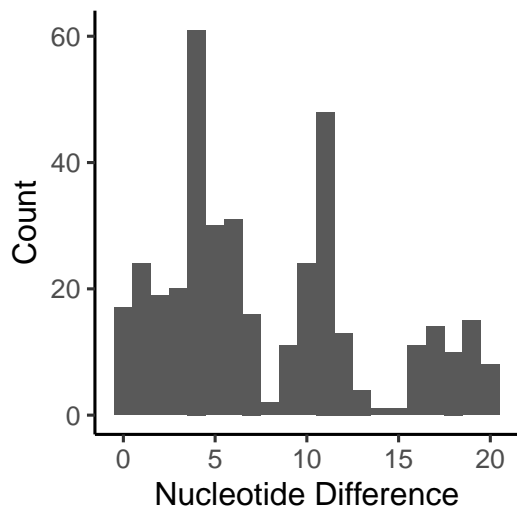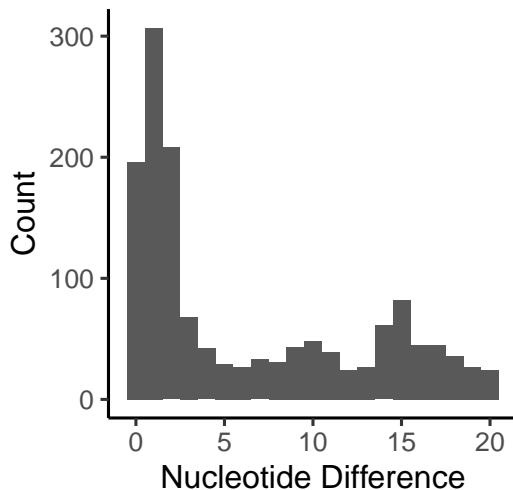**IGHV1−2*04**

419 sequences assigned
17 (4.1%) exact matches, in which:
11 unique CDR3
4 unique J
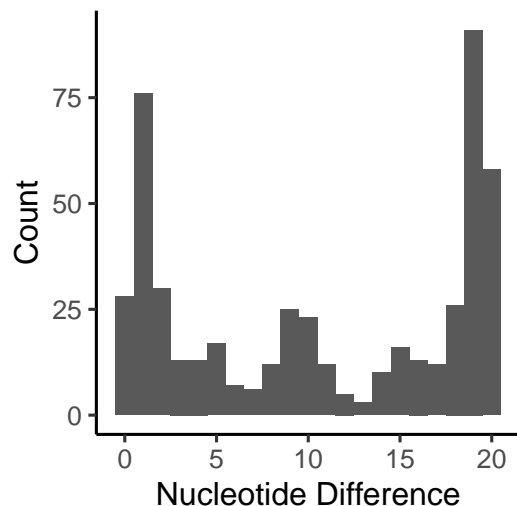
IGHV1−18*01

1990 sequences assigned
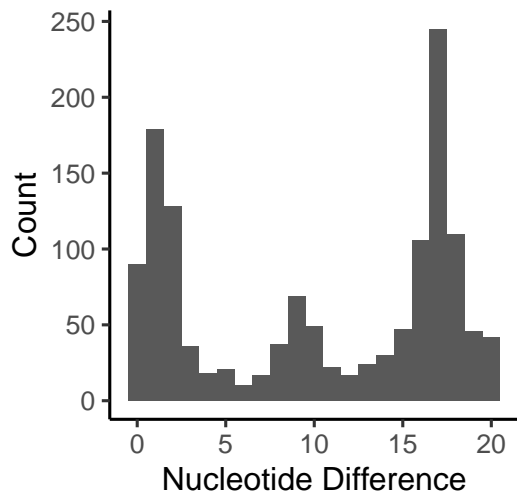196 (9.8%) exact matches, in which:
109 unique CDR3
6 unique J

IGHV1−46*01

778 sequences assigned
28 (3.6%) exact matches, in which:
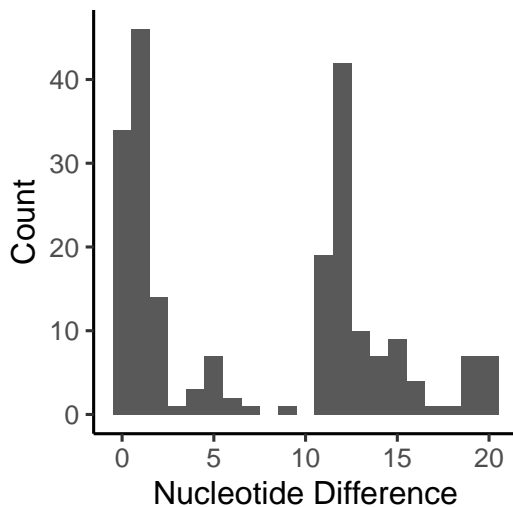19 unique CDR3
5 unique J

IGHV1−3*01

1726 sequences assigned
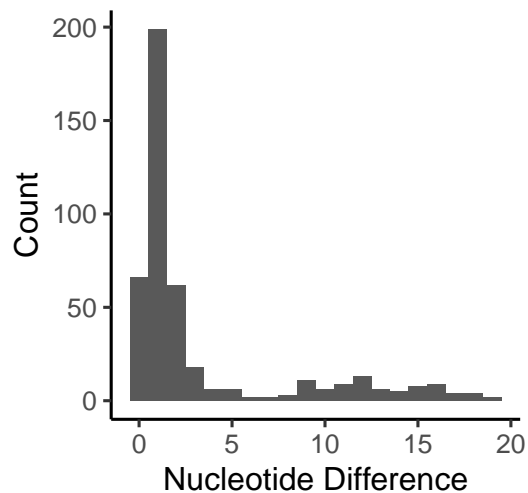90 (5.2%) exact matches, in which:
62 unique CDR3
5 unique J

IGHV1−24*01

222 sequences assigned
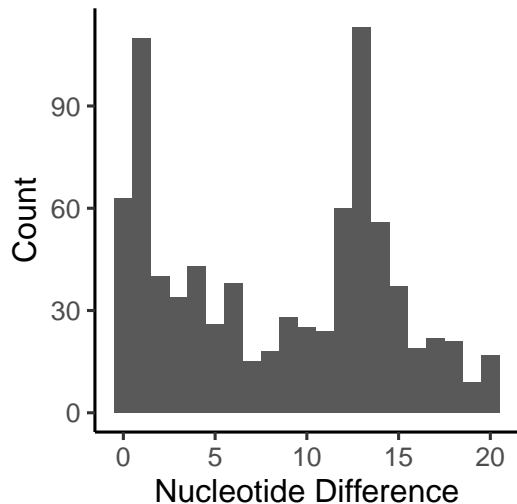34 (15.3%) exact matches, in which:
25 unique CDR3
4 unique J

IGHV1−46*03

514 sequences assigned
66 (12.8%) exact matches, in which:
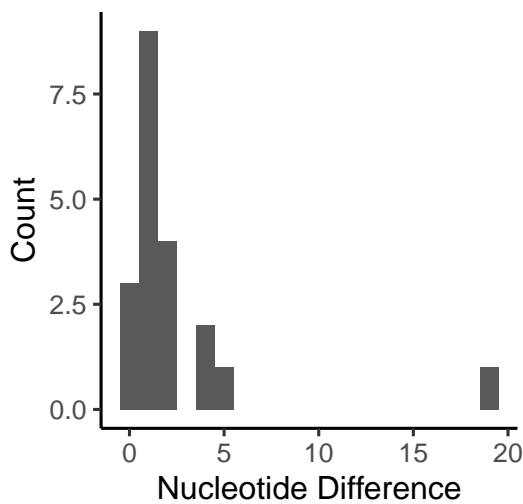41 unique CDR3
4 unique J

IGHV1−8*01

931 sequences assigned
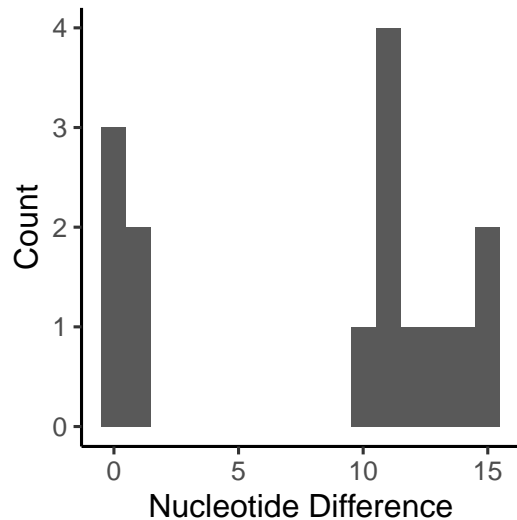63 (6.8%) exact matches, in which:
47 unique CDR3
5 unique J

IGHV1−45*02

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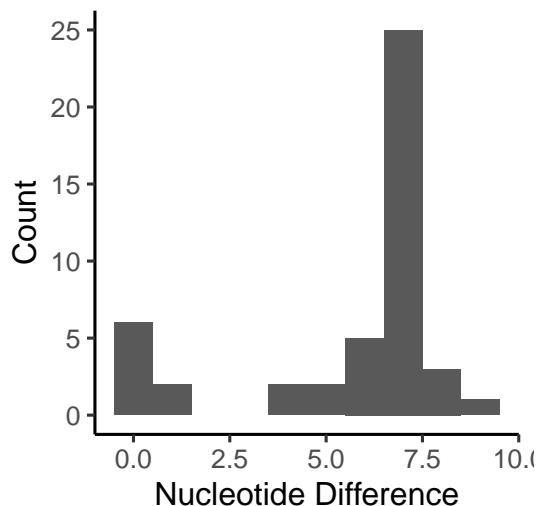3 (15%) exact matches, in which:
2 unique CDR3
2 unique J

IGHV1−58*01

16 sequences assigned
3 (18.8%) exact matches, in which:
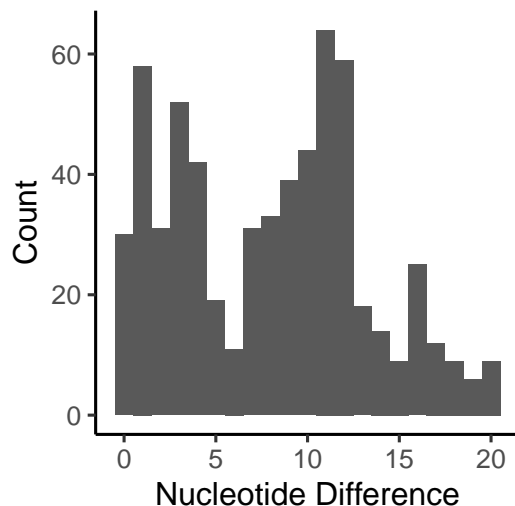2 unique CDR3
1 unique J

IGHV1−58*02

54 sequences assigned
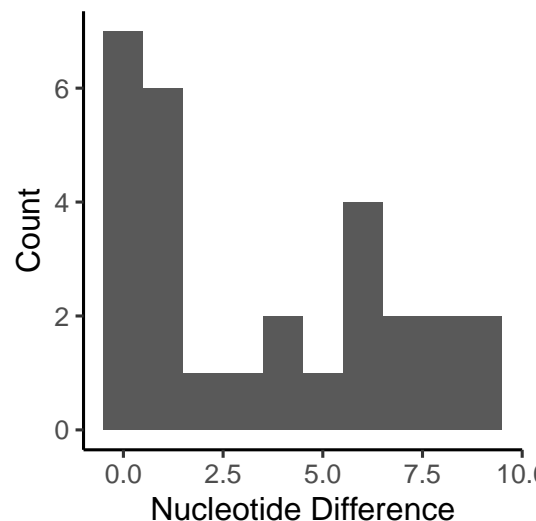6 (11.1%) exact matches, in which:
4 unique CDR3
1 unique J

IGHV2−5*02

684 sequences assigned
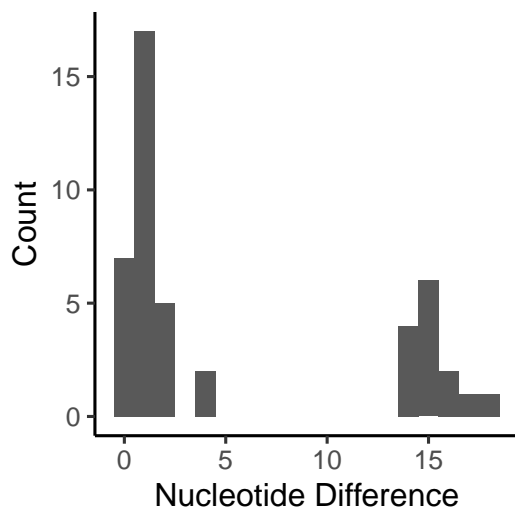30 (4.4%) exact matches, in which:
23 unique CDR3
5 unique J

IGHV2−70*15

28 sequences assigned
7 (25%) exact matches, in which:
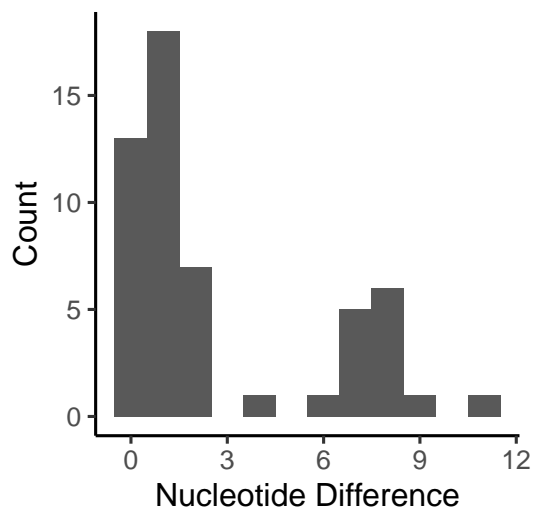7 unique CDR3
2 unique J

IGHV1−69−2*01

55 sequences assigned
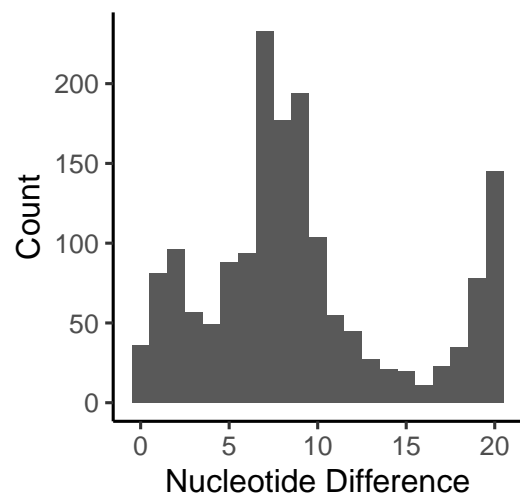7 (12.7%) exact matches, in which:
5 unique CDR3
2 unique J

IGHV2−26*01

54 sequences assigned
13 (24.1%) exact matches, in which:
5 unique CDR3
3 unique J

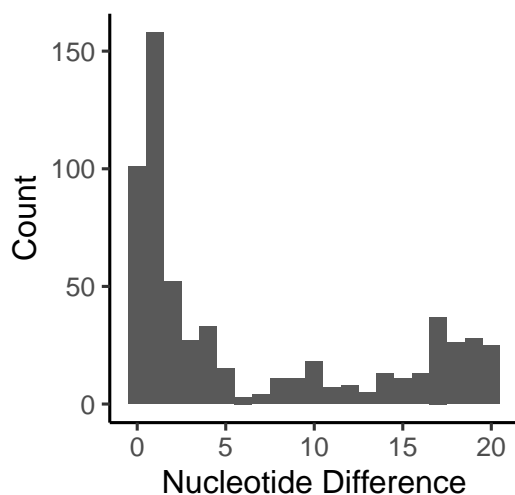## IGHV3−7*01

2130 sequences assigned
36 (1.7%) exact matches, in which:
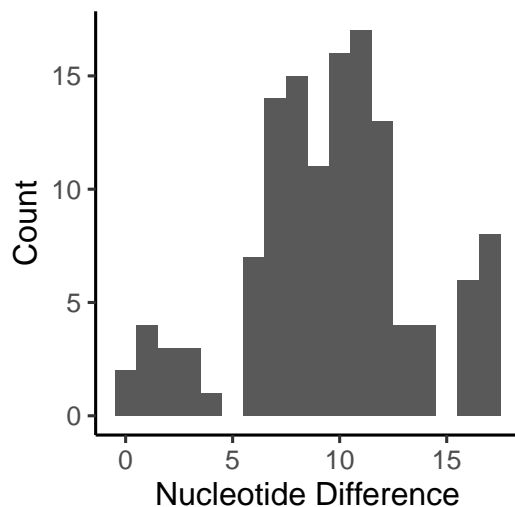32 unique CDR3
4 unique J

IGHV1−69*06

937 sequences assigned
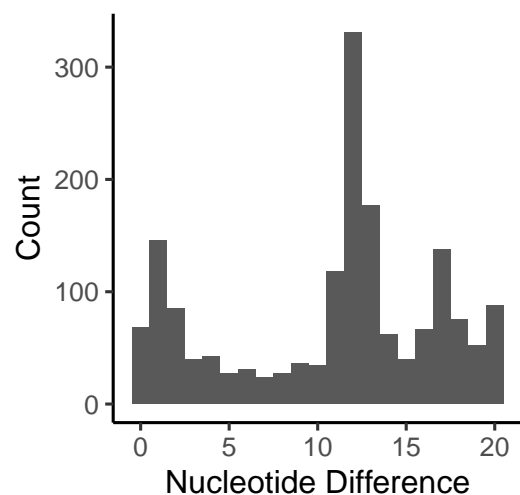101 (10.8%) exact matches, in which:
69 unique CDR3
5 unique J

IGHV2−70*01

128 sequences assigned
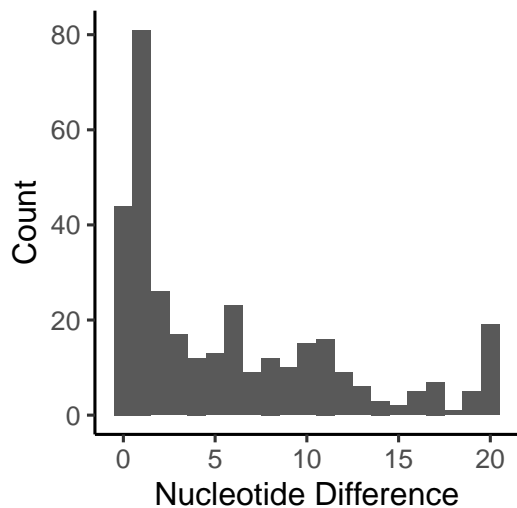2 (1.6%) exact matches, in which:
2 unique CDR3
1 unique J

IGHV3−7*03

1908 sequences assigned
68 (3.6%) exact matches, in which:
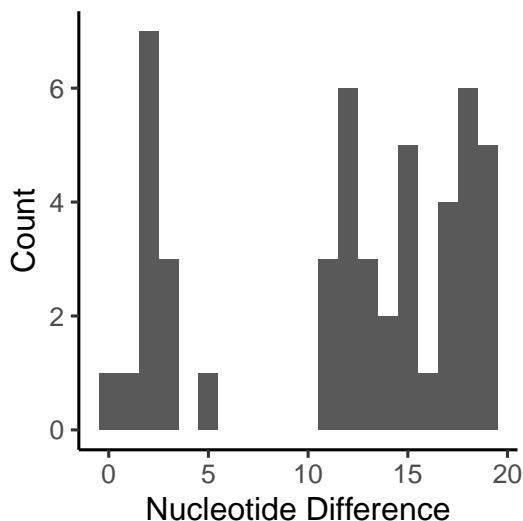47 unique CDR3
5 unique J

IGHV3–9*01

452 sequences assigned
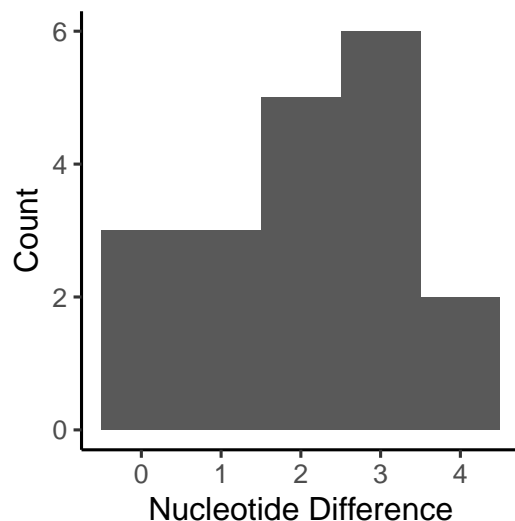44 (9.7%) exact matches, in which:
38 unique CDR3
6 unique J

IGHV3–13*01

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

IGHV3–20*01

19 sequences assigned
3 (15.8%) exact matches, in which:
2 unique CDR3
2 unique J

IGHV3–11*01

418 sequences assigned
23 (5.5%) exact matches, in which:
19 unique CDR3
3 unique J

IGHV3–15*01

306 sequences assigned
16 (5.2%) exact matches, in which:
15 unique CDR3
3 unique J

IGHV3–21*01

1305 sequences assigned
166 (12.7%) exact matches, in which:
98 unique CDR3
5 unique J

IGHV3–11*06

68 sequences assigned
17 (25%) exact matches, in which:
12 unique CDR3
3 unique J

IGHV3–15*07

752 sequences assigned
38 (5.1%) exact matches, in which:
31 unique CDR3
6 unique J

IGHV3–33*01

1221 sequences assigned
67 (5.5%) exact matches, in which:
48 unique CDR3
5 unique J

IGHV3-43*01

151 sequences assigned
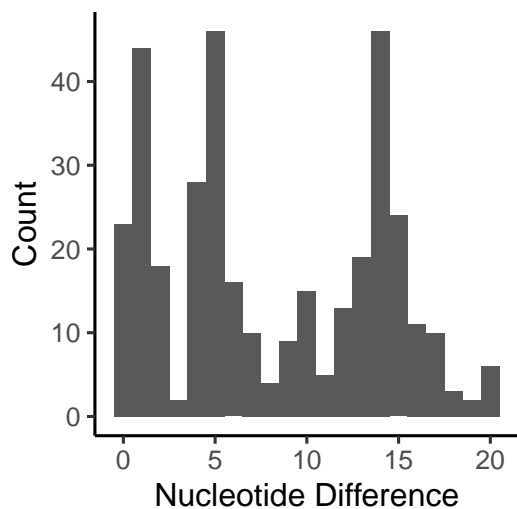1 (0.7%) exact matches, in which:
1 unique CDR3
1 unique J

IGHV3-49*05

238 sequences assigned
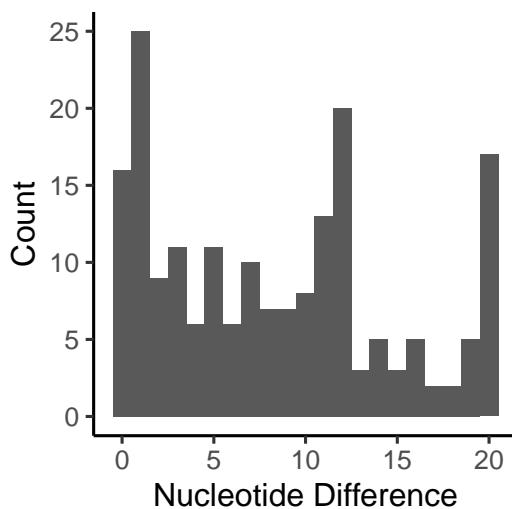12 (5%) exact matches, in which:
9 unique CDR3
2 unique J

IGHV3-64*01

136 sequences assigned
8 (5.9%) exact matches, in which:
5 unique CDR3
3 unique J

IGHV3-48*02

1177 sequences assigned
74 (6.3%) exact matches, in which:
57 unique CDR3
6 unique J

IGHV3-53*01

492 sequences assigned
37 (7.5%) exact matches, in which:
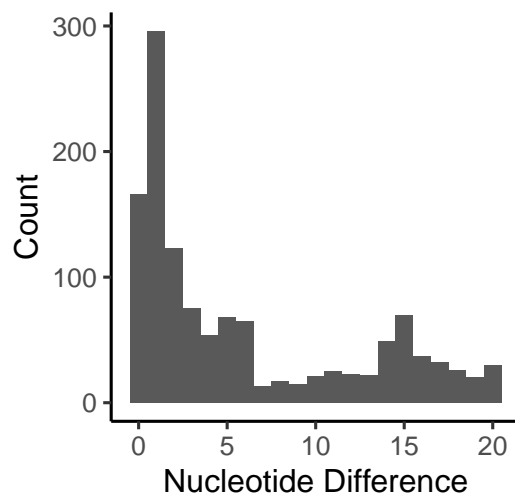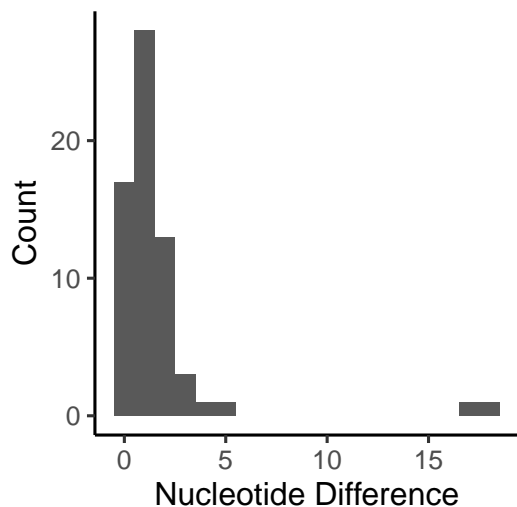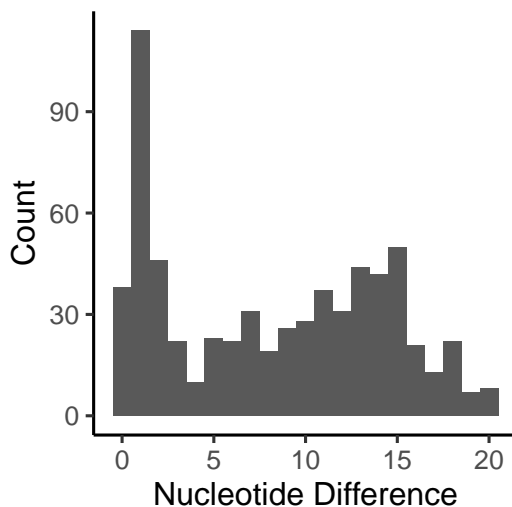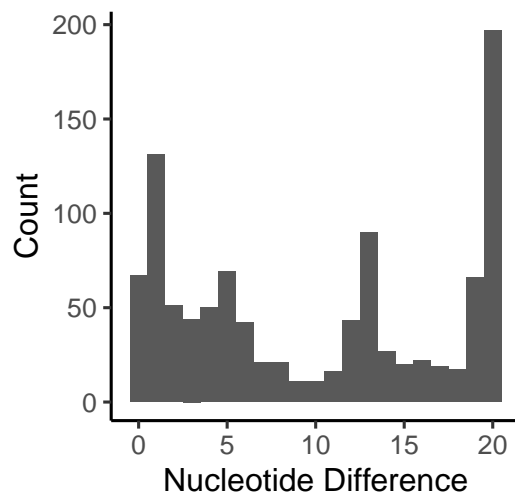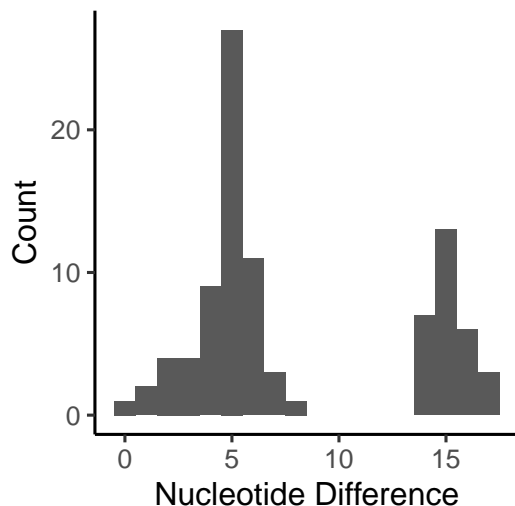30 unique CDR3
4 unique J

IGHV3-64*07

11 sequences assigned
No exact matches.

IGHV3-49*04

561 sequences assigned
9 (1.6%) exact matches, in which:
4 unique CDR3
3 unique J

IGHV3-53*04

136 sequences assigned
25 (18.4%) exact matches, in which:
21 unique CDR3
4 unique J

IGHV3-66*01

508 sequences assigned
41 (8.1%) exact matches, in which:
30 unique CDR3
5 unique J
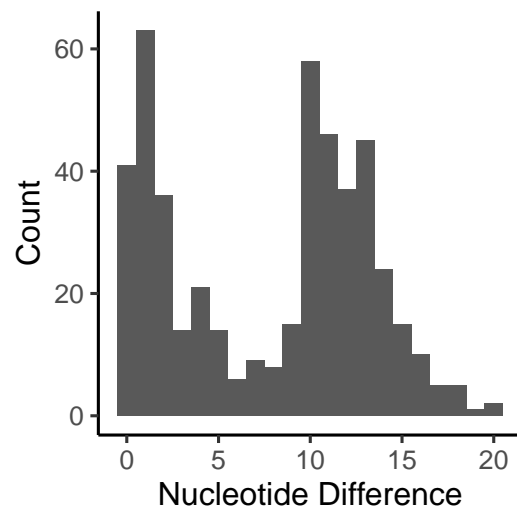
IGHV3−72*01

315 sequences assigned
3 (1%) exact matches, in which:
3 unique CDR3
2 unique J

IGHV3−74*01

1352 sequences assigned
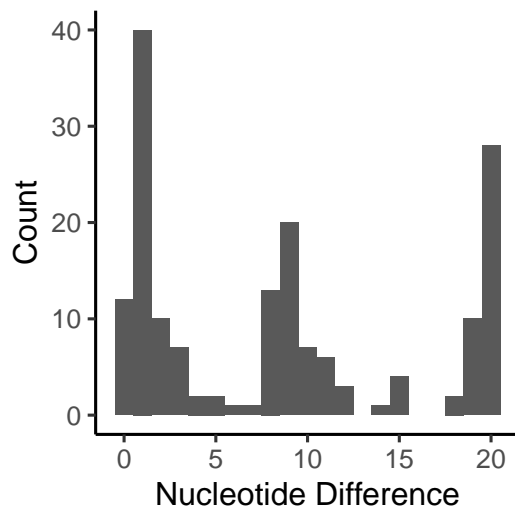62 (4.6%) exact matches, in which:
56 unique CDR3
5 unique J

IGHV4−4*02

282 sequences assigned
21 (7.4%) exact matches, in which:
19 unique CDR3
5 unique J

IGHV3−73*01

112 sequences assigned
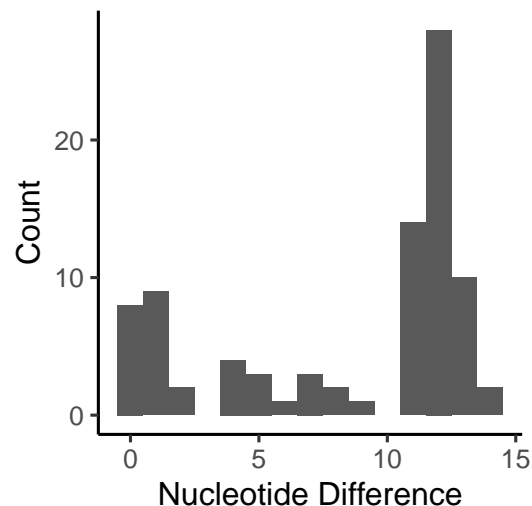8 (7.1%) exact matches, in which:
7 unique CDR3
2 unique J

IGHV3−43D*03

73 sequences assigned
7 (9.6%) exact matches, in which:
5 unique CDR3
2 unique J
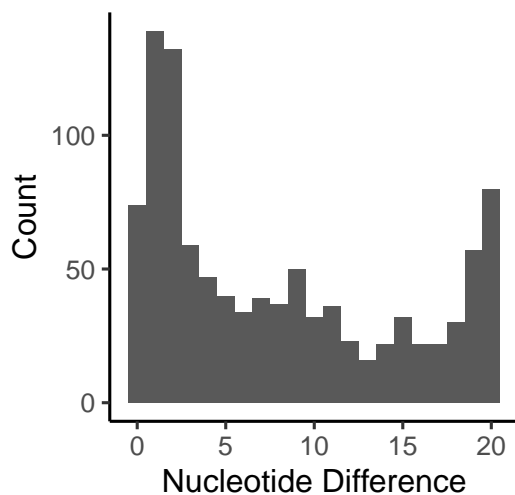
IGHV4−28*07

3 sequences assigned
1 (33.3%) exact matches, in which:
1 unique CDR3
1 unique J

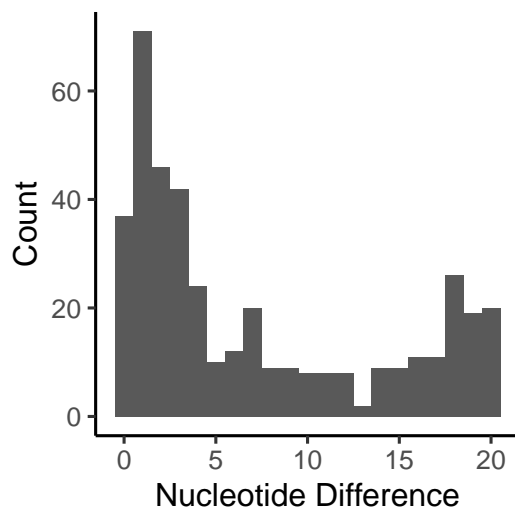# IGHV3−73*02

207 sequences assigned
16 (7.7%) exact matches, in which:
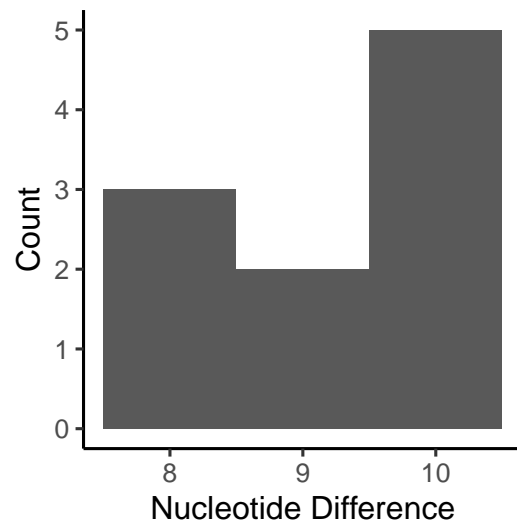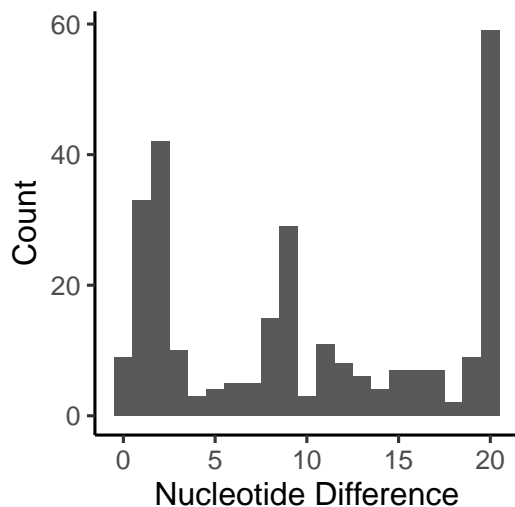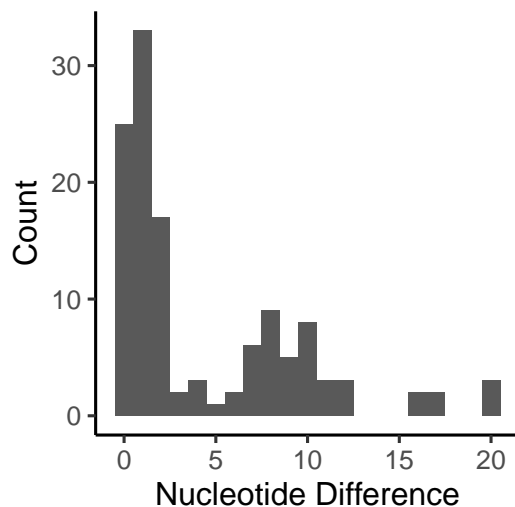14 unique CDR3
3 unique J

IGHV3−64D*06

280 sequences assigned
14 (5%) exact matches, in which:
12 unique CDR3
4 unique J

IGHV4−30−2*01

134 sequences assigned
10 (7.5%) exact matches, in which:
9 unique CDR3
4 unique J

IGHV4-30-4*07

463 sequences assigned
17 (3.7%) exact matches, in which:
11 unique CDR3
4 unique J

IGHV4-38-2*02

664 sequences assigned
47 (7.1%) exact matches, in which:
27 unique CDR3
5 unique J

IGHV4-59*08

826 sequences assigned
54 (6.5%) exact matches, in which:
43 unique CDR3
6 unique J

IGHV4-31*03

521 sequences assigned
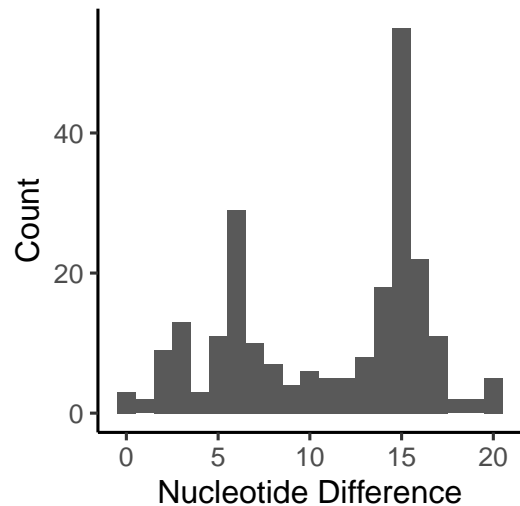90 (17.3%) exact matches, in which:
48 unique CDR3
4 unique J

IGHV4-39*01

3883 sequences assigned
273 (7%) exact matches, in which:
205 unique CDR3
5 unique J

IGHV4-61*01

190 sequences assigned
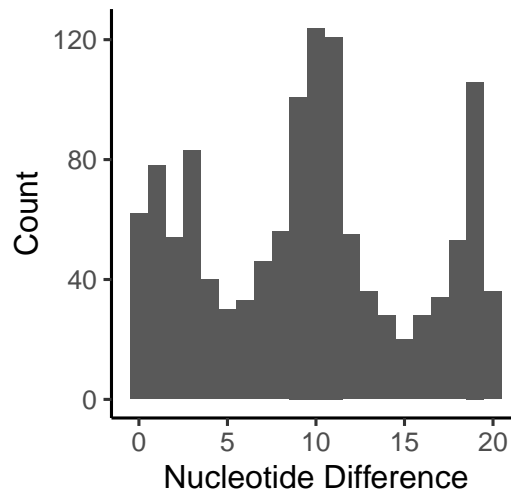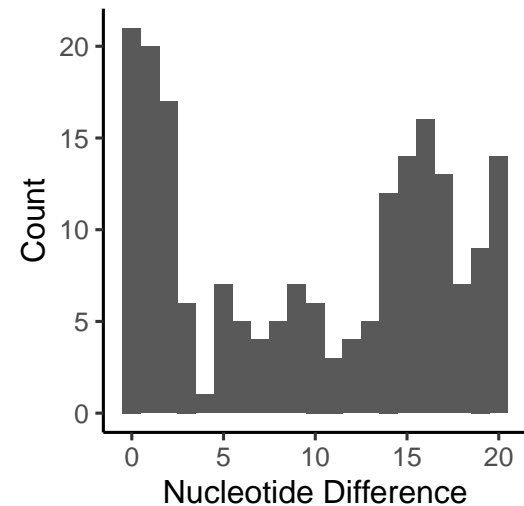14 (7.4%) exact matches, in which:
11 unique CDR3
3 unique J

IGHV4-34*01

1998 sequences assigned
214 (10.7%) exact matches, in which:
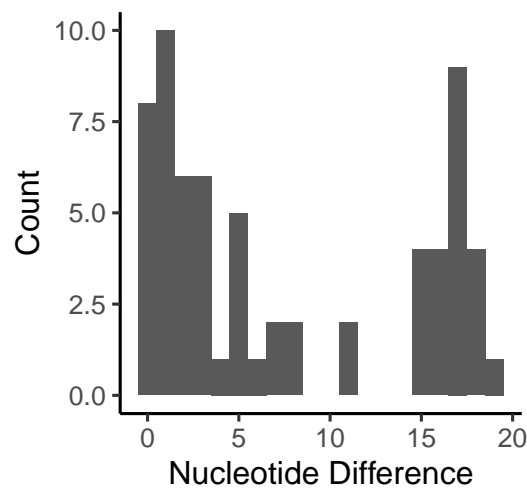159 unique CDR3
5 unique J

IGHV4-59*01

1277 sequences assigned
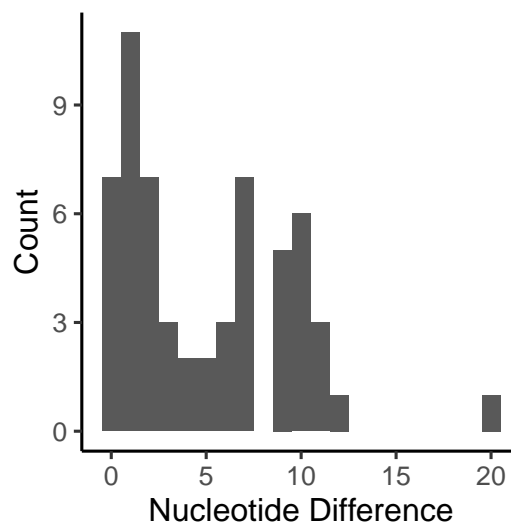104 (8.1%) exact matches, in which:
75 unique CDR3
6 unique J

IGHV4-61*08

215 sequences assigned
No exact matches.

IGHV5−10−1*03

312 sequences assigned
32 (10.3%) exact matches, in which:
20 unique CDR3
4 unique J

IGHV7−4−1*01

24 sequences assigned
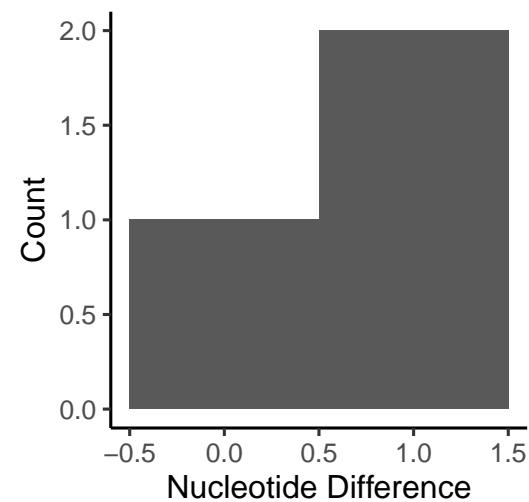4 (16.7%) exact matches, in which:
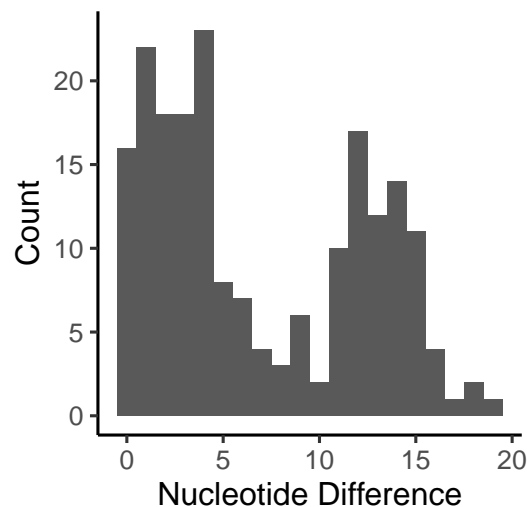2 unique CDR3
1 unique J

IGHV5−51*01

1539 sequences assigned
186 (12.1%) exact matches, in which:
131 unique CDR3
6 unique J

IGHV6−1*01

1547 sequences assigned
92 (5.9%) exact matches, in which:
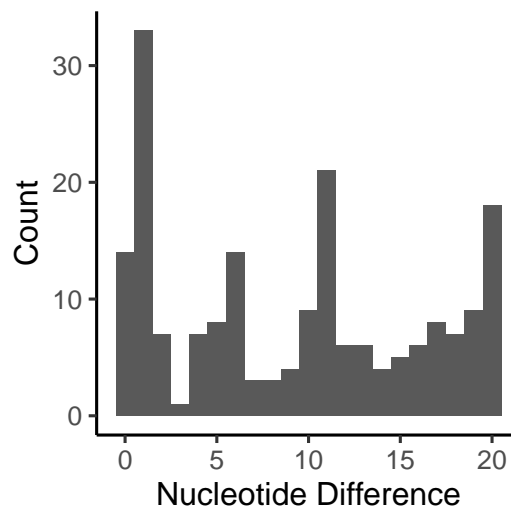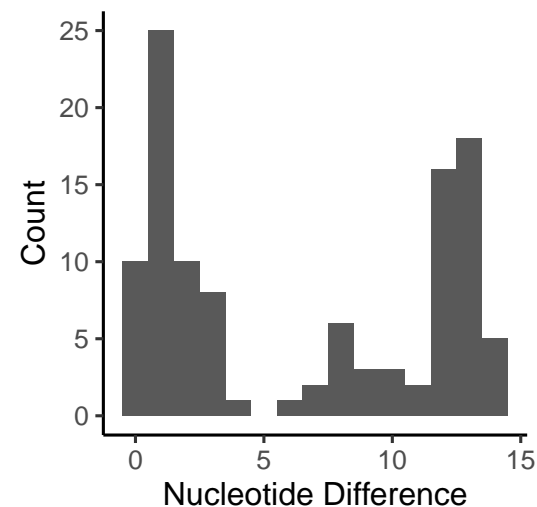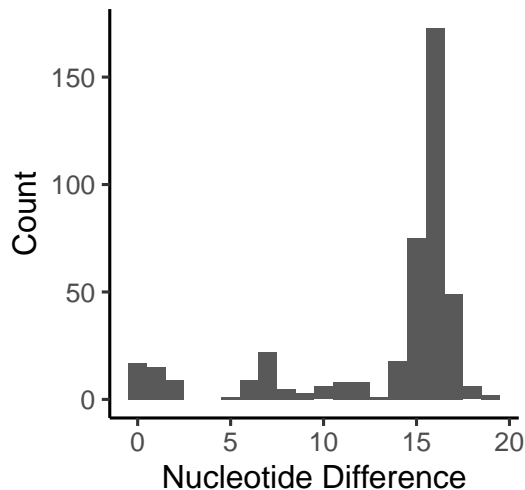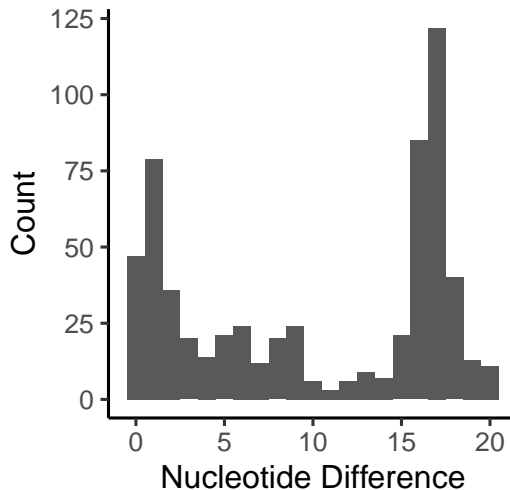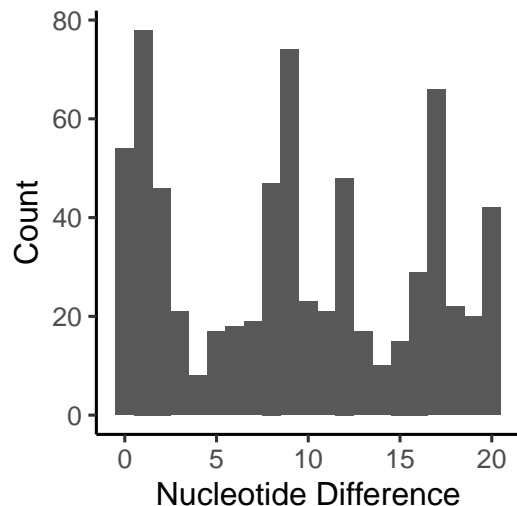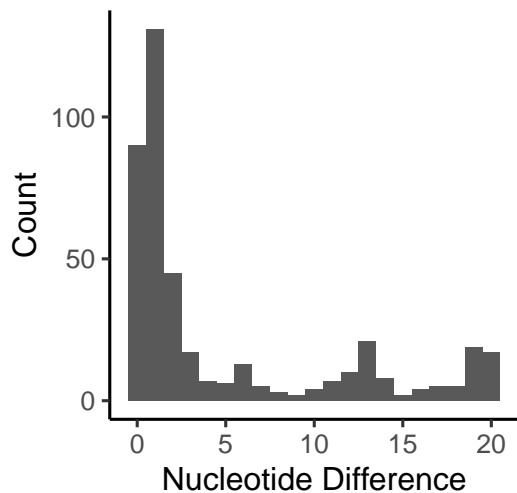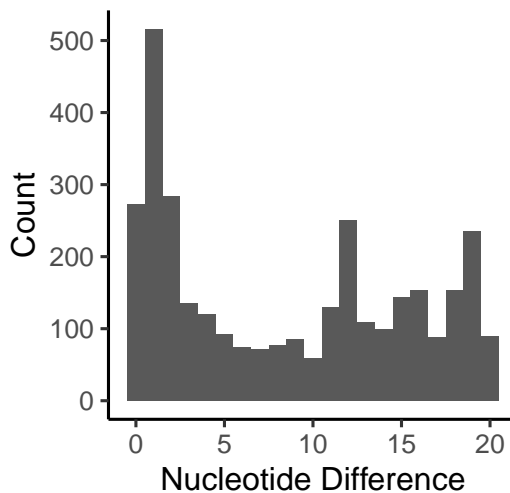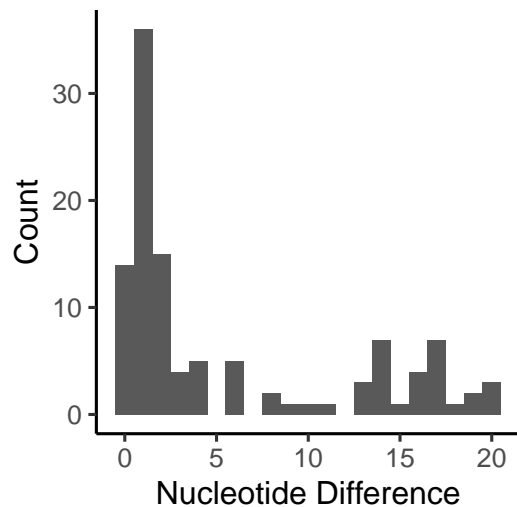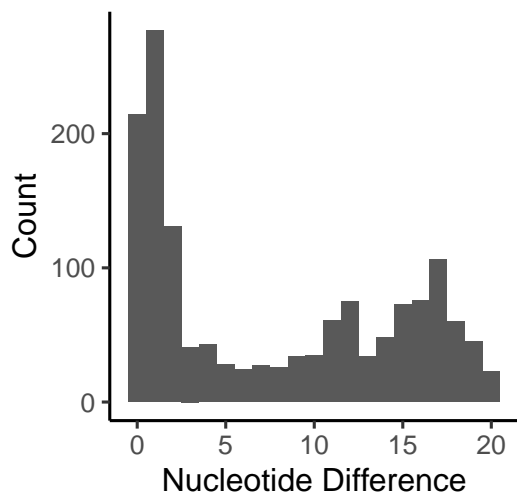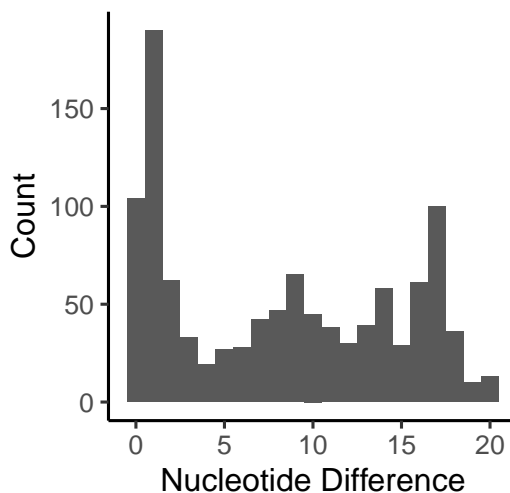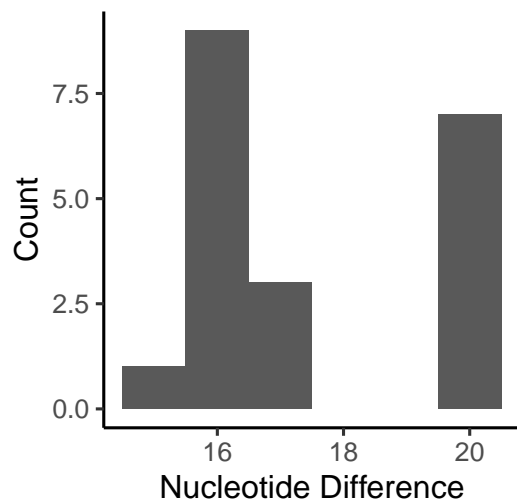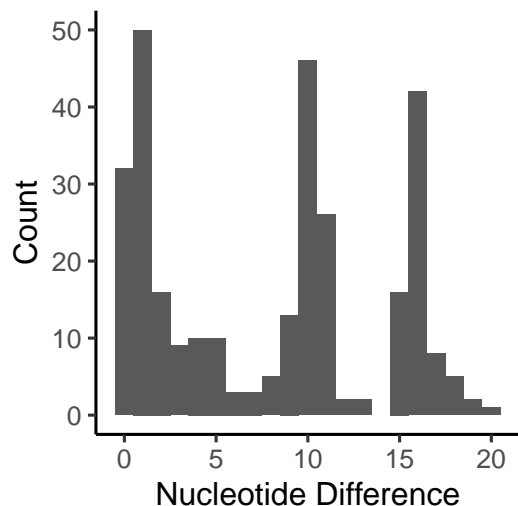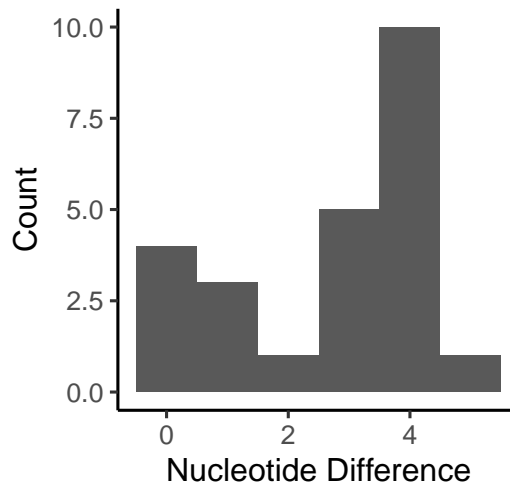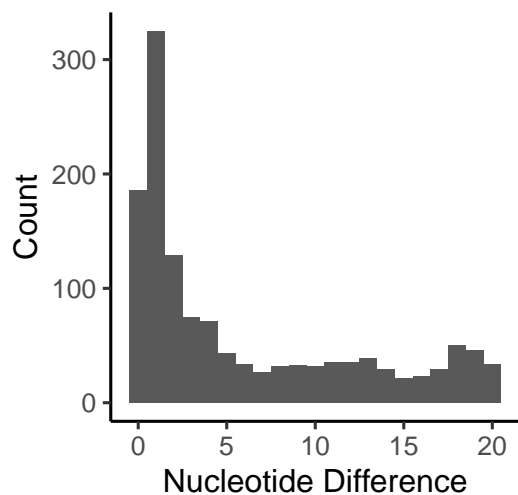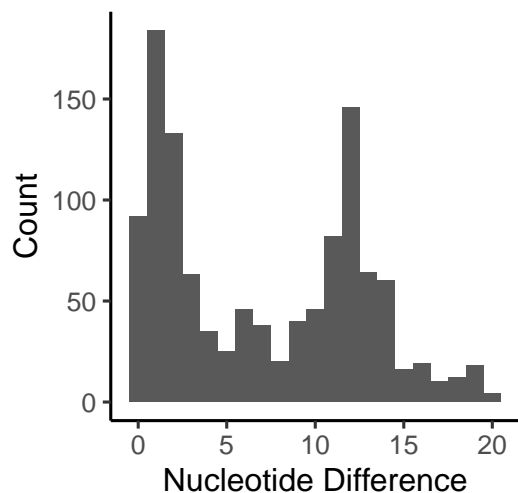57 unique CDR3
4 unique J

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