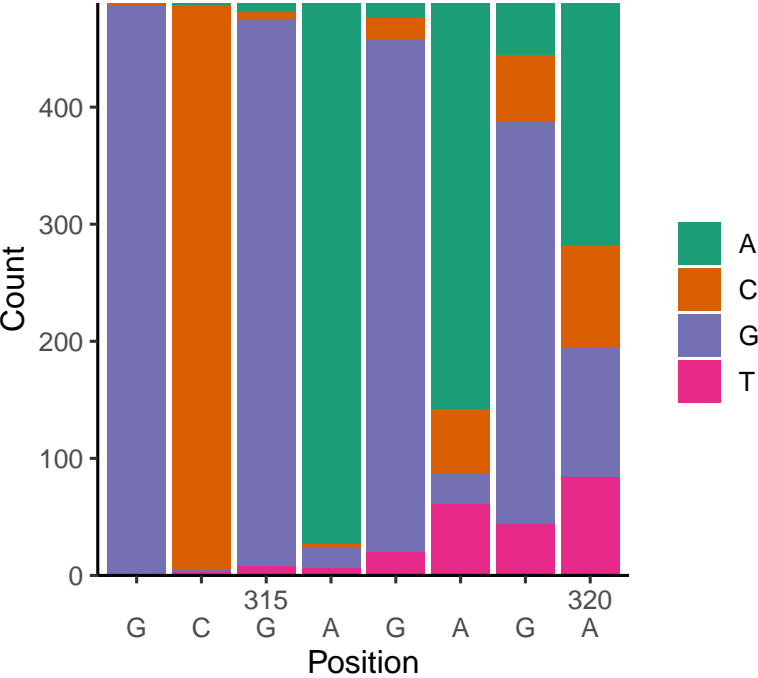


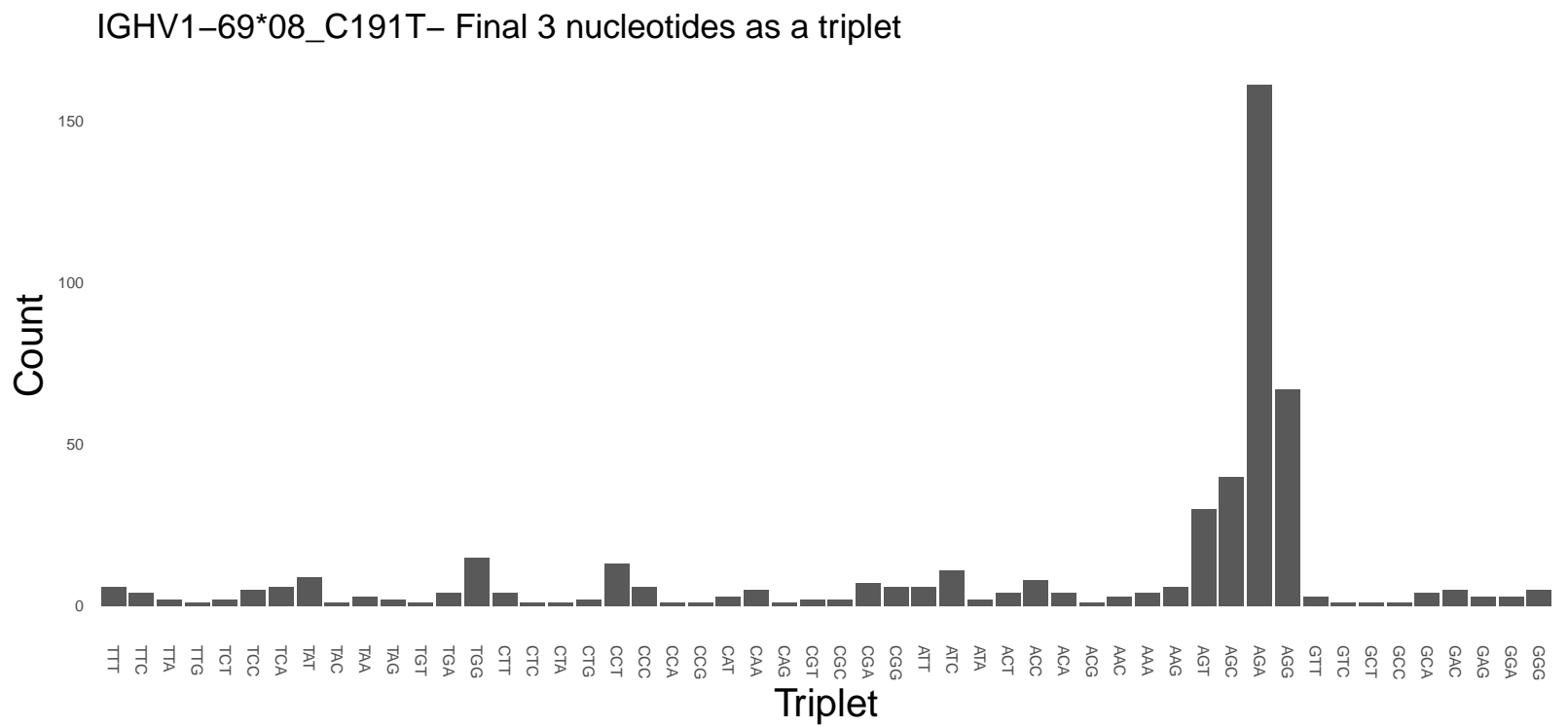
Gene IGHV1-69\*08\_C191T



Gene IGHV1-69\*08\_C191T

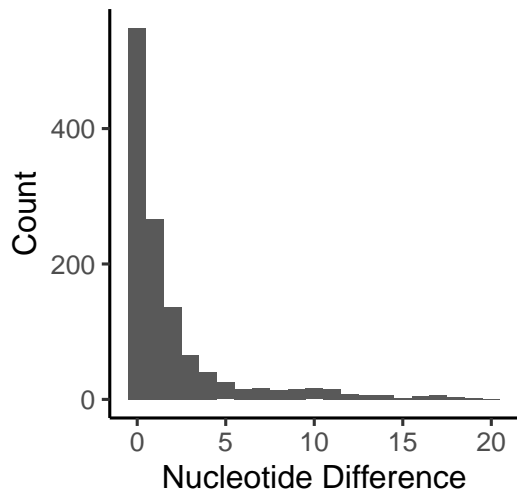


IGHV1-69\*08\_C191T- Final 3 nucleotides as a triplet



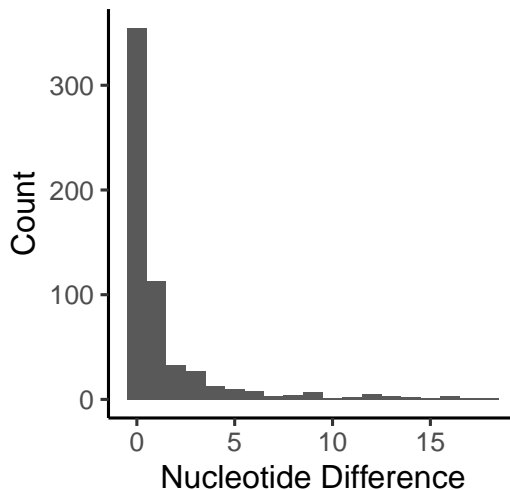
### IGHV1-2\*02

1228 sequences assigned  
549 (44.7%) exact matches, in which:  
461 unique CDR3  
6 unique J



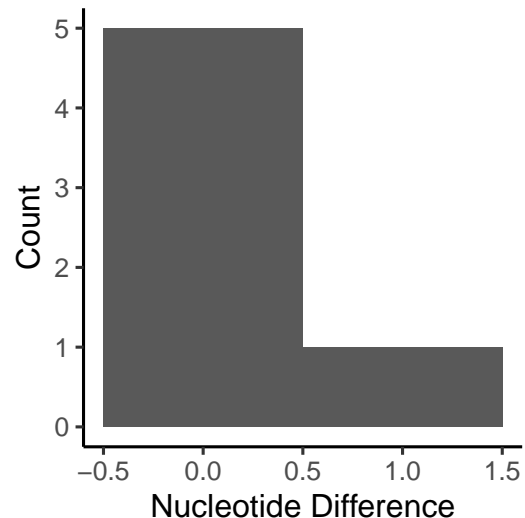
### IGHV1-18\*01

593 sequences assigned  
355 (59.9%) exact matches, in which:  
317 unique CDR3  
6 unique J



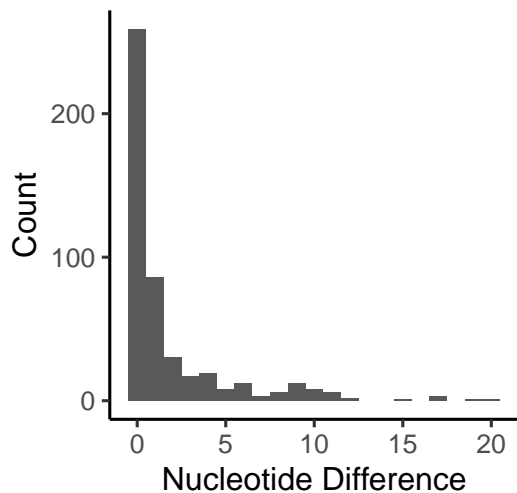
### IGHV1-45\*02

6 sequences assigned  
5 (83.3%) exact matches, in which:  
4 unique CDR3  
3 unique J



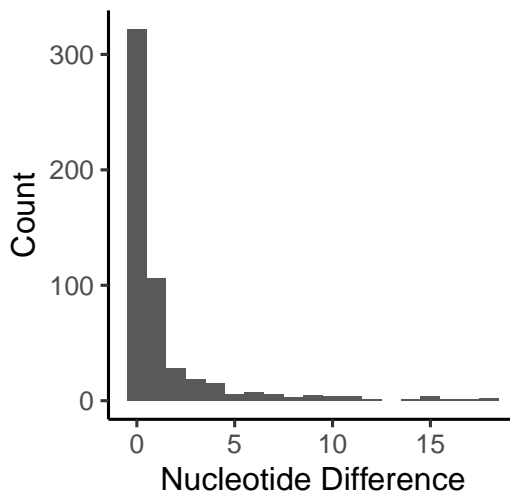
### IGHV1-3\*01

481 sequences assigned  
259 (53.8%) exact matches, in which:  
225 unique CDR3  
6 unique J



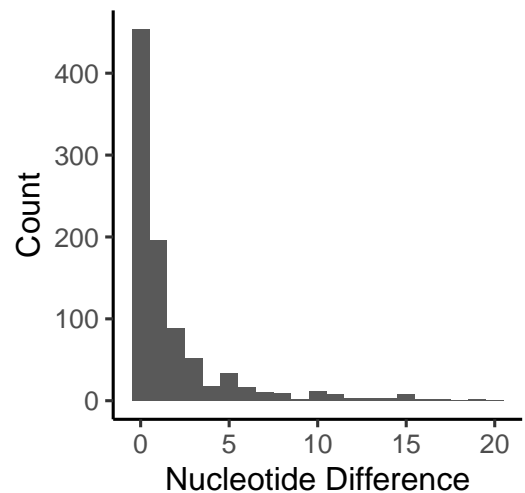
### IGHV1-18\*04

535 sequences assigned  
322 (60.2%) exact matches, in which:  
282 unique CDR3  
6 unique J



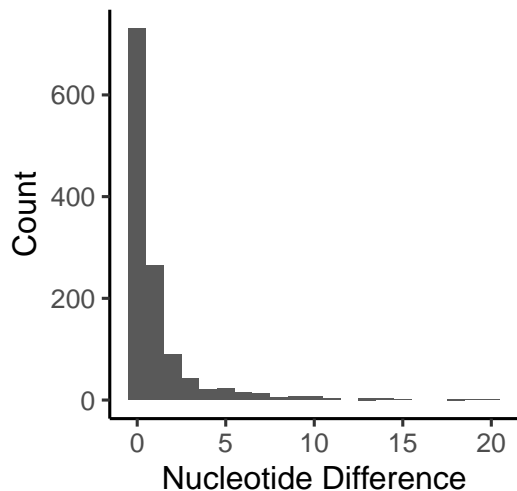
### IGHV1-46\*01

930 sequences assigned  
454 (48.8%) exact matches, in which:  
398 unique CDR3  
6 unique J



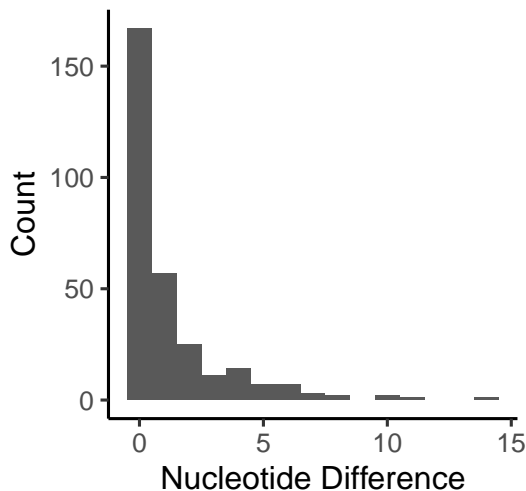
### IGHV1-8\*01

1230 sequences assigned  
731 (59.4%) exact matches, in which:  
604 unique CDR3  
6 unique J



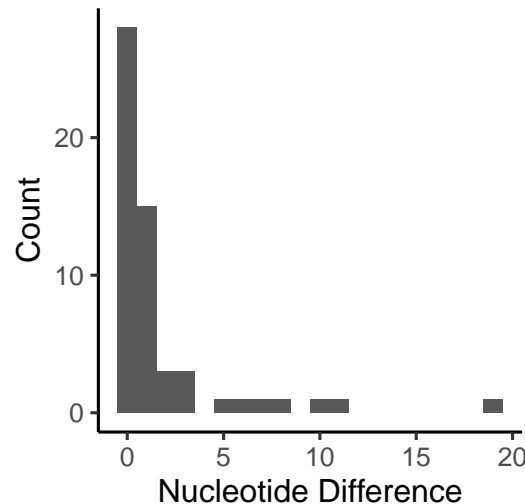
### IGHV1-24\*01

297 sequences assigned  
167 (56.2%) exact matches, in which:  
145 unique CDR3  
5 unique J



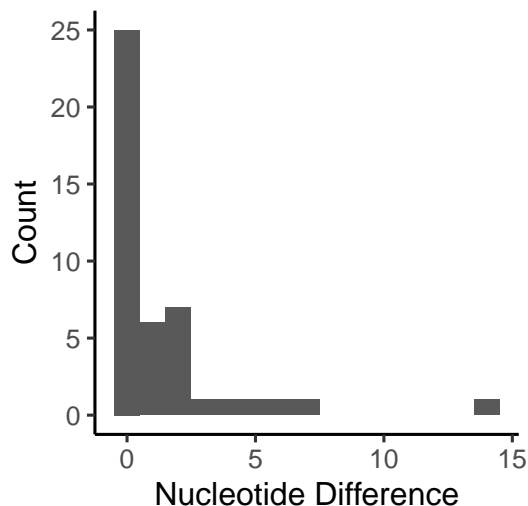
### IGHV1-58\*01

57 sequences assigned  
28 (49.1%) exact matches, in which:  
26 unique CDR3  
6 unique J



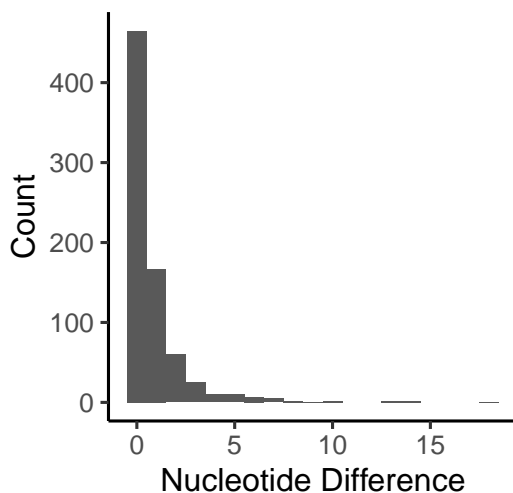
### IGHV1-58\*02

44 sequences assigned  
25 (56.8%) exact matches, in which:  
19 unique CDR3  
4 unique J



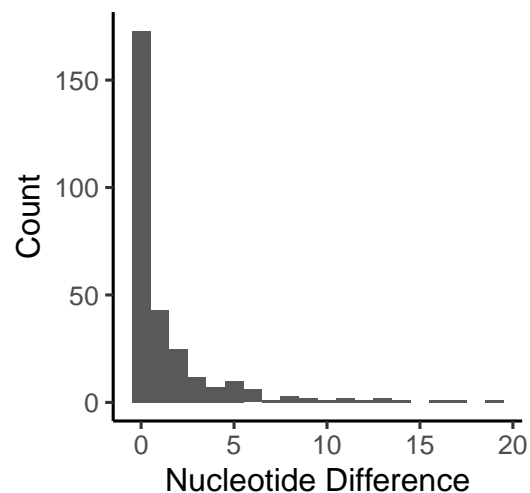
### IGHV1-69\*06

759 sequences assigned  
465 (61.3%) exact matches, in which:  
373 unique CDR3  
5 unique J



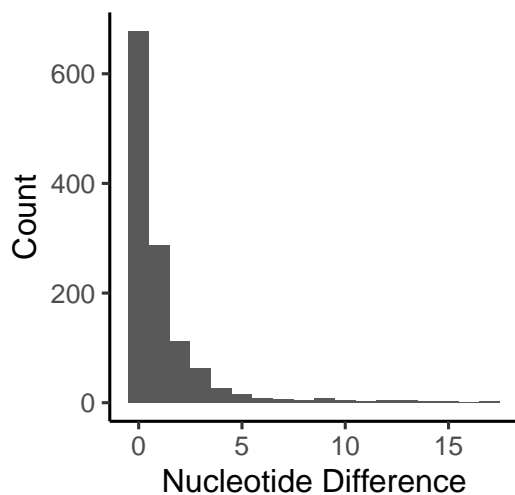
### IGHV2-26\*01

292 sequences assigned  
173 (59.2%) exact matches, in which:  
159 unique CDR3  
6 unique J



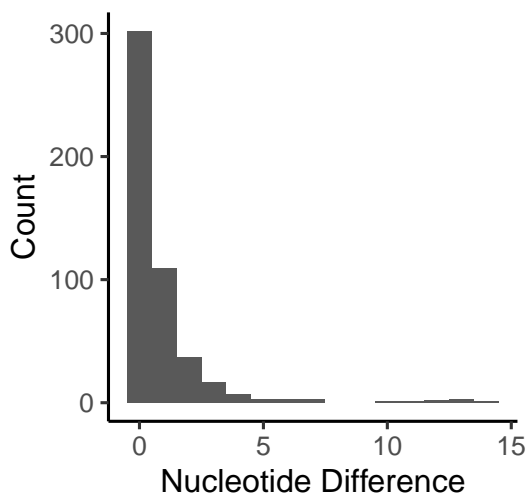
### IGHV1-69\*01

1237 sequences assigned  
678 (54.8%) exact matches, in which:  
542 unique CDR3  
6 unique J



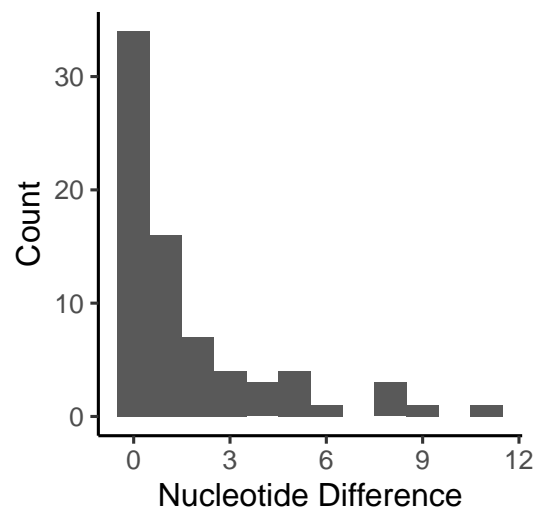
### IGHV1-69\*08\_C191T

489 sequences assigned  
302 (61.8%) exact matches, in which:  
241 unique CDR3  
6 unique J



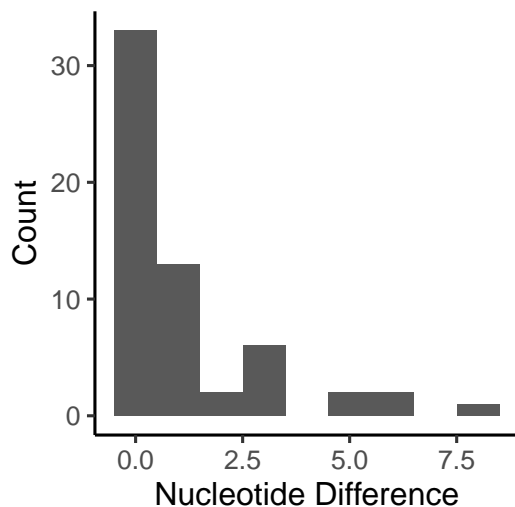
### IGHV2-70\*04

75 sequences assigned  
34 (45.3%) exact matches, in which:  
32 unique CDR3  
5 unique J



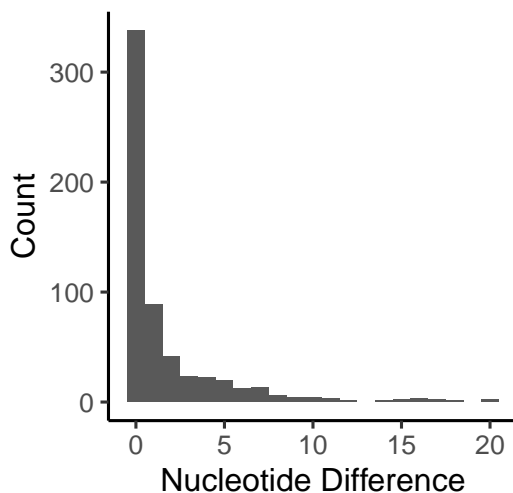
### IGHV1-69-2\*01

59 sequences assigned  
33 (55.9%) exact matches, in which:  
28 unique CDR3  
4 unique J



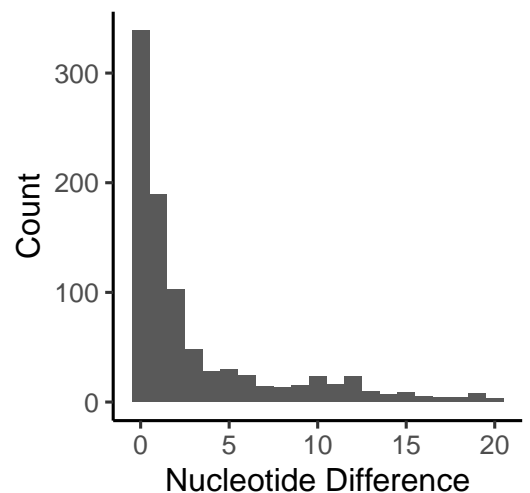
### IGHV2-5\*01

588 sequences assigned  
338 (57.5%) exact matches, in which:  
304 unique CDR3  
5 unique J



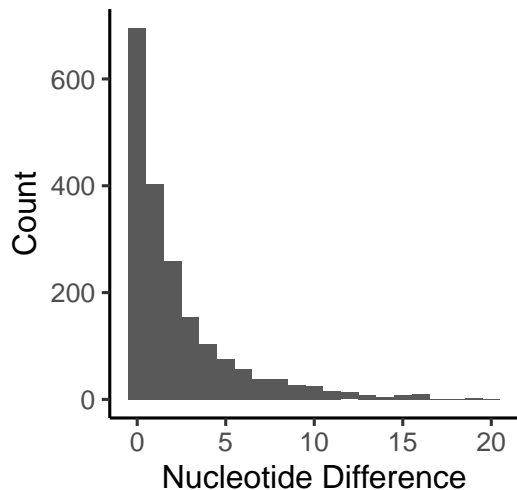
### IGHV3-7\*01

926 sequences assigned  
339 (36.6%) exact matches, in which:  
305 unique CDR3  
6 unique J



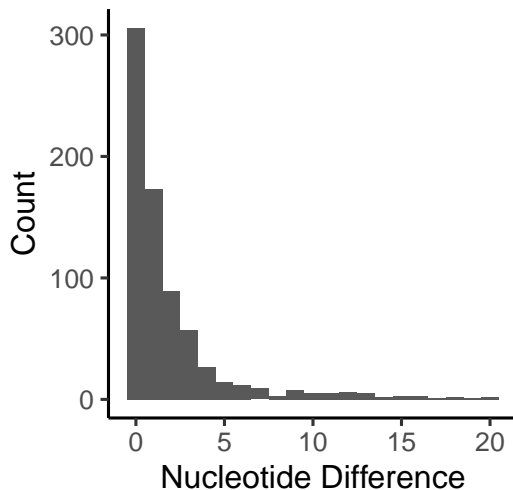
### IGHV3-9\*01

1946 sequences assigned  
696 (35.8%) exact matches, in which:  
574 unique CDR3  
6 unique J



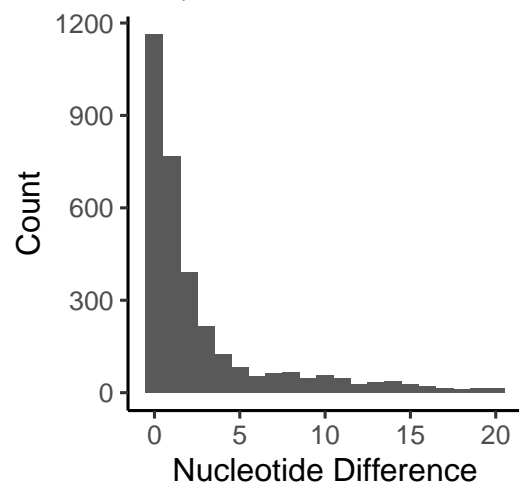
### IGHV3-15\*01

739 sequences assigned  
306 (41.4%) exact matches, in which:  
263 unique CDR3  
5 unique J



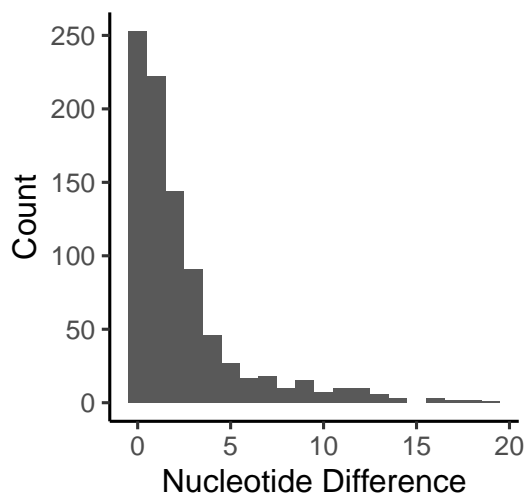
### IGHV3-23\*01

3336 sequences assigned  
1163 (34.9%) exact matches, in which:  
1038 unique CDR3  
6 unique J



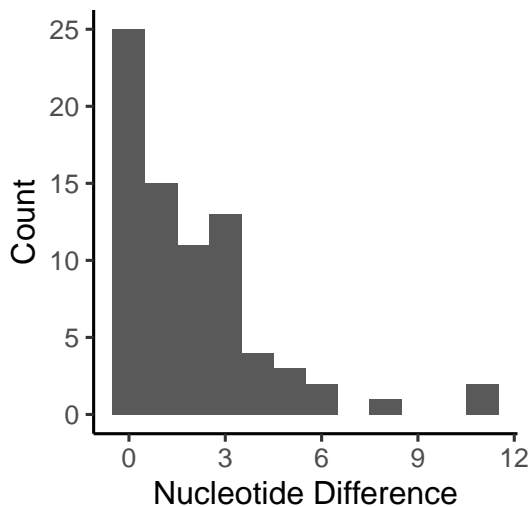
### IGHV3-11\*01

891 sequences assigned  
253 (28.4%) exact matches, in which:  
225 unique CDR3  
6 unique J



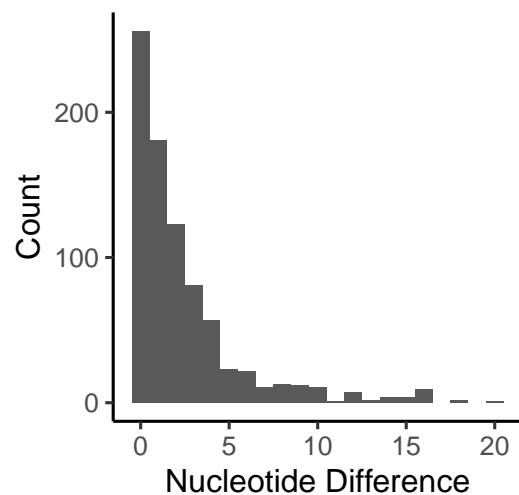
### IGHV3-20\*01

76 sequences assigned  
25 (32.9%) exact matches, in which:  
24 unique CDR3  
4 unique J



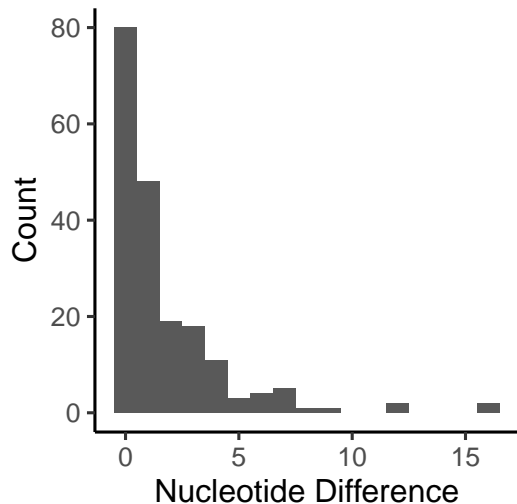
### IGHV3-30-3\*01

824 sequences assigned  
256 (31.1%) exact matches, in which:  
226 unique CDR3  
6 unique J



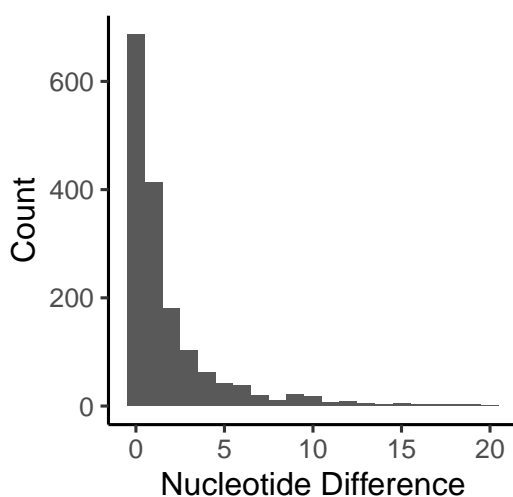
### IGHV3-13\*01

194 sequences assigned  
80 (41.2%) exact matches, in which:  
63 unique CDR3  
5 unique J



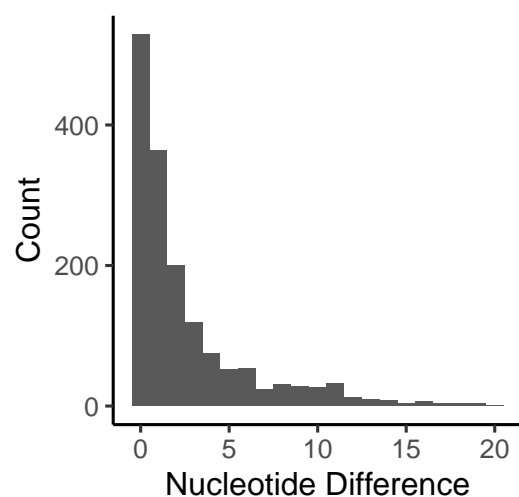
### IGHV3-21\*01

1641 sequences assigned  
687 (41.9%) exact matches, in which:  
589 unique CDR3  
6 unique J



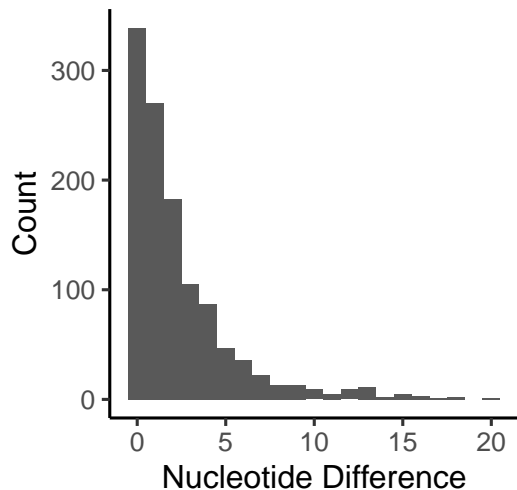
### IGHV3-30\*18

1586 sequences assigned  
529 (33.4%) exact matches, in which:  
459 unique CDR3  
6 unique J



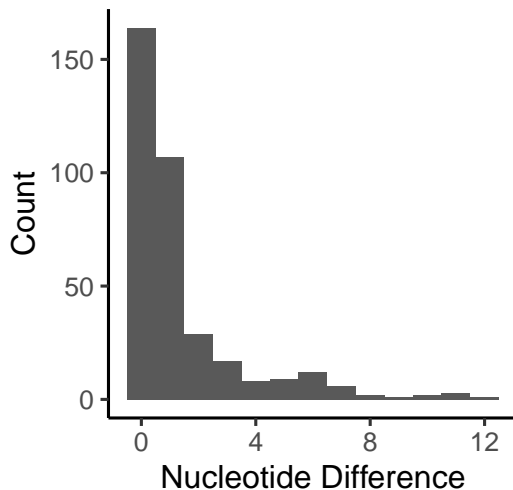
### IGHV3–33\*01

1171 sequences assigned  
339 (28.9%) exact matches, in which:  
304 unique CDR3  
6 unique J



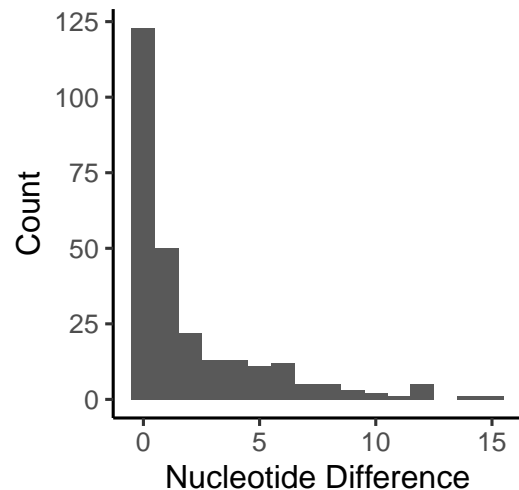
### IGHV3–49\*05

363 sequences assigned  
164 (45.2%) exact matches, in which:  
143 unique CDR3  
6 unique J



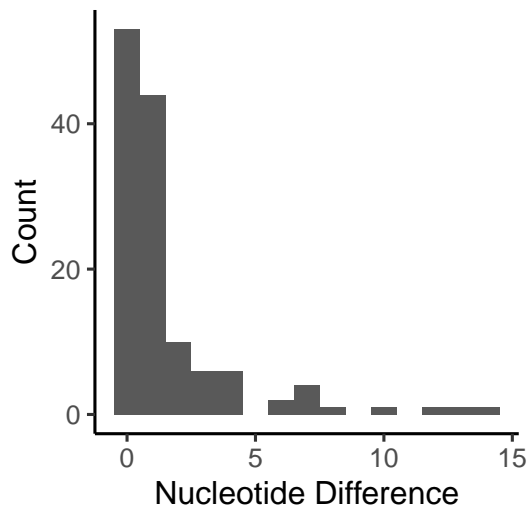
### IGHV3–66\*02

267 sequences assigned  
123 (46.1%) exact matches, in which:  
105 unique CDR3  
5 unique J



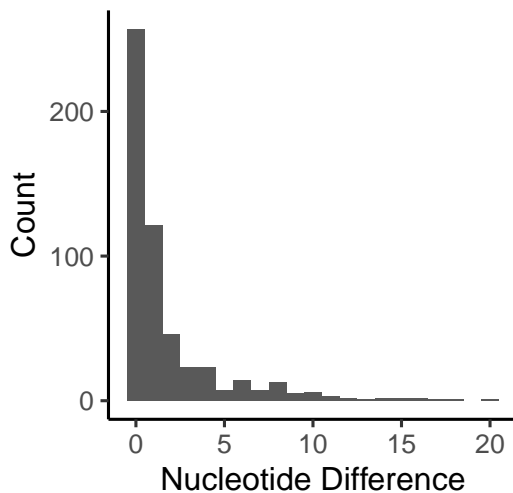
### IGHV3–43\*01

130 sequences assigned  
53 (40.8%) exact matches, in which:  
47 unique CDR3  
5 unique J



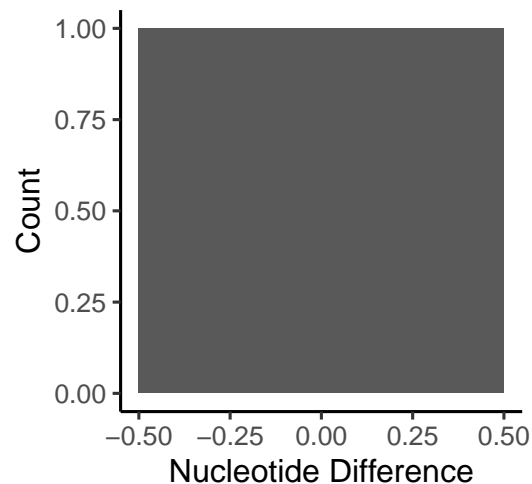
### IGHV3–53\*01

541 sequences assigned  
257 (47.5%) exact matches, in which:  
215 unique CDR3  
6 unique J



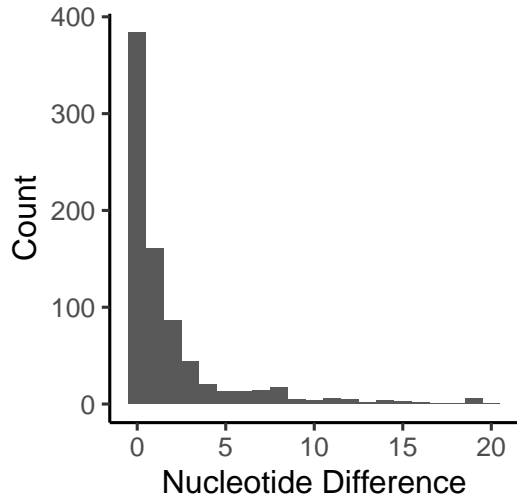
### IGHV3–69–1\*01

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



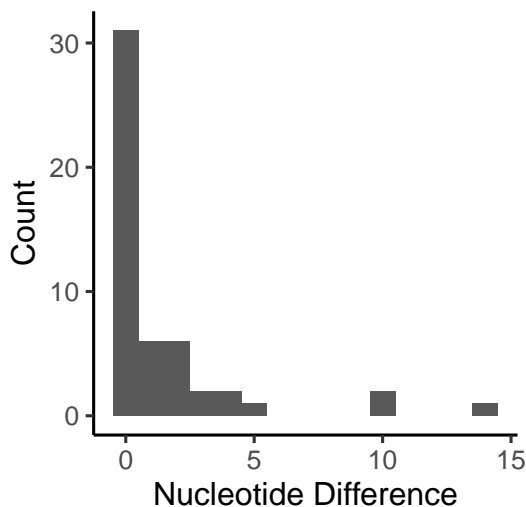
### IGHV3–48\*02

794 sequences assigned  
384 (48.4%) exact matches, in which:  
335 unique CDR3  
6 unique J



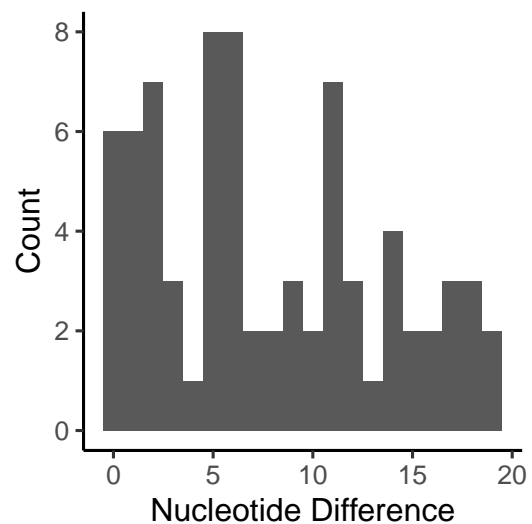
### IGHV3–64\*01

51 sequences assigned  
31 (60.8%) exact matches, in which:  
29 unique CDR3  
5 unique J



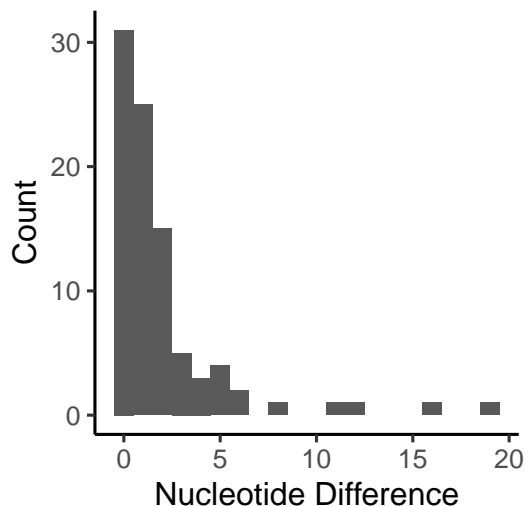
### IGHV3–72\*01

80 sequences assigned  
6 (7.5%) exact matches, in which:  
6 unique CDR3  
3 unique J



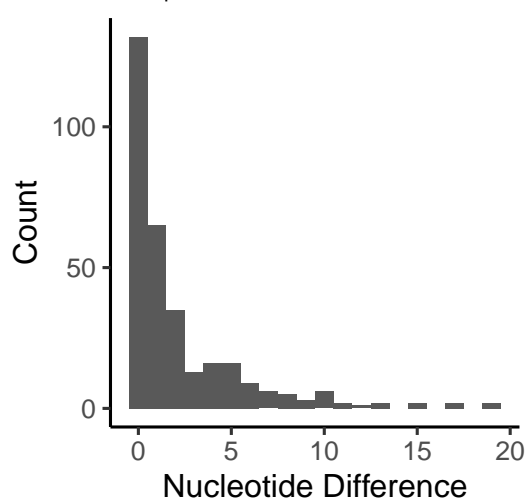
### IGHV3-73\*01

90 sequences assigned  
31 (34.4%) exact matches, in which:  
26 unique CDR3  
4 unique J



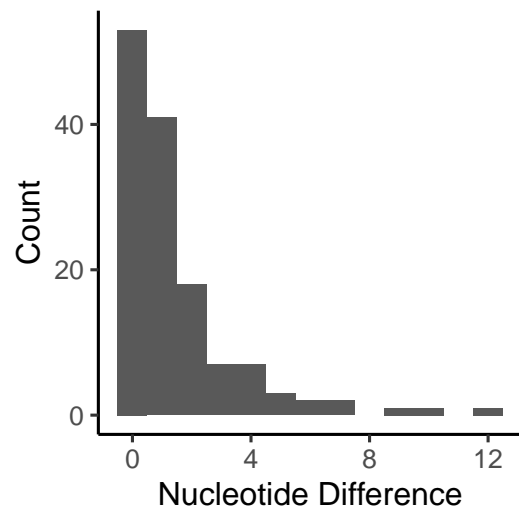
### IGHV4-4\*07

320 sequences assigned  
132 (41.2%) exact matches, in which:  
116 unique CDR3  
5 unique J



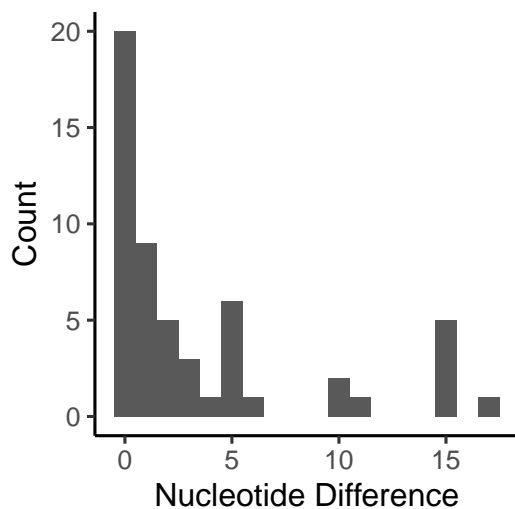
### IGHV4-30-2\*01

136 sequences assigned  
53 (39%) exact matches, in which:  
45 unique CDR3  
6 unique J



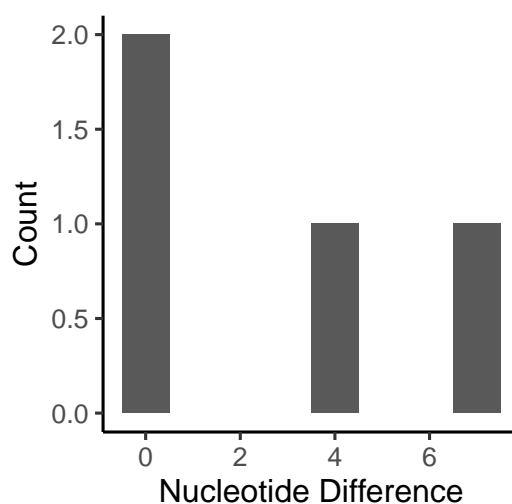
### IGHV3-73\*02

56 sequences assigned  
20 (35.7%) exact matches, in which:  
17 unique CDR3  
3 unique J



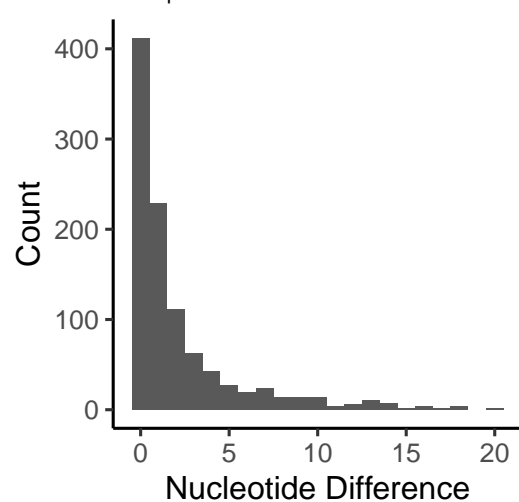
### IGHV4-28\*01

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



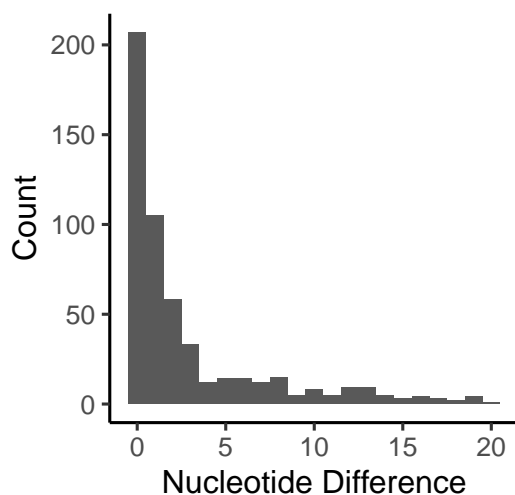
### IGHV4-31\*03

1013 sequences assigned  
412 (40.7%) exact matches, in which:  
363 unique CDR3  
6 unique J



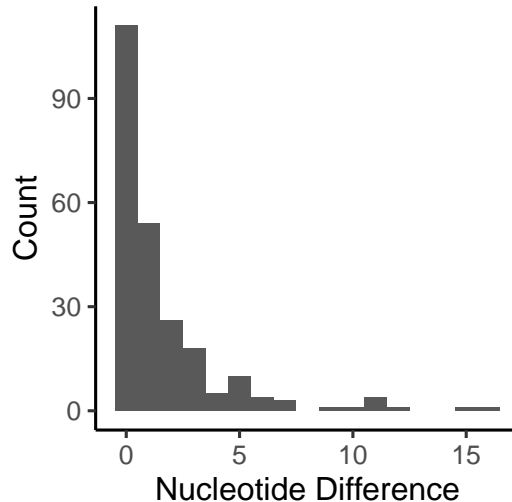
### IGHV3-74\*01

534 sequences assigned  
207 (38.8%) exact matches, in which:  
179 unique CDR3  
6 unique J



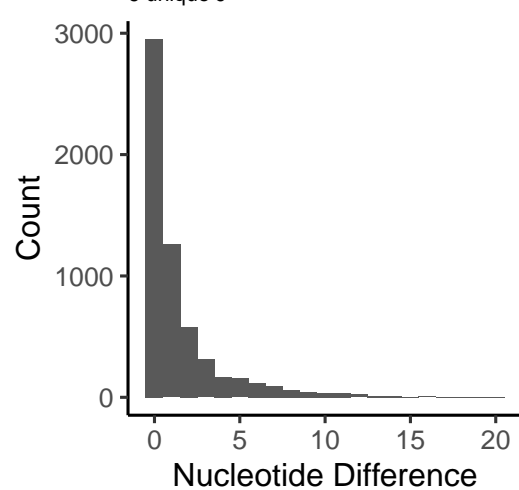
### IGHV4-30-4\*01

240 sequences assigned  
111 (46.2%) exact matches, in which:  
97 unique CDR3  
6 unique J



### IGHV4-34\*01

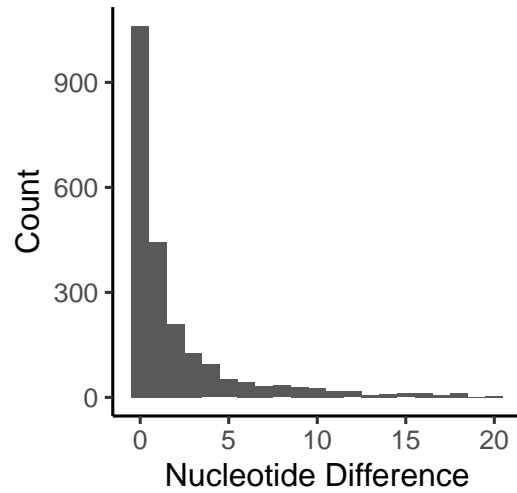
5888 sequences assigned  
2952 (50.1%) exact matches, in which:  
2043 unique CDR3  
6 unique J





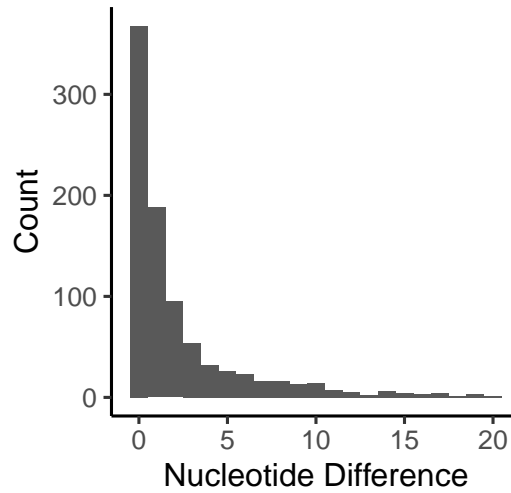
### IGHV4–39\*01

2280 sequences assigned  
1062 (46.6%) exact matches, in which:  
875 unique CDR3  
6 unique J



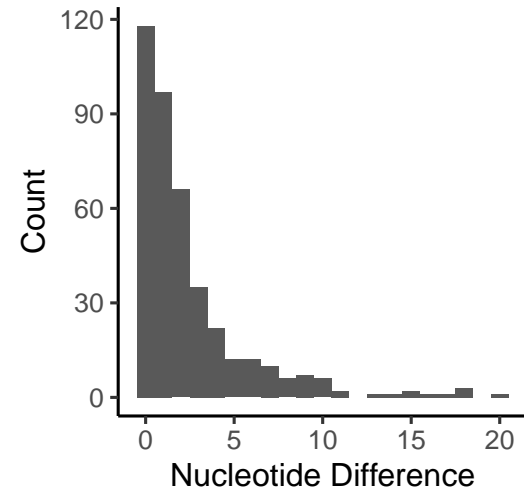
### IGHV4–61\*02

885 sequences assigned  
368 (41.6%) exact matches, in which:  
315 unique CDR3  
6 unique J



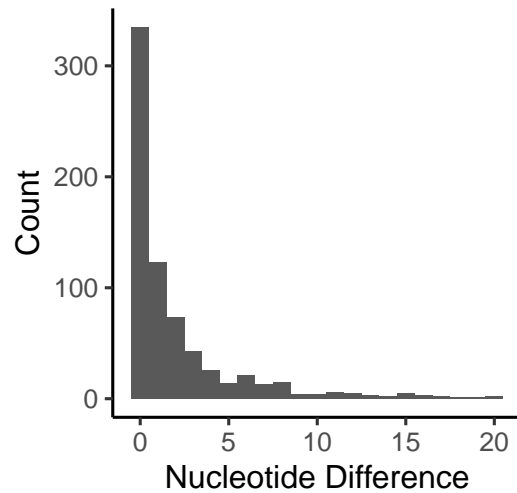
### IGHV6–1\*01

404 sequences assigned  
118 (29.2%) exact matches, in which:  
107 unique CDR3  
4 unique J



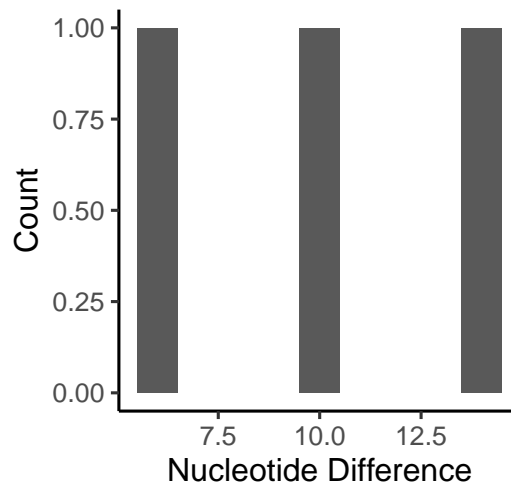
### IGHV4–59\*01

706 sequences assigned  
335 (47.5%) exact matches, in which:  
290 unique CDR3  
6 unique J



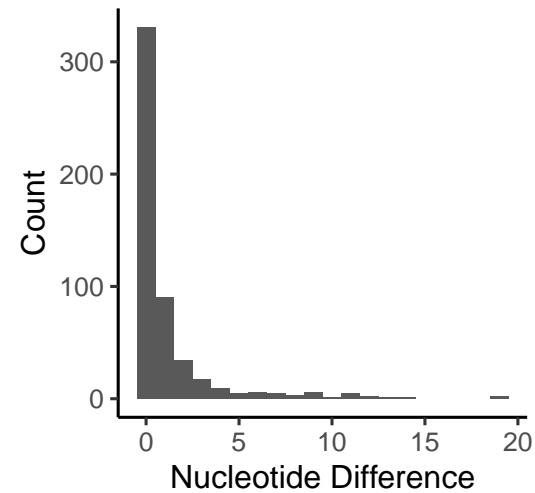
### IGHV4/OR15–8\*01

4 sequences assigned  
No exact matches.



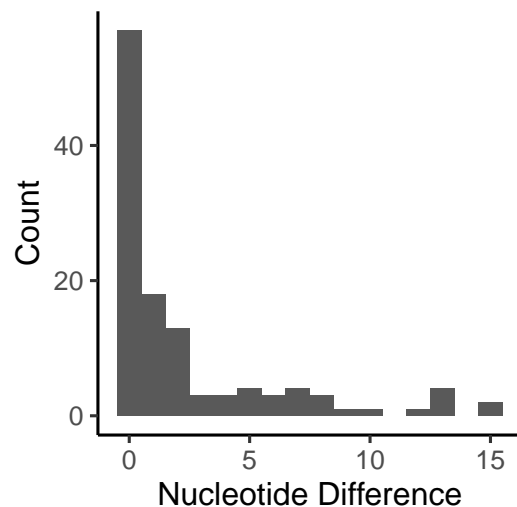
### IGHV7–4–1\*02

522 sequences assigned  
331 (63.4%) exact matches, in which:  
289 unique CDR3  
6 unique J



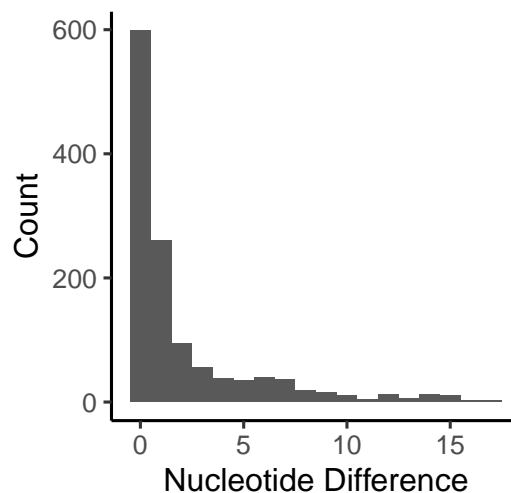
### IGHV4–61\*01

118 sequences assigned  
57 (48.3%) exact matches, in which:  
46 unique CDR3  
5 unique J



### IGHV5–51\*01

1251 sequences assigned  
599 (47.9%) exact matches, in which:  
491 unique CDR3  
6 unique J



IGHV1-69\*08\_C191T

