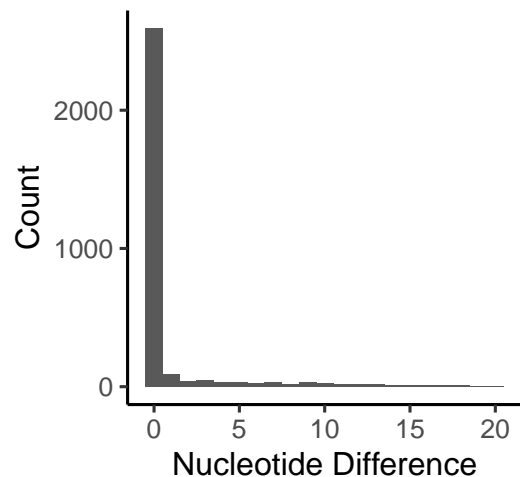


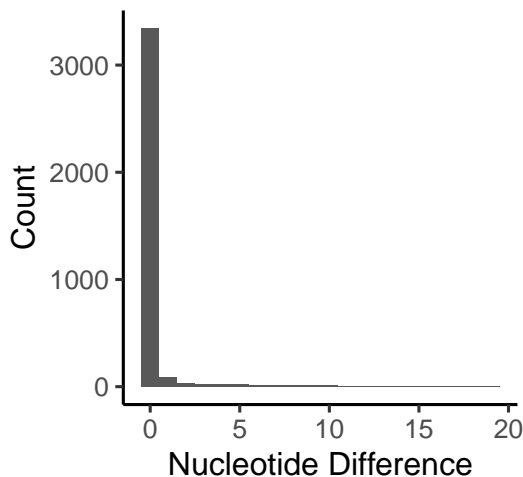
### IGHV1-2\*02

3096 sequences assigned  
2592 (83.7%) exact matches, in which:  
2578 unique CDR3  
6 unique J



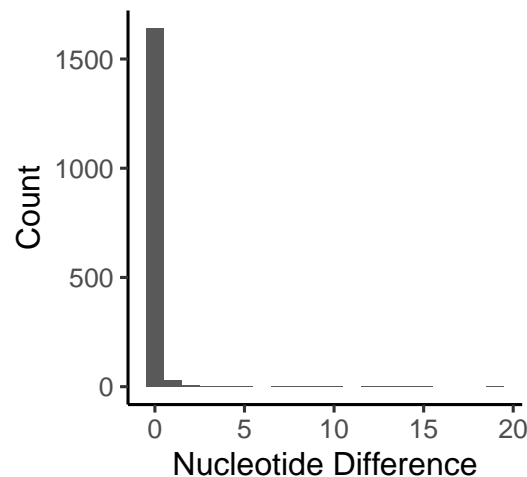
### IGHV1-8\*01

3636 sequences assigned  
3342 (91.9%) exact matches, in which:  
3321 unique CDR3  
6 unique J



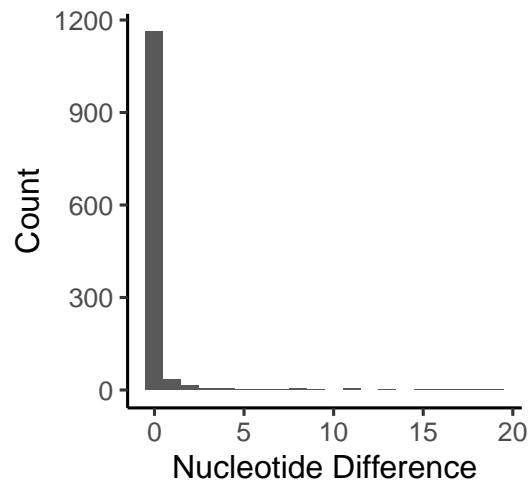
### IGHV1-24\*01

1702 sequences assigned  
1640 (96.4%) exact matches, in which:  
1636 unique CDR3  
6 unique J



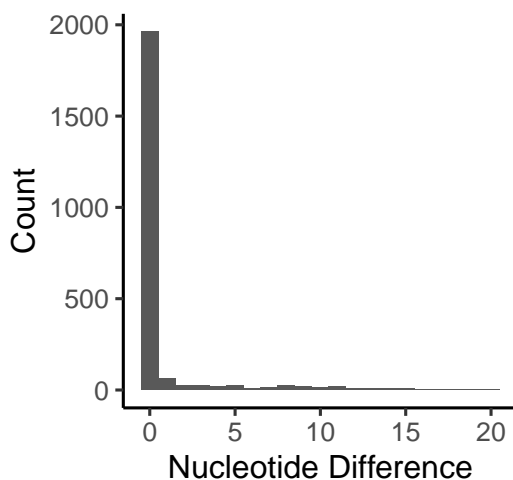
### IGHV1-2\*04

1254 sequences assigned  
1162 (92.7%) exact matches, in which:  
1161 unique CDR3  
6 unique J



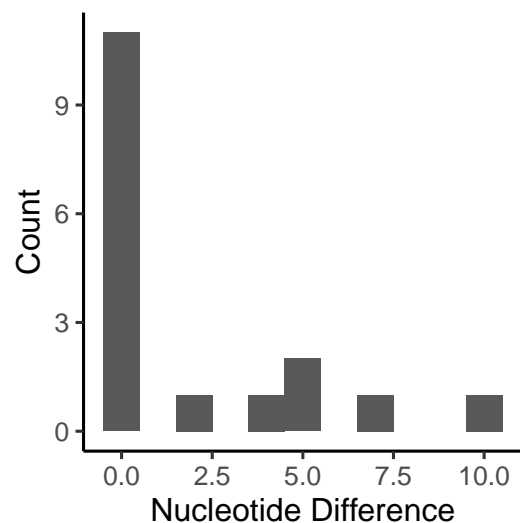
### IGHV1-18\*01

2268 sequences assigned  
1962 (86.5%) exact matches, in which:  
1959 unique CDR3  
6 unique J



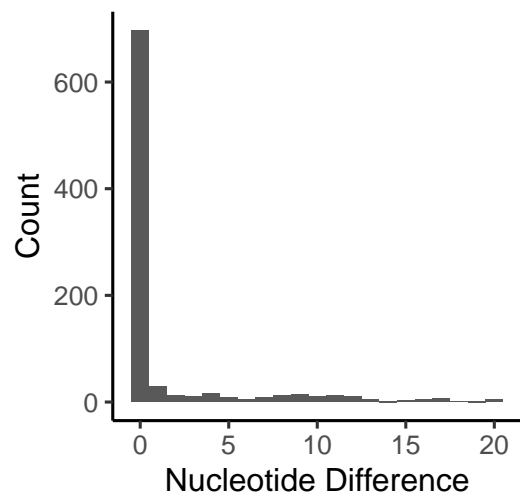
### IGHV1-45\*02

17 sequences assigned  
11 (64.7%) exact matches, in which:  
11 unique CDR3  
3 unique J



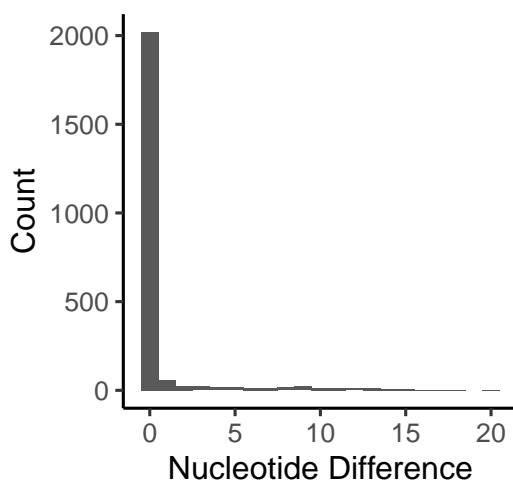
### IGHV1-3\*01\_05

877 sequences assigned  
697 (79.5%) exact matches, in which:  
694 unique CDR3  
6 unique J



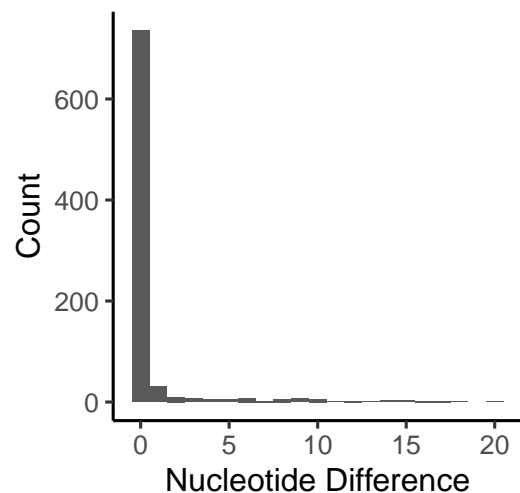
### IGHV1-18\*04

2301 sequences assigned  
2020 (87.8%) exact matches, in which:  
2014 unique CDR3  
6 unique J



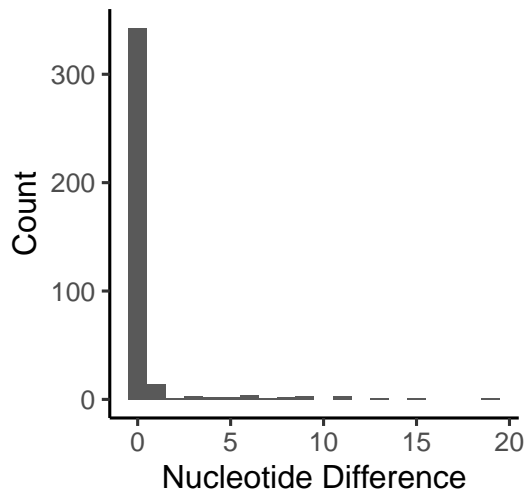
### IGHV1-46\*01

842 sequences assigned  
736 (87.4%) exact matches, in which:  
736 unique CDR3  
6 unique J



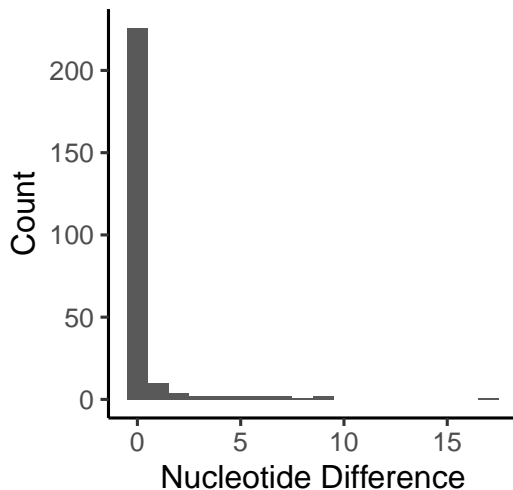
### IGHV1–46\*03

382 sequences assigned  
343 (89.8%) exact matches, in which:  
341 unique CDR3  
6 unique J



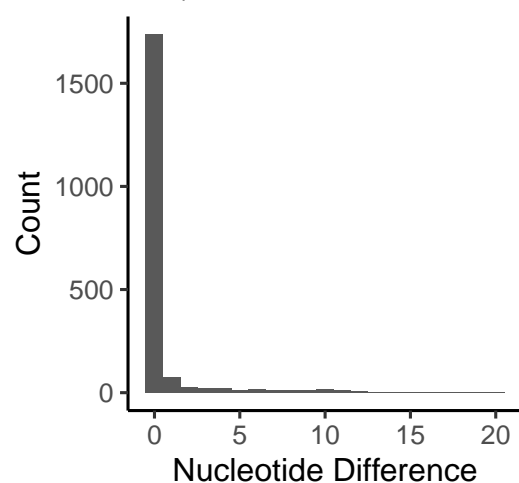
### IGHV2–26\*01

254 sequences assigned  
226 (89%) exact matches, in which:  
225 unique CDR3  
6 unique J



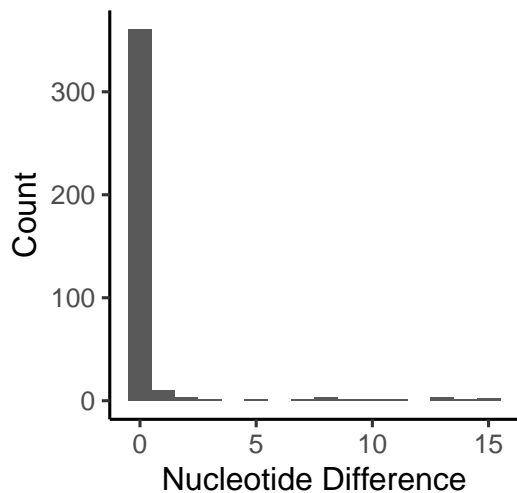
### IGHV3–9\*01

2007 sequences assigned  
1737 (86.5%) exact matches, in which:  
1679 unique CDR3  
6 unique J



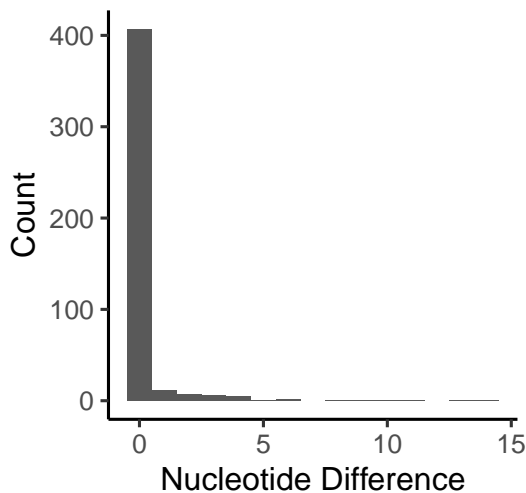
### IGHV1–58\*01\_03

389 sequences assigned  
361 (92.8%) exact matches, in which:  
360 unique CDR3  
6 unique J



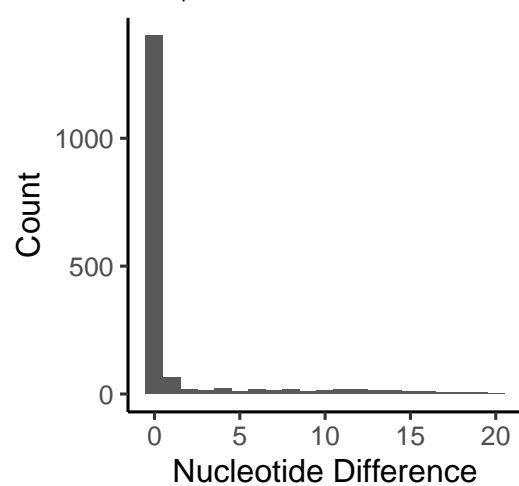
### IGHV2–70\*01

445 sequences assigned  
407 (91.5%) exact matches, in which:  
403 unique CDR3  
5 unique J



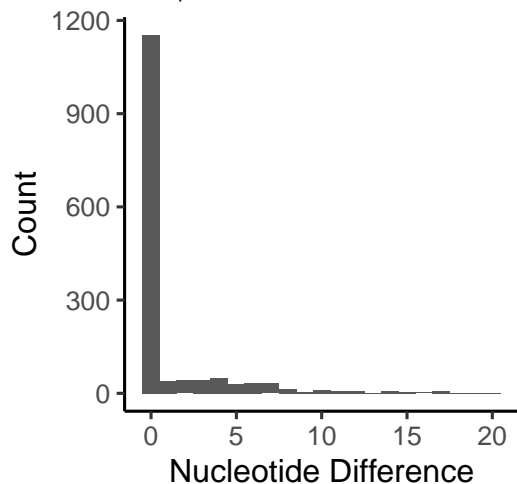
### IGHV3–11\*01

1705 sequences assigned  
1401 (82.2%) exact matches, in which:  
1340 unique CDR3  
6 unique J



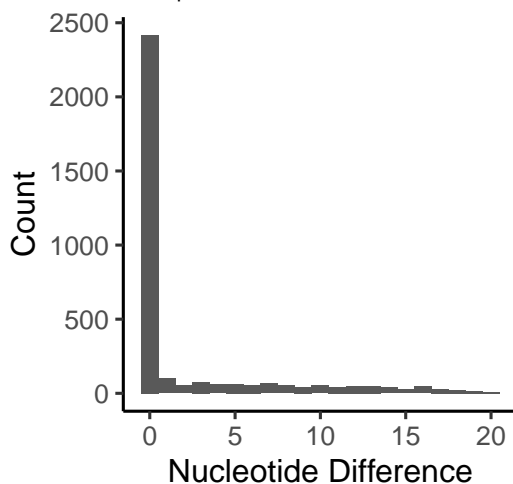
### IGHV2–5\*01

1501 sequences assigned  
1153 (76.8%) exact matches, in which:  
1145 unique CDR3  
6 unique J



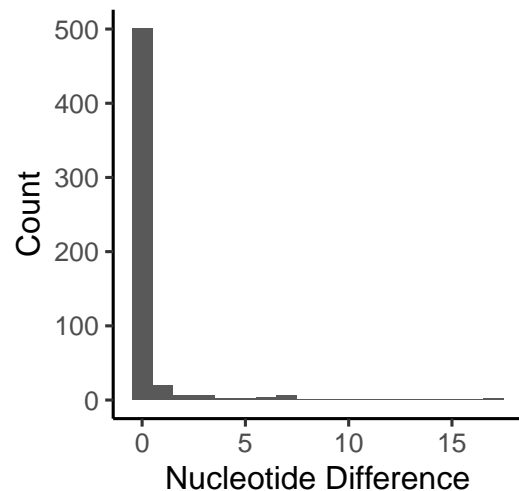
### IGHV3–7\*01

3400 sequences assigned  
2417 (71.1%) exact matches, in which:  
2281 unique CDR3  
6 unique J



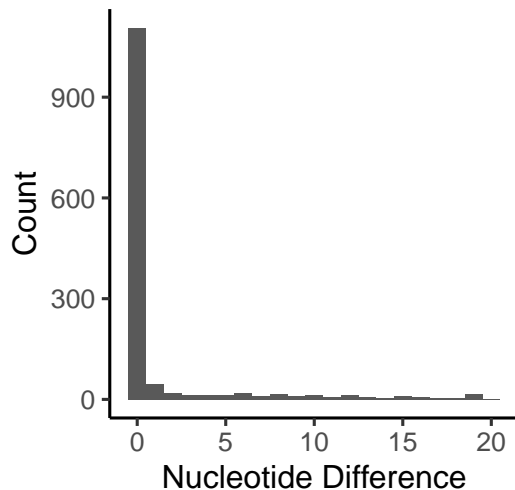
### IGHV3–13\*01

557 sequences assigned  
501 (89.9%) exact matches, in which:  
466 unique CDR3  
5 unique J



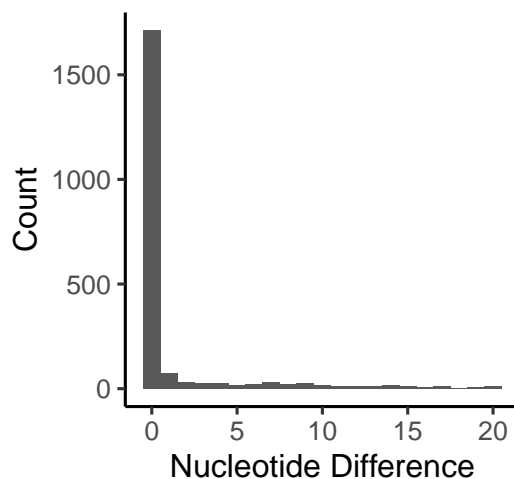
### IGHV3-15\*01\_02

1359 sequences assigned  
1107 (81.5%) exact matches, in which:  
1062 unique CDR3  
6 unique J



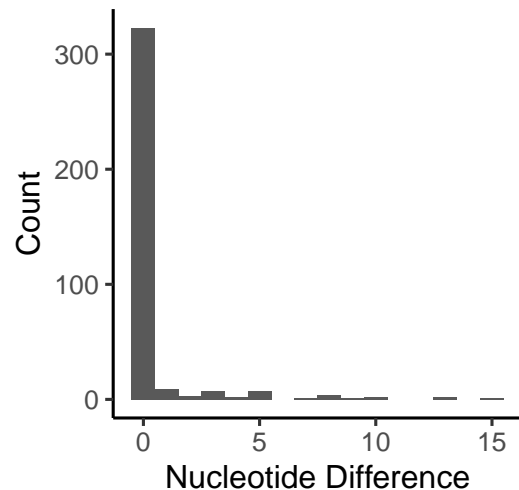
### IGHV3-30-3\*01

2130 sequences assigned  
1712 (80.4%) exact matches, in which:  
1650 unique CDR3  
6 unique J



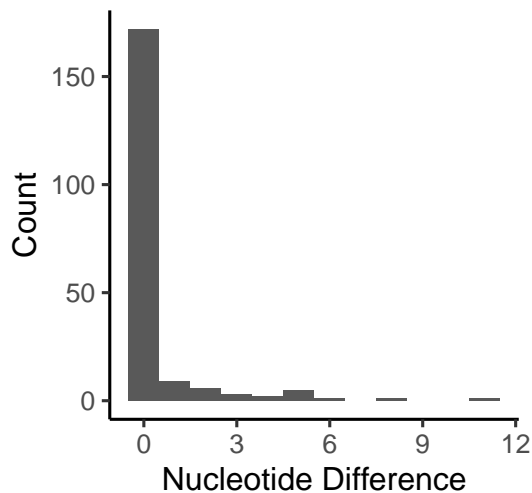
### IGHV3-43\*01

362 sequences assigned  
323 (89.2%) exact matches, in which:  
302 unique CDR3  
6 unique J



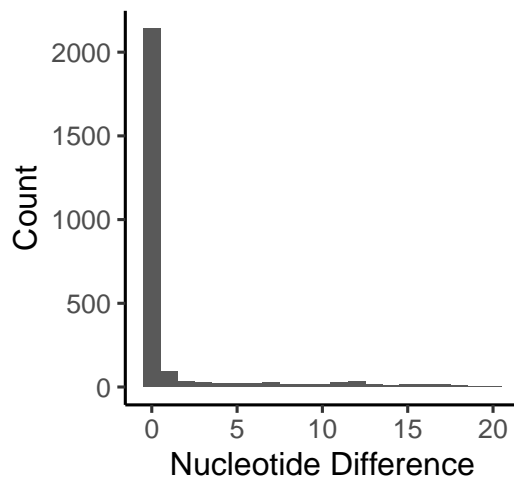
### IGHV3-20\*01\_02

202 sequences assigned  
172 (85.1%) exact matches, in which:  
162 unique CDR3  
5 unique J



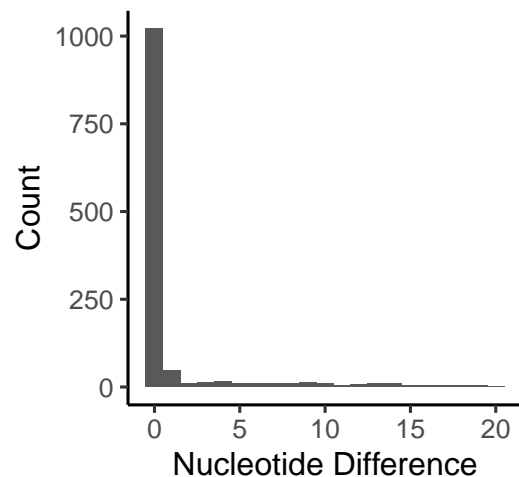
### IGHV3-33\*01

2565 sequences assigned  
2140 (83.4%) exact matches, in which:  
2060 unique CDR3  
6 unique J



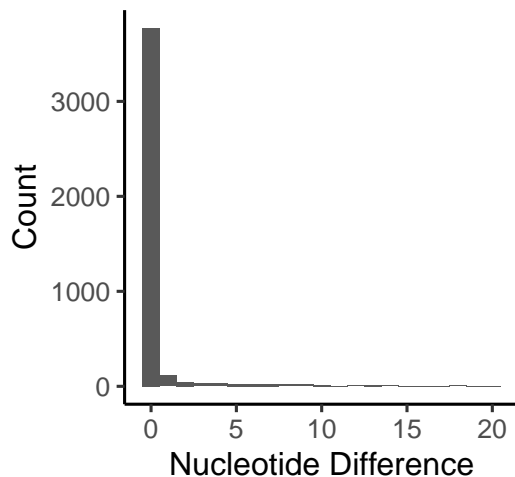
### IGHV3-48\*01

1232 sequences assigned  
1021 (82.9%) exact matches, in which:  
957 unique CDR3  
6 unique J



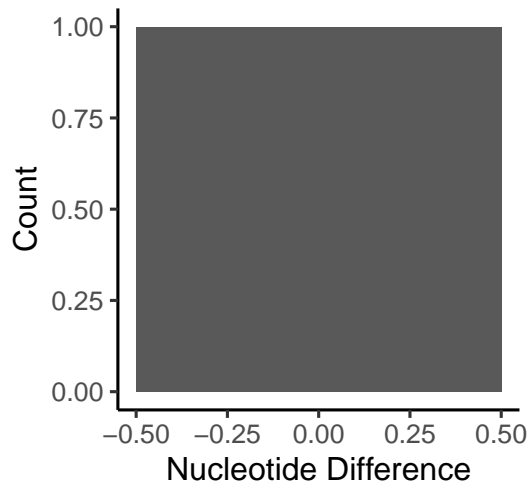
### IGHV3-21\*01\_02

4184 sequences assigned  
3772 (90.2%) exact matches, in which:  
3521 unique CDR3  
6 unique J



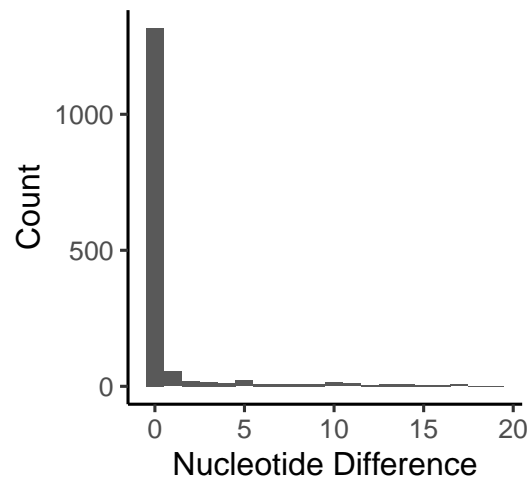
### IGHV3-35\*01

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



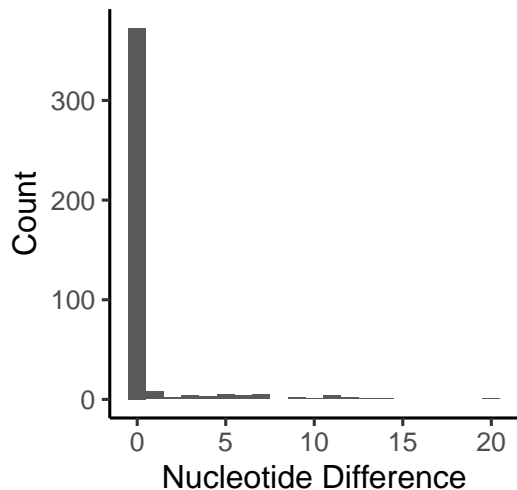
### IGHV3-48\*02

1552 sequences assigned  
1317 (84.9%) exact matches, in which:  
1224 unique CDR3  
6 unique J



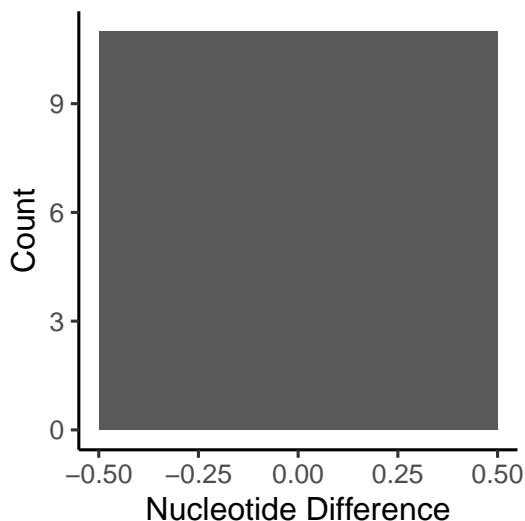
### IGHV3-49\*03\_05

416 sequences assigned  
373 (89.7%) exact matches, in which:  
364 unique CDR3  
6 unique J



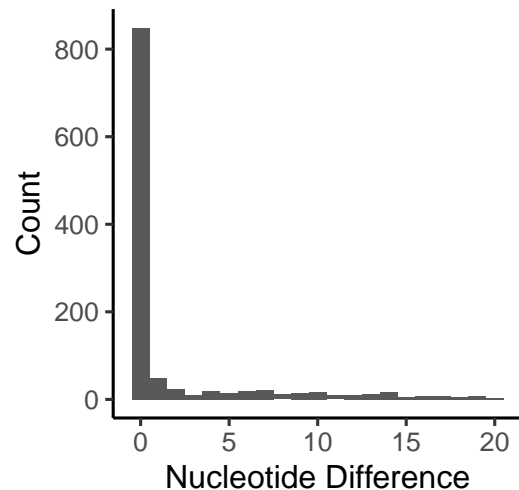
### IGHV3-66\*03

11 sequences assigned  
11 (100%) exact matches, in which:  
11 unique CDR3  
2 unique J



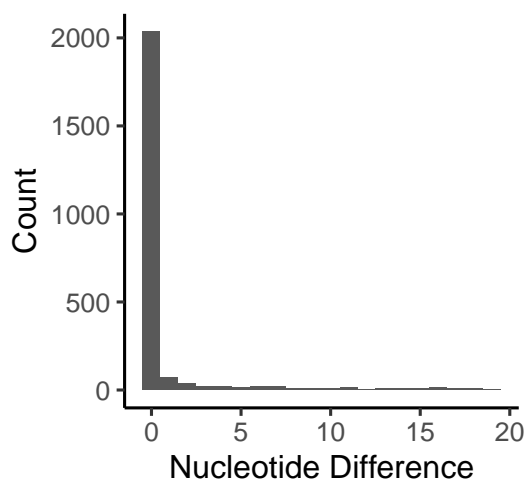
### IGHV3-74\*01\_02

1146 sequences assigned  
849 (74.1%) exact matches, in which:  
803 unique CDR3  
6 unique J



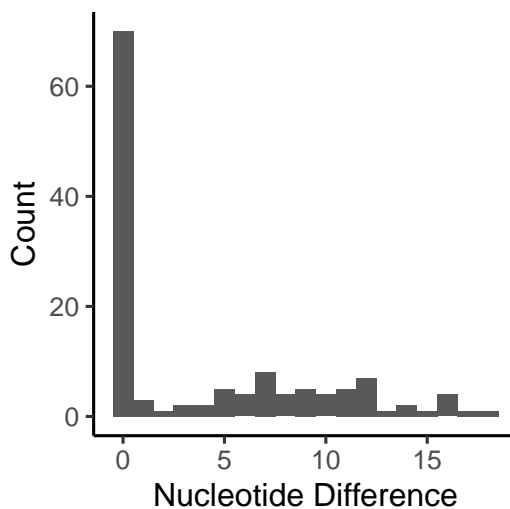
### IGHV3-53\*01\_02

2347 sequences assigned  
2035 (86.7%) exact matches, in which:  
1907 unique CDR3  
6 unique J



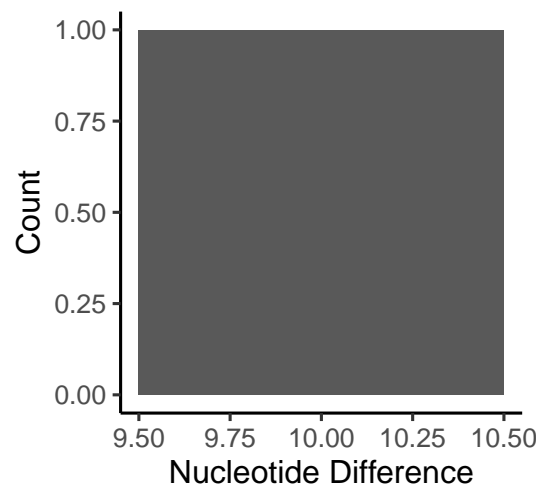
### IGHV3-72\*01

130 sequences assigned  
70 (53.8%) exact matches, in which:  
65 unique CDR3  
6 unique J



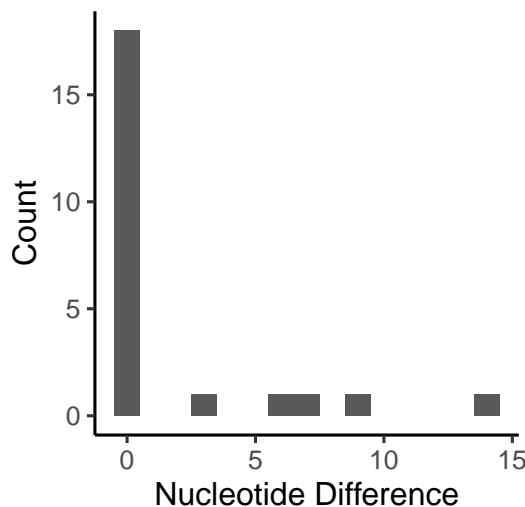
### IGHV3-NL1\*01

1 sequences assigned  
No exact matches.



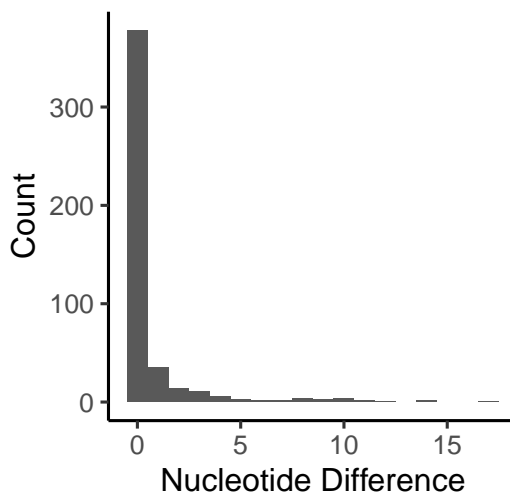
### IGHV3-64\*02\_07

23 sequences assigned  
18 (78.3%) exact matches, in which:  
18 unique CDR3  
5 unique J



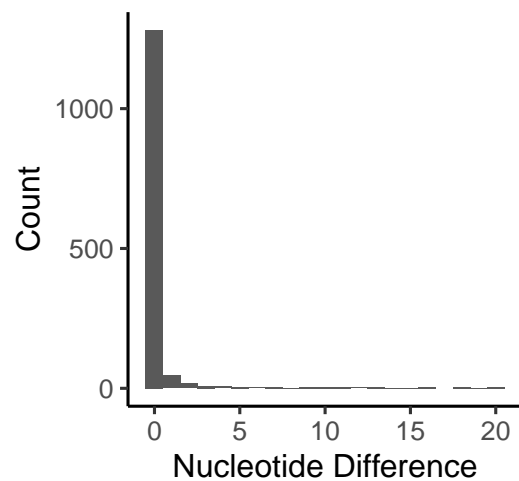
### IGHV3-73\*01\_02

468 sequences assigned  
378 (80.8%) exact matches, in which:  
323 unique CDR3  
6 unique J



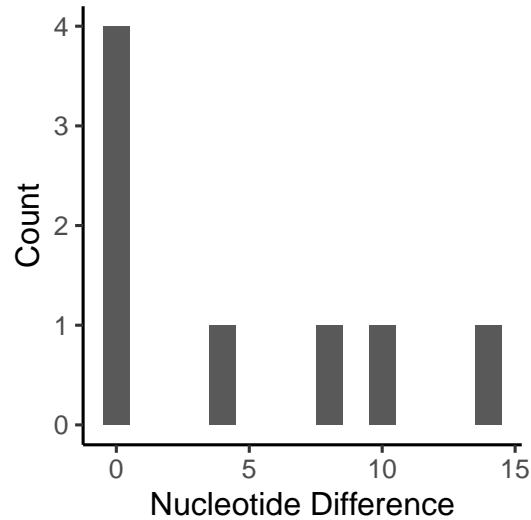
### IGHV4-4\*07

1416 sequences assigned  
1281 (90.5%) exact matches, in which:  
1205 unique CDR3  
6 unique J



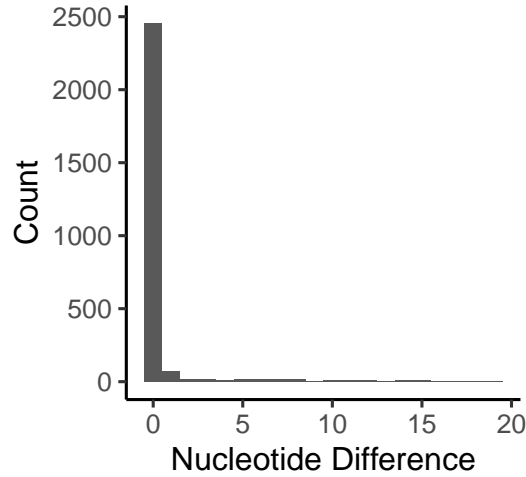
### IGHV4-28\*01\_07

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



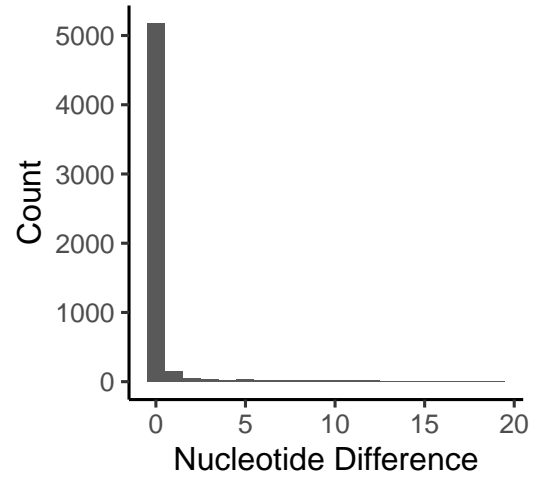
### IGHV4-31\*03\_04

2711 sequences assigned  
2454 (90.5%) exact matches, in which:  
2369 unique CDR3  
6 unique J



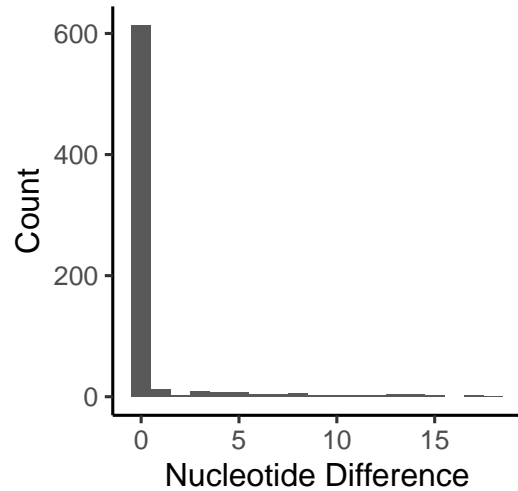
### IGHV4-59\*01\_07

5675 sequences assigned  
5175 (91.2%) exact matches, in which:  
4856 unique CDR3  
6 unique J



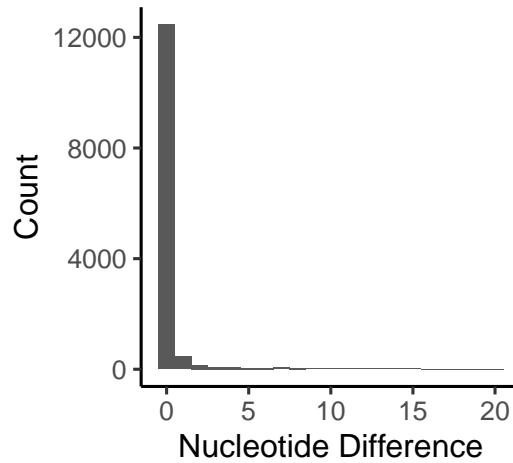
### IGHV4-30-4\*01

688 sequences assigned  
614 (89.2%) exact matches, in which:  
602 unique CDR3  
6 unique J



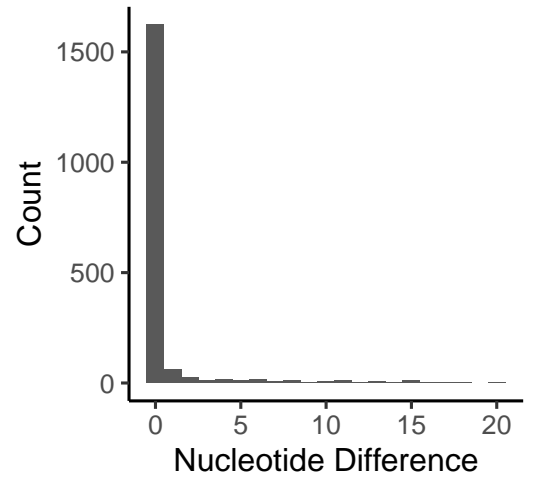
### IGHV4-34\*01\_02

13679 sequences assigned  
12467 (91.1%) exact matches, in which:  
11630 unique CDR3  
6 unique J



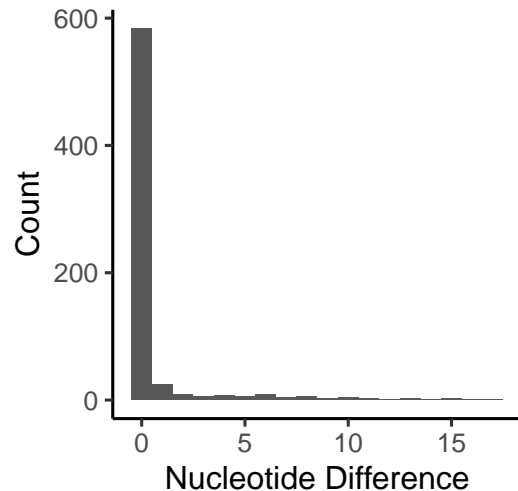
### IGHV4-61\*01

1835 sequences assigned  
1623 (88.4%) exact matches, in which:  
1544 unique CDR3  
6 unique J



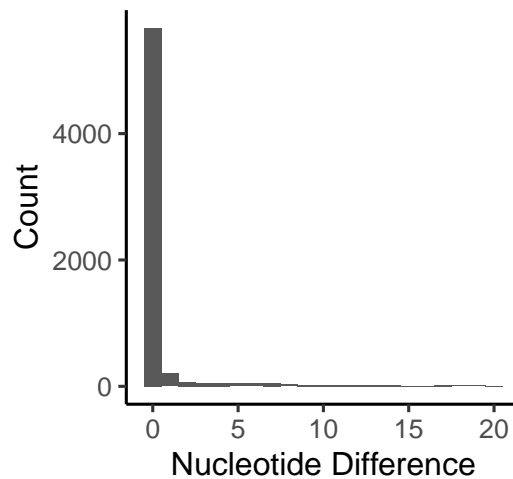
### IGHV4-30-2\*01

672 sequences assigned  
584 (86.9%) exact matches, in which:  
549 unique CDR3  
6 unique J



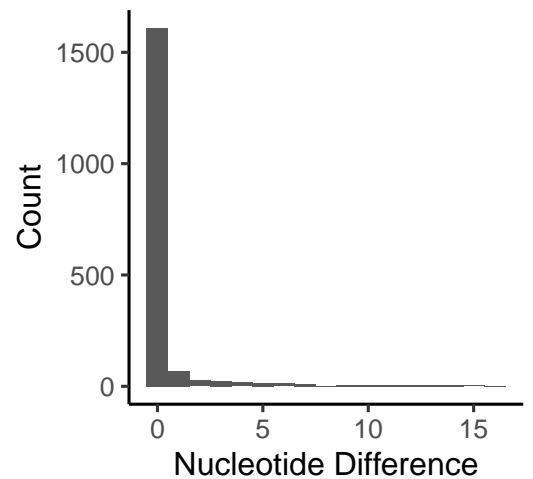
### IGHV4-39\*01\_05

6428 sequences assigned  
5671 (88.2%) exact matches, in which:  
5424 unique CDR3  
6 unique J



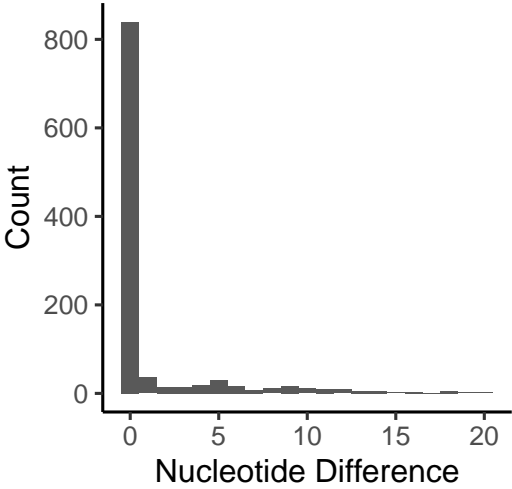
### IGHV5-51\*01\_03

1826 sequences assigned  
1609 (88.1%) exact matches, in which:  
1603 unique CDR3  
6 unique J



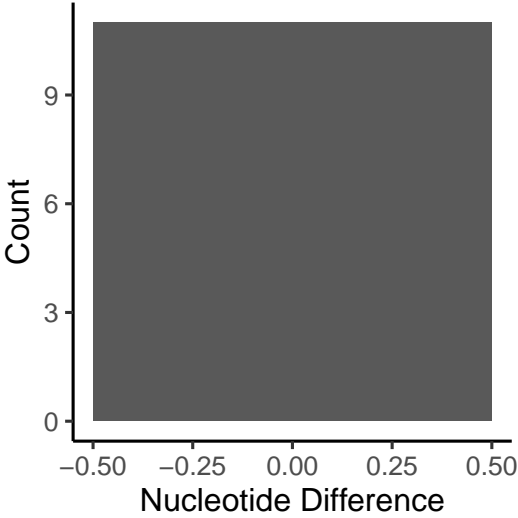
IGHV6-1\*01\_02

1066 sequences assigned  
840 (78.8%) exact matches, in which:  
833 unique CDR3  
6 unique J



IGHV7-4-1\*01

11 sequences assigned  
11 (100%) exact matches, in which:  
11 unique CDR3  
4 unique J





Novel sequence(s)IGHV1-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-39\*02\_C258GIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59\*02\_G88A are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV1-69\*04\_09\_G112AIGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4-59\*02\_G88AIGHV5-51\*07\_A128G are not listed in the genotype and will be ignored.