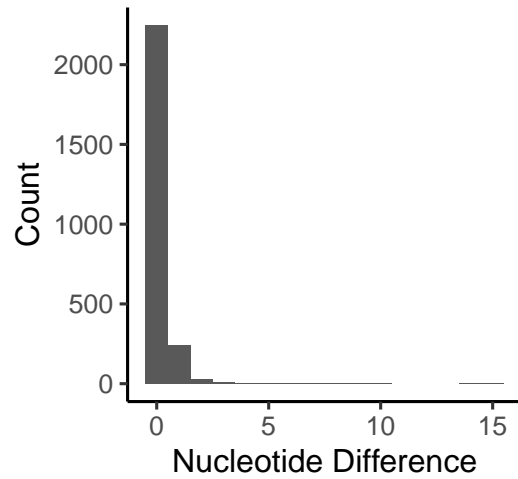


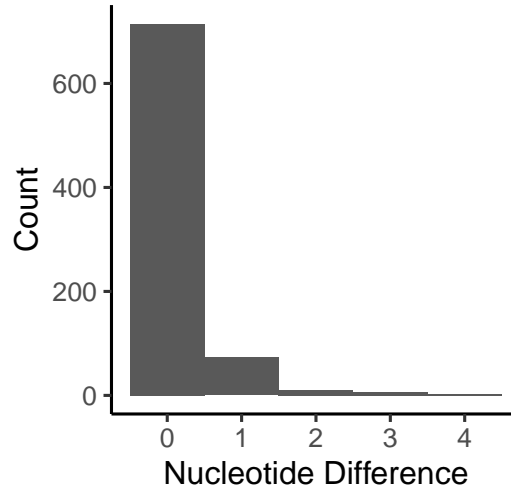
IGHV1-2*02

2542 sequences assigned
2246 (88.4%) exact matches, in which:
2127 unique CDR3
6 unique J



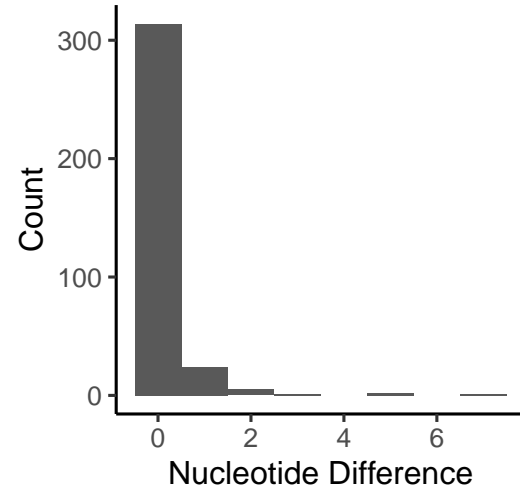
IGHV1-24*01

806 sequences assigned
715 (88.7%) exact matches, in which:
677 unique CDR3
6 unique J



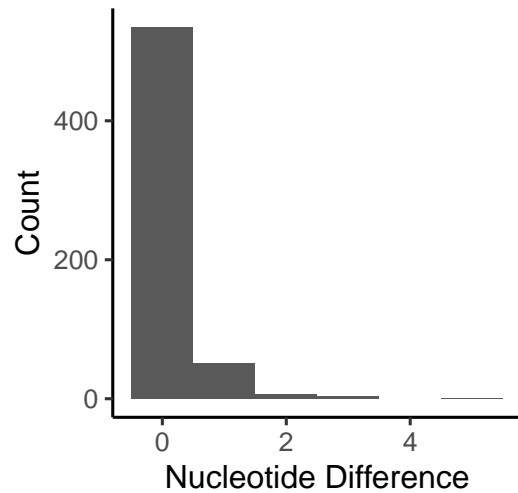
IGHV1-58*01

347 sequences assigned
314 (90.5%) exact matches, in which:
299 unique CDR3
6 unique J



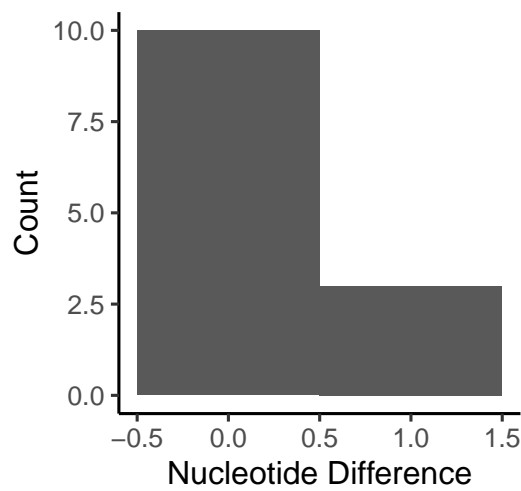
IGHV1-8*01

597 sequences assigned
535 (89.6%) exact matches, in which:
503 unique CDR3
6 unique J



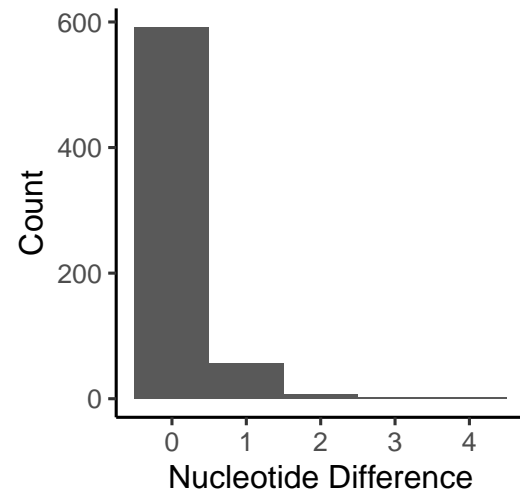
IGHV1-45*02

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



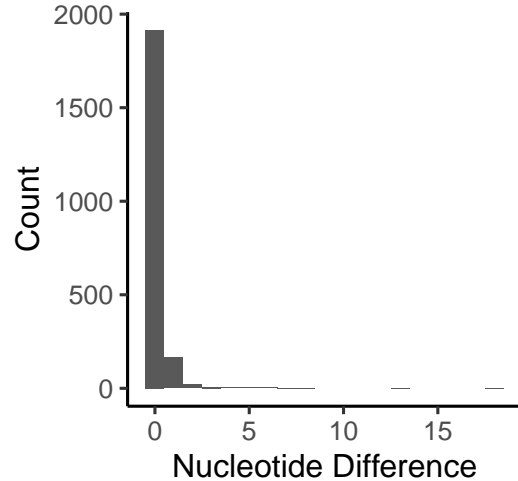
IGHV2-5*01

660 sequences assigned
592 (89.7%) exact matches, in which:
563 unique CDR3
6 unique J



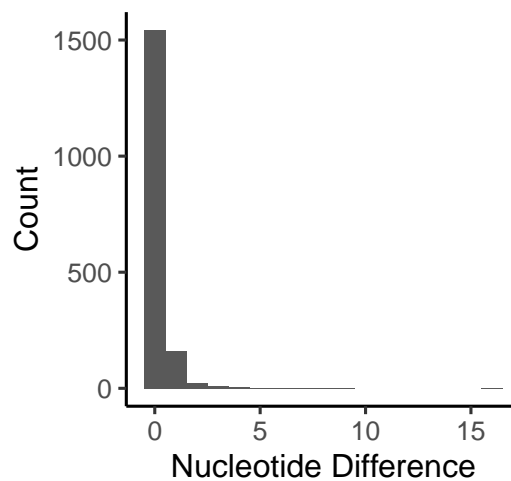
IGHV1-18*01

2123 sequences assigned
1915 (90.2%) exact matches, in which:
1822 unique CDR3
6 unique J



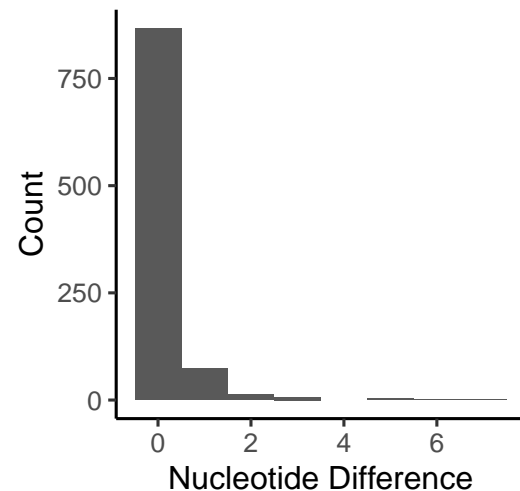
IGHV1-46*01

1747 sequences assigned
1543 (88.3%) exact matches, in which:
1466 unique CDR3
6 unique J



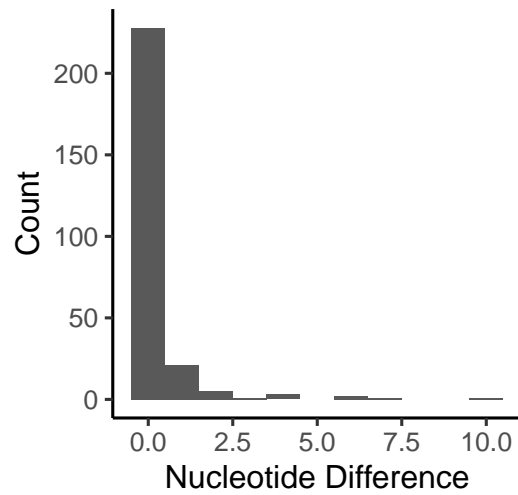
IGHV2-5*02

965 sequences assigned
867 (89.8%) exact matches, in which:
822 unique CDR3
6 unique J



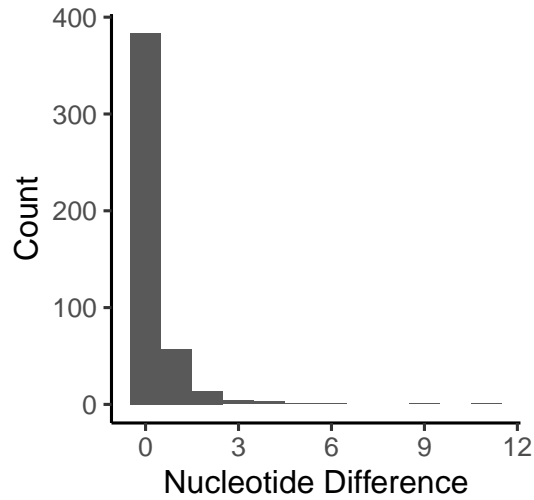
IGHV2-26*01

262 sequences assigned
228 (87%) exact matches, in which:
220 unique CDR3
5 unique J



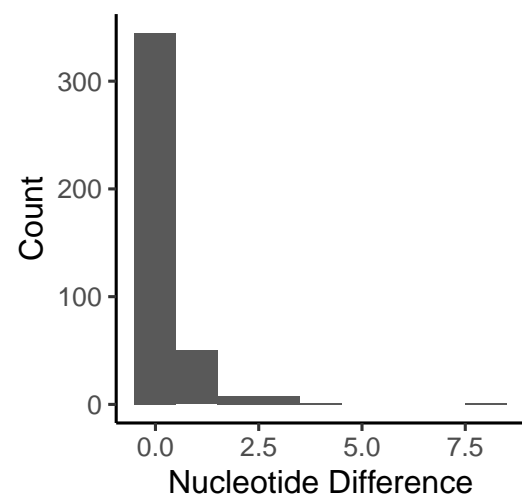
IGHV3-7*01

466 sequences assigned
384 (82.4%) exact matches, in which:
368 unique CDR3
6 unique J



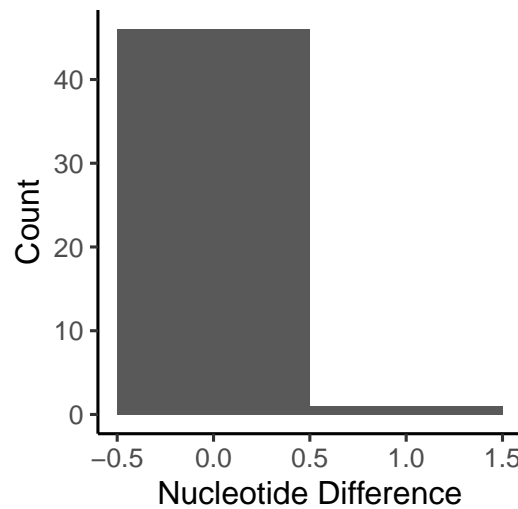
IGHV3-11*01

413 sequences assigned
345 (83.5%) exact matches, in which:
333 unique CDR3
5 unique J



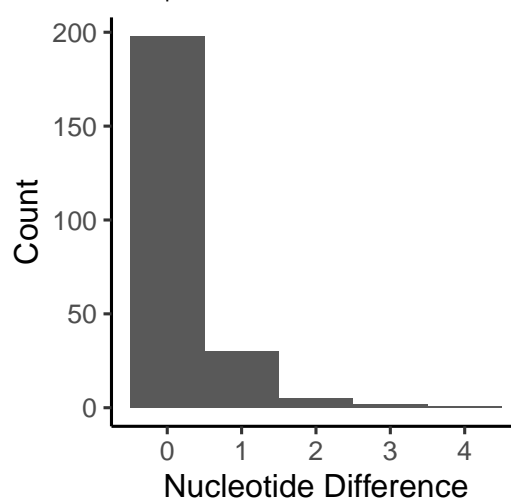
IGHV2-26*04

47 sequences assigned
46 (97.9%) exact matches, in which:
44 unique CDR3
4 unique J



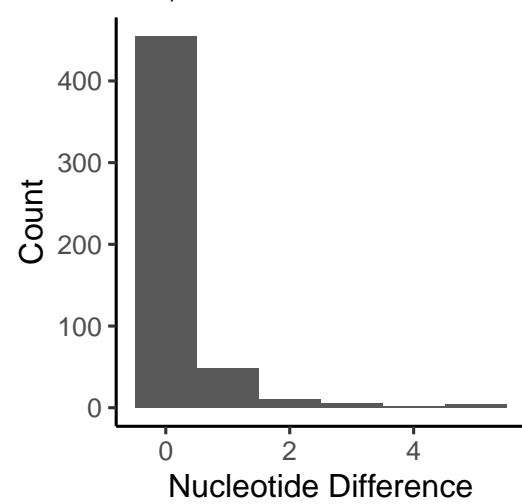
IGHV3-7*04

236 sequences assigned
198 (83.9%) exact matches, in which:
186 unique CDR3
6 unique J



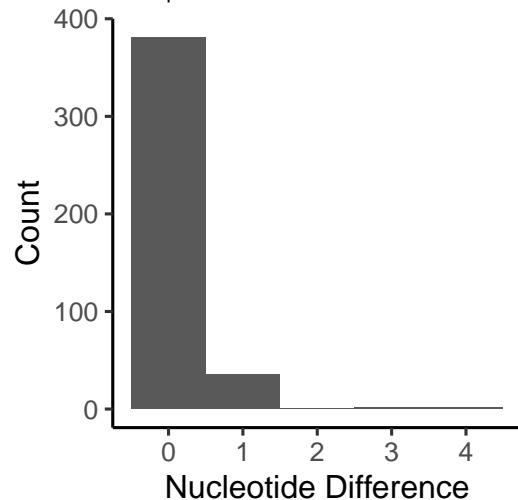
IGHV3-11*05

526 sequences assigned
455 (86.5%) exact matches, in which:
437 unique CDR3
6 unique J



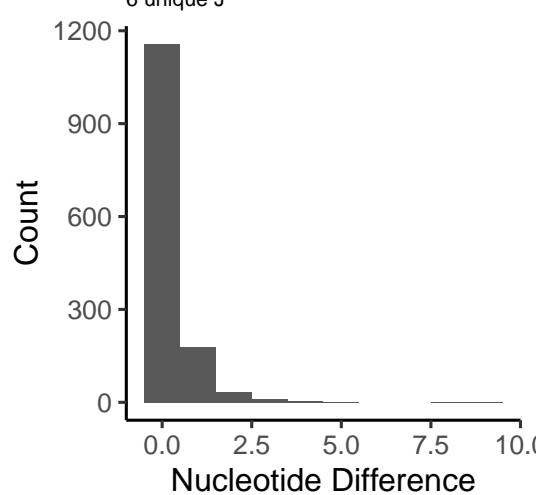
IGHV2-70*01

421 sequences assigned
381 (90.5%) exact matches, in which:
370 unique CDR3
5 unique J



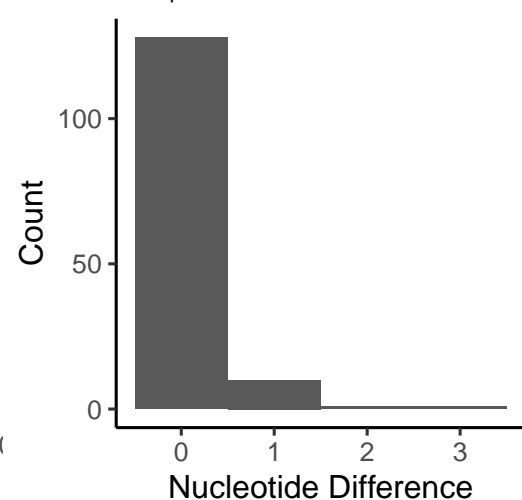
IGHV3-9*01

1391 sequences assigned
1157 (83.2%) exact matches, in which:
1081 unique CDR3
6 unique J



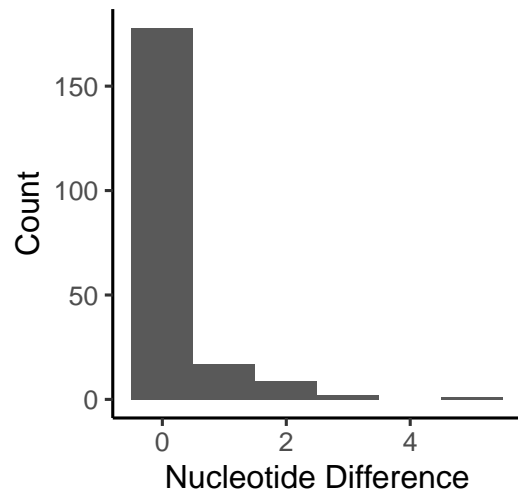
IGHV3-13*01

140 sequences assigned
128 (91.4%) exact matches, in which:
122 unique CDR3
5 unique J



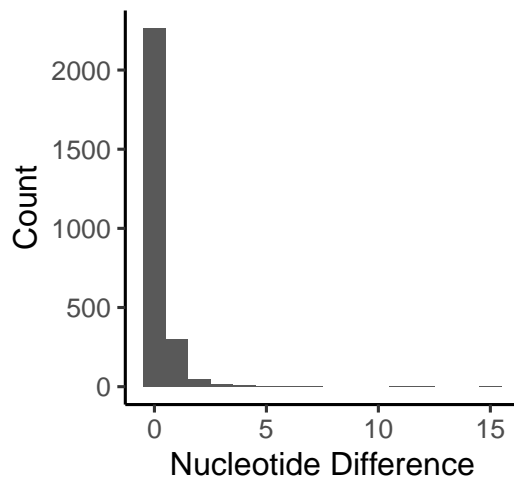
IGHV3–13*04

207 sequences assigned
178 (86%) exact matches, in which:
173 unique CDR3
5 unique J



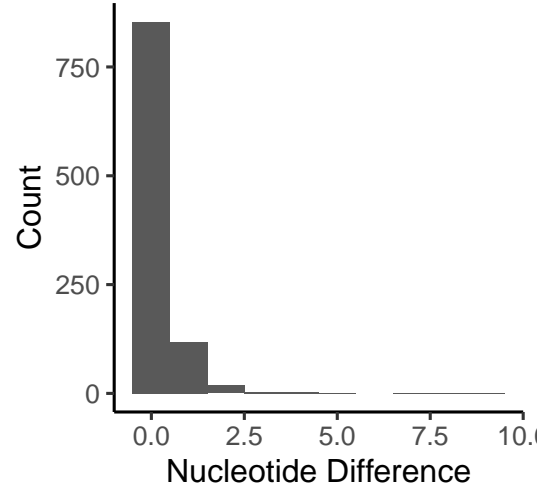
IGHV3–21*01

2651 sequences assigned
2263 (85.4%) exact matches, in which:
2133 unique CDR3
6 unique J



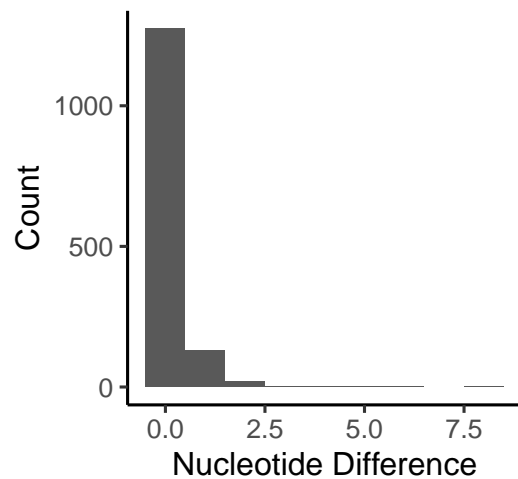
IGHV3–33*01

1000 sequences assigned
854 (85.4%) exact matches, in which:
812 unique CDR3
6 unique J



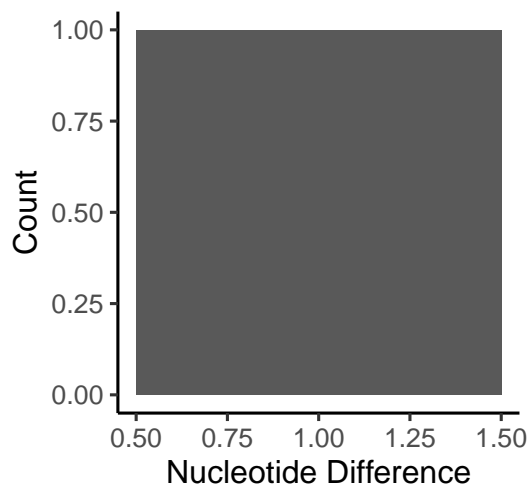
IGHV3–15*01

1434 sequences assigned
1274 (88.8%) exact matches, in which:
1185 unique CDR3
6 unique J



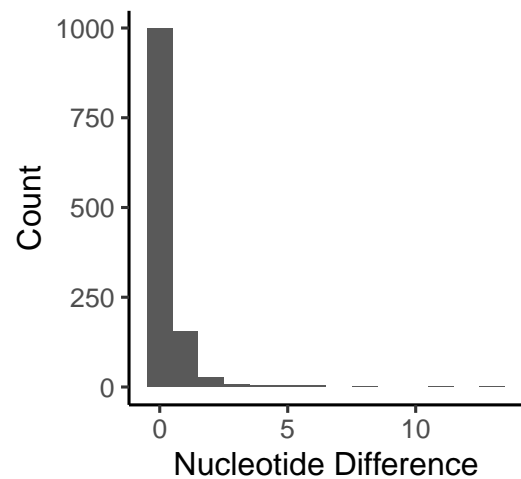
IGHV3–22*01

1 sequences assigned
No exact matches.



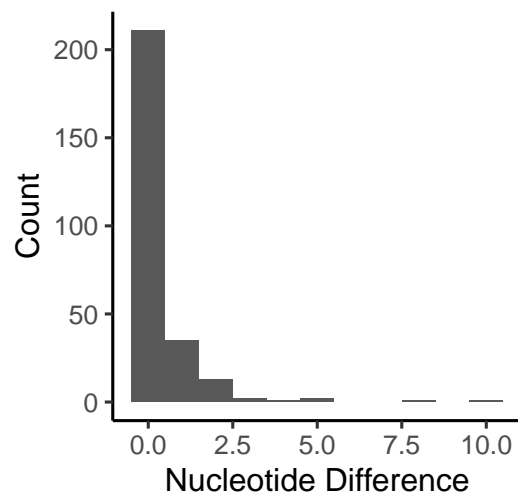
IGHV3–33*08

1202 sequences assigned
998 (83%) exact matches, in which:
950 unique CDR3
6 unique J



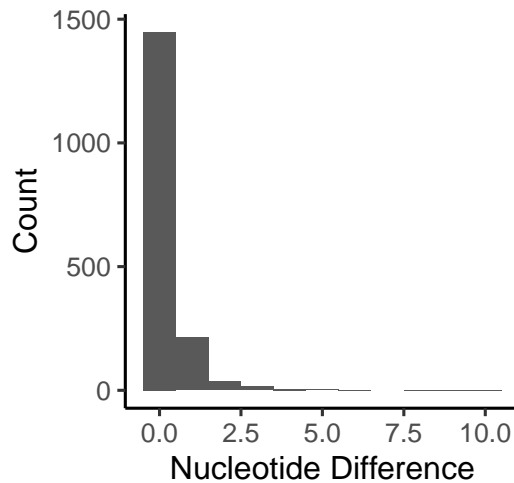
IGHV3–20*04

266 sequences assigned
211 (79.3%) exact matches, in which:
199 unique CDR3
5 unique J



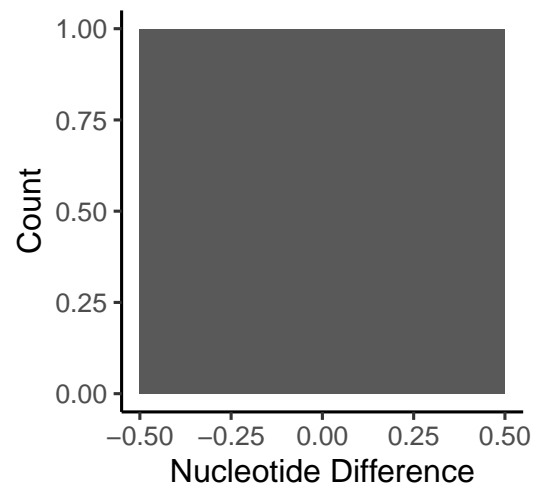
IGHV3–30–3*01

1725 sequences assigned
1448 (83.9%) exact matches, in which:
1364 unique CDR3
6 unique J



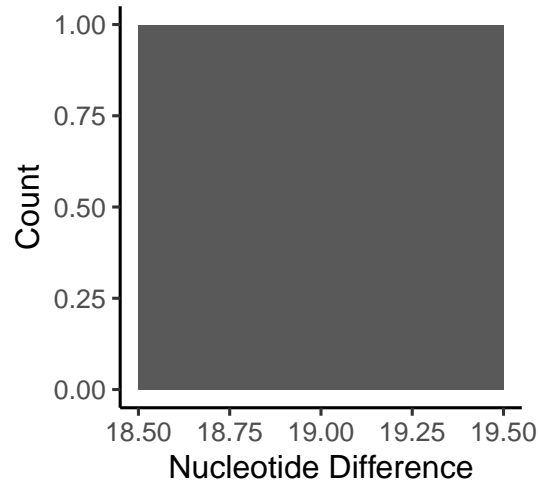
IGHV3–35*01

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



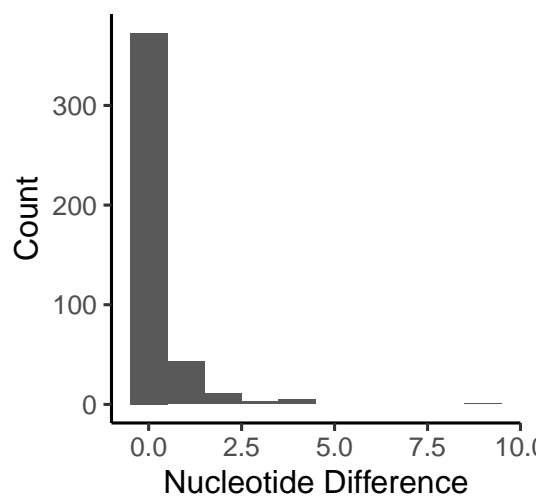
IGHV3-41*02

1 sequences assigned
No exact matches.



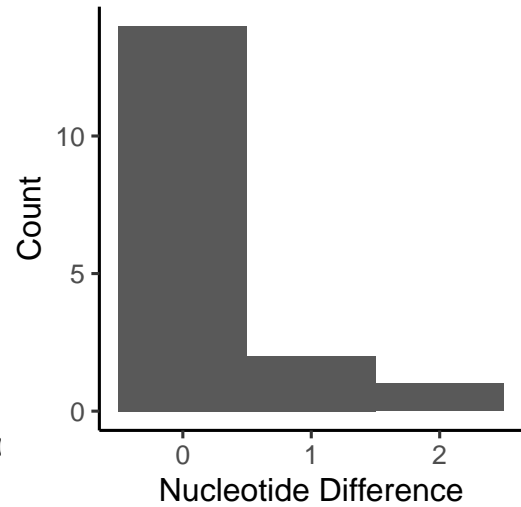
IGHV3-49*05

436 sequences assigned
373 (85.6%) exact matches, in which:
350 unique CDR3
6 unique J



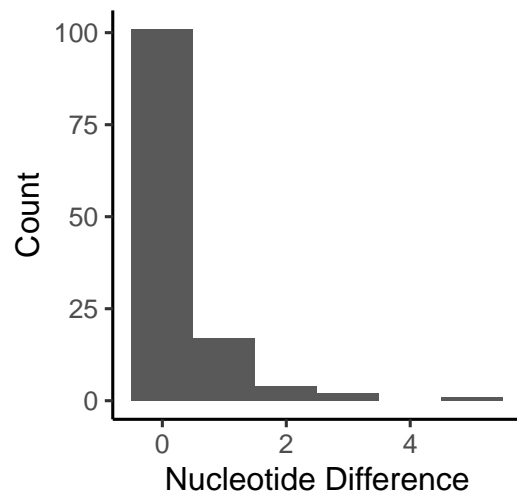
IGHV3-64*02

17 sequences assigned
14 (82.4%) exact matches, in which:
14 unique CDR3
5 unique J



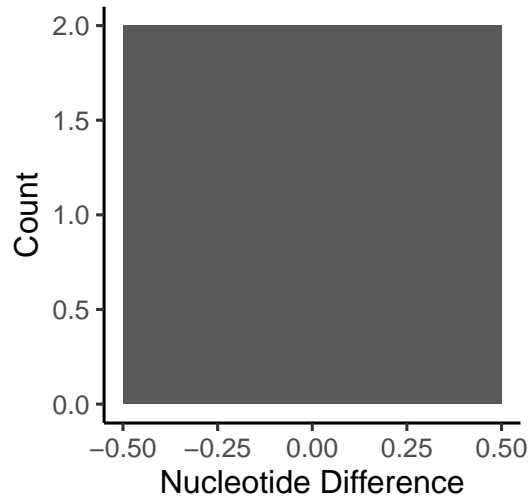
IGHV3-43*01

125 sequences assigned
101 (80.8%) exact matches, in which:
97 unique CDR3
6 unique J



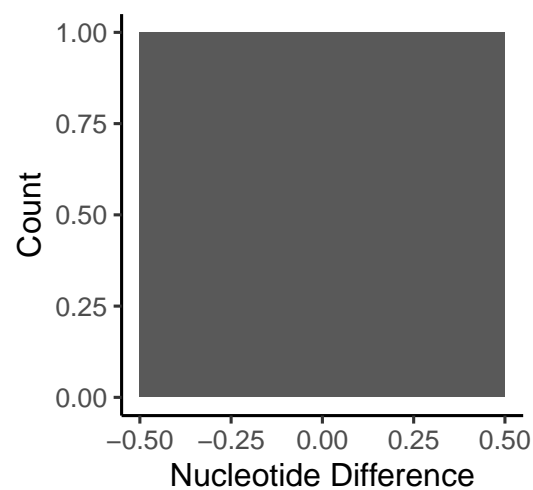
IGHV3-52*01

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



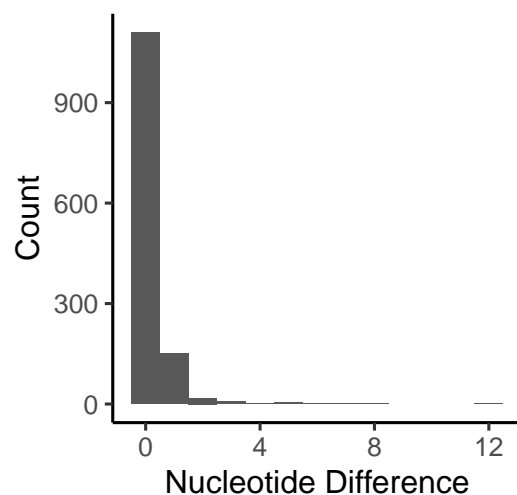
IGHV3-66*03

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



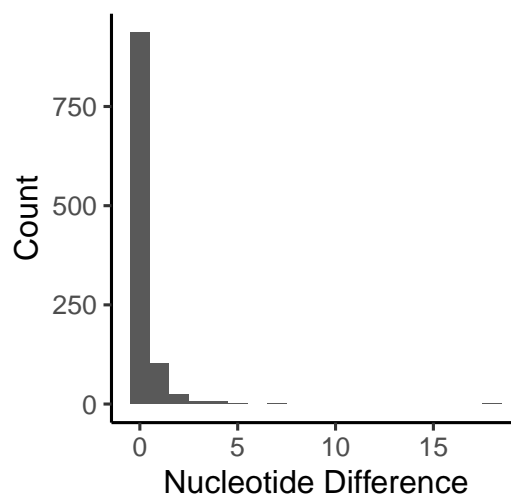
IGHV3-48*02

1300 sequences assigned
1110 (85.4%) exact matches, in which:
1054 unique CDR3
6 unique J



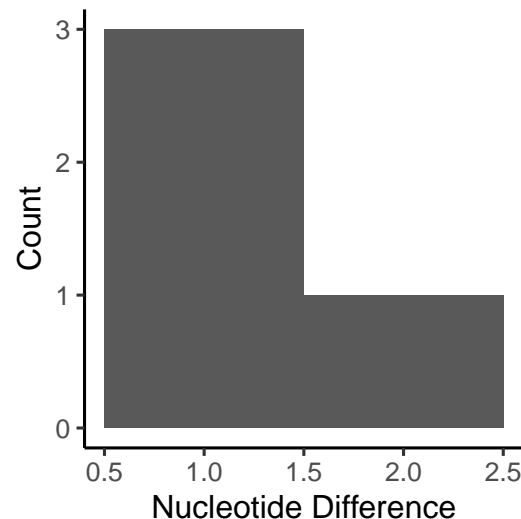
IGHV3-53*01

1080 sequences assigned
937 (86.8%) exact matches, in which:
894 unique CDR3
6 unique J



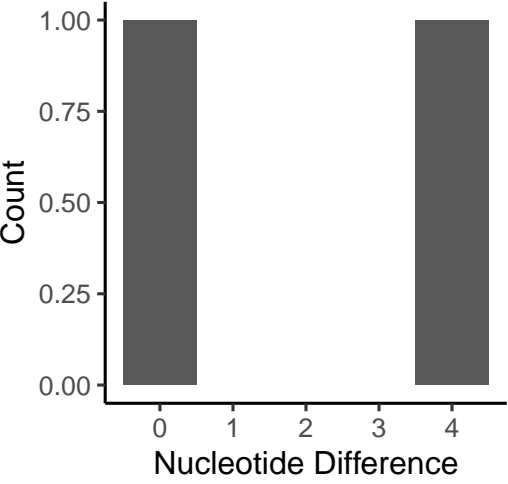
IGHV3-66*04

4 sequences assigned
No exact matches.



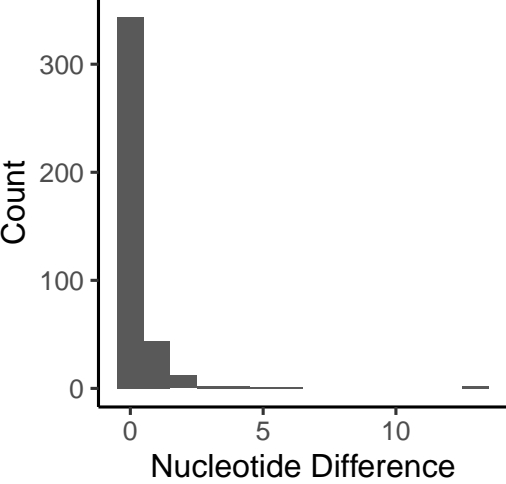
IGHV3-71*03

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



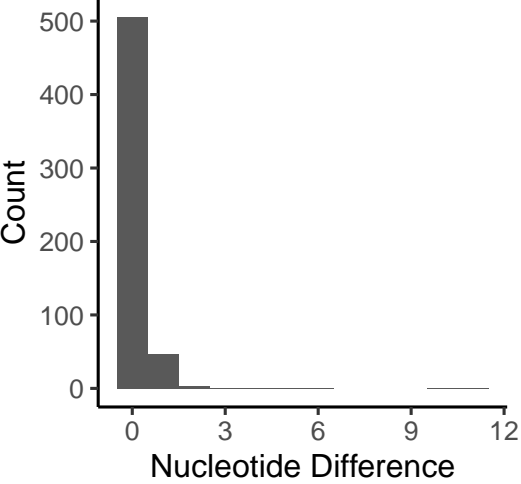
IGHV3-74*01

408 sequences assigned
344 (84.3%) exact matches, in which:
332 unique CDR3
5 unique J



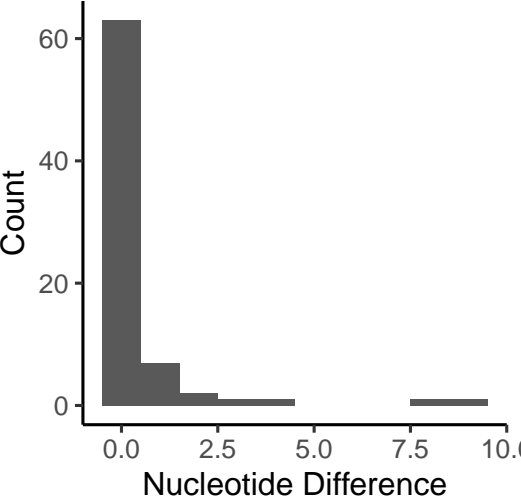
IGHV4-4*07

562 sequences assigned
506 (90%) exact matches, in which:
477 unique CDR3
6 unique J



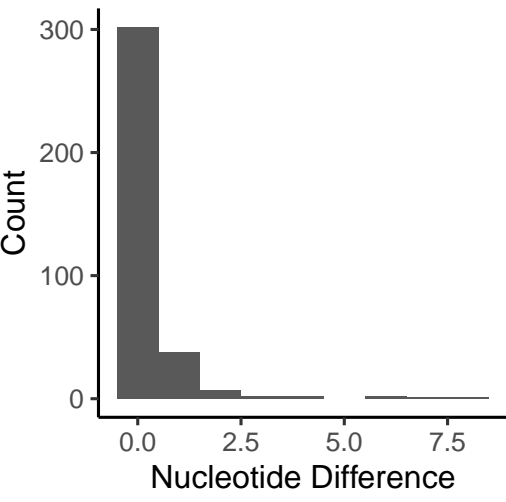
IGHV3-72*01

76 sequences assigned
63 (82.9%) exact matches, in which:
59 unique CDR3
6 unique J



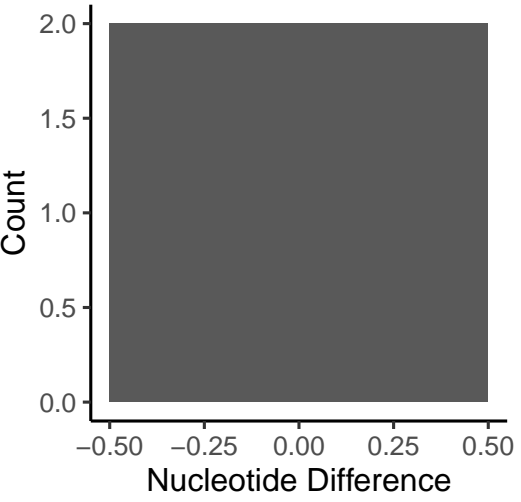
IGHV3-64D*06

355 sequences assigned
302 (85.1%) exact matches, in which:
279 unique CDR3
6 unique J



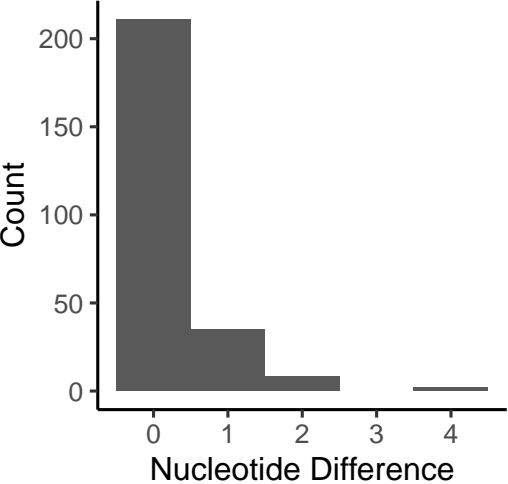
IGHV4-28*01

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



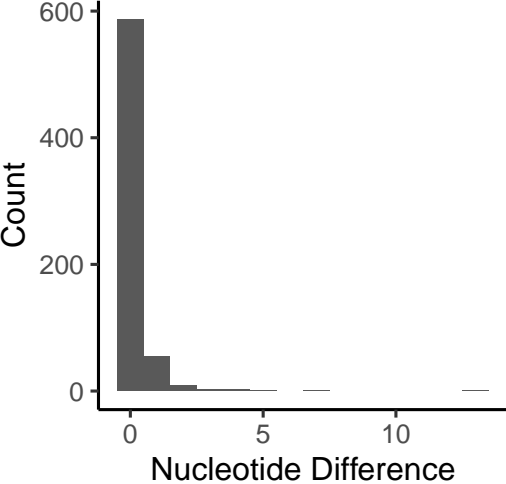
IGHV3-73*02

256 sequences assigned
211 (82.4%) exact matches, in which:
197 unique CDR3
4 unique J



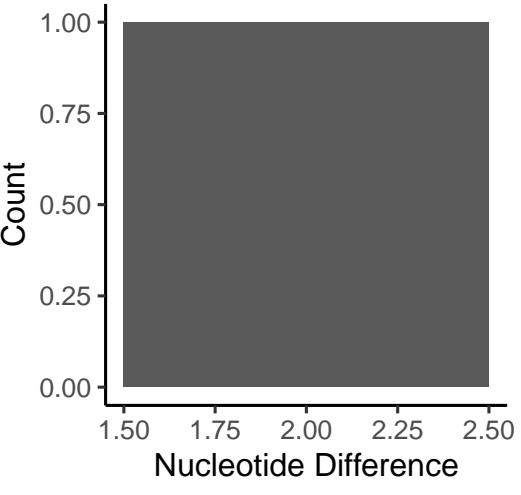
IGHV4-4*02

658 sequences assigned
587 (89.2%) exact matches, in which:
556 unique CDR3
6 unique J



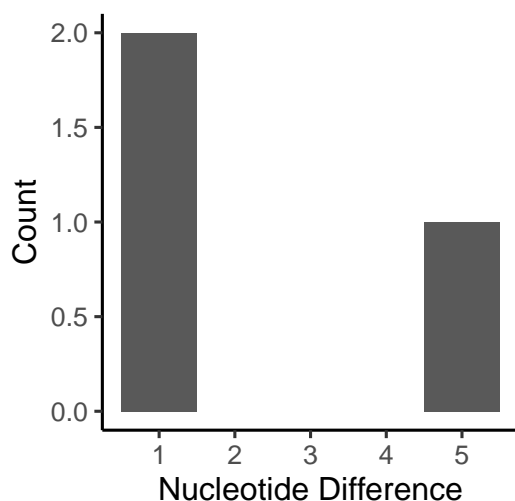
IGHV4-28*03

1 sequences assigned
No exact matches.



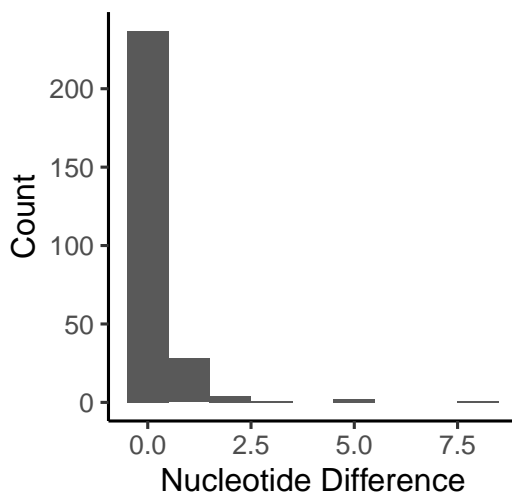
IGHV4-28*04

3 sequences assigned
No exact matches.



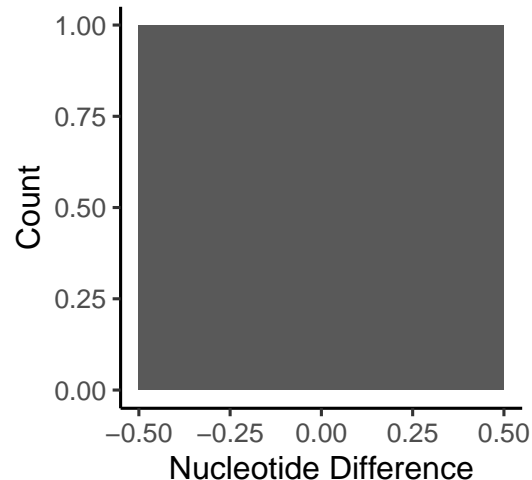
IGHV4-30-2*01

273 sequences assigned
237 (86.8%) exact matches, in which:
226 unique CDR3
6 unique J



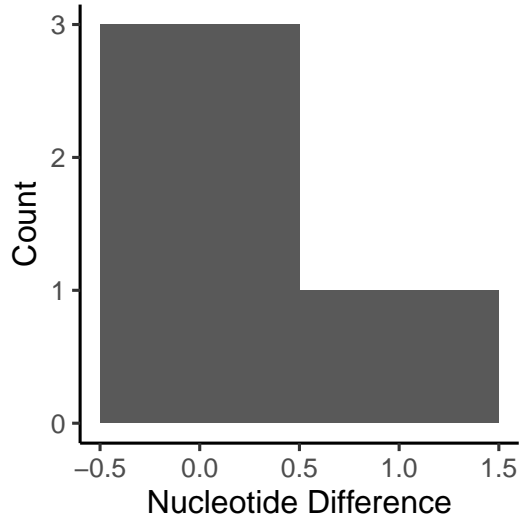
IGHV4-38-2*02

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



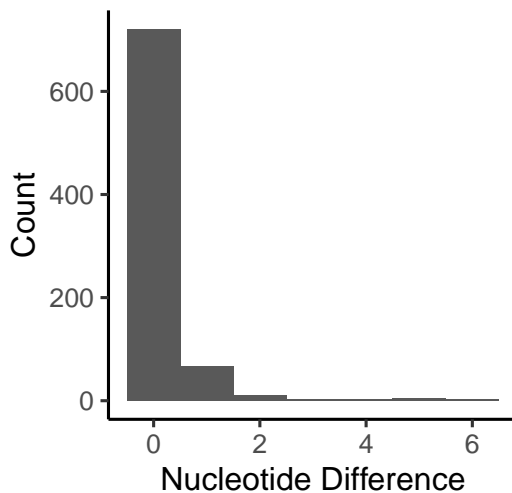
IGHV4-28*07

4 sequences assigned
3 (75%) exact matches, in which:
3 unique CDR3
3 unique J



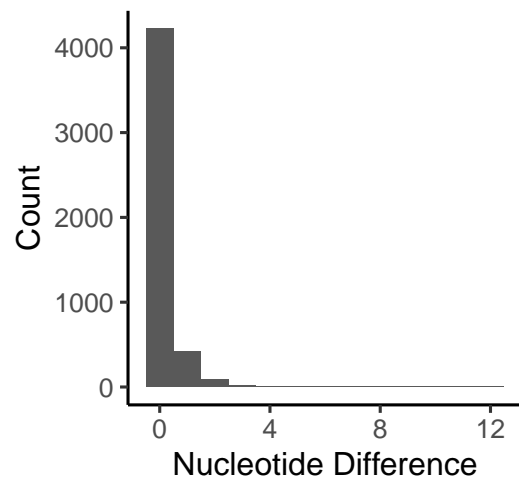
IGHV4-31*03

809 sequences assigned
721 (89.1%) exact matches, in which:
684 unique CDR3
6 unique J



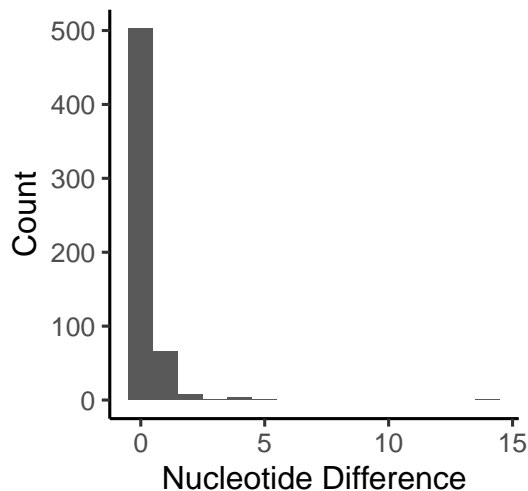
IGHV4-39*01

4797 sequences assigned
4225 (88.1%) exact matches, in which:
3890 unique CDR3
6 unique J



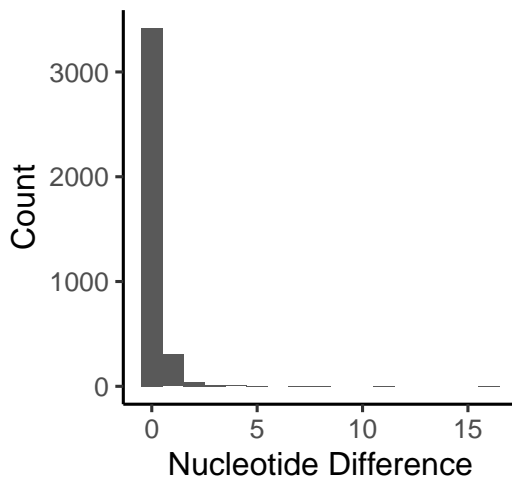
IGHV4-30-4*01

582 sequences assigned
503 (86.4%) exact matches, in which:
479 unique CDR3
6 unique J



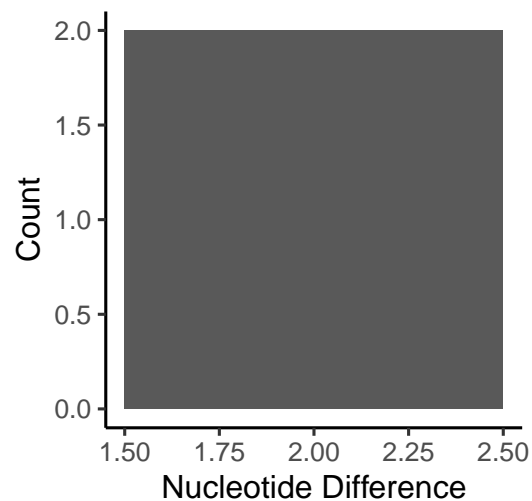
IGHV4-34*01

3802 sequences assigned
3419 (89.9%) exact matches, in which:
3163 unique CDR3
6 unique J



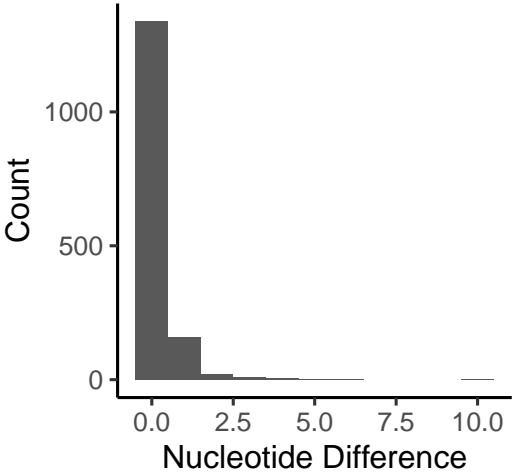
IGHV4-55*08

2 sequences assigned
No exact matches.



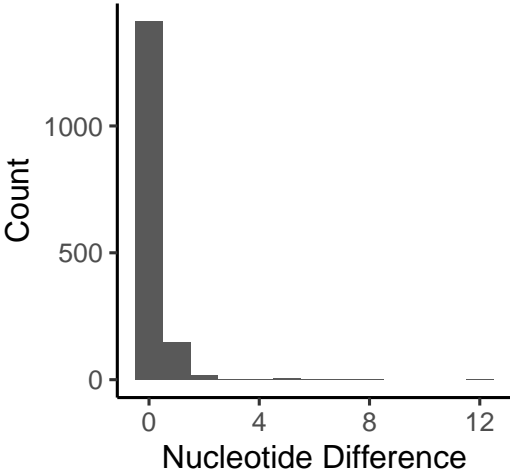
IGHV4–59*01

1536 sequences assigned
1338 (87.1%) exact matches, in which:
1294 unique CDR3
6 unique J



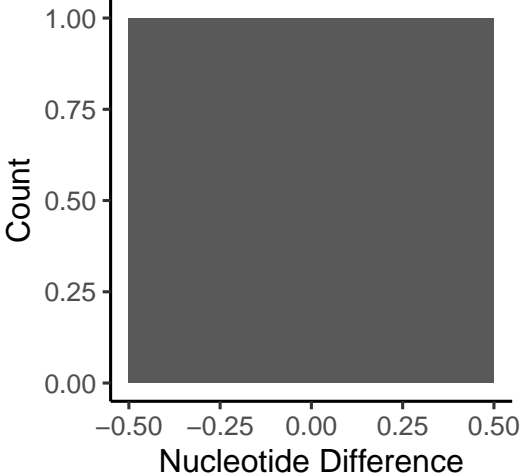
IGHV5–51*01

1593 sequences assigned
1412 (88.6%) exact matches, in which:
1341 unique CDR3
6 unique J



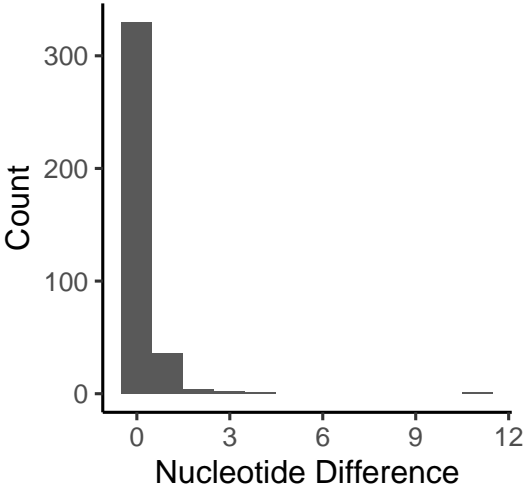
IGHV3/OR16–9*01

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



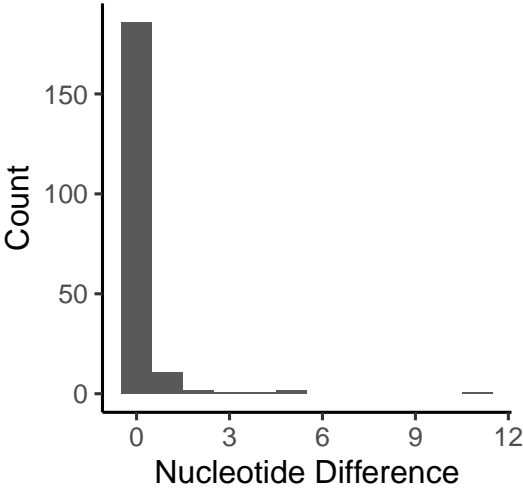
IGHV4–61*01

374 sequences assigned
330 (88.2%) exact matches, in which:
315 unique CDR3
6 unique J



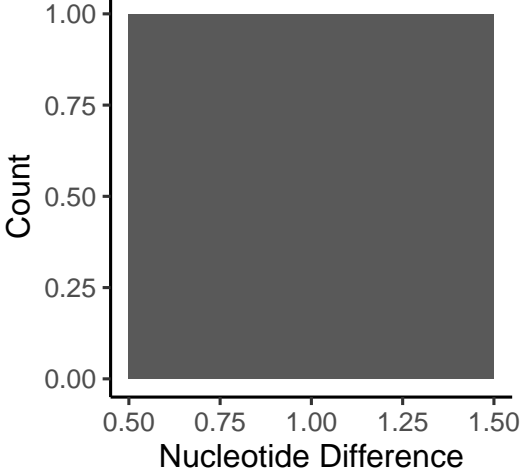
IGHV6–1*01

204 sequences assigned
186 (91.2%) exact matches, in which:
178 unique CDR3
6 unique J



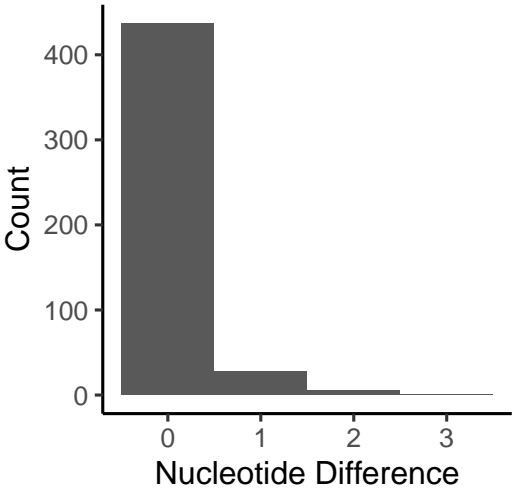
IGHV3/OR16–12*01

1 sequences assigned
No exact matches.



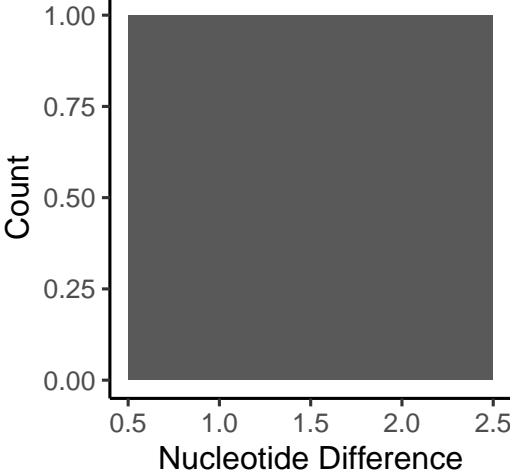
IGHV5–10–1*01

471 sequences assigned
437 (92.8%) exact matches, in which:
419 unique CDR3
6 unique J



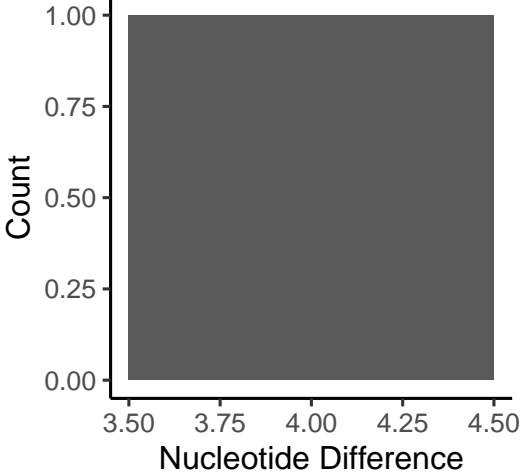
IGHV3/OR16–6*02

2 sequences assigned
No exact matches.



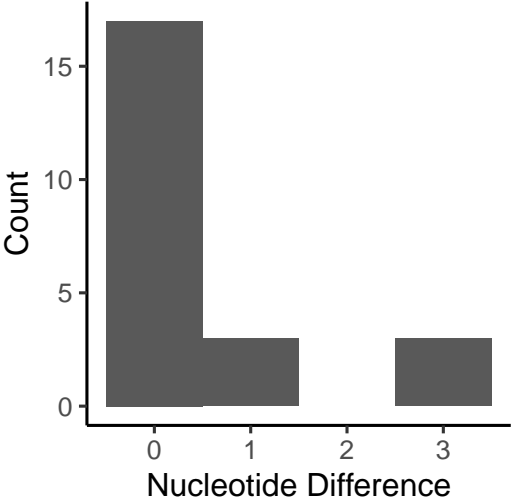
IGHV3/OR16–15*02

1 sequences assigned
No exact matches.



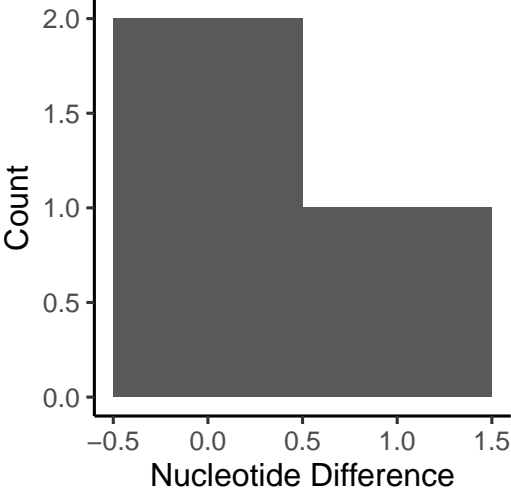
IGHV7-4-1*01

24 sequences assigned
17 (70.8%) exact matches, in which:
17 unique CDR3
4 unique J



IGHV7-81*01

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





Warning – no inferred sequences found.