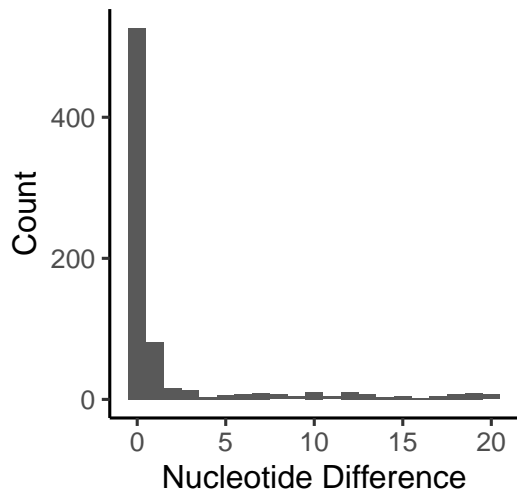


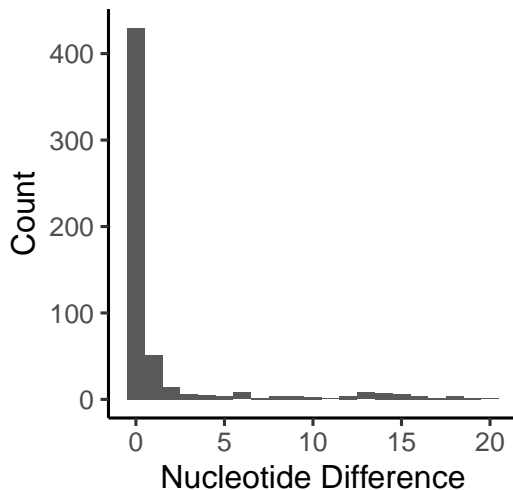
### IGHV1-2\*02

824 sequences assigned  
527 (64%) exact matches, in which:  
522 unique CDR3  
6 unique J



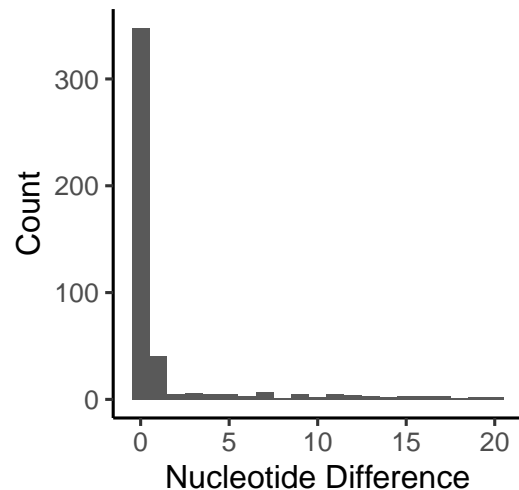
### IGHV1-18\*01

617 sequences assigned  
430 (69.7%) exact matches, in which:  
428 unique CDR3  
6 unique J



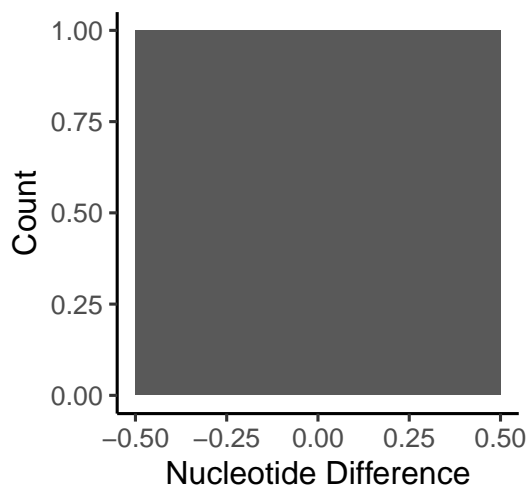
### IGHV1-46\*01

486 sequences assigned  
348 (71.6%) exact matches, in which:  
346 unique CDR3  
6 unique J



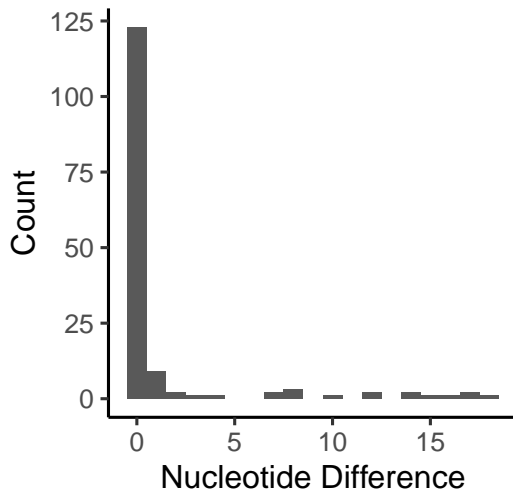
### IGHV1-3\*02

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



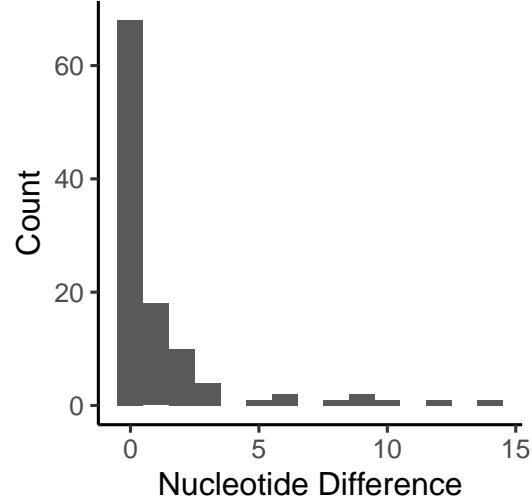
### IGHV1-24\*01

159 sequences assigned  
123 (77.4%) exact matches, in which:  
123 unique CDR3  
6 unique J



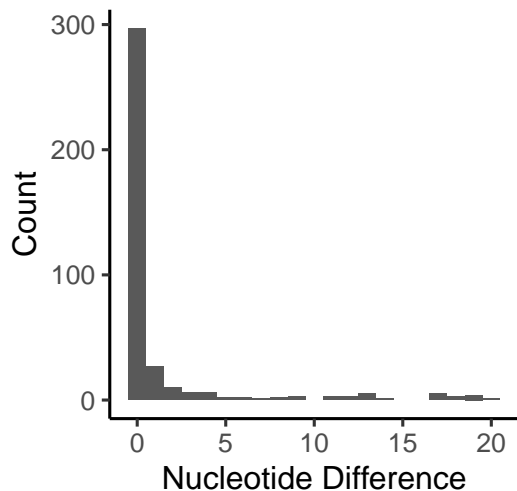
### IGHV1-58\*01

111 sequences assigned  
68 (61.3%) exact matches, in which:  
66 unique CDR3  
5 unique J



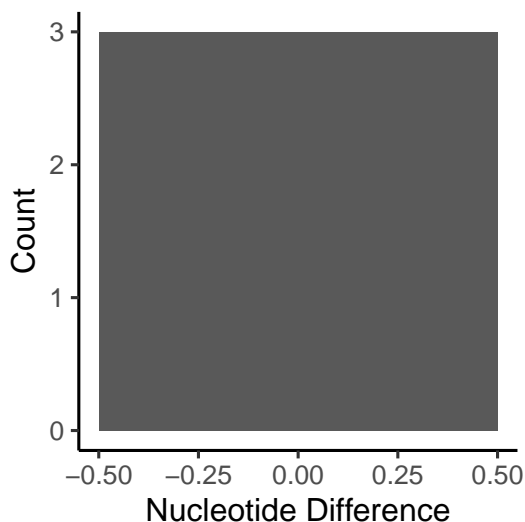
### IGHV1-8\*01

390 sequences assigned  
297 (76.2%) exact matches, in which:  
296 unique CDR3  
6 unique J



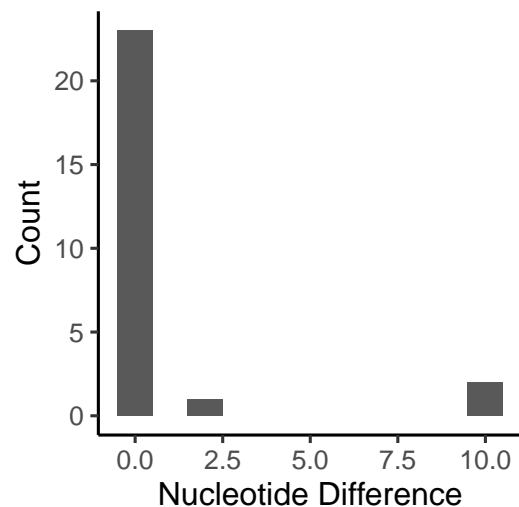
### IGHV1-45\*02

3 sequences assigned  
3 (100%) exact matches, in which:  
3 unique CDR3  
1 unique J



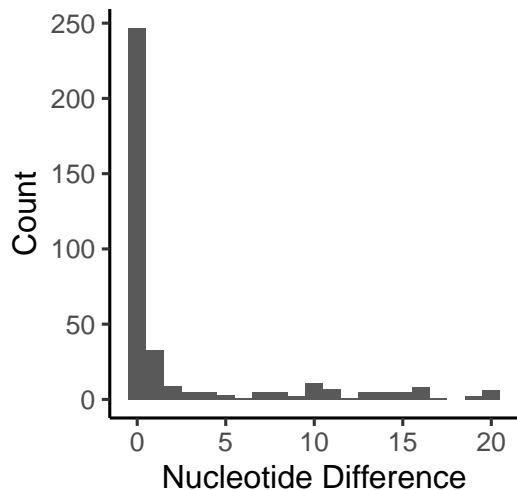
### IGHV1-69-2\*01

27 sequences assigned  
23 (85.2%) exact matches, in which:  
22 unique CDR3  
4 unique J



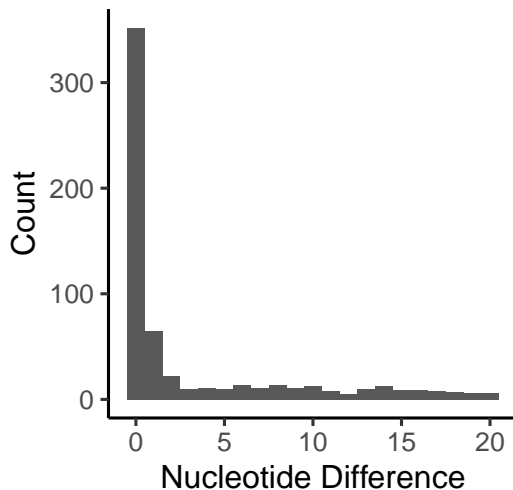
### IGHV2-5\*01

378 sequences assigned  
247 (65.3%) exact matches, in which:  
246 unique CDR3  
6 unique J



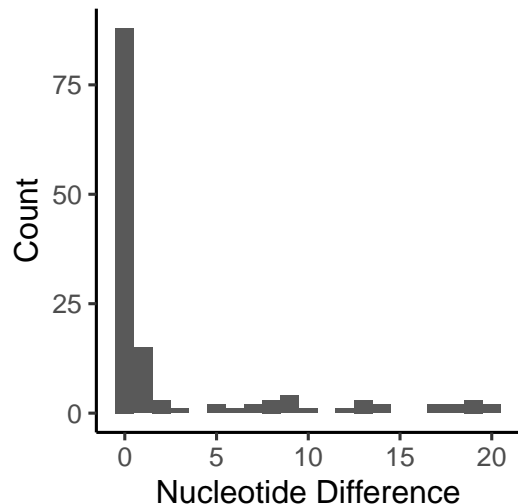
### IGHV3-7\*01

660 sequences assigned  
352 (53.3%) exact matches, in which:  
348 unique CDR3  
6 unique J



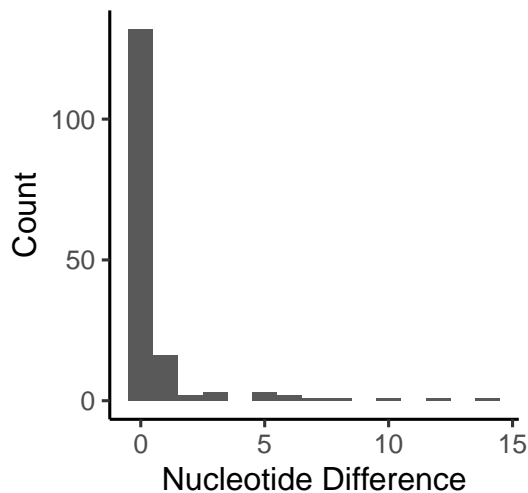
### IGHV3-13\*01

152 sequences assigned  
88 (57.9%) exact matches, in which:  
85 unique CDR3  
5 unique J



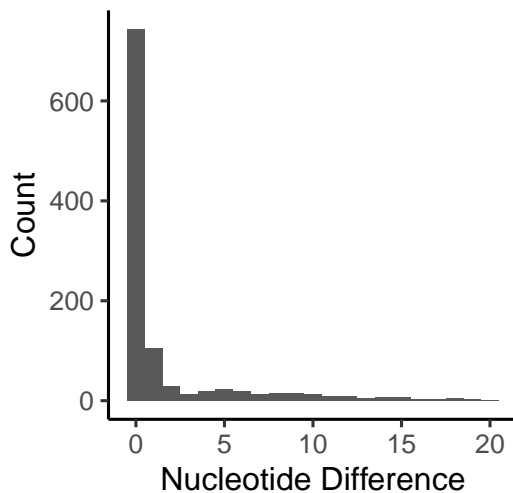
### IGHV2-26\*01

166 sequences assigned  
132 (79.5%) exact matches, in which:  
130 unique CDR3  
5 unique J



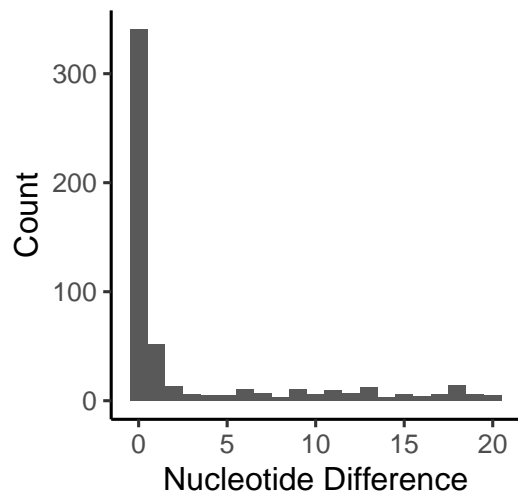
### IGHV3-9\*01

1115 sequences assigned  
744 (66.7%) exact matches, in which:  
738 unique CDR3  
6 unique J



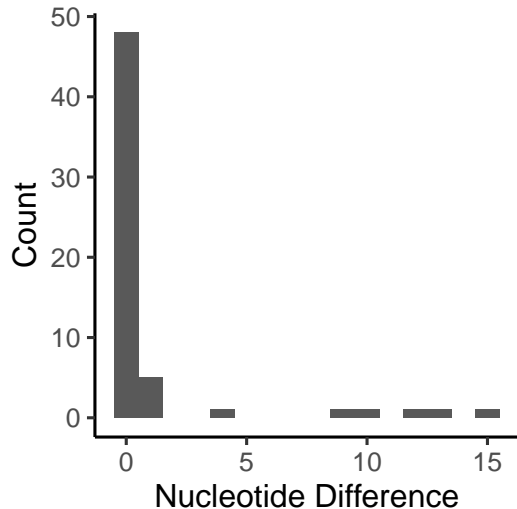
### IGHV3-15\*01

574 sequences assigned  
341 (59.4%) exact matches, in which:  
334 unique CDR3  
6 unique J



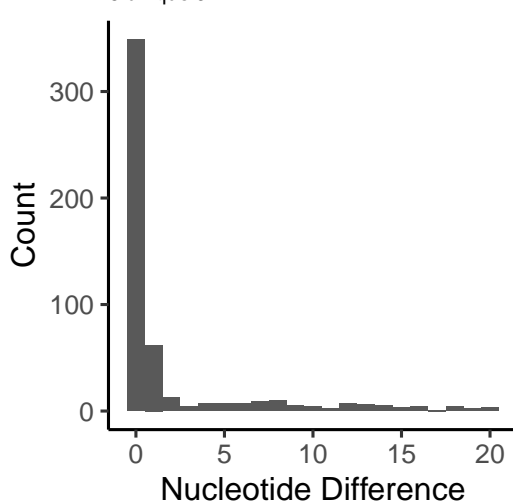
### IGHV2-70\*01

61 sequences assigned  
48 (78.7%) exact matches, in which:  
47 unique CDR3  
5 unique J



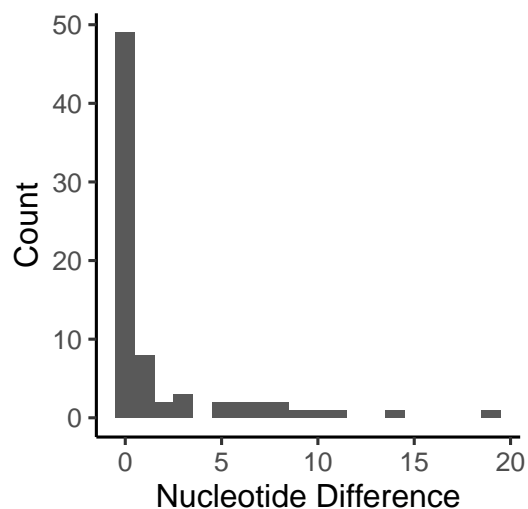
### IGHV3-11\*01

543 sequences assigned  
349 (64.3%) exact matches, in which:  
347 unique CDR3  
6 unique J



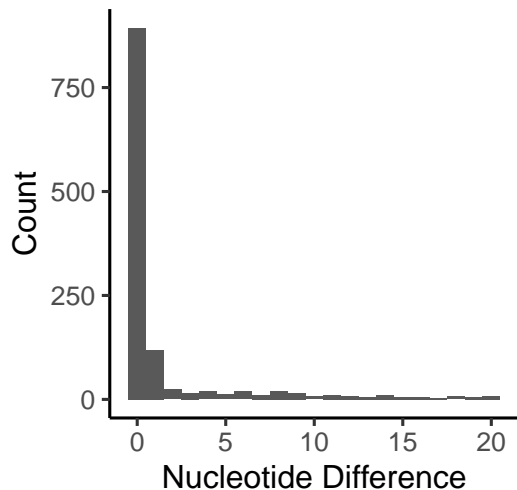
### IGHV3-20\*01

79 sequences assigned  
49 (62%) exact matches, in which:  
49 unique CDR3  
5 unique J



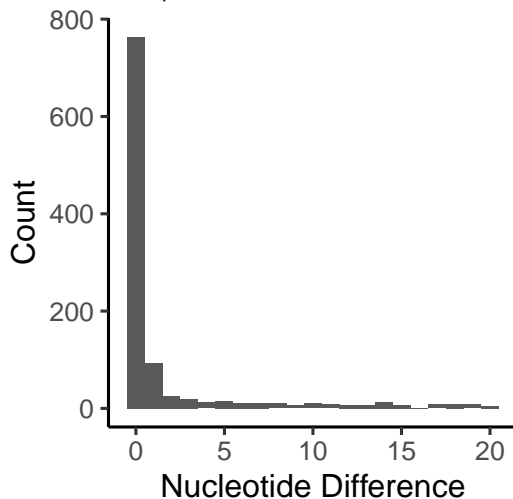
### IGHV3-21\*01

1253 sequences assigned  
894 (71.3%) exact matches, in which:  
883 unique CDR3  
6 unique J



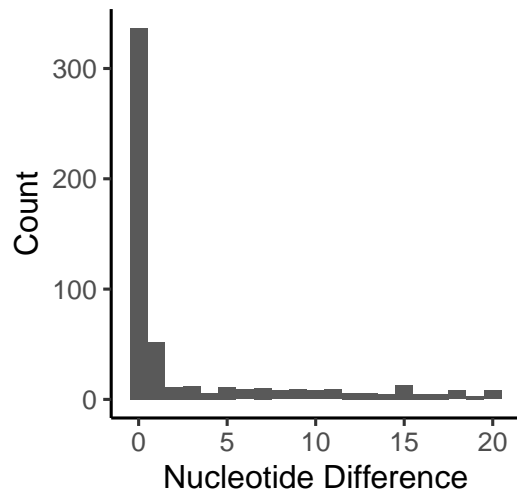
### IGHV3-33\*01

1135 sequences assigned  
764 (67.3%) exact matches, in which:  
753 unique CDR3  
6 unique J



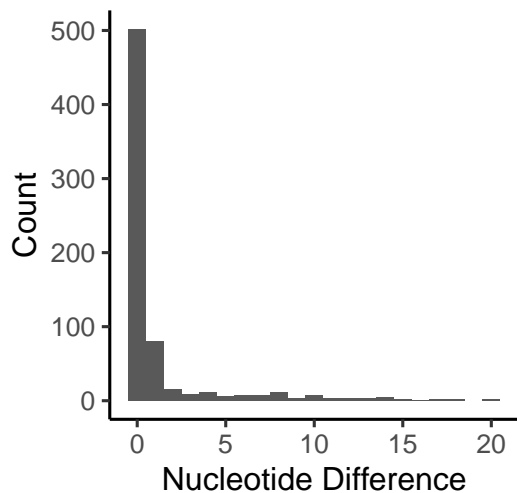
### IGHV3-48\*02

569 sequences assigned  
337 (59.2%) exact matches, in which:  
335 unique CDR3  
6 unique J



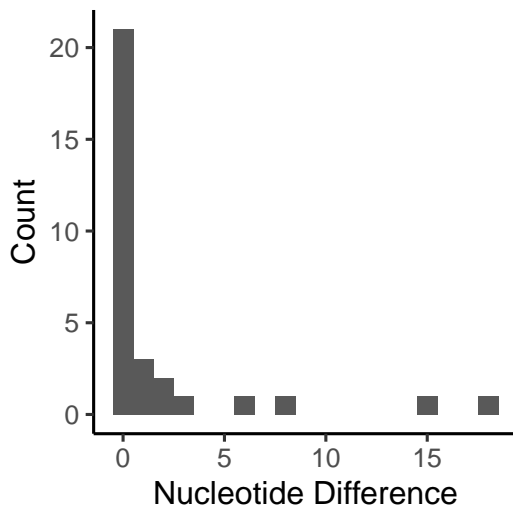
### IGHV3-30-3\*01

714 sequences assigned  
502 (70.3%) exact matches, in which:  
496 unique CDR3  
6 unique J



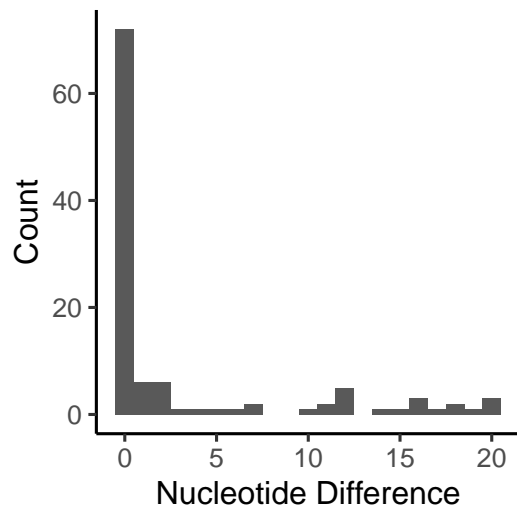
### IGHV3-43\*01

35 sequences assigned  
21 (60%) exact matches, in which:  
21 unique CDR3  
4 unique J



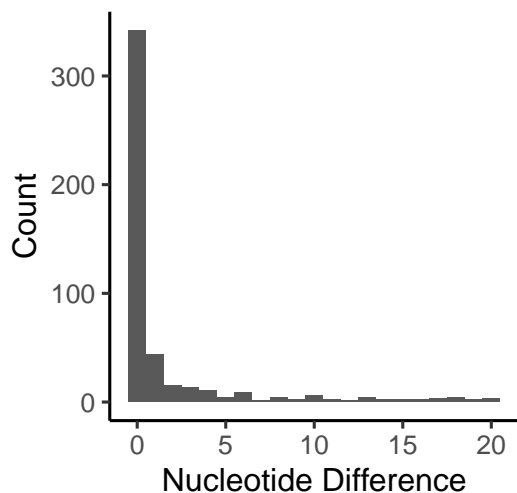
### IGHV3-49\*03

131 sequences assigned  
72 (55%) exact matches, in which:  
72 unique CDR3  
6 unique J



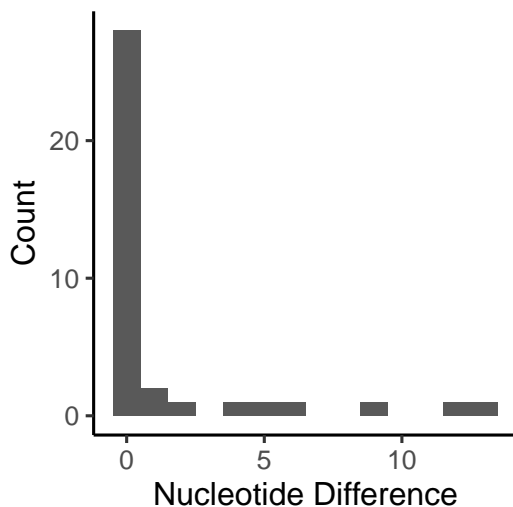
### IGHV3-30\*01

498 sequences assigned  
342 (68.7%) exact matches, in which:  
335 unique CDR3  
6 unique J



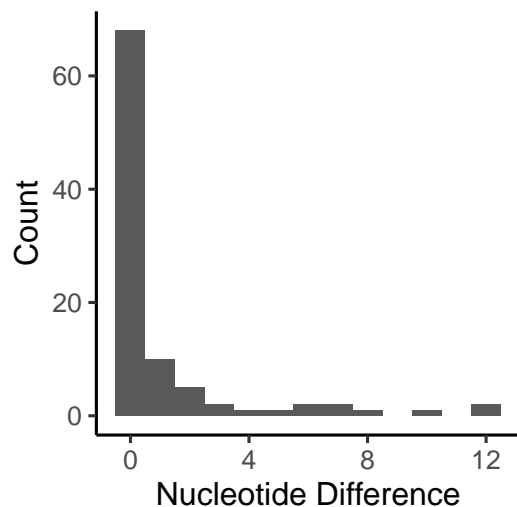
### IGHV3-43\*01\_C237T

37 sequences assigned  
28 (75.7%) exact matches, in which:  
27 unique CDR3  
4 unique J



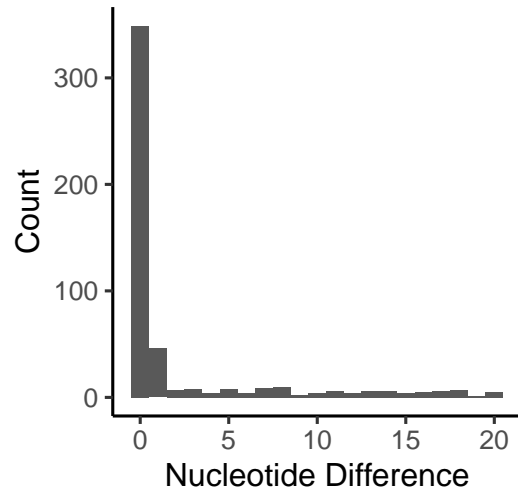
### IGHV3-49\*05

95 sequences assigned  
68 (71.6%) exact matches, in which:  
67 unique CDR3  
5 unique J



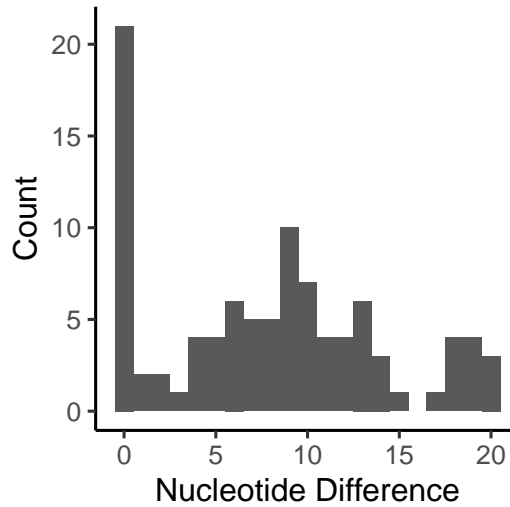
### IGHV3–53\*01

542 sequences assigned  
349 (64.4%) exact matches, in which:  
345 unique CDR3  
6 unique J



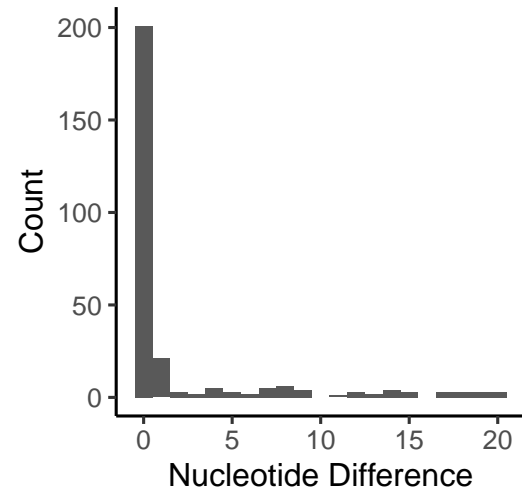
### IGHV3–72\*01

108 sequences assigned  
21 (19.4%) exact matches, in which:  
21 unique CDR3  
4 unique J



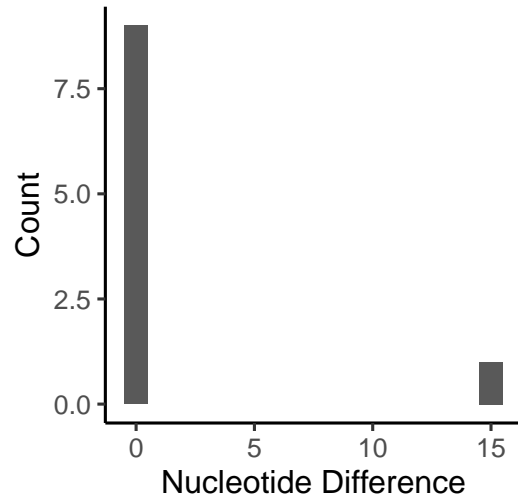
### IGHV4–4\*07

291 sequences assigned  
201 (69.1%) exact matches, in which:  
201 unique CDR3  
6 unique J



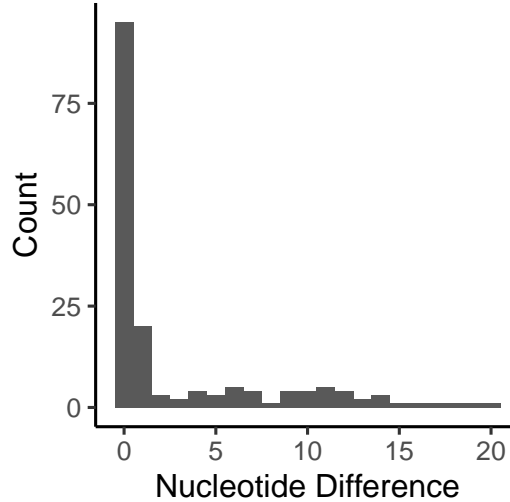
### IGHV3–64\*02

10 sequences assigned  
9 (90%) exact matches, in which:  
9 unique CDR3  
3 unique J



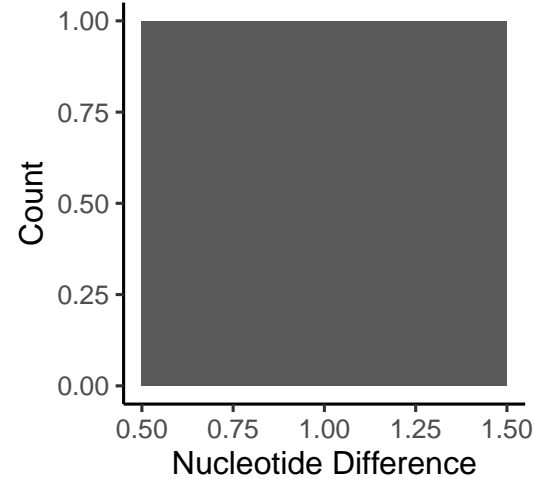
### IGHV3–73\*02

175 sequences assigned  
95 (54.3%) exact matches, in which:  
95 unique CDR3  
5 unique J



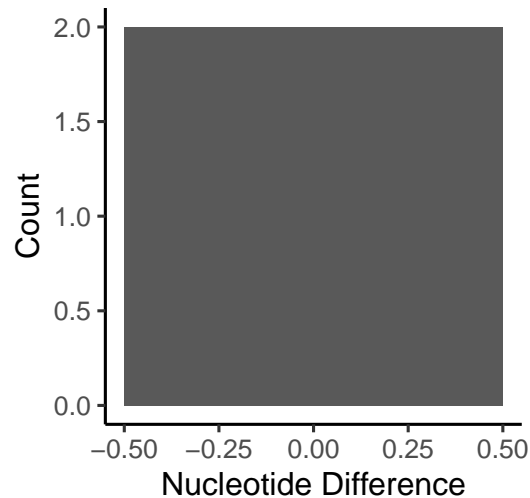
### IGHV4–28\*02

1 sequences assigned  
No exact matches.



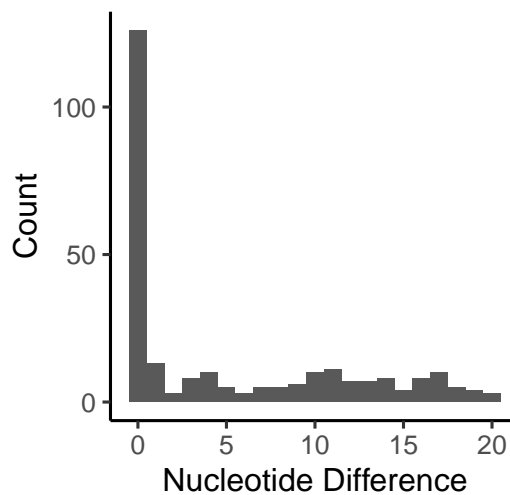
### IGHV3–69–1\*01

6 sequences assigned  
2 (33.3%) exact matches, in which:  
2 unique CDR3  
1 unique J



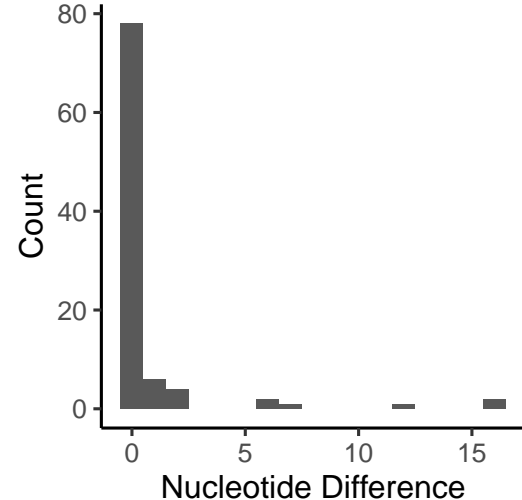
### IGHV3–74\*01

280 sequences assigned  
126 (45%) exact matches, in which:  
125 unique CDR3  
5 unique J



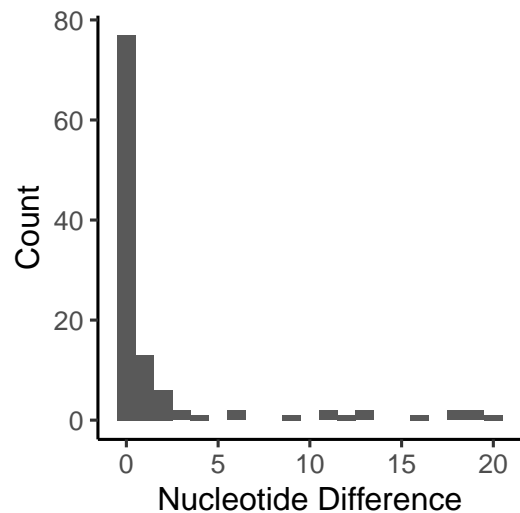
### IGHV4–30–2\*01

107 sequences assigned  
78 (72.9%) exact matches, in which:  
78 unique CDR3  
6 unique J



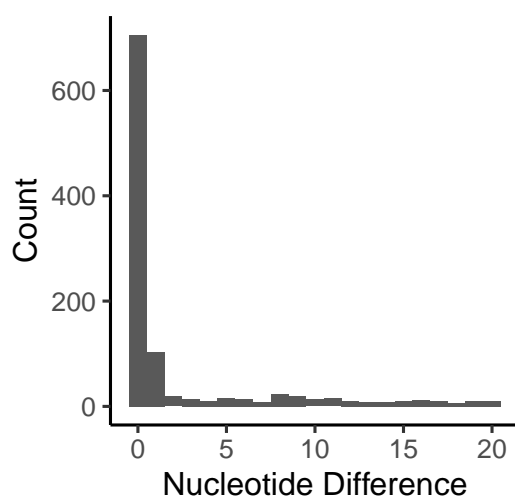
### IGHV4-30-4\*01

120 sequences assigned  
77 (64.2%) exact matches, in which:  
75 unique CDR3  
5 unique J



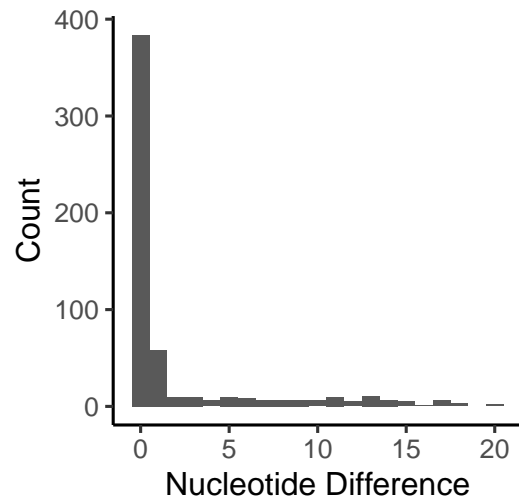
### IGHV4-39\*01

1113 sequences assigned  
706 (63.4%) exact matches, in which:  
702 unique CDR3  
6 unique J



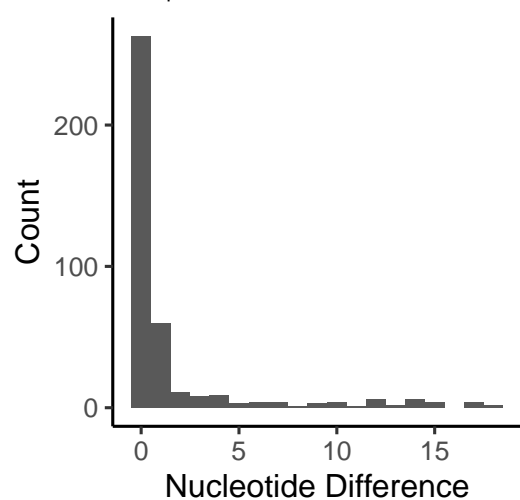
### IGHV5-51\*01

591 sequences assigned  
384 (65%) exact matches, in which:  
380 unique CDR3  
6 unique J



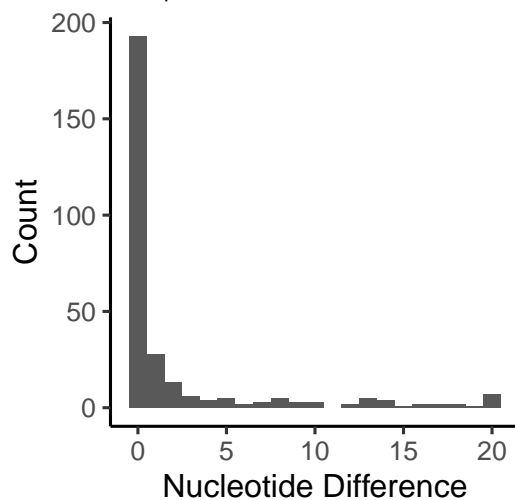
### IGHV4-31\*03

415 sequences assigned  
263 (63.4%) exact matches, in which:  
263 unique CDR3  
6 unique J



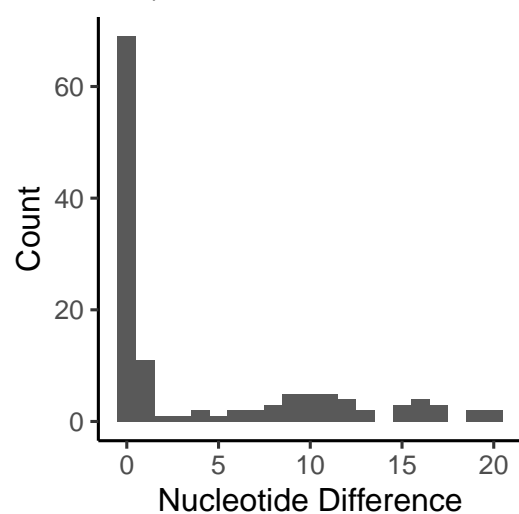
### IGHV4-59\*01

311 sequences assigned  
193 (62.1%) exact matches, in which:  
192 unique CDR3  
6 unique J



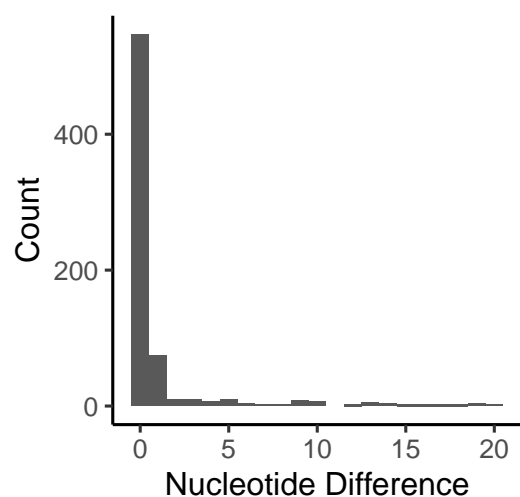
### IGHV6-1\*01

135 sequences assigned  
69 (51.1%) exact matches, in which:  
68 unique CDR3  
5 unique J



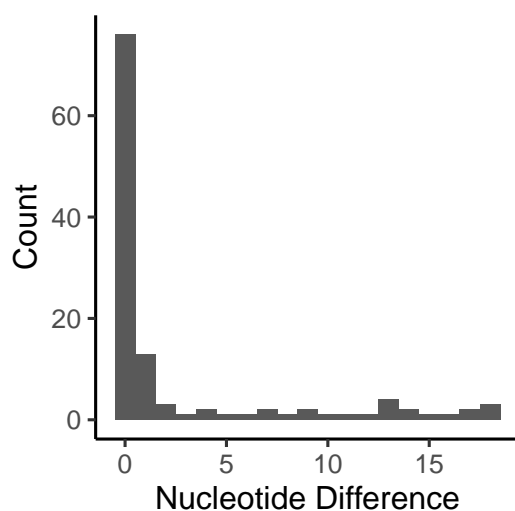
### IGHV4-34\*01

731 sequences assigned  
547 (74.8%) exact matches, in which:  
542 unique CDR3  
6 unique J



### IGHV4-61\*01

131 sequences assigned  
76 (58%) exact matches, in which:  
76 unique CDR3  
6 unique J





Warning – no inferred sequences found.