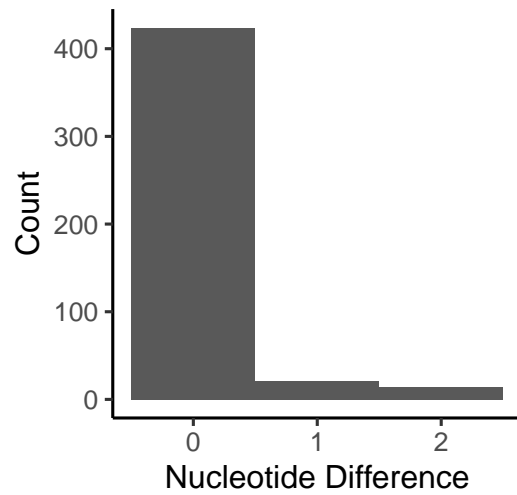


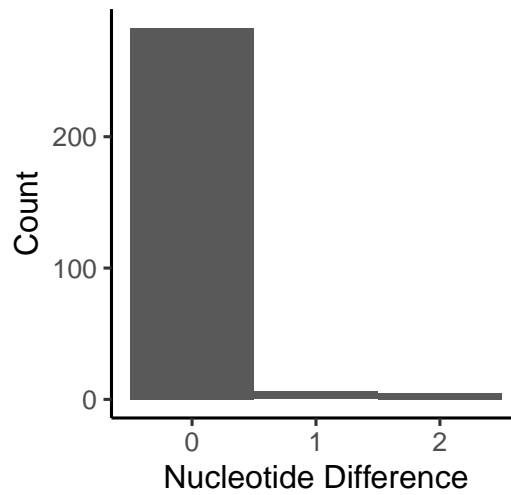
IGHV1-2*04

459 sequences assigned
424 (92.4%) exact matches, in which:
422 unique CDR3
6 unique J



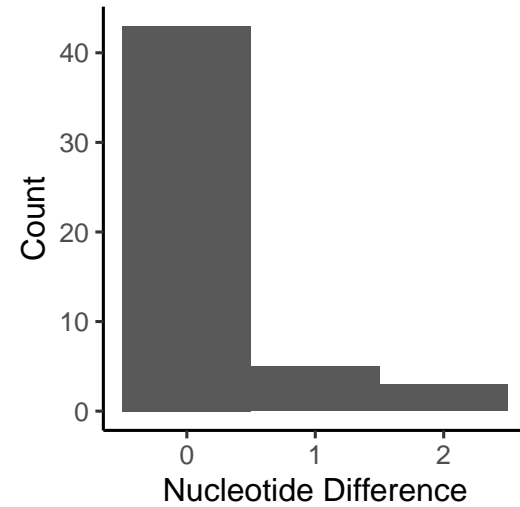
IGHV1-24*01

294 sequences assigned
283 (96.3%) exact matches, in which:
283 unique CDR3
7 unique J



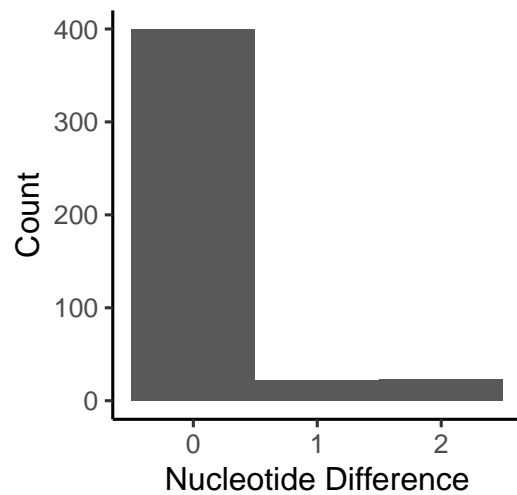
IGHV1-58*02

51 sequences assigned
43 (84.3%) exact matches, in which:
43 unique CDR3
5 unique J



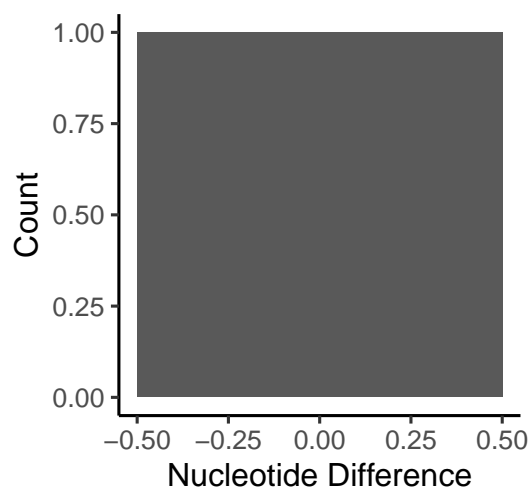
IGHV1-3*01_05

445 sequences assigned
400 (89.9%) exact matches, in which:
398 unique CDR3
7 unique J



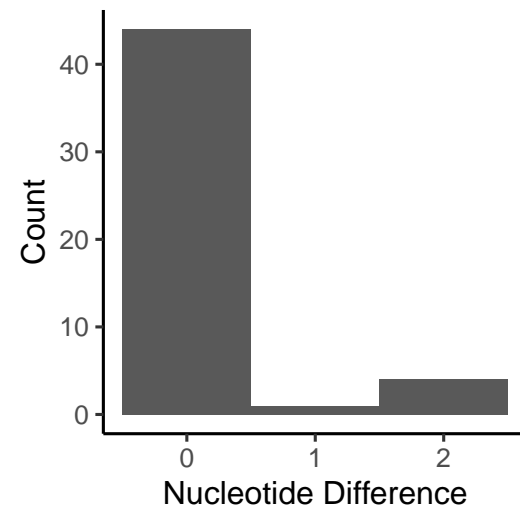
IGHV1-45*02

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



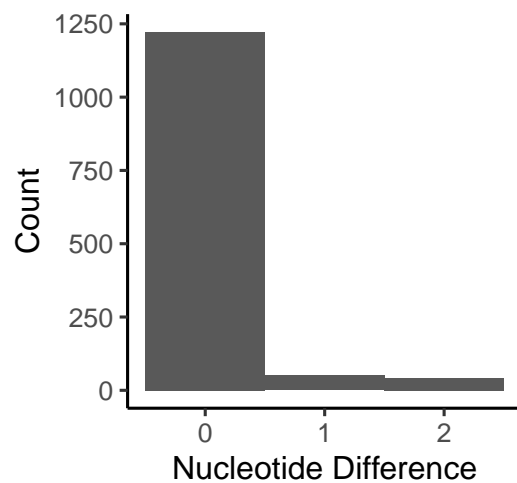
IGHV1-58*01_03

49 sequences assigned
44 (89.8%) exact matches, in which:
44 unique CDR3
4 unique J



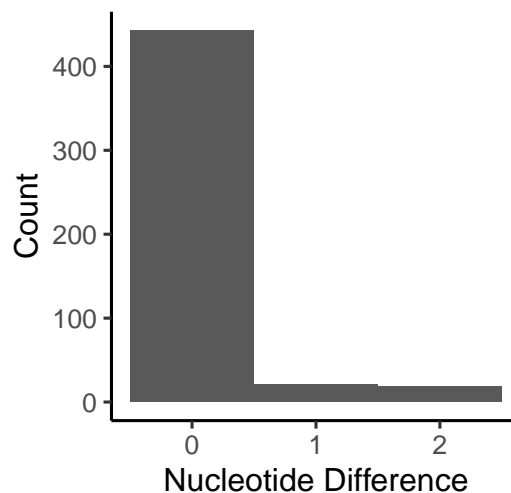
IGHV1-18*01

1316 sequences assigned
1222 (92.9%) exact matches, in which:
1220 unique CDR3
7 unique J



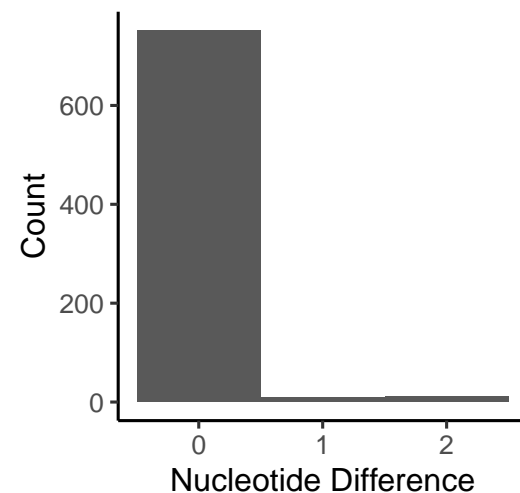
IGHV1-46*01

482 sequences assigned
443 (91.9%) exact matches, in which:
442 unique CDR3
7 unique J



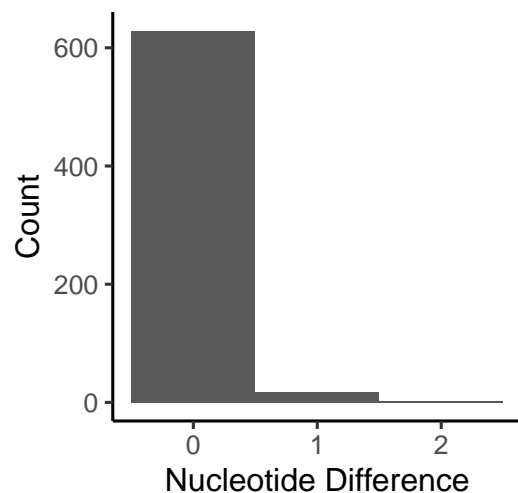
IGHV1-69*01_12_13

772 sequences assigned
752 (97.4%) exact matches, in which:
751 unique CDR3
7 unique J



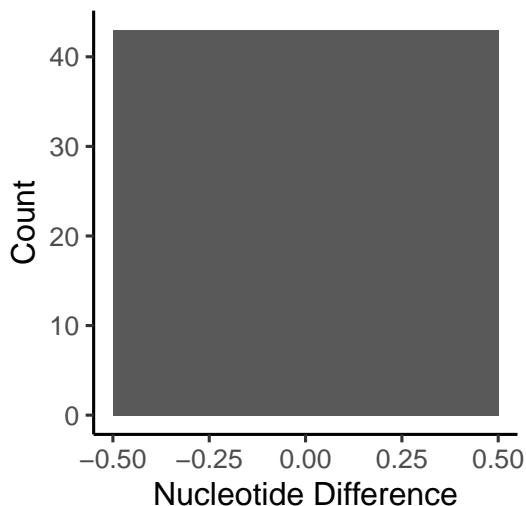
IGHV1-69*04_09

649 sequences assigned
629 (96.9%) exact matches, in which:
629 unique CDR3
7 unique J



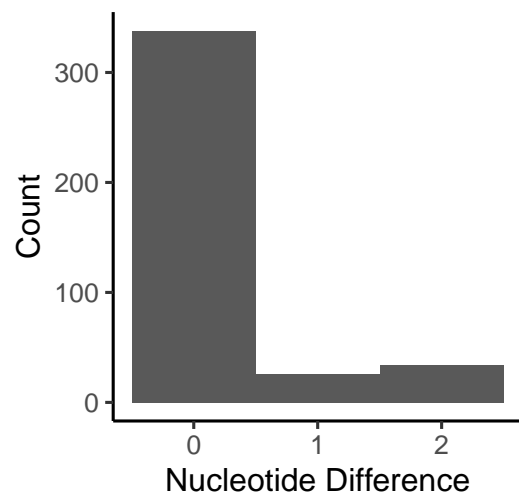
IGHV2-26*01

43 sequences assigned
43 (100%) exact matches, in which:
43 unique CDR3
5 unique J



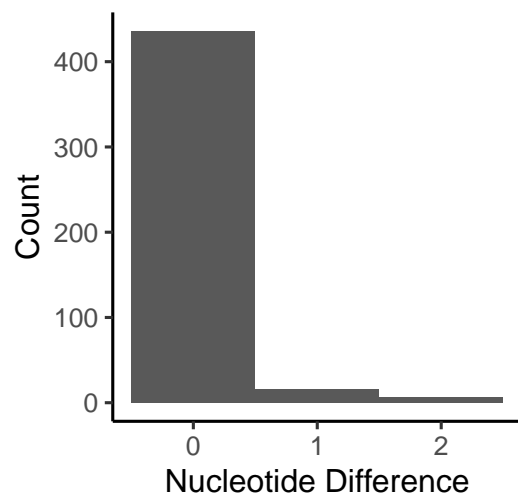
IGHV3-7*03

398 sequences assigned
338 (84.9%) exact matches, in which:
327 unique CDR3
7 unique J



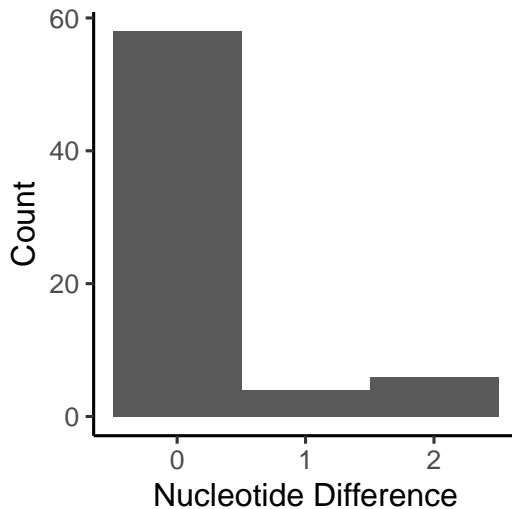
IGHV1-69*06_14

458 sequences assigned
436 (95.2%) exact matches, in which:
435 unique CDR3
6 unique J



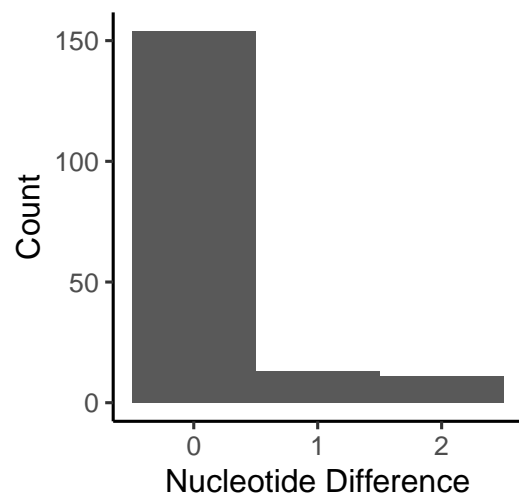
IGHV2-70*01

68 sequences assigned
58 (85.3%) exact matches, in which:
57 unique CDR3
4 unique J



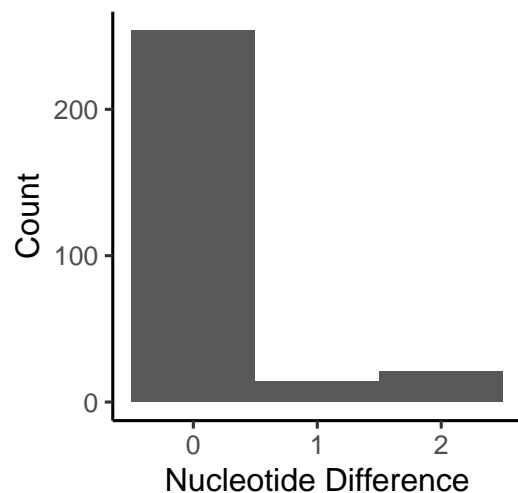
IGHV3-7*04

178 sequences assigned
154 (86.5%) exact matches, in which:
151 unique CDR3
6 unique J



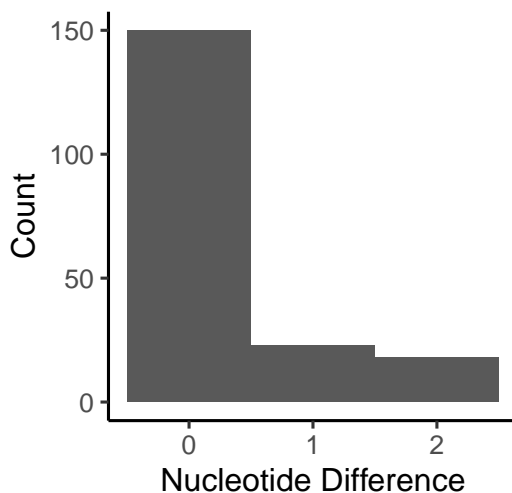
IGHV2-5*02

289 sequences assigned
254 (87.9%) exact matches, in which:
254 unique CDR3
7 unique J



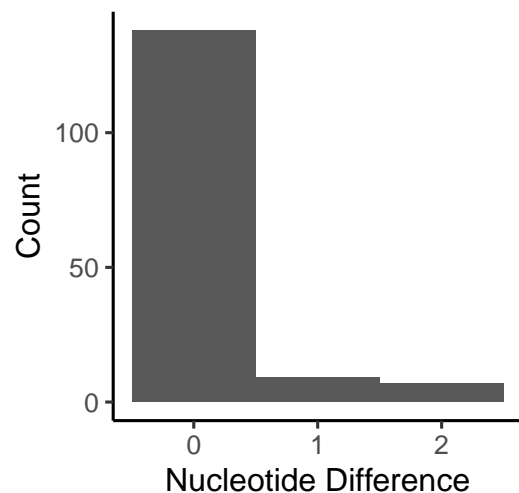
IGHV2-70*11_15

191 sequences assigned
150 (78.5%) exact matches, in which:
149 unique CDR3
5 unique J



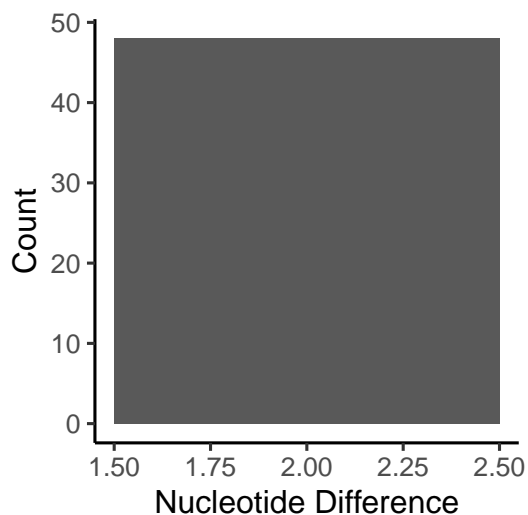
IGHV3-11*06

154 sequences assigned
138 (89.6%) exact matches, in which:
138 unique CDR3
6 unique J



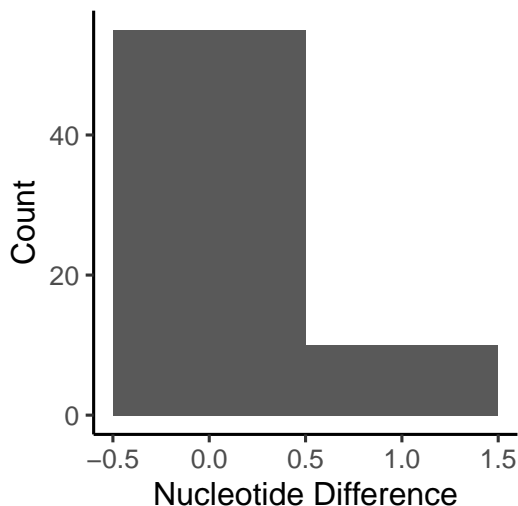
IGHV3-13*01

48 sequences assigned
No exact matches.



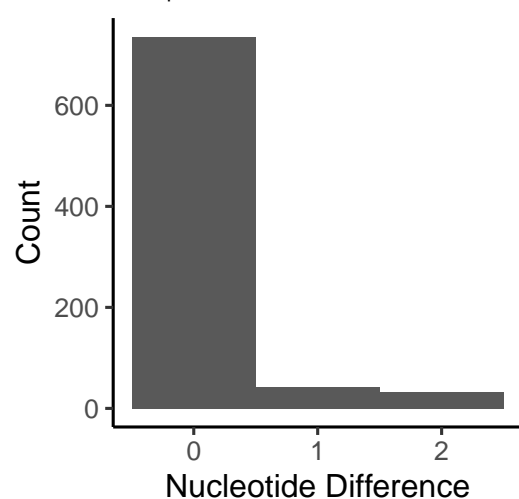
IGHV3-20*03_04

65 sequences assigned
55 (84.6%) exact matches, in which:
53 unique CDR3
6 unique J



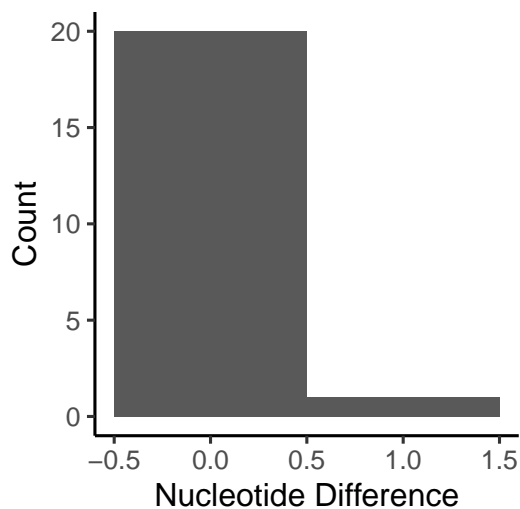
IGHV3-30-3*01

810 sequences assigned
736 (90.9%) exact matches, in which:
724 unique CDR3
7 unique J



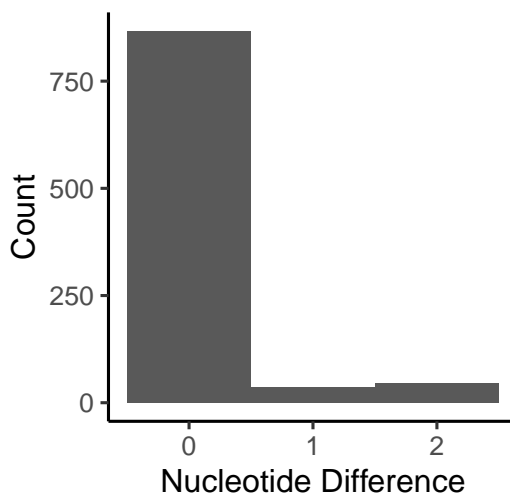
IGHV3-13*05

21 sequences assigned
20 (95.2%) exact matches, in which:
19 unique CDR3
4 unique J



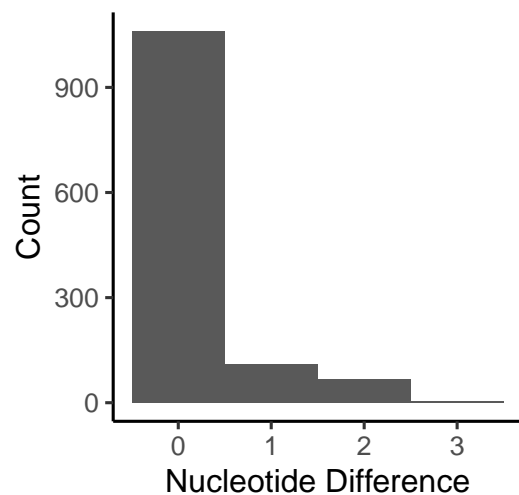
IGHV3-21*01_02

949 sequences assigned
867 (91.4%) exact matches, in which:
835 unique CDR3
7 unique J



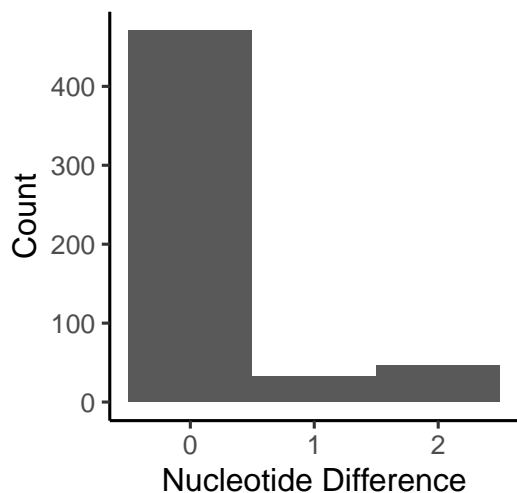
IGHV3-33*01

1241 sequences assigned
1061 (85.5%) exact matches, in which:
1033 unique CDR3
7 unique J



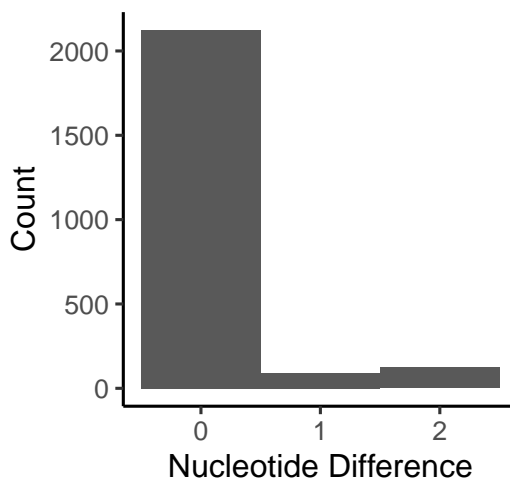
IGHV3-15*07

549 sequences assigned
471 (85.8%) exact matches, in which:
458 unique CDR3
7 unique J



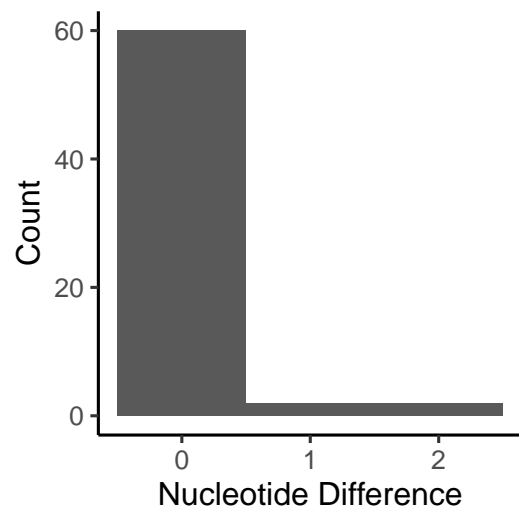
IGHV3-23*01_04

2338 sequences assigned
2124 (90.8%) exact matches, in which:
2077 unique CDR3
7 unique J



IGHV3-43*01

64 sequences assigned
60 (93.8%) exact matches, in which:
60 unique CDR3
6 unique J



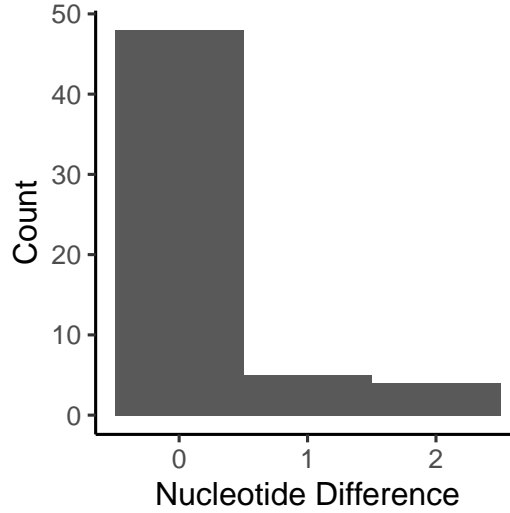
IGHV3-47*02

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



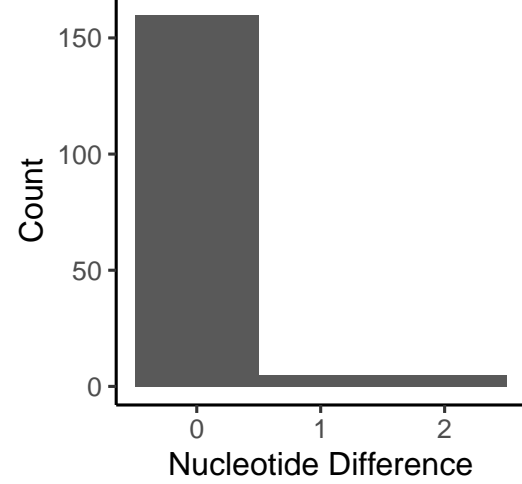
IGHV3-49*04

57 sequences assigned
48 (84.2%) exact matches, in which:
48 unique CDR3
4 unique J



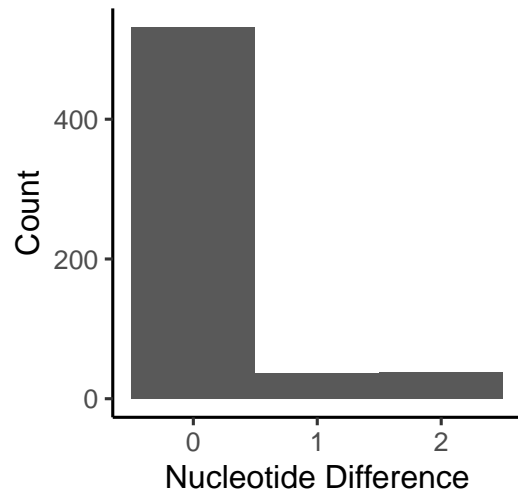
IGHV3-53*01_02

170 sequences assigned
160 (94.1%) exact matches, in which:
156 unique CDR3
6 unique J



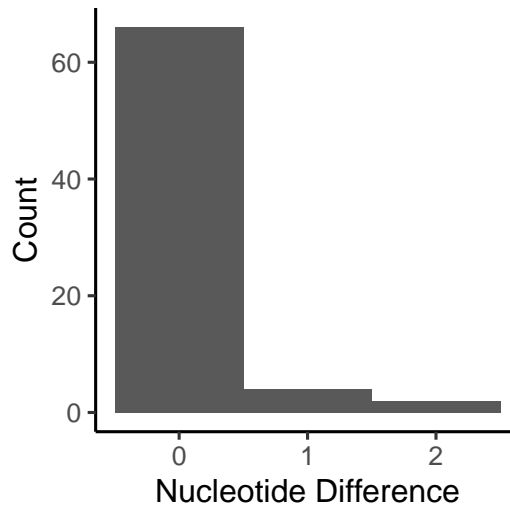
IGHV3-48*02

606 sequences assigned
532 (87.8%) exact matches, in which:
512 unique CDR3
6 unique J



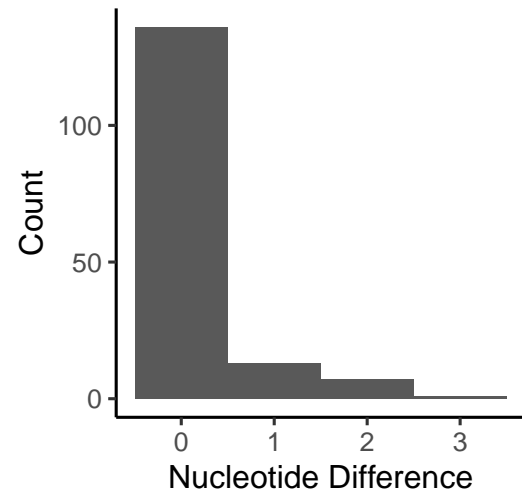
IGHV3-49*03_05

72 sequences assigned
66 (91.7%) exact matches, in which:
66 unique CDR3
4 unique J



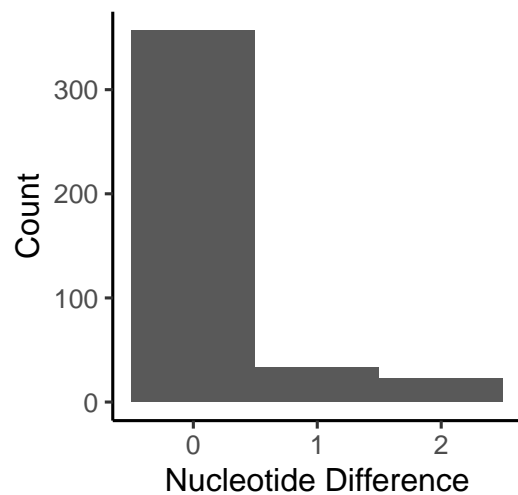
IGHV3-64*01

157 sequences assigned
136 (86.6%) exact matches, in which:
127 unique CDR3
6 unique J



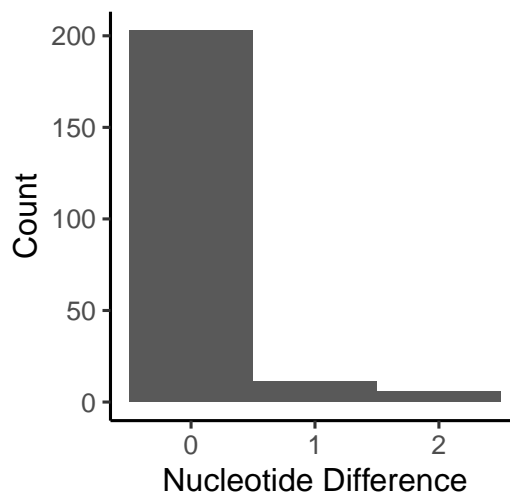
IGHV3-48*03

413 sequences assigned
357 (86.4%) exact matches, in which:
344 unique CDR3
6 unique J



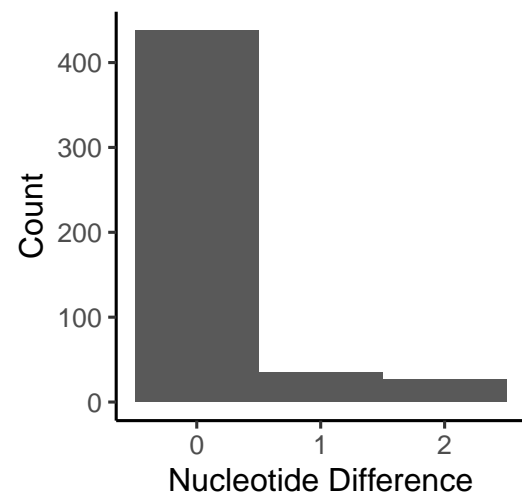
IGHV3-53*04

220 sequences assigned
203 (92.3%) exact matches, in which:
193 unique CDR3
6 unique J



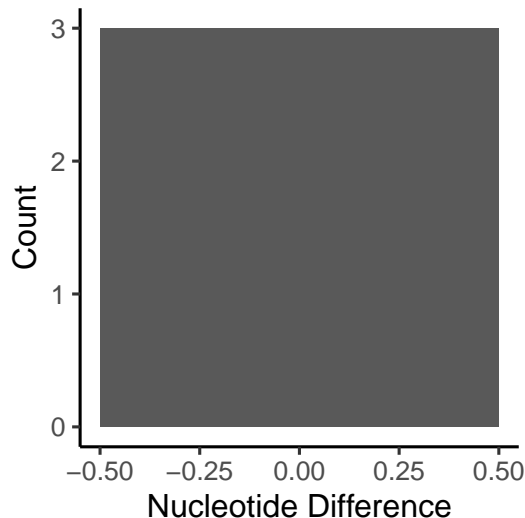
IGHV3-66*01

500 sequences assigned
438 (87.6%) exact matches, in which:
419 unique CDR3
6 unique J



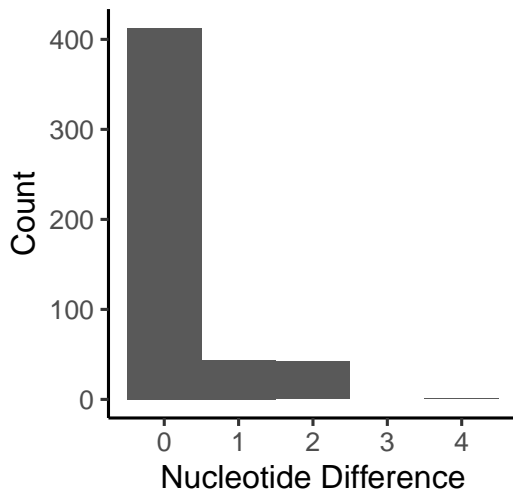
IGHV3-69-1*01

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



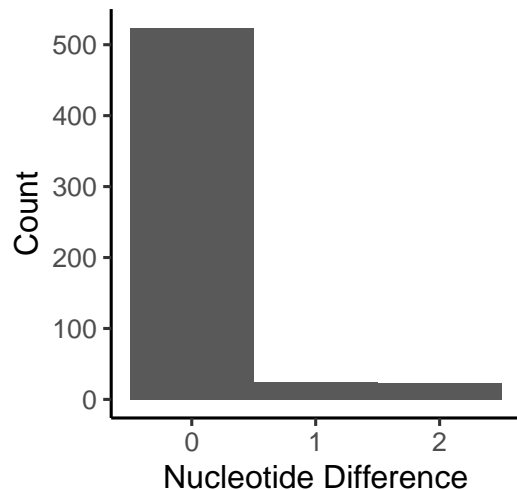
IGHV3-74*01_02

500 sequences assigned
413 (82.6%) exact matches, in which:
394 unique CDR3
7 unique J



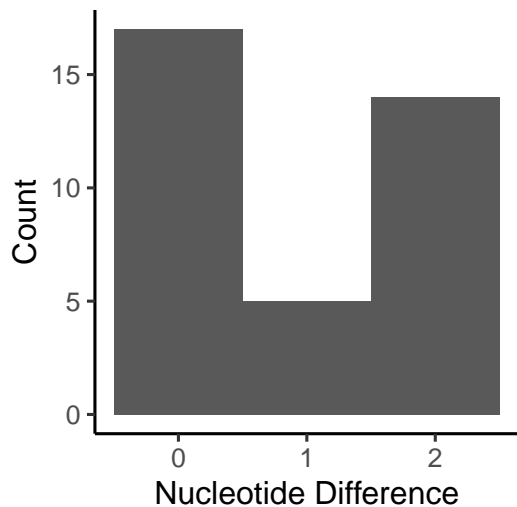
IGHV4-4*02_03

571 sequences assigned
524 (91.8%) exact matches, in which:
517 unique CDR3
7 unique J



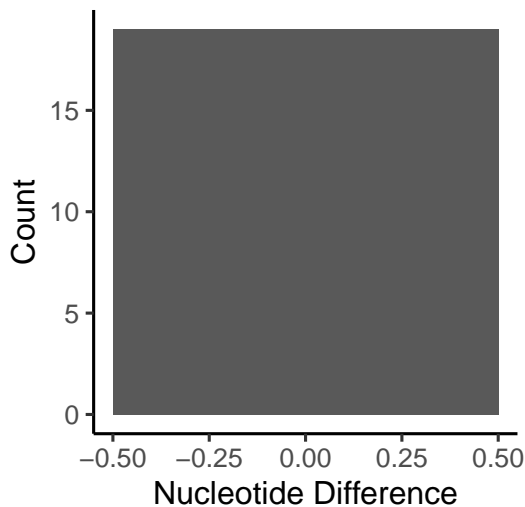
IGHV3-72*01

36 sequences assigned
17 (47.2%) exact matches, in which:
17 unique CDR3
5 unique J



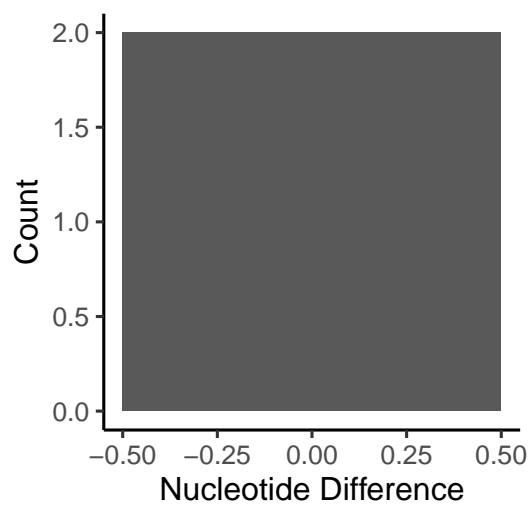
IGHV3-43D*04

19 sequences assigned
19 (100%) exact matches, in which:
19 unique CDR3
3 unique J



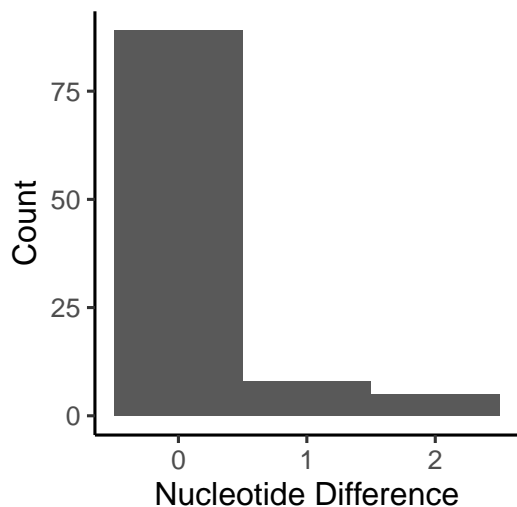
IGHV4-28*03

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



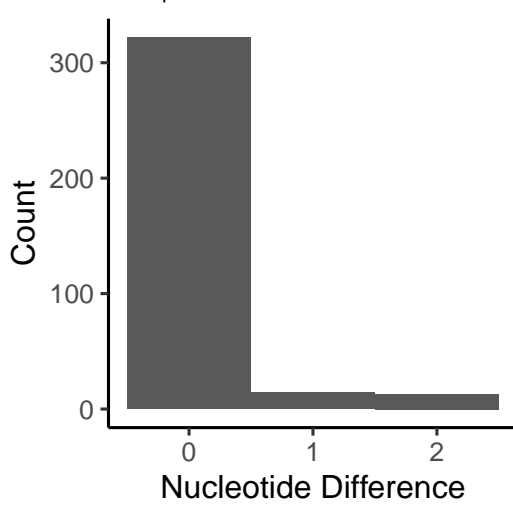
IGHV3-73*01_02

102 sequences assigned
89 (87.3%) exact matches, in which:
88 unique CDR3
5 unique J



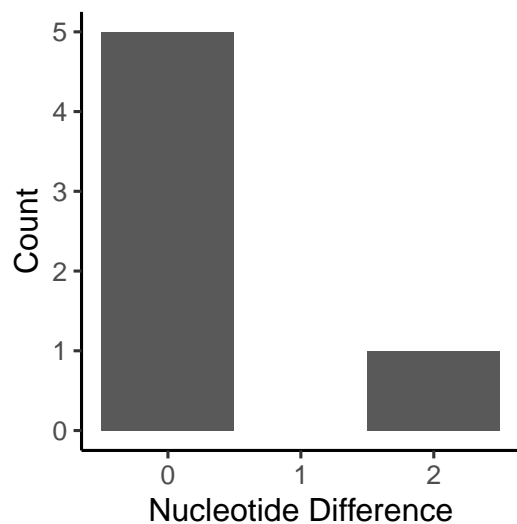
IGHV3-64D*06

349 sequences assigned
322 (92.3%) exact matches, in which:
312 unique CDR3
7 unique J



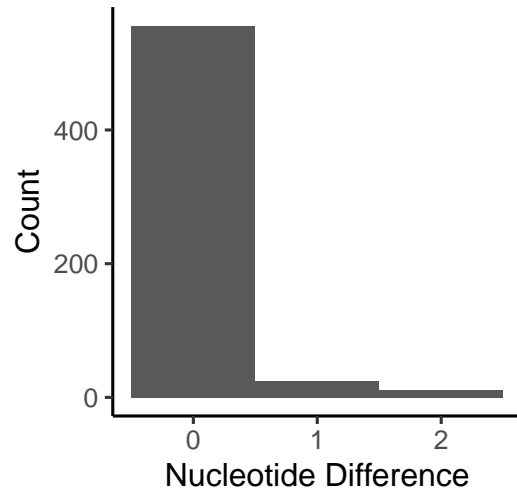
IGHV4-28*01_07

6 sequences assigned
5 (83.3%) exact matches, in which:
4 unique CDR3
4 unique J



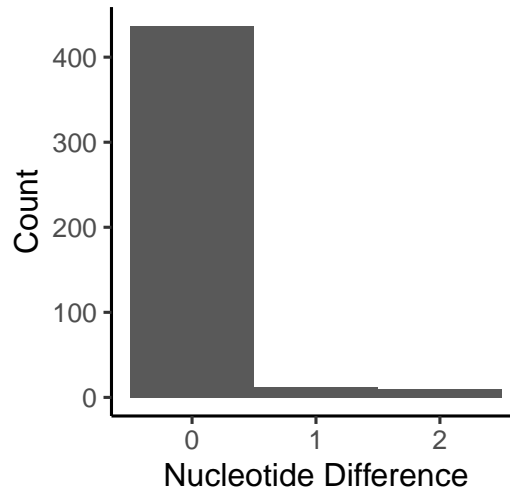
IGHV4-30-2*01

592 sequences assigned
556 (93.9%) exact matches, in which:
539 unique CDR3
7 unique J



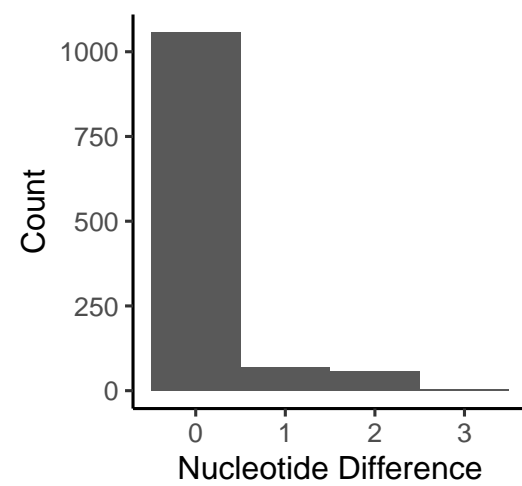
IGHV4-31*02

459 sequences assigned
437 (95.2%) exact matches, in which:
430 unique CDR3
7 unique J



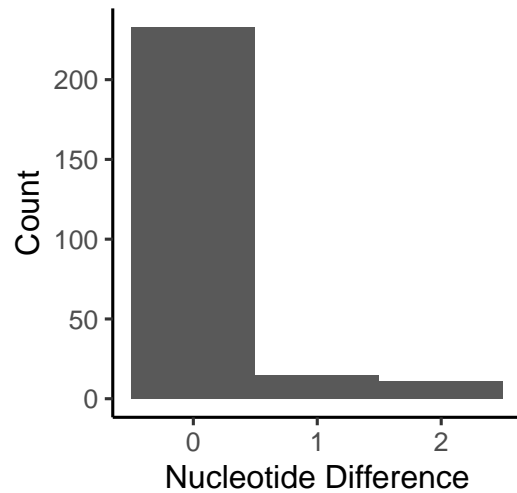
IGHV4-39*02_C258G

1189 sequences assigned
1057 (88.9%) exact matches, in which:
1034 unique CDR3
7 unique J



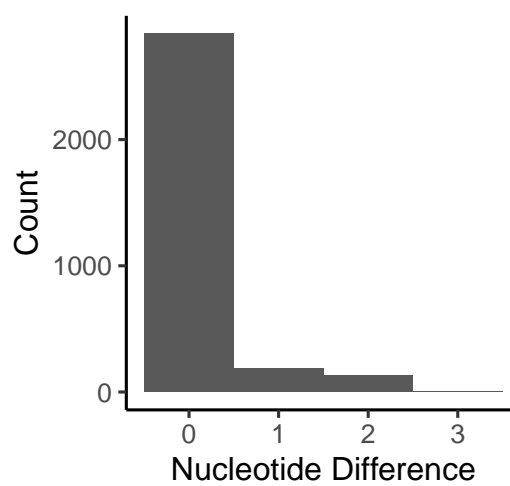
IGHV4-30-4*01

259 sequences assigned
233 (90%) exact matches, in which:
227 unique CDR3
5 unique J



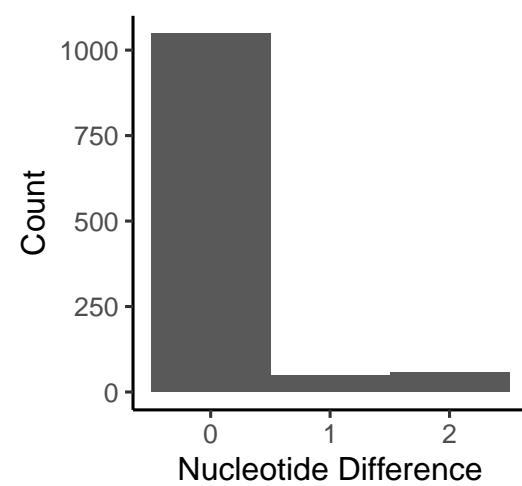
IGHV4-34*01_02

3160 sequences assigned
2839 (89.8%) exact matches, in which:
2735 unique CDR3
7 unique J



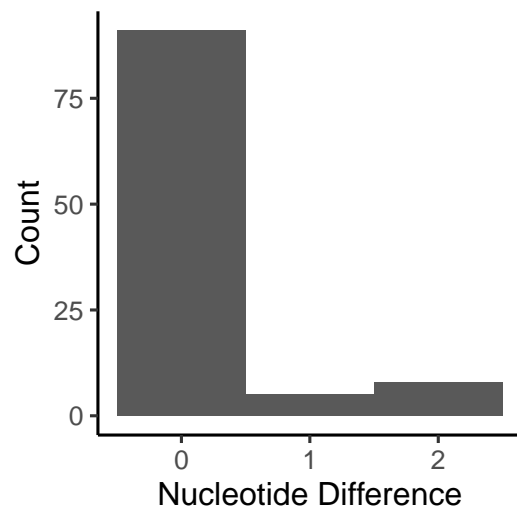
IGHV4-59*08

1153 sequences assigned
1048 (90.9%) exact matches, in which:
1012 unique CDR3
7 unique J



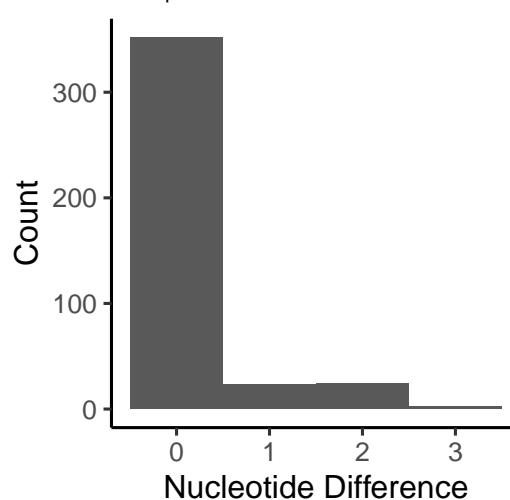
IGHV4-31*01

104 sequences assigned
91 (87.5%) exact matches, in which:
91 unique CDR3
5 unique J



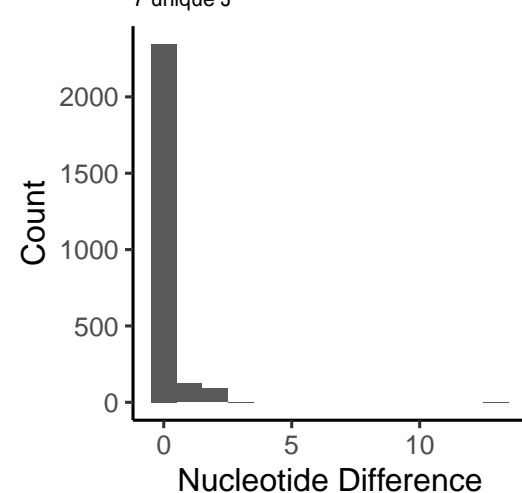
IGHV4-38-2*02_A70G

401 sequences assigned
352 (87.8%) exact matches, in which:
345 unique CDR3
6 unique J



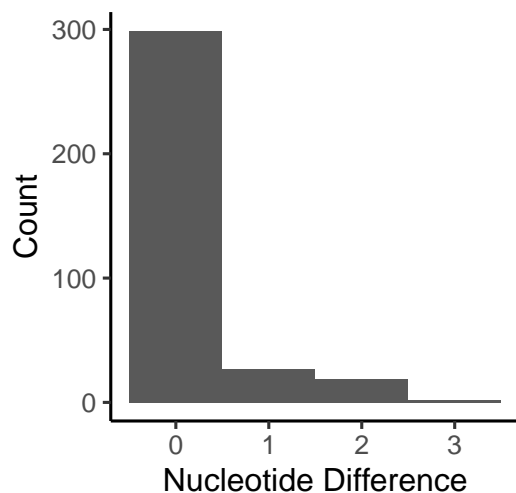
IGHV4-59*02_G88A

2562 sequences assigned
2346 (91.6%) exact matches, in which:
2289 unique CDR3
7 unique J



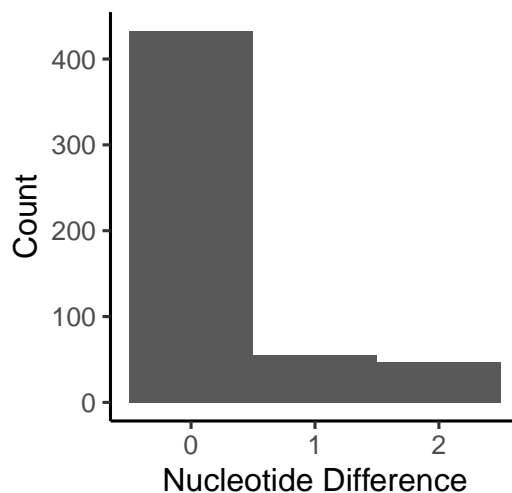
IGHV4–61*01

347 sequences assigned
299 (86.2%) exact matches, in which:
292 unique CDR3
7 unique J



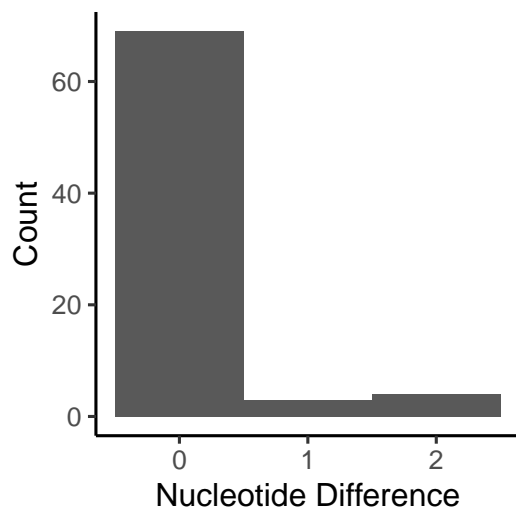
IGHV6–1*01_02

535 sequences assigned
433 (80.9%) exact matches, in which:
433 unique CDR3
7 unique J



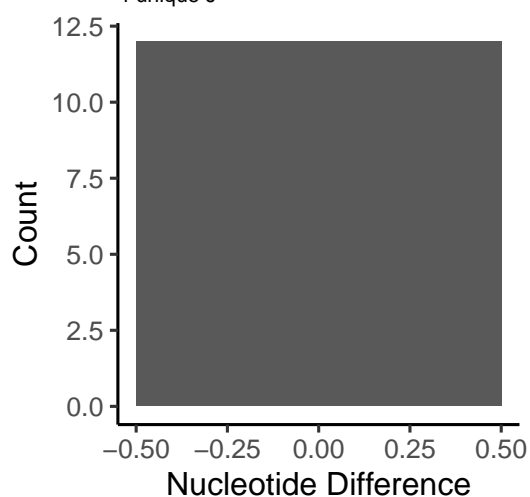
IGHV5–10–1*01_03

76 sequences assigned
69 (90.8%) exact matches, in which:
69 unique CDR3
5 unique J



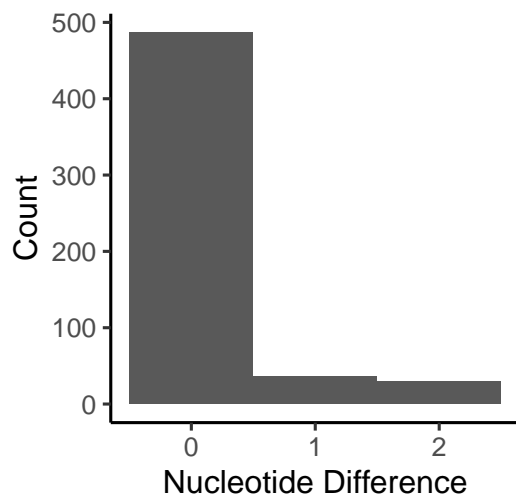
IGHV7–4–1*01

12 sequences assigned
12 (100%) exact matches, in which:
12 unique CDR3
4 unique J

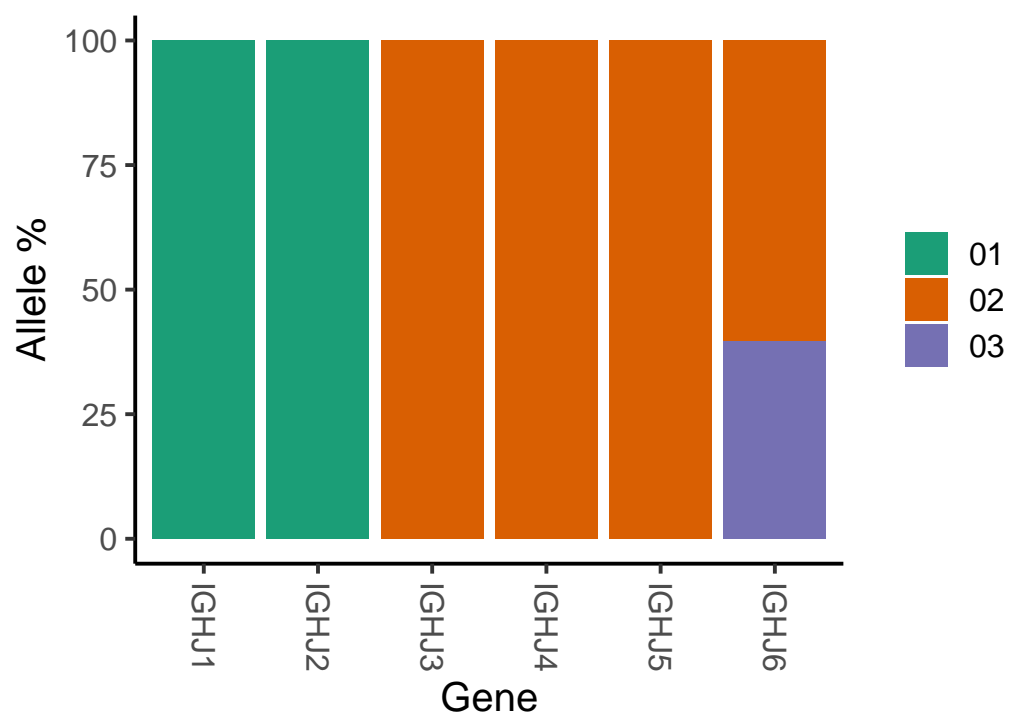


IGHV5–51*07_A128G

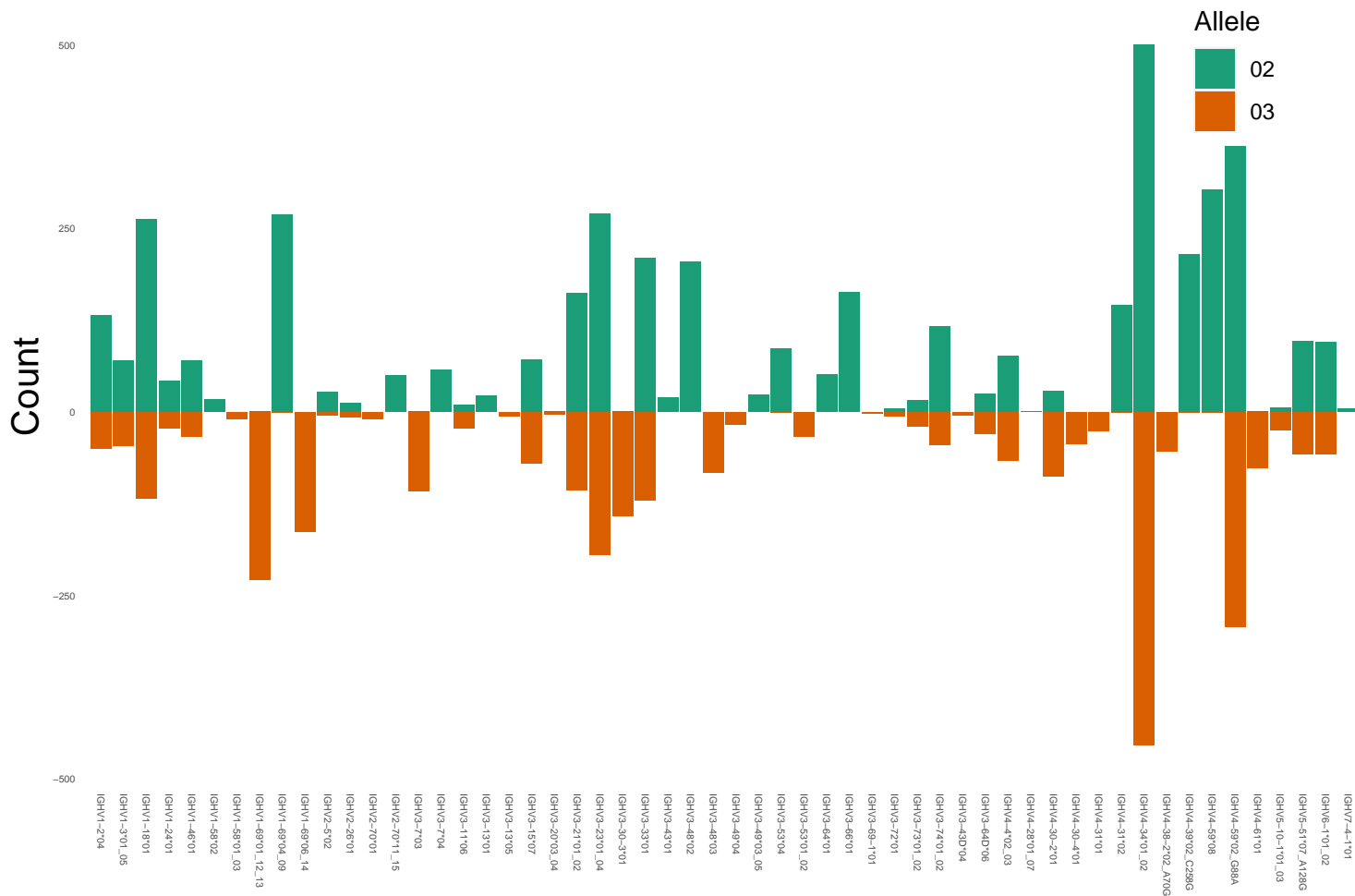
553 sequences assigned
487 (88.1%) exact matches, in which:
486 unique CDR3
7 unique J



Allele Usage



Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.