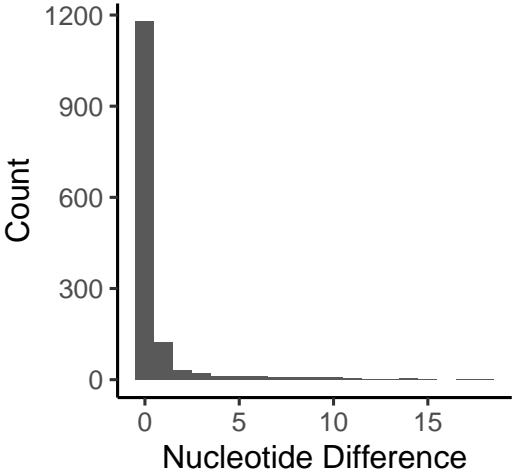


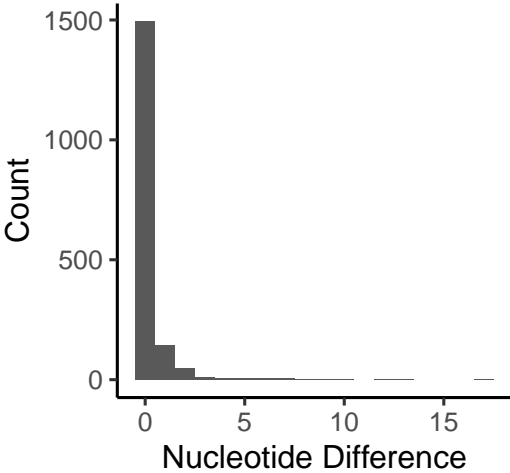
IGHV1-2\*02

1439 sequences assigned  
1179 (81.9%) exact matches, in which:  
1091 unique CDR3  
6 unique J



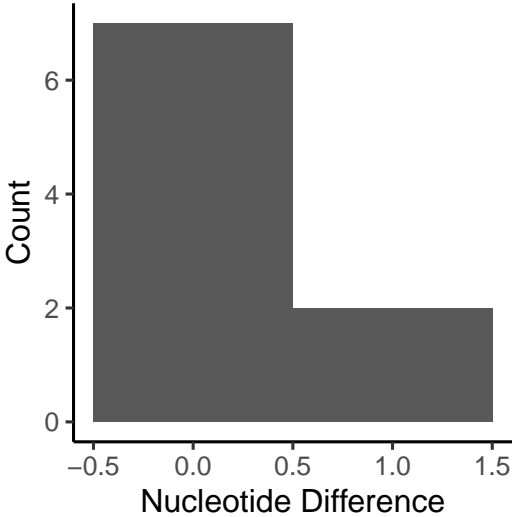
IGHV1-8\*01

1739 sequences assigned  
1494 (85.9%) exact matches, in which:  
1378 unique CDR3  
6 unique J



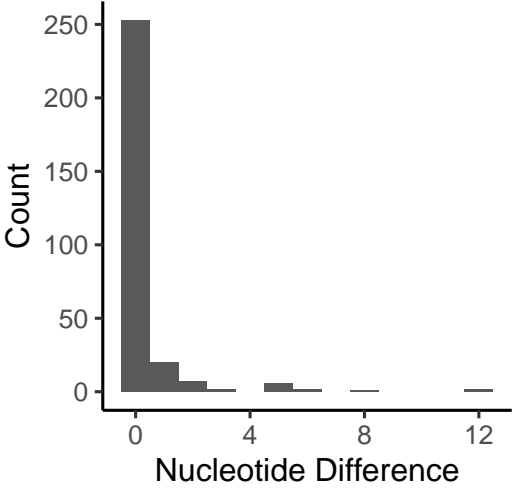
IGHV1-45\*02

10 sequences assigned  
7 (70%) exact matches, in which:  
7 unique CDR3  
4 unique J



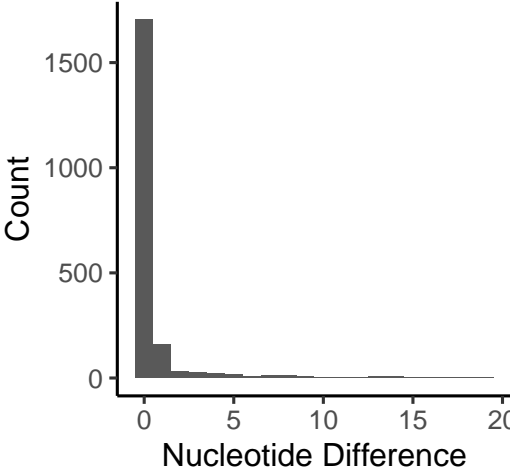
IGHV1-2\*04

293 sequences assigned  
253 (86.3%) exact matches, in which:  
235 unique CDR3  
6 unique J



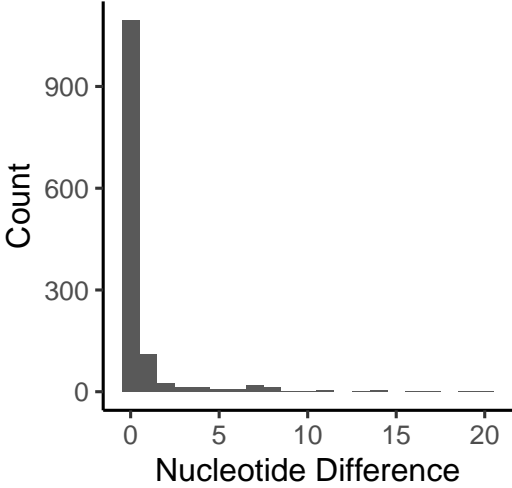
IGHV1-18\*01

2023 sequences assigned  
1704 (84.2%) exact matches, in which:  
1597 unique CDR3  
6 unique J



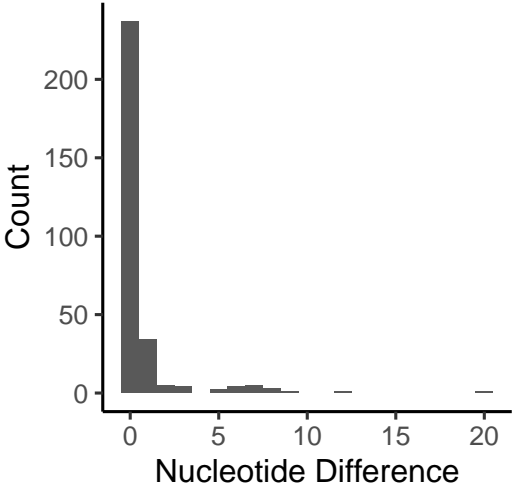
IGHV1-46\*01

1326 sequences assigned  
1096 (82.7%) exact matches, in which:  
1033 unique CDR3  
6 unique J



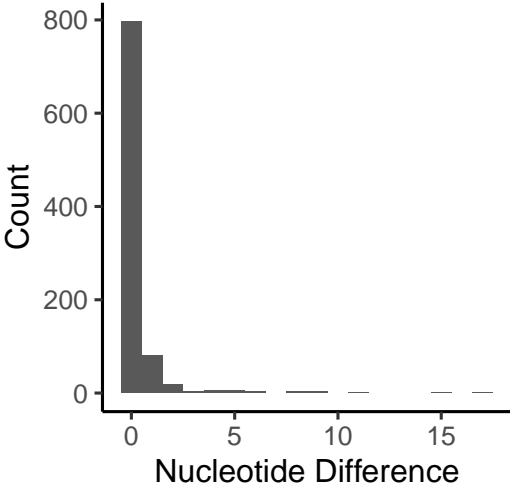
IGHV1-3\*05

298 sequences assigned  
237 (79.5%) exact matches, in which:  
222 unique CDR3  
6 unique J



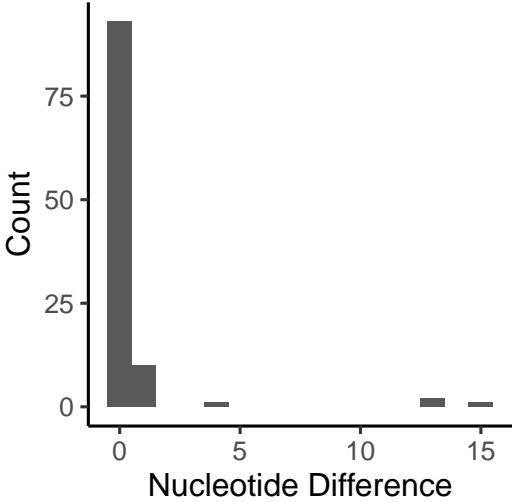
IGHV1-24\*01

923 sequences assigned  
797 (86.3%) exact matches, in which:  
755 unique CDR3  
6 unique J



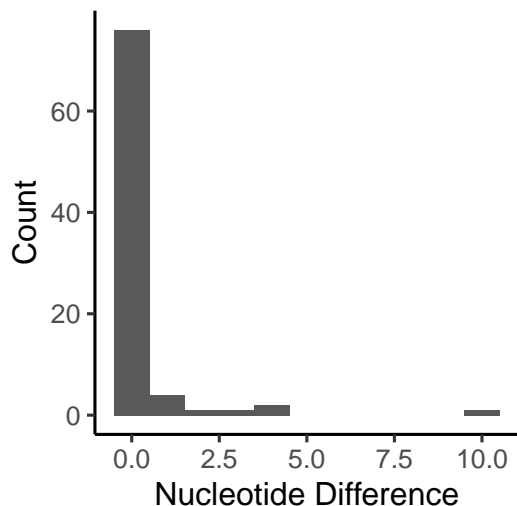
IGHV1-58\*01

107 sequences assigned  
93 (86.9%) exact matches, in which:  
88 unique CDR3  
6 unique J



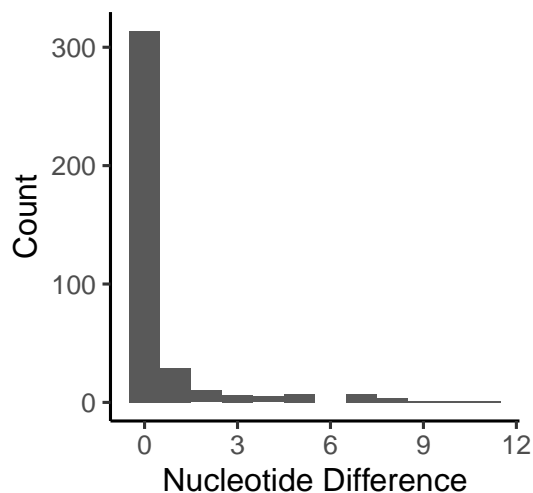
## IGHV1-58\*02

85 sequences assigned  
76 (89.4%) exact matches, in which:  
74 unique CDR3  
6 unique J



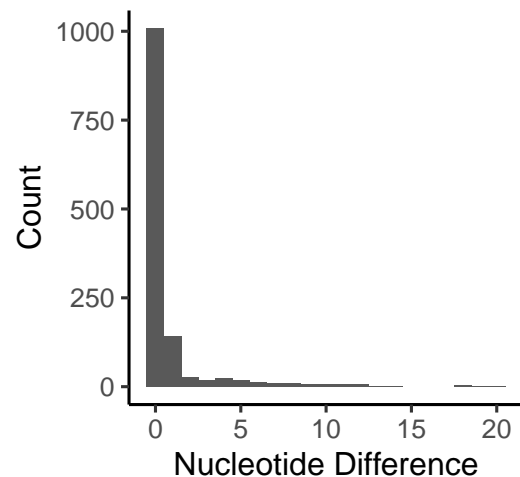
## IGHV2-26\*01

385 sequences assigned  
314 (81.6%) exact matches, in which:  
301 unique CDR3  
5 unique J



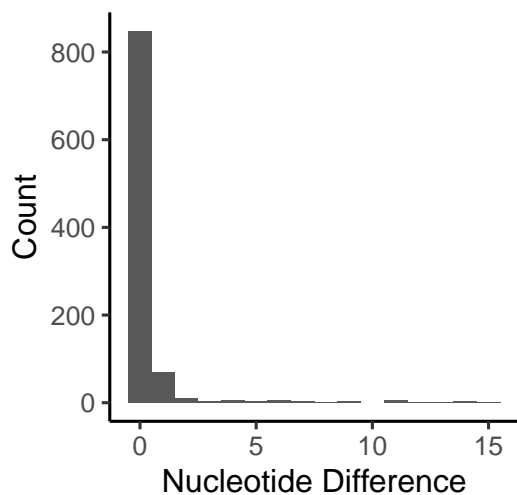
## IGHV3-7\*01

1310 sequences assigned  
1008 (76.9%) exact matches, in which:  
949 unique CDR3  
6 unique J



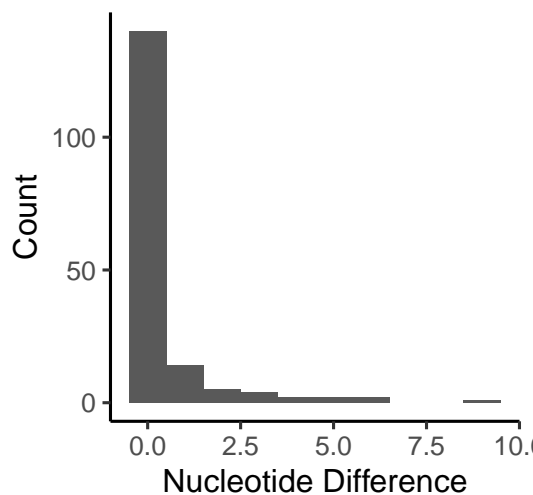
## IGHV1-69\*08\_C191T

968 sequences assigned  
848 (87.6%) exact matches, in which:  
779 unique CDR3  
6 unique J



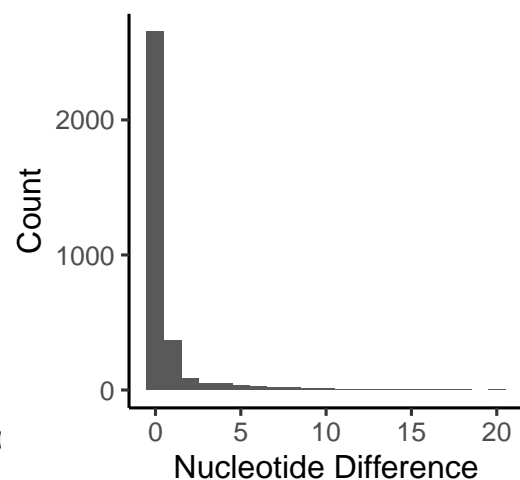
## IGHV2-70\*01

170 sequences assigned  
140 (82.4%) exact matches, in which:  
135 unique CDR3  
5 unique J



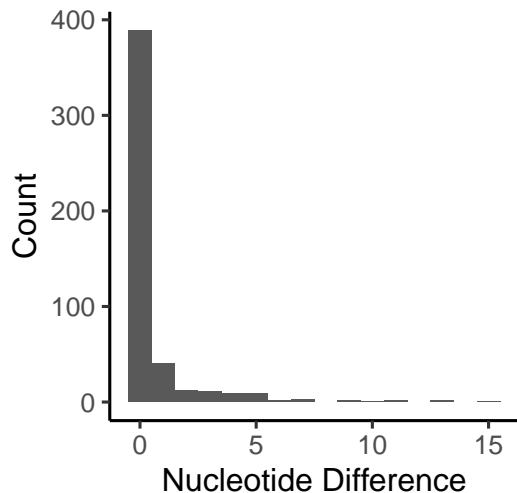
## IGHV3-9\*01

3335 sequences assigned  
2653 (79.6%) exact matches, in which:  
2417 unique CDR3  
6 unique J



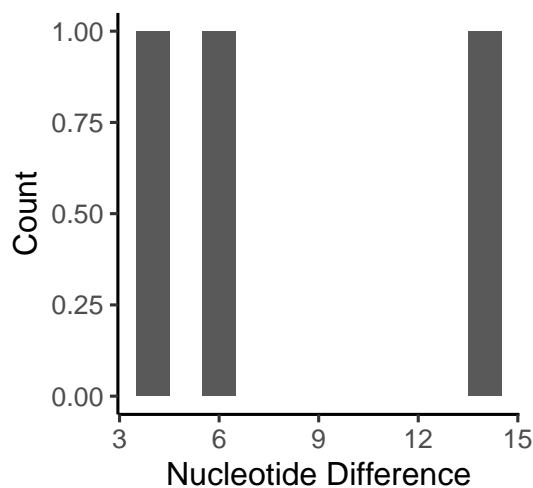
## IGHV2-5\*01

483 sequences assigned  
389 (80.5%) exact matches, in which:  
367 unique CDR3  
6 unique J



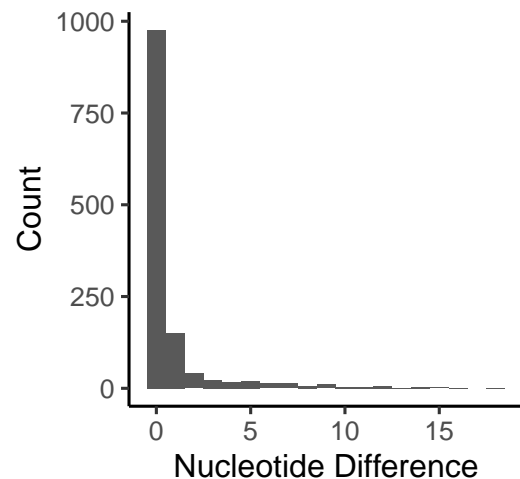
## IGHV2-70D\*04

3 sequences assigned  
No exact matches.



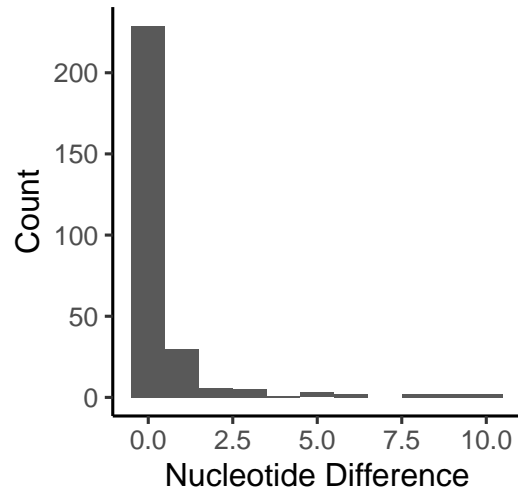
## IGHV3-11\*01

1290 sequences assigned  
976 (75.7%) exact matches, in which:  
920 unique CDR3  
6 unique J



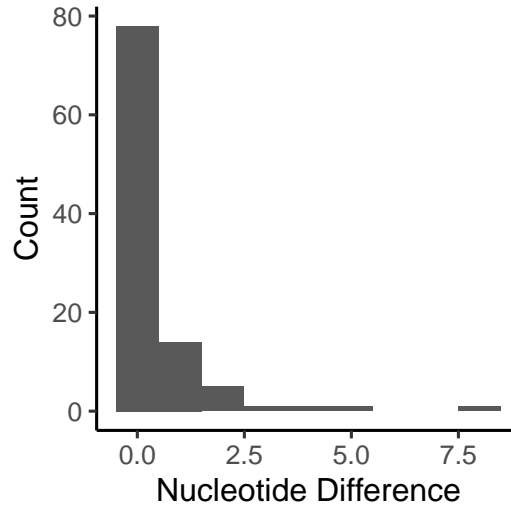
### IGHV3-13\*01

282 sequences assigned  
229 (81.2%) exact matches, in which:  
214 unique CDR3  
5 unique J



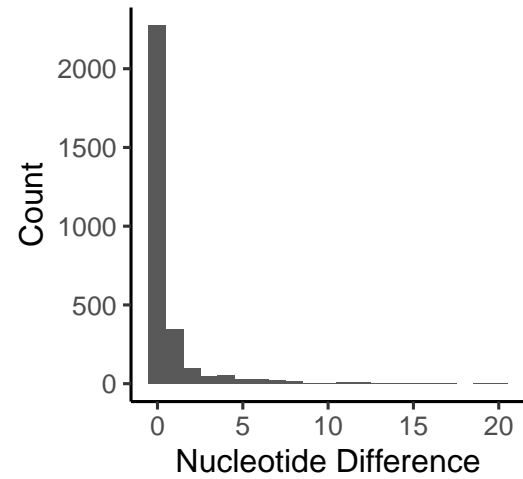
### IGHV3-20\*01

101 sequences assigned  
78 (77.2%) exact matches, in which:  
68 unique CDR3  
6 unique J



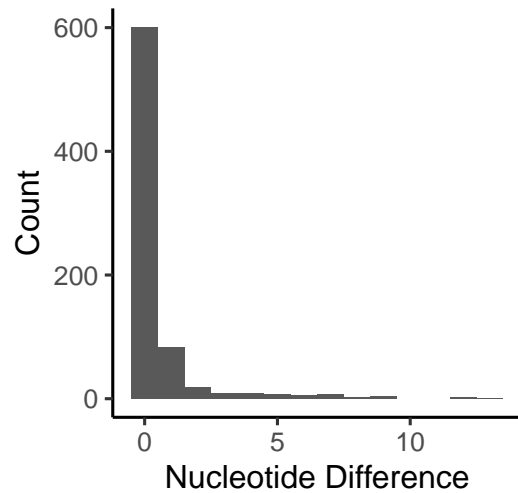
### IGHV3-33\*01

2958 sequences assigned  
2275 (76.9%) exact matches, in which:  
2091 unique CDR3  
6 unique J



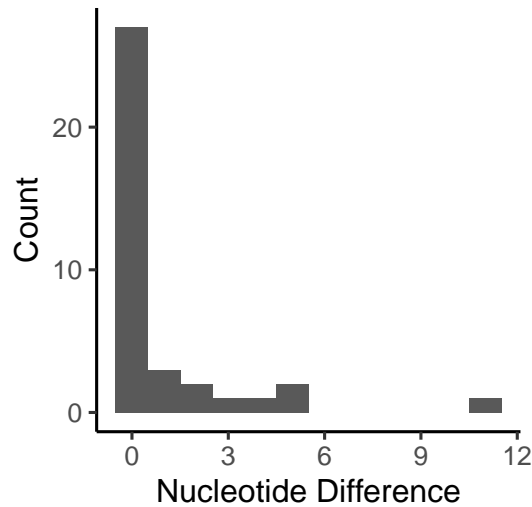
### IGHV3-15\*01

751 sequences assigned  
601 (80%) exact matches, in which:  
551 unique CDR3  
6 unique J



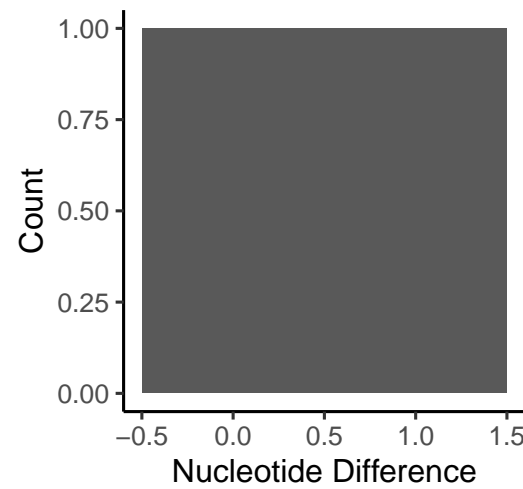
### IGHV3-20\*04

38 sequences assigned  
27 (71.1%) exact matches, in which:  
25 unique CDR3  
5 unique J



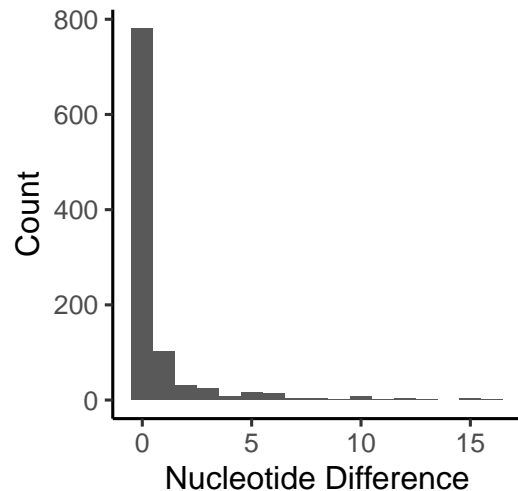
### IGHV3-35\*01

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



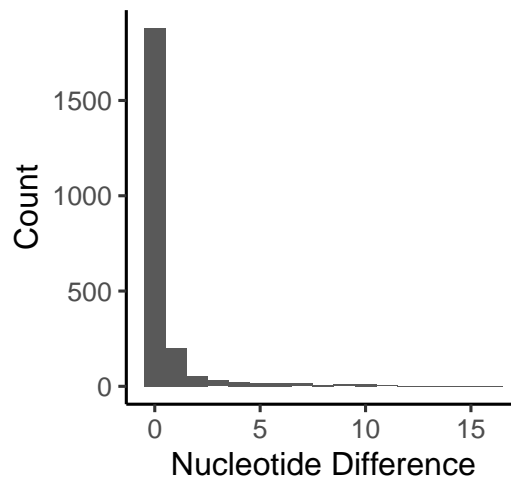
### IGHV3-15\*07

1001 sequences assigned  
781 (78%) exact matches, in which:  
744 unique CDR3  
6 unique J



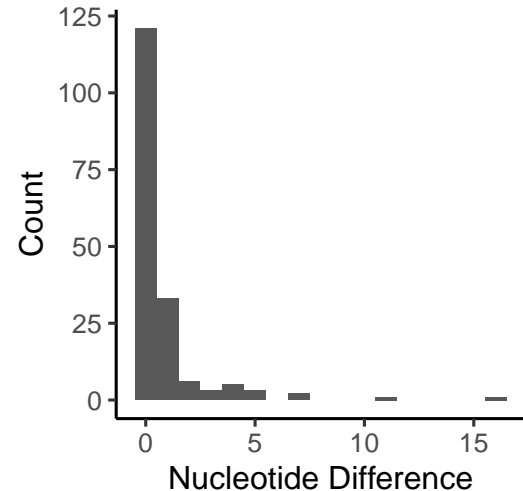
### IGHV3-21\*01

2276 sequences assigned  
1880 (82.6%) exact matches, in which:  
1719 unique CDR3  
6 unique J



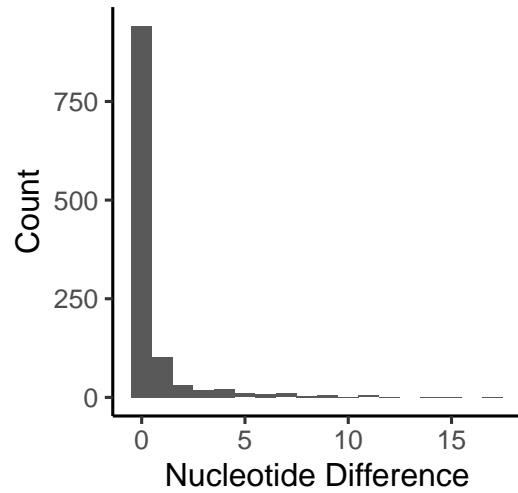
### IGHV3-43\*01

175 sequences assigned  
121 (69.1%) exact matches, in which:  
111 unique CDR3  
6 unique J



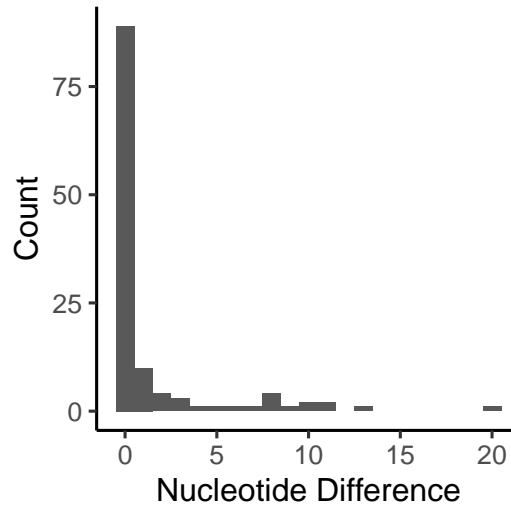
### IGHV3-48\*02

1165 sequences assigned  
942 (80.9%) exact matches, in which:  
882 unique CDR3  
6 unique J



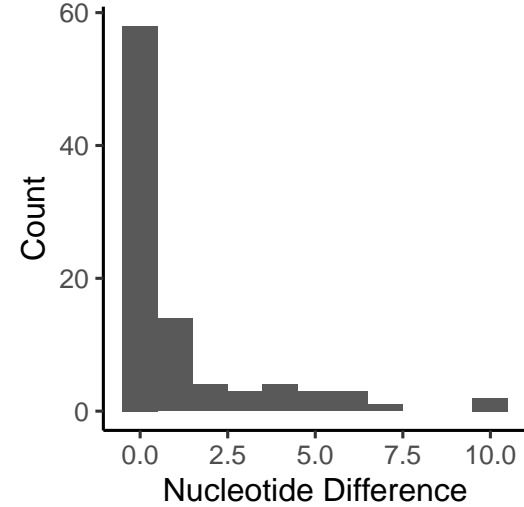
### IGHV3-64\*01

121 sequences assigned  
89 (73.6%) exact matches, in which:  
83 unique CDR3  
6 unique J



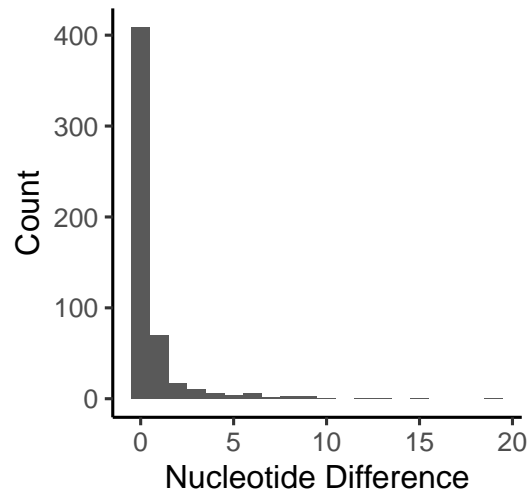
### IGHV3-72\*01

92 sequences assigned  
58 (63%) exact matches, in which:  
55 unique CDR3  
5 unique J



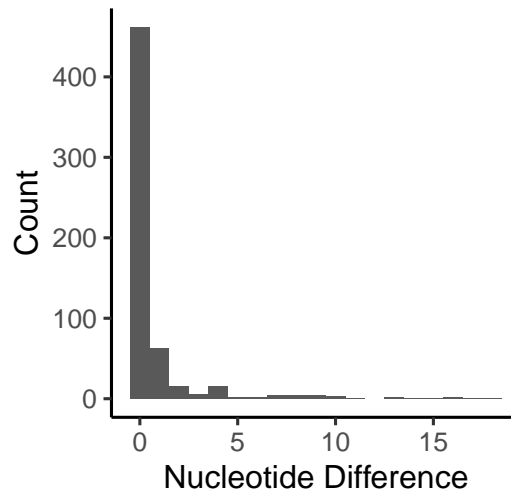
### IGHV3-49\*05

536 sequences assigned  
409 (76.3%) exact matches, in which:  
381 unique CDR3  
6 unique J



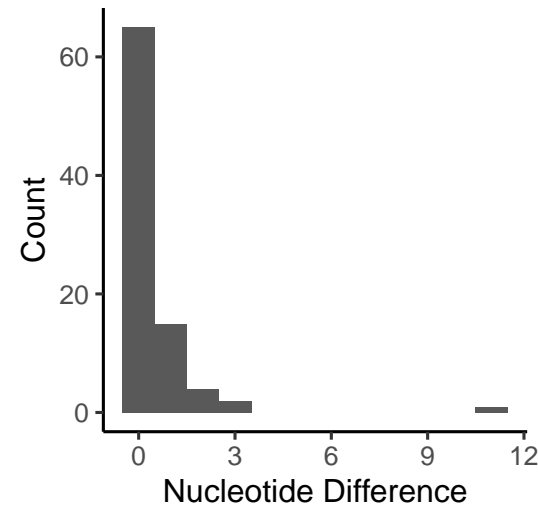
### IGHV3-66\*02

590 sequences assigned  
462 (78.3%) exact matches, in which:  
425 unique CDR3  
6 unique J



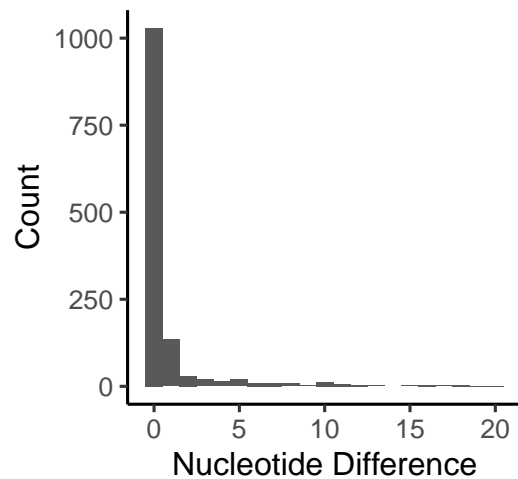
### IGHV3-73\*01

87 sequences assigned  
65 (74.7%) exact matches, in which:  
61 unique CDR3  
5 unique J



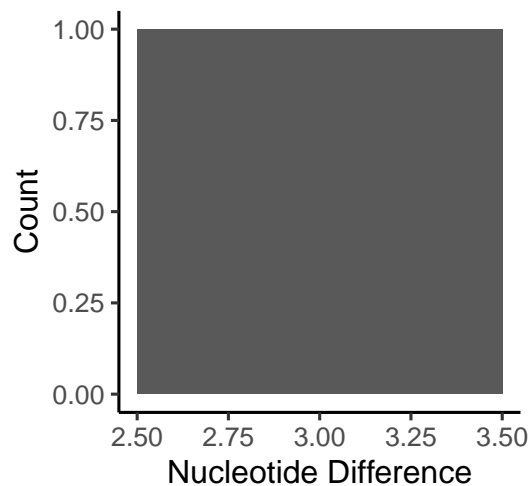
### IGHV3-53\*01

1314 sequences assigned  
1029 (78.3%) exact matches, in which:  
941 unique CDR3  
6 unique J



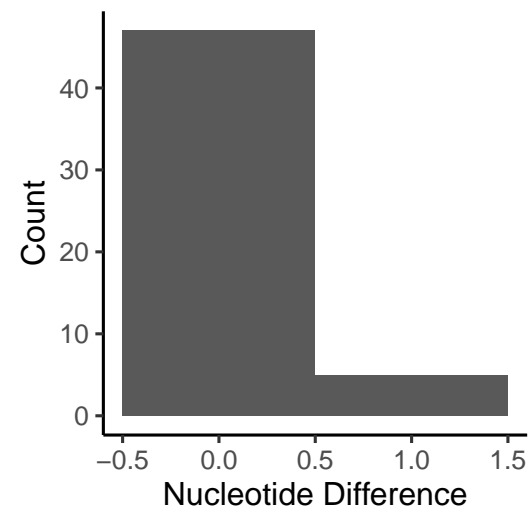
### IGHV3-69-1\*01

1 sequences assigned  
No exact matches.



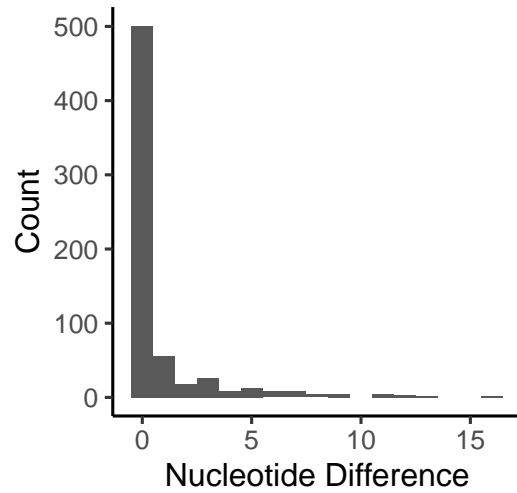
### IGHV3-73\*02

52 sequences assigned  
47 (90.4%) exact matches, in which:  
45 unique CDR3  
4 unique J



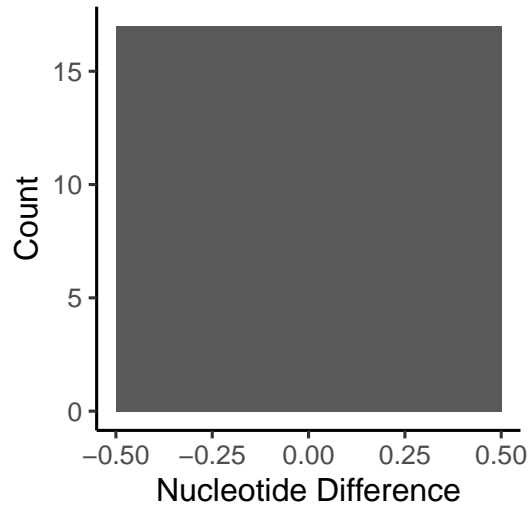
### IGHV3–74\*01

660 sequences assigned  
501 (75.9%) exact matches, in which:  
479 unique CDR3  
6 unique J



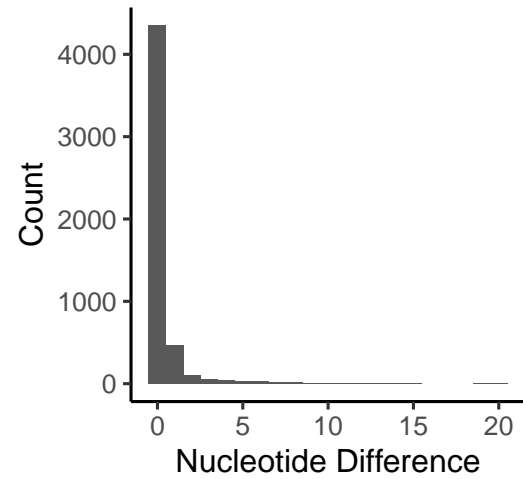
### IGHV4–28\*01

17 sequences assigned  
17 (100%) exact matches, in which:  
16 unique CDR3  
6 unique J



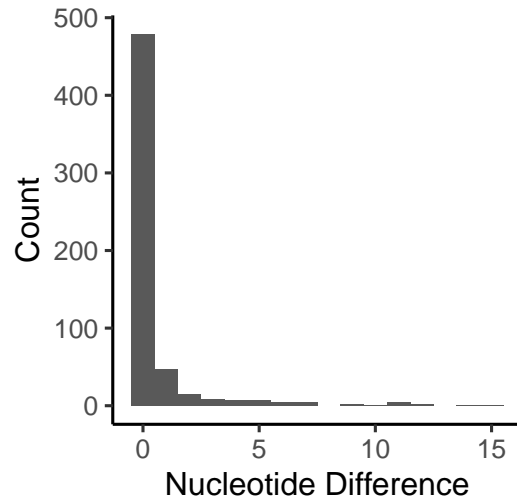
### IGHV4–34\*01

5144 sequences assigned  
4351 (84.6%) exact matches, in which:  
3954 unique CDR3  
6 unique J



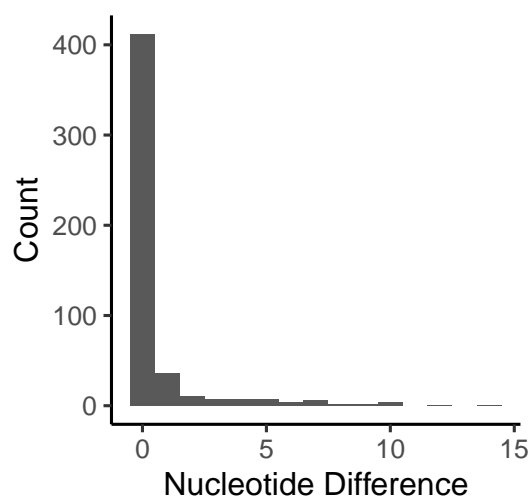
### IGHV4–4\*02

584 sequences assigned  
479 (82%) exact matches, in which:  
454 unique CDR3  
6 unique J



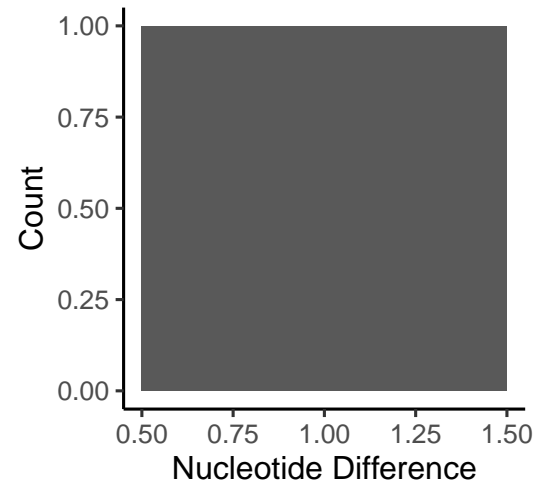
### IGHV4–30–2\*01

500 sequences assigned  
412 (82.4%) exact matches, in which:  
391 unique CDR3  
6 unique J



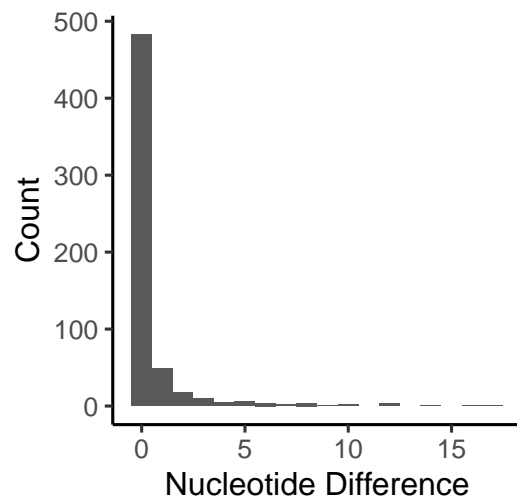
### IGHV4–38–2\*02

1 sequences assigned  
No exact matches.



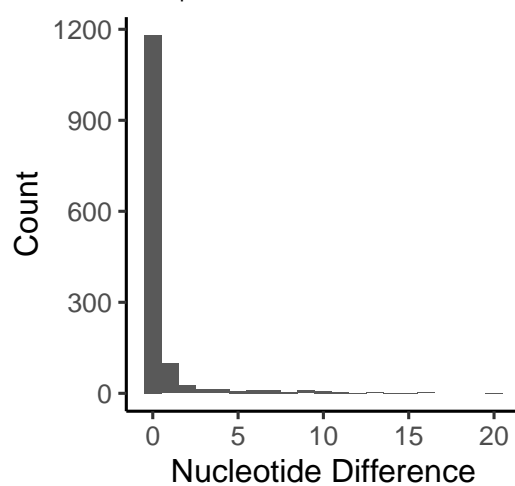
### IGHV4–4\*07

590 sequences assigned  
483 (81.9%) exact matches, in which:  
449 unique CDR3  
6 unique J



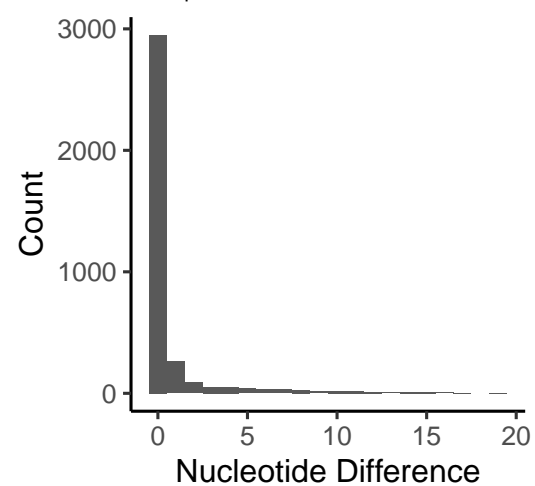
### IGHV4–31\*03

1398 sequences assigned  
1181 (84.5%) exact matches, in which:  
1120 unique CDR3  
6 unique J



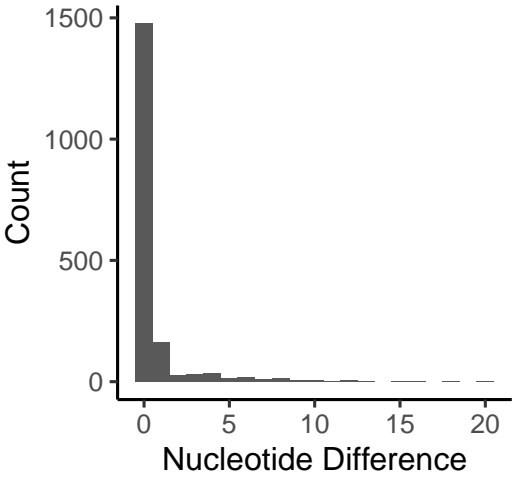
### IGHV4–39\*01

3648 sequences assigned  
2949 (80.8%) exact matches, in which:  
2659 unique CDR3  
6 unique J



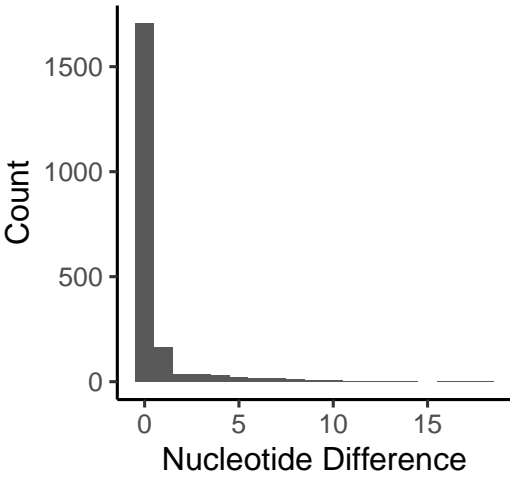
IGHV4-59\*01

1817 sequences assigned  
1477 (81.3%) exact matches, in which:  
1408 unique CDR3  
6 unique J



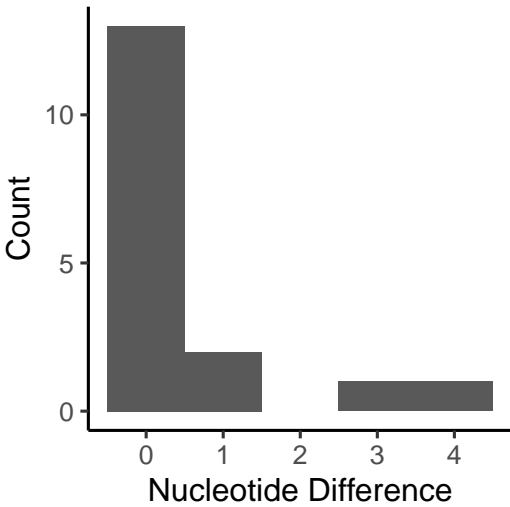
IGHV5-51\*01

2075 sequences assigned  
1706 (82.2%) exact matches, in which:  
1583 unique CDR3  
6 unique J



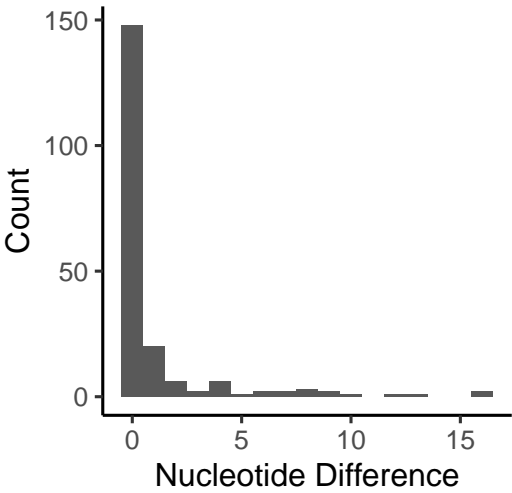
IGHV7-4-1\*01

17 sequences assigned  
13 (76.5%) exact matches, in which:  
13 unique CDR3  
4 unique J



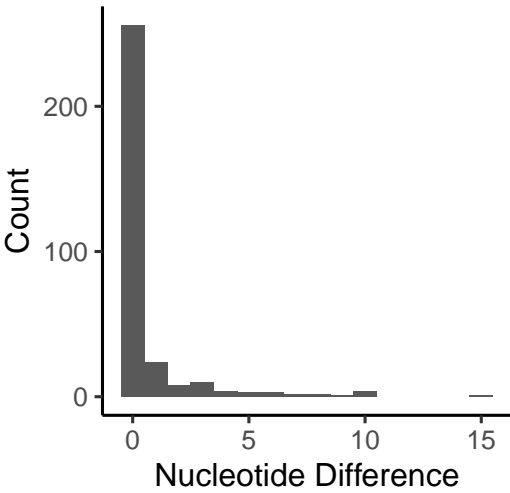
IGHV4-61\*01

197 sequences assigned  
148 (75.1%) exact matches, in which:  
143 unique CDR3  
5 unique J



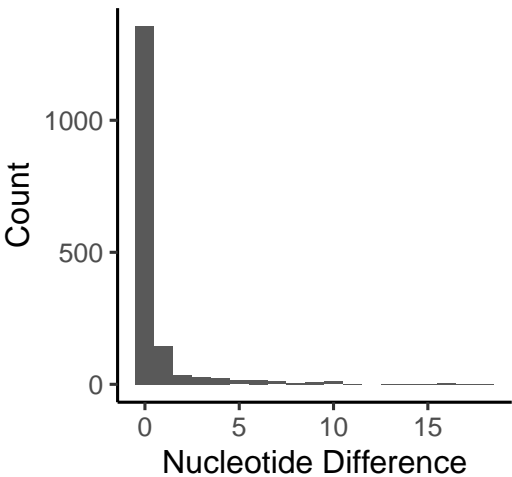
IGHV6-1\*01

318 sequences assigned  
256 (80.5%) exact matches, in which:  
234 unique CDR3  
6 unique J



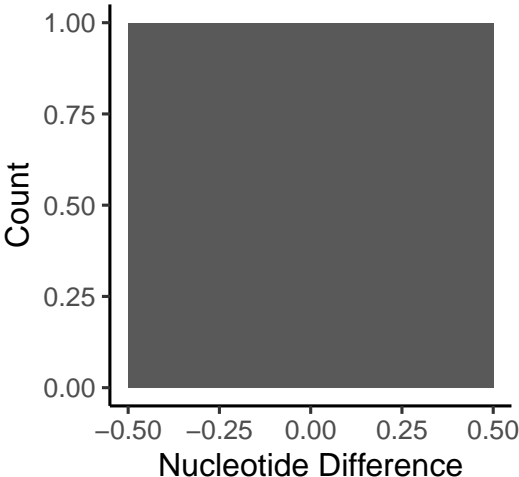
IGHV4-61\*02

1671 sequences assigned  
1357 (81.2%) exact matches, in which:  
1294 unique CDR3  
6 unique J



IGHV3/OR16-8\*01

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





Warning – no inferred sequences found.