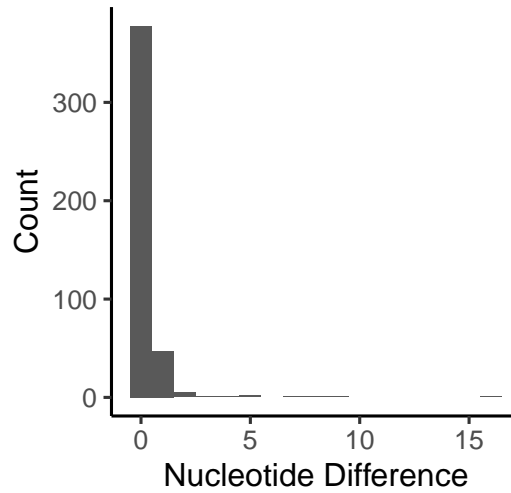
IGHV3-74*01

337 sequences assigned
282 (83.7%) exact matches, in which:
272 unique CDR3
6 unique J



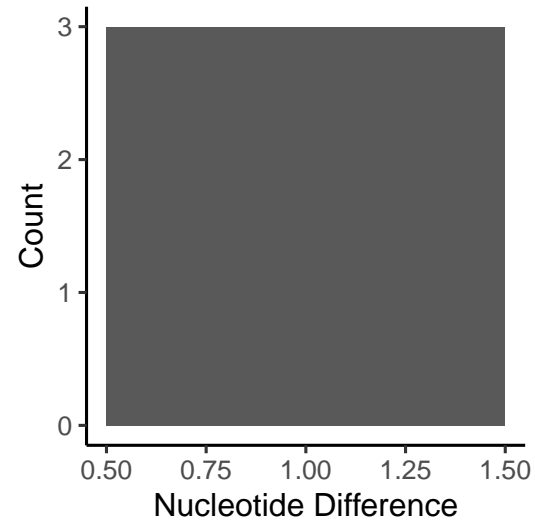
IGHV4-4*07

438 sequences assigned
378 (86.3%) exact matches, in which:
362 unique CDR3
6 unique J



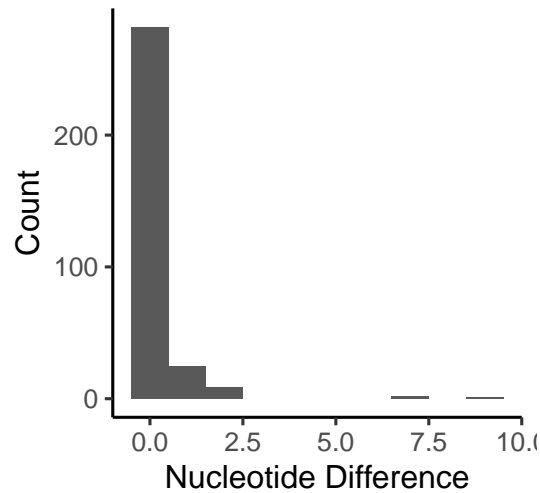
IGHV4-28*04

3 sequences assigned
No exact matches.



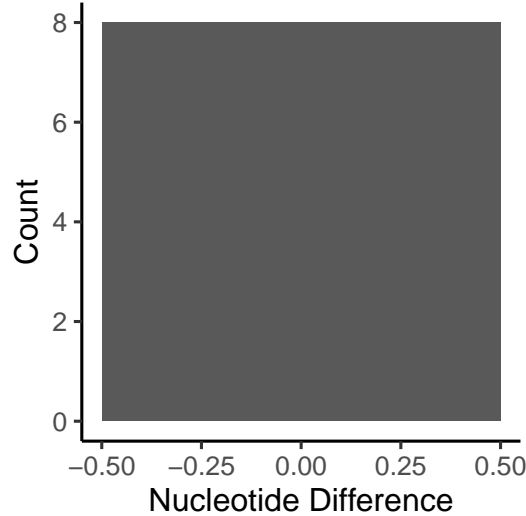
IGHV3-64D*06

319 sequences assigned
282 (88.4%) exact matches, in which:
259 unique CDR3
6 unique J



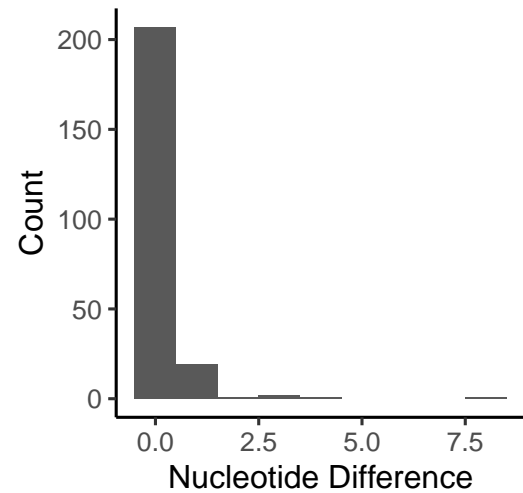
IGHV4-28*01

8 sequences assigned
8 (100%) exact matches, in which:
8 unique CDR3
4 unique J



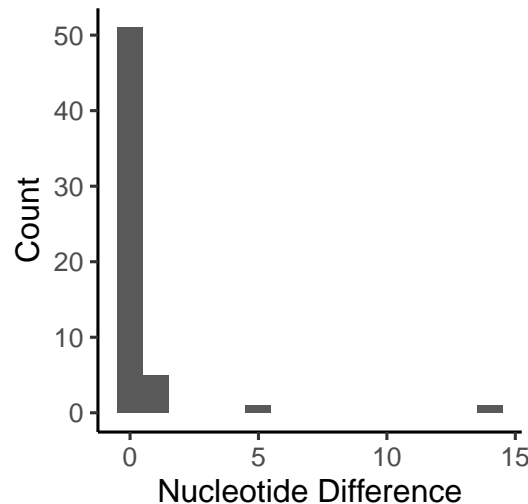
IGHV4-30-2*01

232 sequences assigned
207 (89.2%) exact matches, in which:
186 unique CDR3
5 unique J



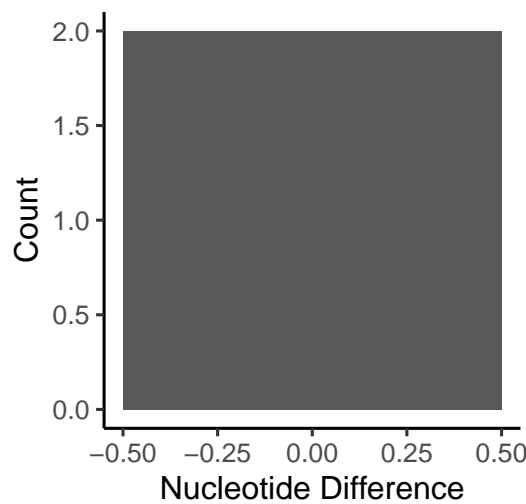
IGHV4-4*02

58 sequences assigned
51 (87.9%) exact matches, in which:
49 unique CDR3
5 unique J



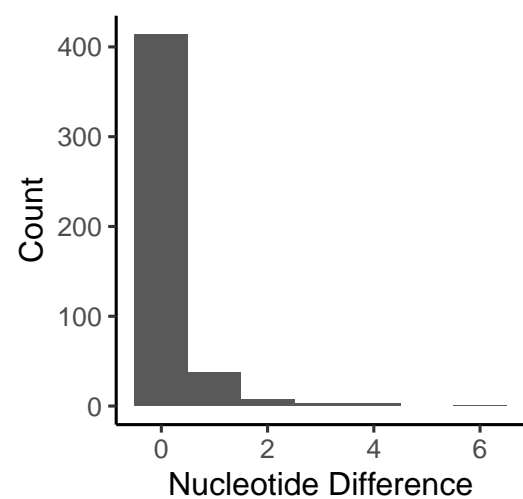
IGHV4-28*03

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



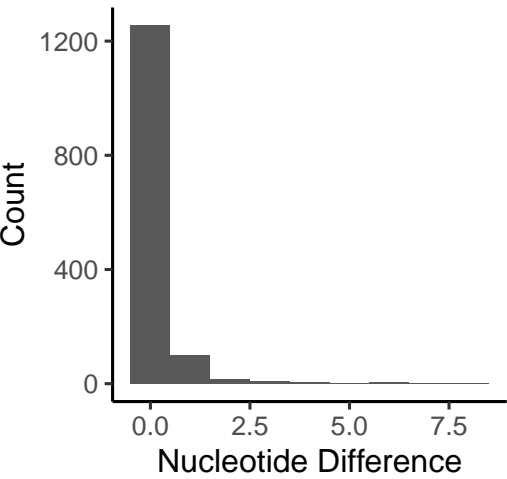
IGHV4-30-4*01

465 sequences assigned
414 (89%) exact matches, in which:
398 unique CDR3
6 unique J



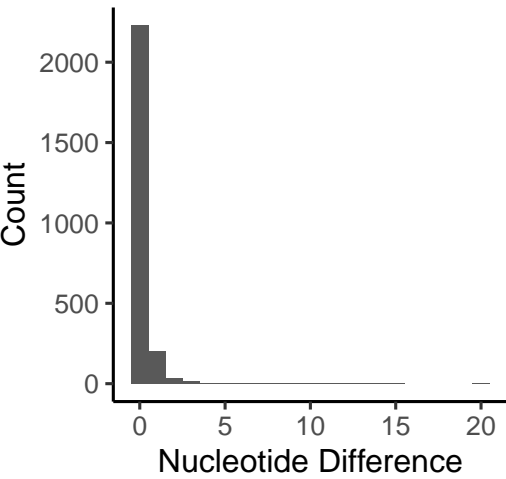
IGHV4-31*03

1397 sequences assigned
1255 (89.8%) exact matches, in which:
1181 unique CDR3
6 unique J



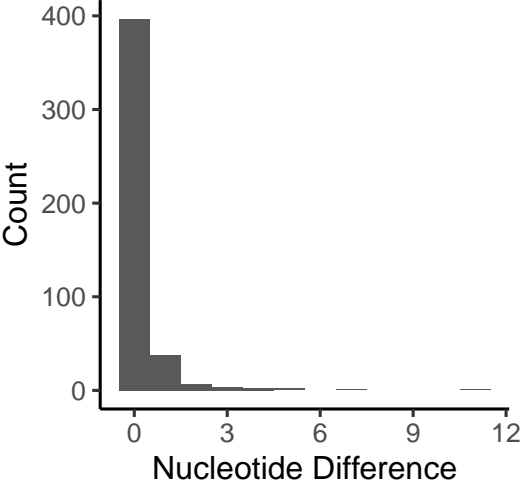
IGHV4-39*01

2516 sequences assigned
2229 (88.6%) exact matches, in which:
2056 unique CDR3
6 unique J



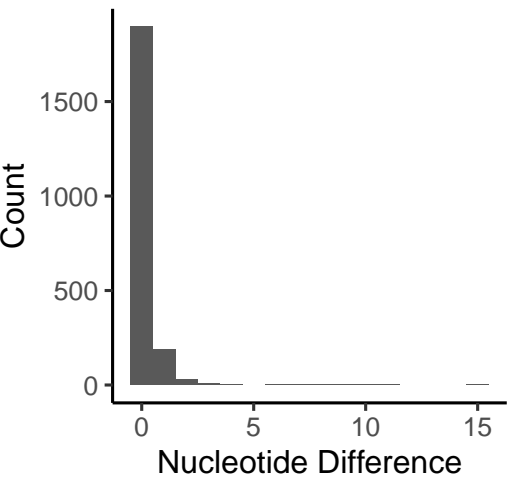
IGHV4-61*01

454 sequences assigned
397 (87.4%) exact matches, in which:
381 unique CDR3
6 unique J



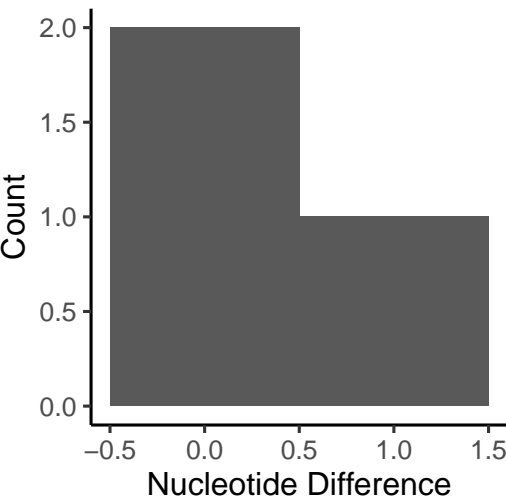
IGHV4-34*01

2139 sequences assigned
1896 (88.6%) exact matches, in which:
1758 unique CDR3
6 unique J



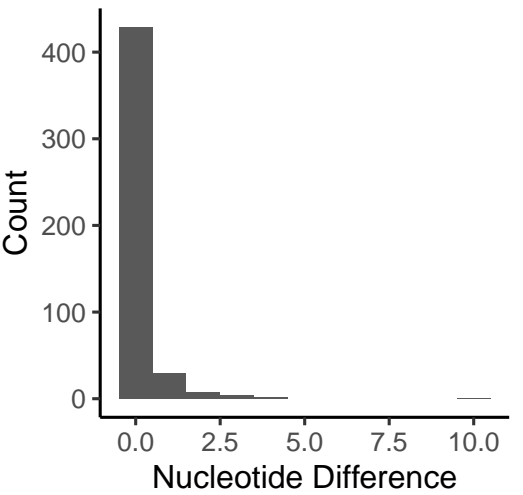
IGHV4-55*01

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
2 unique J



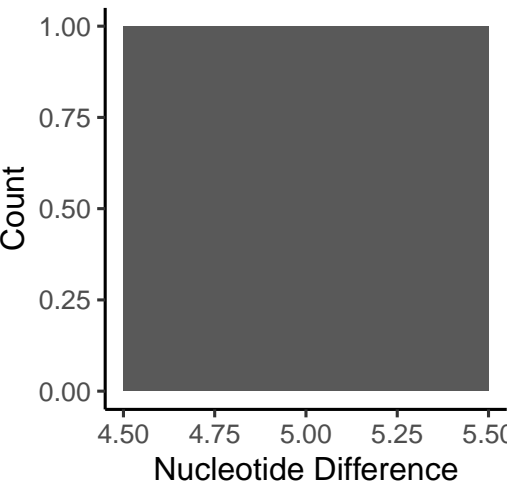
IGHV5-10-1*01

473 sequences assigned
429 (90.7%) exact matches, in which:
401 unique CDR3
6 unique J



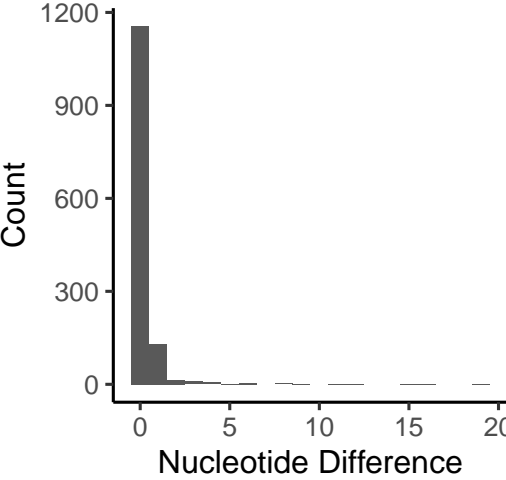
IGHV4-38-2*02

1 sequences assigned
No exact matches.



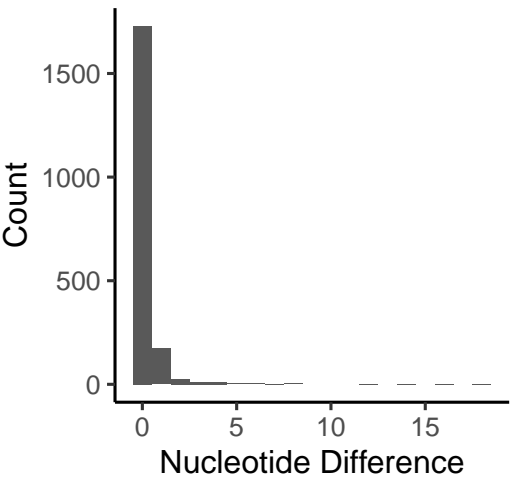
IGHV4-59*01

1332 sequences assigned
1156 (86.8%) exact matches, in which:
1103 unique CDR3
6 unique J



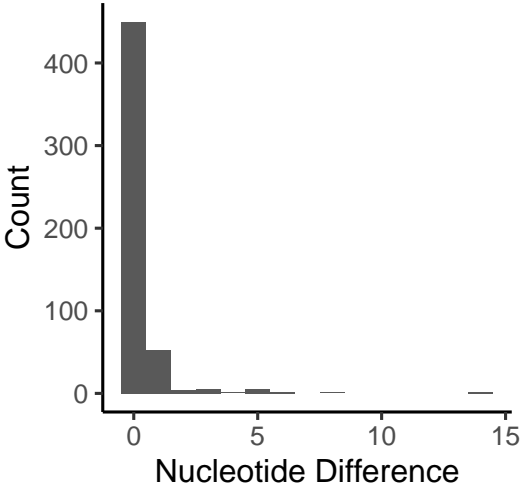
IGHV5-51*01

1973 sequences assigned
1729 (87.6%) exact matches, in which:
1620 unique CDR3
6 unique J



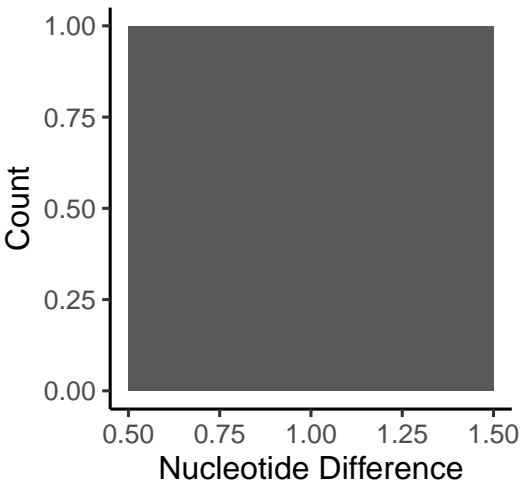
IGHV6-1*01

523 sequences assigned
450 (86%) exact matches, in which:
414 unique CDR3
6 unique J



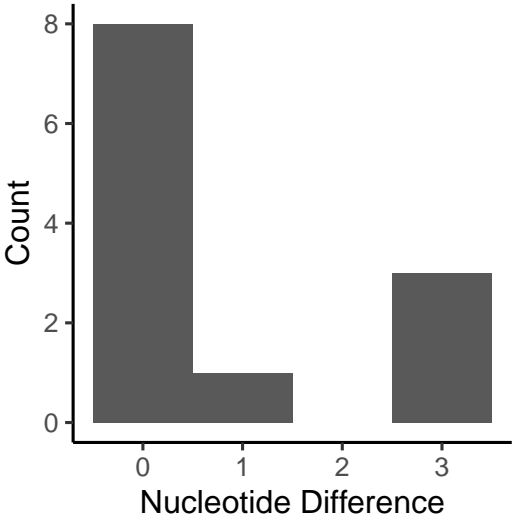
IGHV3/OR16-12*01

1 sequences assigned
No exact matches.



IGHV7-4-1*01

12 sequences assigned
8 (66.7%) exact matches, in which:
8 unique CDR3
3 unique J





[illegible]