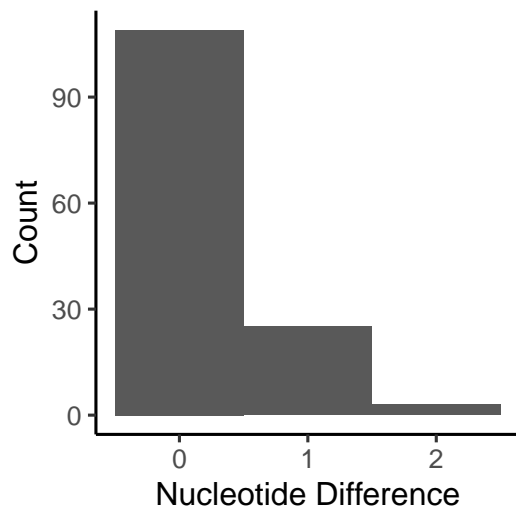


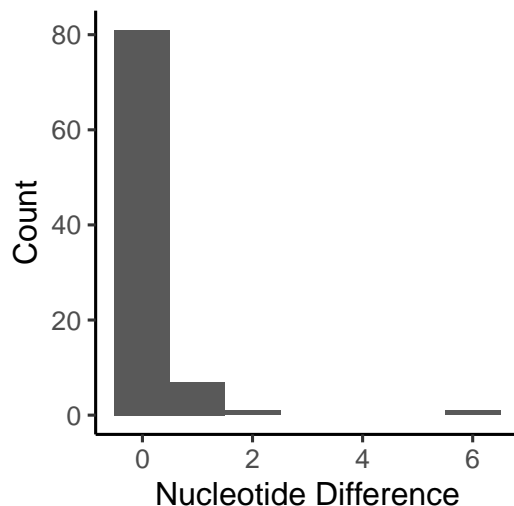
IGHV1-2*02

138 sequences assigned
109 (79%) exact matches, in which:
109 unique CDR3
6 unique J



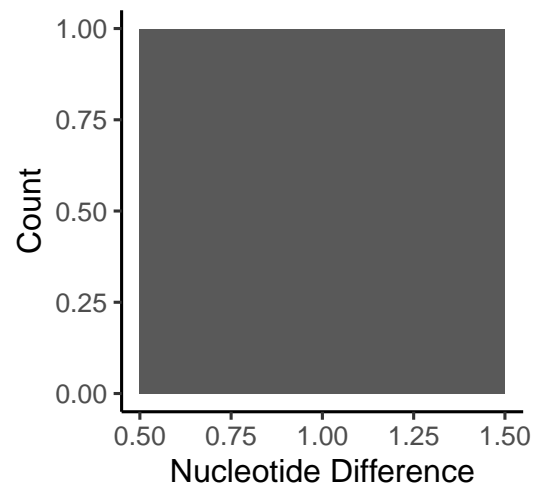
IGHV1-8*01

90 sequences assigned
81 (90%) exact matches, in which:
81 unique CDR3
6 unique J



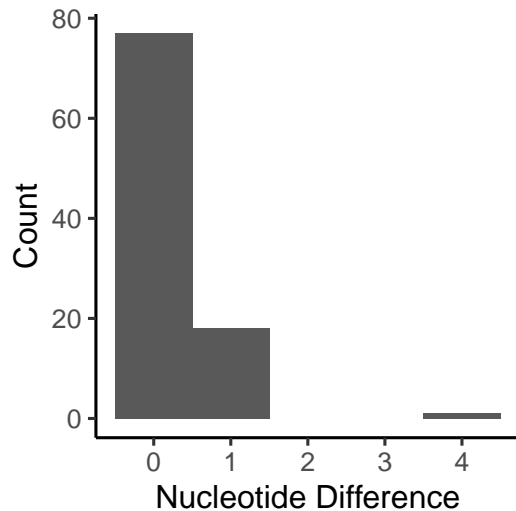
IGHV1-45*02

1 sequences assigned
No exact matches.



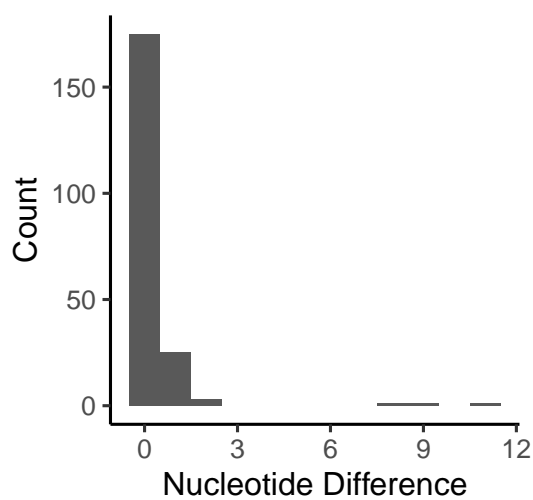
IGHV1-2*06

96 sequences assigned
77 (80.2%) exact matches, in which:
77 unique CDR3
6 unique J



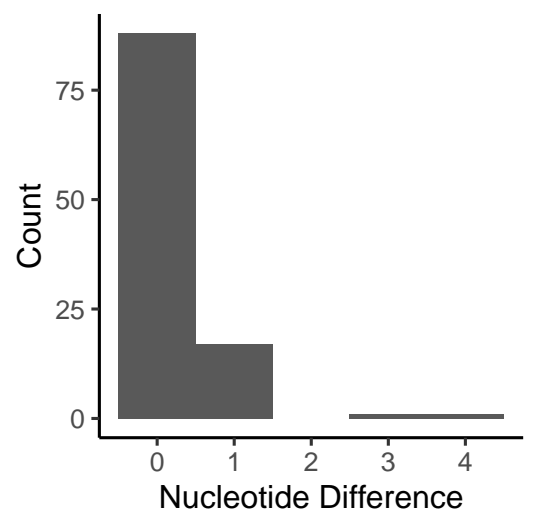
IGHV1-18*01

206 sequences assigned
175 (85%) exact matches, in which:
175 unique CDR3
7 unique J



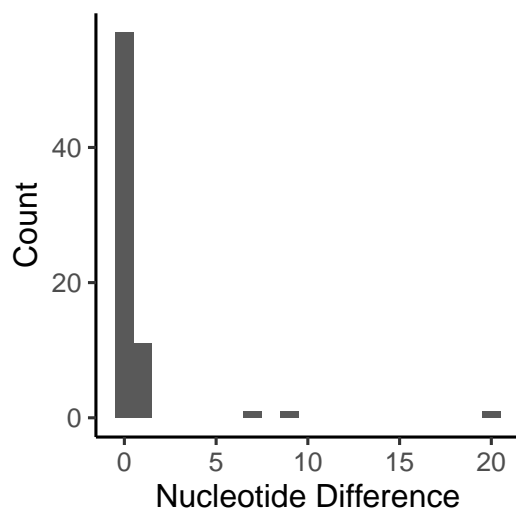
IGHV1-46*01

107 sequences assigned
88 (82.2%) exact matches, in which:
87 unique CDR3
7 unique J



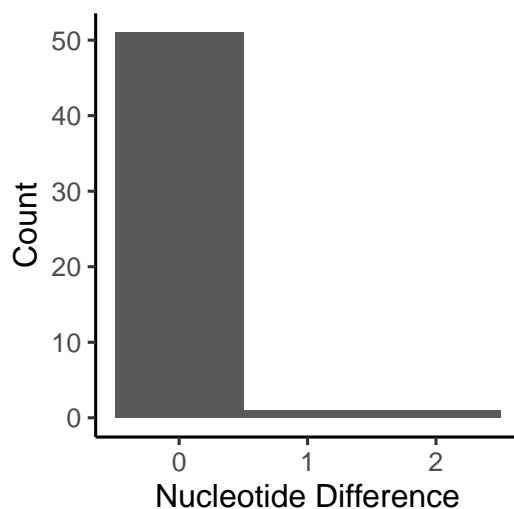
IGHV1-3*01

71 sequences assigned
57 (80.3%) exact matches, in which:
57 unique CDR3
6 unique J



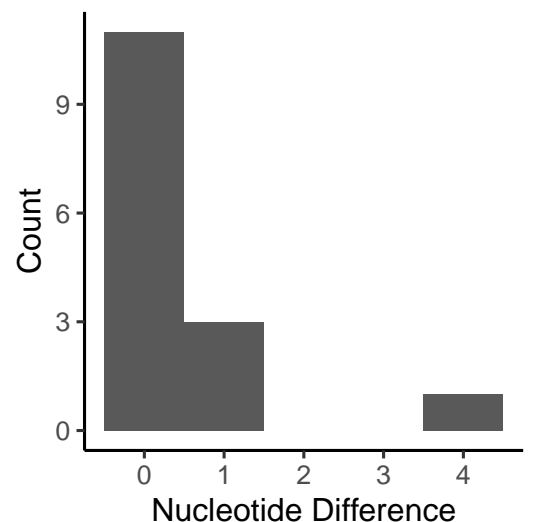
IGHV1-24*01

53 sequences assigned
51 (96.2%) exact matches, in which:
51 unique CDR3
6 unique J



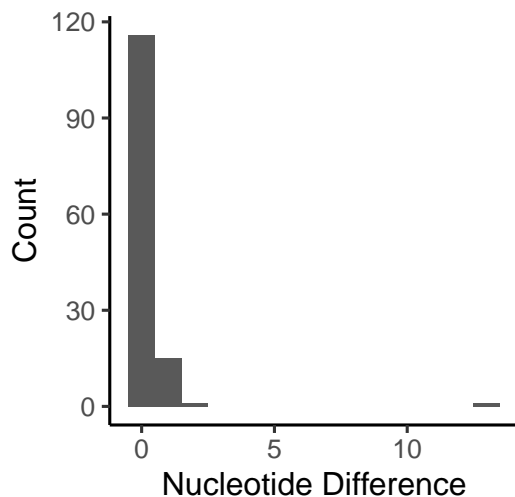
IGHV1-58*02

15 sequences assigned
11 (73.3%) exact matches, in which:
11 unique CDR3
5 unique J



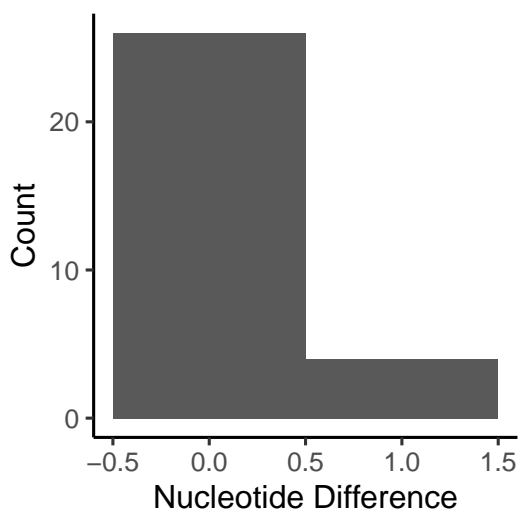
IGHV1–69*04

133 sequences assigned
116 (87.2%) exact matches, in which:
115 unique CDR3
6 unique J



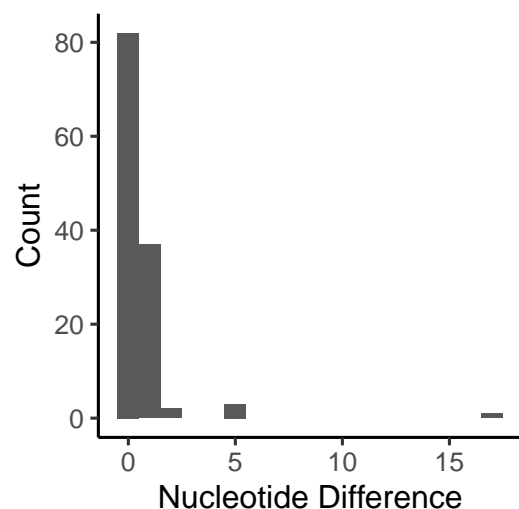
IGHV2–5*02

30 sequences assigned
26 (86.7%) exact matches, in which:
26 unique CDR3
6 unique J



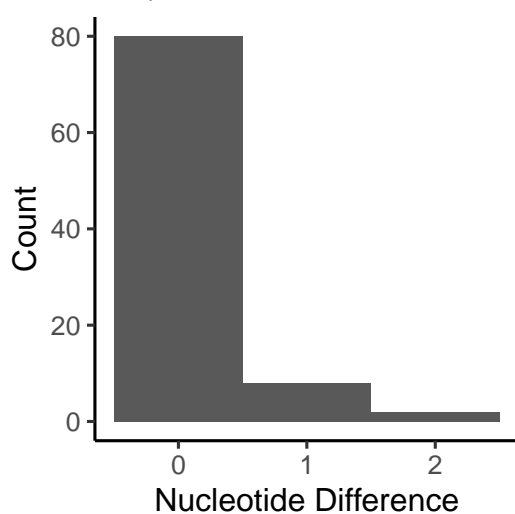
IGHV3–7*01

125 sequences assigned
82 (65.6%) exact matches, in which:
82 unique CDR3
5 unique J



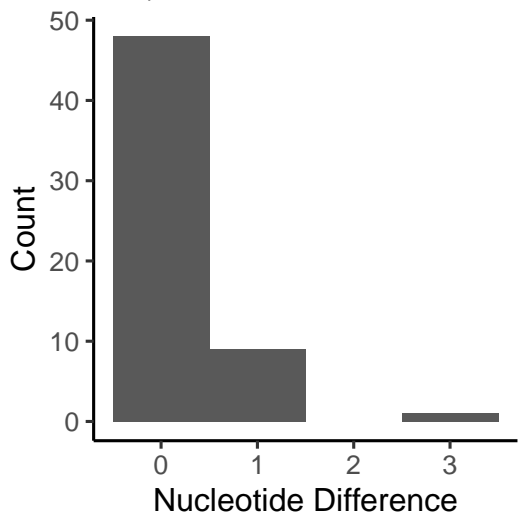
IGHV1–69*08_C191T

90 sequences assigned
80 (88.9%) exact matches, in which:
80 unique CDR3
5 unique J



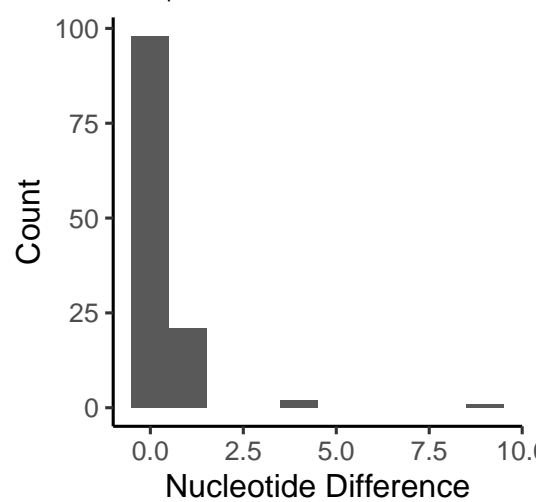
IGHV2–26*01

58 sequences assigned
48 (82.8%) exact matches, in which:
48 unique CDR3
6 unique J



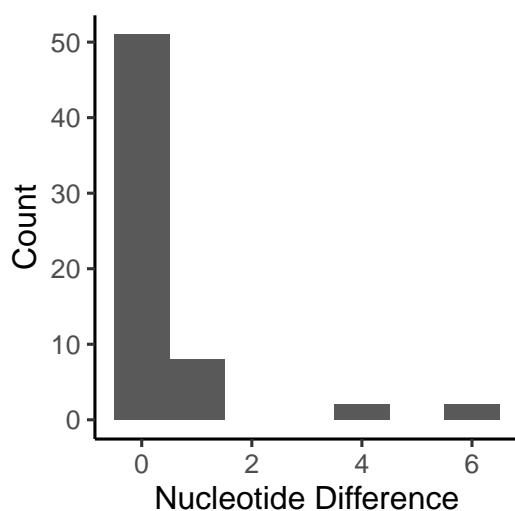
IGHV3–7*03

122 sequences assigned
98 (80.3%) exact matches, in which:
97 unique CDR3
6 unique J



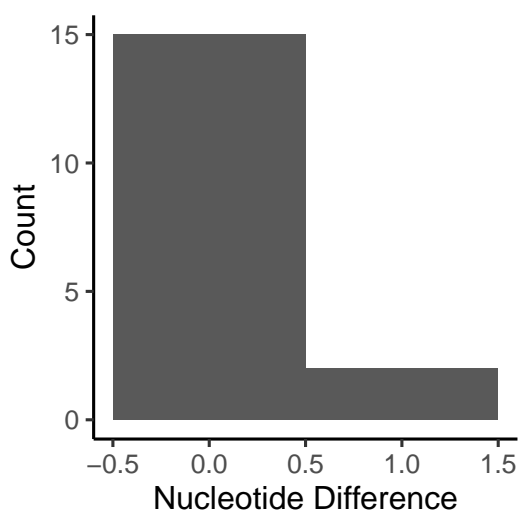
IGHV2–5*01

63 sequences assigned
51 (81%) exact matches, in which:
51 unique CDR3
5 unique J



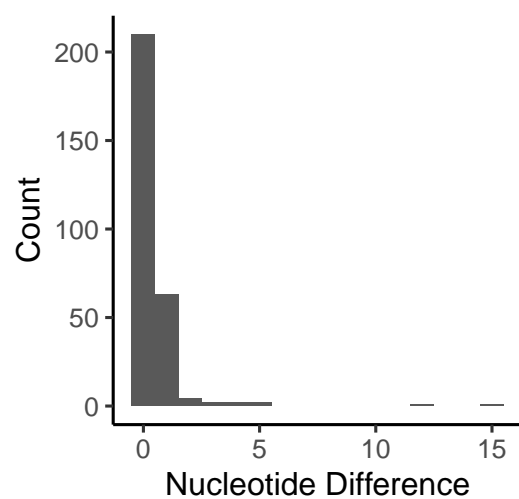
IGHV2–70*15

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



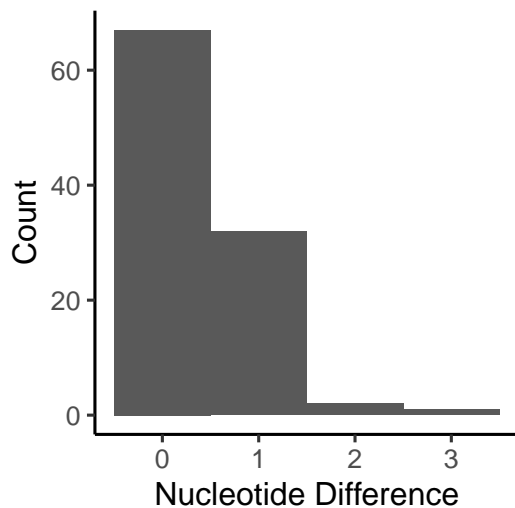
IGHV3–9*01

286 sequences assigned
210 (73.4%) exact matches, in which:
208 unique CDR3
6 unique J



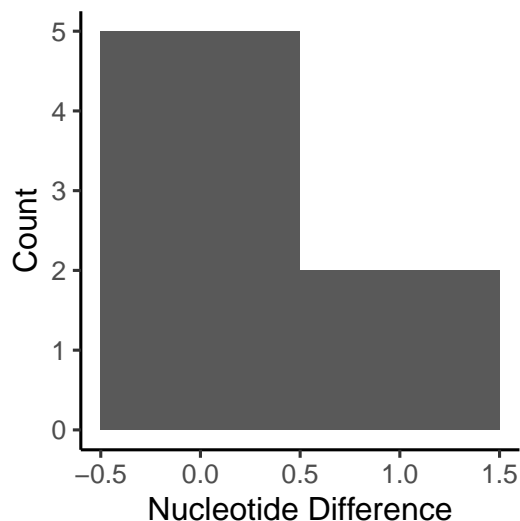
IGHV3-11*01

103 sequences assigned
67 (65%) exact matches, in which:
67 unique CDR3
6 unique J



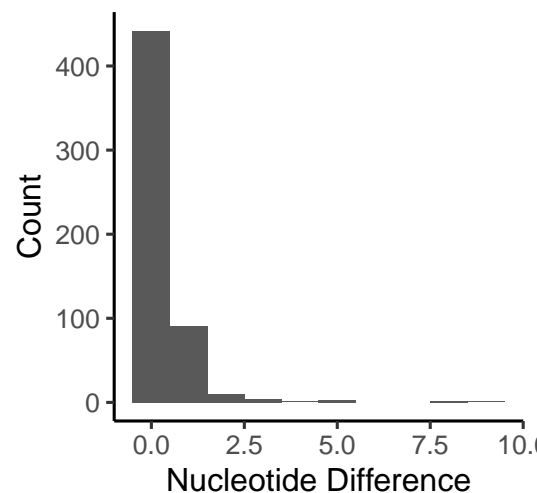
IGHV3-13*05

7 sequences assigned
5 (71.4%) exact matches, in which:
5 unique CDR3
3 unique J



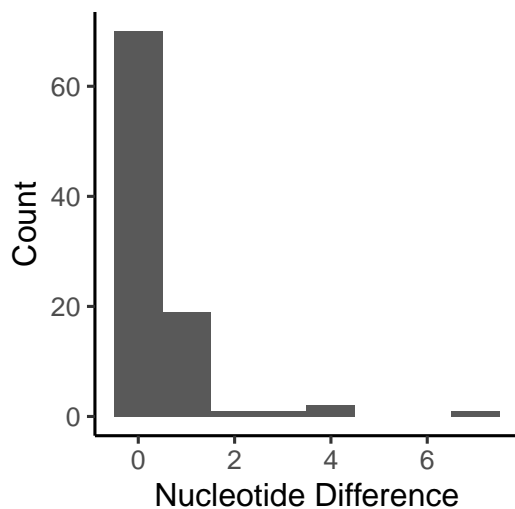
IGHV3-21*01

554 sequences assigned
442 (79.8%) exact matches, in which:
438 unique CDR3
7 unique J



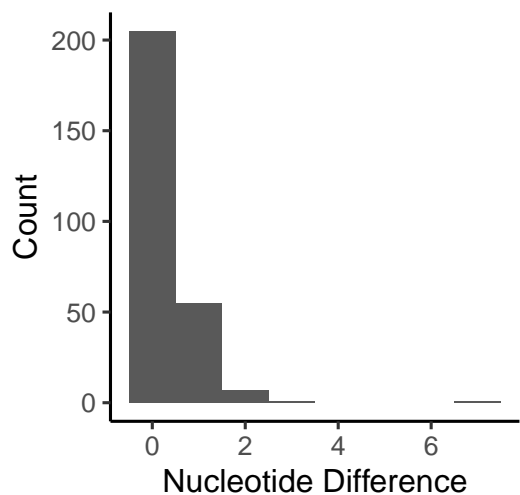
IGHV3-11*06

95 sequences assigned
70 (73.7%) exact matches, in which:
69 unique CDR3
6 unique J



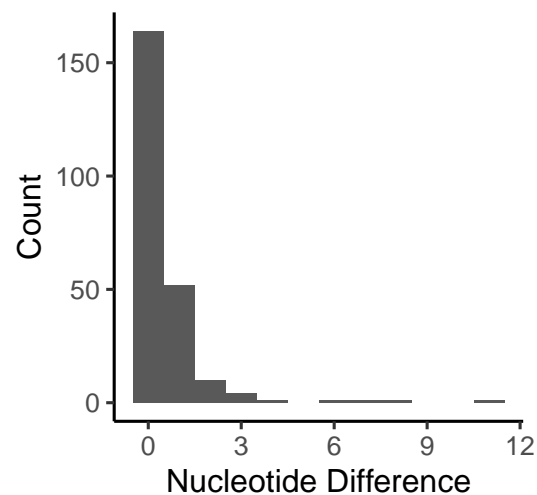
IGHV3-15*01

269 sequences assigned
205 (76.2%) exact matches, in which:
204 unique CDR3
7 unique J



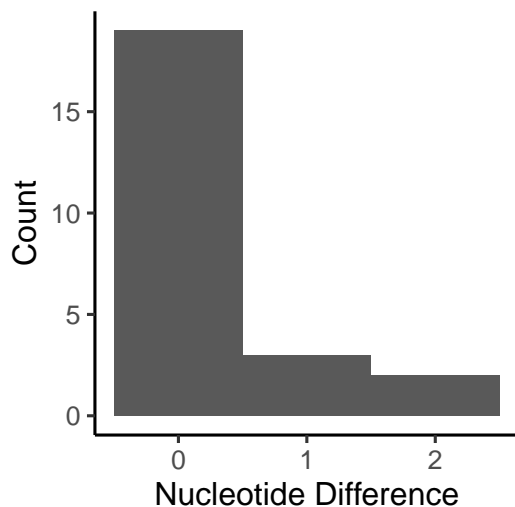
IGHV3-30-3*01

237 sequences assigned
164 (69.2%) exact matches, in which:
164 unique CDR3
6 unique J



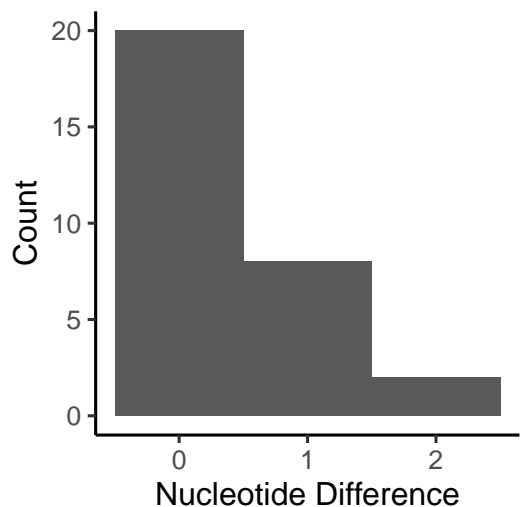
IGHV3-13*01

24 sequences assigned
19 (79.2%) exact matches, in which:
19 unique CDR3
5 unique J



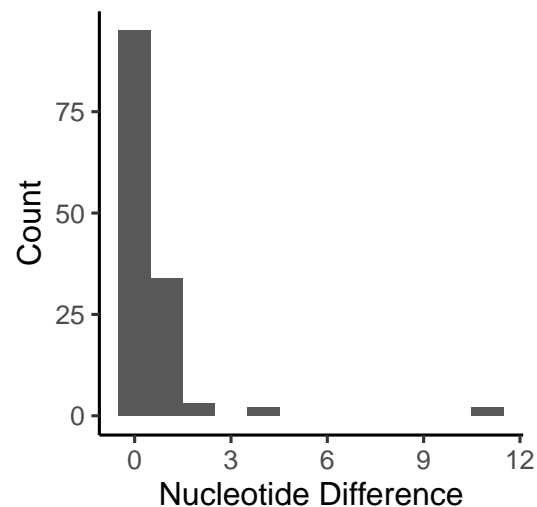
IGHV3-20*01

31 sequences assigned
20 (64.5%) exact matches, in which:
20 unique CDR3
5 unique J



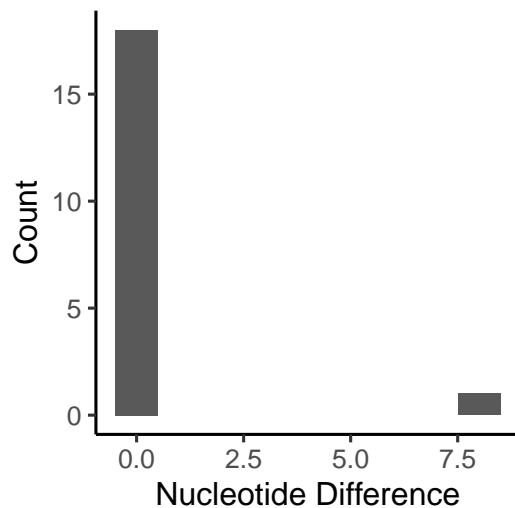
IGHV3-33*01

136 sequences assigned
95 (69.9%) exact matches, in which:
93 unique CDR3
6 unique J



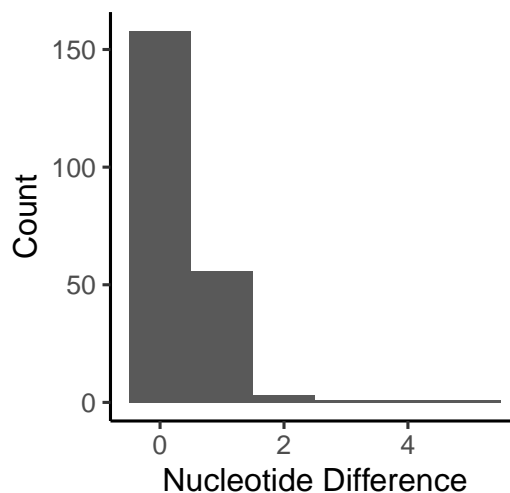
IGHV3-43*01

19 sequences assigned
18 (94.7%) exact matches, in which:
18 unique CDR3
4 unique J



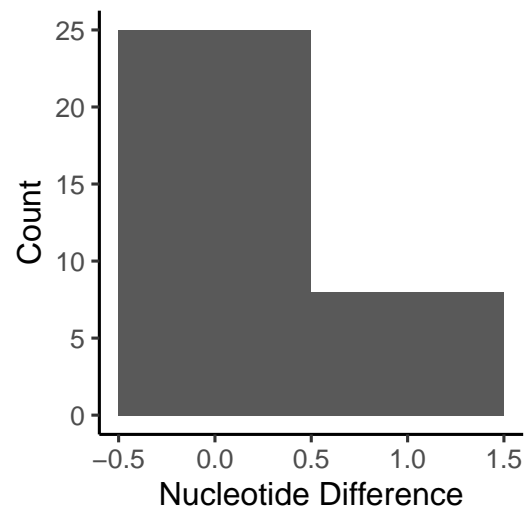
IGHV3-48*03

220 sequences assigned
158 (71.8%) exact matches, in which:
157 unique CDR3
6 unique J



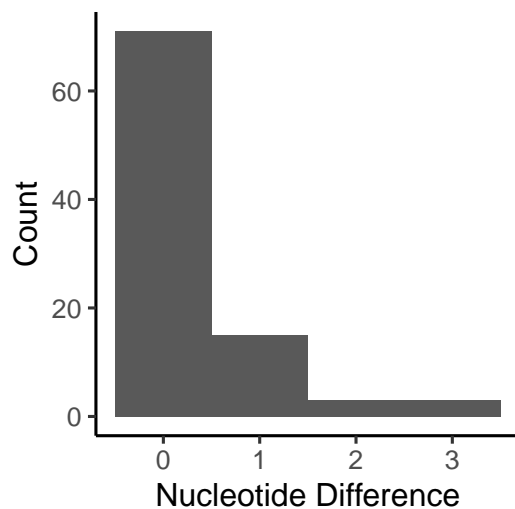
IGHV3-53*02

34 sequences assigned
25 (73.5%) exact matches, in which:
25 unique CDR3
5 unique J



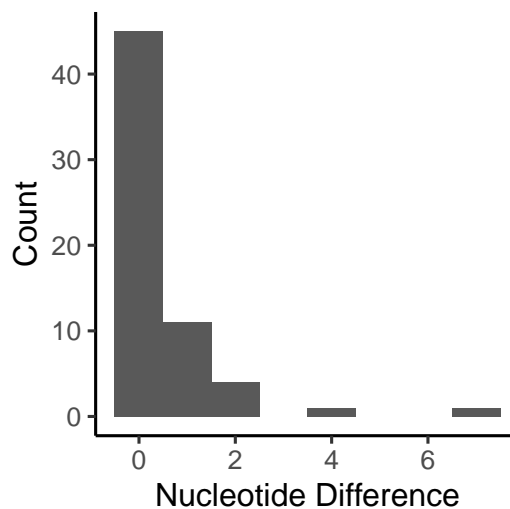
IGHV3-43*02

92 sequences assigned
71 (77.2%) exact matches, in which:
70 unique CDR3
6 unique J



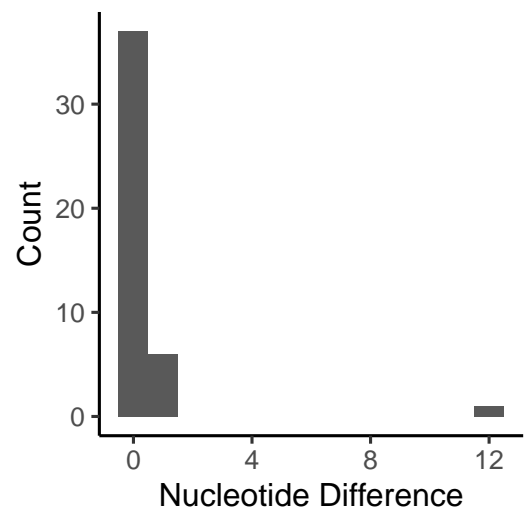
IGHV3-49*03

62 sequences assigned
45 (72.6%) exact matches, in which:
45 unique CDR3
5 unique J



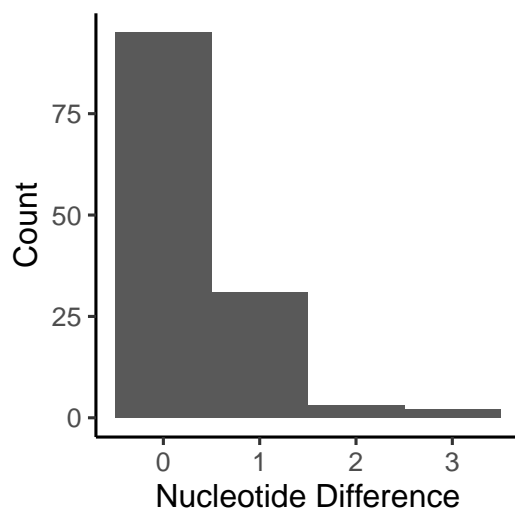
IGHV3-53*04

44 sequences assigned
37 (84.1%) exact matches, in which:
36 unique CDR3
5 unique J



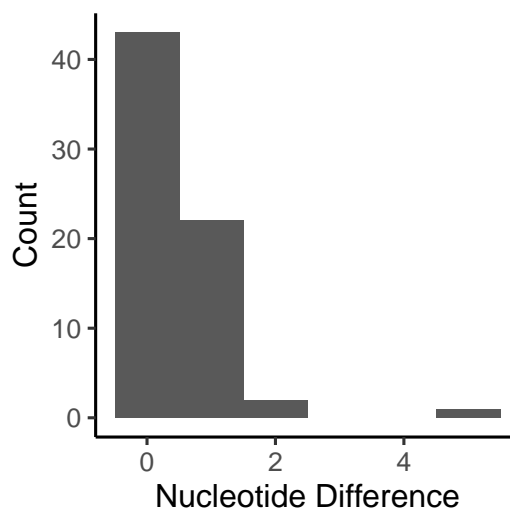
IGHV3-48*01

131 sequences assigned
95 (72.5%) exact matches, in which:
95 unique CDR3
6 unique J



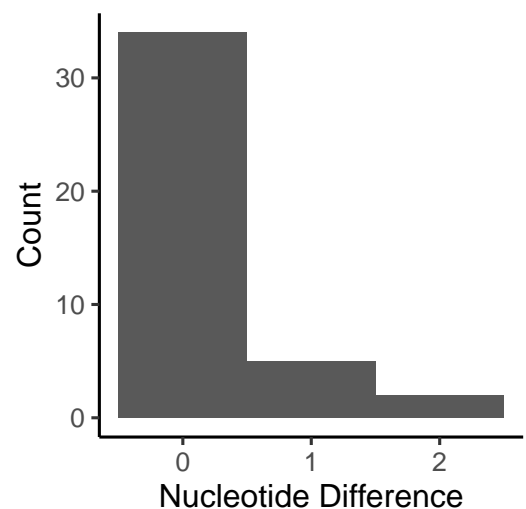
IGHV3-49*04

68 sequences assigned
43 (63.2%) exact matches, in which:
43 unique CDR3
5 unique J



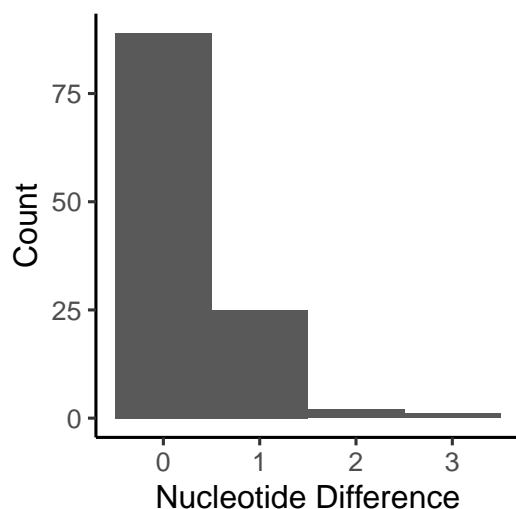
IGHV3-64*01

41 sequences assigned
34 (82.9%) exact matches, in which:
34 unique CDR3
6 unique J



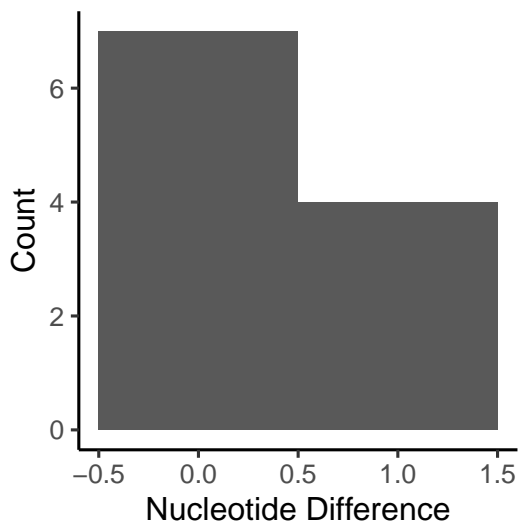
IGHV3-66*01

117 sequences assigned
89 (76.1%) exact matches, in which:
87 unique CDR3
7 unique J



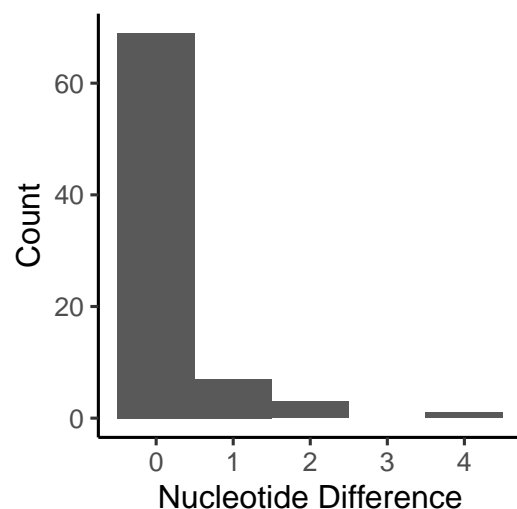
IGHV3-72*01

11 sequences assigned
7 (63.6%) exact matches, in which:
7 unique CDR3
4 unique J



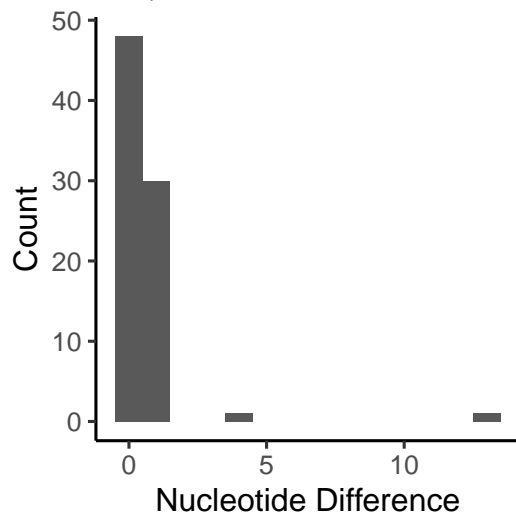
IGHV3-64D*06

80 sequences assigned
69 (86.2%) exact matches, in which:
69 unique CDR3
6 unique J



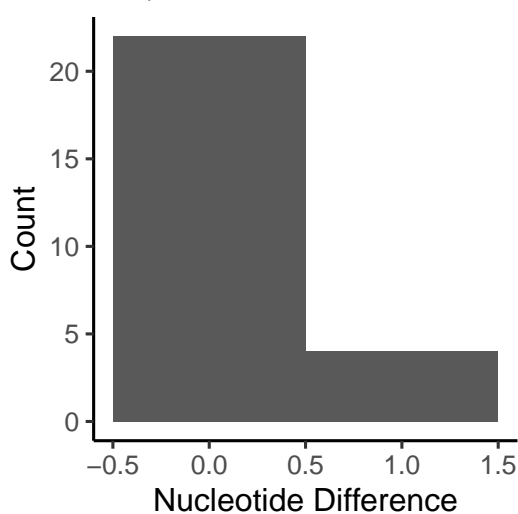
IGHV3-66*02

80 sequences assigned
48 (60%) exact matches, in which:
48 unique CDR3
6 unique J



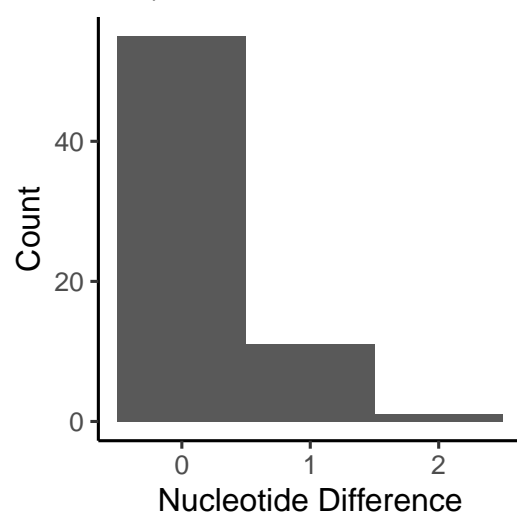
IGHV3-73*01

26 sequences assigned
22 (84.6%) exact matches, in which:
22 unique CDR3
5 unique J



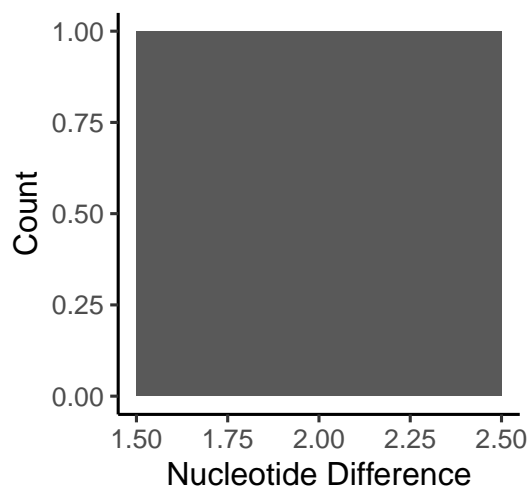
IGHV4-4*02

67 sequences assigned
55 (82.1%) exact matches, in which:
55 unique CDR3
5 unique J



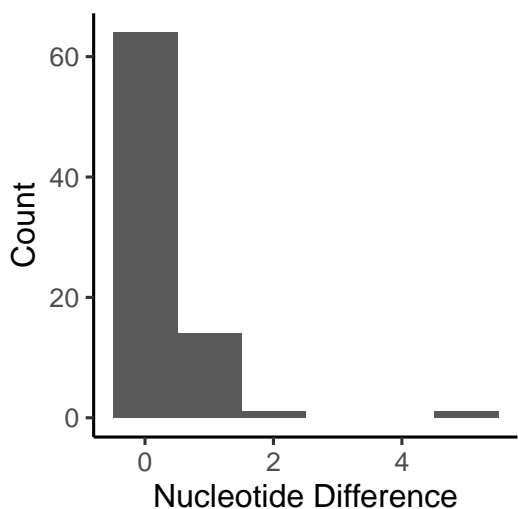
IGHV3-71*03

1 sequences assigned
No exact matches.



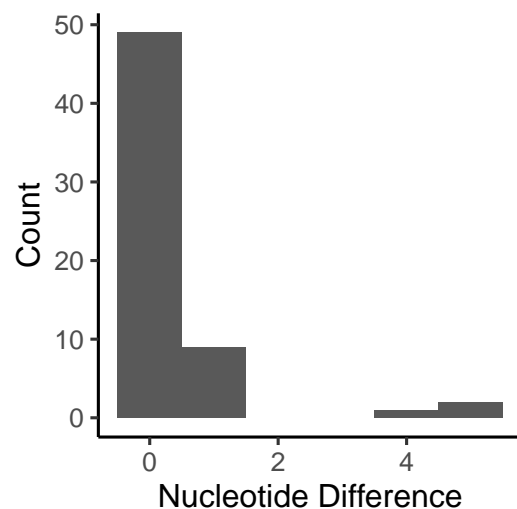
IGHV3-74*01

80 sequences assigned
64 (80%) exact matches, in which:
63 unique CDR3
7 unique J



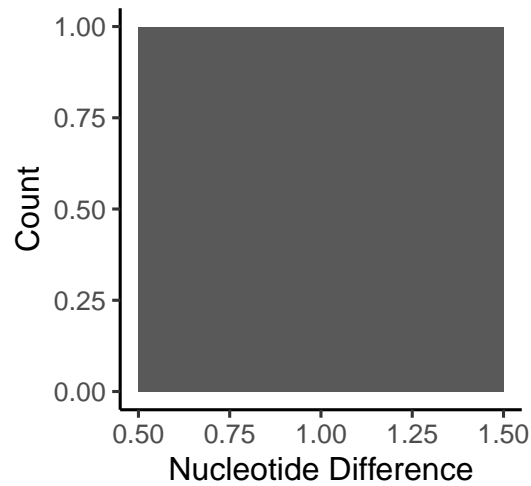
IGHV4-4*07

61 sequences assigned
49 (80.3%) exact matches, in which:
49 unique CDR3
5 unique J



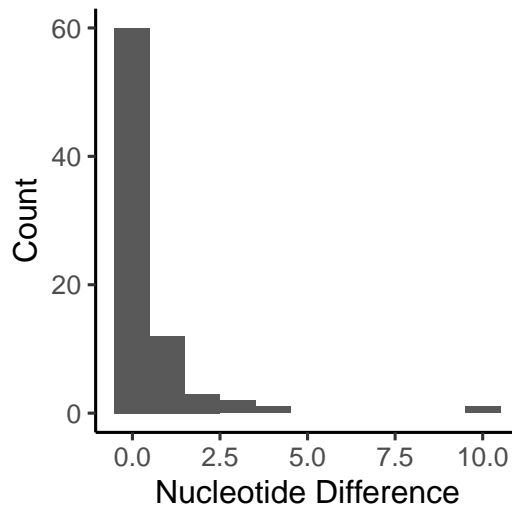
IGHV4-28*04

1 sequences assigned
No exact matches.



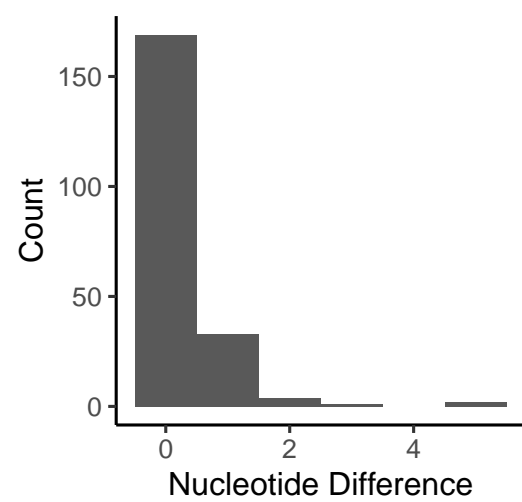
IGHV4-31*03

79 sequences assigned
60 (75.9%) exact matches, in which:
60 unique CDR3
5 unique J



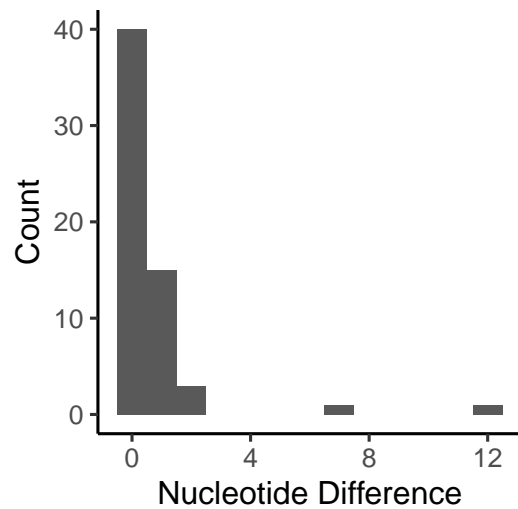
IGHV4-39*07

210 sequences assigned
169 (80.5%) exact matches, in which:
169 unique CDR3
6 unique J



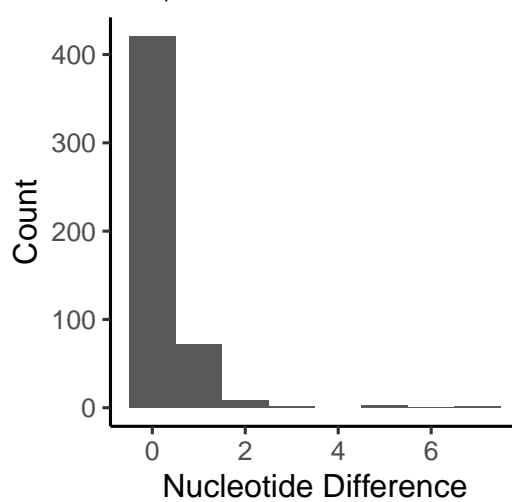
IGHV4-30-4*01

60 sequences assigned
40 (66.7%) exact matches, in which:
40 unique CDR3
5 unique J



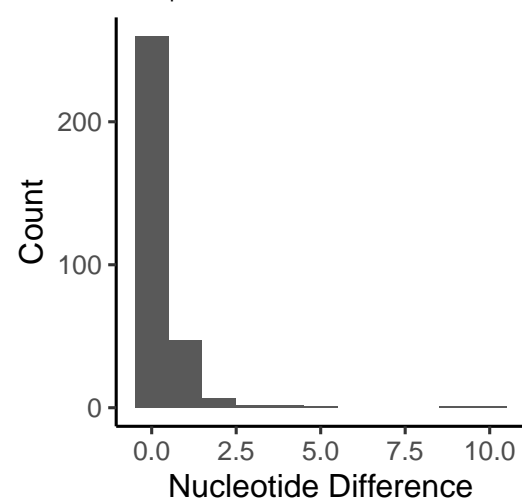
IGHV4-34*01

509 sequences assigned
421 (82.7%) exact matches, in which:
421 unique CDR3
7 unique J



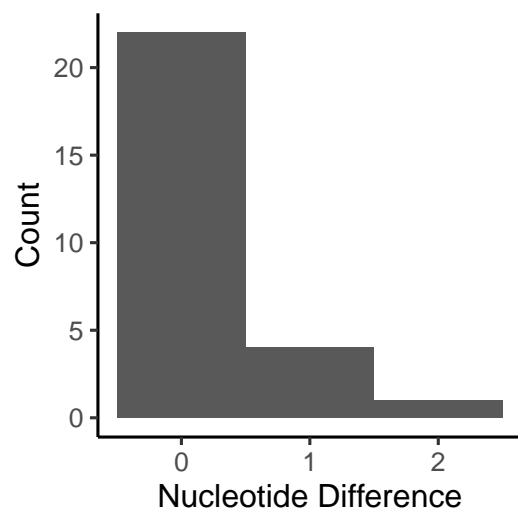
IGHV4-59*01

322 sequences assigned
260 (80.7%) exact matches, in which:
257 unique CDR3
7 unique J



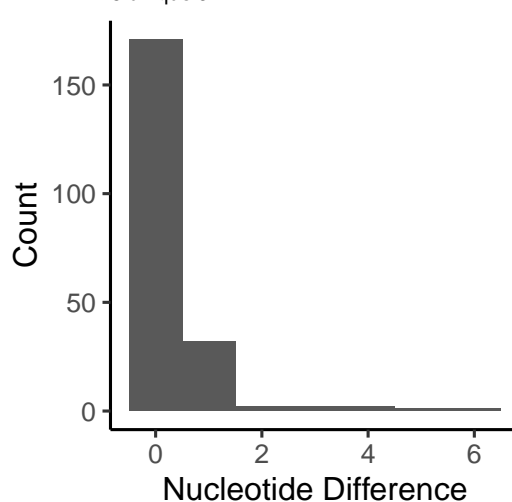
IGHV4-30-2*01

27 sequences assigned
22 (81.5%) exact matches, in which:
22 unique CDR3
5 unique J



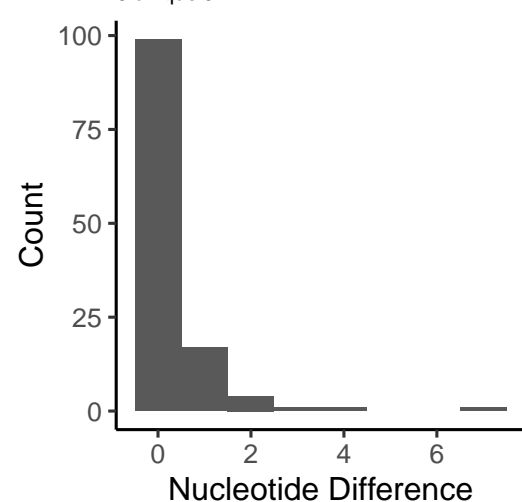
IGHV4-39*01

216 sequences assigned
171 (79.2%) exact matches, in which:
170 unique CDR3
6 unique J



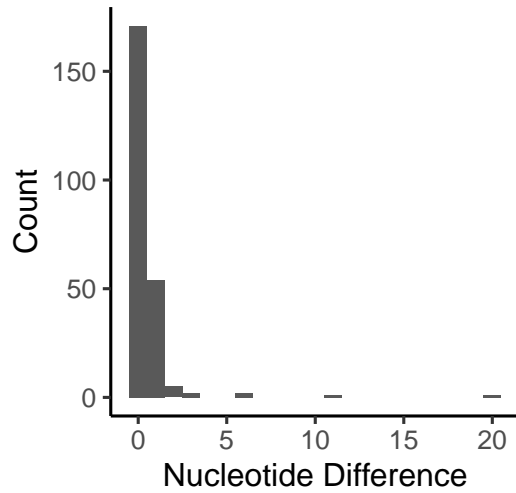
IGHV4-59*08

123 sequences assigned
99 (80.5%) exact matches, in which:
99 unique CDR3
6 unique J



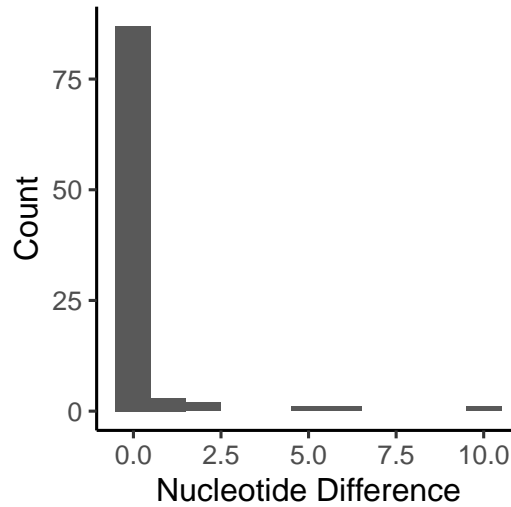
IGHV4–61*02

237 sequences assigned
171 (72.2%) exact matches, in which:
171 unique CDR3
6 unique J



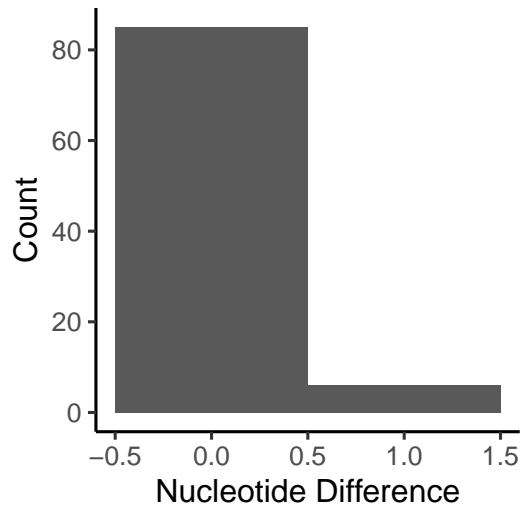
IGHV5–51*03

96 sequences assigned
87 (90.6%) exact matches, in which:
86 unique CDR3
5 unique J



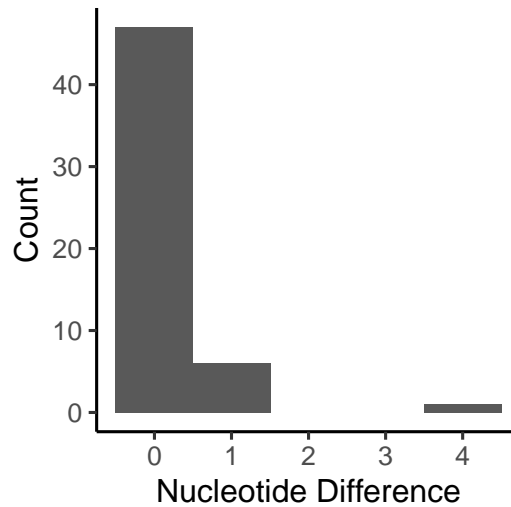
IGHV5–10–1*03

91 sequences assigned
85 (93.4%) exact matches, in which:
85 unique CDR3
6 unique J



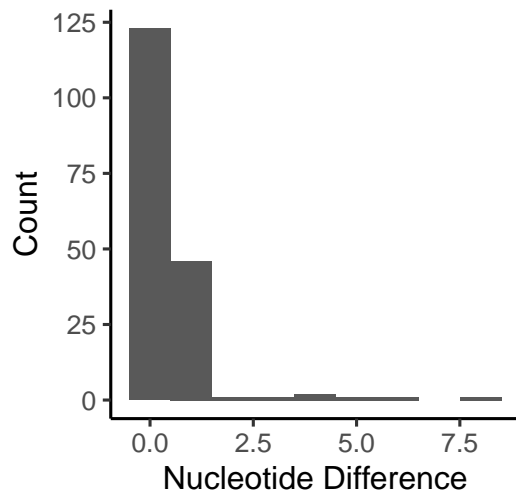
IGHV6–1*01

54 sequences assigned
47 (87%) exact matches, in which:
47 unique CDR3
6 unique J



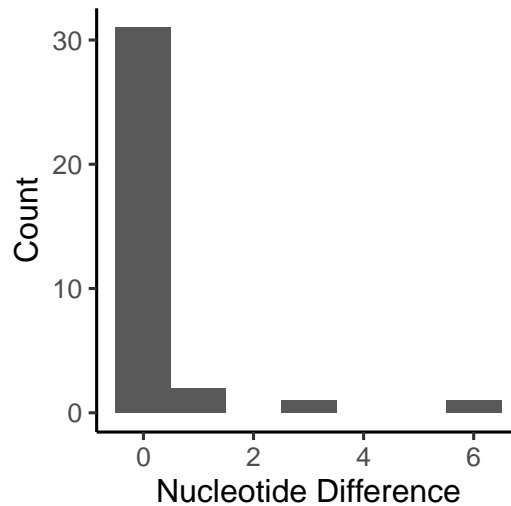
IGHV5–51*01

176 sequences assigned
123 (69.9%) exact matches, in which:
123 unique CDR3
7 unique J

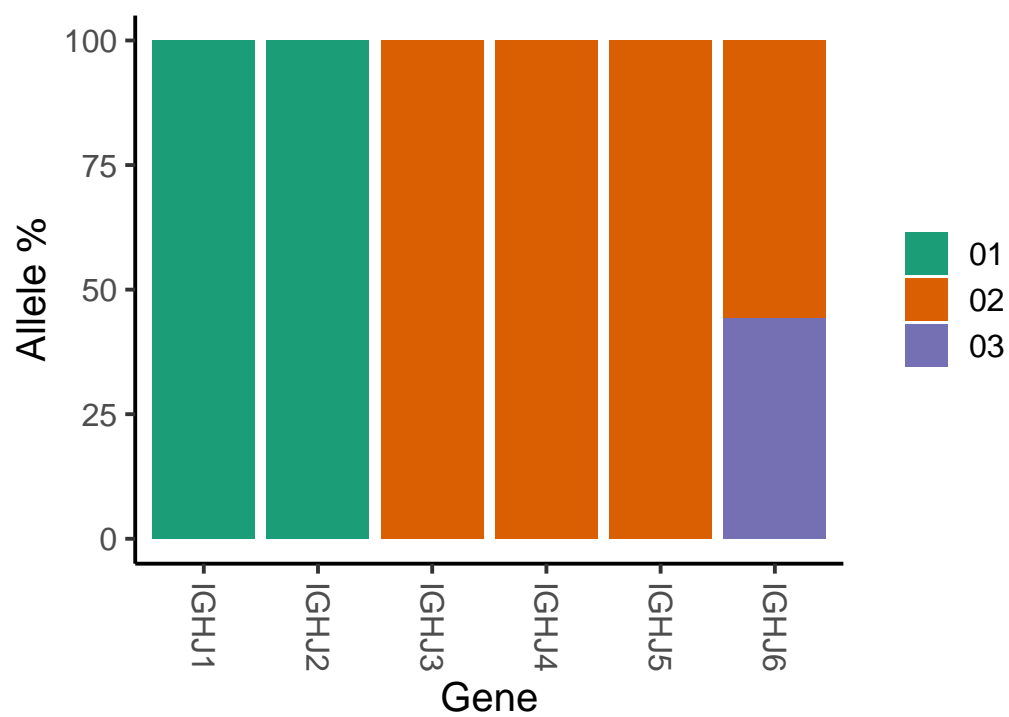


IGHV7–4–1*02

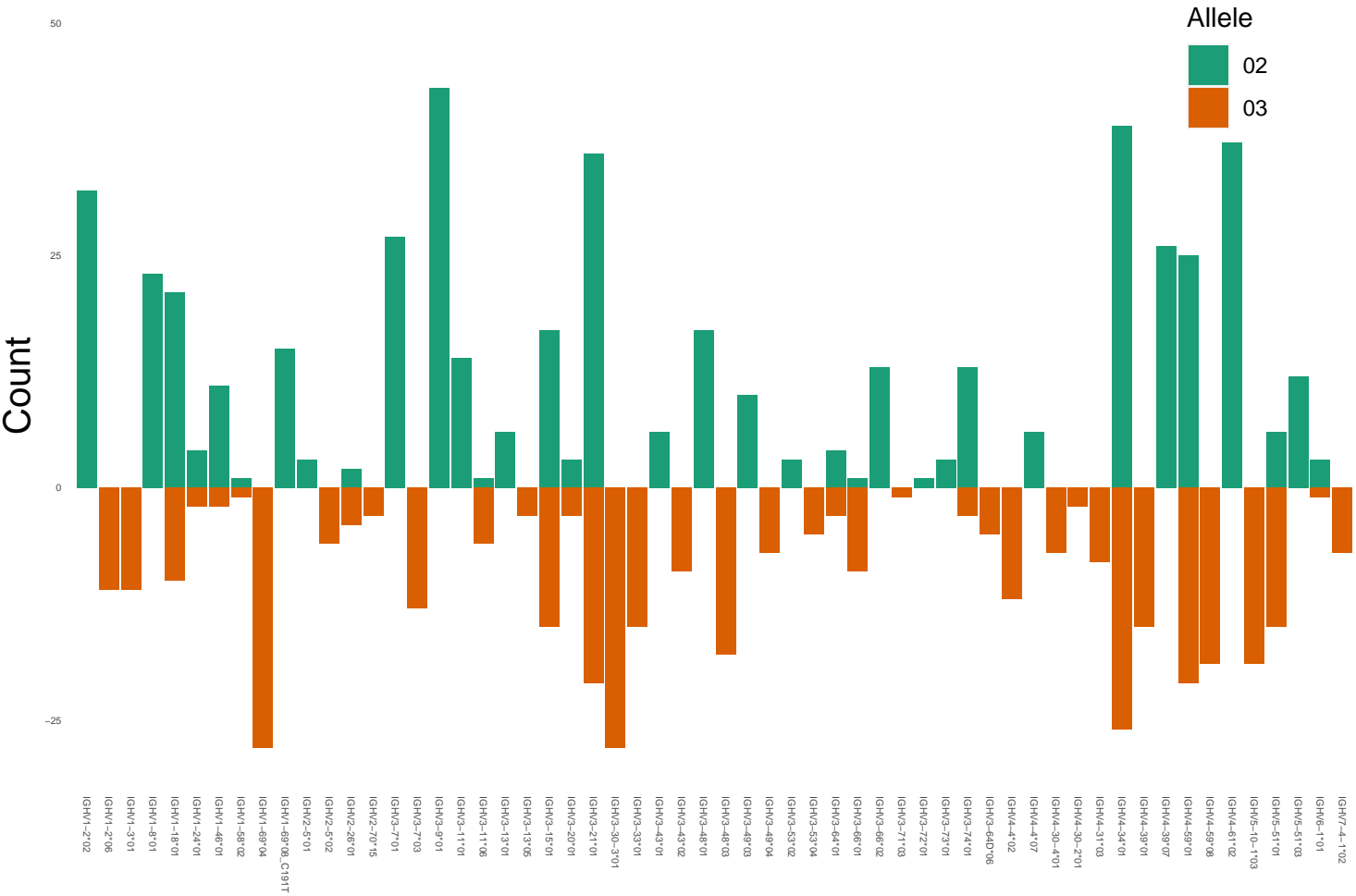
35 sequences assigned
31 (88.6%) exact matches, in which:
30 unique CDR3
5 unique J



Allele Usage



Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.