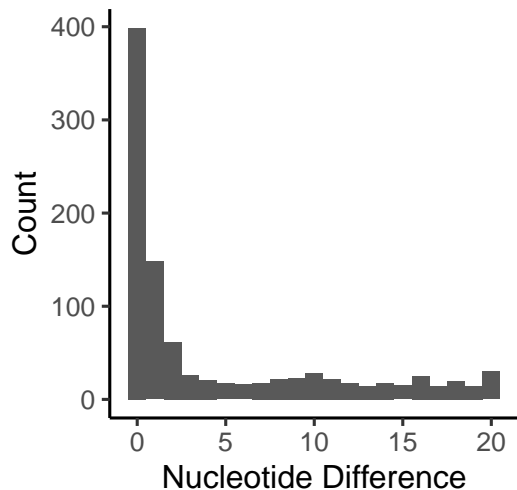


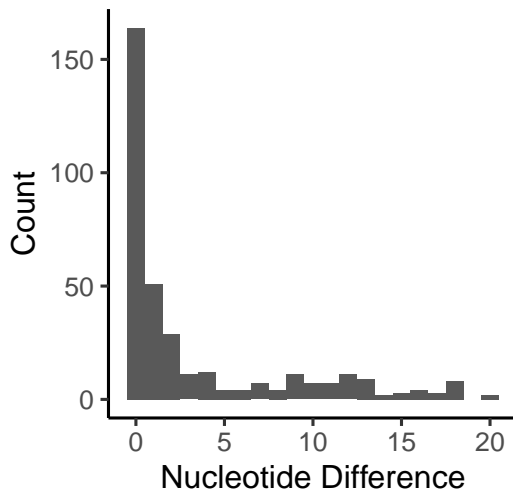
IGHV1-2*02

1273 sequences assigned
399 (31.3%) exact matches, in which:
396 unique CDR3
6 unique J



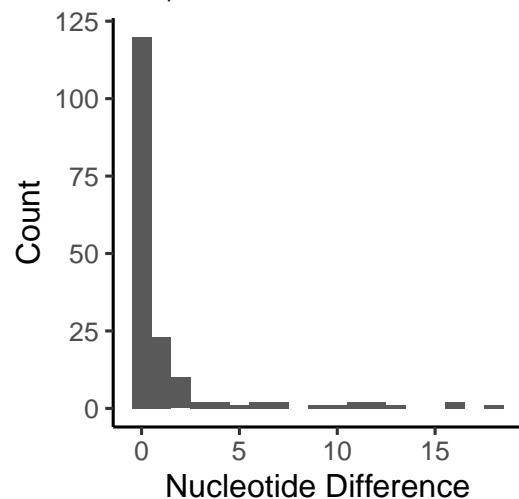
IGHV1-8*01

378 sequences assigned
164 (43.4%) exact matches, in which:
160 unique CDR3
7 unique J



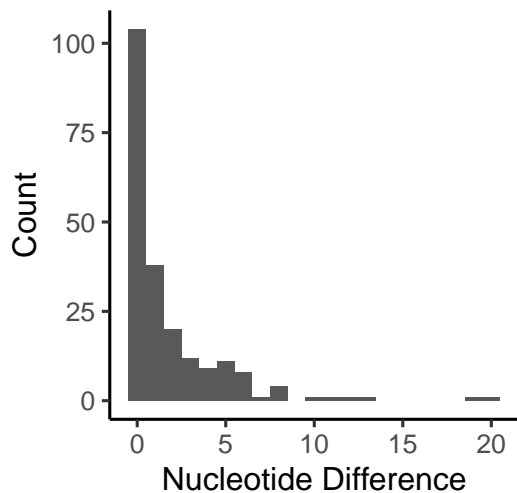
IGHV1-24*01

186 sequences assigned
120 (64.5%) exact matches, in which:
120 unique CDR3
7 unique J



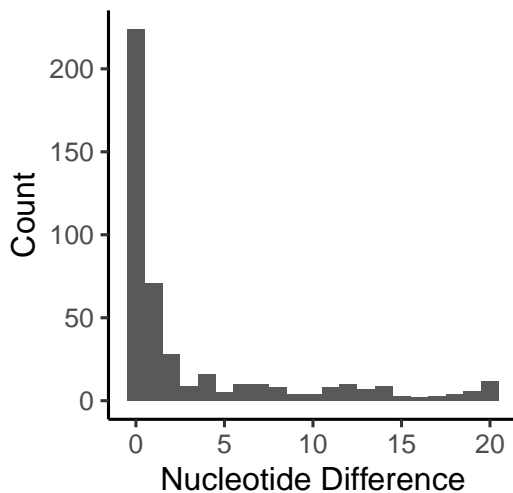
IGHV1-2*04

242 sequences assigned
104 (43%) exact matches, in which:
104 unique CDR3
7 unique J



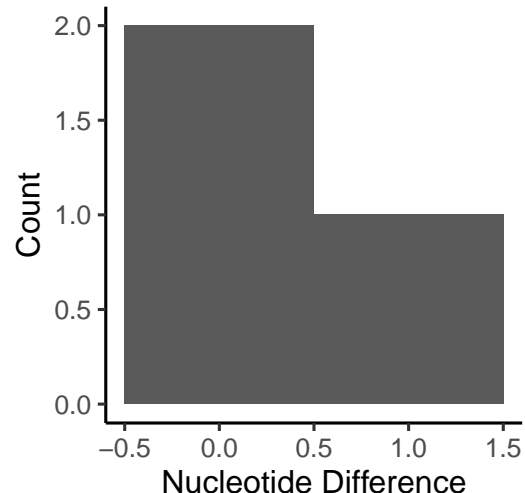
IGHV1-18*01

550 sequences assigned
224 (40.7%) exact matches, in which:
224 unique CDR3
6 unique J



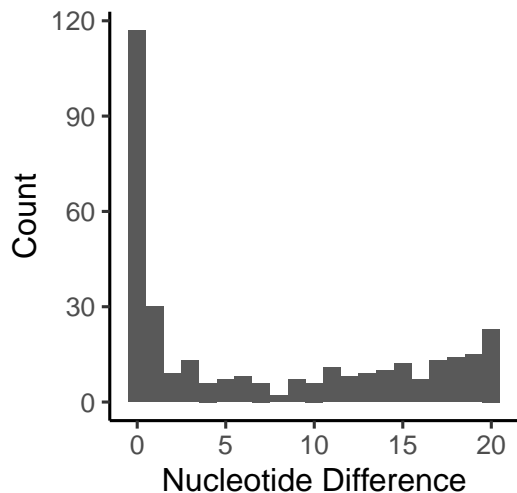
IGHV1-45*02

3 sequences assigned
2 (66.7%) exact matches, in which:
2 unique CDR3
1 unique J



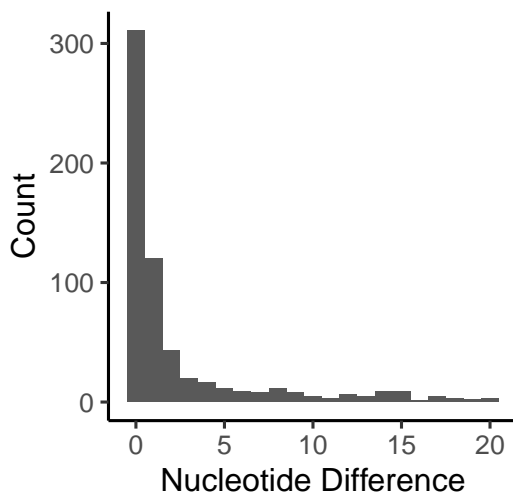
IGHV1-3*01

543 sequences assigned
117 (21.5%) exact matches, in which:
116 unique CDR3
7 unique J



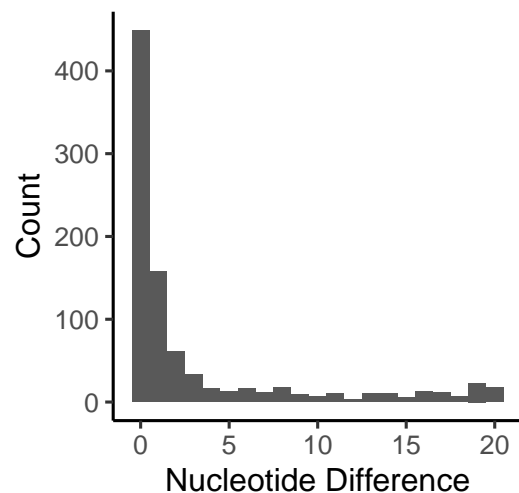
IGHV1-18*04

690 sequences assigned
311 (45.1%) exact matches, in which:
309 unique CDR3
6 unique J



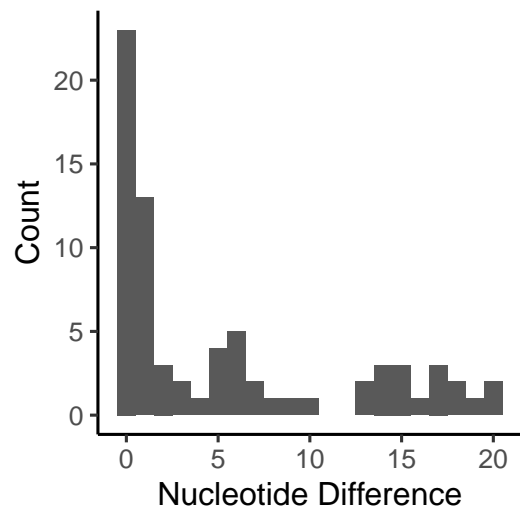
IGHV1-46*01

1353 sequences assigned
449 (33.2%) exact matches, in which:
441 unique CDR3
7 unique J



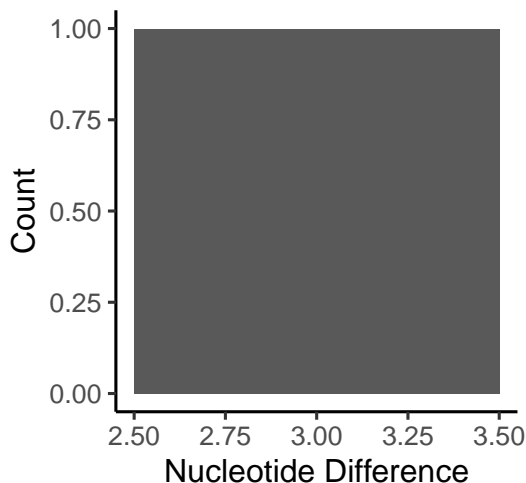
IGHV1-58*01

90 sequences assigned
23 (25.6%) exact matches, in which:
22 unique CDR3
4 unique J



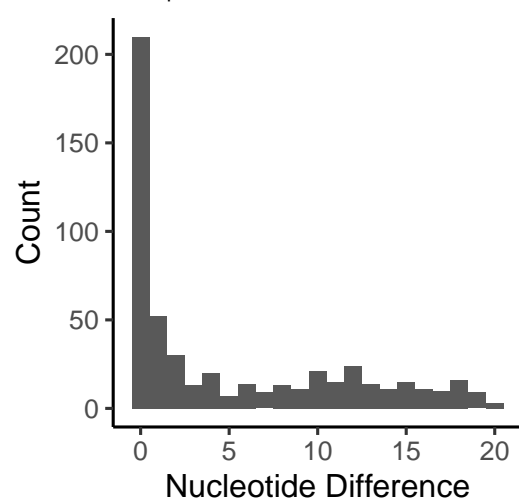
IGHV1-69-2*01

1 sequences assigned
No exact matches.



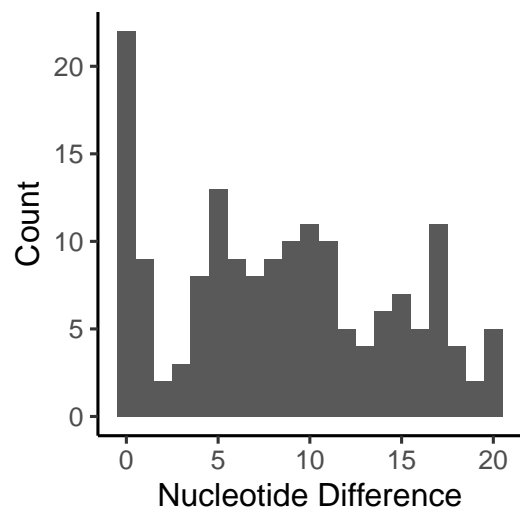
IGHV2-5*01

647 sequences assigned
210 (32.5%) exact matches, in which:
208 unique CDR3
6 unique J



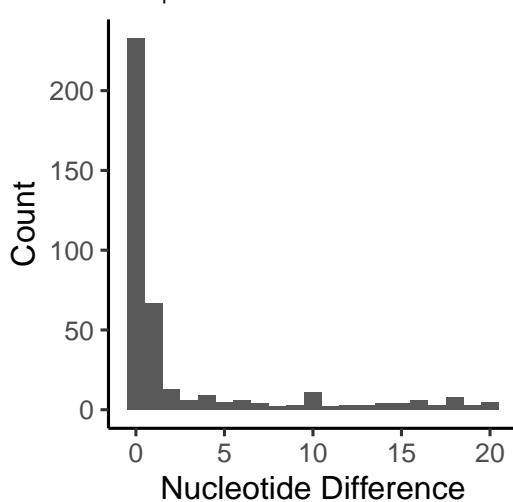
IGHV1-58*02

201 sequences assigned
22 (10.9%) exact matches, in which:
22 unique CDR3
4 unique J



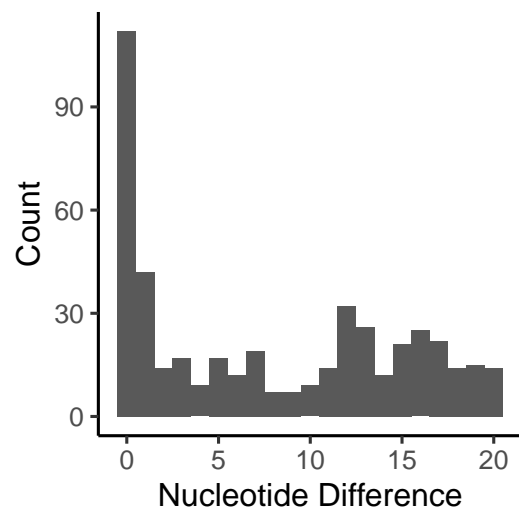
IGHV1-69*02

455 sequences assigned
233 (51.2%) exact matches, in which:
222 unique CDR3
6 unique J



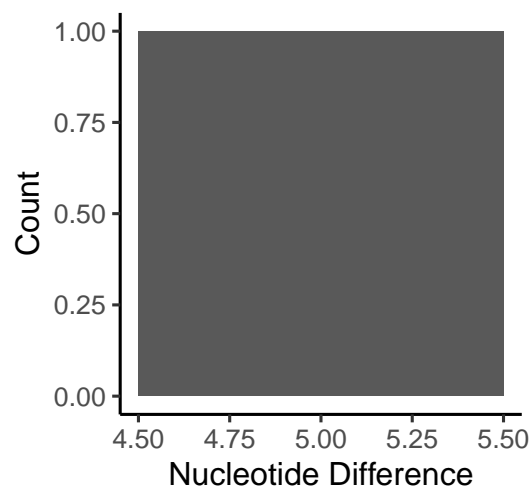
IGHV2-5*02

662 sequences assigned
112 (16.9%) exact matches, in which:
110 unique CDR3
6 unique J



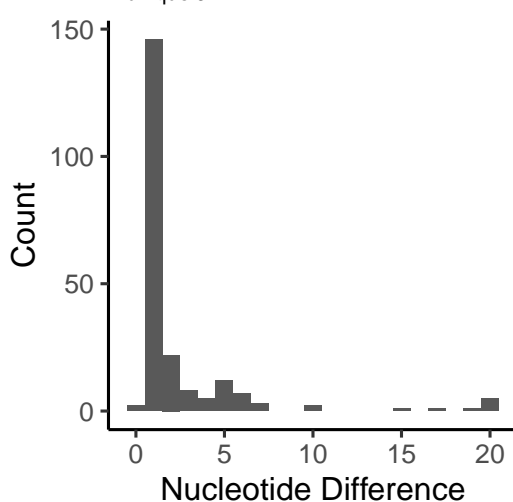
IGHV1-68*01

1 sequences assigned
No exact matches.



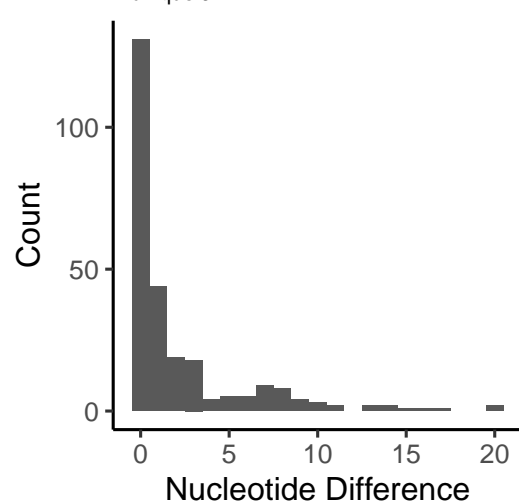
IGHV1-69*08

293 sequences assigned
2 (0.7%) exact matches, in which:
2 unique CDR3
1 unique J



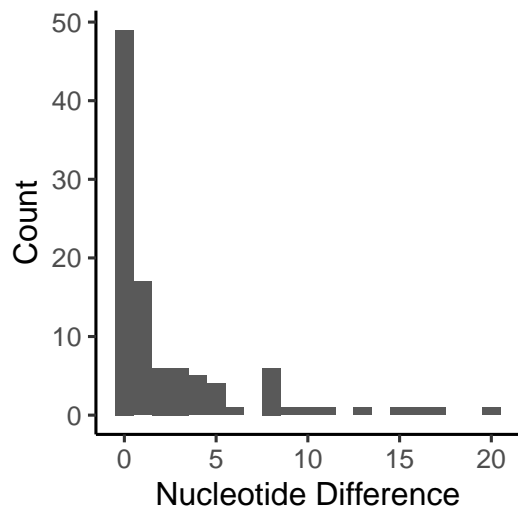
IGHV2-26*01

275 sequences assigned
131 (47.6%) exact matches, in which:
128 unique CDR3
7 unique J



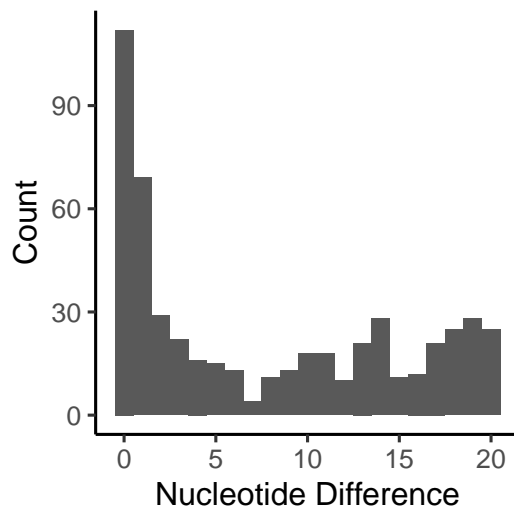
IGHV2-70*01

103 sequences assigned
49 (47.6%) exact matches, in which:
48 unique CDR3
4 unique J



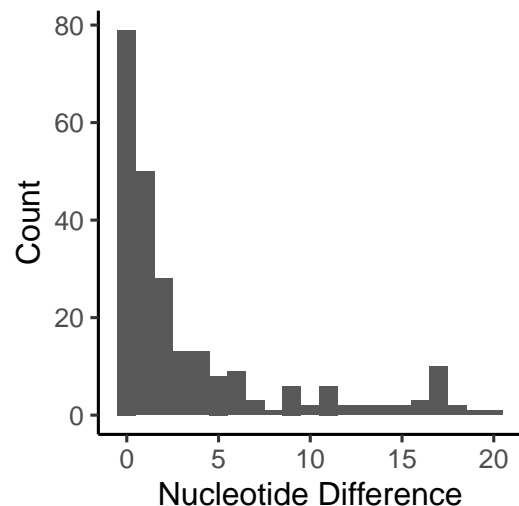
IGHV3-7*03

767 sequences assigned
112 (14.6%) exact matches, in which:
110 unique CDR3
6 unique J



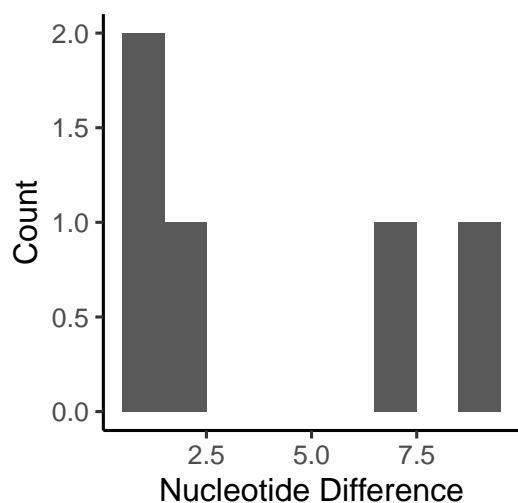
IGHV3-11*06

290 sequences assigned
79 (27.2%) exact matches, in which:
76 unique CDR3
5 unique J



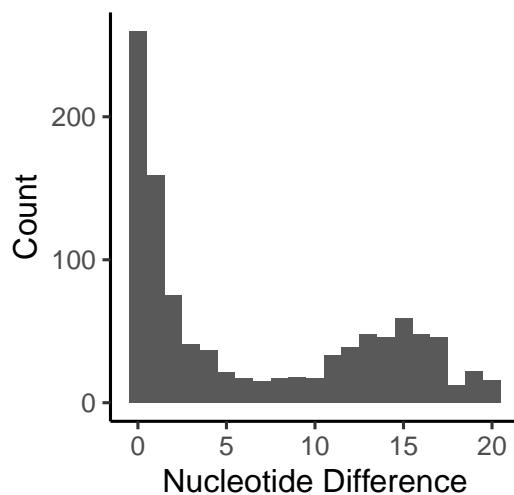
IGHV2-70D*04

5 sequences assigned
No exact matches.



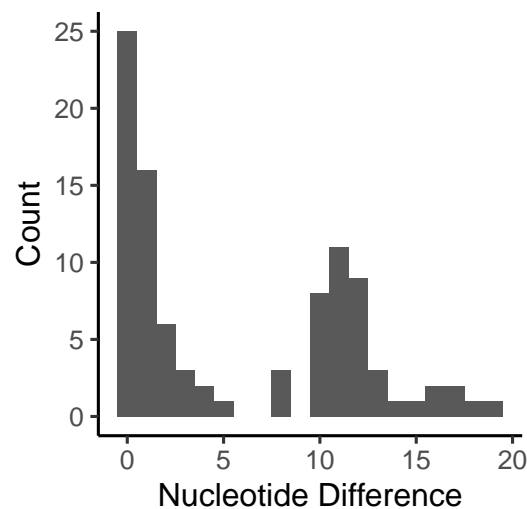
IGHV3-9*01

1250 sequences assigned
260 (20.8%) exact matches, in which:
257 unique CDR3
6 unique J



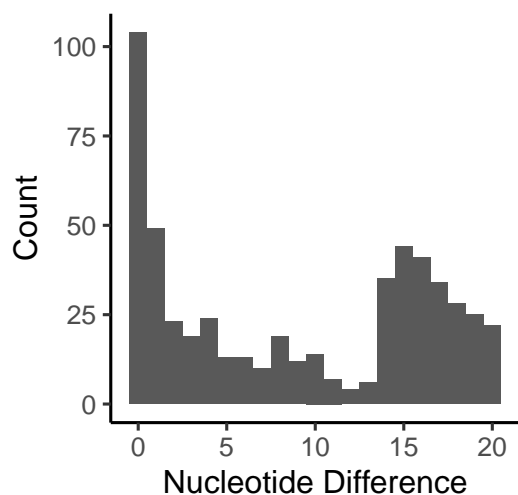
IGHV3-13*01

102 sequences assigned
25 (24.5%) exact matches, in which:
25 unique CDR3
4 unique J



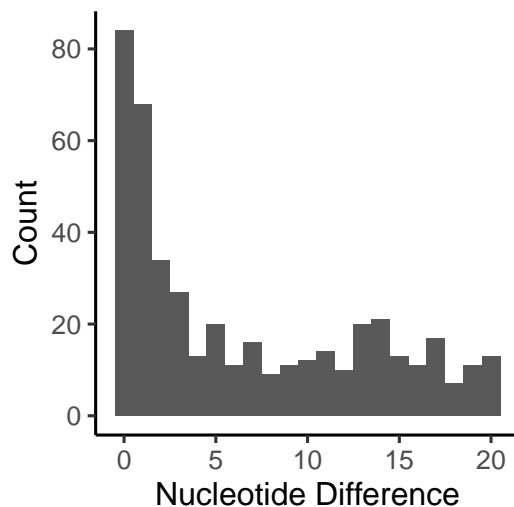
IGHV3-7*01

750 sequences assigned
104 (13.9%) exact matches, in which:
102 unique CDR3
6 unique J



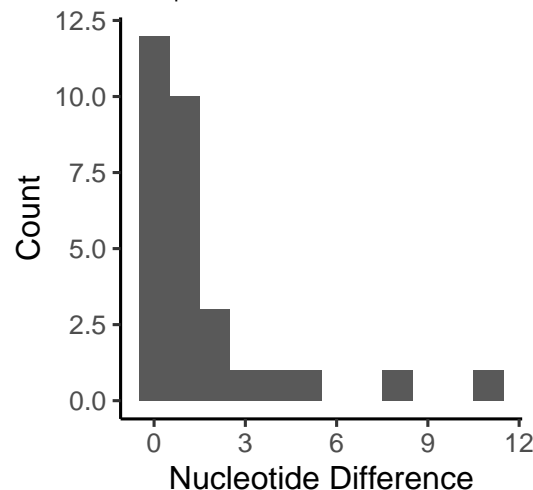
IGHV3-11*01

574 sequences assigned
84 (14.6%) exact matches, in which:
84 unique CDR3
6 unique J



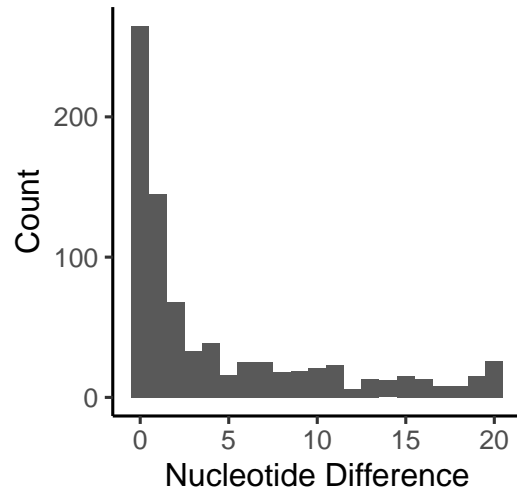
IGHV3-13*05

30 sequences assigned
12 (40%) exact matches, in which:
12 unique CDR3
4 unique J



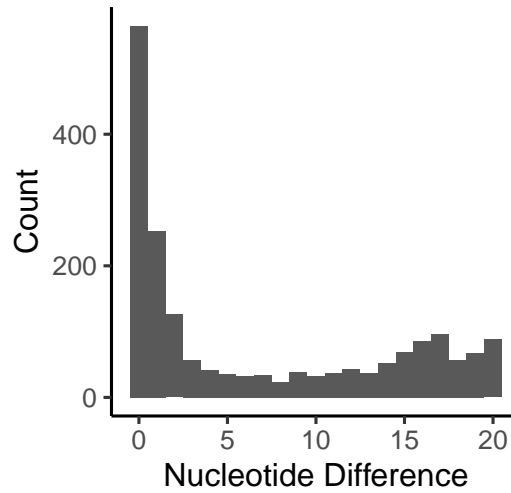
IGHV3-15*01

1082 sequences assigned
265 (24.5%) exact matches, in which:
262 unique CDR3
7 unique J



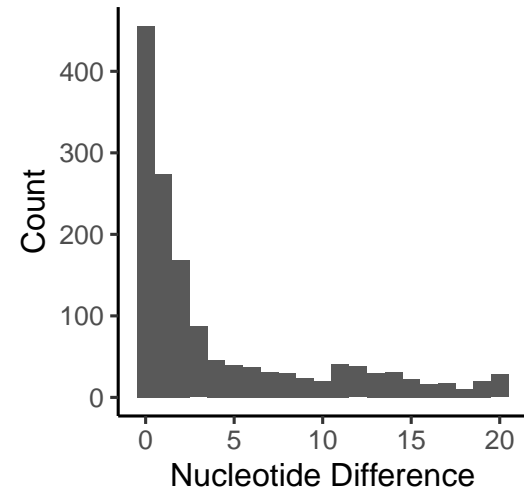
IGHV3-21*01

3764 sequences assigned
565 (15%) exact matches, in which:
558 unique CDR3
7 unique J



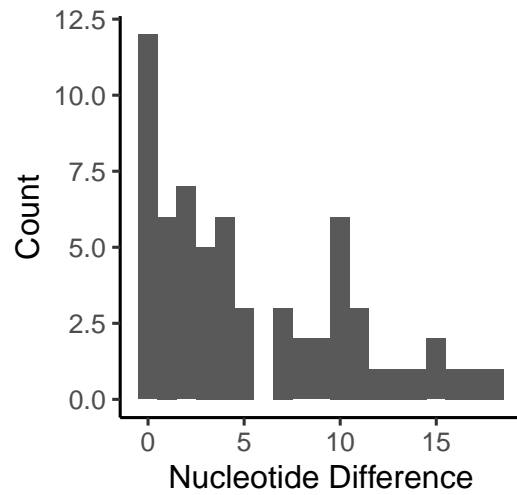
IGHV3-33*01

1773 sequences assigned
456 (25.7%) exact matches, in which:
445 unique CDR3
7 unique J



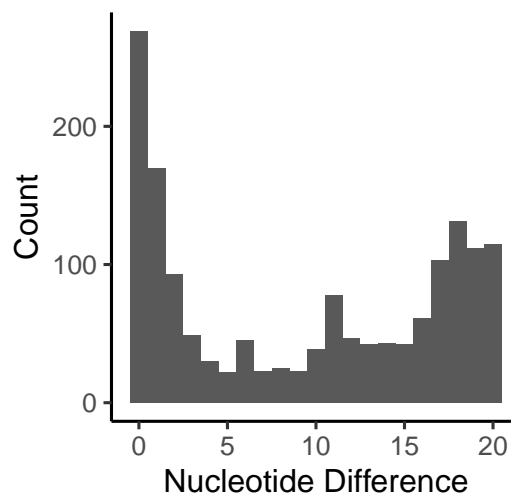
IGHV3-20*01

66 sequences assigned
12 (18.2%) exact matches, in which:
9 unique CDR3
3 unique J



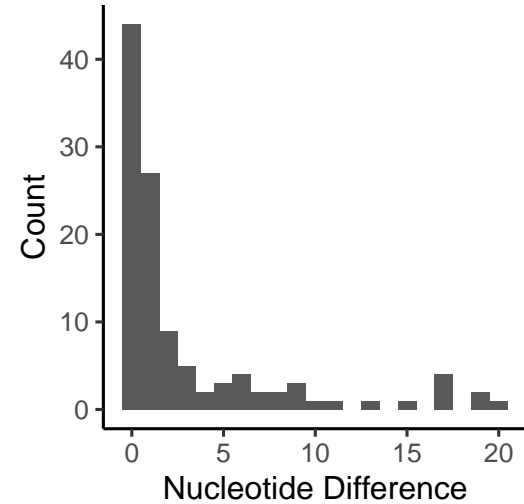
IGHV3-30-3*01

2016 sequences assigned
269 (13.3%) exact matches, in which:
263 unique CDR3
6 unique J



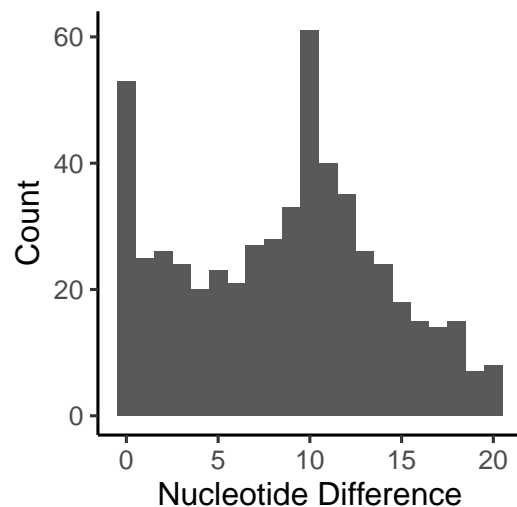
IGHV3-43*01

129 sequences assigned
44 (34.1%) exact matches, in which:
43 unique CDR3
7 unique J



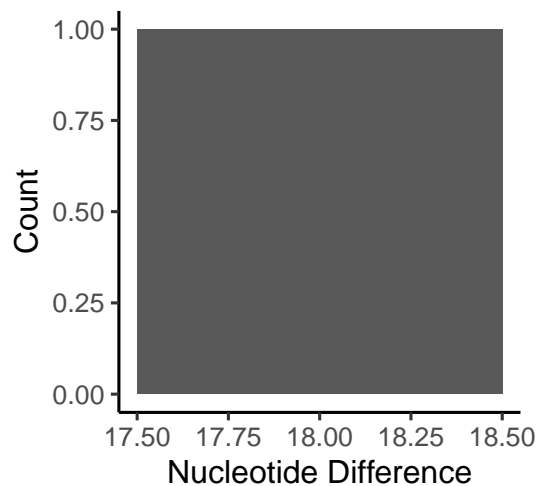
IGHV3-20*04

577 sequences assigned
53 (9.2%) exact matches, in which:
53 unique CDR3
5 unique J



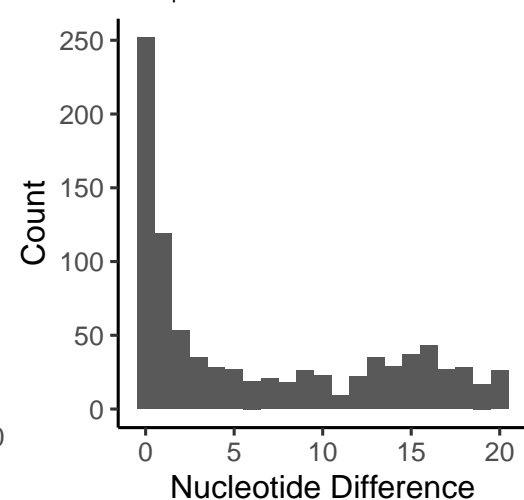
IGHV3-30-3*02

2 sequences assigned
No exact matches.



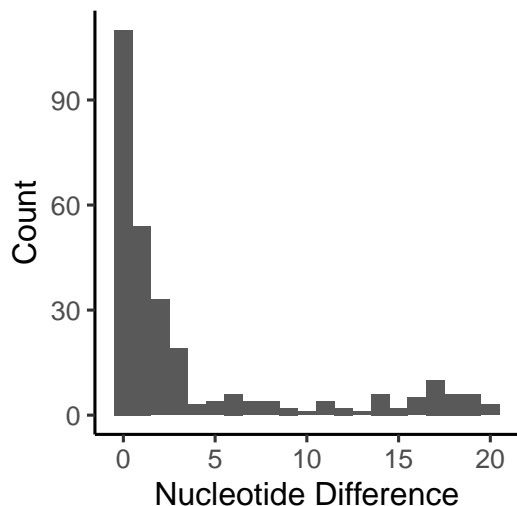
IGHV3-48*02

1126 sequences assigned
252 (22.4%) exact matches, in which:
245 unique CDR3
7 unique J



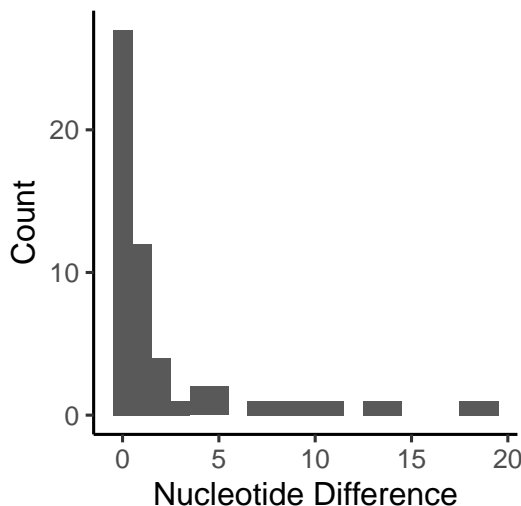
IGHV3-49*05

379 sequences assigned
110 (29%) exact matches, in which:
108 unique CDR3
7 unique J



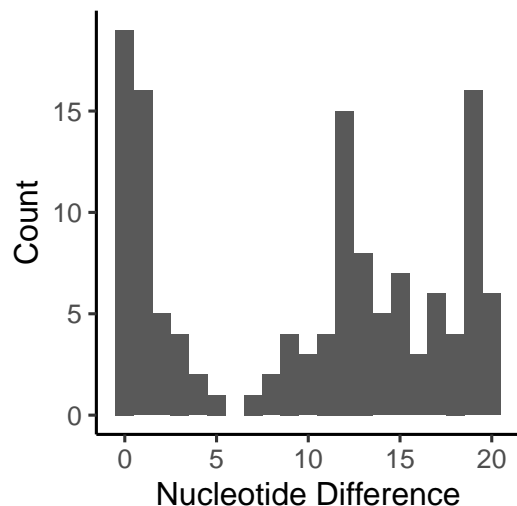
IGHV3-64*01

68 sequences assigned
27 (39.7%) exact matches, in which:
26 unique CDR3
5 unique J



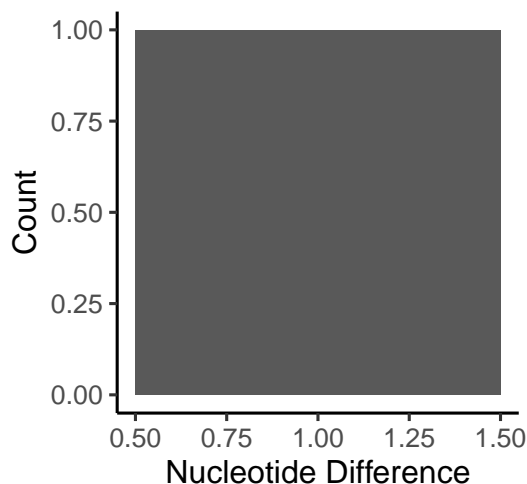
IGHV3-72*01

221 sequences assigned
19 (8.6%) exact matches, in which:
19 unique CDR3
4 unique J



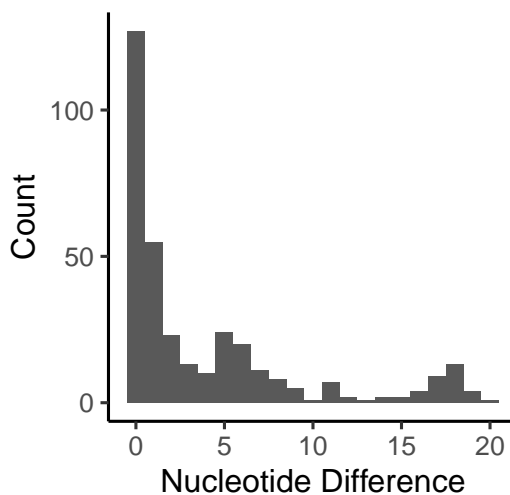
IGHV3-52*01

2 sequences assigned
No exact matches.



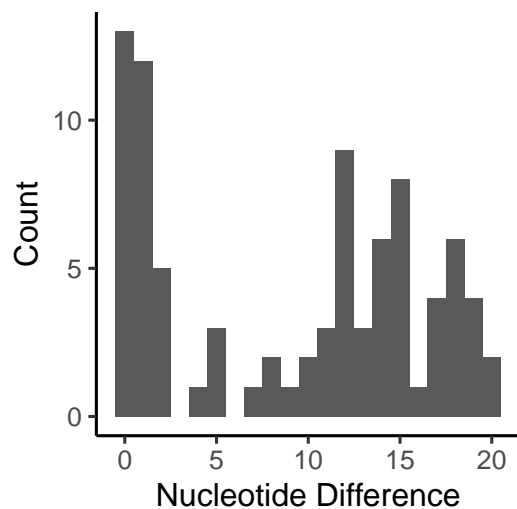
IGHV3-66*02

369 sequences assigned
127 (34.4%) exact matches, in which:
124 unique CDR3
5 unique J



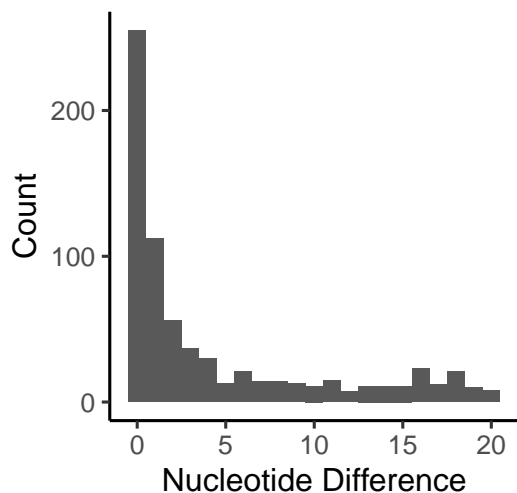
IGHV3-73*01

100 sequences assigned
13 (13%) exact matches, in which:
13 unique CDR3
4 unique J



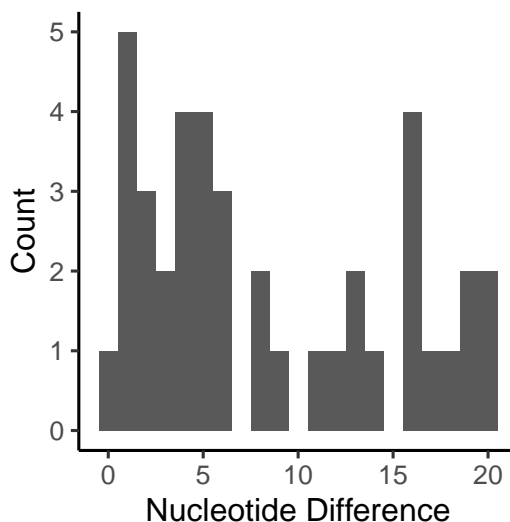
IGHV3-53*01

895 sequences assigned
255 (28.5%) exact matches, in which:
247 unique CDR3
7 unique J



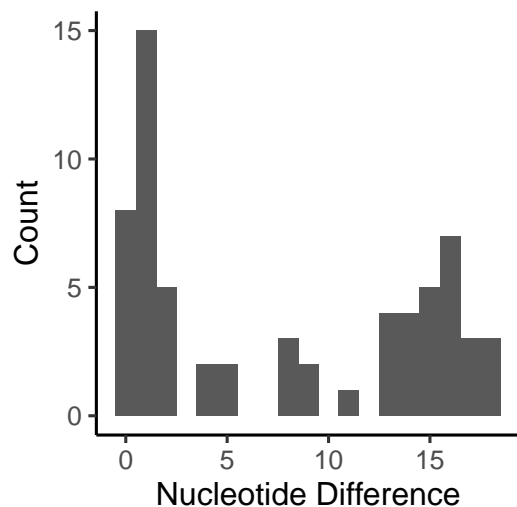
IGHV3-69-1*02

62 sequences assigned
1 (1.6%) exact matches, in which:
1 unique CDR3
1 unique J



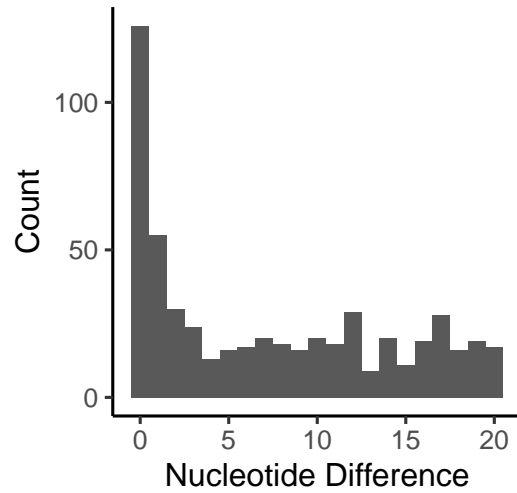
IGHV3-73*02

77 sequences assigned
8 (10.4%) exact matches, in which:
8 unique CDR3
2 unique J



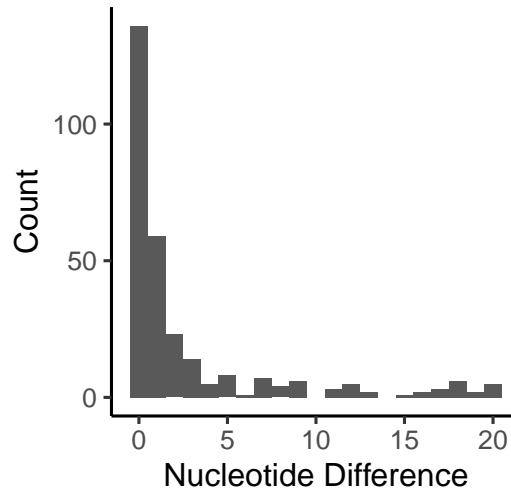
IGHV3-74*01

798 sequences assigned
126 (15.8%) exact matches, in which:
125 unique CDR3
7 unique J



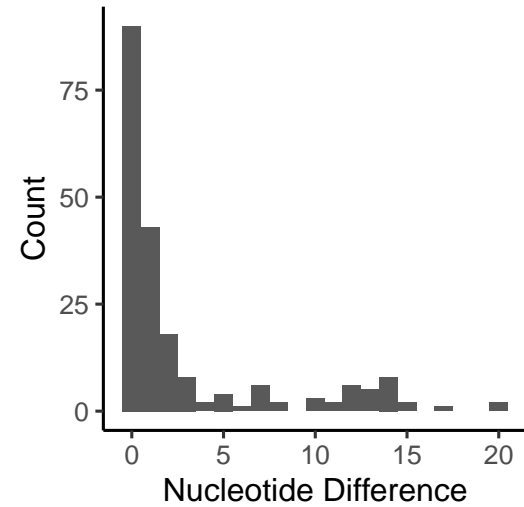
IGHV4-4*07

369 sequences assigned
136 (36.9%) exact matches, in which:
136 unique CDR3
5 unique J



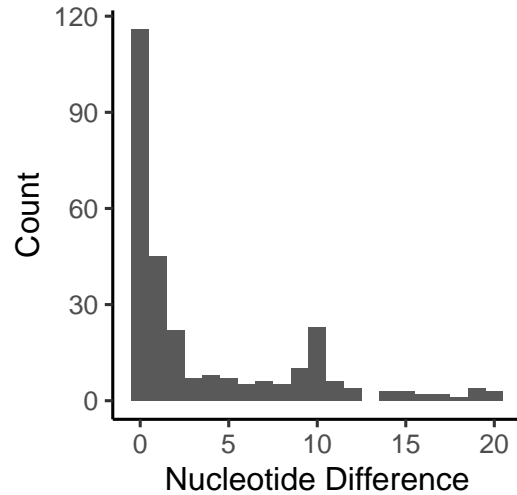
IGHV4-30-4*01

268 sequences assigned
90 (33.6%) exact matches, in which:
89 unique CDR3
7 unique J



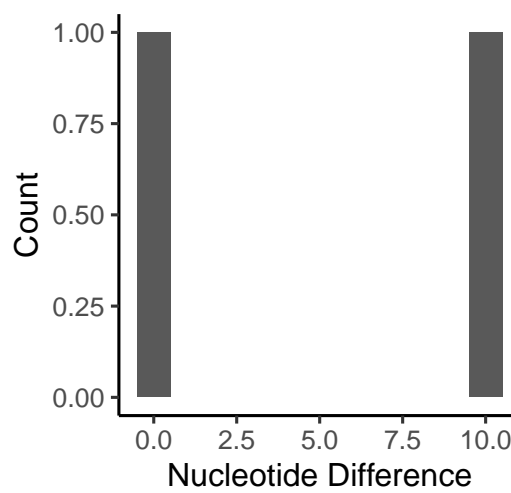
IGHV3-64D*09

385 sequences assigned
116 (30.1%) exact matches, in which:
115 unique CDR3
6 unique J



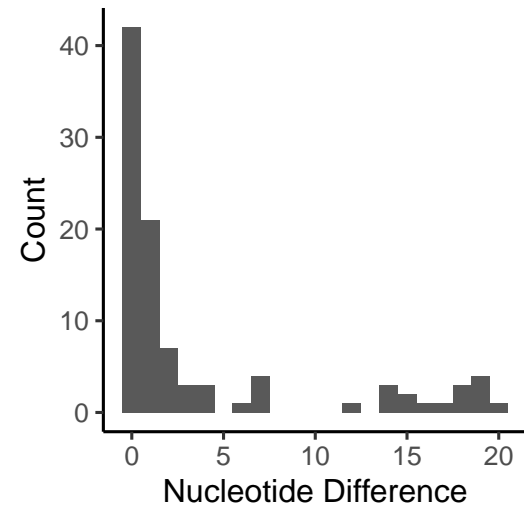
IGHV4-28*01

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



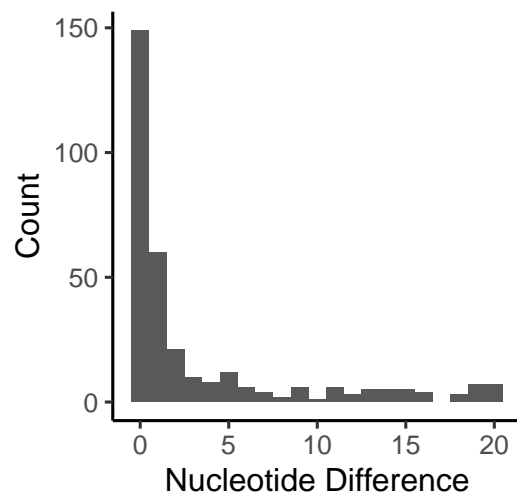
IGHV4-30-2*01

125 sequences assigned
42 (33.6%) exact matches, in which:
41 unique CDR3
5 unique J



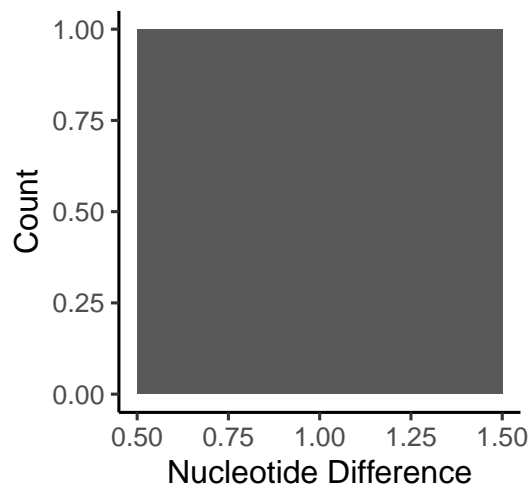
IGHV4-4*02

413 sequences assigned
149 (36.1%) exact matches, in which:
146 unique CDR3
6 unique J



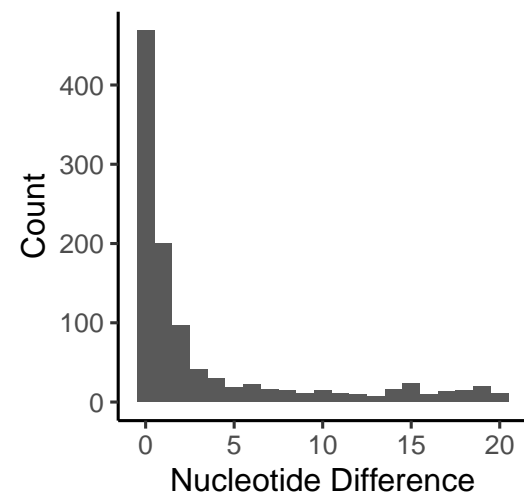
IGHV4-28*04

1 sequences assigned
No exact matches.



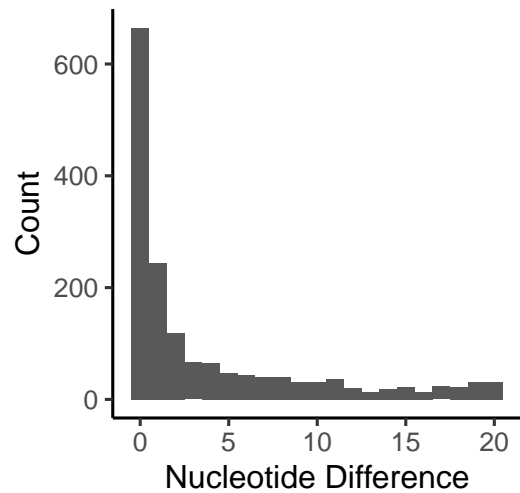
IGHV4-31*03

1461 sequences assigned
469 (32.1%) exact matches, in which:
450 unique CDR3
7 unique J



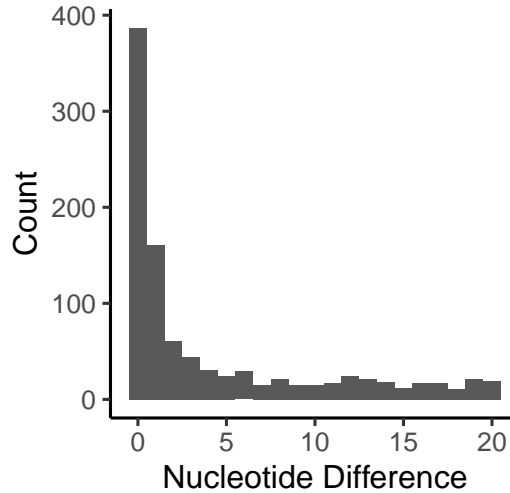
IGHV4–34*01

2014 sequences assigned
665 (33%) exact matches, in which:
655 unique CDR3
7 unique J



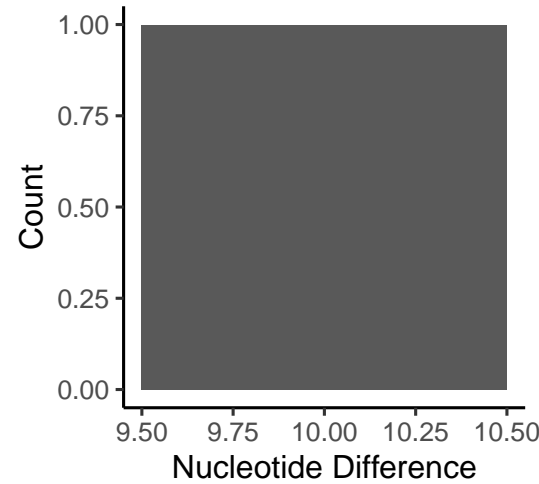
IGHV4–59*01

1216 sequences assigned
387 (31.8%) exact matches, in which:
382 unique CDR3
7 unique J



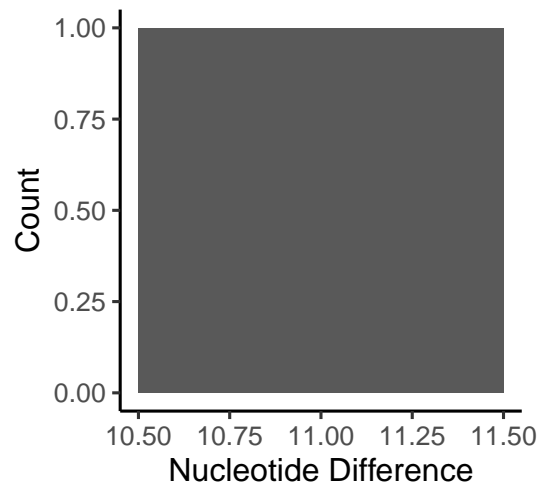
IGHV1/OR15–1*04

2 sequences assigned
No exact matches.



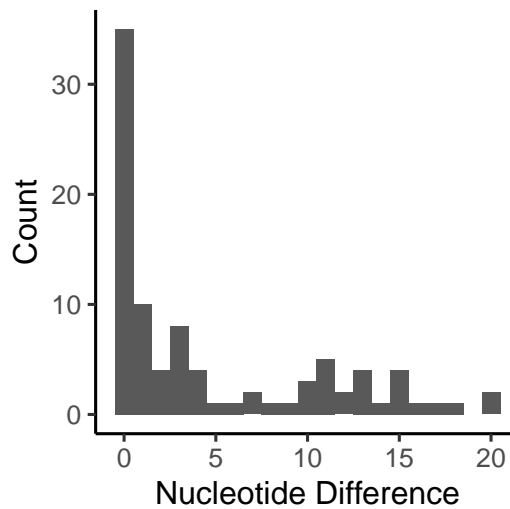
IGHV4–38–2*02

3 sequences assigned
No exact matches.



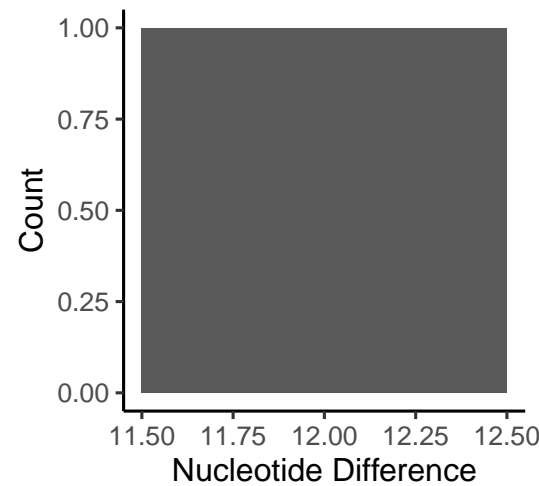
IGHV4–61*01

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



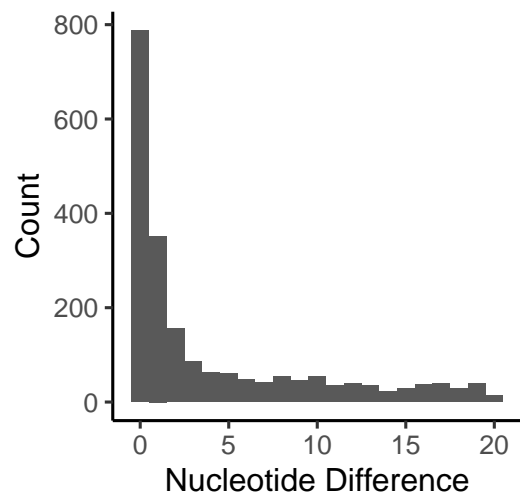
IGHV4/OR15–8*02

4 sequences assigned
No exact matches.



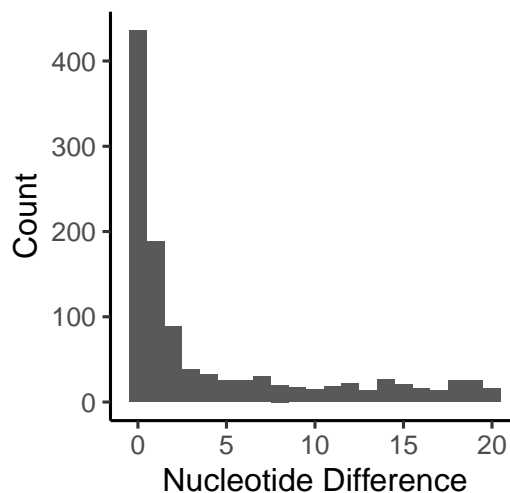
IGHV4–39*01

2797 sequences assigned
788 (28.2%) exact matches, in which:
770 unique CDR3
7 unique J



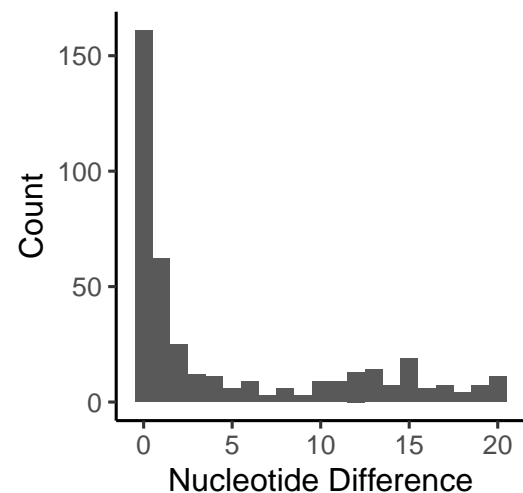
IGHV4–61*02

1466 sequences assigned
436 (29.7%) exact matches, in which:
424 unique CDR3
7 unique J



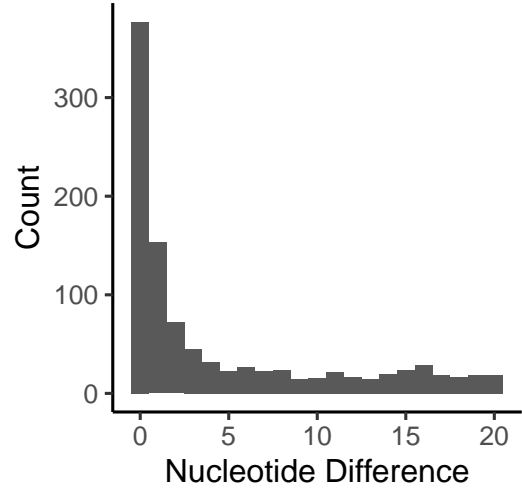
IGHV5–10–1*03

586 sequences assigned
161 (27.5%) exact matches, in which:
159 unique CDR3
6 unique J



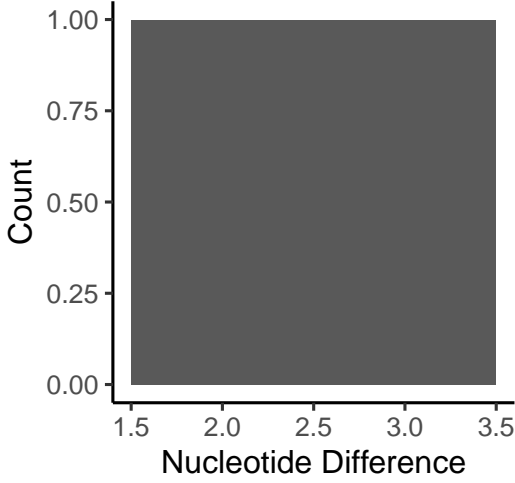
IGHV5-51*01

1416 sequences assigned
377 (26.6%) exact matches, in which:
369 unique CDR3
7 unique J



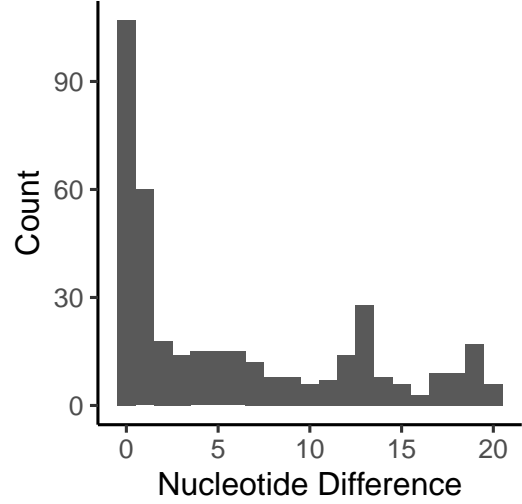
IGHV7-4-1*01

2 sequences assigned
No exact matches.



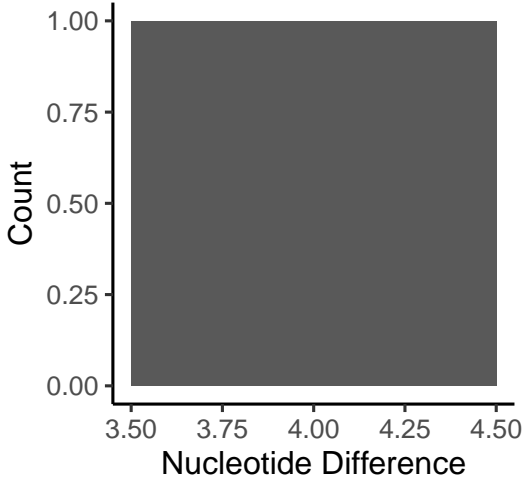
IGHV6-1*01

418 sequences assigned
107 (25.6%) exact matches, in which:
105 unique CDR3
7 unique J



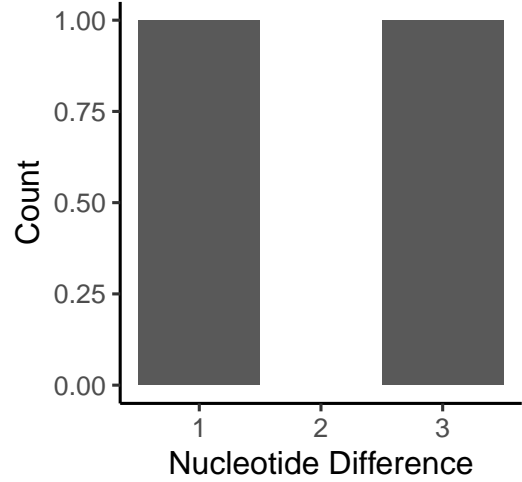
IGHV7-4-1*02

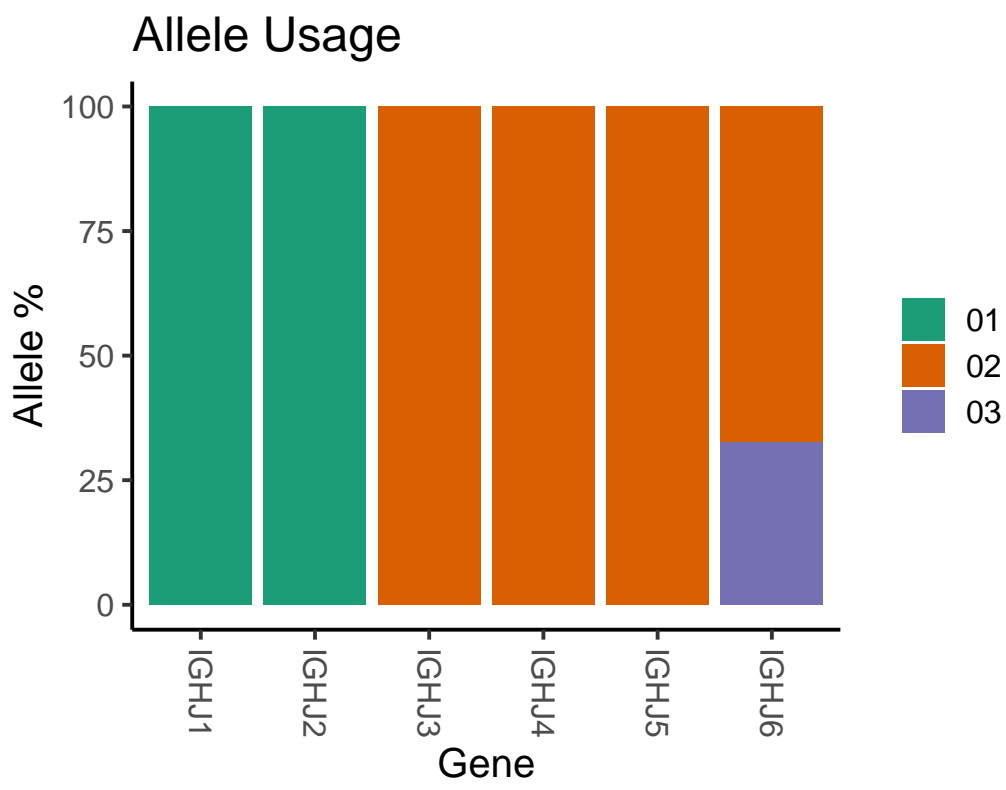
2 sequences assigned
No exact matches.



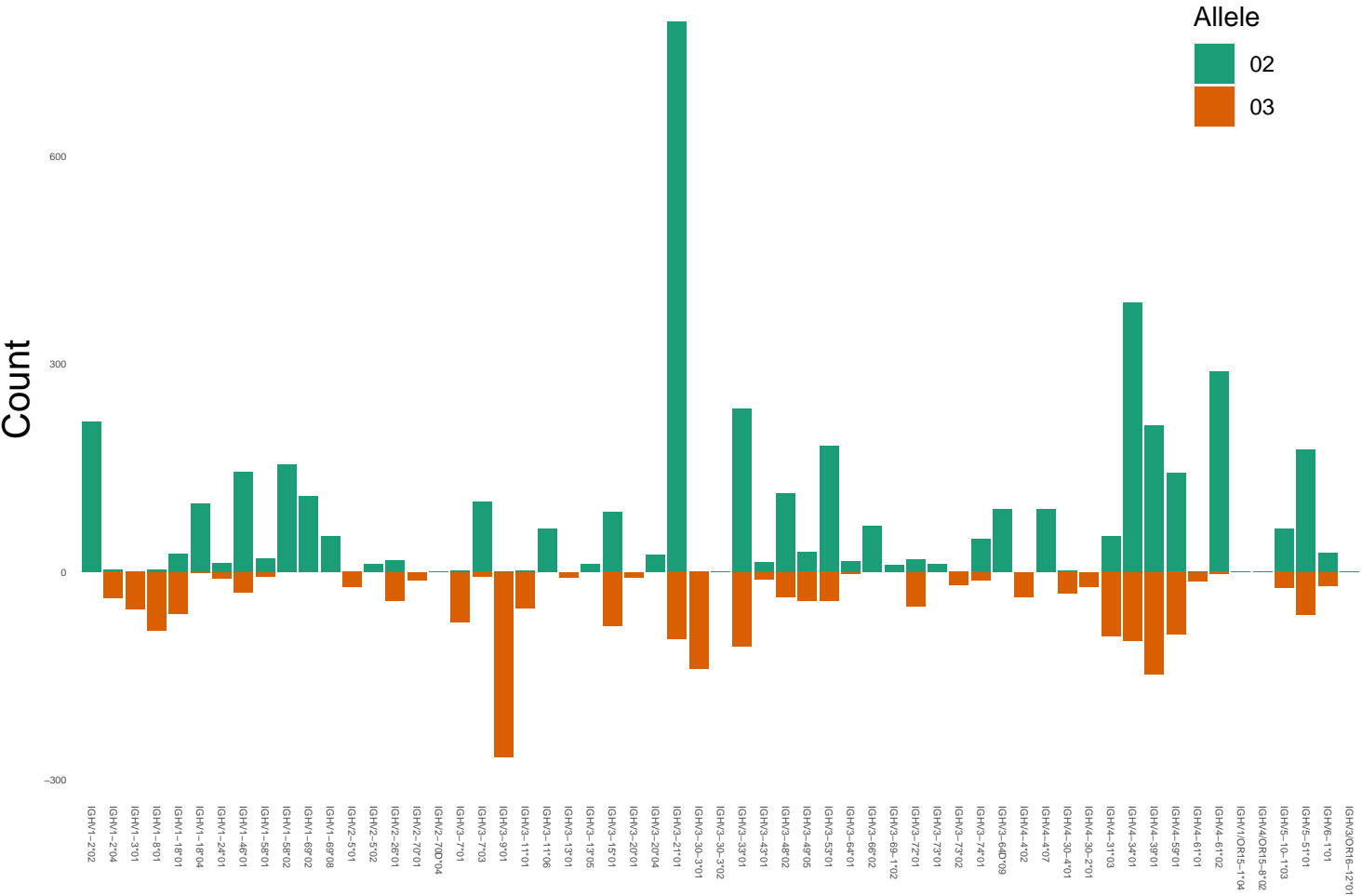
IGHV3/OR16-12*01

3 sequences assigned
No exact matches.





Sequence Count by IGHJ6 allele usage



Warning – no inferred sequences found.