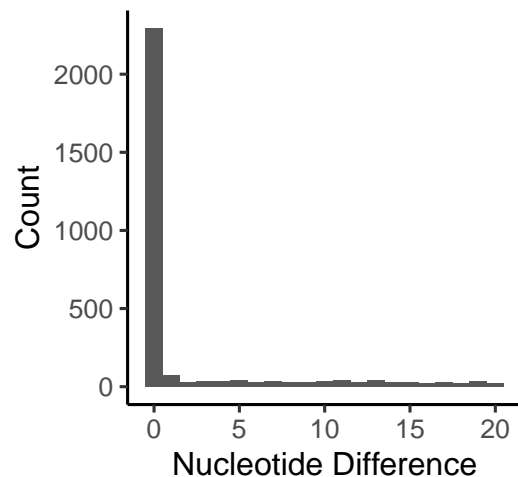


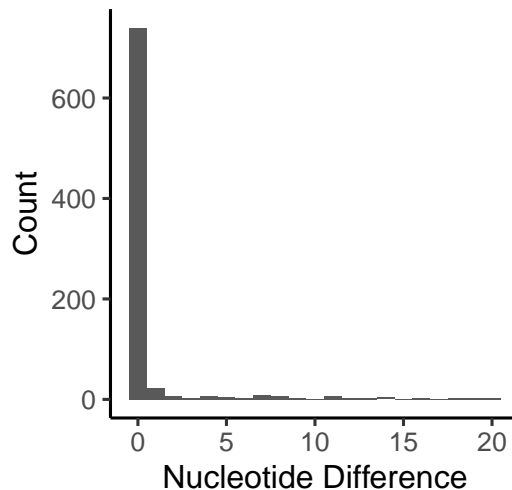
### IGHV1-2\*02

3161 sequences assigned  
2293 (72.5%) exact matches, in which:  
2289 unique CDR3  
7 unique J



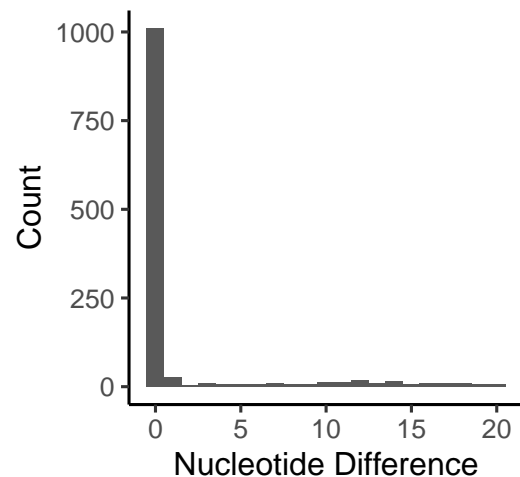
### IGHV1-8\*01

844 sequences assigned  
740 (87.7%) exact matches, in which:  
740 unique CDR3  
6 unique J



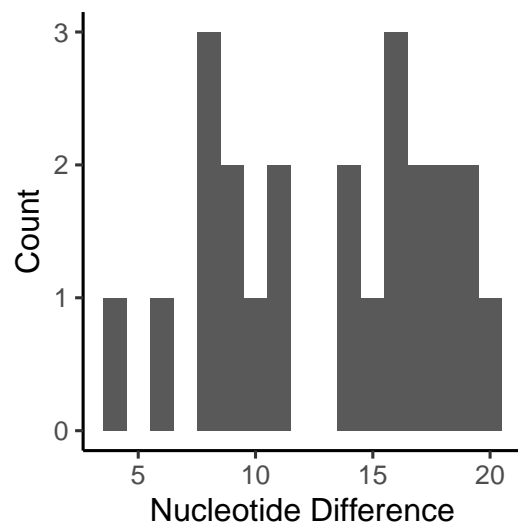
### IGHV1-18\*01\_A190G

1315 sequences assigned  
1010 (76.8%) exact matches, in which:  
1010 unique CDR3  
6 unique J



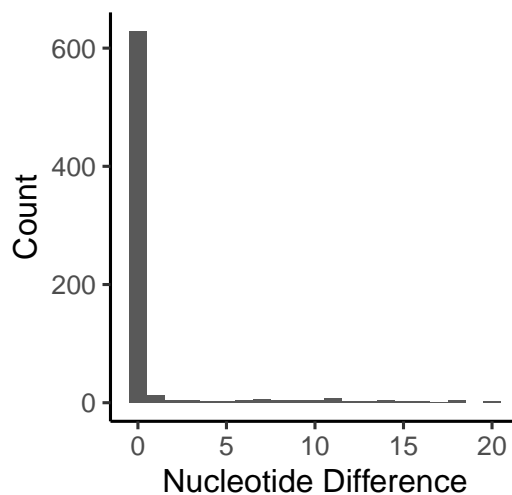
### IGHV1-3\*04

31 sequences assigned  
No exact matches.



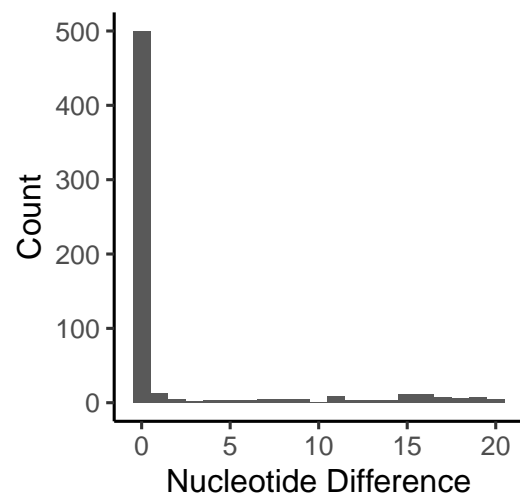
### IGHV1-8\*02

731 sequences assigned  
629 (86%) exact matches, in which:  
628 unique CDR3  
7 unique J



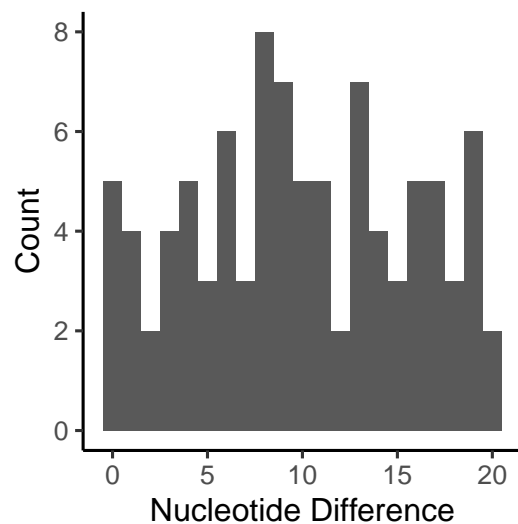
### IGHV1-24\*01

639 sequences assigned  
500 (78.2%) exact matches, in which:  
498 unique CDR3  
7 unique J



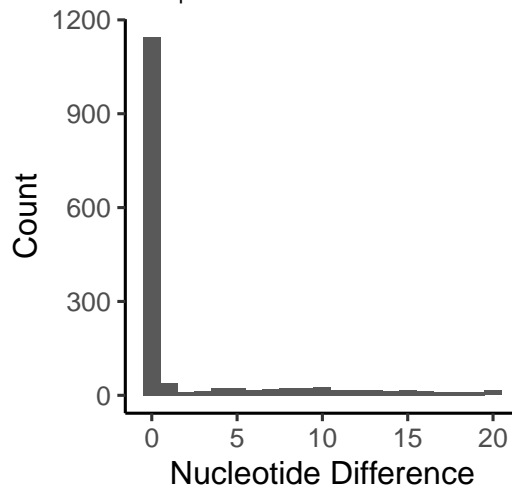
### IGHV1-3\*01\_05

123 sequences assigned  
5 (4.1%) exact matches, in which:  
5 unique CDR3  
2 unique J



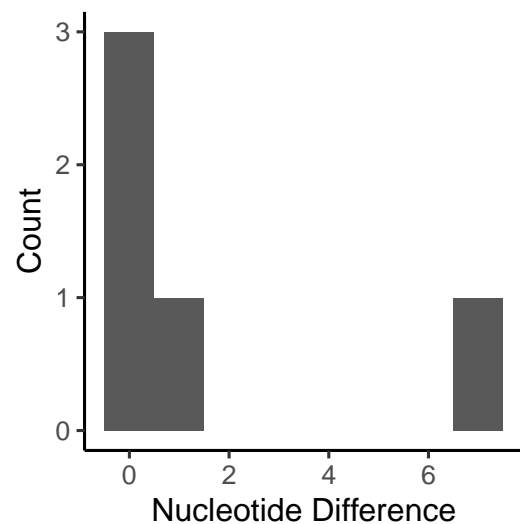
### IGHV1-18\*01

1612 sequences assigned  
1145 (71%) exact matches, in which:  
1144 unique CDR3  
6 unique J



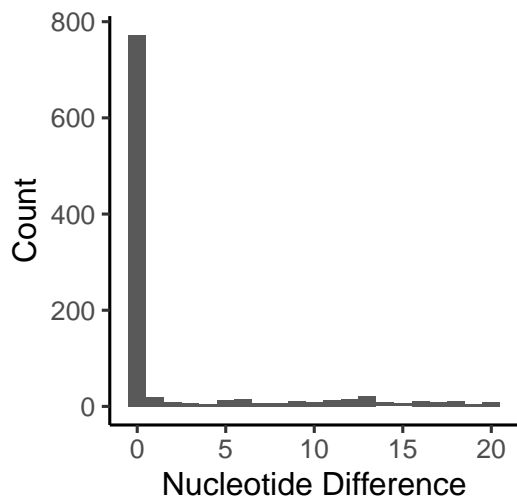
### IGHV1-45\*02

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



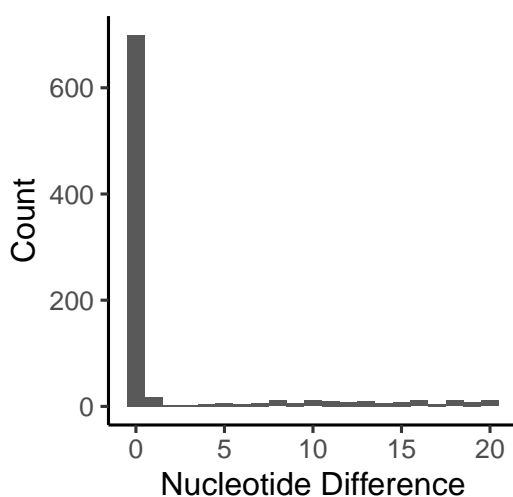
### IGHV1-46\*01

1059 sequences assigned  
773 (73%) exact matches, in which:  
773 unique CDR3  
7 unique J



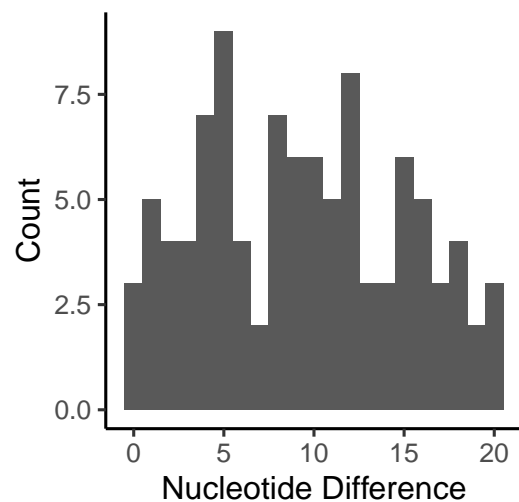
### IGHV1-69\*01\_12\_13

995 sequences assigned  
700 (70.4%) exact matches, in which:  
700 unique CDR3  
7 unique J



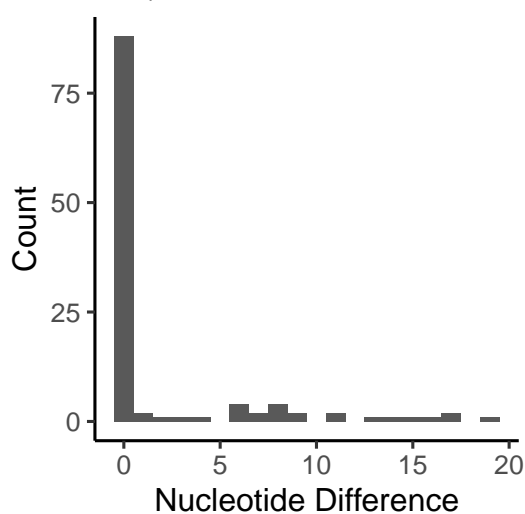
### IGHV2-5\*02

119 sequences assigned  
3 (2.5%) exact matches, in which:  
3 unique CDR3  
2 unique J



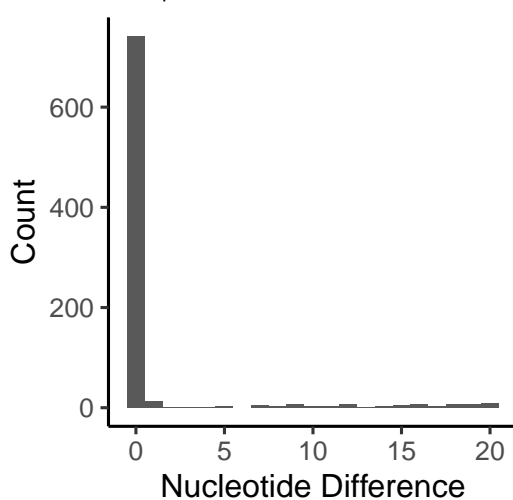
### IGHV1-58\*02

126 sequences assigned  
88 (69.8%) exact matches, in which:  
88 unique CDR3  
7 unique J



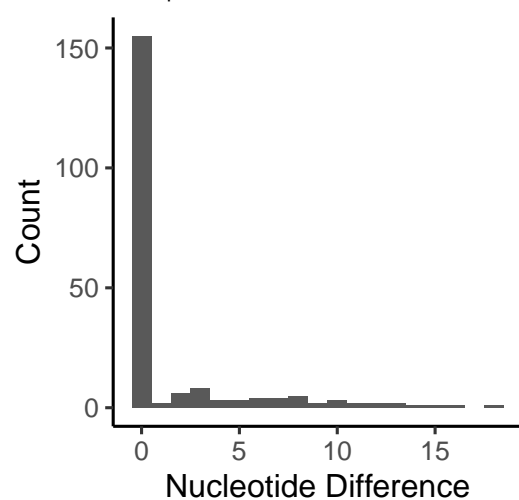
### IGHV1-69\*04\_09\_G112A

901 sequences assigned  
742 (82.4%) exact matches, in which:  
739 unique CDR3  
7 unique J



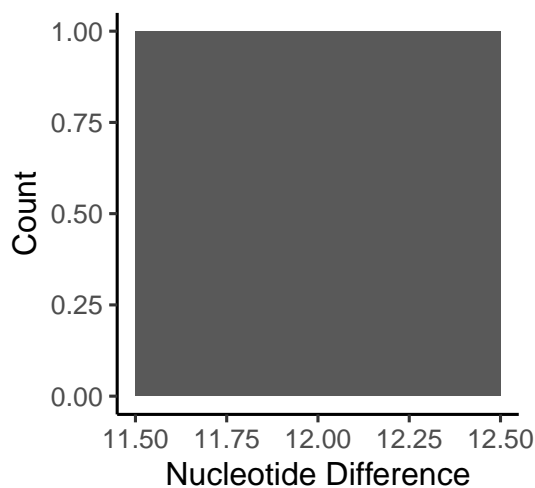
### IGHV2-5\*05\_09

210 sequences assigned  
155 (73.8%) exact matches, in which:  
155 unique CDR3  
6 unique J



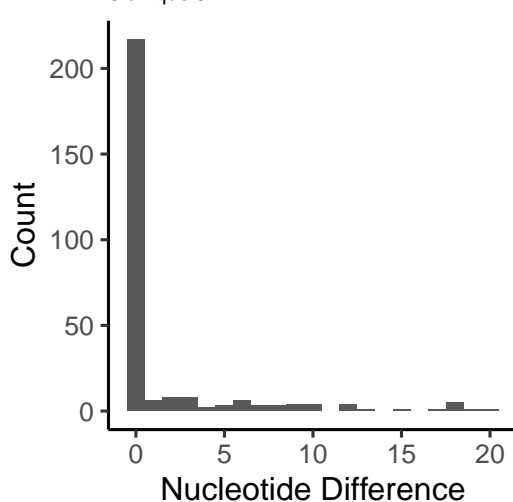
### IGHV1-69-2\*01

2 sequences assigned  
No exact matches.



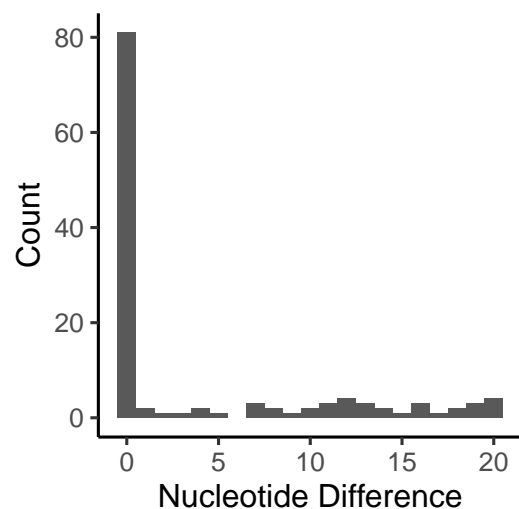
### IGHV2-5\*01

286 sequences assigned  
217 (75.9%) exact matches, in which:  
217 unique CDR3  
6 unique J



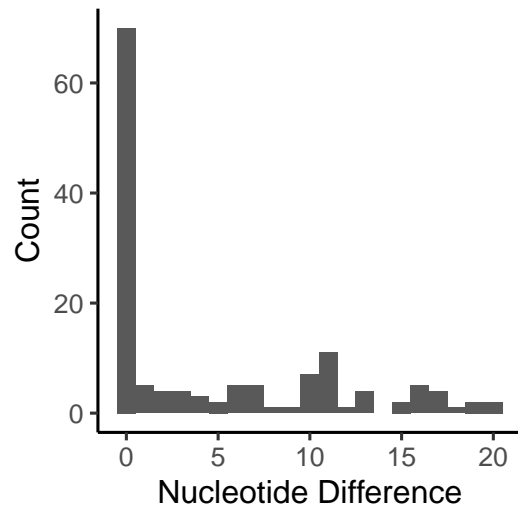
### IGHV2-26\*01

128 sequences assigned  
81 (63.3%) exact matches, in which:  
81 unique CDR3  
7 unique J



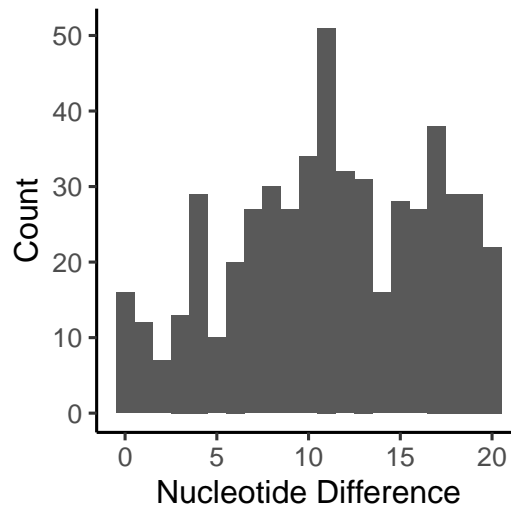
### IGHV2-70\*11\_15

146 sequences assigned  
70 (47.9%) exact matches, in which:  
70 unique CDR3  
5 unique J



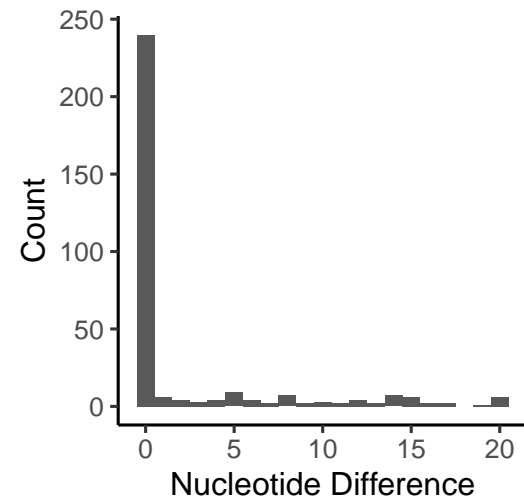
### IGHV3-7\*03

659 sequences assigned  
16 (2.4%) exact matches, in which:  
12 unique CDR3  
5 unique J



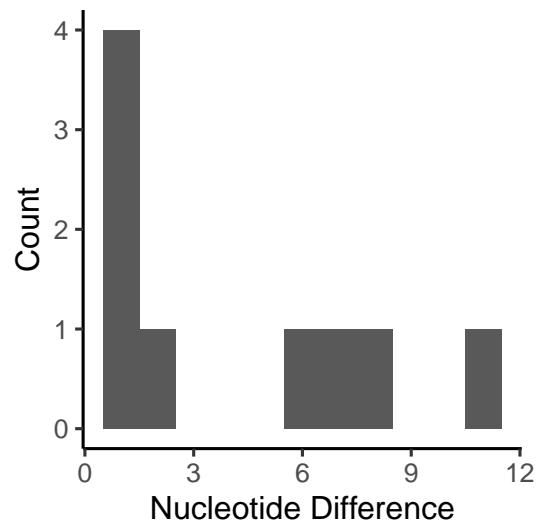
### IGHV3-11\*04

333 sequences assigned  
240 (72.1%) exact matches, in which:  
239 unique CDR3  
6 unique J



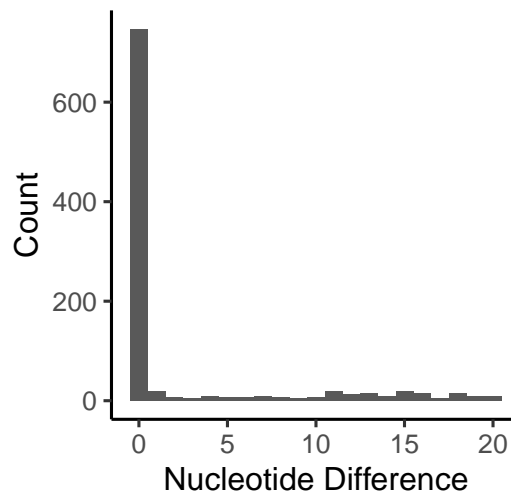
### IGHV2-70D\*04

11 sequences assigned  
No exact matches.



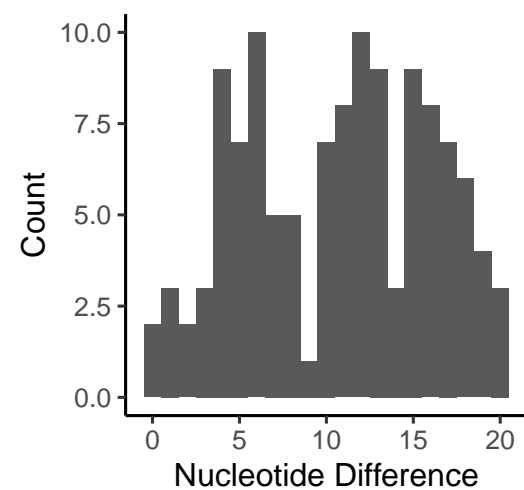
### IGHV3-9\*01

999 sequences assigned  
747 (74.8%) exact matches, in which:  
737 unique CDR3  
7 unique J



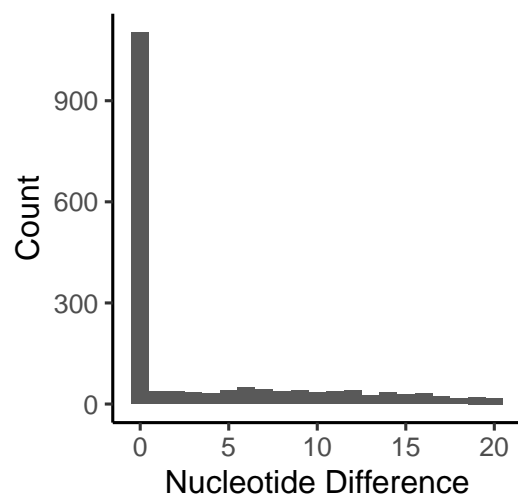
### IGHV3-11\*06

179 sequences assigned  
2 (1.1%) exact matches, in which:  
2 unique CDR3  
2 unique J



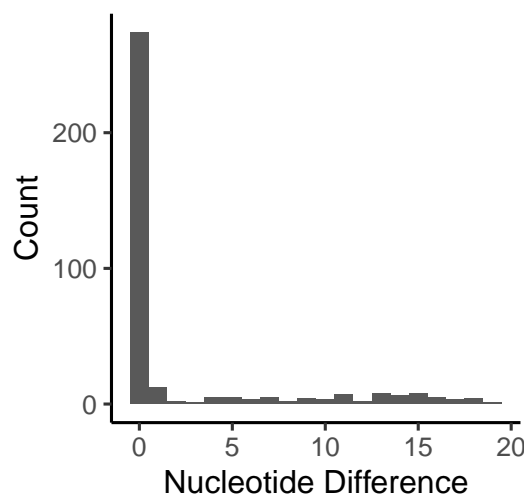
### IGHV3-7\*01

1900 sequences assigned  
1103 (58.1%) exact matches, in which:  
1075 unique CDR3  
7 unique J



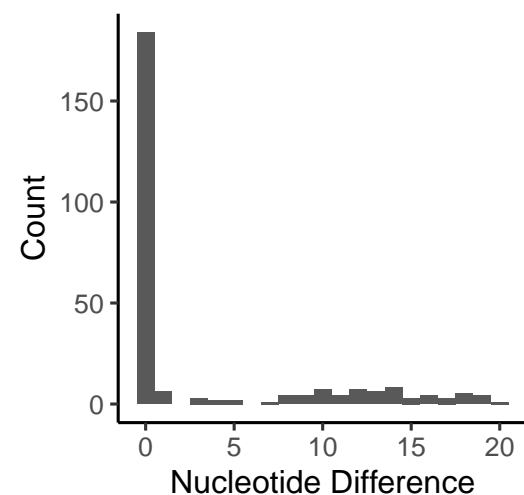
### IGHV3-11\*01

395 sequences assigned  
274 (69.4%) exact matches, in which:  
267 unique CDR3  
6 unique J



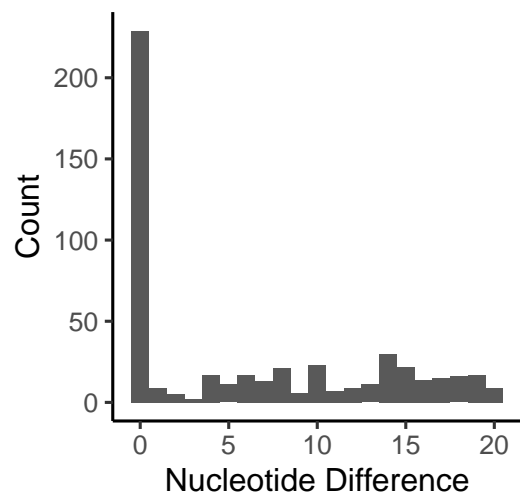
### IGHV3-13\*01

266 sequences assigned  
184 (69.2%) exact matches, in which:  
182 unique CDR3  
7 unique J



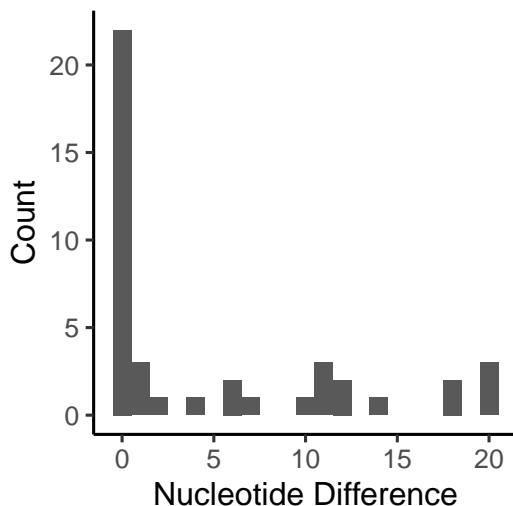
### IGHV3–15\*01\_02

575 sequences assigned  
229 (39.8%) exact matches, in which:  
224 unique CDR3  
6 unique J



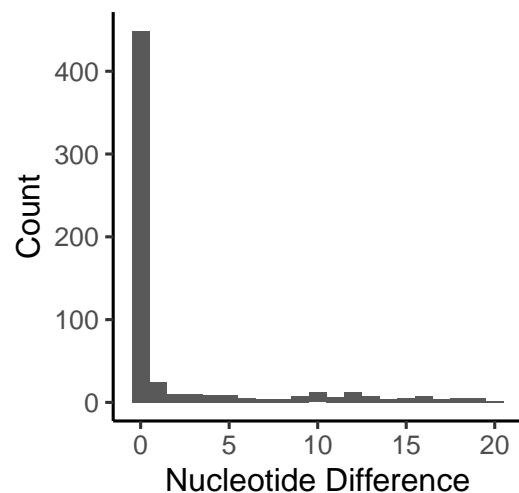
### IGHV3–20\*03\_04

45 sequences assigned  
22 (48.9%) exact matches, in which:  
22 unique CDR3  
4 unique J



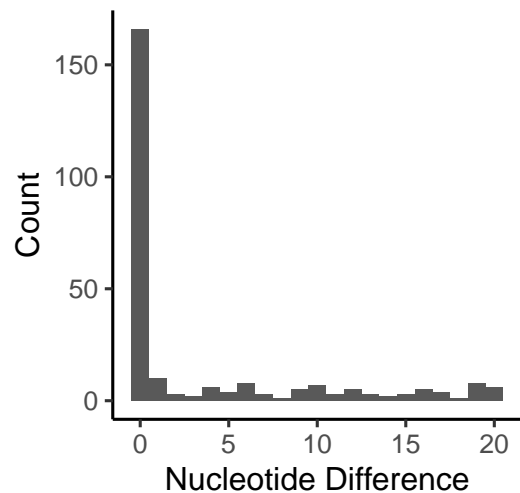
### IGHV3–30\*02\_A245G

618 sequences assigned  
449 (72.7%) exact matches, in which:  
438 unique CDR3  
6 unique J



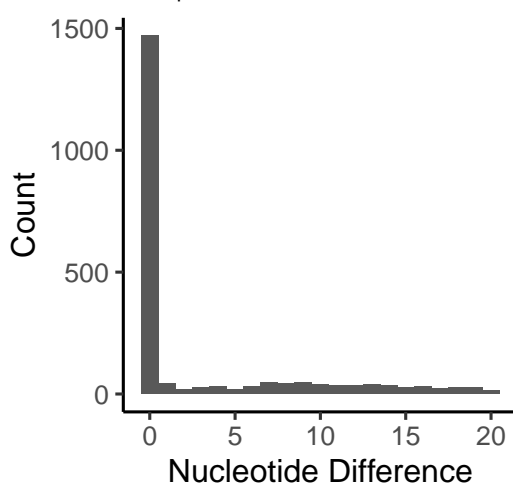
### IGHV3–15\*01\_02\_G147A

268 sequences assigned  
166 (61.9%) exact matches, in which:  
163 unique CDR3  
6 unique J



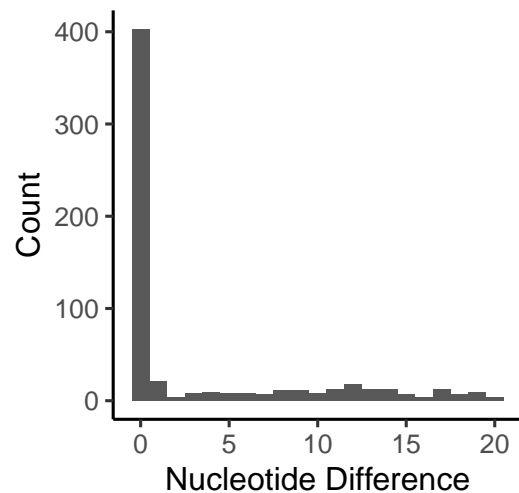
### IGHV3–21\*01\_02

2311 sequences assigned  
1470 (63.6%) exact matches, in which:  
1430 unique CDR3  
7 unique J



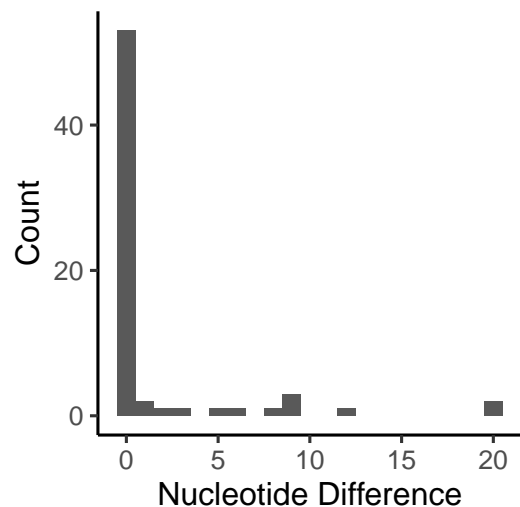
### IGHV3–33\*01

658 sequences assigned  
403 (61.2%) exact matches, in which:  
397 unique CDR3  
6 unique J



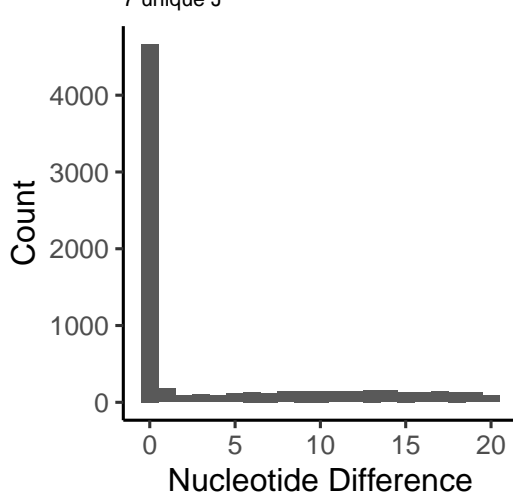
### IGHV3–20\*01\_02

66 sequences assigned  
53 (80.3%) exact matches, in which:  
51 unique CDR3  
6 unique J



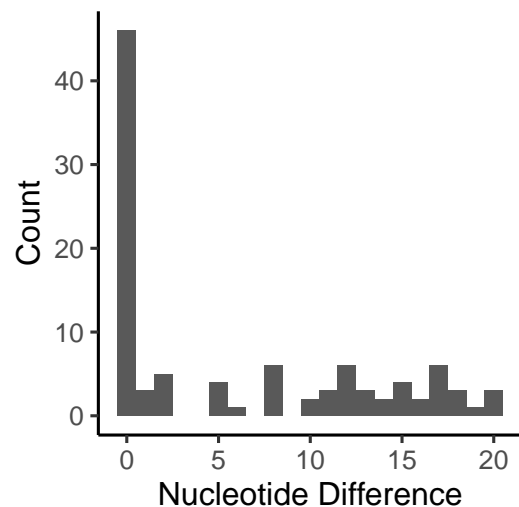
### IGHV3–23\*01\_04

8183 sequences assigned  
4666 (57%) exact matches, in which:  
4561 unique CDR3  
7 unique J



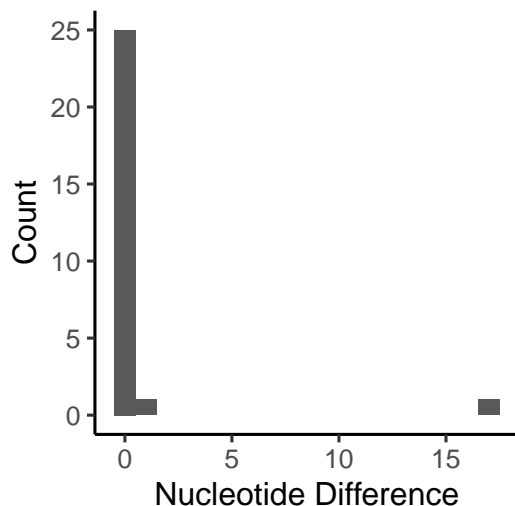
### IGHV3–43\*01

120 sequences assigned  
46 (38.3%) exact matches, in which:  
46 unique CDR3  
6 unique J



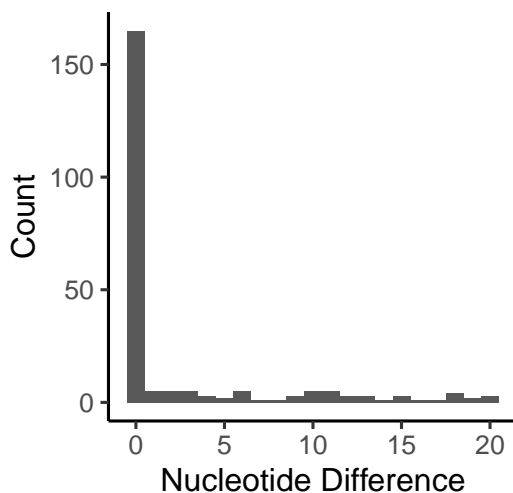
### IGHV3-43\*01\_T177A

27 sequences assigned  
25 (92.6%) exact matches, in which:  
25 unique CDR3  
4 unique J



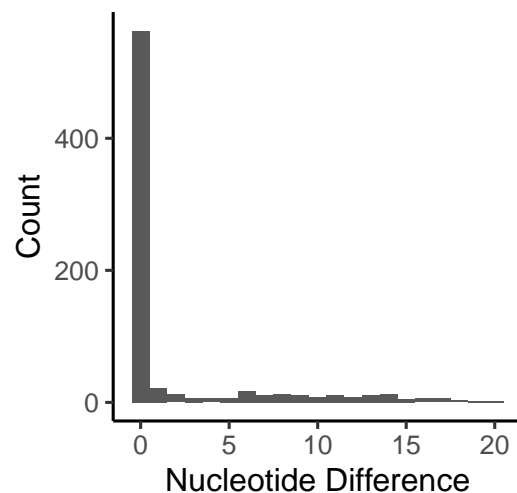
### IGHV3-49\*03\_05

242 sequences assigned  
165 (68.2%) exact matches, in which:  
165 unique CDR3  
7 unique J



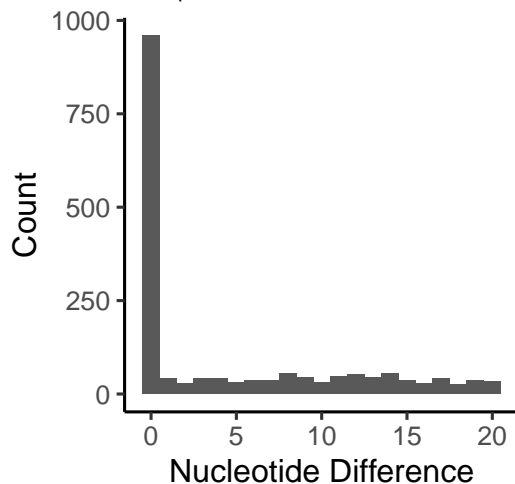
### IGHV3-66\*02

808 sequences assigned  
563 (69.7%) exact matches, in which:  
549 unique CDR3  
7 unique J



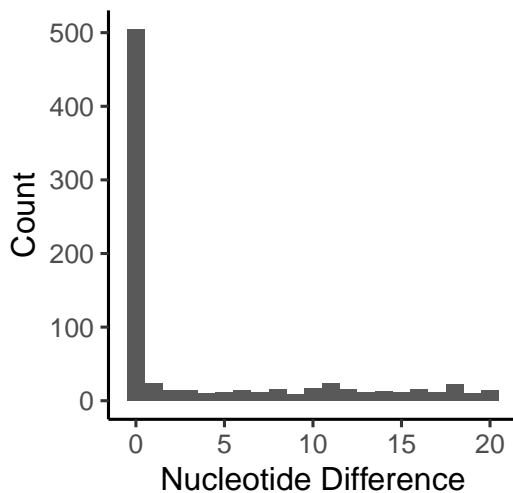
### IGHV3-48\*02

1947 sequences assigned  
959 (49.3%) exact matches, in which:  
943 unique CDR3  
7 unique J



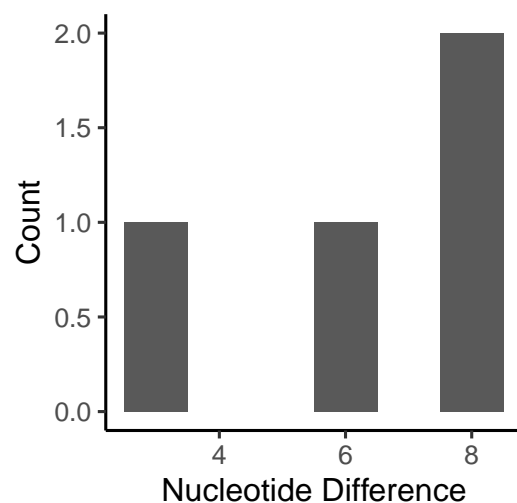
### IGHV3-53\*01\_02

863 sequences assigned  
505 (58.5%) exact matches, in which:  
496 unique CDR3  
7 unique J



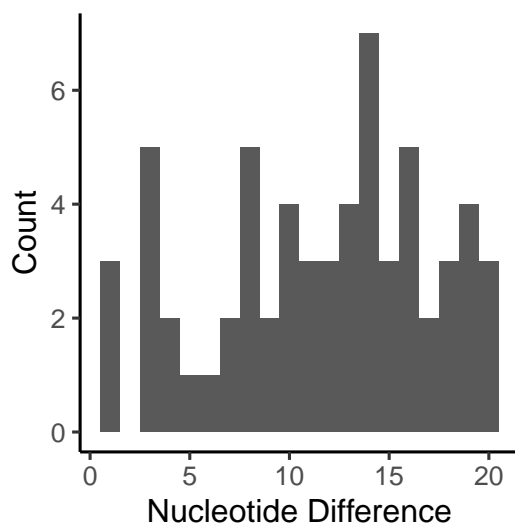
### IGHV3-69-1\*02

5 sequences assigned  
No exact matches.



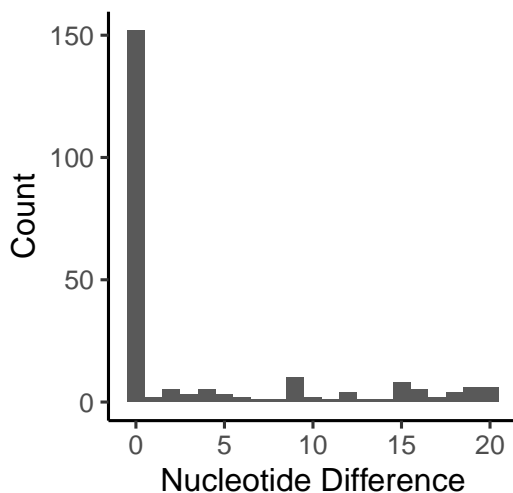
### IGHV3-49\*04

74 sequences assigned  
No exact matches.



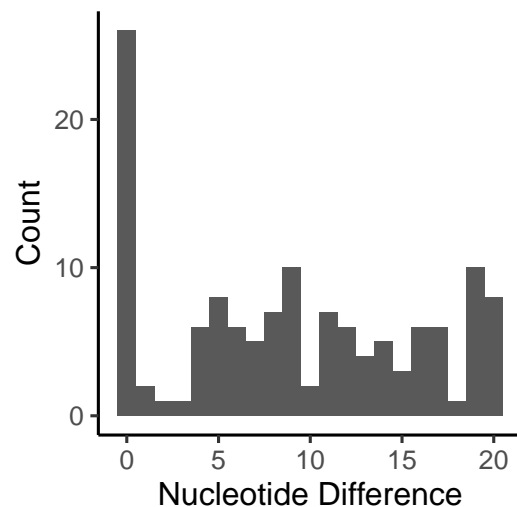
### IGHV3-64\*01

263 sequences assigned  
152 (57.8%) exact matches, in which:  
145 unique CDR3  
7 unique J



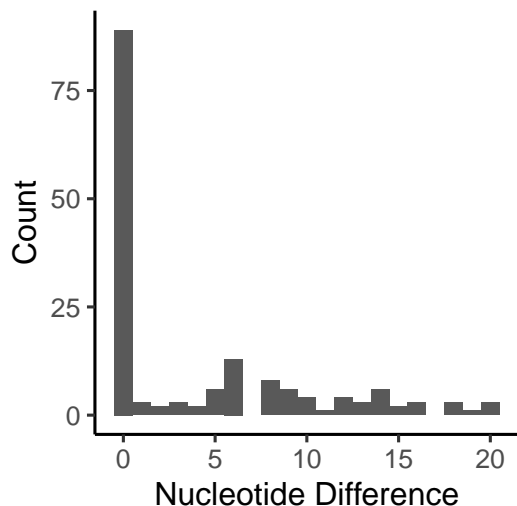
### IGHV3-72\*01

156 sequences assigned  
26 (16.7%) exact matches, in which:  
23 unique CDR3  
5 unique J



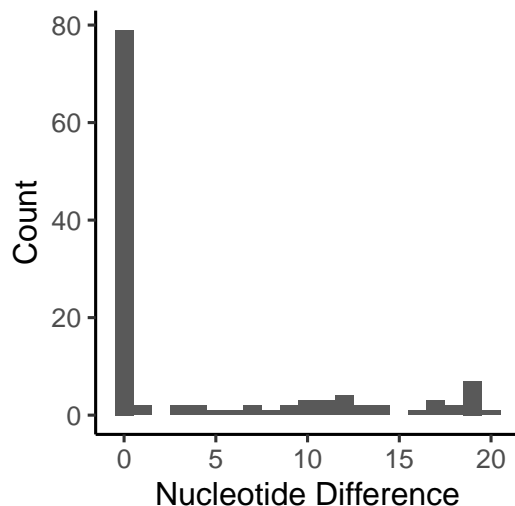
### IGHV3-73\*01\_02

187 sequences assigned  
89 (47.6%) exact matches, in which:  
89 unique CDR3  
6 unique J



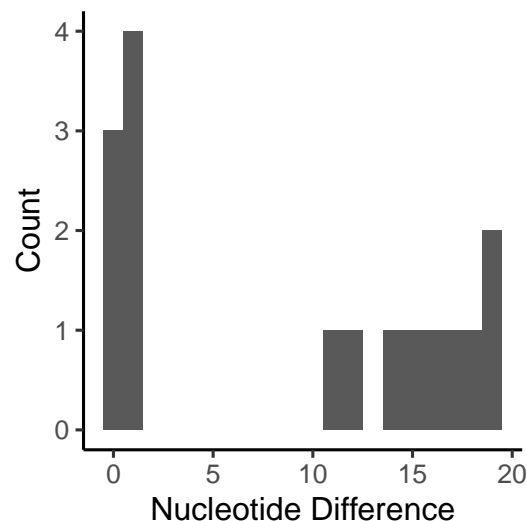
### IGHV3-43D\*03

127 sequences assigned  
79 (62.2%) exact matches, in which:  
79 unique CDR3  
6 unique J



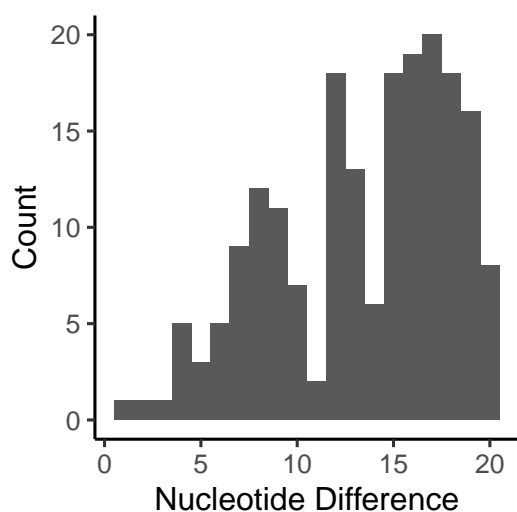
### IGHV4-28\*01\_07

18 sequences assigned  
3 (16.7%) exact matches, in which:  
3 unique CDR3  
2 unique J



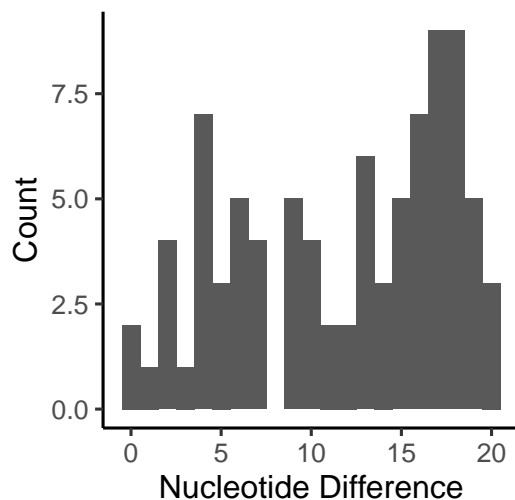
### IGHV3-74\*03

265 sequences assigned  
No exact matches.



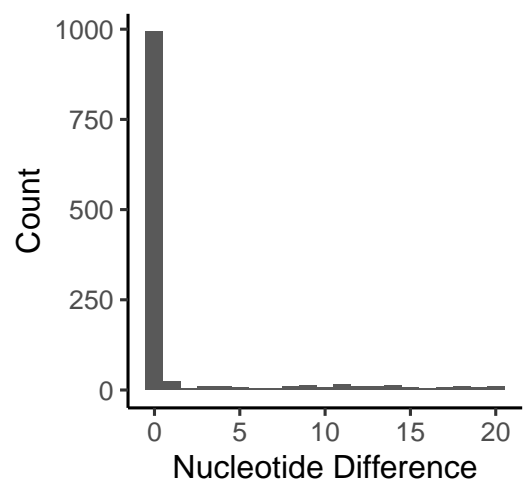
### IGHV3-64D\*06

143 sequences assigned  
2 (1.4%) exact matches, in which:  
2 unique CDR3  
2 unique J



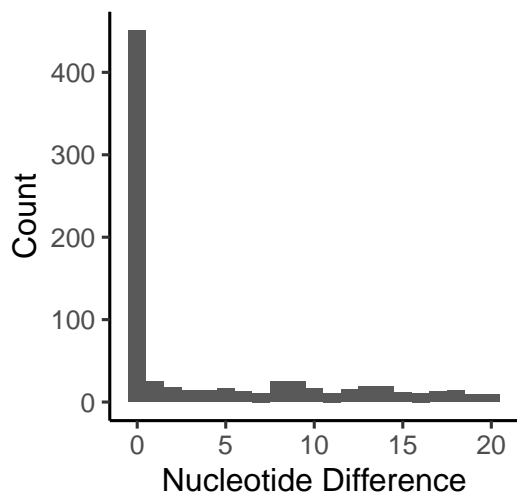
### IGHV4-30-2\*01

1263 sequences assigned  
993 (78.6%) exact matches, in which:  
970 unique CDR3  
6 unique J



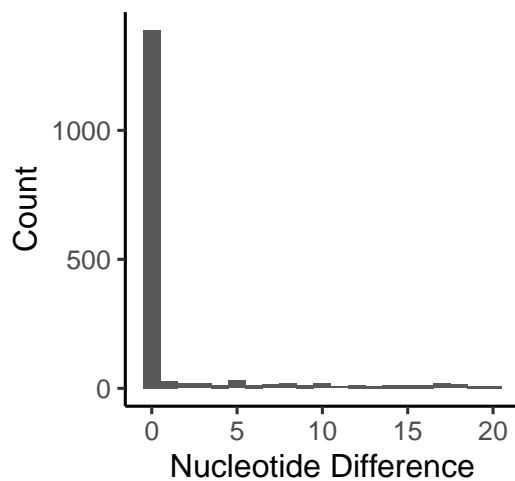
### IGHV3-74\*01\_02

836 sequences assigned  
451 (53.9%) exact matches, in which:  
440 unique CDR3  
7 unique J



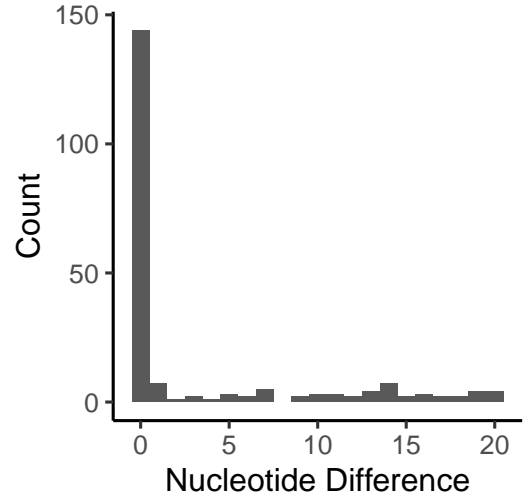
### IGHV4-4\*07

1780 sequences assigned  
1389 (78%) exact matches, in which:  
1369 unique CDR3  
7 unique J



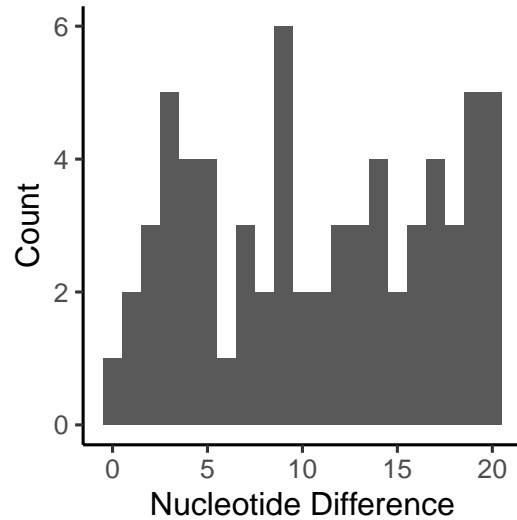
### IGHV4-30-4\*07

260 sequences assigned  
144 (55.4%) exact matches, in which:  
144 unique CDR3  
6 unique J



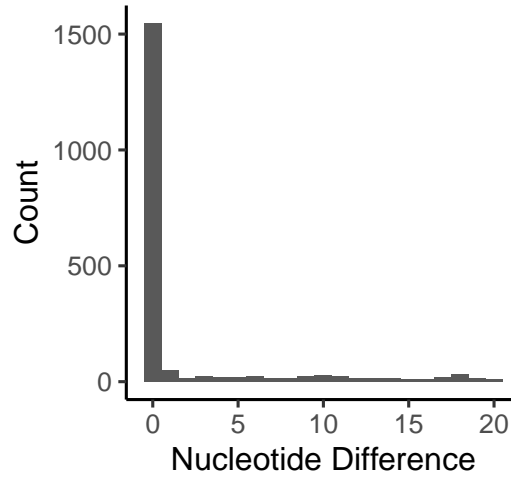
### IGHV4-31\*02

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



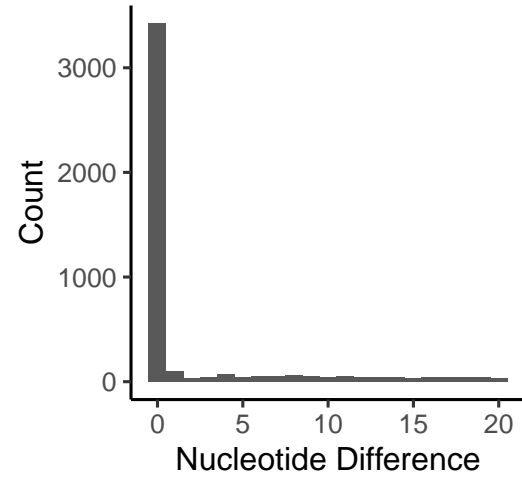
### IGHV4-39\*07

2084 sequences assigned  
1546 (74.2%) exact matches, in which:  
1528 unique CDR3  
7 unique J



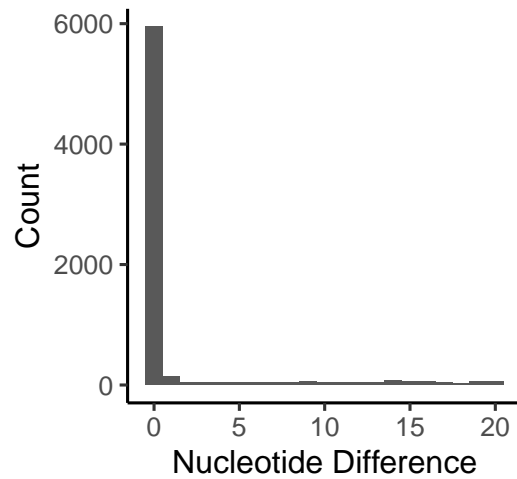
### IGHV4-59\*02\_G88A

4708 sequences assigned  
3424 (72.7%) exact matches, in which:  
3357 unique CDR3  
7 unique J



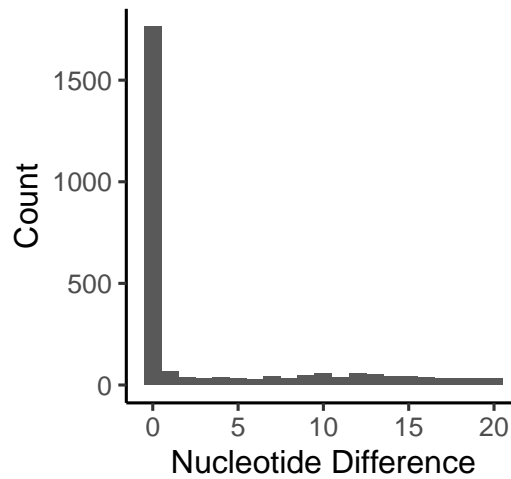
### IGHV4-34\*01\_02

7288 sequences assigned  
5949 (81.6%) exact matches, in which:  
5775 unique CDR3  
7 unique J



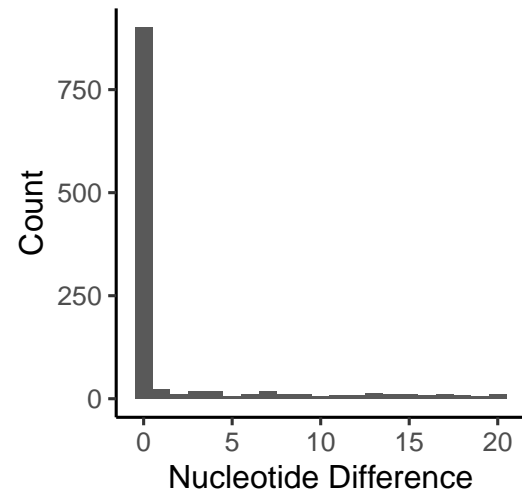
### IGHV4-39\*02\_C258G\_C

2926 sequences assigned  
1763 (60.3%) exact matches, in which:  
1724 unique CDR3  
7 unique J



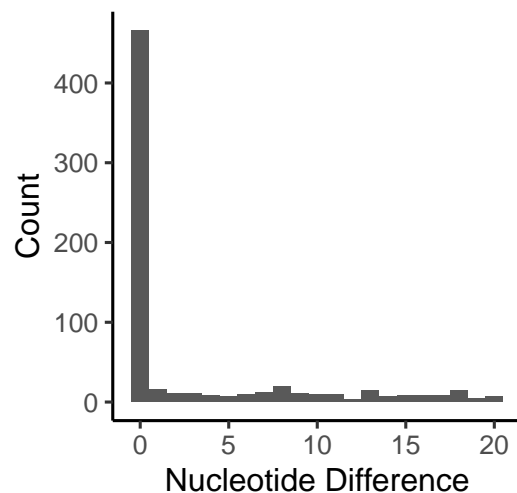
### IGHV4-61\*02

1185 sequences assigned  
902 (76.1%) exact matches, in which:  
893 unique CDR3  
6 unique J



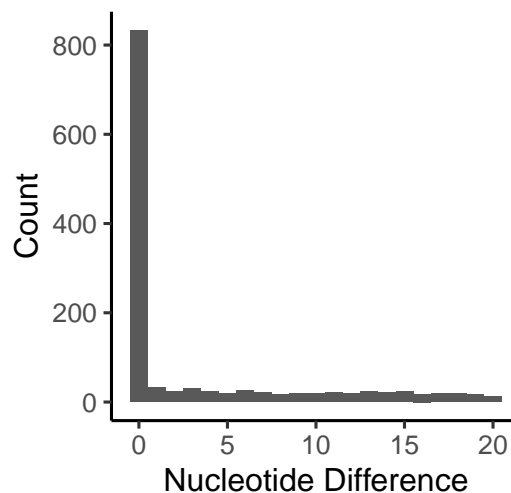
### IGHV4-38-2\*02

731 sequences assigned  
466 (63.7%) exact matches, in which:  
456 unique CDR3  
6 unique J



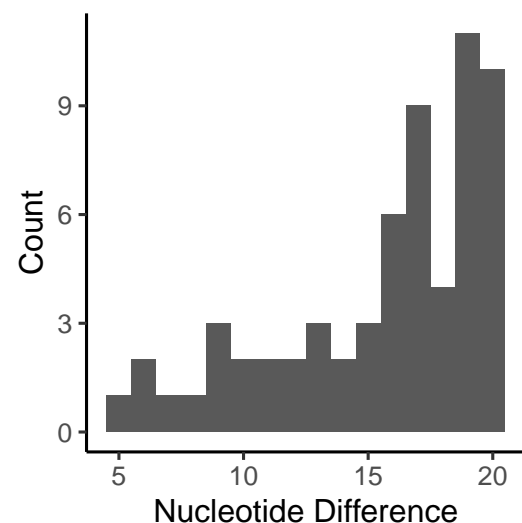
### IGHV4-59\*08

1384 sequences assigned  
833 (60.2%) exact matches, in which:  
814 unique CDR3  
7 unique J



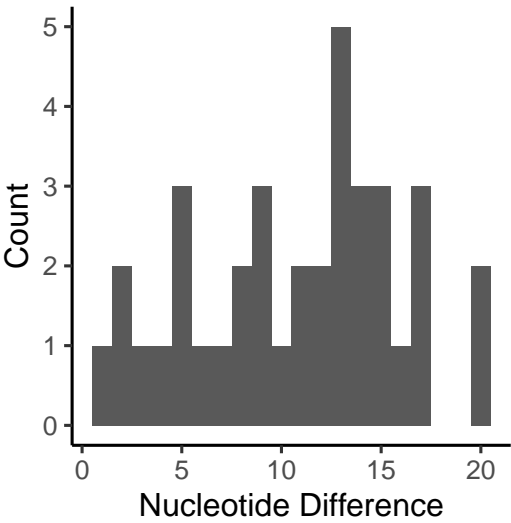
### IGHV4/OR15-8\*02

105 sequences assigned  
No exact matches.



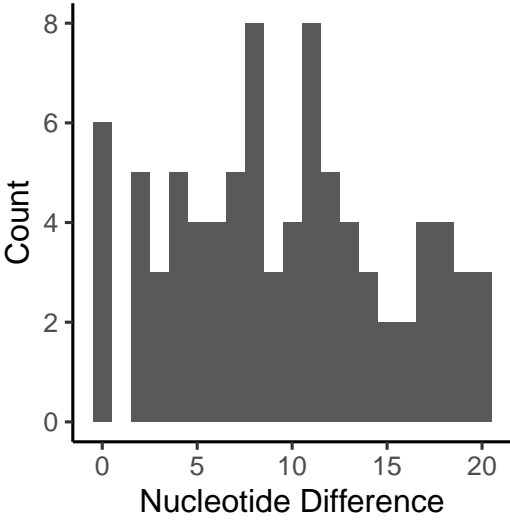
IGHV5-10-1\*01\_03

55 sequences assigned  
No exact matches.



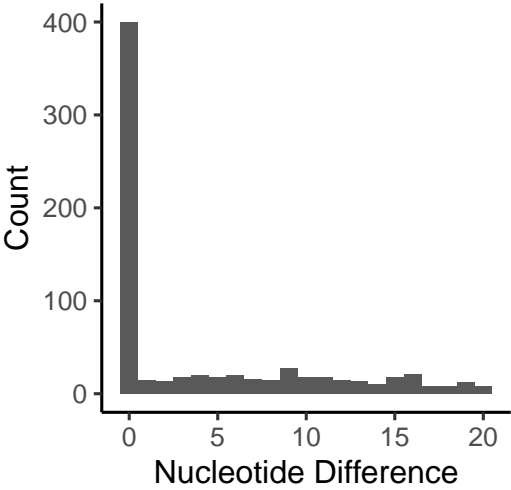
IGHV7-4-1\*02

131 sequences assigned  
6 (4.6%) exact matches, in which:  
6 unique CDR3  
1 unique J



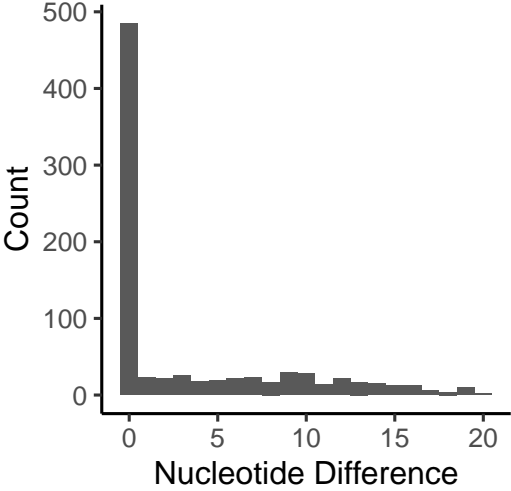
IGHV5-51\*07\_A128G

760 sequences assigned  
400 (52.6%) exact matches, in which:  
400 unique CDR3  
7 unique J



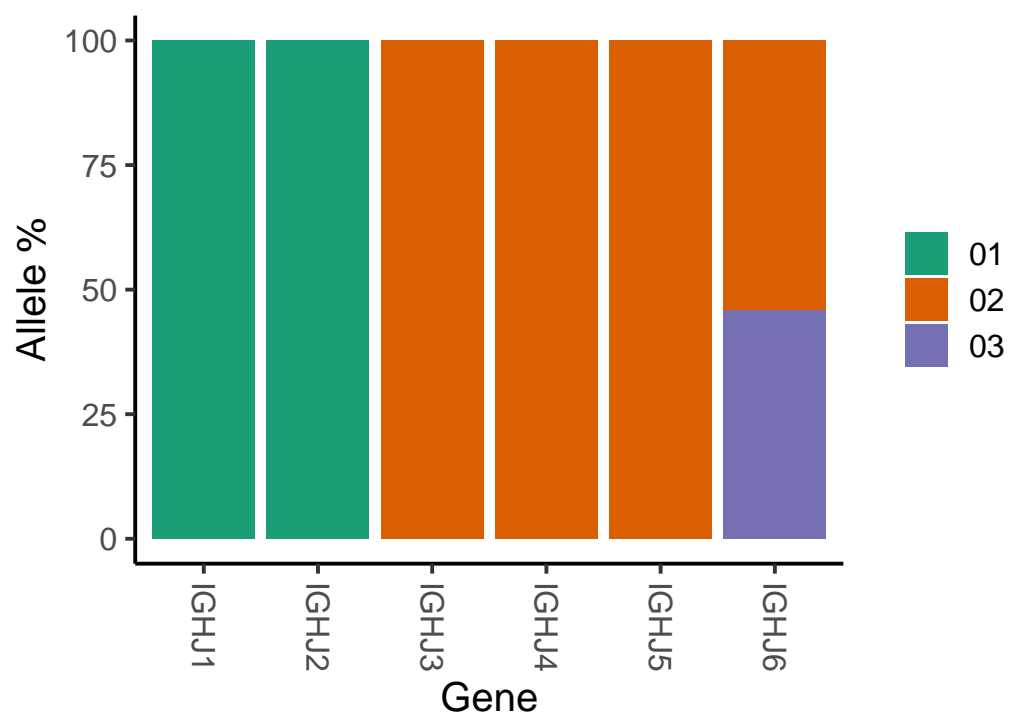
IGHV6-1\*01\_02

855 sequences assigned  
485 (56.7%) exact matches, in which:  
483 unique CDR3  
7 unique J

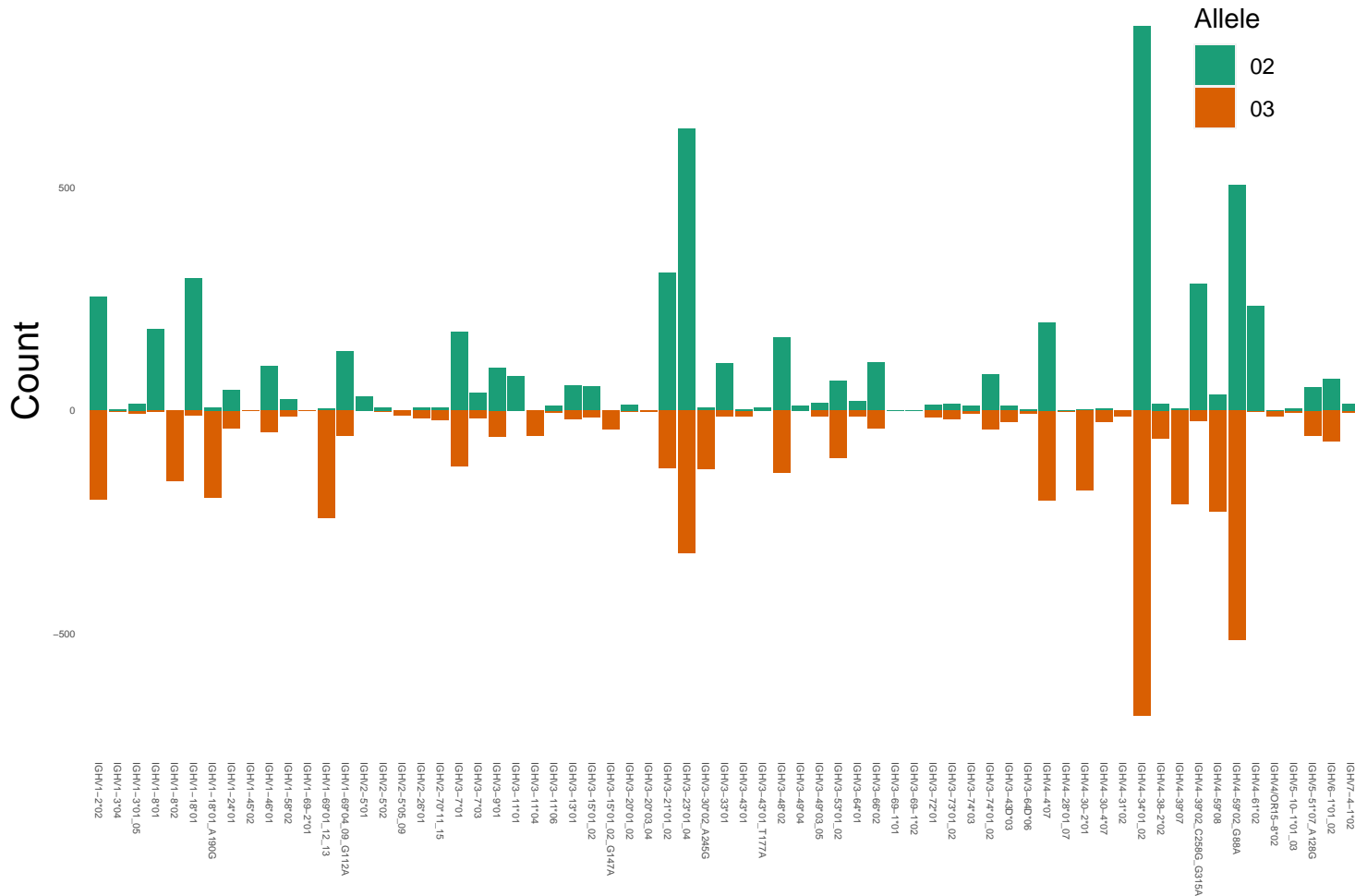




Allele Usage



Sequence Count byIGHJ6 allele usage



Warning – no inferred sequences found.