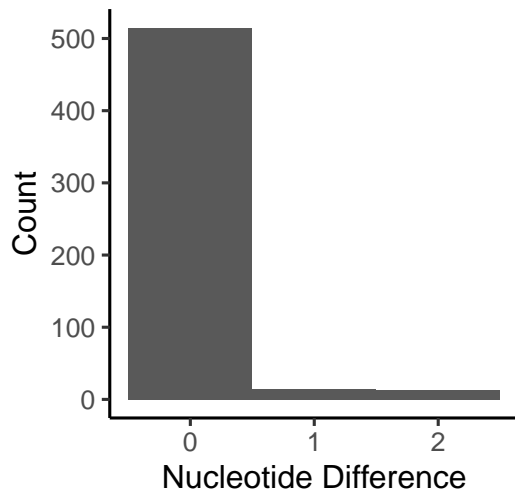


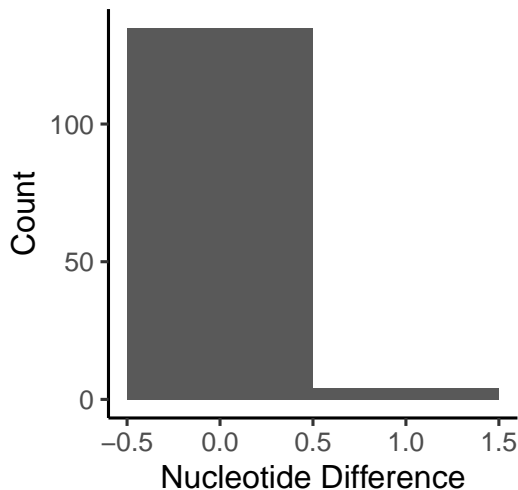
### IGHV1-2\*02

542 sequences assigned  
515 (95%) exact matches, in which:  
515 unique CDR3  
6 unique J



### IGHV1-24\*01

139 sequences assigned  
135 (97.1%) exact matches, in which:  
135 unique CDR3  
6 unique J



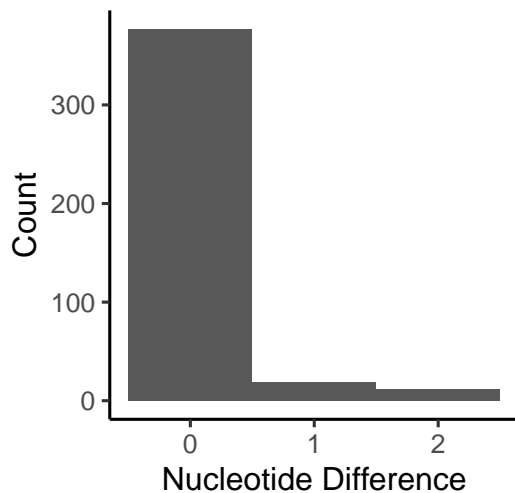
### IGHV1-69-2\*01

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



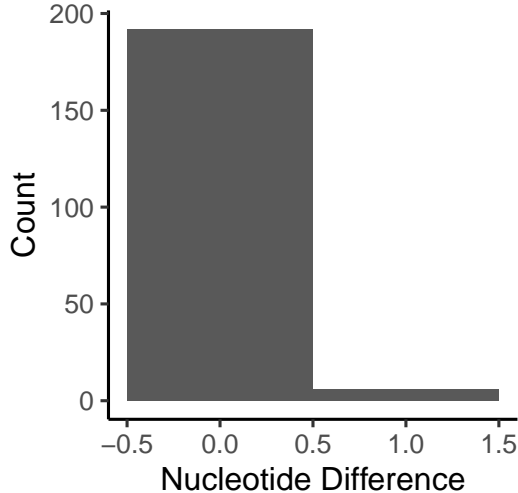
### IGHV1-8\*01

408 sequences assigned  
377 (92.4%) exact matches, in which:  
377 unique CDR3  
6 unique J



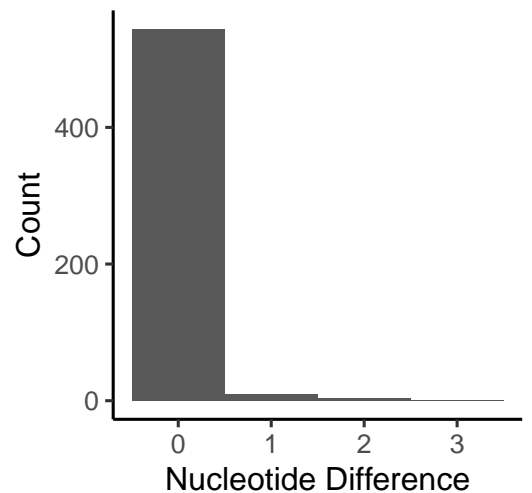
### IGHV1-46\*01

198 sequences assigned  
192 (97%) exact matches, in which:  
192 unique CDR3  
6 unique J



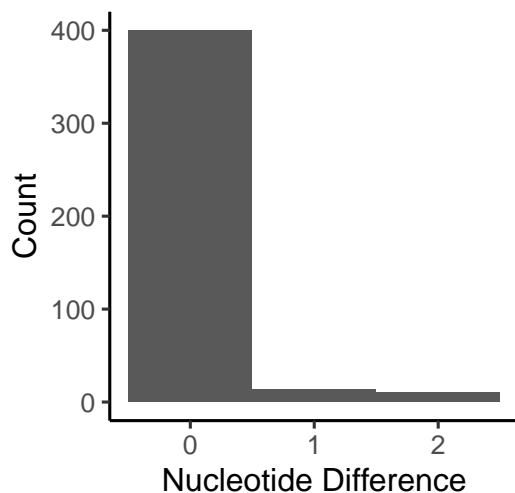
### IGHV1-69\*01\_12\_13

559 sequences assigned  
544 (97.3%) exact matches, in which:  
544 unique CDR3  
6 unique J



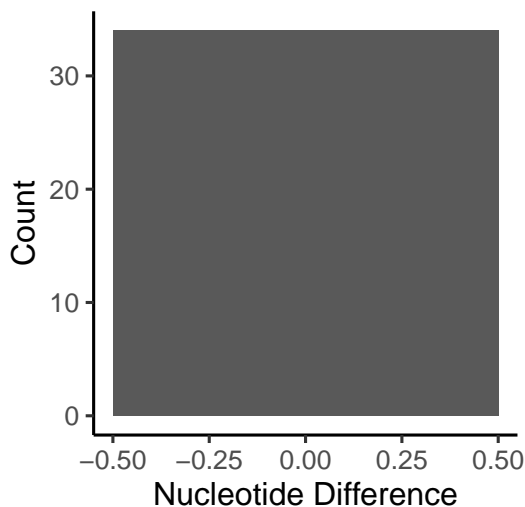
### IGHV1-18\*01

423 sequences assigned  
400 (94.6%) exact matches, in which:  
400 unique CDR3  
6 unique J



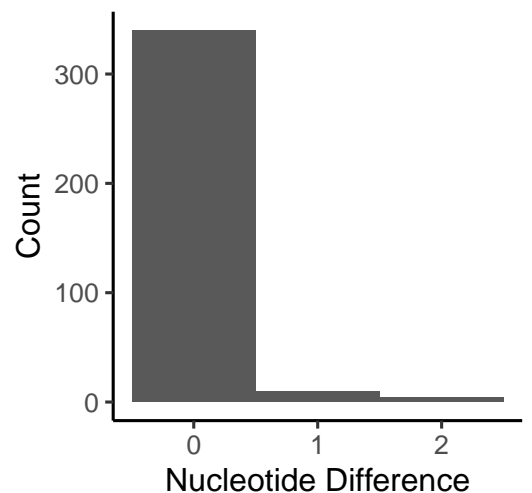
### IGHV1-58\*01\_03

34 sequences assigned  
34 (100%) exact matches, in which:  
34 unique CDR3  
4 unique J



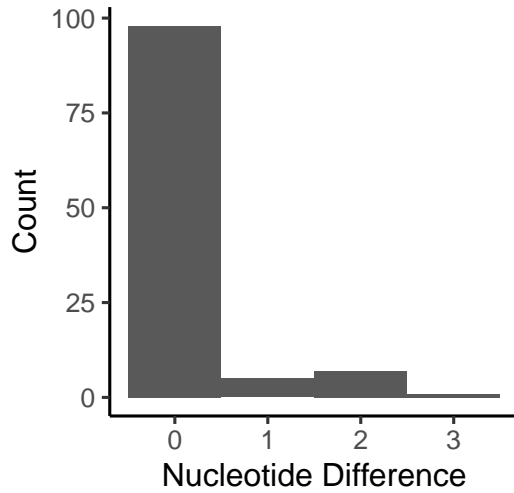
### IGHV1-69\*06\_14

354 sequences assigned  
340 (96%) exact matches, in which:  
340 unique CDR3  
6 unique J



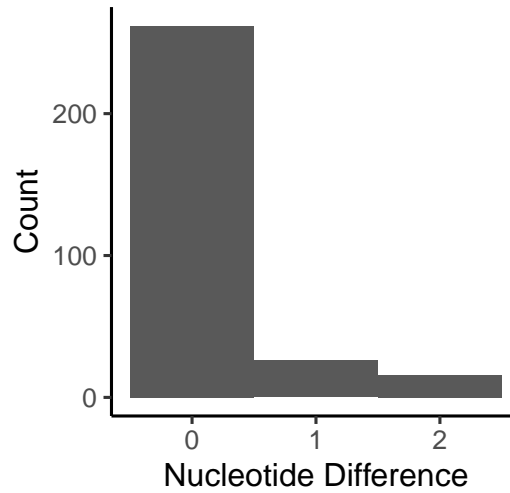
### IGHV2-5\*01

111 sequences assigned  
98 (88.3%) exact matches, in which:  
98 unique CDR3  
6 unique J



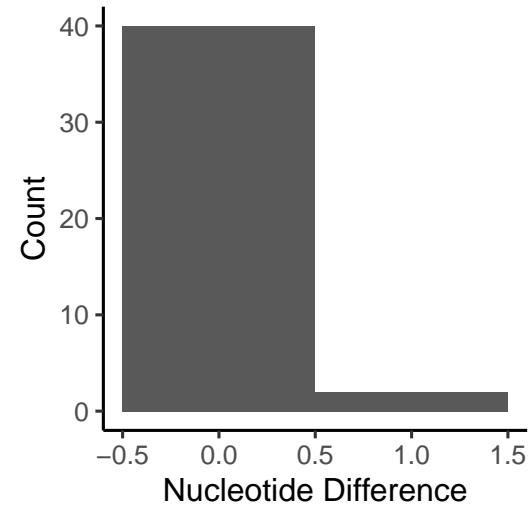
### IGHV3-7\*01

304 sequences assigned  
262 (86.2%) exact matches, in which:  
255 unique CDR3  
6 unique J



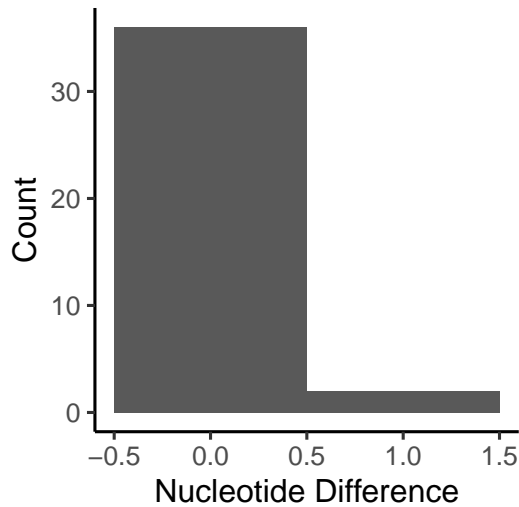
### IGHV3-13\*01

42 sequences assigned  
40 (95.2%) exact matches, in which:  
39 unique CDR3  
5 unique J



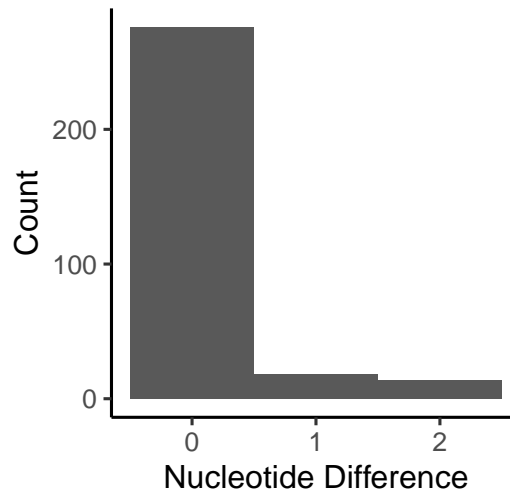
### IGHV2-26\*01

38 sequences assigned  
36 (94.7%) exact matches, in which:  
36 unique CDR3  
5 unique J



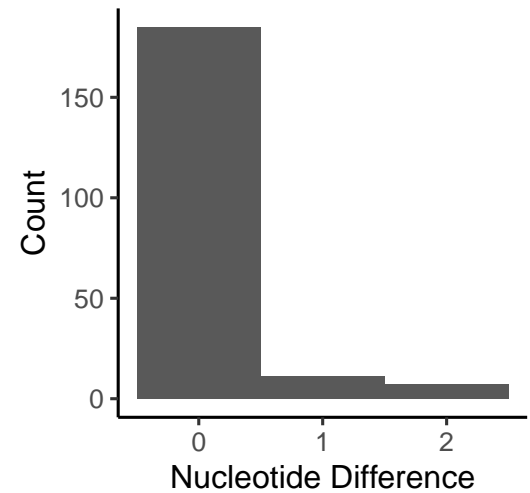
### IGHV3-9\*01

308 sequences assigned  
276 (89.6%) exact matches, in which:  
271 unique CDR3  
6 unique J



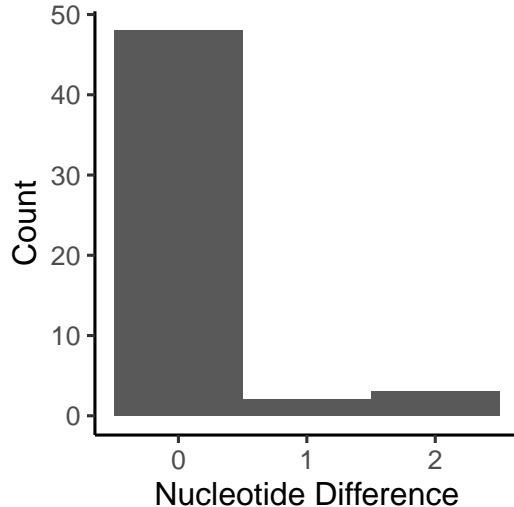
### IGHV3-15\*01\_02

203 sequences assigned  
185 (91.1%) exact matches, in which:  
184 unique CDR3  
6 unique J



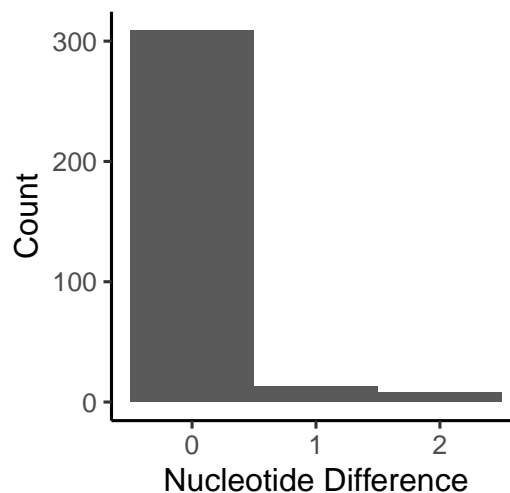
### IGHV2-70\*01

53 sequences assigned  
48 (90.6%) exact matches, in which:  
48 unique CDR3  
5 unique J



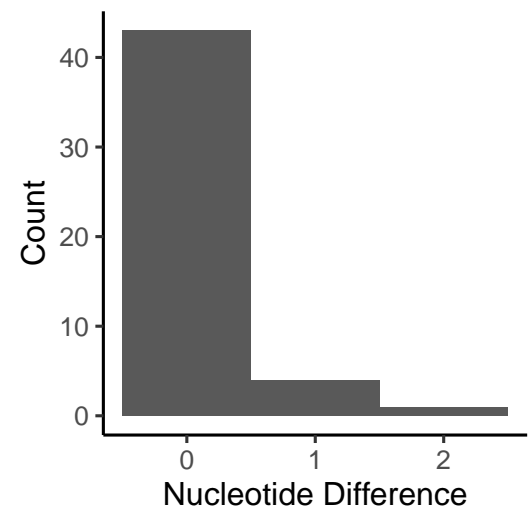
### IGHV3-11\*01

330 sequences assigned  
309 (93.6%) exact matches, in which:  
305 unique CDR3  
6 unique J



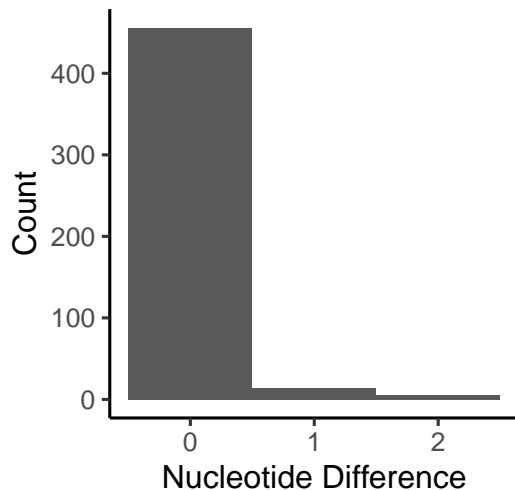
### IGHV3-20\*01\_02

48 sequences assigned  
43 (89.6%) exact matches, in which:  
43 unique CDR3  
5 unique J



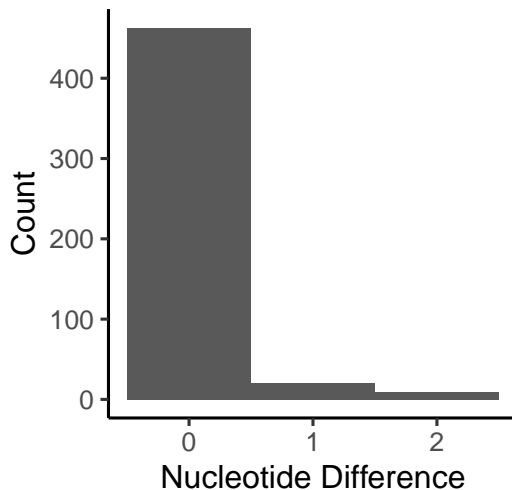
### IGHV3-21\*01\_02

475 sequences assigned  
456 (96%) exact matches, in which:  
446 unique CDR3  
6 unique J



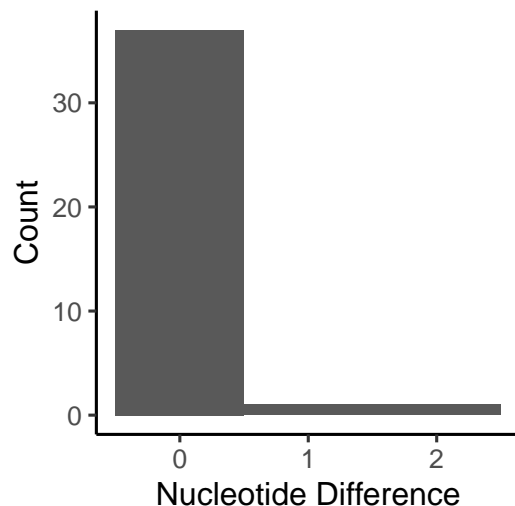
### IGHV3-33\*01

492 sequences assigned  
463 (94.1%) exact matches, in which:  
453 unique CDR3  
6 unique J



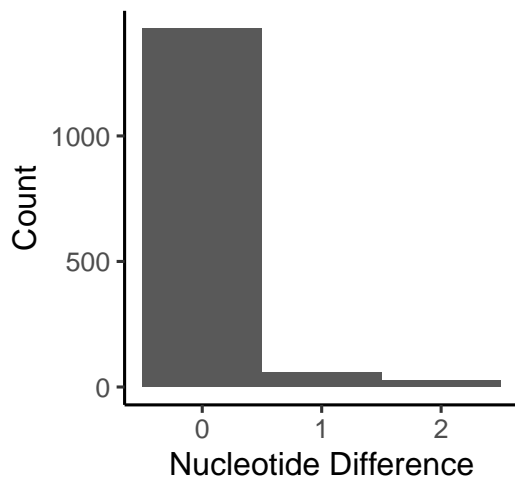
### IGHV3-49\*03\_05

39 sequences assigned  
37 (94.9%) exact matches, in which:  
36 unique CDR3  
4 unique J



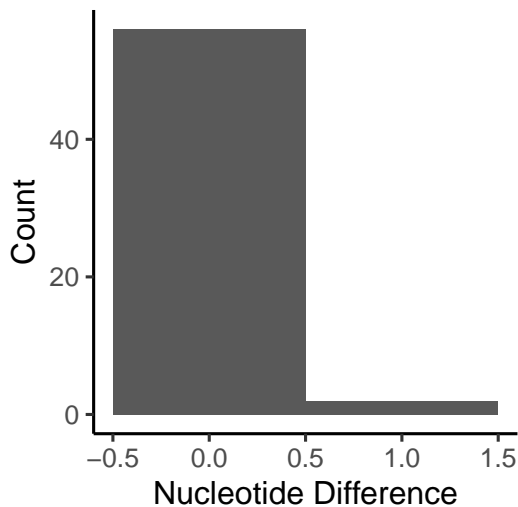
### IGHV3-23\*01\_04

1512 sequences assigned  
1427 (94.4%) exact matches, in which:  
1386 unique CDR3  
6 unique J



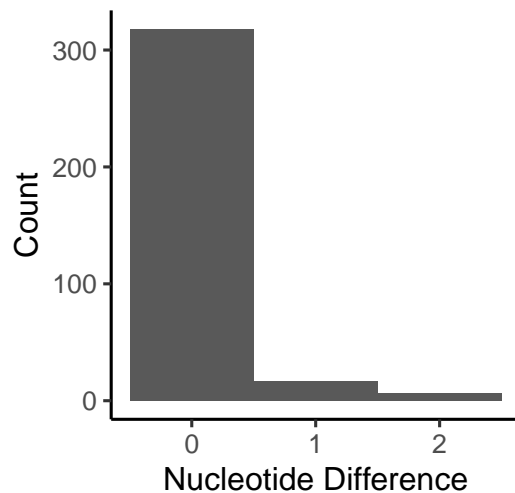
### IGHV3-43\*01

58 sequences assigned  
56 (96.6%) exact matches, in which:  
56 unique CDR3  
6 unique J



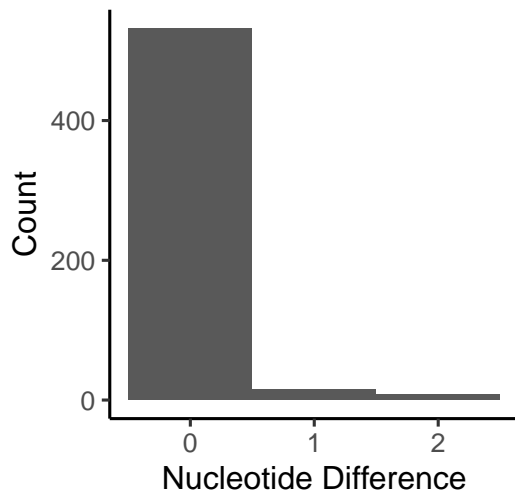
### IGHV3-53\*01\_02

341 sequences assigned  
318 (93.3%) exact matches, in which:  
310 unique CDR3  
6 unique J



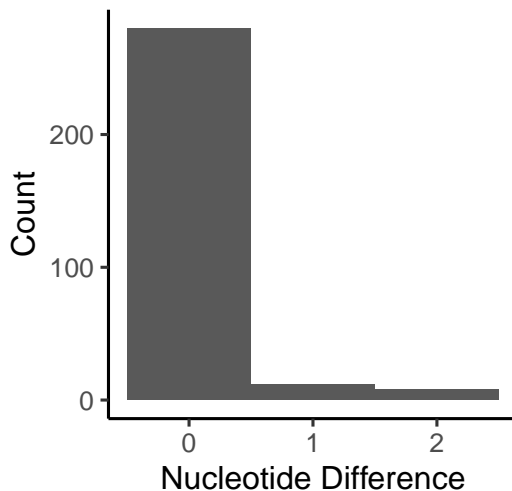
### IGHV3-30-3\*01

555 sequences assigned  
532 (95.9%) exact matches, in which:  
527 unique CDR3  
6 unique J



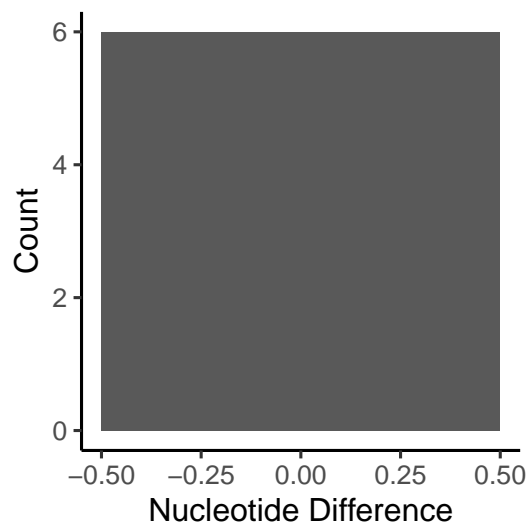
### IGHV3-48\*02

300 sequences assigned  
280 (93.3%) exact matches, in which:  
275 unique CDR3  
6 unique J



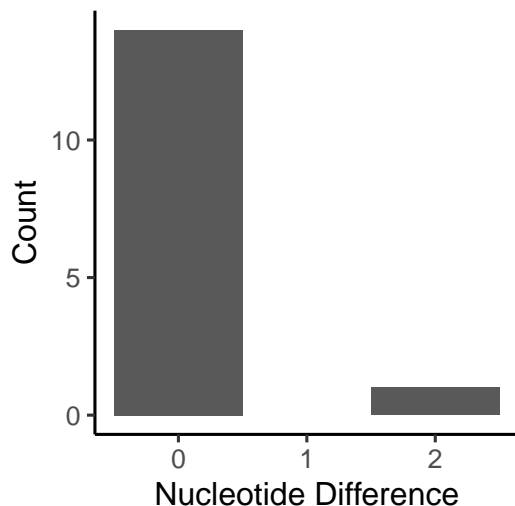
### IGHV3-64\*02\_07

6 sequences assigned  
6 (100%) exact matches, in which:  
6 unique CDR3  
3 unique J



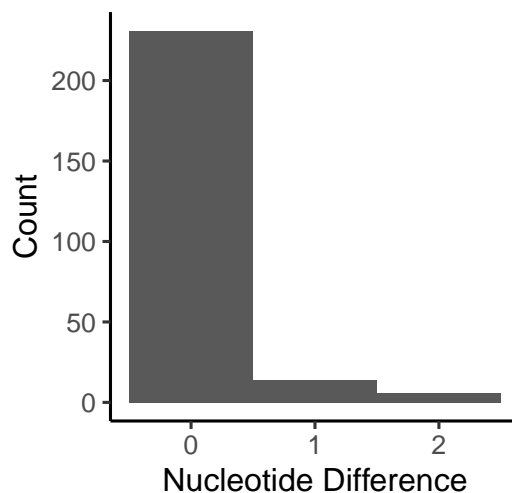
### IGHV3-72\*01

15 sequences assigned  
14 (93.3%) exact matches, in which:  
14 unique CDR3  
3 unique J



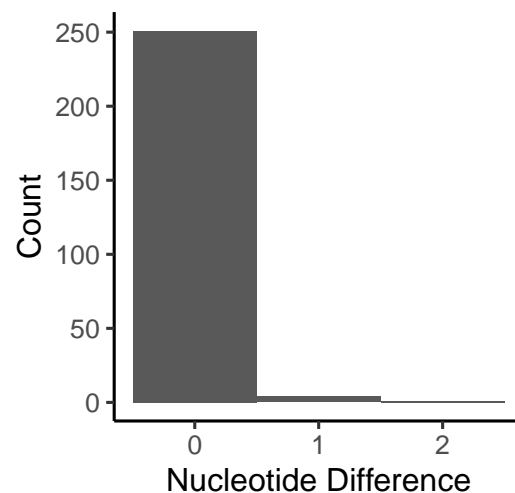
### IGHV4-4\*07

251 sequences assigned  
231 (92%) exact matches, in which:  
228 unique CDR3  
6 unique J



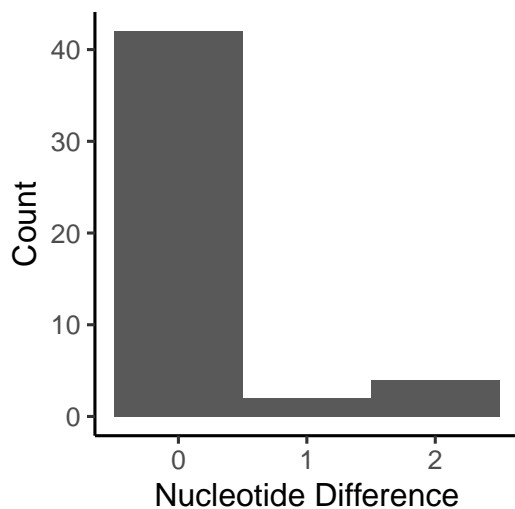
### IGHV4-30-4\*01

256 sequences assigned  
251 (98%) exact matches, in which:  
247 unique CDR3  
6 unique J



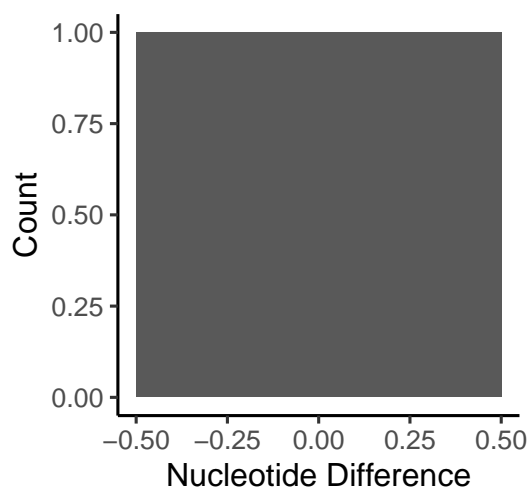
### IGHV3-73\*01\_02

48 sequences assigned  
42 (87.5%) exact matches, in which:  
42 unique CDR3  
5 unique J



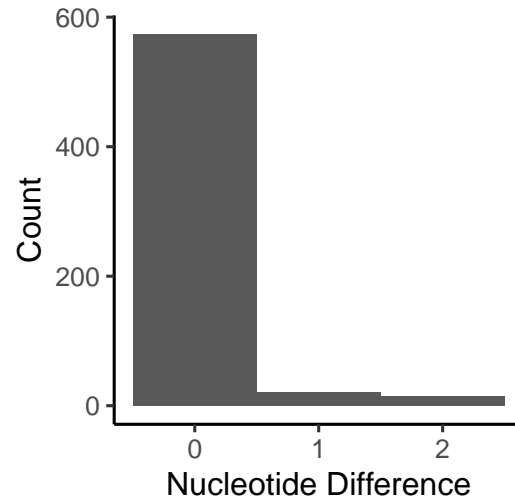
### IGHV4-28\*01\_07

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



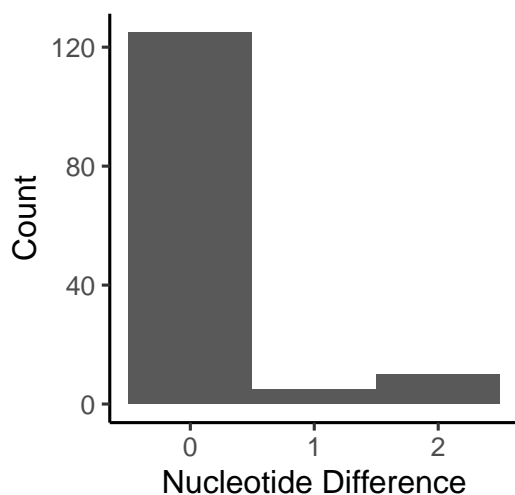
### IGHV4-31\*02

610 sequences assigned  
574 (94.1%) exact matches, in which:  
570 unique CDR3  
6 unique J



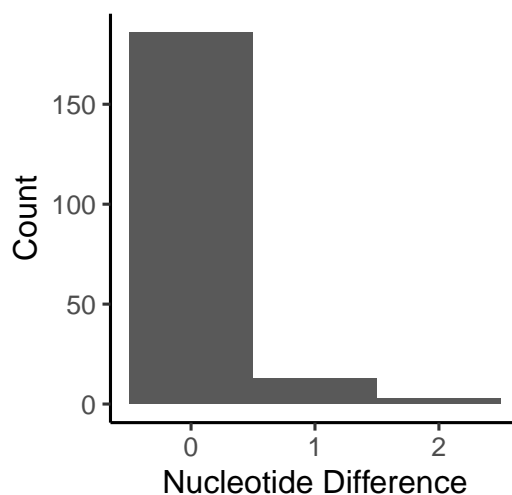
### IGHV3-74\*01\_02

140 sequences assigned  
125 (89.3%) exact matches, in which:  
116 unique CDR3  
5 unique J



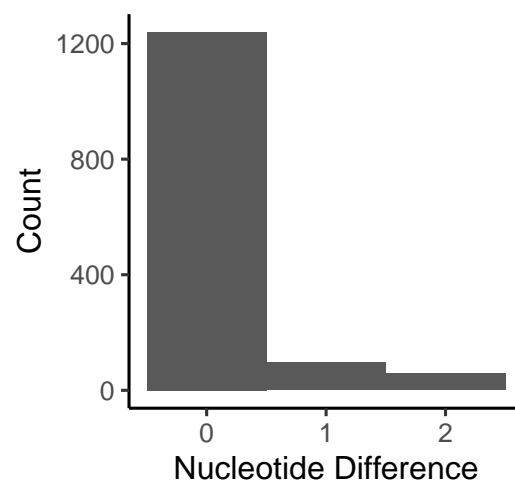
### IGHV4-30-2\*01

202 sequences assigned  
186 (92.1%) exact matches, in which:  
180 unique CDR3  
6 unique J



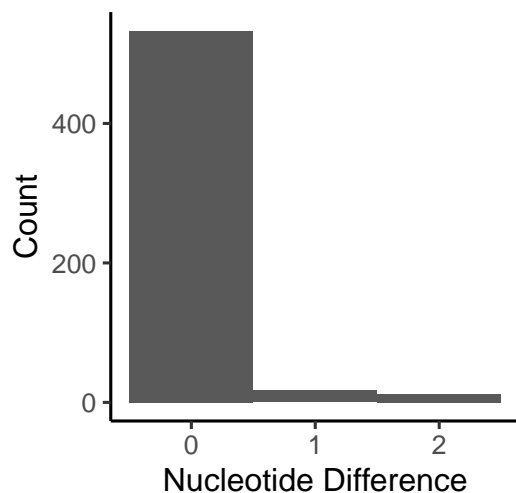
### IGHV4-34\*01\_02

1394 sequences assigned  
1240 (89%) exact matches, in which:  
1213 unique CDR3  
6 unique J



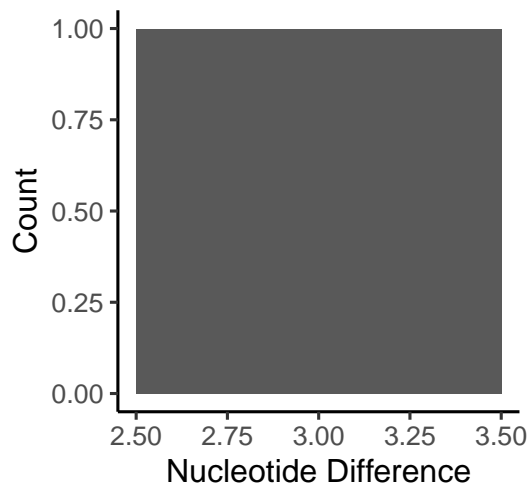
### IGHV4-39\*02\_C258G

562 sequences assigned  
533 (94.8%) exact matches, in which:  
526 unique CDR3  
6 unique J



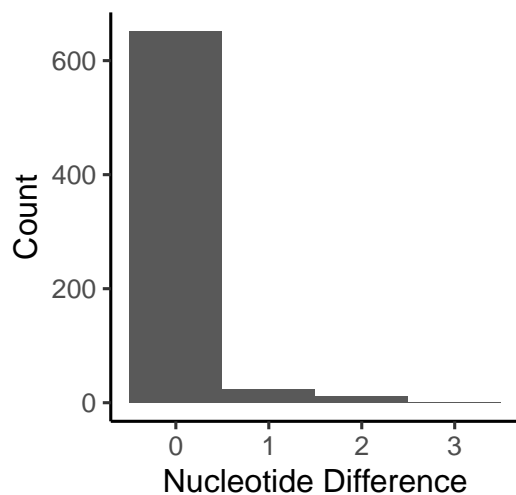
### IGHV4/OR15-8\*01

1 sequences assigned  
No exact matches.



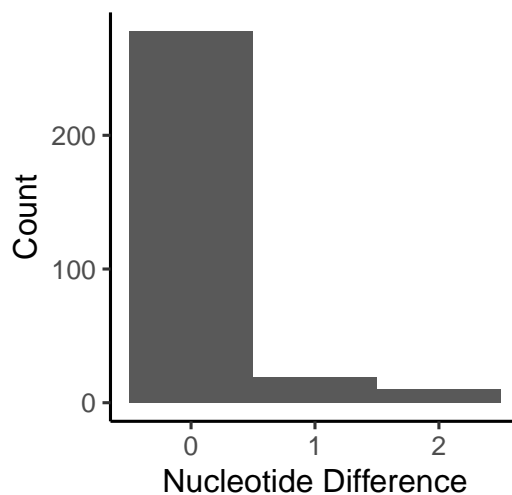
### IGHV4-59\*02\_G88A

688 sequences assigned  
652 (94.8%) exact matches, in which:  
638 unique CDR3  
6 unique J



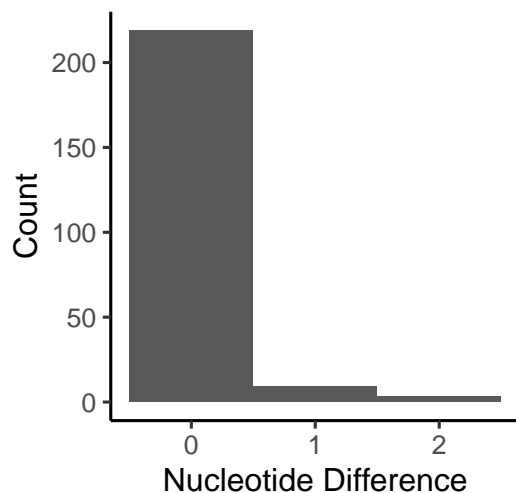
### IGHV5-51\*07\_A128G

307 sequences assigned  
278 (90.6%) exact matches, in which:  
277 unique CDR3  
6 unique J



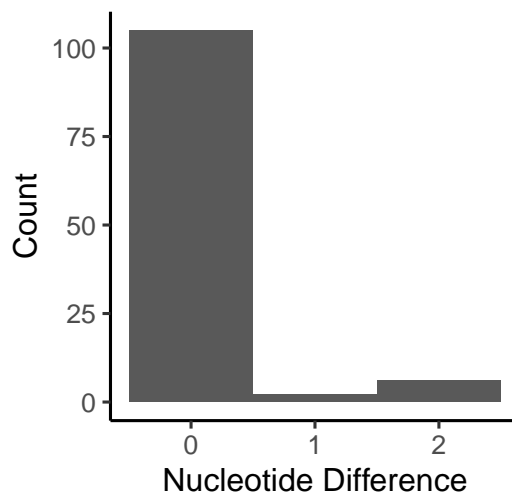
### IGHV4-61\*01

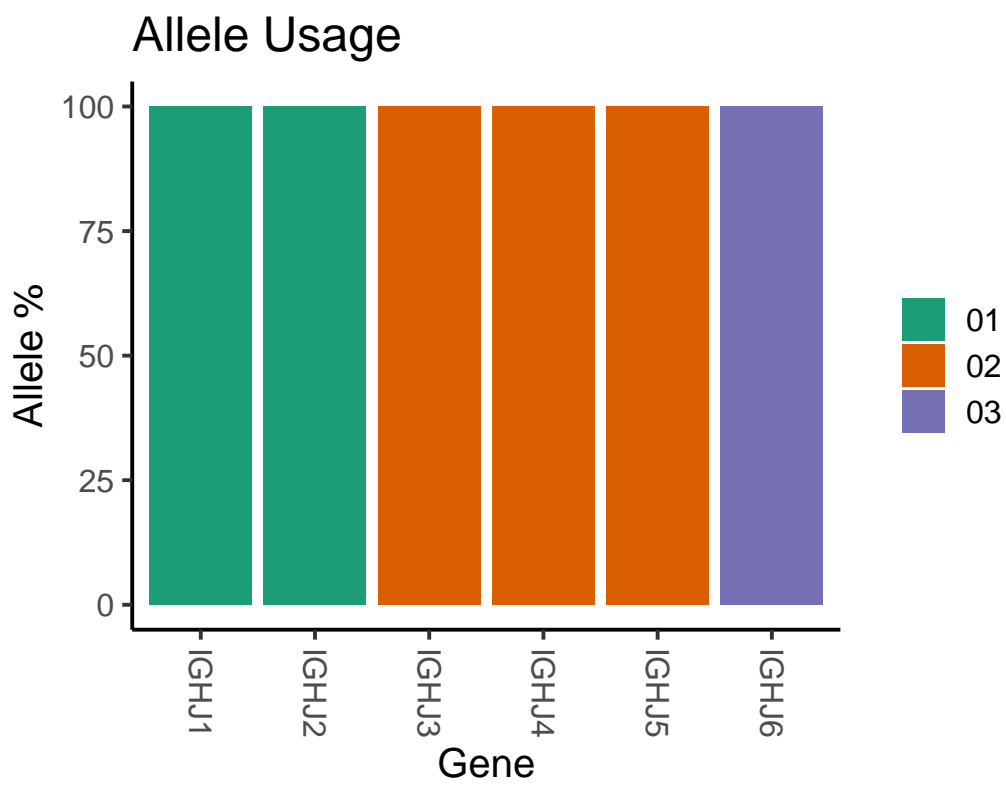
231 sequences assigned  
219 (94.8%) exact matches, in which:  
218 unique CDR3  
6 unique J



### IGHV6-1\*01\_02

113 sequences assigned  
105 (92.9%) exact matches, in which:  
105 unique CDR3  
6 unique J





Warning – no inferred sequences found.