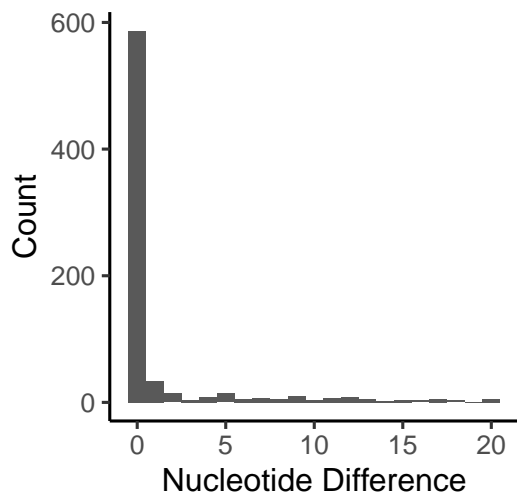


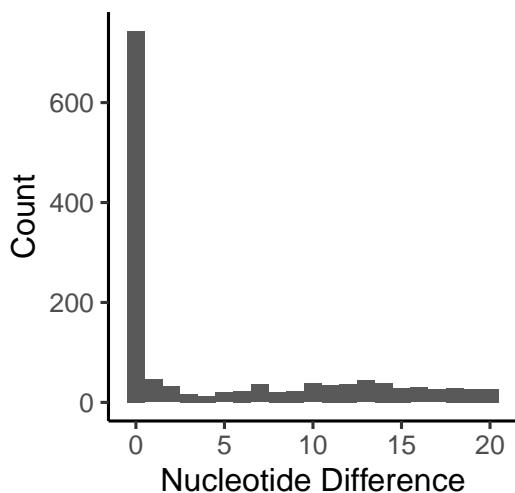
IGHV1-2*04

758 sequences assigned
587 (77.4%) exact matches, in which:
587 unique CDR3
6 unique J



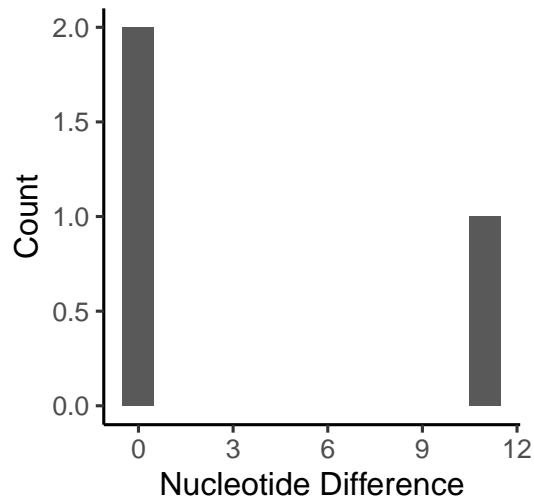
IGHV1-18*01

1458 sequences assigned
744 (51%) exact matches, in which:
744 unique CDR3
6 unique J



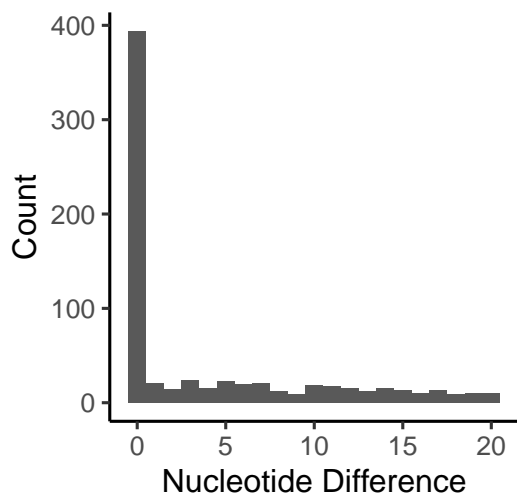
IGHV1-45*02

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



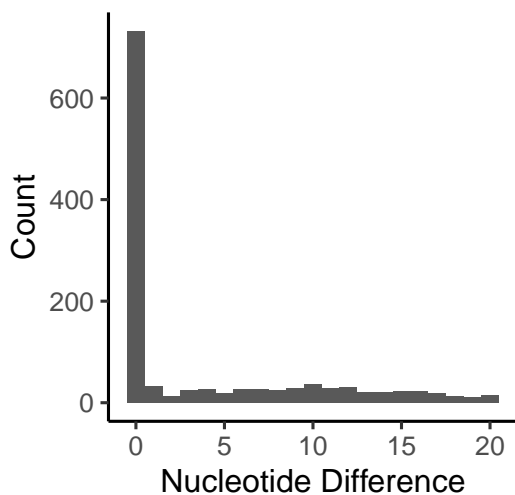
IGHV1-3*01_05

745 sequences assigned
394 (52.9%) exact matches, in which:
392 unique CDR3
6 unique J



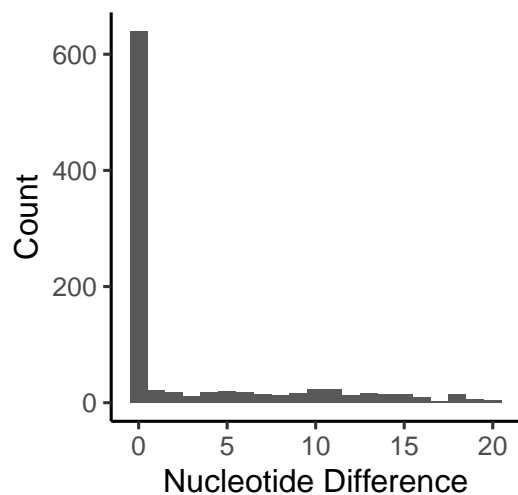
IGHV1-18*04

1262 sequences assigned
732 (58%) exact matches, in which:
731 unique CDR3
6 unique J



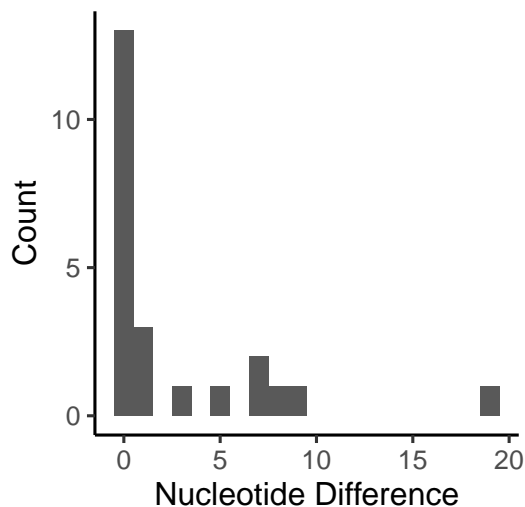
IGHV1-46*01

982 sequences assigned
640 (65.2%) exact matches, in which:
638 unique CDR3
6 unique J



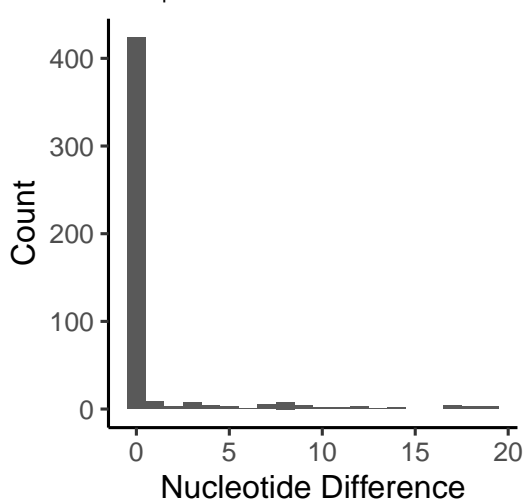
IGHV1-8*01

24 sequences assigned
13 (54.2%) exact matches, in which:
13 unique CDR3
5 unique J



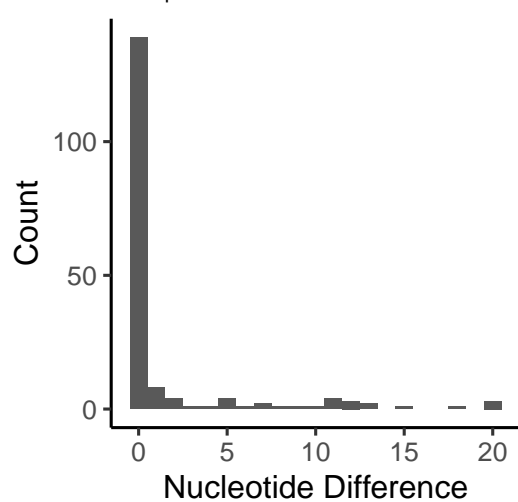
IGHV1-24*01

496 sequences assigned
424 (85.5%) exact matches, in which:
423 unique CDR3
6 unique J



IGHV1-58*01_03

180 sequences assigned
139 (77.2%) exact matches, in which:
139 unique CDR3
6 unique J



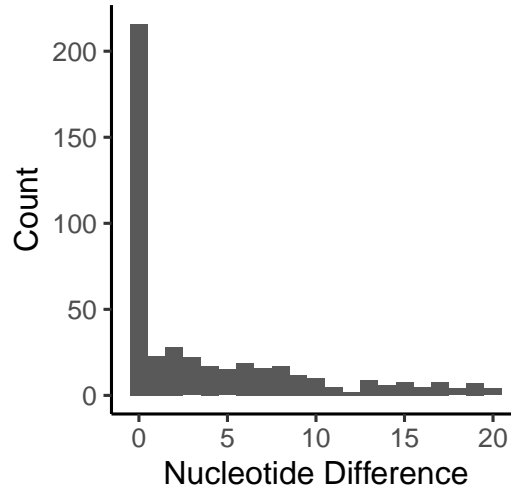
IGHV1-68*01

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



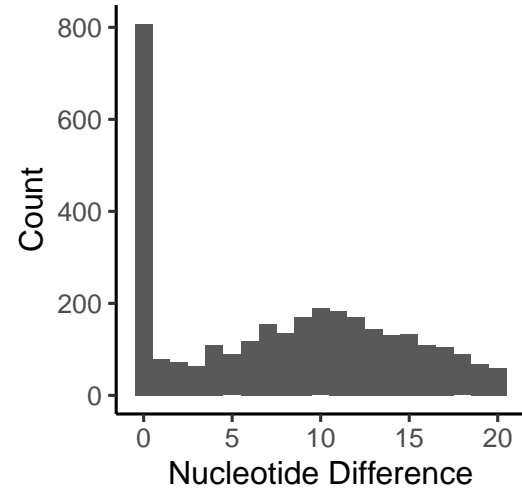
IGHV2-5*02

473 sequences assigned
216 (45.7%) exact matches, in which:
216 unique CDR3
6 unique J



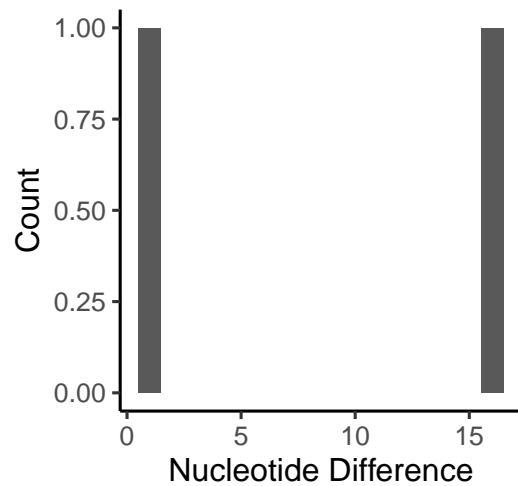
IGHV3-7*03

3422 sequences assigned
808 (23.6%) exact matches, in which:
795 unique CDR3
6 unique J



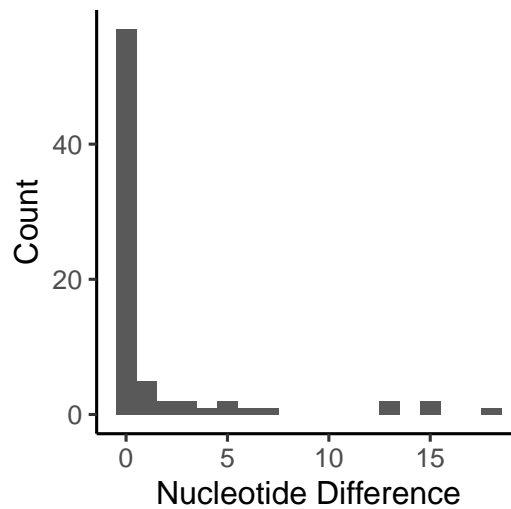
IGHV1-69-2*01

4 sequences assigned
No exact matches.



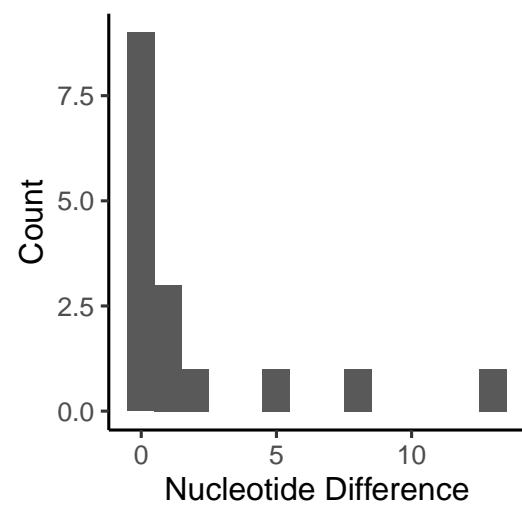
IGHV2-26*01

78 sequences assigned
57 (73.1%) exact matches, in which:
57 unique CDR3
5 unique J



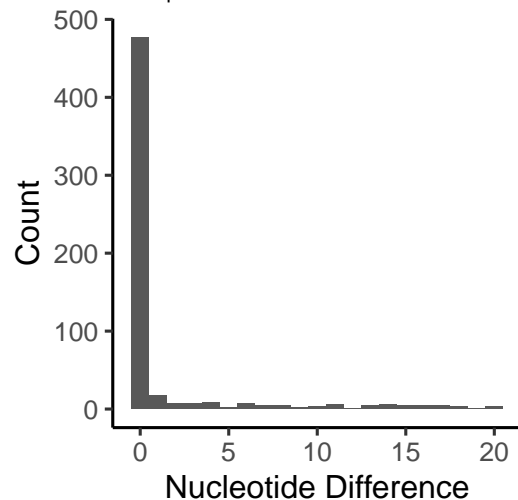
IGHV3-9*01

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



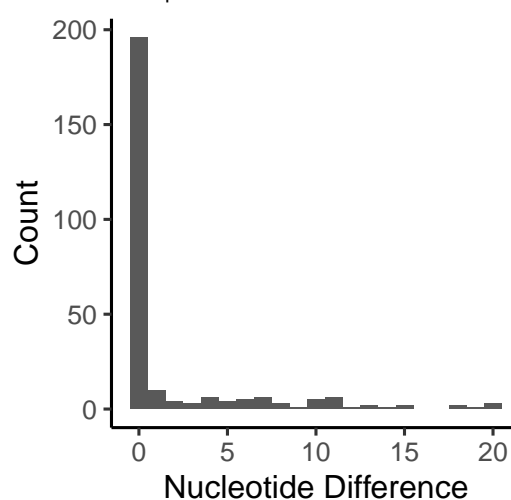
IGHV1-69*06_14

612 sequences assigned
477 (77.9%) exact matches, in which:
476 unique CDR3
6 unique J



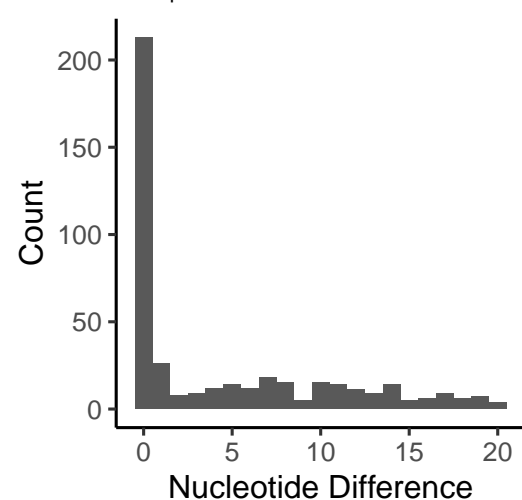
IGHV2-70*01

265 sequences assigned
196 (74%) exact matches, in which:
195 unique CDR3
5 unique J



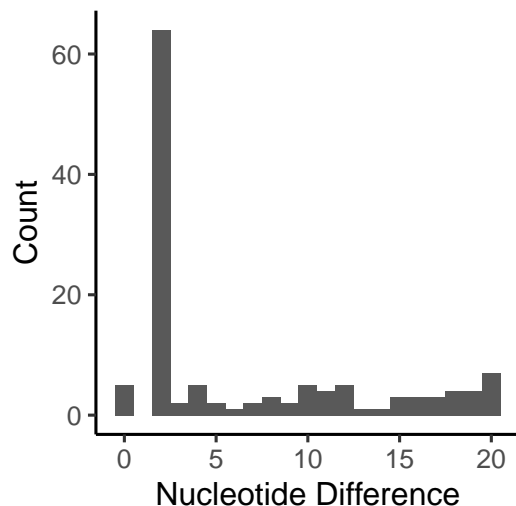
IGHV3-11*06

469 sequences assigned
213 (45.4%) exact matches, in which:
210 unique CDR3
6 unique J



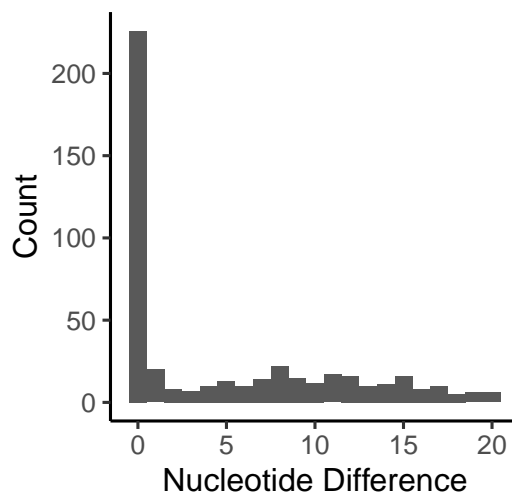
IGHV3-13*01

137 sequences assigned
5 (3.6%) exact matches, in which:
5 unique CDR3
4 unique J



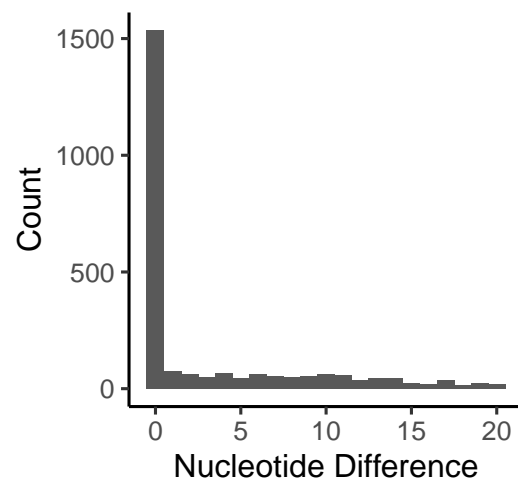
IGHV3-15*01_02

499 sequences assigned
226 (45.3%) exact matches, in which:
222 unique CDR3
6 unique J



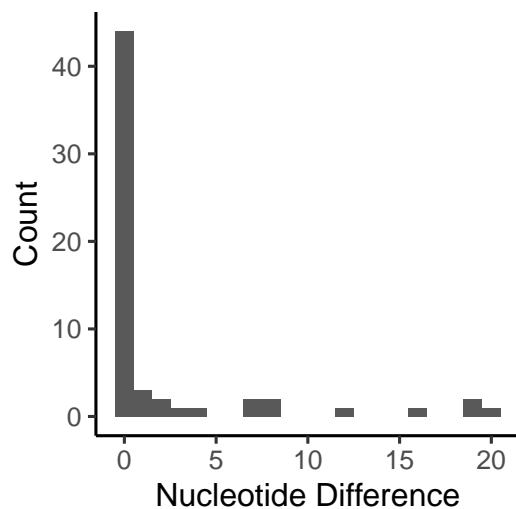
IGHV3-21*01_02

2506 sequences assigned
1535 (61.3%) exact matches, in which:
1503 unique CDR3
6 unique J



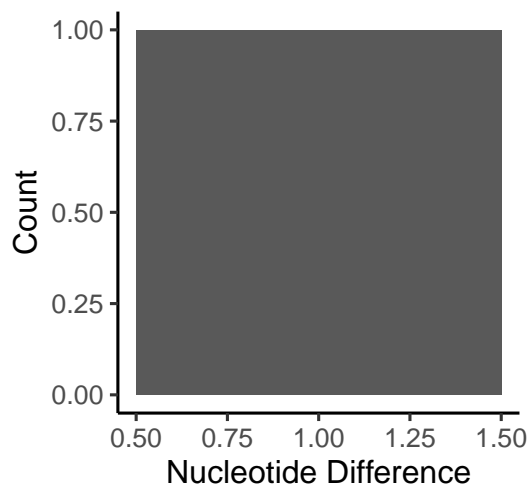
IGHV3-13*05

63 sequences assigned
44 (69.8%) exact matches, in which:
44 unique CDR3
4 unique J



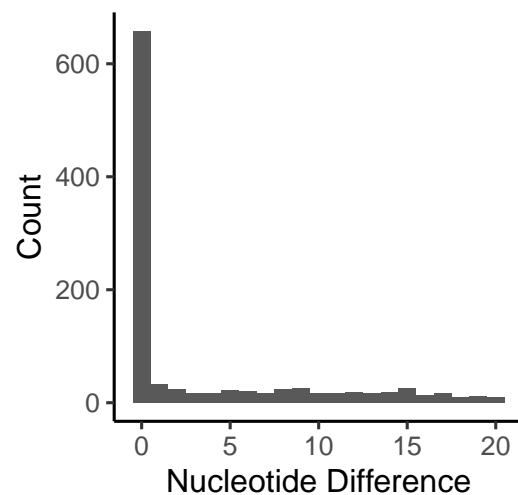
IGHV3-19*01

1 sequences assigned
No exact matches.



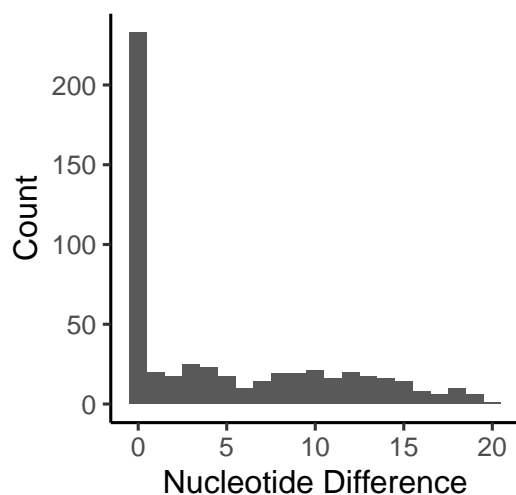
IGHV3-30-3*01

1072 sequences assigned
658 (61.4%) exact matches, in which:
648 unique CDR3
6 unique J



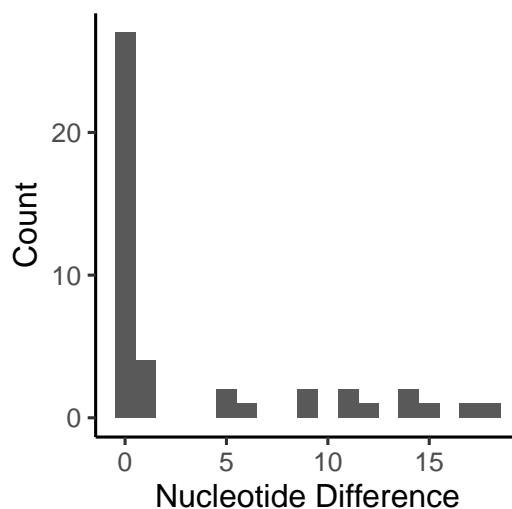
IGHV3-15*07

563 sequences assigned
233 (41.4%) exact matches, in which:
231 unique CDR3
6 unique J



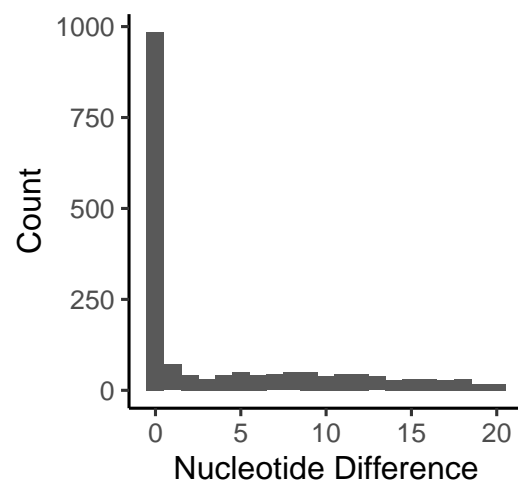
IGHV3-20*03_04

46 sequences assigned
27 (58.7%) exact matches, in which:
27 unique CDR3
4 unique J



IGHV3-33*01

1836 sequences assigned
985 (53.6%) exact matches, in which:
974 unique CDR3
6 unique J



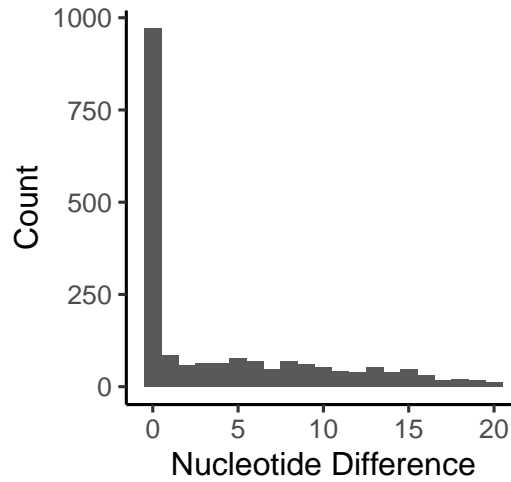
IGHV3-35*01

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



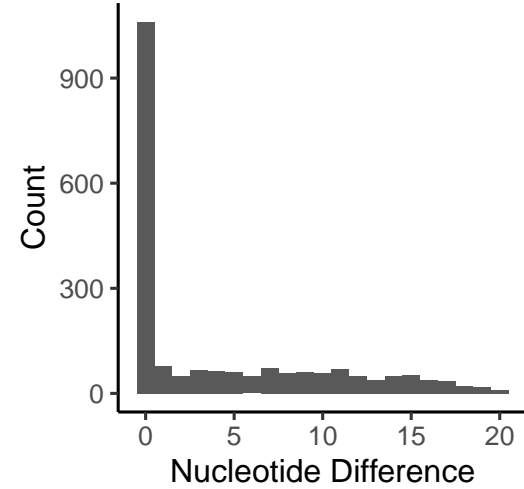
IGHV3-48*02

2019 sequences assigned
971 (48.1%) exact matches, in which:
952 unique CDR3
6 unique J



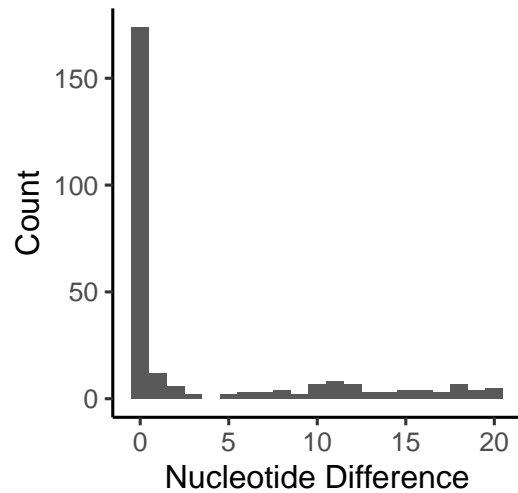
IGHV3-53*01_02

2142 sequences assigned
1061 (49.5%) exact matches, in which:
1043 unique CDR3
6 unique J



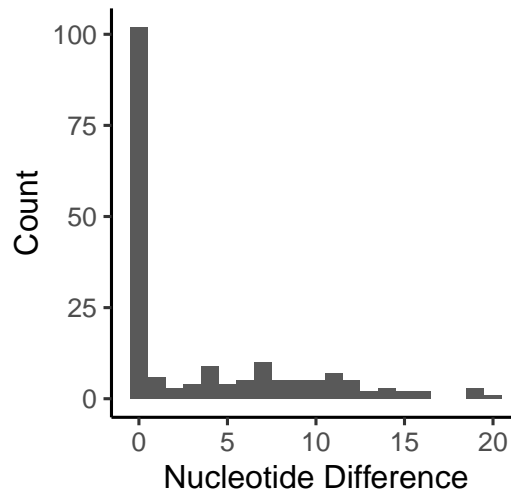
IGHV3-43*01

274 sequences assigned
174 (63.5%) exact matches, in which:
174 unique CDR3
6 unique J



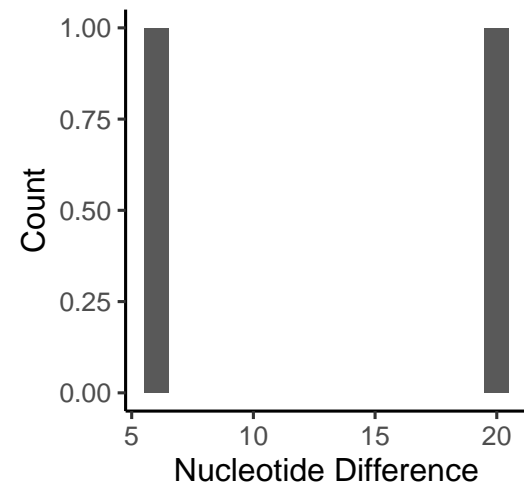
IGHV3-49*03_05

189 sequences assigned
102 (54%) exact matches, in which:
102 unique CDR3
4 unique J



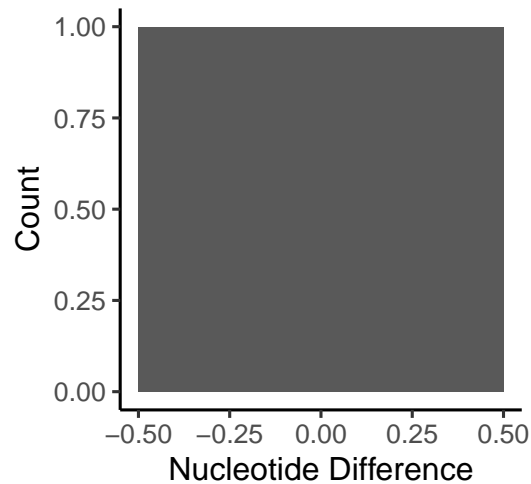
IGHV3-64*04

2 sequences assigned
No exact matches.



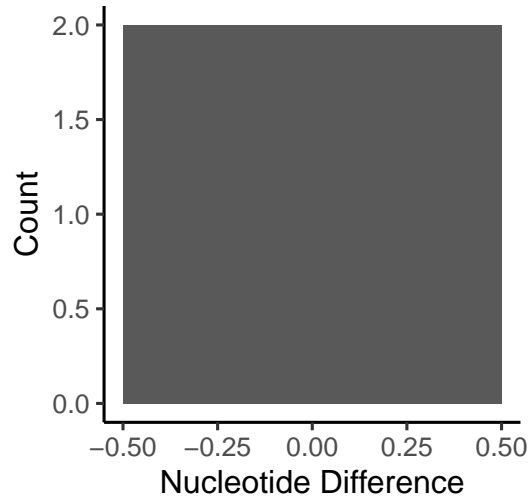
IGHV3-47*02

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



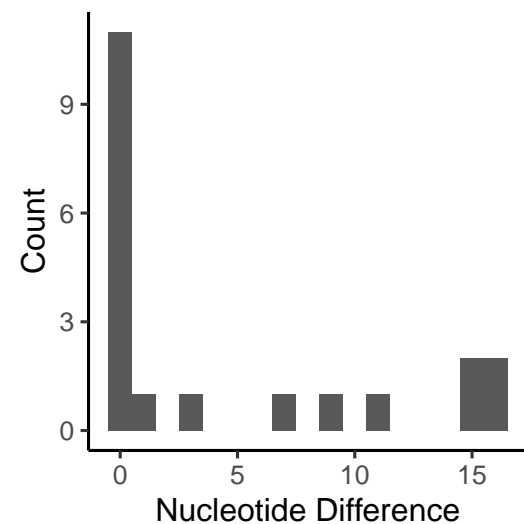
IGHV3-52*01_03

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



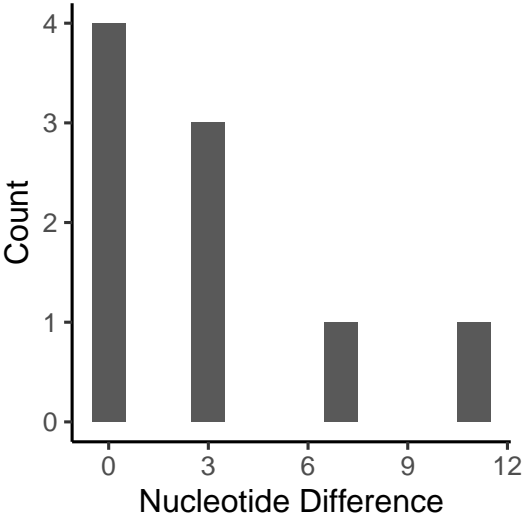
IGHV3-64*02_07

20 sequences assigned
11 (55%) exact matches, in which:
11 unique CDR3
4 unique J



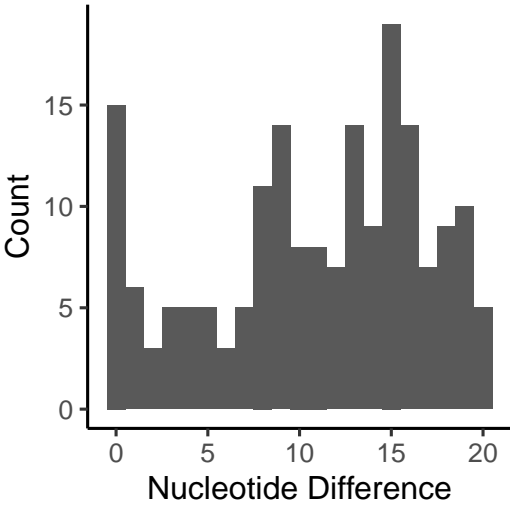
IGHV3-66*03

9 sequences assigned
4 (44.4%) exact matches, in which:
4 unique CDR3
3 unique J



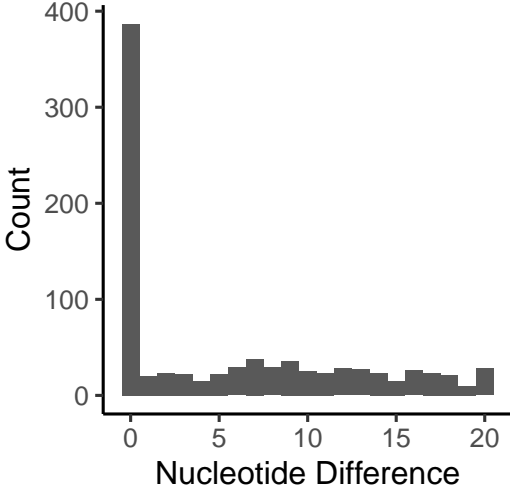
IGHV3-72*01

191 sequences assigned
15 (7.9%) exact matches, in which:
13 unique CDR3
5 unique J



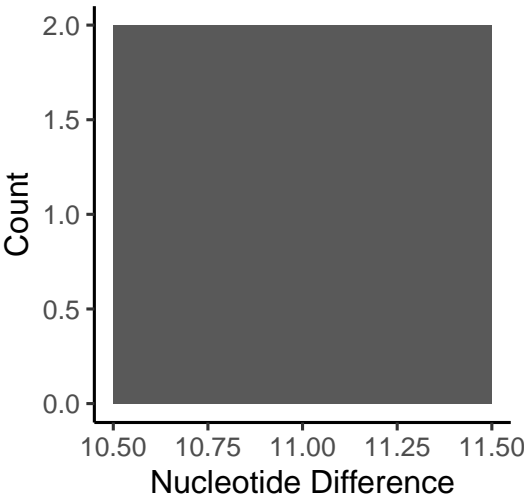
IGHV3-64D*06

943 sequences assigned
387 (41%) exact matches, in which:
384 unique CDR3
6 unique J



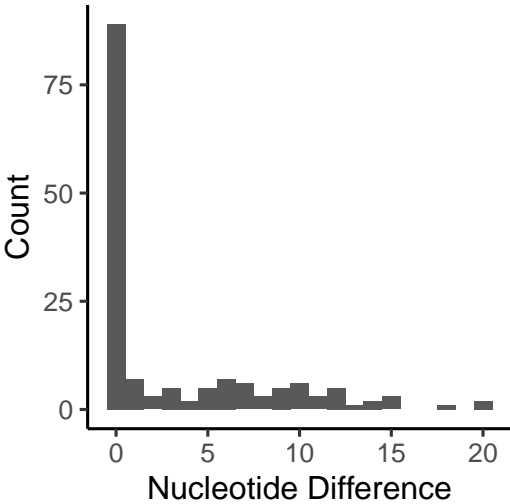
IGHV3-66*04

2 sequences assigned
No exact matches.



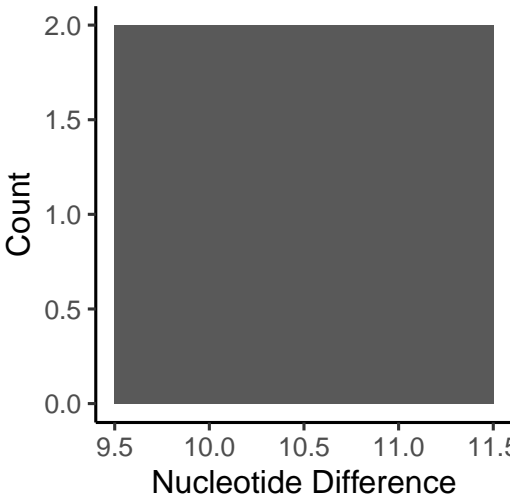
IGHV3-73*01_02

158 sequences assigned
89 (56.3%) exact matches, in which:
89 unique CDR3
5 unique J



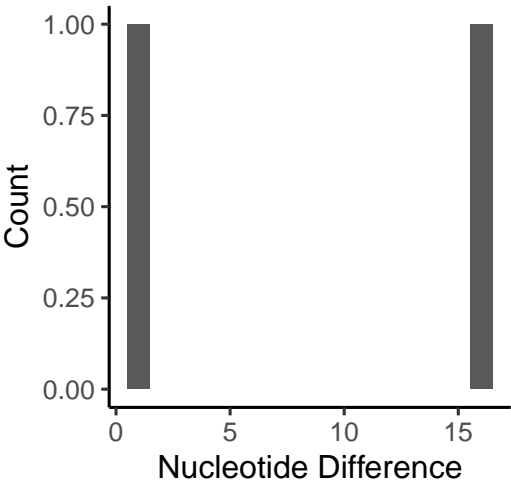
IGHV4-28*03

4 sequences assigned
No exact matches.



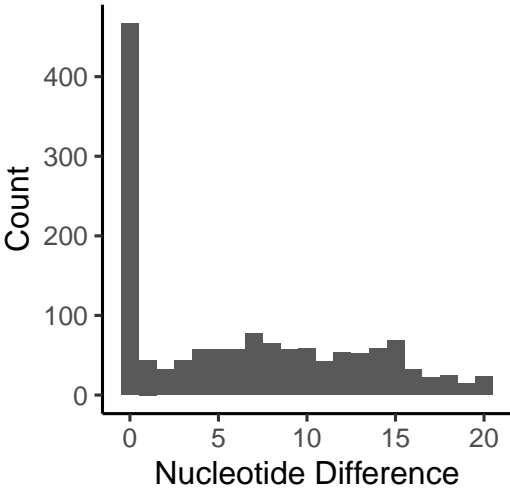
IGHV3-69-1*02

2 sequences assigned
No exact matches.



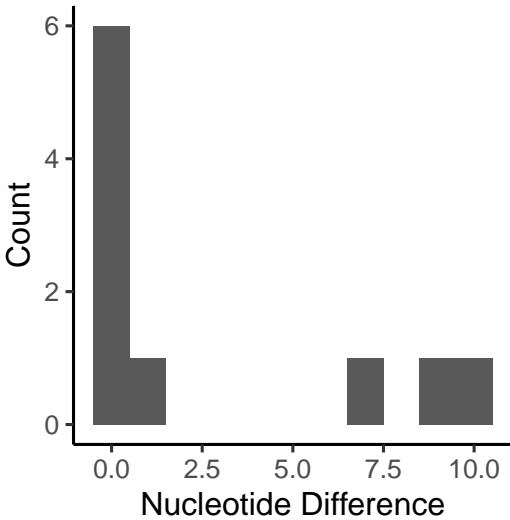
IGHV3-74*01_02

1495 sequences assigned
467 (31.2%) exact matches, in which:
453 unique CDR3
6 unique J



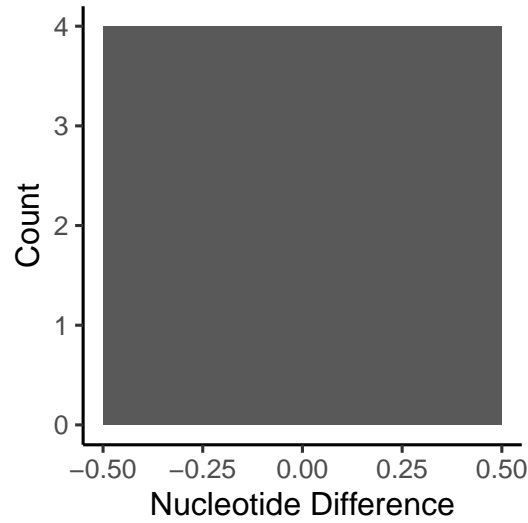
IGHV4-28*01_07

10 sequences assigned
6 (60%) exact matches, in which:
6 unique CDR3
4 unique J



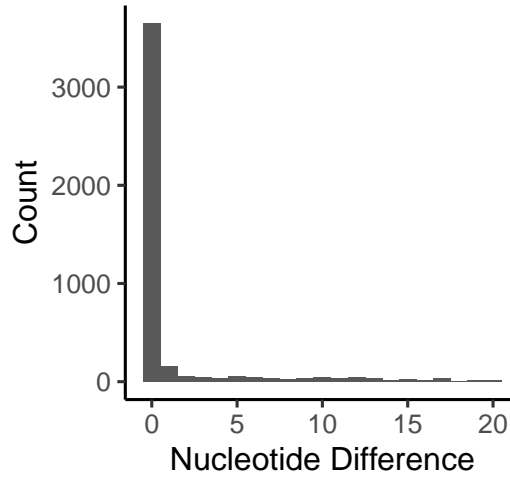
IGHV4-28*02_05

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



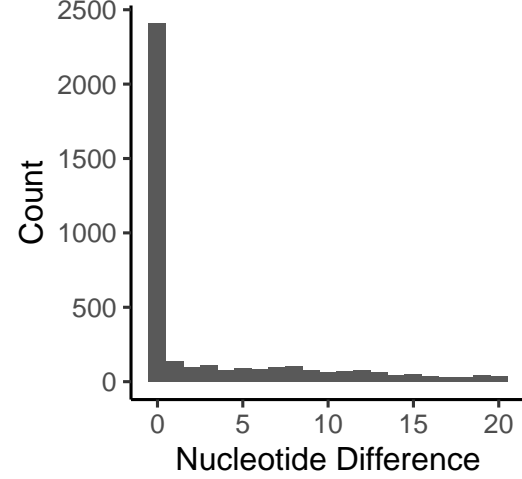
IGHV4-34*01_02

4588 sequences assigned
3649 (79.5%) exact matches, in which:
3590 unique CDR3
6 unique J



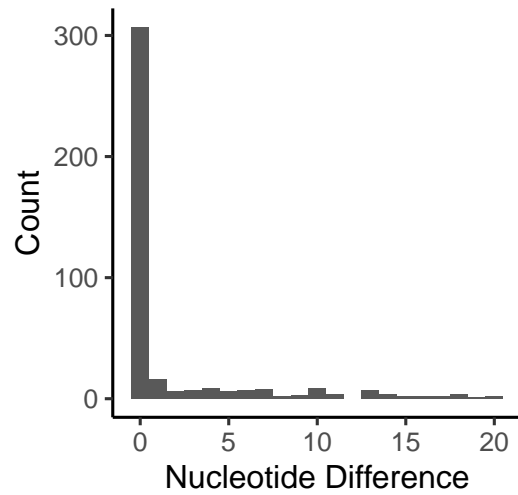
IGHV4-59*01_07

4023 sequences assigned
2408 (59.9%) exact matches, in which:
2364 unique CDR3
6 unique J



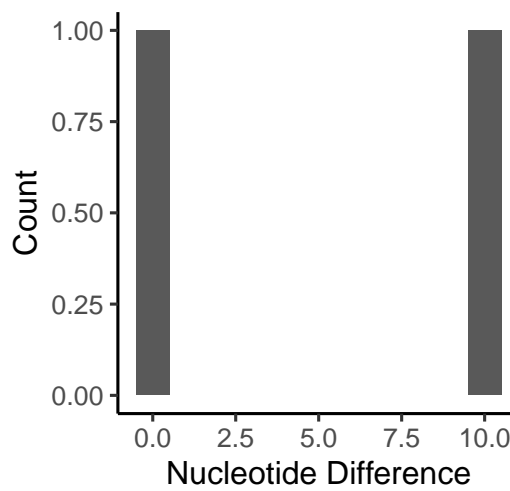
IGHV4-30-2*01

417 sequences assigned
307 (73.6%) exact matches, in which:
304 unique CDR3
6 unique J



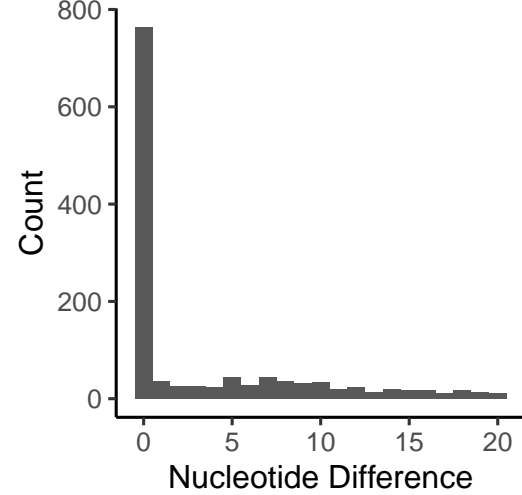
IGHV4-38-2*01

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



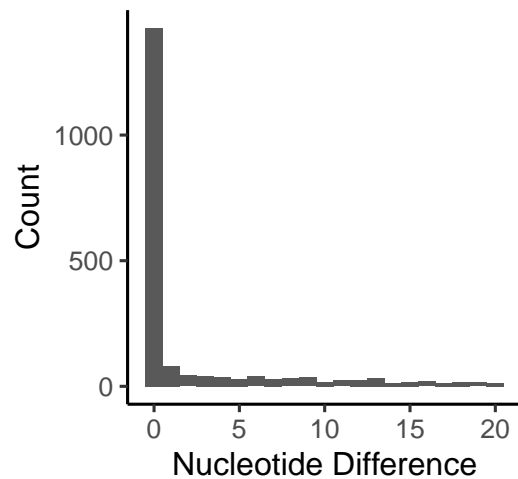
IGHV4-61*01

1329 sequences assigned
764 (57.5%) exact matches, in which:
749 unique CDR3
6 unique J



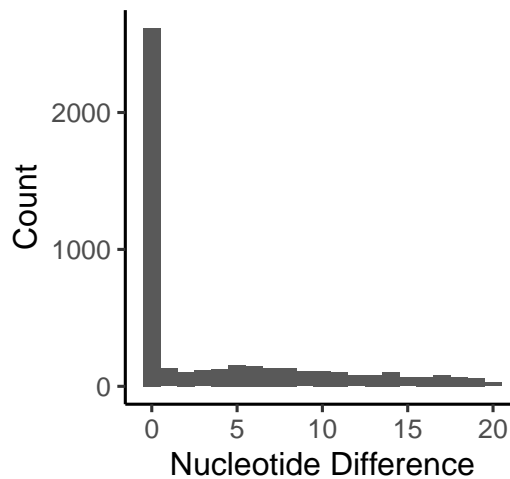
IGHV4-31*03_04

2093 sequences assigned
1426 (68.1%) exact matches, in which:
1409 unique CDR3
6 unique J



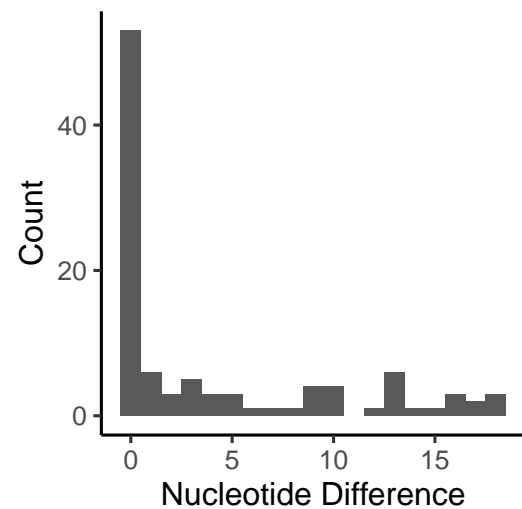
IGHV4-39*01_05

4895 sequences assigned
2617 (53.5%) exact matches, in which:
2577 unique CDR3
6 unique J



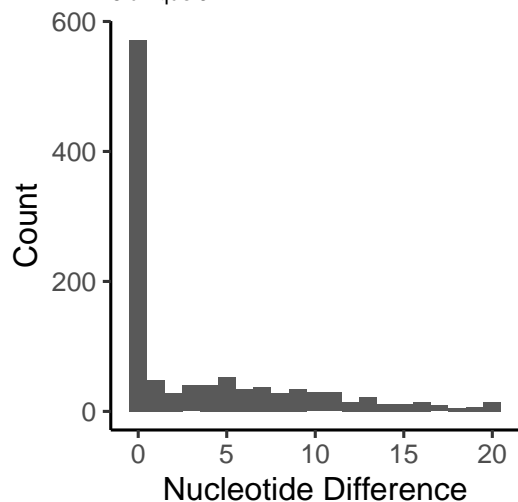
IGHV5-10-1*01_03

109 sequences assigned
53 (48.6%) exact matches, in which:
53 unique CDR3
6 unique J



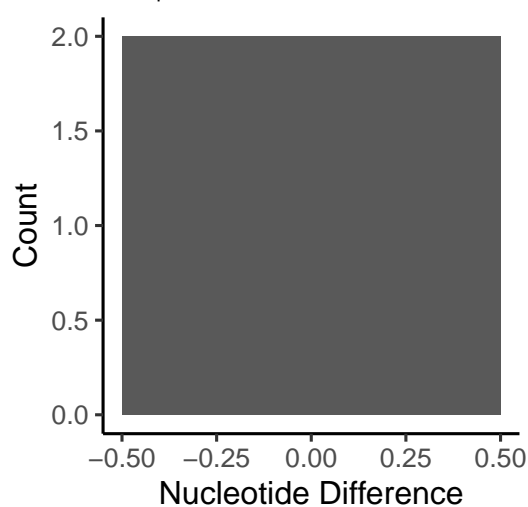
IGHV5-51*01_03

1119 sequences assigned
572 (51.1%) exact matches, in which:
571 unique CDR3
6 unique J



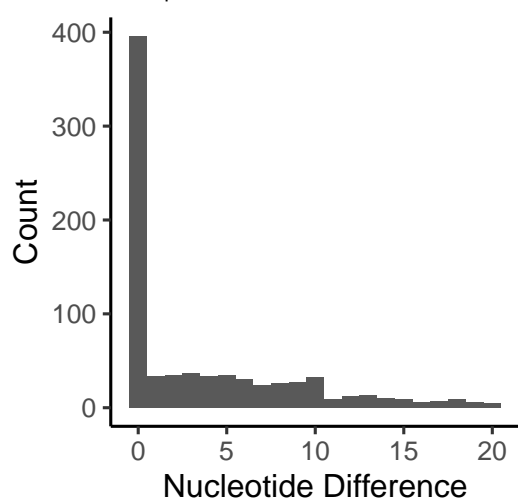
IGHV7-81*01

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



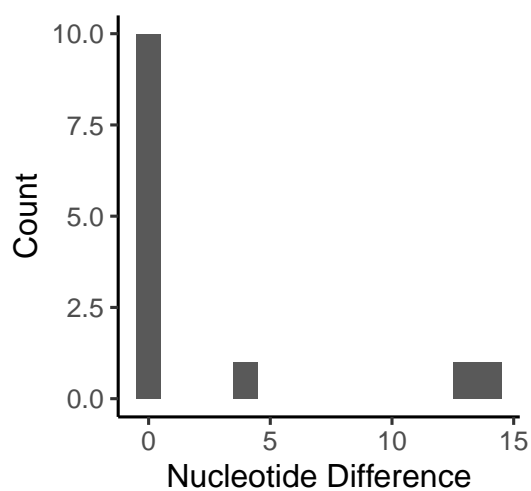
IGHV6-1*01_02

824 sequences assigned
396 (48.1%) exact matches, in which:
396 unique CDR3
6 unique J



IGHV7-4-1*01

13 sequences assigned
10 (76.9%) exact matches, in which:
10 unique CDR3
4 unique J





Never sequences(0) for IV : 00 02=000A for IV: 01 07=011200 are not listed in the genotype and will be ignored.