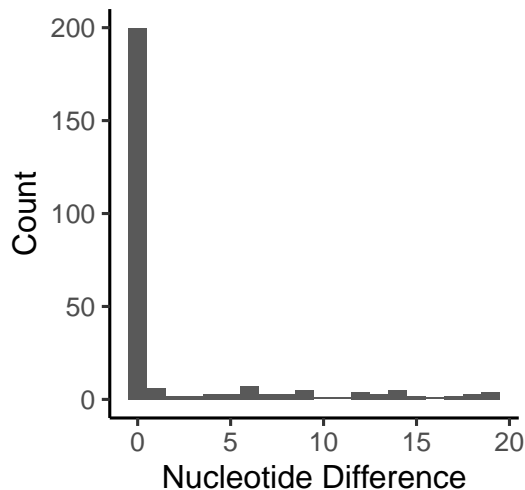


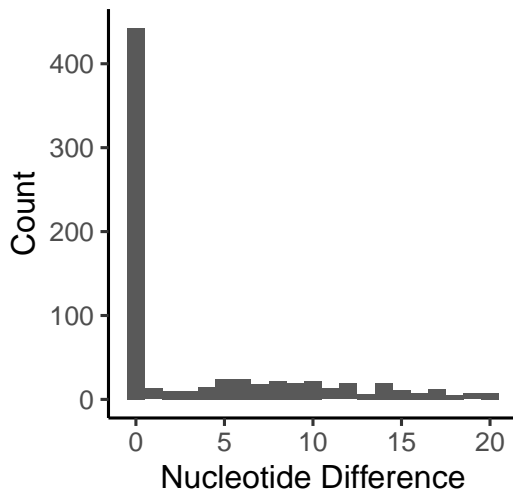
IGHV1-2*04

270 sequences assigned
200 (74.1%) exact matches, in which:
199 unique CDR3
7 unique J



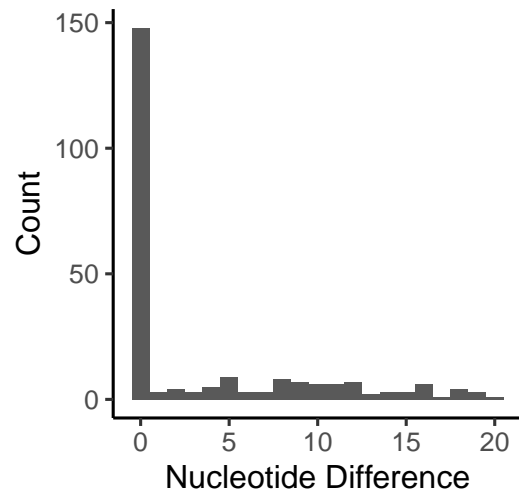
IGHV1-18*04

764 sequences assigned
443 (58%) exact matches, in which:
442 unique CDR3
7 unique J



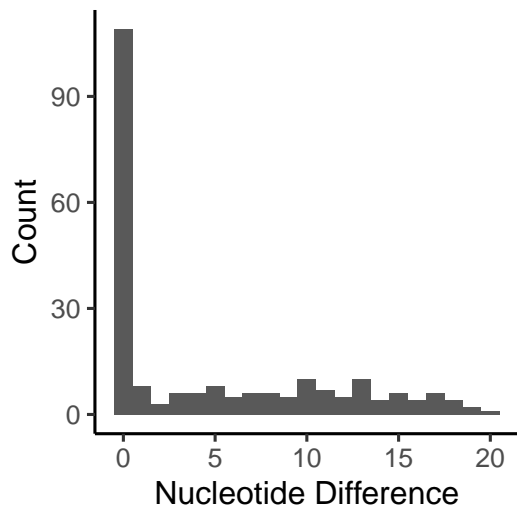
IGHV1-46*01

253 sequences assigned
148 (58.5%) exact matches, in which:
148 unique CDR3
5 unique J



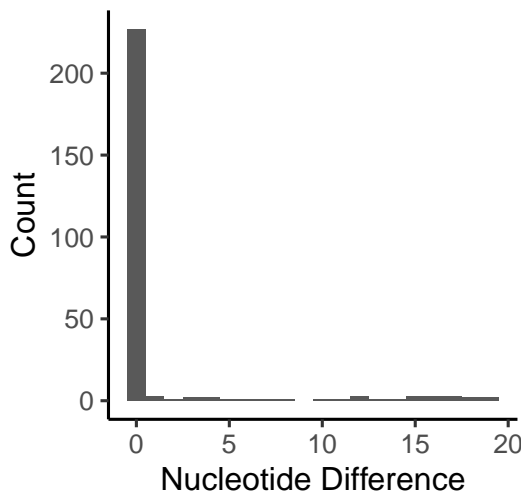
IGHV1-3*01_05

244 sequences assigned
109 (44.7%) exact matches, in which:
108 unique CDR3
6 unique J



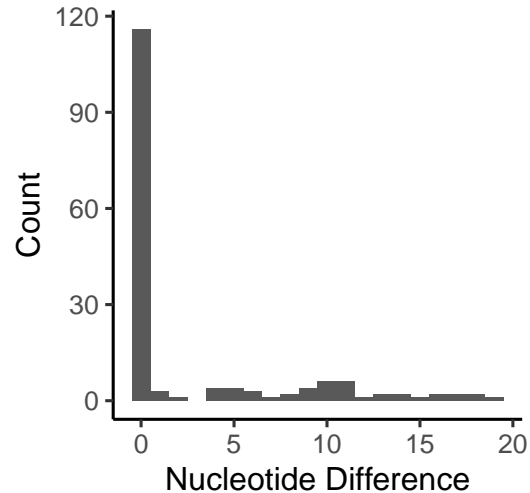
IGHV1-24*01

268 sequences assigned
227 (84.7%) exact matches, in which:
226 unique CDR3
7 unique J



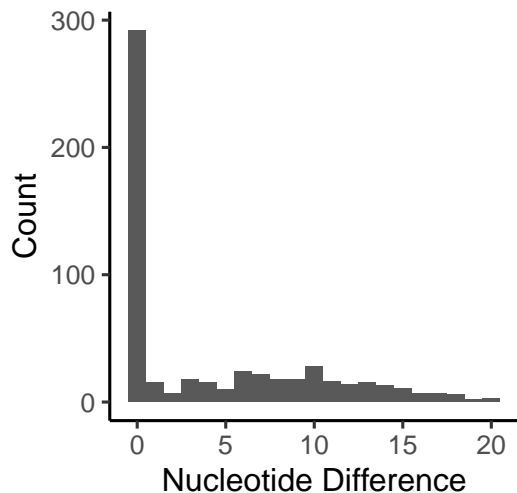
IGHV1-46*04

172 sequences assigned
116 (67.4%) exact matches, in which:
116 unique CDR3
4 unique J



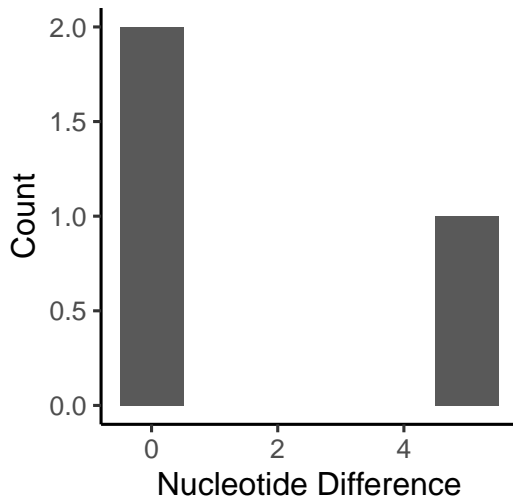
IGHV1-18*01

620 sequences assigned
292 (47.1%) exact matches, in which:
288 unique CDR3
6 unique J



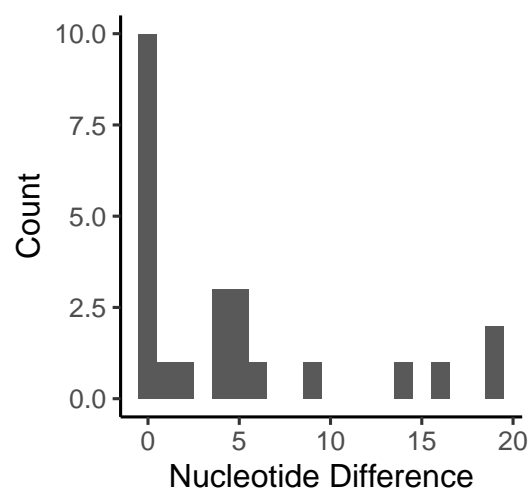
IGHV1-45*02

7 sequences assigned
2 (28.6%) exact matches, in which:
2 unique CDR3
1 unique J

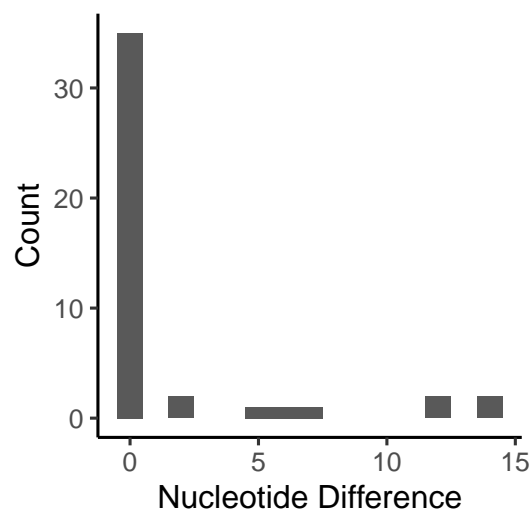


IGHV1-58*02

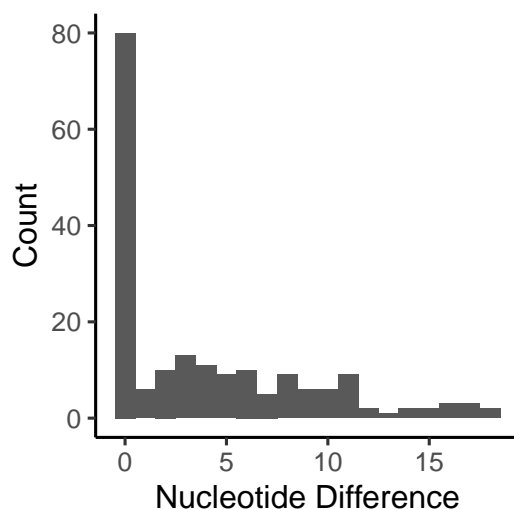
36 sequences assigned
10 (27.8%) exact matches, in which:
10 unique CDR3
3 unique J



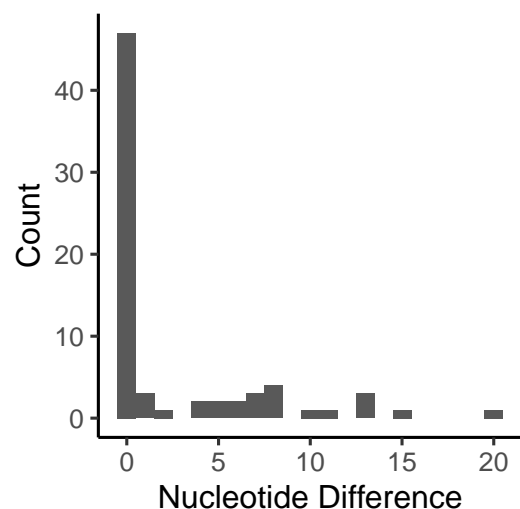
78 sequences assigned
35 (44.9%) exact matches, in which:
35 unique CDR3
5 unique J



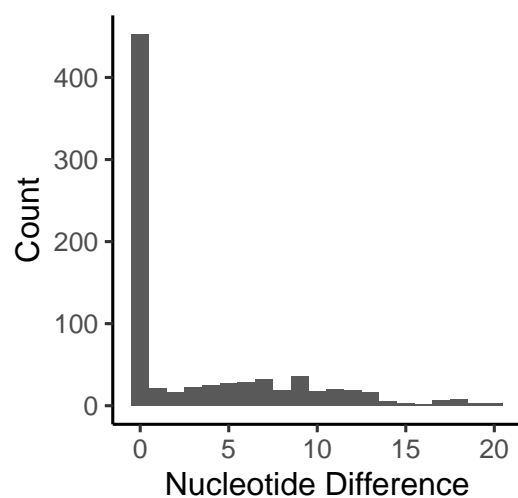
206 sequences assigned
80 (38.8%) exact matches, in which:
80 unique CDR3
7 unique J



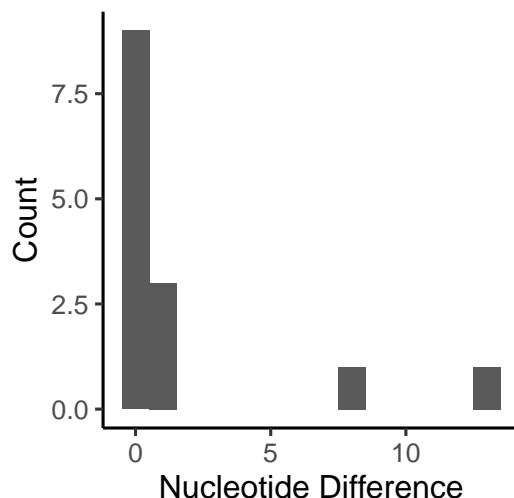
74 sequences assigned
47 (63.5%) exact matches, in which:
47 unique CDR3
5 unique J



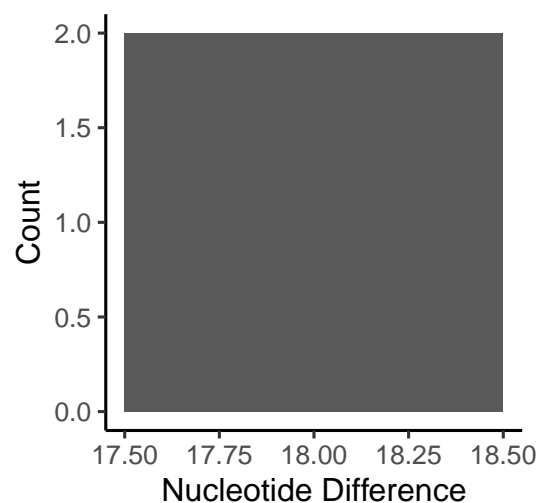
805 sequences assigned
453 (56.3%) exact matches, in which:
453 unique CDR3
7 unique J



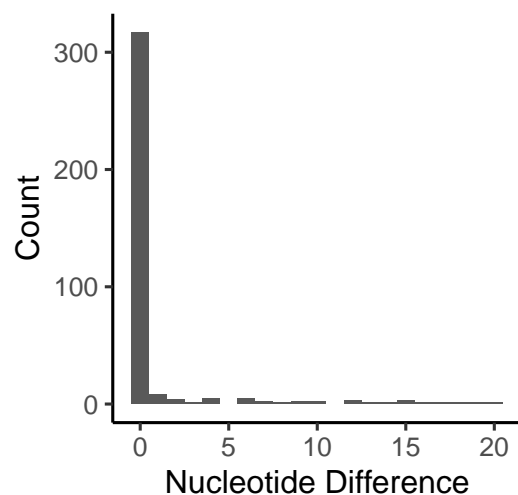
16 sequences assigned
9 (56.2%) exact matches, in which:
9 unique CDR3
4 unique J



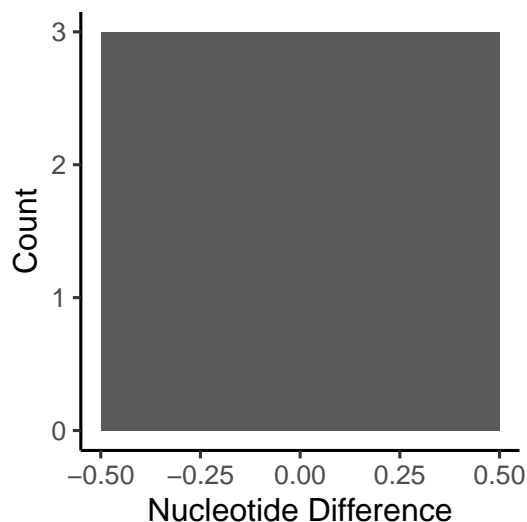
2 sequences assigned
No exact matches.



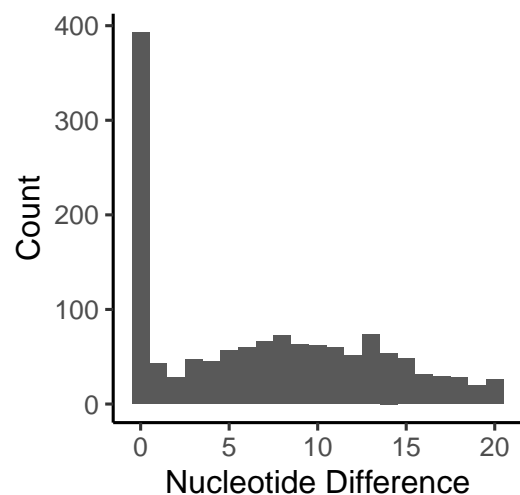
388 sequences assigned
317 (81.7%) exact matches, in which:
317 unique CDR3
7 unique J



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

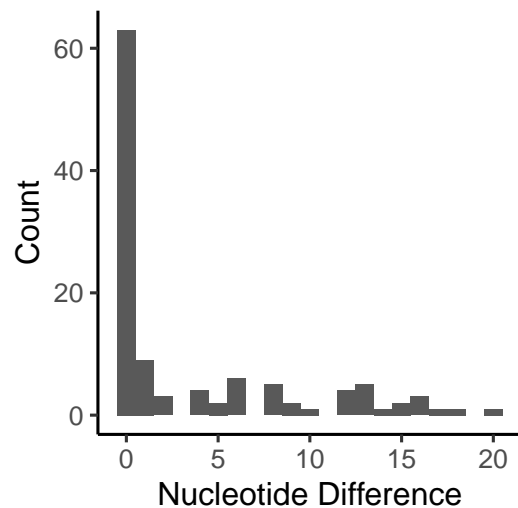


1407 sequences assigned
393 (27.9%) exact matches, in which:
388 unique CDR3
7 unique J



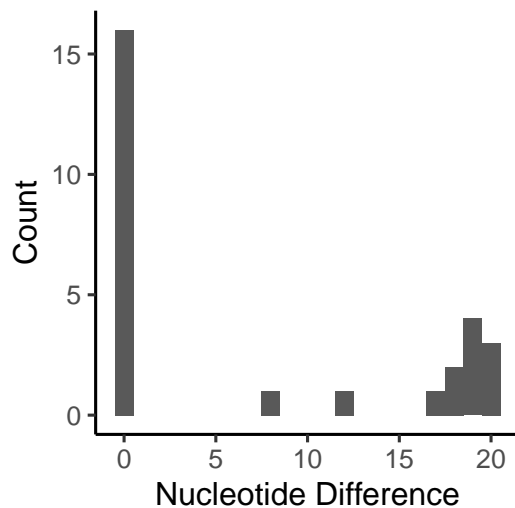
IGHV3-11*06

120 sequences assigned
63 (52.5%) exact matches, in which:
63 unique CDR3
5 unique J



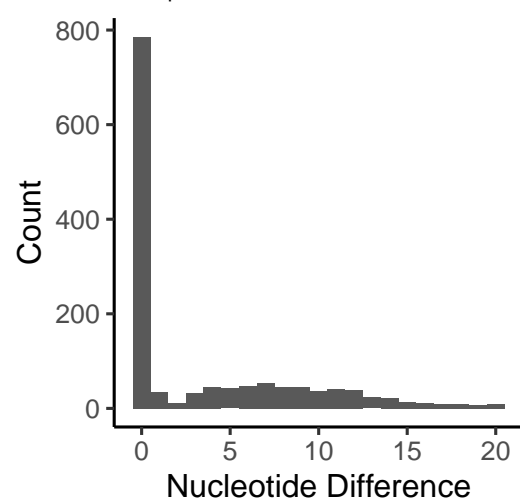
IGHV3-13*05

28 sequences assigned
16 (57.1%) exact matches, in which:
16 unique CDR3
5 unique J



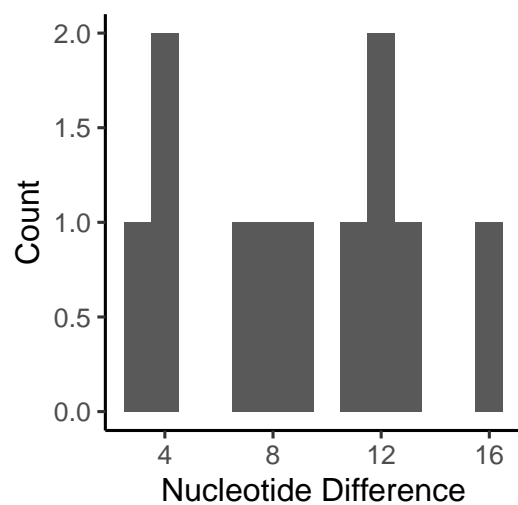
IGHV3-21*01_02

1408 sequences assigned
786 (55.8%) exact matches, in which:
771 unique CDR3
7 unique J



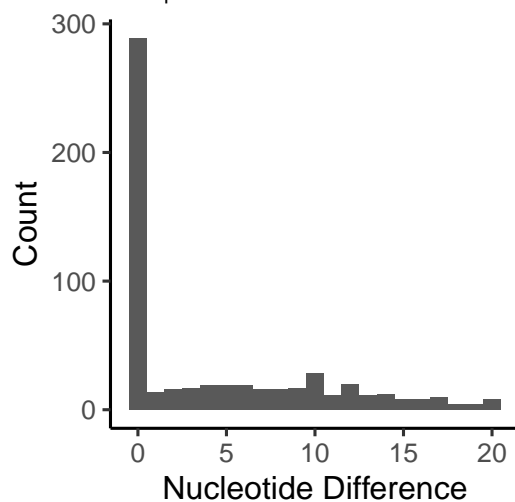
IGHV3-13*01

12 sequences assigned
No exact matches.



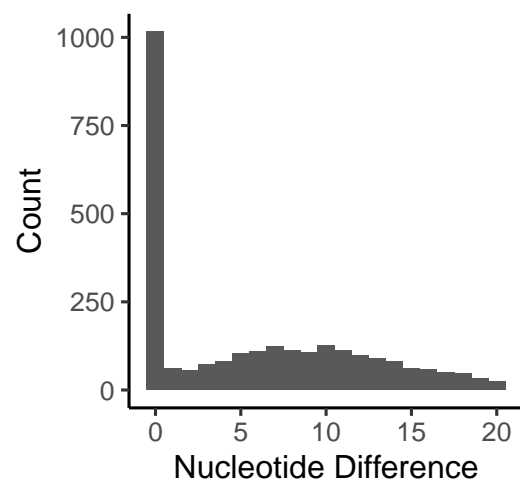
IGHV3-15*01_02

603 sequences assigned
289 (47.9%) exact matches, in which:
288 unique CDR3
7 unique J



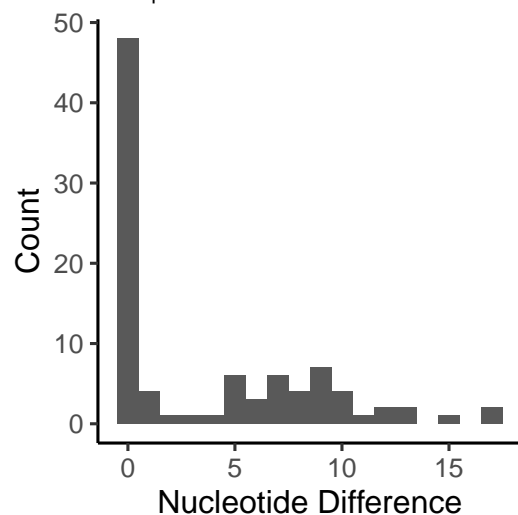
IGHV3-23*01_04

2783 sequences assigned
1016 (36.5%) exact matches, in which:
1001 unique CDR3
7 unique J



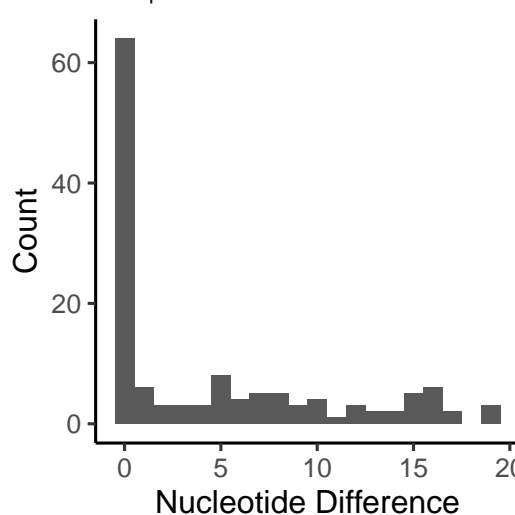
IGHV3-13*04

127 sequences assigned
48 (37.8%) exact matches, in which:
47 unique CDR3
5 unique J



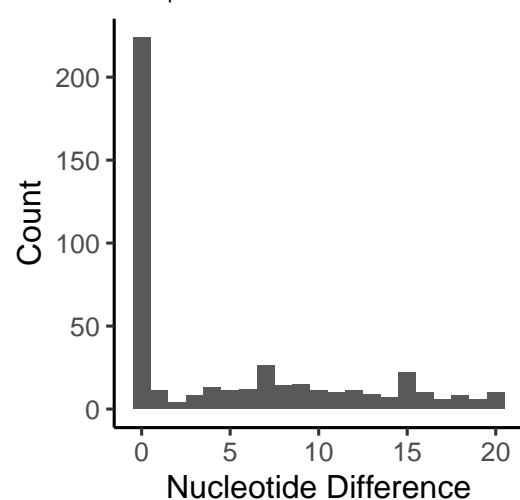
IGHV3-20*03_04

137 sequences assigned
64 (46.7%) exact matches, in which:
64 unique CDR3
6 unique J



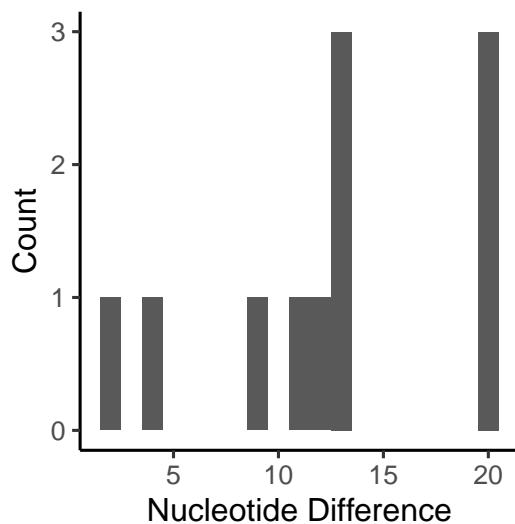
IGHV3-30*01

478 sequences assigned
224 (46.9%) exact matches, in which:
224 unique CDR3
6 unique J



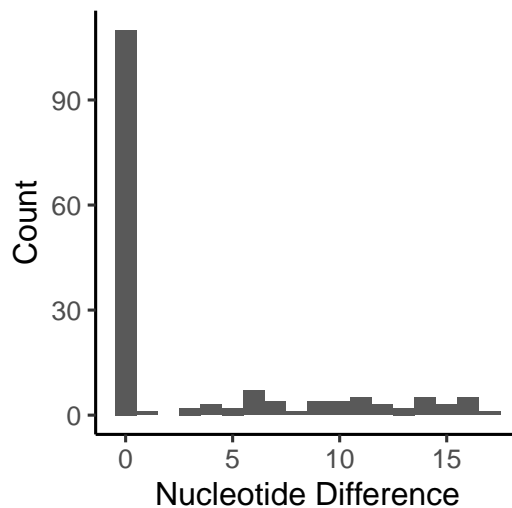
IGHV3-30-3*03

16 sequences assigned
No exact matches.



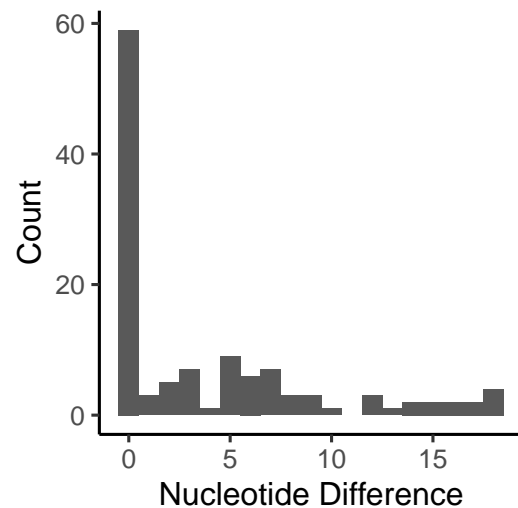
IGHV3-43*01

173 sequences assigned
110 (63.6%) exact matches, in which:
108 unique CDR3
6 unique J



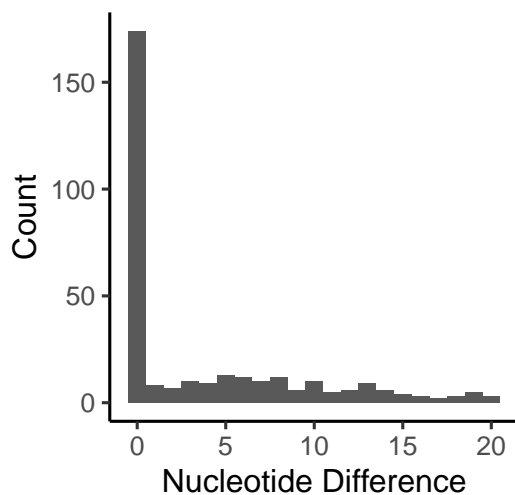
IGHV3-49*04

129 sequences assigned
59 (45.7%) exact matches, in which:
59 unique CDR3
5 unique J



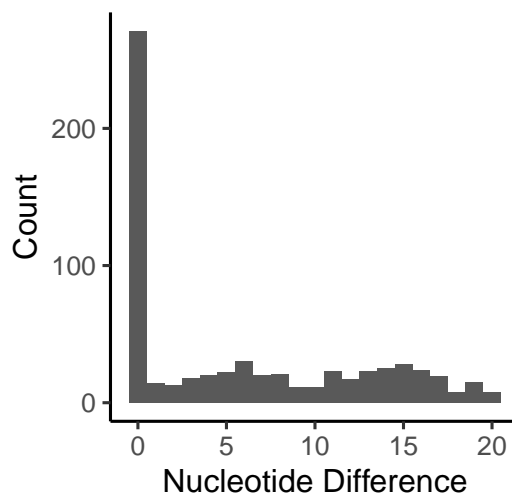
IGHV3-33*01

333 sequences assigned
174 (52.3%) exact matches, in which:
171 unique CDR3
6 unique J



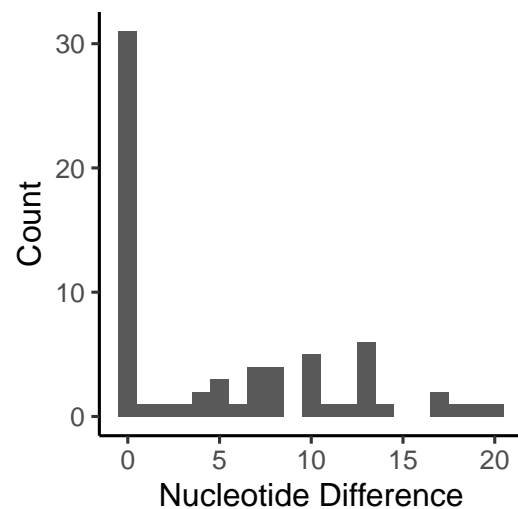
IGHV3-48*01

671 sequences assigned
271 (40.4%) exact matches, in which:
266 unique CDR3
6 unique J



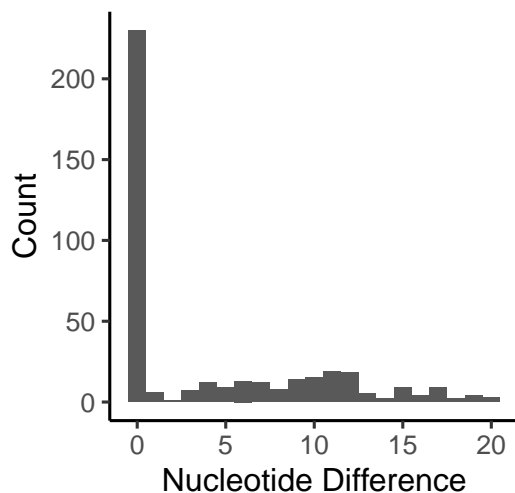
IGHV3-49*03_05

67 sequences assigned
31 (46.3%) exact matches, in which:
31 unique CDR3
5 unique J



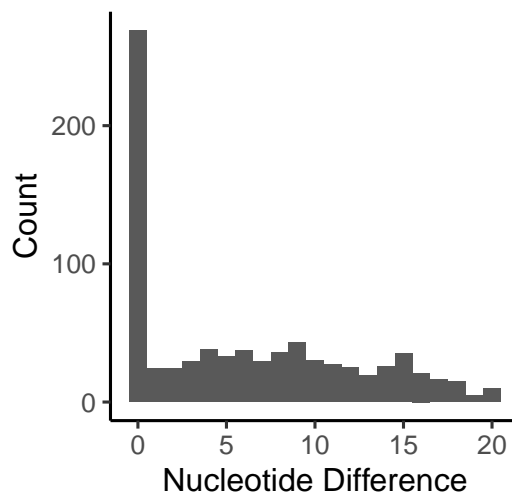
IGHV3-33*08

416 sequences assigned
230 (55.3%) exact matches, in which:
230 unique CDR3
6 unique J



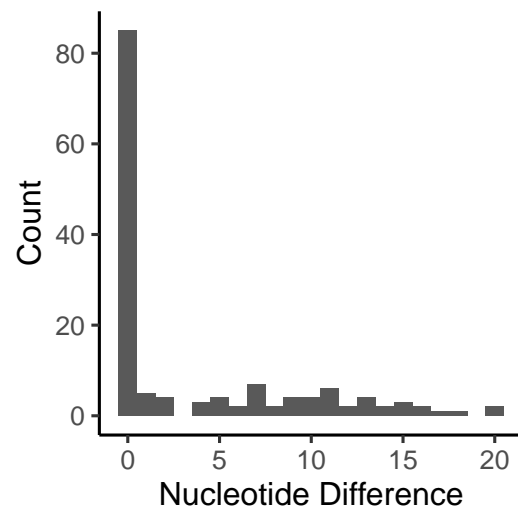
IGHV3-48*02

848 sequences assigned
269 (31.7%) exact matches, in which:
263 unique CDR3
6 unique J



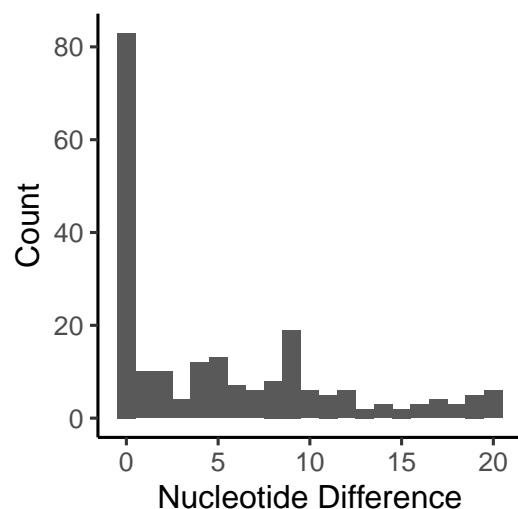
IGHV3-53*04

149 sequences assigned
85 (57%) exact matches, in which:
85 unique CDR3
5 unique J



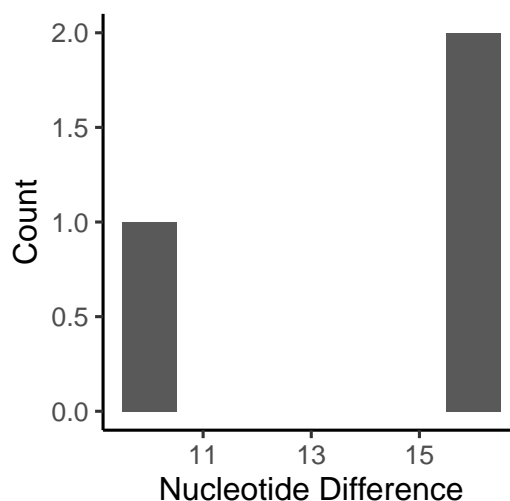
IGHV3-53*01_02

222 sequences assigned
83 (37.4%) exact matches, in which:
83 unique CDR3
6 unique J



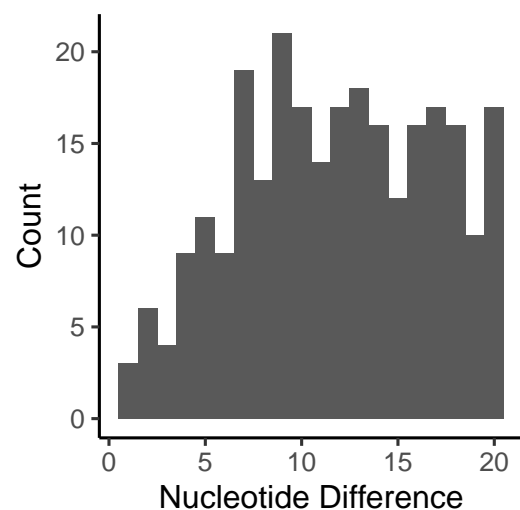
IGHV3-69-1*01

8 sequences assigned
No exact matches.



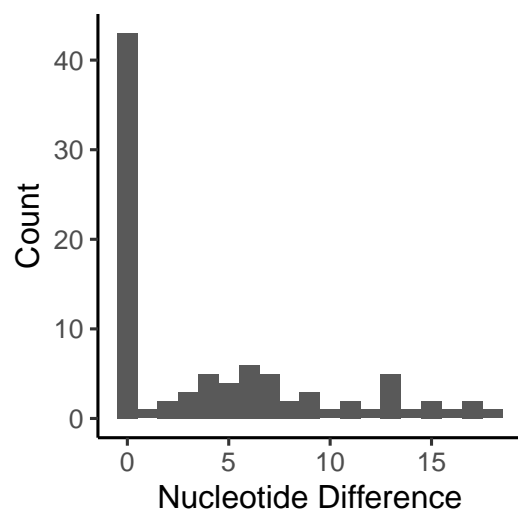
IGHV3-74*03

326 sequences assigned
No exact matches.



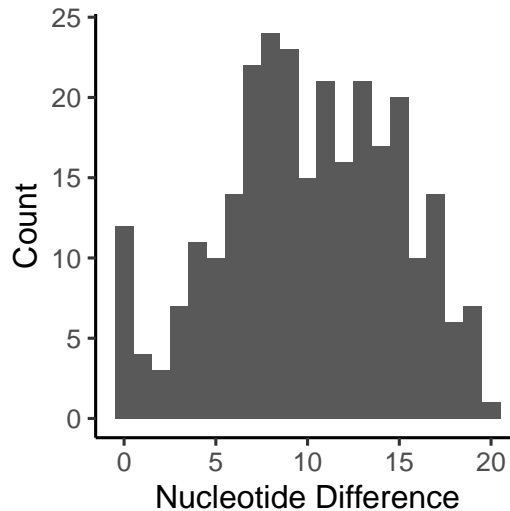
IGHV3-64*01

96 sequences assigned
43 (44.8%) exact matches, in which:
43 unique CDR3
6 unique J



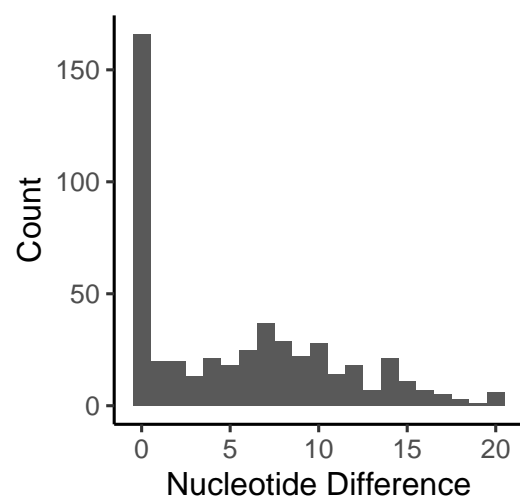
IGHV3-72*01

301 sequences assigned
12 (4%) exact matches, in which:
11 unique CDR3
5 unique J



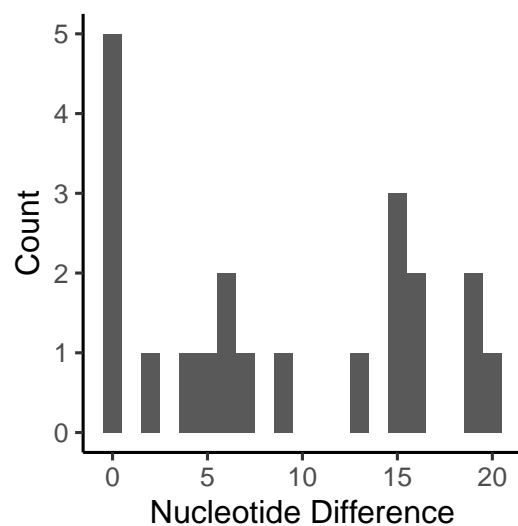
IGHV3-74*01_02

516 sequences assigned
166 (32.2%) exact matches, in which:
160 unique CDR3
6 unique J



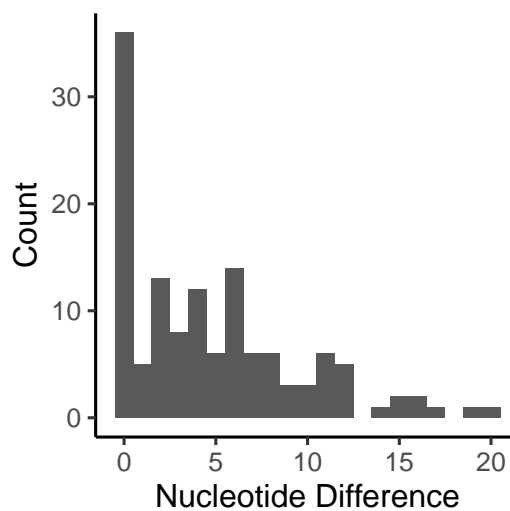
IGHV3-64*02_07

21 sequences assigned
5 (23.8%) exact matches, in which:
4 unique CDR3
2 unique J



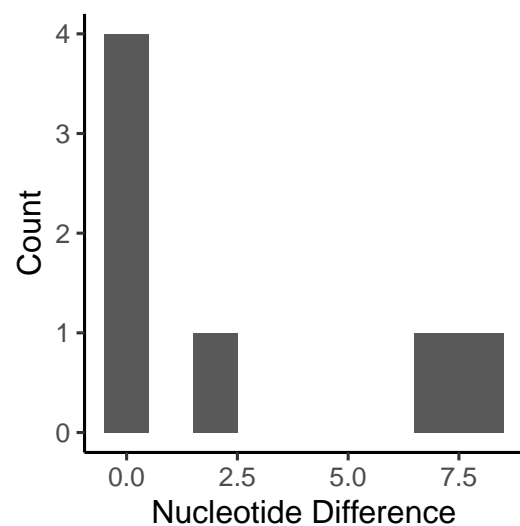
IGHV3-73*01_02

132 sequences assigned
36 (27.3%) exact matches, in which:
36 unique CDR3
6 unique J



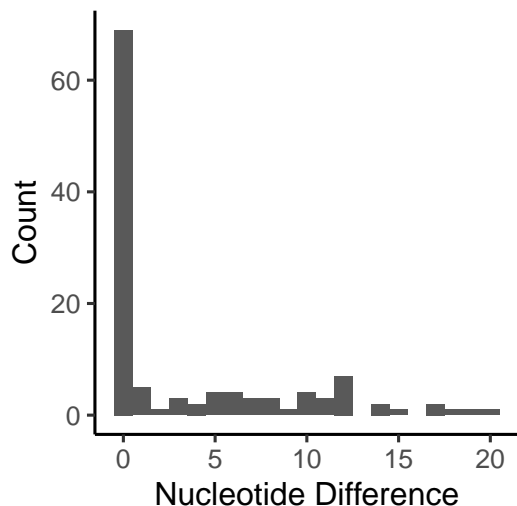
IGHV3-43D*04

7 sequences assigned
4 (57.1%) exact matches, in which:
4 unique CDR3
2 unique J



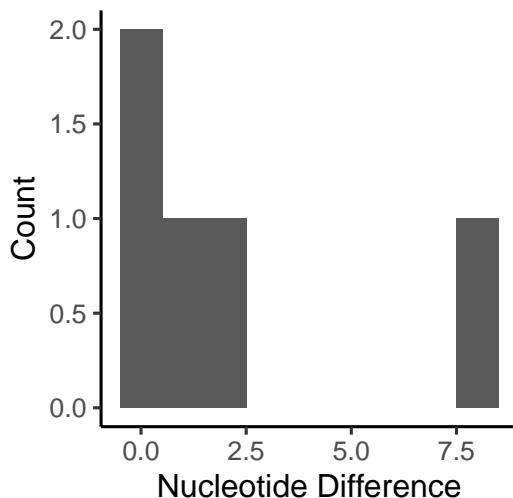
IGHV3-64D*06

123 sequences assigned
69 (56.1%) exact matches, in which:
69 unique CDR3
6 unique J



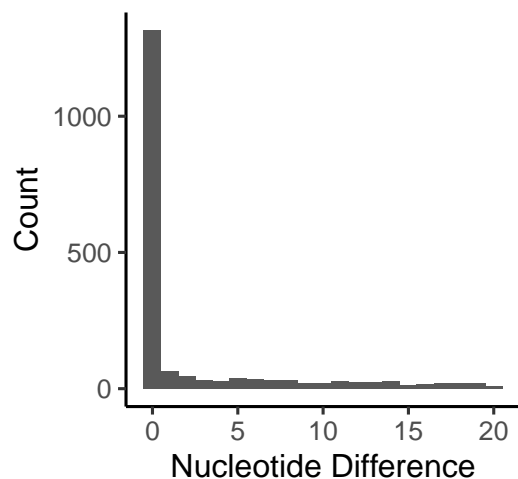
IGHV4-28*01_07

6 sequences assigned
2 (33.3%) exact matches, in which:
2 unique CDR3
1 unique J



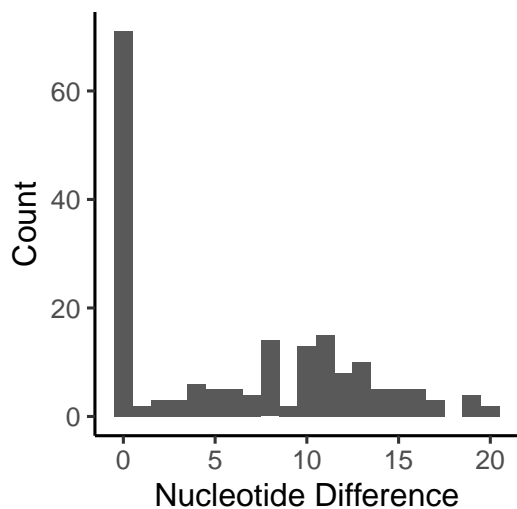
IGHV4-34*01_02

1947 sequences assigned
1315 (67.5%) exact matches, in which:
1298 unique CDR3
7 unique J



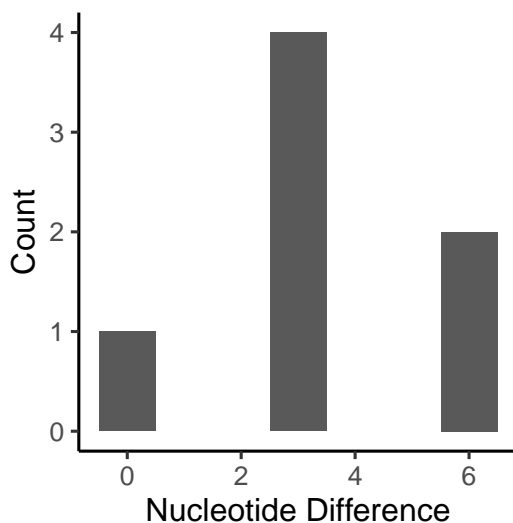
IGHV3-64D*09

193 sequences assigned
71 (36.8%) exact matches, in which:
68 unique CDR3
5 unique J



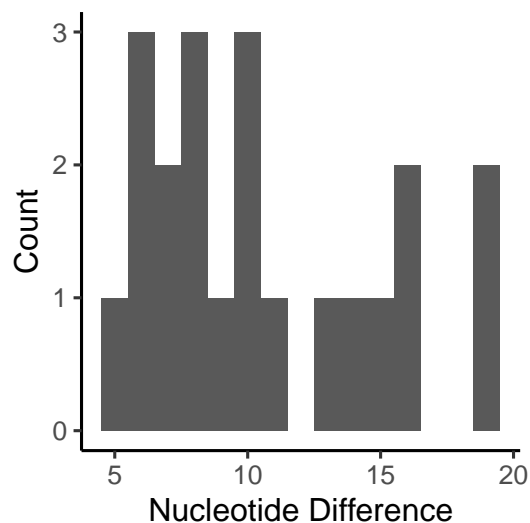
IGHV4-28*02_05

7 sequences assigned
1 (14.3%) exact matches, in which:
1 unique CDR3
1 unique J



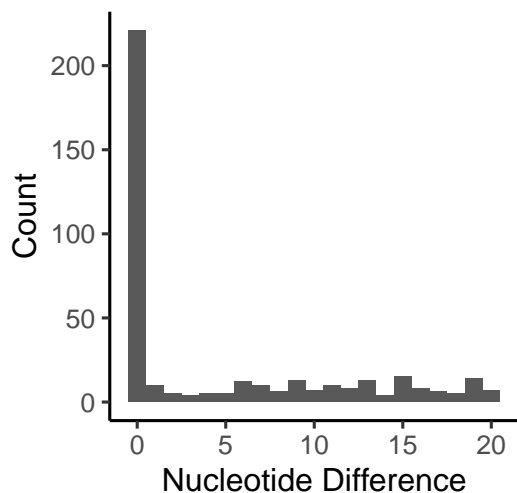
IGHV4-38-2*02

32 sequences assigned
No exact matches.



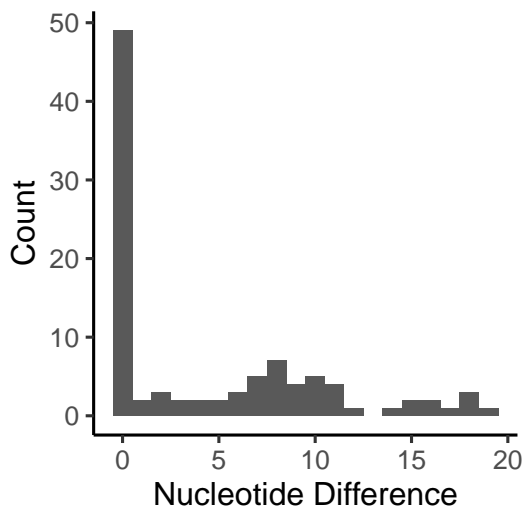
IGHV4-4*02_03

424 sequences assigned
221 (52.1%) exact matches, in which:
219 unique CDR3
7 unique J



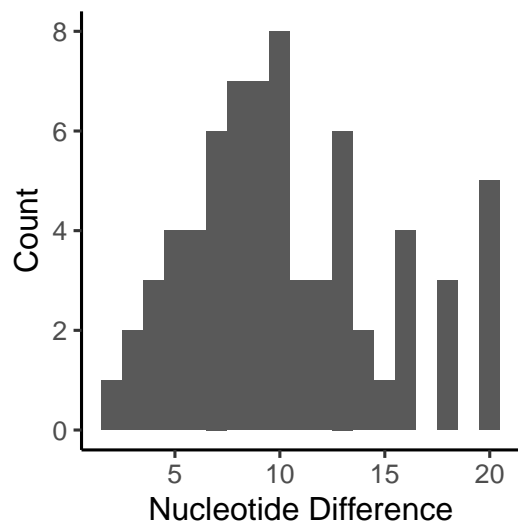
IGHV4-31*01

127 sequences assigned
49 (38.6%) exact matches, in which:
48 unique CDR3
5 unique J



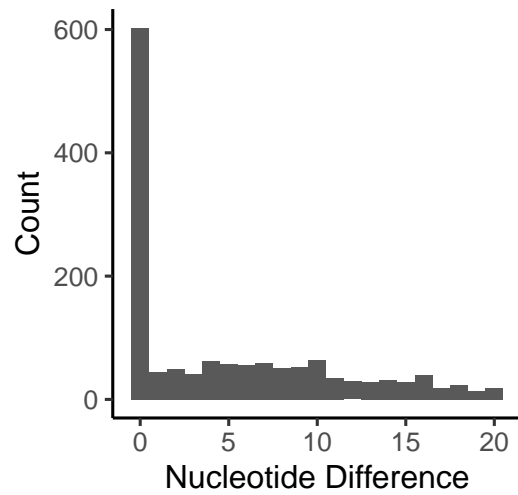
IGHV4-39*02

91 sequences assigned
No exact matches.



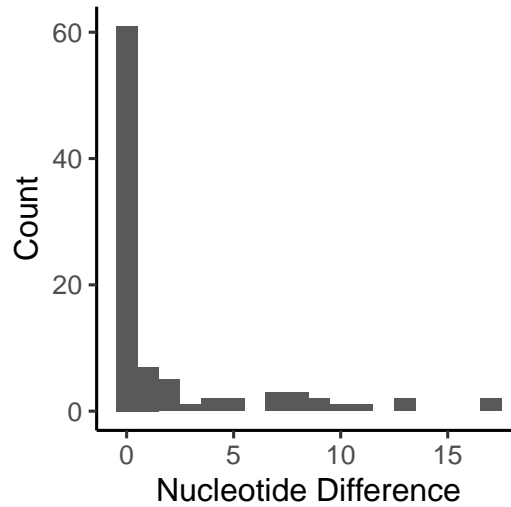
IGHV4–59*08

1549 sequences assigned
603 (38.9%) exact matches, in which:
595 unique CDR3
7 unique J



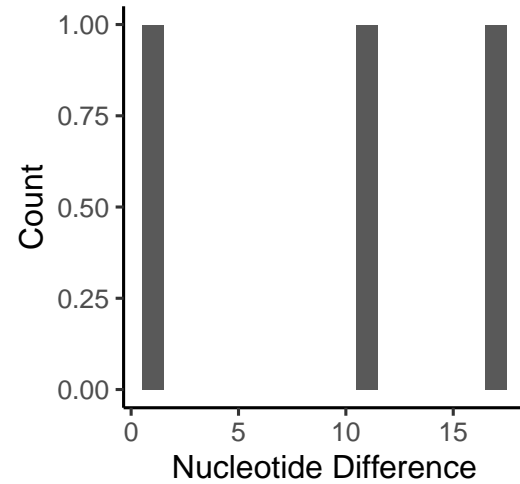
IGHV5–10–1*01_03

99 sequences assigned
61 (61.6%) exact matches, in which:
61 unique CDR3
6 unique J



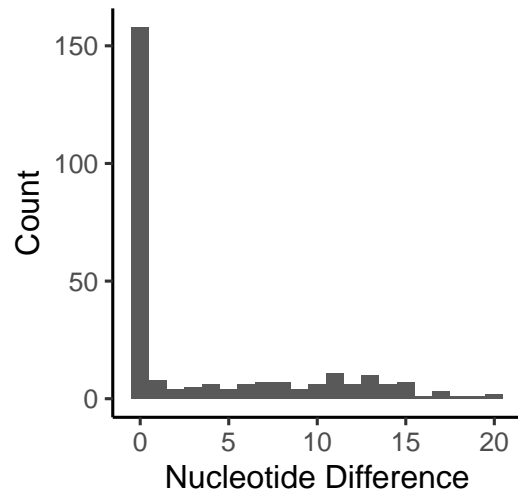
IGHV7–4–1*02

3 sequences assigned
No exact matches.



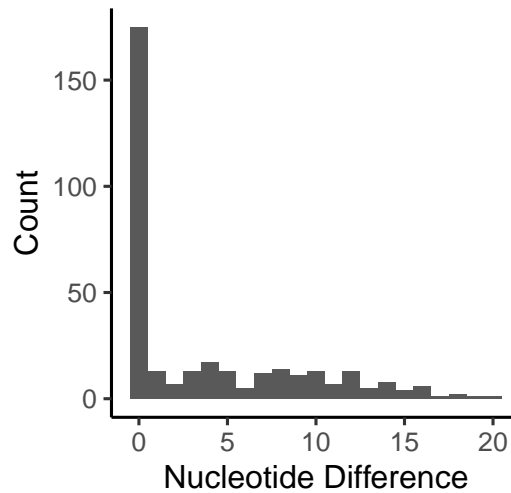
IGHV4–61*01

295 sequences assigned
158 (53.6%) exact matches, in which:
157 unique CDR3
6 unique J



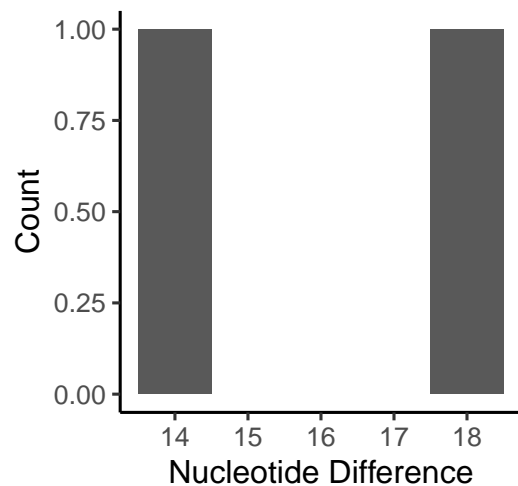
IGHV6–1*01_02

352 sequences assigned
175 (49.7%) exact matches, in which:
173 unique CDR3
7 unique J



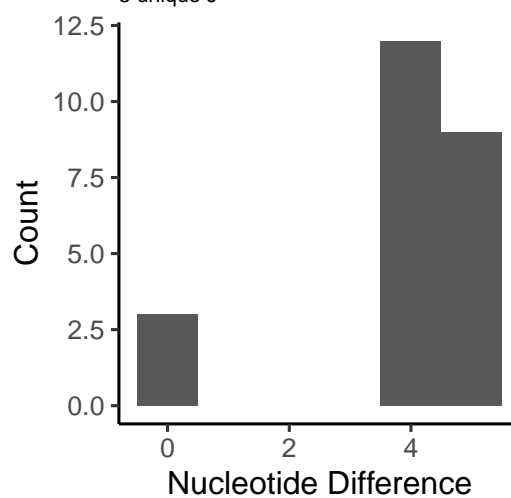
IGHV4/OR15–8*01

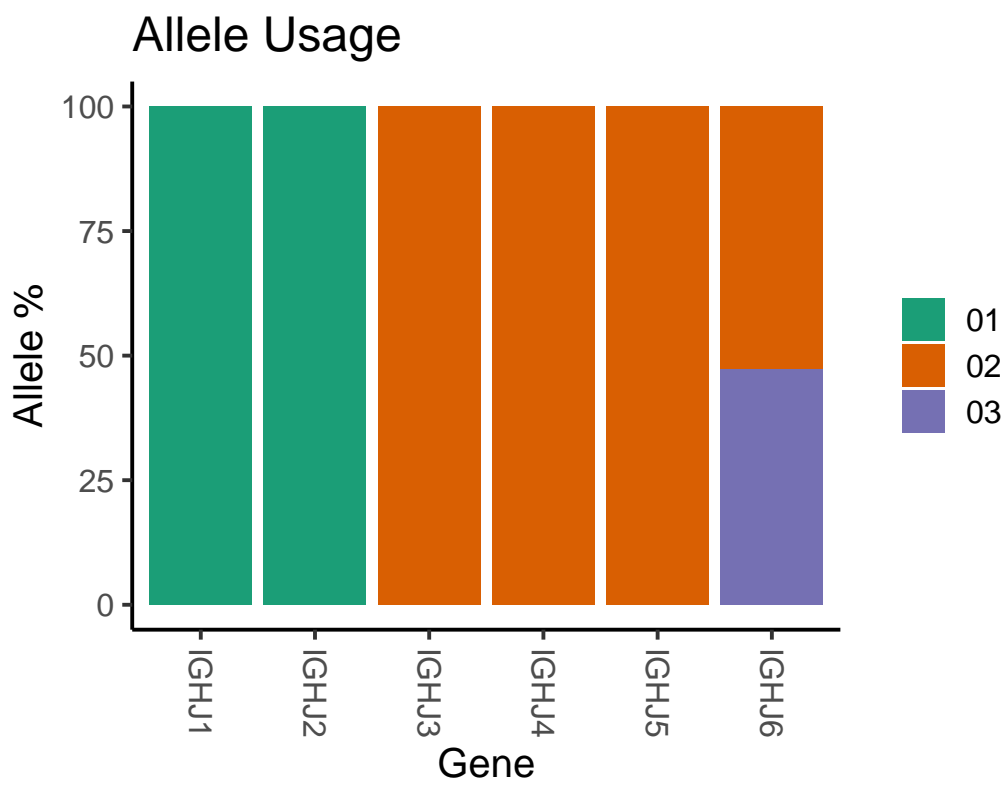
3 sequences assigned
No exact matches.



IGHV7–4–1*01

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





Sequence Count byIGHJ6 allele usage

