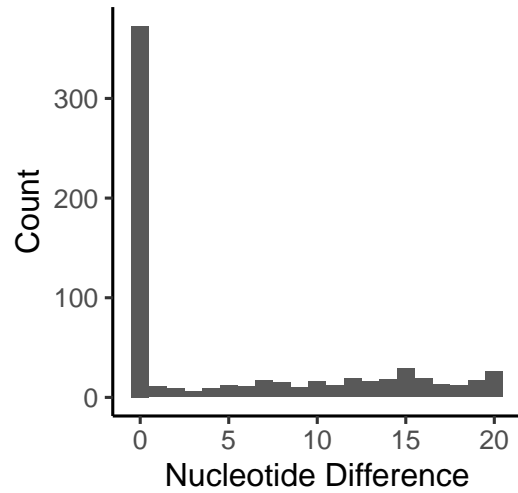


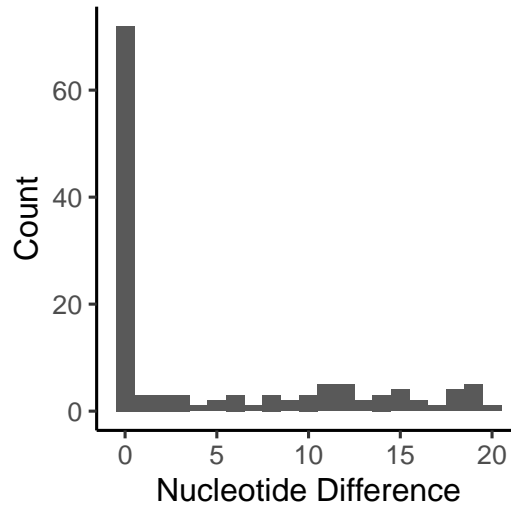
IGHV1-2*02

841 sequences assigned
373 (44.4%) exact matches, in which:
373 unique CDR3
6 unique J



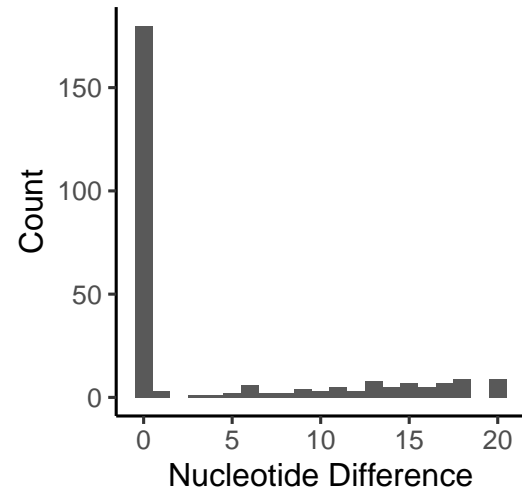
IGHV1-3*01_05

185 sequences assigned
72 (38.9%) exact matches, in which:
72 unique CDR3
5 unique J



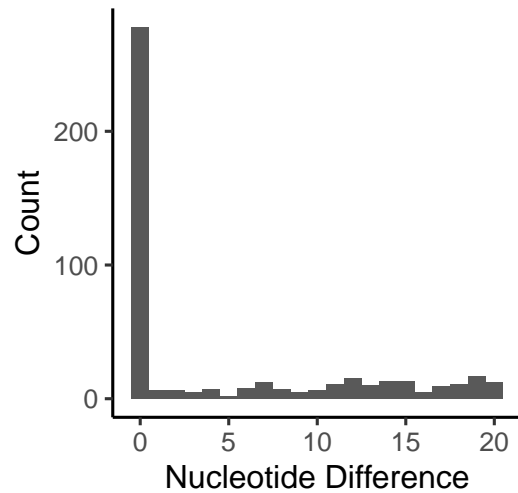
IGHV1-24*01

376 sequences assigned
180 (47.9%) exact matches, in which:
179 unique CDR3
7 unique J



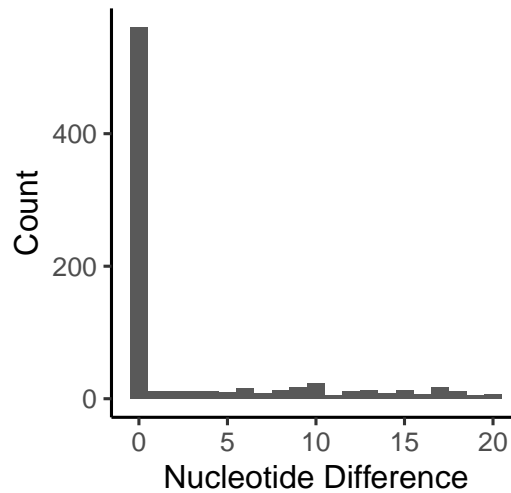
IGHV1-2*06

617 sequences assigned
278 (45.1%) exact matches, in which:
278 unique CDR3
7 unique J



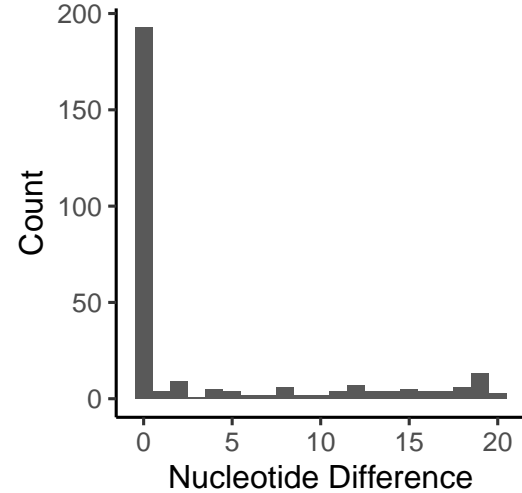
IGHV1-8*01

900 sequences assigned
561 (62.3%) exact matches, in which:
561 unique CDR3
7 unique J



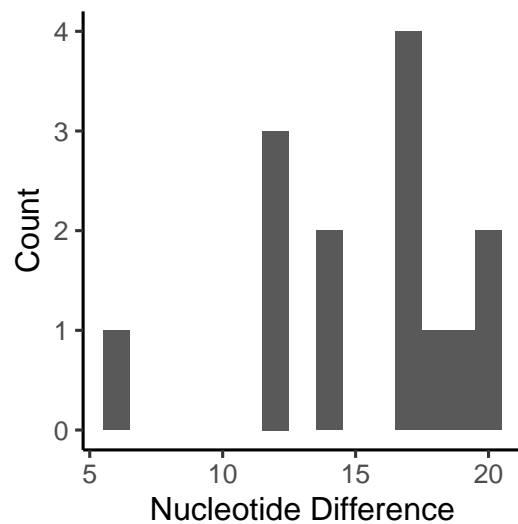
IGHV1-46*01

345 sequences assigned
193 (55.9%) exact matches, in which:
193 unique CDR3
6 unique J



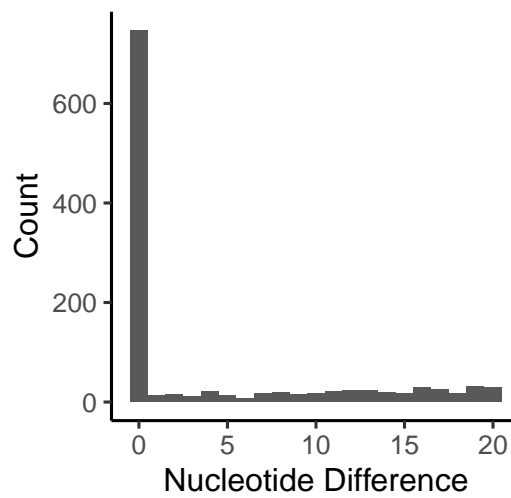
IGHV1-3*04

24 sequences assigned
No exact matches.



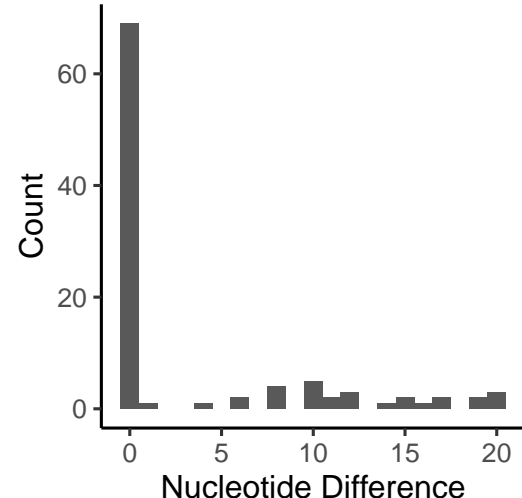
IGHV1-18*01

1445 sequences assigned
747 (51.7%) exact matches, in which:
747 unique CDR3
7 unique J



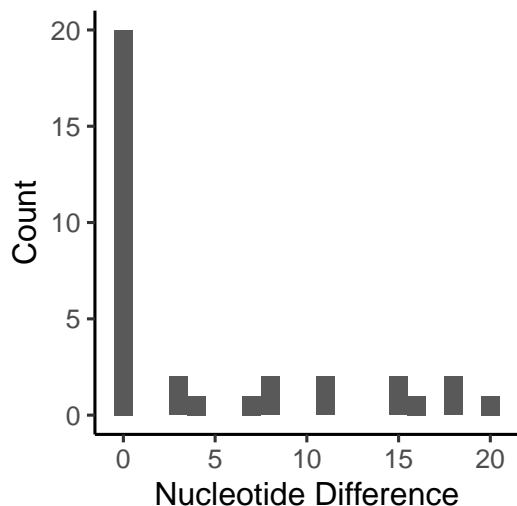
IGHV1-46*03

118 sequences assigned
69 (58.5%) exact matches, in which:
69 unique CDR3
6 unique J



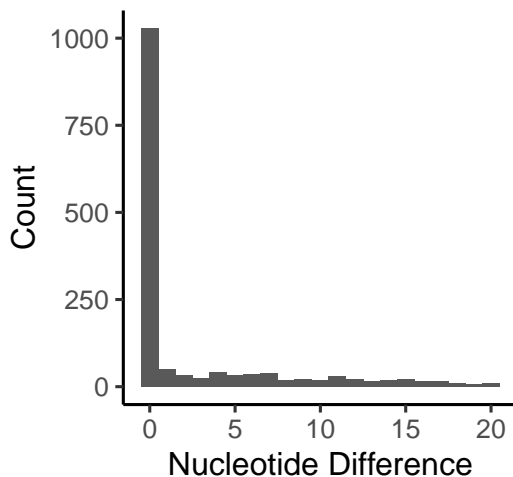
IGHV1-58*02

43 sequences assigned
20 (46.5%) exact matches, in which:
20 unique CDR3
5 unique J



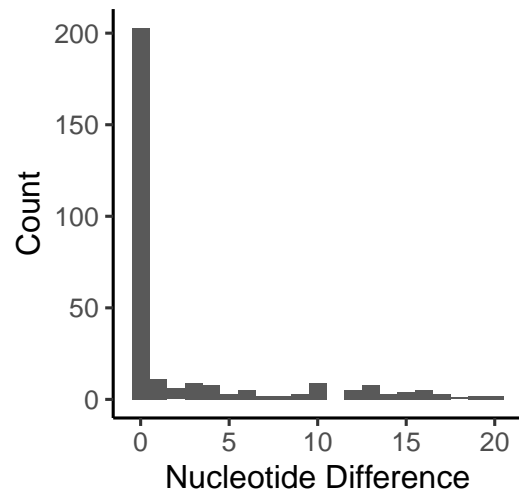
IGHV2-5*02

1619 sequences assigned
1028 (63.5%) exact matches, in which:
1026 unique CDR3
7 unique J



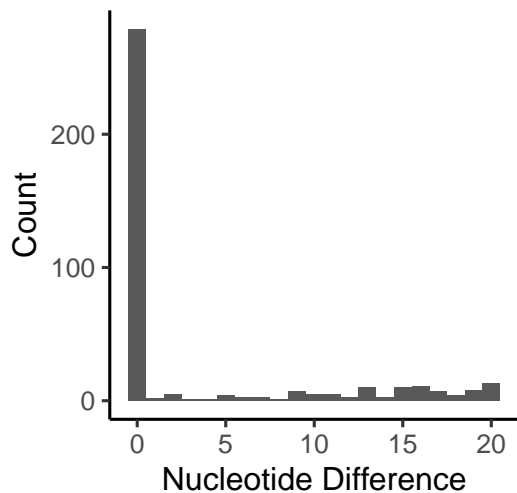
IGHV2-70*11_15

312 sequences assigned
203 (65.1%) exact matches, in which:
202 unique CDR3
7 unique J



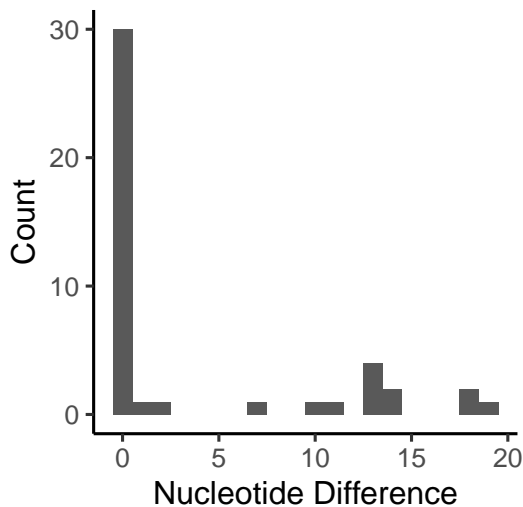
IGHV1-69*05

539 sequences assigned
279 (51.8%) exact matches, in which:
279 unique CDR3
6 unique J



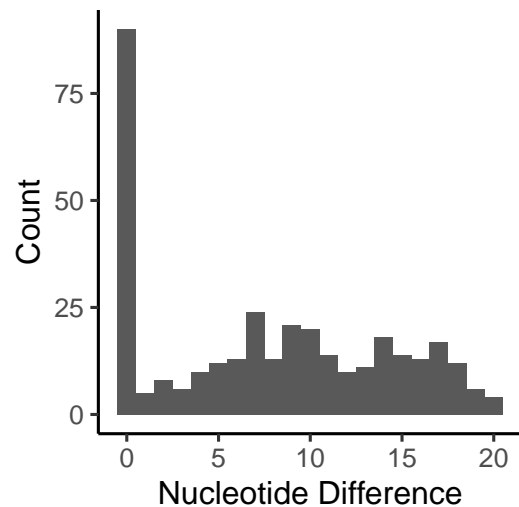
IGHV2-26*01

46 sequences assigned
30 (65.2%) exact matches, in which:
30 unique CDR3
5 unique J



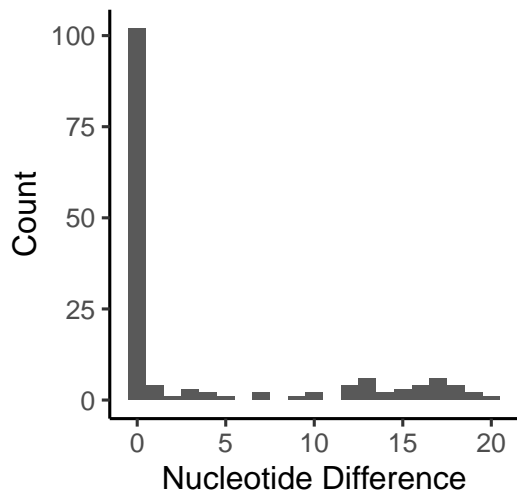
IGHV3-7*01

403 sequences assigned
90 (22.3%) exact matches, in which:
90 unique CDR3
5 unique J



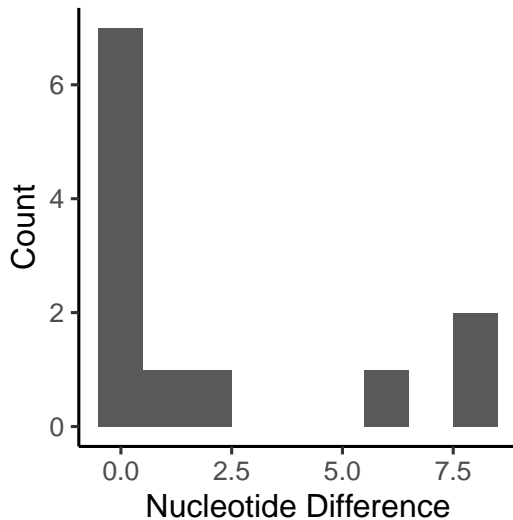
IGHV1-69*04_09

228 sequences assigned
102 (44.7%) exact matches, in which:
102 unique CDR3
6 unique J



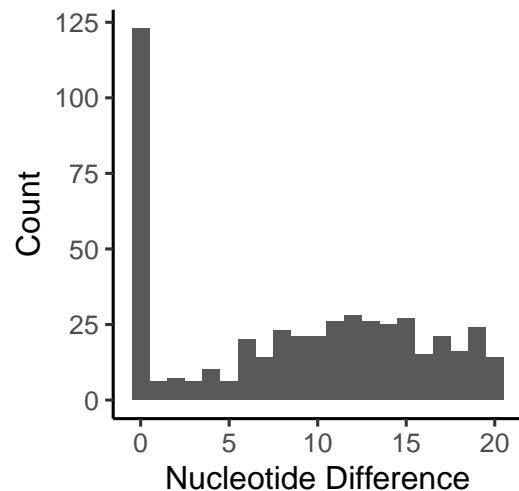
IGHV2-26*02

15 sequences assigned
7 (46.7%) exact matches, in which:
7 unique CDR3
2 unique J



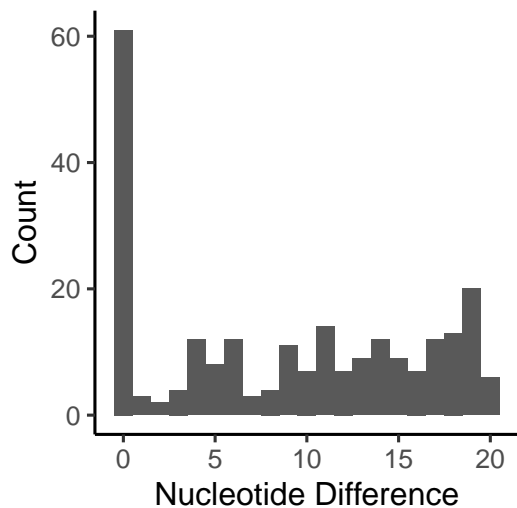
IGHV3-7*03

553 sequences assigned
123 (22.2%) exact matches, in which:
122 unique CDR3
6 unique J



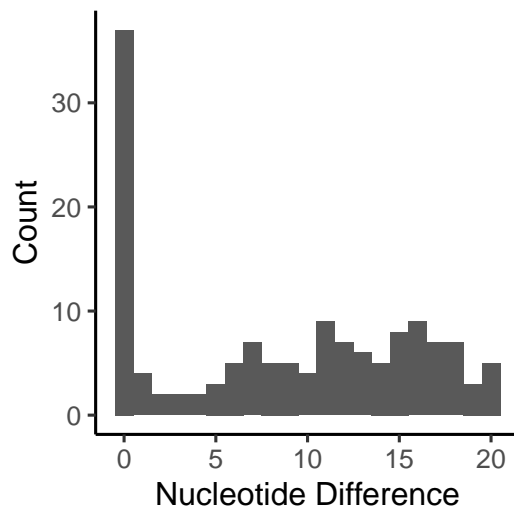
IGHV3-9*01

333 sequences assigned
61 (18.3%) exact matches, in which:
61 unique CDR3
6 unique J



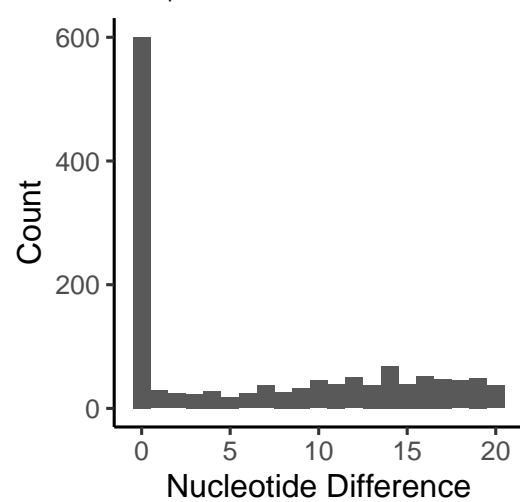
IGHV3-15*01_02

198 sequences assigned
37 (18.7%) exact matches, in which:
37 unique CDR3
6 unique J



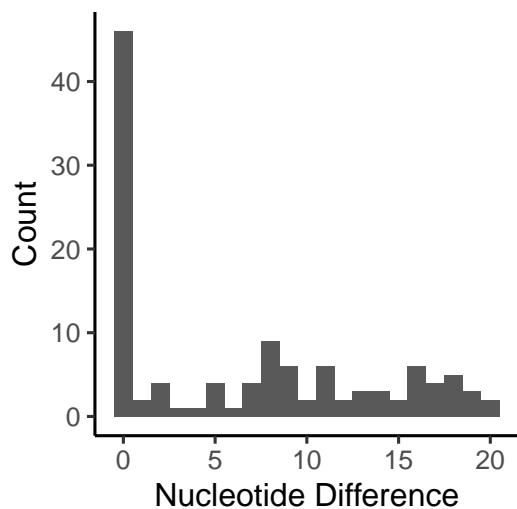
IGHV3-23*01_04

1834 sequences assigned
601 (32.8%) exact matches, in which:
596 unique CDR3
7 unique J



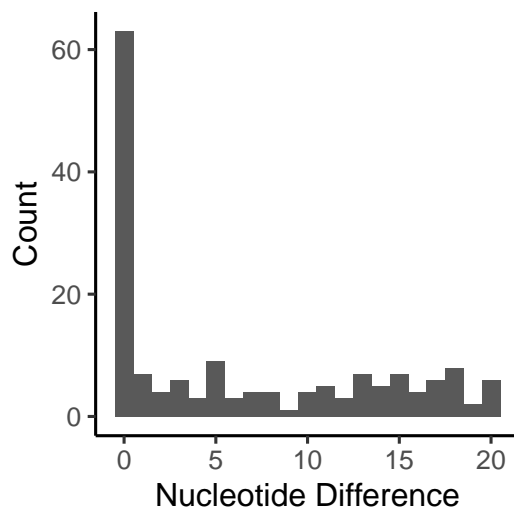
IGHV3-11*01

185 sequences assigned
46 (24.9%) exact matches, in which:
45 unique CDR3
6 unique J



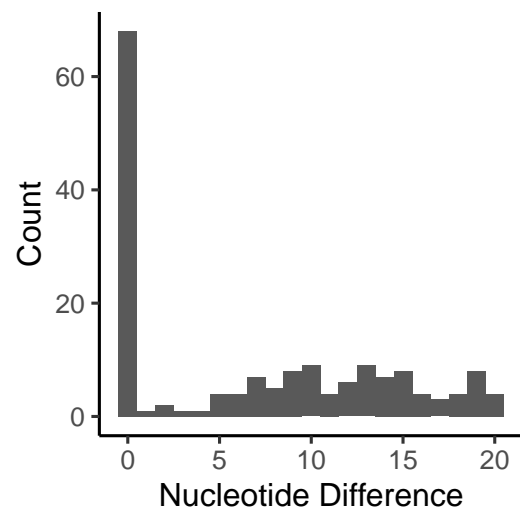
IGHV3-20*03_04

203 sequences assigned
63 (31%) exact matches, in which:
62 unique CDR3
5 unique J



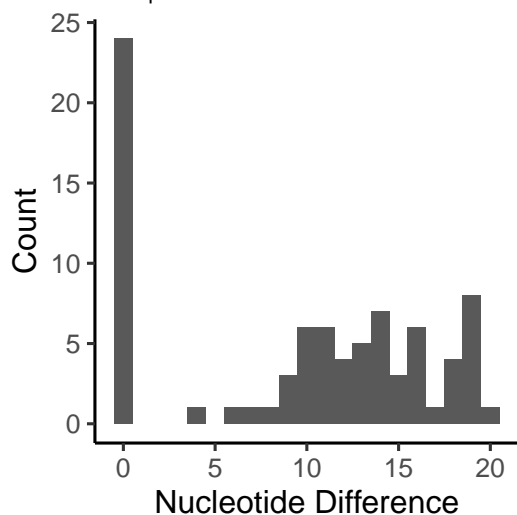
IGHV3-33*01

237 sequences assigned
68 (28.7%) exact matches, in which:
68 unique CDR3
6 unique J



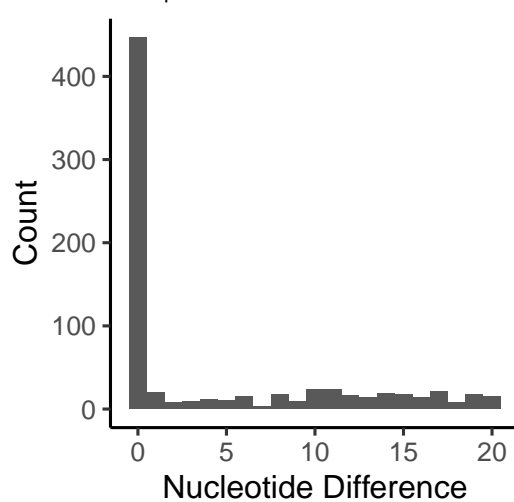
IGHV3-13*01

113 sequences assigned
24 (21.2%) exact matches, in which:
24 unique CDR3
6 unique J



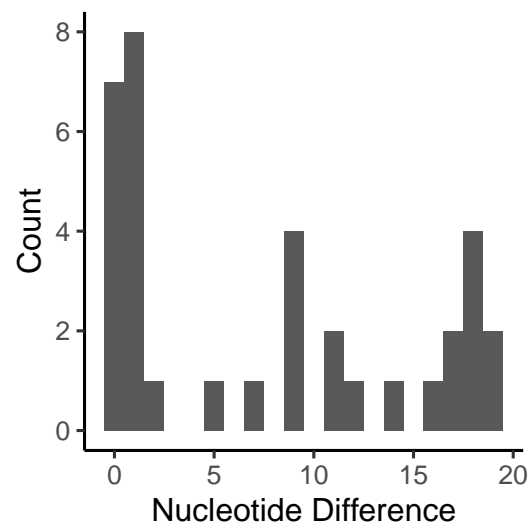
IGHV3-21*01_02

920 sequences assigned
447 (48.6%) exact matches, in which:
439 unique CDR3
7 unique J



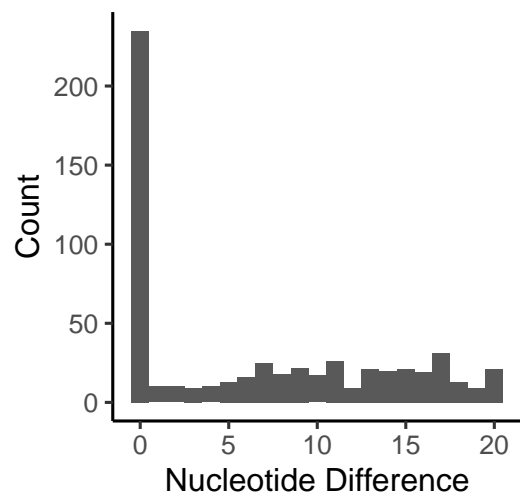
IGHV3-43*01

48 sequences assigned
7 (14.6%) exact matches, in which:
7 unique CDR3
3 unique J



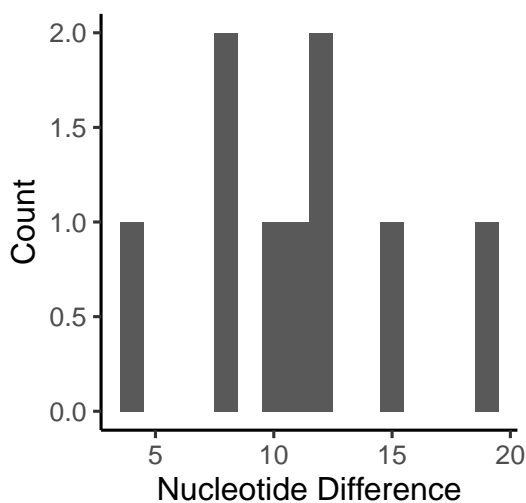
IGHV3-48*01

782 sequences assigned
235 (30.1%) exact matches, in which:
234 unique CDR3
7 unique J



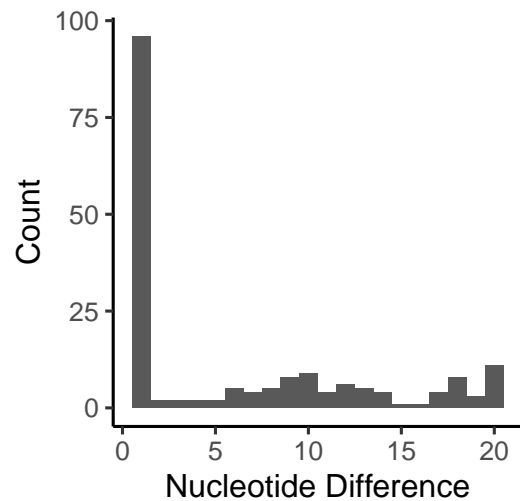
IGHV3-53*01_02

13 sequences assigned
No exact matches.



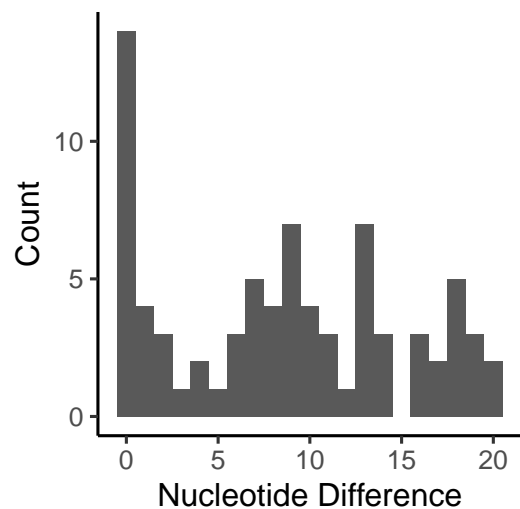
IGHV3-66*01

253 sequences assigned
No exact matches.



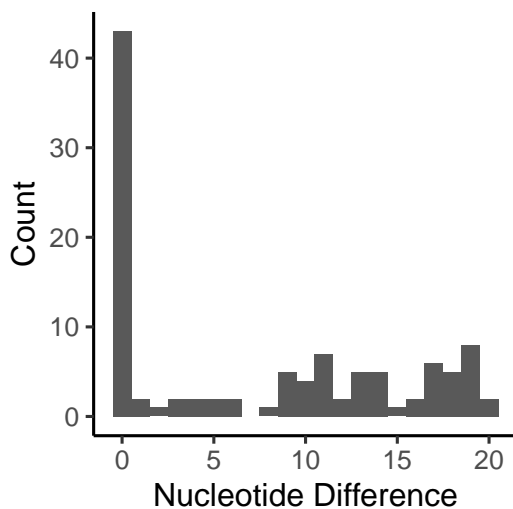
IGHV3-49*03_05

117 sequences assigned
14 (12%) exact matches, in which:
14 unique CDR3
5 unique J



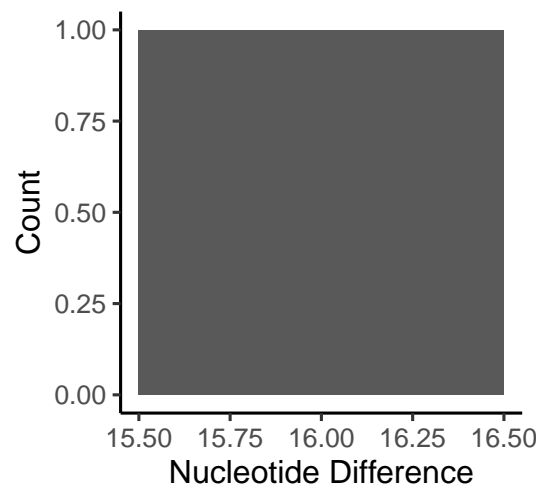
IGHV3-64*01

131 sequences assigned
43 (32.8%) exact matches, in which:
40 unique CDR3
7 unique J



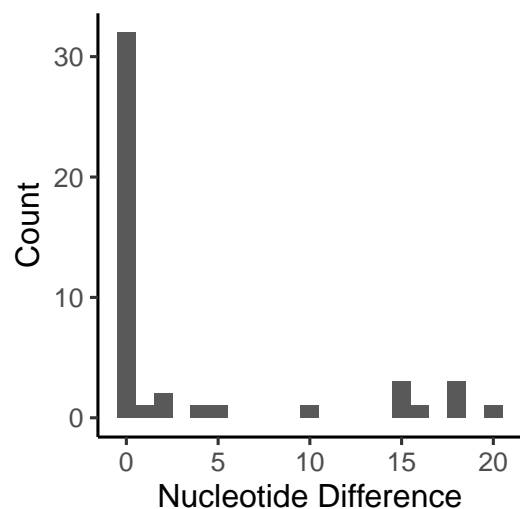
IGHV3-69-1*01

3 sequences assigned
No exact matches.



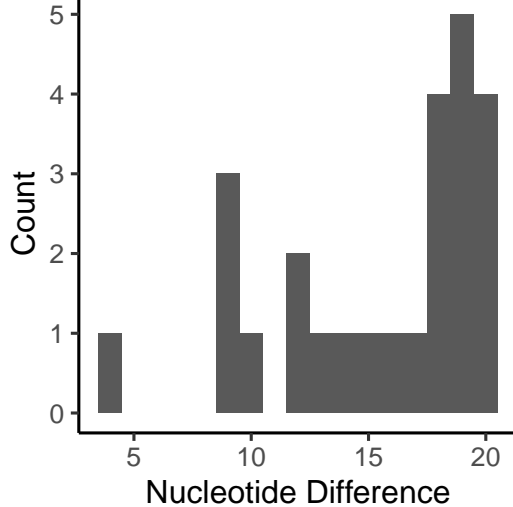
IGHV3-53*04

55 sequences assigned
32 (58.2%) exact matches, in which:
30 unique CDR3
5 unique J



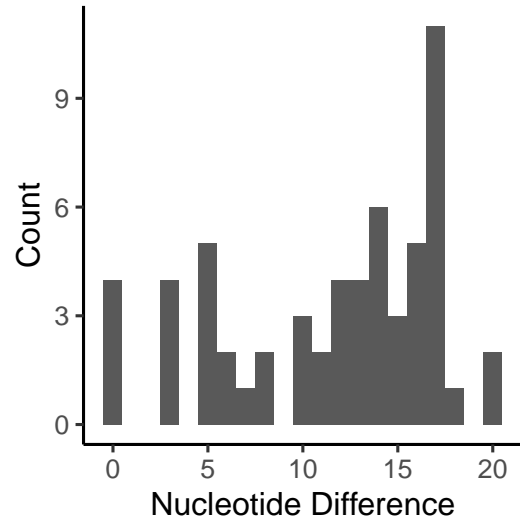
IGHV3-64*02_07

37 sequences assigned
No exact matches.



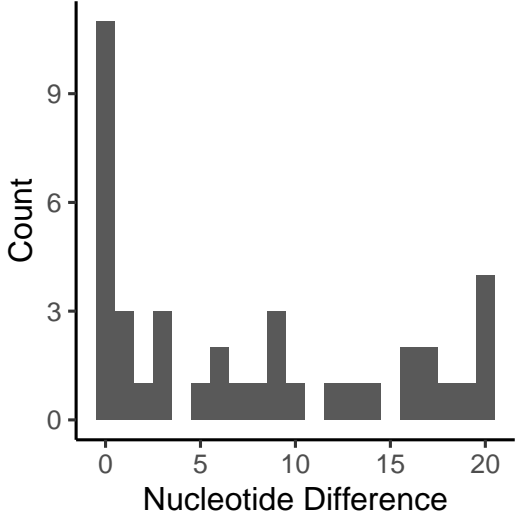
IGHV3-72*01

75 sequences assigned
4 (5.3%) exact matches, in which:
4 unique CDR3
2 unique J



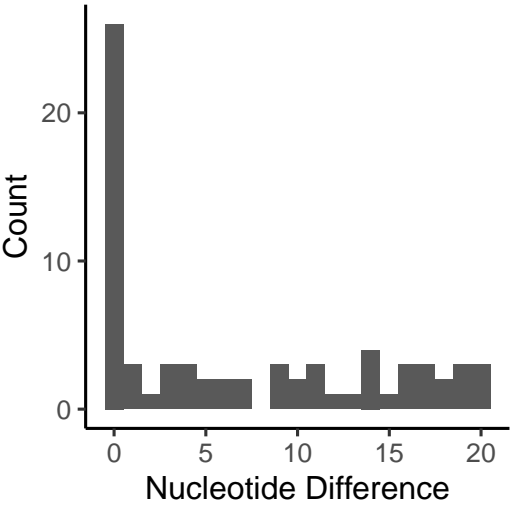
IGHV3-73*01_02

54 sequences assigned
11 (20.4%) exact matches, in which:
11 unique CDR3
4 unique J



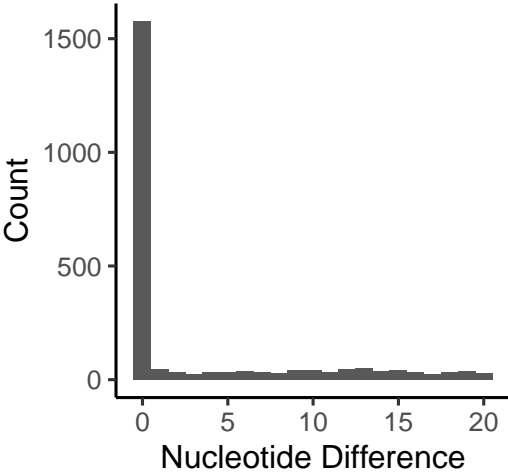
IGHV3-43D*04

94 sequences assigned
26 (27.7%) exact matches, in which:
26 unique CDR3
6 unique J



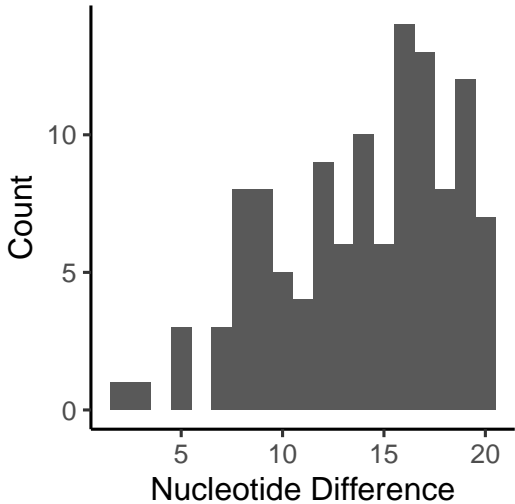
IGHV4-4*09

2667 sequences assigned
1576 (59.1%) exact matches, in which:
1556 unique CDR3
7 unique J



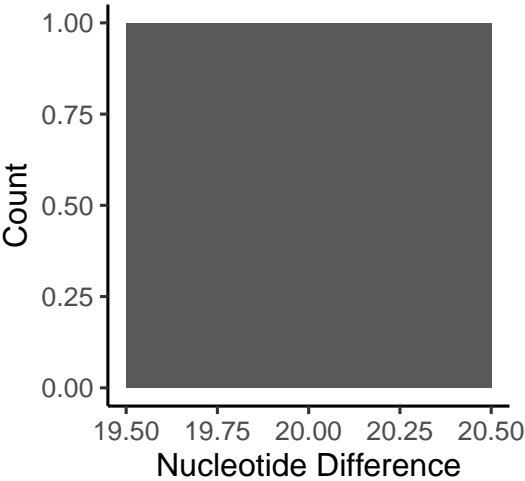
IGHV3-74*03

191 sequences assigned
No exact matches.



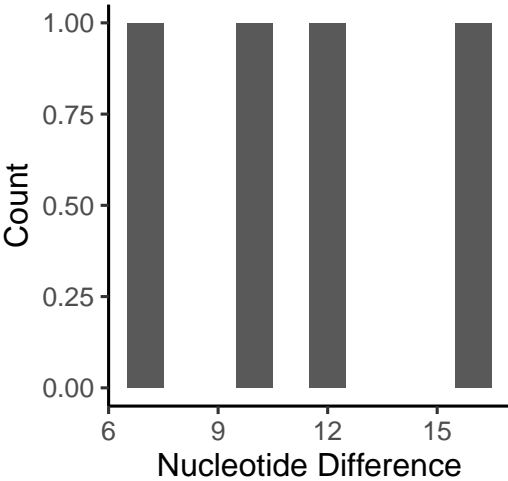
IGHV3-64D*06

1 sequences assigned
No exact matches.



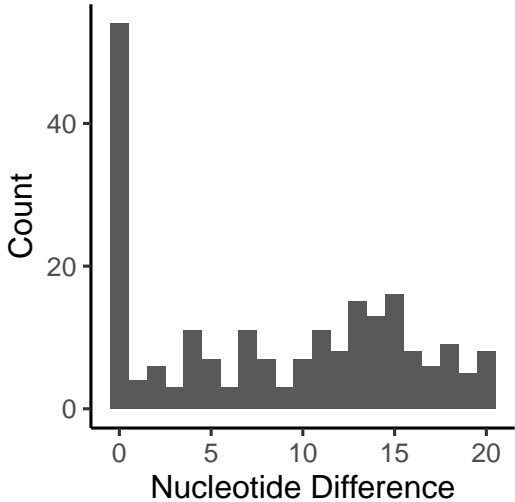
IGHV4-28*06

5 sequences assigned
No exact matches.



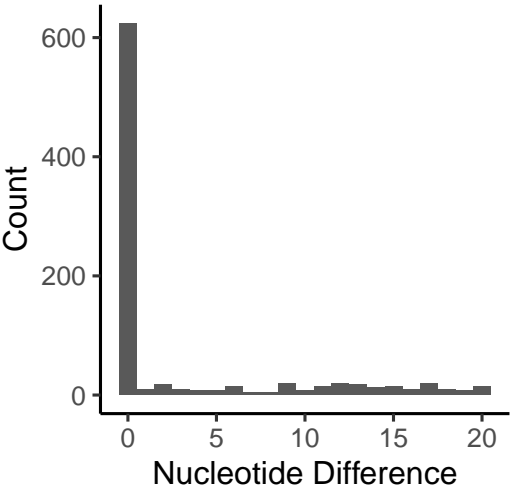
IGHV3-74*01_02

266 sequences assigned
54 (20.3%) exact matches, in which:
54 unique CDR3
6 unique J



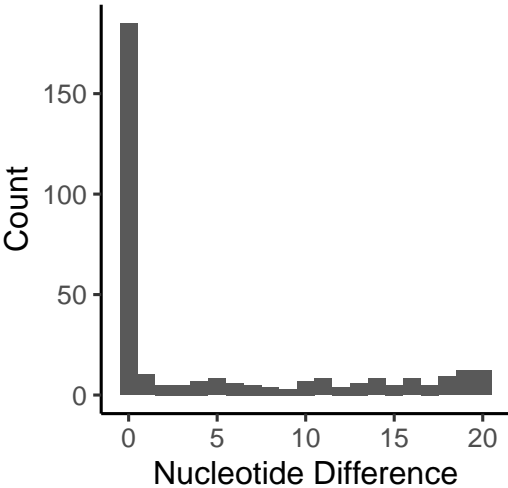
IGHV4-4*07

1017 sequences assigned
624 (61.4%) exact matches, in which:
622 unique CDR3
7 unique J



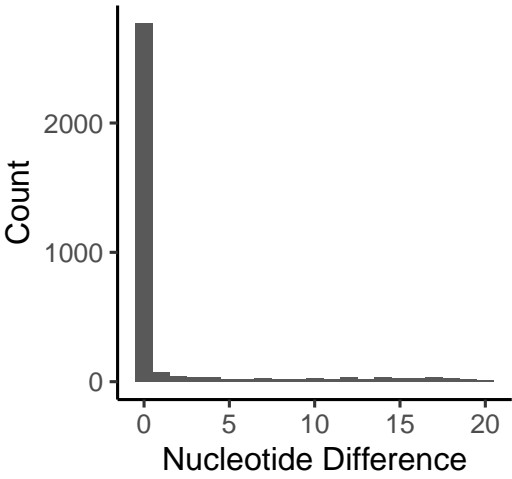
IGHV4-31*02

472 sequences assigned
185 (39.2%) exact matches, in which:
184 unique CDR3
6 unique J



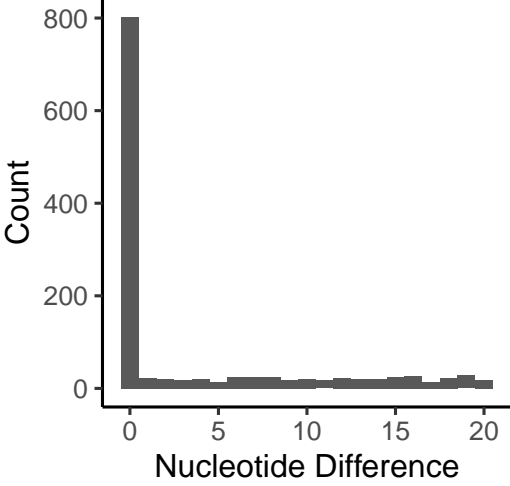
IGHV4-34*01_02

3603 sequences assigned
2770 (76.9%) exact matches, in which:
2749 unique CDR3
7 unique J



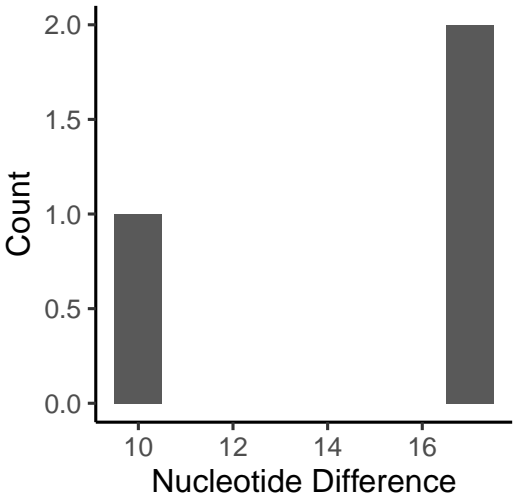
IGHV4-59*08

1519 sequences assigned
803 (52.9%) exact matches, in which:
794 unique CDR3
7 unique J



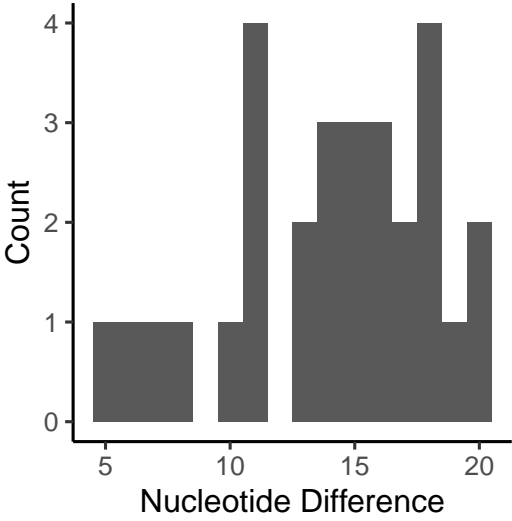
IGHV4/OR15-8*02

38 sequences assigned
No exact matches.



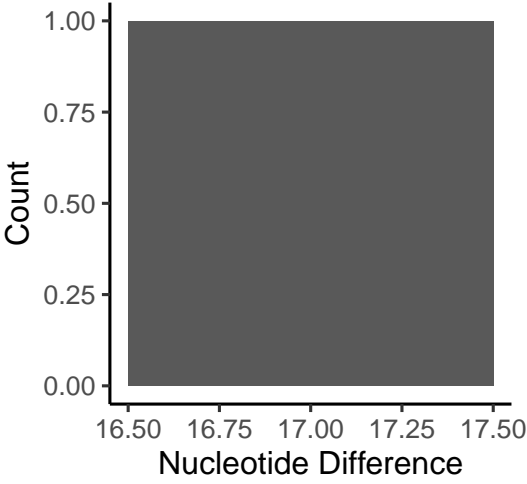
IGHV4-38-2*02

68 sequences assigned
No exact matches.



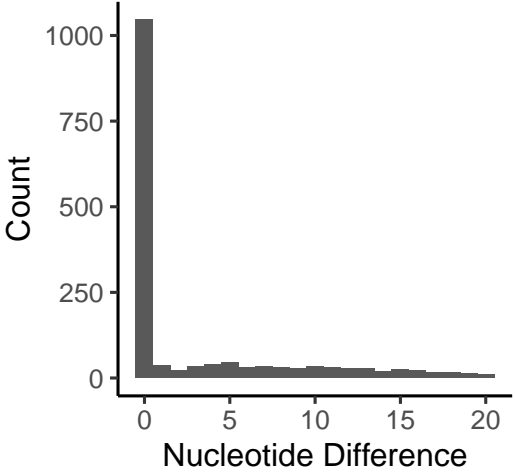
IGHV1/OR15-1*04

2 sequences assigned
No exact matches.



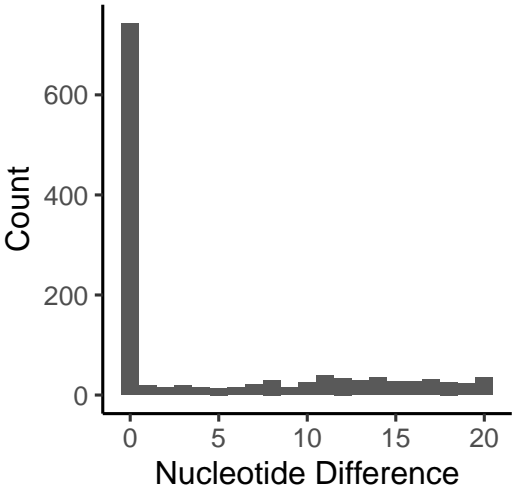
IGHV6-1*01_02

1644 sequences assigned
1046 (63.6%) exact matches, in which:
1039 unique CDR3
7 unique J



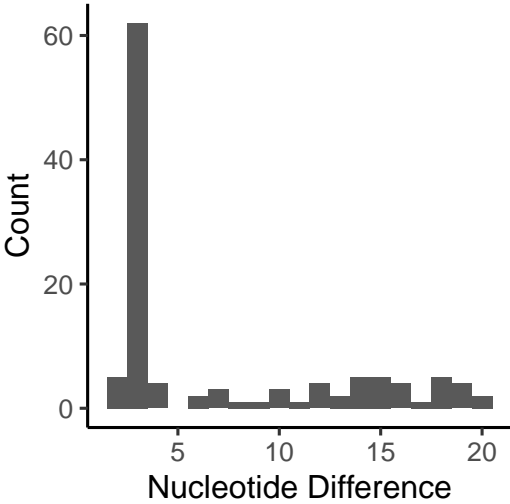
IGHV4-39*07

1623 sequences assigned
743 (45.8%) exact matches, in which:
738 unique CDR3
6 unique J



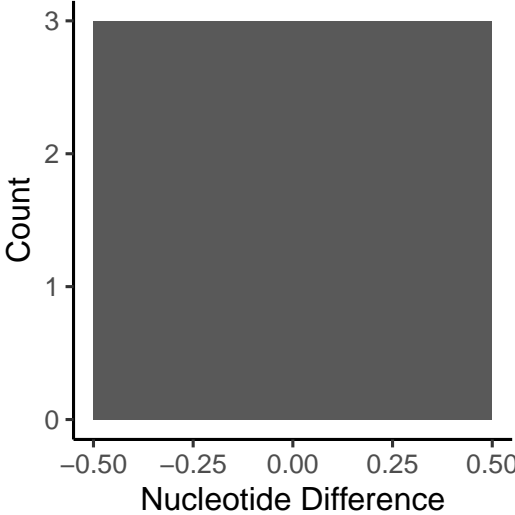
IGHV4/OR15-8*01

200 sequences assigned
No exact matches.

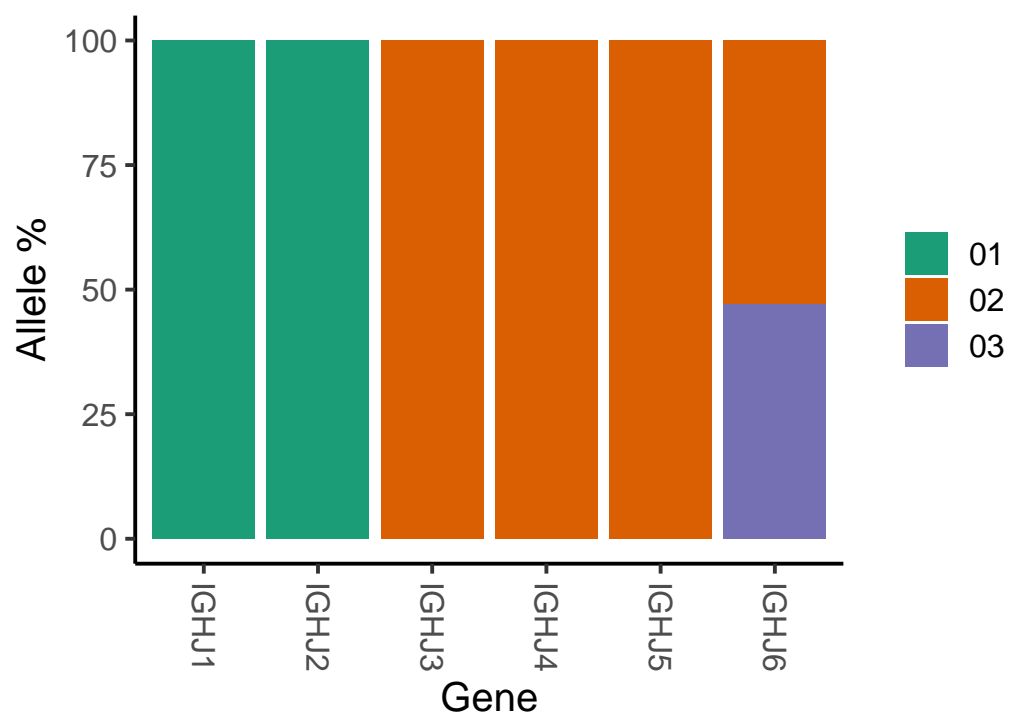


IGHV7-4-1*01

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



Allele Usage



Sequence Count by IGHJ6 allele usage



[illegible]