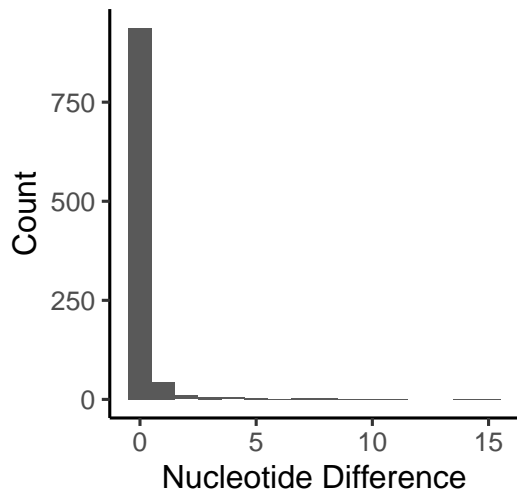


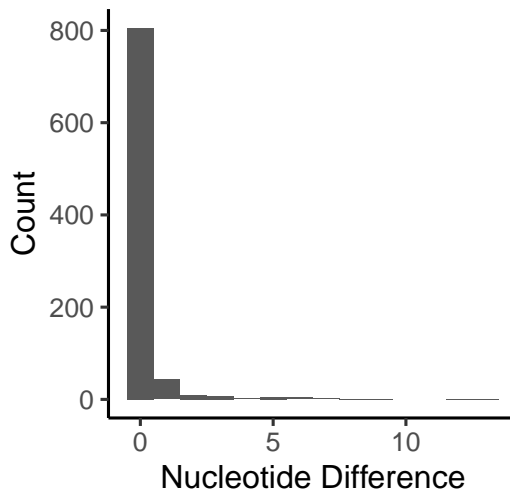
### IGHV1–2\*02

1022 sequences assigned  
938 (91.8%) exact matches, in which:  
938 unique CDR3  
6 unique J



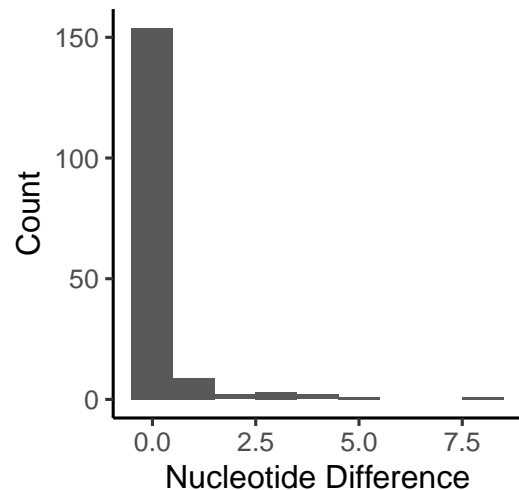
### IGHV1–18\*01

883 sequences assigned  
806 (91.3%) exact matches, in which:  
804 unique CDR3  
6 unique J



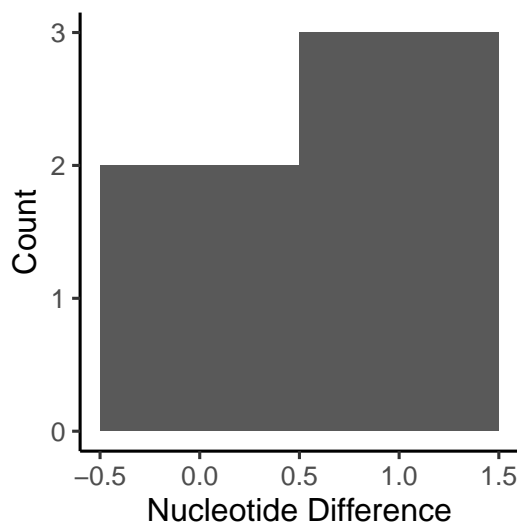
### IGHV1–46\*01

172 sequences assigned  
154 (89.5%) exact matches, in which:  
154 unique CDR3  
6 unique J



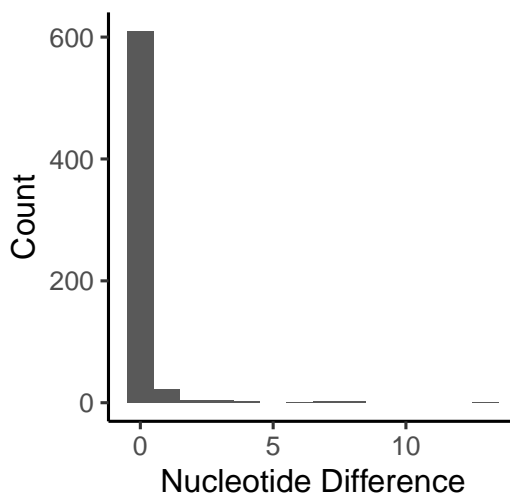
### IGHV1–3\*02

5 sequences assigned  
2 (40%) exact matches, in which:  
2 unique CDR3  
2 unique J



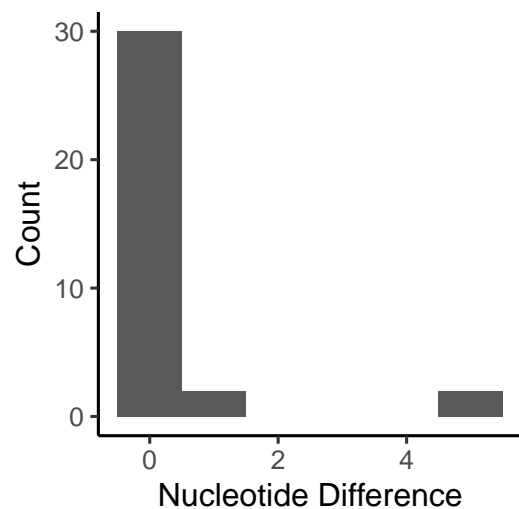
### IGHV1–24\*01

650 sequences assigned  
610 (93.8%) exact matches, in which:  
609 unique CDR3  
6 unique J



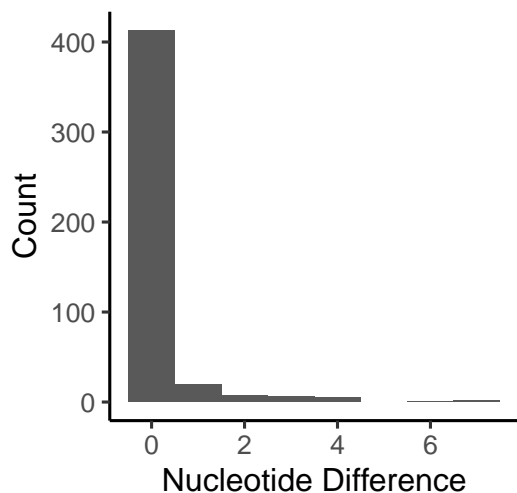
### IGHV1–58\*02

34 sequences assigned  
30 (88.2%) exact matches, in which:  
30 unique CDR3  
5 unique J



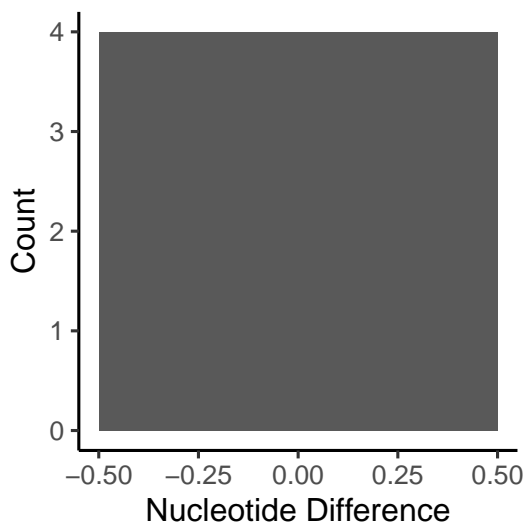
### IGHV1–8\*01

453 sequences assigned  
413 (91.2%) exact matches, in which:  
413 unique CDR3  
6 unique J



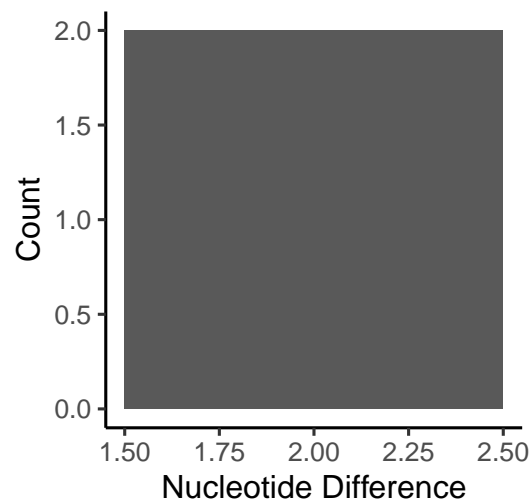
### IGHV1–45\*02

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



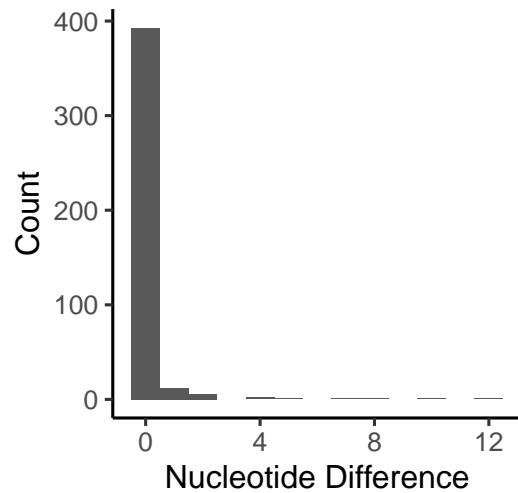
### IGHV1–68\*02

2 sequences assigned  
No exact matches.



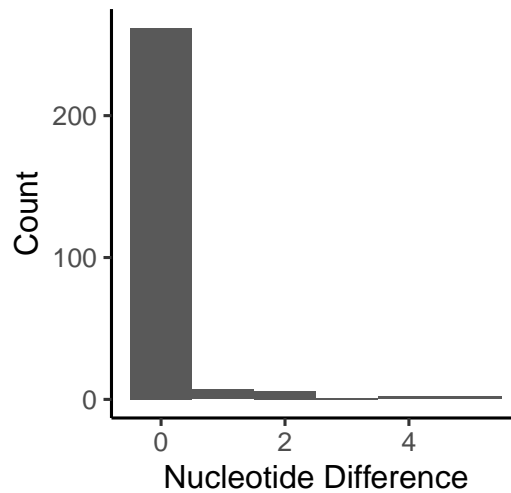
### IGHV1–69\*04

418 sequences assigned  
393 (94%) exact matches, in which:  
392 unique CDR3  
6 unique J



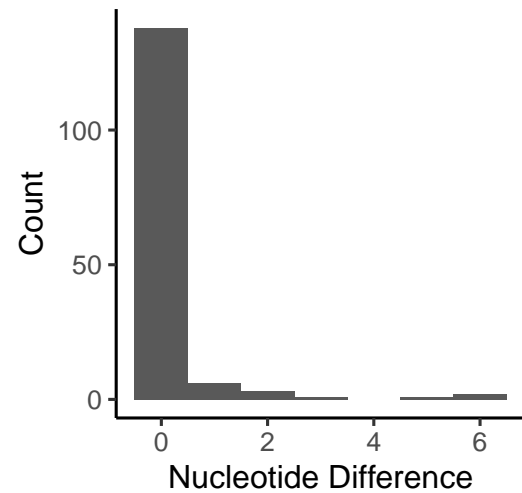
### IGHV2–5\*02

280 sequences assigned  
262 (93.6%) exact matches, in which:  
262 unique CDR3  
6 unique J



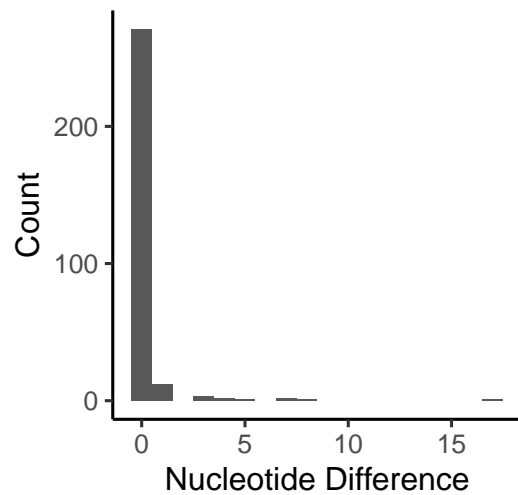
### IGHV2–70\*15

151 sequences assigned  
138 (91.4%) exact matches, in which:  
138 unique CDR3  
4 unique J



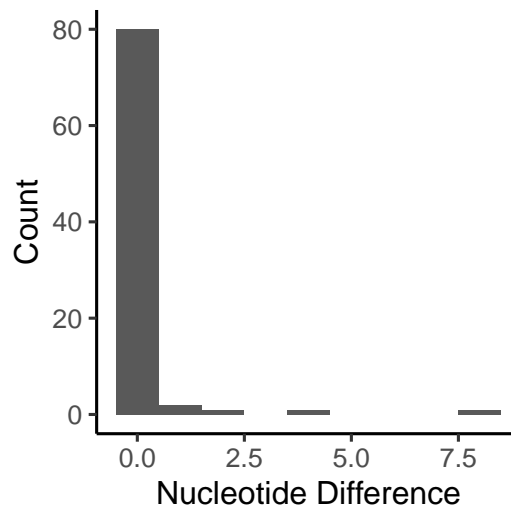
### IGHV1–69\*04\_A163G

293 sequences assigned  
271 (92.5%) exact matches, in which:  
271 unique CDR3  
6 unique J



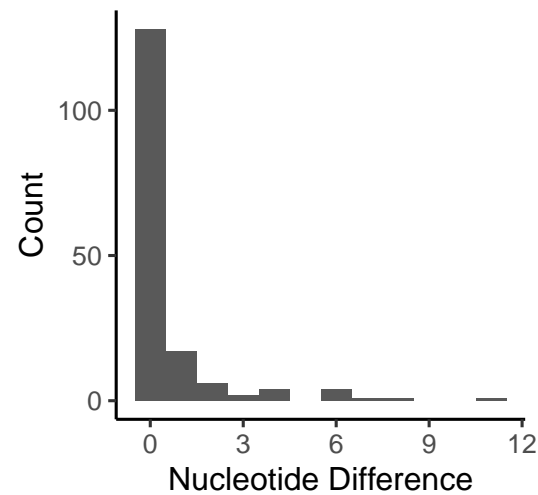
### IGHV2–26\*01

85 sequences assigned  
80 (94.1%) exact matches, in which:  
80 unique CDR3  
5 unique J



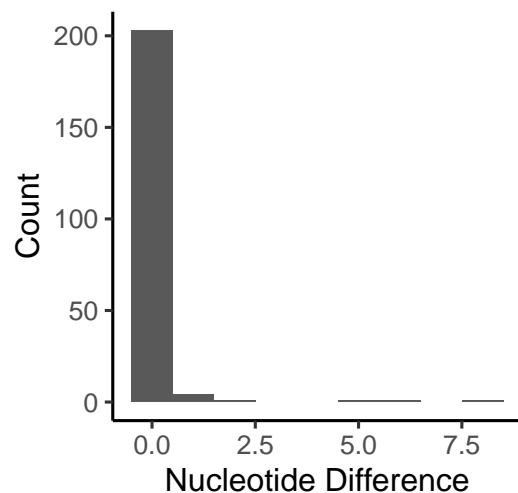
### IGHV3–7\*01

164 sequences assigned  
128 (78%) exact matches, in which:  
128 unique CDR3  
6 unique J



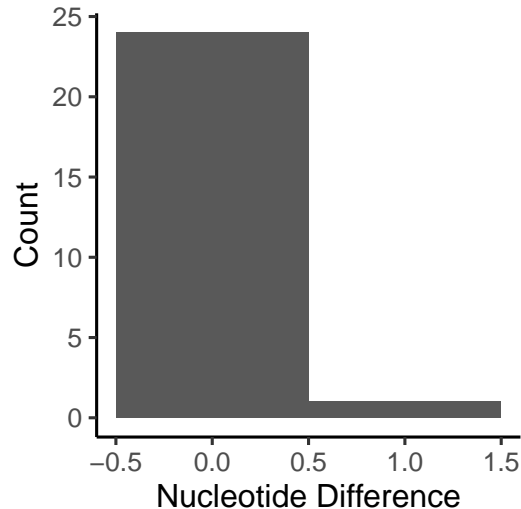
### IGHV2–5\*01

211 sequences assigned  
203 (96.2%) exact matches, in which:  
203 unique CDR3  
6 unique J



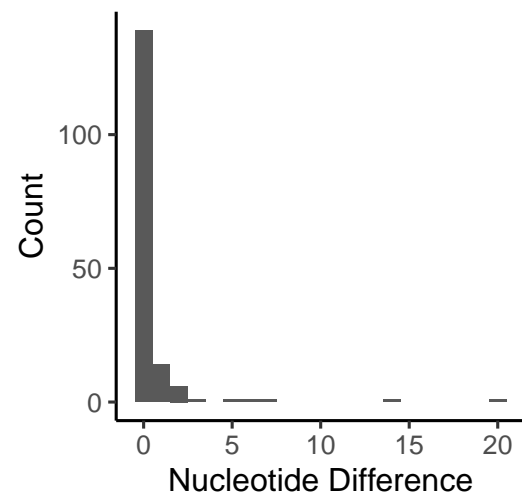
### IGHV2–26\*02

25 sequences assigned  
24 (96%) exact matches, in which:  
24 unique CDR3  
6 unique J



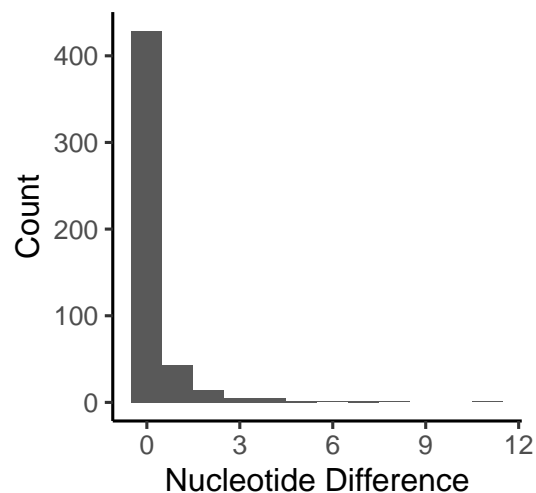
### IGHV3–7\*03

165 sequences assigned  
139 (84.2%) exact matches, in which:  
139 unique CDR3  
6 unique J



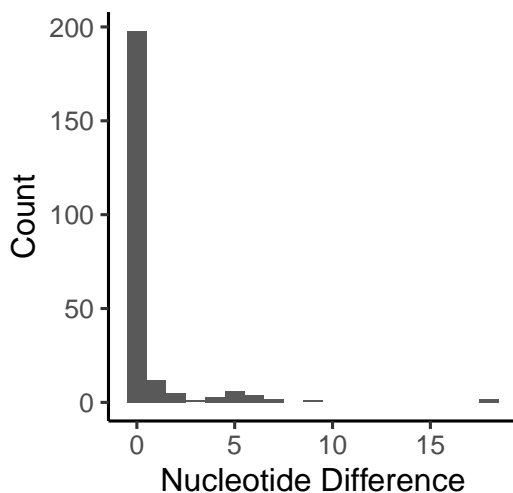
### IGHV3-9\*01

503 sequences assigned  
429 (85.3%) exact matches, in which:  
429 unique CDR3  
6 unique J



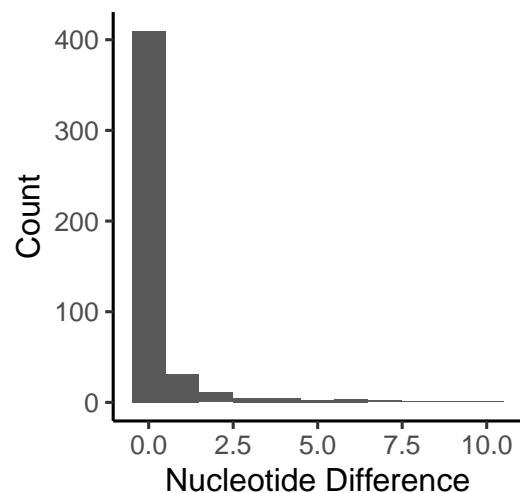
### IGHV3-15\*01

234 sequences assigned  
198 (84.6%) exact matches, in which:  
197 unique CDR3  
6 unique J



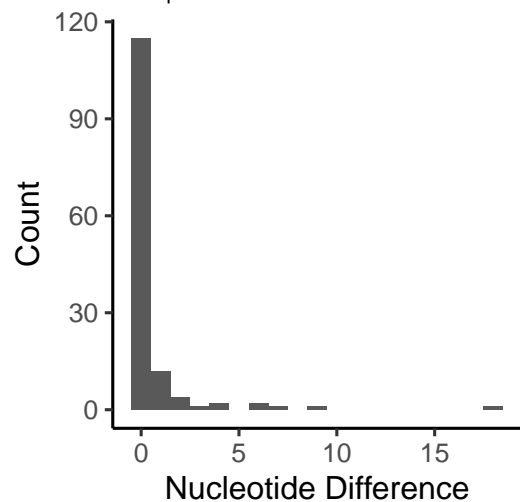
### IGHV3-21\*01

475 sequences assigned  
410 (86.3%) exact matches, in which:  
410 unique CDR3  
6 unique J



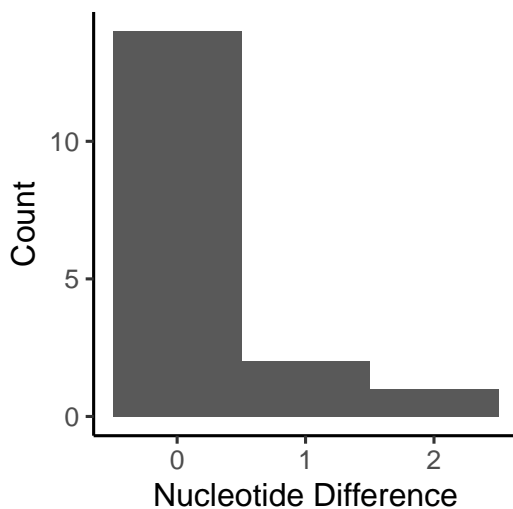
### IGHV3-11\*01

139 sequences assigned  
115 (82.7%) exact matches, in which:  
115 unique CDR3  
5 unique J



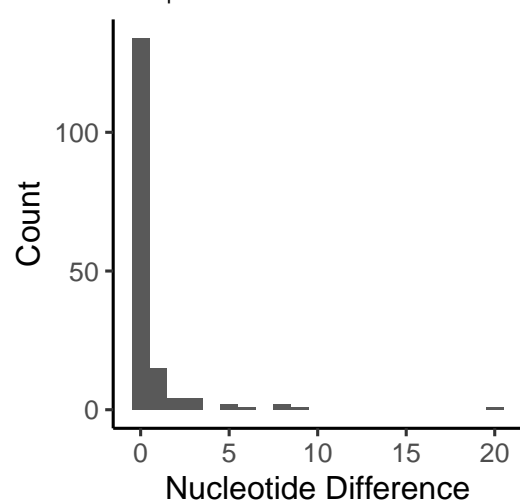
### IGHV3-20\*01

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



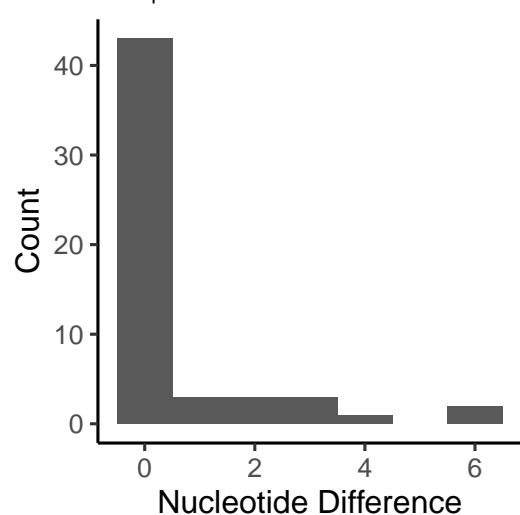
### IGHV3-30\*02\_G49A

164 sequences assigned  
134 (81.7%) exact matches, in which:  
134 unique CDR3  
6 unique J



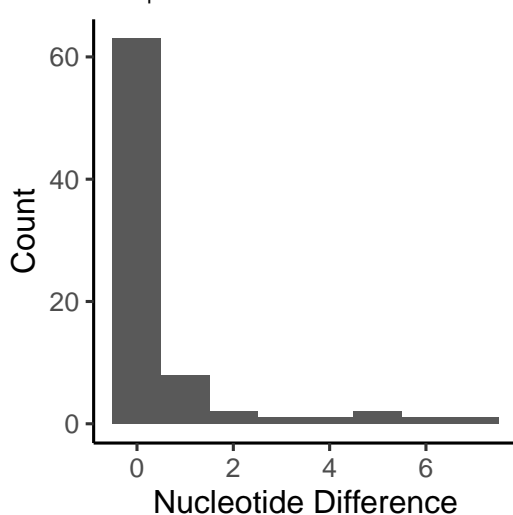
### IGHV3-13\*01

55 sequences assigned  
43 (78.2%) exact matches, in which:  
43 unique CDR3  
5 unique J



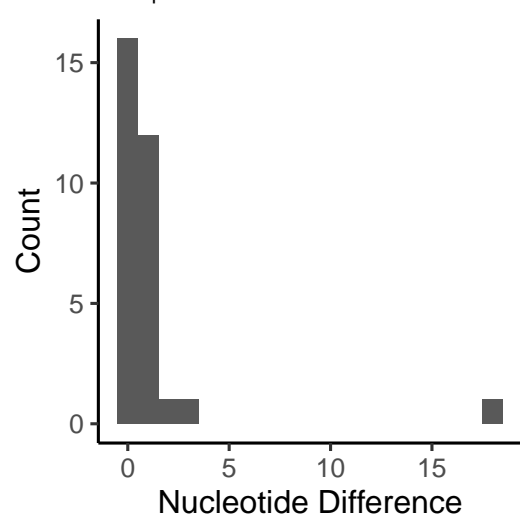
### IGHV3-20\*04

79 sequences assigned  
63 (79.7%) exact matches, in which:  
63 unique CDR3  
6 unique J



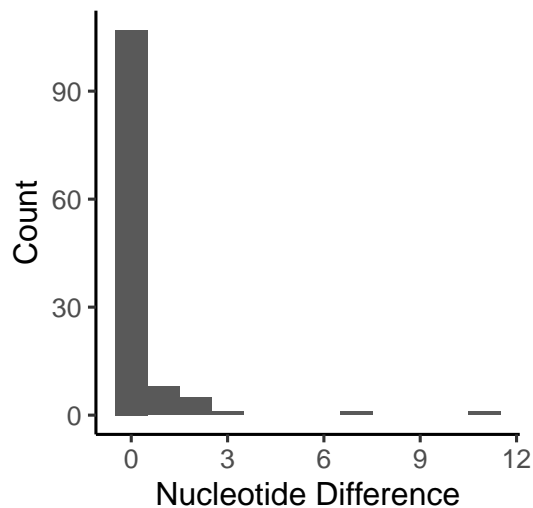
### IGHV3-43\*01

31 sequences assigned  
16 (51.6%) exact matches, in which:  
16 unique CDR3  
5 unique J



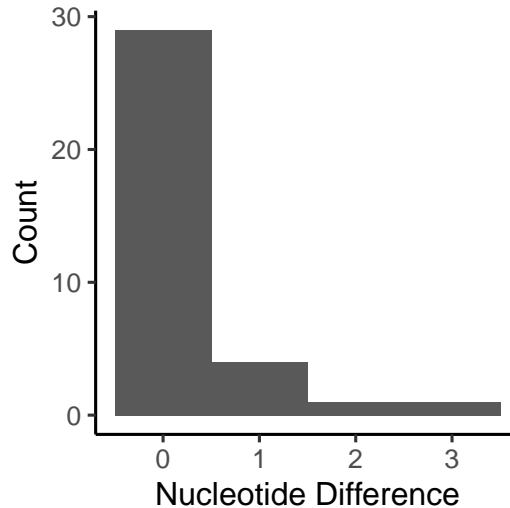
### IGHV3-48\*01

123 sequences assigned  
107 (87%) exact matches, in which:  
107 unique CDR3  
6 unique J



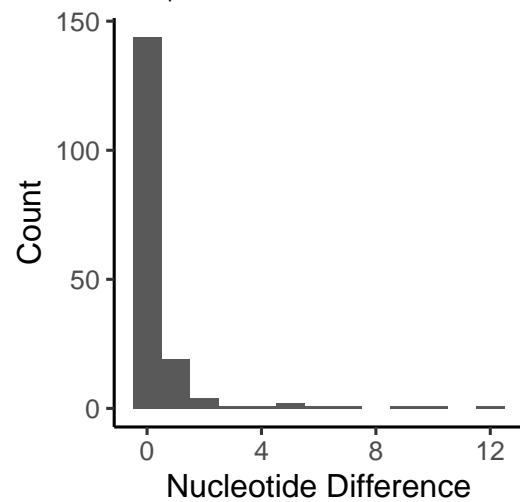
### IGHV3-53\*04

35 sequences assigned  
29 (82.9%) exact matches, in which:  
29 unique CDR3  
4 unique J



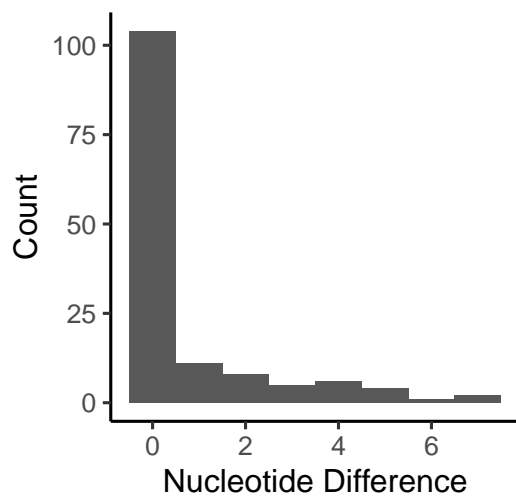
### IGHV3-66\*01

176 sequences assigned  
144 (81.8%) exact matches, in which:  
144 unique CDR3  
6 unique J



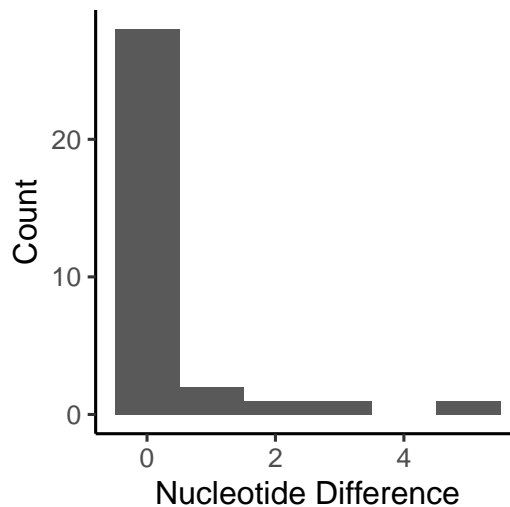
### IGHV3-48\*04

142 sequences assigned  
104 (73.2%) exact matches, in which:  
104 unique CDR3  
5 unique J



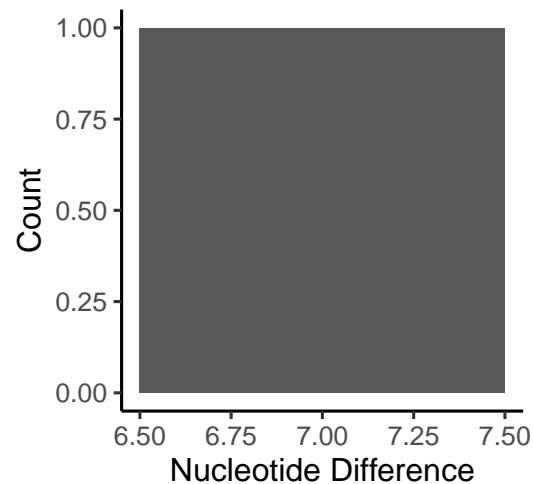
### IGHV3-53\*04\_G37A

33 sequences assigned  
28 (84.8%) exact matches, in which:  
28 unique CDR3  
4 unique J



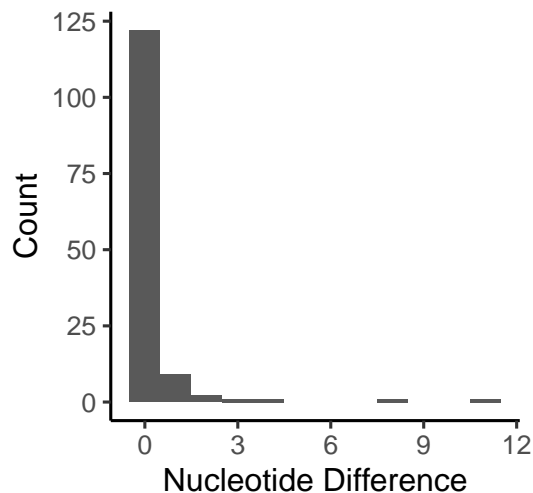
### IGHV3-69-1\*01

1 sequences assigned  
No exact matches.



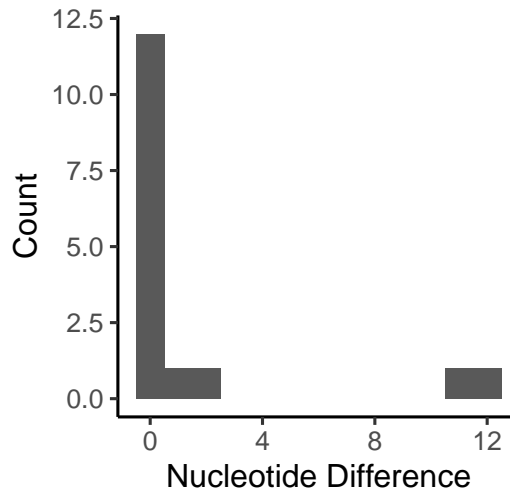
### IGHV3-49\*03

137 sequences assigned  
122 (89.1%) exact matches, in which:  
122 unique CDR3  
6 unique J



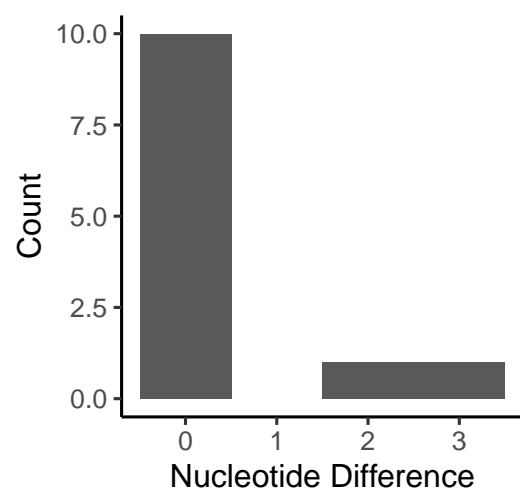
### IGHV3-64\*01

16 sequences assigned  
12 (75%) exact matches, in which:  
12 unique CDR3  
3 unique J



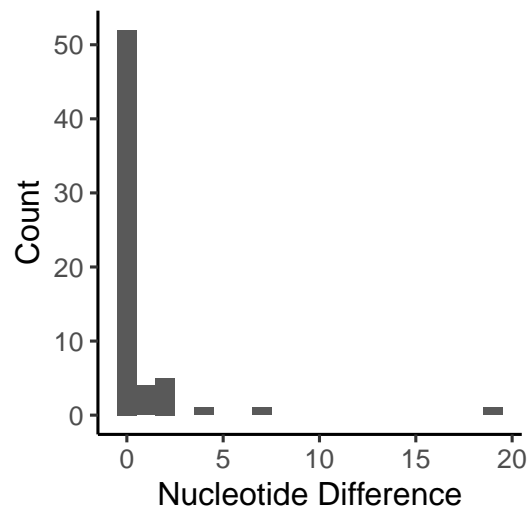
### IGHV3-72\*01

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



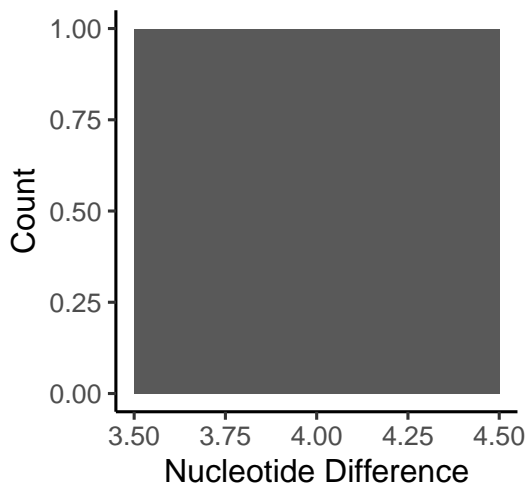
### IGHV3-73\*01

64 sequences assigned  
52 (81.2%) exact matches, in which:  
52 unique CDR3  
5 unique J



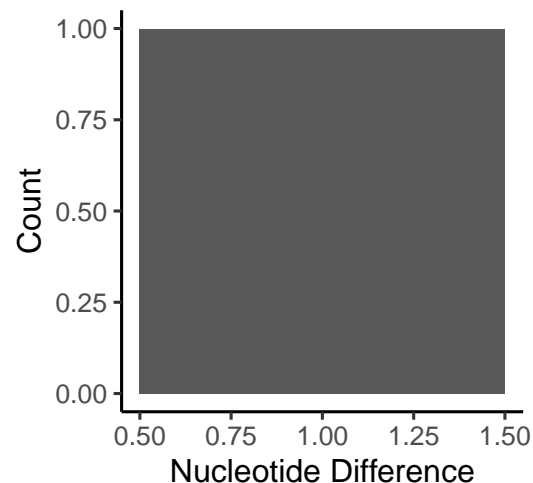
### IGHV3-NL1\*01

1 sequences assigned  
No exact matches.



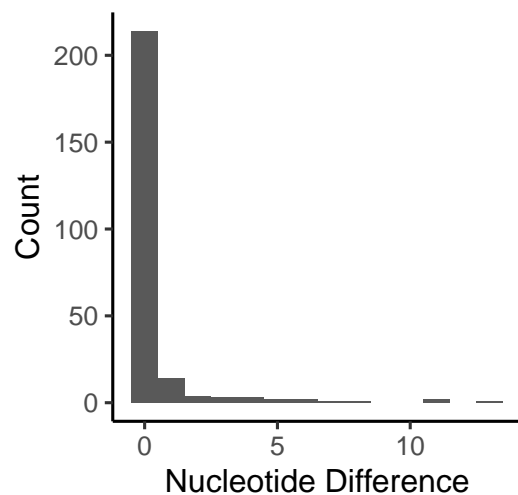
### IGHV4-28\*06

1 sequences assigned  
No exact matches.



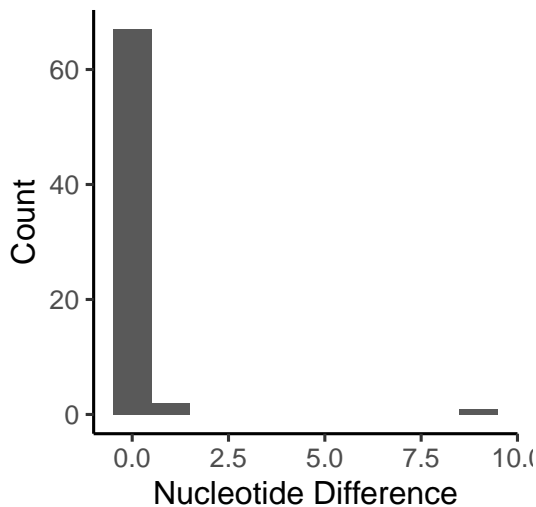
### IGHV3-74\*01

247 sequences assigned  
214 (86.6%) exact matches, in which:  
214 unique CDR3  
6 unique J



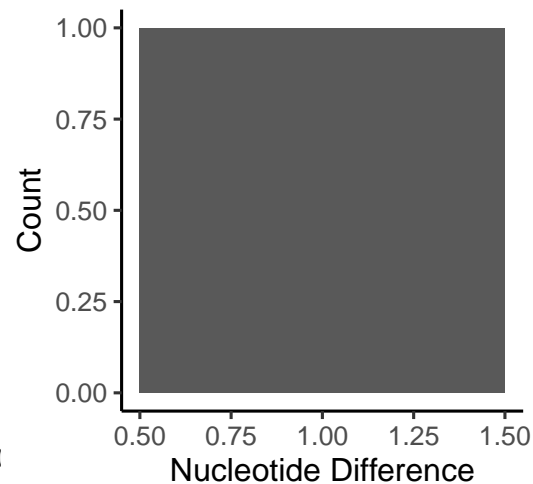
### IGHV4-4\*07

70 sequences assigned  
67 (95.7%) exact matches, in which:  
67 unique CDR3  
6 unique J



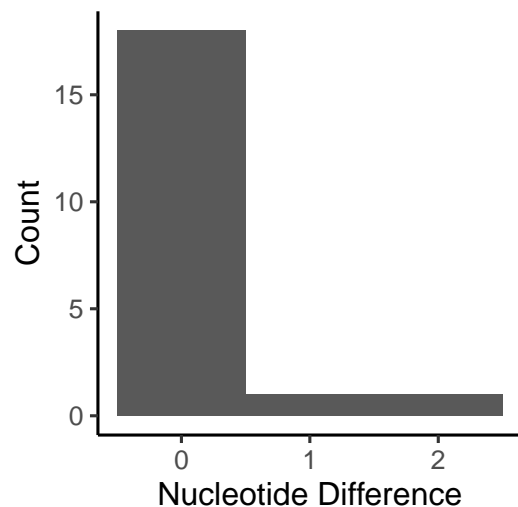
### IGHV4-28\*07

1 sequences assigned  
No exact matches.



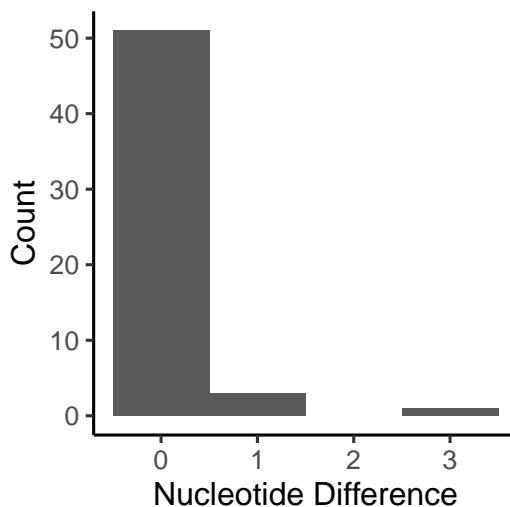
### IGHV3-43D\*03

20 sequences assigned  
18 (90%) exact matches, in which:  
18 unique CDR3  
3 unique J



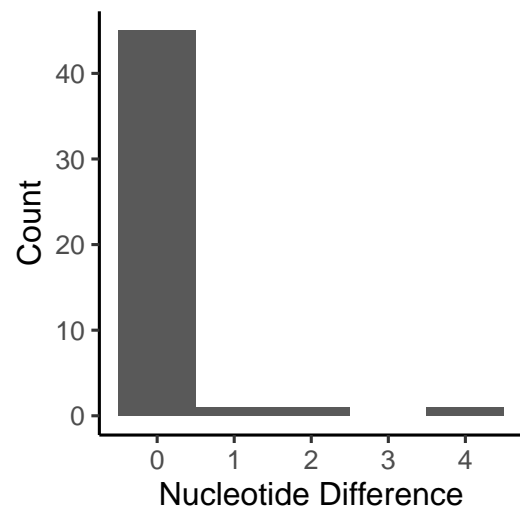
### IGHV4-4\*07\_A70G

55 sequences assigned  
51 (92.7%) exact matches, in which:  
51 unique CDR3  
6 unique J



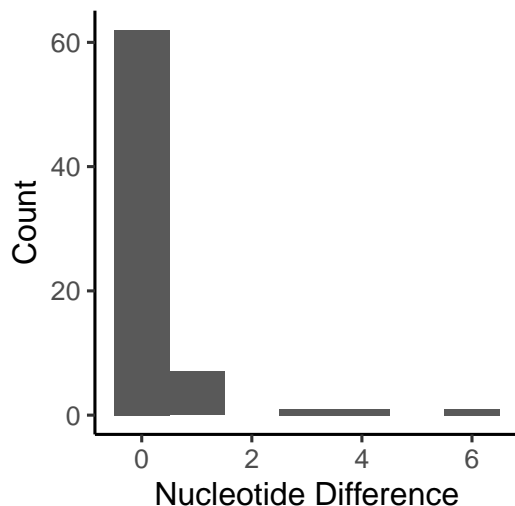
### IGHV4-30-2\*01

48 sequences assigned  
45 (93.8%) exact matches, in which:  
45 unique CDR3  
4 unique J



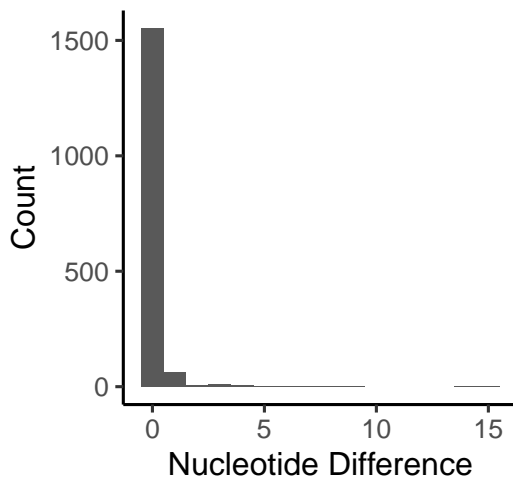
### IGHV4-30-4\*07

72 sequences assigned  
62 (86.1%) exact matches, in which:  
62 unique CDR3  
5 unique J



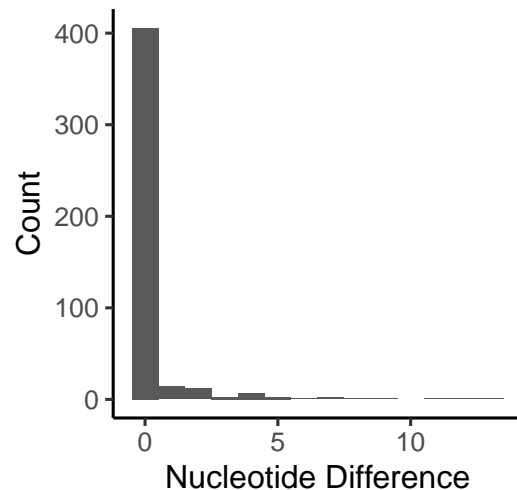
### IGHV4-39\*07

1652 sequences assigned  
1552 (93.9%) exact matches, in which:  
1550 unique CDR3  
6 unique J



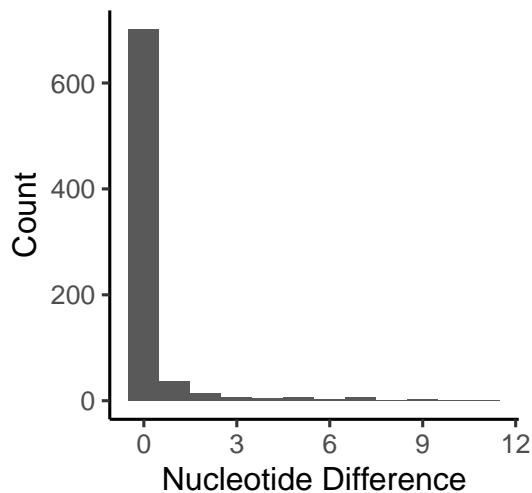
### IGHV5-51\*01

453 sequences assigned  
406 (89.6%) exact matches, in which:  
405 unique CDR3  
6 unique J



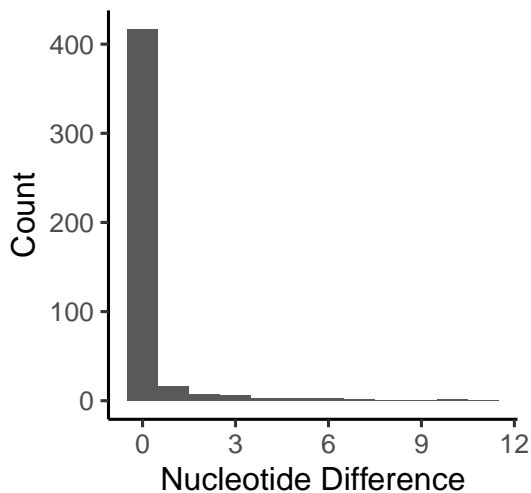
### IGHV4-34\*01

785 sequences assigned  
702 (89.4%) exact matches, in which:  
701 unique CDR3  
6 unique J



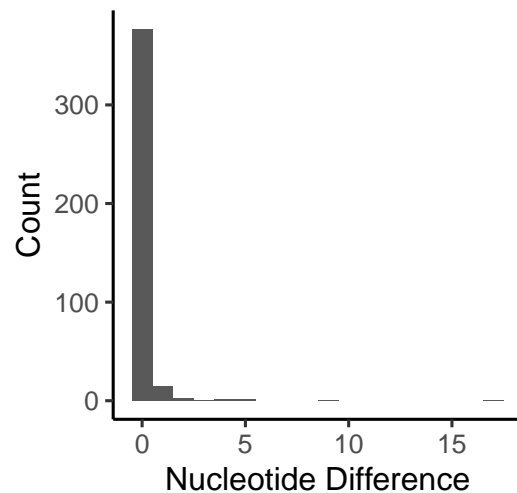
### IGHV4-59\*01

463 sequences assigned  
417 (90.1%) exact matches, in which:  
417 unique CDR3  
6 unique J



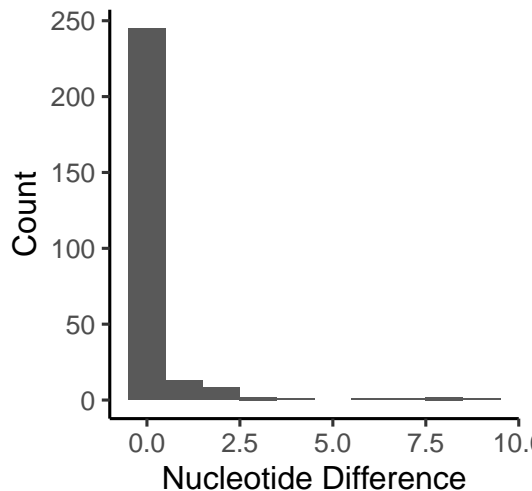
### IGHV5-51\*01\_C45G

402 sequences assigned  
377 (93.8%) exact matches, in which:  
377 unique CDR3  
6 unique J



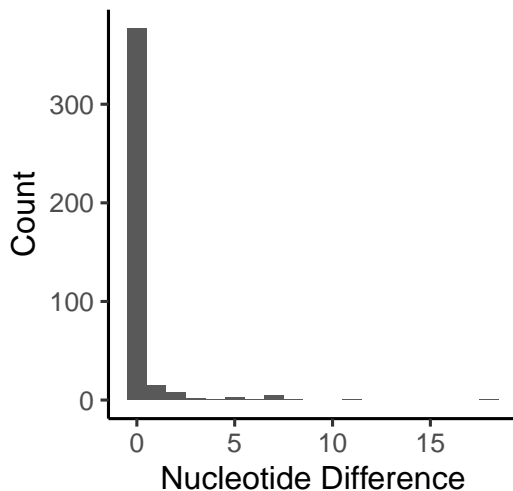
### IGHV4-38-2\*02

274 sequences assigned  
245 (89.4%) exact matches, in which:  
244 unique CDR3  
6 unique J



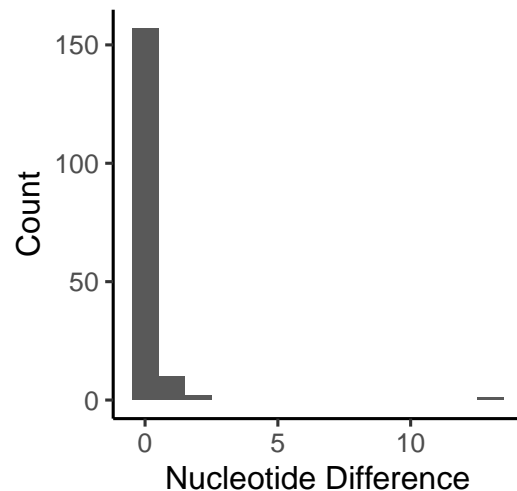
### IGHV4-59\*08

416 sequences assigned  
377 (90.6%) exact matches, in which:  
377 unique CDR3  
6 unique J



### IGHV6-1\*01

170 sequences assigned  
157 (92.4%) exact matches, in which:  
156 unique CDR3  
6 unique J





Warning – no inferred sequences found.