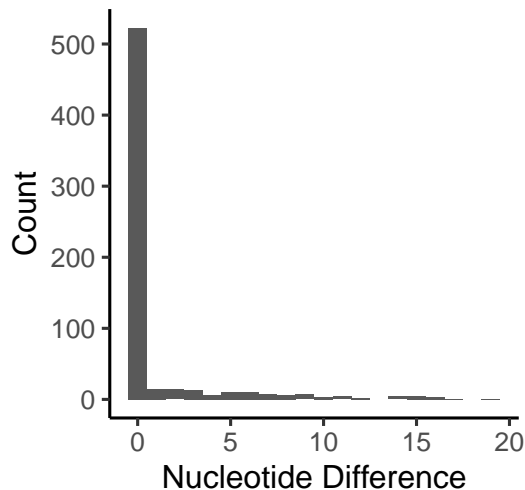


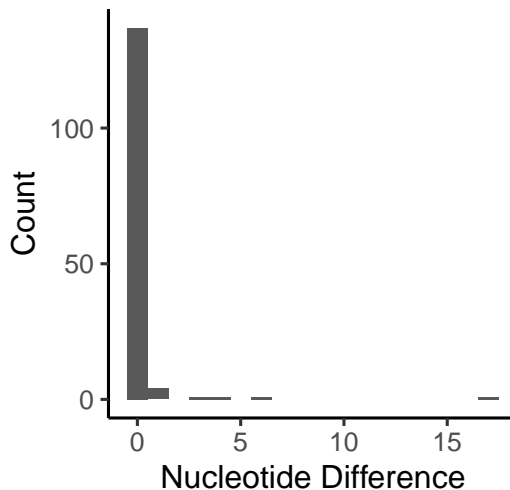
IGHV1-2*02

641 sequences assigned
523 (81.6%) exact matches, in which:
518 unique CDR3
6 unique J



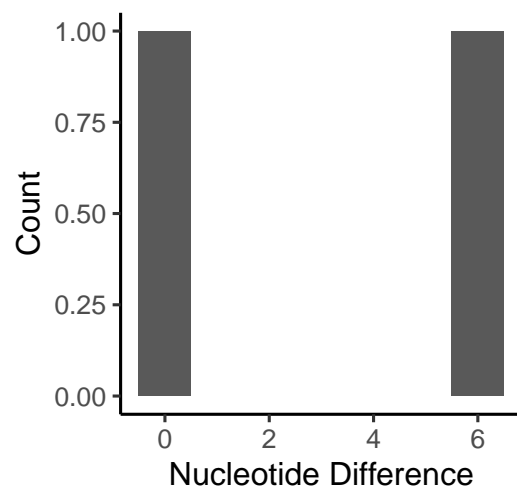
IGHV1-24*01

145 sequences assigned
137 (94.5%) exact matches, in which:
136 unique CDR3
6 unique J



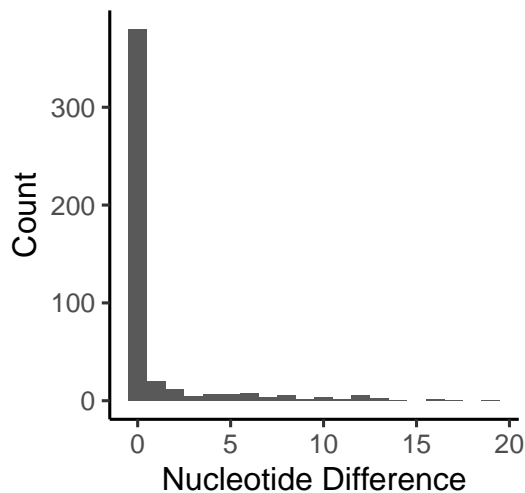
IGHV1-69-2*01

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



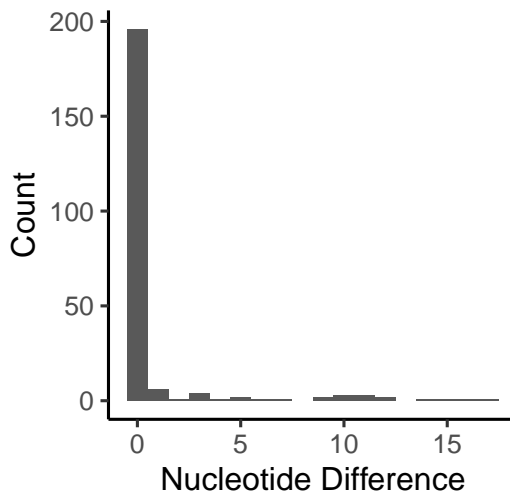
IGHV1-8*01

471 sequences assigned
380 (80.7%) exact matches, in which:
378 unique CDR3
6 unique J



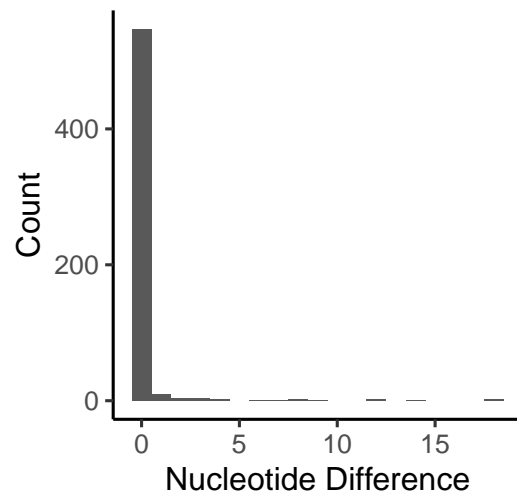
IGHV1-46*01

228 sequences assigned
196 (86%) exact matches, in which:
196 unique CDR3
6 unique J



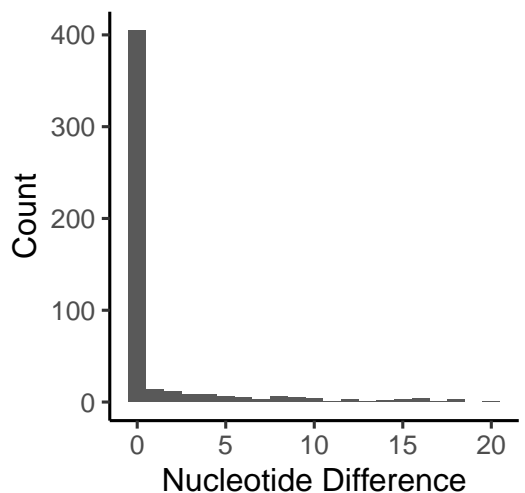
IGHV1-69*01_12_13

576 sequences assigned
547 (95%) exact matches, in which:
544 unique CDR3
6 unique J



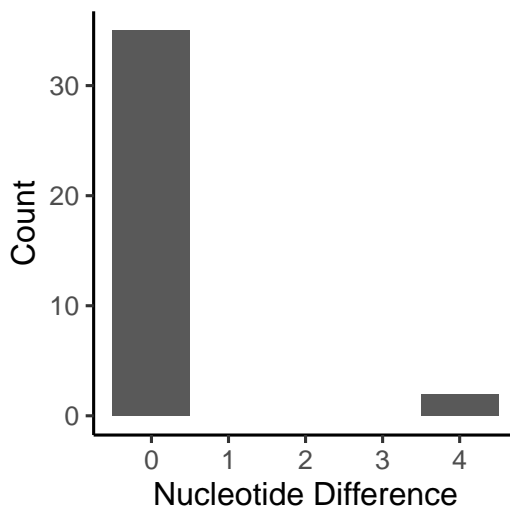
IGHV1-18*01

499 sequences assigned
405 (81.2%) exact matches, in which:
402 unique CDR3
6 unique J



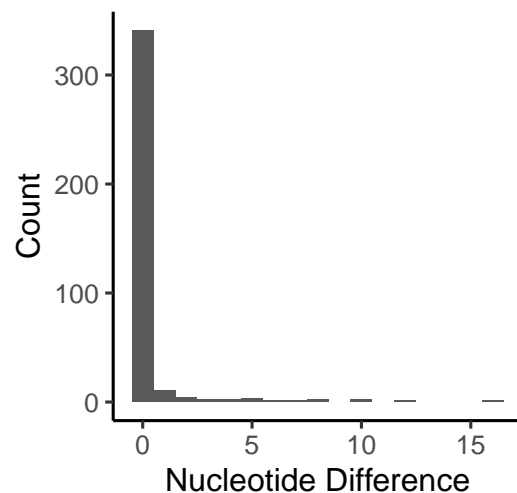
IGHV1-58*01_03

38 sequences assigned
35 (92.1%) exact matches, in which:
35 unique CDR3
4 unique J



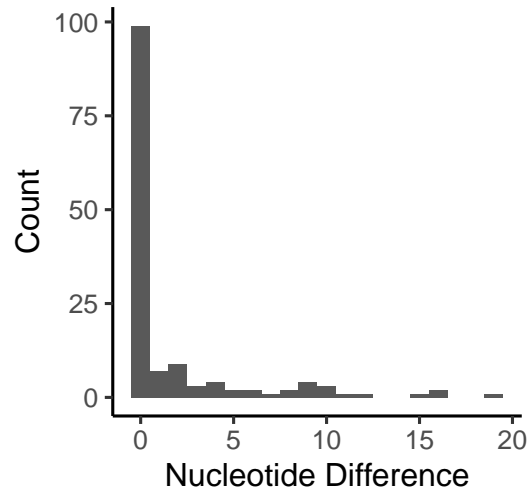
IGHV1-69*06_14

374 sequences assigned
341 (91.2%) exact matches, in which:
340 unique CDR3
6 unique J



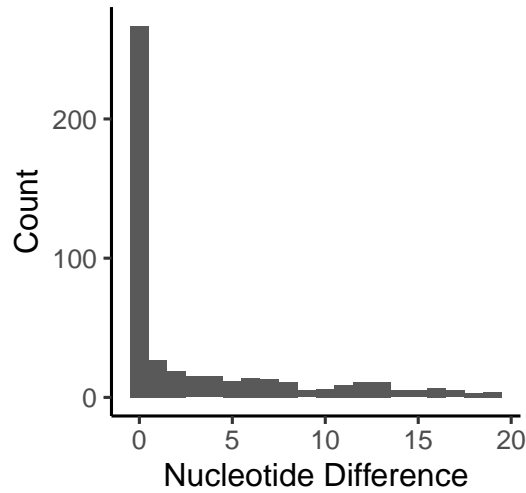
IGHV2-5*01

152 sequences assigned
99 (65.1%) exact matches, in which:
99 unique CDR3
6 unique J



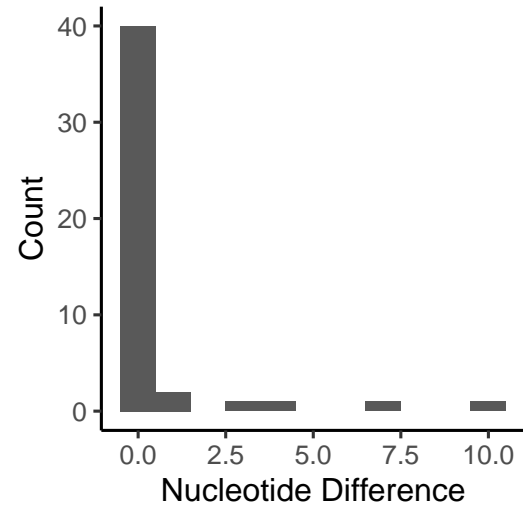
IGHV3-7*01

468 sequences assigned
267 (57.1%) exact matches, in which:
260 unique CDR3
6 unique J



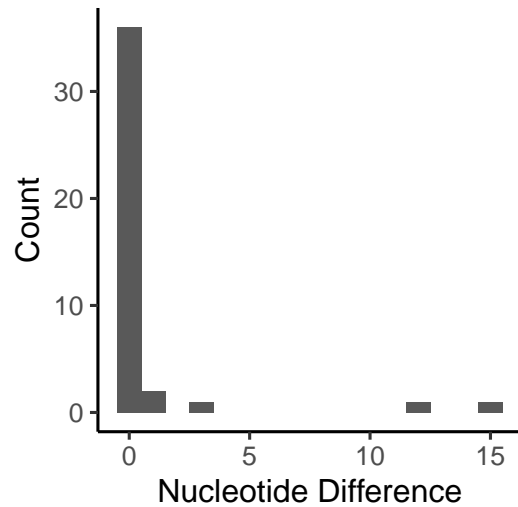
IGHV3-13*01

46 sequences assigned
40 (87%) exact matches, in which:
39 unique CDR3
5 unique J



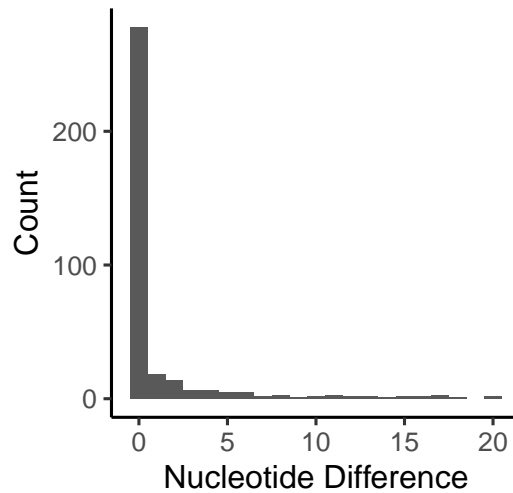
IGHV2-26*01

43 sequences assigned
36 (83.7%) exact matches, in which:
36 unique CDR3
5 unique J



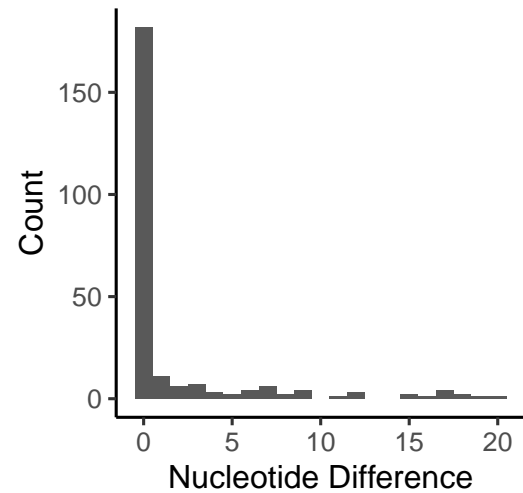
IGHV3-9*01

362 sequences assigned
278 (76.8%) exact matches, in which:
272 unique CDR3
6 unique J



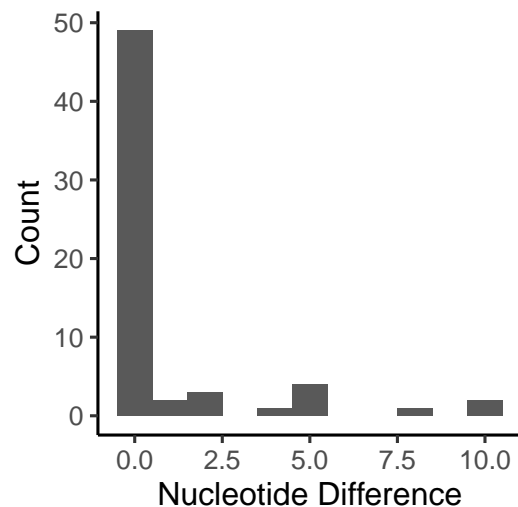
IGHV3-15*01_02

246 sequences assigned
182 (74%) exact matches, in which:
179 unique CDR3
6 unique J



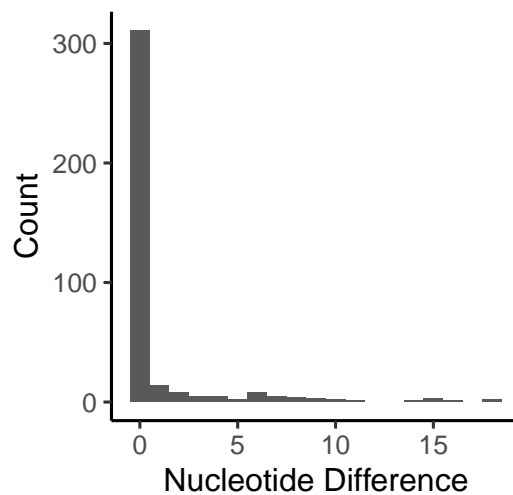
IGHV2-70*01

62 sequences assigned
49 (79%) exact matches, in which:
48 unique CDR3
5 unique J



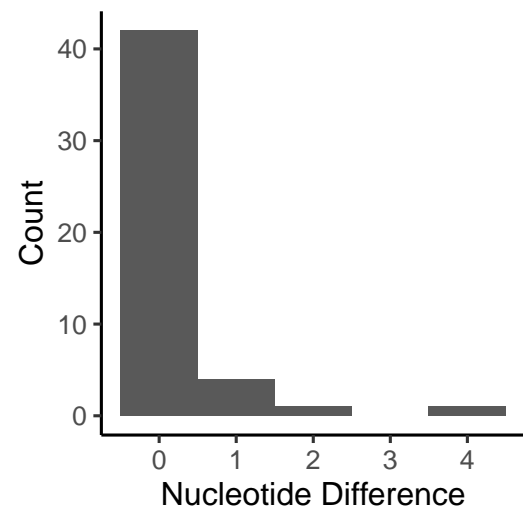
IGHV3-11*01

376 sequences assigned
311 (82.7%) exact matches, in which:
306 unique CDR3
6 unique J



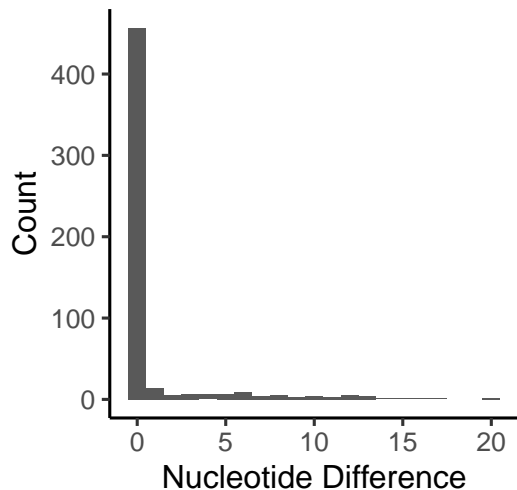
IGHV3-20*01_02

50 sequences assigned
42 (84%) exact matches, in which:
42 unique CDR3
5 unique J



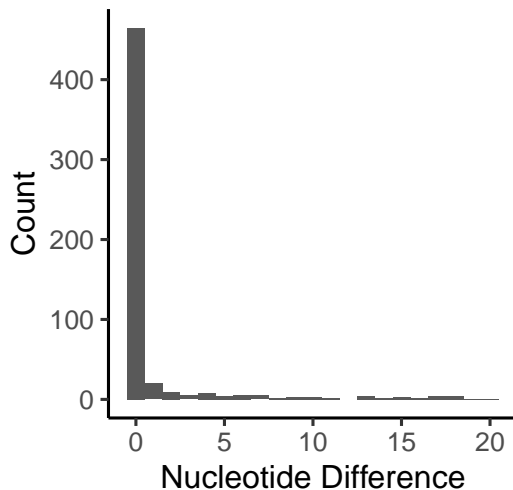
IGHV3-21*01_02

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



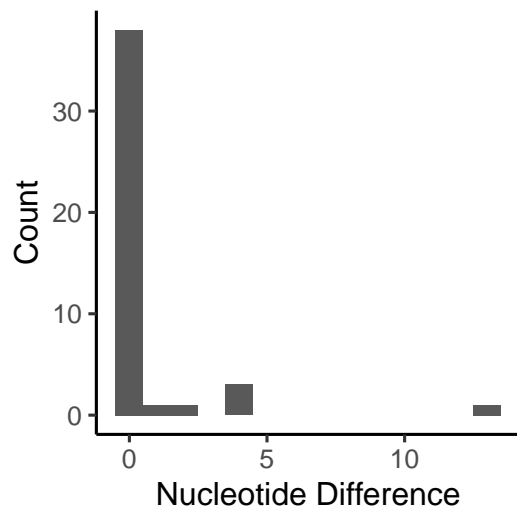
IGHV3-33*01

561 sequences assigned
465 (82.9%) exact matches, in which:
455 unique CDR3
6 unique J



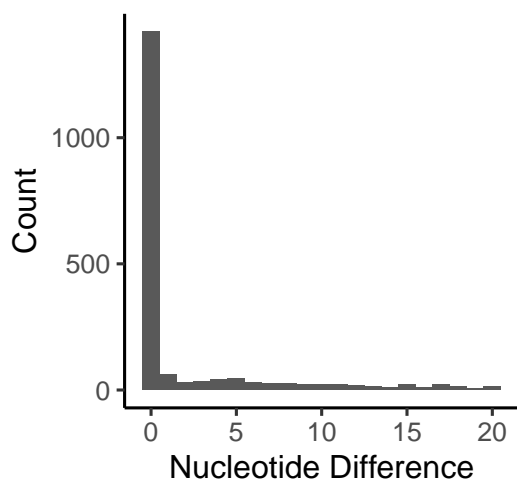
IGHV3-49*03_05

45 sequences assigned
38 (84.4%) exact matches, in which:
37 unique CDR3
4 unique J



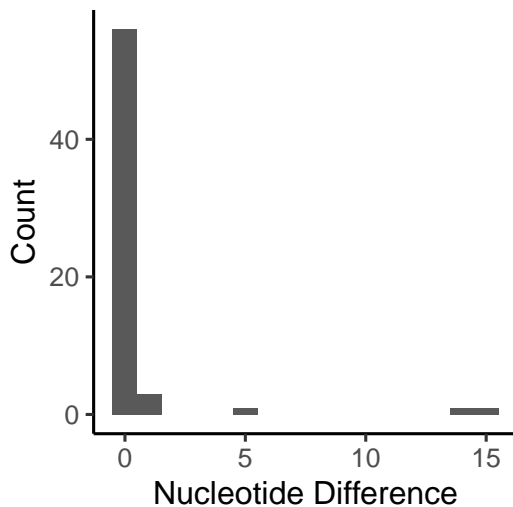
IGHV3-23*01_04

1920 sequences assigned
1420 (74%) exact matches, in which:
1376 unique CDR3
6 unique J



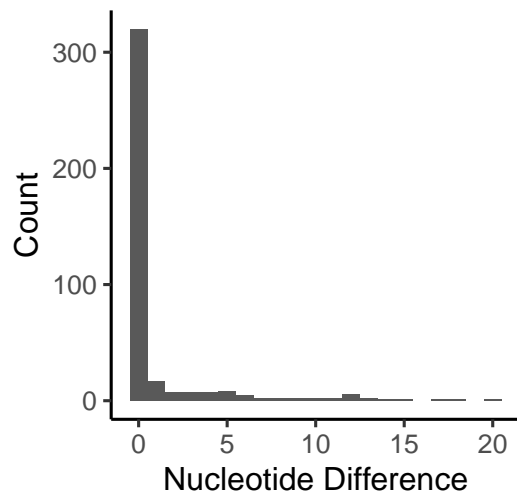
IGHV3-43*01

62 sequences assigned
56 (90.3%) exact matches, in which:
56 unique CDR3
6 unique J



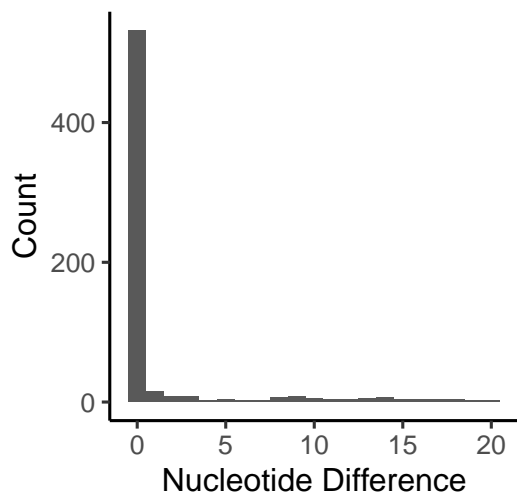
IGHV3-53*01_02

394 sequences assigned
320 (81.2%) exact matches, in which:
311 unique CDR3
6 unique J



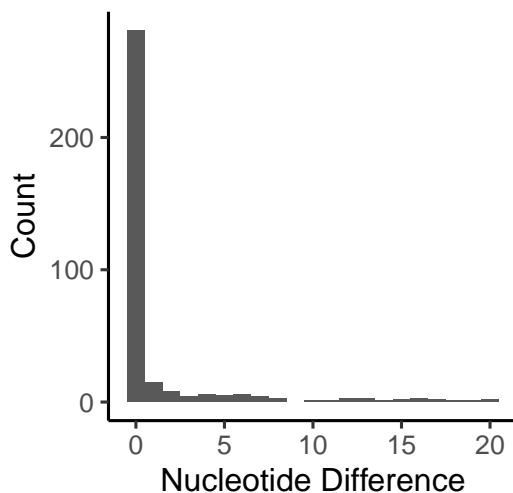
IGHV3-30-3*01

641 sequences assigned
532 (83%) exact matches, in which:
524 unique CDR3
6 unique J



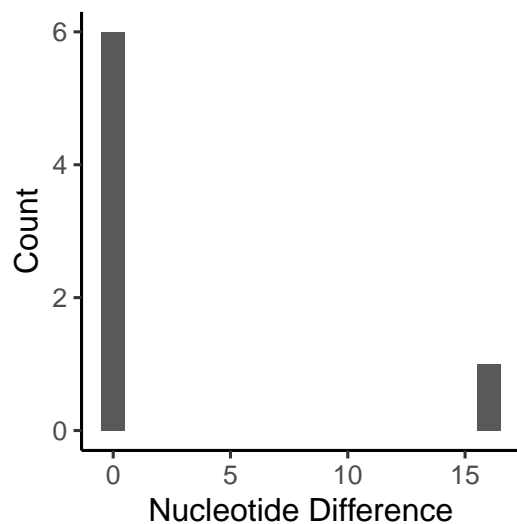
IGHV3-48*02

361 sequences assigned
281 (77.8%) exact matches, in which:
276 unique CDR3
6 unique J



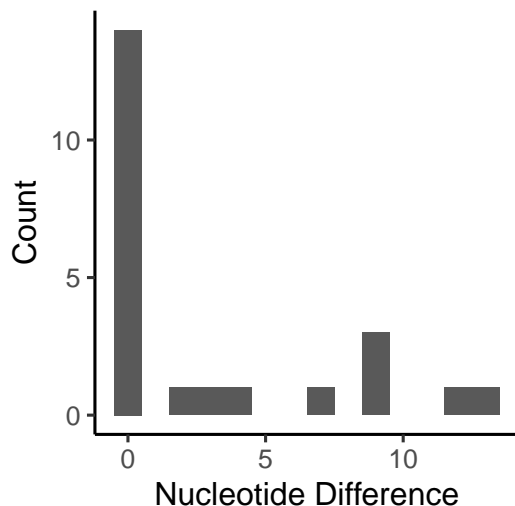
IGHV3-64*02_07

7 sequences assigned
6 (85.7%) exact matches, in which:
6 unique CDR3
3 unique J



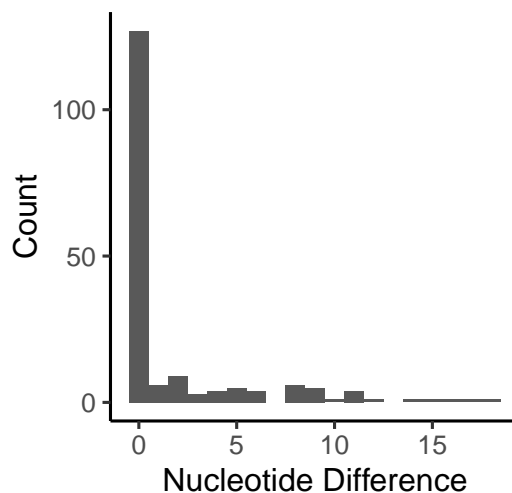
IGHV3-72*01

24 sequences assigned
14 (58.3%) exact matches, in which:
14 unique CDR3
3 unique J



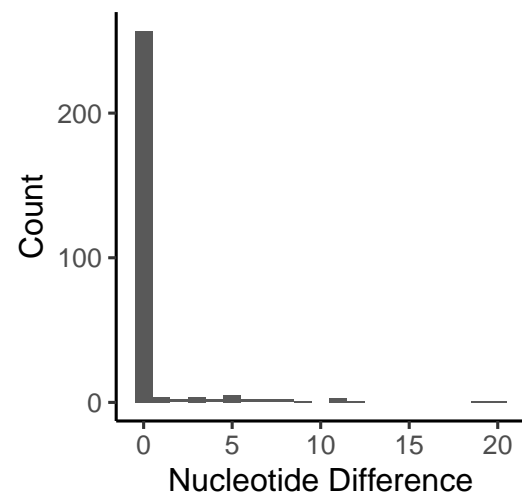
IGHV3-74*01_02

183 sequences assigned
127 (69.4%) exact matches, in which:
116 unique CDR3
5 unique J



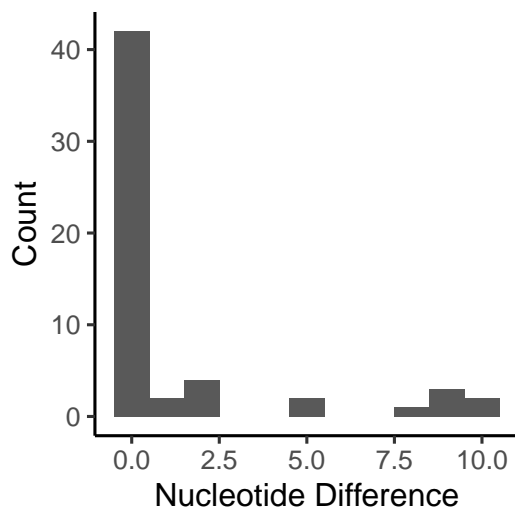
IGHV4-30-4*01

291 sequences assigned
257 (88.3%) exact matches, in which:
250 unique CDR3
6 unique J



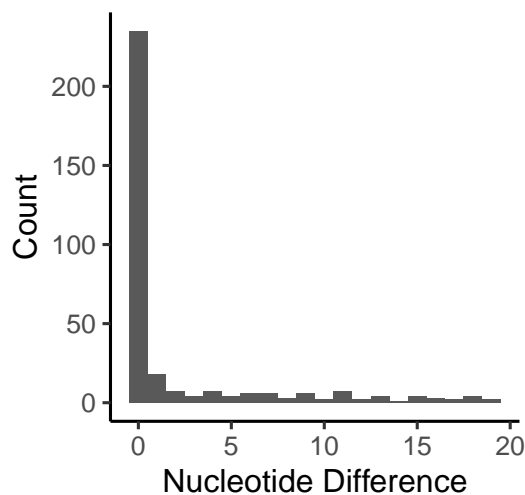
IGHV3-73*01_02

56 sequences assigned
42 (75%) exact matches, in which:
42 unique CDR3
5 unique J



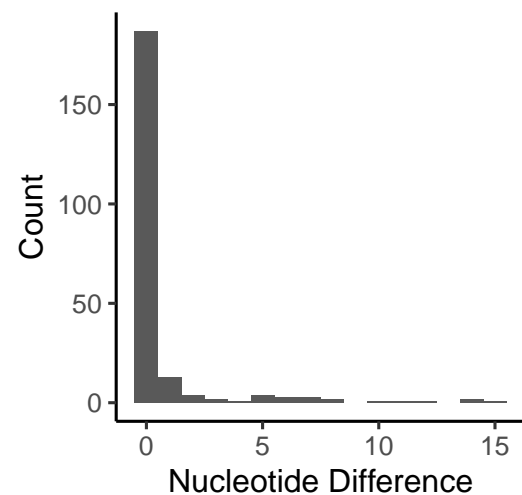
IGHV4-4*07

328 sequences assigned
235 (71.6%) exact matches, in which:
229 unique CDR3
6 unique J



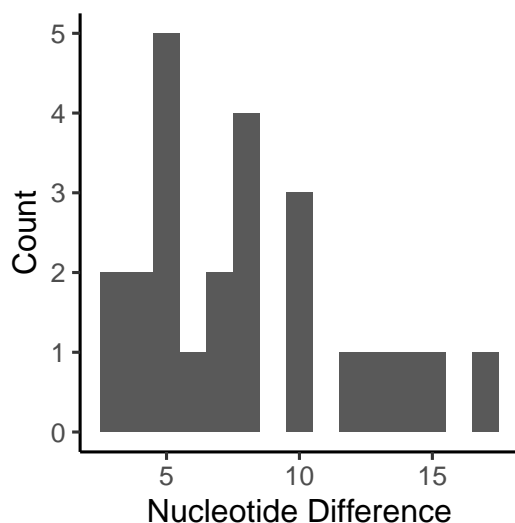
IGHV4-30-2*01

230 sequences assigned
187 (81.3%) exact matches, in which:
181 unique CDR3
6 unique J



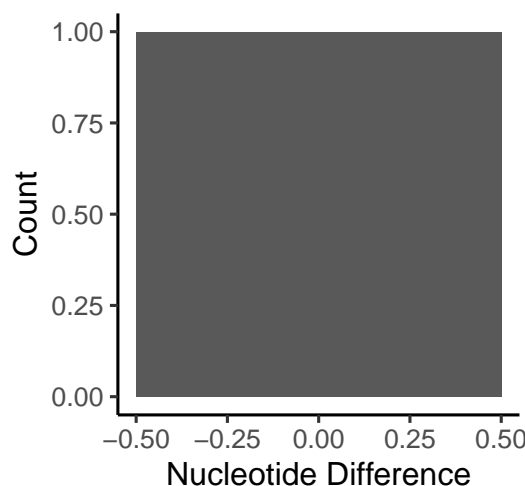
IGHV3-74*03

26 sequences assigned
No exact matches.



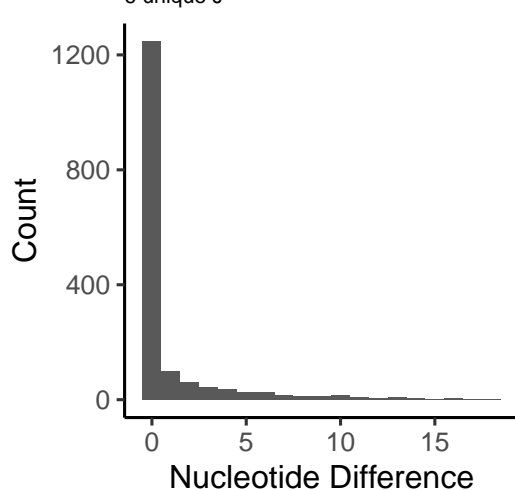
IGHV4-28*01_07

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



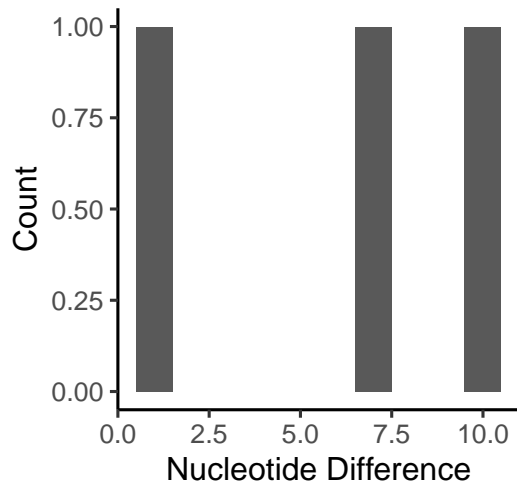
IGHV4-34*01_02

1642 sequences assigned
1247 (75.9%) exact matches, in which:
1214 unique CDR3
6 unique J



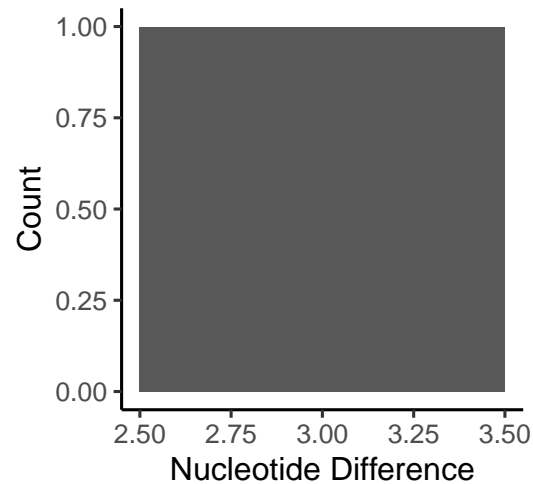
IGHV4-59*11

5 sequences assigned
No exact matches.



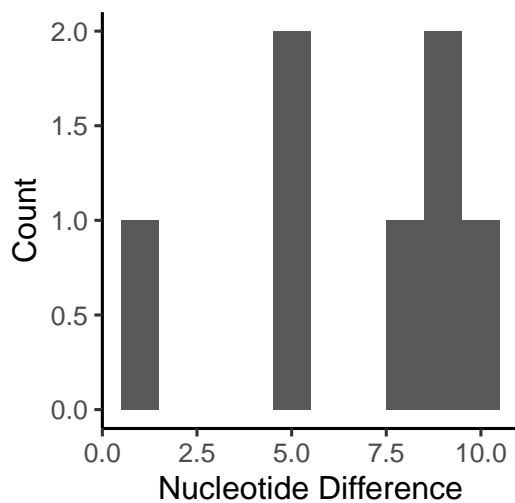
IGHV4/OR15-8*01

1 sequences assigned
No exact matches.



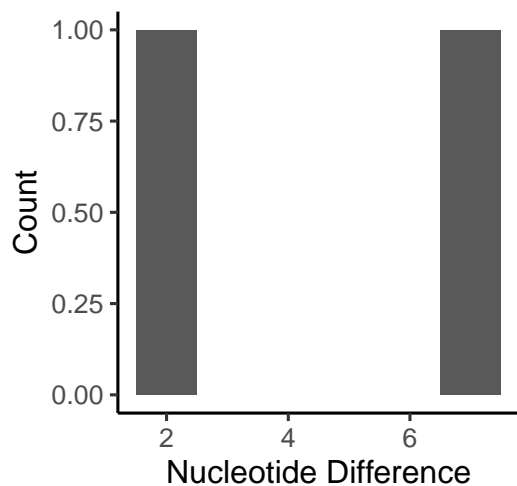
IGHV4-39*02

9 sequences assigned
No exact matches.



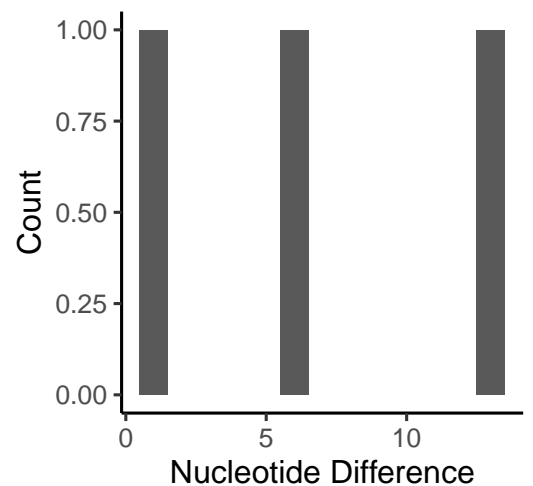
IGHV4-59*12

3 sequences assigned
No exact matches.



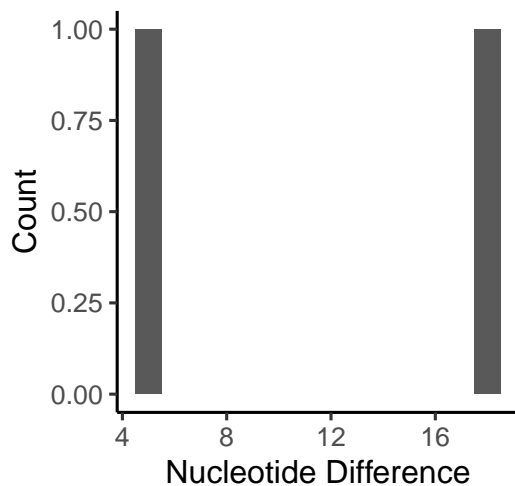
IGHV5-51*06

3 sequences assigned
No exact matches.



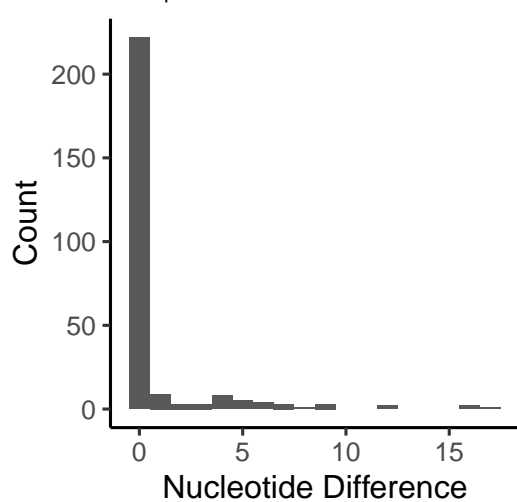
IGHV4-59*02

2 sequences assigned
No exact matches.



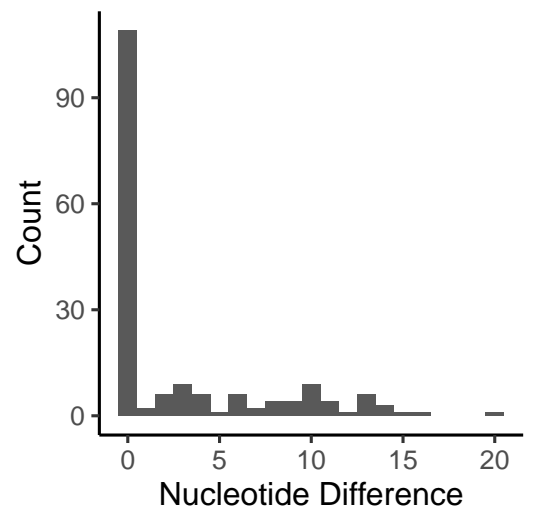
IGHV4-61*01

270 sequences assigned
222 (82.2%) exact matches, in which:
220 unique CDR3
6 unique J

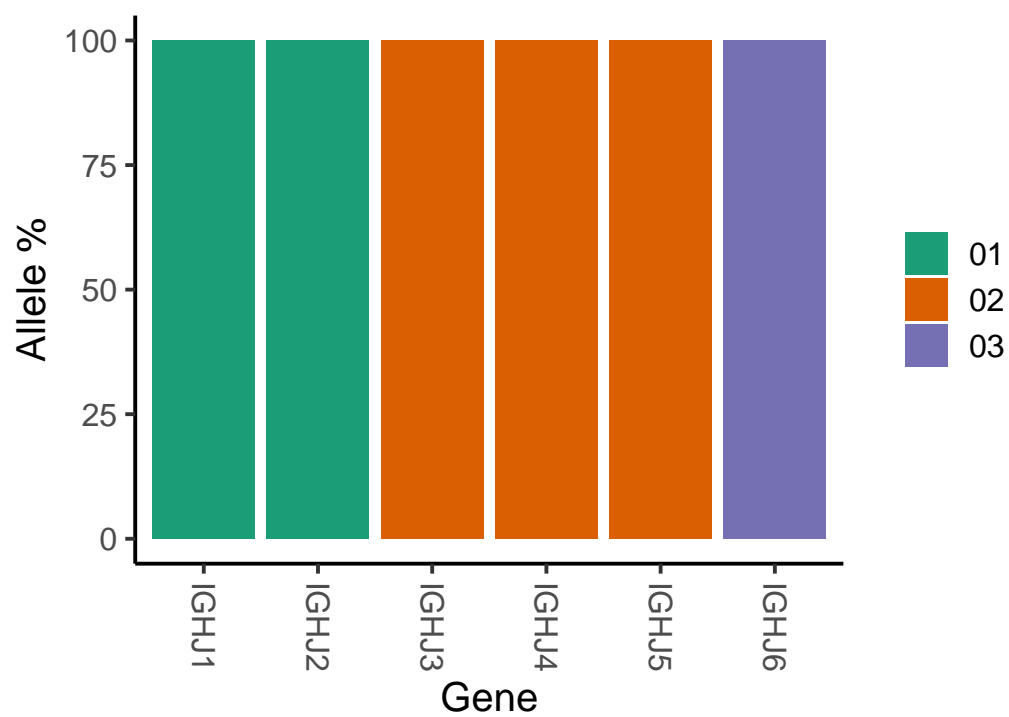


IGHV6-1*01_02

175 sequences assigned
109 (62.3%) exact matches, in which:
107 unique CDR3
6 unique J



Allele Usage



[illegible]