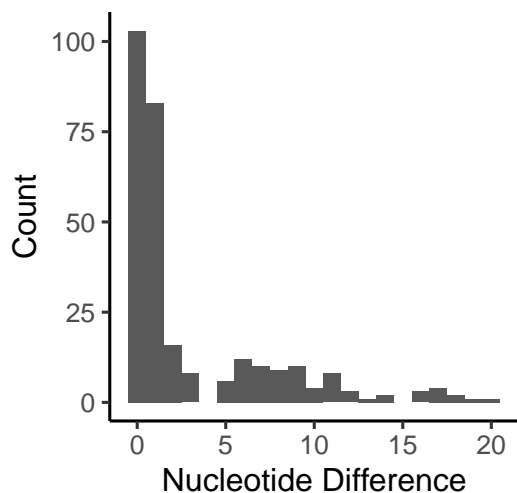


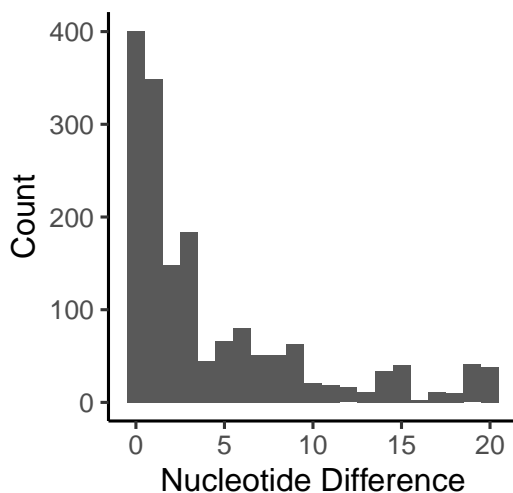
IGHV1-2*04

292 sequences assigned
103 (35.3%) exact matches, in which:
87 unique CDR3
6 unique J



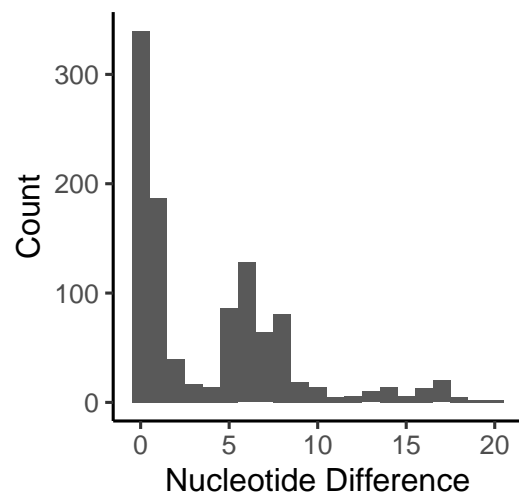
IGHV1-8*01

1727 sequences assigned
401 (23.2%) exact matches, in which:
356 unique CDR3
6 unique J



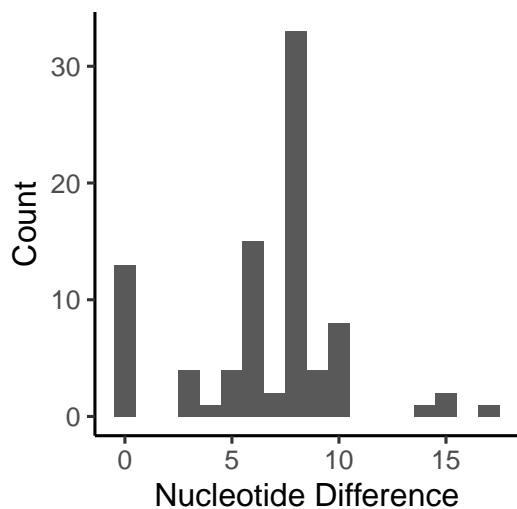
IGHV1-46*01

1213 sequences assigned
340 (28%) exact matches, in which:
311 unique CDR3
7 unique J



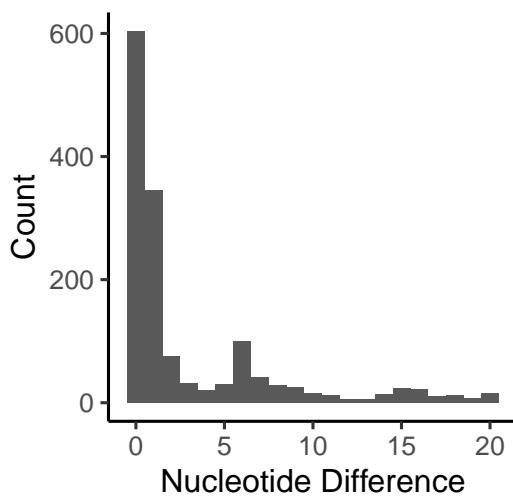
IGHV1-2*02_T211C_T213

94 sequences assigned
13 (13.8%) exact matches, in which:
13 unique CDR3
5 unique J



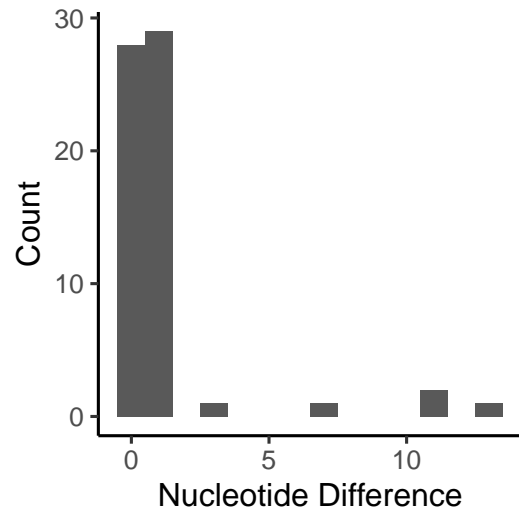
IGHV1-18*01

1931 sequences assigned
604 (31.3%) exact matches, in which:
539 unique CDR3
6 unique J



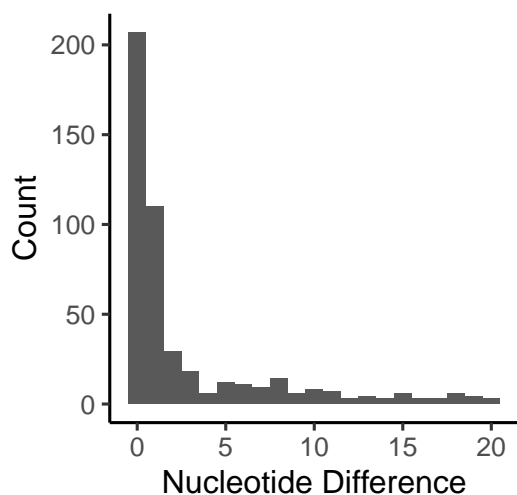
IGHV1-58*01_03

63 sequences assigned
28 (44.4%) exact matches, in which:
24 unique CDR3
6 unique J



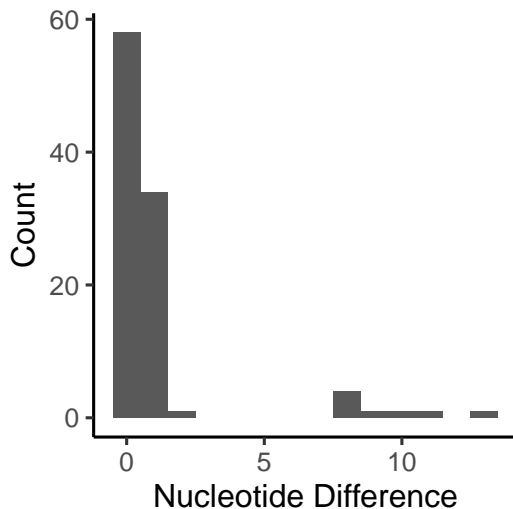
IGHV1-3*01_05

739 sequences assigned
207 (28%) exact matches, in which:
178 unique CDR3
6 unique J



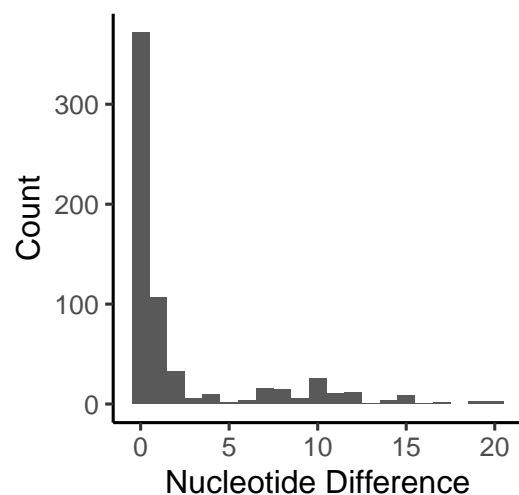
IGHV1-24*01

119 sequences assigned
58 (48.7%) exact matches, in which:
57 unique CDR3
7 unique J



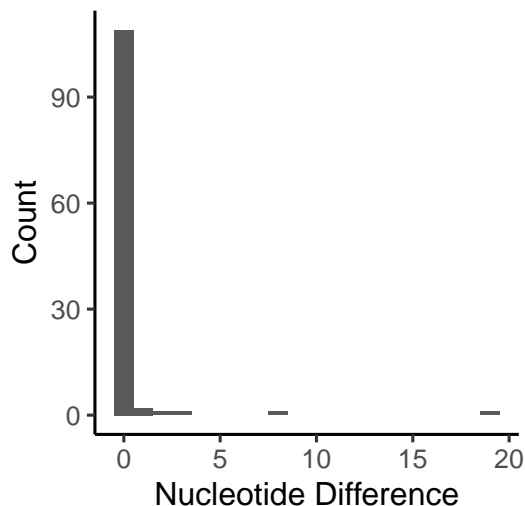
IGHV1-69*01_12_13

721 sequences assigned
372 (51.6%) exact matches, in which:
355 unique CDR3
7 unique J



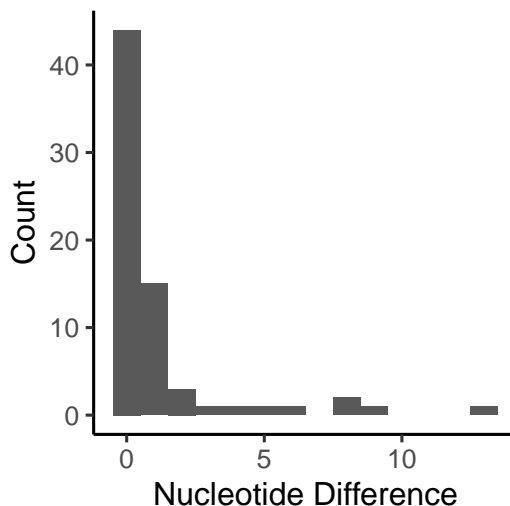
IGHV1-69*01_12_13_A81

117 sequences assigned
109 (93.2%) exact matches, in which:
109 unique CDR3
5 unique J



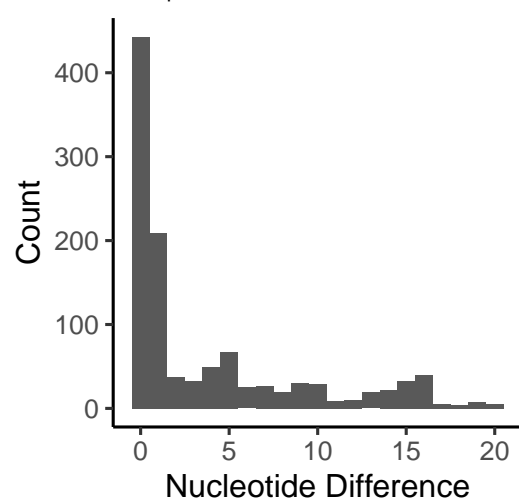
IGHV2-26*01

78 sequences assigned
44 (56.4%) exact matches, in which:
32 unique CDR3
6 unique J



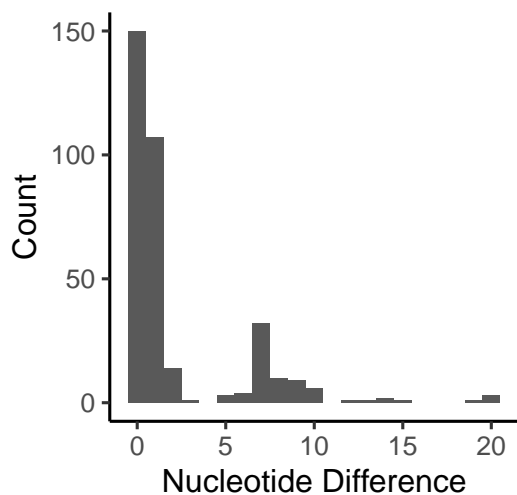
IGHV3-9*01

1293 sequences assigned
443 (34.3%) exact matches, in which:
234 unique CDR3
7 unique J



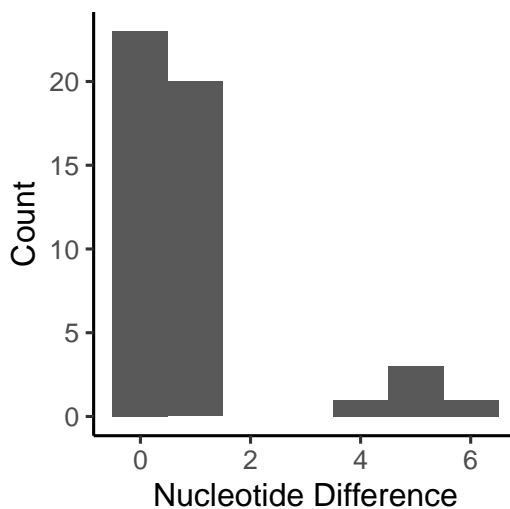
IGHV1-69*04_09_G112A

351 sequences assigned
150 (42.7%) exact matches, in which:
140 unique CDR3
6 unique J



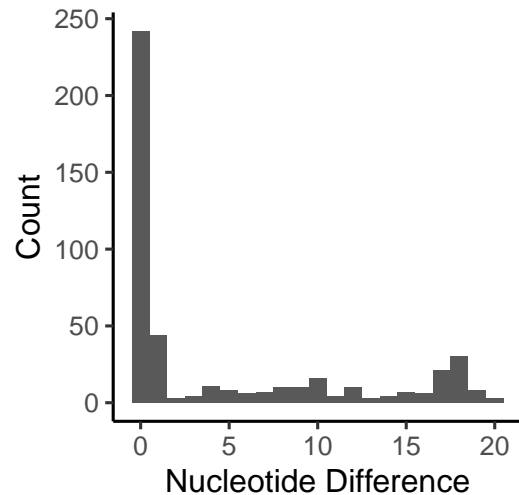
IGHV2-70*01

48 sequences assigned
23 (47.9%) exact matches, in which:
18 unique CDR3
4 unique J



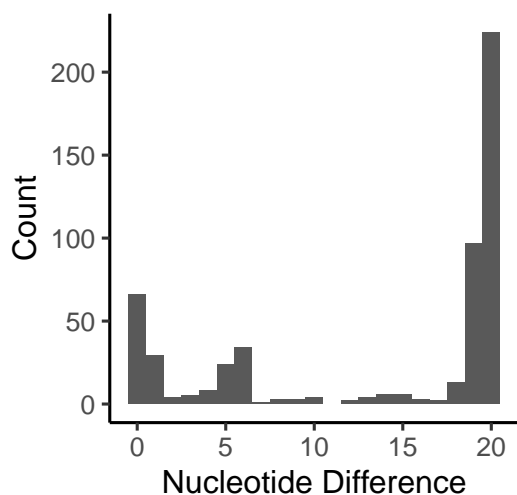
IGHV3-11*01

568 sequences assigned
242 (42.6%) exact matches, in which:
141 unique CDR3
7 unique J



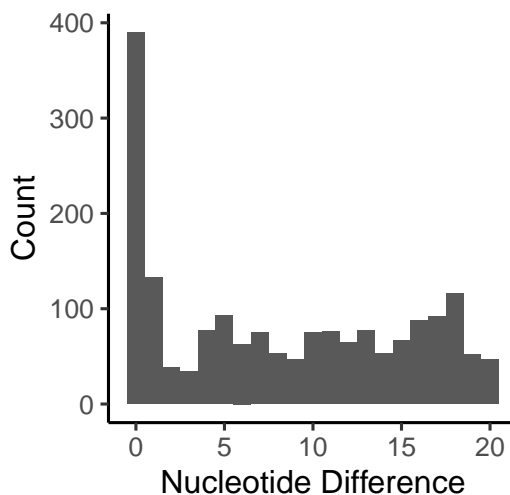
IGHV2-5*02

562 sequences assigned
66 (11.7%) exact matches, in which:
58 unique CDR3
6 unique J



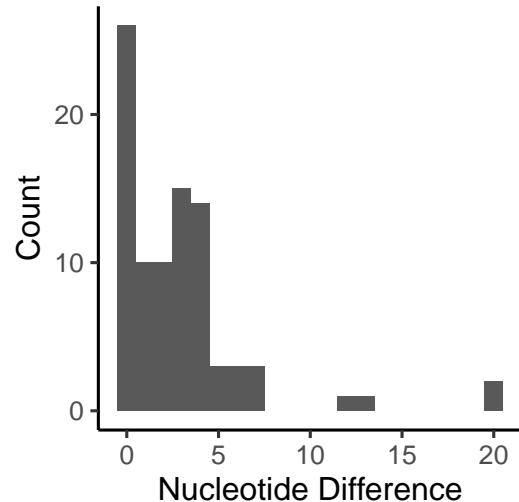
IGHV3-7*01

2208 sequences assigned
390 (17.7%) exact matches, in which:
238 unique CDR3
7 unique J



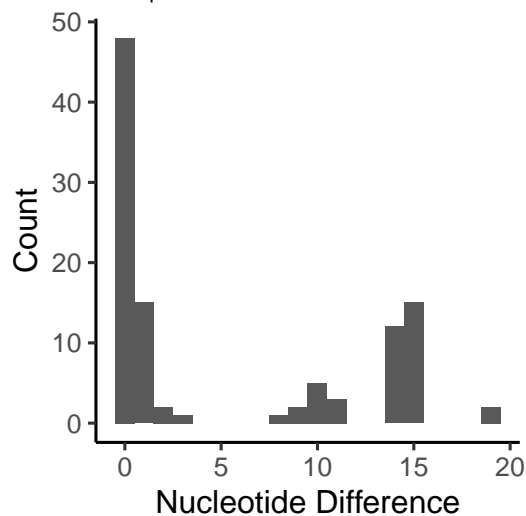
IGHV3-11*04

88 sequences assigned
26 (29.5%) exact matches, in which:
25 unique CDR3
7 unique J



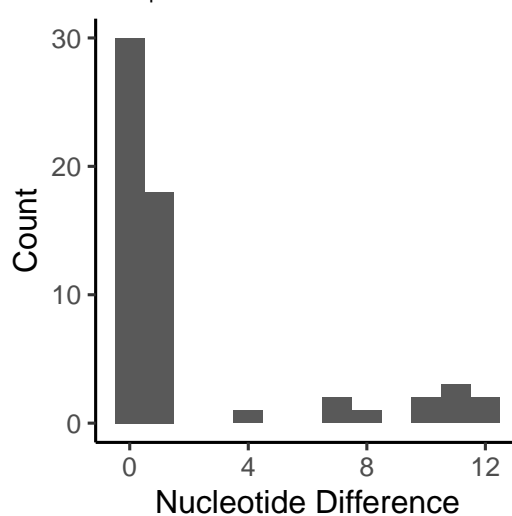
IGHV3-13*01

112 sequences assigned
48 (42.9%) exact matches, in which:
26 unique CDR3
6 unique J



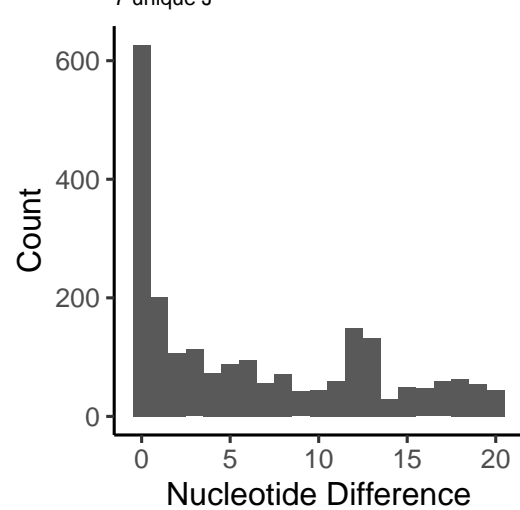
IGHV3-20*01_02

59 sequences assigned
30 (50.8%) exact matches, in which:
17 unique CDR3
5 unique J



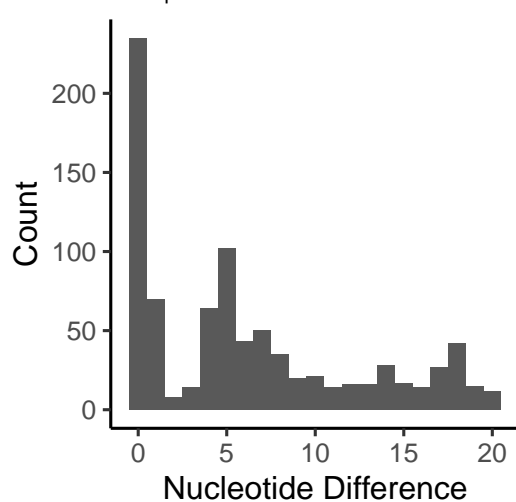
IGHV3-23*01_04

2721 sequences assigned
627 (23%) exact matches, in which:
345 unique CDR3
7 unique J



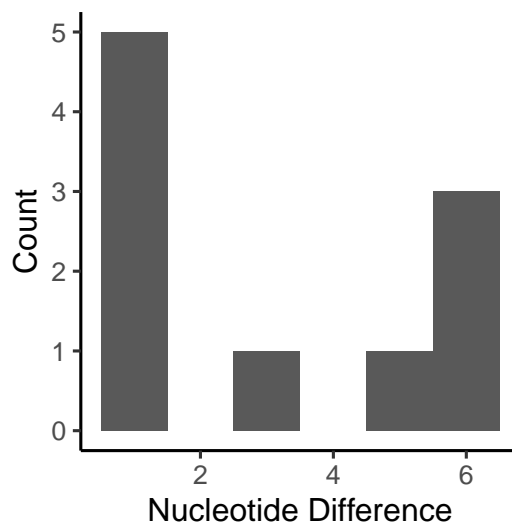
IGHV3-15*01_02

1035 sequences assigned
235 (22.7%) exact matches, in which:
139 unique CDR3
7 unique J



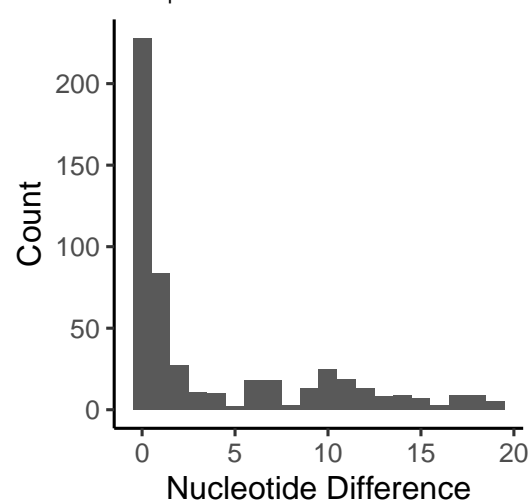
IGHV3-20*03_04

11 sequences assigned
No exact matches.



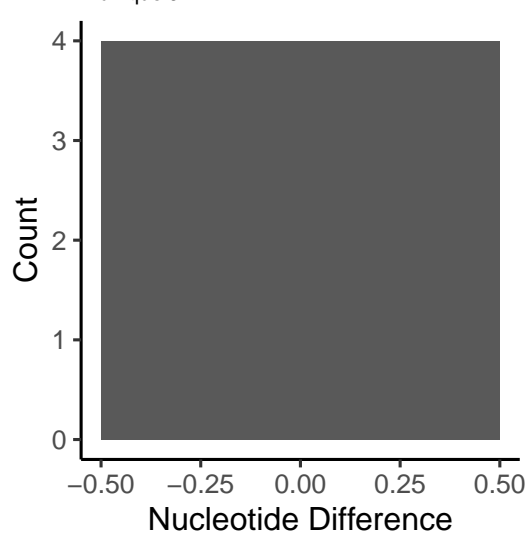
IGHV3-30-3*01

571 sequences assigned
228 (39.9%) exact matches, in which:
142 unique CDR3
6 unique J



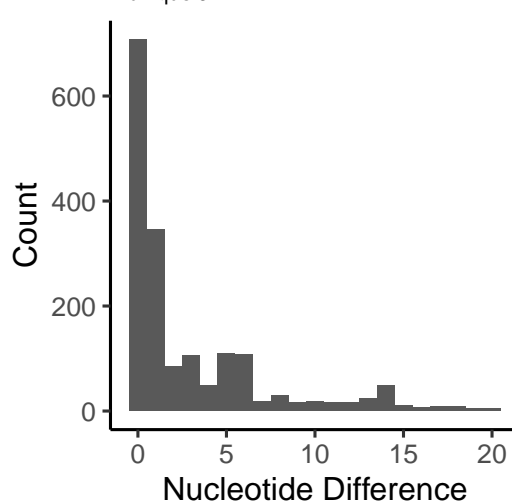
IGHV3-19*01

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



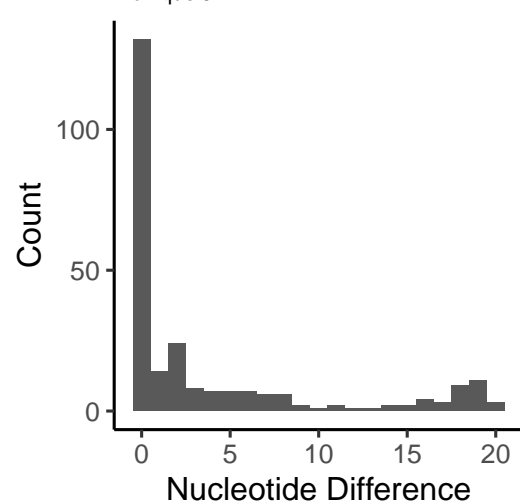
IGHV3-21*01_02

1814 sequences assigned
708 (39%) exact matches, in which:
397 unique CDR3
7 unique J



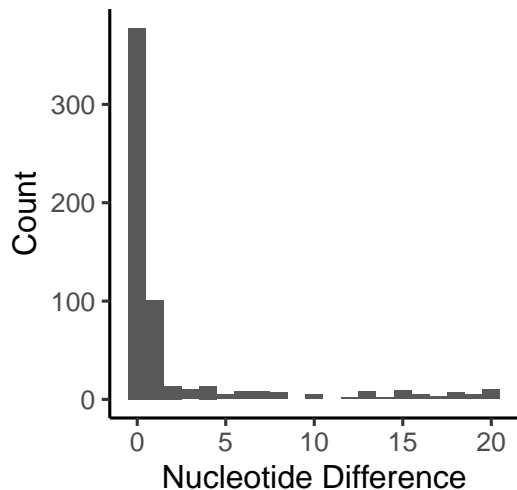
IGHV3-30*03_T288C

268 sequences assigned
132 (49.3%) exact matches, in which:
87 unique CDR3
7 unique J



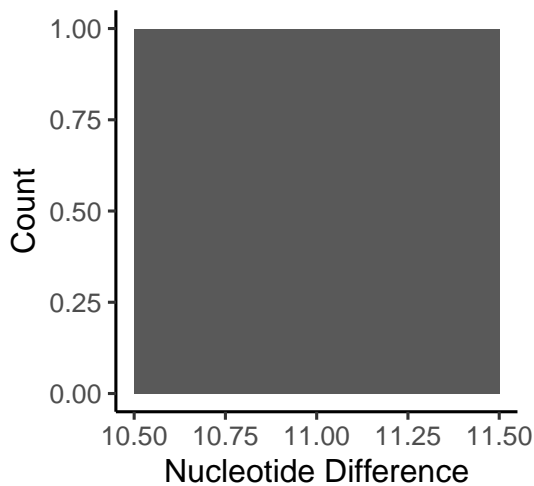
IGHV3–33*05

686 sequences assigned
378 (55.1%) exact matches, in which:
226 unique CDR3
7 unique J



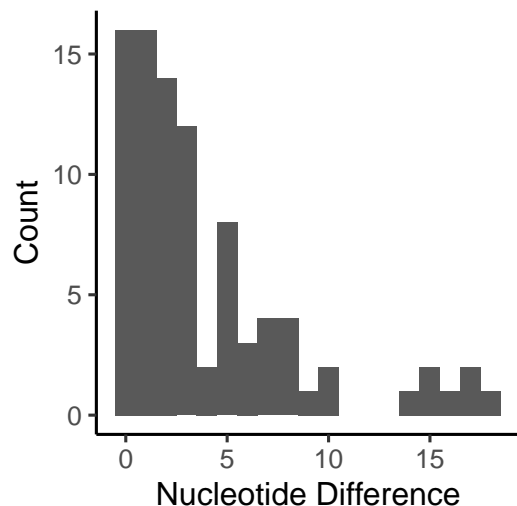
IGHV3–47*02

1 sequences assigned
No exact matches.



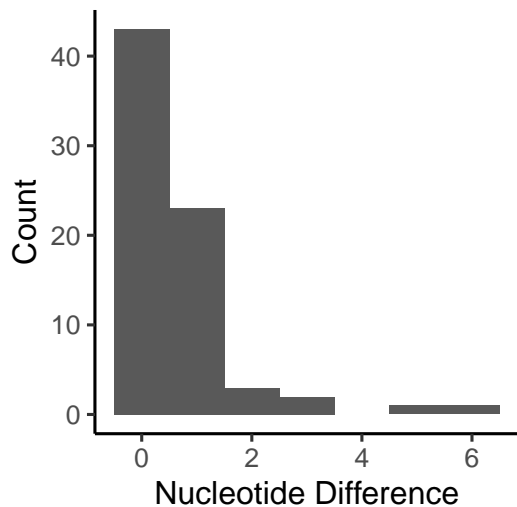
IGHV3–48*04

94 sequences assigned
16 (17%) exact matches, in which:
14 unique CDR3
5 unique J



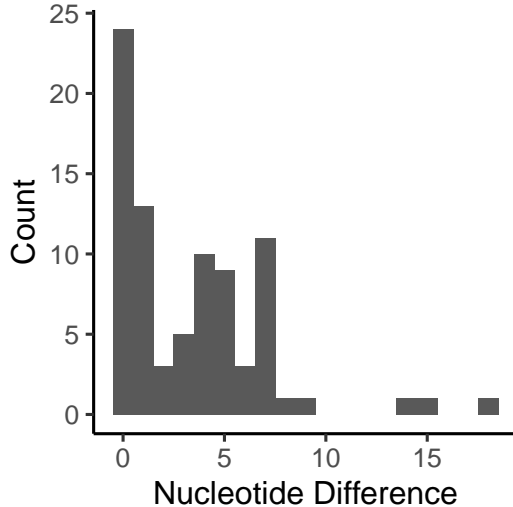
IGHV3–33*05_T300C_G3I

81 sequences assigned
43 (53.1%) exact matches, in which:
33 unique CDR3
5 unique J



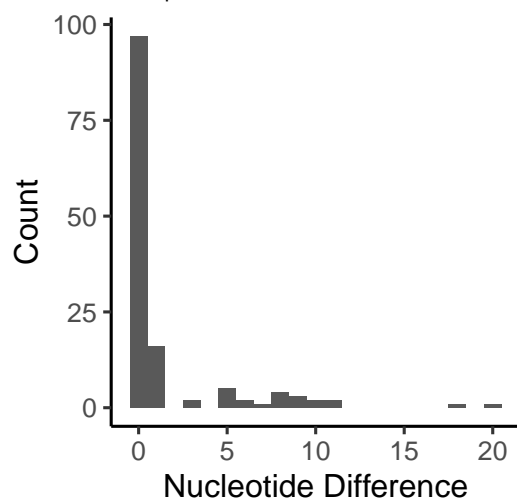
IGHV3–48*01

86 sequences assigned
24 (27.9%) exact matches, in which:
22 unique CDR3
6 unique J



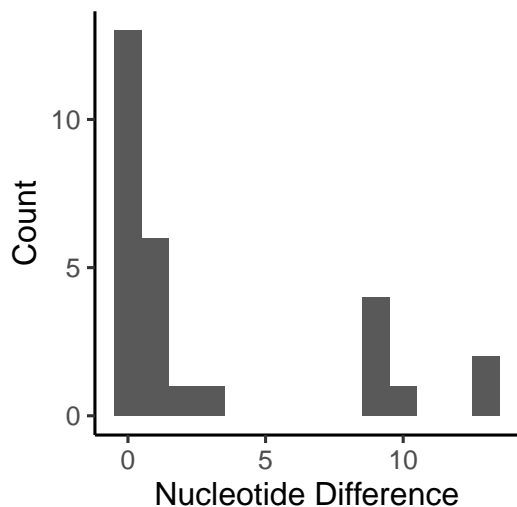
IGHV3–49*03_05

143 sequences assigned
97 (67.8%) exact matches, in which:
53 unique CDR3
6 unique J



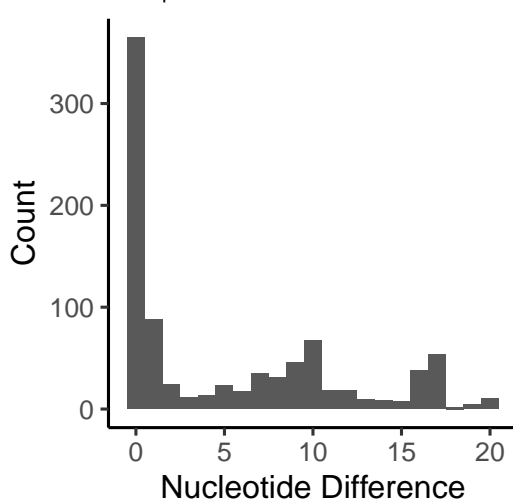
IGHV3–43*01

29 sequences assigned
13 (44.8%) exact matches, in which:
7 unique CDR3
2 unique J



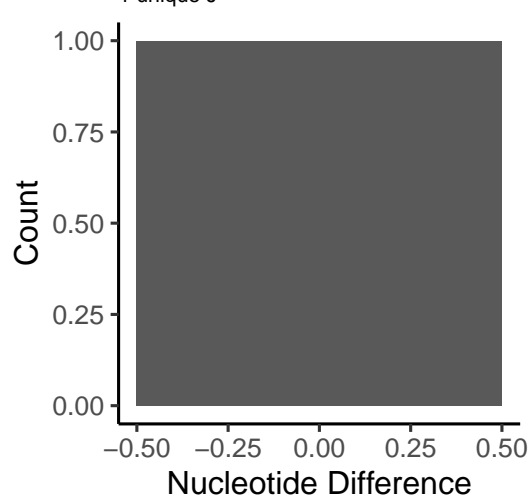
IGHV3–48*02

991 sequences assigned
365 (36.8%) exact matches, in which:
202 unique CDR3
7 unique J



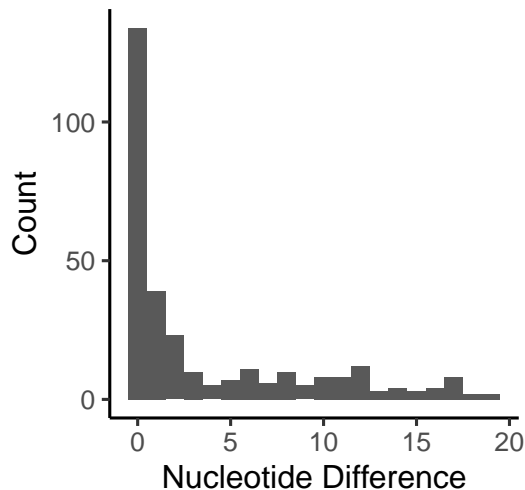
IGHV3–52*01_03

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



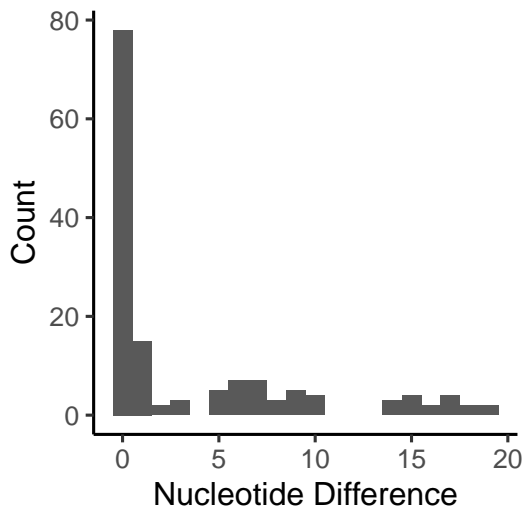
IGHV3-53*01_02

522 sequences assigned
134 (25.7%) exact matches, in which:
72 unique CDR3
7 unique J



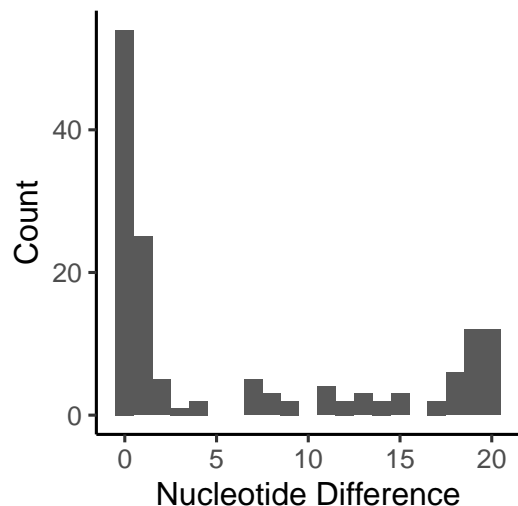
IGHV3-66*02

210 sequences assigned
78 (37.1%) exact matches, in which:
41 unique CDR3
5 unique J



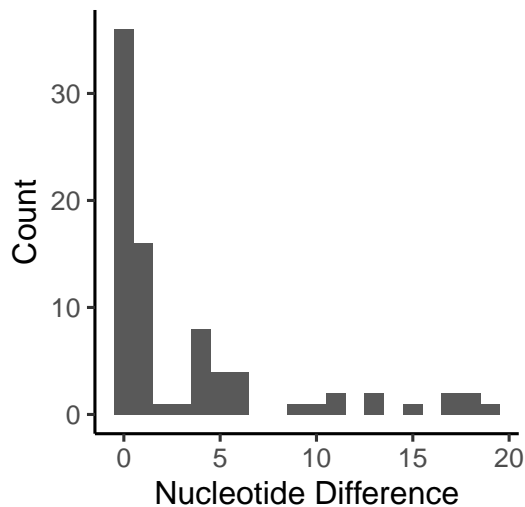
IGHV3-73*01_02

168 sequences assigned
54 (32.1%) exact matches, in which:
27 unique CDR3
5 unique J



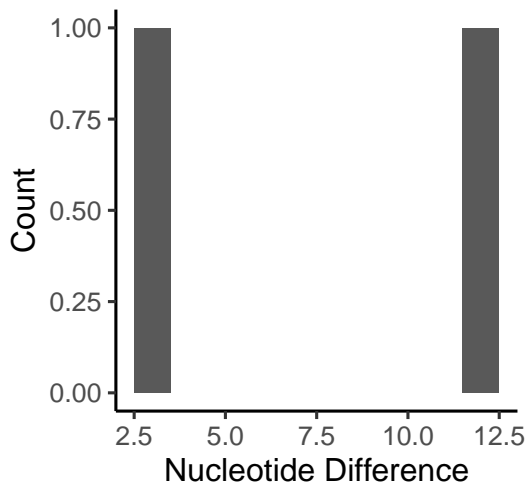
IGHV3-64*01

82 sequences assigned
36 (43.9%) exact matches, in which:
19 unique CDR3
5 unique J



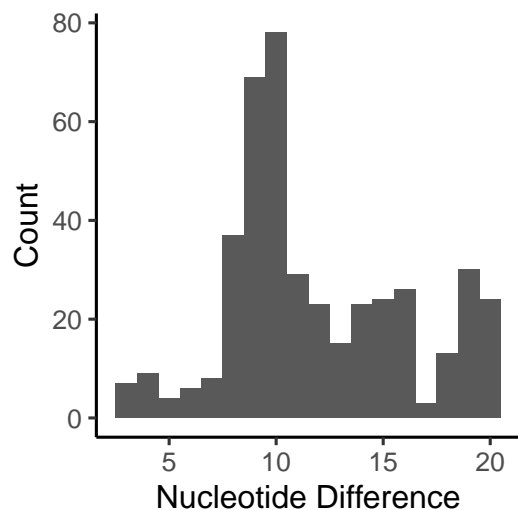
IGHV3-69-1*01

5 sequences assigned
No exact matches.



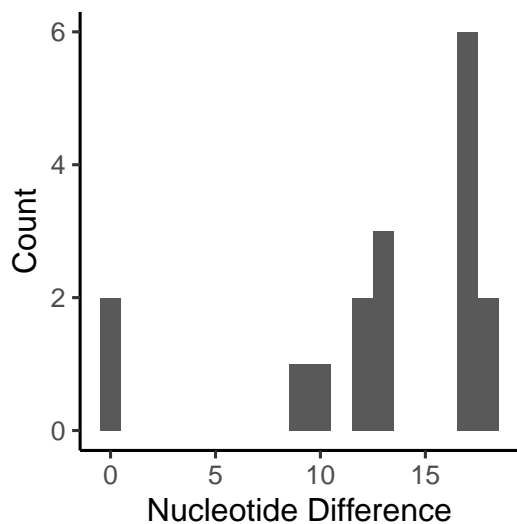
IGHV3-74*03

519 sequences assigned
No exact matches.



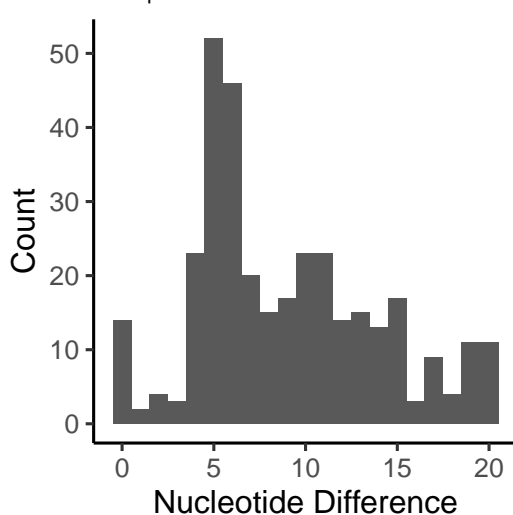
IGHV3-64*02_07

17 sequences assigned
2 (11.8%) exact matches, in which:
1 unique CDR3
1 unique J



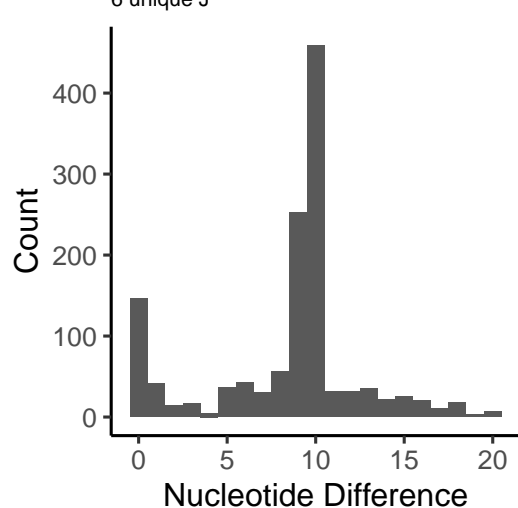
IGHV3-72*01

417 sequences assigned
14 (3.4%) exact matches, in which:
8 unique CDR3
5 unique J



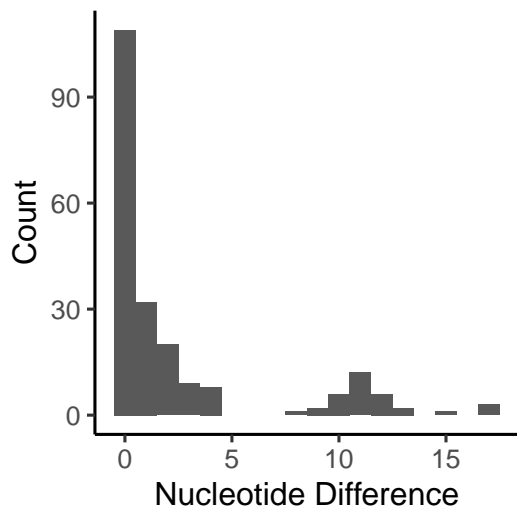
IGHV3-74*01_02

1345 sequences assigned
146 (10.9%) exact matches, in which:
82 unique CDR3
6 unique J



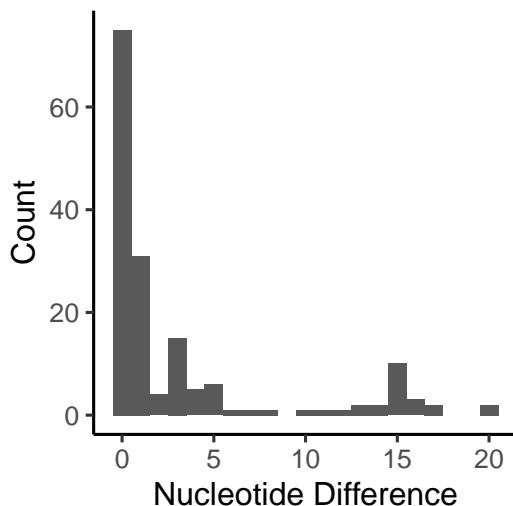
IGHV4-4*02_03

241 sequences assigned
109 (45.2%) exact matches, in which:
70 unique CDR3
5 unique J



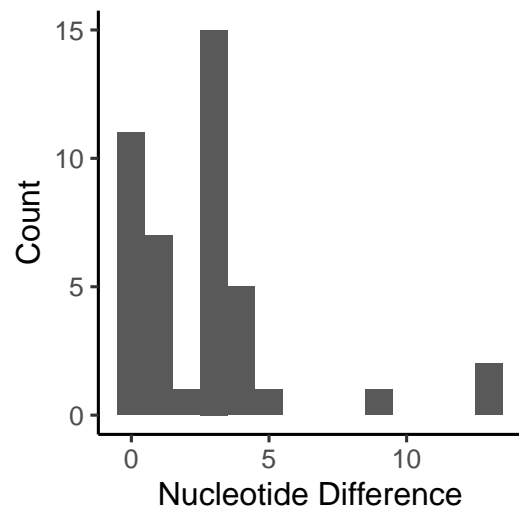
IGHV4-30-4*01

169 sequences assigned
75 (44.4%) exact matches, in which:
65 unique CDR3
6 unique J



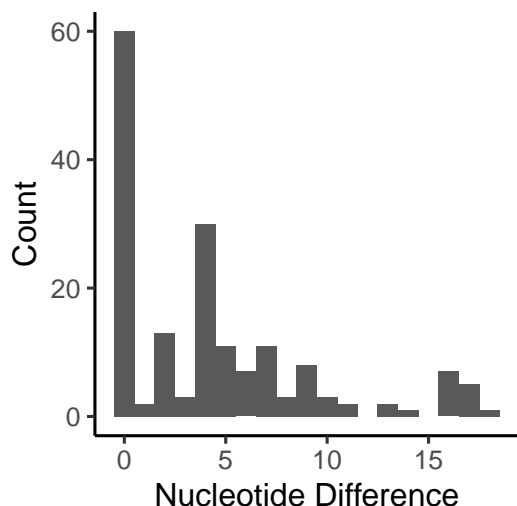
IGHV4-30-4*01_T285C_0

43 sequences assigned
11 (25.6%) exact matches, in which:
11 unique CDR3
5 unique J



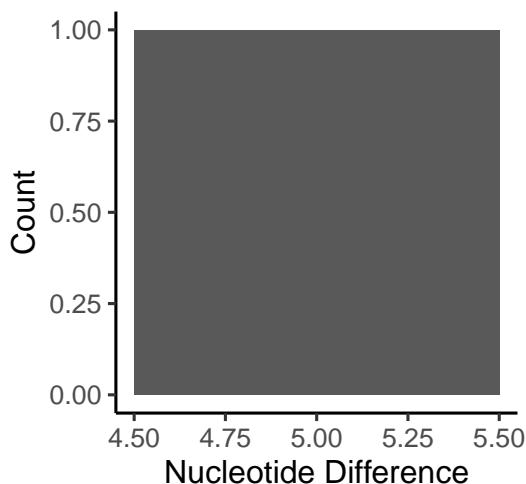
IGHV4-4*07_G234A_G29^ ^

169 sequences assigned
60 (35.5%) exact matches, in which:
60 unique CDR3
6 unique J



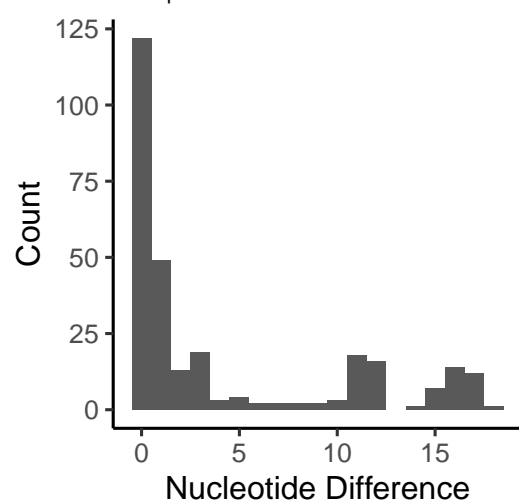
IGHV4-30-2*03

2 sequences assigned
No exact matches.



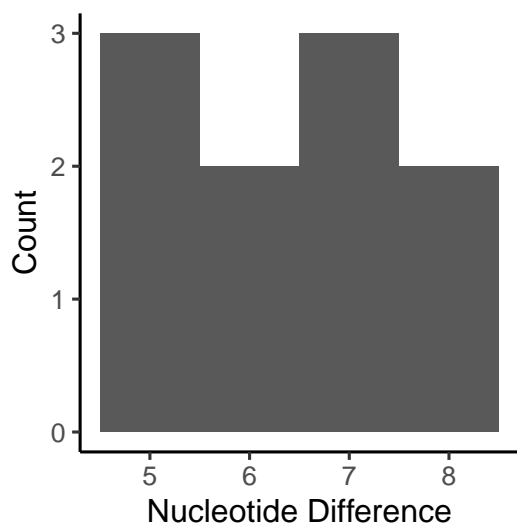
IGHV4-31*02

333 sequences assigned
122 (36.6%) exact matches, in which:
112 unique CDR3
7 unique J



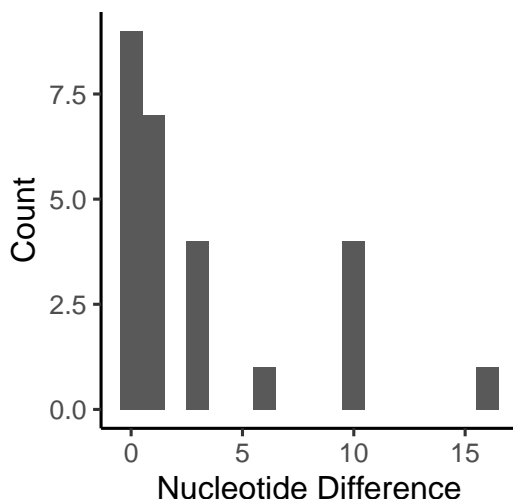
IGHV4-28*02_05

10 sequences assigned
No exact matches.



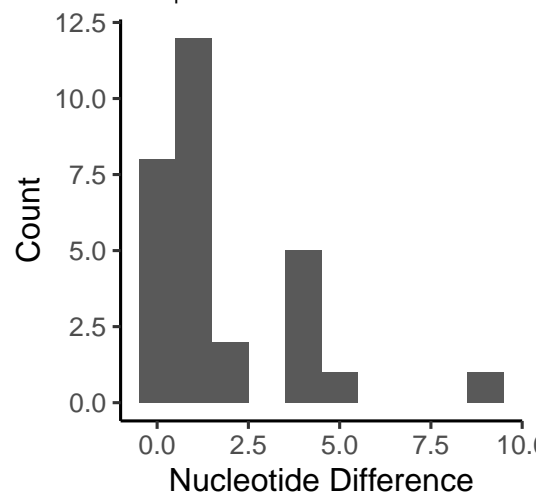
IGHV4-30-4*01_T285C_0

26 sequences assigned
9 (34.6%) exact matches, in which:
9 unique CDR3
4 unique J



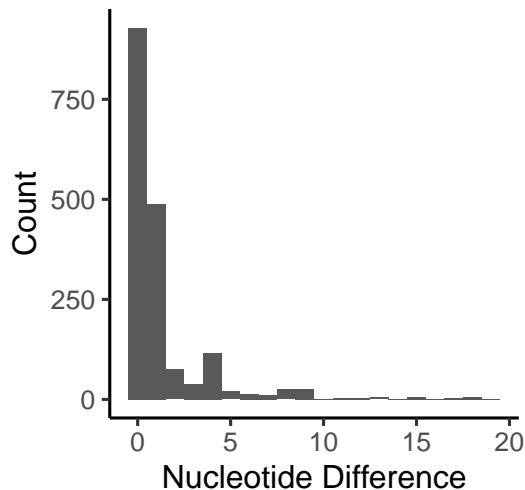
IGHV4-31*02_T285C_0

29 sequences assigned
8 (27.6%) exact matches, in which:
8 unique CDR3
3 unique J



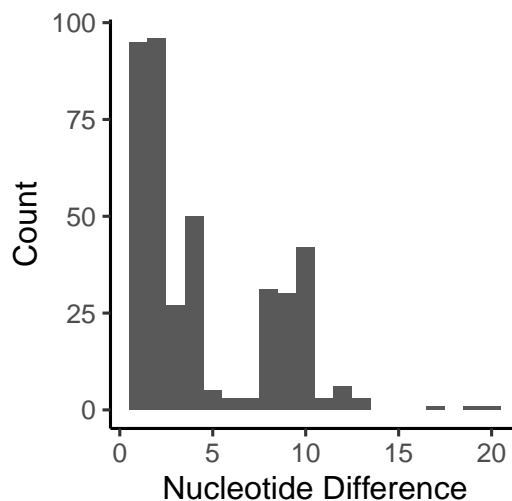
IGHV4-34*01_02

2027 sequences assigned
929 (45.8%) exact matches, in which:
614 unique CDR3
7 unique J



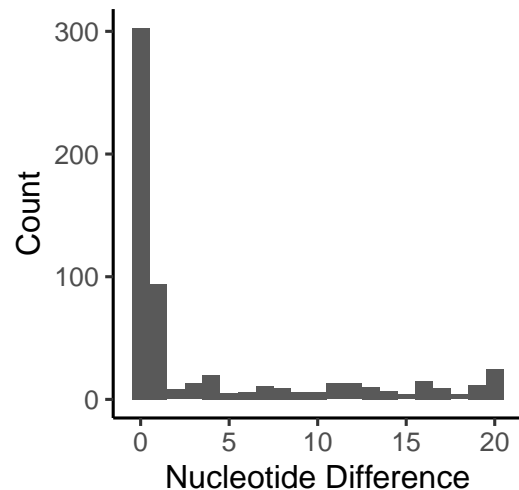
IGHV4-39*07

402 sequences assigned
No exact matches.



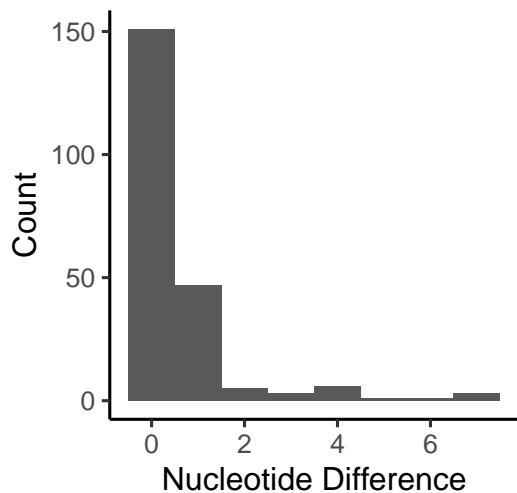
IGHV4-59*13

844 sequences assigned
303 (35.9%) exact matches, in which:
279 unique CDR3
7 unique J



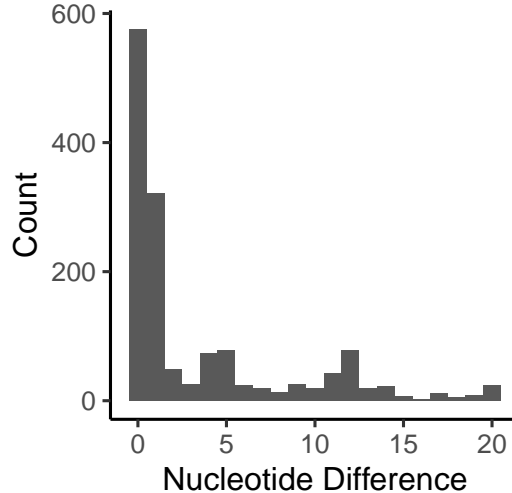
IGHV4-34*01_02_C288T

219 sequences assigned
151 (68.9%) exact matches, in which:
142 unique CDR3
6 unique J



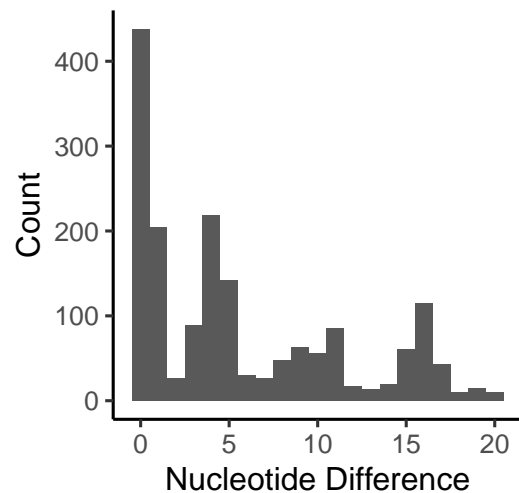
IGHV4-39*02_C258G

1987 sequences assigned
576 (29%) exact matches, in which:
470 unique CDR3
7 unique J



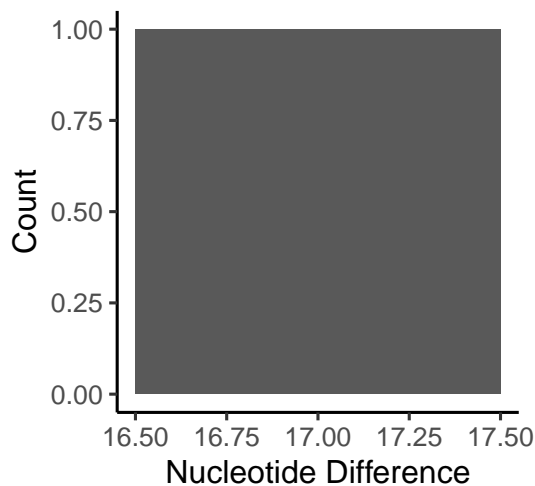
IGHV4-59*02_G88A

2036 sequences assigned
438 (21.5%) exact matches, in which:
390 unique CDR3
6 unique J



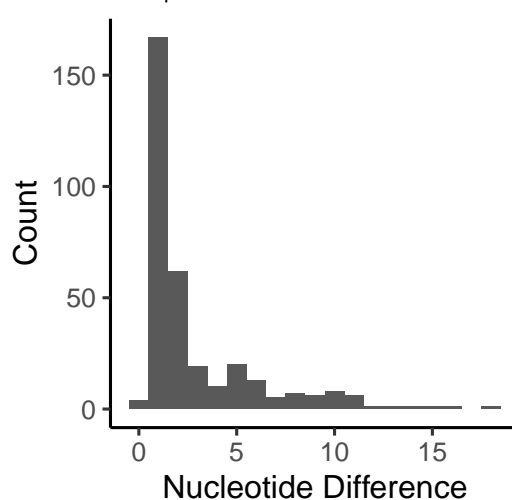
IGHV4-38-2*02

1 sequences assigned
No exact matches.



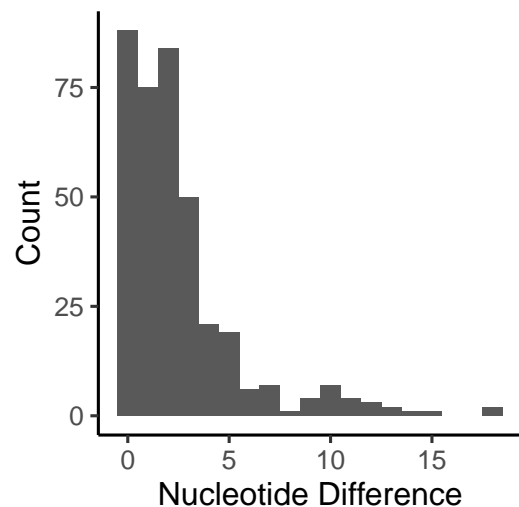
IGHV4-59*12

333 sequences assigned
4 (1.2%) exact matches, in which:
4 unique CDR3
3 unique J



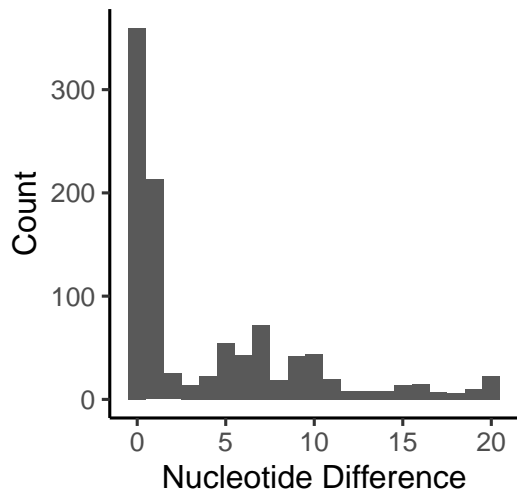
IGHV4-61*01

432 sequences assigned
88 (20.4%) exact matches, in which:
86 unique CDR3
6 unique J



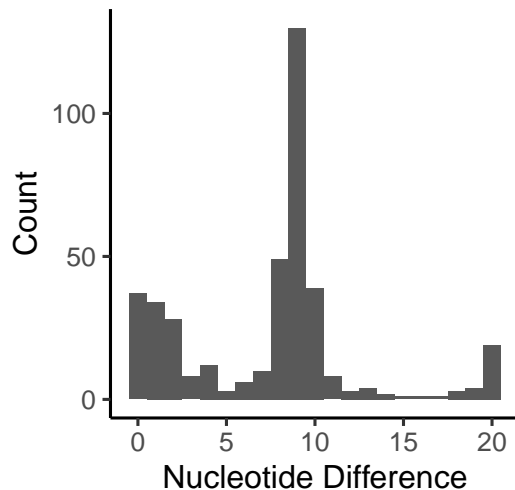
IGHV4-61*02

1183 sequences assigned
360 (30.4%) exact matches, in which:
322 unique CDR3
7 unique J



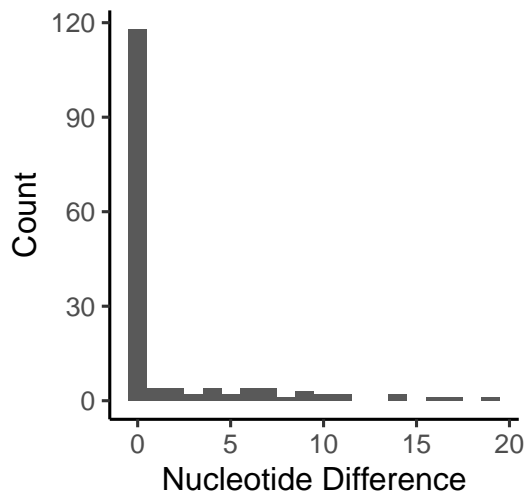
IGHV6-1*01_02

441 sequences assigned
37 (8.4%) exact matches, in which:
36 unique CDR3
6 unique J



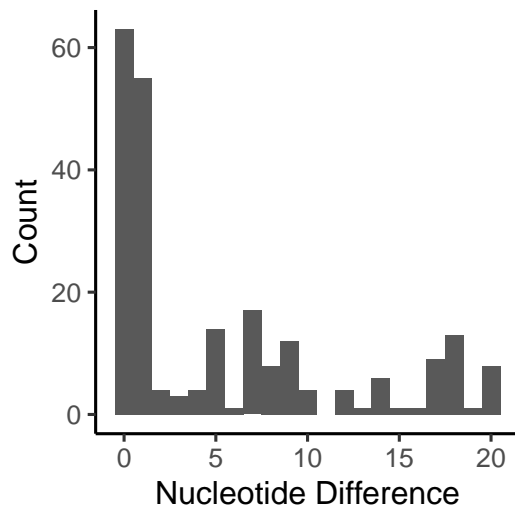
IGHV4-61*02_C288T_A2

158 sequences assigned
118 (74.7%) exact matches, in which:
118 unique CDR3
6 unique J



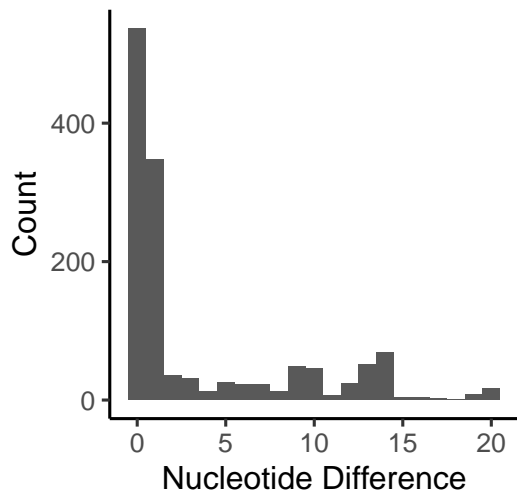
IGHV7-4-1*02

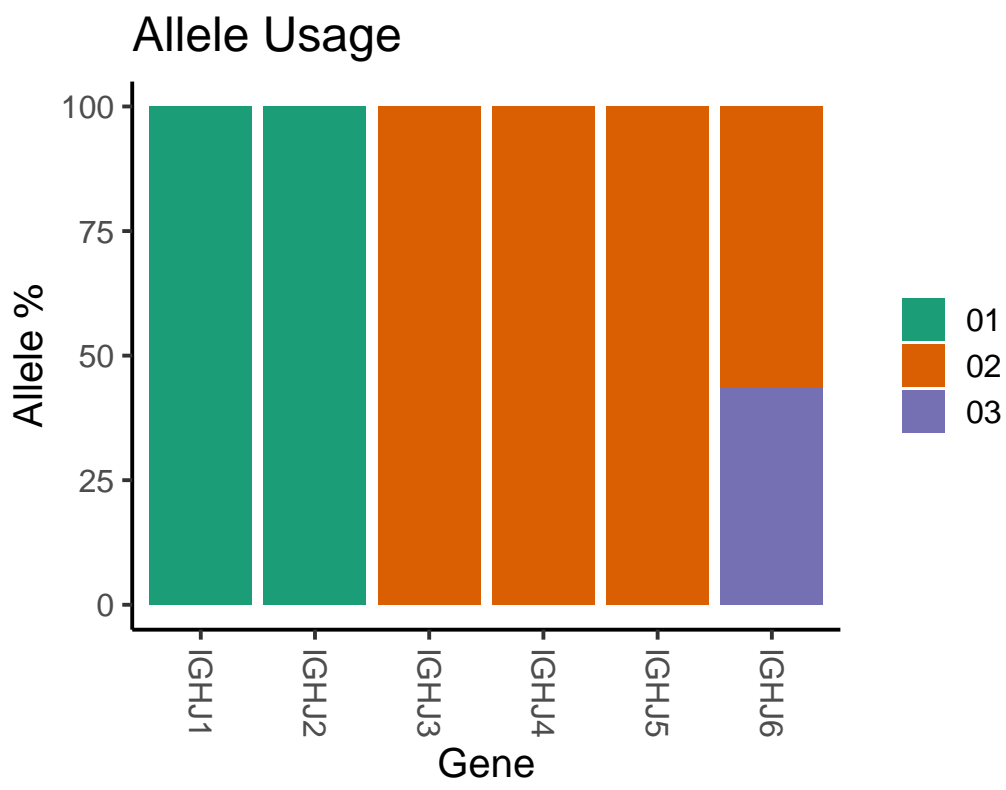
323 sequences assigned
63 (19.5%) exact matches, in which:
60 unique CDR3
7 unique J

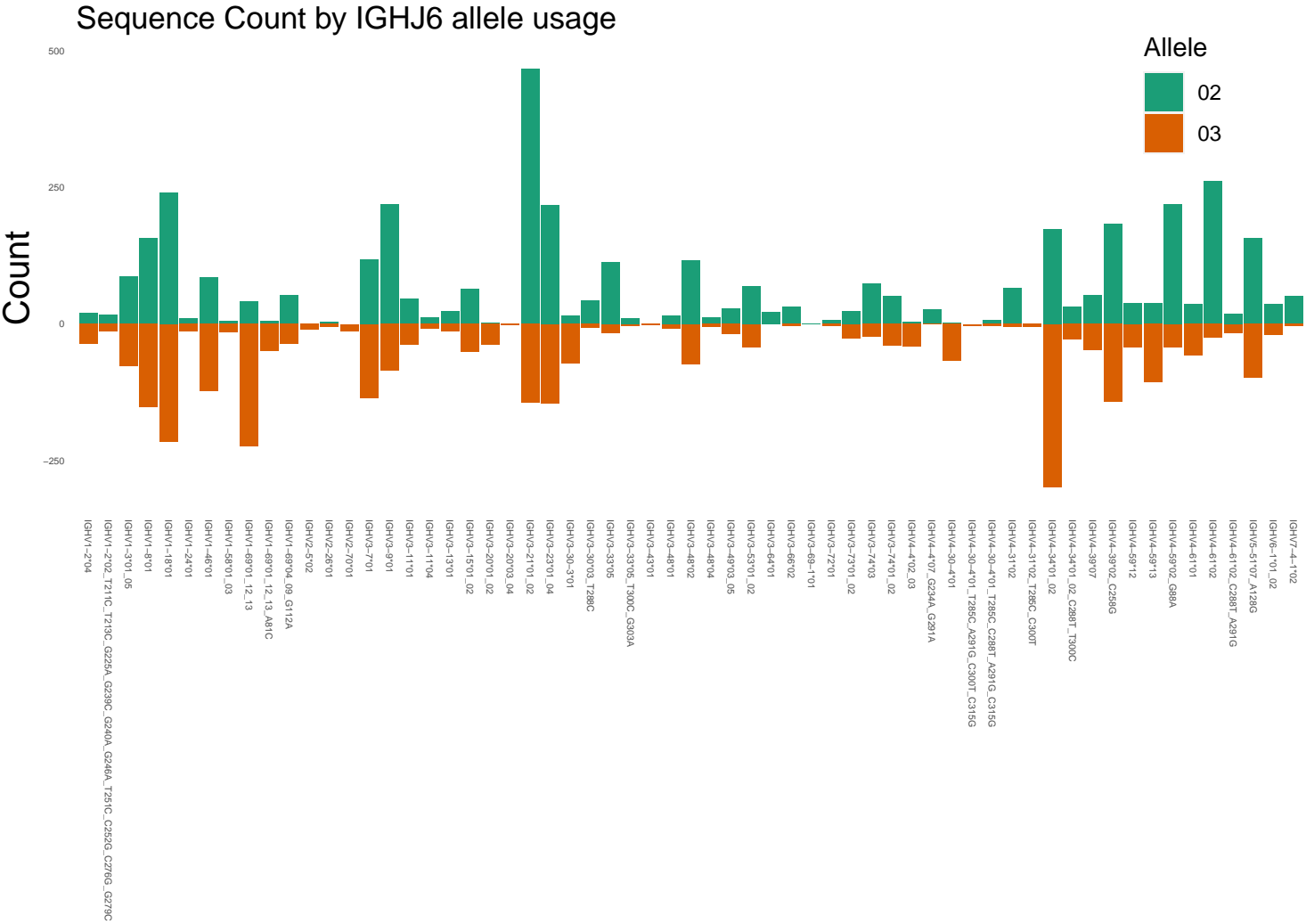


IGHV5-51*07_A128G

1414 sequences assigned
537 (38%) exact matches, in which:
279 unique CDR3
7 unique J







Warning – no inferred sequences found.