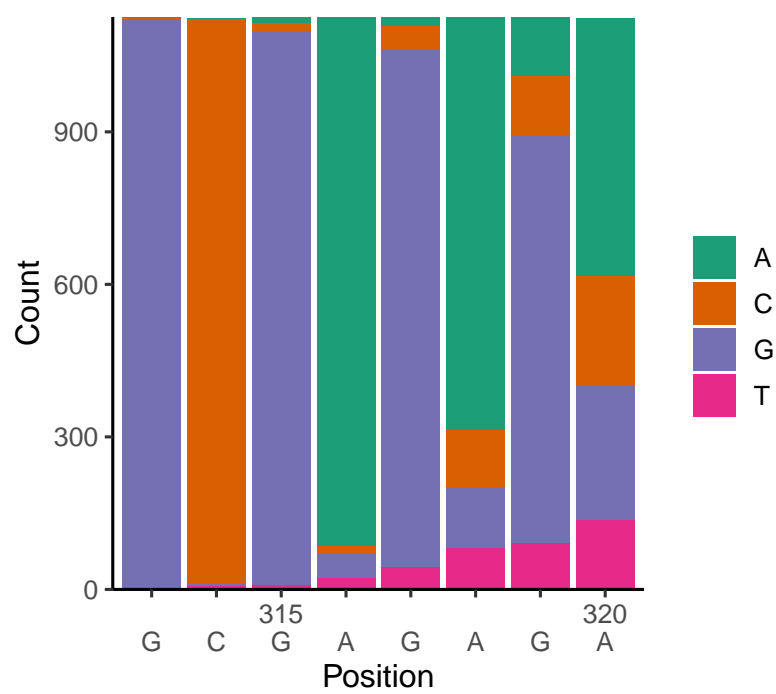
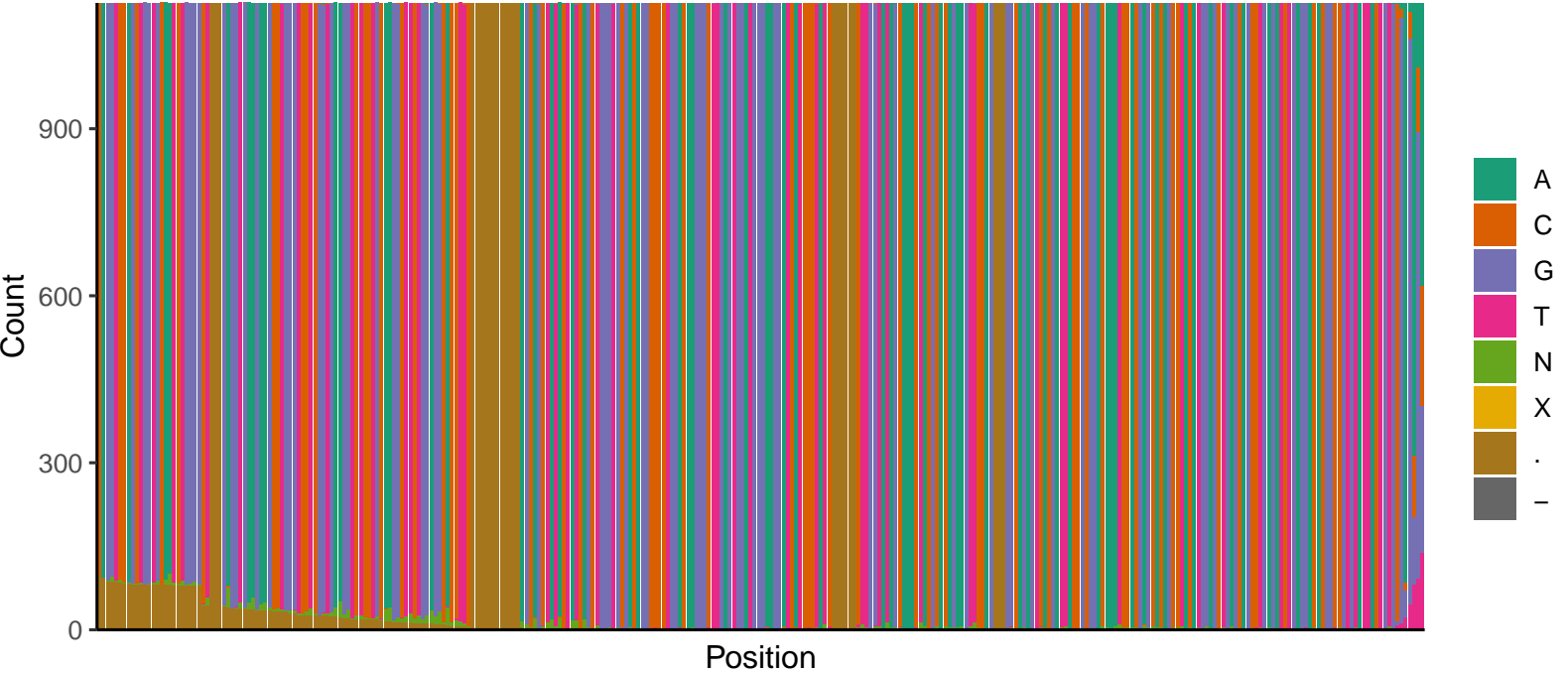


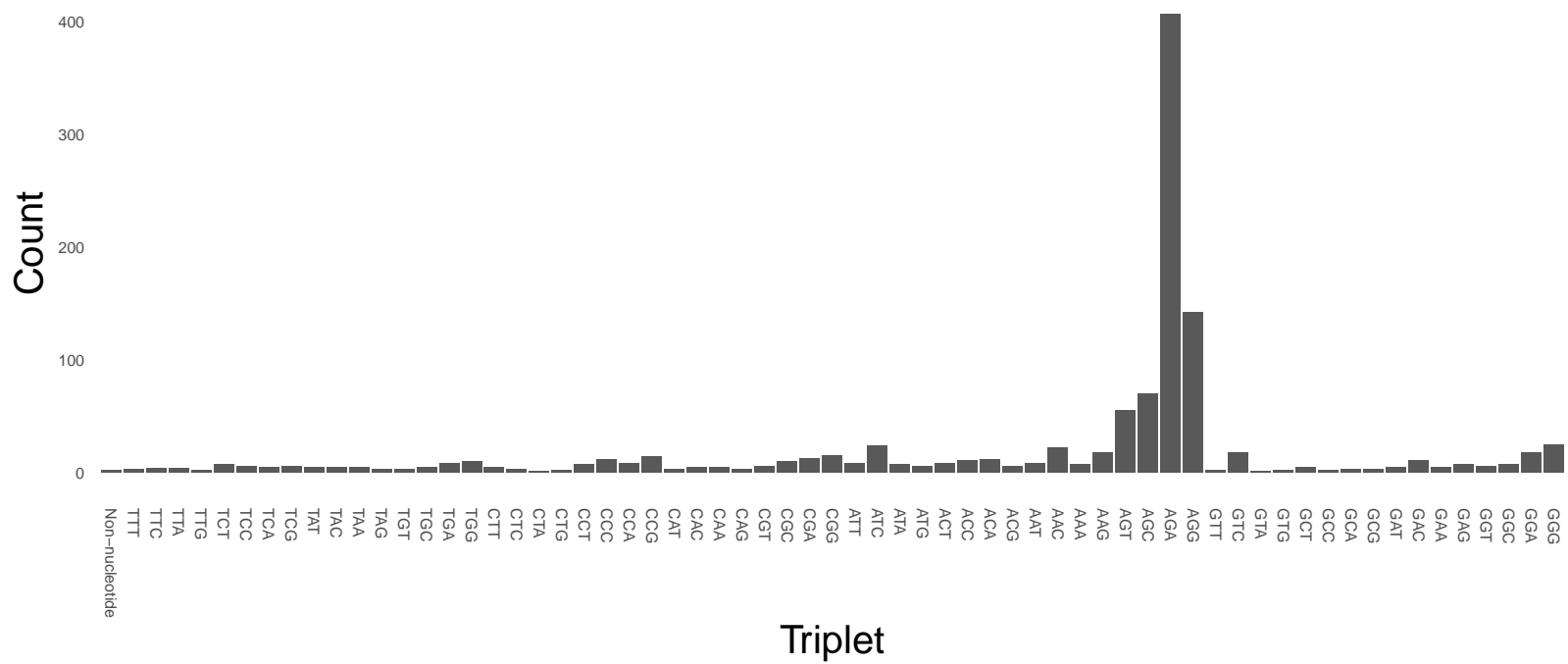
Gene IGHV1-69*08_C191T



Gene IGHV1-69*08_C191T

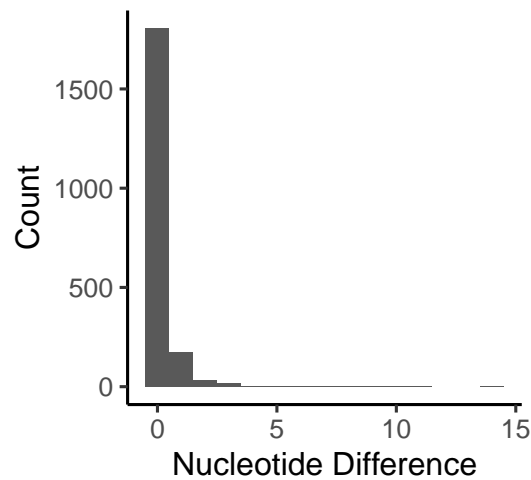


IGHV1-69*08_C191T- Final 3 nucleotides as a triplet



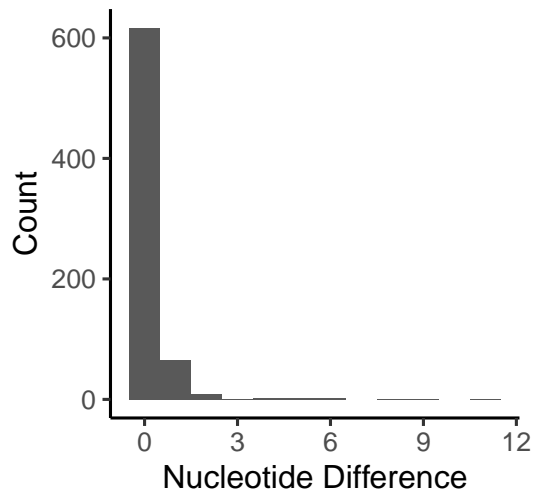
IGHV1-2*02

2055 sequences assigned
1805 (87.8%) exact matches, in which:
1752 unique CDR3
6 unique J



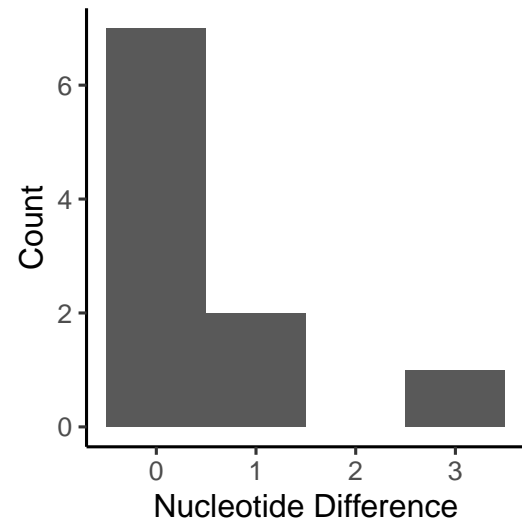
IGHV1-18*01

702 sequences assigned
617 (87.9%) exact matches, in which:
606 unique CDR3
6 unique J



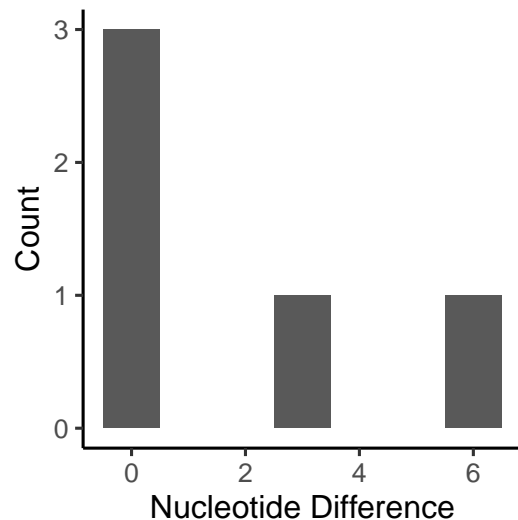
IGHV1-45*02

10 sequences assigned
7 (70%) exact matches, in which:
7 unique CDR3
3 unique J



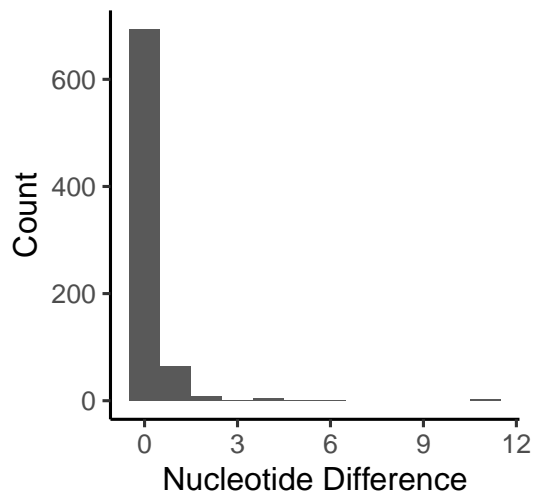
IGHV1-3*02

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



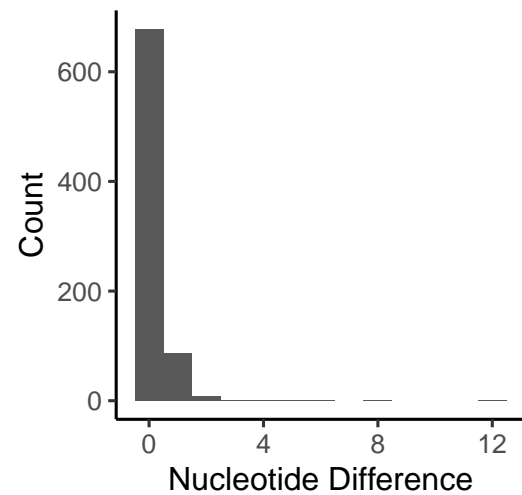
IGHV1-18*04

776 sequences assigned
694 (89.4%) exact matches, in which:
675 unique CDR3
6 unique J



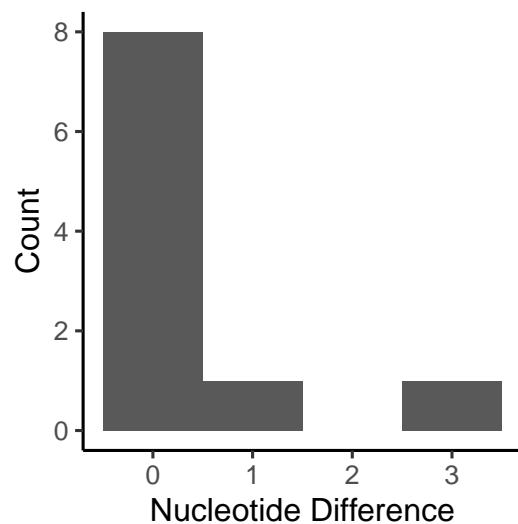
IGHV1-46*01

778 sequences assigned
678 (87.1%) exact matches, in which:
662 unique CDR3
6 unique J



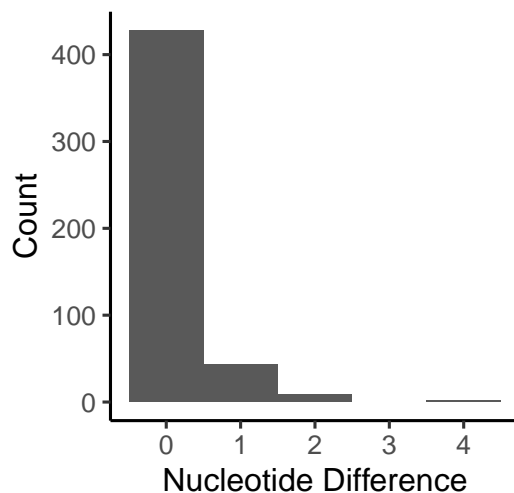
IGHV1-8*01

10 sequences assigned
8 (80%) exact matches, in which:
8 unique CDR3
4 unique J



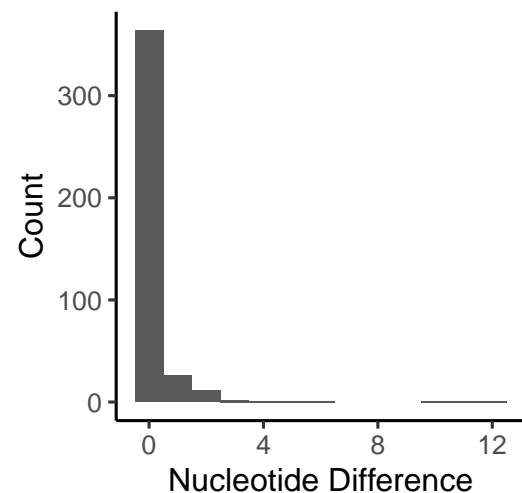
IGHV1-24*01

482 sequences assigned
428 (88.8%) exact matches, in which:
413 unique CDR3
6 unique J



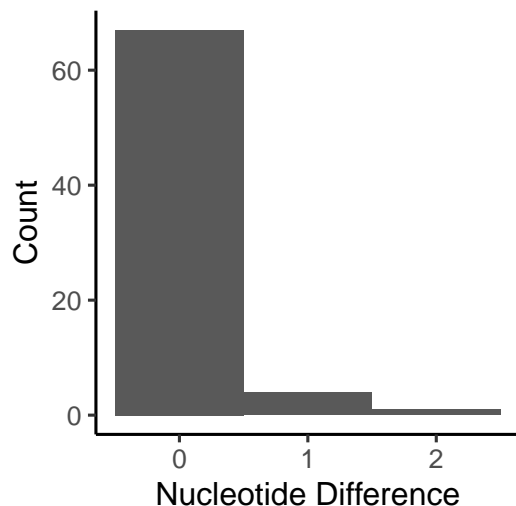
IGHV1-46*04

409 sequences assigned
364 (89%) exact matches, in which:
355 unique CDR3
5 unique J



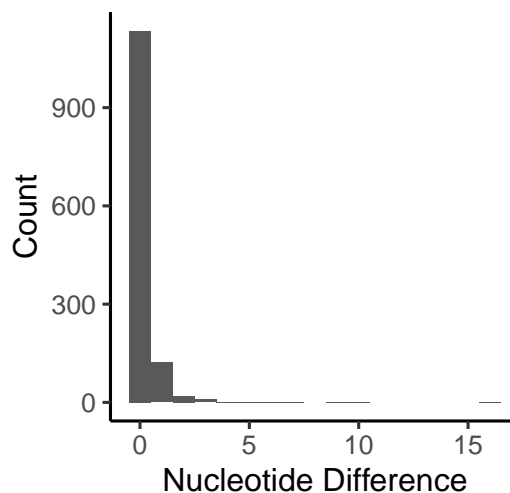
IGHV1-58*01

72 sequences assigned
67 (93.1%) exact matches, in which:
66 unique CDR3
5 unique J



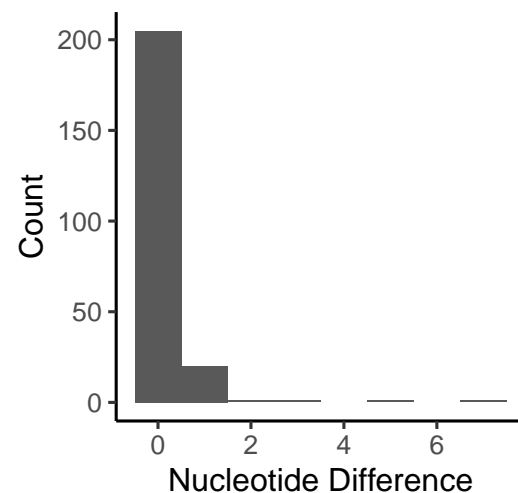
IGHV1-69*04

1295 sequences assigned
1135 (87.6%) exact matches, in which:
1088 unique CDR3
6 unique J



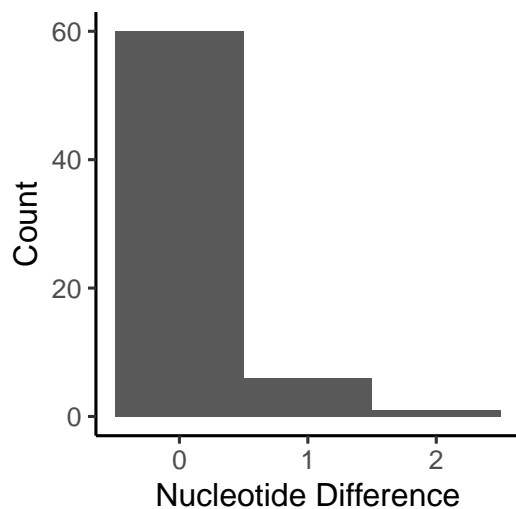
IGHV2-5*02

229 sequences assigned
205 (89.5%) exact matches, in which:
193 unique CDR3
6 unique J



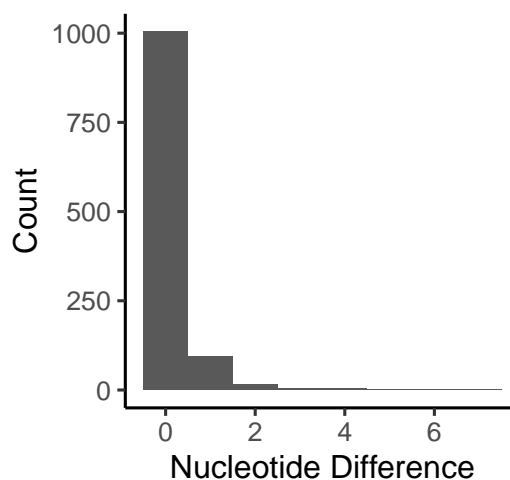
IGHV1-58*02

67 sequences assigned
60 (89.6%) exact matches, in which:
58 unique CDR3
5 unique J



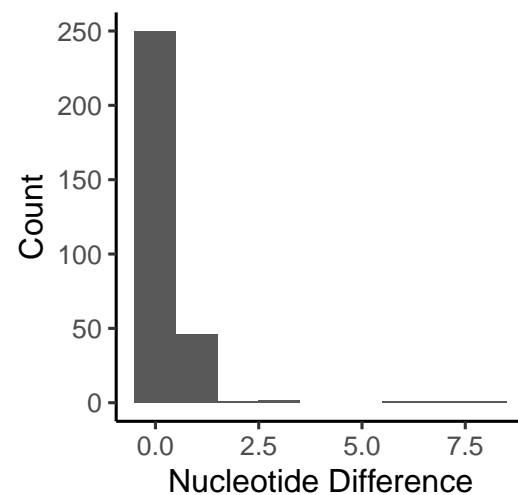
IGHV1-69*08_C191T

1126 sequences assigned
1004 (89.2%) exact matches, in which:
972 unique CDR3
6 unique J



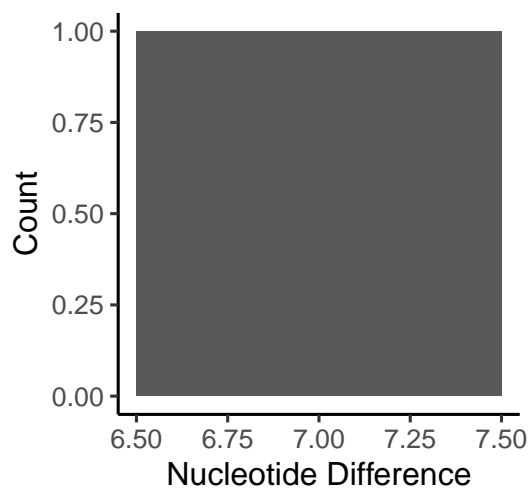
IGHV2-26*01

302 sequences assigned
250 (82.8%) exact matches, in which:
240 unique CDR3
6 unique J



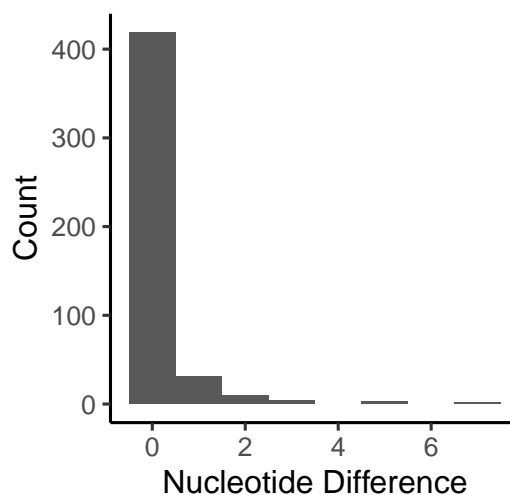
IGHV1-68*02

1 sequences assigned
No exact matches.



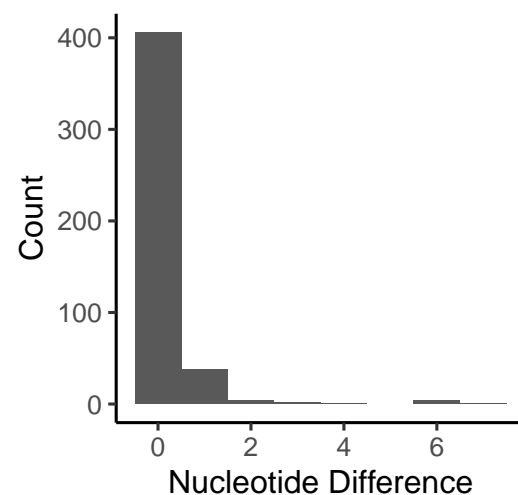
IGHV2-5*01

469 sequences assigned
419 (89.3%) exact matches, in which:
401 unique CDR3
6 unique J



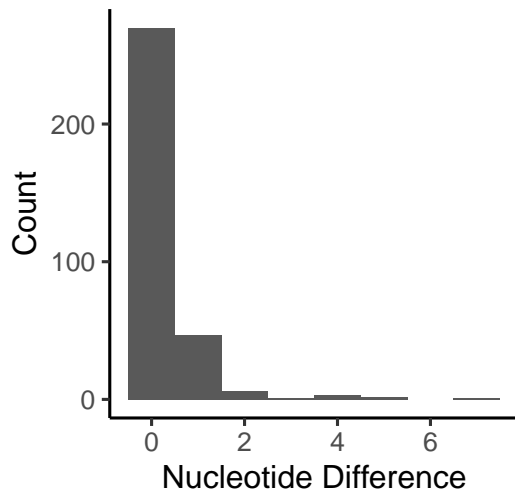
IGHV2-70*15

456 sequences assigned
406 (89%) exact matches, in which:
397 unique CDR3
6 unique J



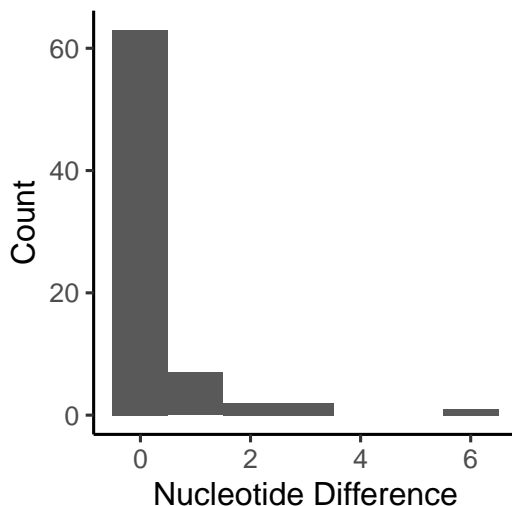
IGHV3-7*03

330 sequences assigned
270 (81.8%) exact matches, in which:
263 unique CDR3
6 unique J



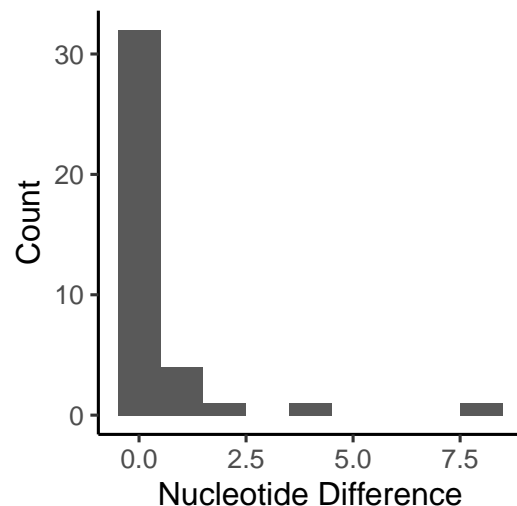
IGHV3-13*05

75 sequences assigned
63 (84%) exact matches, in which:
62 unique CDR3
4 unique J



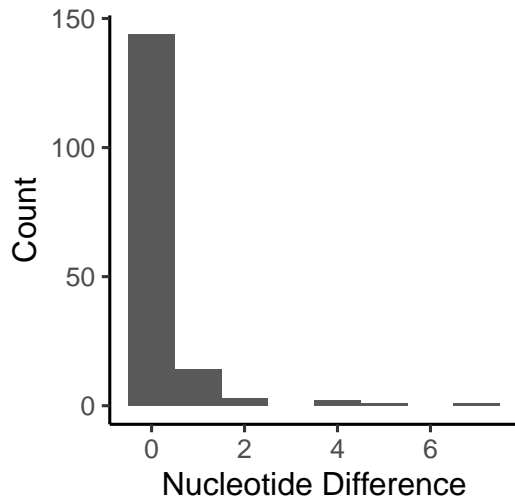
IGHV3-20*04

39 sequences assigned
32 (82.1%) exact matches, in which:
31 unique CDR3
4 unique J



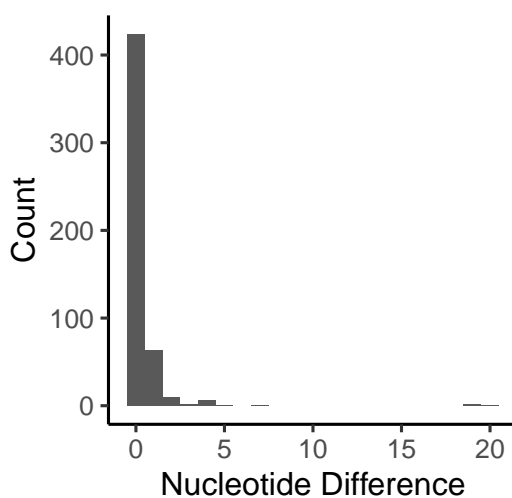
IGHV3-7*05

165 sequences assigned
144 (87.3%) exact matches, in which:
143 unique CDR3
6 unique J



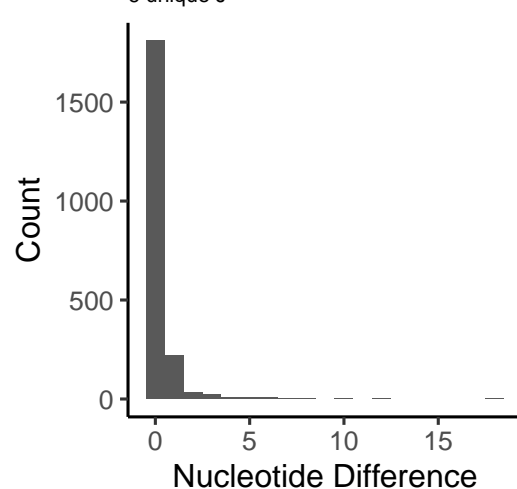
IGHV3-15*01

510 sequences assigned
424 (83.1%) exact matches, in which:
410 unique CDR3
6 unique J



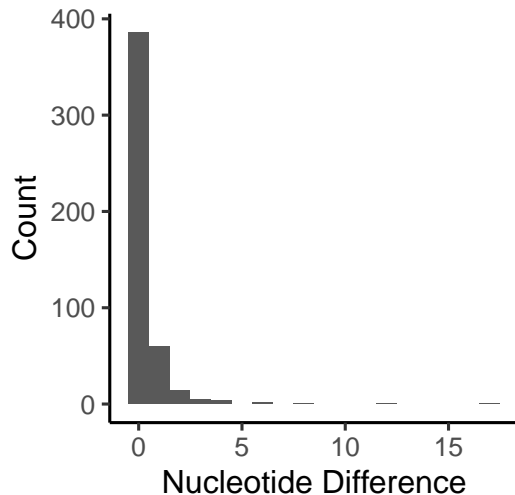
IGHV3-21*01

2121 sequences assigned
1810 (85.3%) exact matches, in which:
1748 unique CDR3
6 unique J



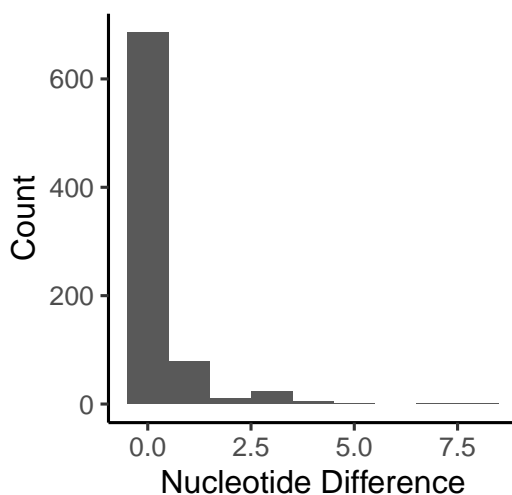
IGHV3-11*06

475 sequences assigned
386 (81.3%) exact matches, in which:
376 unique CDR3
6 unique J



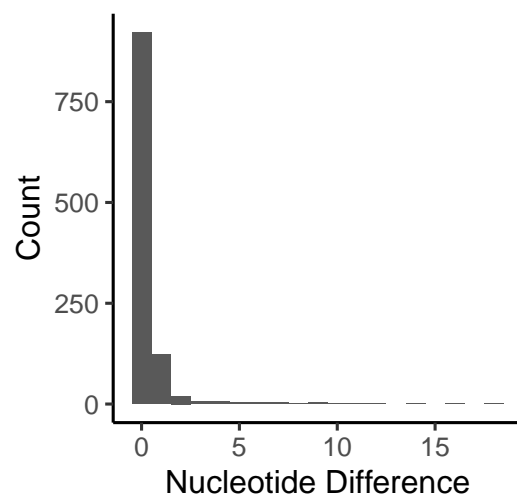
IGHV3-15*07

806 sequences assigned
686 (85.1%) exact matches, in which:
661 unique CDR3
6 unique J



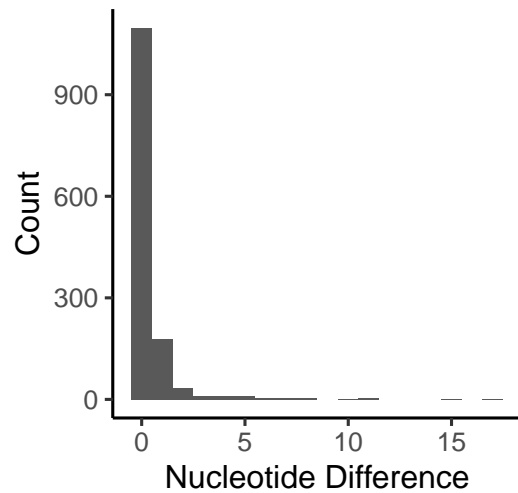
IGHV3-23*01

1098 sequences assigned
922 (84%) exact matches, in which:
898 unique CDR3
6 unique J



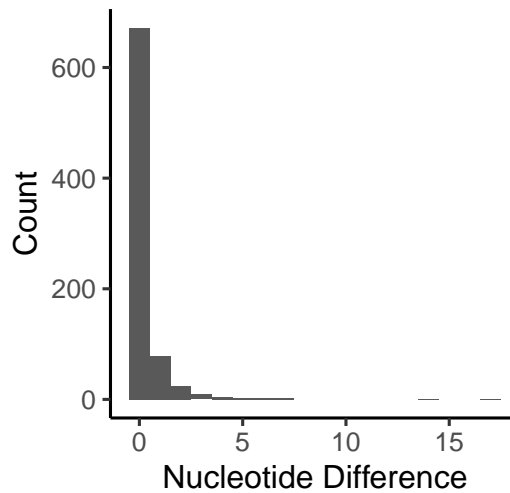
IGHV3–23*04

1357 sequences assigned
1098 (80.9%) exact matches, in which:
1053 unique CDR3
6 unique J



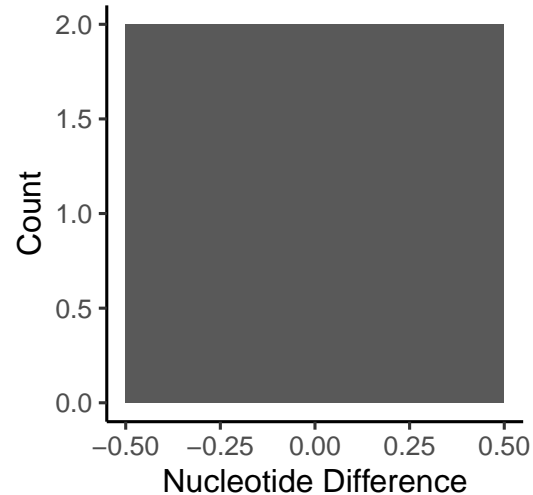
IGHV3–30*18

797 sequences assigned
672 (84.3%) exact matches, in which:
650 unique CDR3
6 unique J



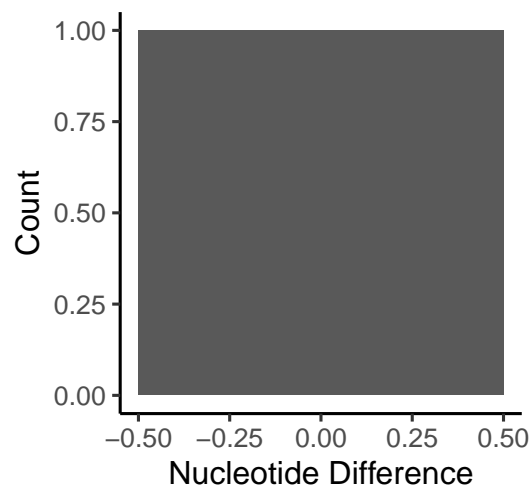
IGHV3–35*01

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



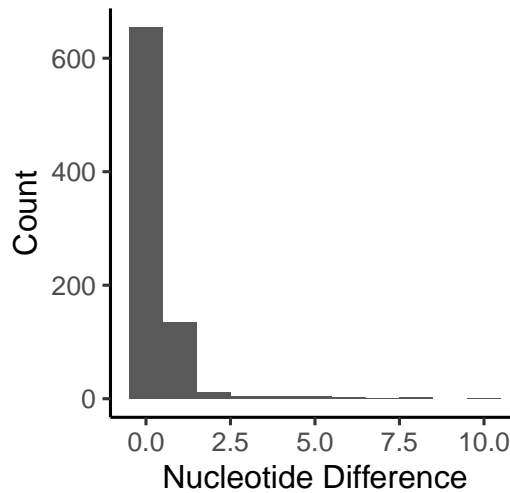
IGHV3–25*04

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



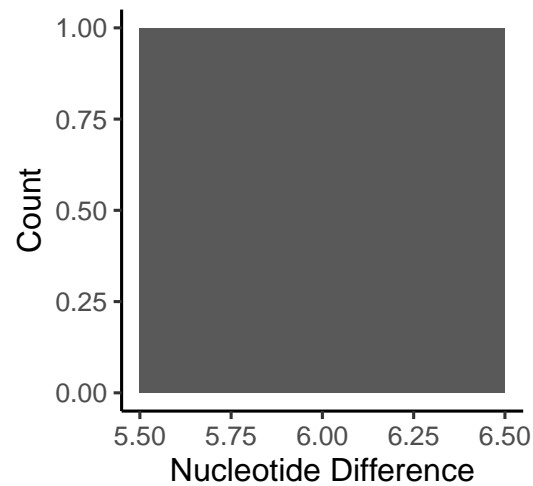
IGHV3–33*01

826 sequences assigned
655 (79.3%) exact matches, in which:
636 unique CDR3
6 unique J



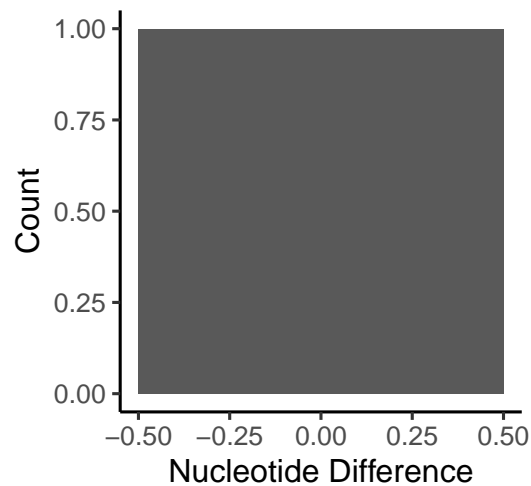
IGHV3–41*02

1 sequences assigned
No exact matches.



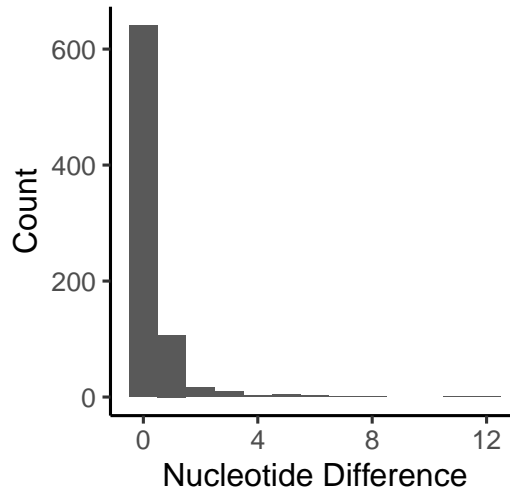
IGHV3–30–3*01

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



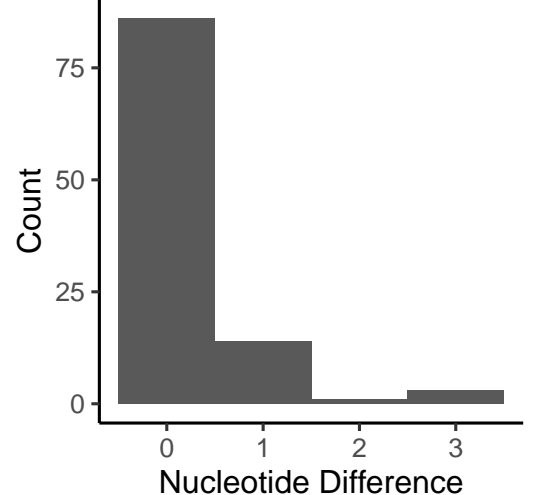
IGHV3–33*08

789 sequences assigned
641 (81.2%) exact matches, in which:
627 unique CDR3
6 unique J



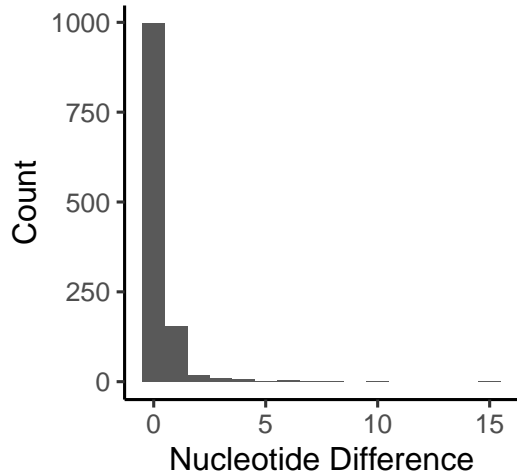
IGHV3–43*01

104 sequences assigned
86 (82.7%) exact matches, in which:
84 unique CDR3
5 unique J



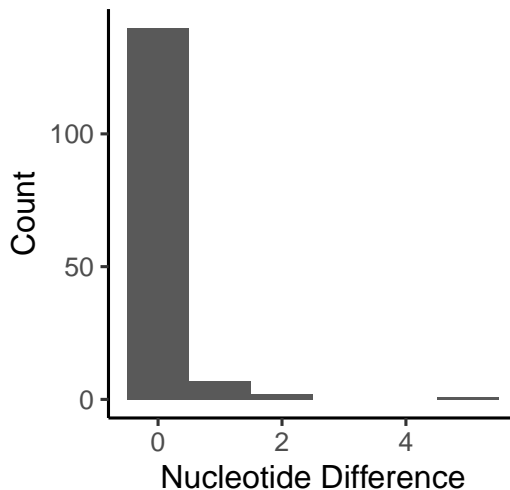
IGHV3-48*01

1198 sequences assigned
997 (83.2%) exact matches, in which:
974 unique CDR3
6 unique J



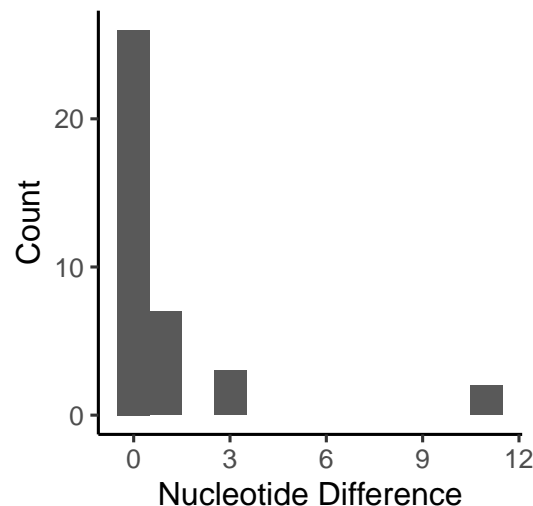
IGHV3-53*04

151 sequences assigned
140 (92.7%) exact matches, in which:
139 unique CDR3
6 unique J



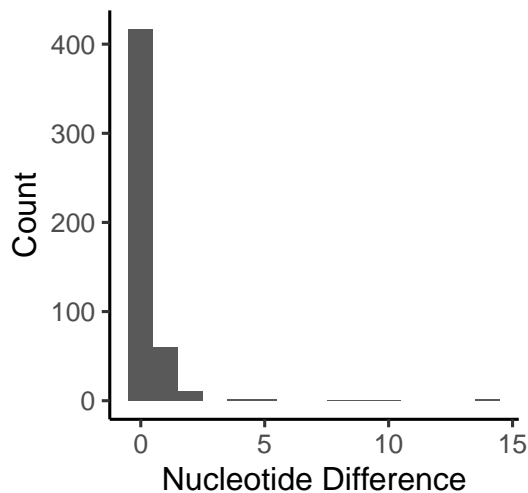
IGHV3-72*01

38 sequences assigned
26 (68.4%) exact matches, in which:
26 unique CDR3
5 unique J



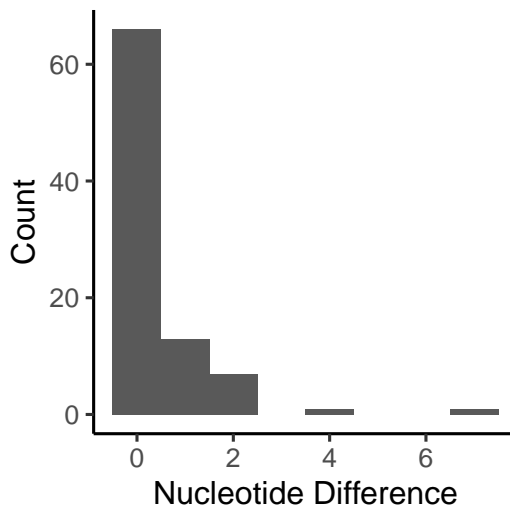
IGHV3-49*03

497 sequences assigned
417 (83.9%) exact matches, in which:
410 unique CDR3
6 unique J



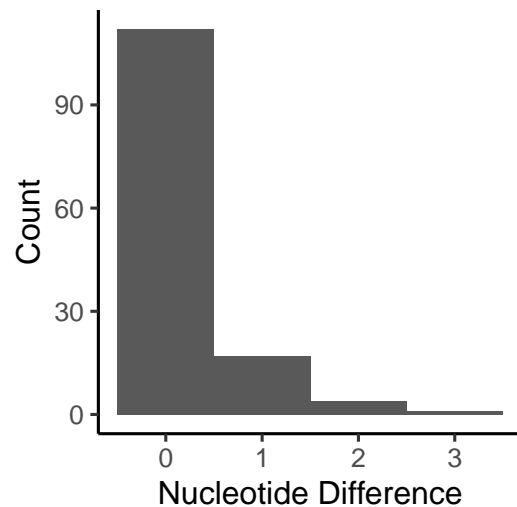
IGHV3-64*01

88 sequences assigned
66 (75%) exact matches, in which:
64 unique CDR3
6 unique J



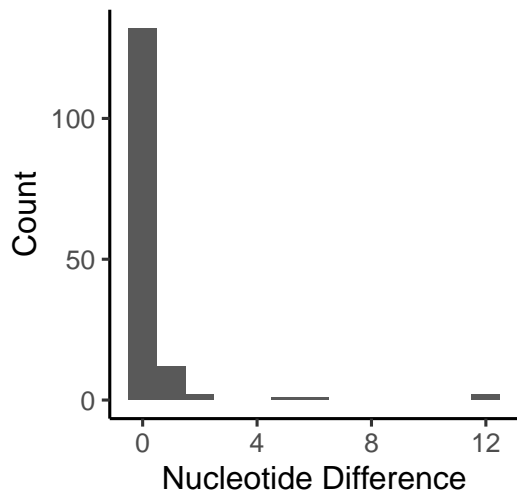
IGHV3-73*01

134 sequences assigned
112 (83.6%) exact matches, in which:
110 unique CDR3
4 unique J



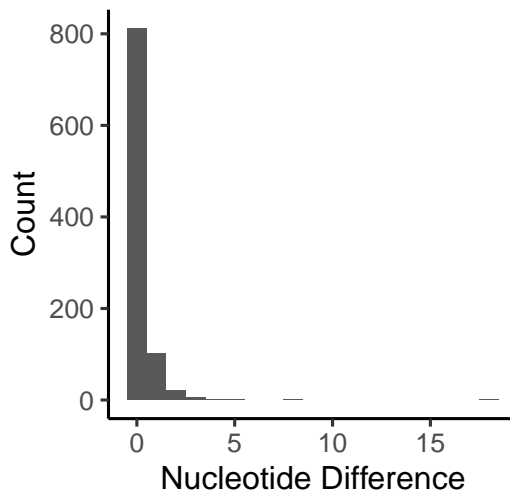
IGHV3-53*02

150 sequences assigned
132 (88%) exact matches, in which:
129 unique CDR3
6 unique J



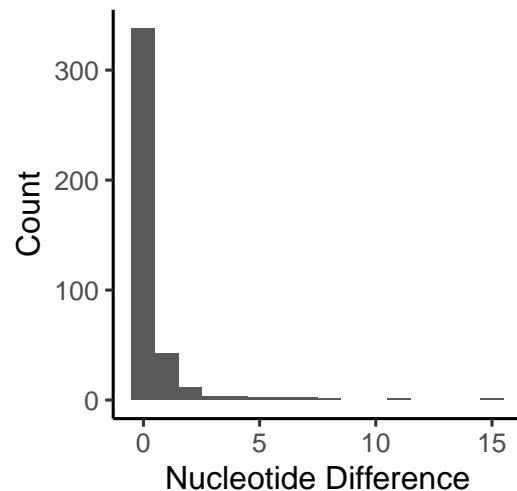
IGHV3-66*01

946 sequences assigned
812 (85.8%) exact matches, in which:
785 unique CDR3
6 unique J



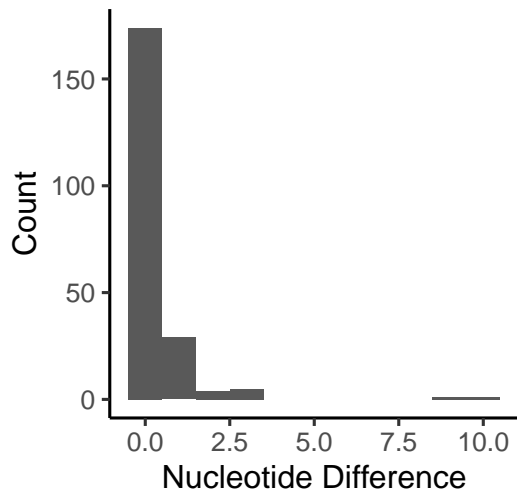
IGHV3-74*01

406 sequences assigned
338 (83.3%) exact matches, in which:
330 unique CDR3
6 unique J



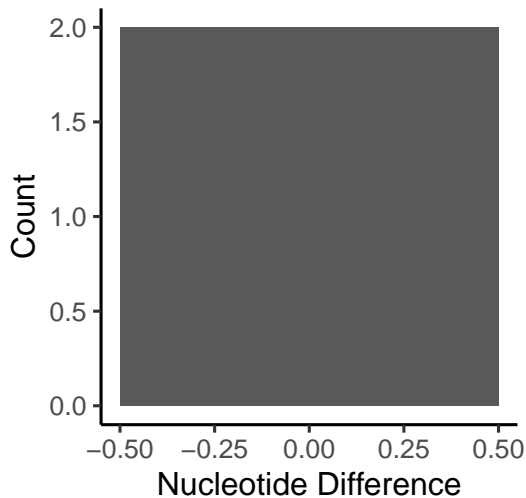
IGHV3–64D*06

214 sequences assigned
174 (81.3%) exact matches, in which:
169 unique CDR3
5 unique J



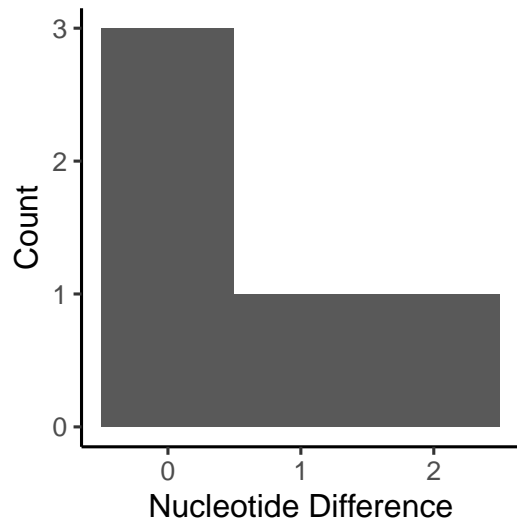
IGHV4–28*01

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



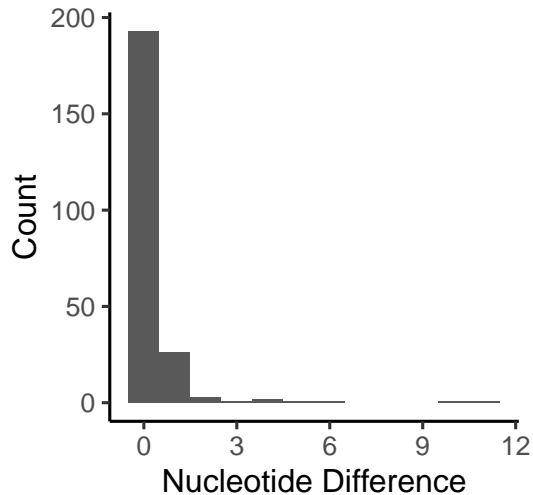
IGHV4–28*07

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



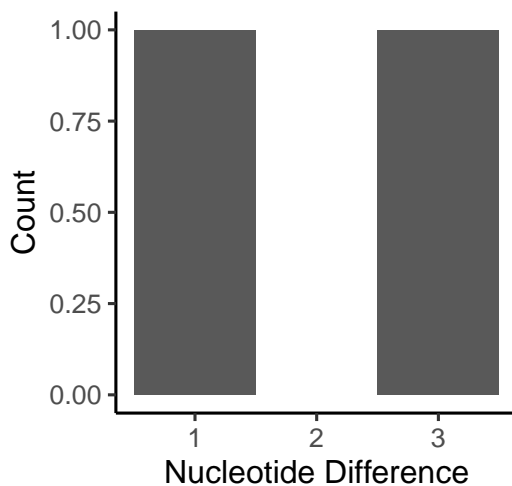
IGHV3–64D*08

229 sequences assigned
193 (84.3%) exact matches, in which:
188 unique CDR3
6 unique J



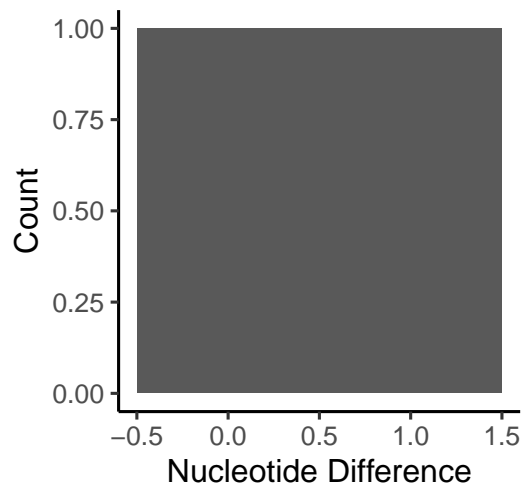
IGHV4–28*03

2 sequences assigned
No exact matches.



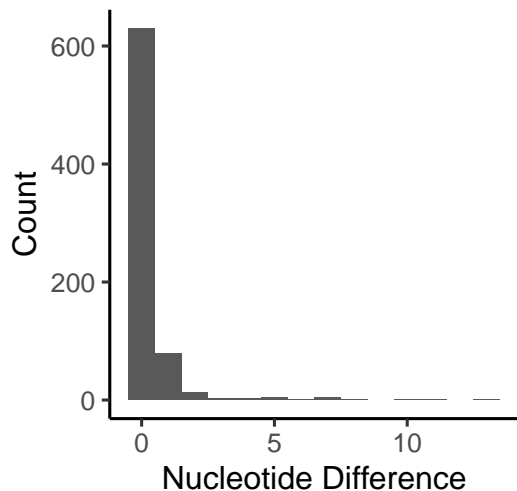
IGHV4–30–2*03

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



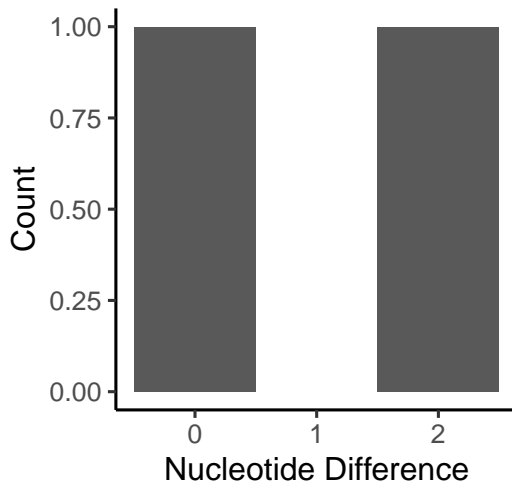
IGHV4–4*07

739 sequences assigned
630 (85.3%) exact matches, in which:
613 unique CDR3
6 unique J



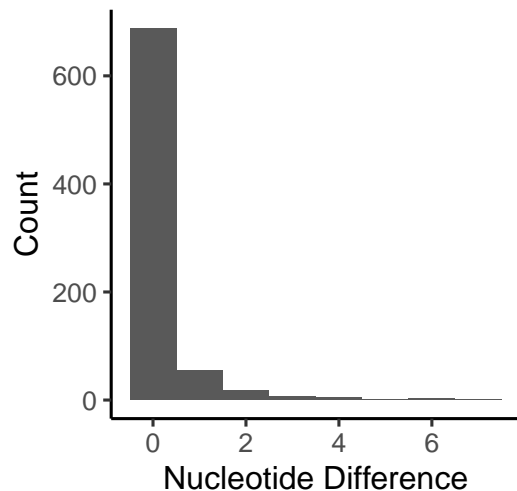
IGHV4–28*04

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



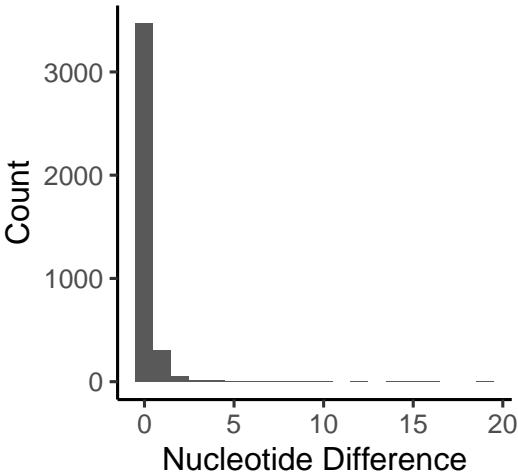
IGHV4–31*03

775 sequences assigned
688 (88.8%) exact matches, in which:
670 unique CDR3
6 unique J



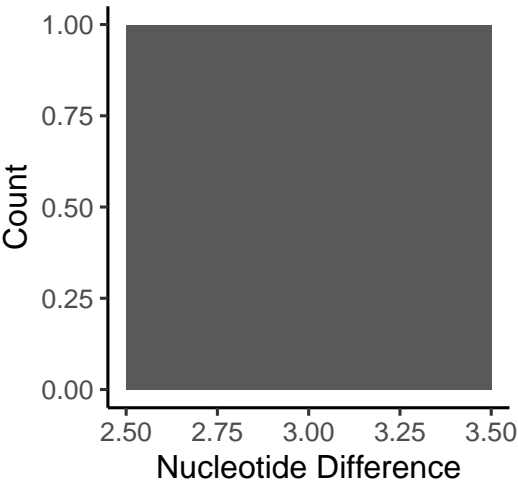
IGHV4-34*01

3880 sequences assigned
3470 (89.4%) exact matches, in which:
3349 unique CDR3
6 unique J



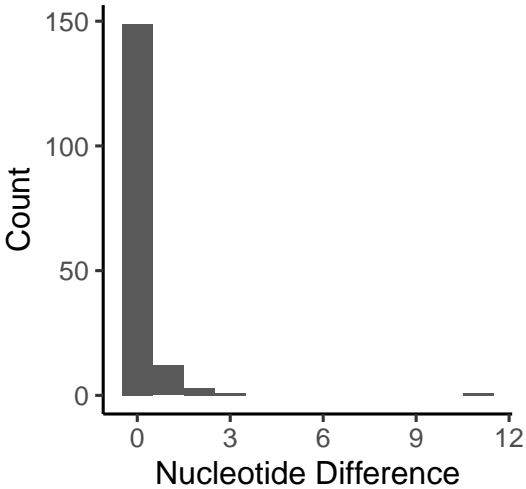
IGHV4-55*08

1 sequences assigned
No exact matches.



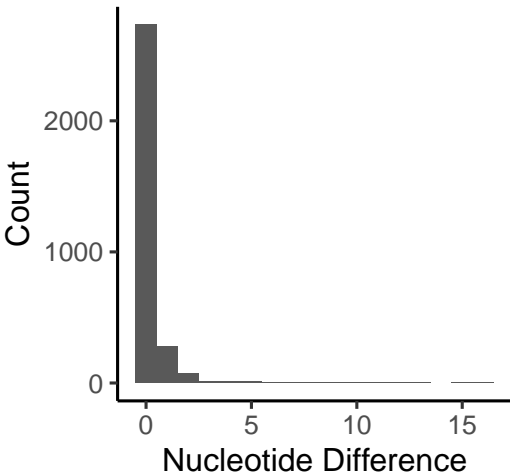
IGHV4-61*01

167 sequences assigned
149 (89.2%) exact matches, in which:
149 unique CDR3
5 unique J



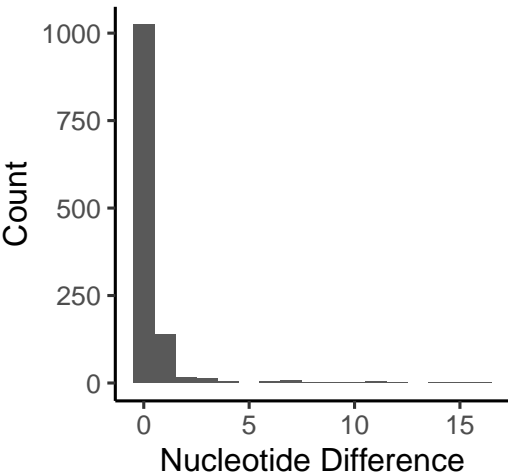
IGHV4-39*01

3139 sequences assigned
2733 (87.1%) exact matches, in which:
2606 unique CDR3
6 unique J



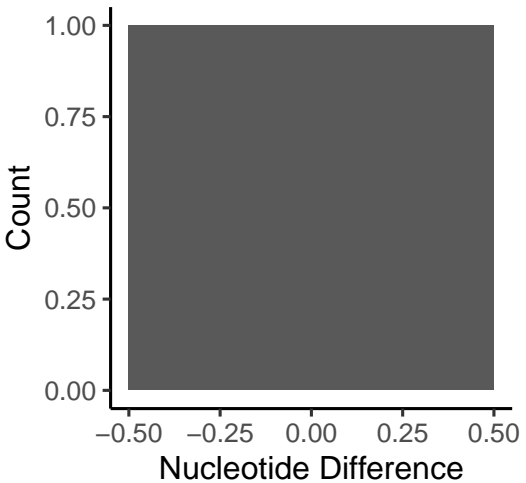
IGHV4-59*01

1216 sequences assigned
1024 (84.2%) exact matches, in which:
1002 unique CDR3
6 unique J



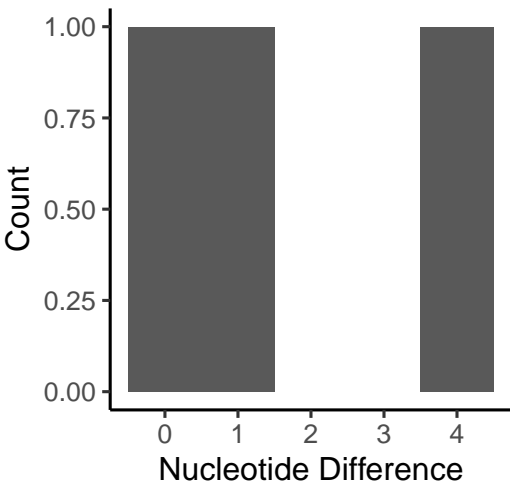
IGHV1/OR15-2*01

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



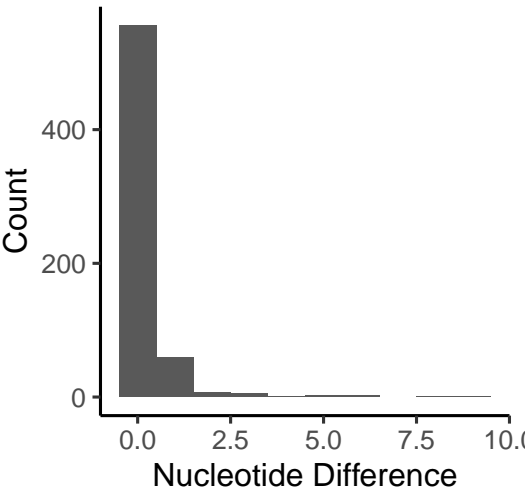
IGHV4-55*01

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



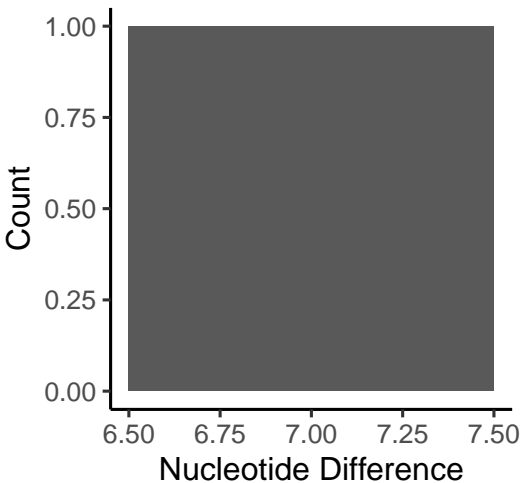
IGHV4-59*08

634 sequences assigned
556 (87.7%) exact matches, in which:
544 unique CDR3
6 unique J



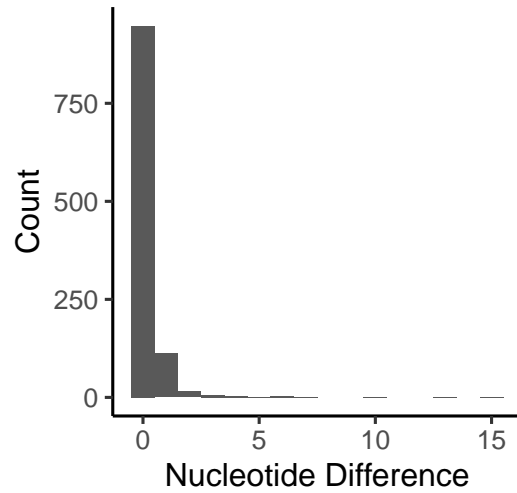
IGHV4/OR15-8*02

1 sequences assigned
No exact matches.



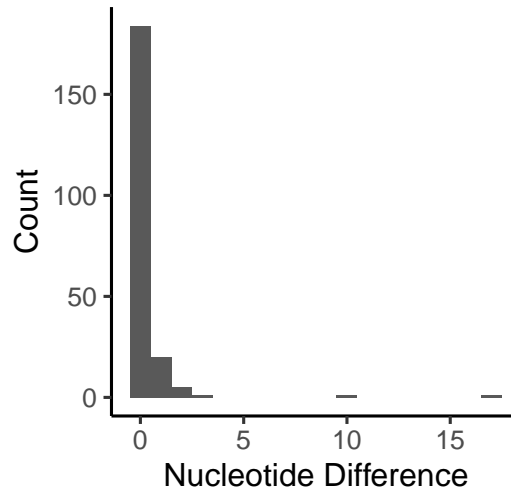
IGHV5-10-1*03

1097 sequences assigned
948 (86.4%) exact matches, in which:
912 unique CDR3
6 unique J



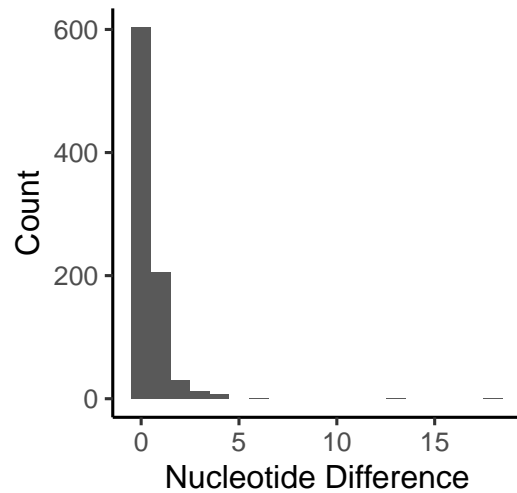
IGHV6-1*01

212 sequences assigned
184 (86.8%) exact matches, in which:
176 unique CDR3
6 unique J



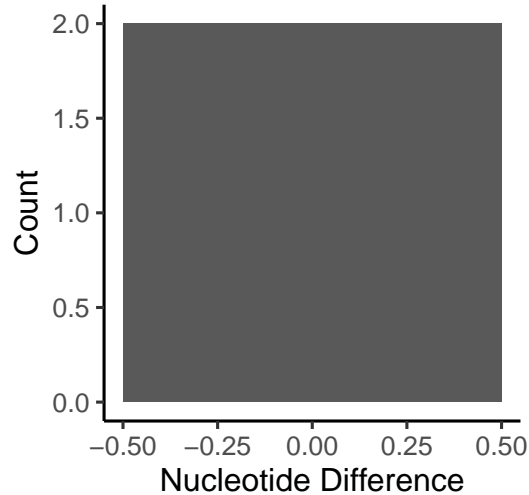
IGHV5-51*01

862 sequences assigned
604 (70.1%) exact matches, in which:
585 unique CDR3
6 unique J



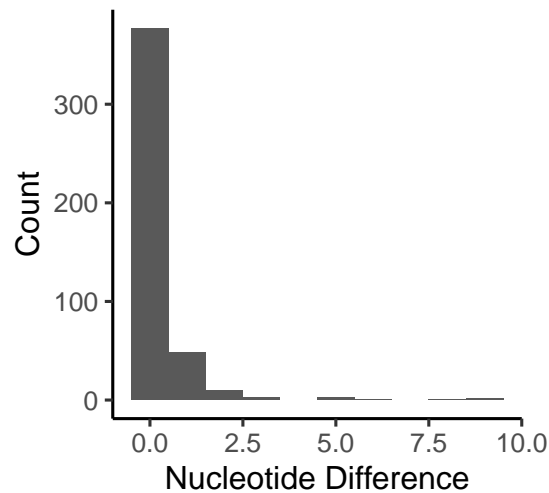
IGHV7-81*01

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



IGHV5-51*03

445 sequences assigned
377 (84.7%) exact matches, in which:
367 unique CDR3
6 unique J



IGHV1-69*08_C191T

