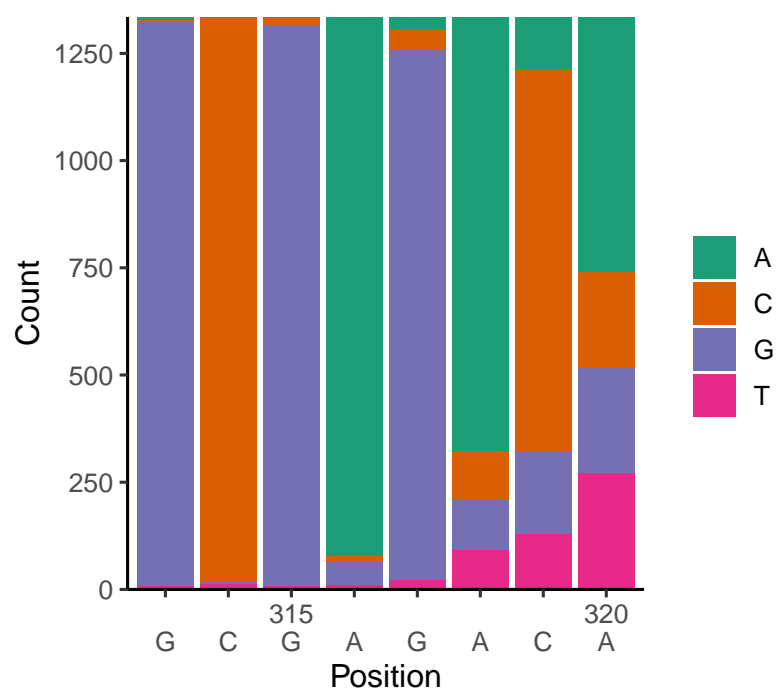


# Gene IGHV4-39\*01\_C66G



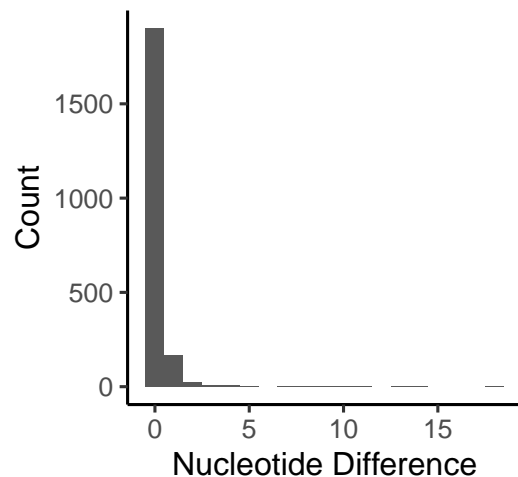
Gene IGHV4-39\*01\_C66G





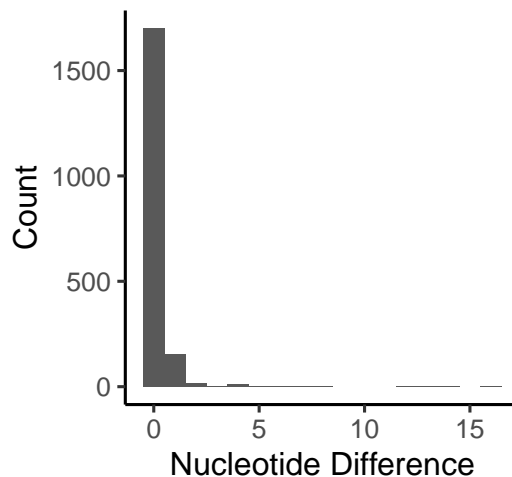
### IGHV1-2\*02

2124 sequences assigned  
1900 (89.5%) exact matches, in which:  
1798 unique CDR3  
7 unique J



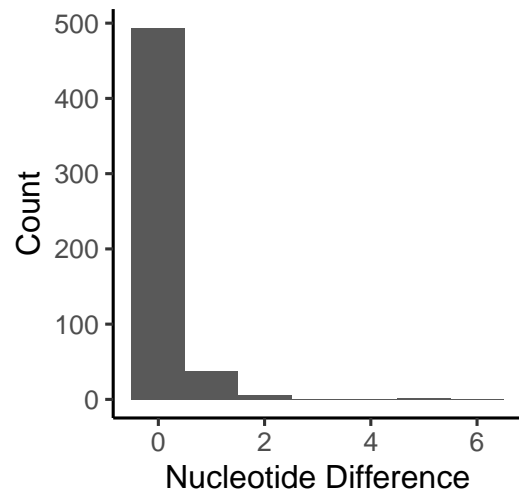
### IGHV1-18\*01

1898 sequences assigned  
1700 (89.6%) exact matches, in which:  
1625 unique CDR3  
7 unique J



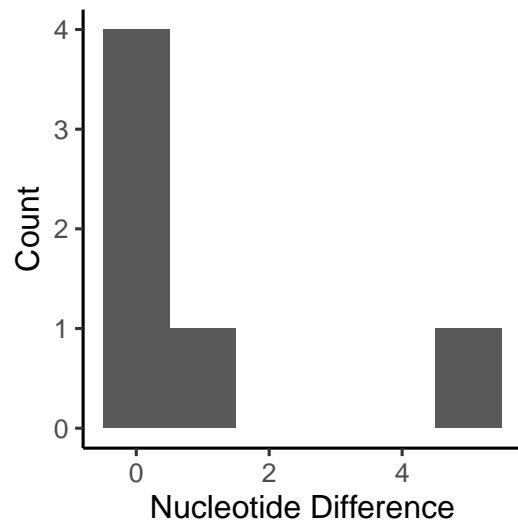
### IGHV1-46\*01

543 sequences assigned  
494 (91%) exact matches, in which:  
475 unique CDR3  
7 unique J



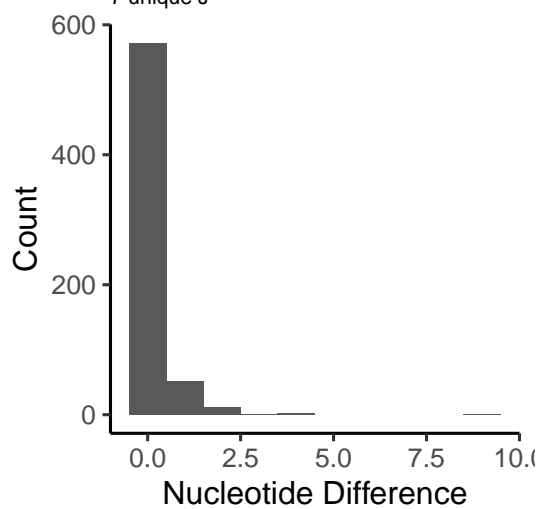
### IGHV1-3\*02

6 sequences assigned  
4 (66.7%) exact matches, in which:  
3 unique CDR3  
3 unique J



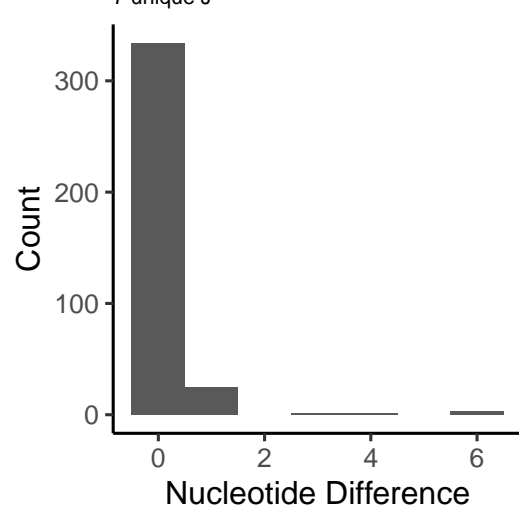
### IGHV1-24\*01

639 sequences assigned  
572 (89.5%) exact matches, in which:  
544 unique CDR3  
7 unique J



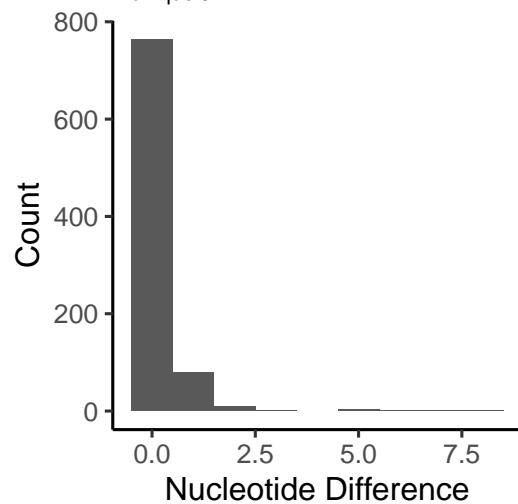
### IGHV1-46\*03

364 sequences assigned  
334 (91.8%) exact matches, in which:  
314 unique CDR3  
7 unique J



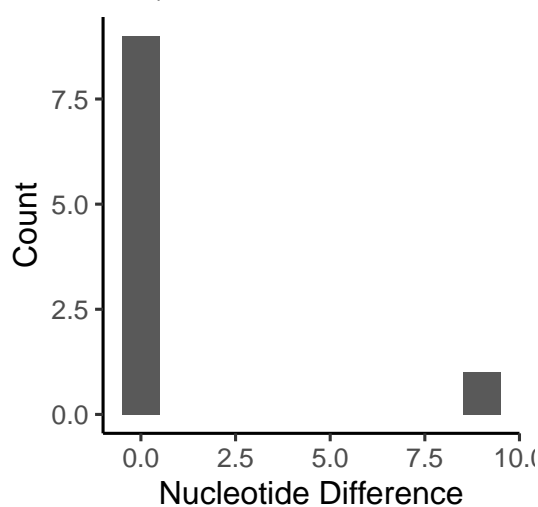
### IGHV1-8\*01

860 sequences assigned  
764 (88.8%) exact matches, in which:  
725 unique CDR3  
7 unique J



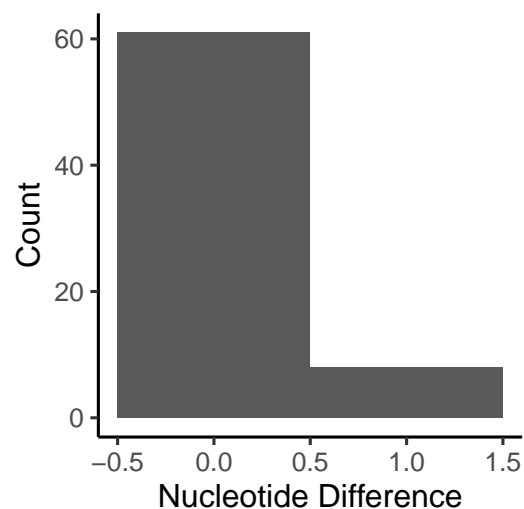
### IGHV1-45\*02

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



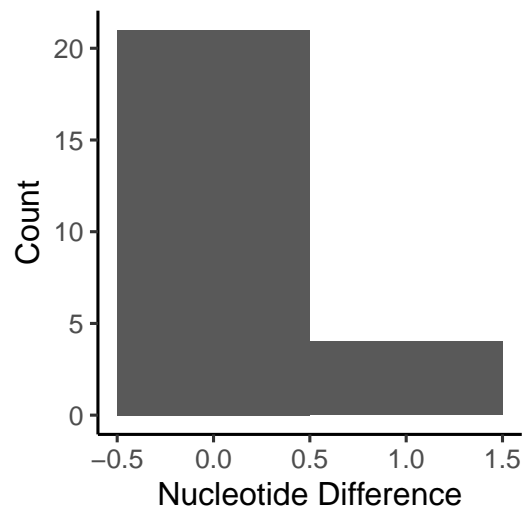
### IGHV1-58\*01

69 sequences assigned  
61 (88.4%) exact matches, in which:  
60 unique CDR3  
5 unique J



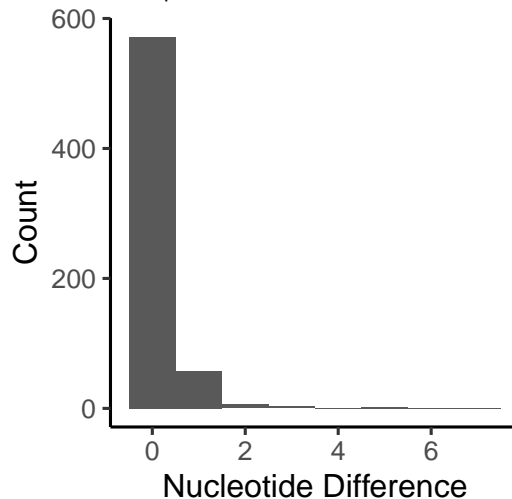
### IGHV1-58\*02

25 sequences assigned  
21 (84%) exact matches, in which:  
20 unique CDR3  
3 unique J



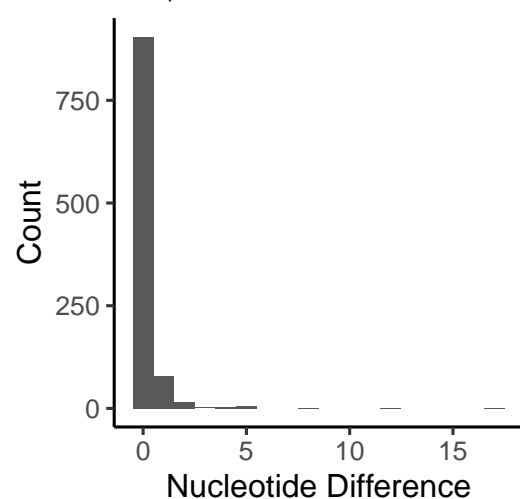
### IGHV1-69\*02

643 sequences assigned  
572 (89%) exact matches, in which:  
540 unique CDR3  
6 unique J



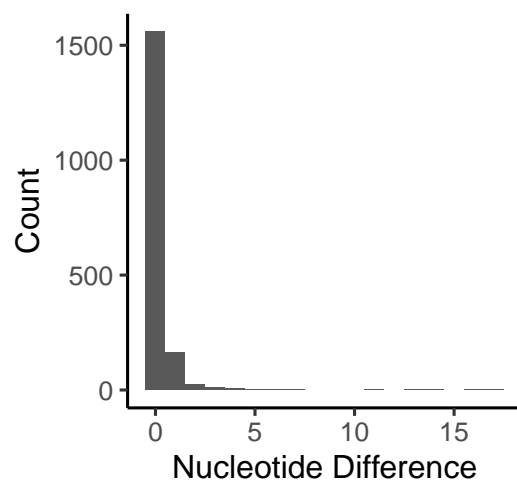
### IGHV2-5\*02

1013 sequences assigned  
905 (89.3%) exact matches, in which:  
876 unique CDR3  
7 unique J



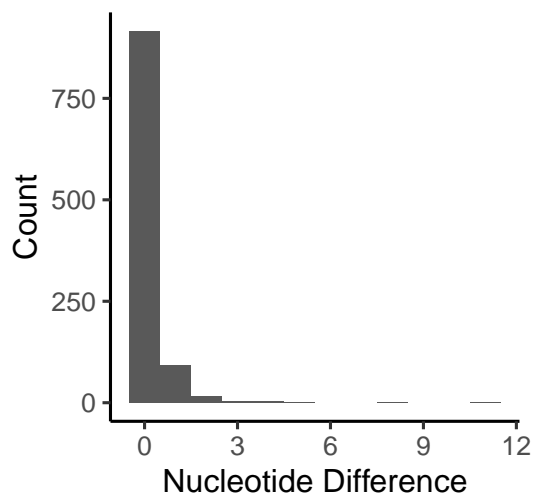
### IGHV1-69\*01

1778 sequences assigned  
1559 (87.7%) exact matches, in which:  
1457 unique CDR3  
7 unique J



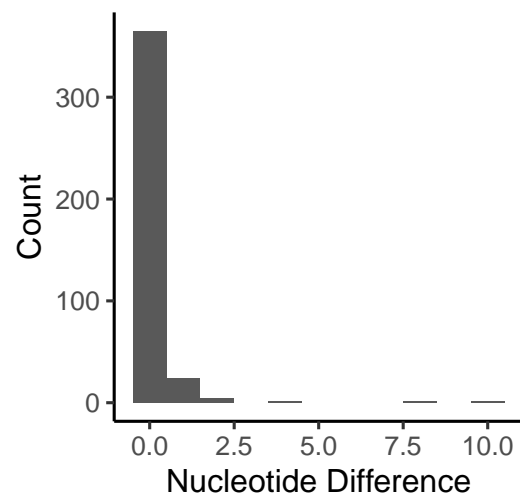
### IGHV1-69\*06

1035 sequences assigned  
916 (88.5%) exact matches, in which:  
870 unique CDR3  
7 unique J



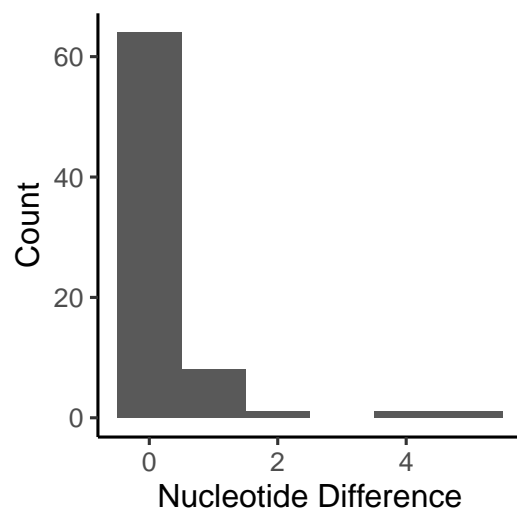
### IGHV2-26\*01

397 sequences assigned  
365 (91.9%) exact matches, in which:  
353 unique CDR3  
7 unique J



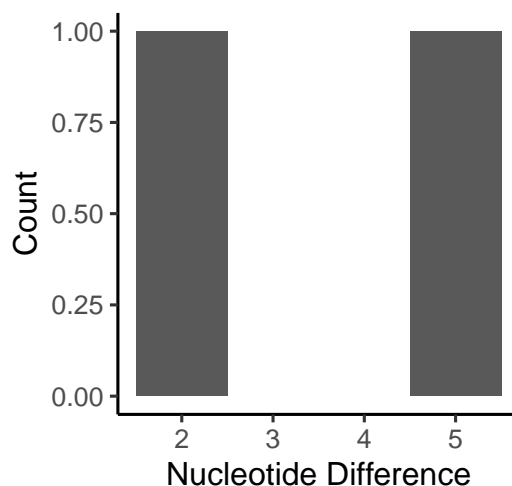
### IGHV1-69-2\*01

75 sequences assigned  
64 (85.3%) exact matches, in which:  
62 unique CDR3  
5 unique J



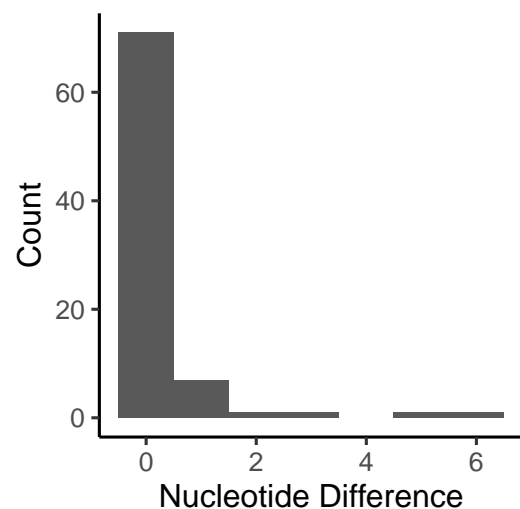
### IGHV1-NL1\*01

2 sequences assigned  
No exact matches.



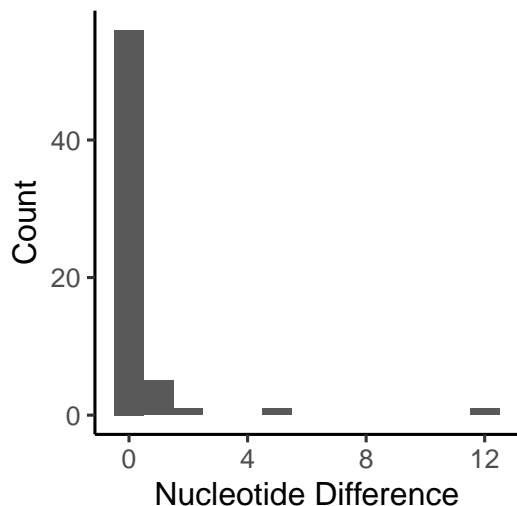
### IGHV2-70\*01

82 sequences assigned  
71 (86.6%) exact matches, in which:  
69 unique CDR3  
5 unique J



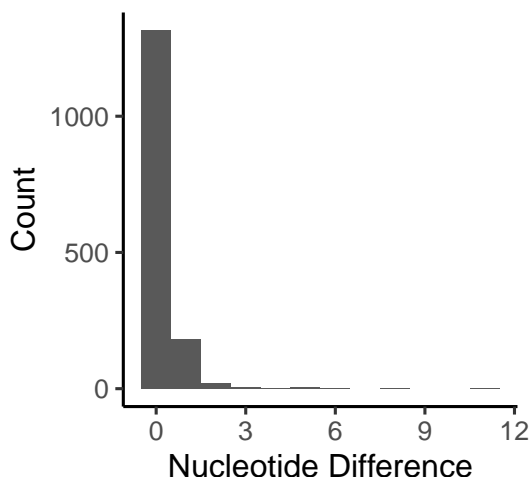
## IGHV2-70\*04

64 sequences assigned  
56 (87.5%) exact matches, in which:  
54 unique CDR3  
5 unique J



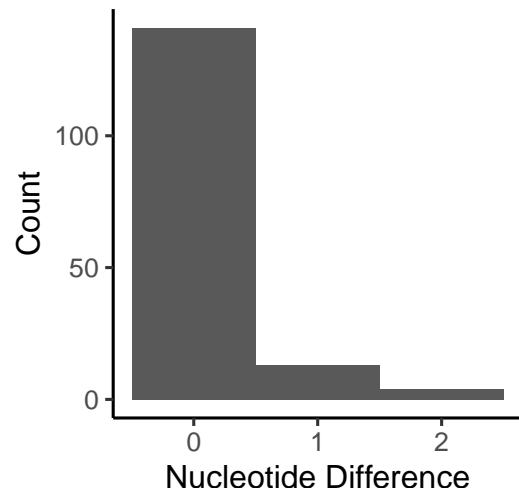
## IGHV3-9\*01

1533 sequences assigned  
1315 (85.8%) exact matches, in which:  
1186 unique CDR3  
6 unique J



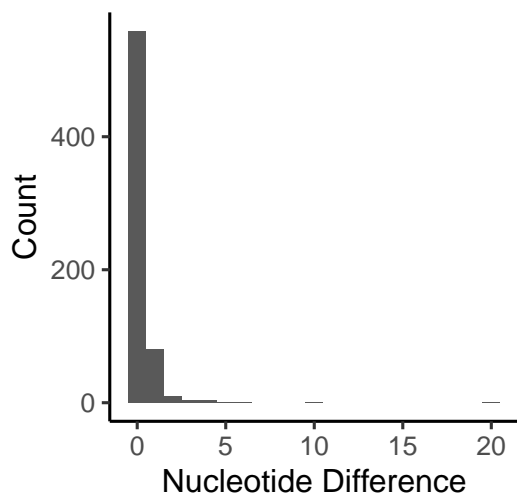
## IGHV3-13\*01

158 sequences assigned  
141 (89.2%) exact matches, in which:  
135 unique CDR3  
5 unique J



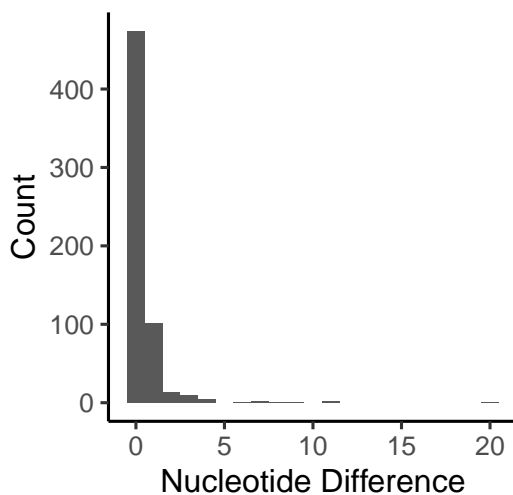
## IGHV3-7\*01

661 sequences assigned  
559 (84.6%) exact matches, in which:  
533 unique CDR3  
7 unique J



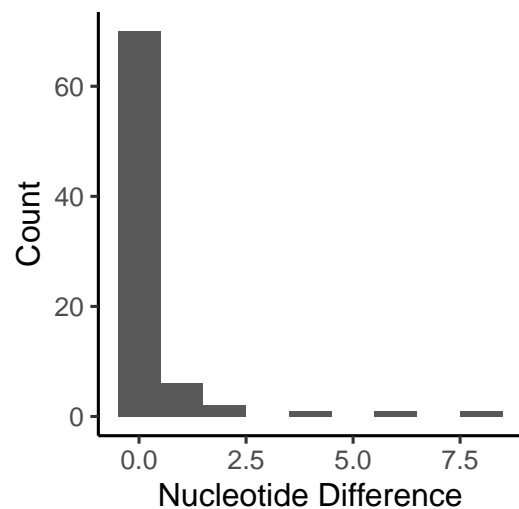
## IGHV3-11\*01

610 sequences assigned  
474 (77.7%) exact matches, in which:  
445 unique CDR3  
6 unique J



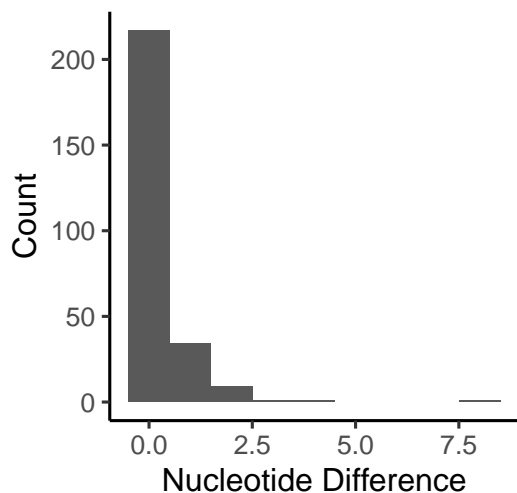
## IGHV3-13\*05

81 sequences assigned  
70 (86.4%) exact matches, in which:  
68 unique CDR3  
5 unique J



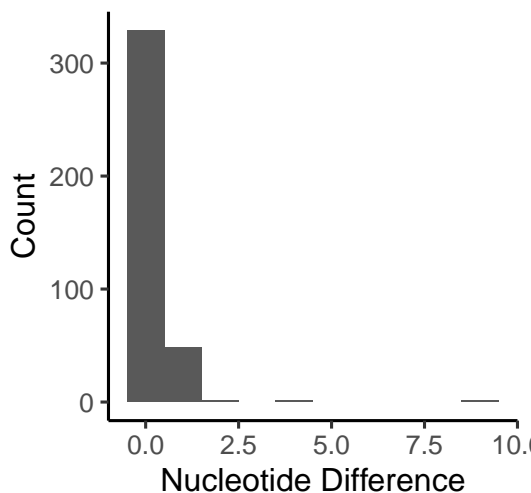
## IGHV3-7\*04

263 sequences assigned  
217 (82.5%) exact matches, in which:  
208 unique CDR3  
7 unique J



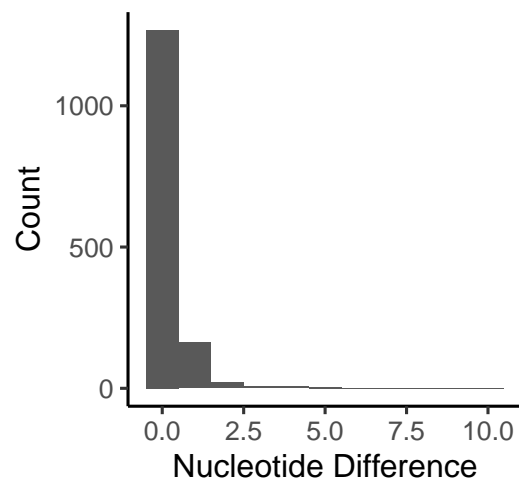
## IGHV3-11\*06

381 sequences assigned  
329 (86.4%) exact matches, in which:  
314 unique CDR3  
6 unique J



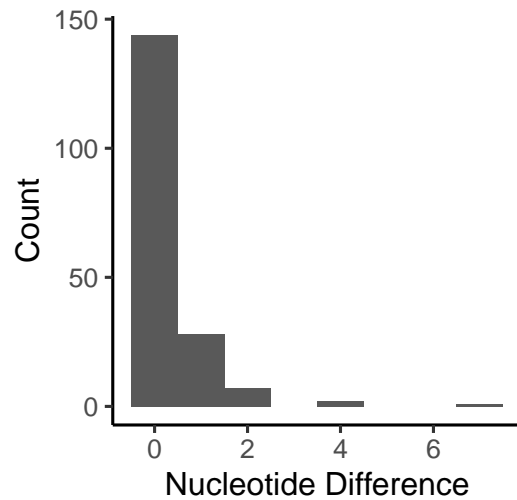
## IGHV3-15\*01

1474 sequences assigned  
1268 (86%) exact matches, in which:  
1198 unique CDR3  
7 unique J



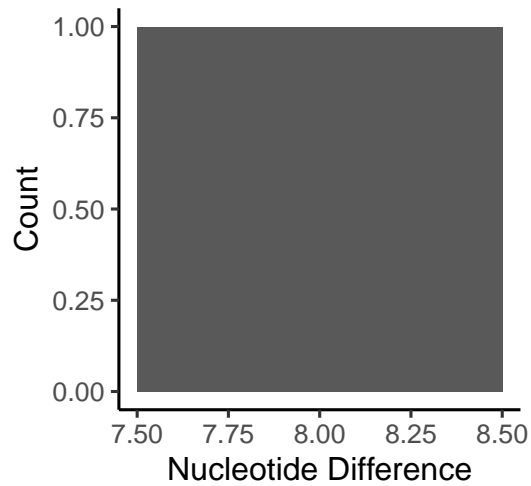
### IGHV3-20\*01

182 sequences assigned  
144 (79.1%) exact matches, in which:  
134 unique CDR3  
6 unique J



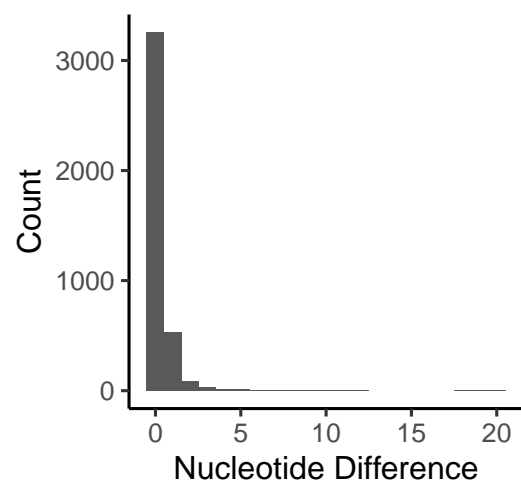
### IGHV3-25\*04

1 sequences assigned  
No exact matches.



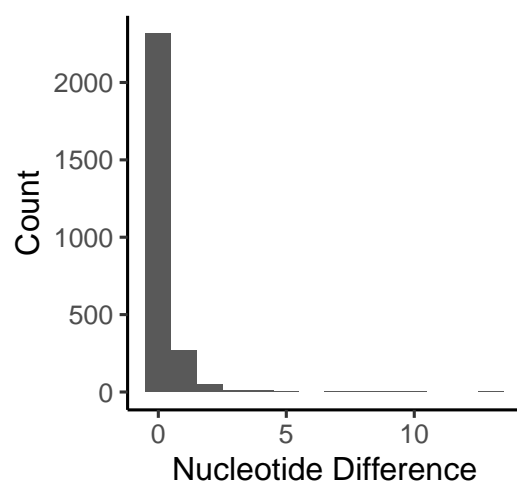
### IGHV3-33\*01

3952 sequences assigned  
3255 (82.4%) exact matches, in which:  
3065 unique CDR3  
7 unique J



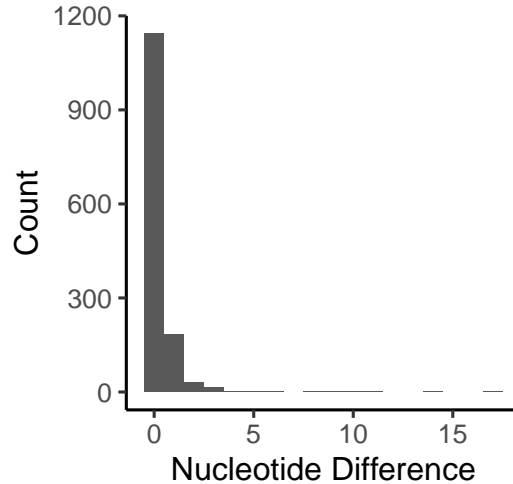
### IGHV3-21\*01

2665 sequences assigned  
2315 (86.9%) exact matches, in which:  
2191 unique CDR3  
7 unique J



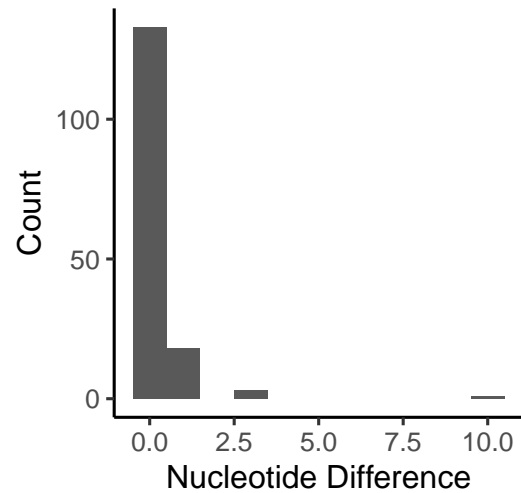
### IGHV3-30-3\*01

1390 sequences assigned  
1143 (82.2%) exact matches, in which:  
1068 unique CDR3  
7 unique J



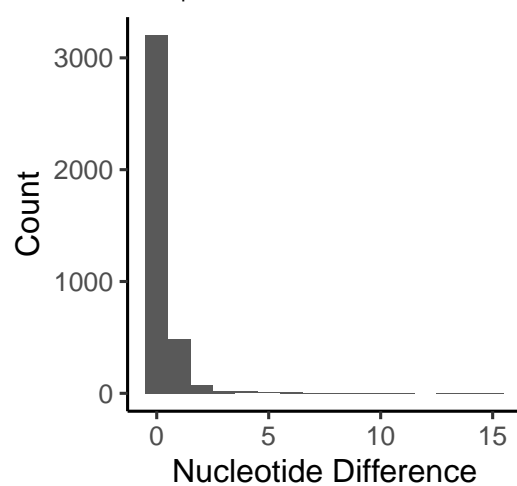
### IGHV3-43\*01

155 sequences assigned  
133 (85.8%) exact matches, in which:  
123 unique CDR3  
7 unique J



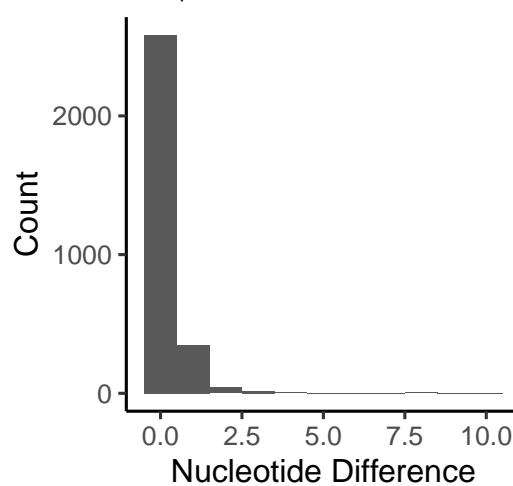
### IGHV3-23\*01

3847 sequences assigned  
3204 (83.3%) exact matches, in which:  
2967 unique CDR3  
7 unique J



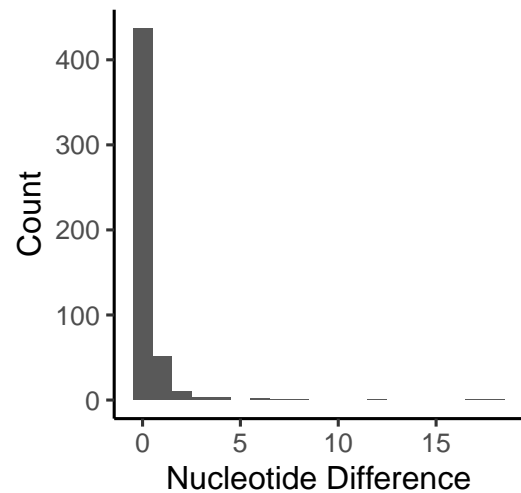
### IGHV3-30\*18

3017 sequences assigned  
2583 (85.6%) exact matches, in which:  
2460 unique CDR3  
7 unique J



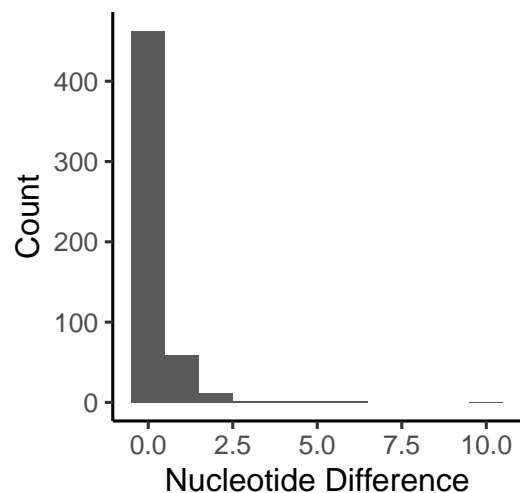
### IGHV3-48\*01

511 sequences assigned  
437 (85.5%) exact matches, in which:  
416 unique CDR3  
6 unique J



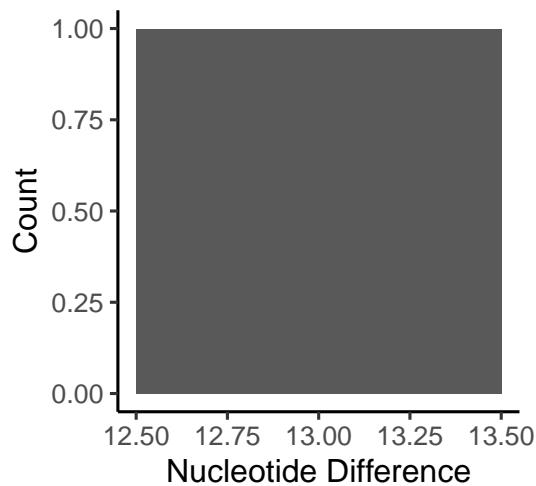
### IGHV3-48\*02

543 sequences assigned  
463 (85.3%) exact matches, in which:  
445 unique CDR3  
7 unique J



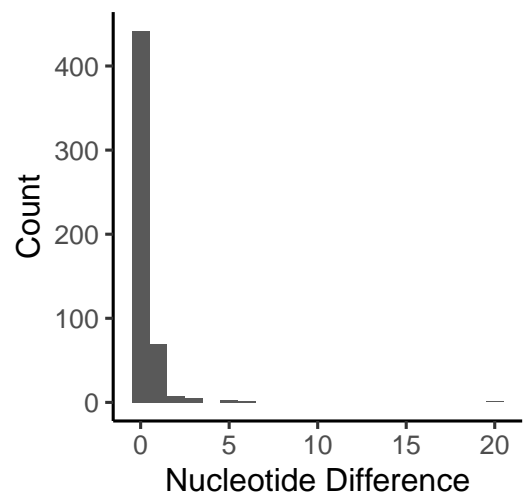
### IGHV3-52\*01

1 sequences assigned  
No exact matches.



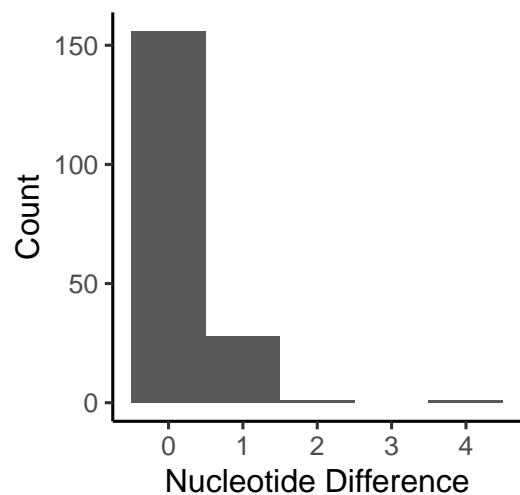
### IGHV3-66\*02

530 sequences assigned  
442 (83.4%) exact matches, in which:  
421 unique CDR3  
7 unique J



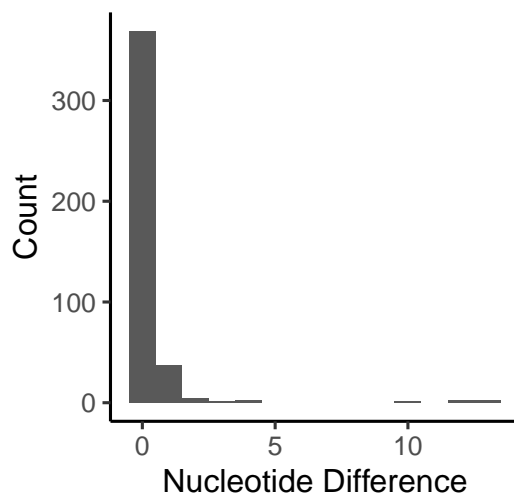
### IGHV3-49\*03

186 sequences assigned  
156 (83.9%) exact matches, in which:  
150 unique CDR3  
5 unique J



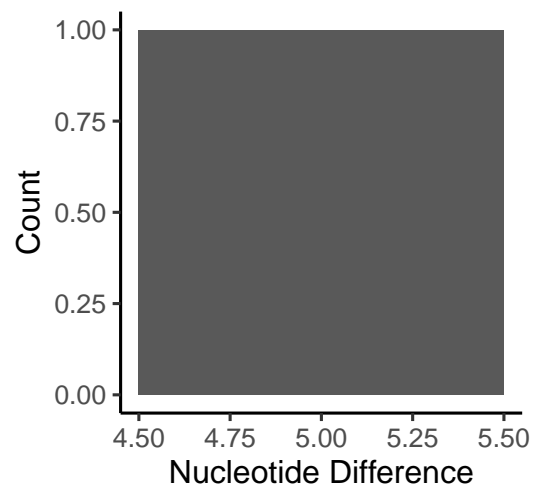
### IGHV3-53\*02

418 sequences assigned  
369 (88.3%) exact matches, in which:  
354 unique CDR3  
7 unique J



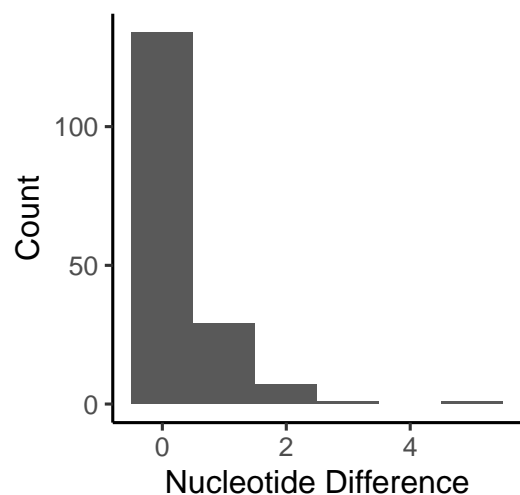
### IGHV3-71\*03

1 sequences assigned  
No exact matches.



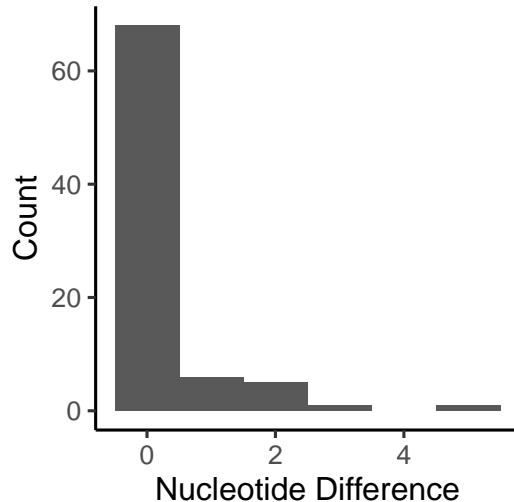
### IGHV3-49\*05

172 sequences assigned  
134 (77.9%) exact matches, in which:  
124 unique CDR3  
6 unique J



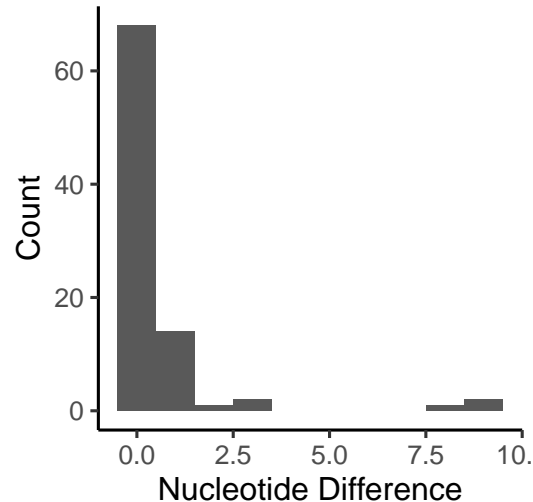
### IGHV3-64\*01

81 sequences assigned  
68 (84%) exact matches, in which:  
64 unique CDR3  
5 unique J



### IGHV3-72\*01

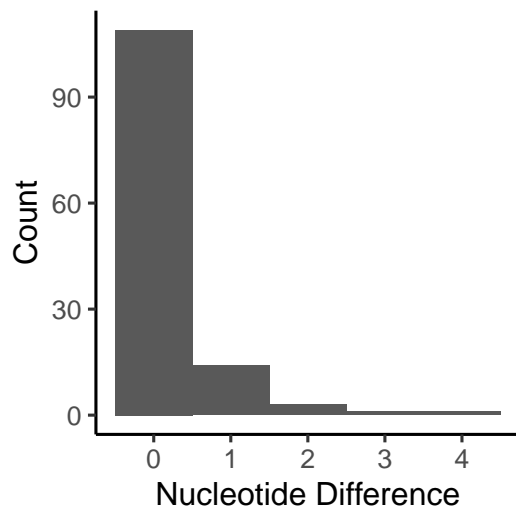
88 sequences assigned  
68 (77.3%) exact matches, in which:  
66 unique CDR3  
6 unique J





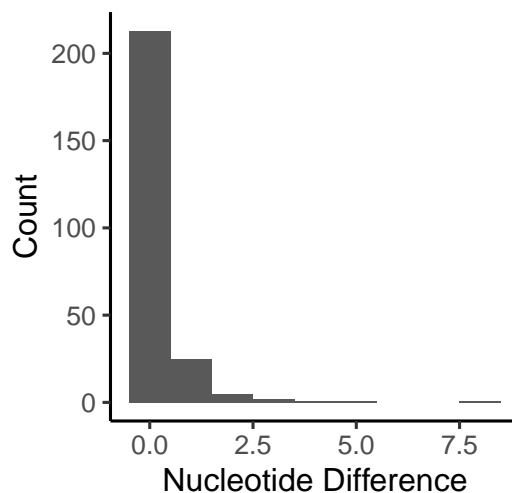
### IGHV3-73\*01

128 sequences assigned  
109 (85.2%) exact matches, in which:  
104 unique CDR3  
6 unique J



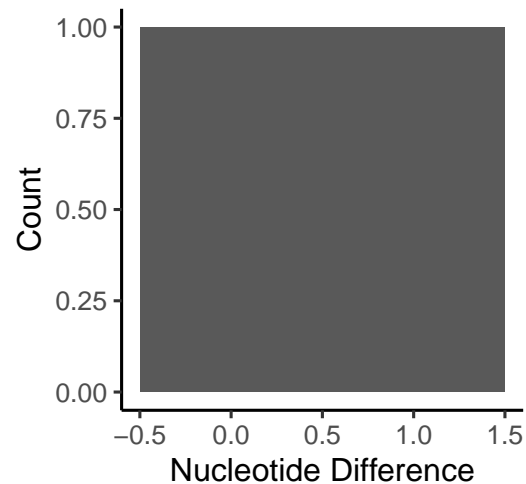
### IGHV3-64D\*06

248 sequences assigned  
213 (85.9%) exact matches, in which:  
199 unique CDR3  
6 unique J



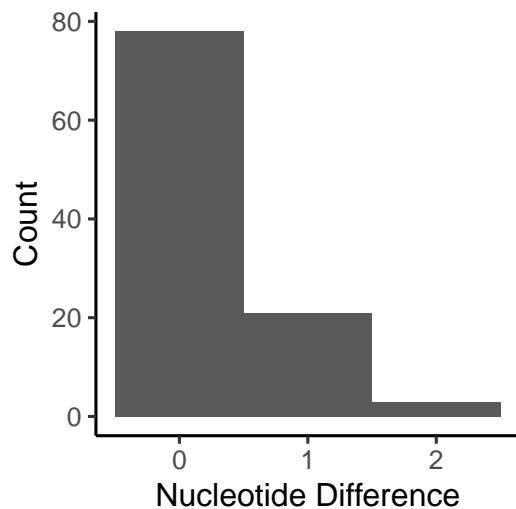
### IGHV4-28\*01

2 sequences assigned  
1 (50%) exact matches, in which:  
1 unique CDR3  
1 unique J



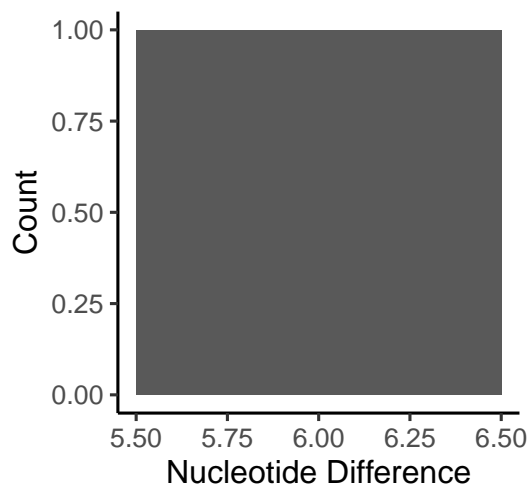
### IGHV3-73\*02

103 sequences assigned  
78 (75.7%) exact matches, in which:  
73 unique CDR3  
6 unique J



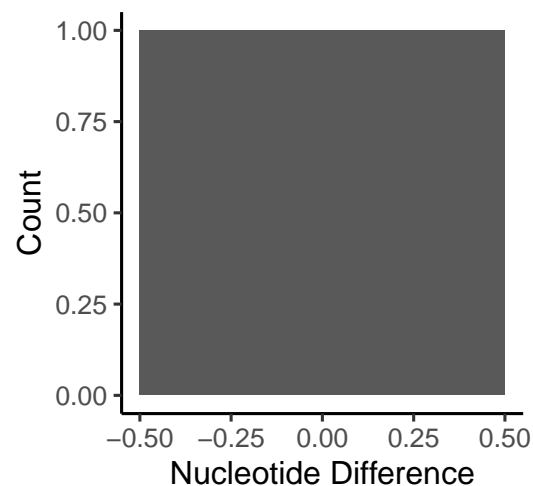
### IGHV3-NL1\*01

1 sequences assigned  
No exact matches.



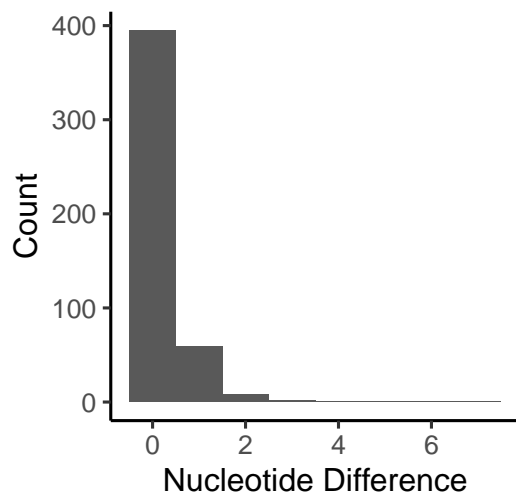
### IGHV4-28\*03

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



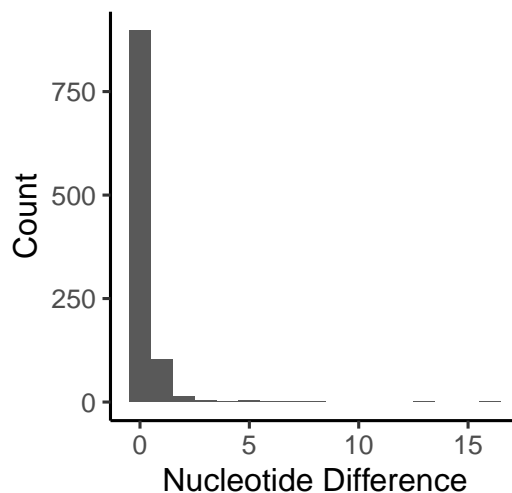
### IGHV3-74\*01

468 sequences assigned  
395 (84.4%) exact matches, in which:  
382 unique CDR3  
7 unique J



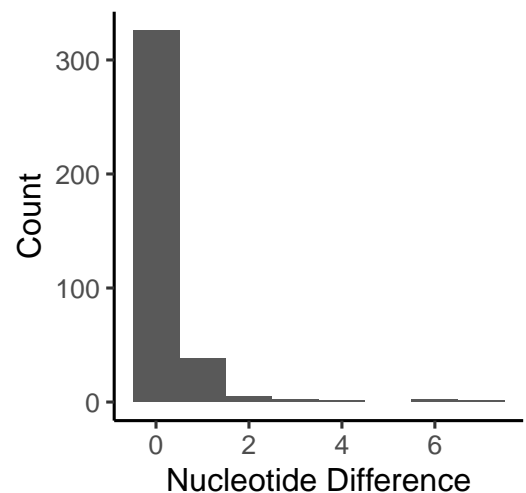
### IGHV4-4\*07

1030 sequences assigned  
898 (87.2%) exact matches, in which:  
863 unique CDR3  
7 unique J



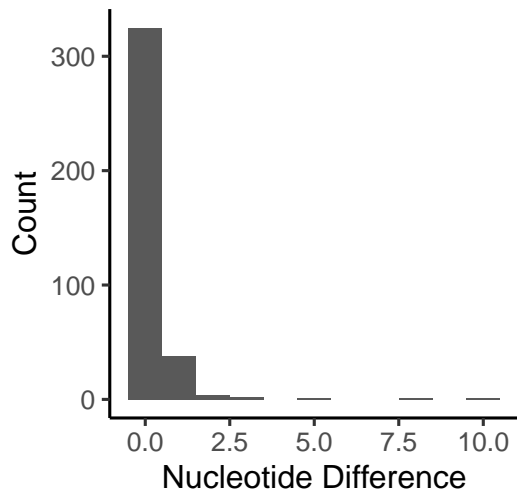
### IGHV4-30-4\*01

375 sequences assigned  
326 (86.9%) exact matches, in which:  
318 unique CDR3  
7 unique J



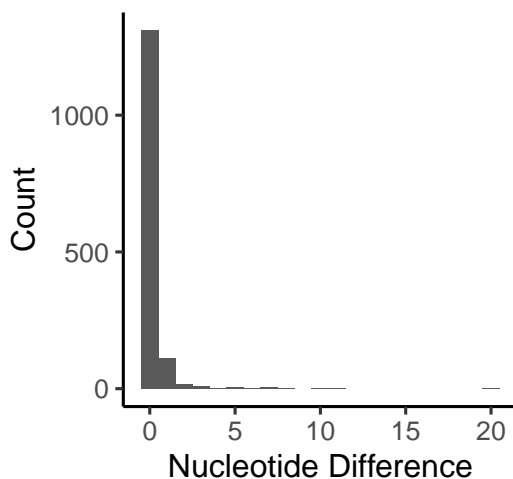
### IGHV4-30-2\*01

372 sequences assigned  
325 (87.4%) exact matches, in which:  
311 unique CDR3  
6 unique J



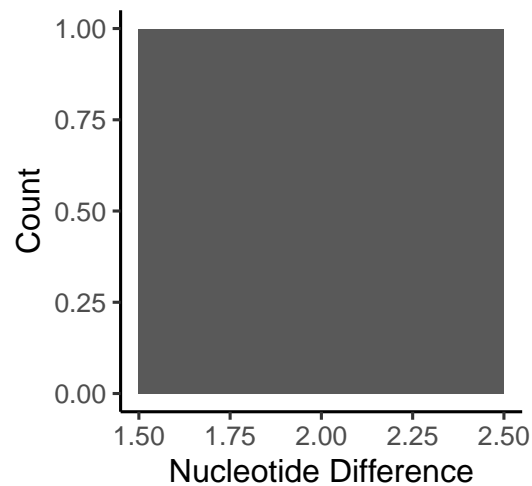
### IGHV4-39\*01

1468 sequences assigned  
1310 (89.2%) exact matches, in which:  
1263 unique CDR3  
6 unique J



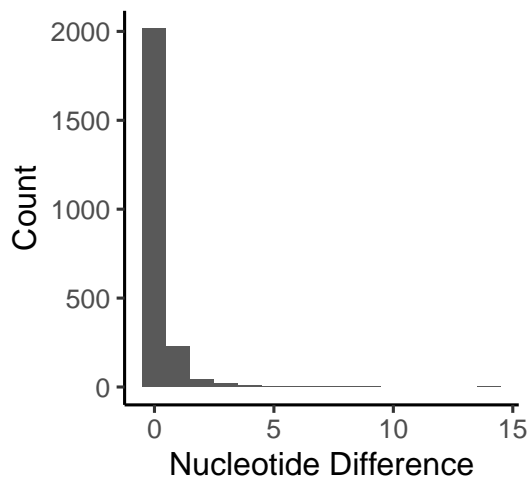
### IGHV4-55\*08

1 sequences assigned  
No exact matches.



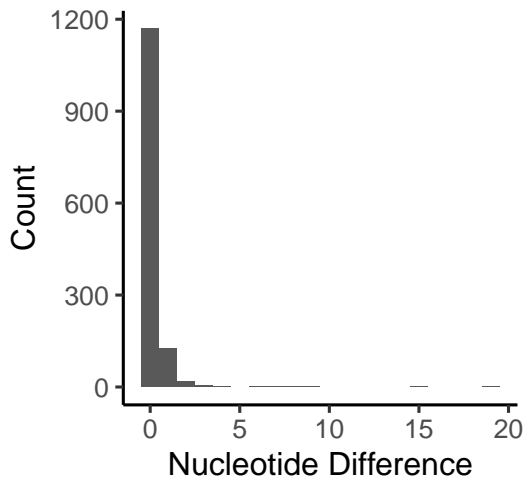
### IGHV4-31\*03

2323 sequences assigned  
2015 (86.7%) exact matches, in which:  
1928 unique CDR3  
7 unique J



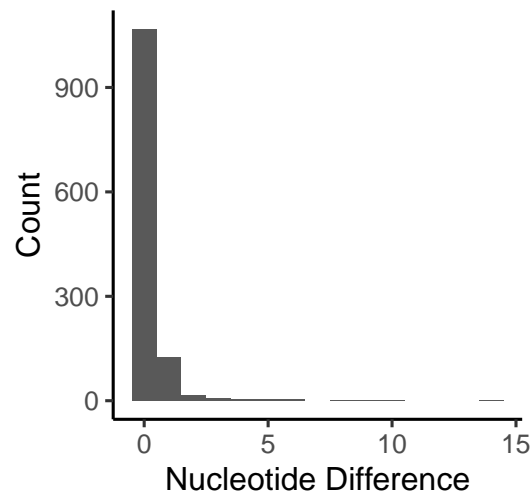
### IGHV4-39\*01\_C66G

1335 sequences assigned  
1169 (87.6%) exact matches, in which:  
1132 unique CDR3  
7 unique J



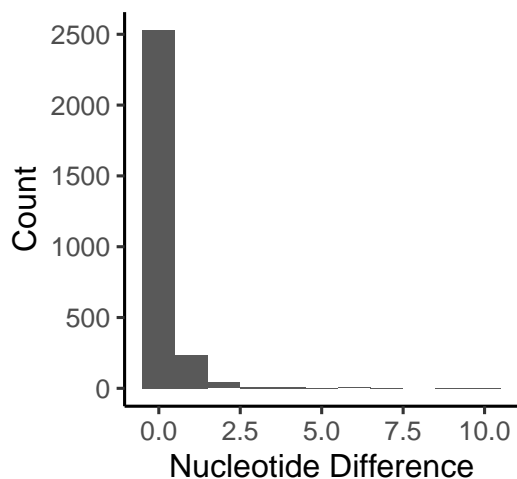
### IGHV4-59\*01

1233 sequences assigned  
1068 (86.6%) exact matches, in which:  
1044 unique CDR3  
7 unique J



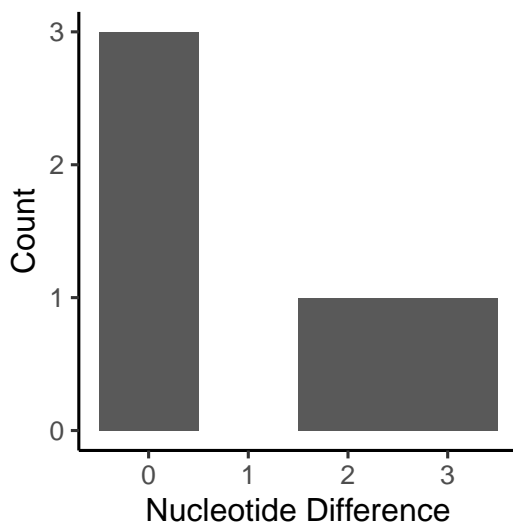
### IGHV4-34\*01

2841 sequences assigned  
2530 (89.1%) exact matches, in which:  
2409 unique CDR3  
7 unique J



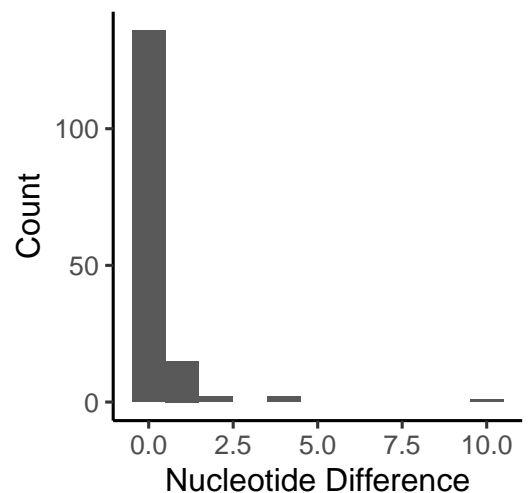
### IGHV4-55\*01

5 sequences assigned  
3 (60%) exact matches, in which:  
3 unique CDR3  
3 unique J



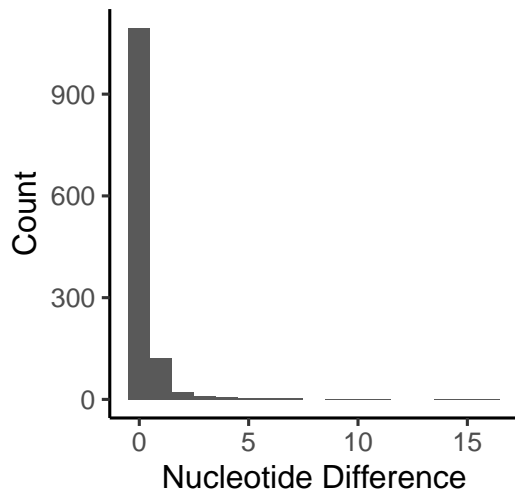
### IGHV4-61\*01

157 sequences assigned  
136 (86.6%) exact matches, in which:  
133 unique CDR3  
6 unique J



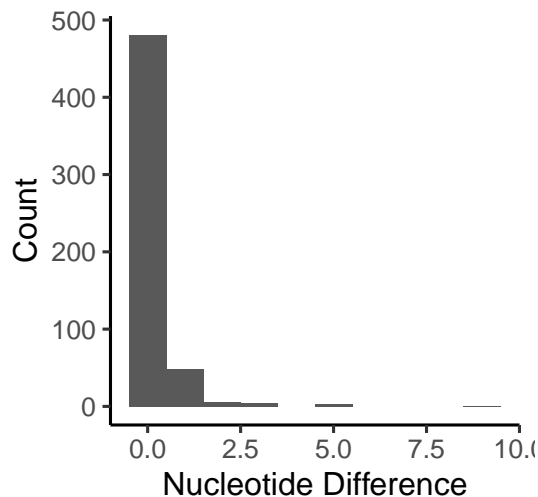
### IGHV4–61\*02

1276 sequences assigned  
1096 (85.9%) exact matches, in which:  
1059 unique CDR3  
6 unique J



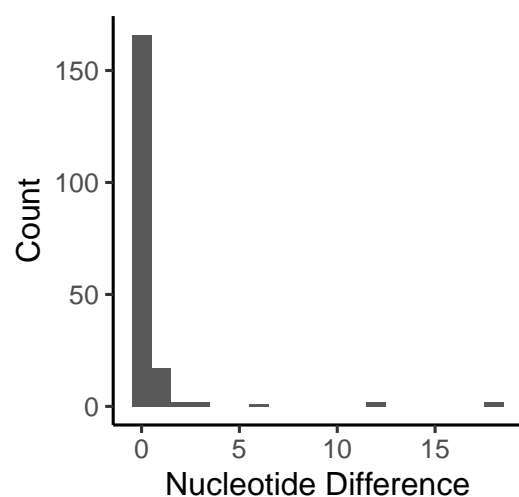
### IGHV5–10–1\*03

545 sequences assigned  
481 (88.3%) exact matches, in which:  
461 unique CDR3  
6 unique J



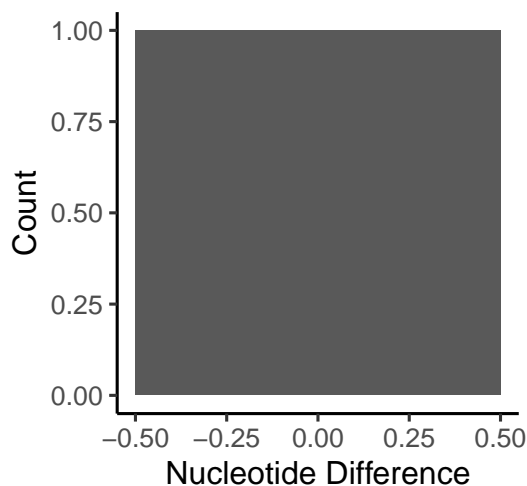
### IGHV6–1\*01

192 sequences assigned  
166 (86.5%) exact matches, in which:  
155 unique CDR3  
7 unique J



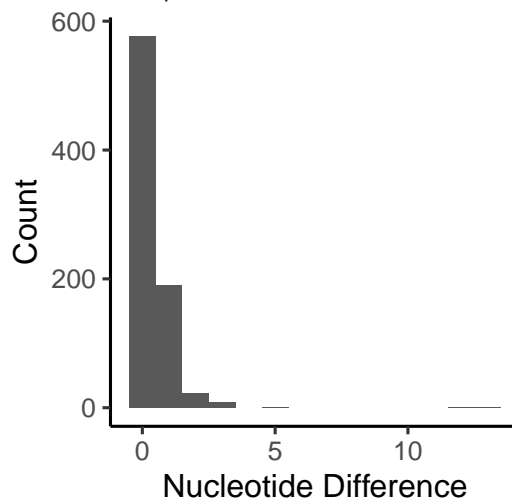
### IGHV1/OR15–2\*01

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



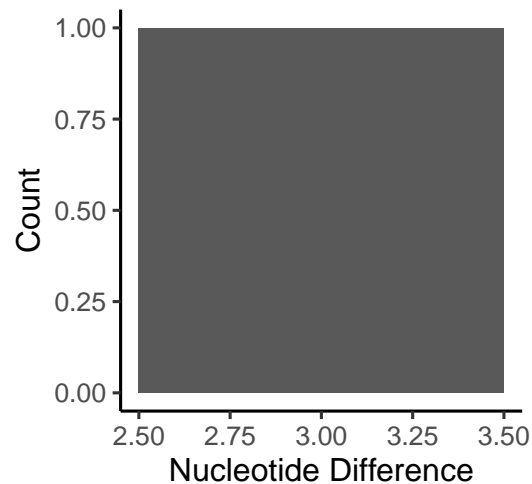
### IGHV5–51\*01

801 sequences assigned  
577 (72%) exact matches, in which:  
539 unique CDR3  
7 unique J



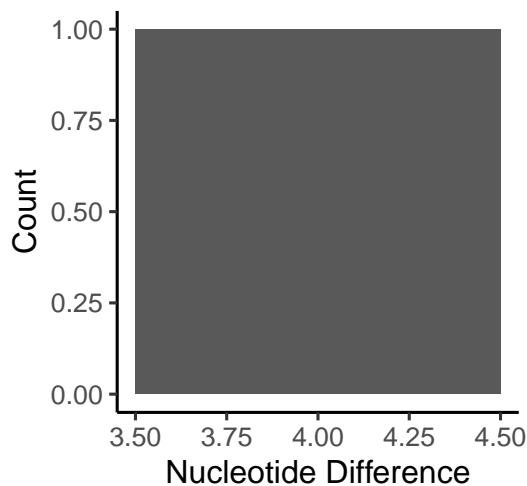
### IGHV3/OR16–12\*01

1 sequences assigned  
No exact matches.



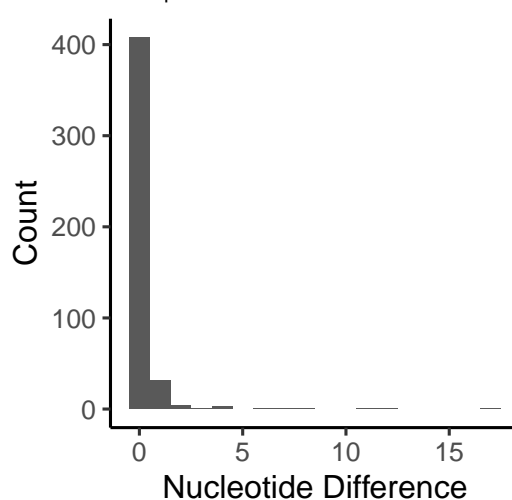
### IGHV4/OR15–8\*02

1 sequences assigned  
No exact matches.



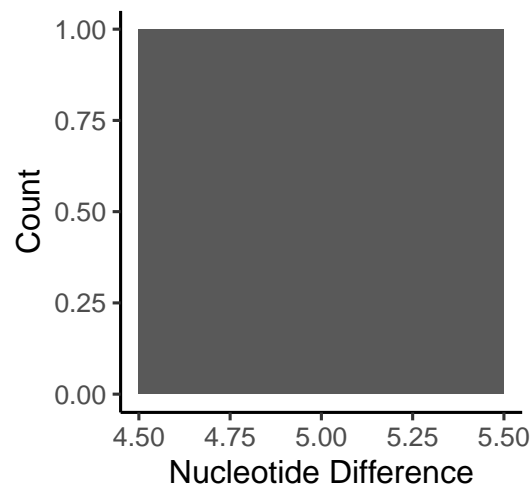
### IGHV5–51\*03

453 sequences assigned  
408 (90.1%) exact matches, in which:  
393 unique CDR3  
6 unique J



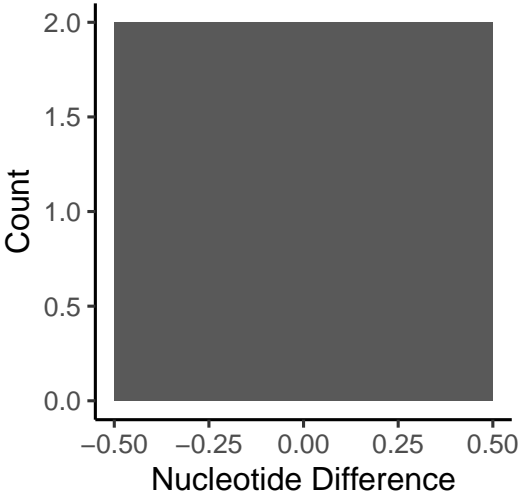
### IGHV3/OR16–15\*02

1 sequences assigned  
No exact matches.

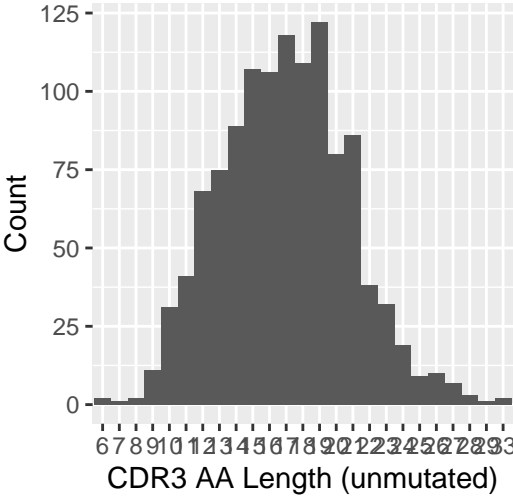


# IGHV7-81\*01

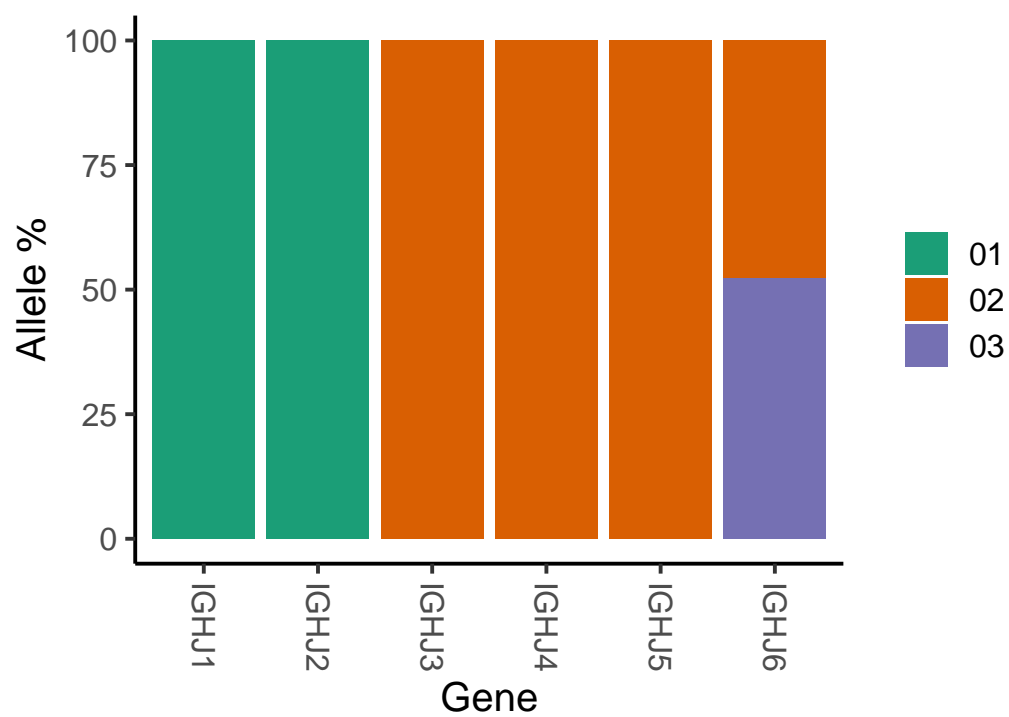
2 sequences assigned  
2 (100%) exact matches, in which:  
2 unique CDR3  
2 unique J



IGHV4-39\*01\_C66G



Allele Usage



Sequence Count by IGHJ6 allele usage

