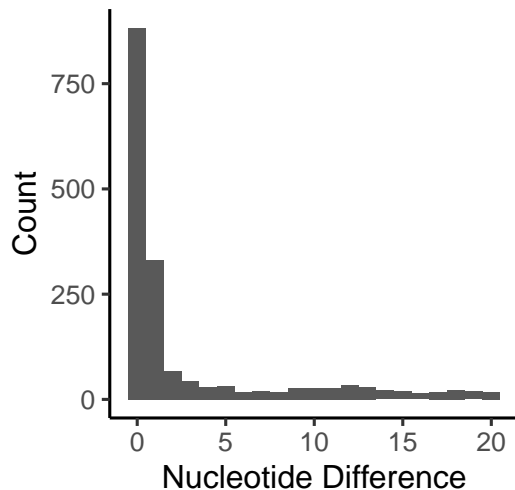


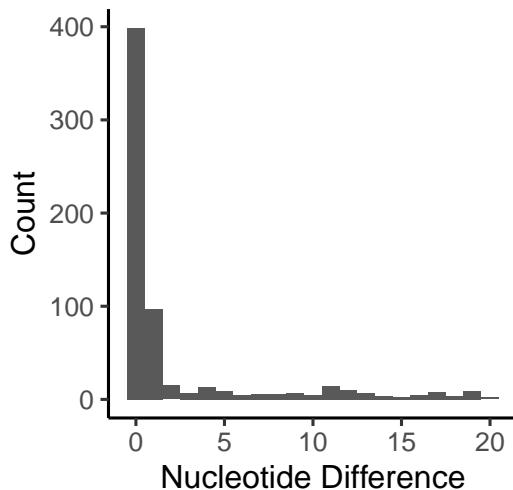
IGHV1-2*02

2016 sequences assigned
883 (43.8%) exact matches, in which:
868 unique CDR3
6 unique J



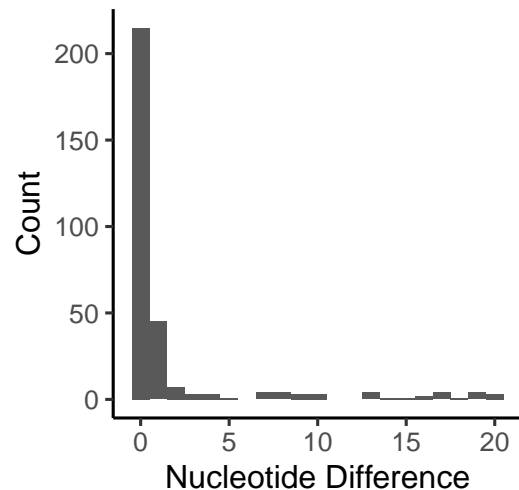
IGHV1-8*01

686 sequences assigned
399 (58.2%) exact matches, in which:
395 unique CDR3
6 unique J



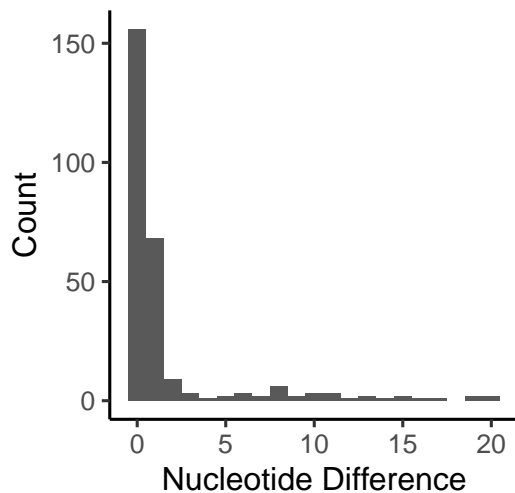
IGHV1-24*01

360 sequences assigned
215 (59.7%) exact matches, in which:
211 unique CDR3
6 unique J



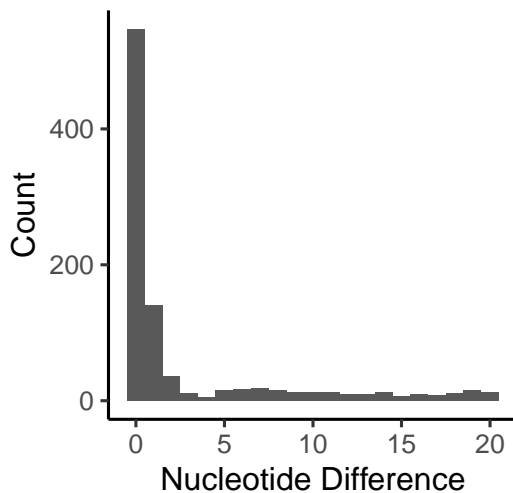
IGHV1-2*04

280 sequences assigned
156 (55.7%) exact matches, in which:
156 unique CDR3
4 unique J



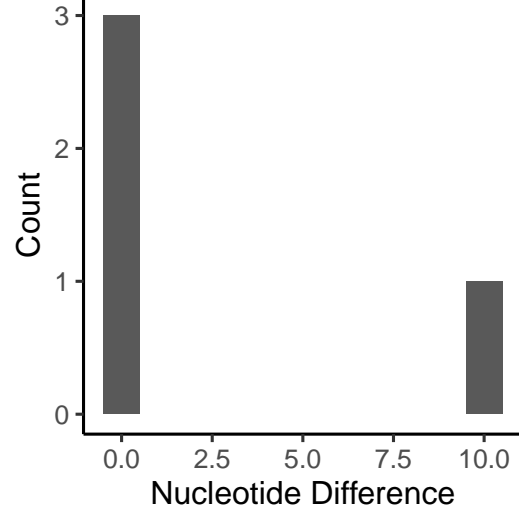
IGHV1-18*01

1218 sequences assigned
547 (44.9%) exact matches, in which:
542 unique CDR3
6 unique J



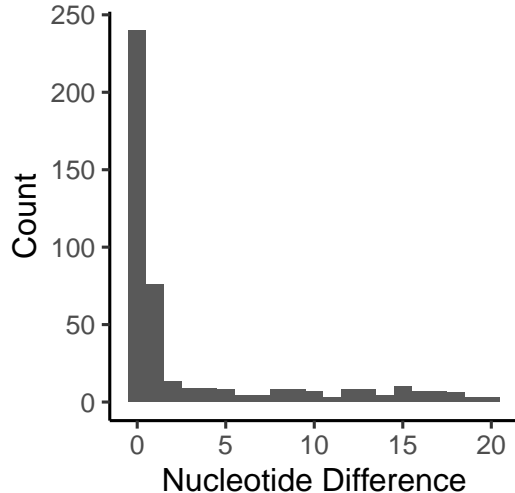
IGHV1-45*02

24 sequences assigned
3 (12.5%) exact matches, in which:
3 unique CDR3
3 unique J



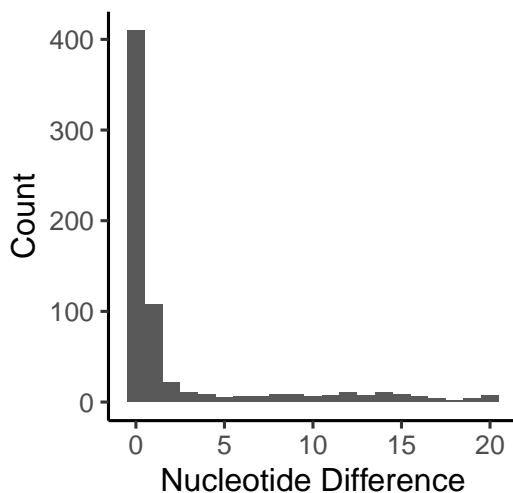
IGHV1-3*01

563 sequences assigned
240 (42.6%) exact matches, in which:
239 unique CDR3
6 unique J



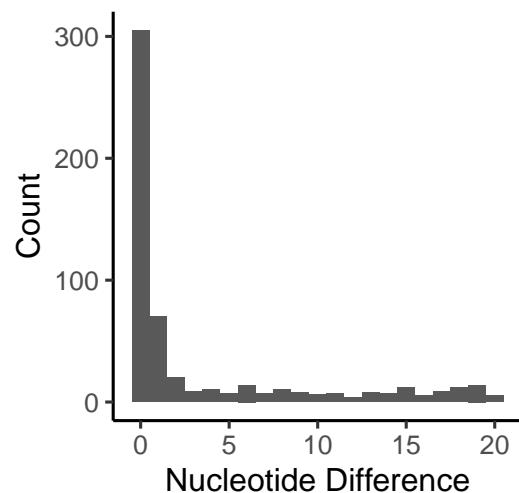
IGHV1-18*04

807 sequences assigned
410 (50.8%) exact matches, in which:
407 unique CDR3
6 unique J



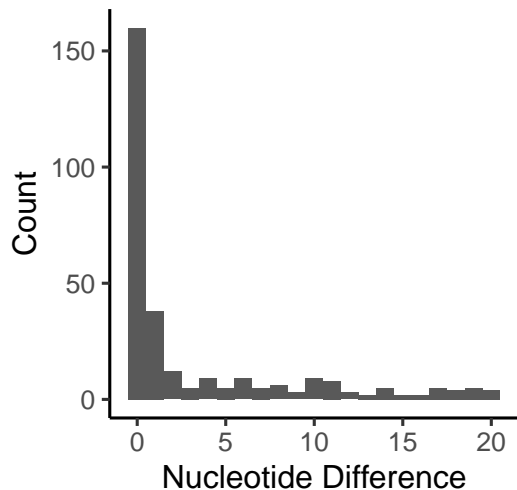
IGHV1-46*01

679 sequences assigned
305 (44.9%) exact matches, in which:
303 unique CDR3
6 unique J



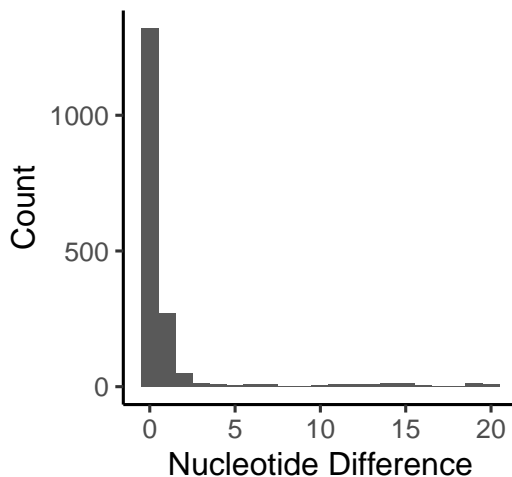
IGHV1-46*03

335 sequences assigned
160 (47.8%) exact matches, in which:
158 unique CDR3
6 unique J



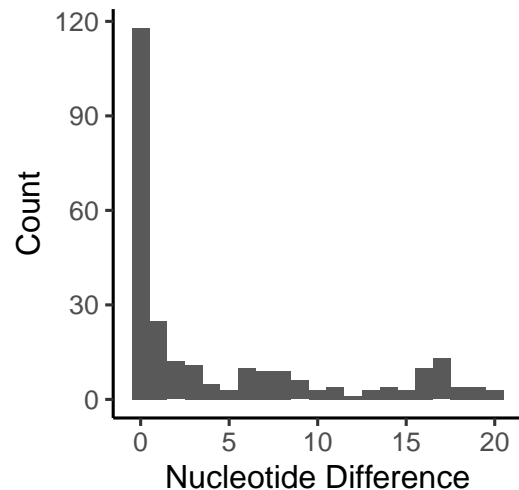
IGHV1-69*01

1954 sequences assigned
1320 (67.6%) exact matches, in which:
1308 unique CDR3
6 unique J



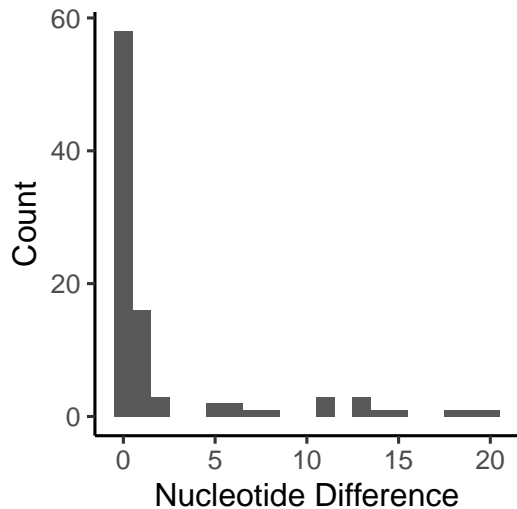
IGHV2-5*02

334 sequences assigned
118 (35.3%) exact matches, in which:
118 unique CDR3
6 unique J



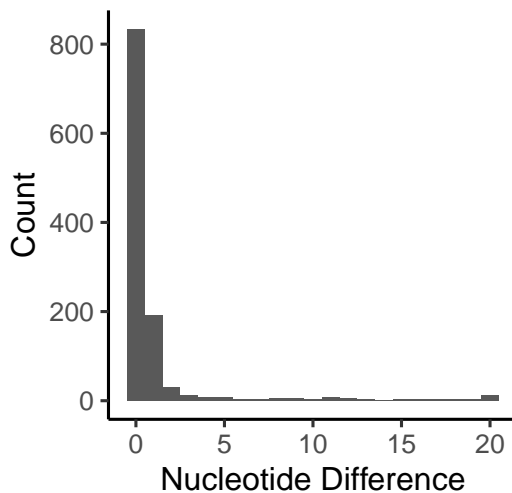
IGHV1-58*01

103 sequences assigned
58 (56.3%) exact matches, in which:
58 unique CDR3
6 unique J



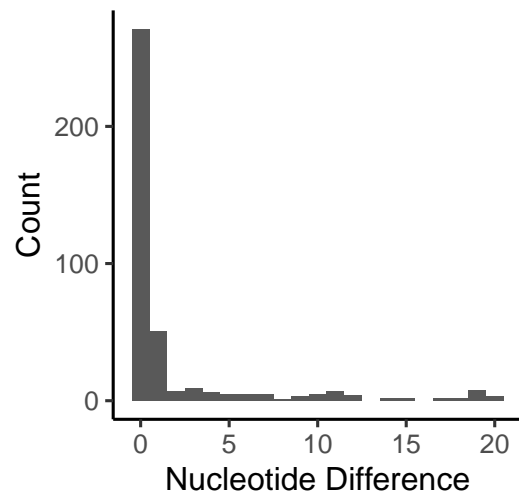
IGHV1-69*10

1348 sequences assigned
834 (61.9%) exact matches, in which:
831 unique CDR3
6 unique J



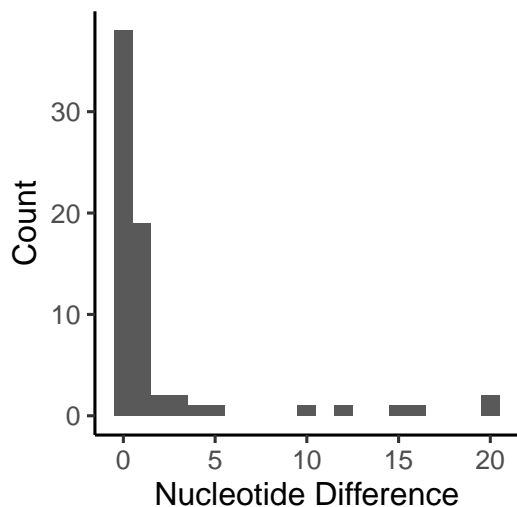
IGHV2-26*01

442 sequences assigned
271 (61.3%) exact matches, in which:
270 unique CDR3
5 unique J



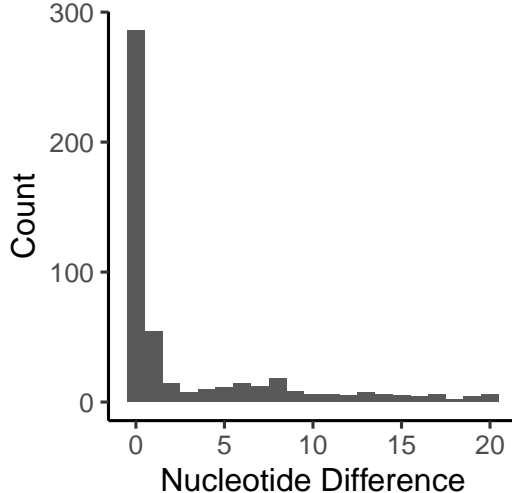
IGHV1-58*02

77 sequences assigned
38 (49.4%) exact matches, in which:
37 unique CDR3
5 unique J



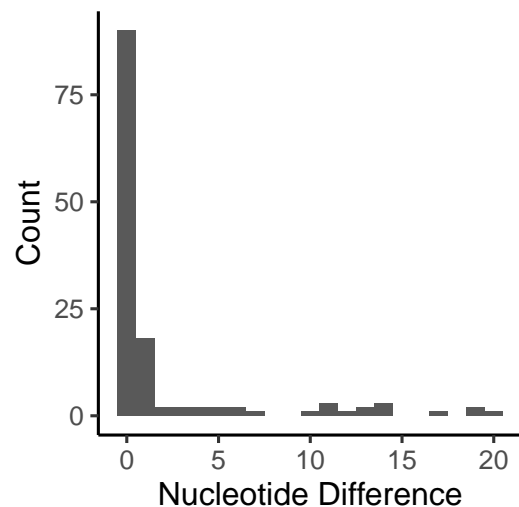
IGHV2-5*01

528 sequences assigned
286 (54.2%) exact matches, in which:
285 unique CDR3
6 unique J



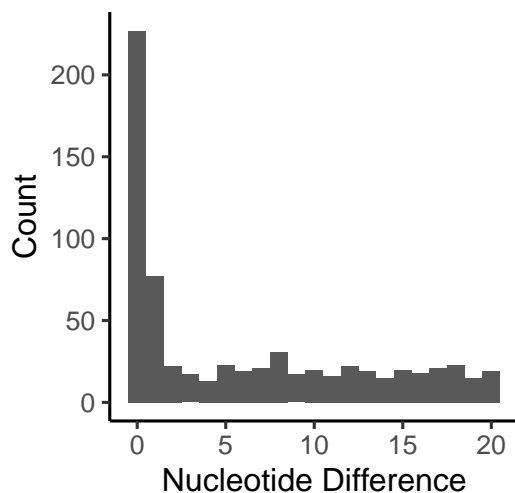
IGHV2-70*01

147 sequences assigned
90 (61.2%) exact matches, in which:
90 unique CDR3
5 unique J



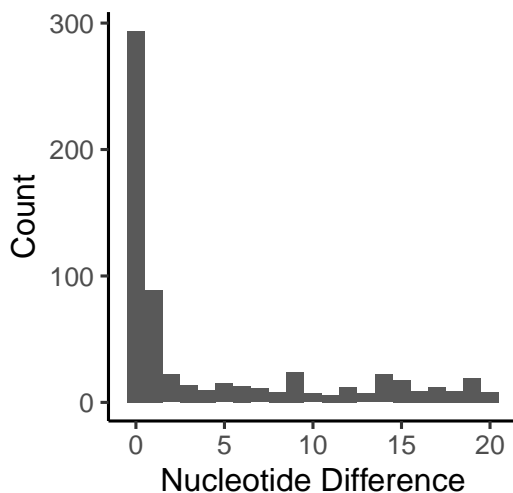
IGHV3-7*01

819 sequences assigned
227 (27.7%) exact matches, in which:
224 unique CDR3
6 unique J



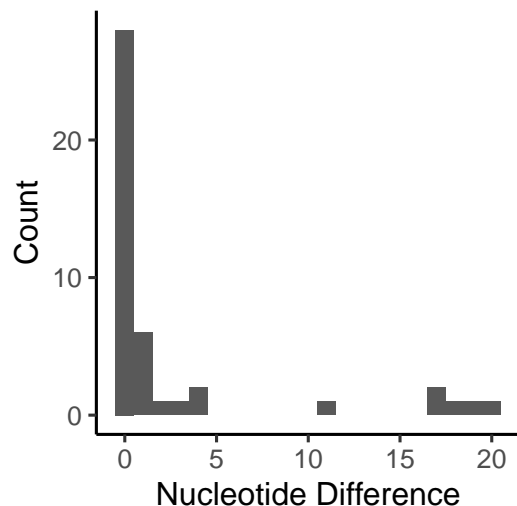
IGHV3-11*01

757 sequences assigned
294 (38.8%) exact matches, in which:
290 unique CDR3
6 unique J



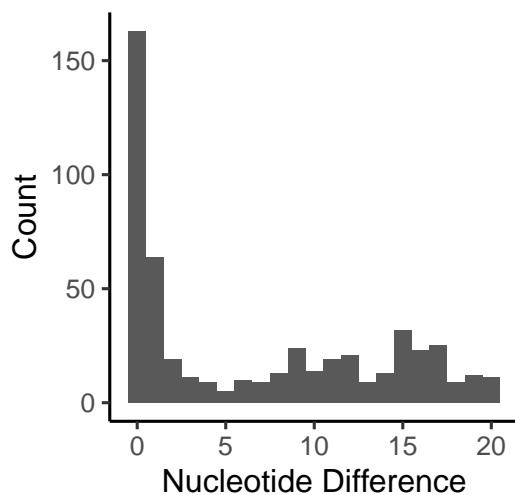
IGHV3-13*05

45 sequences assigned
28 (62.2%) exact matches, in which:
28 unique CDR3
4 unique J



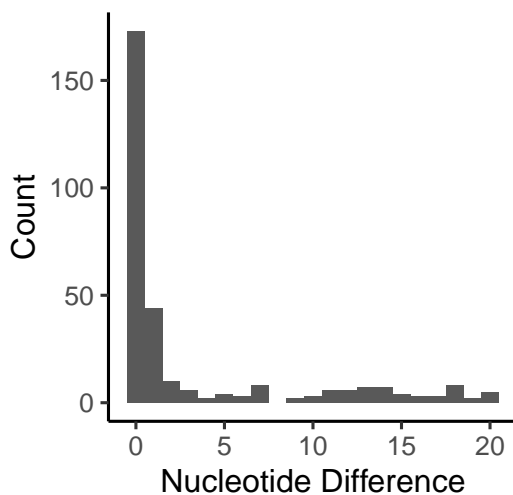
IGHV3-7*03

657 sequences assigned
163 (24.8%) exact matches, in which:
162 unique CDR3
5 unique J



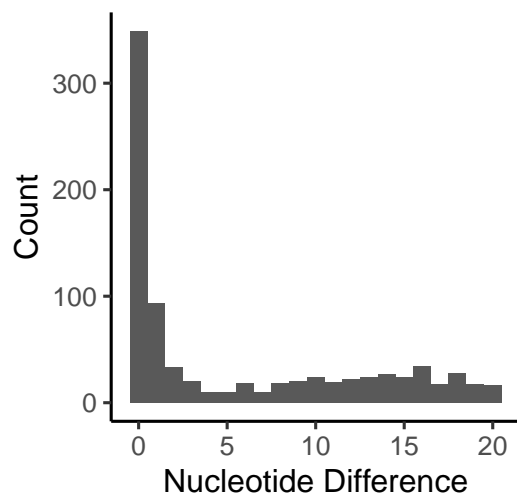
IGHV3-11*06

564 sequences assigned
173 (30.7%) exact matches, in which:
173 unique CDR3
6 unique J



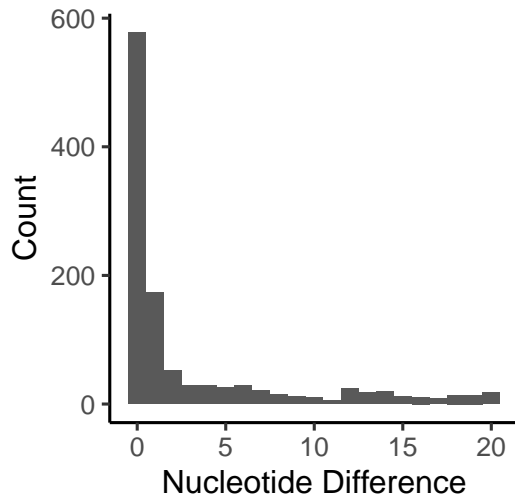
IGHV3-15*01

1055 sequences assigned
349 (33.1%) exact matches, in which:
346 unique CDR3
6 unique J



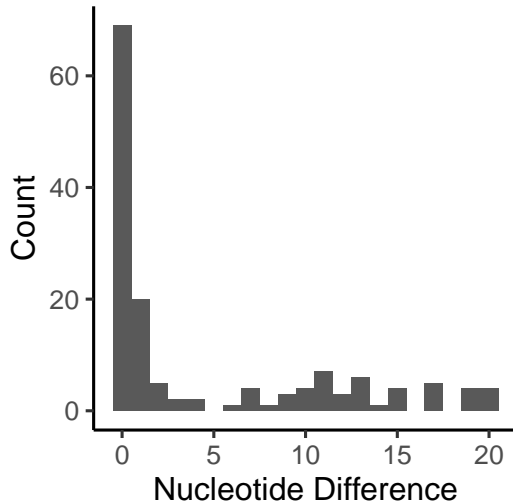
IGHV3-9*01

1340 sequences assigned
578 (43.1%) exact matches, in which:
574 unique CDR3
6 unique J



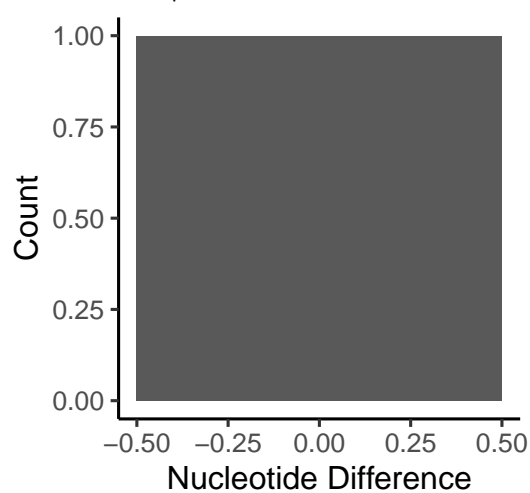
IGHV3-13*01

173 sequences assigned
69 (39.9%) exact matches, in which:
69 unique CDR3
5 unique J



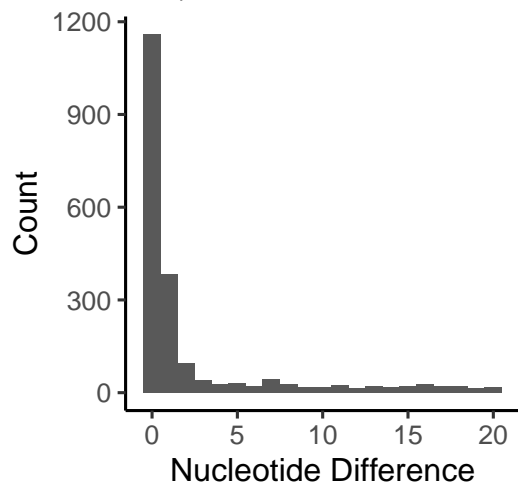
IGHV3-20*02

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



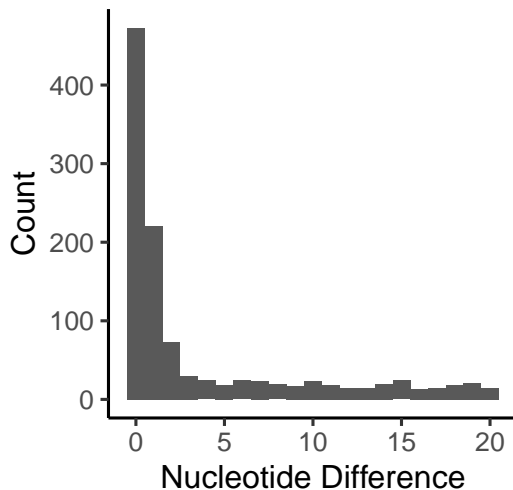
IGHV3-21*01

2417 sequences assigned
1159 (48%) exact matches, in which:
1153 unique CDR3
6 unique J



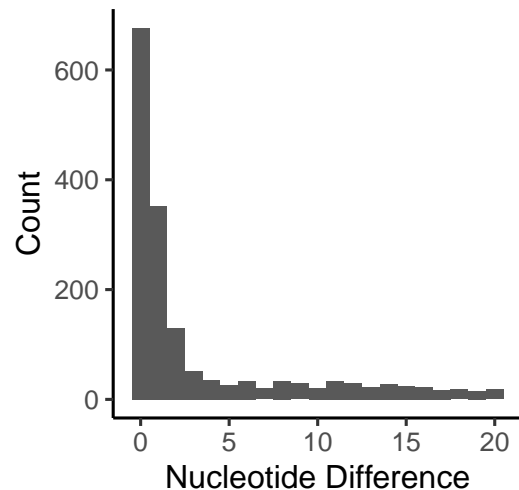
IGHV3-30*01

1329 sequences assigned
473 (35.6%) exact matches, in which:
471 unique CDR3
6 unique J



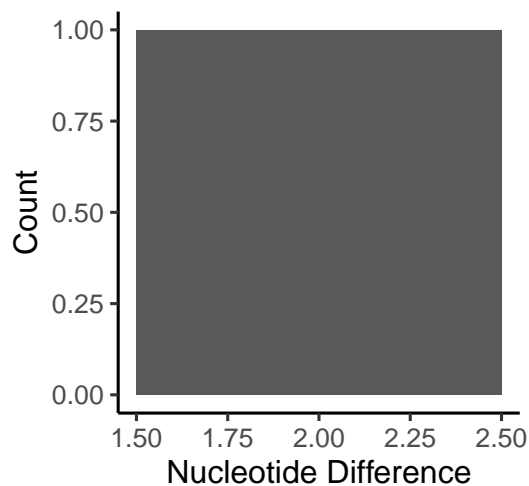
IGHV3-33*01

1848 sequences assigned
677 (36.6%) exact matches, in which:
673 unique CDR3
6 unique J



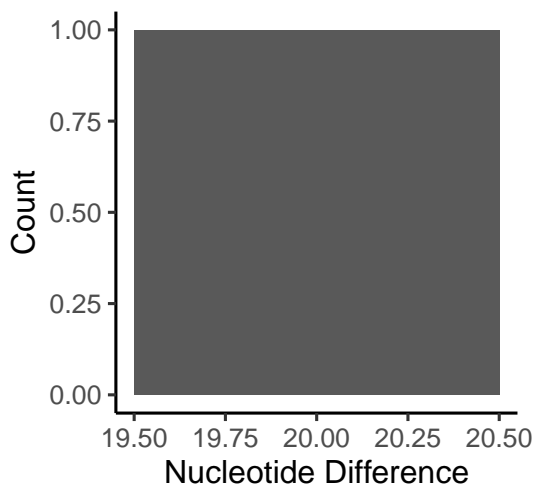
IGHV3-22*02

1 sequences assigned
No exact matches.



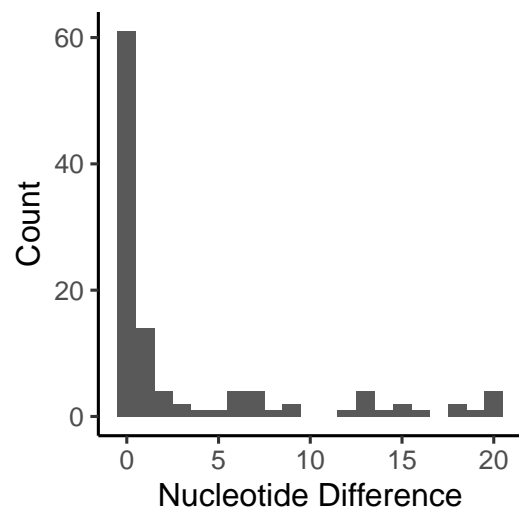
IGHV3-30-3*01

12 sequences assigned
No exact matches.



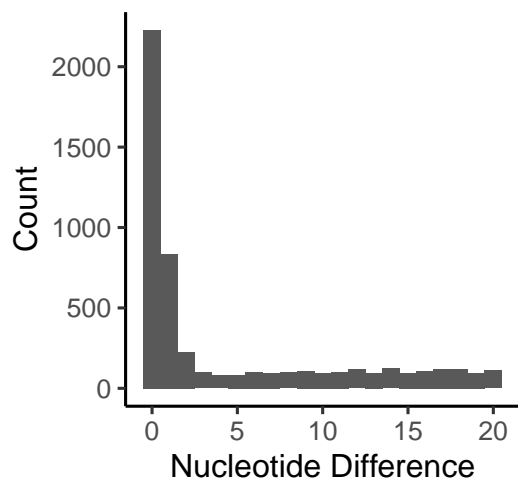
IGHV3-43*01

140 sequences assigned
61 (43.6%) exact matches, in which:
61 unique CDR3
4 unique J



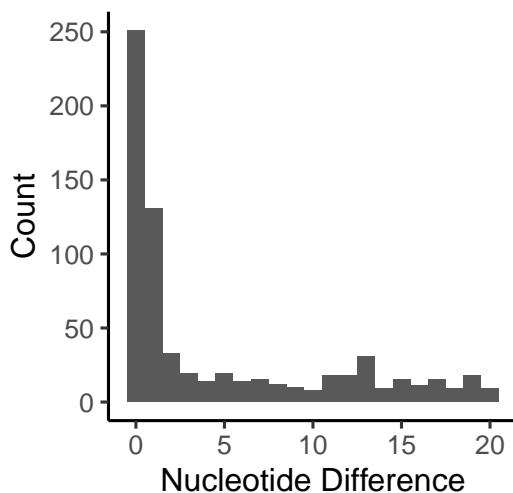
IGHV3-23*01

6409 sequences assigned
2228 (34.8%) exact matches, in which:
2220 unique CDR3
6 unique J



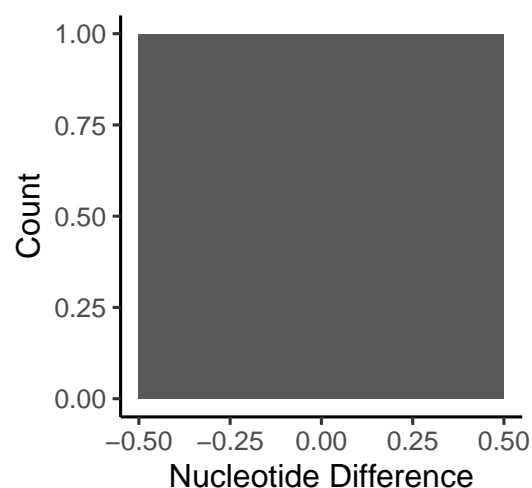
IGHV3-30*18

836 sequences assigned
251 (30%) exact matches, in which:
249 unique CDR3
6 unique J



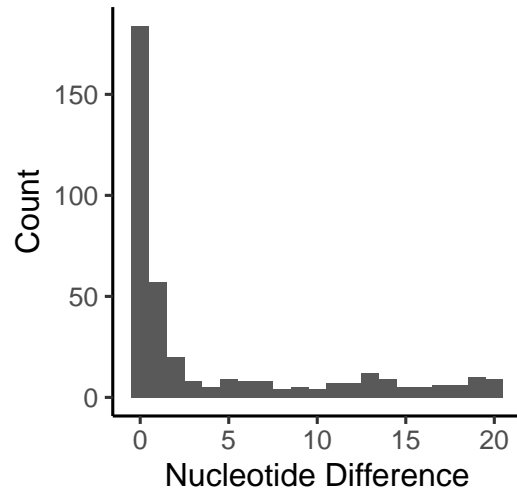
IGHV3-47*02

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



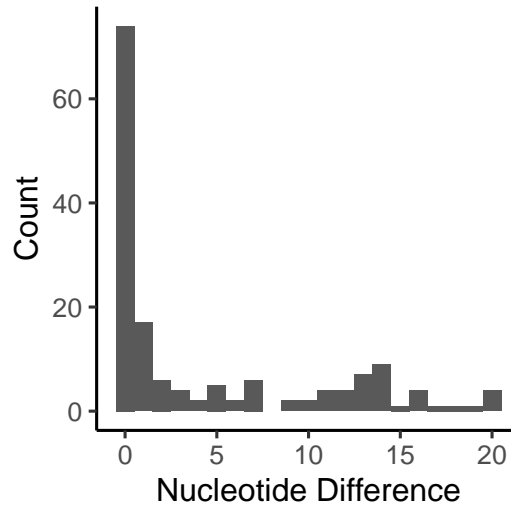
IGHV3-48*02

488 sequences assigned
184 (37.7%) exact matches, in which:
181 unique CDR3
6 unique J



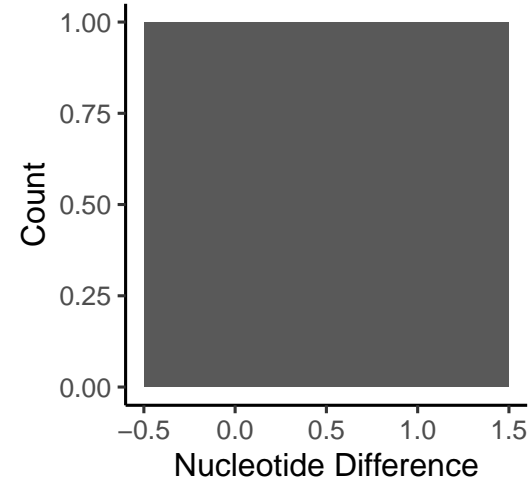
IGHV3-49*05

196 sequences assigned
74 (37.8%) exact matches, in which:
73 unique CDR3
6 unique J



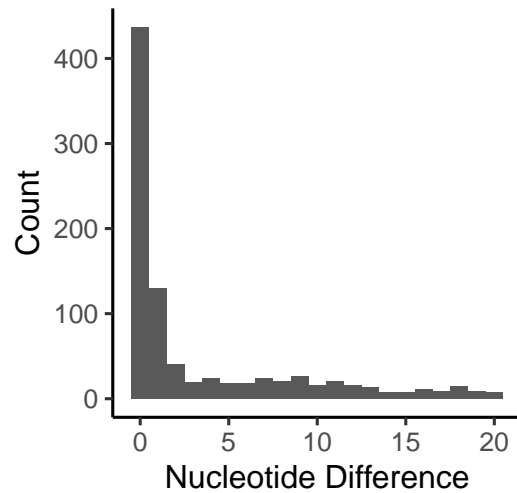
IGHV3-66*03

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



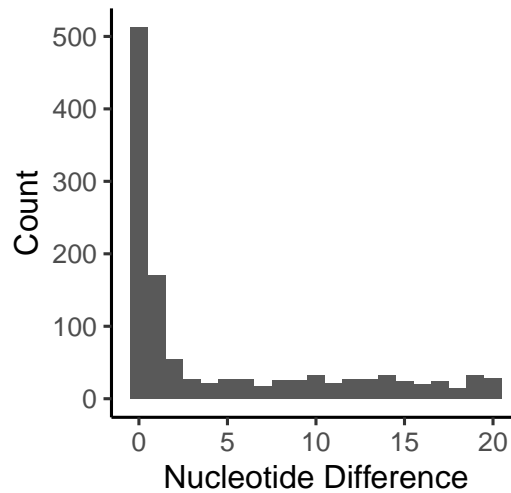
IGHV3-48*03

1042 sequences assigned
437 (41.9%) exact matches, in which:
436 unique CDR3
6 unique J



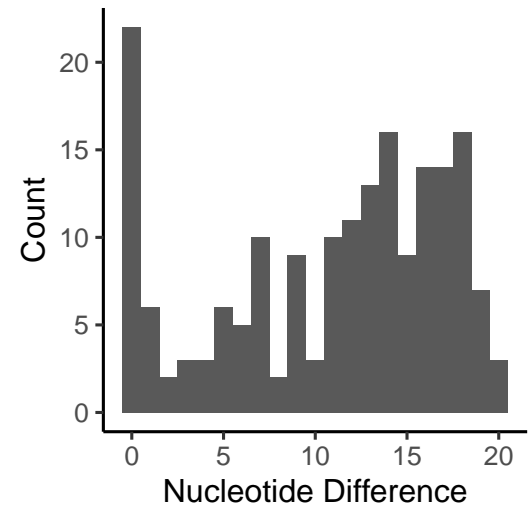
IGHV3-53*01

1436 sequences assigned
513 (35.7%) exact matches, in which:
505 unique CDR3
6 unique J



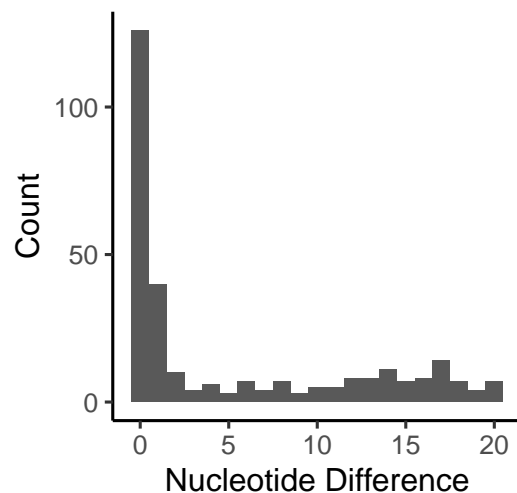
IGHV3-72*01

232 sequences assigned
22 (9.5%) exact matches, in which:
22 unique CDR3
5 unique J



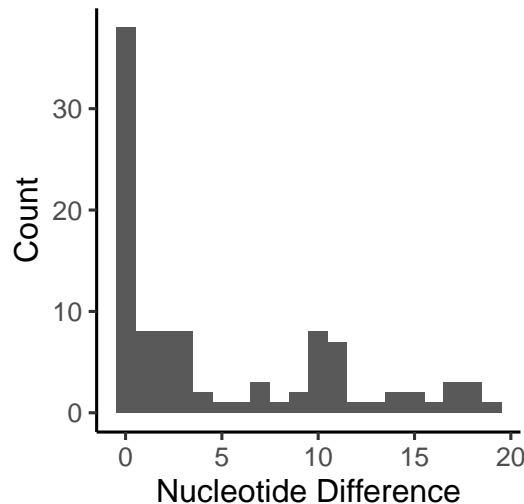
IGHV3-49*04

387 sequences assigned
126 (32.6%) exact matches, in which:
125 unique CDR3
6 unique J



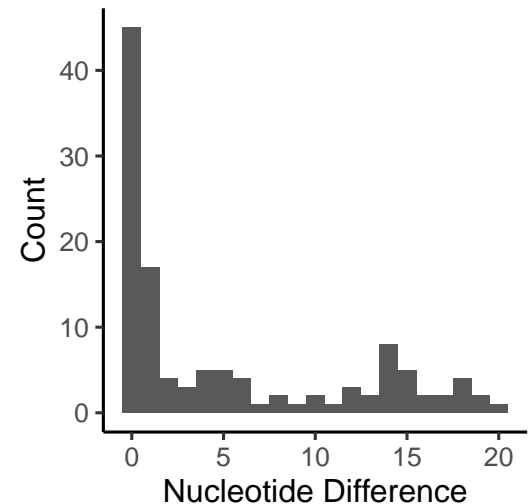
IGHV3-64*01

123 sequences assigned
38 (30.9%) exact matches, in which:
38 unique CDR3
6 unique J



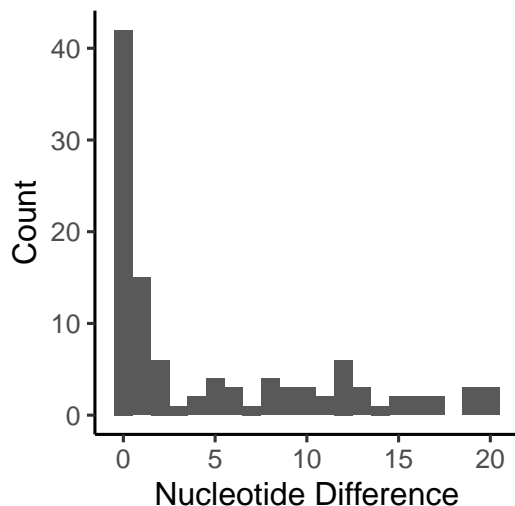
IGHV3-73*01

135 sequences assigned
45 (33.3%) exact matches, in which:
45 unique CDR3
5 unique J



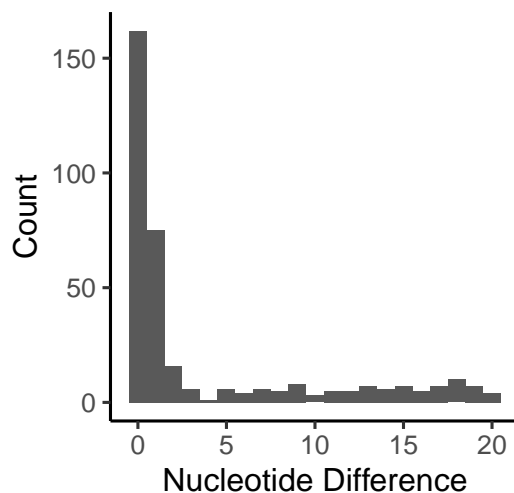
IGHV3-73*02

123 sequences assigned
42 (34.1%) exact matches, in which:
42 unique CDR3
4 unique J



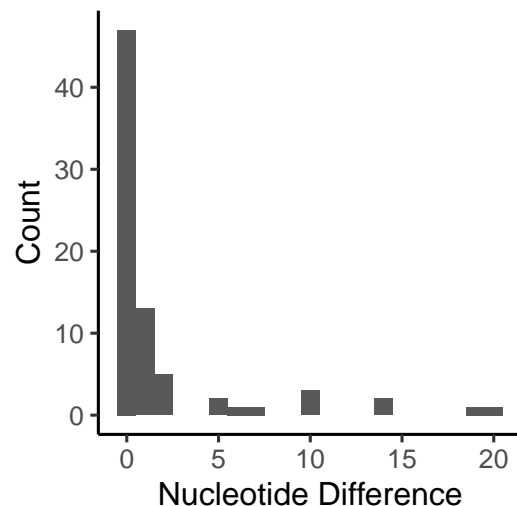
IGHV4-4*02

448 sequences assigned
162 (36.2%) exact matches, in which:
161 unique CDR3
6 unique J



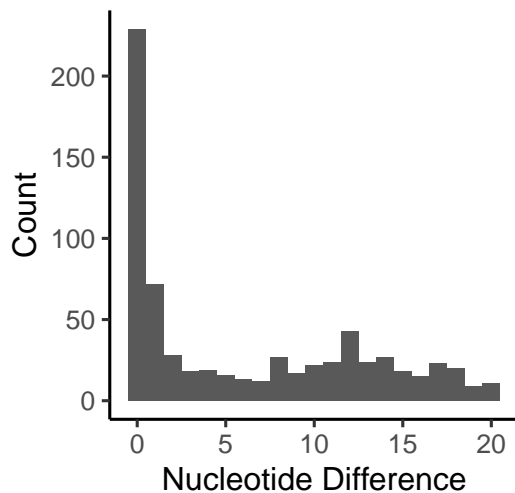
IGHV4-31*01

77 sequences assigned
47 (61%) exact matches, in which:
47 unique CDR3
6 unique J



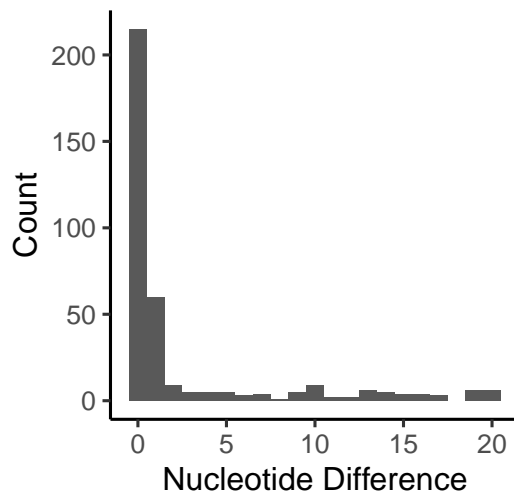
IGHV3-74*01

787 sequences assigned
229 (29.1%) exact matches, in which:
225 unique CDR3
6 unique J



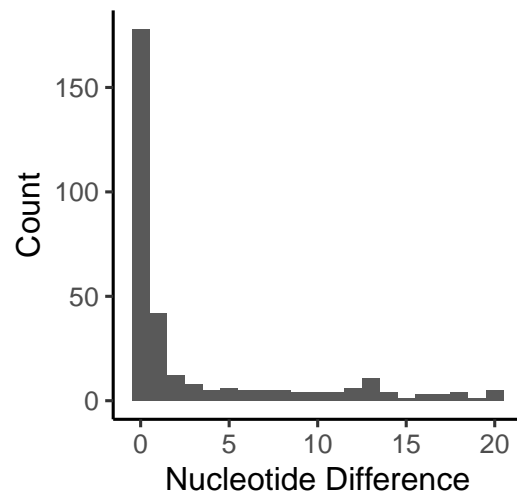
IGHV4-4*07

430 sequences assigned
215 (50%) exact matches, in which:
214 unique CDR3
6 unique J



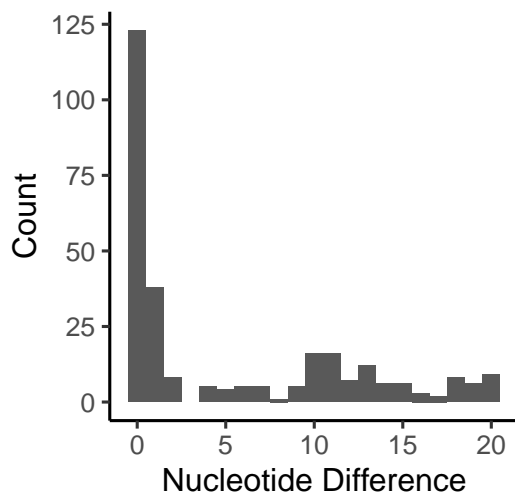
IGHV4-31*03

393 sequences assigned
178 (45.3%) exact matches, in which:
178 unique CDR3
5 unique J



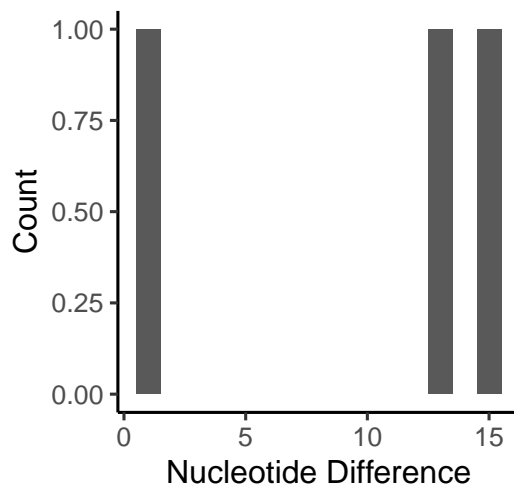
IGHV3-64D*06

410 sequences assigned
123 (30%) exact matches, in which:
122 unique CDR3
6 unique J



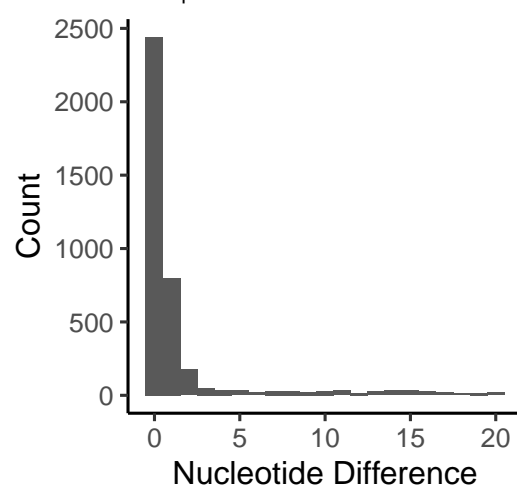
IGHV4-28*07

3 sequences assigned
No exact matches.



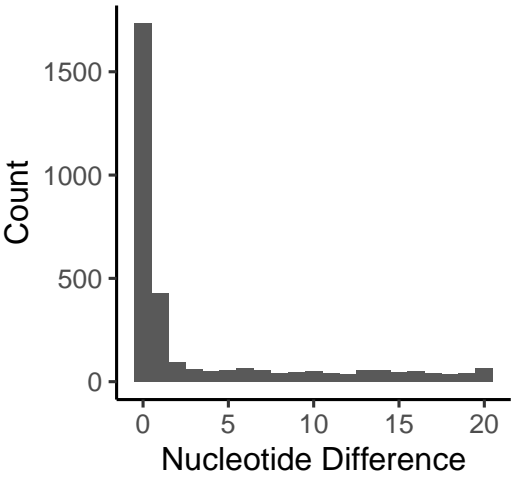
IGHV4-34*01

4231 sequences assigned
2441 (57.7%) exact matches, in which:
2416 unique CDR3
6 unique J



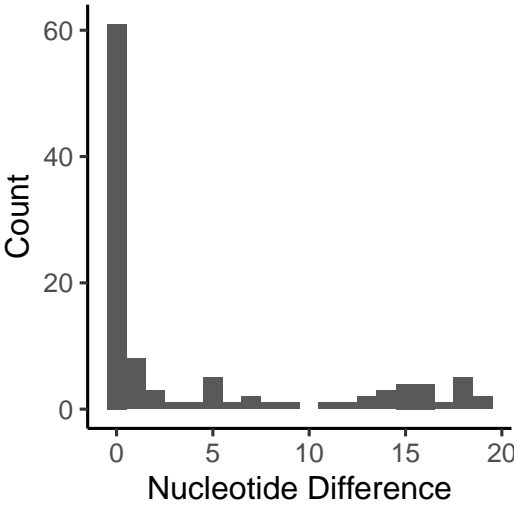
IGHV4-39*01

3736 sequences assigned
1734 (46.4%) exact matches, in which:
1727 unique CDR3
6 unique J



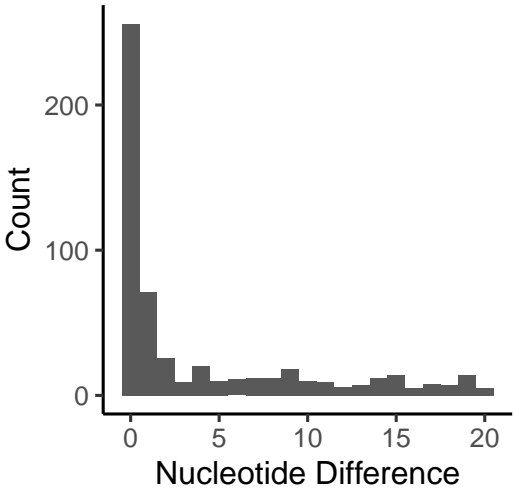
IGHV4-61*01

143 sequences assigned
61 (42.7%) exact matches, in which:
61 unique CDR3
5 unique J



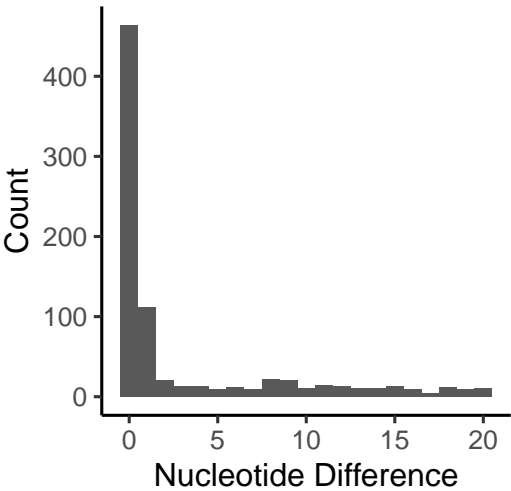
IGHV5-51*03

632 sequences assigned
256 (40.5%) exact matches, in which:
254 unique CDR3
6 unique J



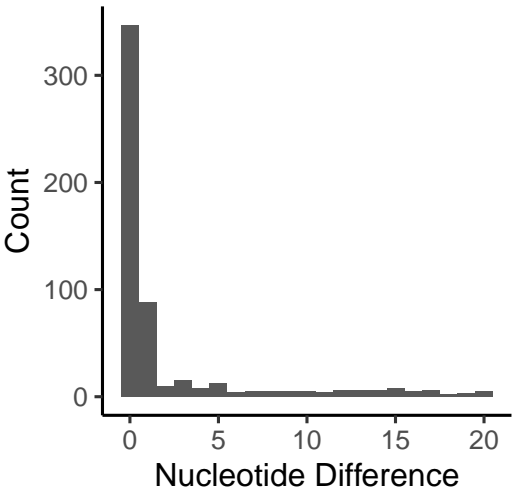
IGHV4-59*01

969 sequences assigned
464 (47.9%) exact matches, in which:
460 unique CDR3
6 unique J



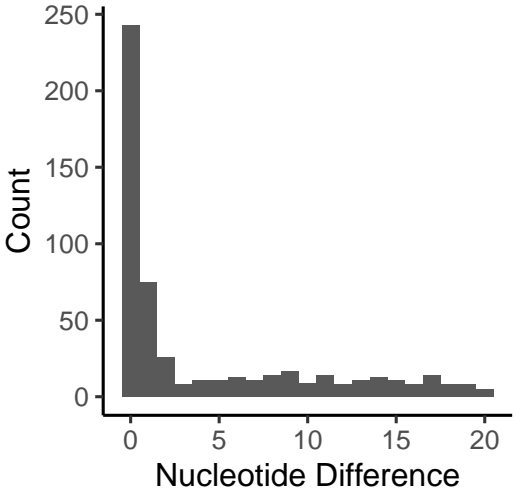
IGHV5-10-1*03

668 sequences assigned
347 (51.9%) exact matches, in which:
347 unique CDR3
6 unique J



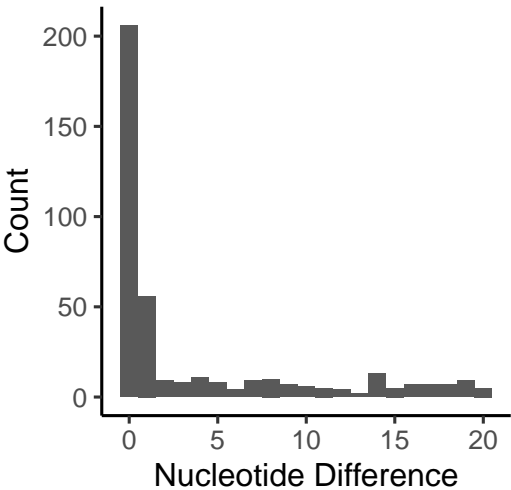
IGHV6-1*01

592 sequences assigned
243 (41%) exact matches, in which:
241 unique CDR3
6 unique J



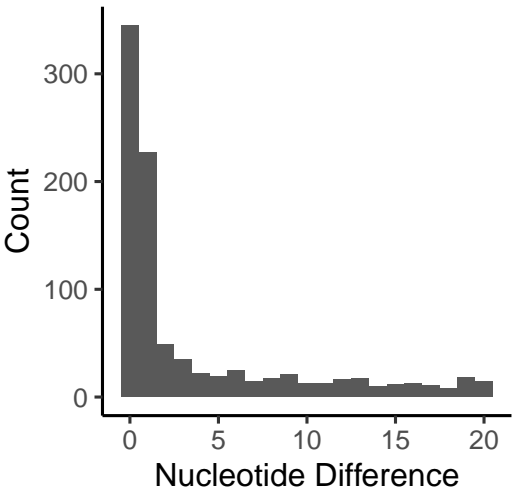
IGHV4-59*08

448 sequences assigned
206 (46%) exact matches, in which:
206 unique CDR3
6 unique J



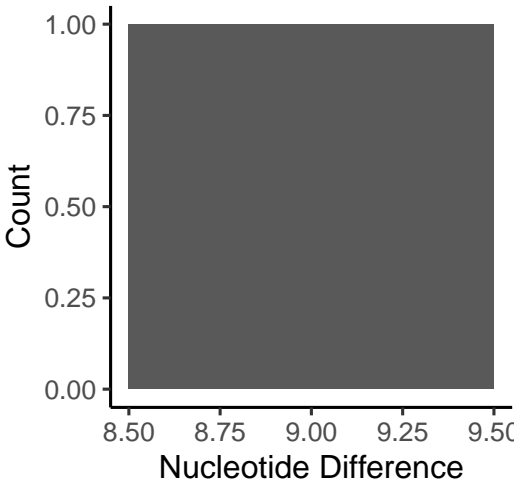
IGHV5-51*01

1074 sequences assigned
345 (32.1%) exact matches, in which:
345 unique CDR3
6 unique J



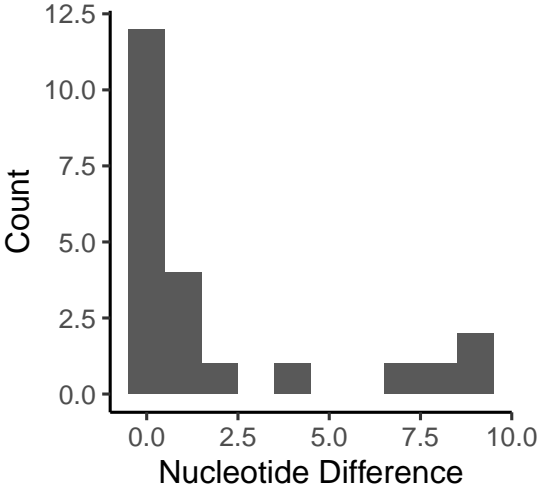
IGHV3/OR16-9*01

1 sequences assigned
No exact matches.



IGHV7-4-1*01

31 sequences assigned
12 (38.7%) exact matches, in which:
12 unique CDR3
4 unique J





Warning – no inferred sequences found.