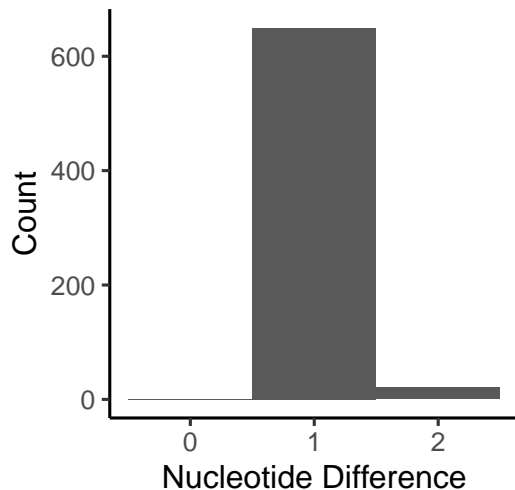


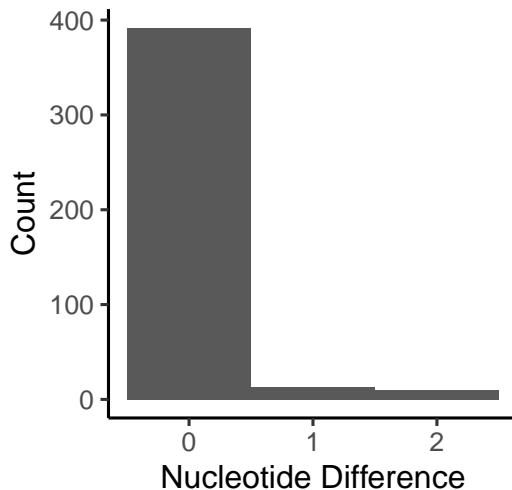
IGHV1-2*02

672 sequences assigned
1 (0.1%) exact matches, in which:
1 unique CDR3
1 unique J



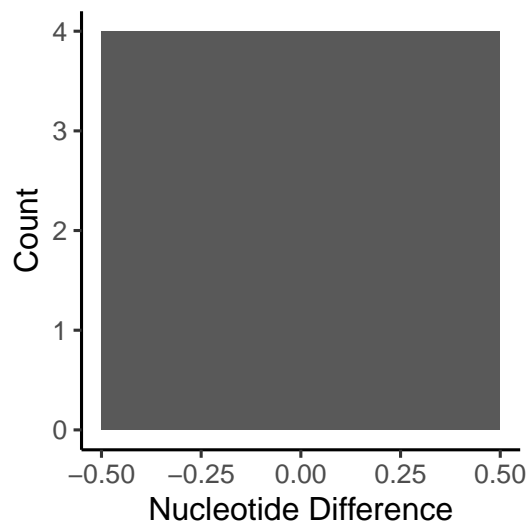
IGHV1-8*01

415 sequences assigned
392 (94.5%) exact matches, in which:
388 unique CDR3
5 unique J



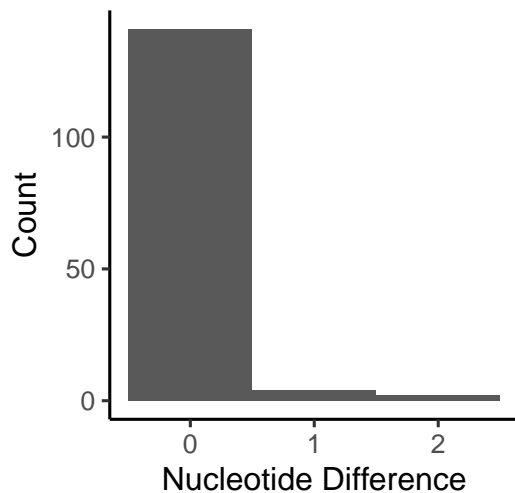
IGHV1-45*02

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



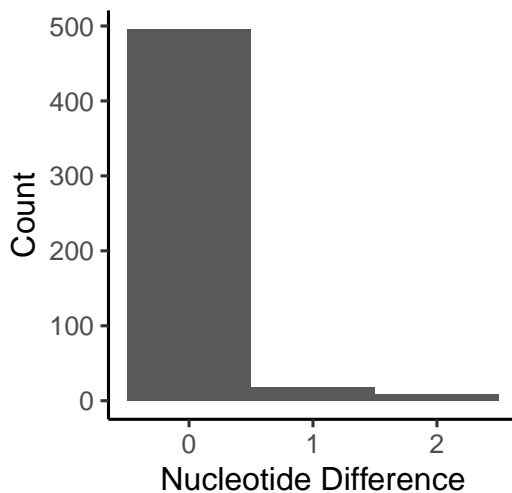
IGHV1-2*04

147 sequences assigned
141 (95.9%) exact matches, in which:
139 unique CDR3
4 unique J



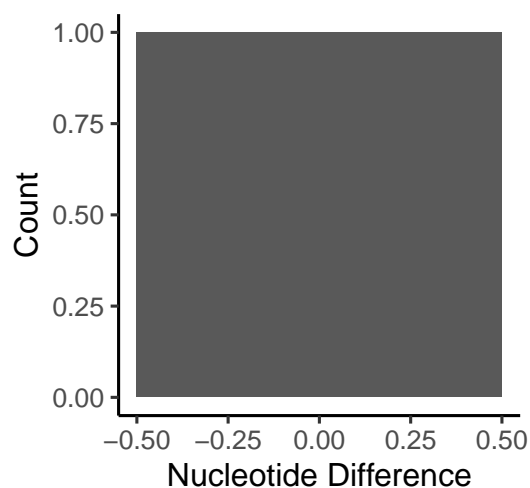
IGHV1-18*01

523 sequences assigned
496 (94.8%) exact matches, in which:
492 unique CDR3
6 unique J



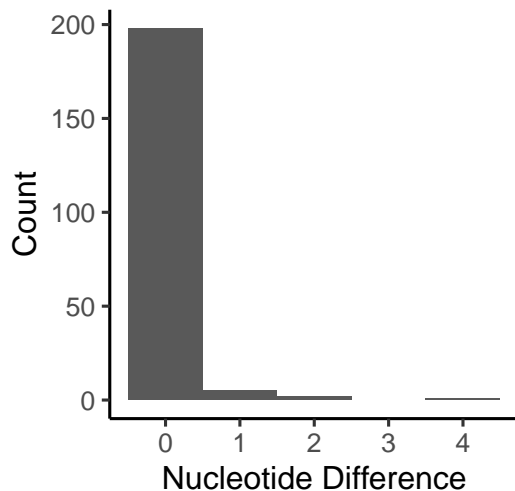
IGHV1-45*03

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



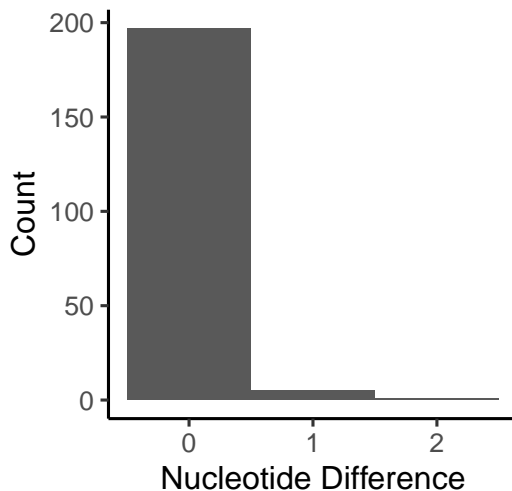
IGHV1-3*01_05

206 sequences assigned
198 (96.1%) exact matches, in which:
197 unique CDR3
6 unique J



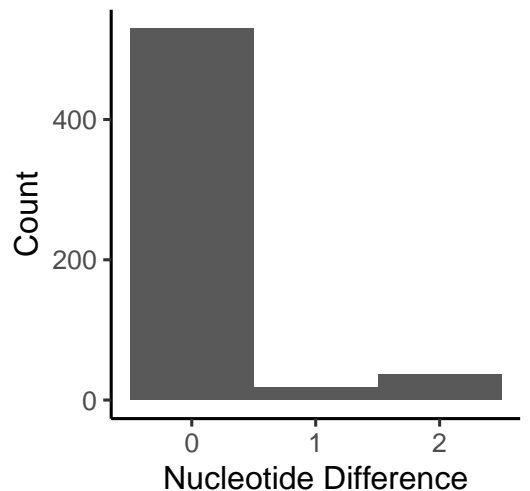
IGHV1-24*01

203 sequences assigned
197 (97%) exact matches, in which:
194 unique CDR3
6 unique J



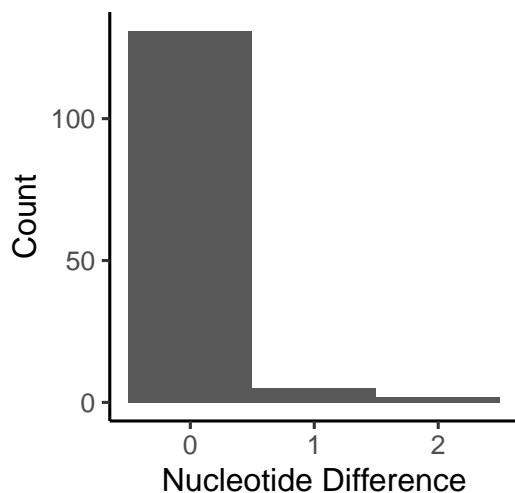
IGHV1-46*01

584 sequences assigned
530 (90.8%) exact matches, in which:
527 unique CDR3
6 unique J



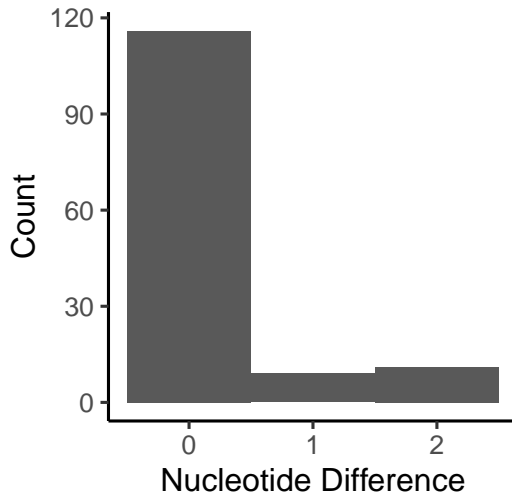
IGHV1–58*01_03

138 sequences assigned
131 (94.9%) exact matches, in which:
130 unique CDR3
6 unique J



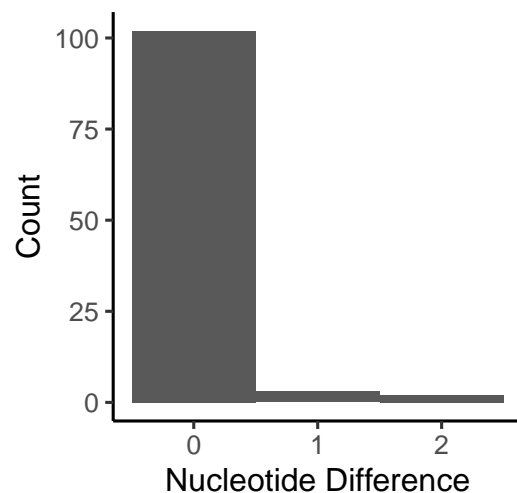
IGHV2–5*01

136 sequences assigned
116 (85.3%) exact matches, in which:
116 unique CDR3
5 unique J



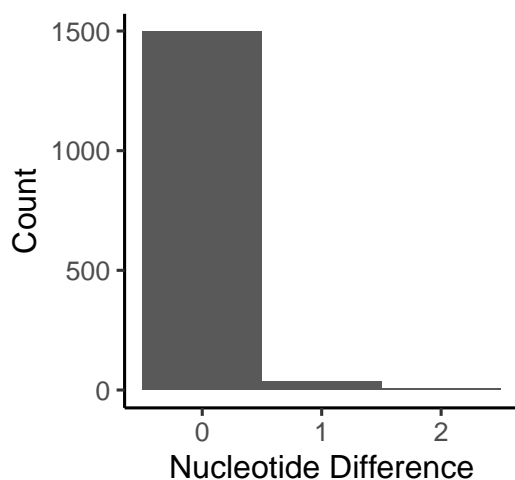
IGHV2–70*01

107 sequences assigned
102 (95.3%) exact matches, in which:
102 unique CDR3
6 unique J



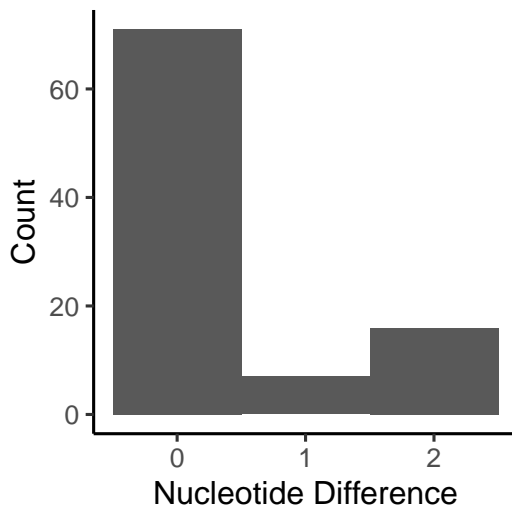
IGHV1–69*04_09

1540 sequences assigned
1497 (97.2%) exact matches, in which:
1491 unique CDR3
6 unique J



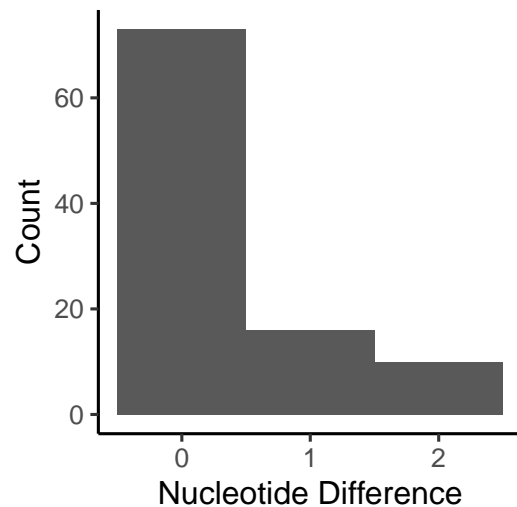
IGHV2–5*02

94 sequences assigned
71 (75.5%) exact matches, in which:
71 unique CDR3
6 unique J



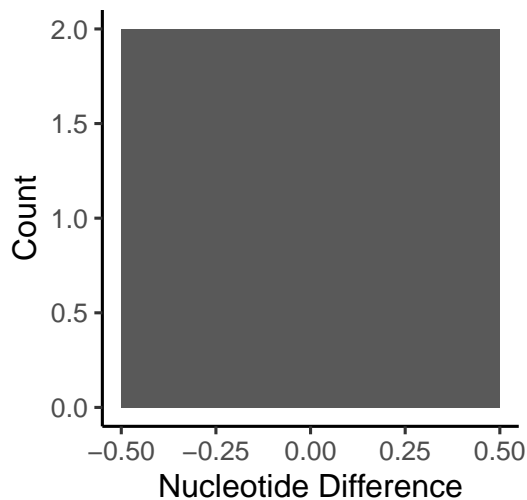
IGHV2–70*11_15

99 sequences assigned
73 (73.7%) exact matches, in which:
72 unique CDR3
5 unique J



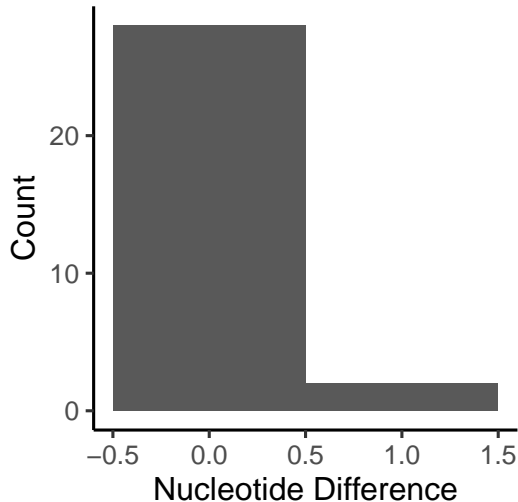
IGHV1–69D*01

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



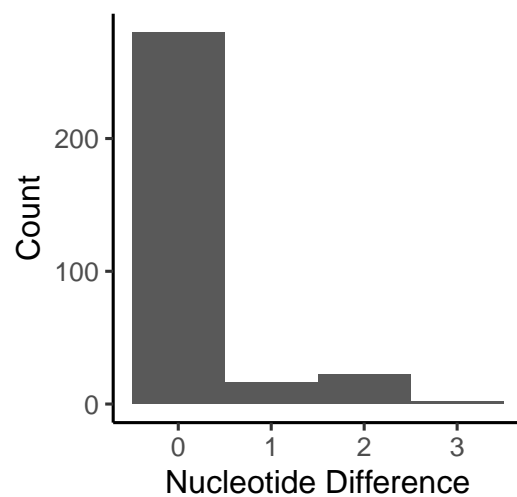
IGHV2–26*01

30 sequences assigned
28 (93.3%) exact matches, in which:
28 unique CDR3
5 unique J



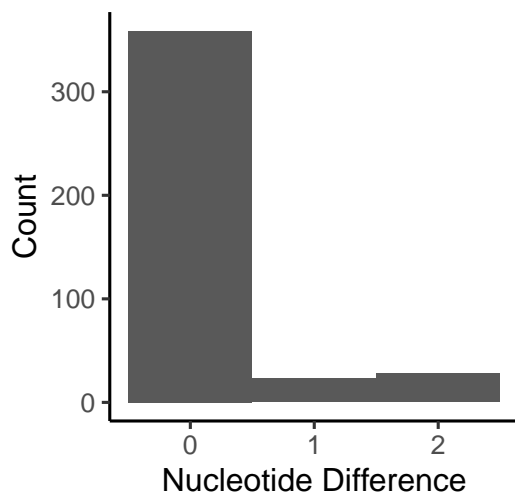
IGHV3–7*01

320 sequences assigned
280 (87.5%) exact matches, in which:
260 unique CDR3
6 unique J



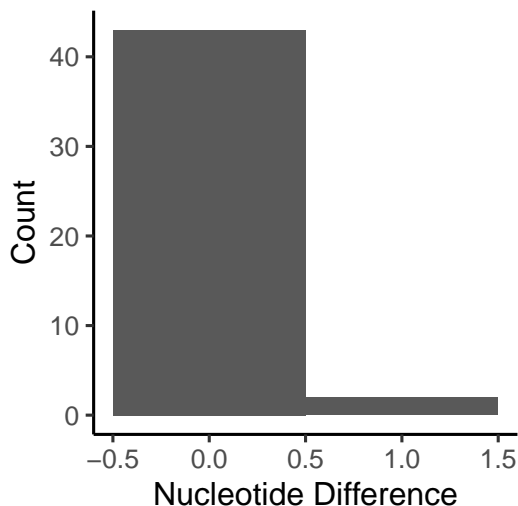
IGHV3-7*03

410 sequences assigned
359 (87.6%) exact matches, in which:
328 unique CDR3
6 unique J



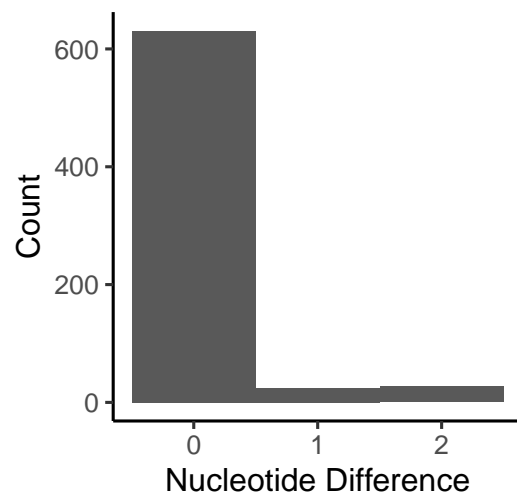
IGHV3-13*01

45 sequences assigned
43 (95.6%) exact matches, in which:
38 unique CDR3
5 unique J



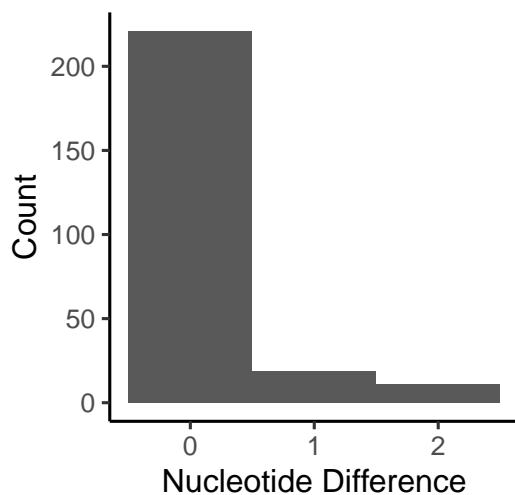
IGHV3-21*01_02

683 sequences assigned
631 (92.4%) exact matches, in which:
584 unique CDR3
6 unique J



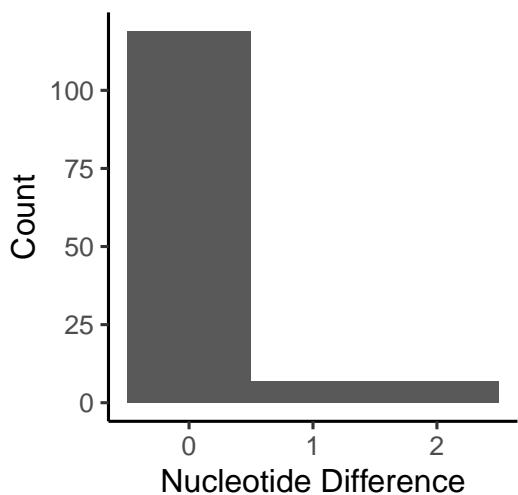
IGHV3-9*01

251 sequences assigned
221 (88%) exact matches, in which:
214 unique CDR3
6 unique J



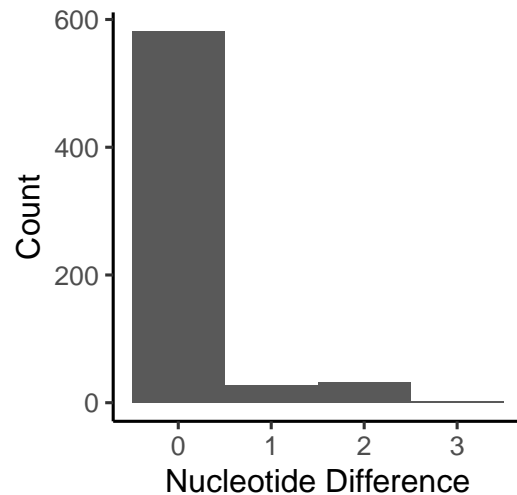
IGHV3-15*01_02

133 sequences assigned
119 (89.5%) exact matches, in which:
115 unique CDR3
6 unique J



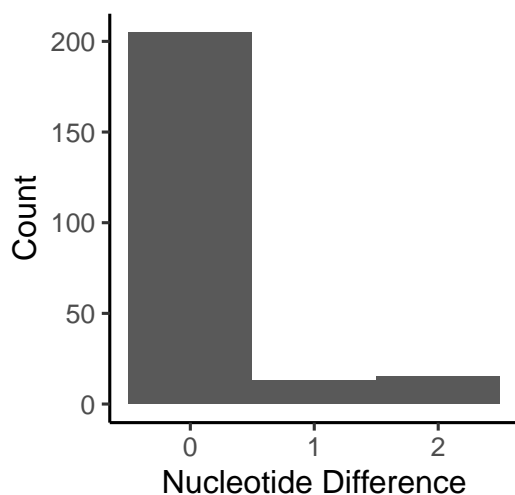
IGHV3-33*01

644 sequences assigned
582 (90.4%) exact matches, in which:
557 unique CDR3
6 unique J



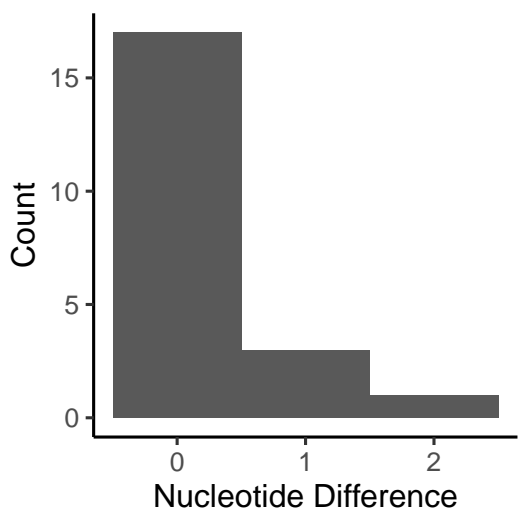
IGHV3-11*01

233 sequences assigned
205 (88%) exact matches, in which:
196 unique CDR3
5 unique J



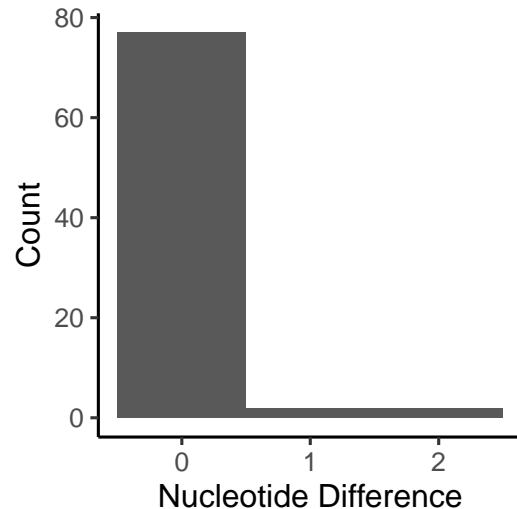
IGHV3-20*01_02

21 sequences assigned
17 (81%) exact matches, in which:
17 unique CDR3
5 unique J



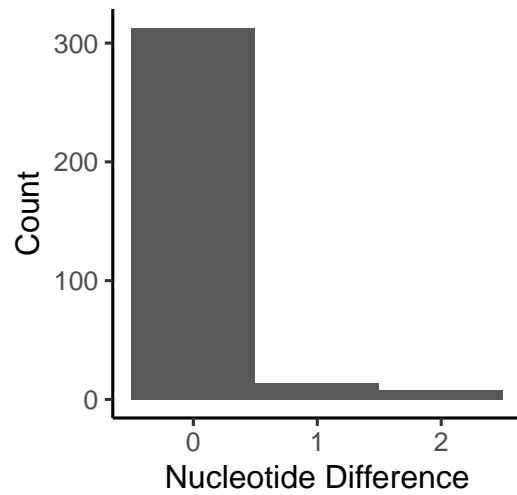
IGHV3-43*01

81 sequences assigned
77 (95.1%) exact matches, in which:
71 unique CDR3
6 unique J



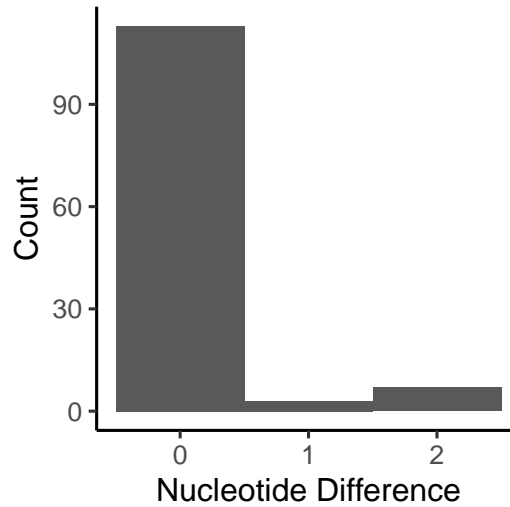
IGHV3-43*02

335 sequences assigned
313 (93.4%) exact matches, in which:
301 unique CDR3
6 unique J



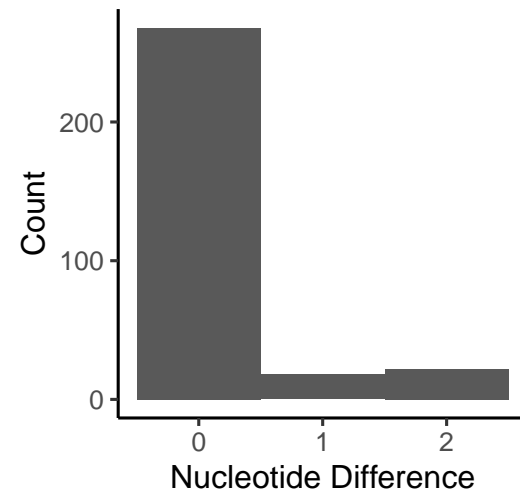
IGHV3-49*04

123 sequences assigned
113 (91.9%) exact matches, in which:
109 unique CDR3
6 unique J



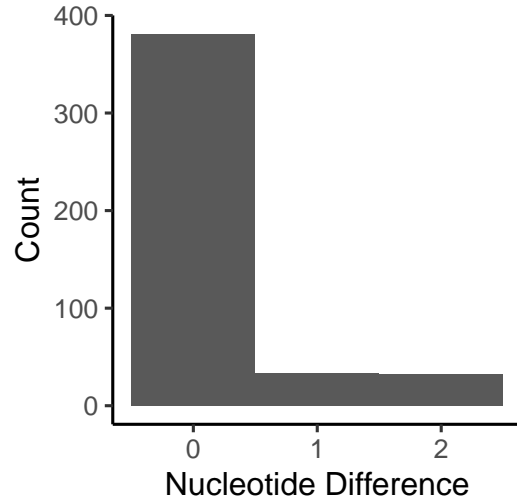
IGHV3-53*01_02

308 sequences assigned
268 (87%) exact matches, in which:
253 unique CDR3
6 unique J



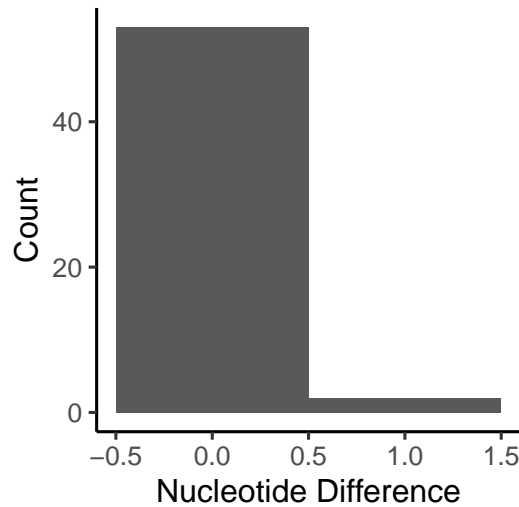
IGHV3-48*02

446 sequences assigned
381 (85.4%) exact matches, in which:
346 unique CDR3
6 unique J



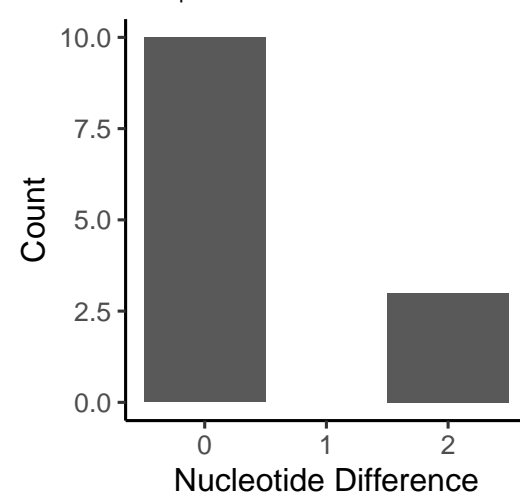
IGHV3-49*03_05

55 sequences assigned
53 (96.4%) exact matches, in which:
52 unique CDR3
5 unique J



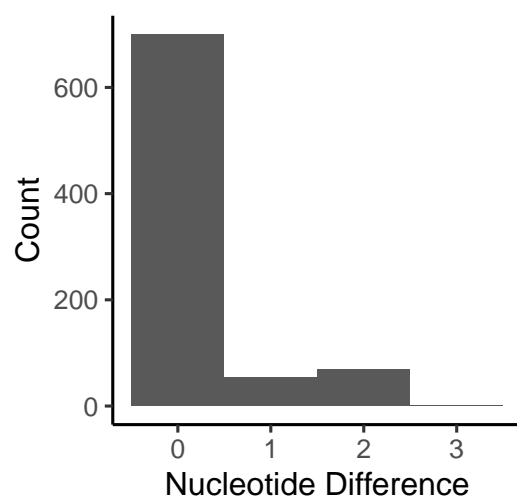
IGHV3-64*02_07

13 sequences assigned
10 (76.9%) exact matches, in which:
9 unique CDR3
4 unique J



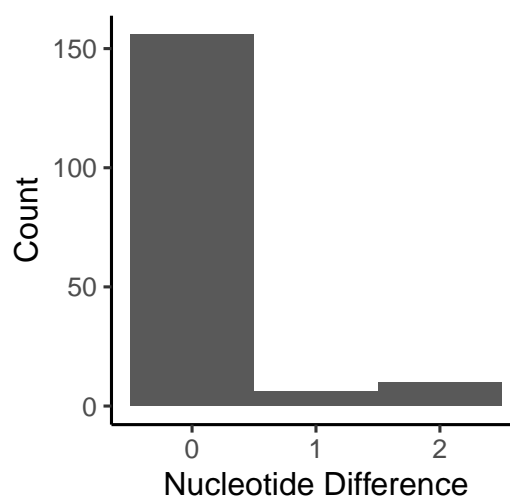
IGHV3-48*03

822 sequences assigned
700 (85.2%) exact matches, in which:
663 unique CDR3
6 unique J



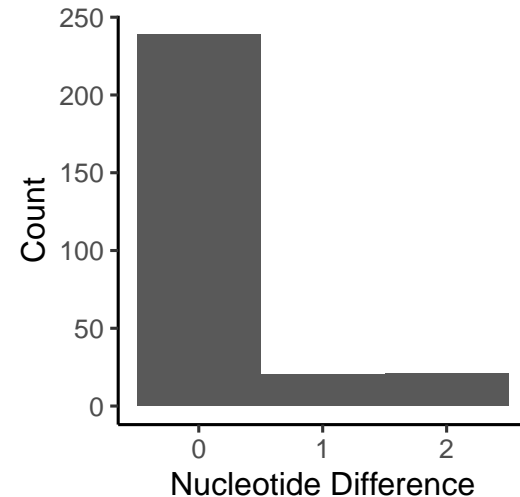
IGHV3-53*04

172 sequences assigned
156 (90.7%) exact matches, in which:
151 unique CDR3
6 unique J



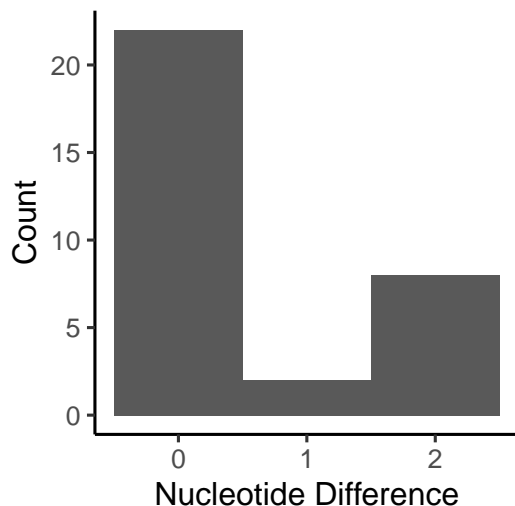
IGHV3-66*01

280 sequences assigned
239 (85.4%) exact matches, in which:
222 unique CDR3
6 unique J



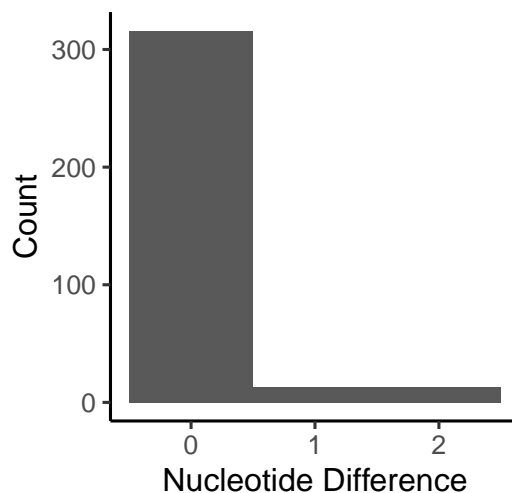
IGHV3-72*01

32 sequences assigned
22 (68.8%) exact matches, in which:
21 unique CDR3
4 unique J



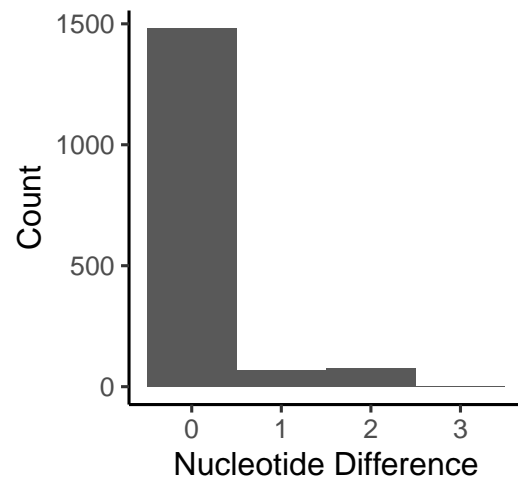
IGHV4-4*07

342 sequences assigned
316 (92.4%) exact matches, in which:
291 unique CDR3
5 unique J



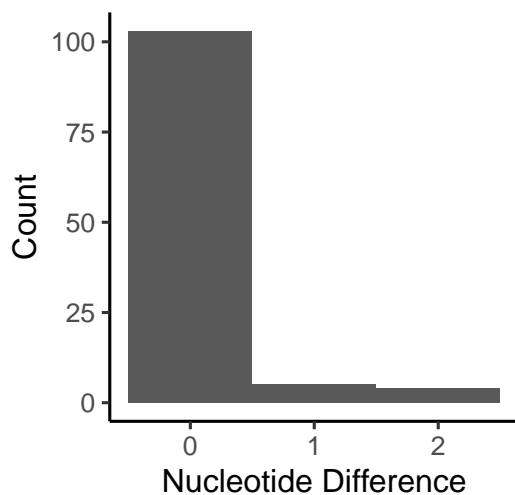
IGHV4-39*01_05

1627 sequences assigned
1481 (91%) exact matches, in which:
1393 unique CDR3
6 unique J



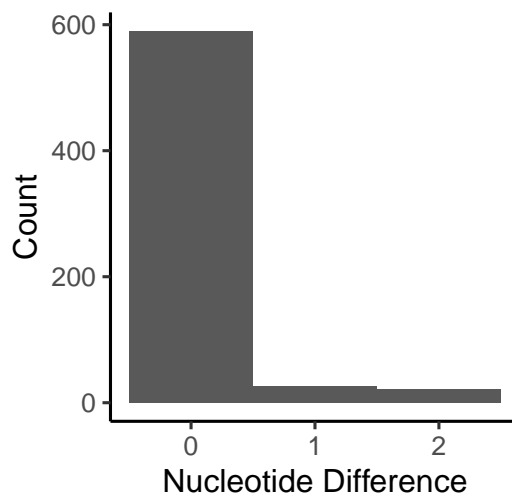
IGHV3-73*01_02

112 sequences assigned
103 (92%) exact matches, in which:
99 unique CDR3
6 unique J



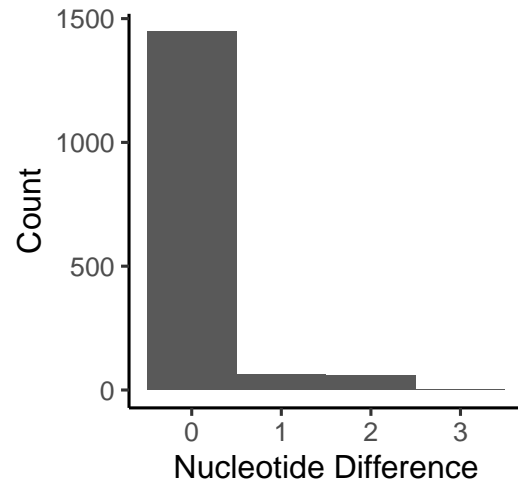
IGHV4-31*03_04

638 sequences assigned
590 (92.5%) exact matches, in which:
568 unique CDR3
6 unique J



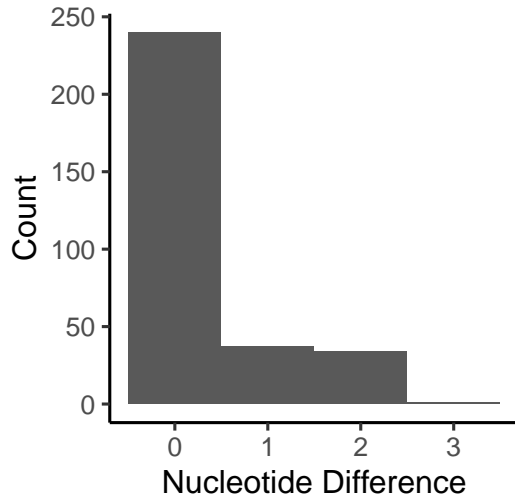
IGHV4-59*01_07

1573 sequences assigned
1447 (92%) exact matches, in which:
1344 unique CDR3
6 unique J



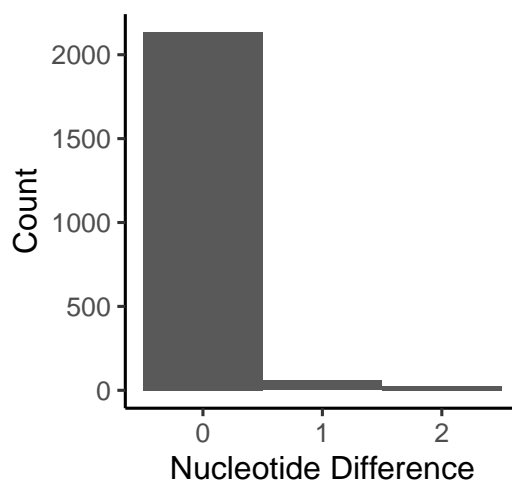
IGHV3-74*01_02

312 sequences assigned
240 (76.9%) exact matches, in which:
226 unique CDR3
6 unique J



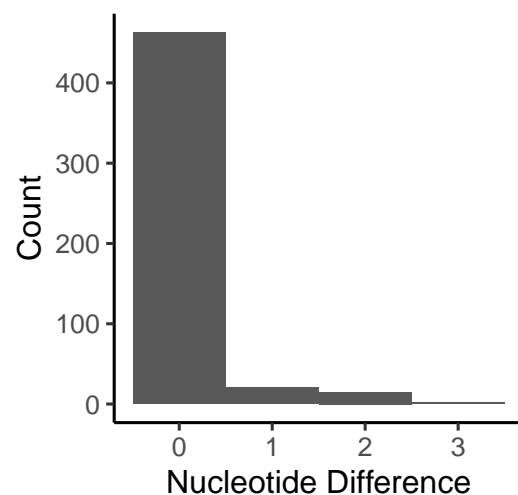
IGHV4-34*01_02

2220 sequences assigned
2135 (96.2%) exact matches, in which:
1972 unique CDR3
6 unique J



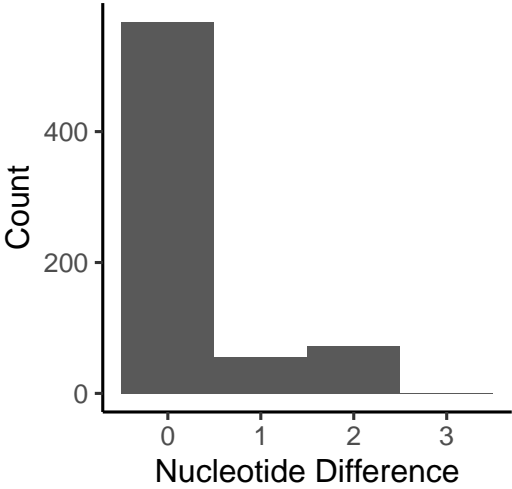
IGHV4-61*01

501 sequences assigned
463 (92.4%) exact matches, in which:
441 unique CDR3
6 unique J



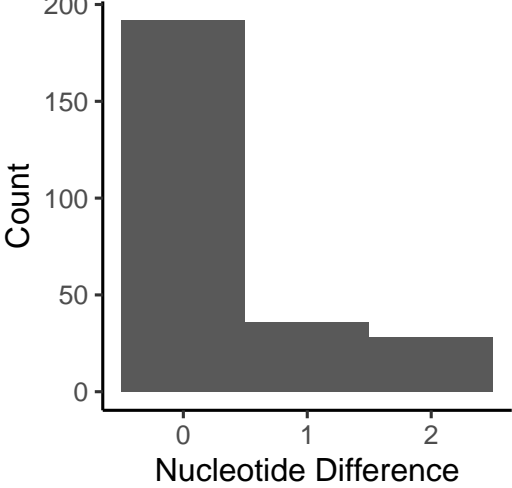
IGHV5–51*01_03

698 sequences assigned
568 (81.4%) exact matches, in which:
566 unique CDR3
6 unique J



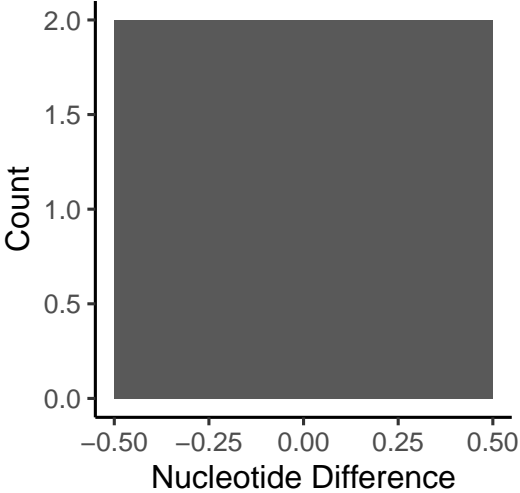
IGHV6–1*01_02

256 sequences assigned
192 (75%) exact matches, in which:
192 unique CDR3
6 unique J



IGHV7–4–1*01

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





Warning – no inferred sequences found.

Novel sequence(s)IGHV4–39*02_C258GIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV1–69*04_09_G112AIGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88A are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88A are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59*02_G88AIGHV5–51*07_A128G are not listed in the genotype and will be ignored.