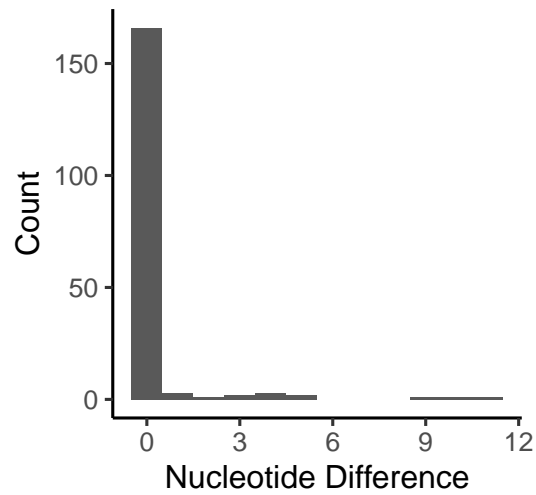


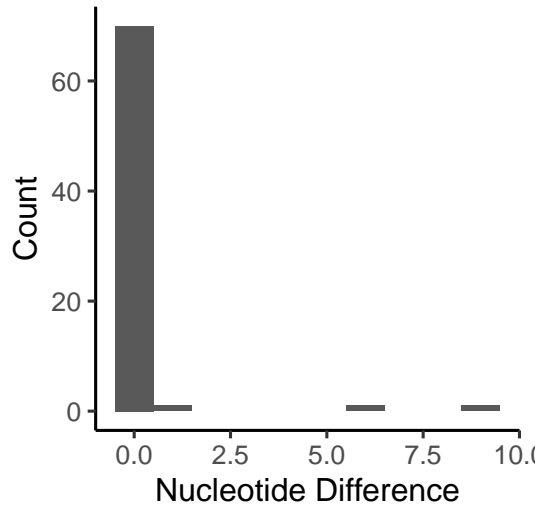
IGHV1-2*02

180 sequences assigned
166 (92.2%) exact matches, in which:
166 unique CDR3
6 unique J



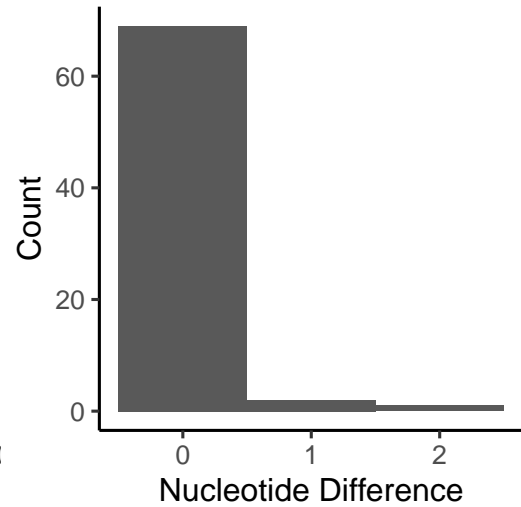
IGHV1-8*01

73 sequences assigned
70 (95.9%) exact matches, in which:
69 unique CDR3
6 unique J



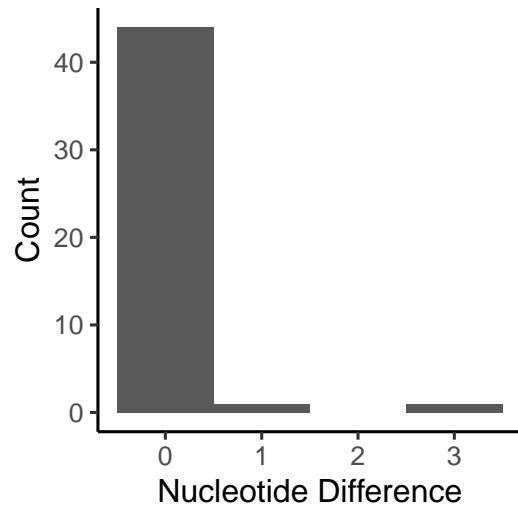
IGHV1-24*01

72 sequences assigned
69 (95.8%) exact matches, in which:
69 unique CDR3
5 unique J



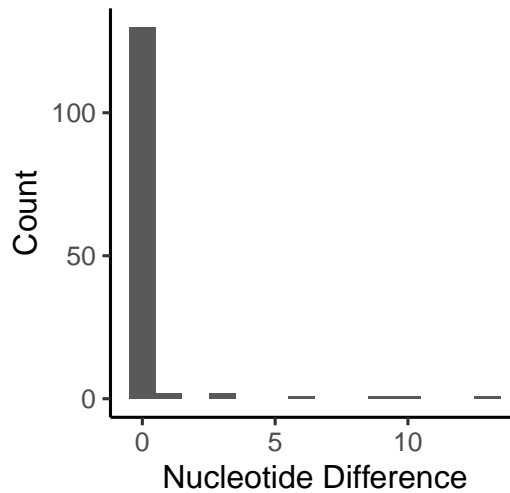
IGHV1-2*04

46 sequences assigned
44 (95.7%) exact matches, in which:
44 unique CDR3
4 unique J



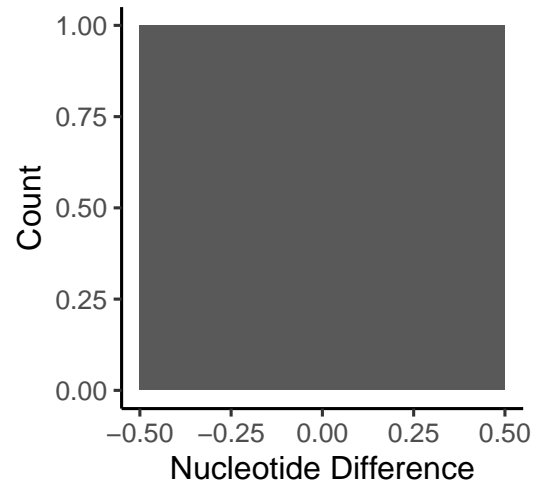
IGHV1-18*01

138 sequences assigned
130 (94.2%) exact matches, in which:
130 unique CDR3
6 unique J



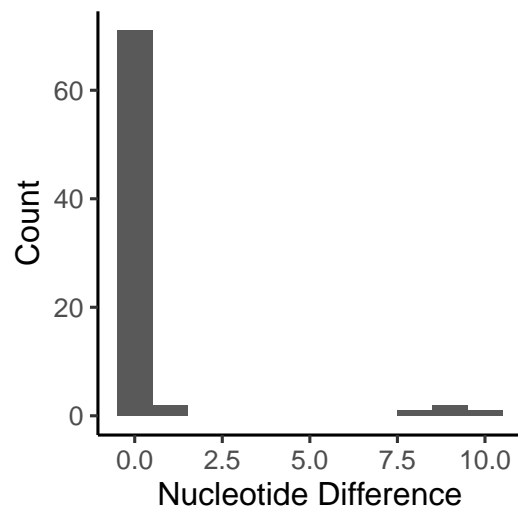
IGHV1-45*02

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



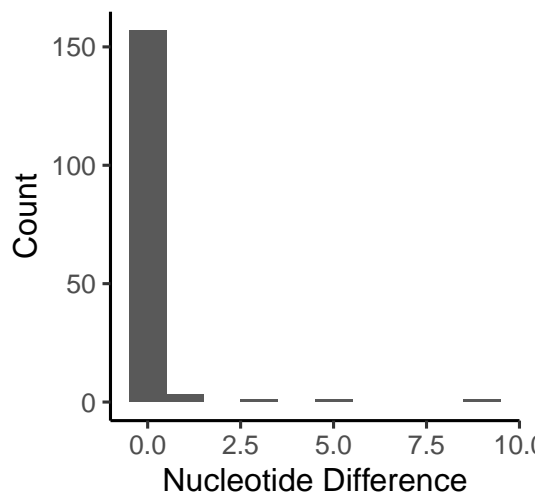
IGHV1-3*01

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



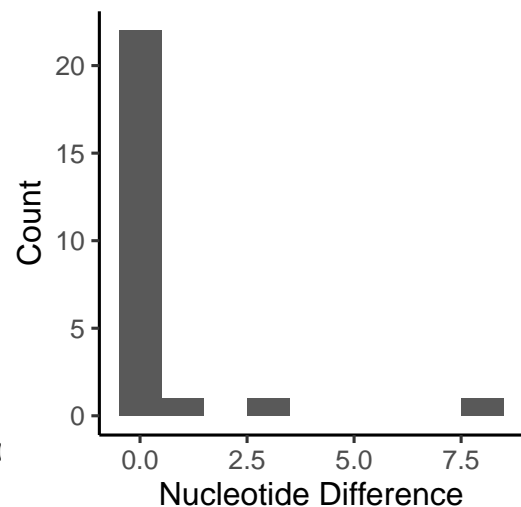
IGHV1-18*04

164 sequences assigned
157 (95.7%) exact matches, in which:
157 unique CDR3
6 unique J



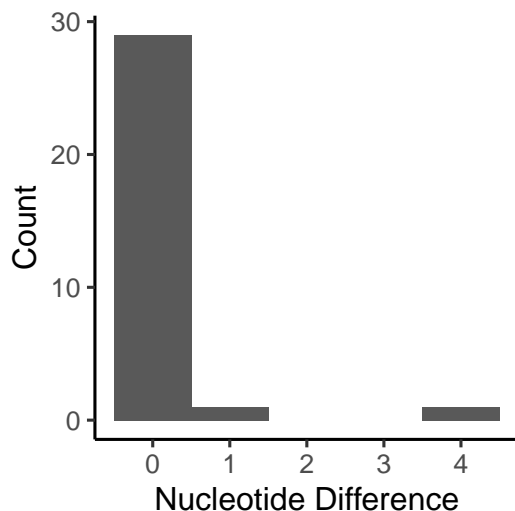
IGHV1-46*01

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



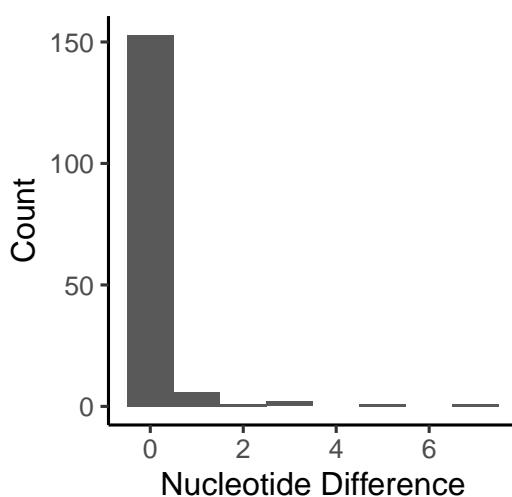
IGHV1-46*03

31 sequences assigned
29 (93.5%) exact matches, in which:
29 unique CDR3
5 unique J



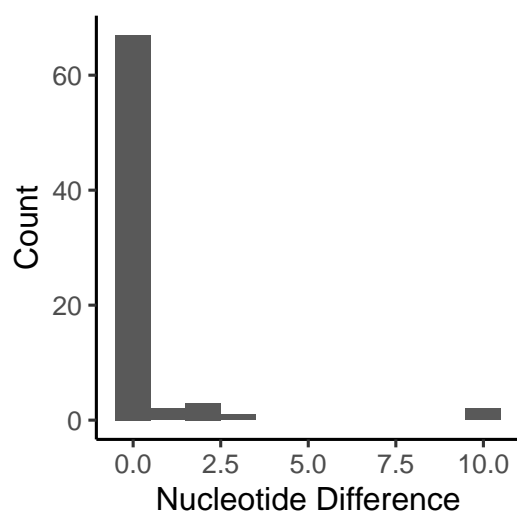
IGHV1-69*04

164 sequences assigned
153 (93.3%) exact matches, in which:
153 unique CDR3
6 unique J



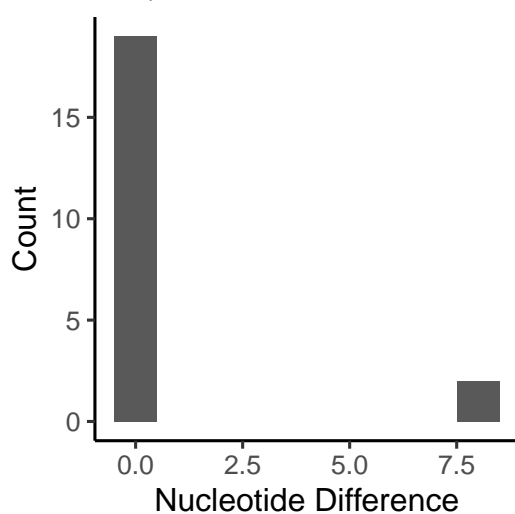
IGHV2-5*02

75 sequences assigned
67 (89.3%) exact matches, in which:
67 unique CDR3
6 unique J



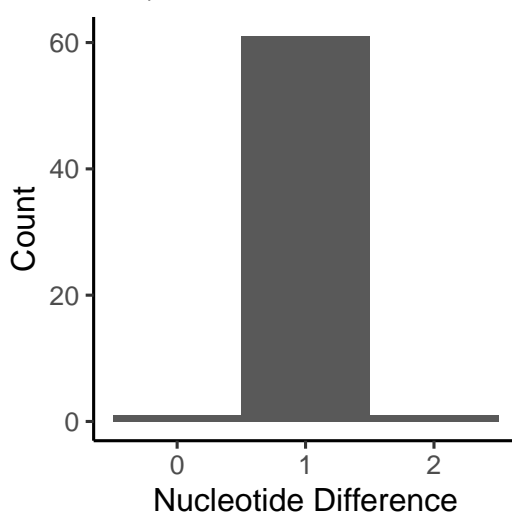
IGHV1-58*02

21 sequences assigned
19 (90.5%) exact matches, in which:
19 unique CDR3
3 unique J



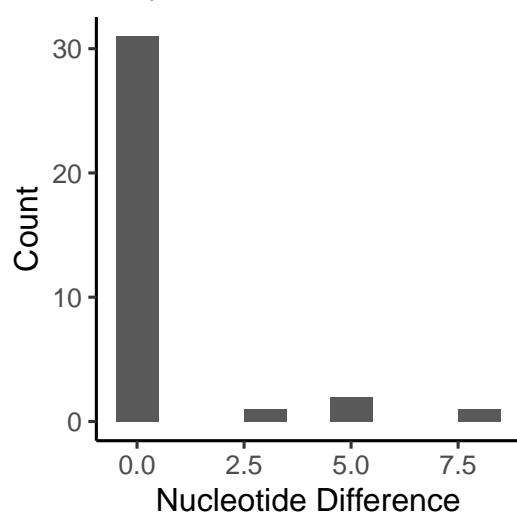
IGHV1-69*08

63 sequences assigned
1 (1.6%) exact matches, in which:
1 unique CDR3
1 unique J



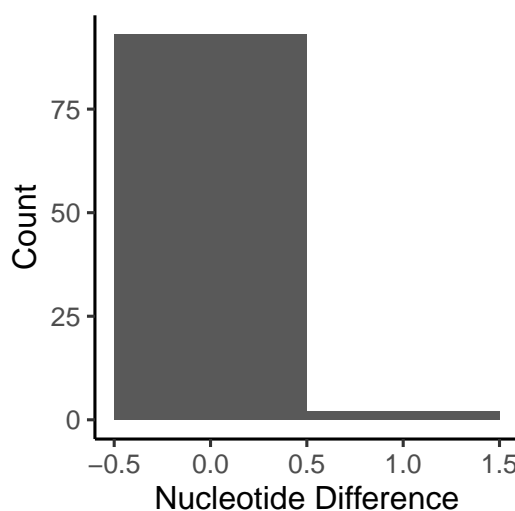
IGHV2-26*01

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



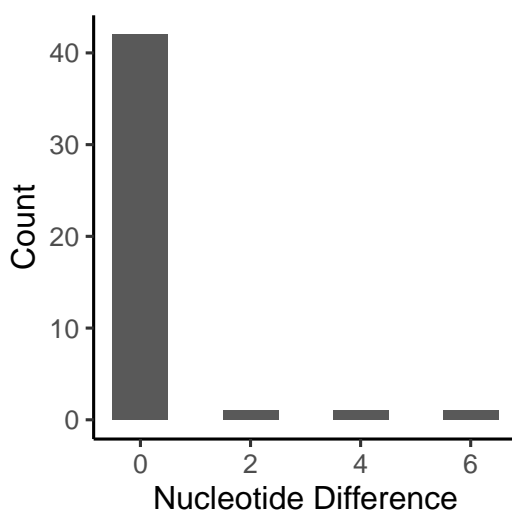
IGHV1-69*02

95 sequences assigned
93 (97.9%) exact matches, in which:
93 unique CDR3
5 unique J



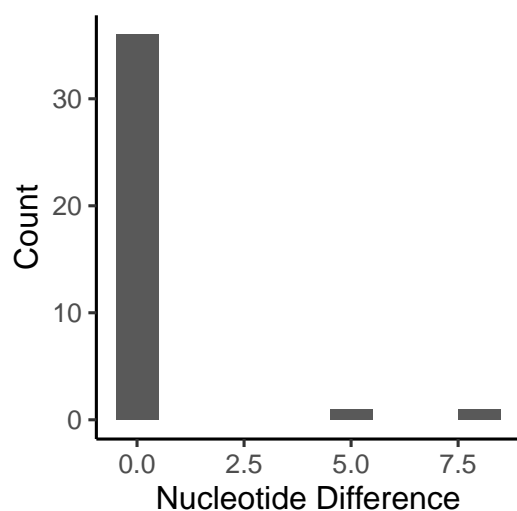
IGHV2-5*01

47 sequences assigned
42 (89.4%) exact matches, in which:
42 unique CDR3
6 unique J



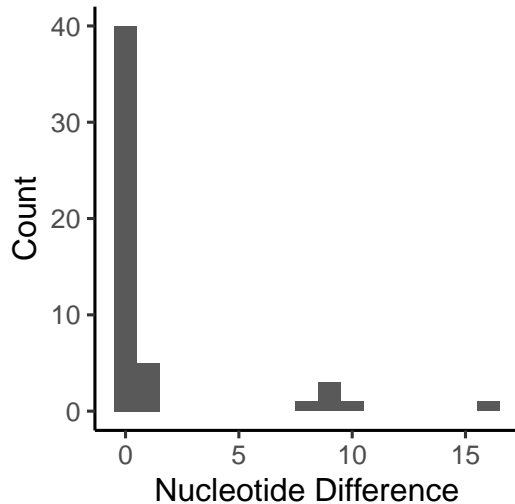
IGHV2-70*15

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



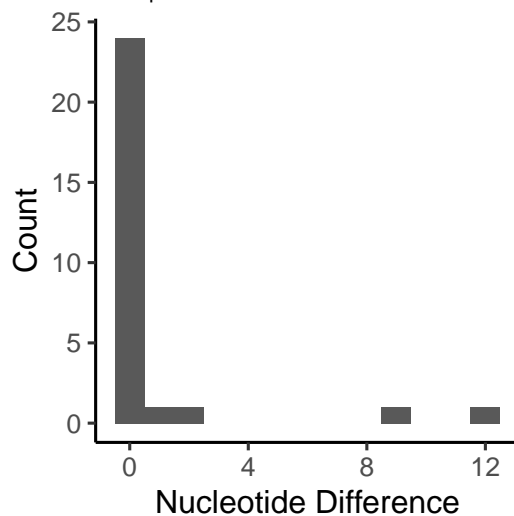
IGHV3-7*03

51 sequences assigned
40 (78.4%) exact matches, in which:
40 unique CDR3
5 unique J



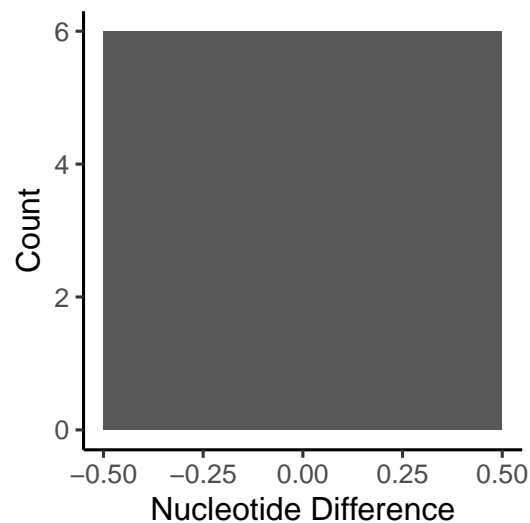
IGHV3-11*01

28 sequences assigned
24 (85.7%) exact matches, in which:
24 unique CDR3
6 unique J



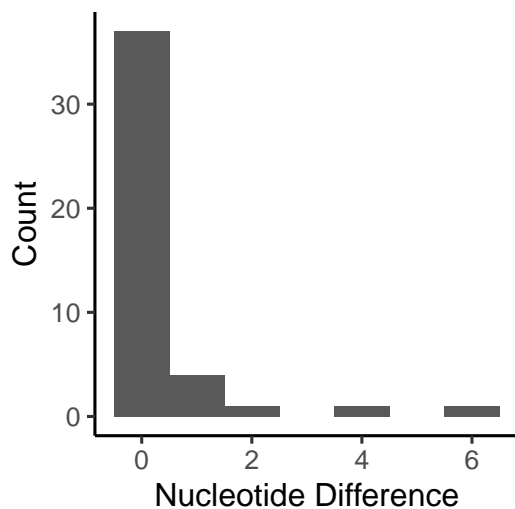
IGHV3-13*05

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



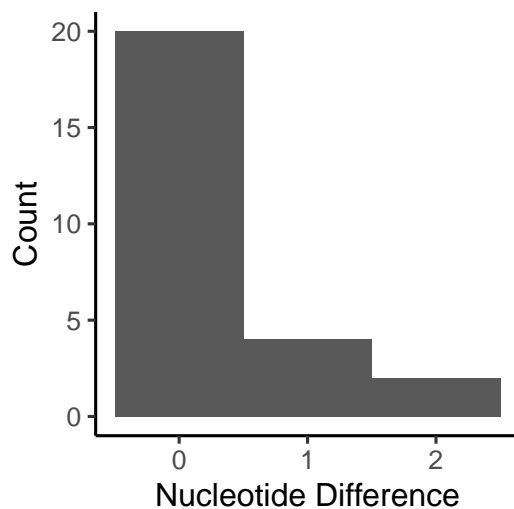
IGHV3-7*04

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



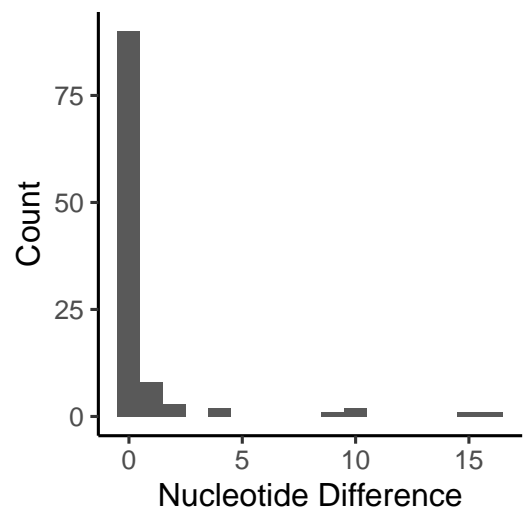
IGHV3-11*06

26 sequences assigned
20 (76.9%) exact matches, in which:
20 unique CDR3
5 unique J



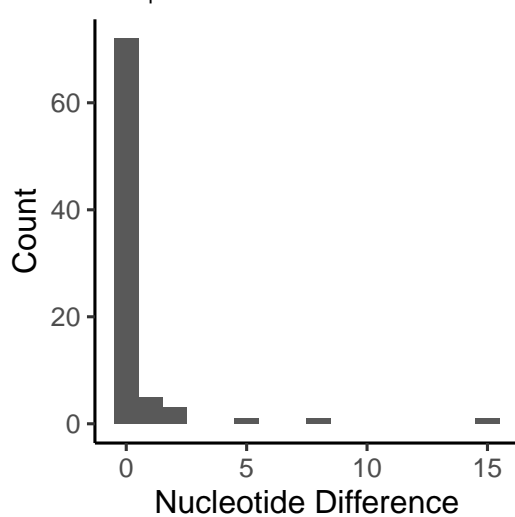
IGHV3-15*01

108 sequences assigned
90 (83.3%) exact matches, in which:
90 unique CDR3
5 unique J



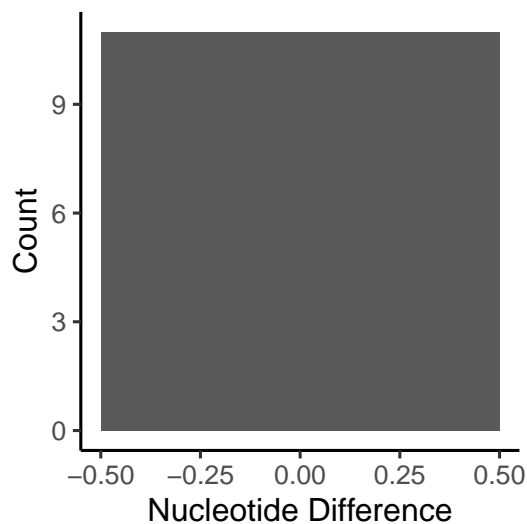
IGHV3-9*01

83 sequences assigned
72 (86.7%) exact matches, in which:
72 unique CDR3
6 unique J



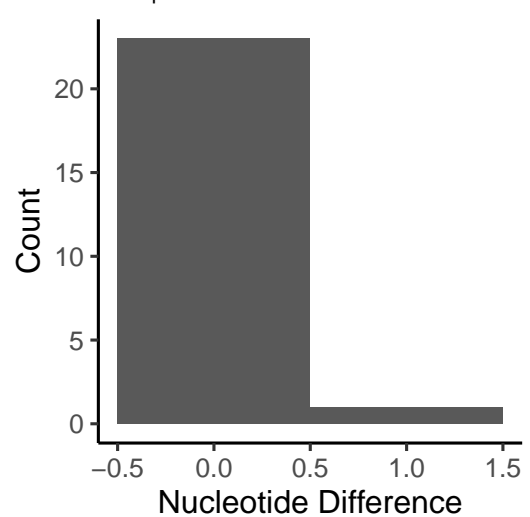
IGHV3-13*01

11 sequences assigned
11 (100%) exact matches, in which:
11 unique CDR3
4 unique J



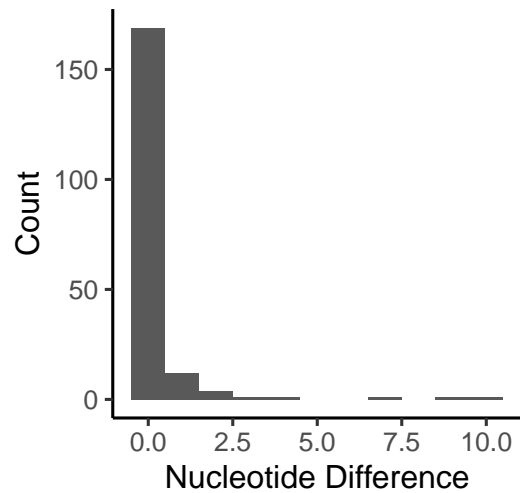
IGHV3-20*04

24 sequences assigned
23 (95.8%) exact matches, in which:
23 unique CDR3
4 unique J



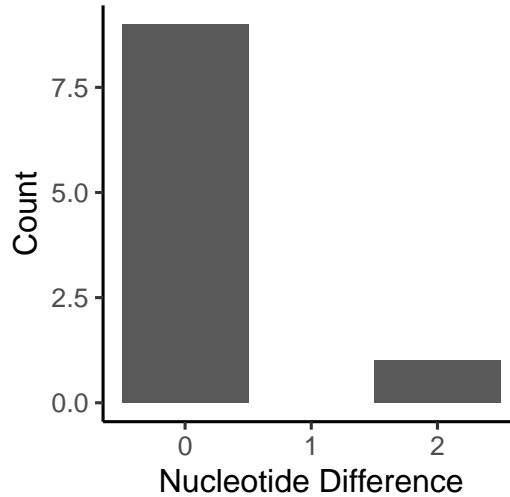
IGHV3-21*01

190 sequences assigned
169 (88.9%) exact matches, in which:
169 unique CDR3
6 unique J



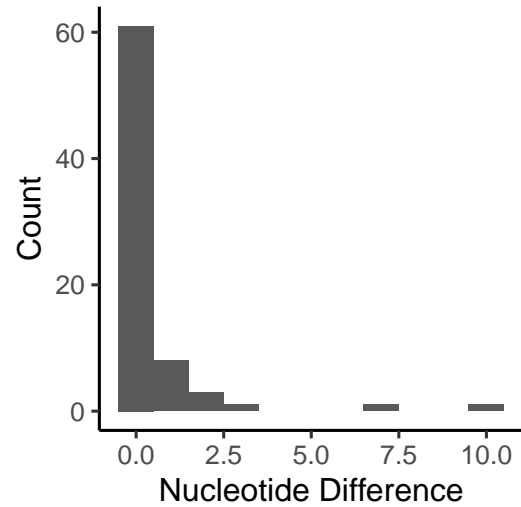
IGHV3-43*01

10 sequences assigned
9 (90%) exact matches, in which:
9 unique CDR3
3 unique J



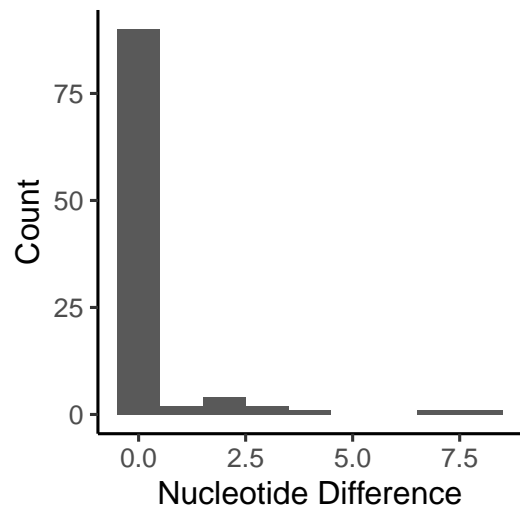
IGHV3-48*03

78 sequences assigned
61 (78.2%) exact matches, in which:
61 unique CDR3
6 unique J



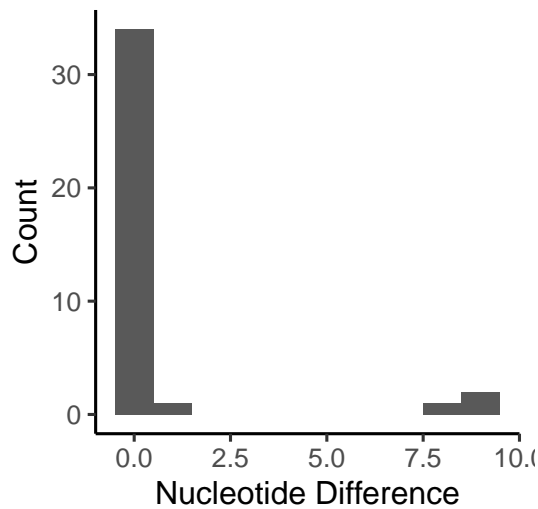
IGHV3-30-3*01

102 sequences assigned
90 (88.2%) exact matches, in which:
90 unique CDR3
6 unique J



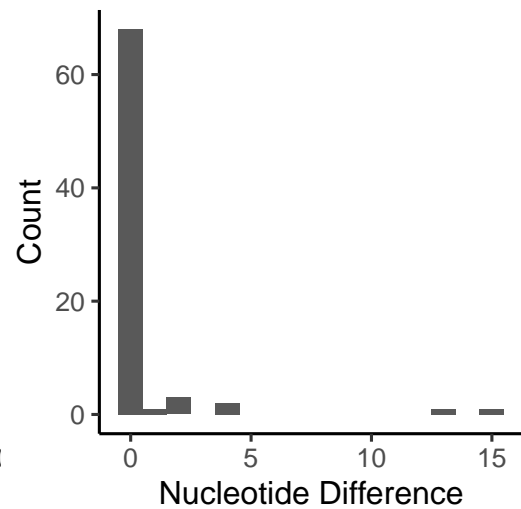
IGHV3-43*02

38 sequences assigned
34 (89.5%) exact matches, in which:
34 unique CDR3
5 unique J



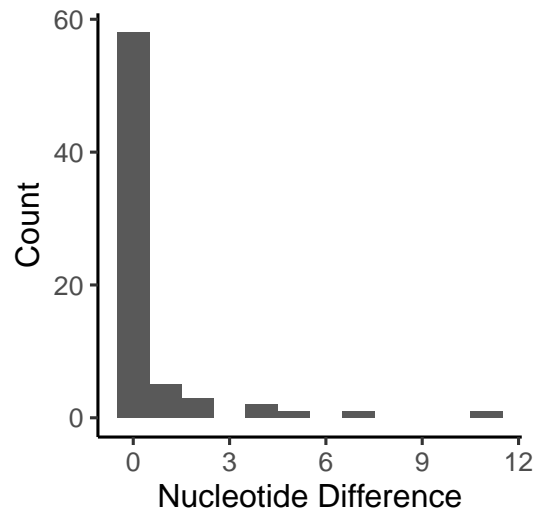
IGHV3-49*04

76 sequences assigned
68 (89.5%) exact matches, in which:
68 unique CDR3
5 unique J



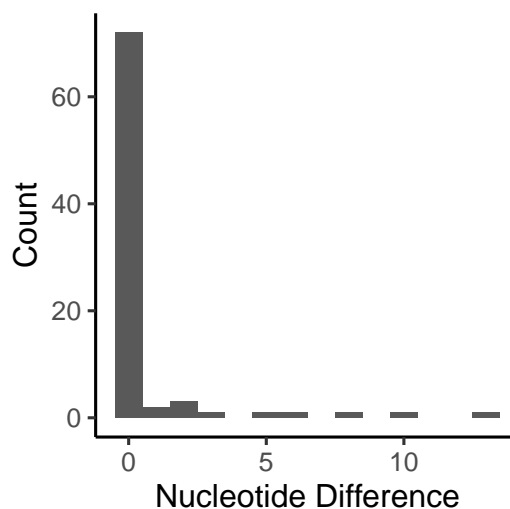
IGHV3-33*01

73 sequences assigned
58 (79.5%) exact matches, in which:
58 unique CDR3
6 unique J



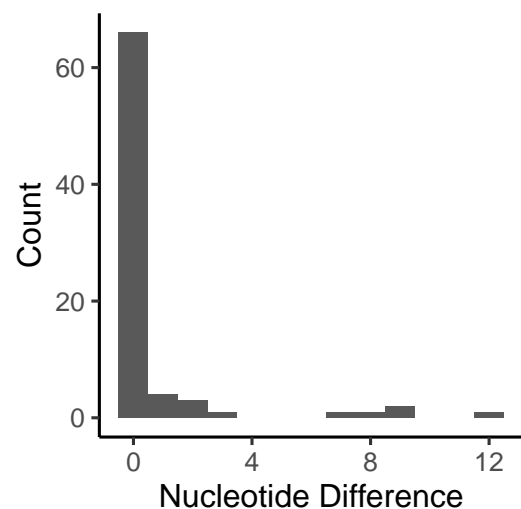
IGHV3-48*02

84 sequences assigned
72 (85.7%) exact matches, in which:
72 unique CDR3
5 unique J



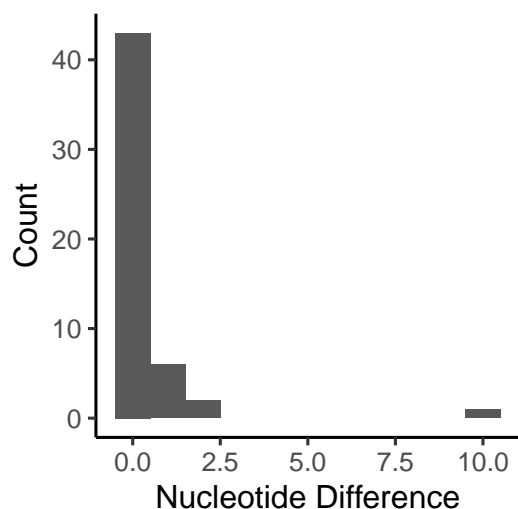
IGHV3-53*01

80 sequences assigned
66 (82.5%) exact matches, in which:
66 unique CDR3
6 unique J



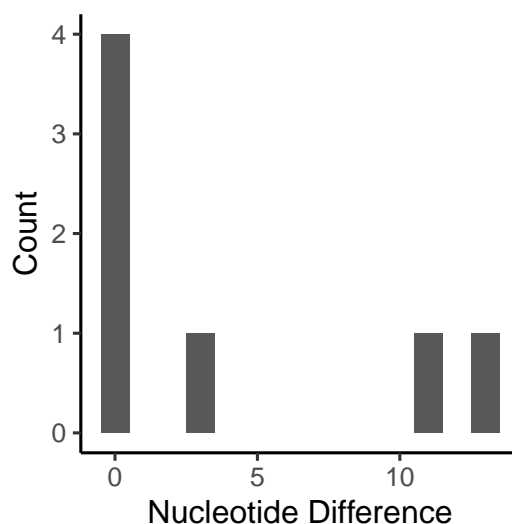
IGHV3-53*04

52 sequences assigned
43 (82.7%) exact matches, in which:
43 unique CDR3
5 unique J



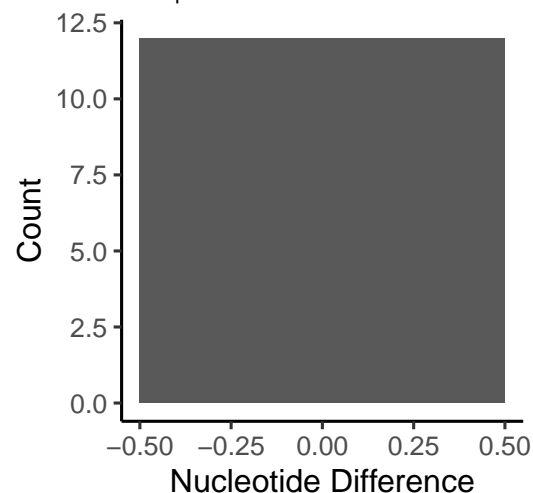
IGHV3-72*01

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
4 unique J



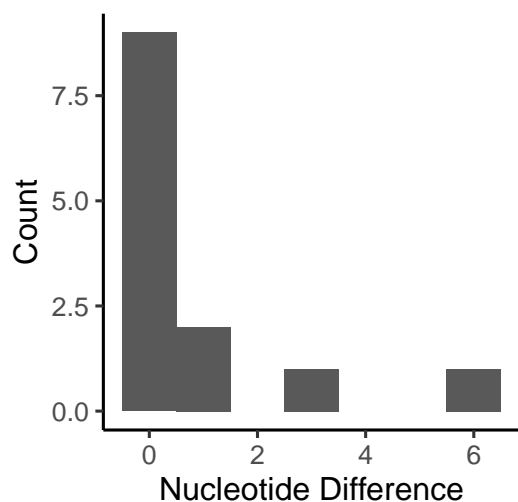
IGHV3-43D*03

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



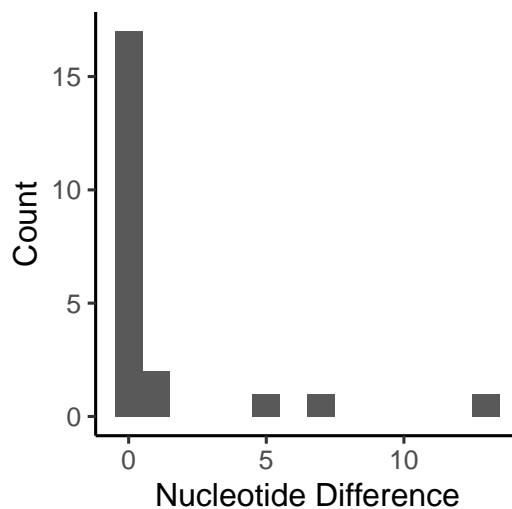
IGHV3-64*01

13 sequences assigned
9 (69.2%) exact matches, in which:
9 unique CDR3
3 unique J



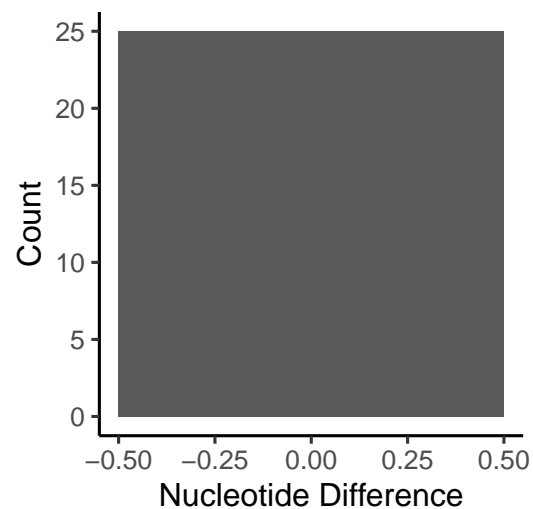
IGHV3-73*01

22 sequences assigned
17 (77.3%) exact matches, in which:
17 unique CDR3
4 unique J



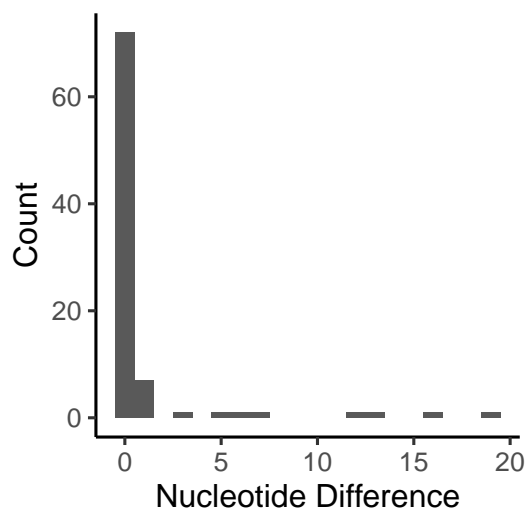
IGHV3-64D*06

25 sequences assigned
25 (100%) exact matches, in which:
25 unique CDR3
5 unique J



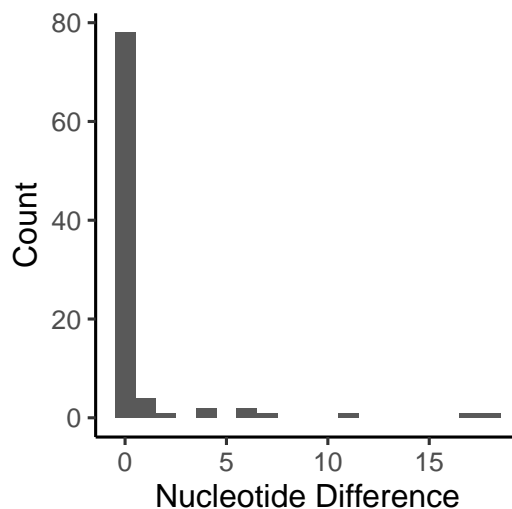
IGHV3-66*01

87 sequences assigned
72 (82.8%) exact matches, in which:
72 unique CDR3
5 unique J



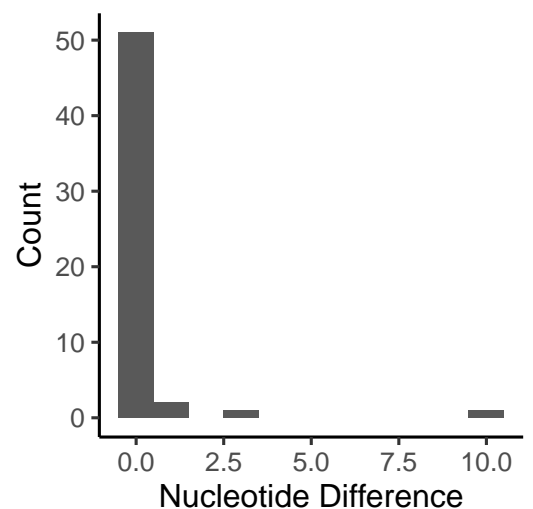
IGHV3-74*01

93 sequences assigned
78 (83.9%) exact matches, in which:
78 unique CDR3
5 unique J



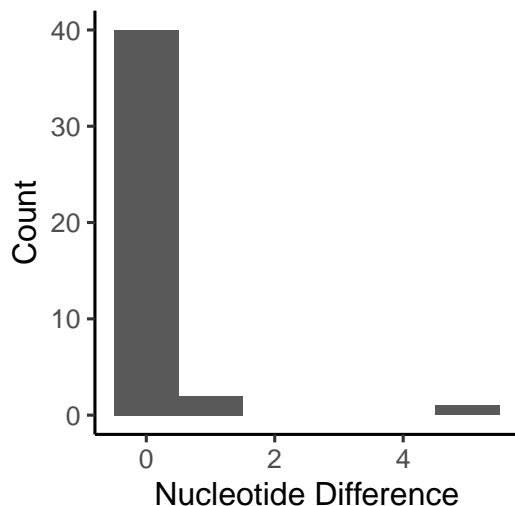
IGHV4-4*02

56 sequences assigned
51 (91.1%) exact matches, in which:
51 unique CDR3
4 unique J



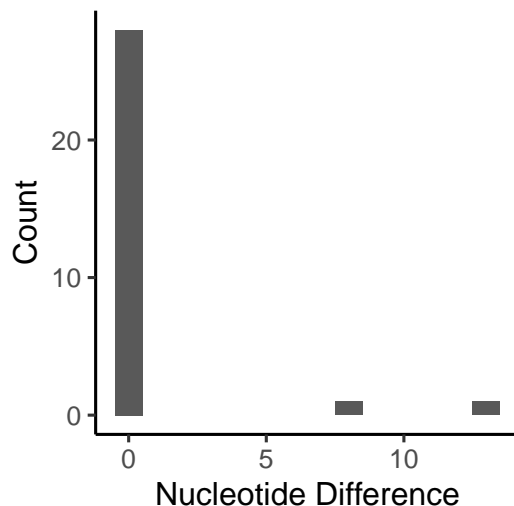
IGHV4-4*07

43 sequences assigned
40 (93%) exact matches, in which:
40 unique CDR3
5 unique J



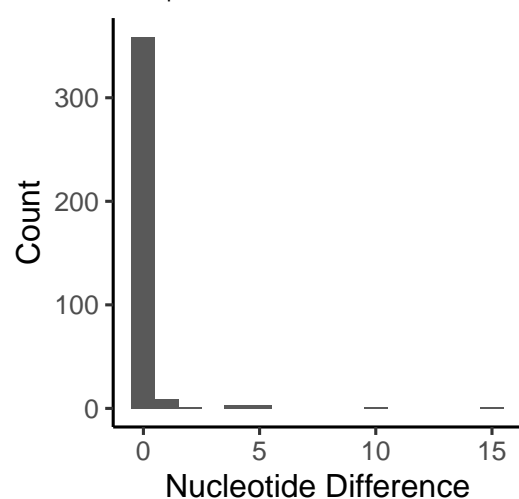
IGHV4-30-4*01

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



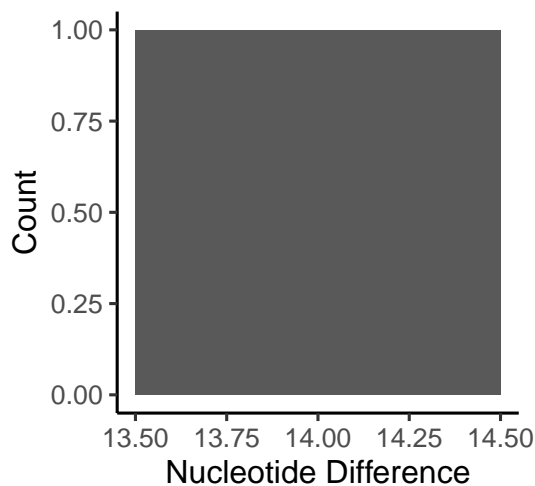
IGHV4-34*01

377 sequences assigned
359 (95.2%) exact matches, in which:
359 unique CDR3
6 unique J



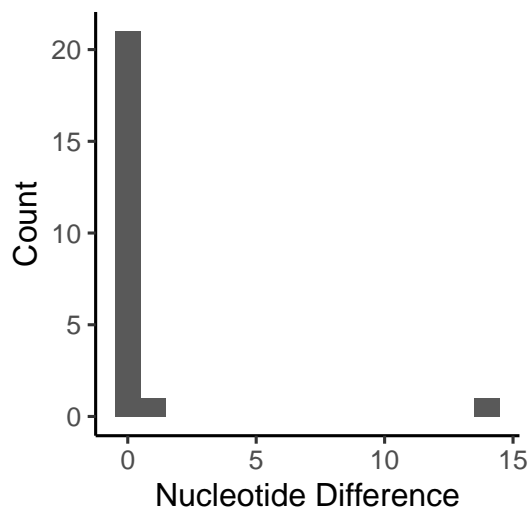
IGHV4-28*01

1 sequences assigned
No exact matches.



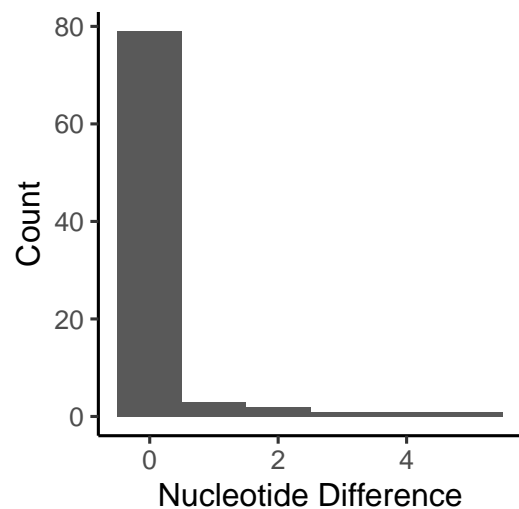
IGHV4-30-4*07

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



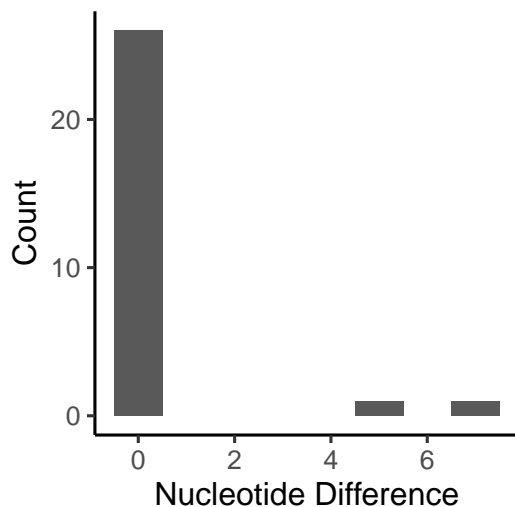
IGHV4-38-2*02

88 sequences assigned
79 (89.8%) exact matches, in which:
79 unique CDR3
5 unique J



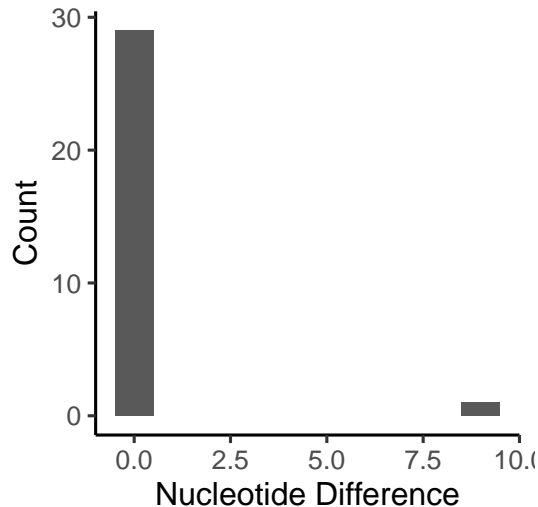
IGHV4-30-2*01

28 sequences assigned
26 (92.9%) exact matches, in which:
26 unique CDR3
5 unique J



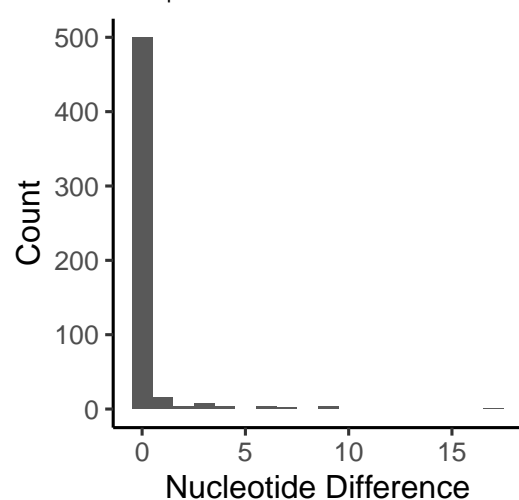
IGHV4-31*03

30 sequences assigned
29 (96.7%) exact matches, in which:
29 unique CDR3
4 unique J



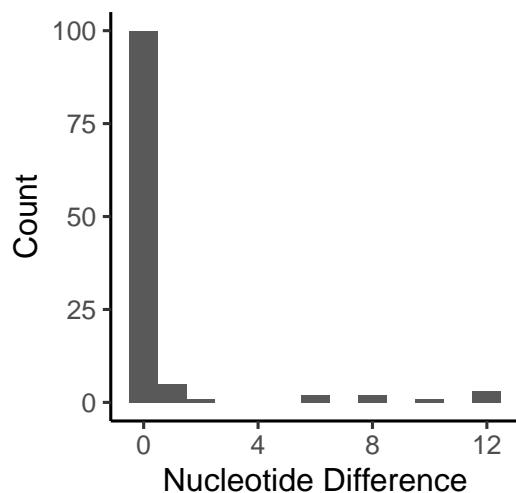
IGHV4-39*01

540 sequences assigned
500 (92.6%) exact matches, in which:
499 unique CDR3
6 unique J



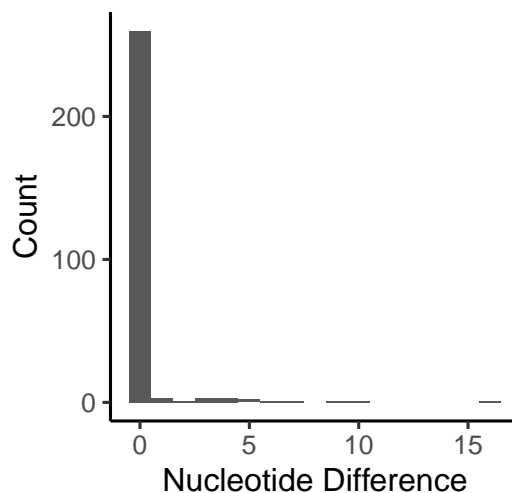
IGHV4–59*01

114 sequences assigned
100 (87.7%) exact matches, in which:
100 unique CDR3
6 unique J



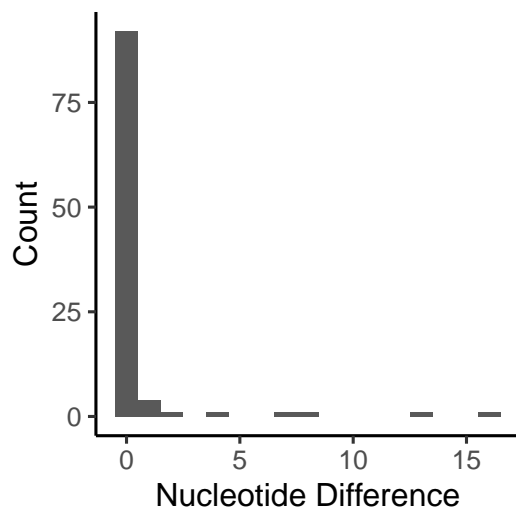
IGHV5–51*01

277 sequences assigned
260 (93.9%) exact matches, in which:
260 unique CDR3
6 unique J



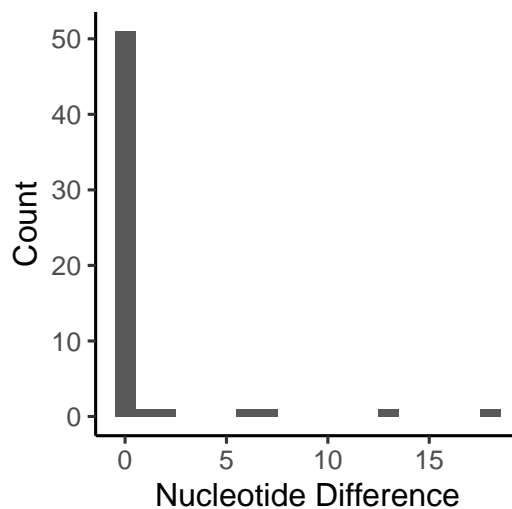
IGHV4–59*08

102 sequences assigned
92 (90.2%) exact matches, in which:
92 unique CDR3
6 unique J



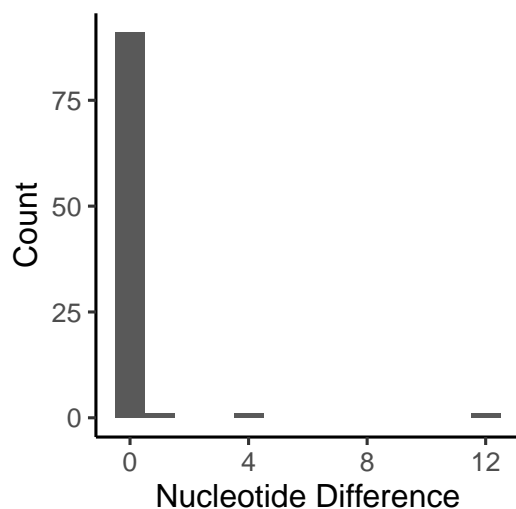
IGHV6–1*01

57 sequences assigned
51 (89.5%) exact matches, in which:
51 unique CDR3
5 unique J



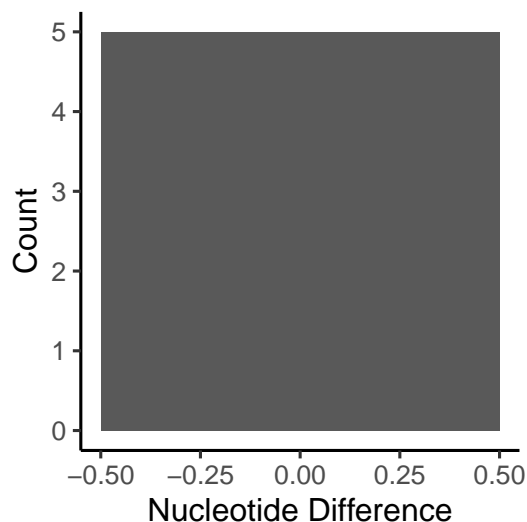
IGHV5–10–1*03

95 sequences assigned
91 (95.8%) exact matches, in which:
90 unique CDR3
5 unique J



IGHV7–4–1*01

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





Warning – no inferred sequences found.