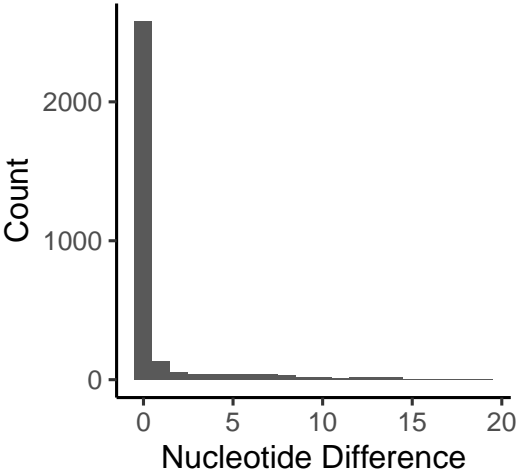


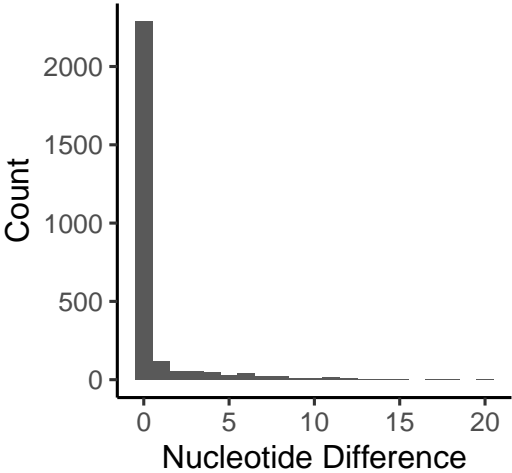
IGHV1-2*02

3115 sequences assigned
2579 (82.8%) exact matches, in which:
2572 unique CDR3
6 unique J



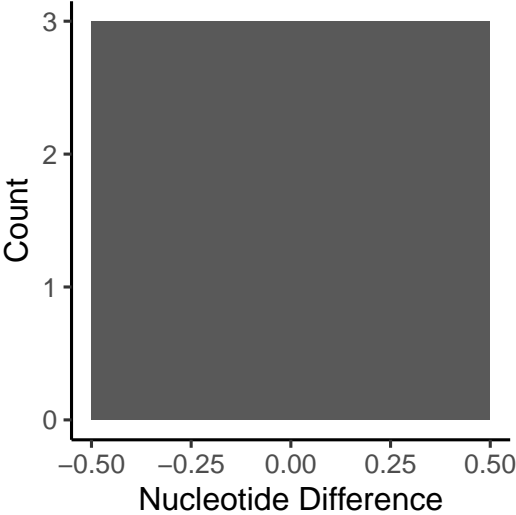
IGHV1-8*01

2740 sequences assigned
2288 (83.5%) exact matches, in which:
2283 unique CDR3
6 unique J



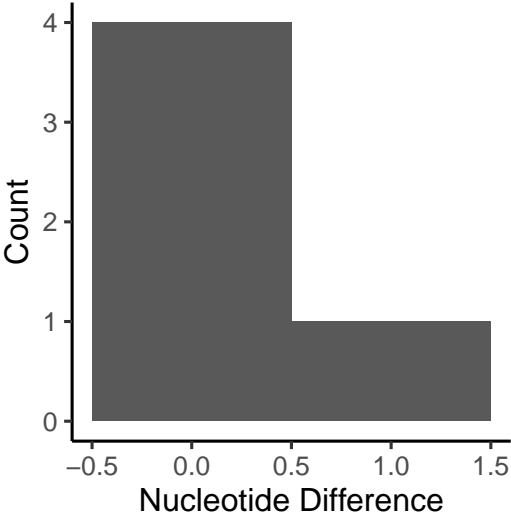
IGHV1-45*02

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



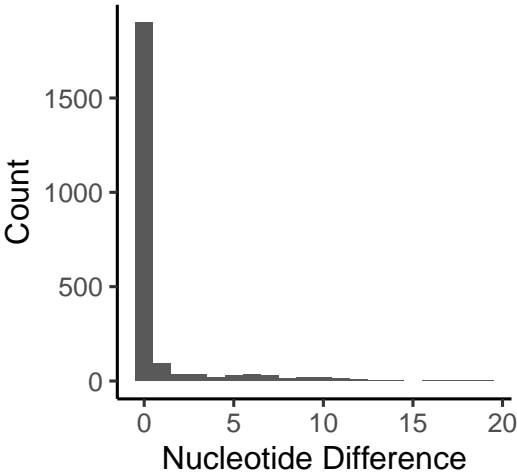
IGHV1-3*02

5 sequences assigned
4 (80%) exact matches, in which:
4 unique CDR3
3 unique J



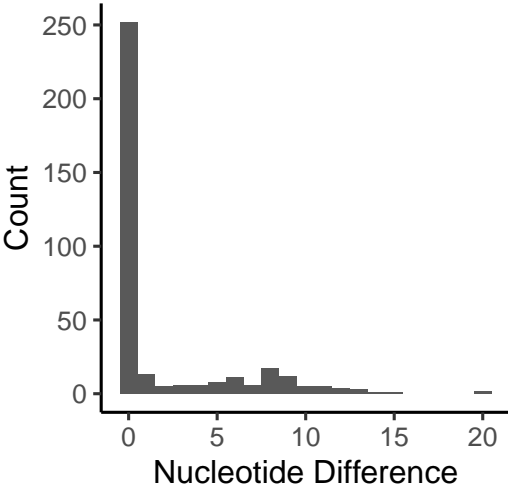
IGHV1-18*01

2263 sequences assigned
1899 (83.9%) exact matches, in which:
1893 unique CDR3
6 unique J



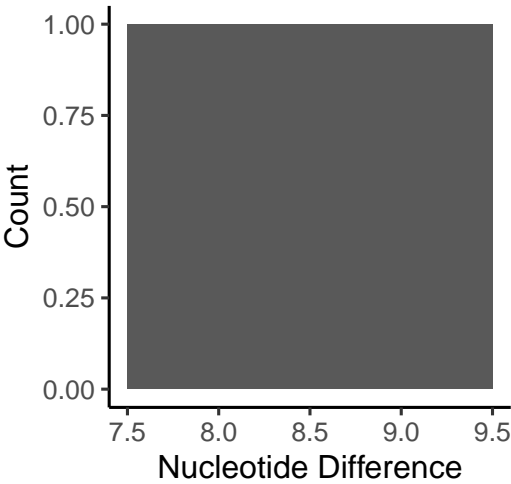
IGHV1-46*01

357 sequences assigned
252 (70.6%) exact matches, in which:
252 unique CDR3
6 unique J



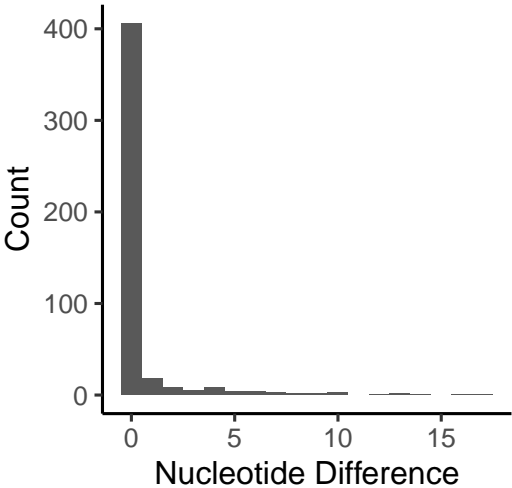
IGHV1-3*01_05

2 sequences assigned
No exact matches.



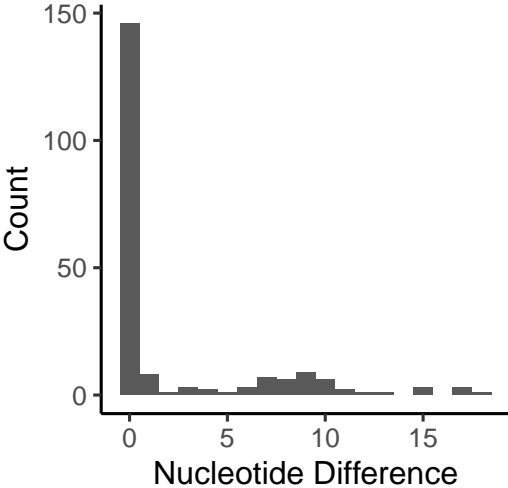
IGHV1-24*01

469 sequences assigned
406 (86.6%) exact matches, in which:
406 unique CDR3
6 unique J



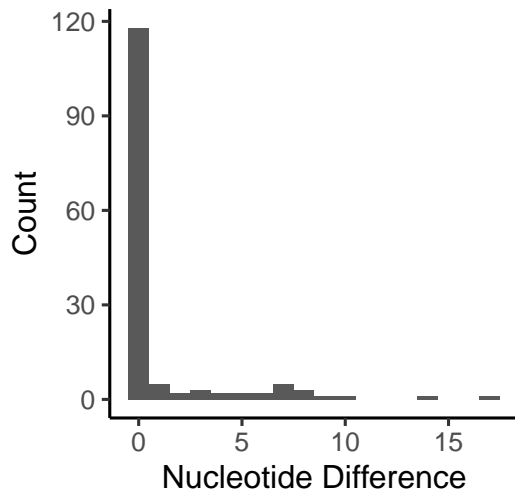
IGHV1-46*03

203 sequences assigned
146 (71.9%) exact matches, in which:
146 unique CDR3
6 unique J



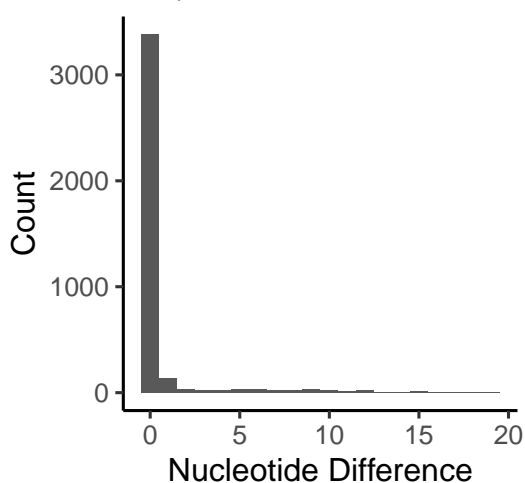
IGHV1–58*01_03

146 sequences assigned
118 (80.8%) exact matches, in which:
118 unique CDR3
5 unique J



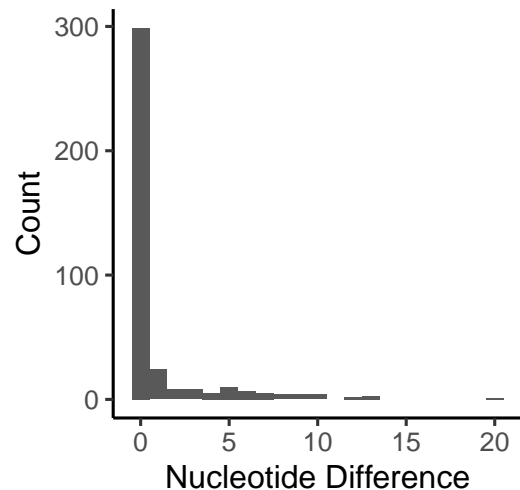
IGHV1–69*01_12_13

3829 sequences assigned
3382 (88.3%) exact matches, in which:
3379 unique CDR3
6 unique J



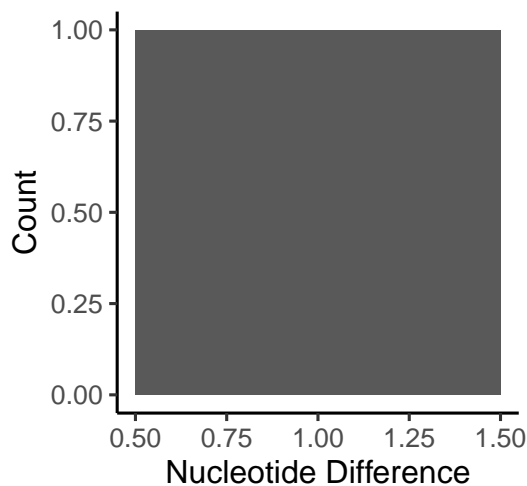
IGHV2–5*02

386 sequences assigned
299 (77.5%) exact matches, in which:
297 unique CDR3
6 unique J



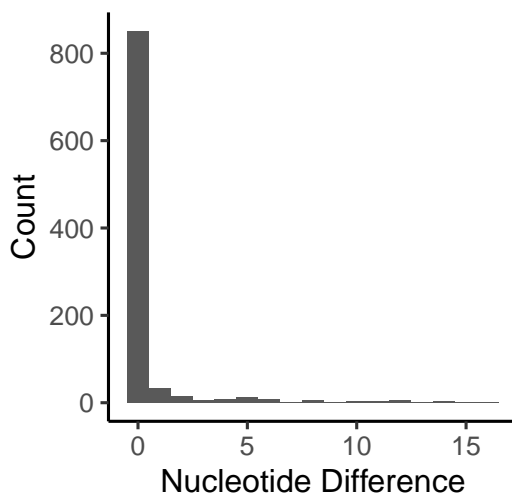
IGHV1–68*01

1 sequences assigned
No exact matches.



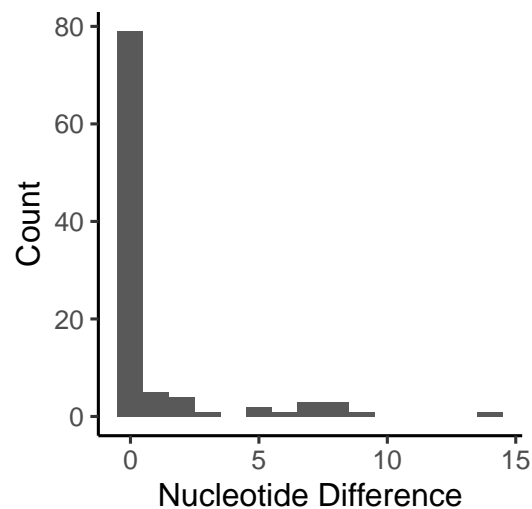
IGHV1–69*06_14

963 sequences assigned
851 (88.4%) exact matches, in which:
851 unique CDR3
6 unique J



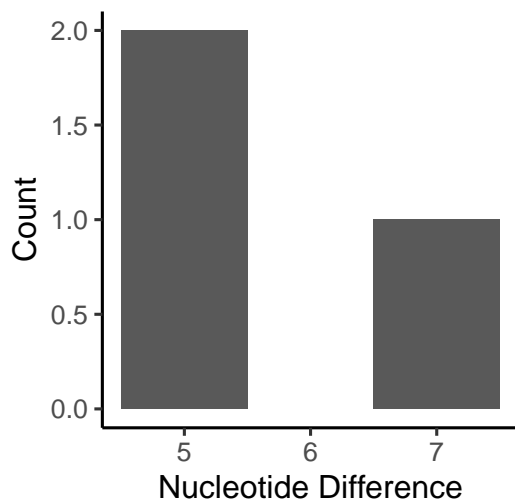
IGHV2–26*01

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



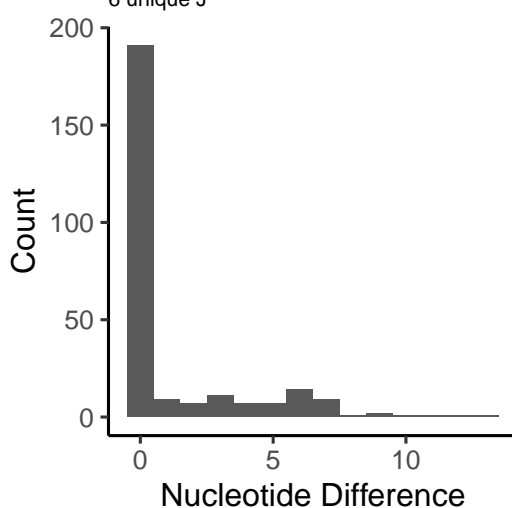
IGHV1–69–2*01

3 sequences assigned
No exact matches.



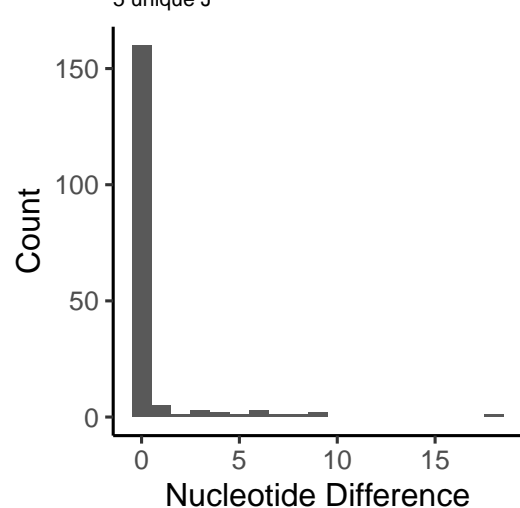
IGHV2–5*01

262 sequences assigned
191 (72.9%) exact matches, in which:
191 unique CDR3
6 unique J



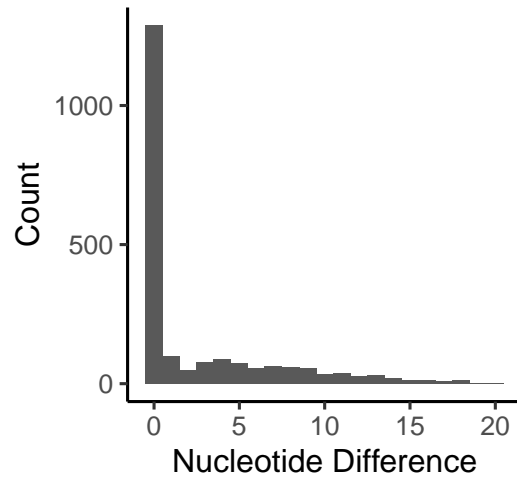
IGHV2–70*01

180 sequences assigned
160 (88.9%) exact matches, in which:
158 unique CDR3
5 unique J



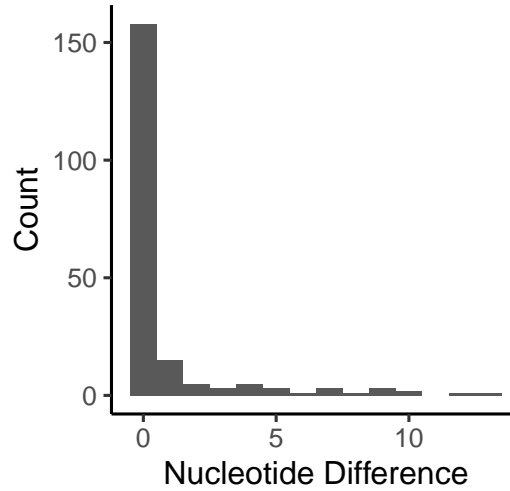
IGHV3-7*01

2112 sequences assigned
1288 (61%) exact matches, in which:
1237 unique CDR3
6 unique J



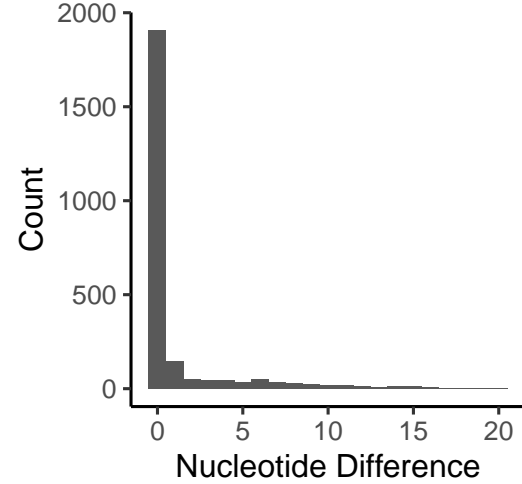
IGHV3-13*01

201 sequences assigned
158 (78.6%) exact matches, in which:
153 unique CDR3
5 unique J



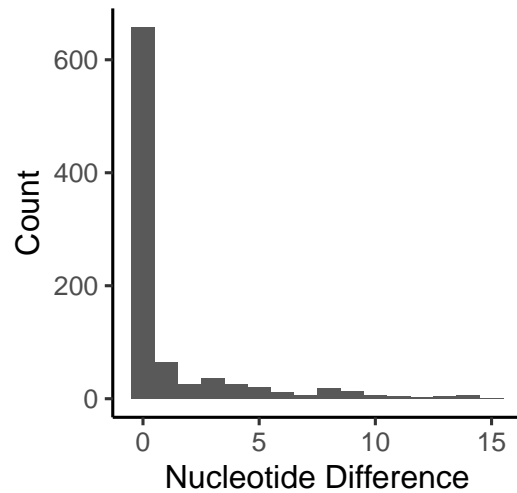
IGHV3-21*01_02

2470 sequences assigned
1906 (77.2%) exact matches, in which:
1869 unique CDR3
6 unique J



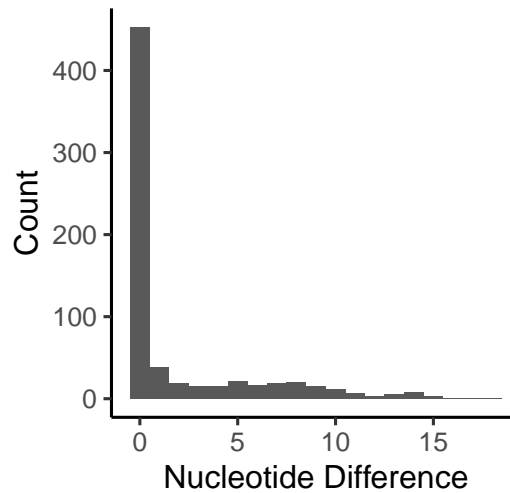
IGHV3-9*01

905 sequences assigned
658 (72.7%) exact matches, in which:
642 unique CDR3
6 unique J



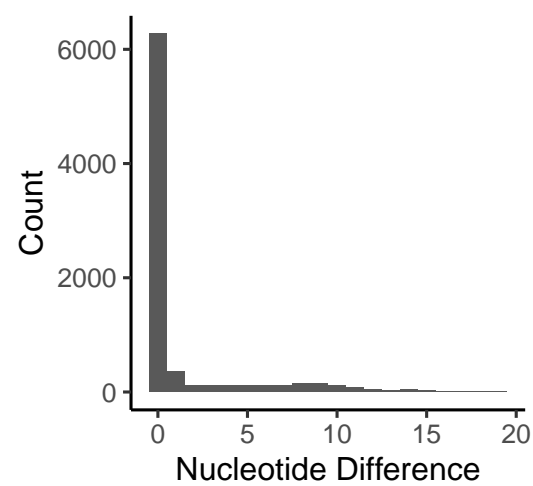
IGHV3-15*01_02

675 sequences assigned
453 (67.1%) exact matches, in which:
443 unique CDR3
6 unique J



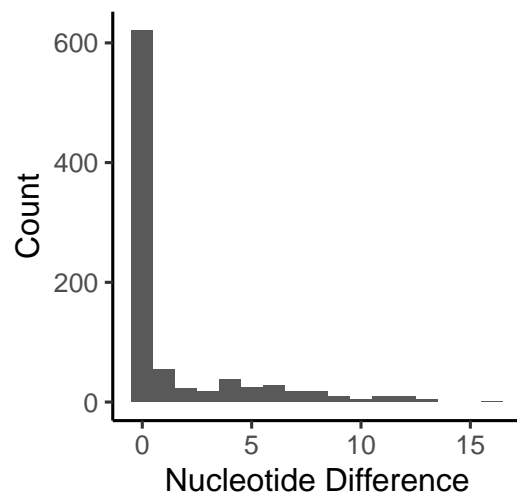
IGHV3-23*01_04

7999 sequences assigned
6273 (78.4%) exact matches, in which:
6145 unique CDR3
6 unique J



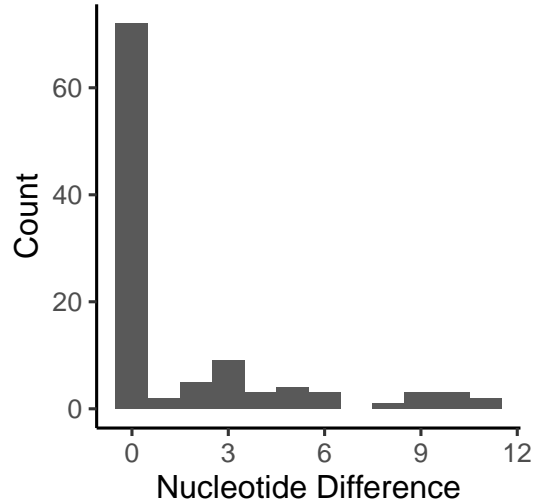
IGHV3-11*01

881 sequences assigned
621 (70.5%) exact matches, in which:
610 unique CDR3
6 unique J



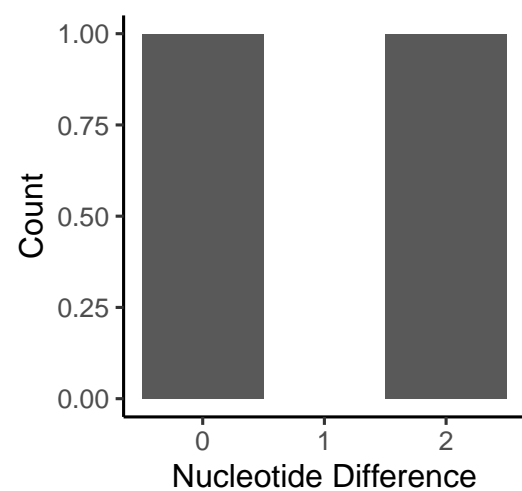
IGHV3-20*01_02

107 sequences assigned
72 (67.3%) exact matches, in which:
69 unique CDR3
6 unique J



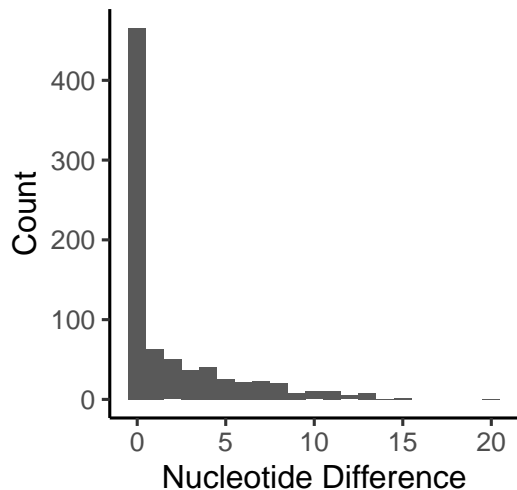
IGHV3-30-3*01

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



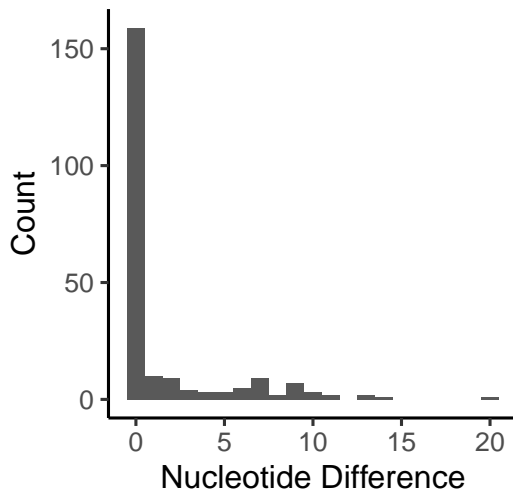
IGHV3–30*03

798 sequences assigned
466 (58.4%) exact matches, in which:
451 unique CDR3
6 unique J



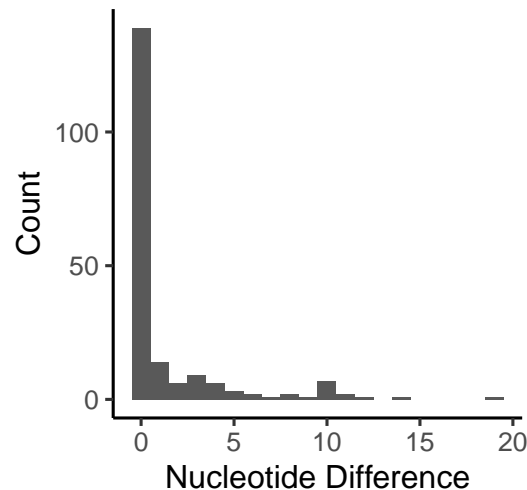
IGHV3–43*01

220 sequences assigned
159 (72.3%) exact matches, in which:
158 unique CDR3
6 unique J



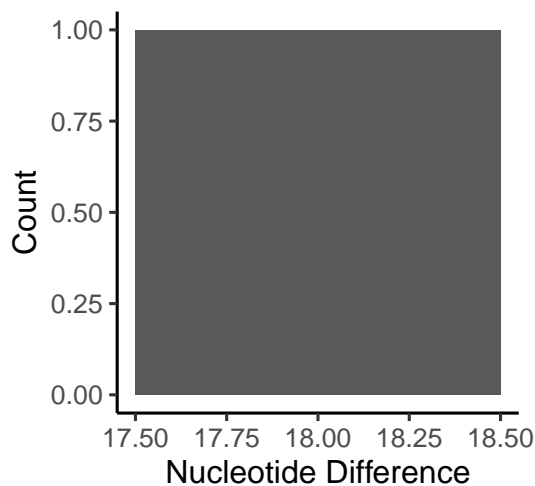
IGHV3–49*03_05

197 sequences assigned
139 (70.6%) exact matches, in which:
137 unique CDR3
6 unique J



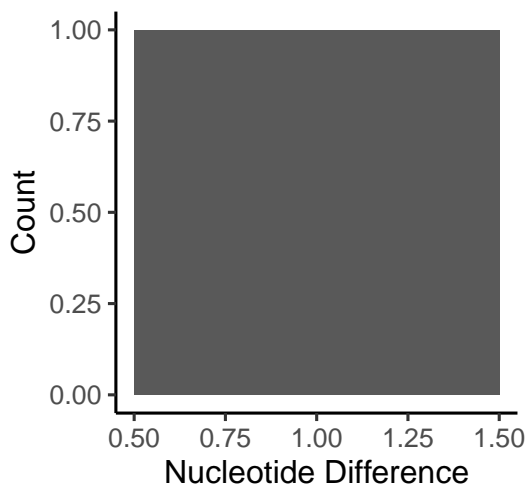
IGHV3–30–3*03

1 sequences assigned
No exact matches.



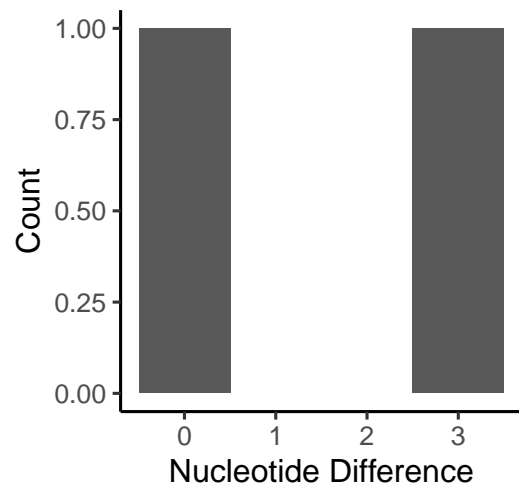
IGHV3–47*02

1 sequences assigned
No exact matches.



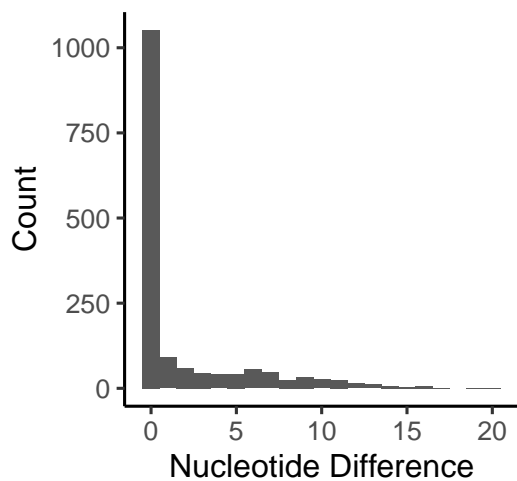
IGHV3–52*01_03

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



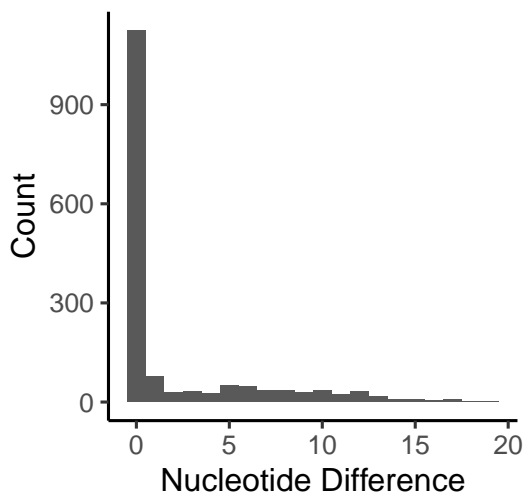
IGHV3–33*01

1587 sequences assigned
1052 (66.3%) exact matches, in which:
1031 unique CDR3
6 unique J



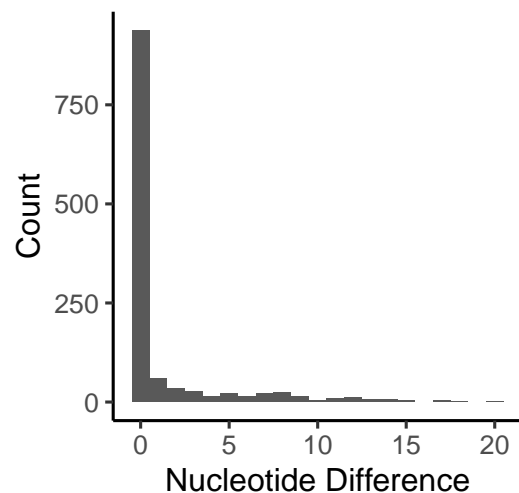
IGHV3–48*02

1631 sequences assigned
1125 (69%) exact matches, in which:
1097 unique CDR3
6 unique J



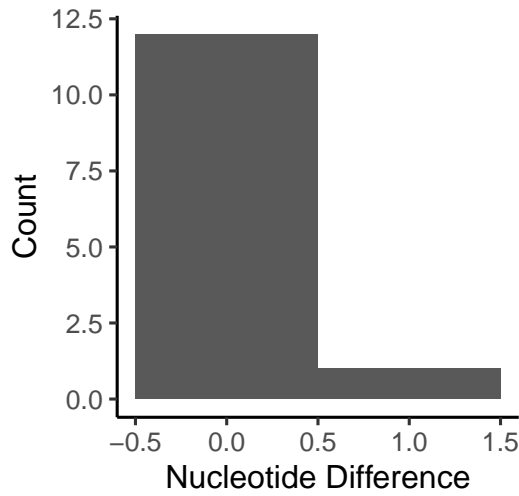
IGHV3–53*01_02

1215 sequences assigned
938 (77.2%) exact matches, in which:
924 unique CDR3
6 unique J



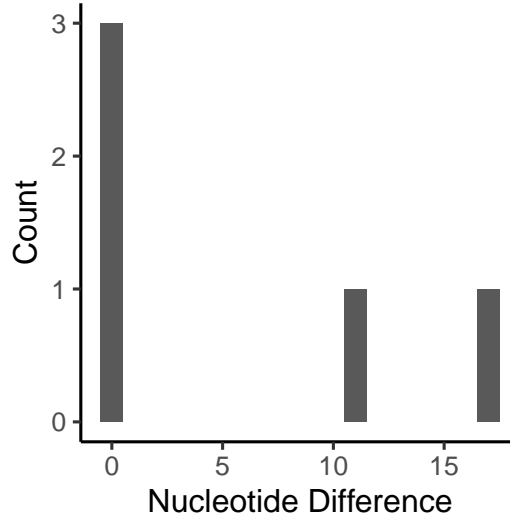
IGHV3-64*02_07

13 sequences assigned
12 (92.3%) exact matches, in which:
12 unique CDR3
4 unique J



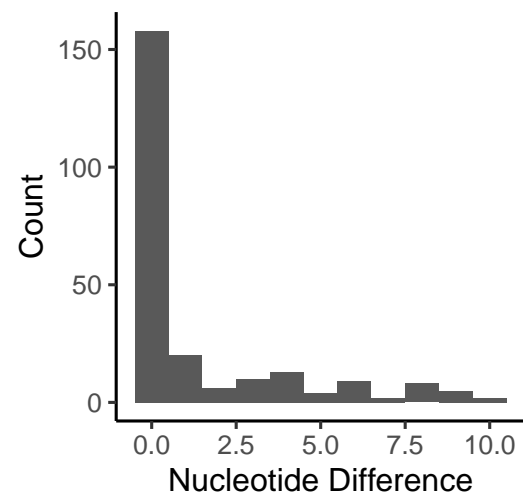
IGHV3-69-1*01

5 sequences assigned
3 (60%) exact matches, in which:
3 unique CDR3
3 unique J



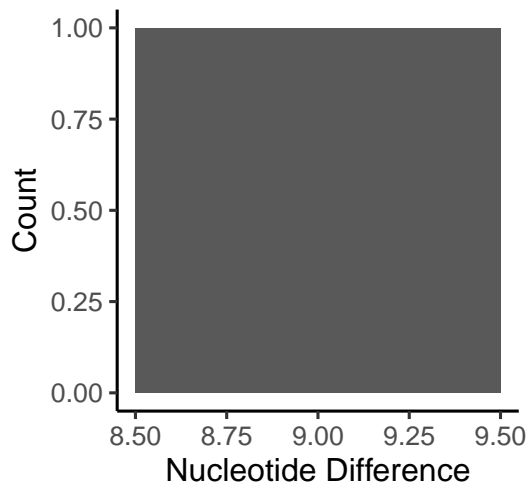
IGHV3-73*01_02

237 sequences assigned
158 (66.7%) exact matches, in which:
142 unique CDR3
6 unique J



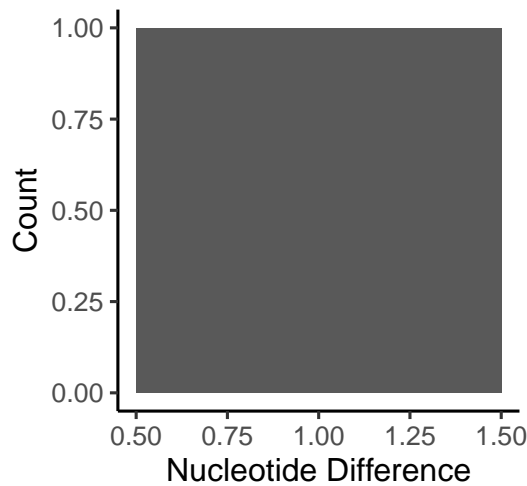
IGHV3-66*01

2 sequences assigned
No exact matches.



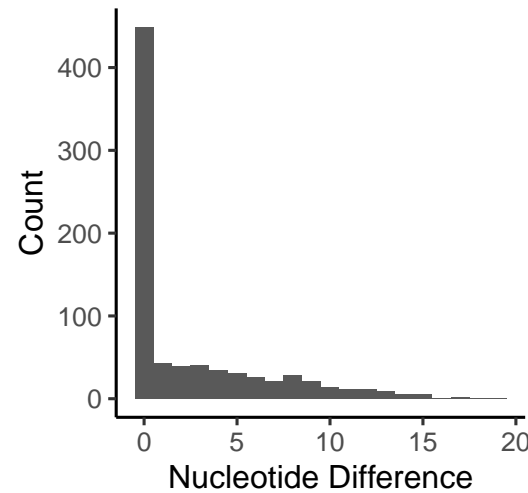
IGHV3-71*01_04

1 sequences assigned
No exact matches.



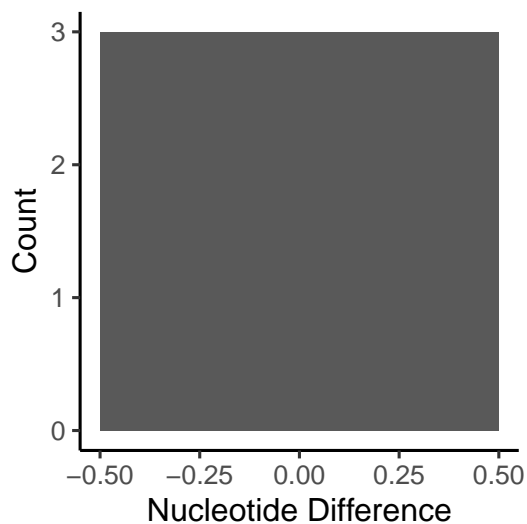
IGHV3-74*01_02

796 sequences assigned
449 (56.4%) exact matches, in which:
420 unique CDR3
6 unique J



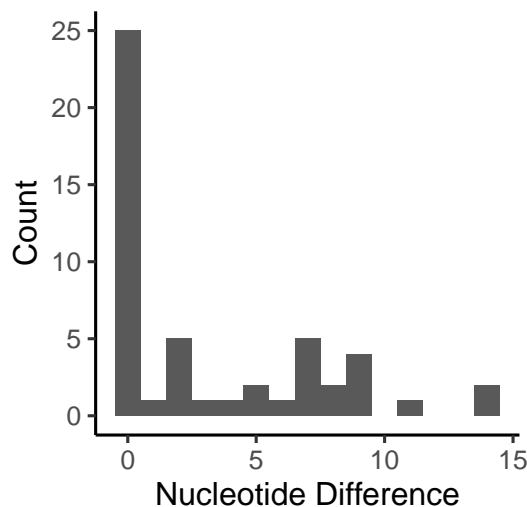
IGHV3-66*03

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



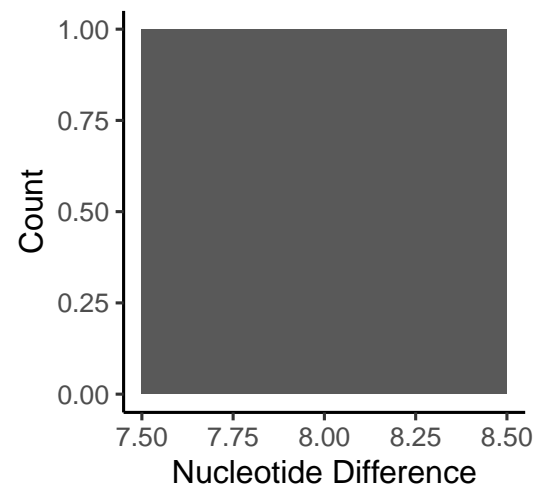
IGHV3-72*01

50 sequences assigned
25 (50%) exact matches, in which:
24 unique CDR3
4 unique J



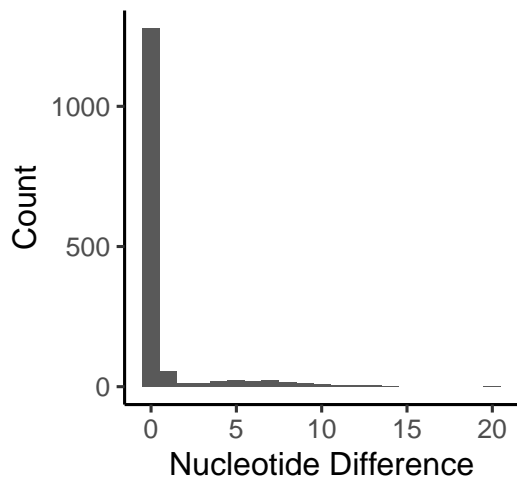
IGHV3-64D*09

2 sequences assigned
No exact matches.



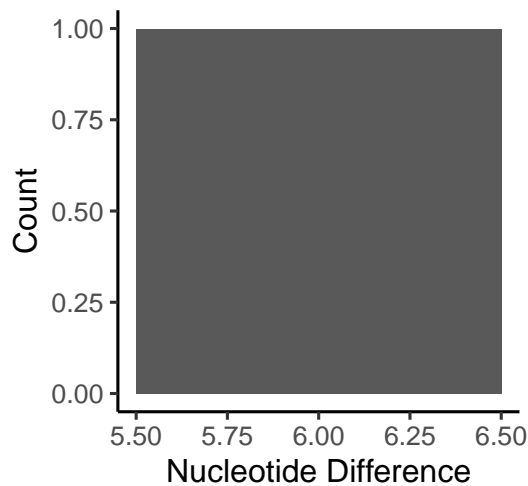
IGHV4-4*07

1497 sequences assigned
1278 (85.4%) exact matches, in which:
1247 unique CDR3
6 unique J



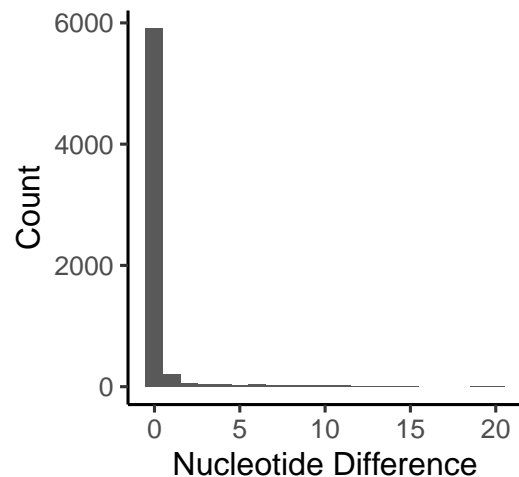
IGHV4-30-4*01

1 sequences assigned
No exact matches.



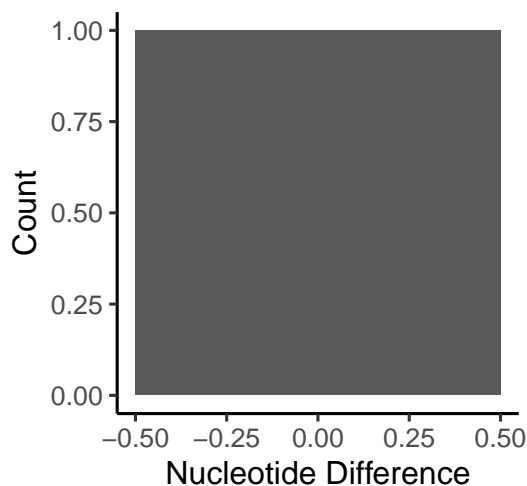
IGHV4-34*01_02

6463 sequences assigned
5909 (91.4%) exact matches, in which:
5855 unique CDR3
6 unique J



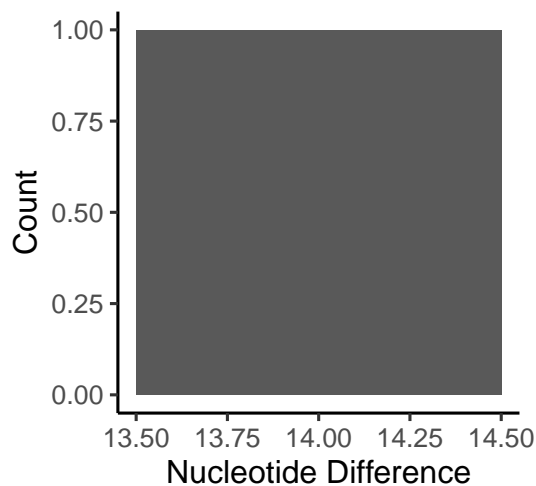
IGHV4-28*03

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



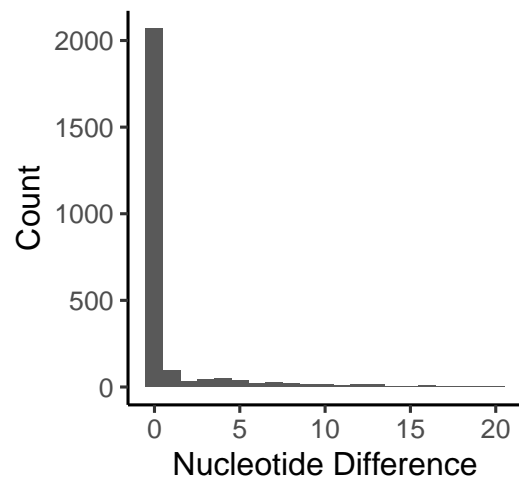
IGHV4-30-2*01

2 sequences assigned
No exact matches.



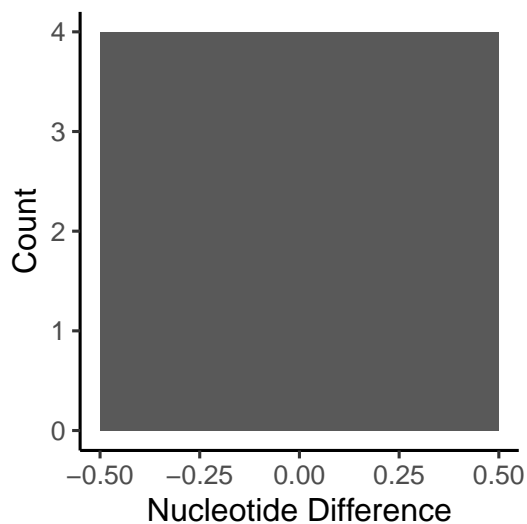
IGHV4-39*02_C258G

2483 sequences assigned
2068 (83.3%) exact matches, in which:
2031 unique CDR3
6 unique J



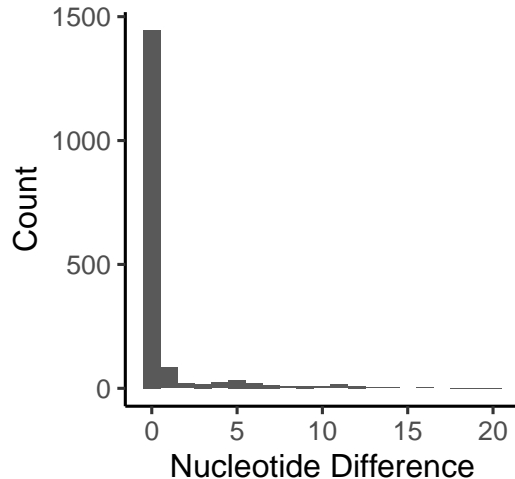
IGHV4-28*01_07

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



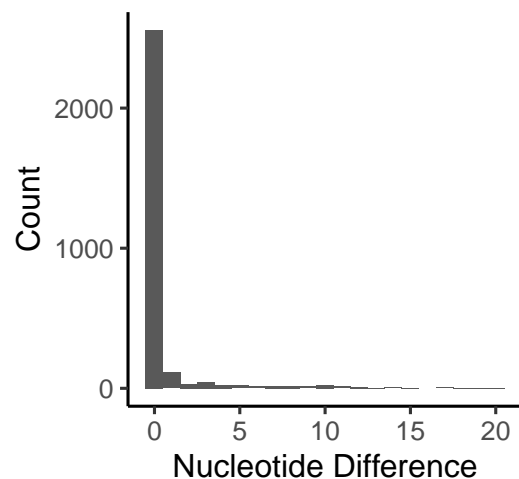
IGHV4-31*02

1726 sequences assigned
1446 (83.8%) exact matches, in which:
1429 unique CDR3
6 unique J



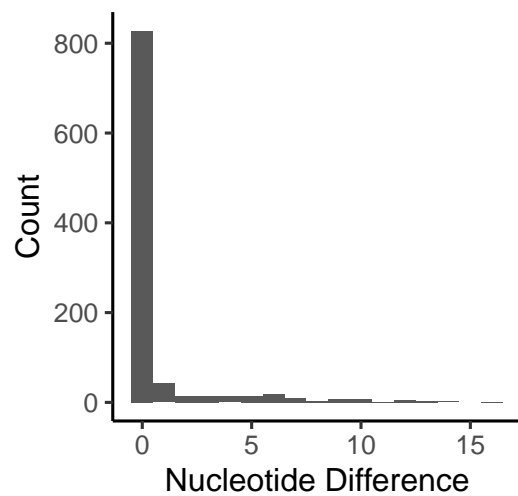
IGHV4-59*02_G88A

2923 sequences assigned
2557 (87.5%) exact matches, in which:
2526 unique CDR3
6 unique J



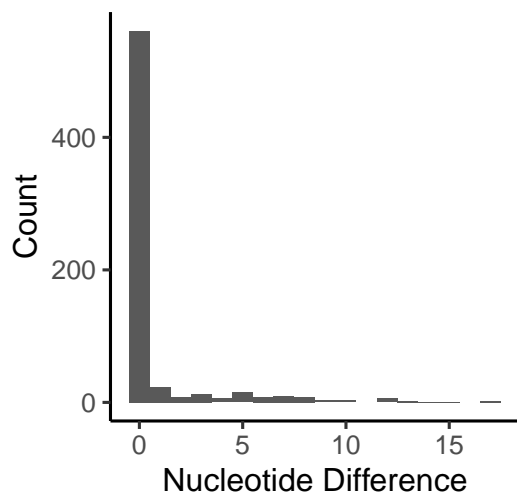
IGHV4–61*01

985 sequences assigned
828 (84.1%) exact matches, in which:
824 unique CDR3
6 unique J



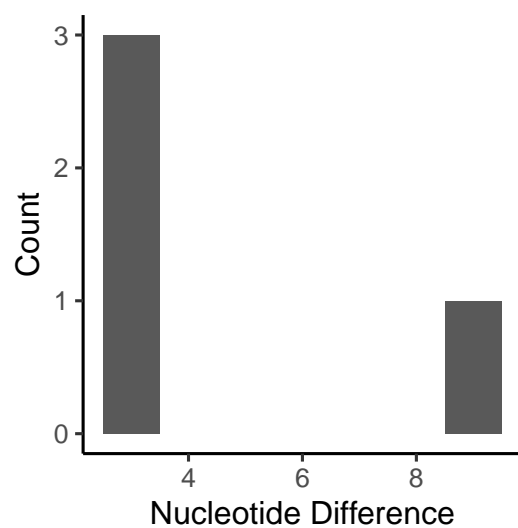
IGHV6–1*01_02

670 sequences assigned
561 (83.7%) exact matches, in which:
560 unique CDR3
6 unique J



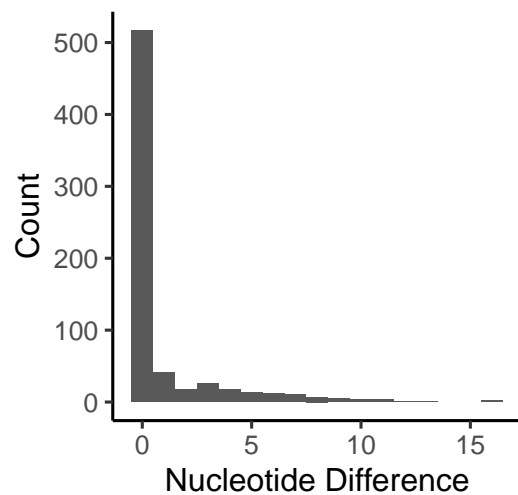
IGHV4/OR15–8*01

5 sequences assigned
No exact matches.



IGHV5–51*07_A128G

678 sequences assigned
517 (76.3%) exact matches, in which:
514 unique CDR3
6 unique J





Warning – no inferred sequences found.