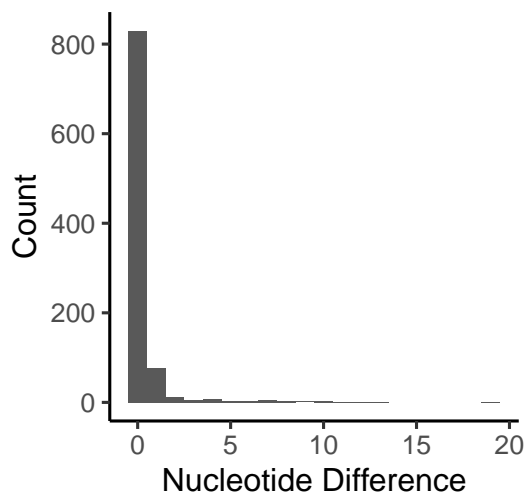


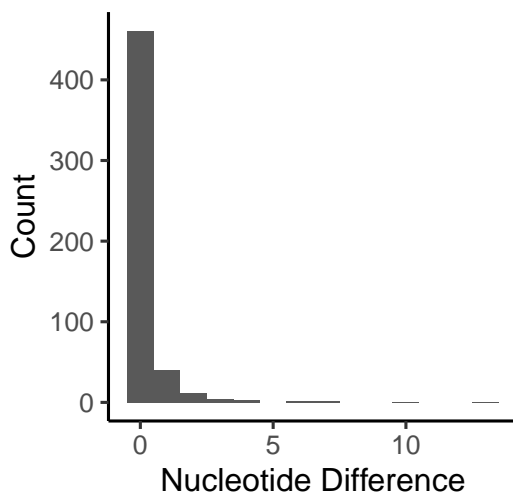
IGHV1-2*02

961 sequences assigned
830 (86.4%) exact matches, in which:
797 unique CDR3
6 unique J



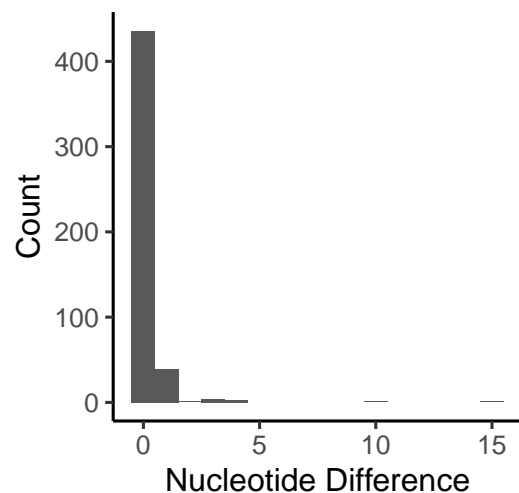
IGHV1-8*01

526 sequences assigned
461 (87.6%) exact matches, in which:
440 unique CDR3
6 unique J



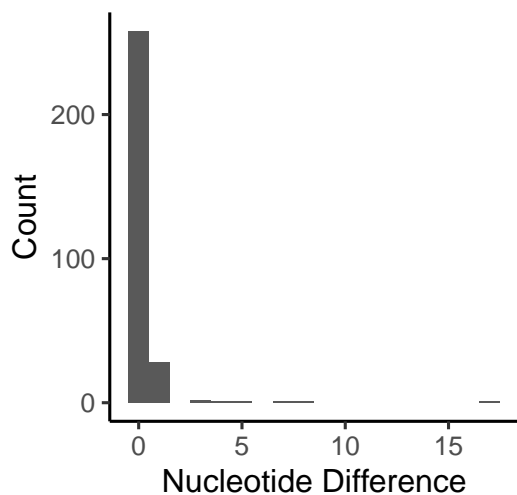
IGHV1-24*01

486 sequences assigned
436 (89.7%) exact matches, in which:
418 unique CDR3
6 unique J



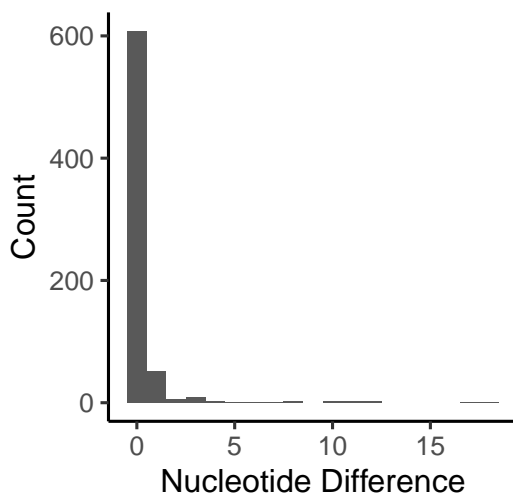
IGHV1-2*04

293 sequences assigned
258 (88.1%) exact matches, in which:
247 unique CDR3
6 unique J



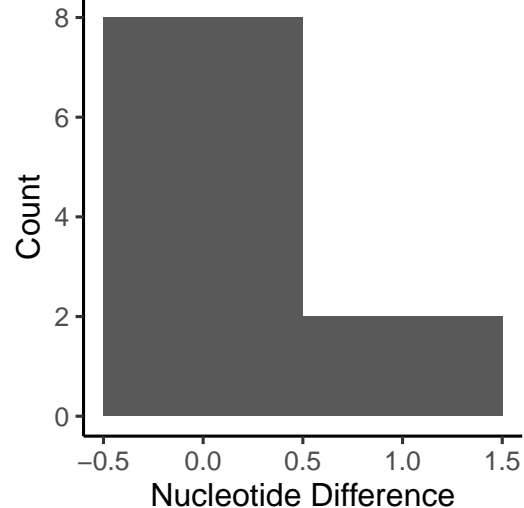
IGHV1-18*01

692 sequences assigned
608 (87.9%) exact matches, in which:
592 unique CDR3
6 unique J



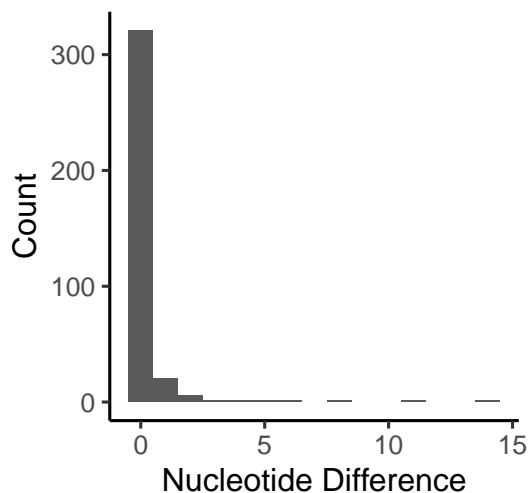
IGHV1-45*02

10 sequences assigned
8 (80%) exact matches, in which:
8 unique CDR3
3 unique J



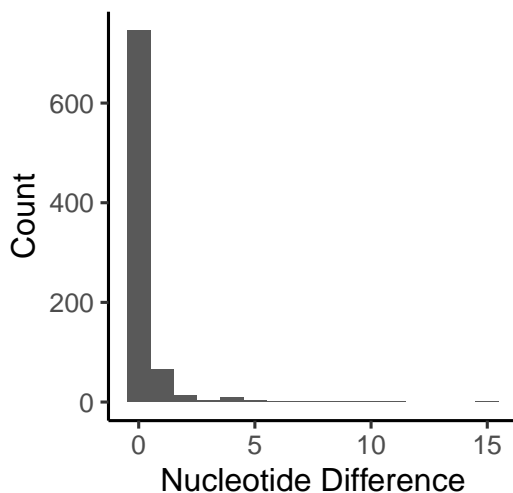
IGHV1-3*01

355 sequences assigned
321 (90.4%) exact matches, in which:
316 unique CDR3
6 unique J



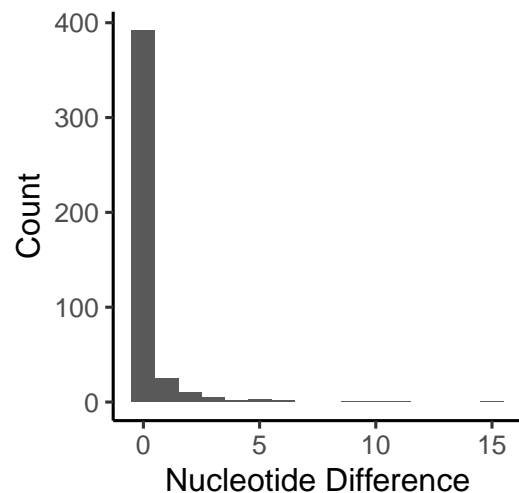
IGHV1-18*04

850 sequences assigned
746 (87.8%) exact matches, in which:
726 unique CDR3
6 unique J



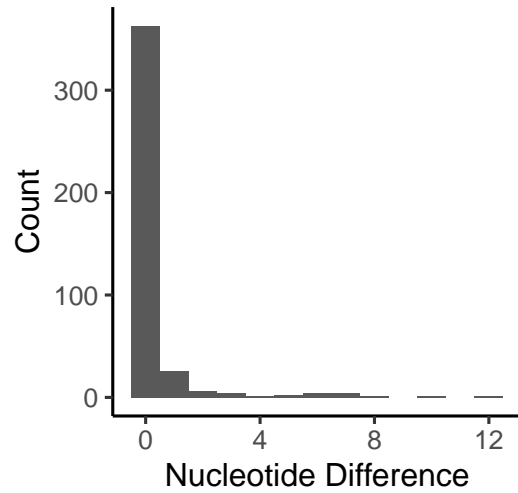
IGHV1-46*01

446 sequences assigned
392 (87.9%) exact matches, in which:
375 unique CDR3
6 unique J



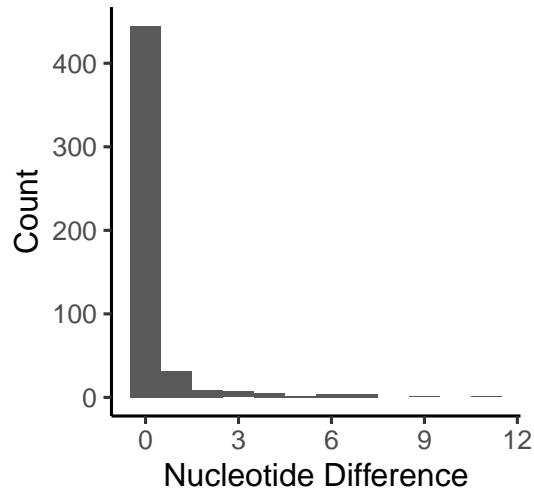
IGHV1-46*03

413 sequences assigned
363 (87.9%) exact matches, in which:
349 unique CDR3
6 unique J



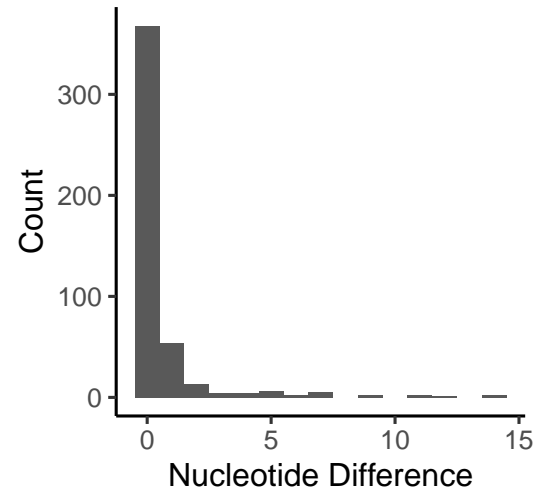
IGHV2-5*01

510 sequences assigned
445 (87.3%) exact matches, in which:
439 unique CDR3
6 unique J



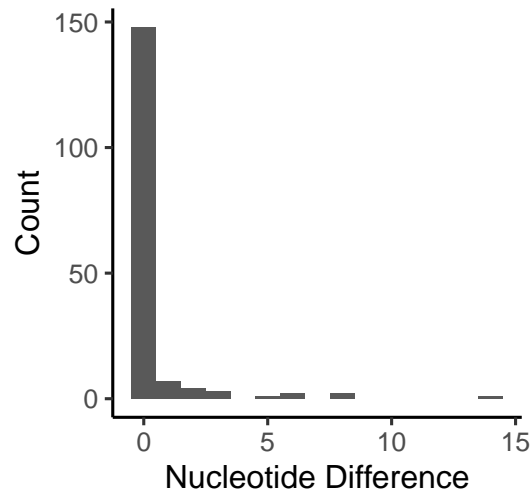
IGHV3-7*01

463 sequences assigned
368 (79.5%) exact matches, in which:
353 unique CDR3
6 unique J



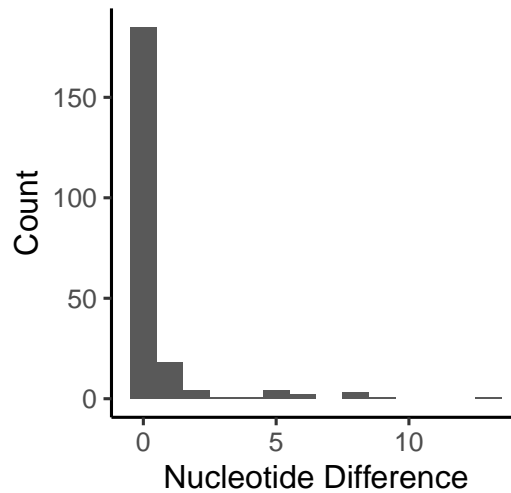
IGHV1-58*01

171 sequences assigned
148 (86.5%) exact matches, in which:
139 unique CDR3
6 unique J



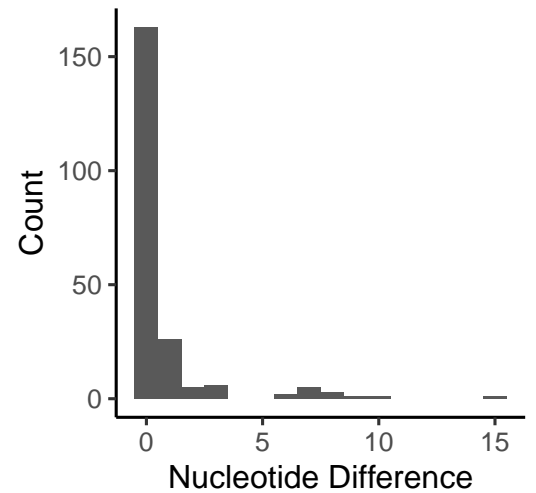
IGHV2-26*01

220 sequences assigned
185 (84.1%) exact matches, in which:
180 unique CDR3
6 unique J



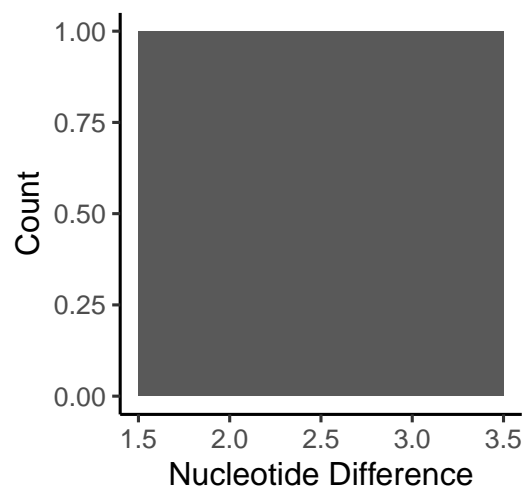
IGHV3-7*05

213 sequences assigned
163 (76.5%) exact matches, in which:
158 unique CDR3
6 unique J



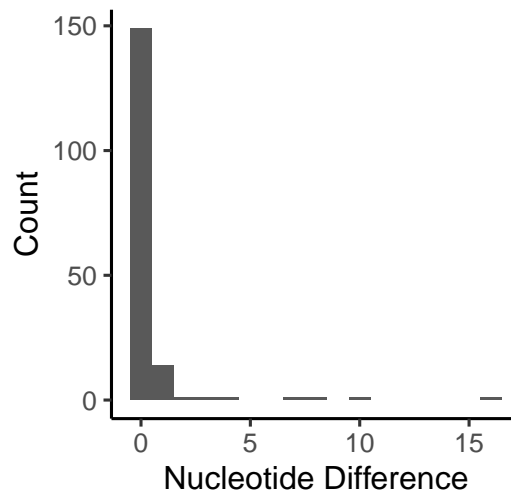
IGHV1-NL1*01

2 sequences assigned
No exact matches.



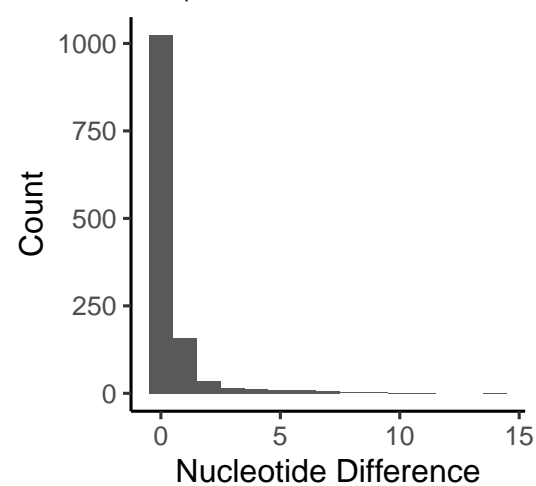
IGHV2-70*01

170 sequences assigned
149 (87.6%) exact matches, in which:
146 unique CDR3
6 unique J



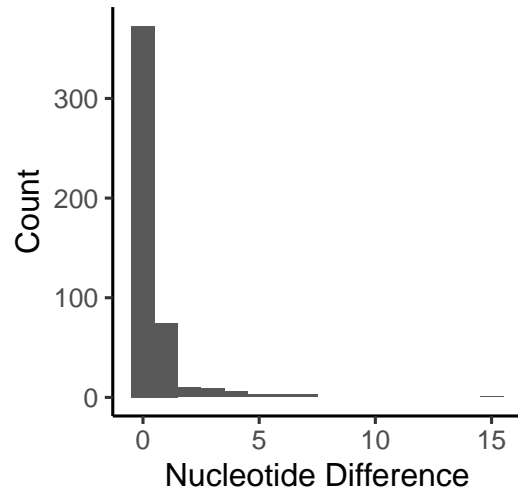
IGHV3-9*01

1277 sequences assigned
1024 (80.2%) exact matches, in which:
965 unique CDR3
6 unique J



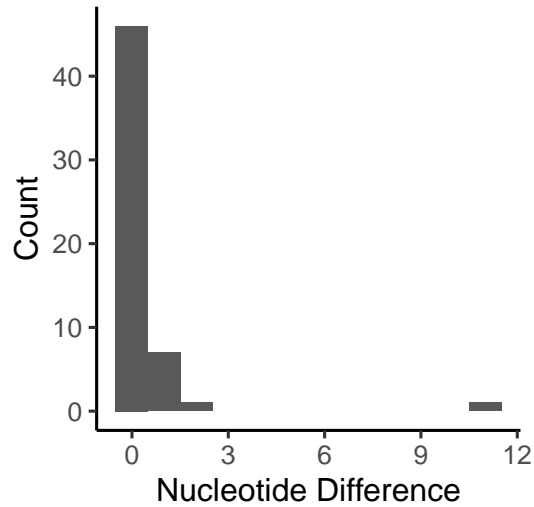
IGHV3-11*01

483 sequences assigned
373 (77.2%) exact matches, in which:
357 unique CDR3
6 unique J



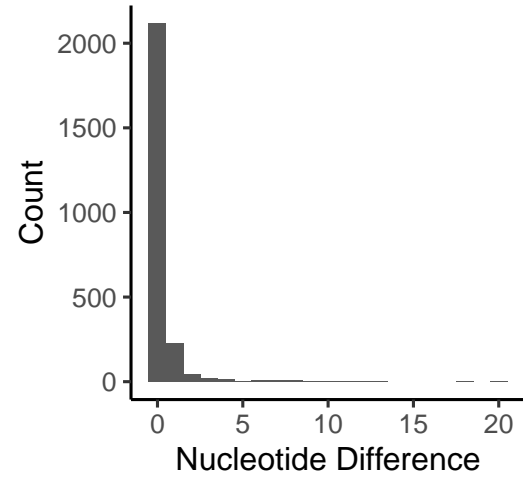
IGHV3-13*05

55 sequences assigned
46 (83.6%) exact matches, in which:
44 unique CDR3
4 unique J



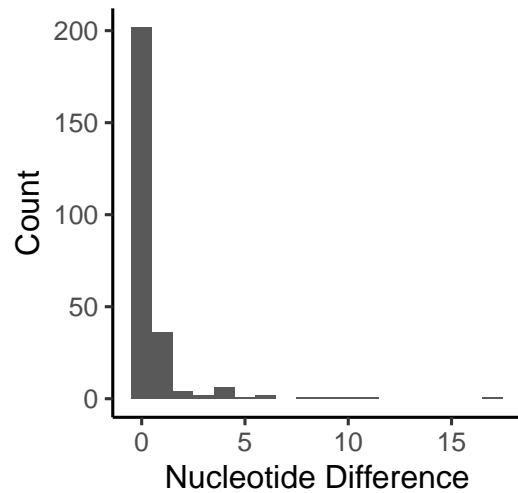
IGHV3-21*01

2468 sequences assigned
2117 (85.8%) exact matches, in which:
2009 unique CDR3
6 unique J



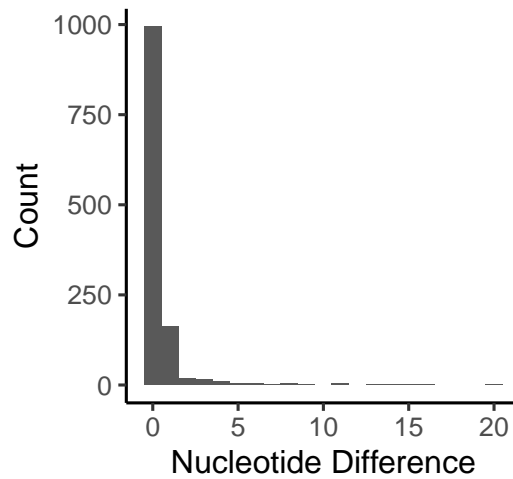
IGHV3-11*06

258 sequences assigned
202 (78.3%) exact matches, in which:
194 unique CDR3
6 unique J



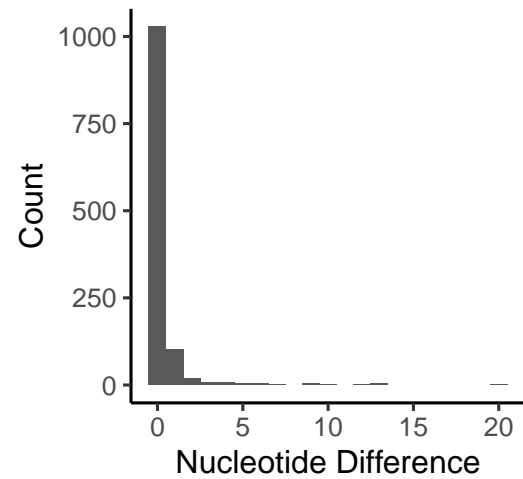
IGHV3-15*01

1226 sequences assigned
994 (81.1%) exact matches, in which:
965 unique CDR3
6 unique J



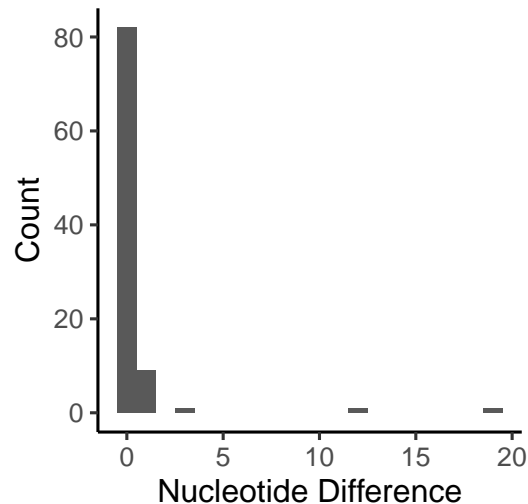
IGHV3-30*01

1181 sequences assigned
1028 (87%) exact matches, in which:
979 unique CDR3
6 unique J



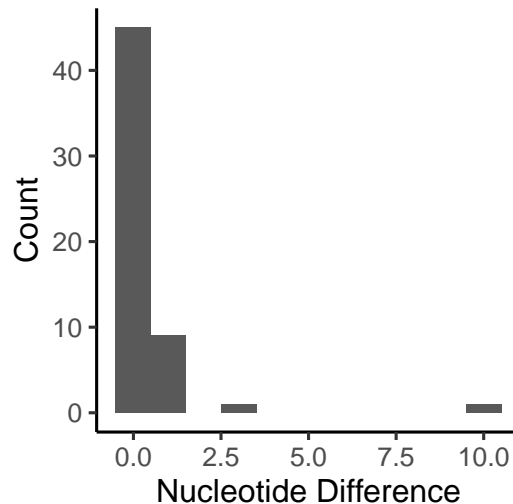
IGHV3-13*01

95 sequences assigned
82 (86.3%) exact matches, in which:
80 unique CDR3
6 unique J



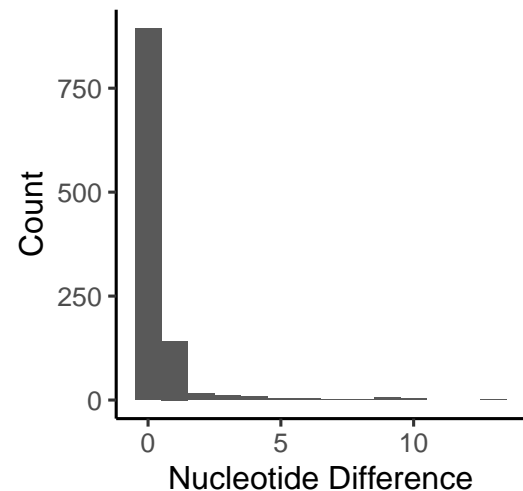
IGHV3-20*01

56 sequences assigned
45 (80.4%) exact matches, in which:
42 unique CDR3
5 unique J



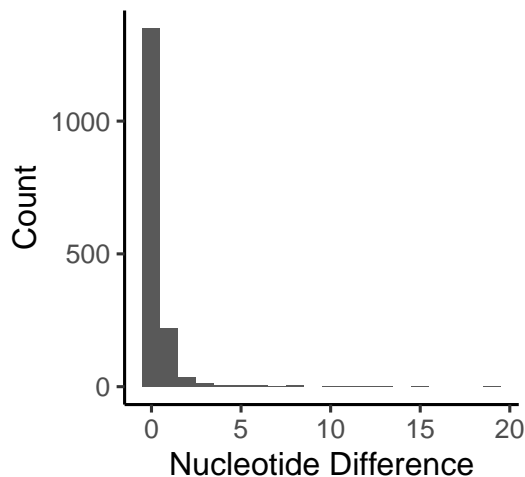
IGHV3-30-3*01

1092 sequences assigned
894 (81.9%) exact matches, in which:
851 unique CDR3
6 unique J



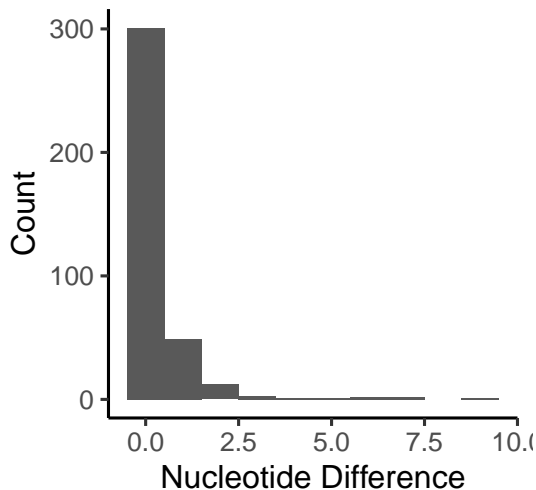
IGHV3–33*01

1650 sequences assigned
1349 (81.8%) exact matches, in which:
1275 unique CDR3
6 unique J



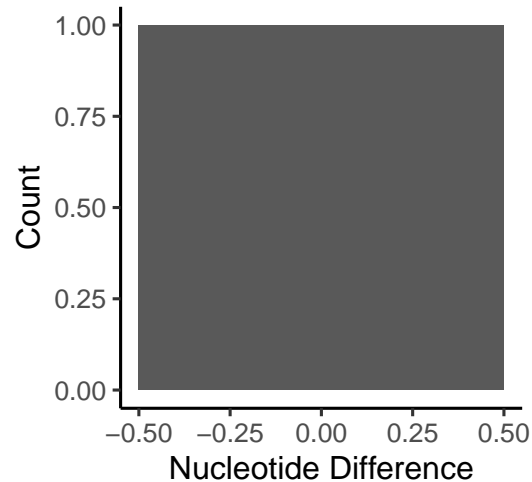
IGHV3–49*05

372 sequences assigned
301 (80.9%) exact matches, in which:
281 unique CDR3
6 unique J



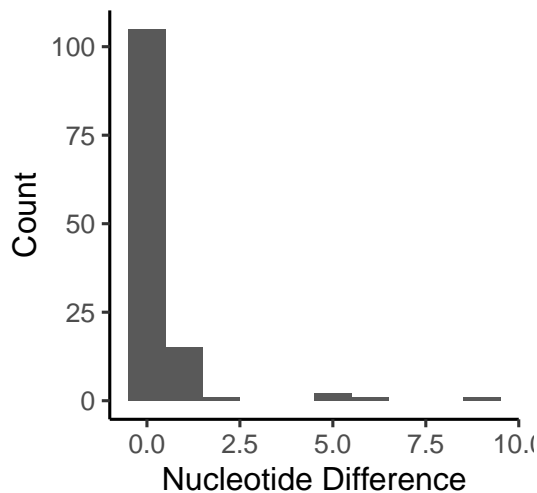
IGHV3–66*04

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



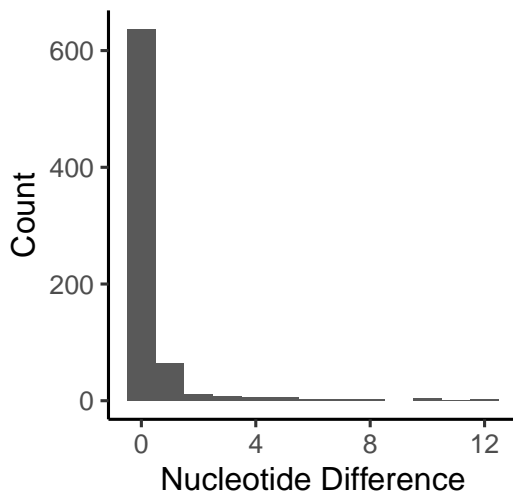
IGHV3–43*01

127 sequences assigned
105 (82.7%) exact matches, in which:
102 unique CDR3
6 unique J



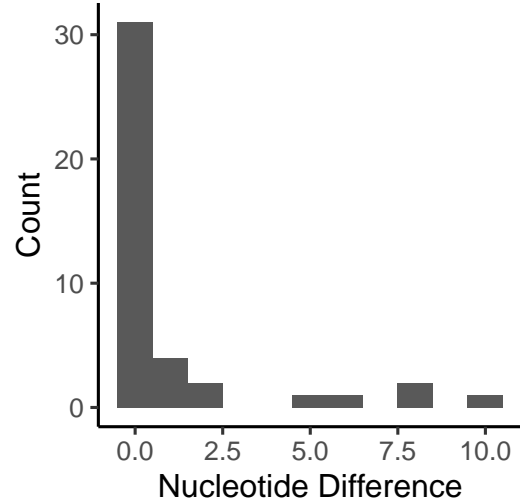
IGHV3–53*01

745 sequences assigned
637 (85.5%) exact matches, in which:
607 unique CDR3
6 unique J



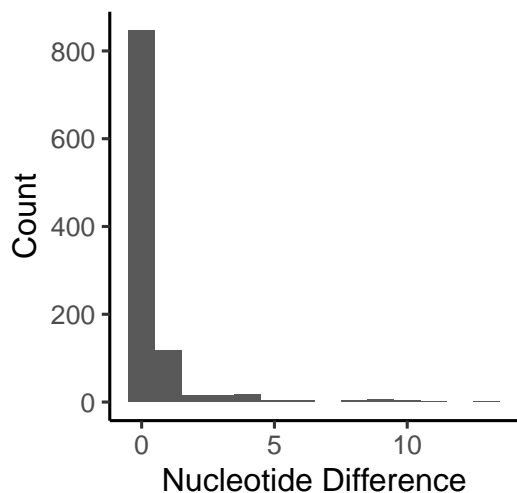
IGHV3–72*01

42 sequences assigned
31 (73.8%) exact matches, in which:
31 unique CDR3
4 unique J



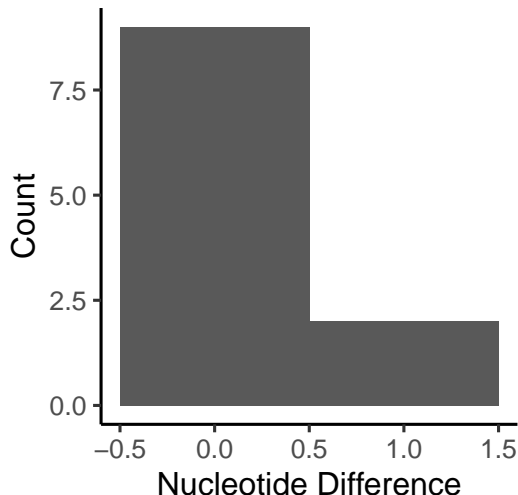
IGHV3–48*02

1036 sequences assigned
847 (81.8%) exact matches, in which:
807 unique CDR3
6 unique J



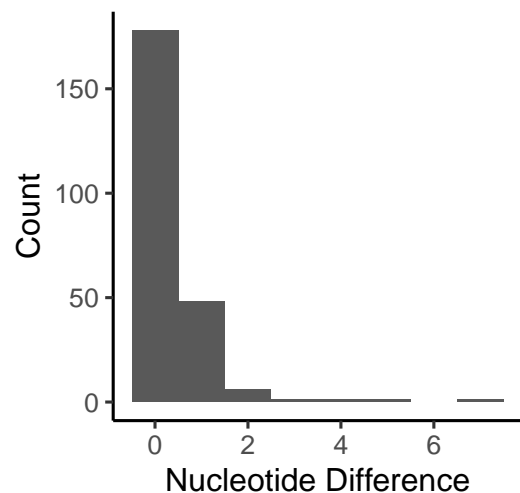
IGHV3–64*02

11 sequences assigned
9 (81.8%) exact matches, in which:
8 unique CDR3
3 unique J



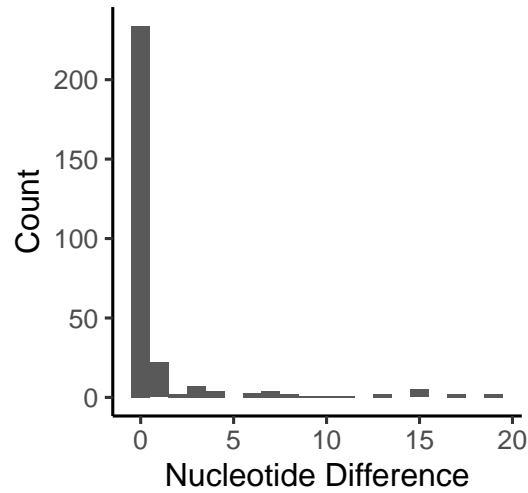
IGHV3–73*02

237 sequences assigned
178 (75.1%) exact matches, in which:
157 unique CDR3
5 unique J



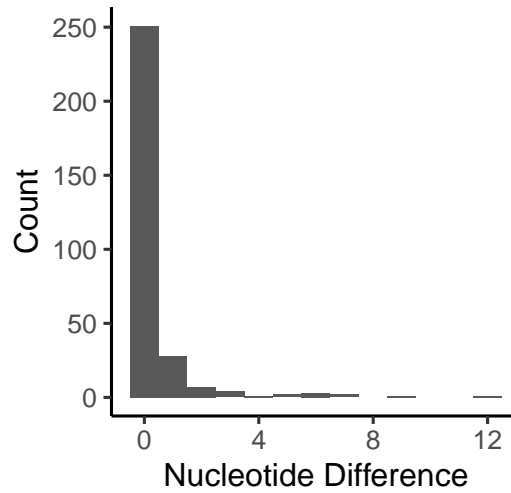
IGHV3-74*01

298 sequences assigned
234 (78.5%) exact matches, in which:
224 unique CDR3
6 unique J



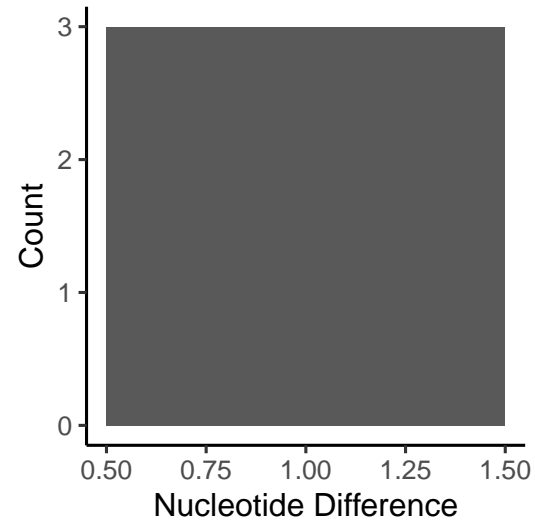
IGHV4-4*07

302 sequences assigned
251 (83.1%) exact matches, in which:
241 unique CDR3
6 unique J



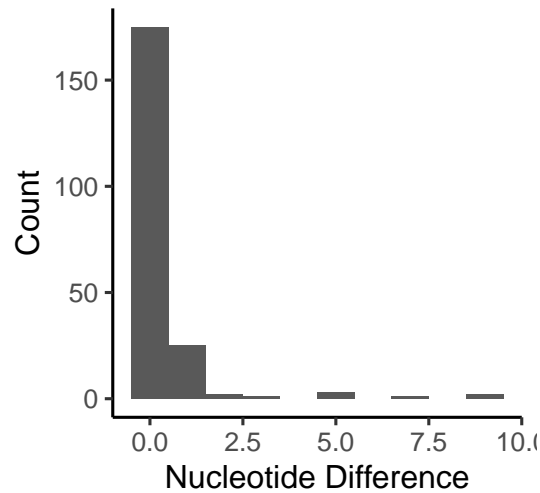
IGHV4-28*04

3 sequences assigned
No exact matches.



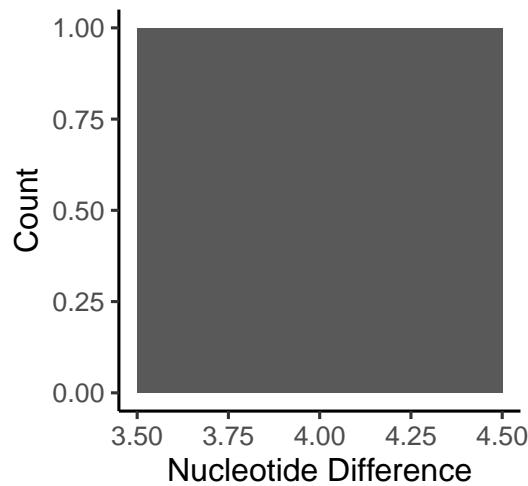
IGHV3-64D*08

209 sequences assigned
175 (83.7%) exact matches, in which:
165 unique CDR3
6 unique J



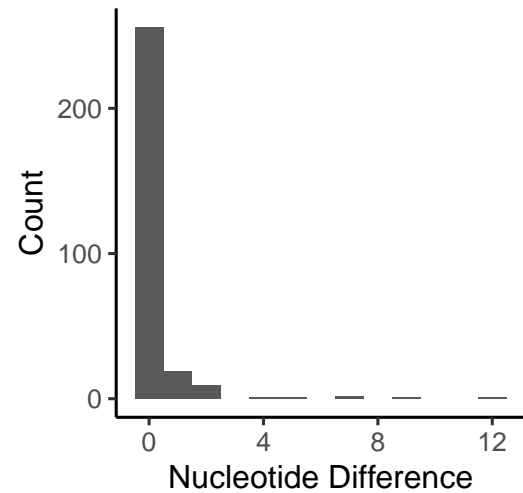
IGHV4-28*01

1 sequences assigned
No exact matches.



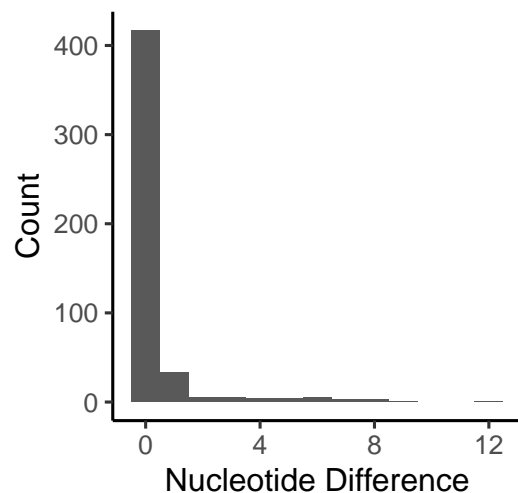
IGHV4-30-4*01

290 sequences assigned
256 (88.3%) exact matches, in which:
249 unique CDR3
6 unique J



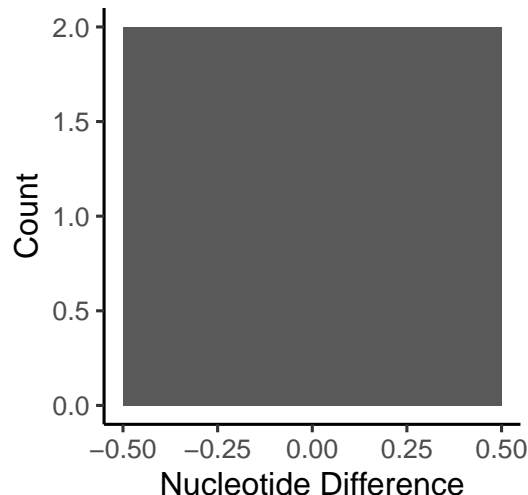
IGHV4-4*02

481 sequences assigned
417 (86.7%) exact matches, in which:
404 unique CDR3
6 unique J



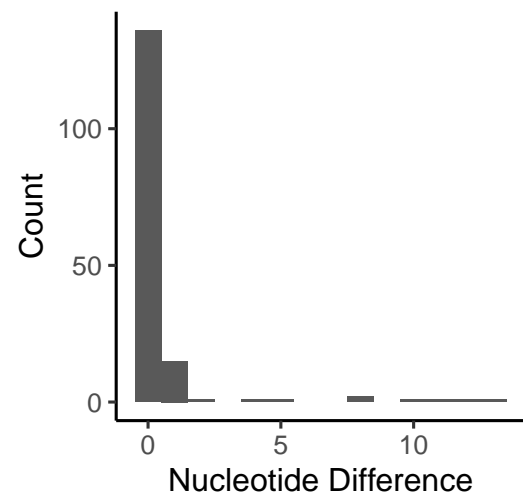
IGHV4-28*02

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



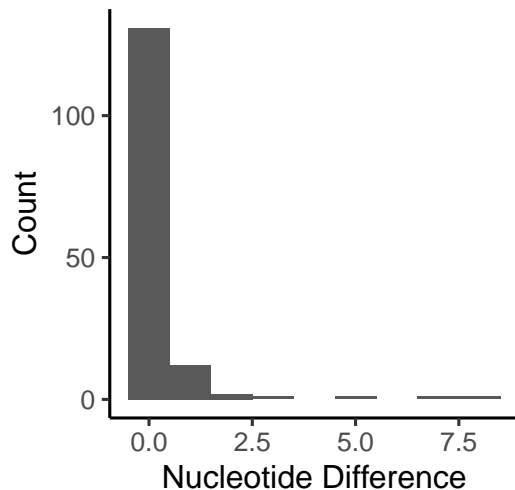
IGHV4-30-2*01

160 sequences assigned
136 (85%) exact matches, in which:
131 unique CDR3
6 unique J



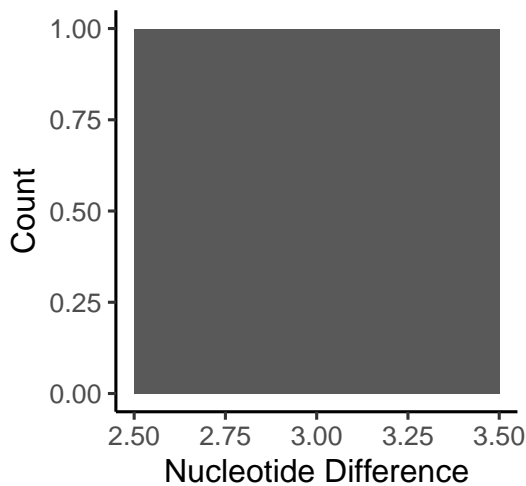
IGHV4-31*01

149 sequences assigned
131 (87.9%) exact matches, in which:
128 unique CDR3
6 unique J



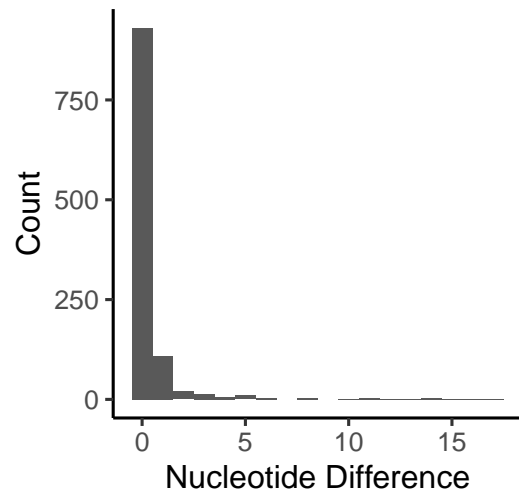
IGHV4-38-2*02

1 sequences assigned
No exact matches.



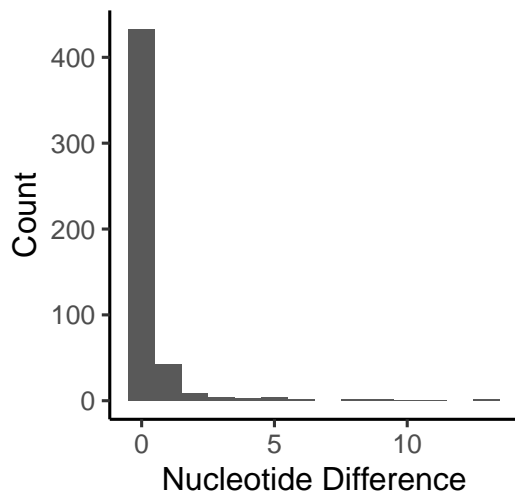
IGHV4-59*01

1111 sequences assigned
931 (83.8%) exact matches, in which:
911 unique CDR3
6 unique J



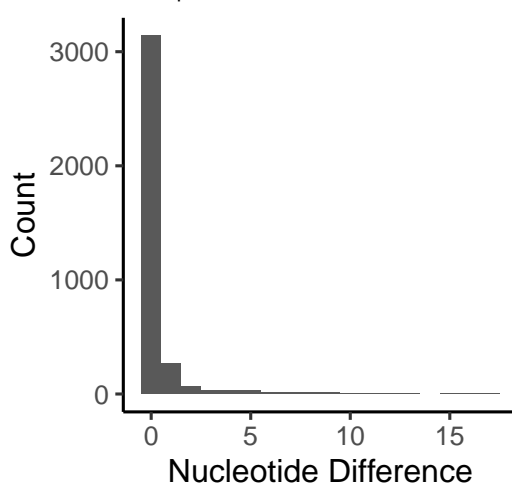
IGHV4-31*03

505 sequences assigned
433 (85.7%) exact matches, in which:
418 unique CDR3
6 unique J



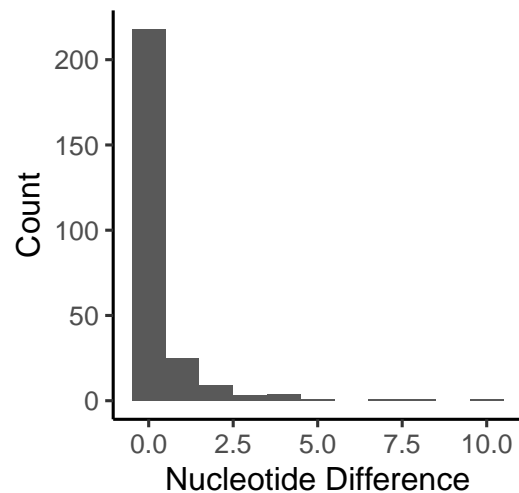
IGHV4-39*01

3634 sequences assigned
3140 (86.4%) exact matches, in which:
2975 unique CDR3
6 unique J



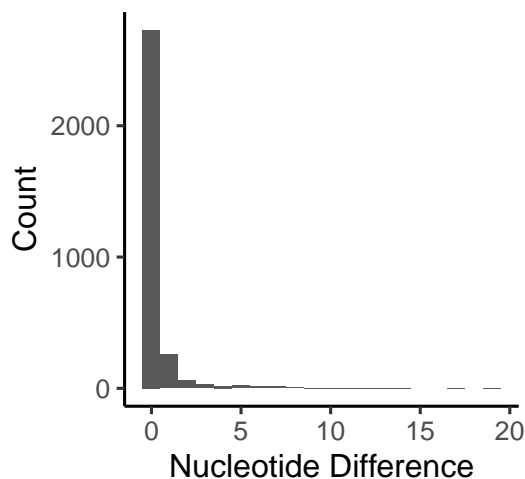
IGHV4-61*01

265 sequences assigned
218 (82.3%) exact matches, in which:
214 unique CDR3
6 unique J



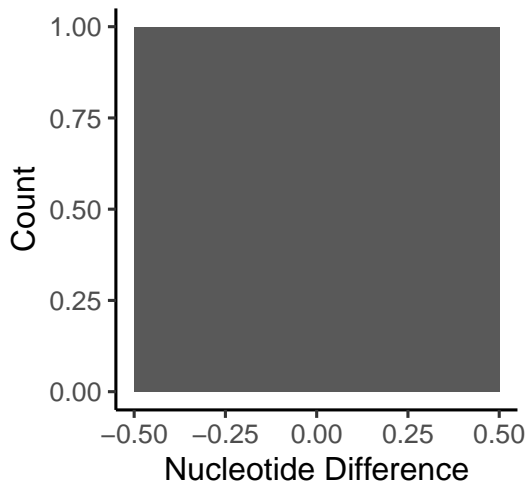
IGHV4-34*01

3164 sequences assigned
2729 (86.3%) exact matches, in which:
2599 unique CDR3
6 unique J



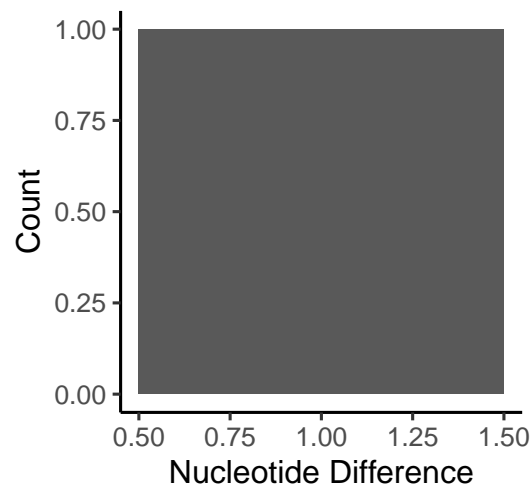
IGHV4-55*08

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



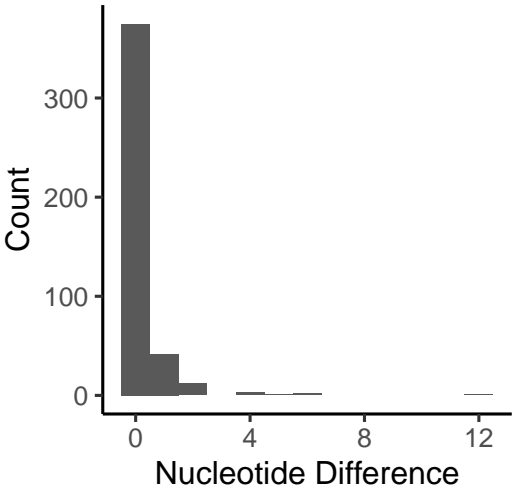
IGHV1/OR15-1*03

1 sequences assigned
No exact matches.



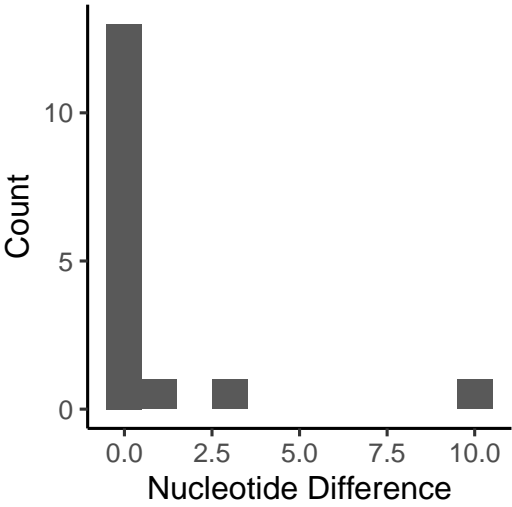
IGHV5-10-1*03

436 sequences assigned
375 (86%) exact matches, in which:
363 unique CDR3
5 unique J



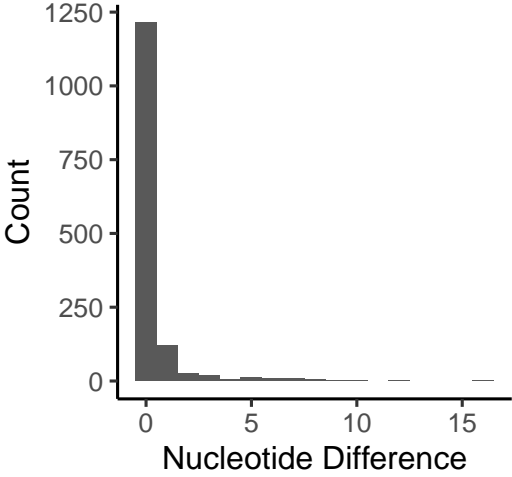
IGHV7-4-1*01

16 sequences assigned
13 (81.2%) exact matches, in which:
12 unique CDR3
3 unique J



IGHV5-51*01

1429 sequences assigned
1214 (85%) exact matches, in which:
1173 unique CDR3
6 unique J



IGHV6-1*01

213 sequences assigned
179 (84%) exact matches, in which:
168 unique CDR3
6 unique J

