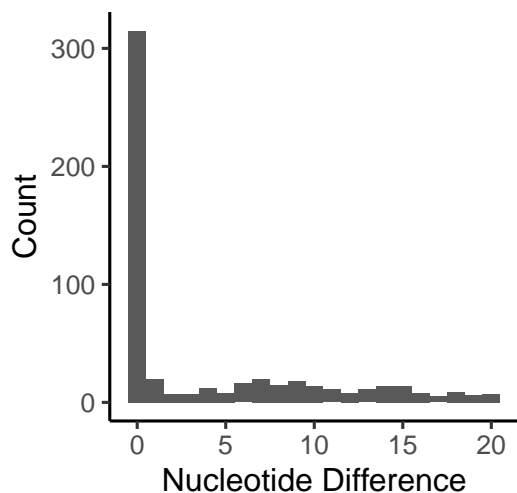


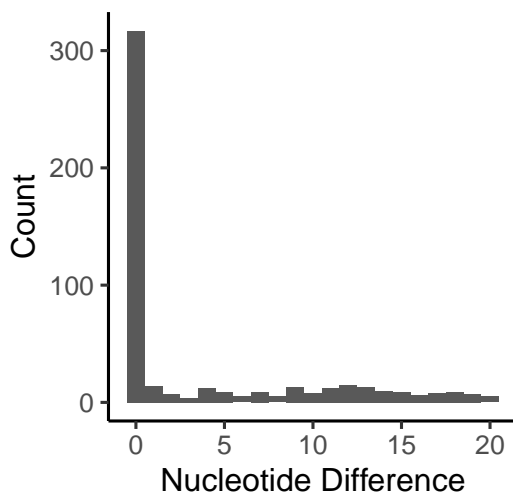
IGHV1–2*02

577 sequences assigned
315 (54.6%) exact matches, in which:
310 unique CDR3
6 unique J



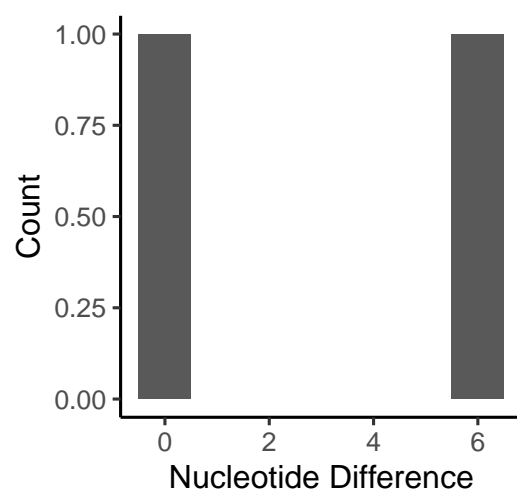
IGHV1–18*01

547 sequences assigned
317 (58%) exact matches, in which:
316 unique CDR3
6 unique J



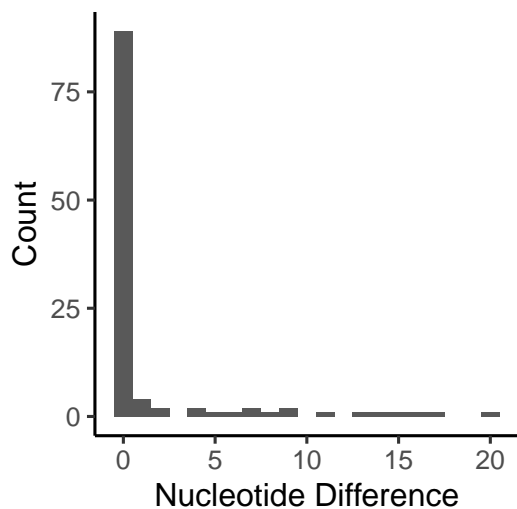
IGHV1–45*02

2 sequences assigned
1 (50%) exact matches, in which:
1 unique CDR3
1 unique J



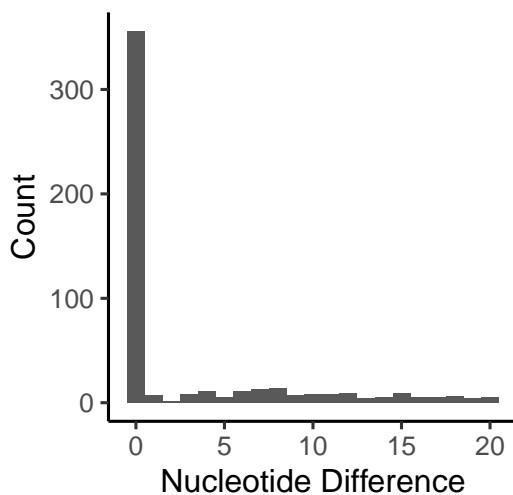
IGHV1–2*04

115 sequences assigned
89 (77.4%) exact matches, in which:
89 unique CDR3
5 unique J



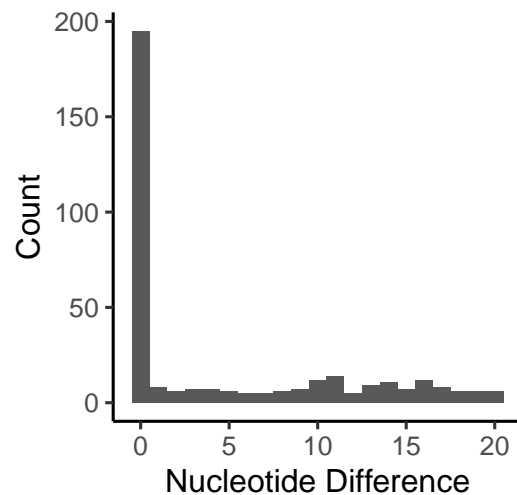
IGHV1–18*04

516 sequences assigned
356 (69%) exact matches, in which:
355 unique CDR3
6 unique J



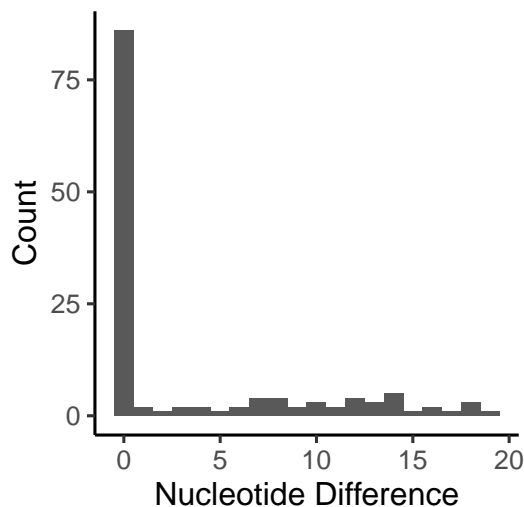
IGHV1–46*01

387 sequences assigned
195 (50.4%) exact matches, in which:
194 unique CDR3
6 unique J



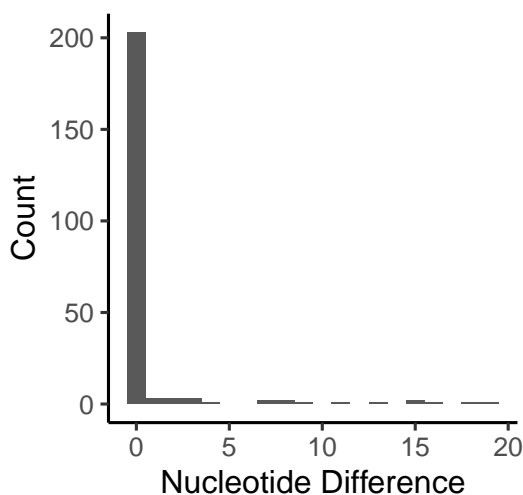
IGHV1–3*01_05

139 sequences assigned
86 (61.9%) exact matches, in which:
86 unique CDR3
6 unique J



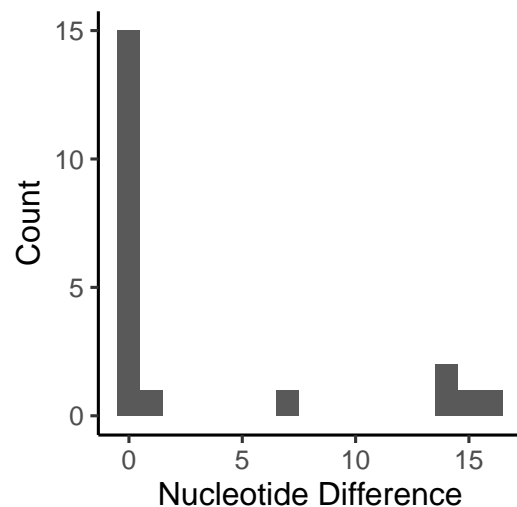
IGHV1–24*01

227 sequences assigned
203 (89.4%) exact matches, in which:
203 unique CDR3
6 unique J



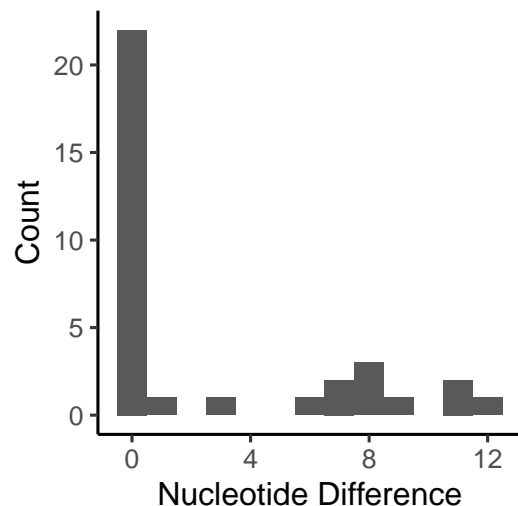
IGHV1–58*02

21 sequences assigned
15 (71.4%) exact matches, in which:
15 unique CDR3
5 unique J



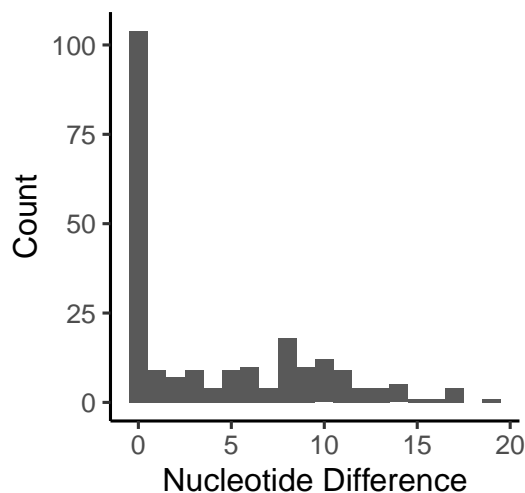
IGHV1-58*01_03

35 sequences assigned
22 (62.9%) exact matches, in which:
22 unique CDR3
5 unique J



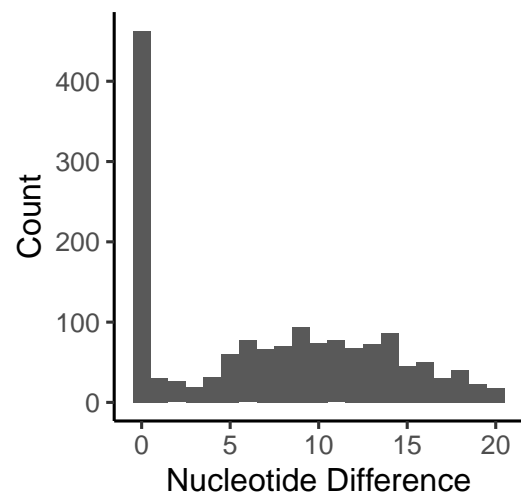
IGHV2-5*02

232 sequences assigned
104 (44.8%) exact matches, in which:
103 unique CDR3
6 unique J



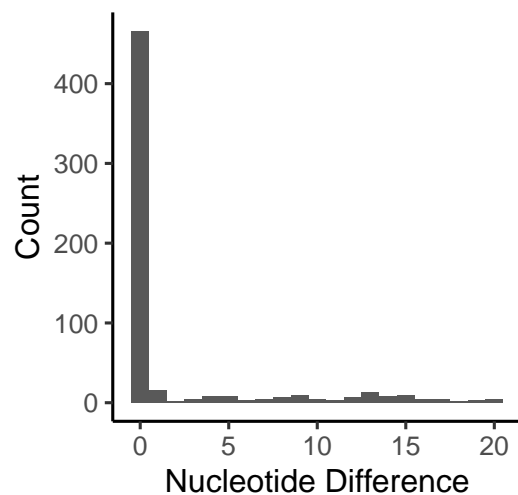
IGHV3-7*03

1604 sequences assigned
463 (28.9%) exact matches, in which:
448 unique CDR3
6 unique J



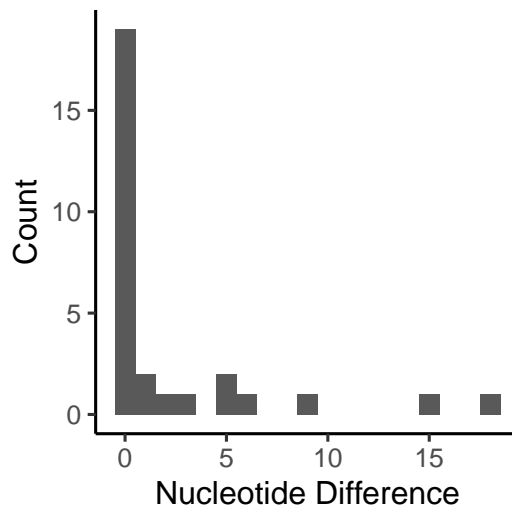
IGHV1-69*01_12_13

619 sequences assigned
466 (75.3%) exact matches, in which:
466 unique CDR3
6 unique J



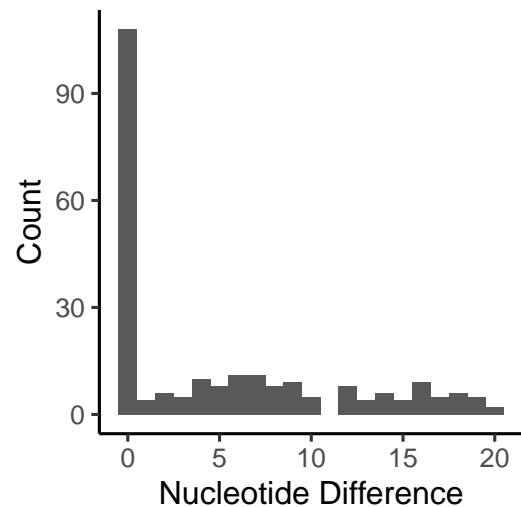
IGHV2-26*01

30 sequences assigned
19 (63.3%) exact matches, in which:
19 unique CDR3
5 unique J



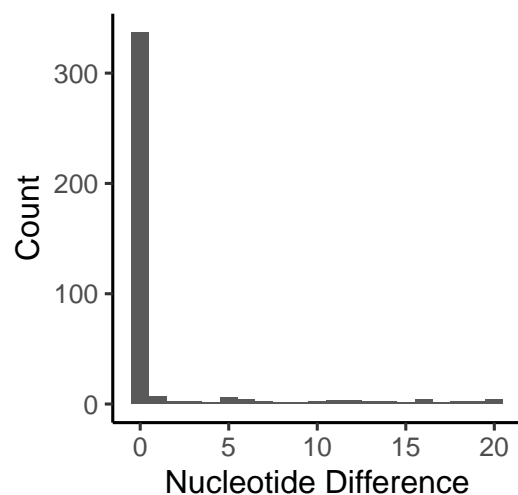
IGHV3-11*06

249 sequences assigned
108 (43.4%) exact matches, in which:
102 unique CDR3
5 unique J



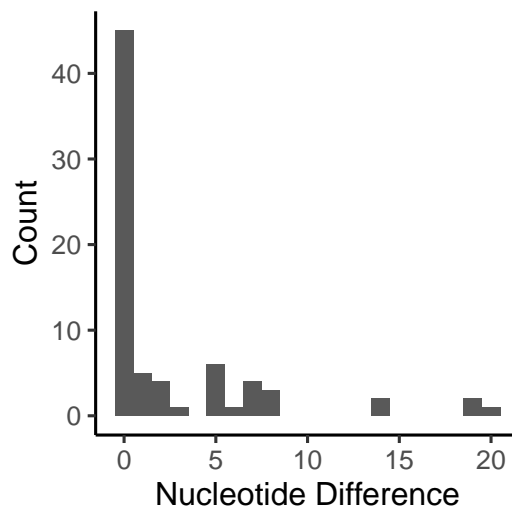
IGHV1-69*06_14

407 sequences assigned
337 (82.8%) exact matches, in which:
337 unique CDR3
6 unique J



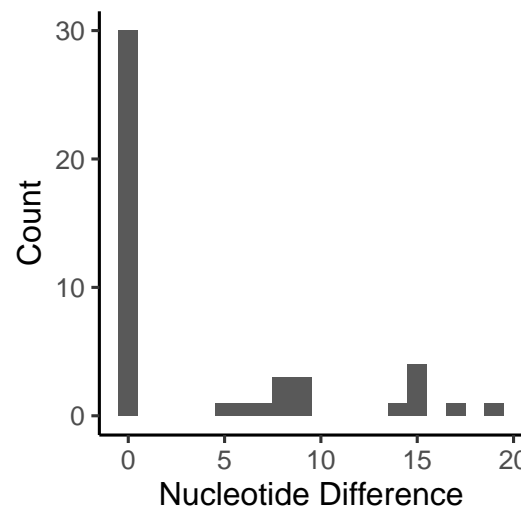
IGHV2-70*01

75 sequences assigned
45 (60%) exact matches, in which:
44 unique CDR3
4 unique J



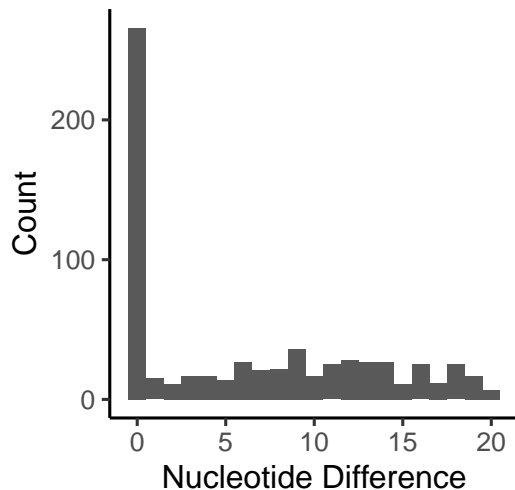
IGHV3-13*05

61 sequences assigned
30 (49.2%) exact matches, in which:
28 unique CDR3
5 unique J



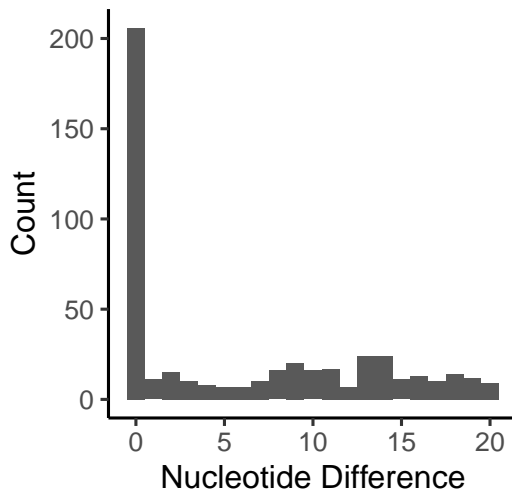
IGHV3-15*01_02

709 sequences assigned
266 (37.5%) exact matches, in which:
257 unique CDR3
6 unique J



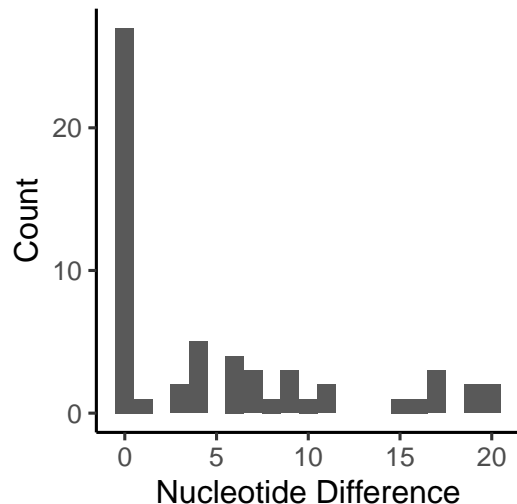
IGHV3-30*01

487 sequences assigned
206 (42.3%) exact matches, in which:
200 unique CDR3
6 unique J



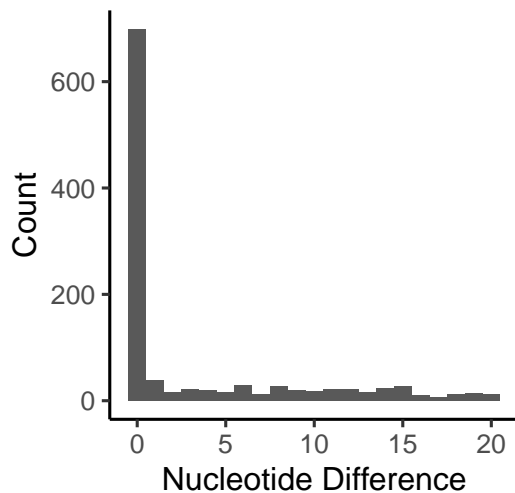
IGHV3-43*01

61 sequences assigned
27 (44.3%) exact matches, in which:
26 unique CDR3
4 unique J



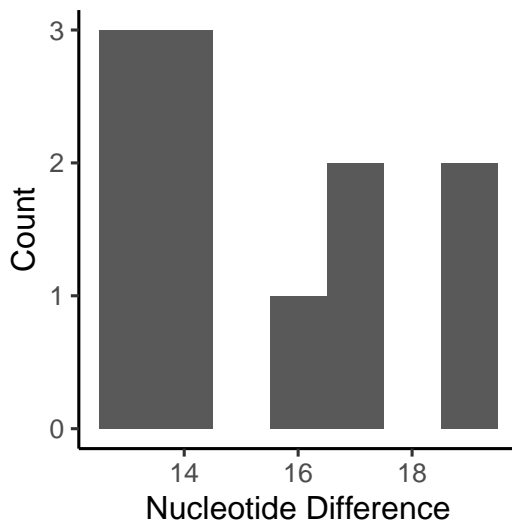
IGHV3-21*01_02

1151 sequences assigned
699 (60.7%) exact matches, in which:
680 unique CDR3
6 unique J



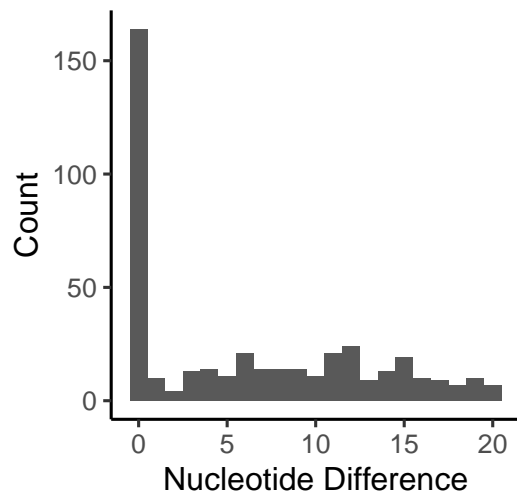
IGHV3-30-3*03

11 sequences assigned
No exact matches.



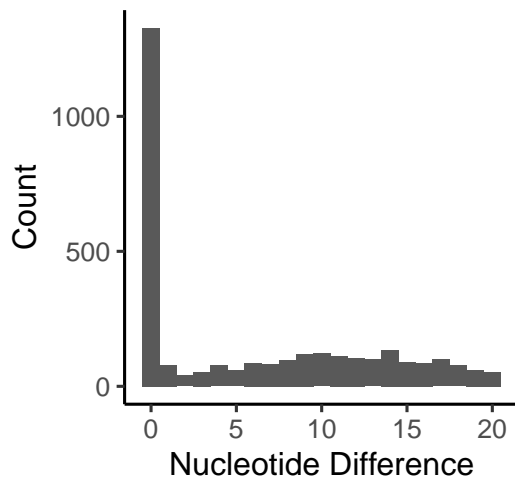
IGHV3-48*01

447 sequences assigned
164 (36.7%) exact matches, in which:
161 unique CDR3
6 unique J



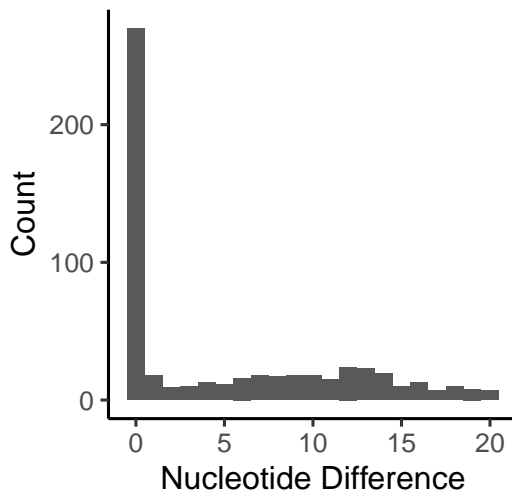
IGHV3-23*01_04

3353 sequences assigned
1327 (39.6%) exact matches, in which:
1306 unique CDR3
6 unique J



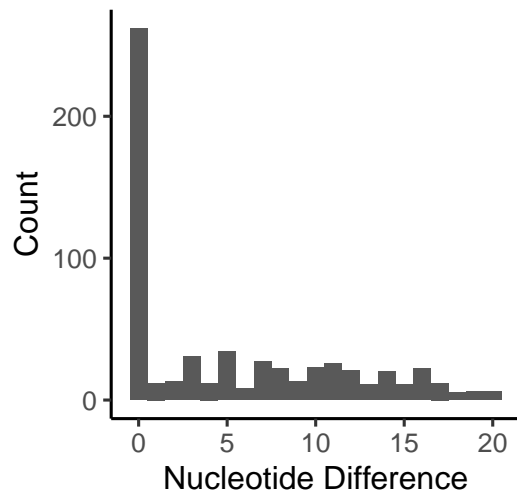
IGHV3-33*01

585 sequences assigned
270 (46.2%) exact matches, in which:
268 unique CDR3
6 unique J



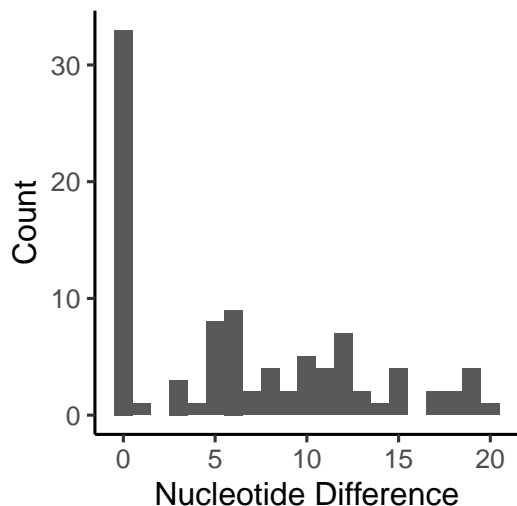
IGHV3-48*03

638 sequences assigned
262 (41.1%) exact matches, in which:
258 unique CDR3
6 unique J



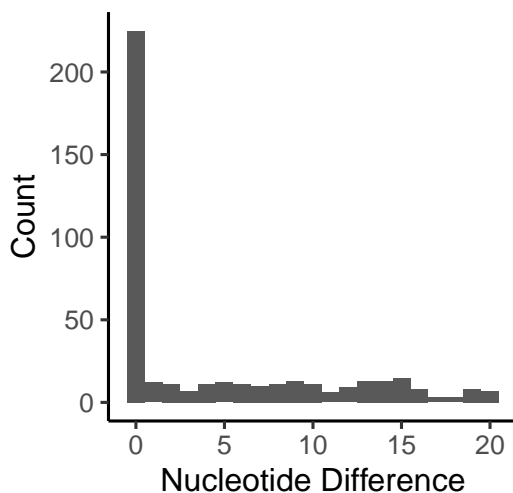
IGHV3-49*04

101 sequences assigned
33 (32.7%) exact matches, in which:
33 unique CDR3
6 unique J



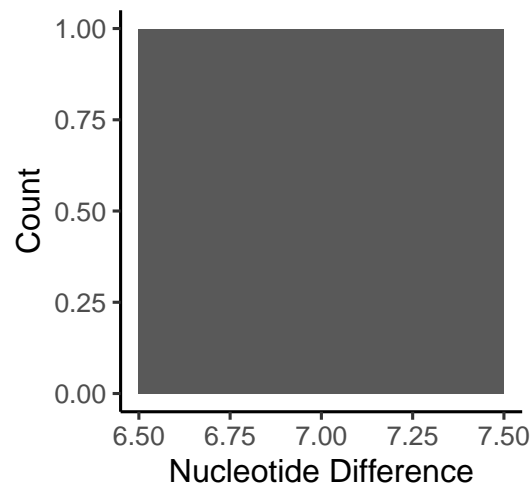
IGHV3-53*01_02

468 sequences assigned
225 (48.1%) exact matches, in which:
217 unique CDR3
6 unique J



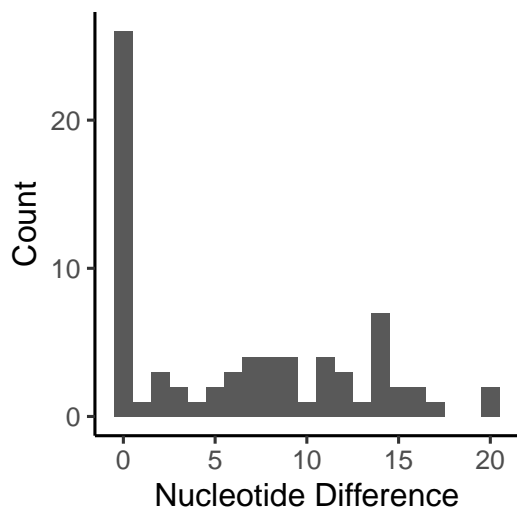
IGHV3-69-1*02

1 sequences assigned
No exact matches.



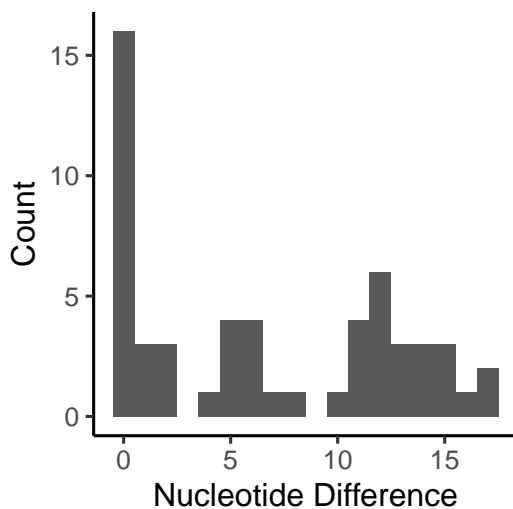
IGHV3-49*03_05

75 sequences assigned
26 (34.7%) exact matches, in which:
26 unique CDR3
4 unique J



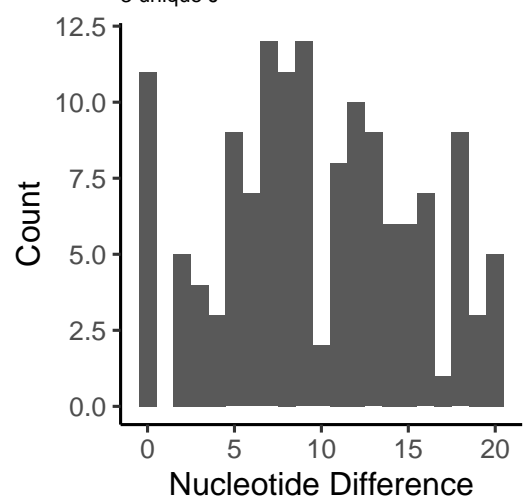
IGHV3-64*01

56 sequences assigned
16 (28.6%) exact matches, in which:
15 unique CDR3
3 unique J



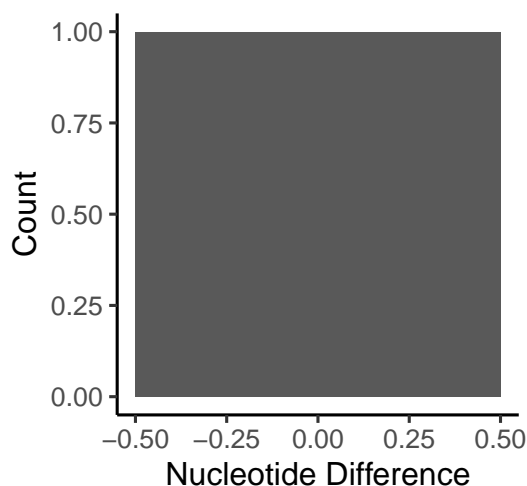
IGHV3-72*01

156 sequences assigned
11 (7.1%) exact matches, in which:
11 unique CDR3
3 unique J



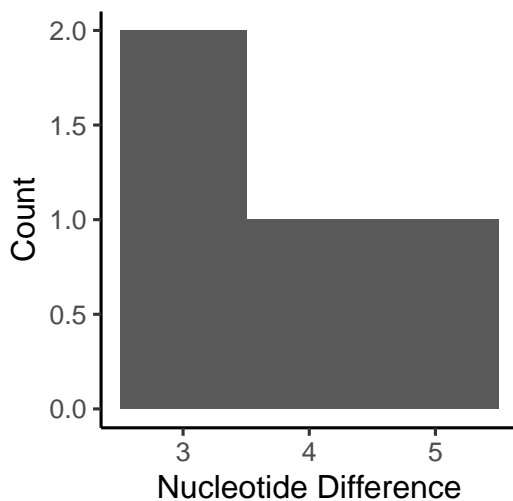
IGHV3-52*01_03

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



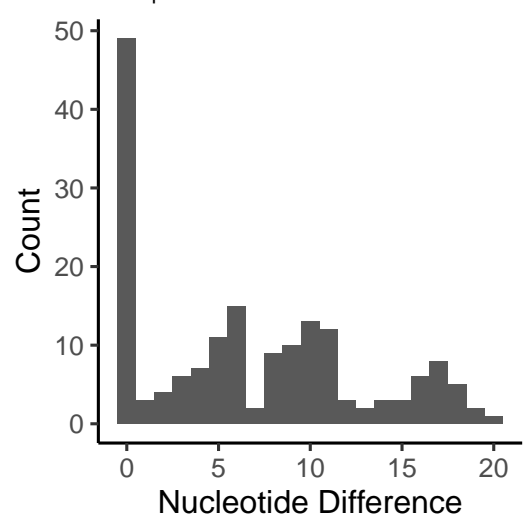
IGHV3-69-1*01

4 sequences assigned
No exact matches.



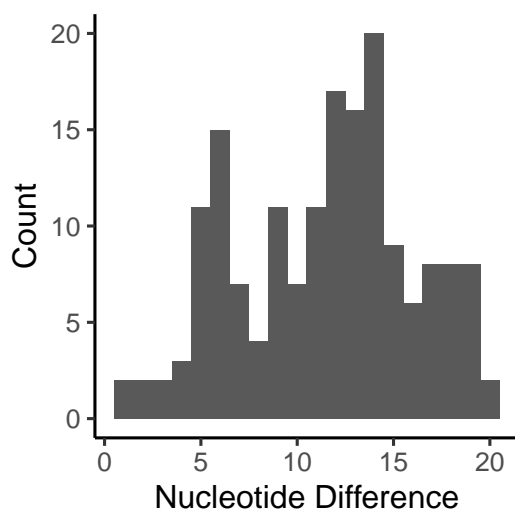
IGHV3-73*01_02

184 sequences assigned
49 (26.6%) exact matches, in which:
45 unique CDR3
4 unique J



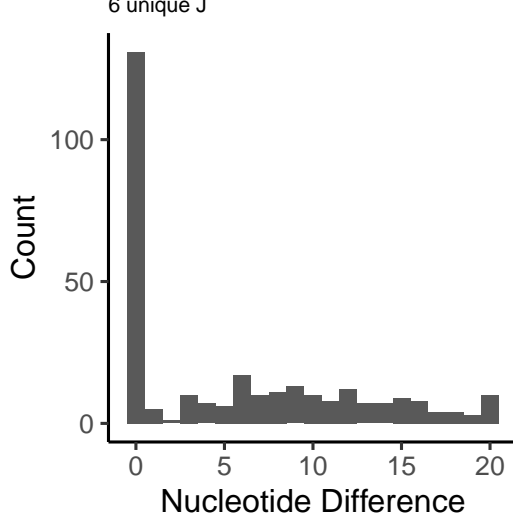
IGHV3-74*03

194 sequences assigned
No exact matches.



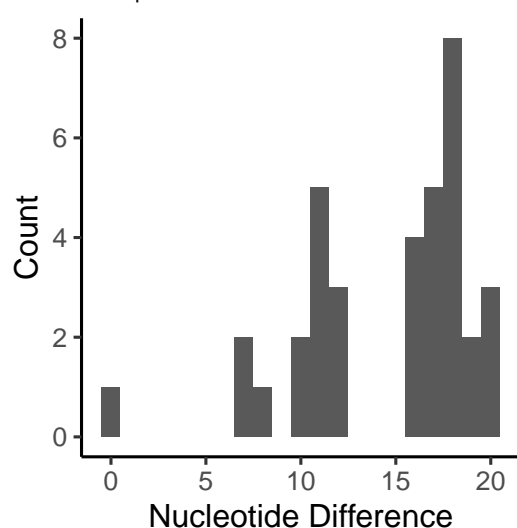
IGHV3-64D*06

323 sequences assigned
131 (40.6%) exact matches, in which:
130 unique CDR3
6 unique J



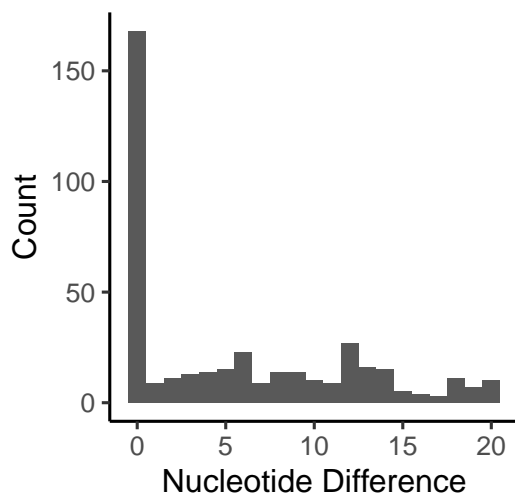
IGHV4-28*01_07

36 sequences assigned
1 (2.8%) exact matches, in which:
1 unique CDR3
1 unique J



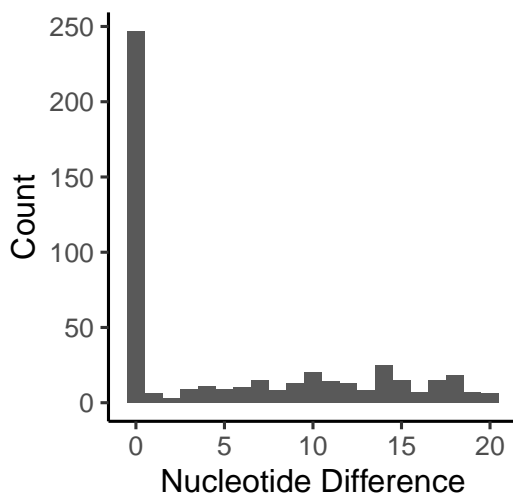
IGHV3-74*01_02

421 sequences assigned
168 (39.9%) exact matches, in which:
156 unique CDR3
6 unique J



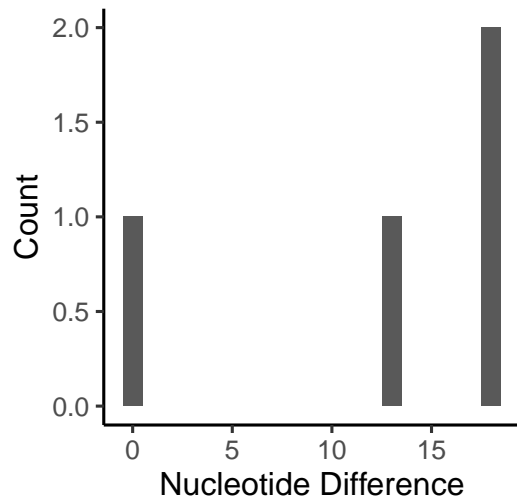
IGHV4-4*07

524 sequences assigned
247 (47.1%) exact matches, in which:
241 unique CDR3
6 unique J



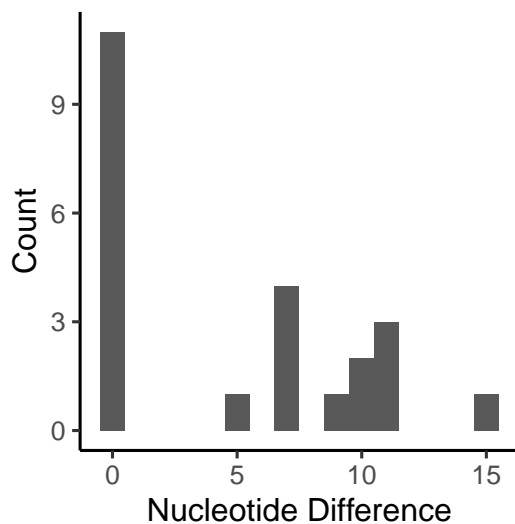
IGHV4-28*02_05

4 sequences assigned
1 (25%) exact matches, in which:
1 unique CDR3
1 unique J



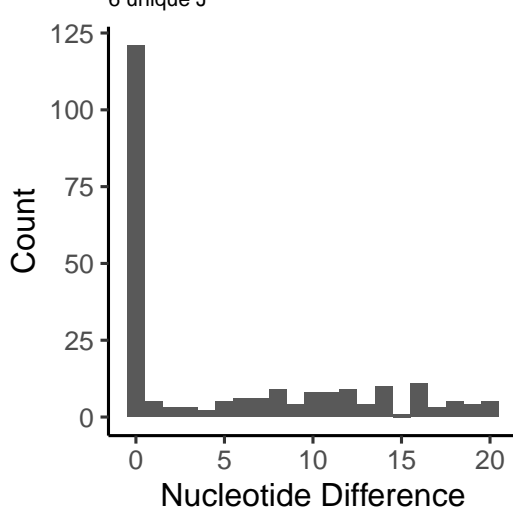
IGHV3-43D*04

25 sequences assigned
11 (44%) exact matches, in which:
11 unique CDR3
3 unique J



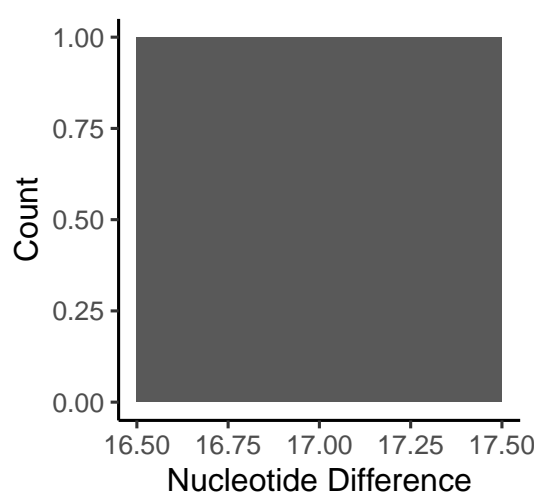
IGHV4-4*02_03

305 sequences assigned
121 (39.7%) exact matches, in which:
119 unique CDR3
6 unique J



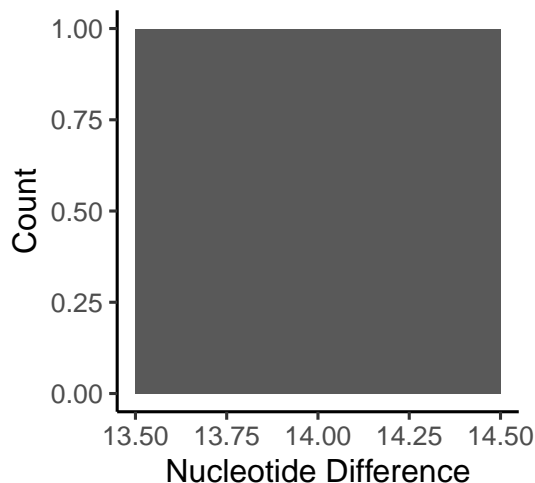
IGHV4-30-2*01

1 sequences assigned
No exact matches.



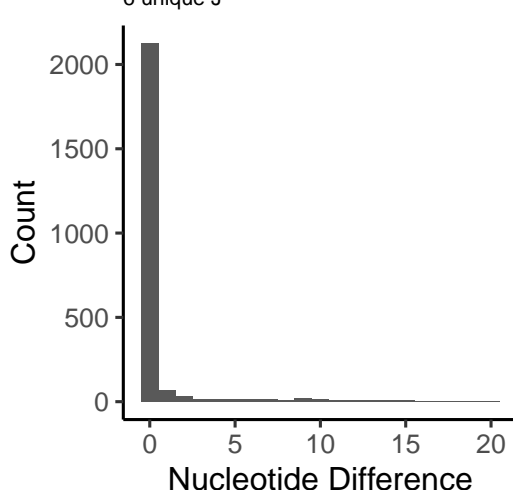
IGHV4-30-4*08

1 sequences assigned
No exact matches.



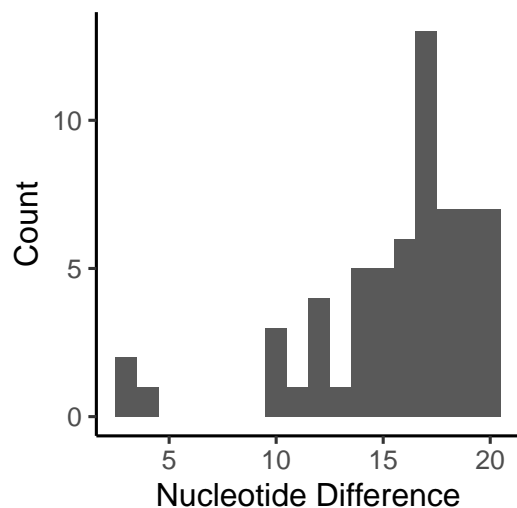
IGHV4-34*01_02

2446 sequences assigned
2125 (86.9%) exact matches, in which:
2099 unique CDR3
6 unique J



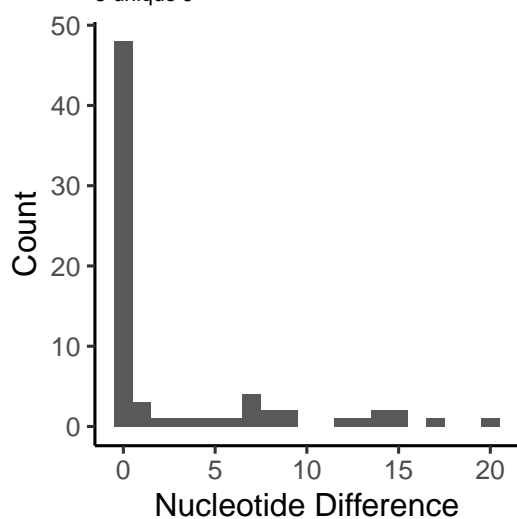
IGHV4-59*02

86 sequences assigned
No exact matches.



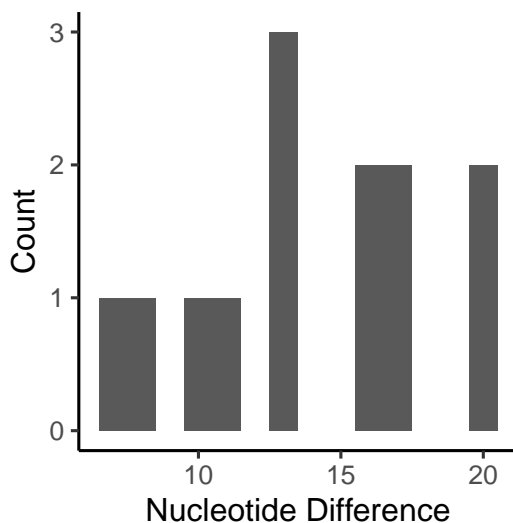
IGHV4-31*01

74 sequences assigned
48 (64.9%) exact matches, in which:
47 unique CDR3
5 unique J



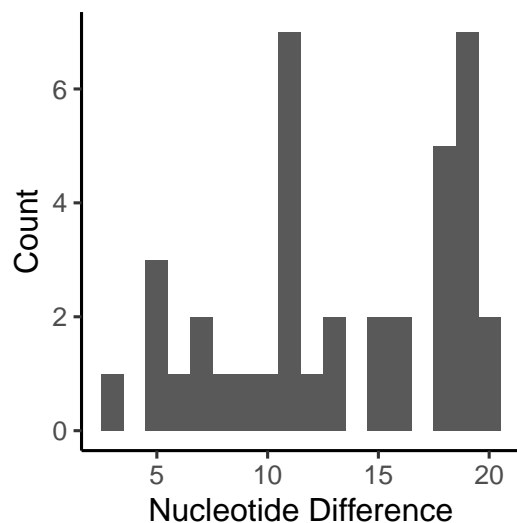
IGHV4-38-2*02

18 sequences assigned
No exact matches.



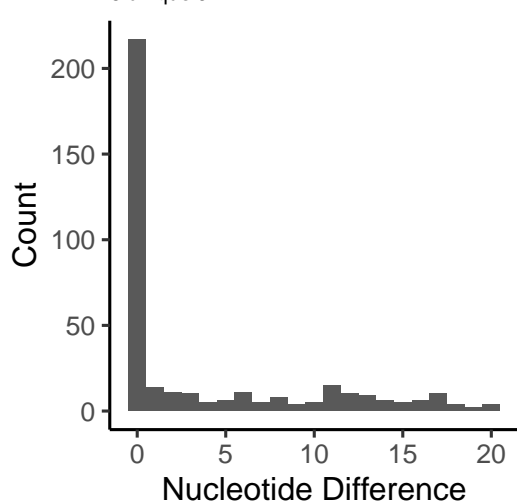
IGHV4-59*11

47 sequences assigned
No exact matches.



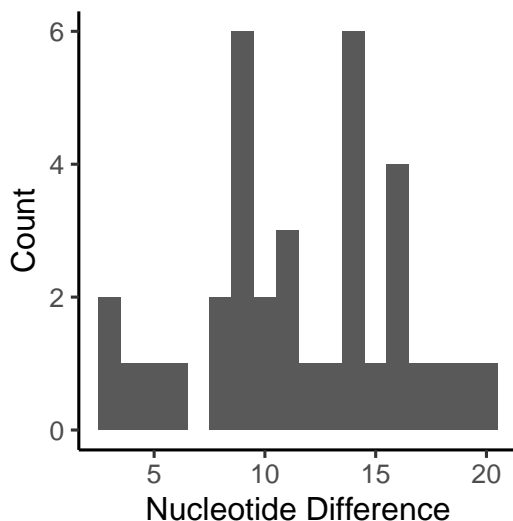
IGHV4-31*02

421 sequences assigned
217 (51.5%) exact matches, in which:
215 unique CDR3
6 unique J



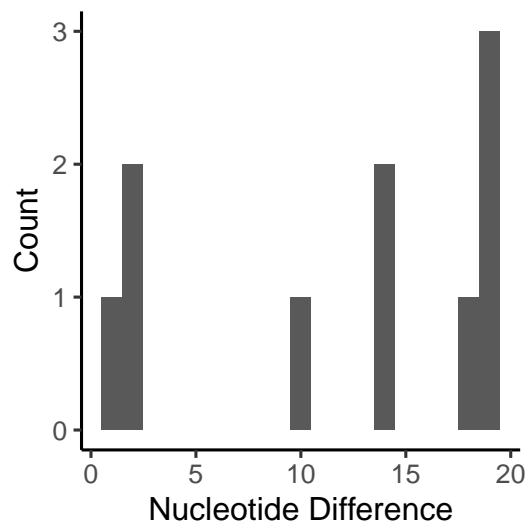
IGHV4-39*02

39 sequences assigned
No exact matches.



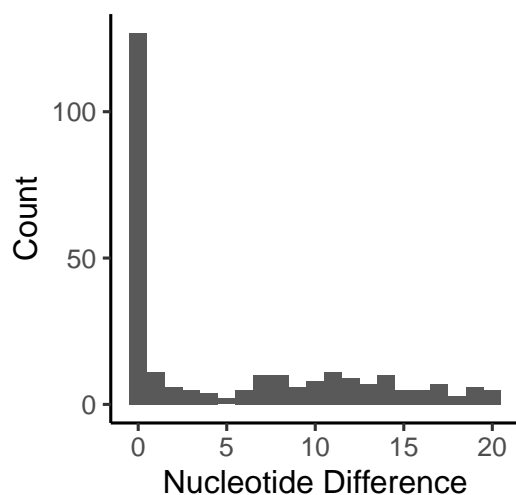
IGHV4-59*12

11 sequences assigned
No exact matches.



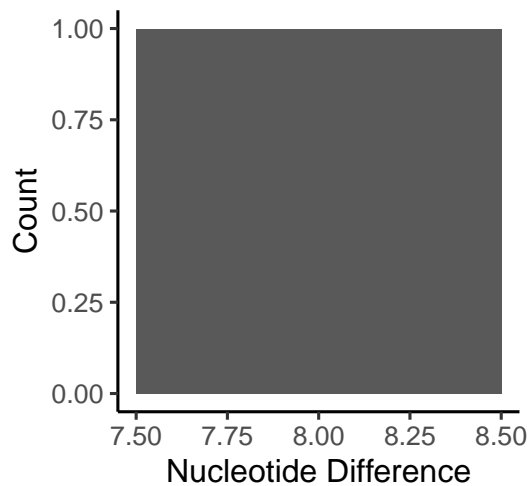
IGHV4-61*01

295 sequences assigned
127 (43.1%) exact matches, in which:
124 unique CDR3
5 unique J



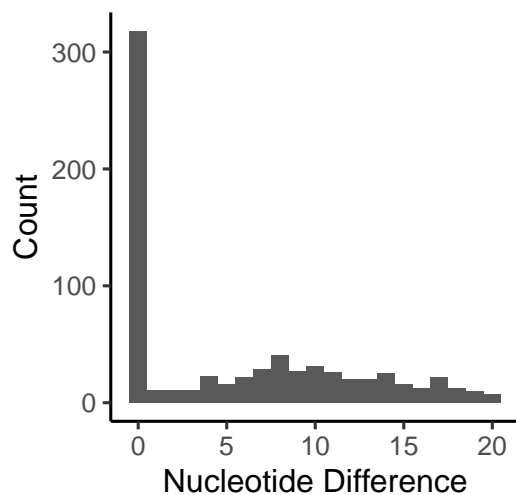
IGHV5-51*01_03

1 sequences assigned
No exact matches.



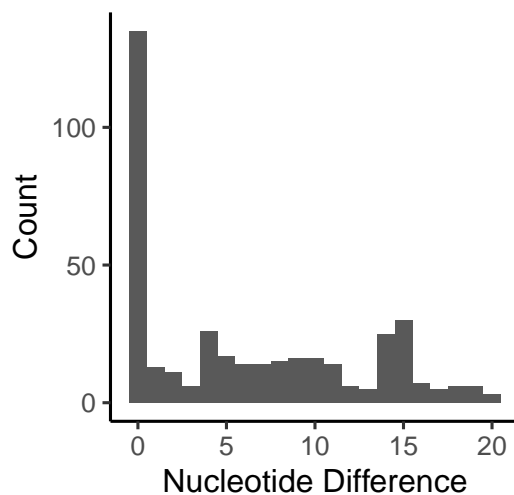
IGHV4-61*02

773 sequences assigned
318 (41.1%) exact matches, in which:
312 unique CDR3
6 unique J



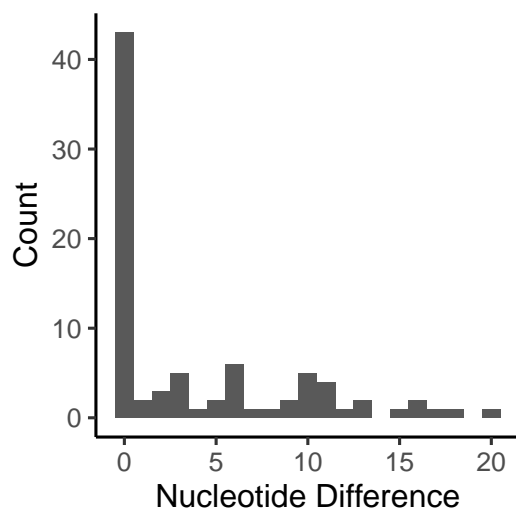
IGHV6-1*01_02

397 sequences assigned
135 (34%) exact matches, in which:
134 unique CDR3
6 unique J



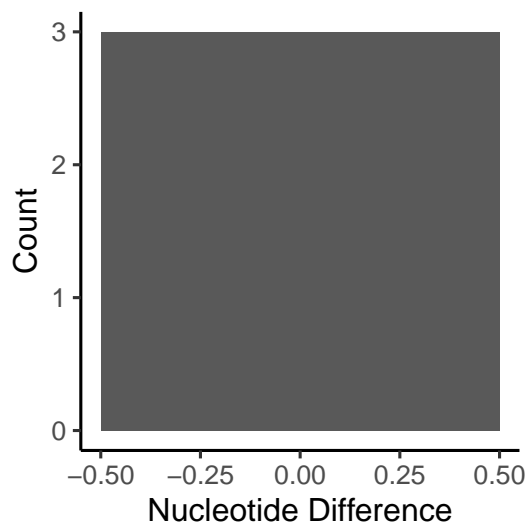
IGHV5-10-1*01_03

87 sequences assigned
43 (49.4%) exact matches, in which:
43 unique CDR3
5 unique J



IGHV7-4-1*01

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





[illegible]