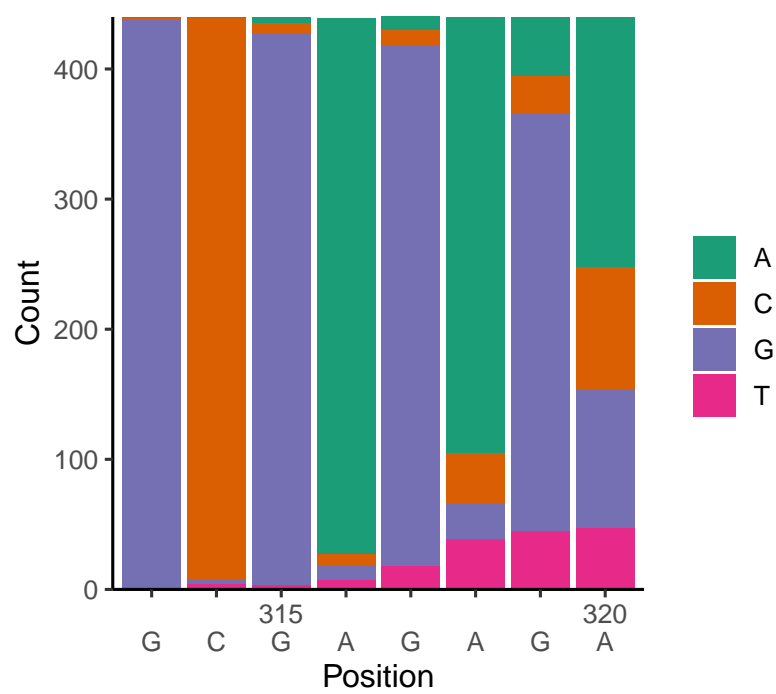
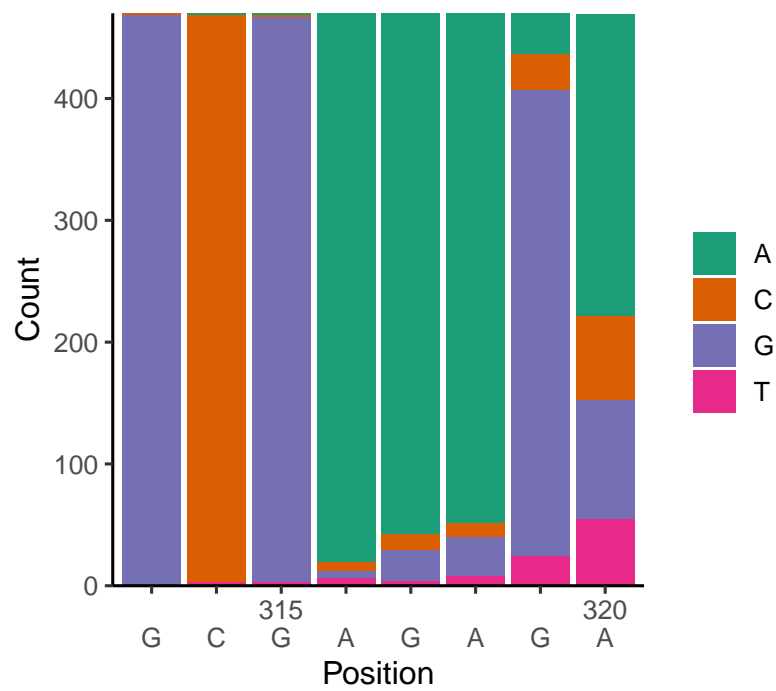


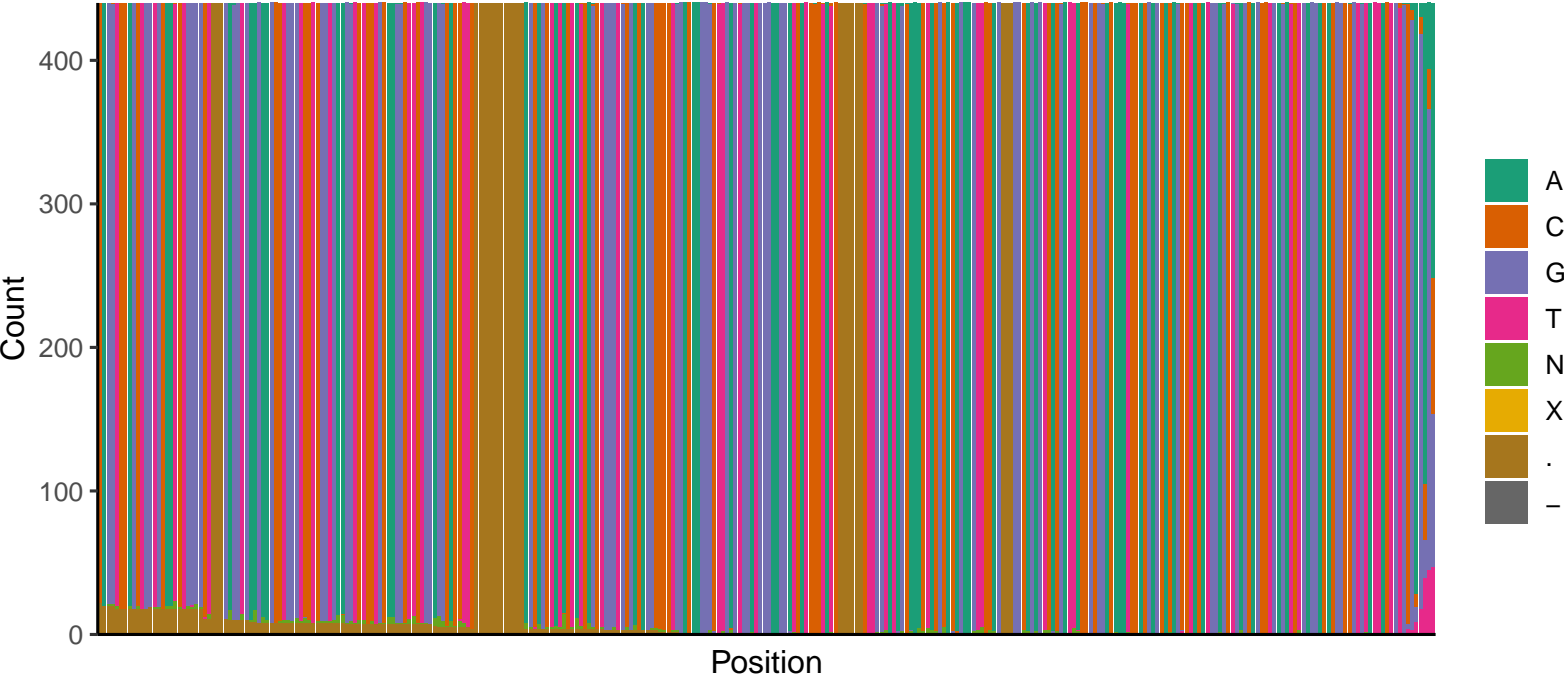
Gene IGHV1-69*08_C191T



Gene IGHV3-30*04_C201T



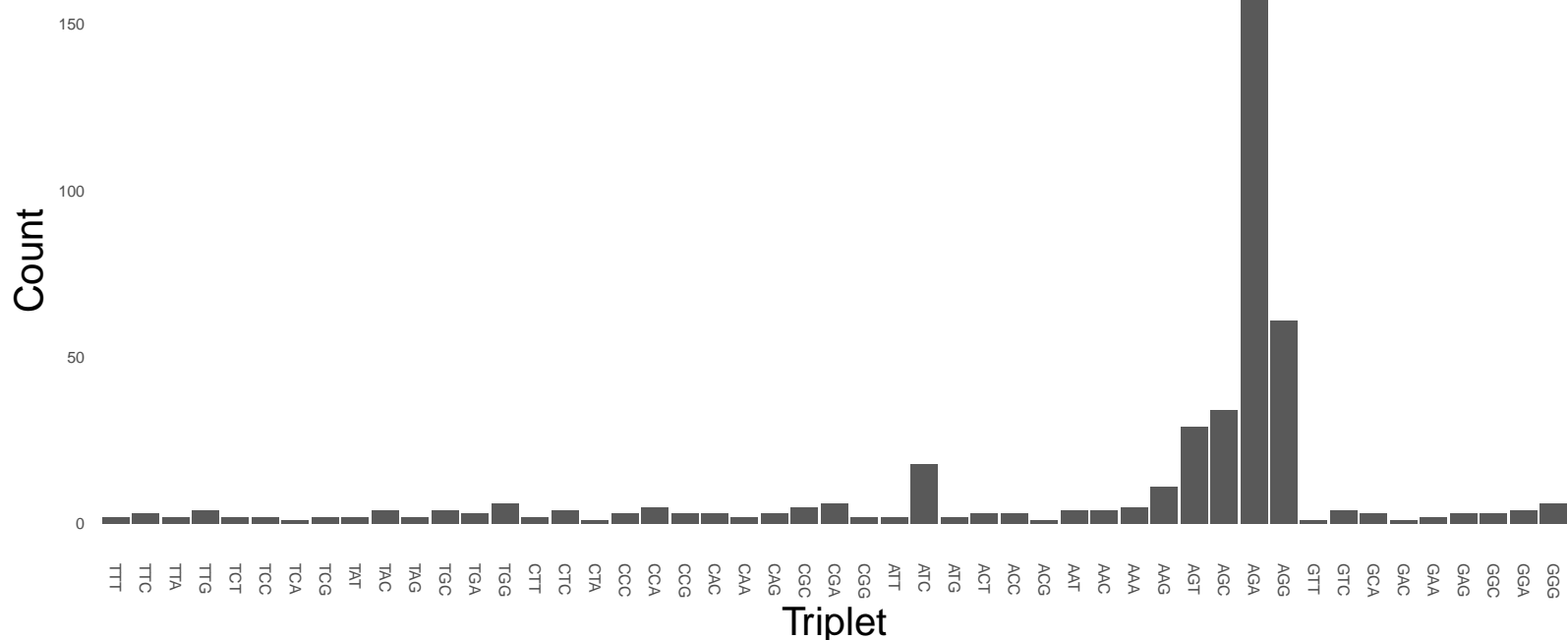
Gene IGHV1-69*08_C191T



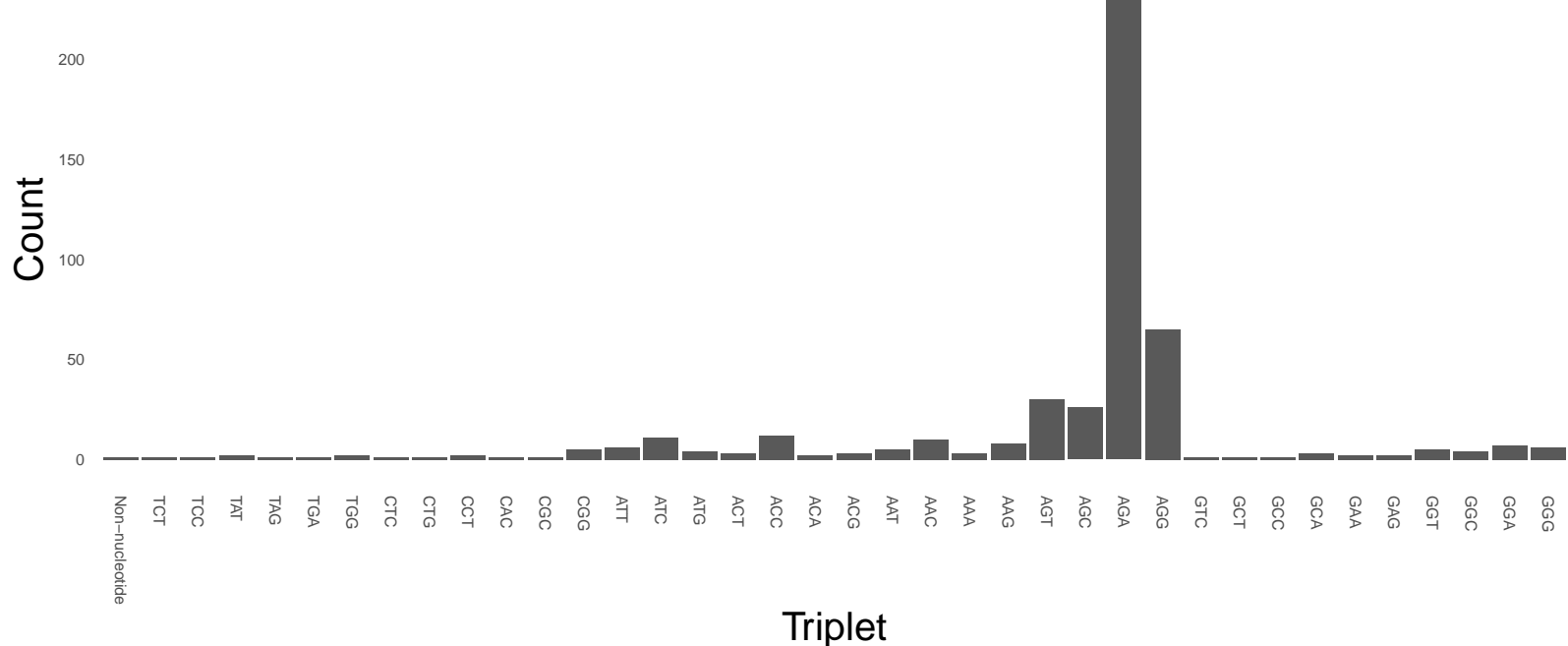
Gene IGHV3-30*04_C201T



IGHV1-69*08_C191T- Final 3 nucleotides as a triplet

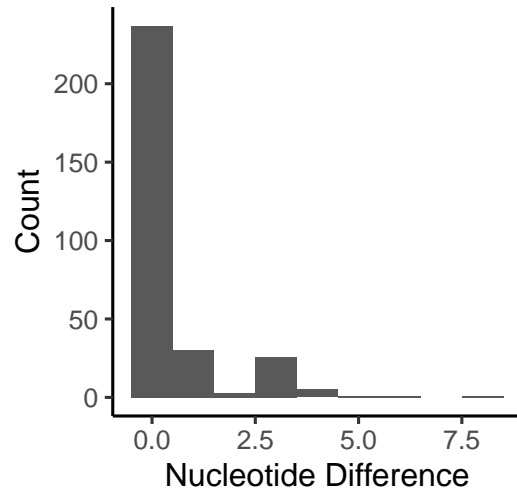


IGHV3-30*04_C201T- Final 3 nucleotides as a triplet



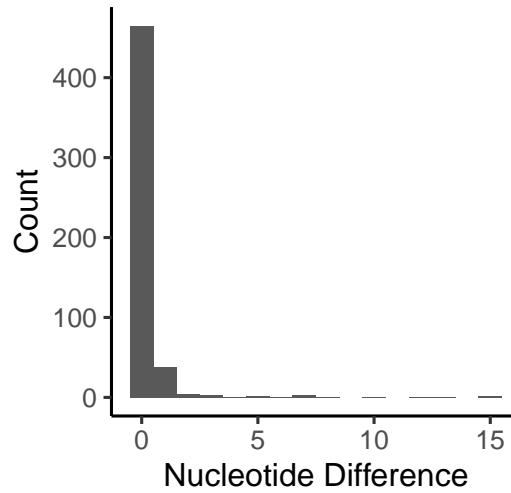
IGHV1-2*04

304 sequences assigned
237 (78%) exact matches, in which:
229 unique CDR3
7 unique J



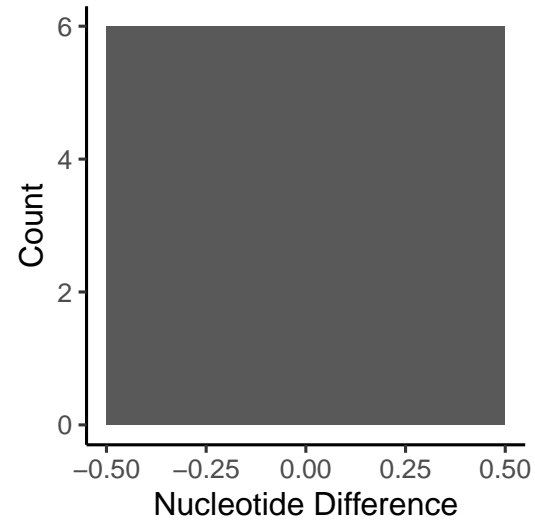
IGHV1-18*01

524 sequences assigned
465 (88.7%) exact matches, in which:
438 unique CDR3
7 unique J



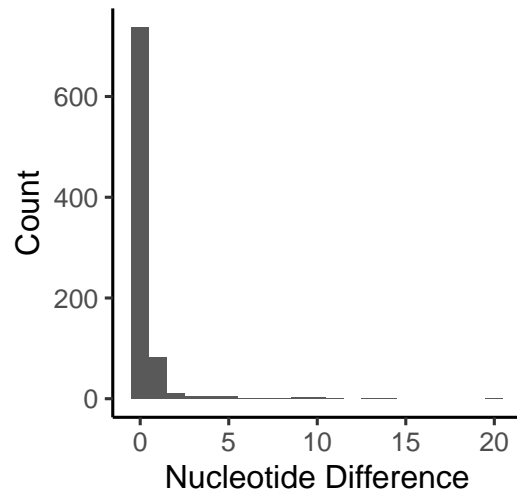
IGHV1-45*02

6 sequences assigned
6 (100%) exact matches, in which:
6 unique CDR3
3 unique J



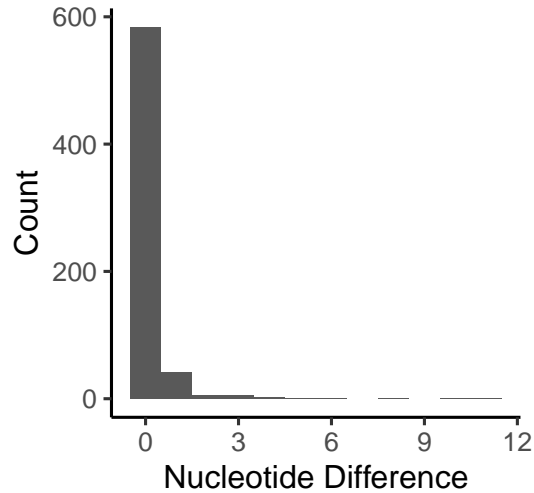
IGHV1-3*01

859 sequences assigned
738 (85.9%) exact matches, in which:
711 unique CDR3
7 unique J



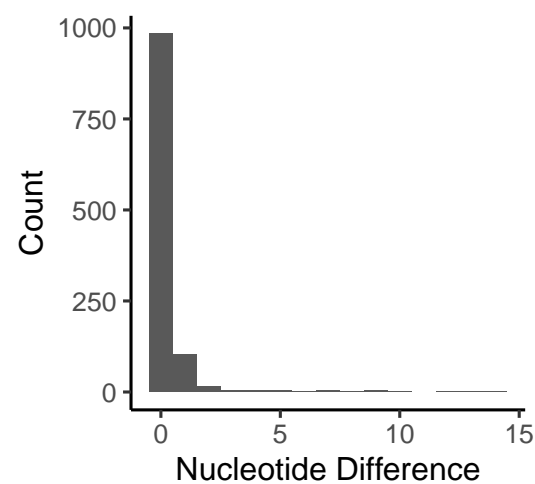
IGHV1-18*04

645 sequences assigned
584 (90.5%) exact matches, in which:
561 unique CDR3
6 unique J



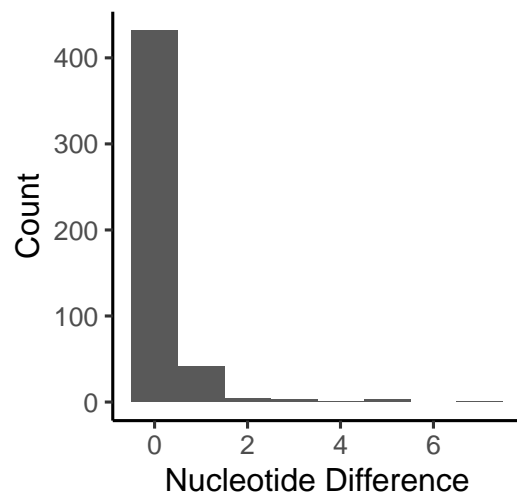
IGHV1-46*01

1129 sequences assigned
984 (87.2%) exact matches, in which:
932 unique CDR3
7 unique J



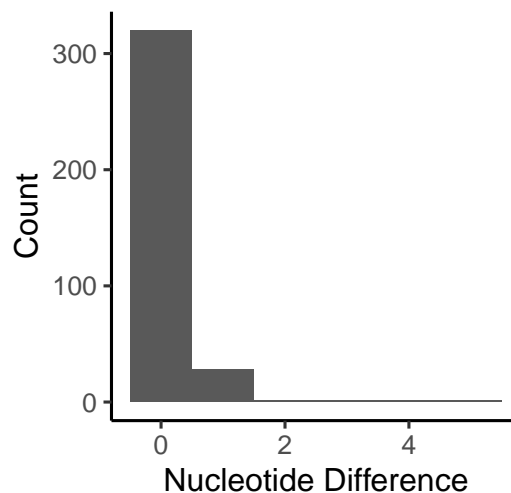
IGHV1-8*01

485 sequences assigned
432 (89.1%) exact matches, in which:
404 unique CDR3
6 unique J



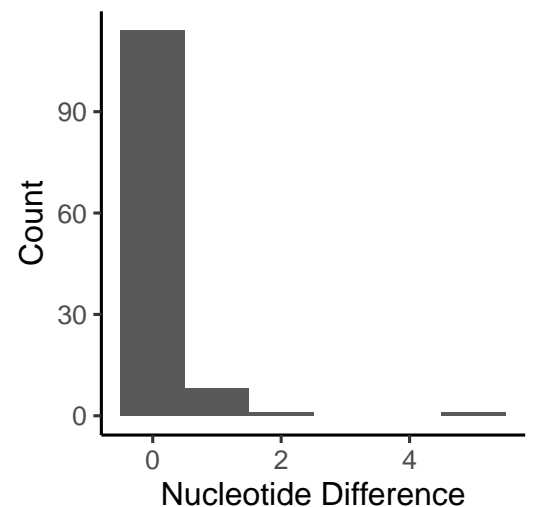
IGHV1-24*01

352 sequences assigned
320 (90.9%) exact matches, in which:
300 unique CDR3
7 unique J



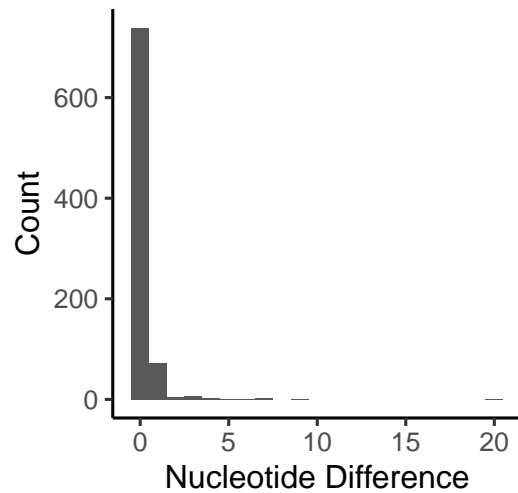
IGHV1-58*02

124 sequences assigned
114 (91.9%) exact matches, in which:
108 unique CDR3
6 unique J



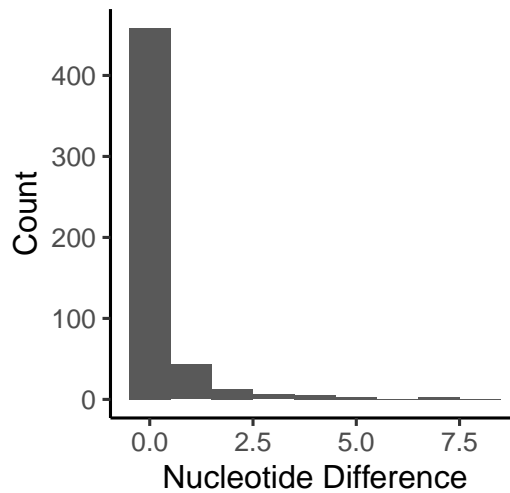
IGHV1–69*10

832 sequences assigned
739 (88.8%) exact matches, in which:
691 unique CDR3
7 unique J



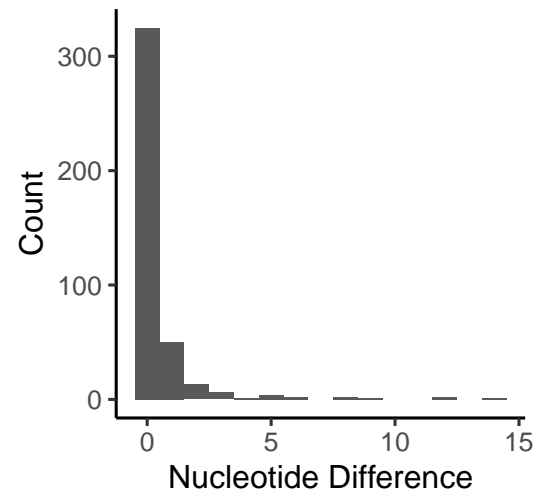
IGHV2–5*02

534 sequences assigned
459 (86%) exact matches, in which:
439 unique CDR3
6 unique J



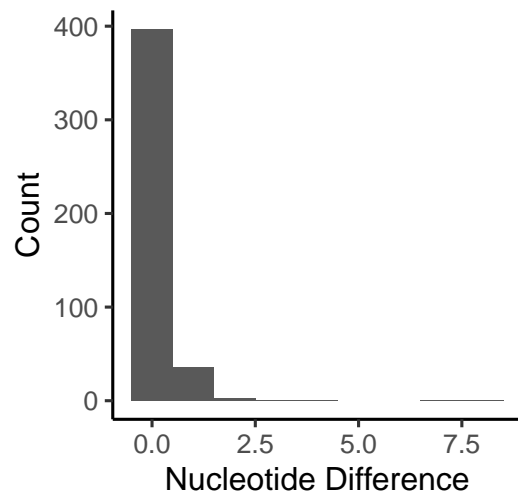
IGHV3–7*01

407 sequences assigned
325 (79.9%) exact matches, in which:
306 unique CDR3
7 unique J



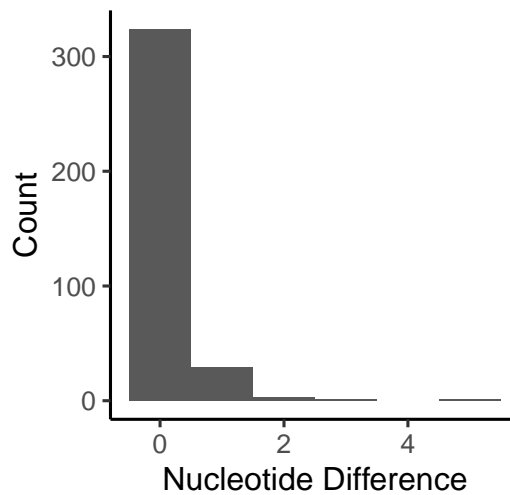
IGHV1–69*08_C191T

440 sequences assigned
397 (90.2%) exact matches, in which:
364 unique CDR3
6 unique J



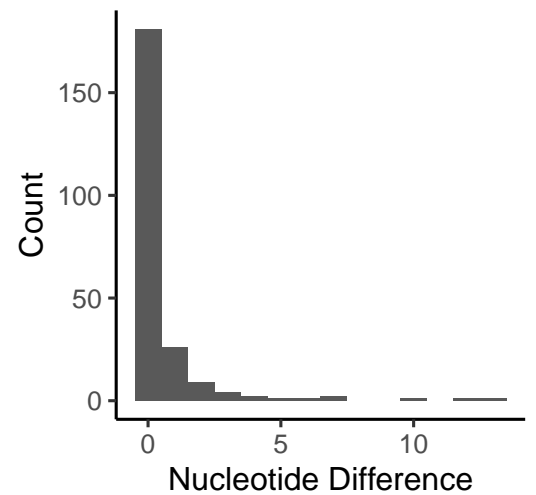
IGHV2–26*01

358 sequences assigned
324 (90.5%) exact matches, in which:
314 unique CDR3
7 unique J



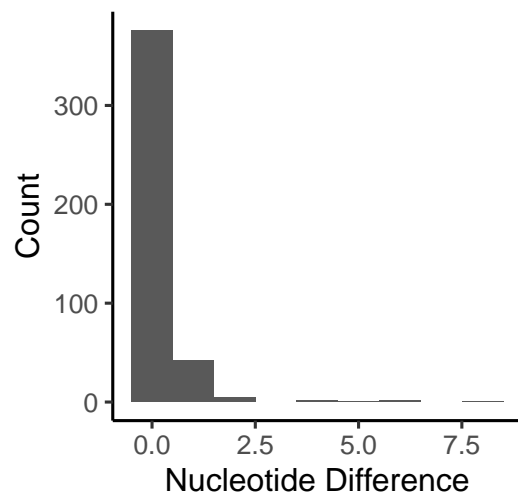
IGHV3–7*05

229 sequences assigned
181 (79%) exact matches, in which:
173 unique CDR3
6 unique J



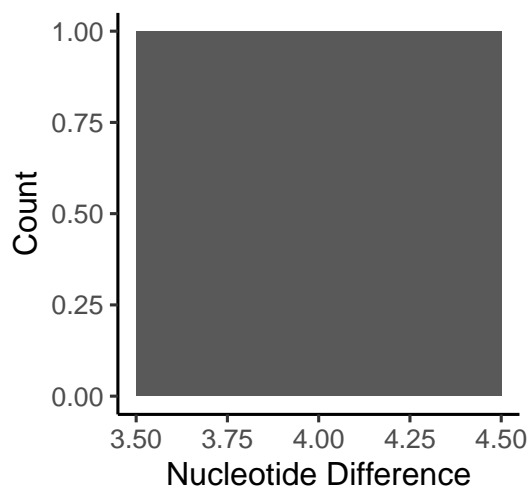
IGHV2–5*01

430 sequences assigned
376 (87.4%) exact matches, in which:
363 unique CDR3
6 unique J



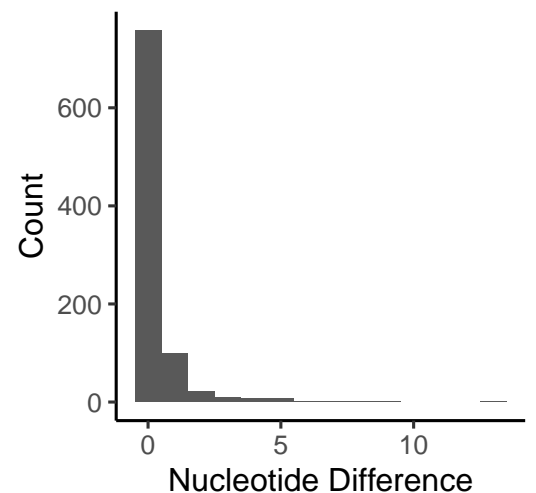
IGHV2–70*12

4 sequences assigned
No exact matches.



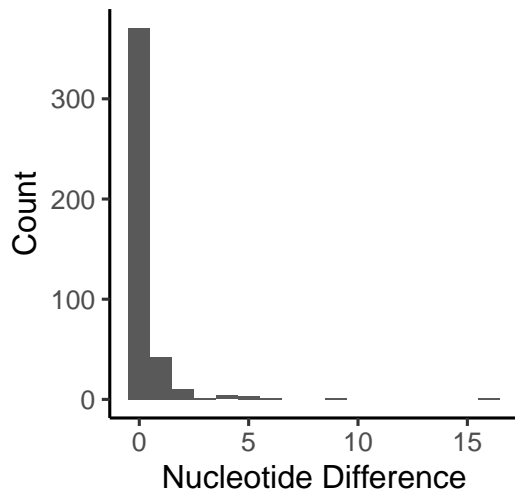
IGHV3–9*01

908 sequences assigned
758 (83.5%) exact matches, in which:
695 unique CDR3
7 unique J



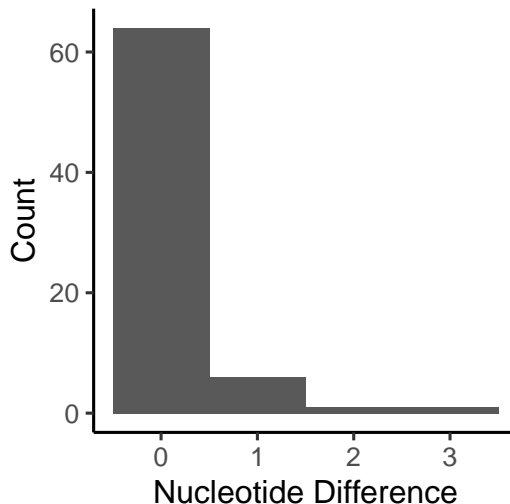
IGHV3-11*01

434 sequences assigned
371 (85.5%) exact matches, in which:
350 unique CDR3
6 unique J



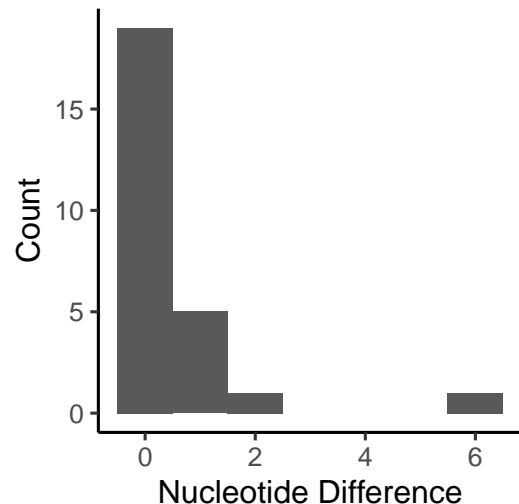
IGHV3-13*05

72 sequences assigned
64 (88.9%) exact matches, in which:
60 unique CDR3
5 unique J



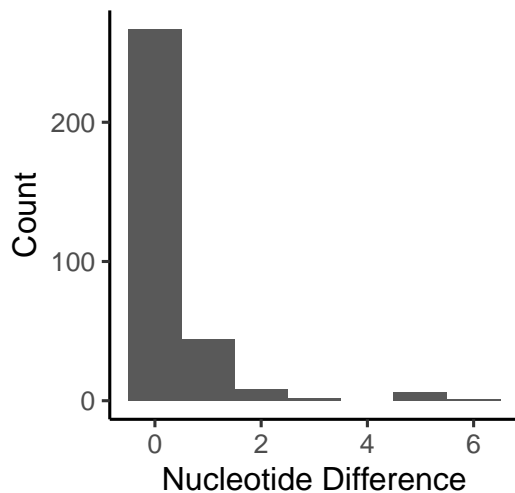
IGHV3-20*04

26 sequences assigned
19 (73.1%) exact matches, in which:
19 unique CDR3
5 unique J



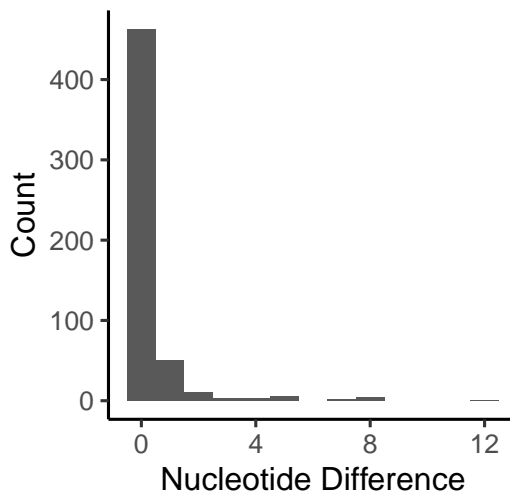
IGHV3-11*06

328 sequences assigned
267 (81.4%) exact matches, in which:
248 unique CDR3
6 unique J



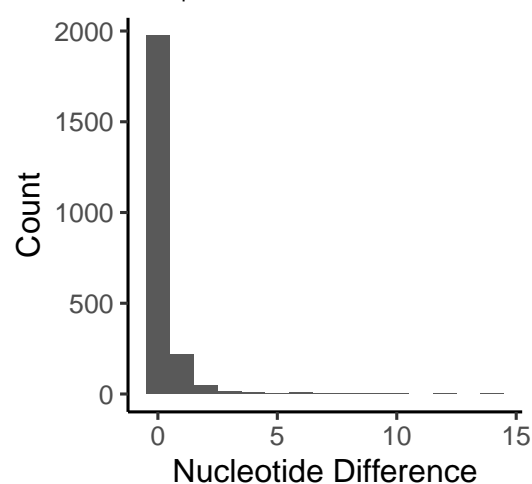
IGHV3-15*01

543 sequences assigned
463 (85.3%) exact matches, in which:
431 unique CDR3
6 unique J



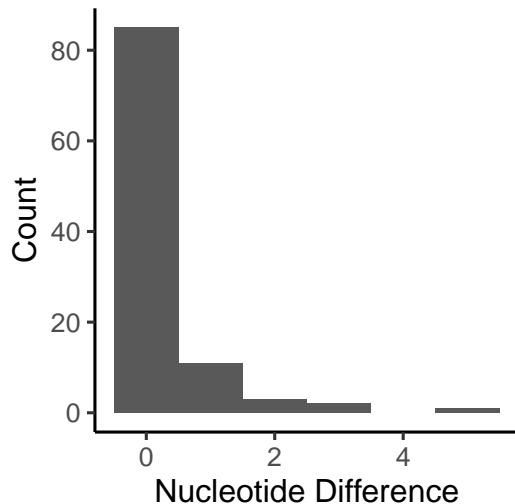
IGHV3-21*01

2285 sequences assigned
1974 (86.4%) exact matches, in which:
1815 unique CDR3
7 unique J



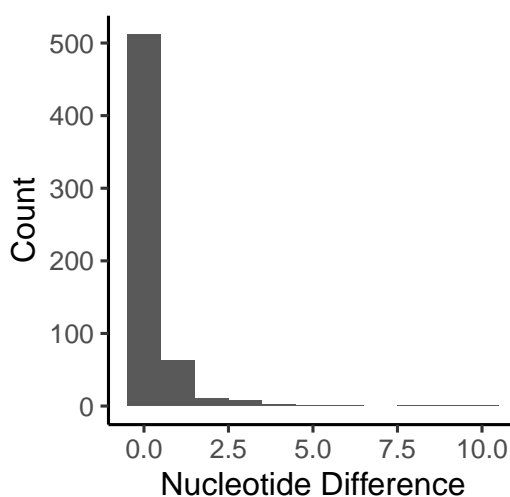
IGHV3-13*01

102 sequences assigned
85 (83.3%) exact matches, in which:
81 unique CDR3
5 unique J



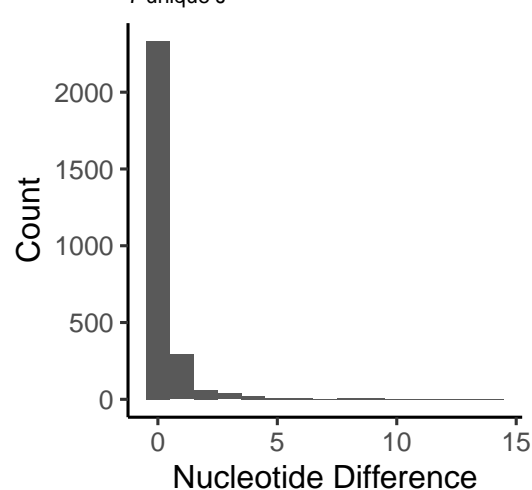
IGHV3-15*07

600 sequences assigned
512 (85.3%) exact matches, in which:
474 unique CDR3
7 unique J



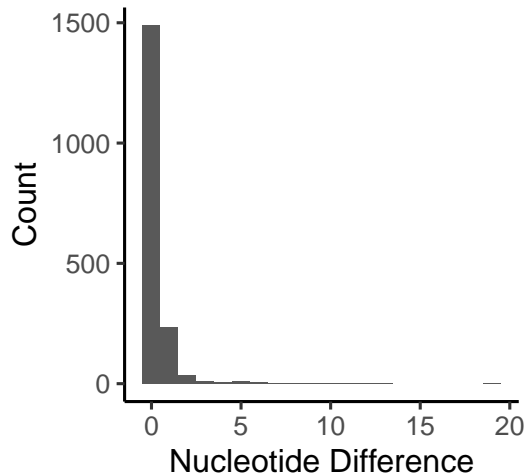
IGHV3-23*01

2790 sequences assigned
2333 (83.6%) exact matches, in which:
2140 unique CDR3
7 unique J



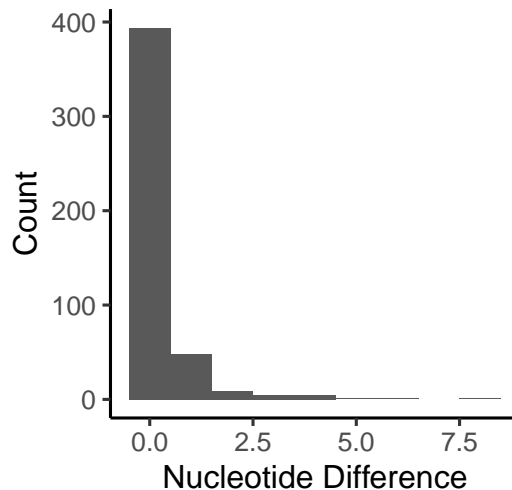
IGHV3-23*04

1807 sequences assigned
1489 (82.4%) exact matches, in which:
1388 unique CDR3
6 unique J



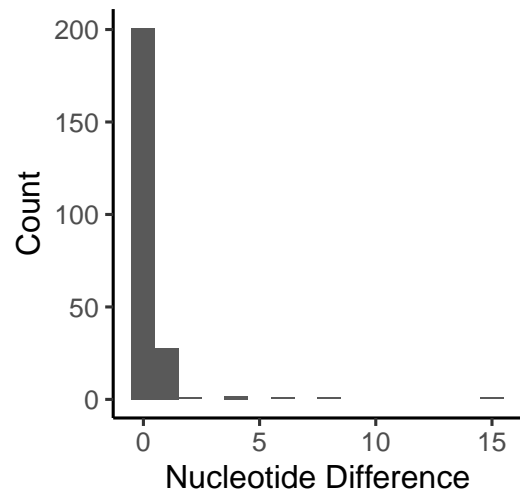
IGHV3-30*04_C201T

470 sequences assigned
394 (83.8%) exact matches, in which:
374 unique CDR3
7 unique J



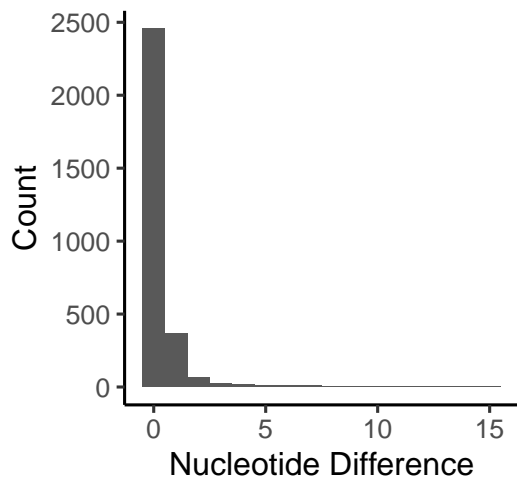
IGHV3-43*01

235 sequences assigned
201 (85.5%) exact matches, in which:
184 unique CDR3
7 unique J



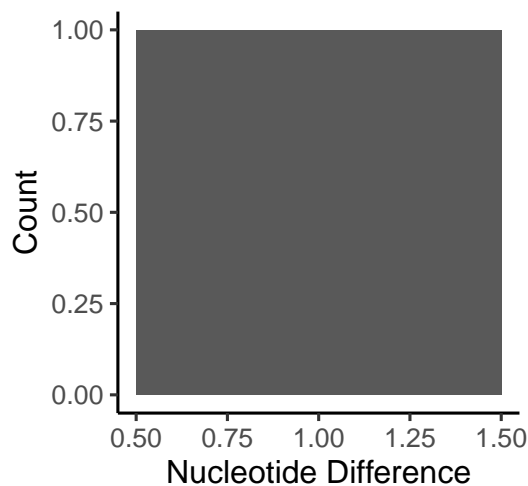
IGHV3-30-3*01

2977 sequences assigned
2456 (82.5%) exact matches, in which:
2280 unique CDR3
7 unique J



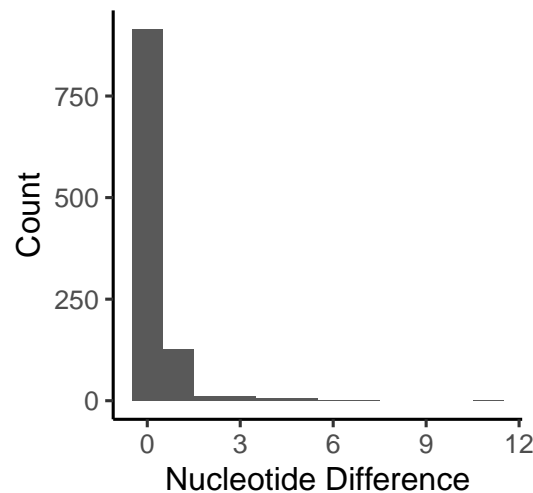
IGHV3-33*06

1 sequences assigned
No exact matches.



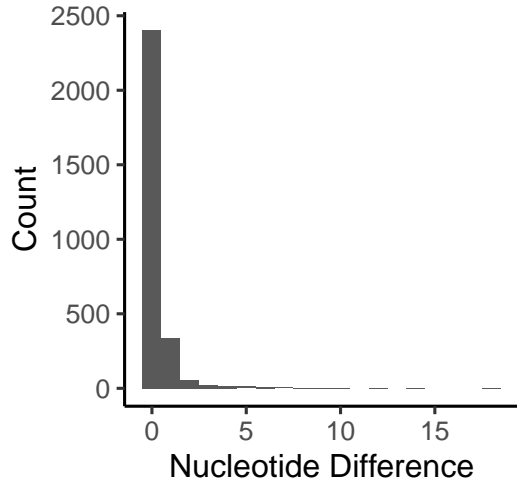
IGHV3-48*02

1077 sequences assigned
915 (85%) exact matches, in which:
863 unique CDR3
7 unique J



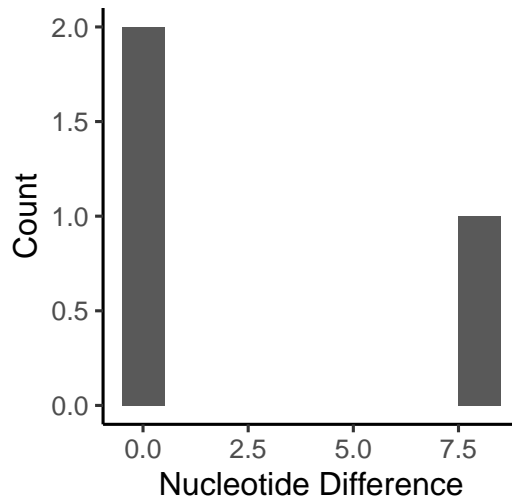
IGHV3-30*18

2884 sequences assigned
2404 (83.4%) exact matches, in which:
2241 unique CDR3
7 unique J



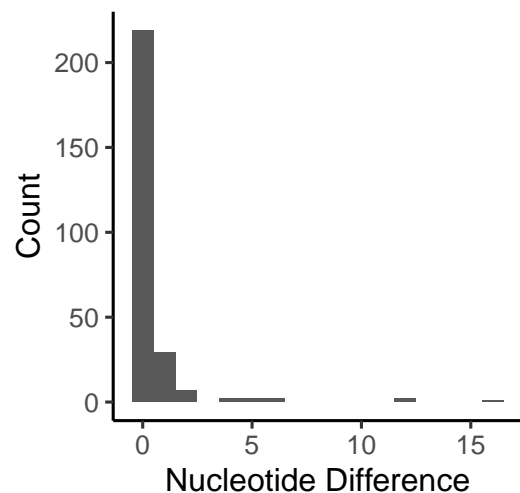
IGHV3-38-3*01

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



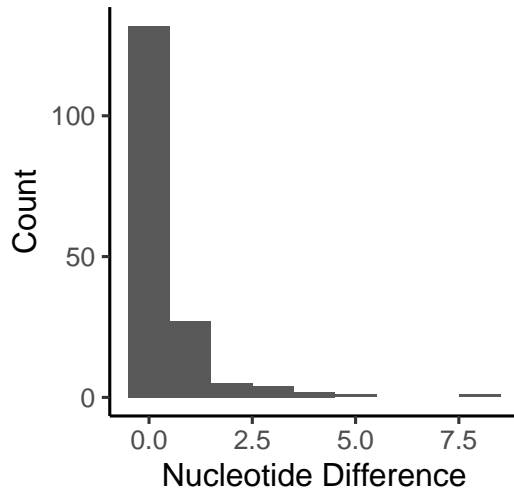
IGHV3-49*04

264 sequences assigned
219 (83%) exact matches, in which:
206 unique CDR3
6 unique J



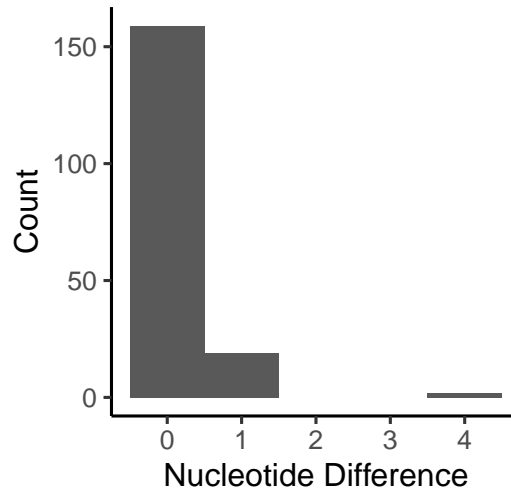
IGHV3-49*05

172 sequences assigned
132 (76.7%) exact matches, in which:
129 unique CDR3
5 unique J



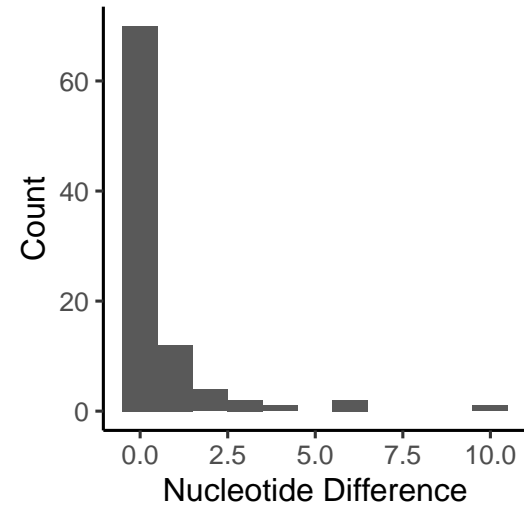
IGHV3-64*01

180 sequences assigned
159 (88.3%) exact matches, in which:
151 unique CDR3
7 unique J



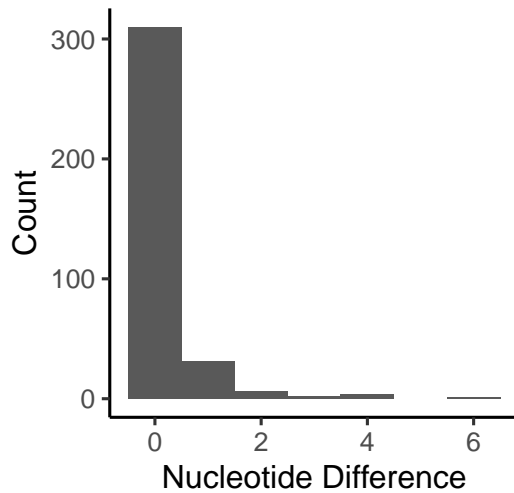
IGHV3-72*01

92 sequences assigned
70 (76.1%) exact matches, in which:
67 unique CDR3
6 unique J



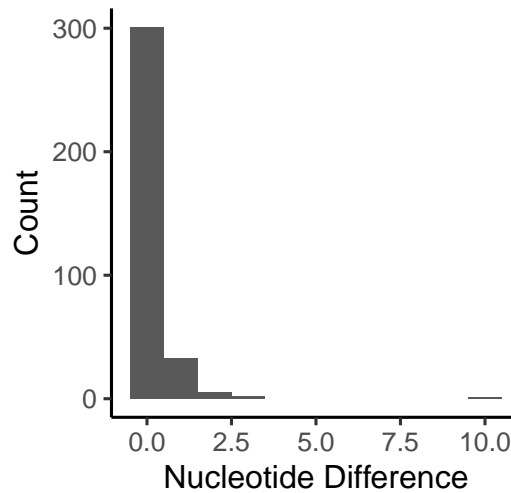
IGHV3-53*01

354 sequences assigned
310 (87.6%) exact matches, in which:
288 unique CDR3
7 unique J



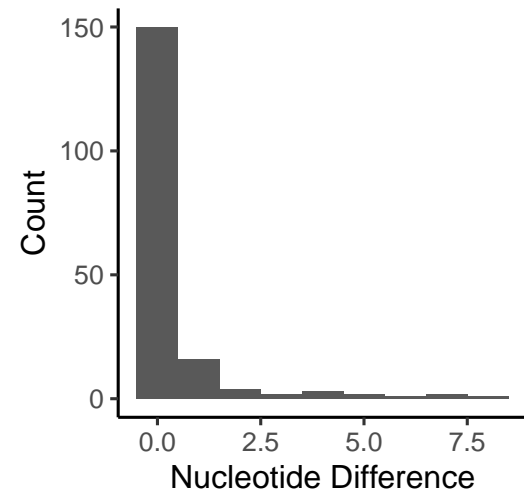
IGHV3-66*02

342 sequences assigned
301 (88%) exact matches, in which:
268 unique CDR3
6 unique J



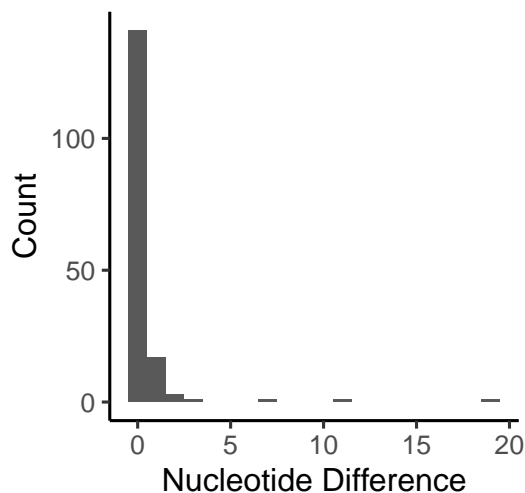
IGHV3-73*01

181 sequences assigned
150 (82.9%) exact matches, in which:
133 unique CDR3
6 unique J



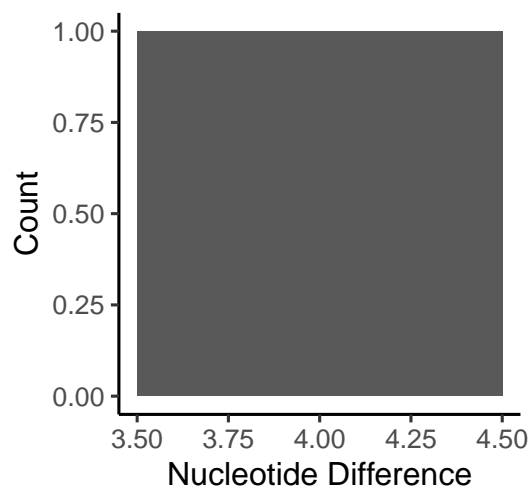
IGHV3-53*04

172 sequences assigned
141 (82%) exact matches, in which:
131 unique CDR3
6 unique J



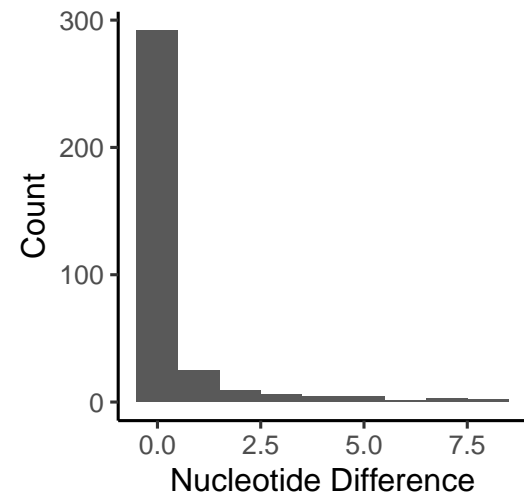
IGHV3-71*03

1 sequences assigned
No exact matches.



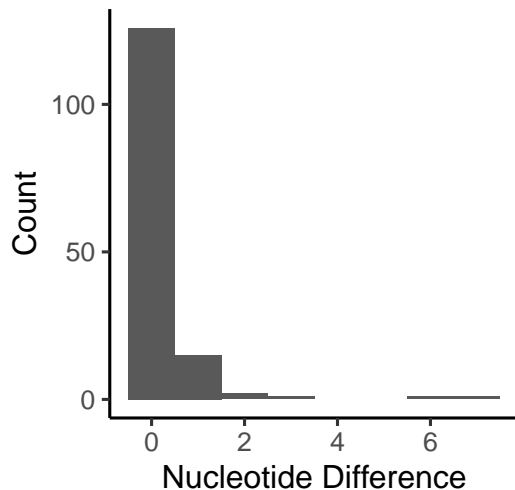
IGHV3-74*01

346 sequences assigned
292 (84.4%) exact matches, in which:
270 unique CDR3
7 unique J



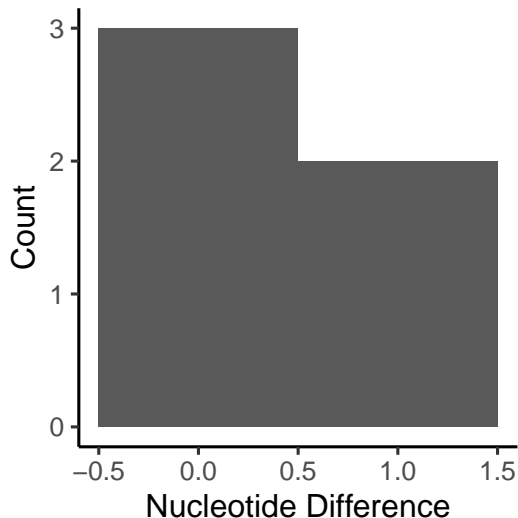
IGHV3-43D*03

146 sequences assigned
126 (86.3%) exact matches, in which:
122 unique CDR3
5 unique J



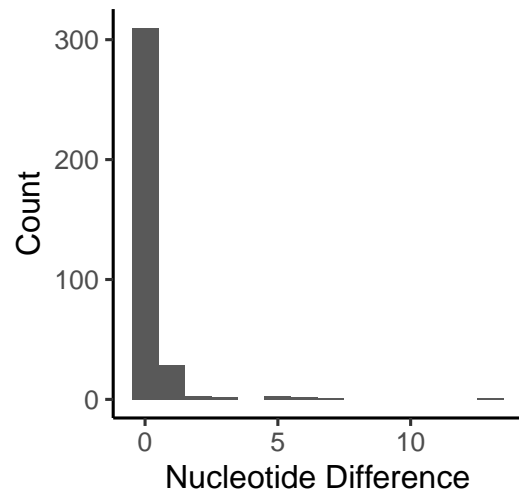
IGHV4-28*01

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
2 unique J



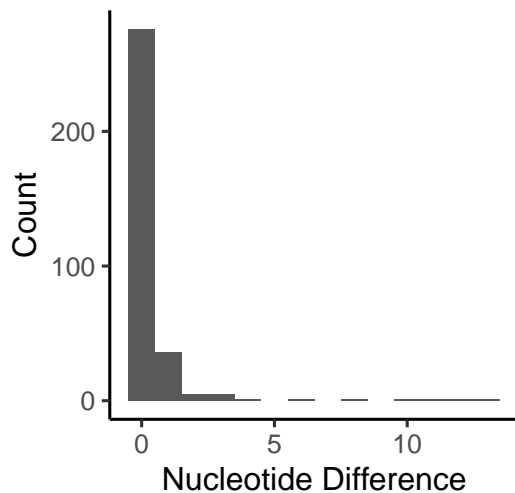
IGHV4-30-2*01

351 sequences assigned
310 (88.3%) exact matches, in which:
296 unique CDR3
7 unique J



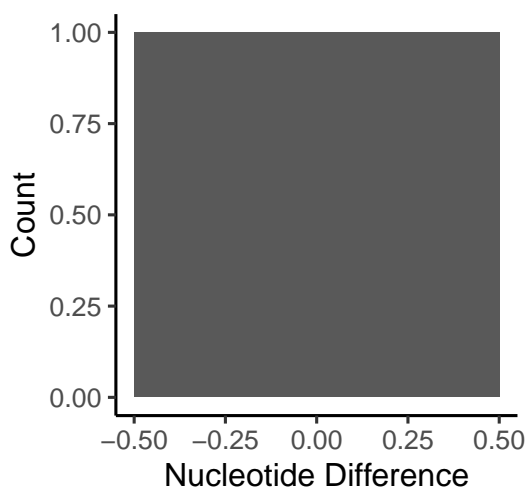
IGHV3-64D*08

329 sequences assigned
276 (83.9%) exact matches, in which:
255 unique CDR3
6 unique J



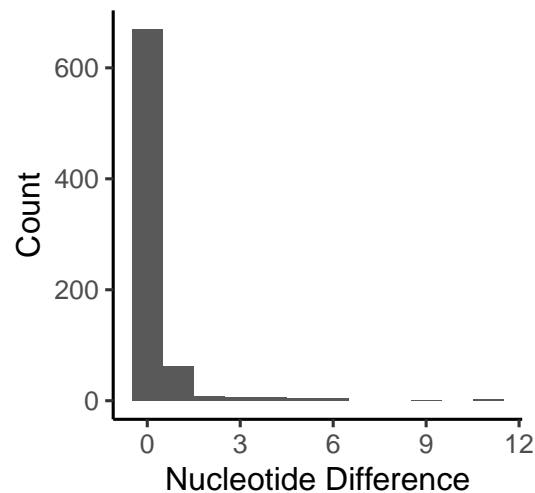
IGHV4-28*03

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



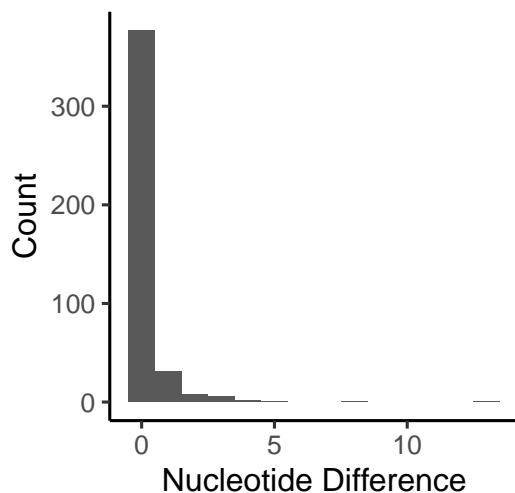
IGHV4-30-4*01

765 sequences assigned
670 (87.6%) exact matches, in which:
643 unique CDR3
7 unique J



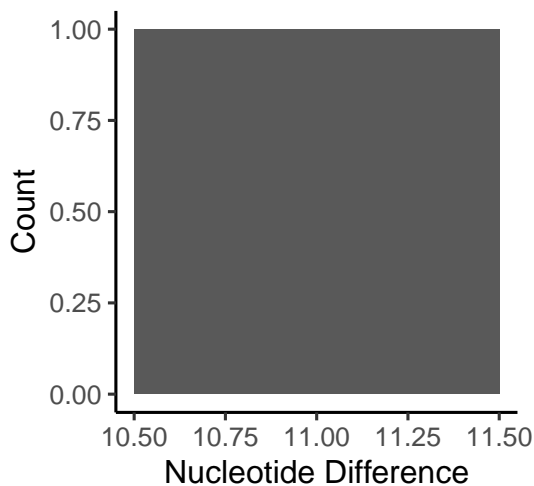
IGHV4-4*02

427 sequences assigned
377 (88.3%) exact matches, in which:
364 unique CDR3
6 unique J



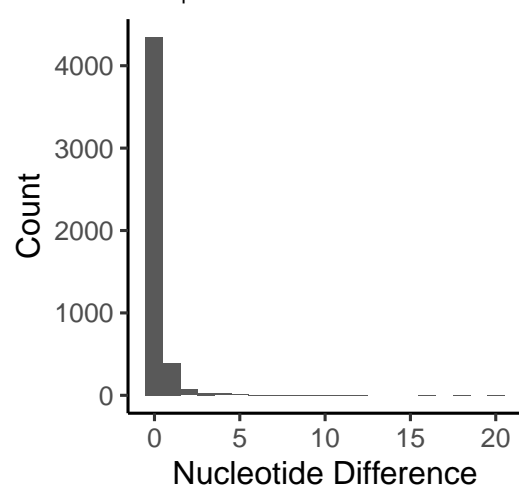
IGHV4-28*06

1 sequences assigned
No exact matches.



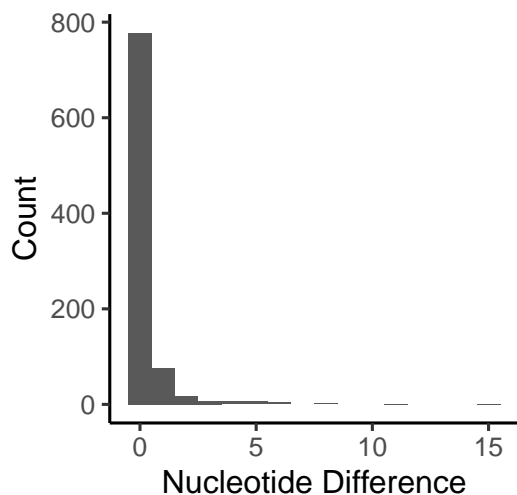
IGHV4-34*01

4894 sequences assigned
4348 (88.8%) exact matches, in which:
4061 unique CDR3
7 unique J



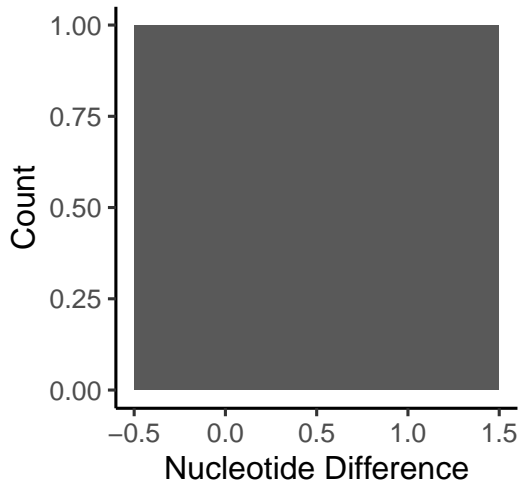
IGHV4-38-2*02

899 sequences assigned
778 (86.5%) exact matches, in which:
711 unique CDR3
6 unique J



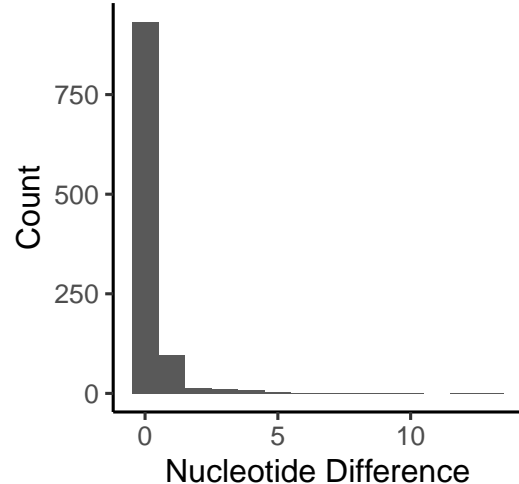
IGHV4-55*08

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



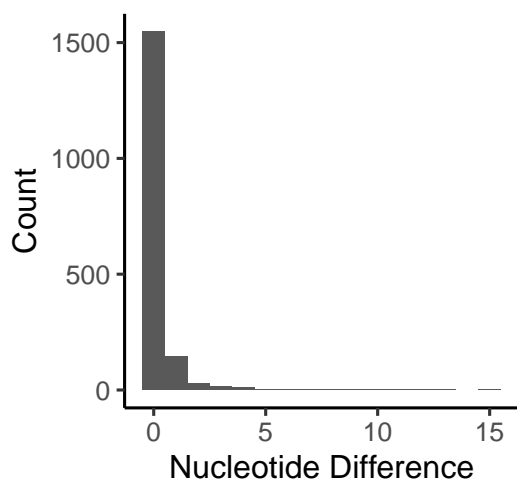
IGHV4-61*02

1077 sequences assigned
933 (86.6%) exact matches, in which:
888 unique CDR3
7 unique J



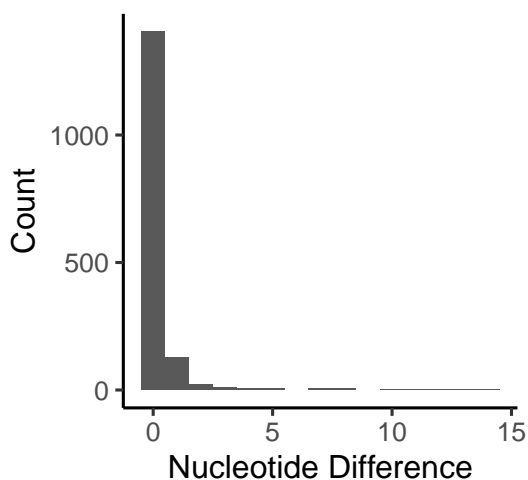
IGHV4-39*01

1767 sequences assigned
1547 (87.5%) exact matches, in which:
1414 unique CDR3
7 unique J



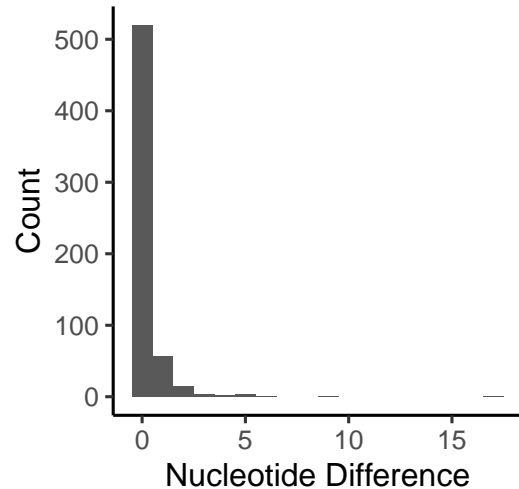
IGHV4-59*01

1594 sequences assigned
1405 (88.1%) exact matches, in which:
1342 unique CDR3
7 unique J



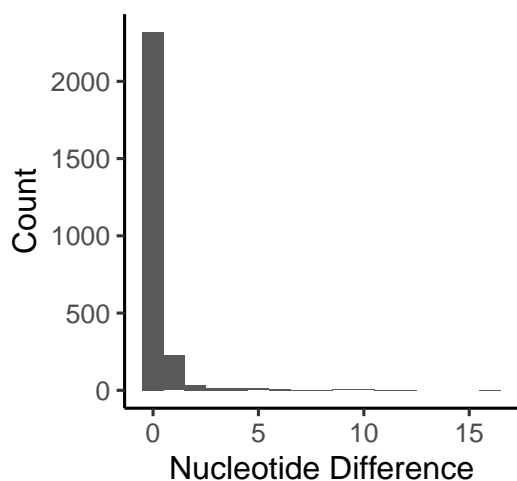
IGHV5-10-1*03

602 sequences assigned
520 (86.4%) exact matches, in which:
499 unique CDR3
7 unique J



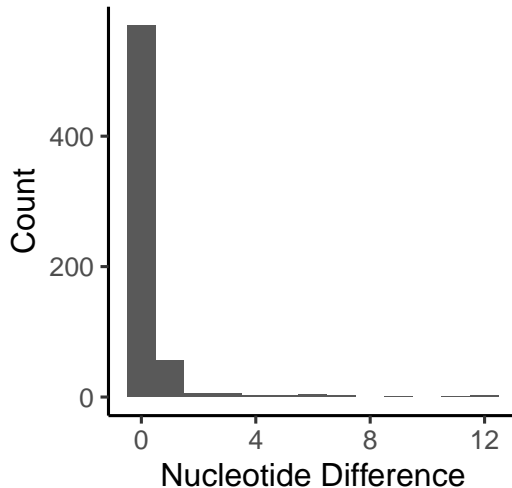
IGHV4-39*07

2650 sequences assigned
2319 (87.5%) exact matches, in which:
2135 unique CDR3
6 unique J



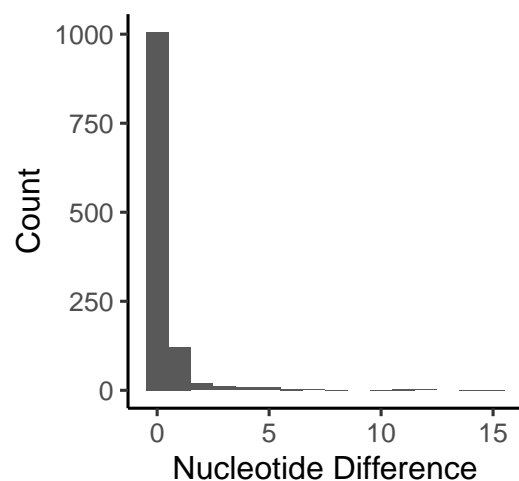
IGHV4-59*08

652 sequences assigned
570 (87.4%) exact matches, in which:
547 unique CDR3
7 unique J



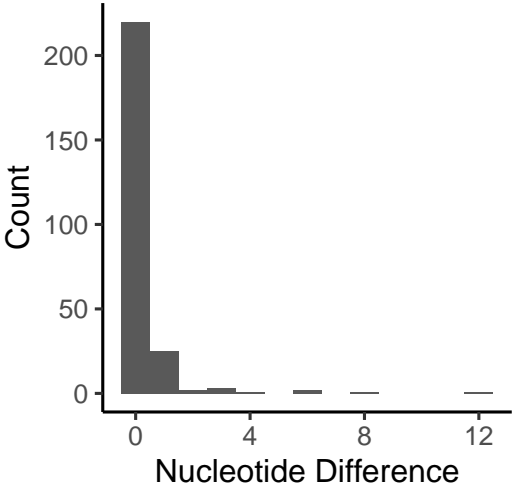
IGHV5-51*01

1189 sequences assigned
1006 (84.6%) exact matches, in which:
940 unique CDR3
7 unique J



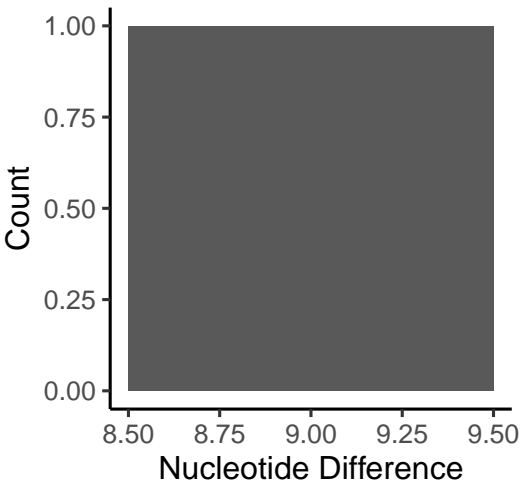
IGHV6-1*01

255 sequences assigned
220 (86.3%) exact matches, in which:
211 unique CDR3
6 unique J



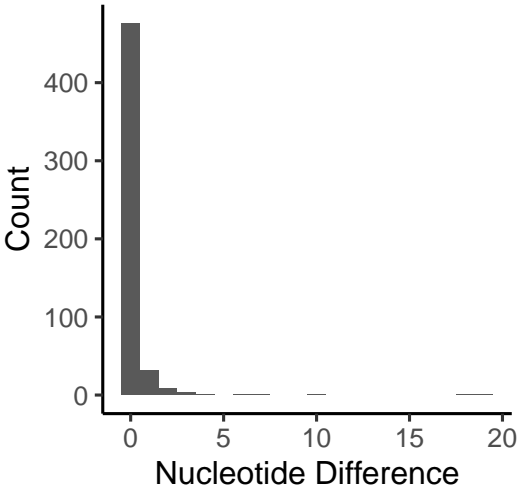
IGHV3/OR16-8*01

1 sequences assigned
No exact matches.

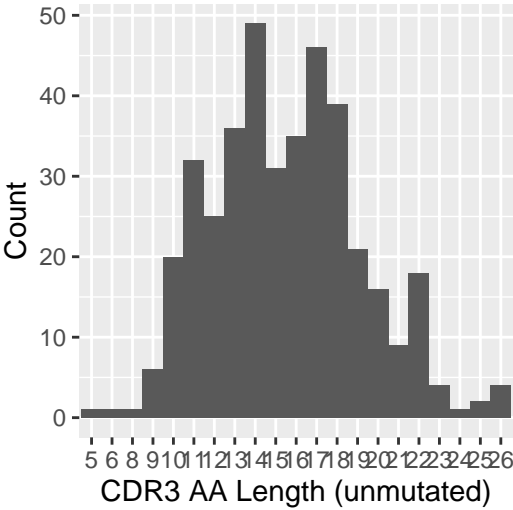


IGHV7-4-1*02

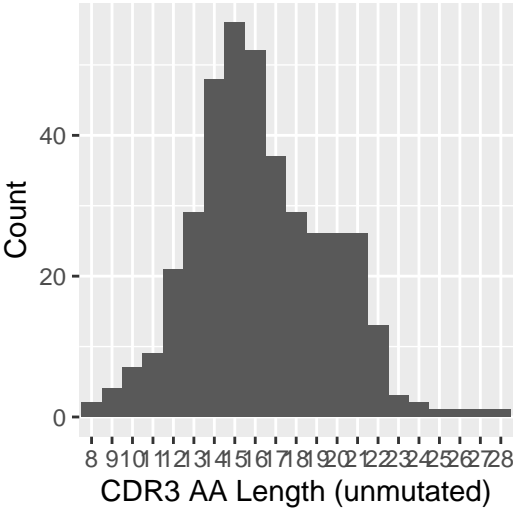
525 sequences assigned
476 (90.7%) exact matches, in which:
458 unique CDR3
6 unique J

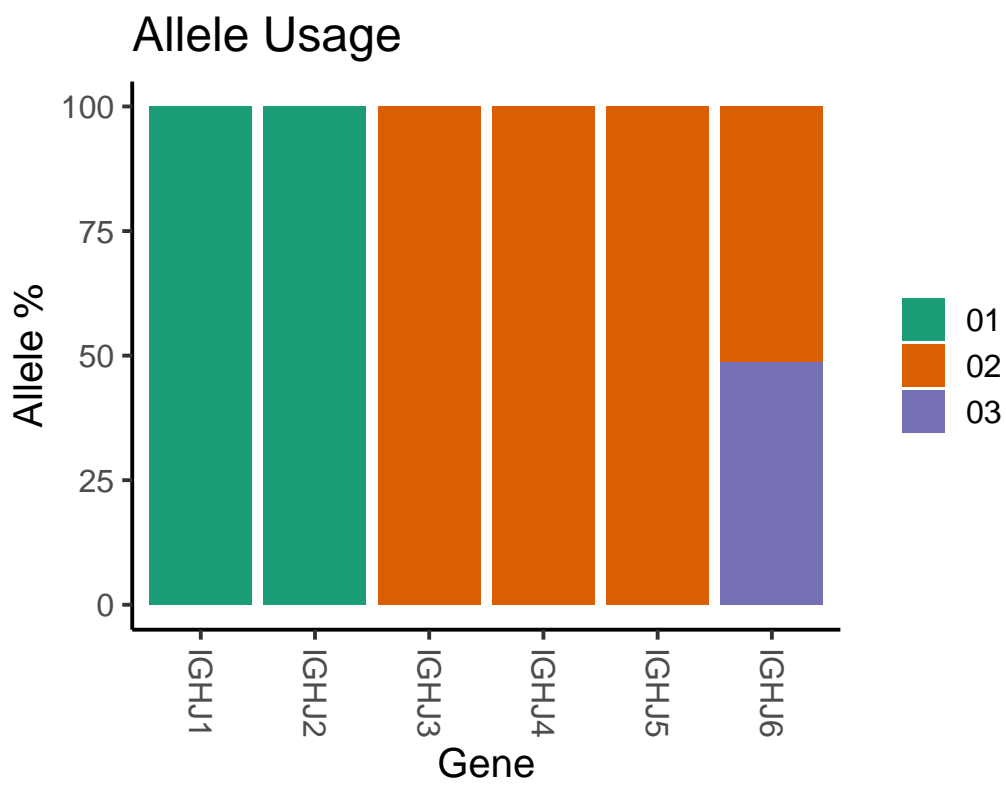


IGHV1-69*08_C191T



IGHV3-30*04_C201T





Sequence Count by IGHJ6 allele usage

