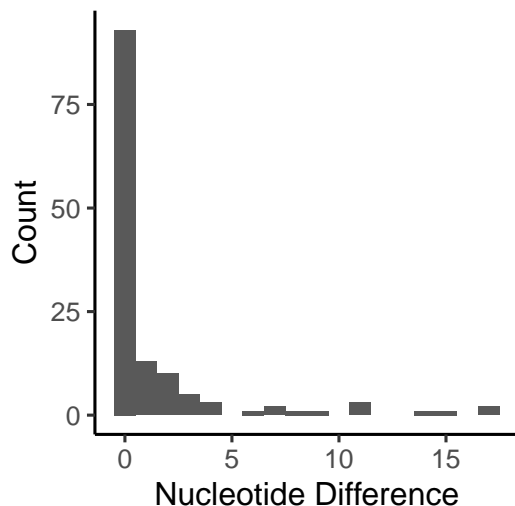


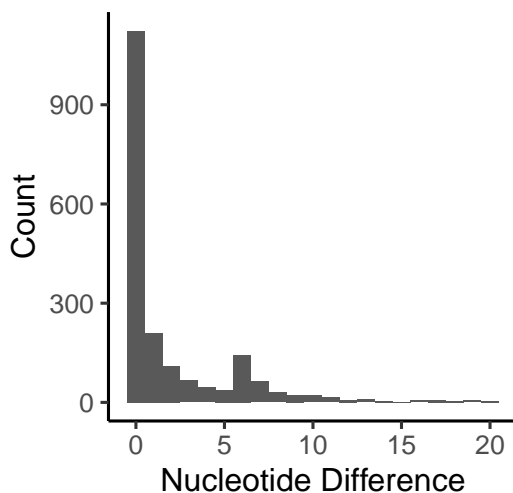
IGHV1-2*04

138 sequences assigned
93 (67.4%) exact matches, in which:
91 unique CDR3
6 unique J



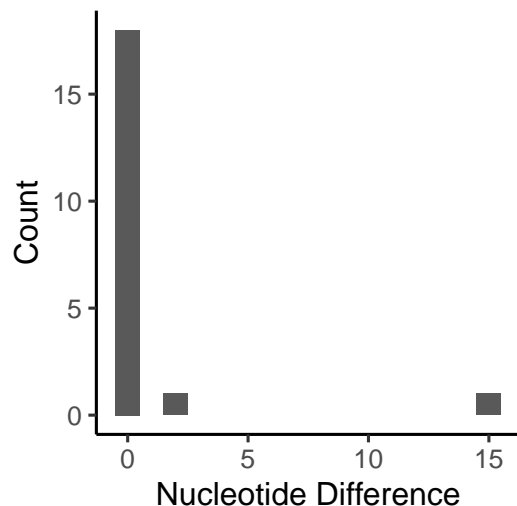
IGHV1-18*01

1958 sequences assigned
1124 (57.4%) exact matches, in which:
1096 unique CDR3
7 unique J



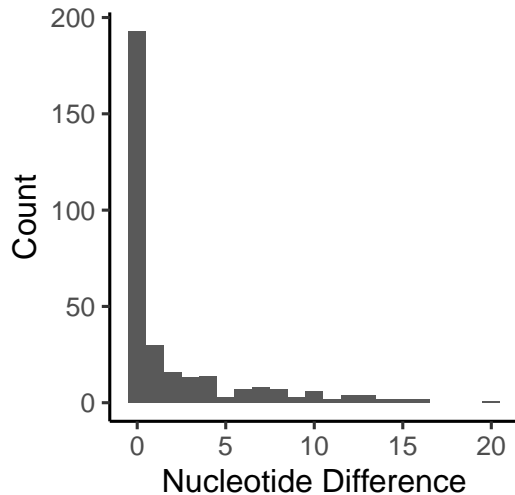
IGHV1-45*02

21 sequences assigned
18 (85.7%) exact matches, in which:
16 unique CDR3
3 unique J



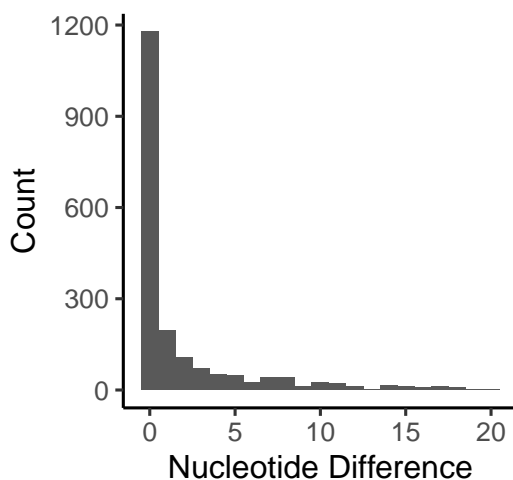
IGHV1-2*06

320 sequences assigned
193 (60.3%) exact matches, in which:
191 unique CDR3
6 unique J



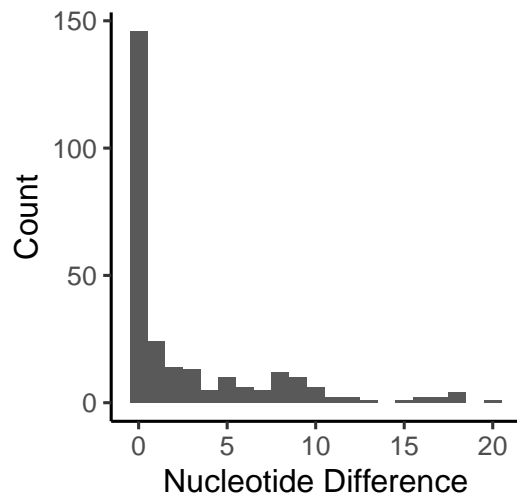
IGHV1-18*04

1906 sequences assigned
1178 (61.8%) exact matches, in which:
1139 unique CDR3
7 unique J



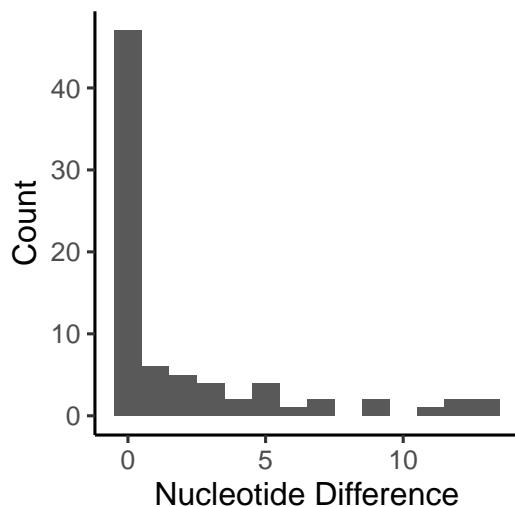
IGHV1-46*01

277 sequences assigned
146 (52.7%) exact matches, in which:
145 unique CDR3
7 unique J



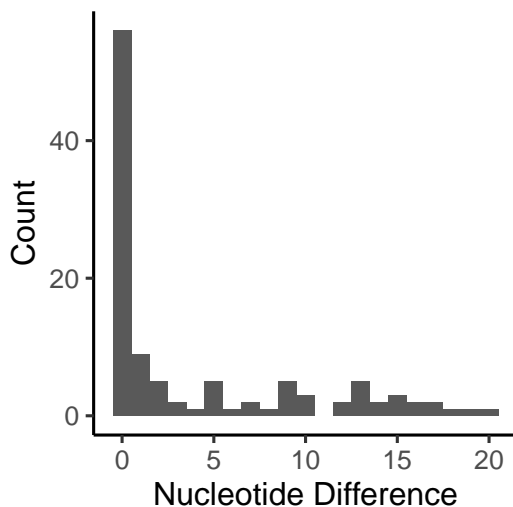
IGHV1-3*01_05

79 sequences assigned
47 (59.5%) exact matches, in which:
47 unique CDR3
6 unique J



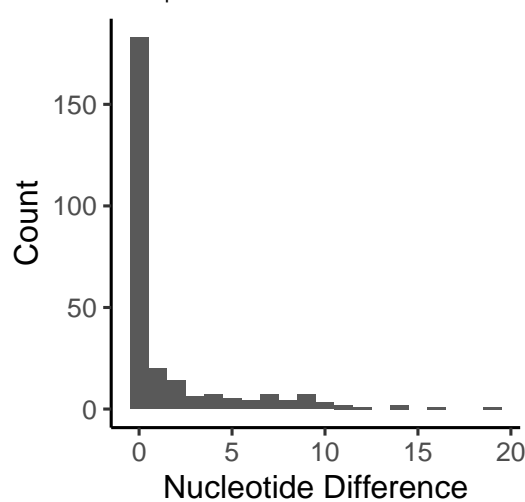
IGHV1-24*01

110 sequences assigned
56 (50.9%) exact matches, in which:
56 unique CDR3
7 unique J



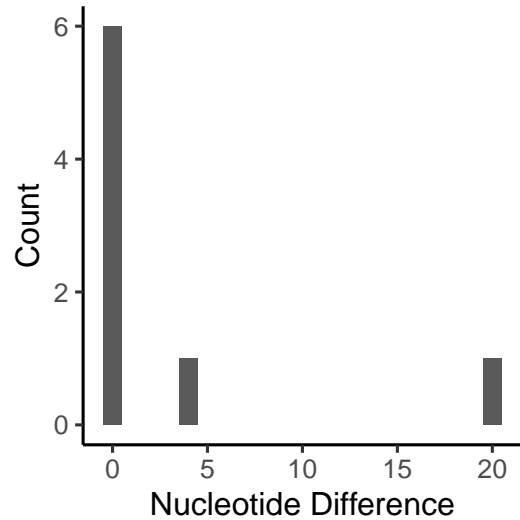
IGHV1-46*03

270 sequences assigned
183 (67.8%) exact matches, in which:
180 unique CDR3
6 unique J



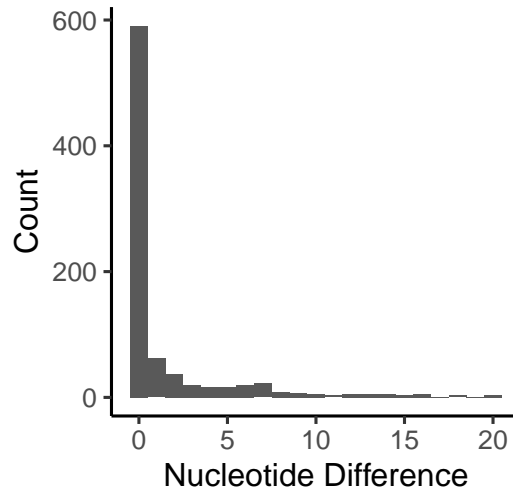
IGHV1-58*02

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



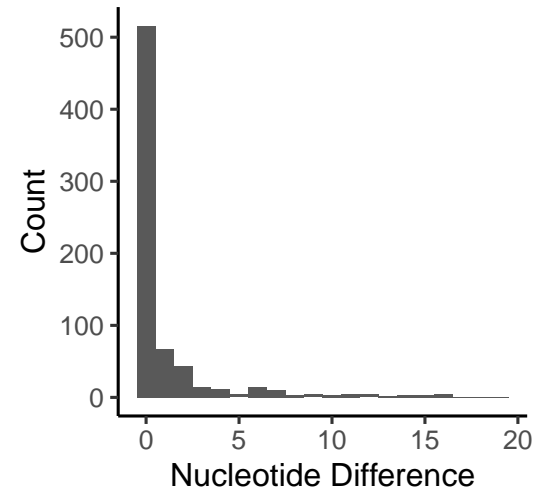
IGHV1-69*01_12_13

858 sequences assigned
591 (68.9%) exact matches, in which:
587 unique CDR3
7 unique J



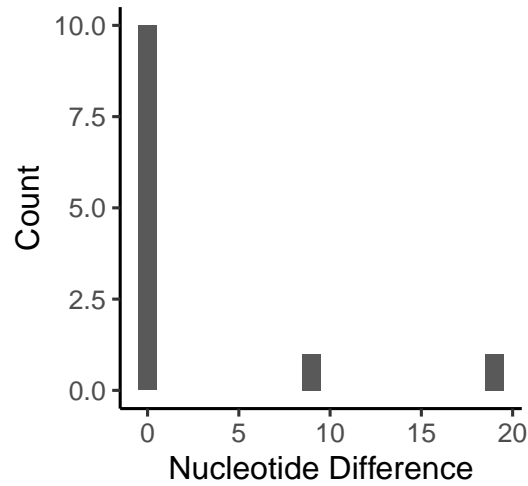
IGHV1-69*15_18

722 sequences assigned
516 (71.5%) exact matches, in which:
514 unique CDR3
7 unique J



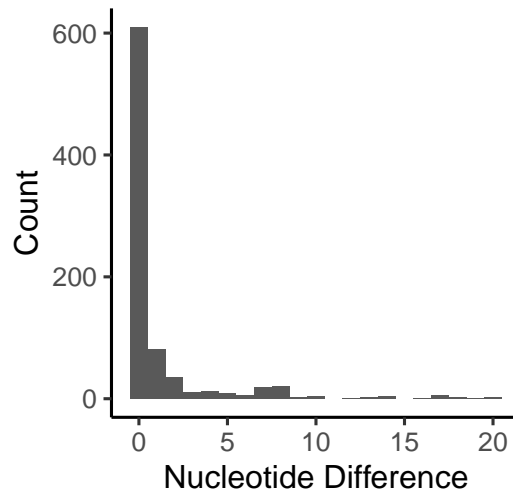
IGHV1-58*01_03

12 sequences assigned
10 (83.3%) exact matches, in which:
10 unique CDR3
2 unique J



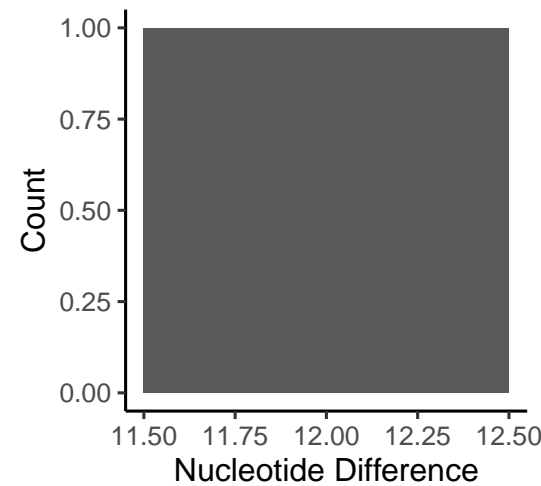
IGHV1-69*04_09_G112A

830 sequences assigned
610 (73.5%) exact matches, in which:
601 unique CDR3
7 unique J



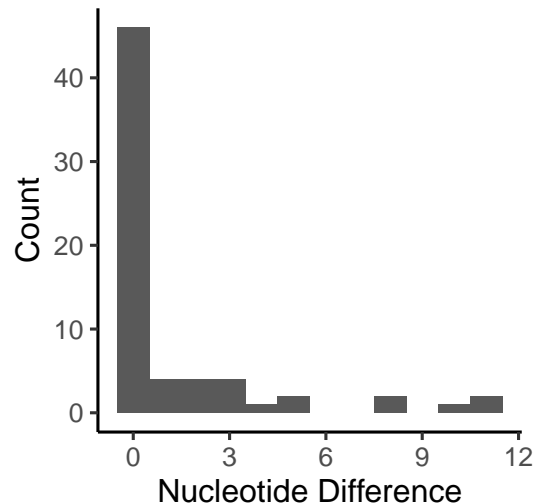
IGHV2-5*02

1 sequences assigned
No exact matches.



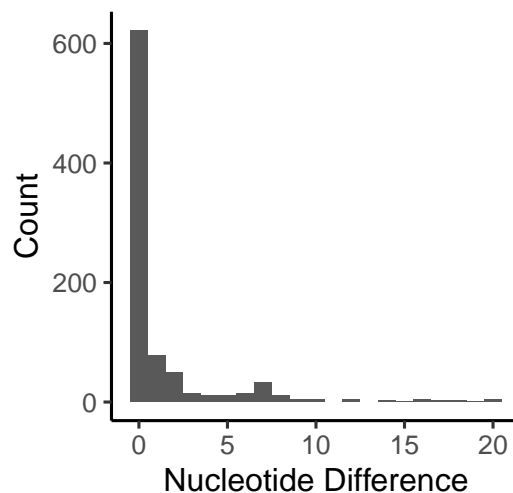
IGHV1-69-2*01

66 sequences assigned
46 (69.7%) exact matches, in which:
46 unique CDR3
7 unique J



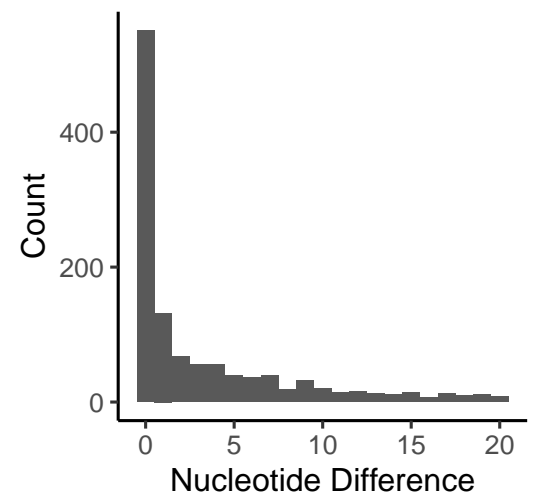
IGHV1-69*06_14

883 sequences assigned
622 (70.4%) exact matches, in which:
619 unique CDR3
7 unique J



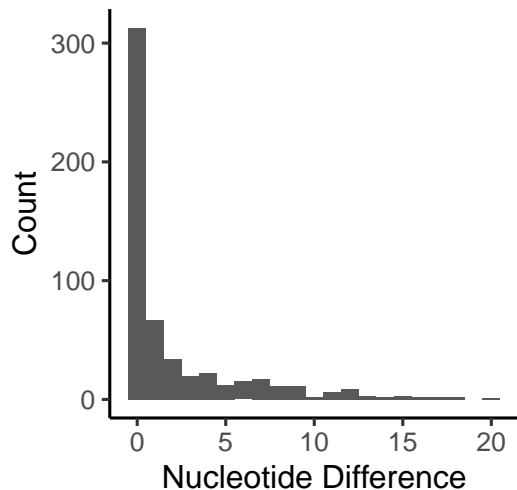
IGHV3-7*03

1185 sequences assigned
551 (46.5%) exact matches, in which:
542 unique CDR3
7 unique J



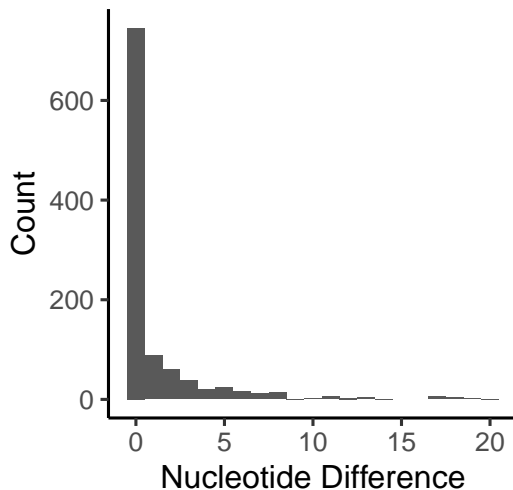
IGHV3-7*05

559 sequences assigned
313 (56%) exact matches, in which:
306 unique CDR3
7 unique J



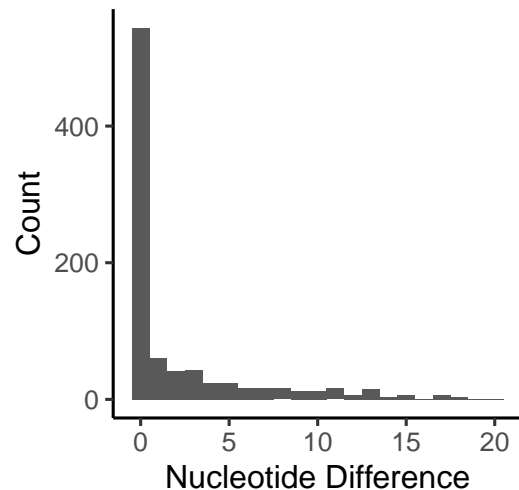
IGHV3-11*06_T300C

1056 sequences assigned
746 (70.6%) exact matches, in which:
730 unique CDR3
7 unique J



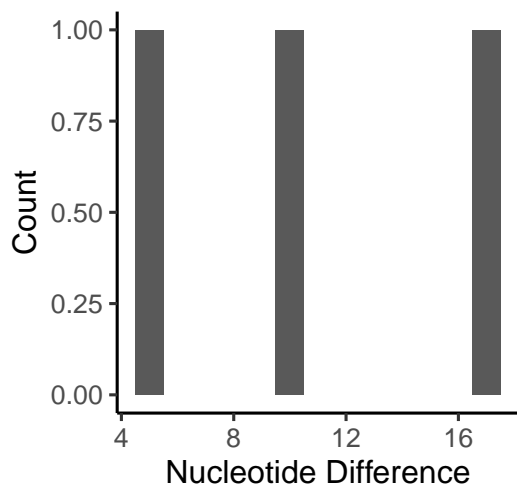
IGHV3-15*01_02

882 sequences assigned
544 (61.7%) exact matches, in which:
542 unique CDR3
7 unique J



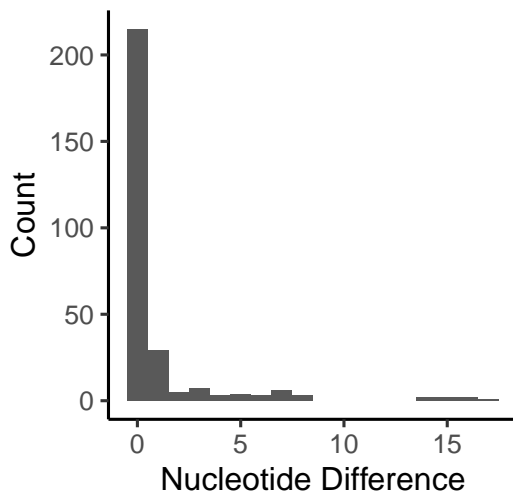
IGHV3-9*01

3 sequences assigned
No exact matches.



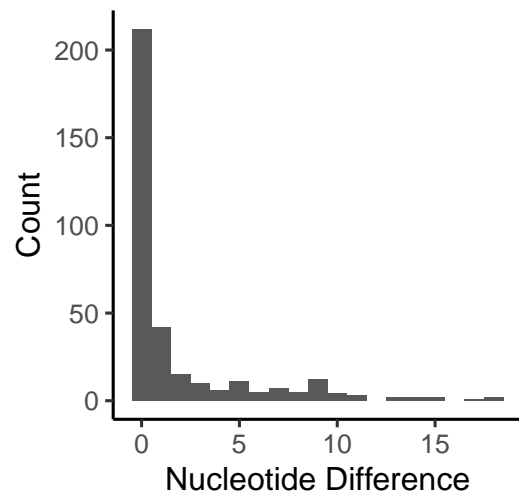
IGHV3-13*04

285 sequences assigned
215 (75.4%) exact matches, in which:
211 unique CDR3
5 unique J



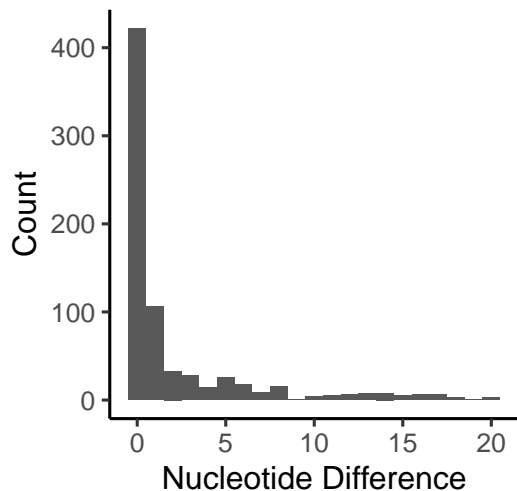
IGHV3-20*03_04

341 sequences assigned
212 (62.2%) exact matches, in which:
207 unique CDR3
6 unique J



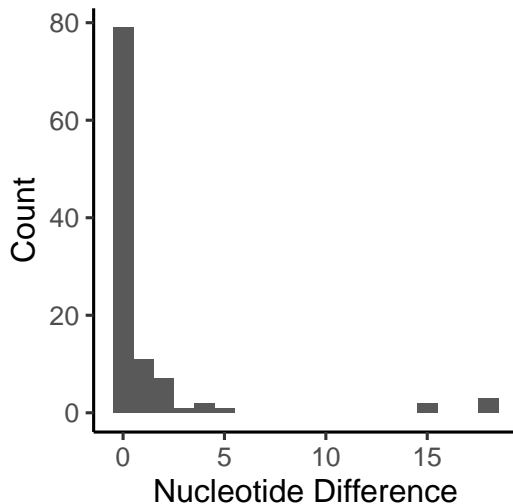
IGHV3-11*06

734 sequences assigned
422 (57.5%) exact matches, in which:
414 unique CDR3
7 unique J



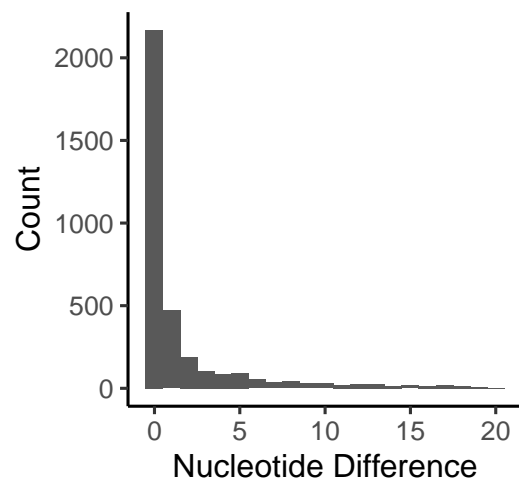
IGHV3-13*05

107 sequences assigned
79 (73.8%) exact matches, in which:
76 unique CDR3
5 unique J



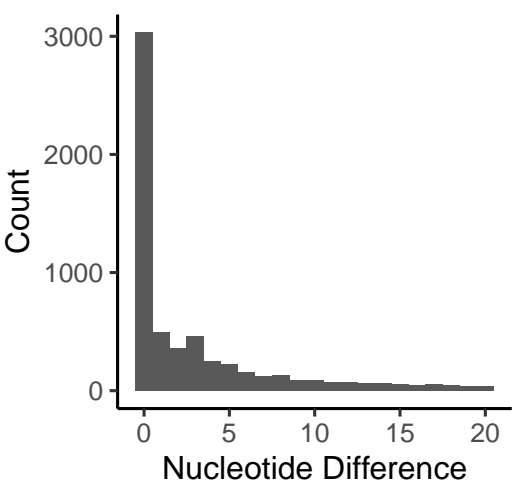
IGHV3-21*01_02

3495 sequences assigned
2168 (62%) exact matches, in which:
2097 unique CDR3
7 unique J



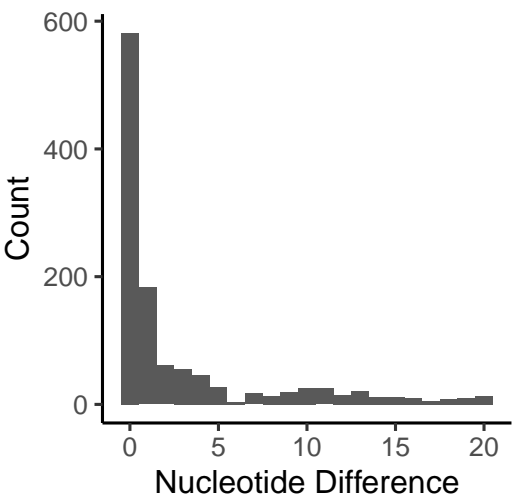
IGHV3-23*01_04

6112 sequences assigned
3033 (49.6%) exact matches, in which:
2949 unique CDR3
7 unique J



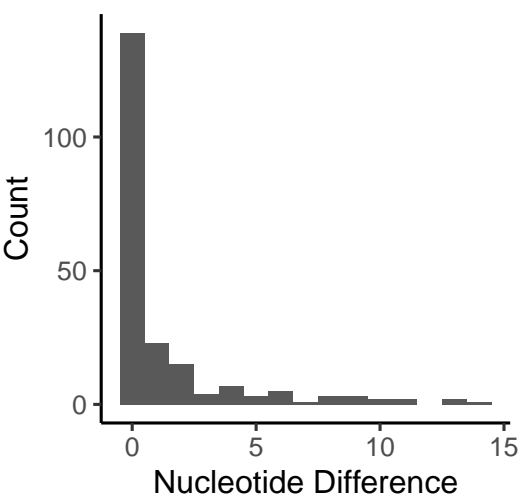
IGHV3-33*01

1190 sequences assigned
582 (48.9%) exact matches, in which:
556 unique CDR3
7 unique J



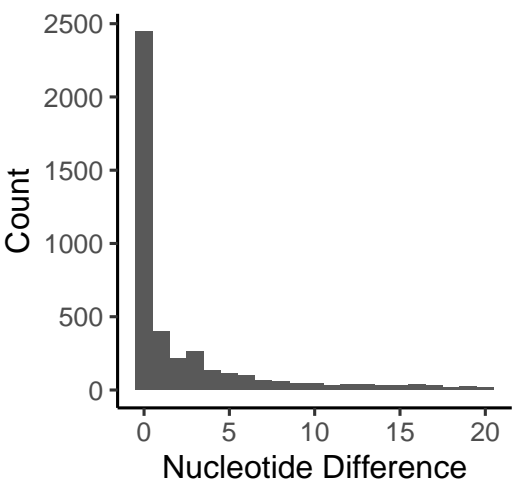
IGHV3-43*01

210 sequences assigned
139 (66.2%) exact matches, in which:
137 unique CDR3
6 unique J



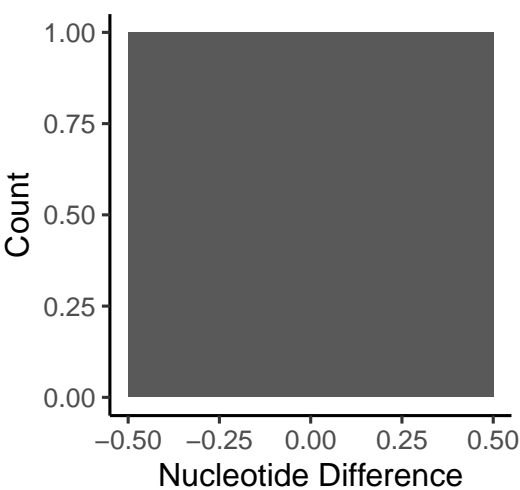
IGHV3-30-3*01

4252 sequences assigned
2445 (57.5%) exact matches, in which:
2406 unique CDR3
7 unique J



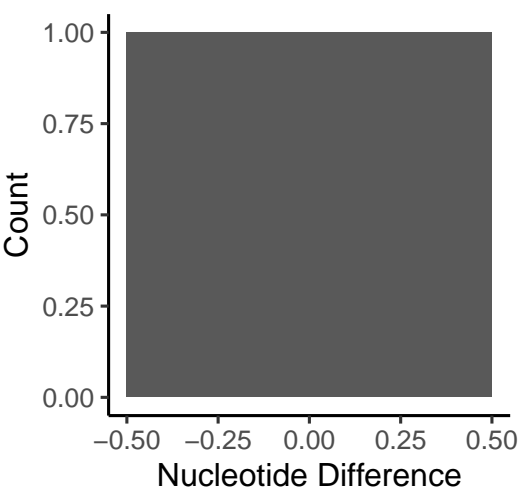
IGHV3-35*02

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



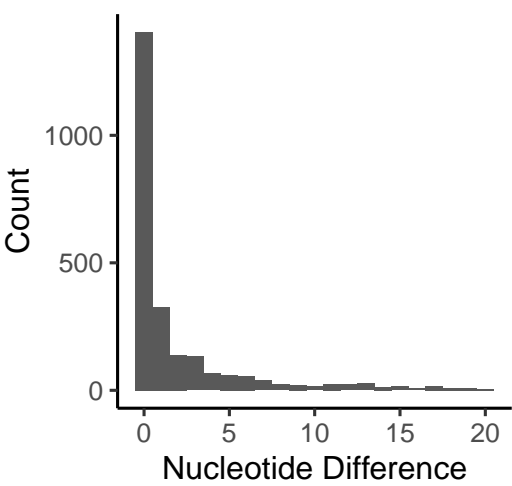
IGHV3-47*02

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



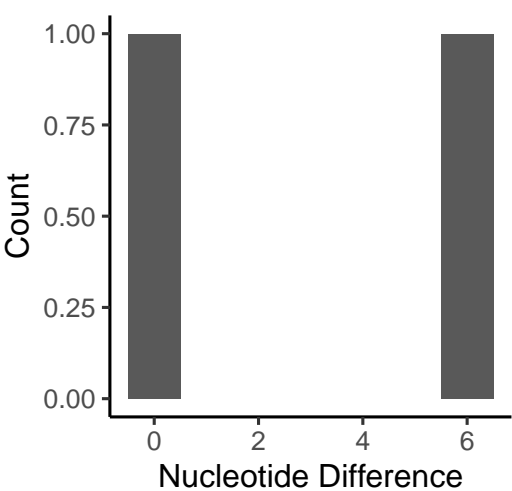
IGHV3-30*02_T201C

2466 sequences assigned
1405 (57%) exact matches, in which:
1304 unique CDR3
7 unique J



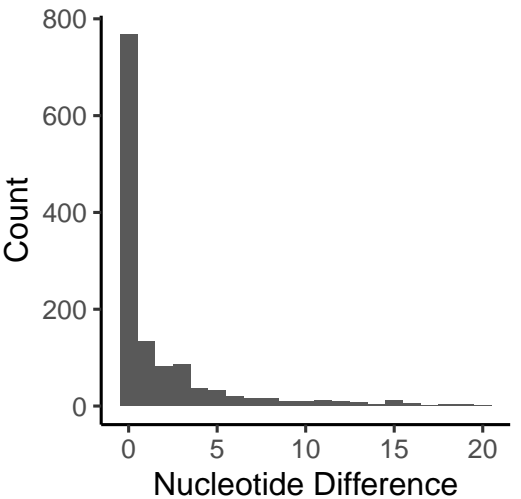
IGHV3-38-3*01

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



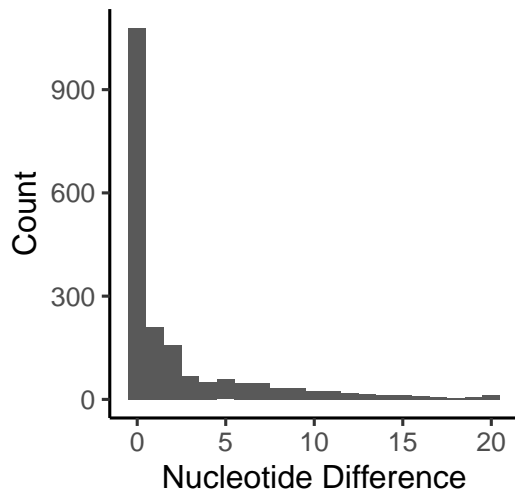
IGHV3-48*01

1278 sequences assigned
768 (60.1%) exact matches, in which:
736 unique CDR3
7 unique J



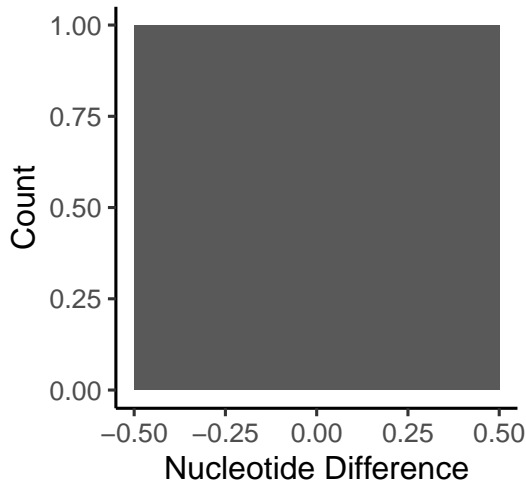
IGHV3-48*03

1959 sequences assigned
1080 (55.1%) exact matches, in which:
1058 unique CDR3
7 unique J



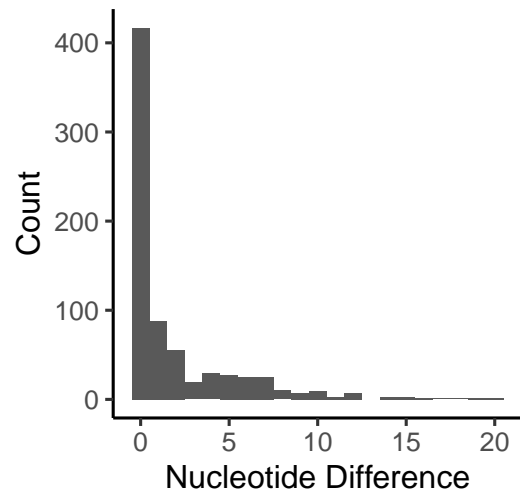
IGHV3-52*01_03

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



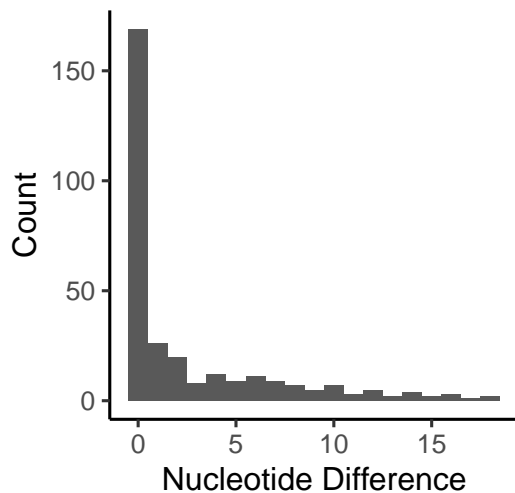
IGHV3-66*02

739 sequences assigned
417 (56.4%) exact matches, in which:
408 unique CDR3
7 unique J



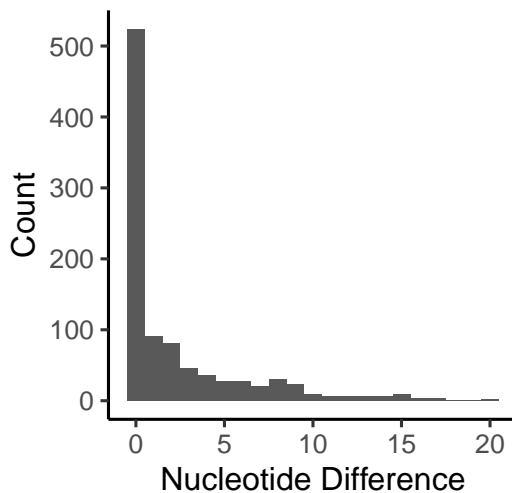
IGHV3-49*04

315 sequences assigned
169 (53.7%) exact matches, in which:
166 unique CDR3
6 unique J



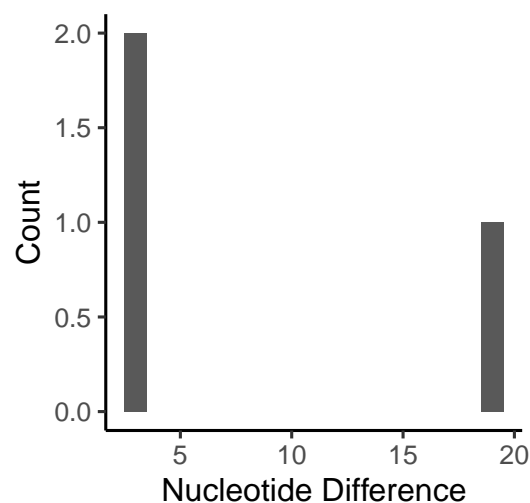
IGHV3-53*01_02

972 sequences assigned
524 (53.9%) exact matches, in which:
511 unique CDR3
7 unique J



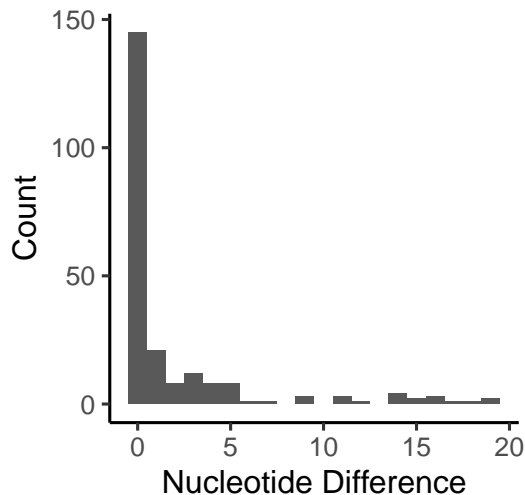
IGHV3-69-1*01

3 sequences assigned
No exact matches.



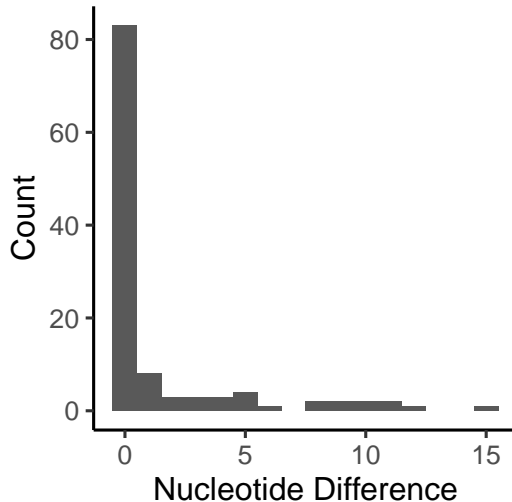
IGHV3-49*03_05

225 sequences assigned
145 (64.4%) exact matches, in which:
144 unique CDR3
7 unique J



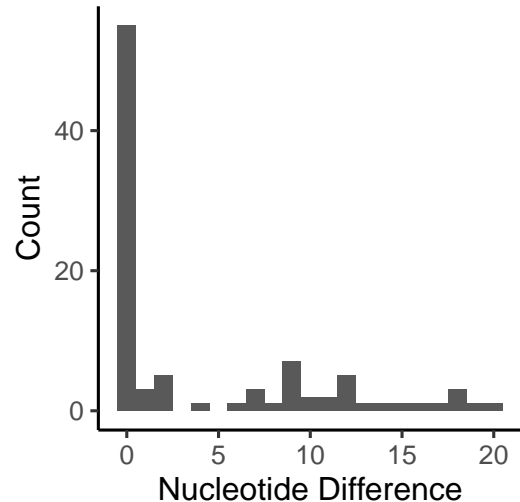
IGHV3-64*02_07

116 sequences assigned
83 (71.6%) exact matches, in which:
79 unique CDR3
5 unique J



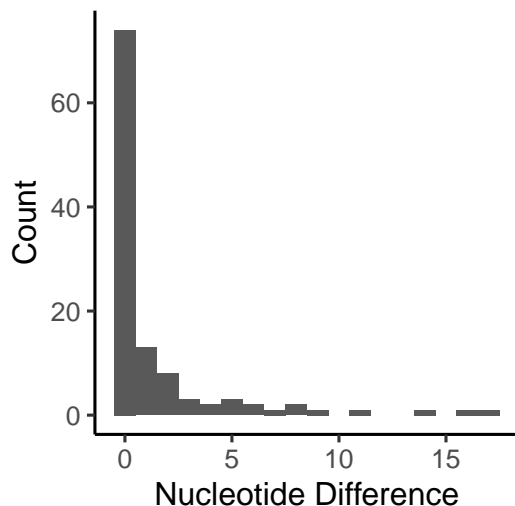
IGHV3-72*01

99 sequences assigned
55 (55.6%) exact matches, in which:
54 unique CDR3
7 unique J



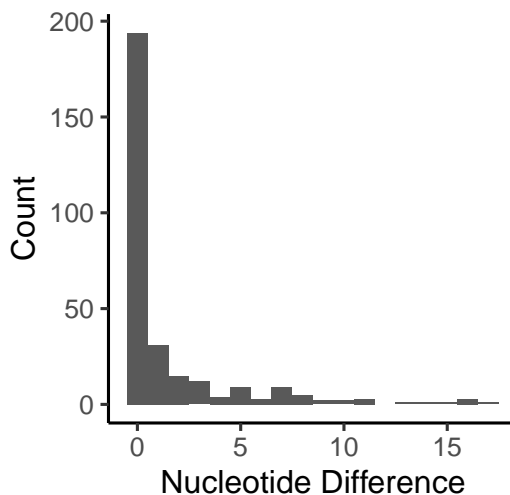
IGHV3-73*01_02

114 sequences assigned
74 (64.9%) exact matches, in which:
74 unique CDR3
7 unique J



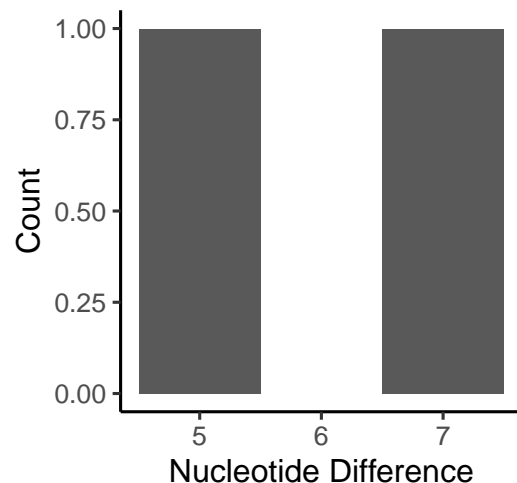
IGHV3-43D*04

299 sequences assigned
194 (64.9%) exact matches, in which:
194 unique CDR3
7 unique J



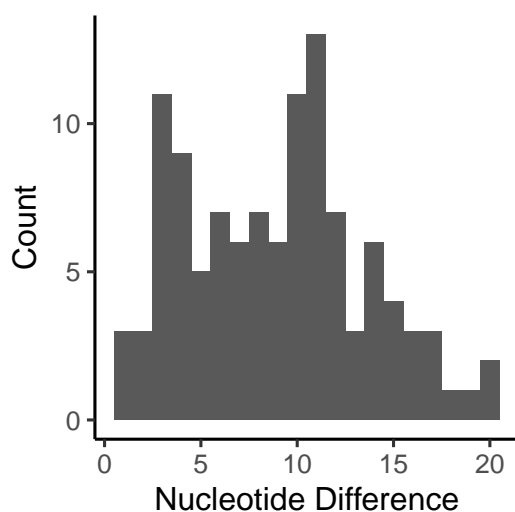
IGHV3-NL1*01

2 sequences assigned
No exact matches.



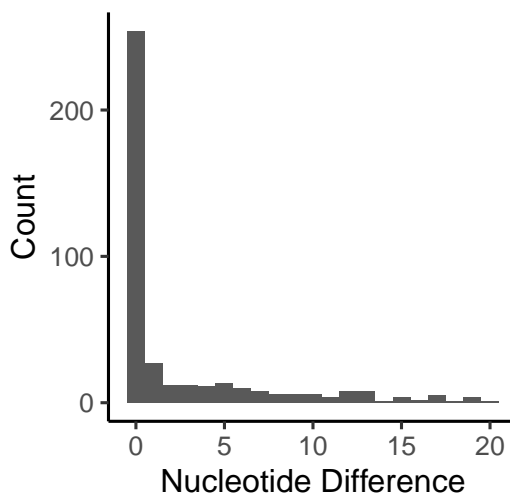
IGHV3-74*03

136 sequences assigned
No exact matches.



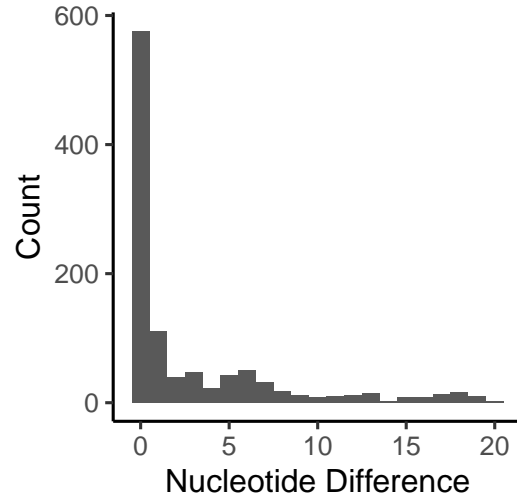
IGHV3-64D*06

423 sequences assigned
254 (60%) exact matches, in which:
201 unique CDR3
6 unique J



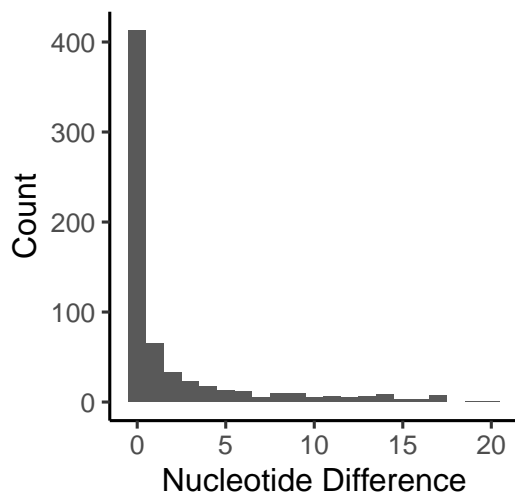
IGHV4-4*02_03

1080 sequences assigned
576 (53.3%) exact matches, in which:
520 unique CDR3
7 unique J



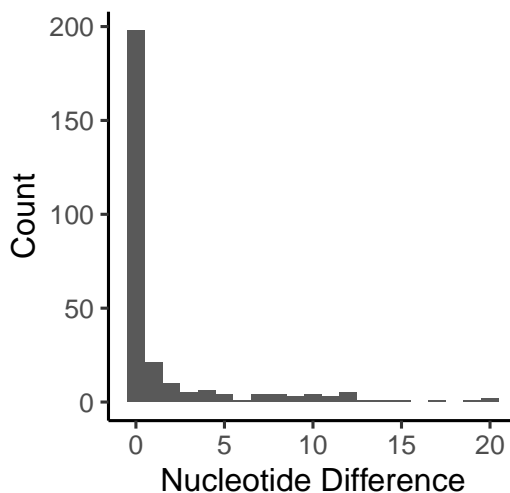
IGHV3-74*01_02

654 sequences assigned
413 (63.1%) exact matches, in which:
404 unique CDR3
7 unique J



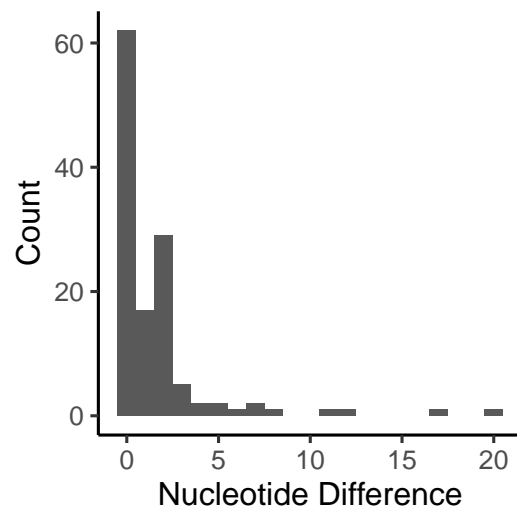
IGHV3-64D*09

278 sequences assigned
198 (71.2%) exact matches, in which:
170 unique CDR3
6 unique J



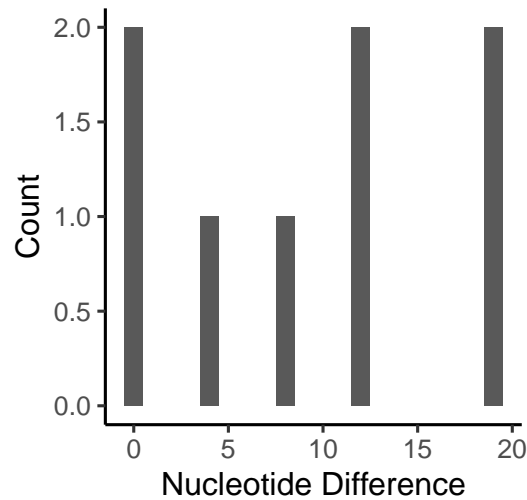
IGHV4-4*02_03_A245C_C

125 sequences assigned
62 (49.6%) exact matches, in which:
62 unique CDR3
7 unique J



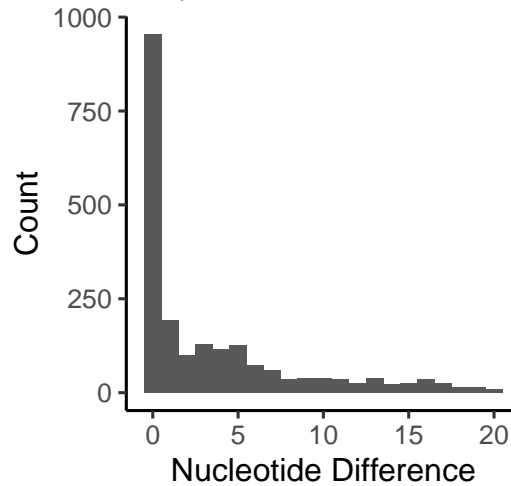
IGHV4-28*01_07

11 sequences assigned
2 (18.2%) exact matches, in which:
2 unique CDR3
2 unique J



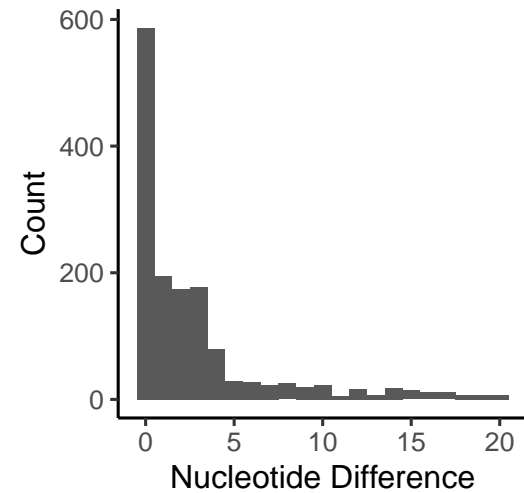
IGHV4-30-4*01

2181 sequences assigned
954 (43.7%) exact matches, in which:
817 unique CDR3
7 unique J



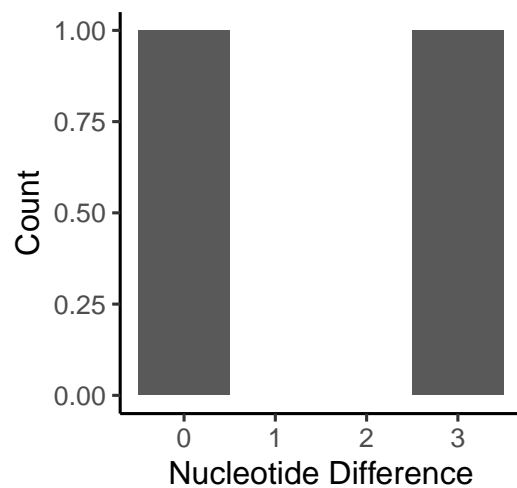
IGHV4-31*02

1523 sequences assigned
587 (38.5%) exact matches, in which:
509 unique CDR3
7 unique J



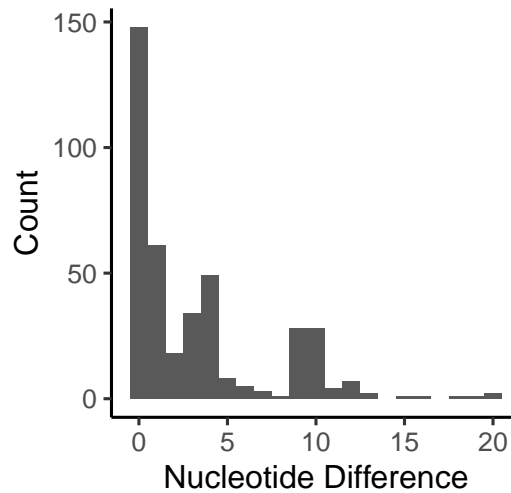
IGHV4-28*02_05

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



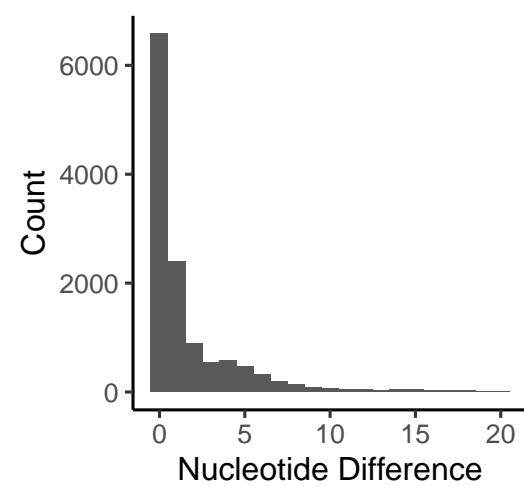
IGHV4-30-4*01_T285C_

405 sequences assigned
148 (36.5%) exact matches, in which:
146 unique CDR3
7 unique J



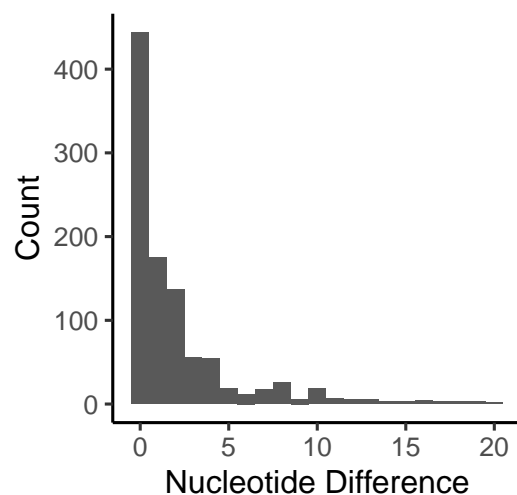
IGHV4-34*01_02

12661 sequences assigned
6581 (52%) exact matches, in which:
5260 unique CDR3
7 unique J



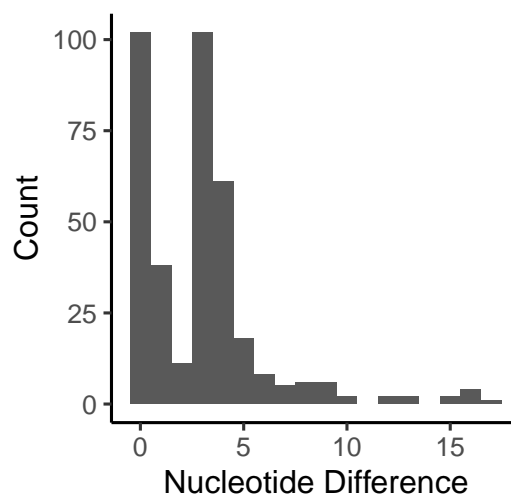
IGHV4-30-2*01

1011 sequences assigned
444 (43.9%) exact matches, in which:
351 unique CDR3
7 unique J



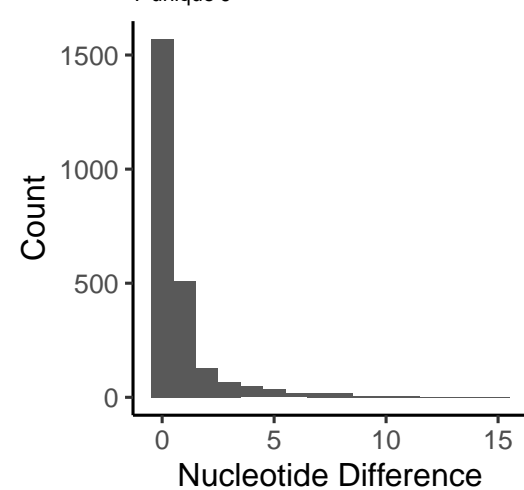
IGHV4-30-4*01_T285C_

371 sequences assigned
102 (27.5%) exact matches, in which:
101 unique CDR3
7 unique J



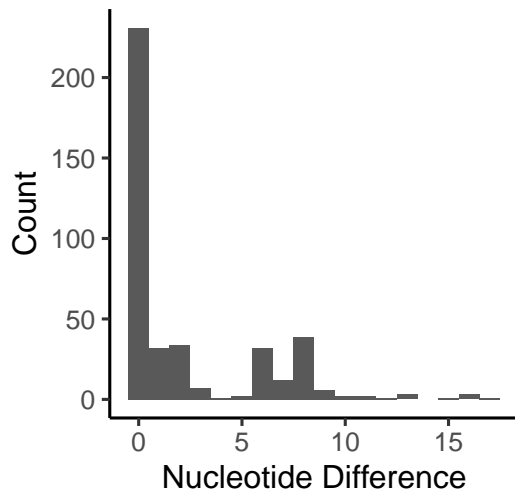
IGHV4-34*01_02_C288

2432 sequences assigned
1570 (64.6%) exact matches, in which:
1494 unique CDR3
7 unique J



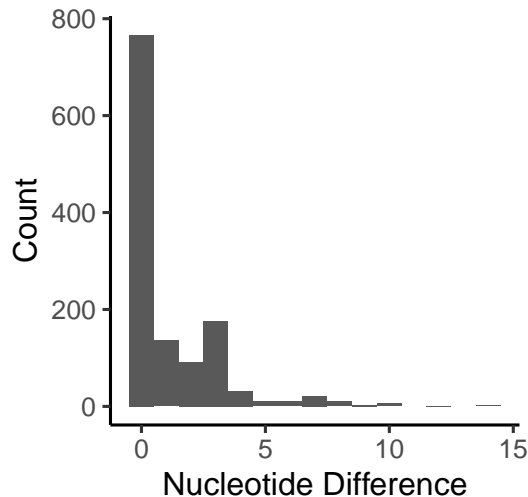
IGHV4-38-2*01_A291G_

411 sequences assigned
231 (56.2%) exact matches, in which:
228 unique CDR3
7 unique J



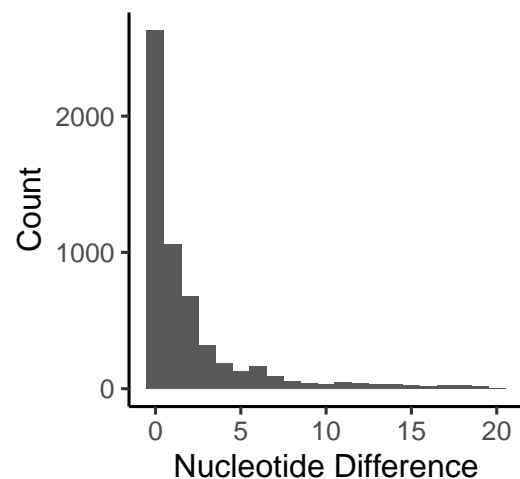
IGHV4-39*07_C288T

1265 sequences assigned
767 (60.6%) exact matches, in which:
753 unique CDR3
7 unique J



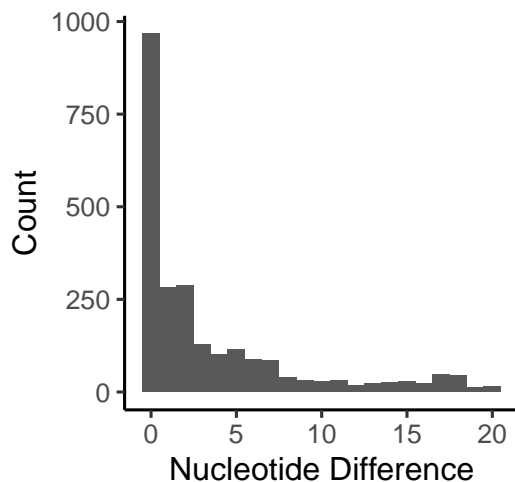
IGHV4-59*02_G88A

5730 sequences assigned
2629 (45.9%) exact matches, in which:
2292 unique CDR3
7 unique J



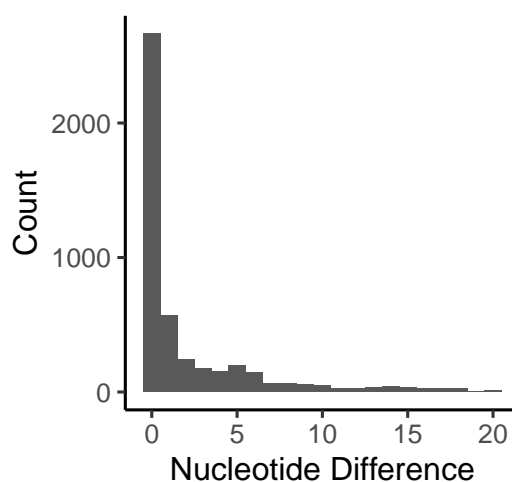
IGHV4-38-2*02_A70G

2460 sequences assigned
967 (39.3%) exact matches, in which:
886 unique CDR3
7 unique J



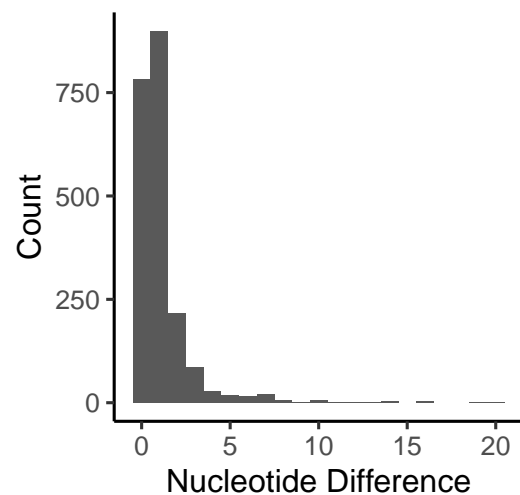
IGHV4-59*11

4641 sequences assigned
2664 (57.4%) exact matches, in which:
2300 unique CDR3
7 unique J



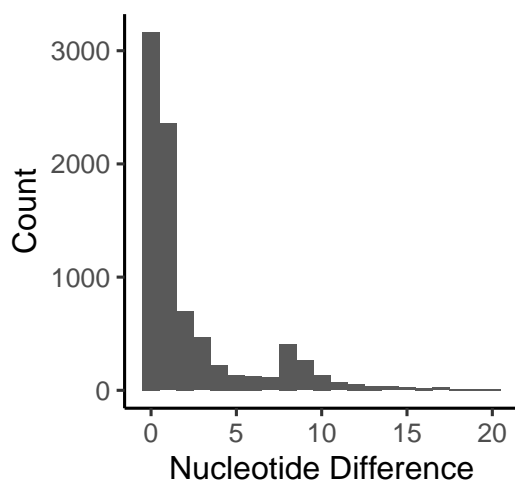
IGHV4-59*11_T288C_C3

2092 sequences assigned
783 (37.4%) exact matches, in which:
769 unique CDR3
7 unique J



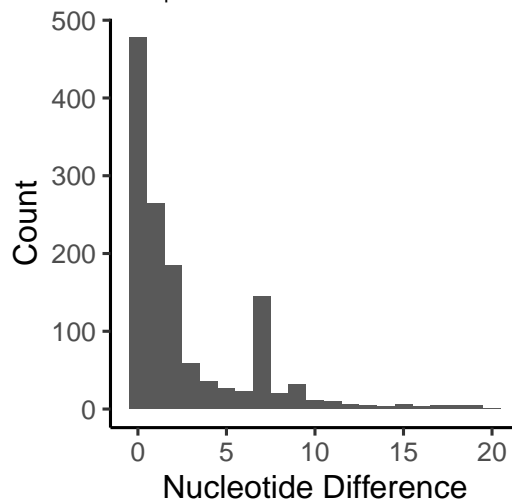
IGHV4-39*07

8434 sequences assigned
3165 (37.5%) exact matches, in which:
2692 unique CDR3
7 unique J



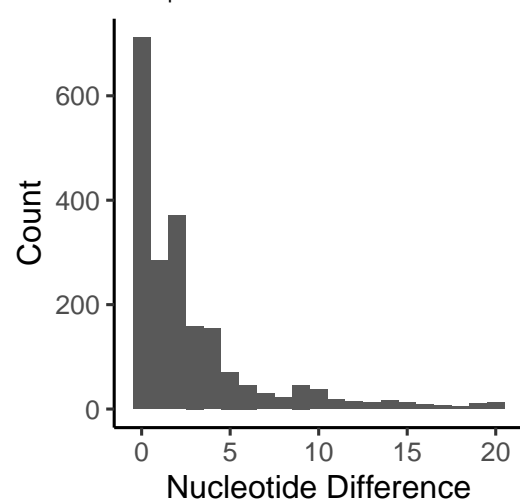
IGHV4-59*02_C77A_C84

1327 sequences assigned
478 (36%) exact matches, in which:
477 unique CDR3
7 unique J



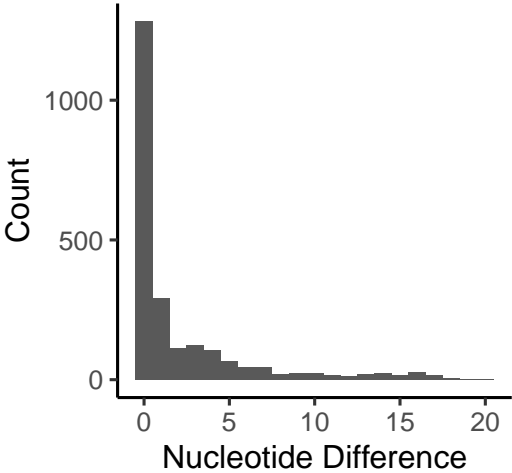
IGHV4-61*01

2068 sequences assigned
712 (34.4%) exact matches, in which:
648 unique CDR3
7 unique J



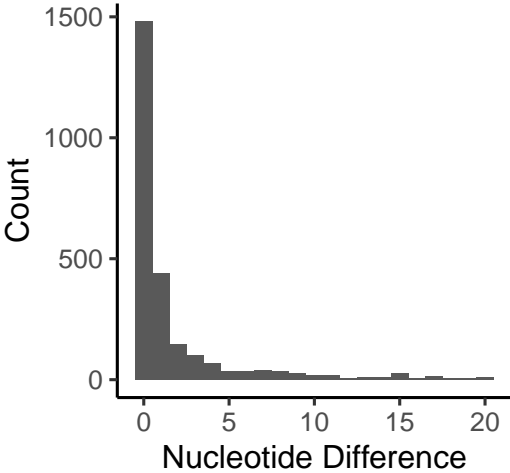
IGHV4-61*09_C163T_T

2278 sequences assigned
1282 (56.3%) exact matches, in which:
1058 unique CDR3
7 unique J



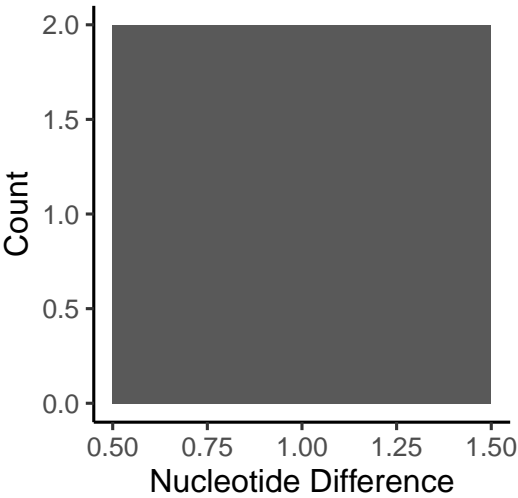
IGHV5-10-1*01_03

2558 sequences assigned
1481 (57.9%) exact matches, in which:
1436 unique CDR3
7 unique J



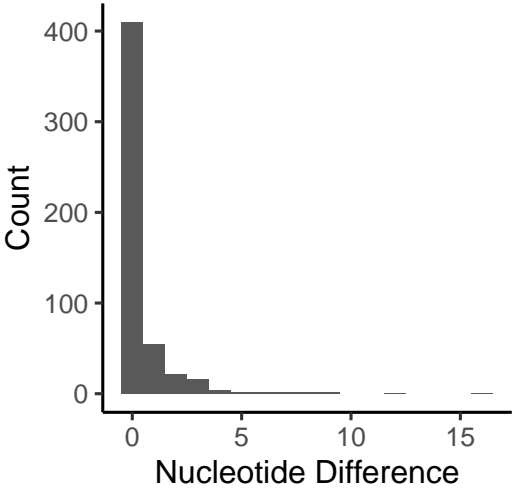
IGHV7-4-1*01

2 sequences assigned
No exact matches.



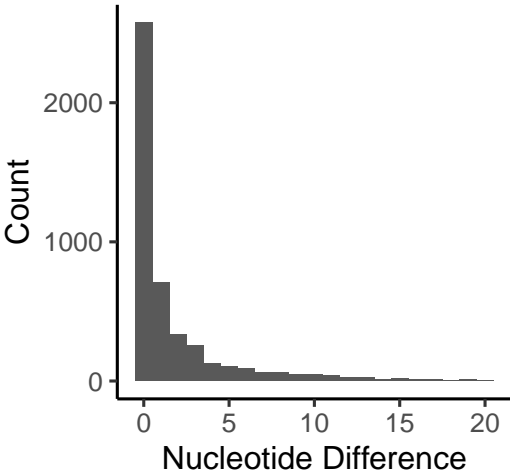
IGHV4-61*09_C163T_T1

518 sequences assigned
410 (79.2%) exact matches, in which:
404 unique CDR3
7 unique J



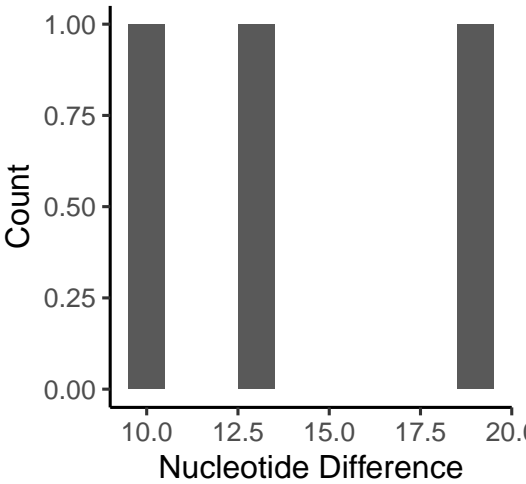
IGHV5-51*07_A128G

4574 sequences assigned
2575 (56.3%) exact matches, in which:
2462 unique CDR3
7 unique J



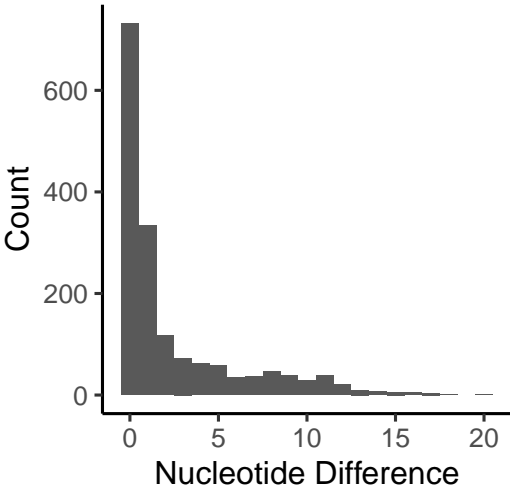
IGHV4/OR15-8*01

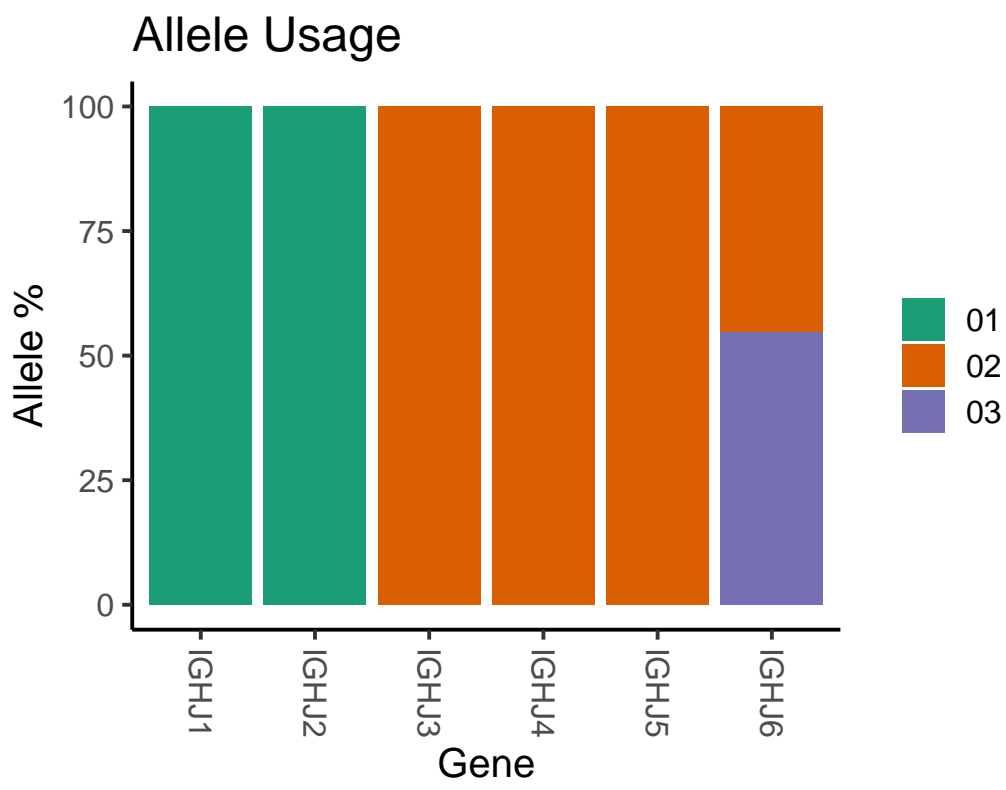
6 sequences assigned
No exact matches.



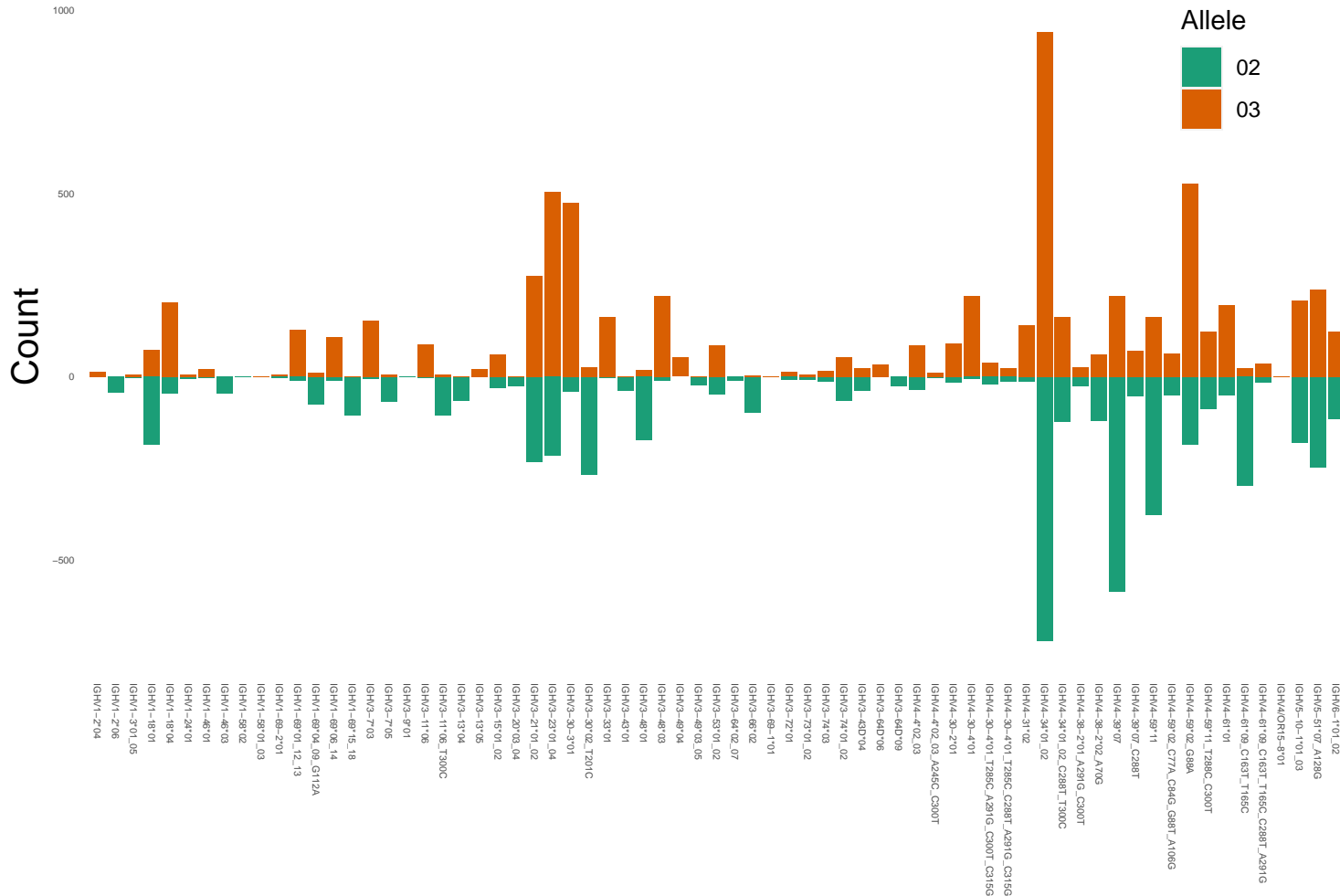
IGHV6-1*01_02

1659 sequences assigned
732 (44.1%) exact matches, in which:
646 unique CDR3
7 unique J





Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.