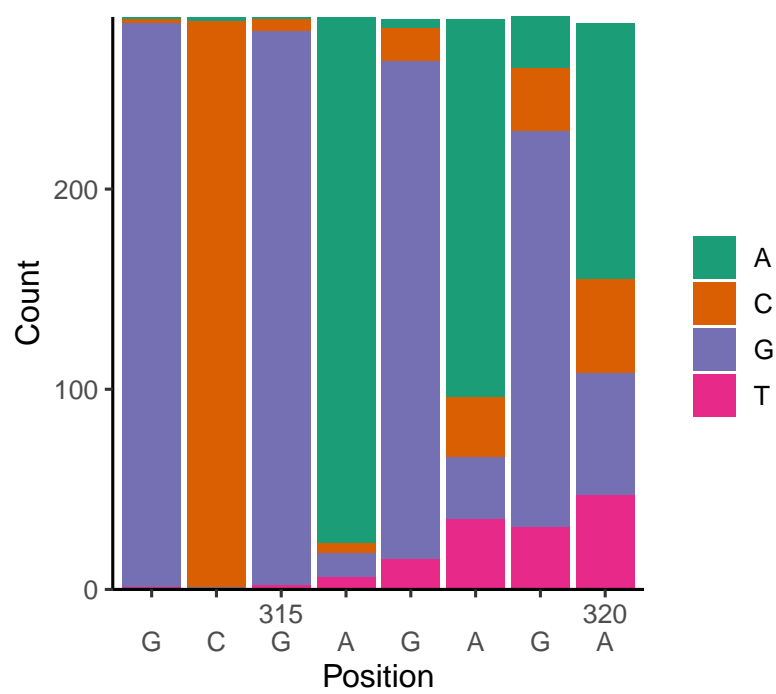
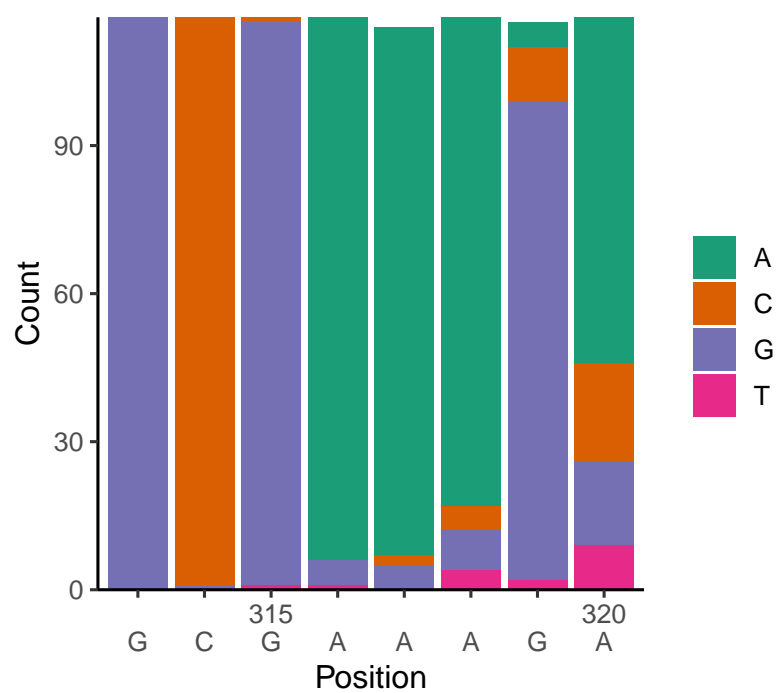


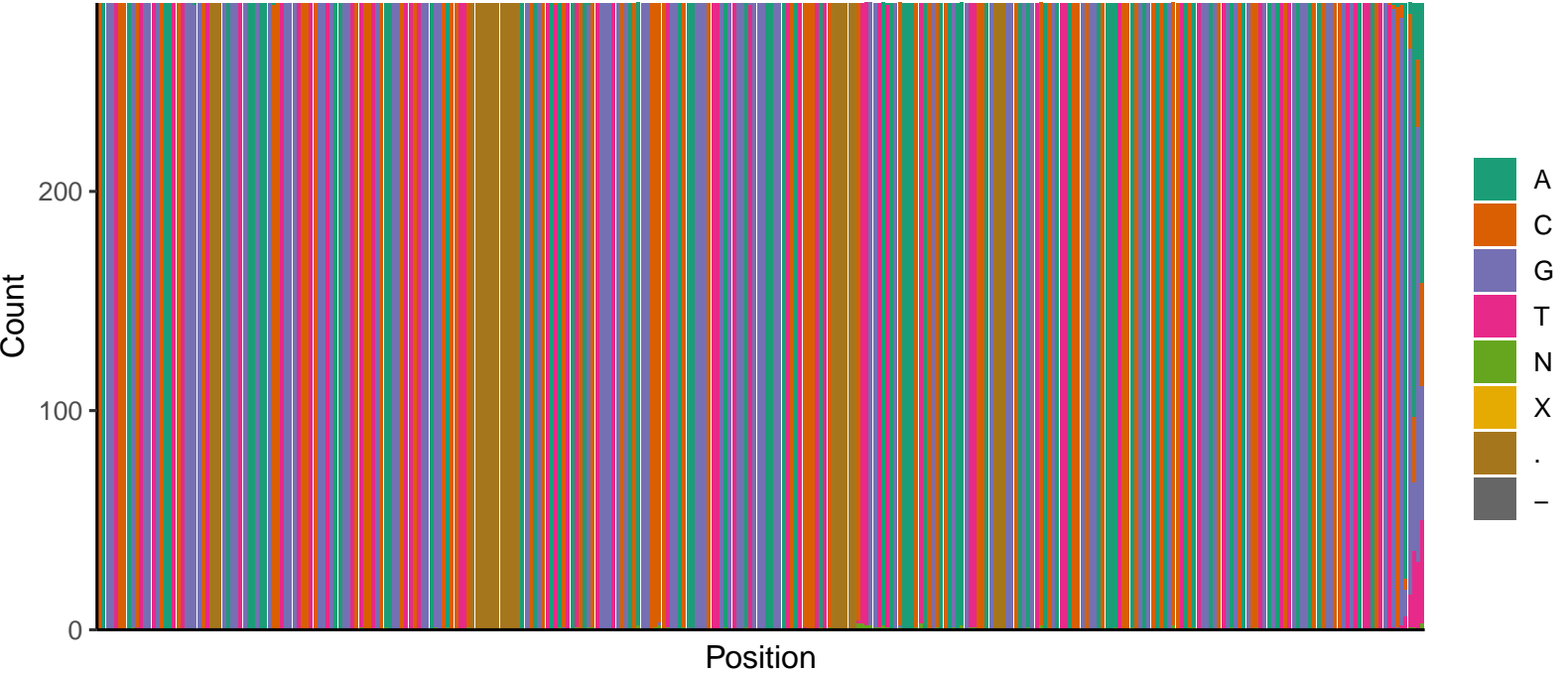
Gene IGHV1-69*08_C191T



Gene IGHV3-30*02_A275G



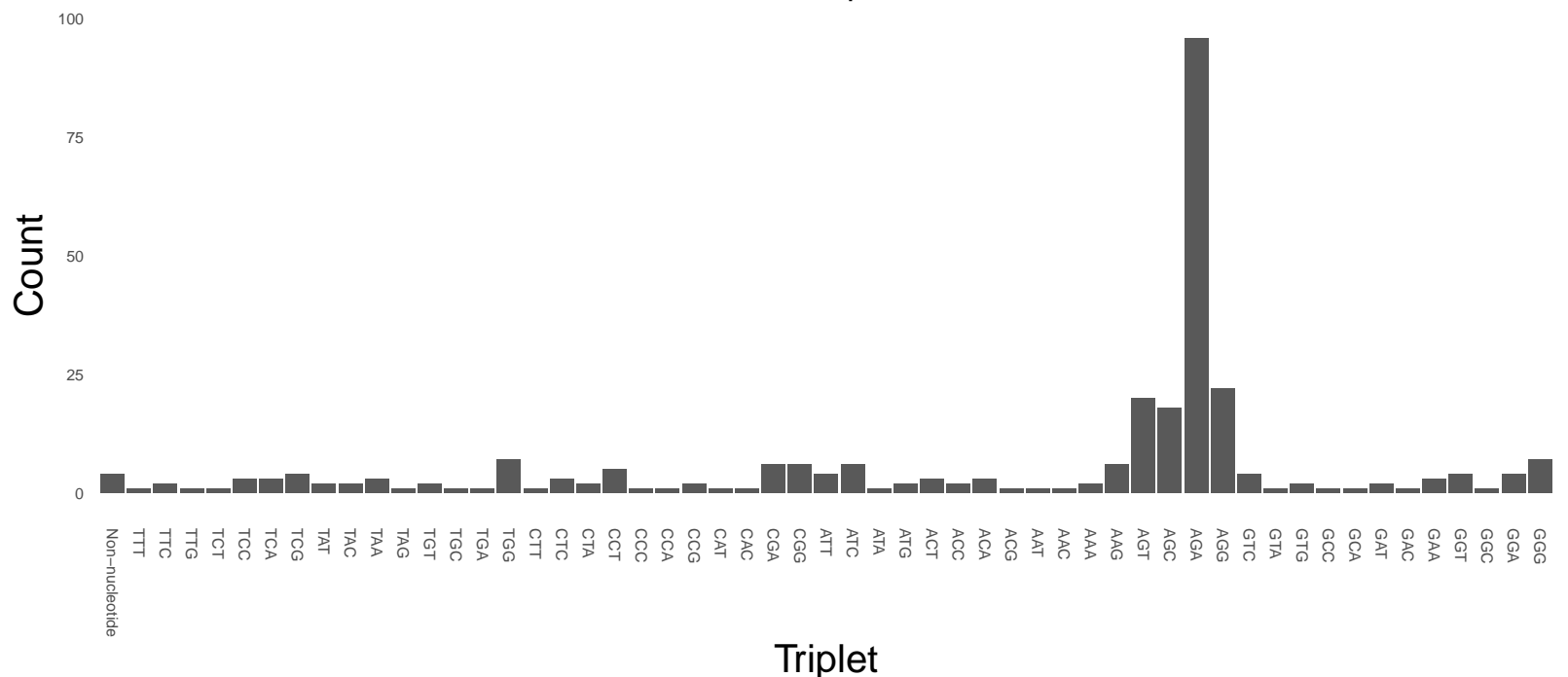
Gene IGHV1-69*08_C191T



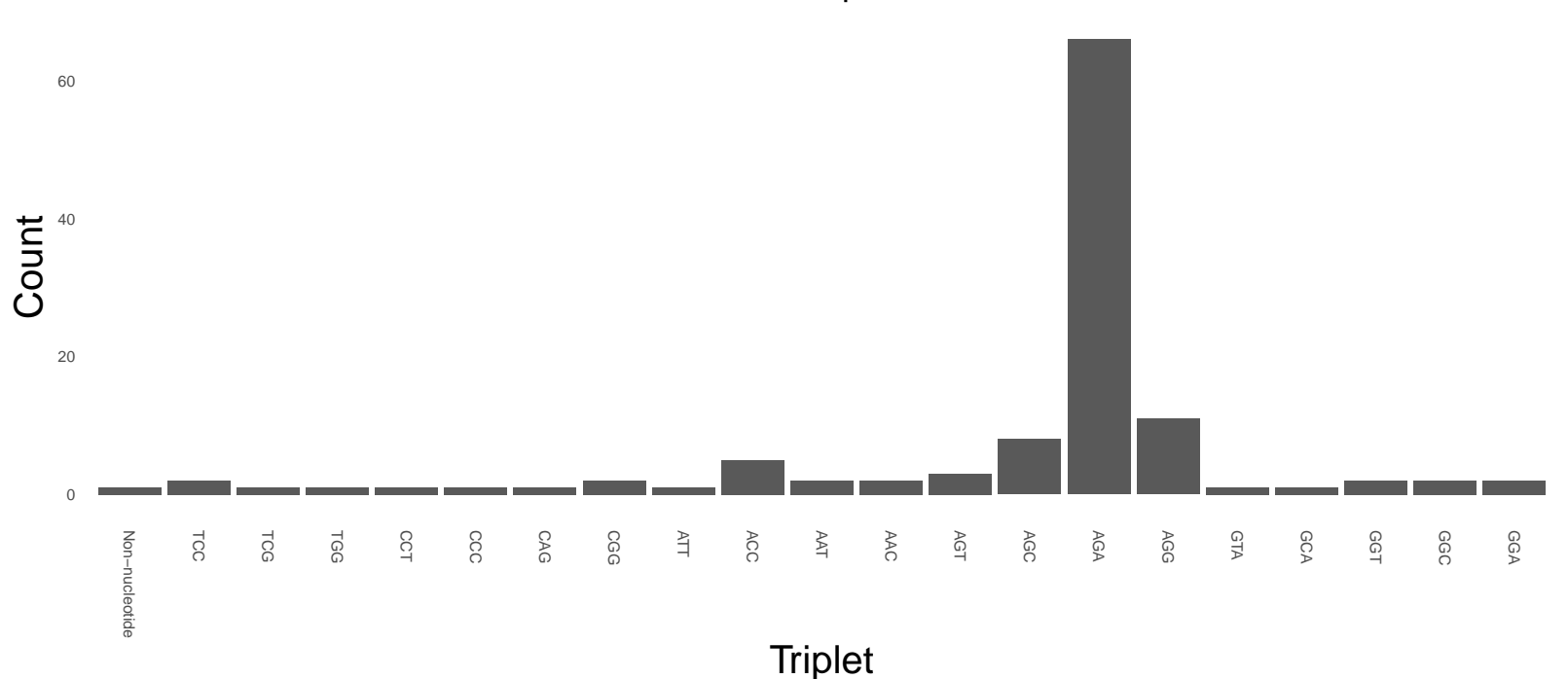
Gene IGHV3-30*02_A275G



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

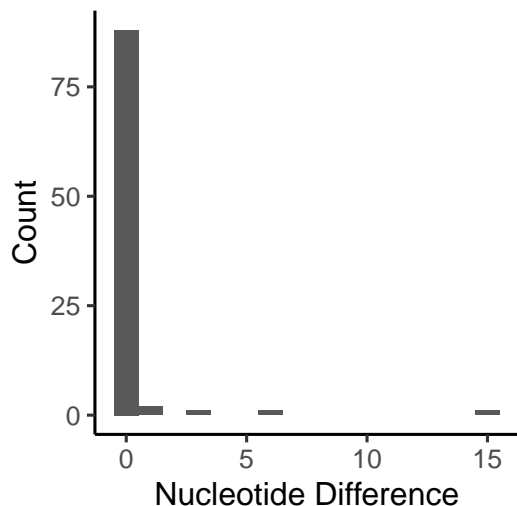


IGHV3-30*02_A275G- Final 3 nucleotides as a triplet



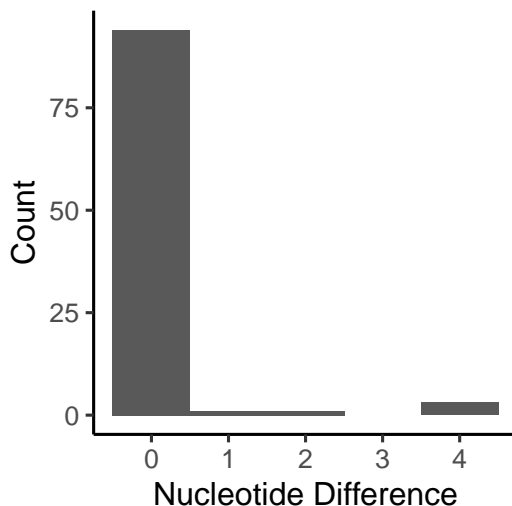
IGHV1-2*04

93 sequences assigned
88 (94.6%) exact matches, in which:
88 unique CDR3
6 unique J



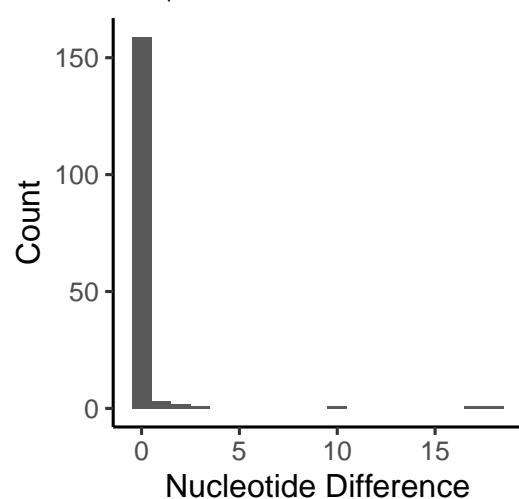
IGHV1-8*01

99 sequences assigned
94 (94.9%) exact matches, in which:
93 unique CDR3
5 unique J



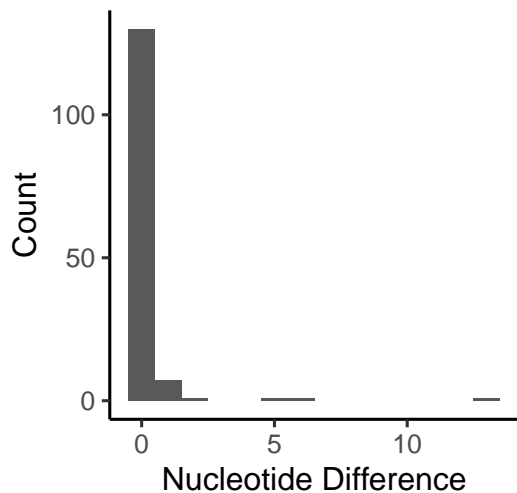
IGHV1-24*01

168 sequences assigned
159 (94.6%) exact matches, in which:
159 unique CDR3
5 unique J



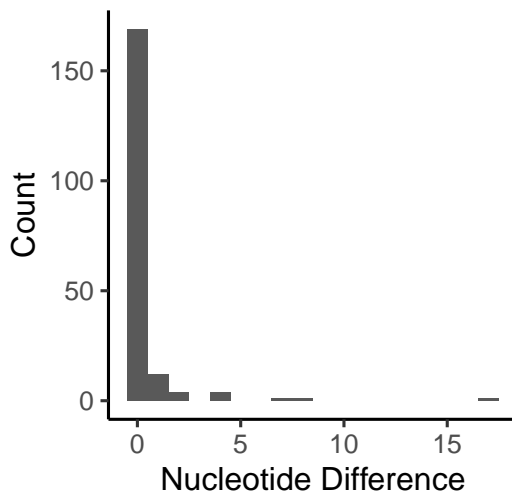
IGHV1-2*06

141 sequences assigned
130 (92.2%) exact matches, in which:
129 unique CDR3
6 unique J



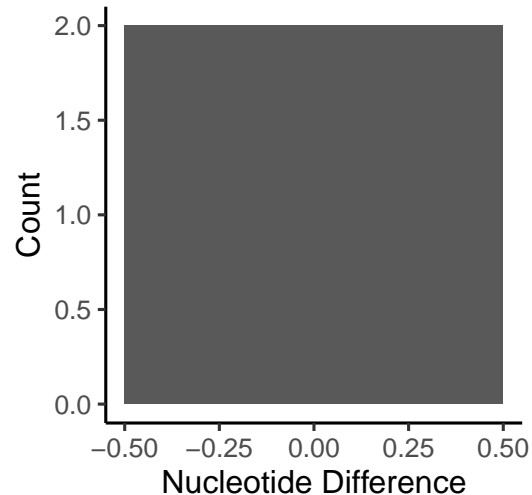
IGHV1-18*01

192 sequences assigned
169 (88%) exact matches, in which:
169 unique CDR3
6 unique J



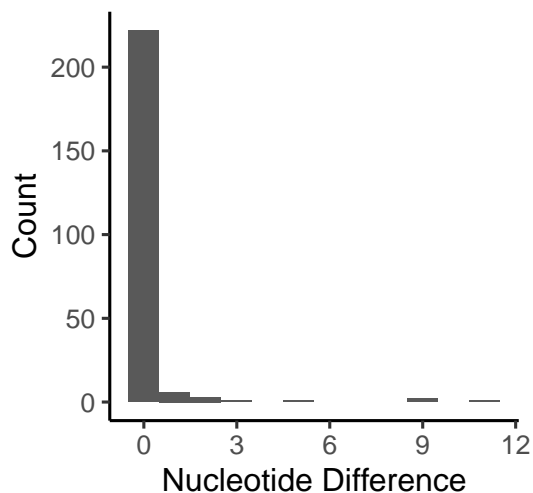
IGHV1-45*02

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



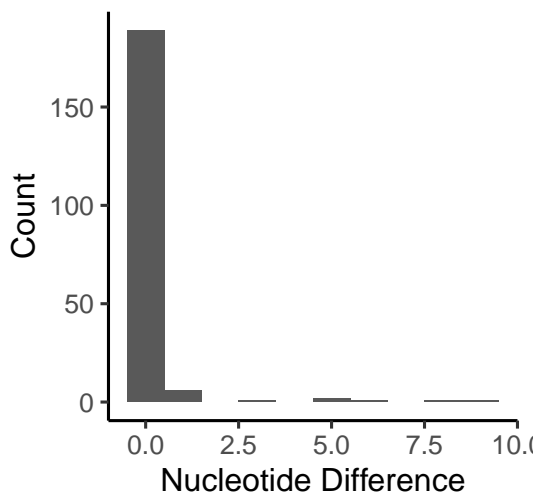
IGHV1-3*01

236 sequences assigned
222 (94.1%) exact matches, in which:
221 unique CDR3
5 unique J



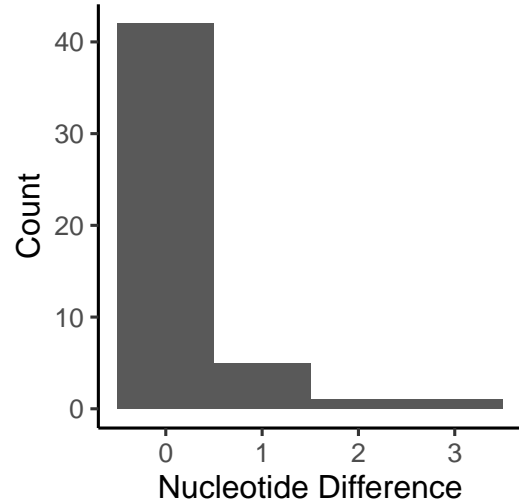
IGHV1-18*04

201 sequences assigned
189 (94%) exact matches, in which:
188 unique CDR3
6 unique J



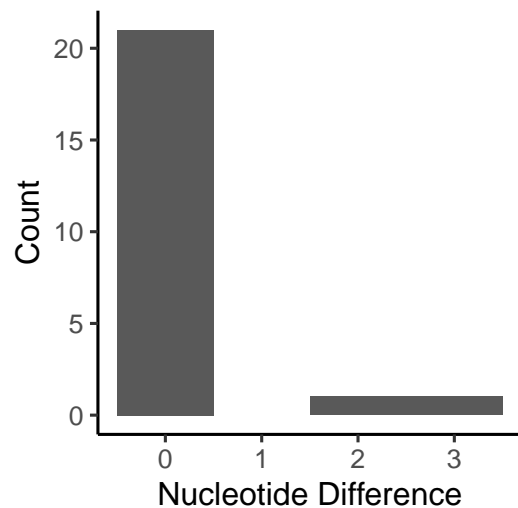
IGHV1-46*03

49 sequences assigned
42 (85.7%) exact matches, in which:
42 unique CDR3
5 unique J



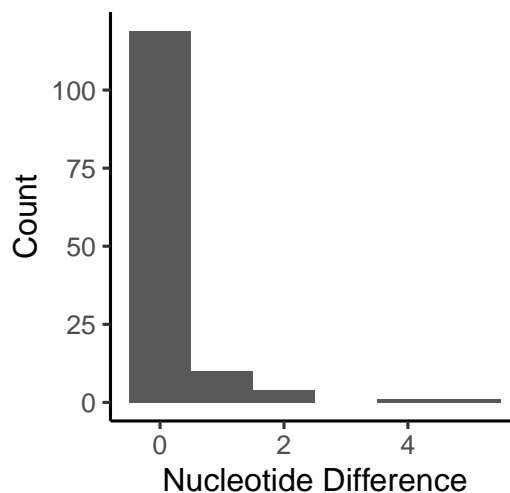
IGHV1–58*02

23 sequences assigned
21 (91.3%) exact matches, in which:
21 unique CDR3
4 unique J



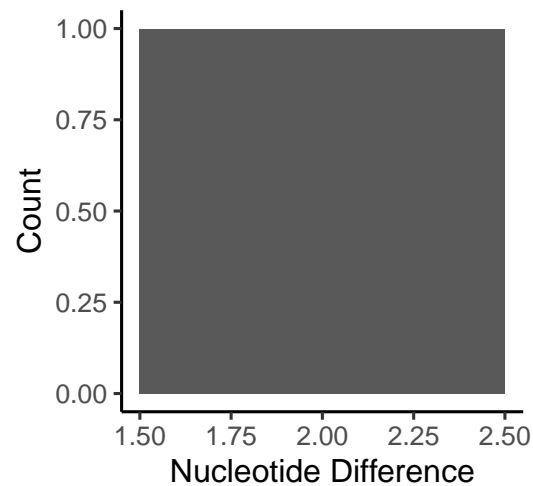
IGHV2–5*02

135 sequences assigned
119 (88.1%) exact matches, in which:
119 unique CDR3
6 unique J



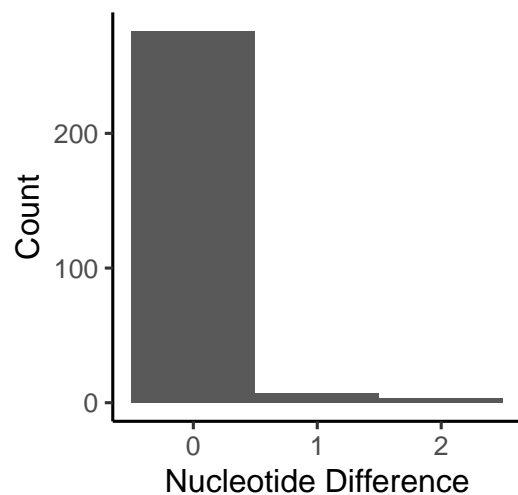
IGHV2–70D*14

1 sequences assigned
No exact matches.



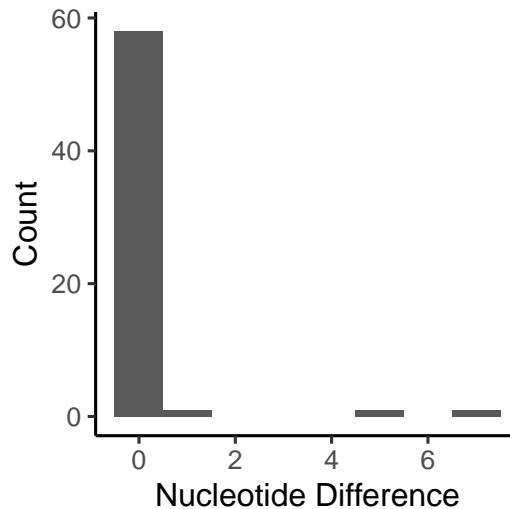
IGHV1–69*08_C191T

286 sequences assigned
276 (96.5%) exact matches, in which:
275 unique CDR3
6 unique J



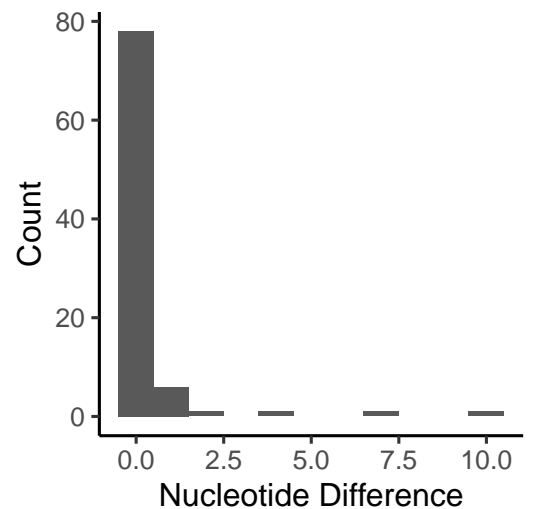
IGHV2–26*01

61 sequences assigned
58 (95.1%) exact matches, in which:
58 unique CDR3
6 unique J



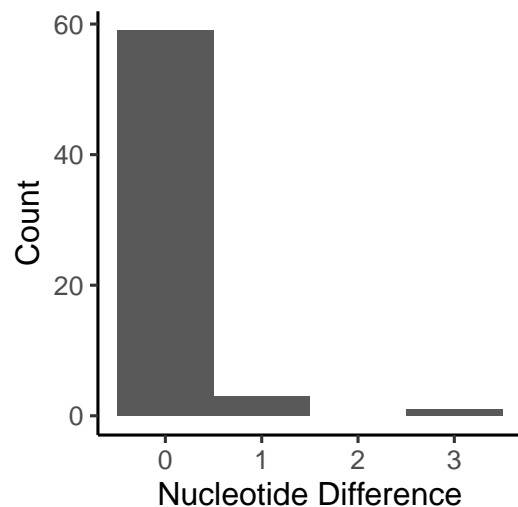
IGHV3–7*01

89 sequences assigned
78 (87.6%) exact matches, in which:
78 unique CDR3
6 unique J



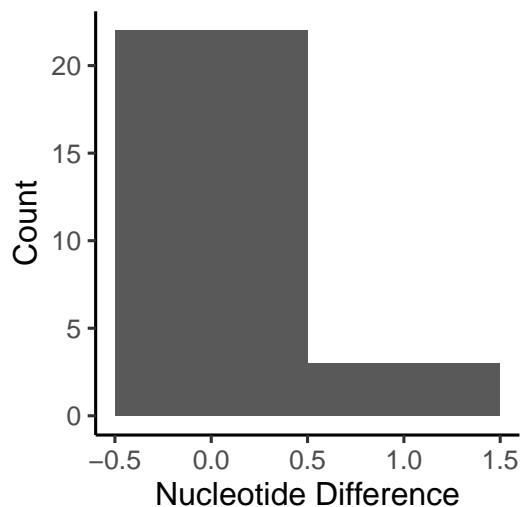
IGHV2–5*01

63 sequences assigned
59 (93.7%) exact matches, in which:
59 unique CDR3
5 unique J



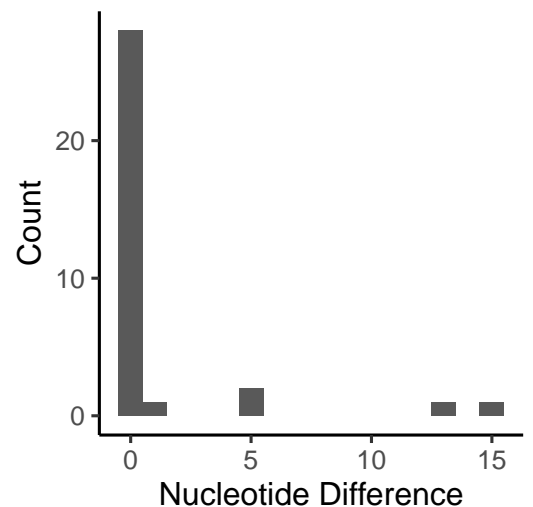
IGHV2–70*15

25 sequences assigned
22 (88%) exact matches, in which:
22 unique CDR3
5 unique J



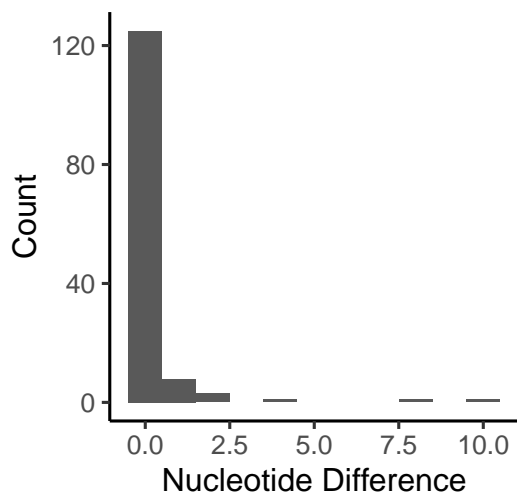
IGHV3–7*05

34 sequences assigned
28 (82.4%) exact matches, in which:
28 unique CDR3
5 unique J



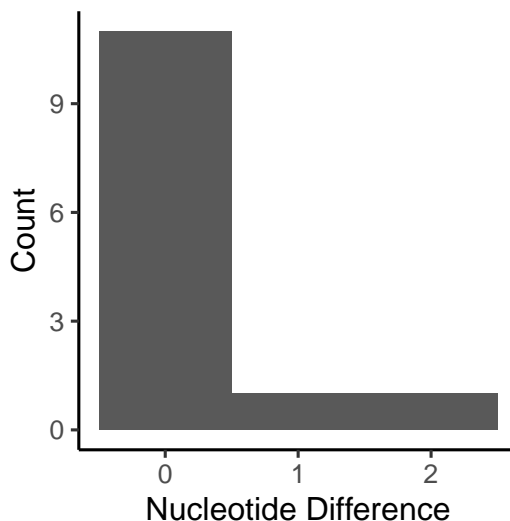
IGHV3-9*01

139 sequences assigned
125 (89.9%) exact matches, in which:
124 unique CDR3
5 unique J



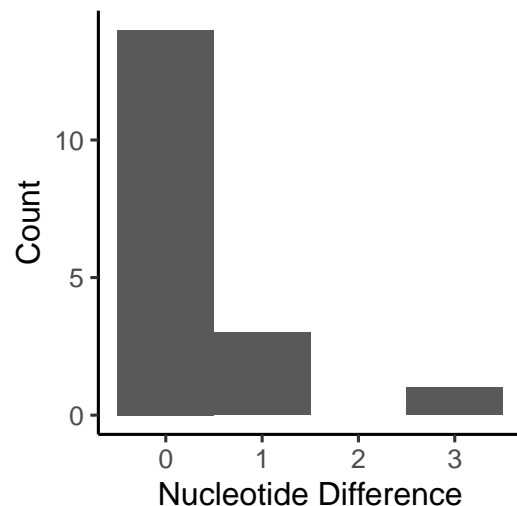
IGHV3-13*01

13 sequences assigned
11 (84.6%) exact matches, in which:
11 unique CDR3
4 unique J



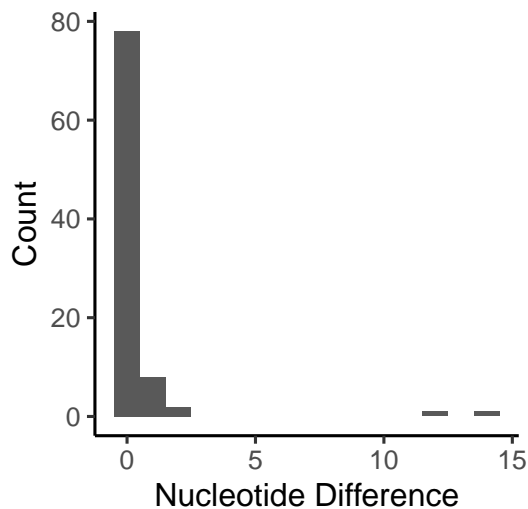
IGHV3-20*01

18 sequences assigned
14 (77.8%) exact matches, in which:
14 unique CDR3
4 unique J



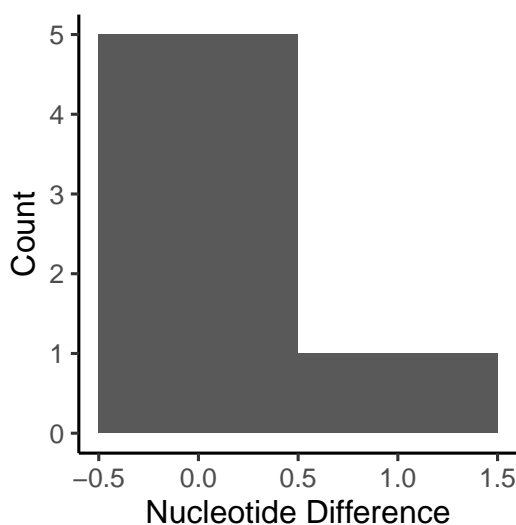
IGHV3-11*01

90 sequences assigned
78 (86.7%) exact matches, in which:
78 unique CDR3
5 unique J



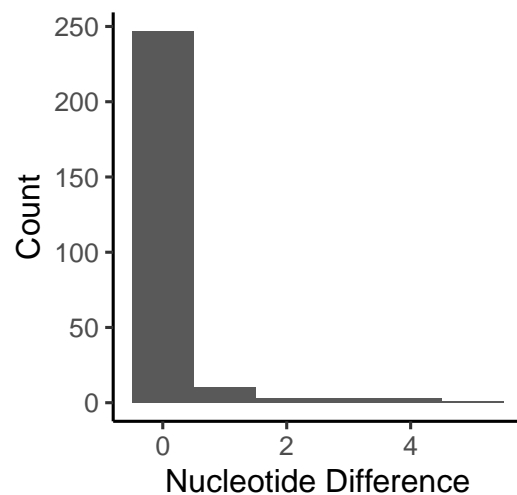
IGHV3-13*05

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



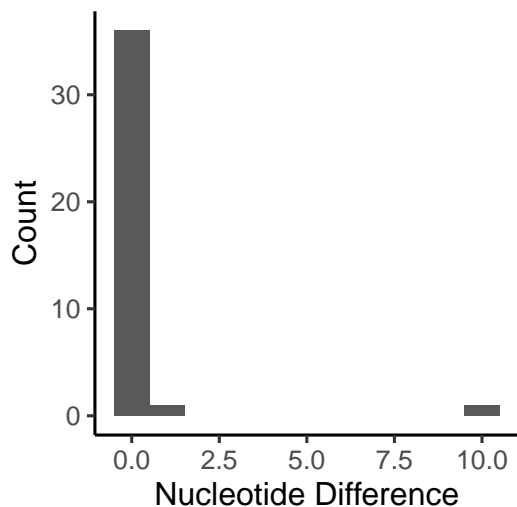
IGHV3-21*01

267 sequences assigned
247 (92.5%) exact matches, in which:
247 unique CDR3
6 unique J



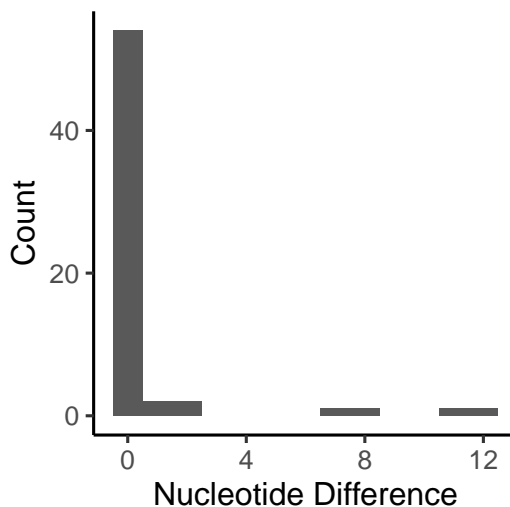
IGHV3-11*06

38 sequences assigned
36 (94.7%) exact matches, in which:
36 unique CDR3
4 unique J



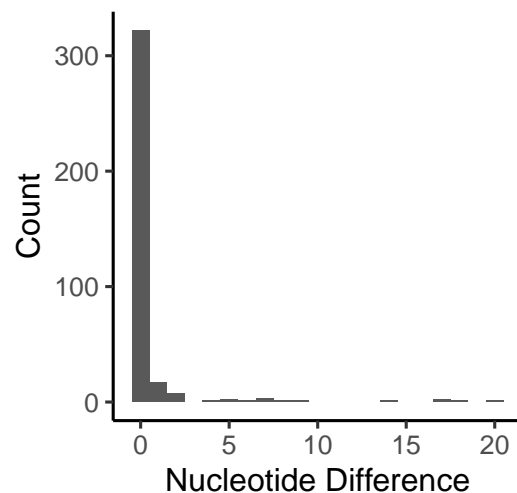
IGHV3-15*01

62 sequences assigned
54 (87.1%) exact matches, in which:
54 unique CDR3
5 unique J



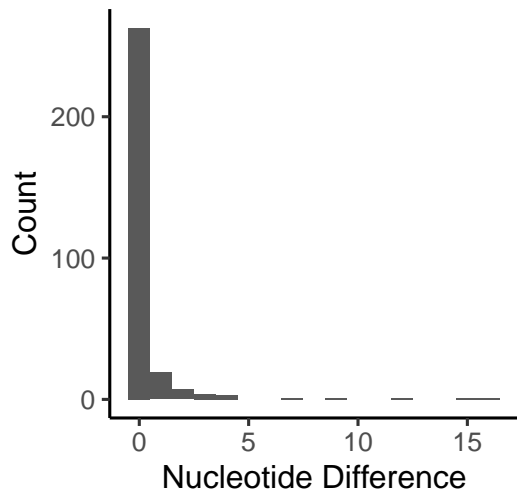
IGHV3-23*01

360 sequences assigned
322 (89.4%) exact matches, in which:
321 unique CDR3
6 unique J



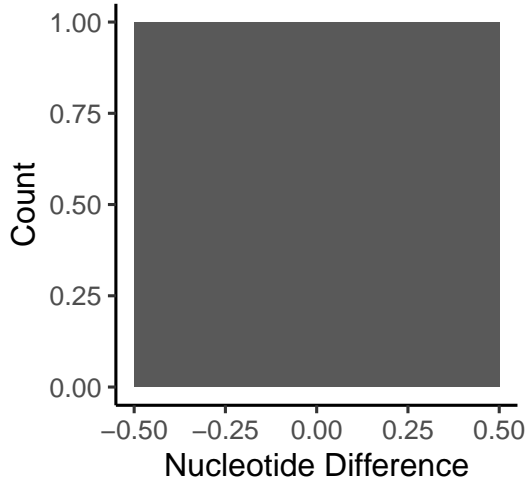
IGHV3-30*04

301 sequences assigned
263 (87.4%) exact matches, in which:
261 unique CDR3
6 unique J



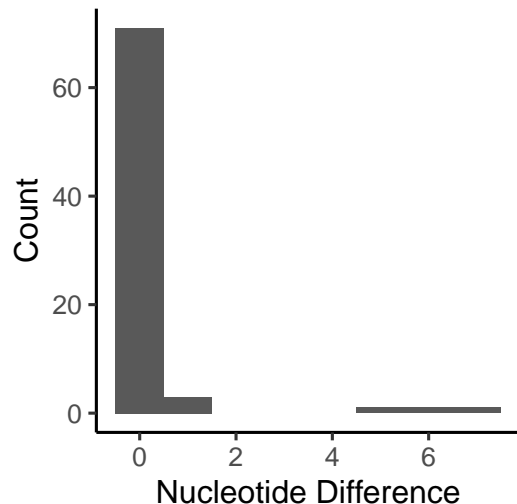
IGHV3-38-3*01

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



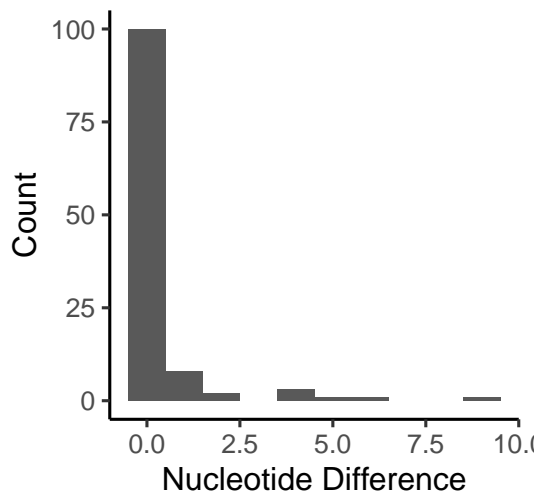
IGHV3-48*02

77 sequences assigned
71 (92.2%) exact matches, in which:
71 unique CDR3
5 unique J



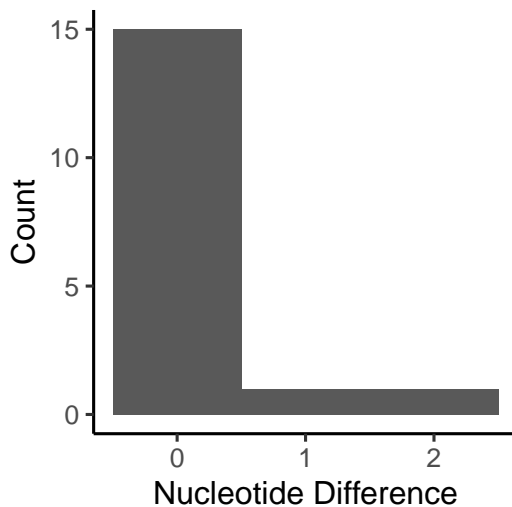
IGHV3-30*02_A275G

116 sequences assigned
100 (86.2%) exact matches, in which:
100 unique CDR3
6 unique J



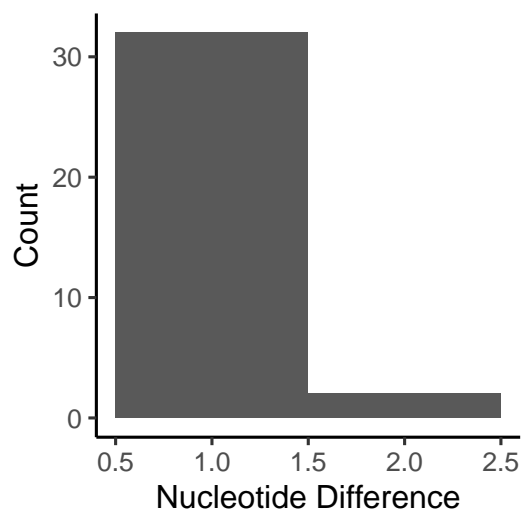
IGHV3-43*01

17 sequences assigned
15 (88.2%) exact matches, in which:
15 unique CDR3
3 unique J



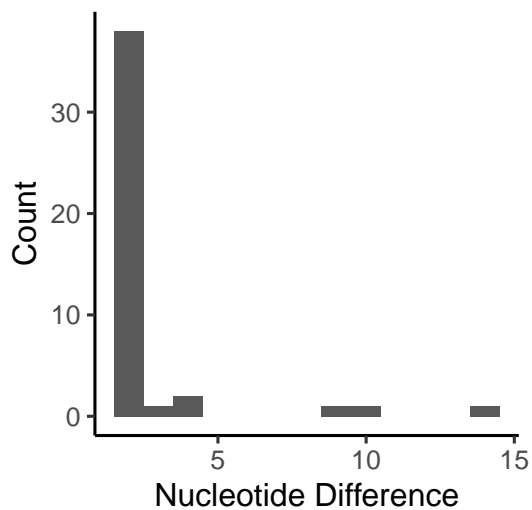
IGHV3-49*03

34 sequences assigned
No exact matches.



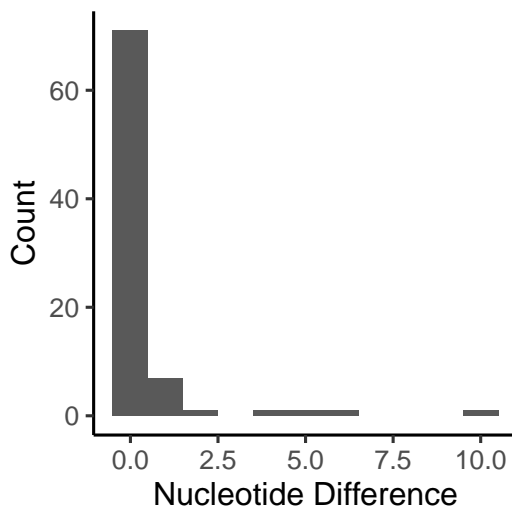
IGHV3-33*05

44 sequences assigned
No exact matches.



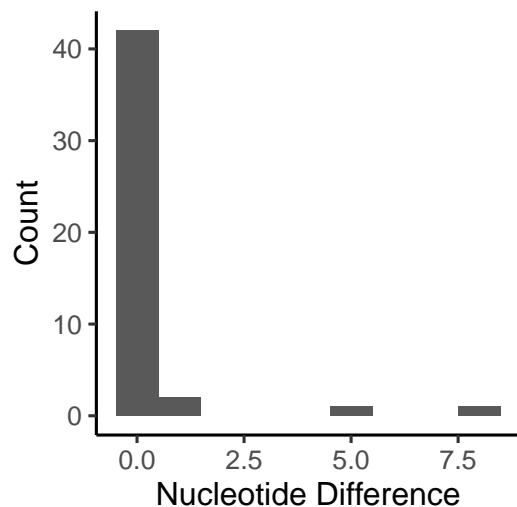
IGHV3-48*01

83 sequences assigned
71 (85.5%) exact matches, in which:
71 unique CDR3
5 unique J



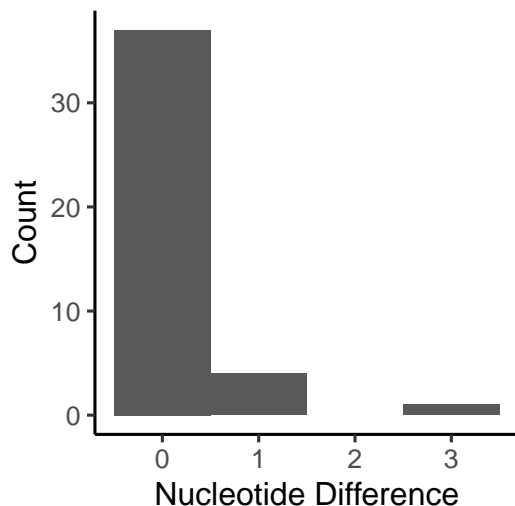
IGHV3-49*04

46 sequences assigned
42 (91.3%) exact matches, in which:
42 unique CDR3
5 unique J



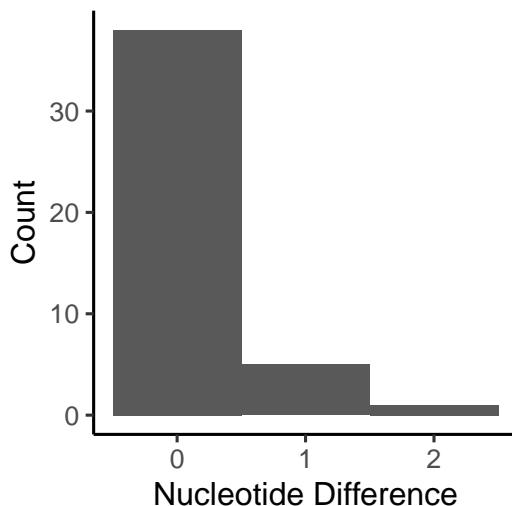
IGHV3-53*02

42 sequences assigned
37 (88.1%) exact matches, in which:
37 unique CDR3
5 unique J



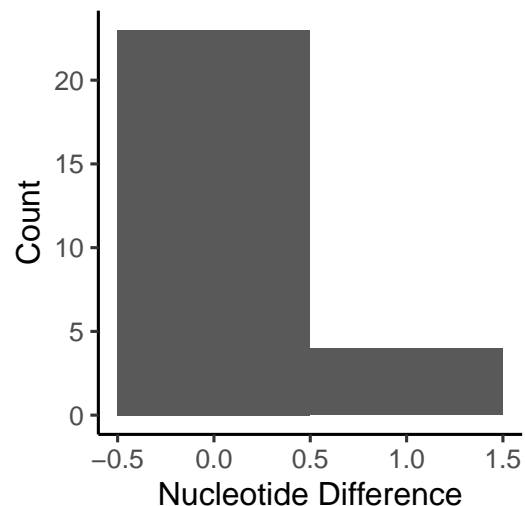
IGHV3-66*01

44 sequences assigned
38 (86.4%) exact matches, in which:
38 unique CDR3
6 unique J



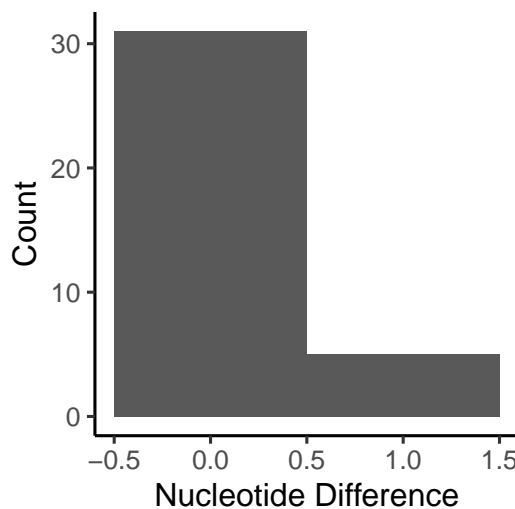
IGHV3-73*01

27 sequences assigned
23 (85.2%) exact matches, in which:
23 unique CDR3
4 unique J



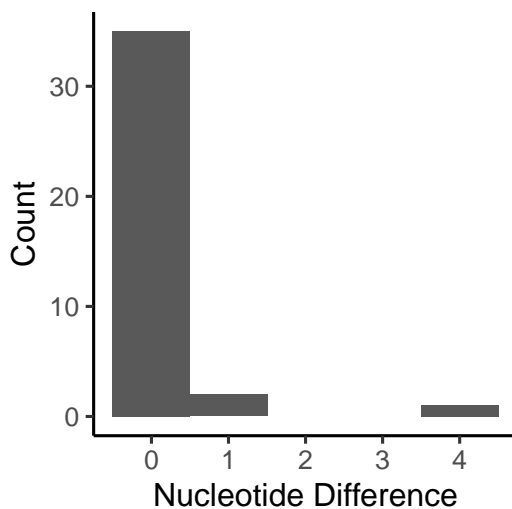
IGHV3-53*04

36 sequences assigned
31 (86.1%) exact matches, in which:
31 unique CDR3
4 unique J



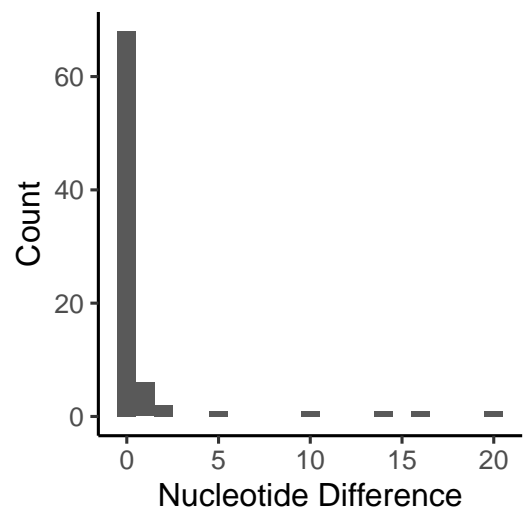
IGHV3-66*02

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



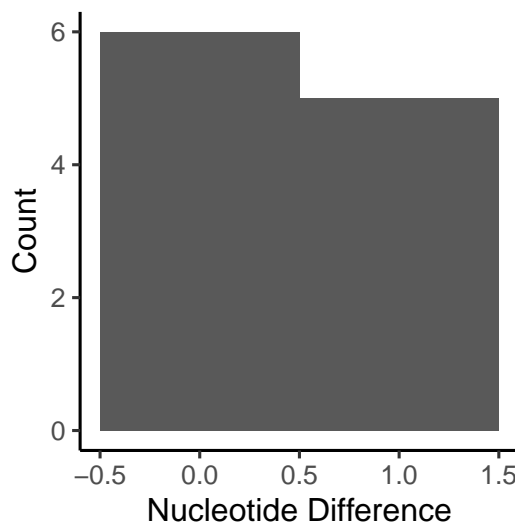
IGHV3-74*01

81 sequences assigned
68 (84%) exact matches, in which:
68 unique CDR3
5 unique J



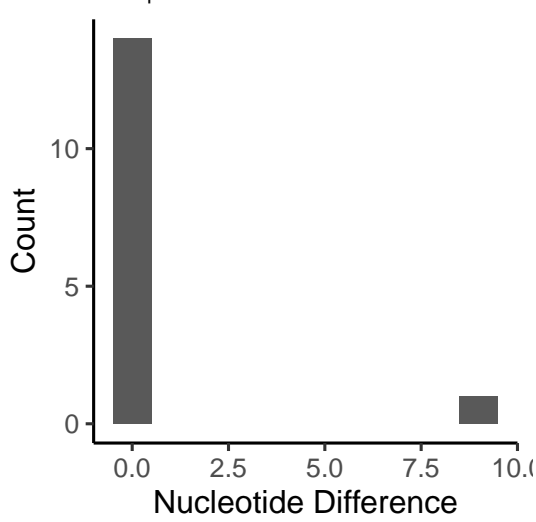
IGHV3-64*01

11 sequences assigned
6 (54.5%) exact matches, in which:
6 unique CDR3
3 unique J



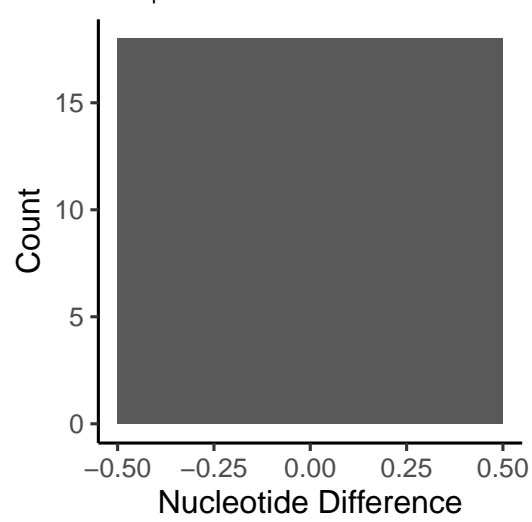
IGHV3-72*01

15 sequences assigned
14 (93.3%) exact matches, in which:
14 unique CDR3
4 unique J



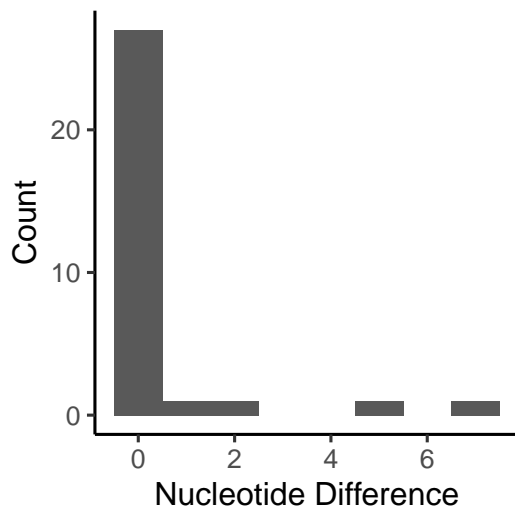
IGHV3-43D*03

18 sequences assigned
18 (100%) exact matches, in which:
18 unique CDR3
3 unique J



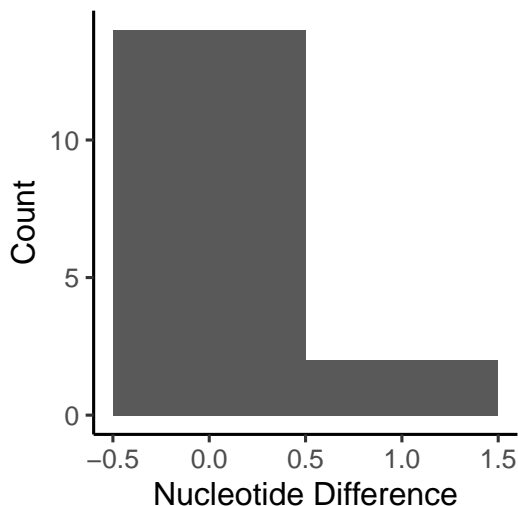
IGHV3–64D*09

31 sequences assigned
27 (87.1%) exact matches, in which:
27 unique CDR3
4 unique J



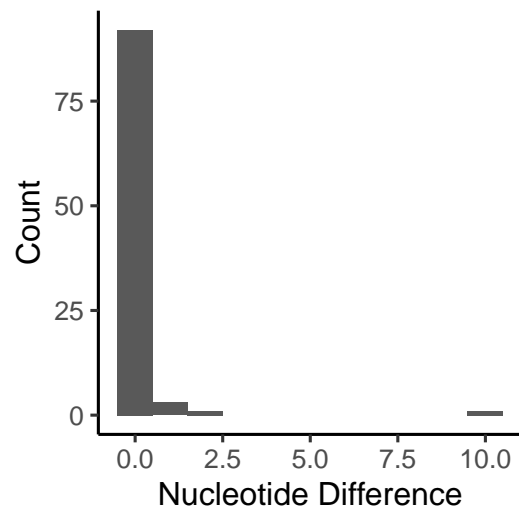
IGHV4–30–2*01

16 sequences assigned
14 (87.5%) exact matches, in which:
14 unique CDR3
4 unique J



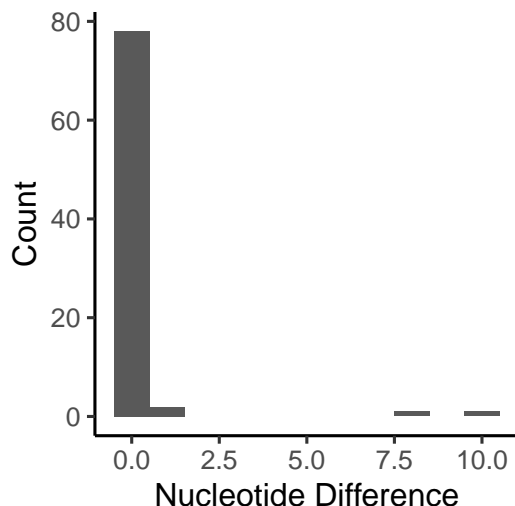
IGHV4–38–2*02

98 sequences assigned
92 (93.9%) exact matches, in which:
92 unique CDR3
4 unique J



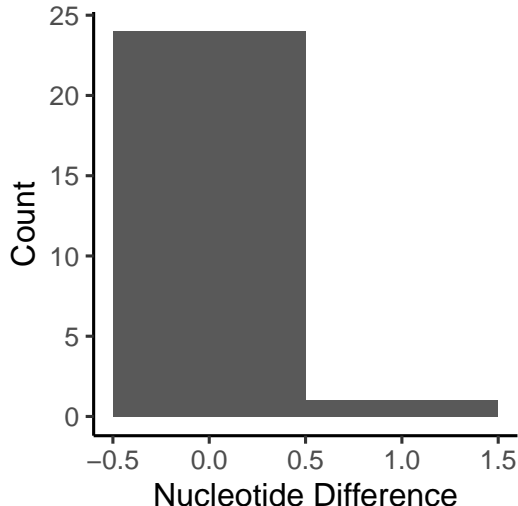
IGHV4–4*02

82 sequences assigned
78 (95.1%) exact matches, in which:
78 unique CDR3
6 unique J



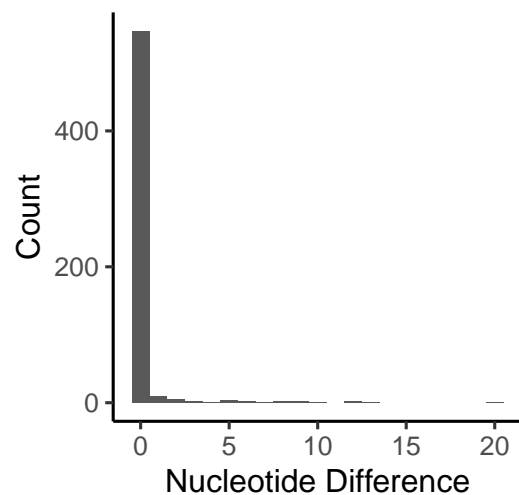
IGHV4–30–4*07

25 sequences assigned
24 (96%) exact matches, in which:
24 unique CDR3
4 unique J



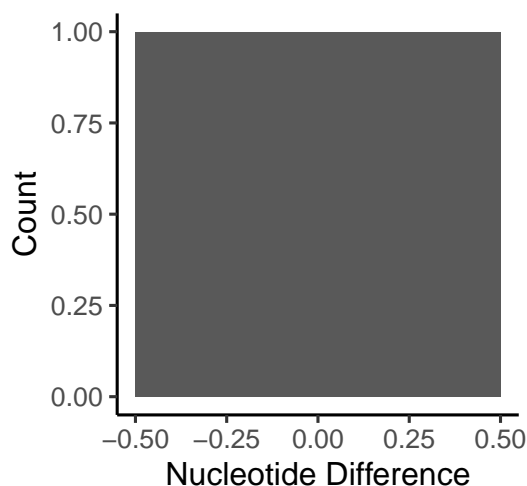
IGHV4–39*01

581 sequences assigned
547 (94.1%) exact matches, in which:
546 unique CDR3
6 unique J



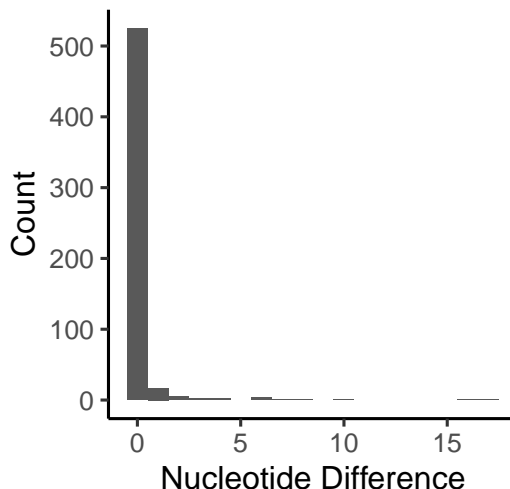
IGHV4–28*05

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



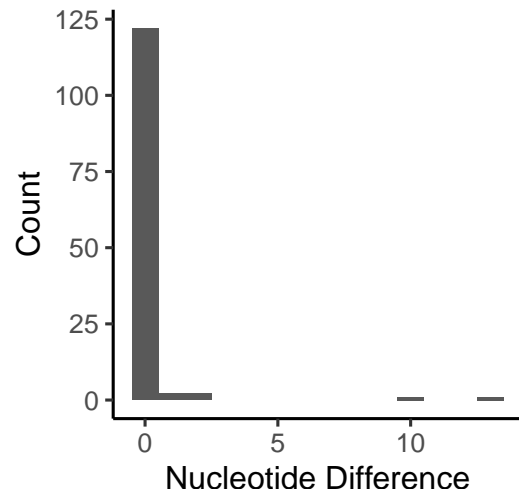
IGHV4–34*01

560 sequences assigned
525 (93.8%) exact matches, in which:
525 unique CDR3
6 unique J



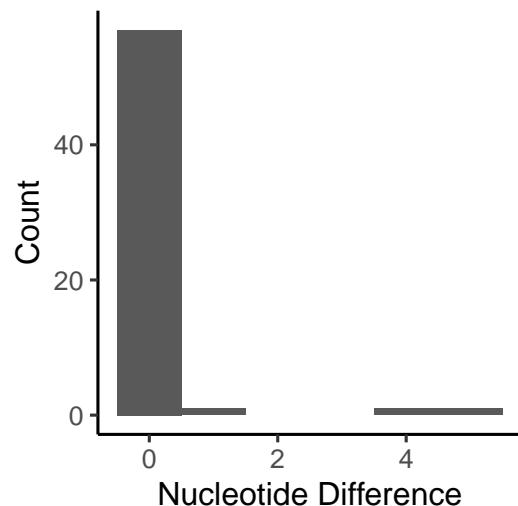
IGHV4–59*01

128 sequences assigned
122 (95.3%) exact matches, in which:
122 unique CDR3
5 unique J



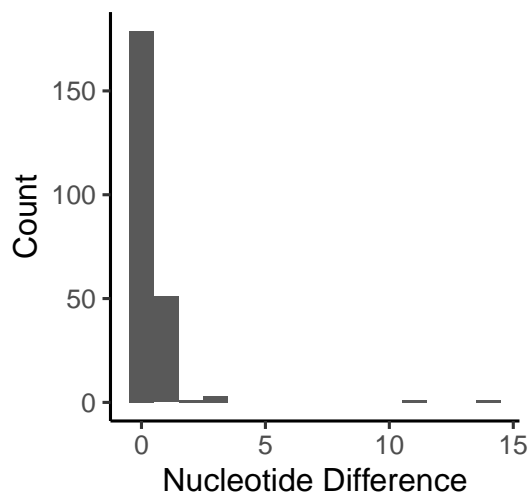
IGHV4–59*08

60 sequences assigned
57 (95%) exact matches, in which:
57 unique CDR3
5 unique J



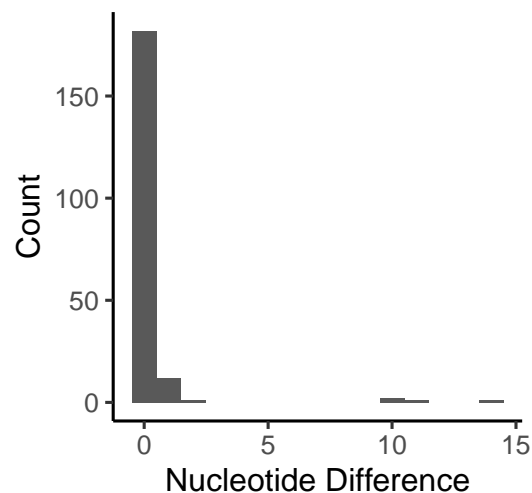
IGHV5–51*01

236 sequences assigned
179 (75.8%) exact matches, in which:
179 unique CDR3
6 unique J



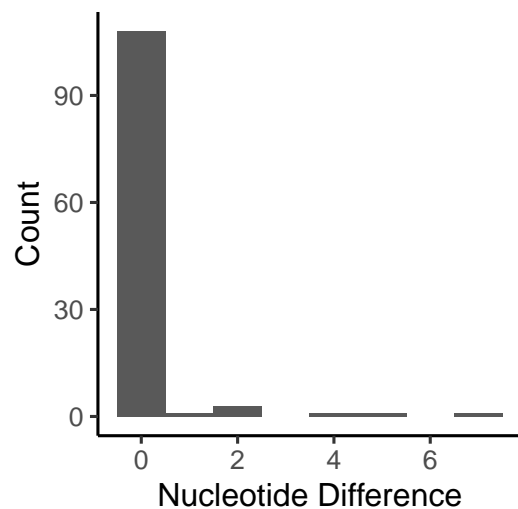
IGHV7–4–1*02

199 sequences assigned
182 (91.5%) exact matches, in which:
182 unique CDR3
6 unique J



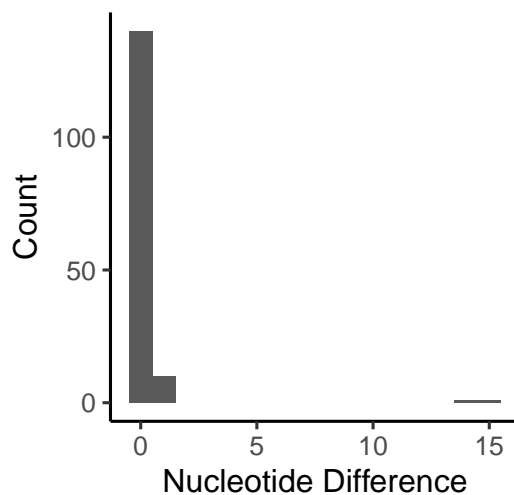
IGHV4–61*02

115 sequences assigned
108 (93.9%) exact matches, in which:
108 unique CDR3
5 unique J



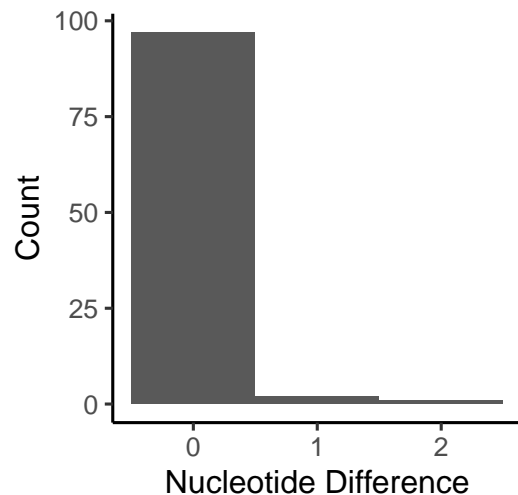
IGHV5–51*03

152 sequences assigned
140 (92.1%) exact matches, in which:
140 unique CDR3
4 unique J



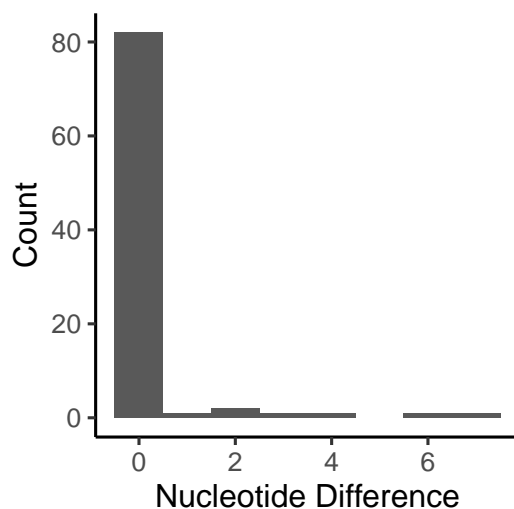
IGHV5–10–1*03

100 sequences assigned
97 (97%) exact matches, in which:
97 unique CDR3
5 unique J

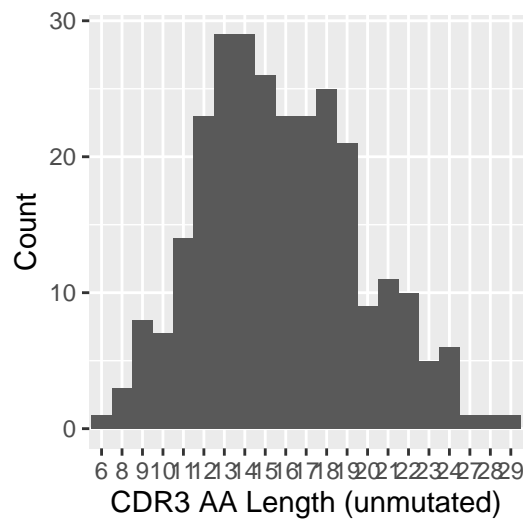


IGHV6–1*01

89 sequences assigned
82 (92.1%) exact matches, in which:
82 unique CDR3
6 unique J



IGHV1-69*08_C191T



IGHV3-30*02_A275G

