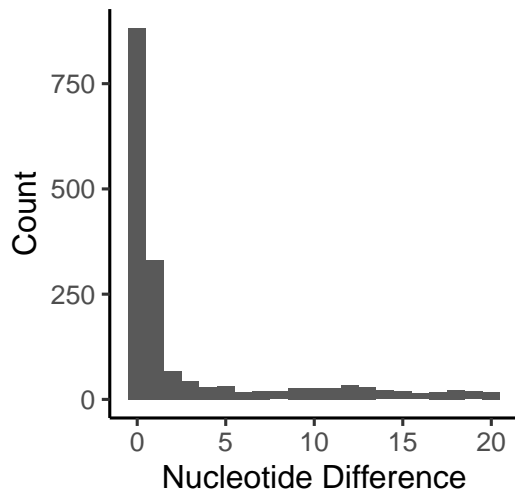


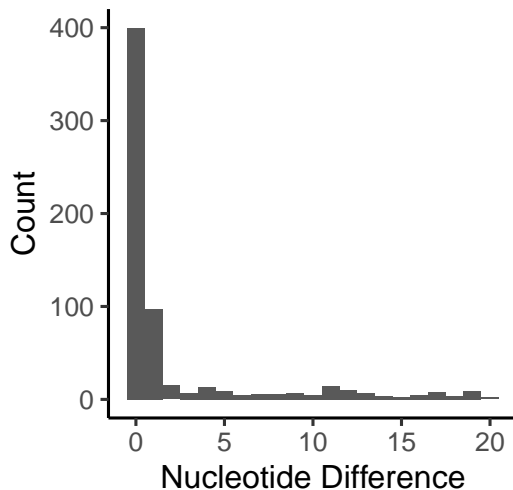
IGHV1-2*02

2019 sequences assigned
883 (43.7%) exact matches, in which:
868 unique CDR3
6 unique J



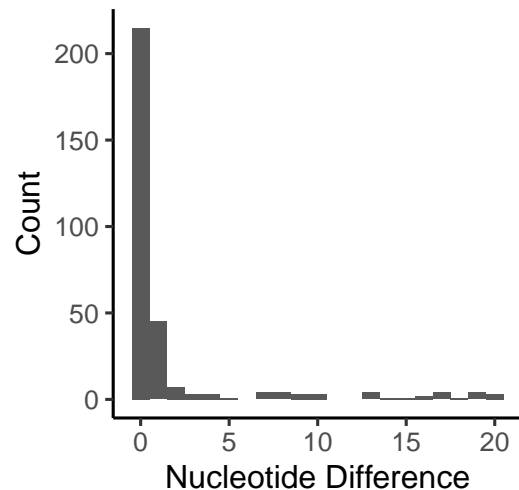
IGHV1-8*01

687 sequences assigned
400 (58.2%) exact matches, in which:
396 unique CDR3
6 unique J



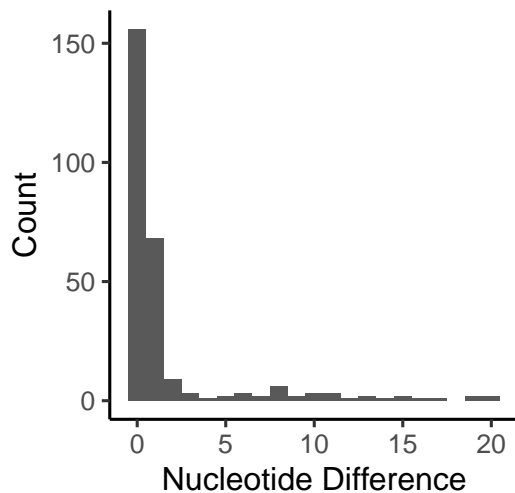
IGHV1-24*01

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



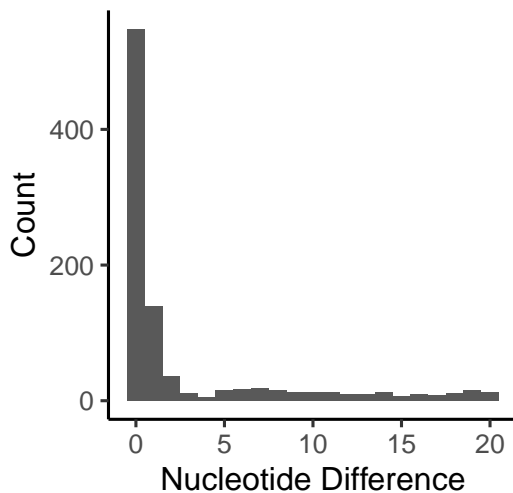
IGHV1-2*04

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



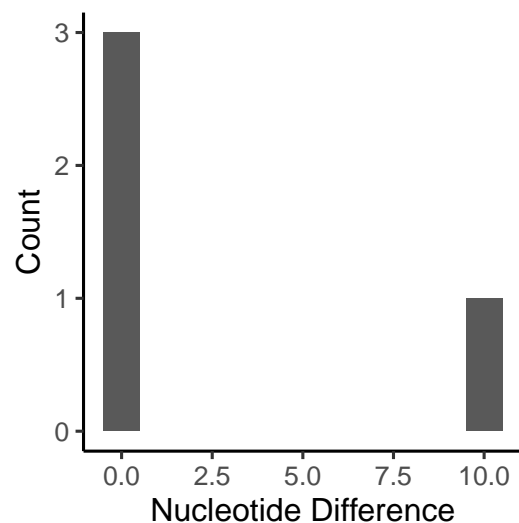
IGHV1-18*01

1220 sequences assigned
548 (44.9%) exact matches, in which:
543 unique CDR3
6 unique J



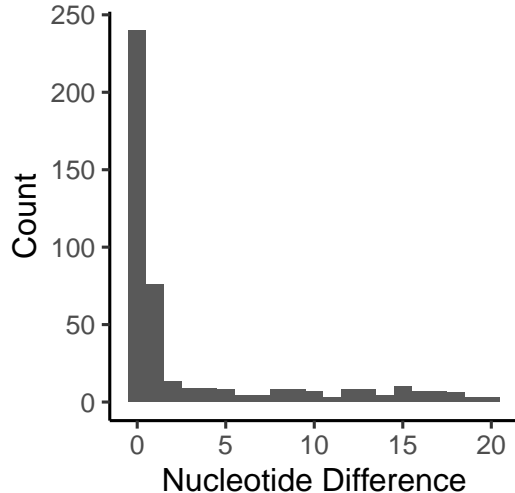
IGHV1-45*02

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



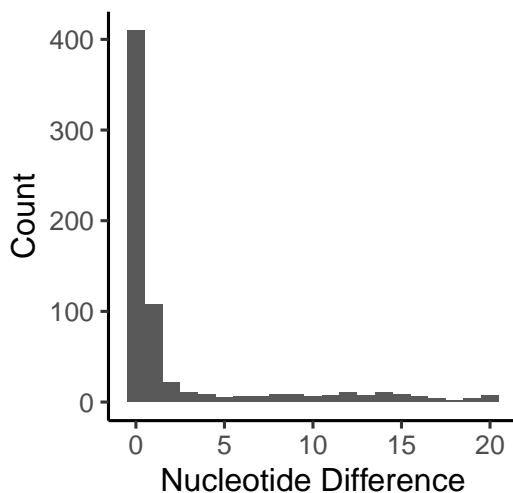
IGHV1-3*01

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



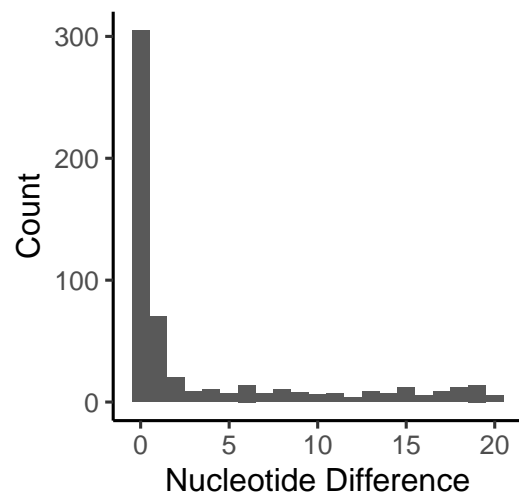
IGHV1-18*04

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



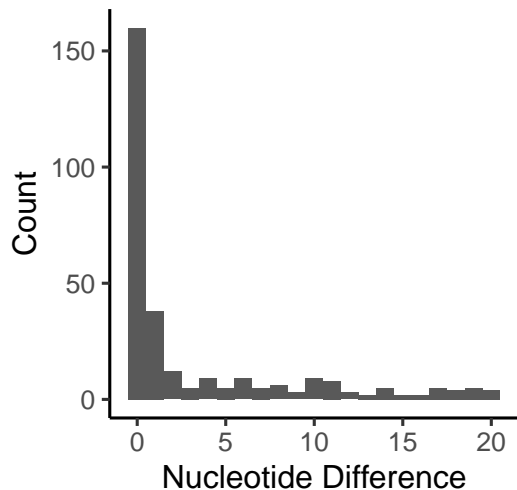
IGHV1-46*01

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



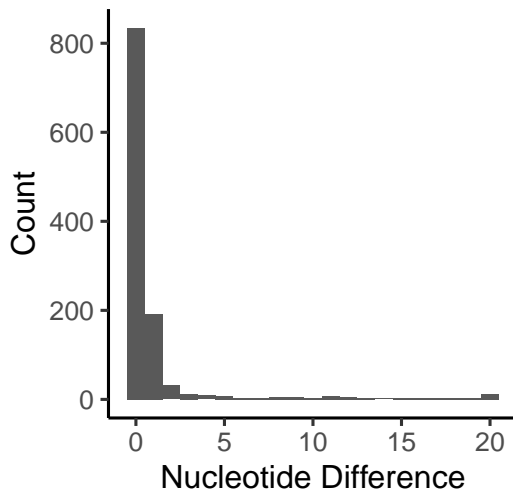
IGHV1-46*03

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



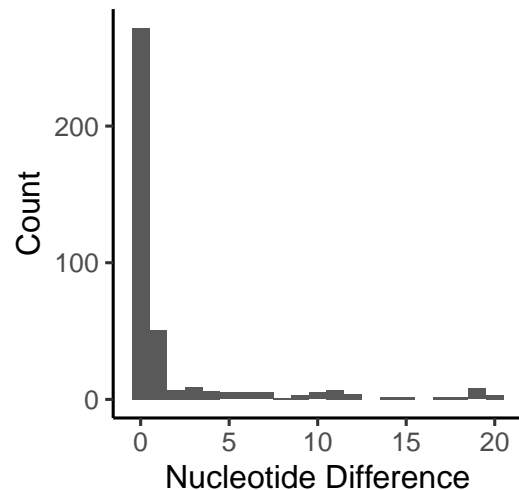
IGHV1-69*10

1350 sequences assigned
835 (61.9%) exact matches, in which:
832 unique CDR3
6 unique J



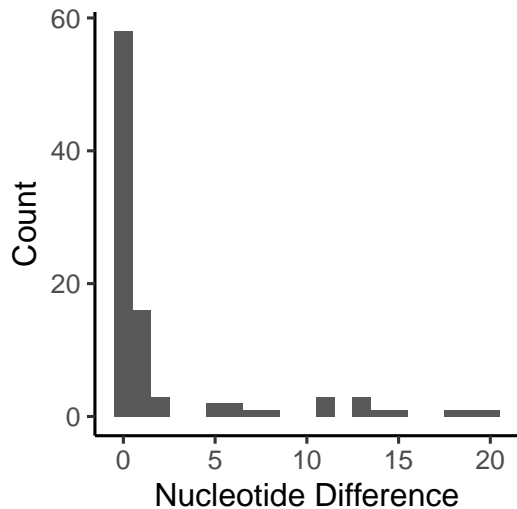
IGHV2-26*01

443 sequences assigned
272 (61.4%) exact matches, in which:
271 unique CDR3
5 unique J



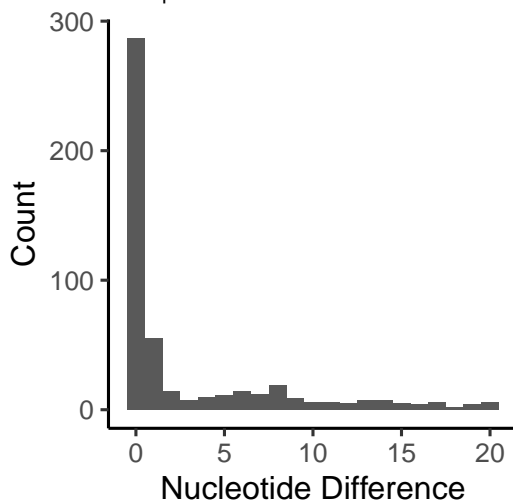
IGHV1-58*01

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



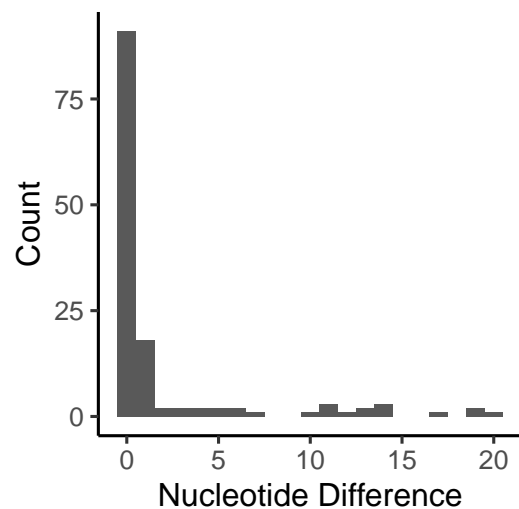
IGHV2-5*01

533 sequences assigned
287 (53.8%) exact matches, in which:
286 unique CDR3
6 unique J



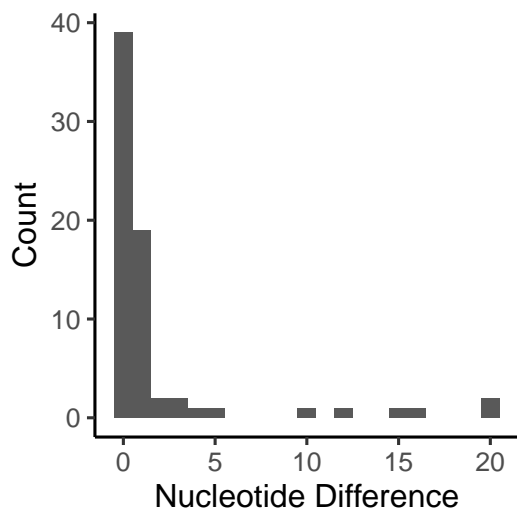
IGHV2-70*01

148 sequences assigned
91 (61.5%) exact matches, in which:
91 unique CDR3
5 unique J



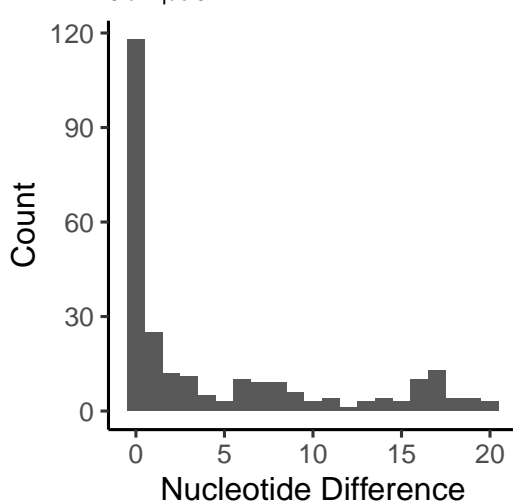
IGHV1-58*02

78 sequences assigned
39 (50%) exact matches, in which:
38 unique CDR3
5 unique J



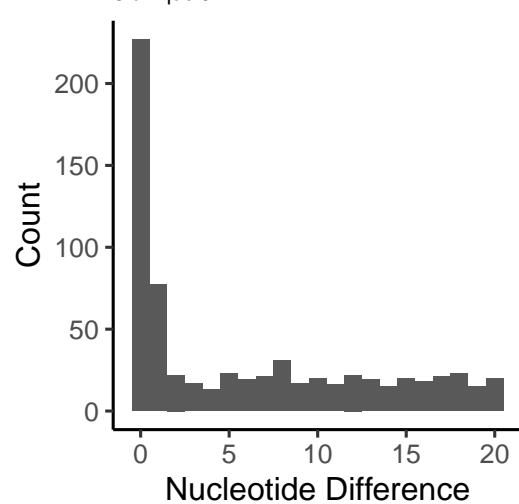
IGHV2-5*02

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



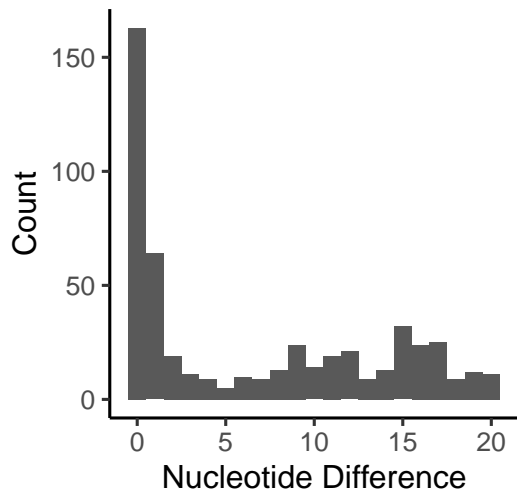
IGHV3-7*01

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



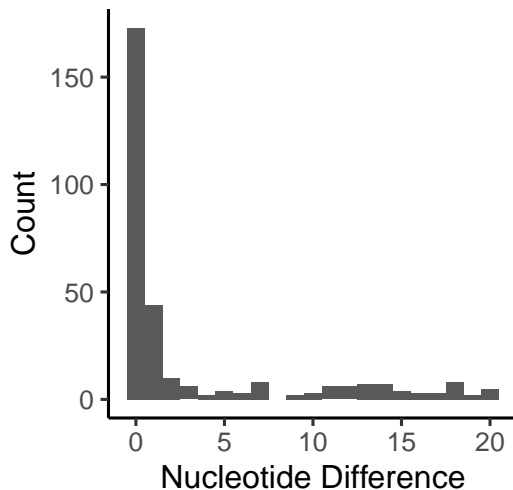
IGHV3-7*03

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



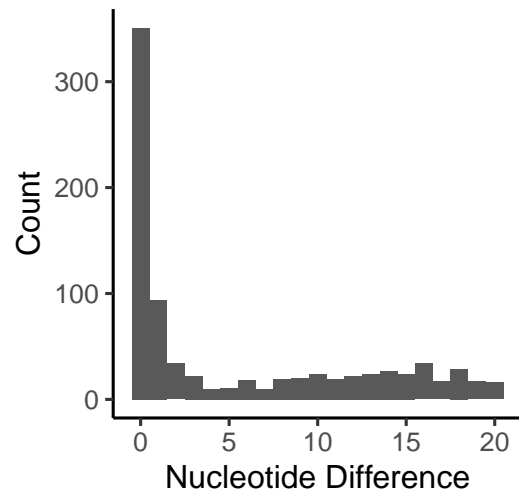
IGHV3-11*06

567 sequences assigned
173 (30.5%) exact matches, in which:
173 unique CDR3
6 unique J



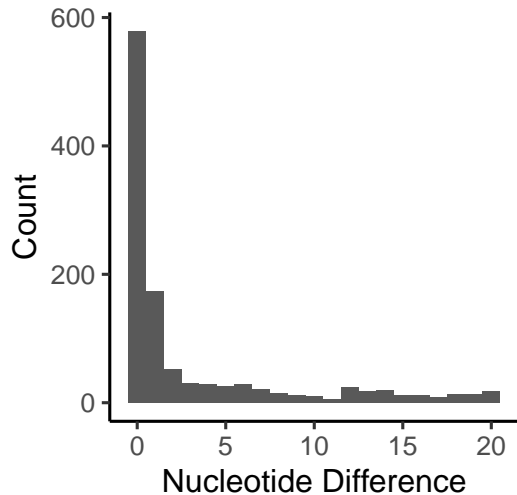
IGHV3-15*01

1065 sequences assigned
351 (33%) exact matches, in which:
348 unique CDR3
6 unique J



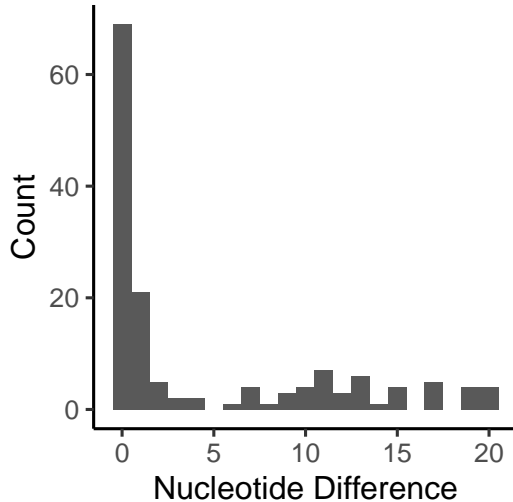
IGHV3-9*01

1343 sequences assigned
579 (43.1%) exact matches, in which:
575 unique CDR3
6 unique J



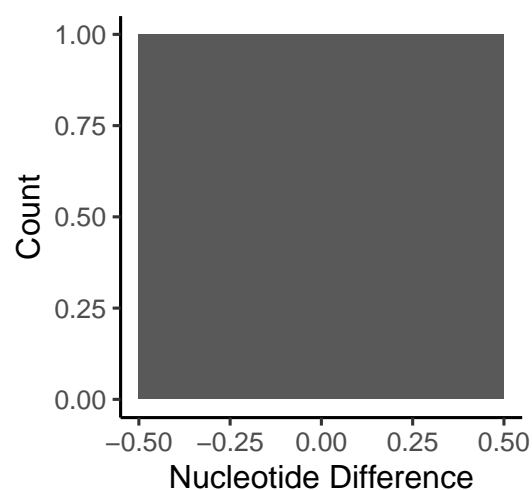
IGHV3-13*01

174 sequences assigned
69 (39.7%) exact matches, in which:
69 unique CDR3
5 unique J



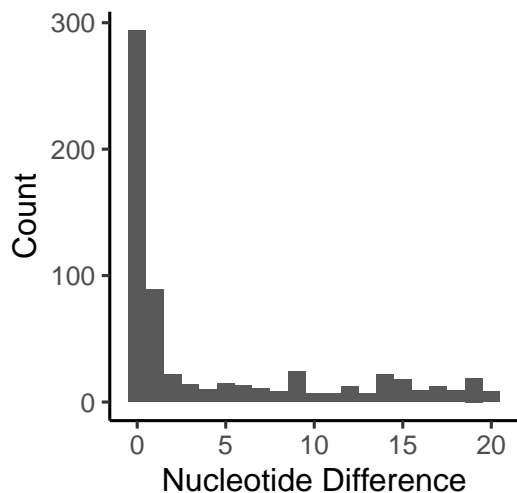
IGHV3-20*02

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



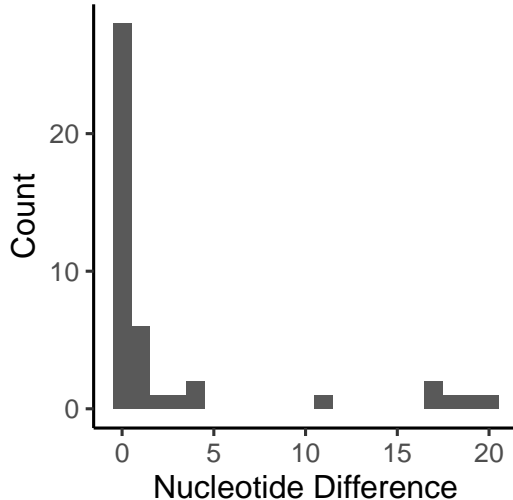
IGHV3-11*01

759 sequences assigned
294 (38.7%) exact matches, in which:
290 unique CDR3
6 unique J



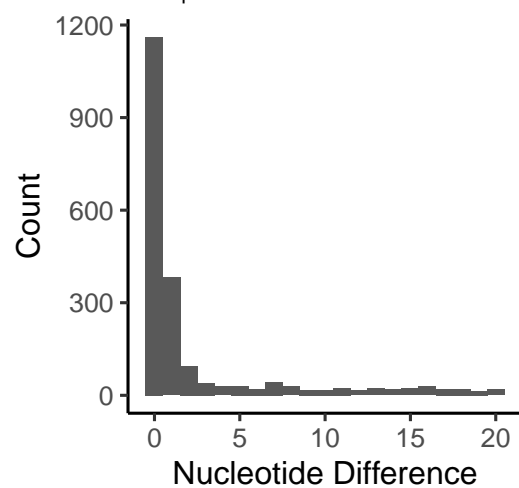
IGHV3-13*05

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



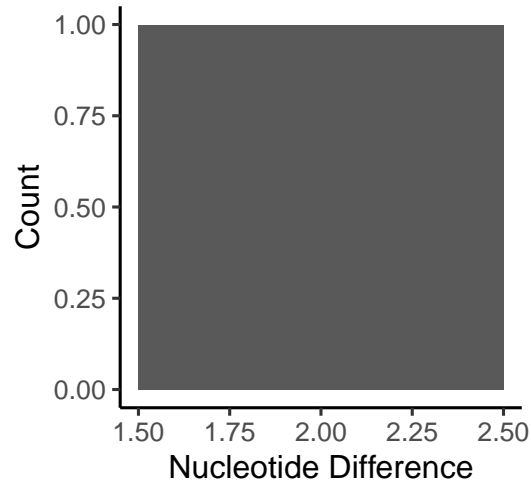
IGHV3-21*01

2424 sequences assigned
1161 (47.9%) exact matches, in which:
1155 unique CDR3
6 unique J



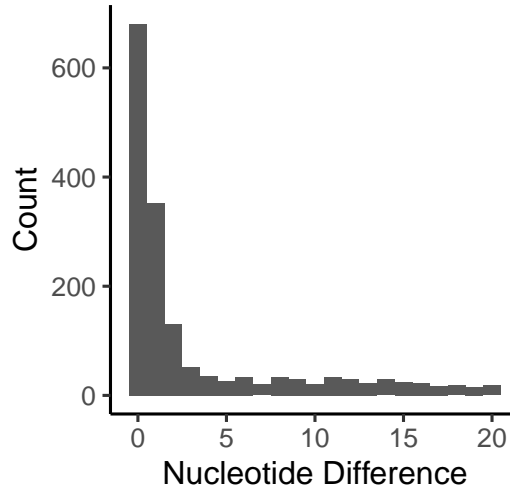
IGHV3-22*02

1 sequences assigned
No exact matches.



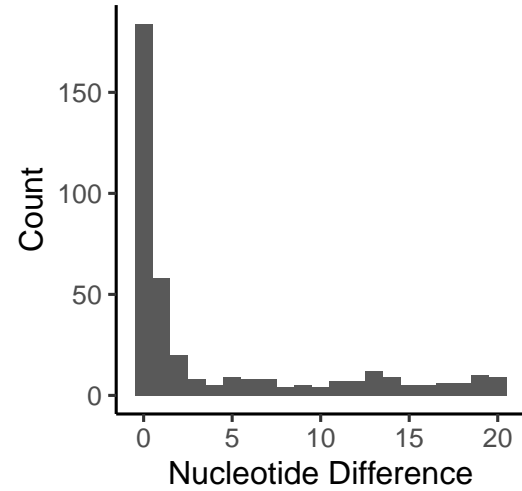
IGHV3-33*01

1858 sequences assigned
681 (36.7%) exact matches, in which:
677 unique CDR3
6 unique J



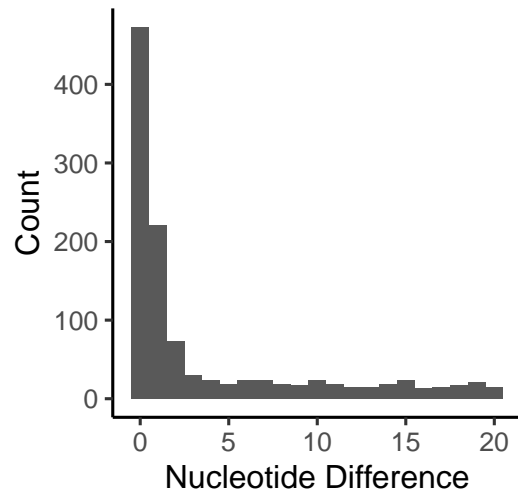
IGHV3-48*02

489 sequences assigned
184 (37.6%) exact matches, in which:
181 unique CDR3
6 unique J



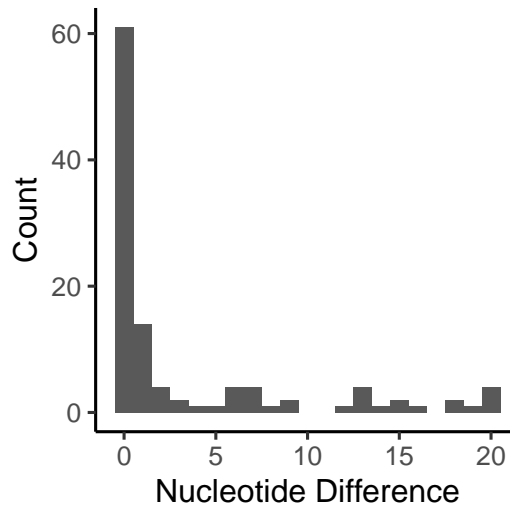
IGHV3-30*01

1305 sequences assigned
473 (36.2%) exact matches, in which:
471 unique CDR3
6 unique J



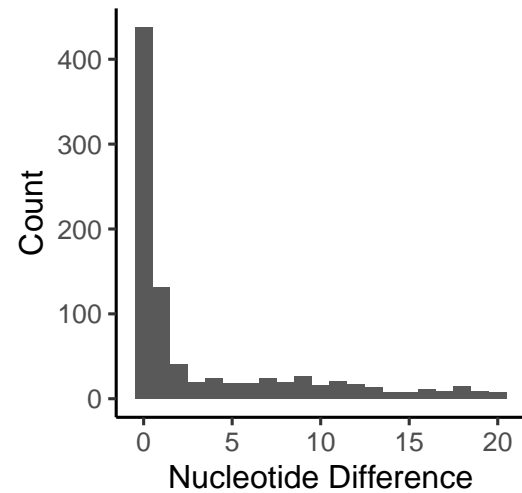
IGHV3-43*01

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



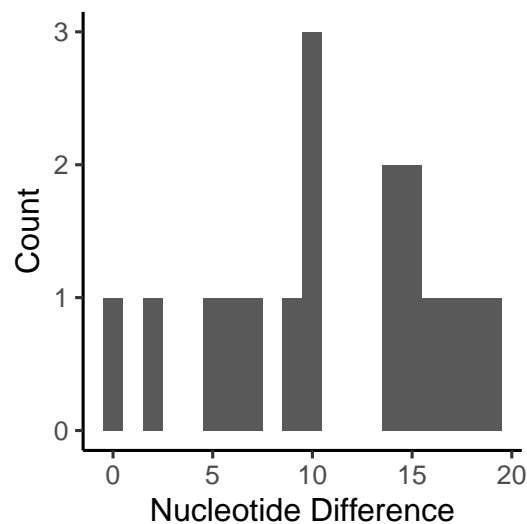
IGHV3-48*03

1045 sequences assigned
438 (41.9%) exact matches, in which:
437 unique CDR3
6 unique J



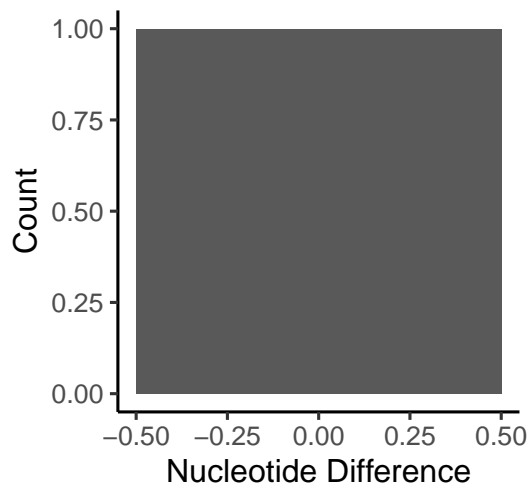
IGHV3-30-3*03

54 sequences assigned
1 (1.9%) exact matches, in which:
1 unique CDR3
1 unique J



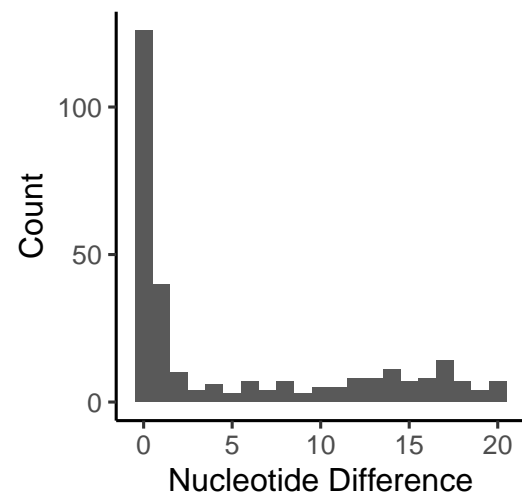
IGHV3-47*02

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



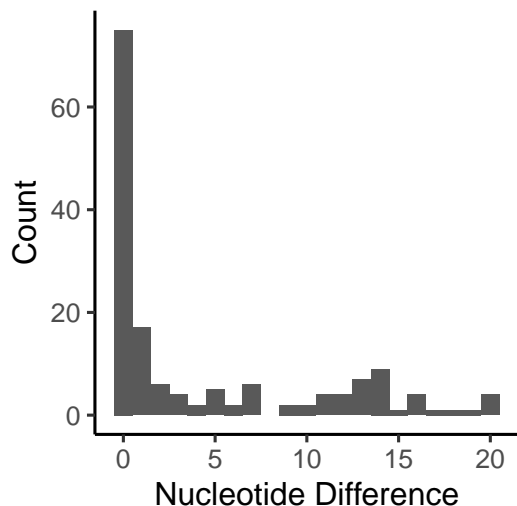
IGHV3-49*04

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



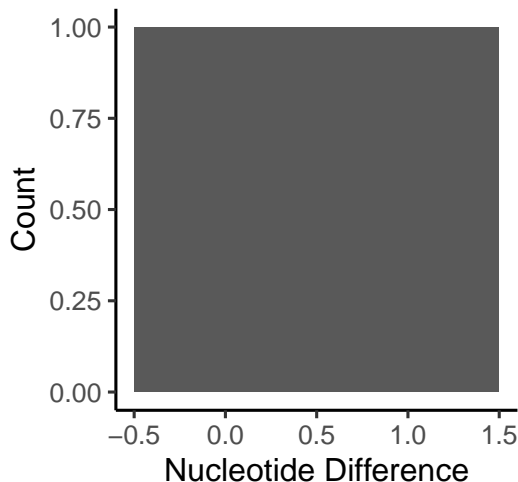
IGHV3-49*05

197 sequences assigned
75 (38.1%) exact matches, in which:
74 unique CDR3
6 unique J



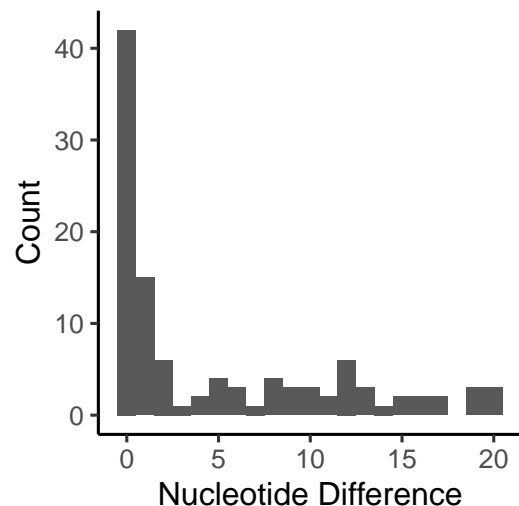
IGHV3-66*03

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



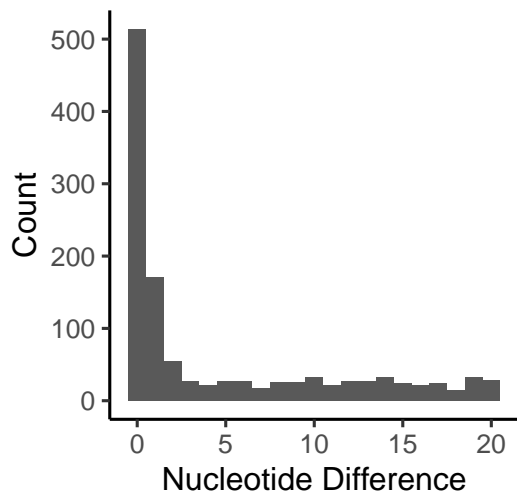
IGHV3-73*02

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



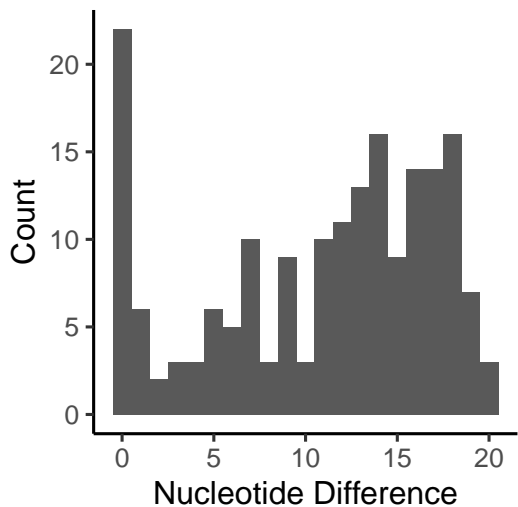
IGHV3-53*01

1443 sequences assigned
514 (35.6%) exact matches, in which:
506 unique CDR3
6 unique J



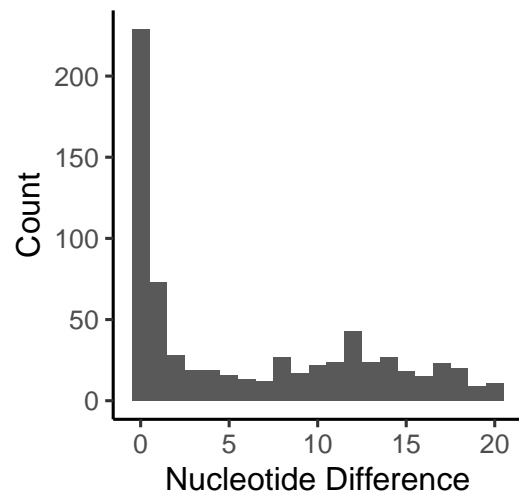
IGHV3-72*01

233 sequences assigned
22 (9.4%) exact matches, in which:
22 unique CDR3
5 unique J



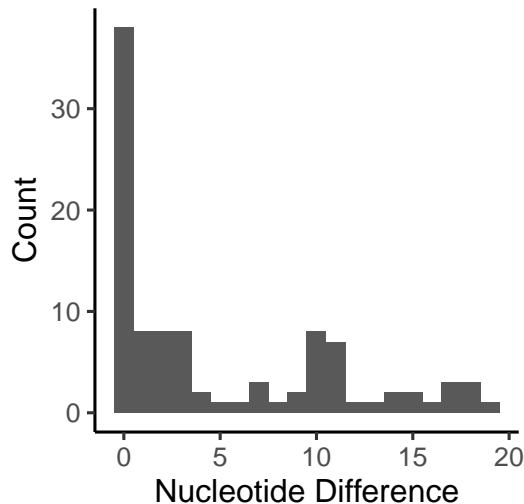
IGHV3-74*01

789 sequences assigned
229 (29%) exact matches, in which:
225 unique CDR3
6 unique J



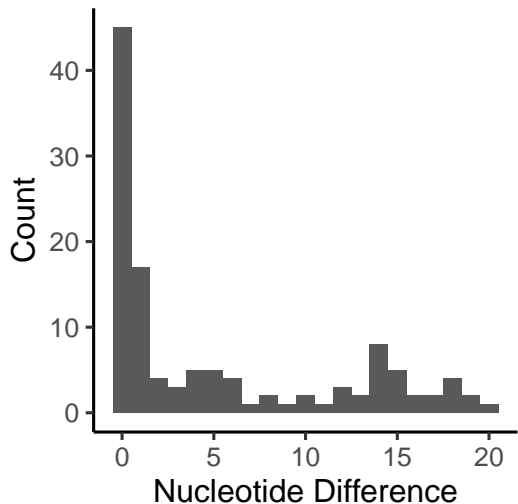
IGHV3-64*01

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



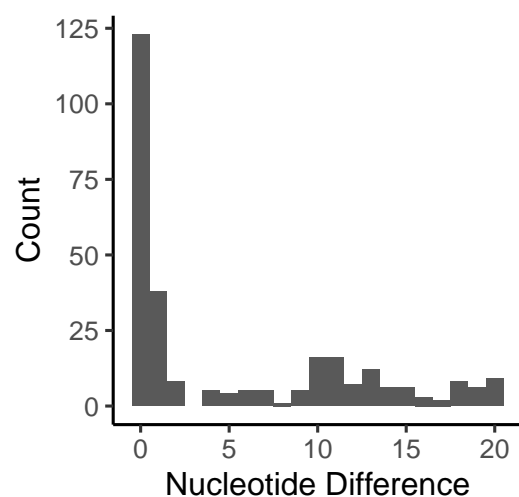
IGHV3-73*01

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



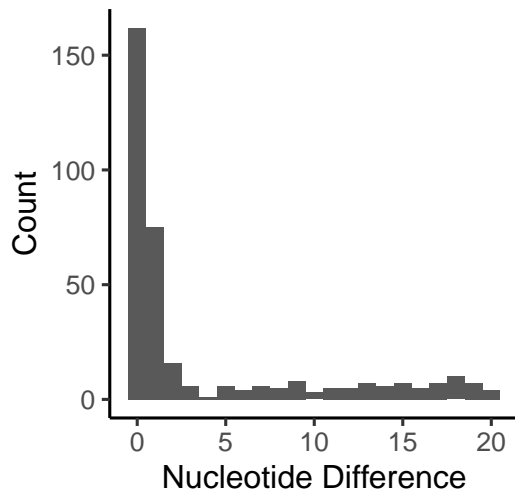
IGHV3-64D*06

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



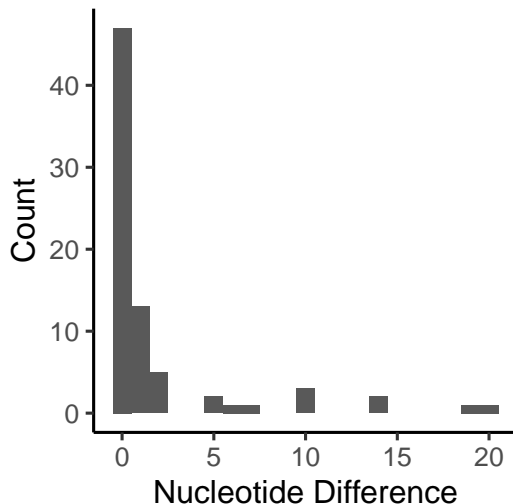
IGHV4-4*02

449 sequences assigned
162 (36.1%) exact matches, in which:
161 unique CDR3
6 unique J



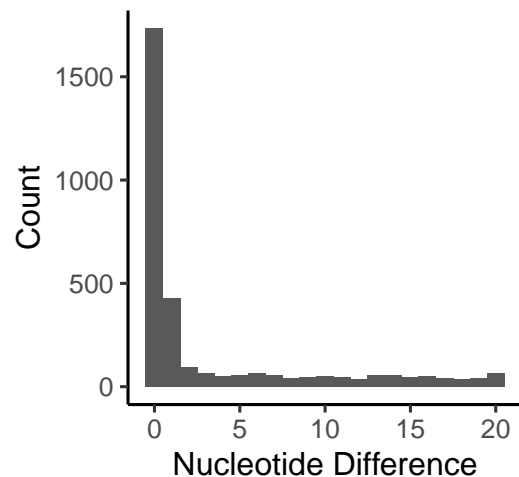
IGHV4-31*01

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



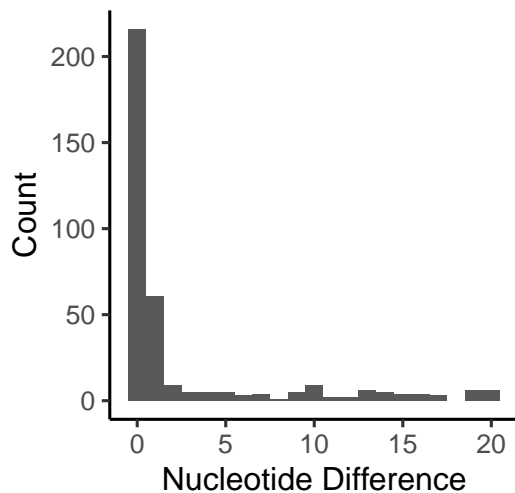
IGHV4-39*01

3744 sequences assigned
1734 (46.3%) exact matches, in which:
1727 unique CDR3
6 unique J



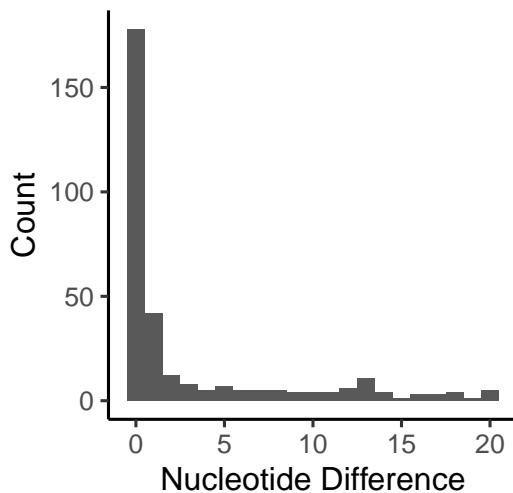
IGHV4-4*07

432 sequences assigned
216 (50%) exact matches, in which:
215 unique CDR3
6 unique J



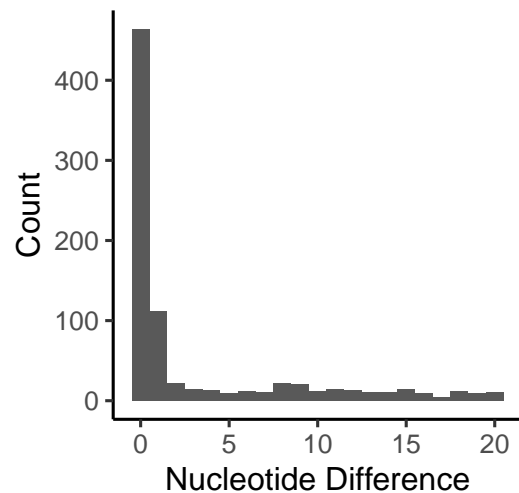
IGHV4-31*03

395 sequences assigned
178 (45.1%) exact matches, in which:
178 unique CDR3
5 unique J



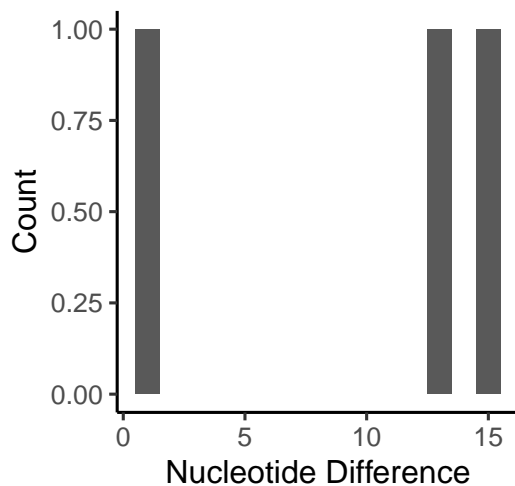
IGHV4-59*01

976 sequences assigned
464 (47.5%) exact matches, in which:
460 unique CDR3
6 unique J



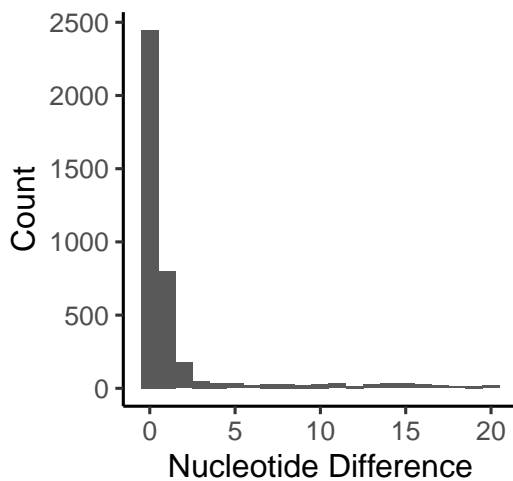
IGHV4-28*07

3 sequences assigned
No exact matches.



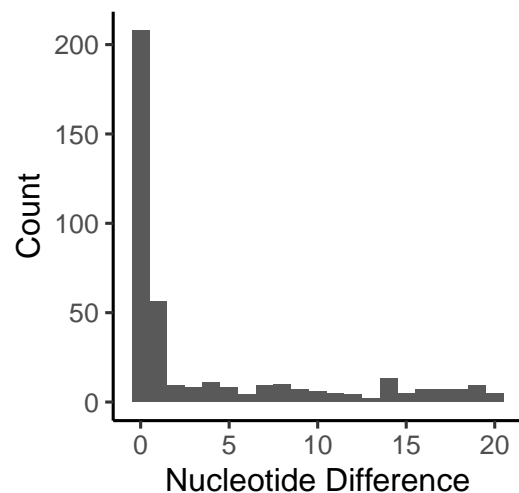
IGHV4-34*01

4242 sequences assigned
2447 (57.7%) exact matches, in which:
2422 unique CDR3
6 unique J



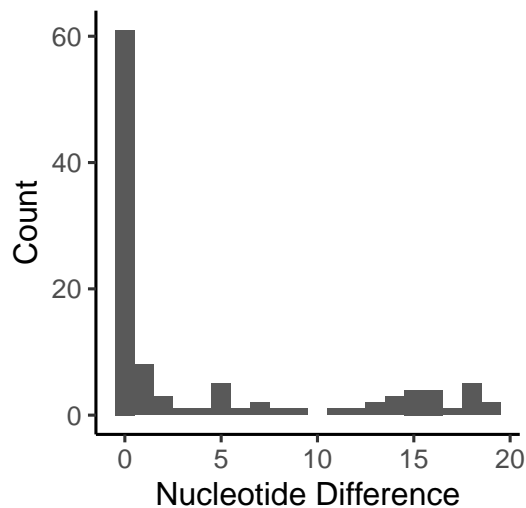
IGHV4-59*08

450 sequences assigned
208 (46.2%) exact matches, in which:
208 unique CDR3
6 unique J



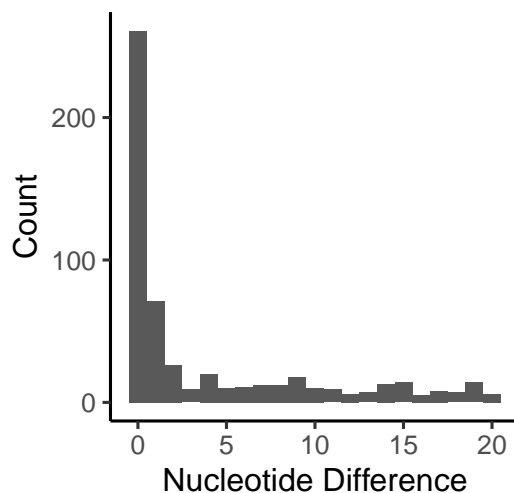
IGHV4–61*01

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



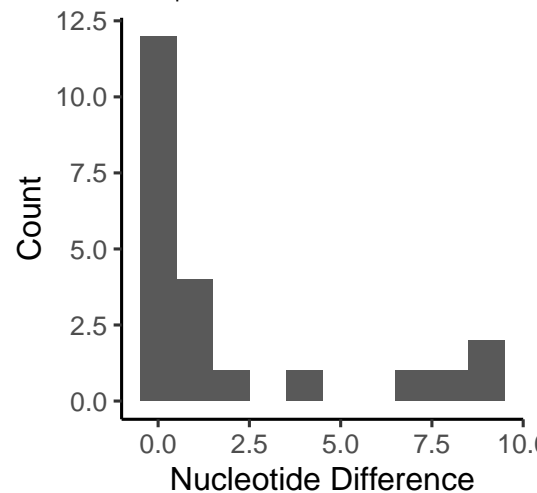
IGHV5–51*03

641 sequences assigned
261 (40.7%) exact matches, in which:
259 unique CDR3
6 unique J



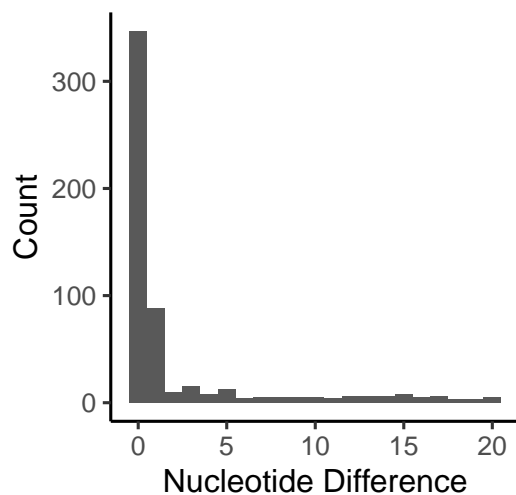
IGHV7–4–1*01

32 sequences assigned
12 (37.5%) exact matches, in which:
12 unique CDR3
4 unique J



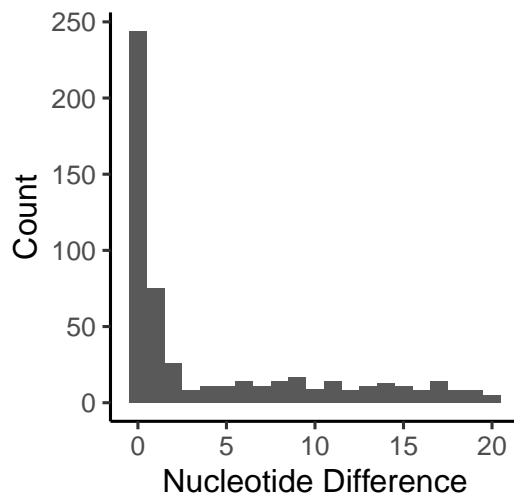
IGHV5–10–1*03

670 sequences assigned
347 (51.8%) exact matches, in which:
347 unique CDR3
6 unique J



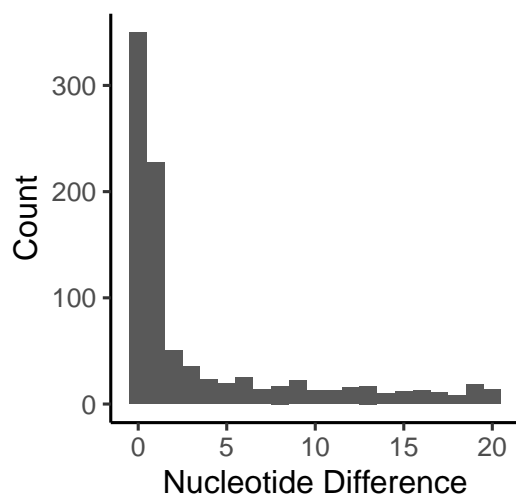
IGHV6–1*01

595 sequences assigned
244 (41%) exact matches, in which:
242 unique CDR3
6 unique J



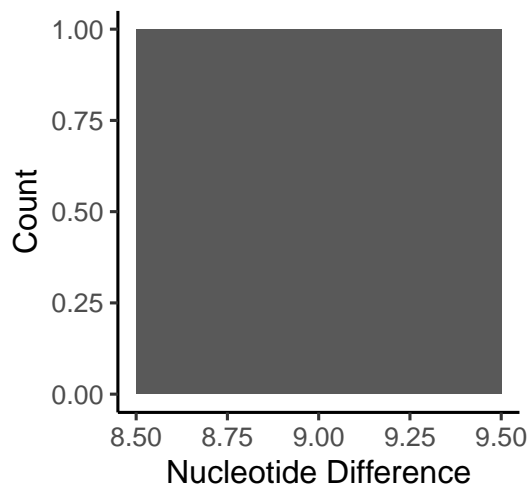
IGHV5–51*01

1085 sequences assigned
350 (32.3%) exact matches, in which:
350 unique CDR3
6 unique J



IGHV3/OR16–9*01

1 sequences assigned
No exact matches.





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