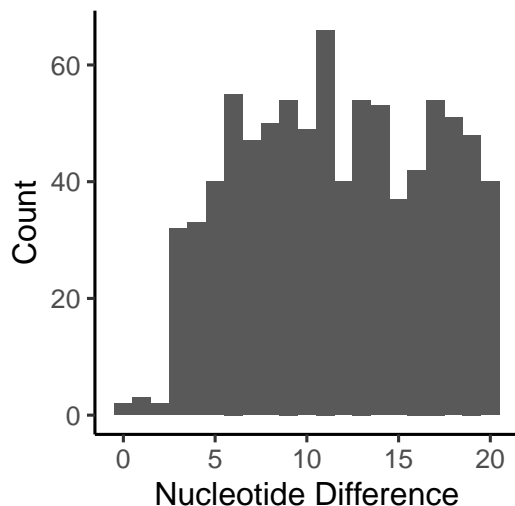


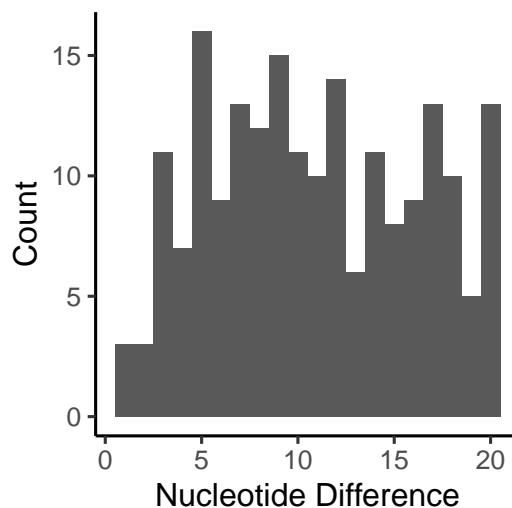
### IGHV1-2\*02

1104 sequences assigned  
2 (0.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



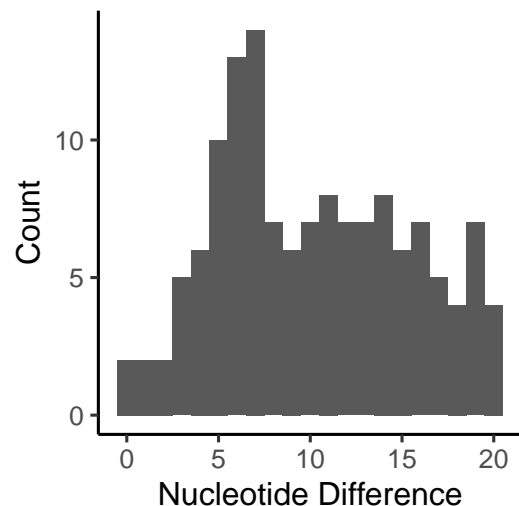
### IGHV1-3\*01\_05

235 sequences assigned  
No exact matches.



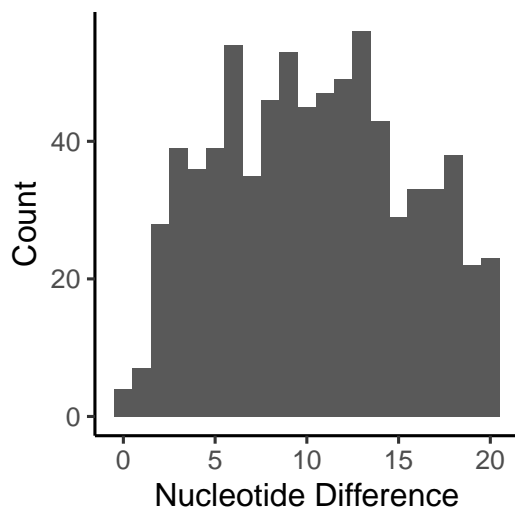
### IGHV1-24\*01

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



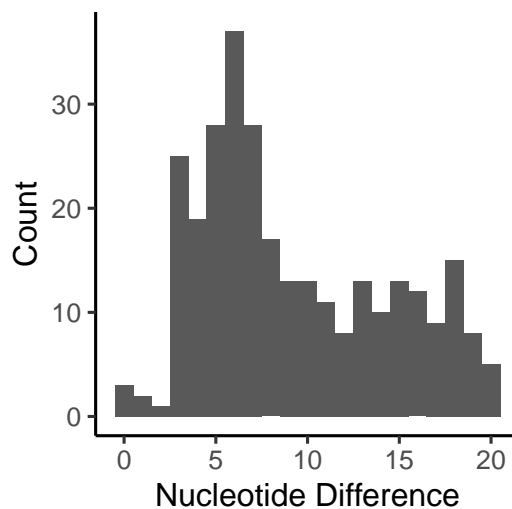
### IGHV1-2\*06

997 sequences assigned  
4 (0.4%) exact matches, in which:  
3 unique CDR3  
2 unique J



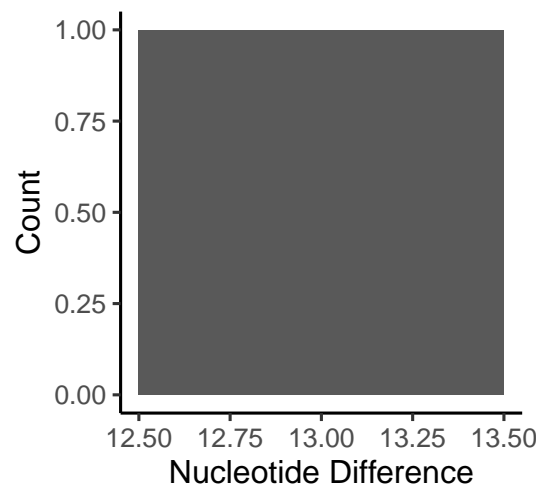
### IGHV1-8\*01

399 sequences assigned  
3 (0.8%) exact matches, in which:  
3 unique CDR3  
2 unique J



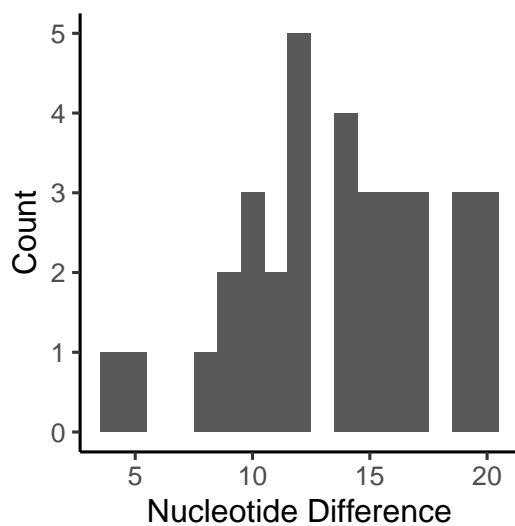
### IGHV1-45\*02

3 sequences assigned  
No exact matches.



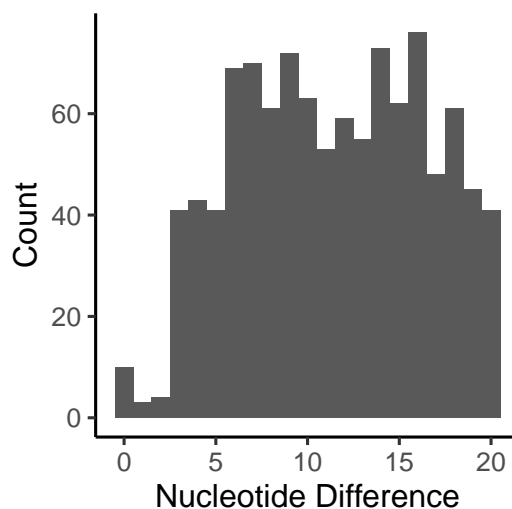
### IGHV1-3\*04

49 sequences assigned  
No exact matches.



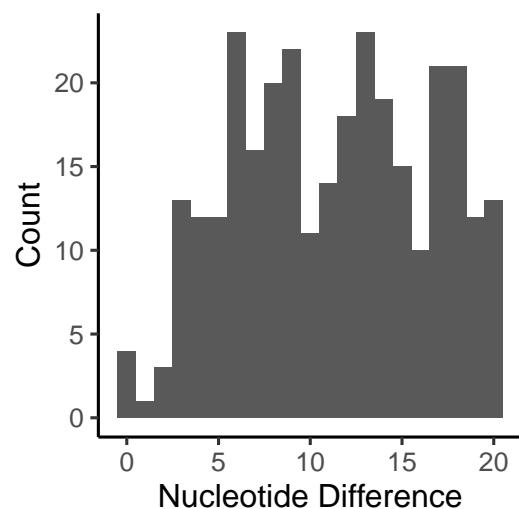
### IGHV1-18\*01

1428 sequences assigned  
10 (0.7%) exact matches, in which:  
10 unique CDR3  
3 unique J



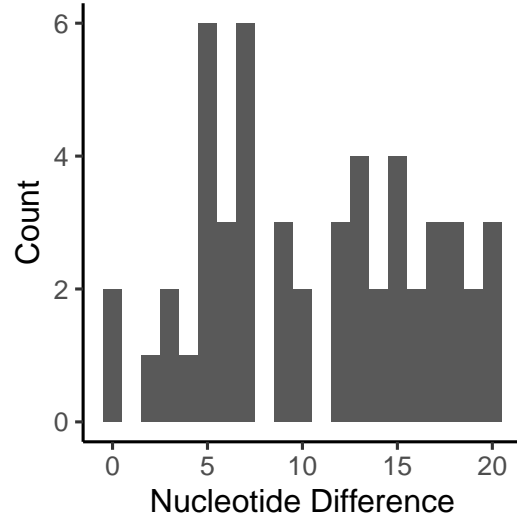
### IGHV1-46\*01

413 sequences assigned  
4 (1%) exact matches, in which:  
4 unique CDR3  
3 unique J



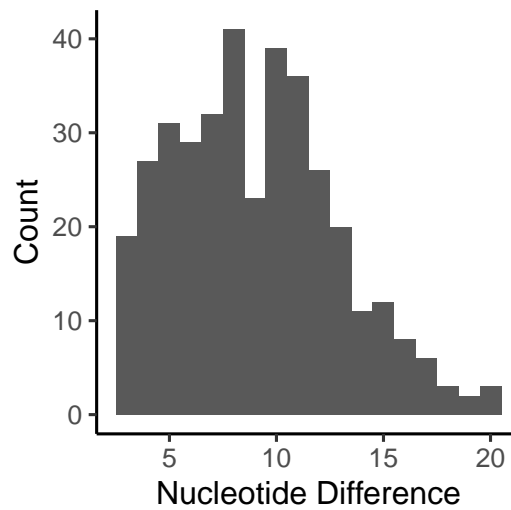
### IGHV1-58\*01\_03

72 sequences assigned  
2 (2.8%) exact matches, in which:  
2 unique CDR3  
2 unique J



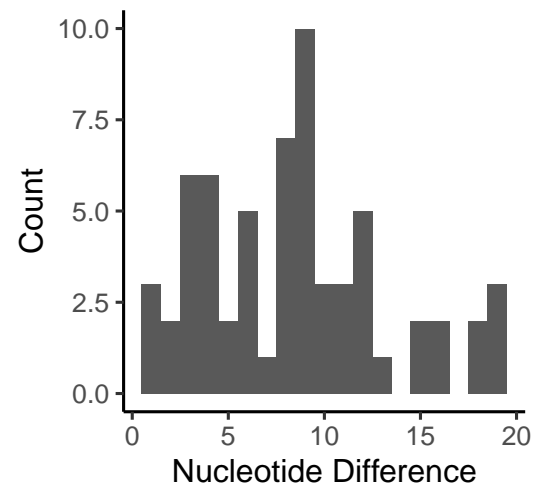
### IGHV2-5\*01

400 sequences assigned  
No exact matches.



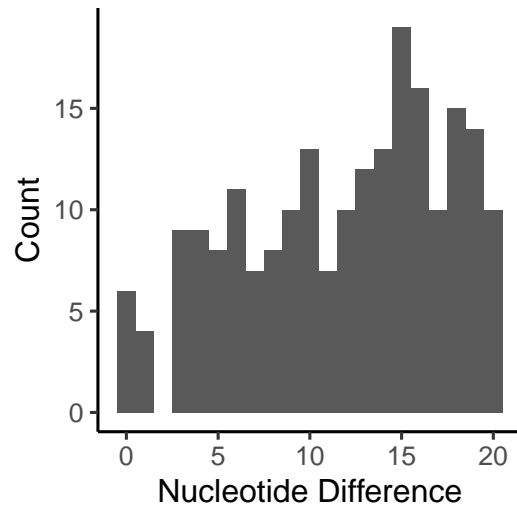
### IGHV2-70\*01

76 sequences assigned  
No exact matches.



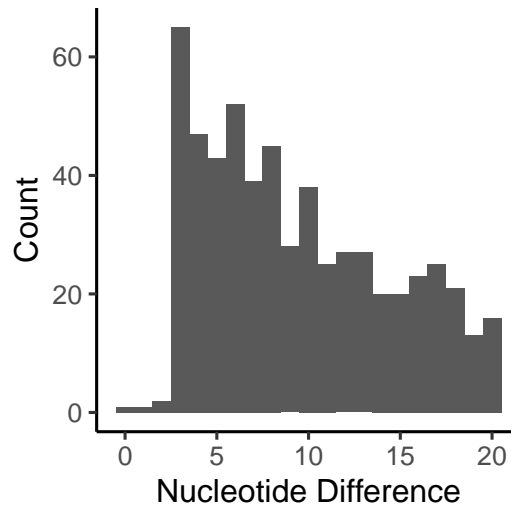
### IGHV1-69\*01\_12\_13

426 sequences assigned  
6 (1.4%) exact matches, in which:  
5 unique CDR3  
1 unique J



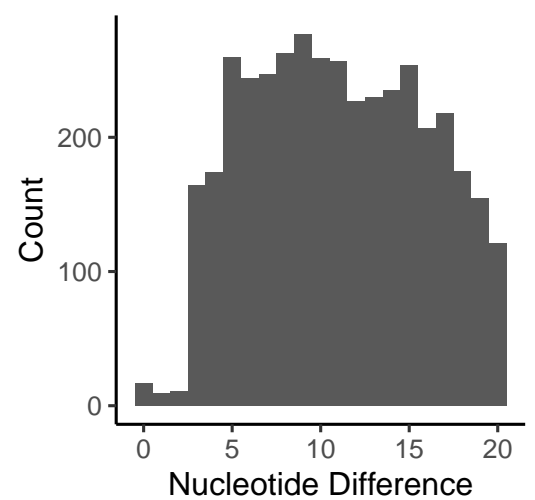
### IGHV2-5\*02

707 sequences assigned  
1 (0.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



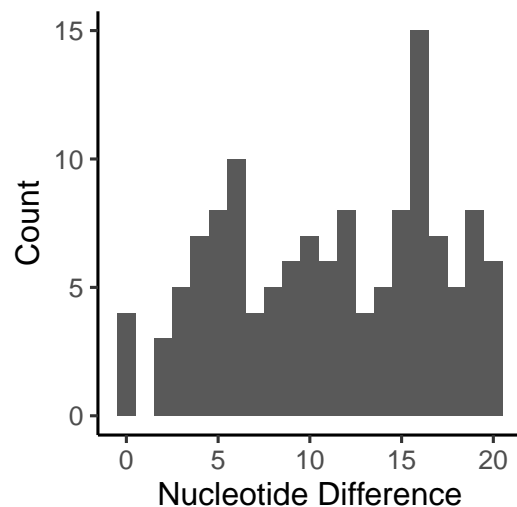
### IGHV3-7\*01

4646 sequences assigned  
17 (0.4%) exact matches, in which:  
12 unique CDR3  
4 unique J



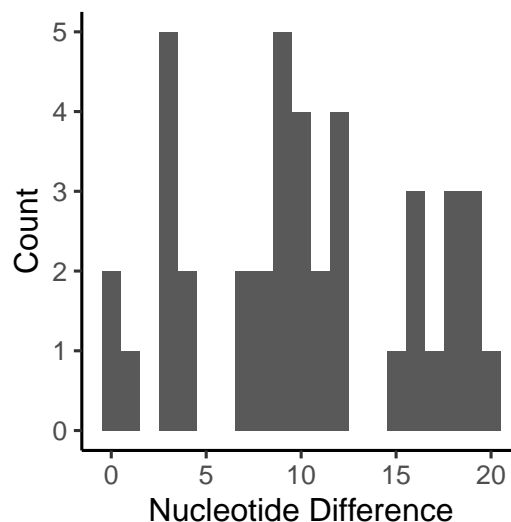
### IGHV1-69\*06\_14

261 sequences assigned  
4 (1.5%) exact matches, in which:  
4 unique CDR3  
2 unique J



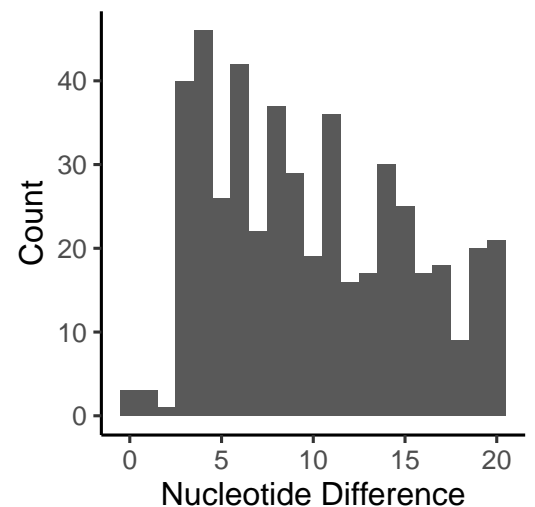
### IGHV2-26\*01

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



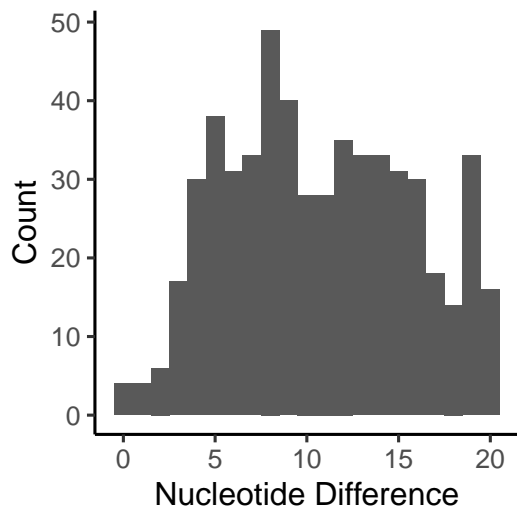
### IGHV3-9\*01

581 sequences assigned  
3 (0.5%) exact matches, in which:  
3 unique CDR3  
2 unique J



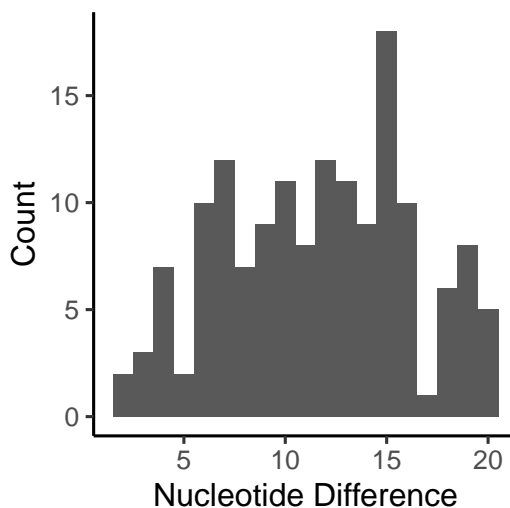
### IGHV3-11\*01

766 sequences assigned  
4 (0.5%) exact matches, in which:  
2 unique CDR3  
2 unique J



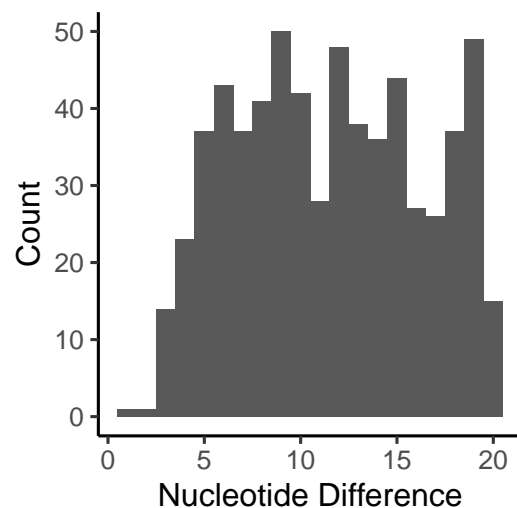
### IGHV3-13\*01

211 sequences assigned  
No exact matches.



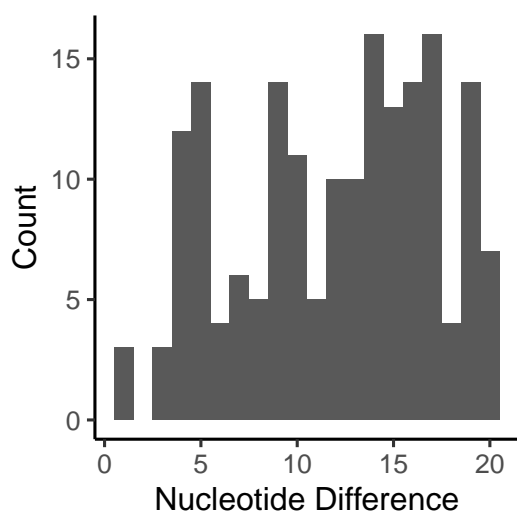
### IGHV3-15\*01\_02

754 sequences assigned  
No exact matches.



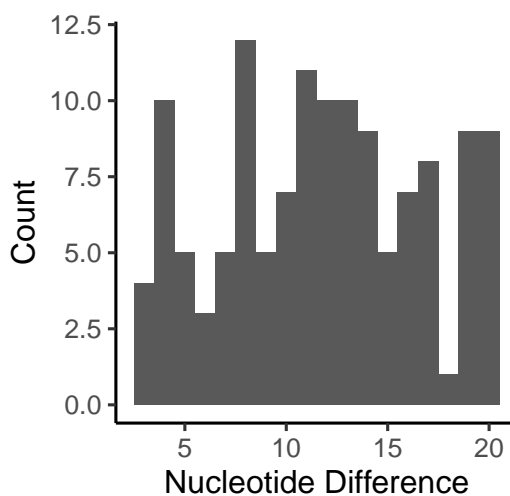
### IGHV3-11\*06

229 sequences assigned  
No exact matches.



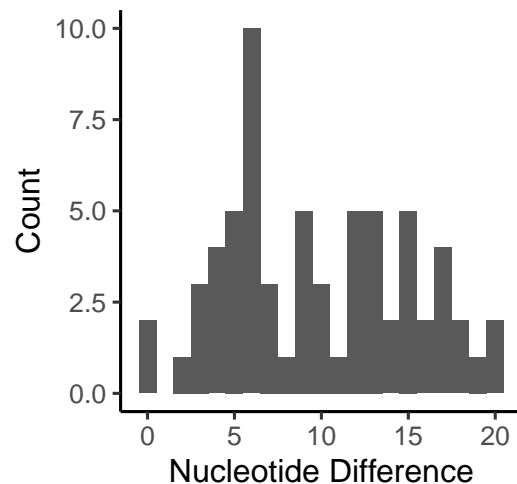
### IGHV3-13\*04

154 sequences assigned  
No exact matches.



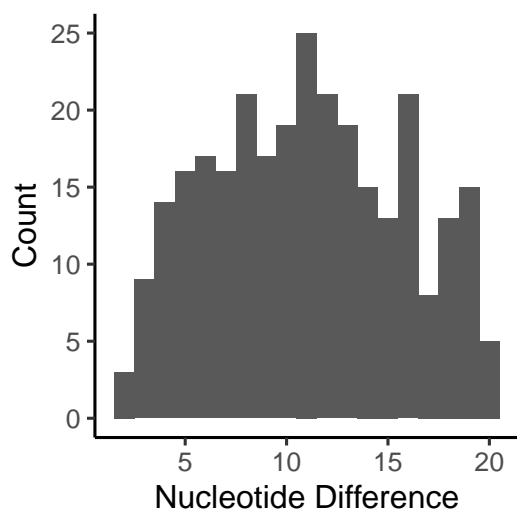
### IGHV3-20\*01\_02

74 sequences assigned  
2 (2.7%) exact matches, in which:  
2 unique CDR3  
1 unique J



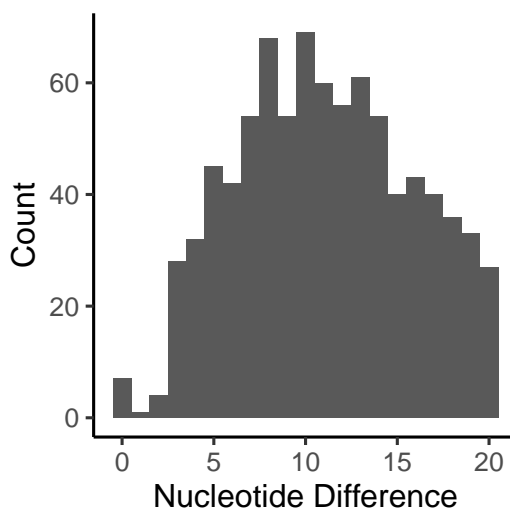
### IGHV3-11\*03\_05

396 sequences assigned  
No exact matches.



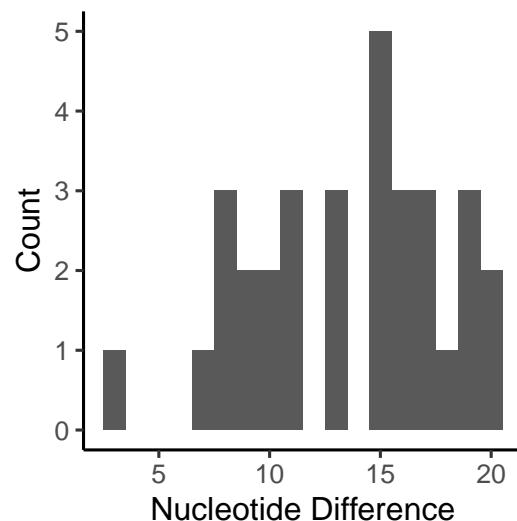
### IGHV3-15\*07

1040 sequences assigned  
7 (0.7%) exact matches, in which:  
5 unique CDR3  
3 unique J



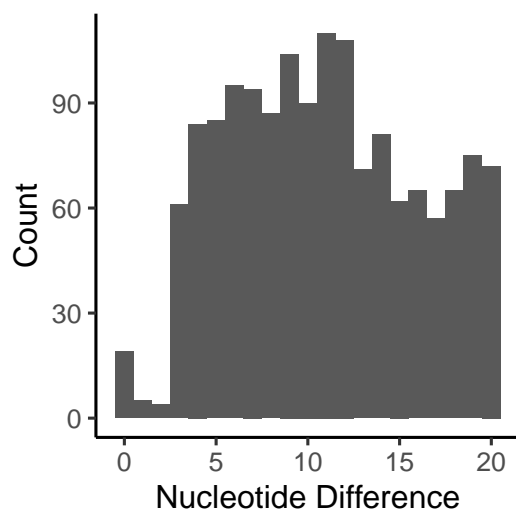
### IGHV3-20\*03\_04

50 sequences assigned  
No exact matches.



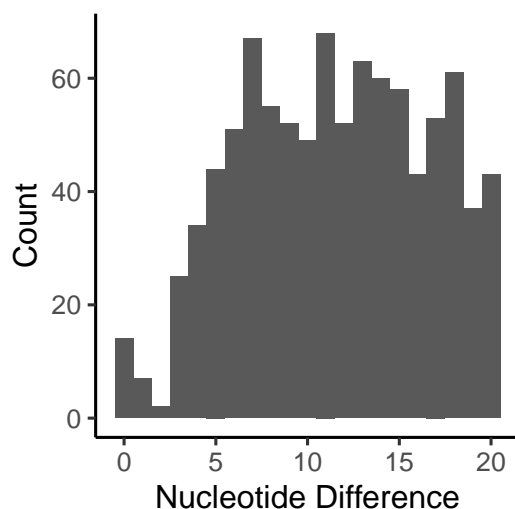
### IGHV3-21\*01\_02

1965 sequences assigned  
19 (1%) exact matches, in which:  
9 unique CDR3  
3 unique J



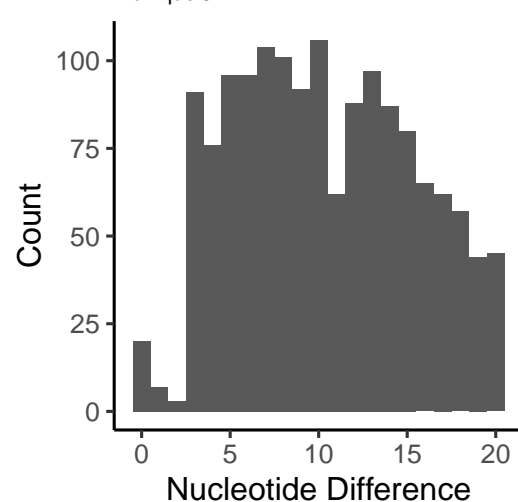
### IGHV3-33\*01

1252 sequences assigned  
14 (1.1%) exact matches, in which:  
9 unique CDR3  
2 unique J



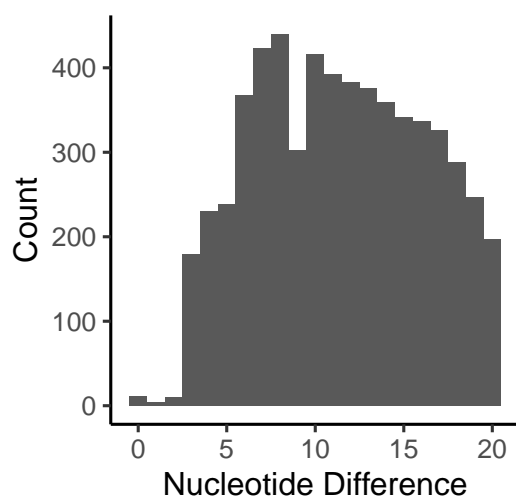
### IGHV3-48\*02

1906 sequences assigned  
20 (1%) exact matches, in which:  
9 unique CDR3  
4 unique J



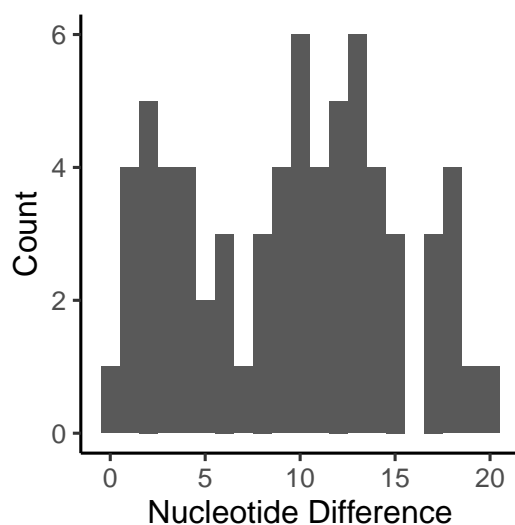
### IGHV3-23\*01\_04

7417 sequences assigned  
11 (0.1%) exact matches, in which:  
7 unique CDR3  
3 unique J



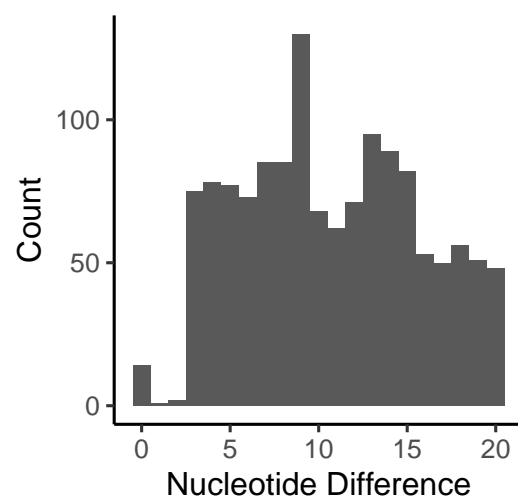
### IGHV3-43\*01

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



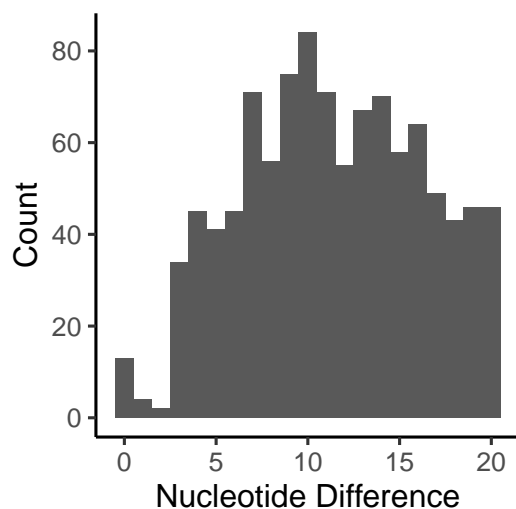
### IGHV3-48\*03

1667 sequences assigned  
14 (0.8%) exact matches, in which:  
7 unique CDR3  
3 unique J



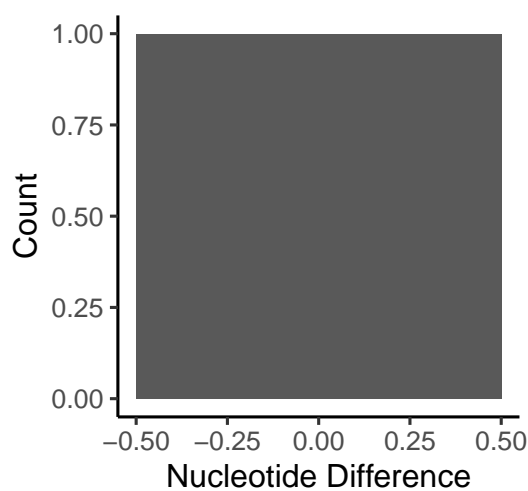
### IGHV3-30-3\*01

1358 sequences assigned  
13 (1%) exact matches, in which:  
8 unique CDR3  
3 unique J



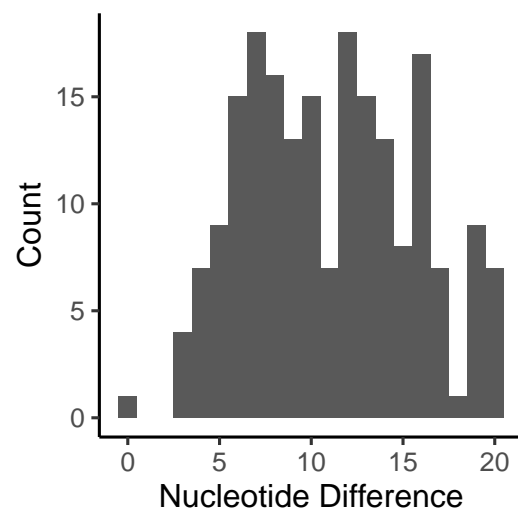
### IGHV3-47\*02

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



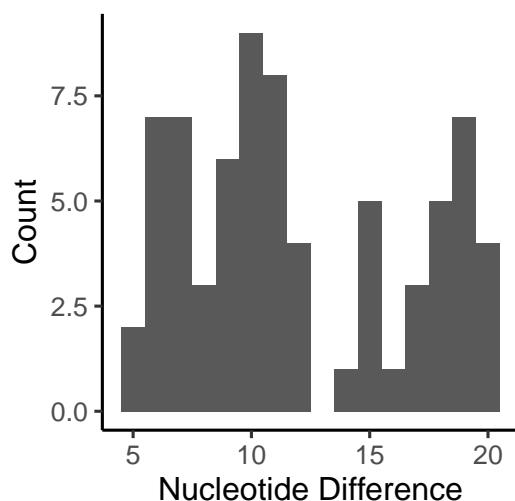
### IGHV3-49\*04

230 sequences assigned  
1 (0.4%) exact matches, in which:  
1 unique CDR3  
1 unique J



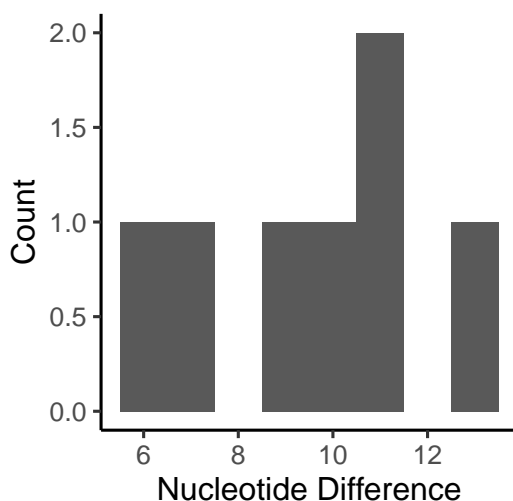
### IGHV3-49\*03\_05

87 sequences assigned  
No exact matches.



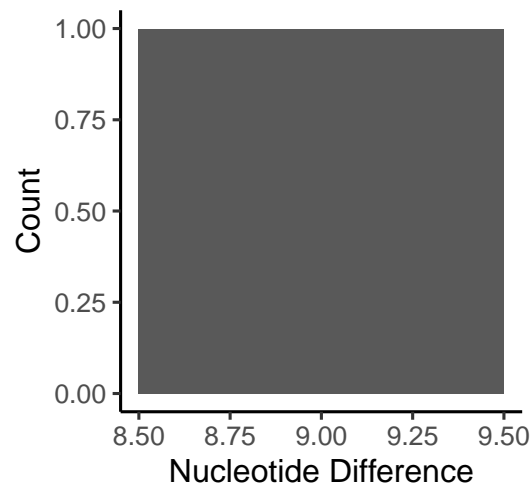
### IGHV3-64\*05

8 sequences assigned  
No exact matches.



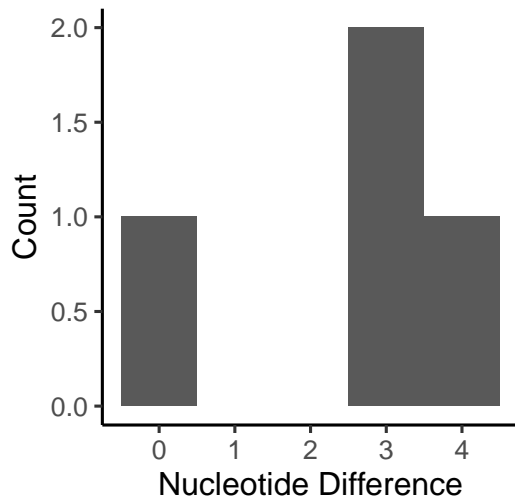
### IGHV3-66\*03

2 sequences assigned  
No exact matches.



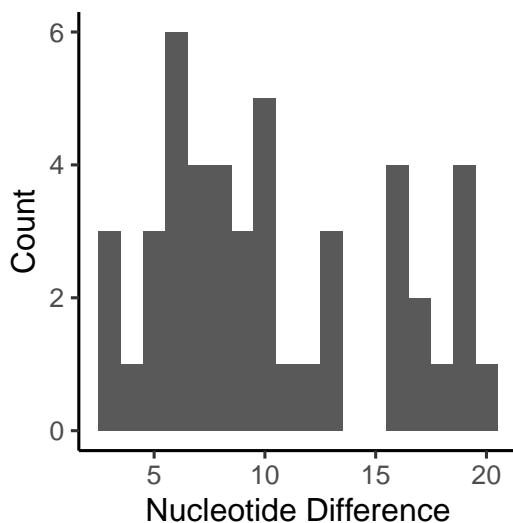
### IGHV3-52\*01\_03

4 sequences assigned  
1 (25%) exact matches, in which:  
1 unique CDR3  
1 unique J



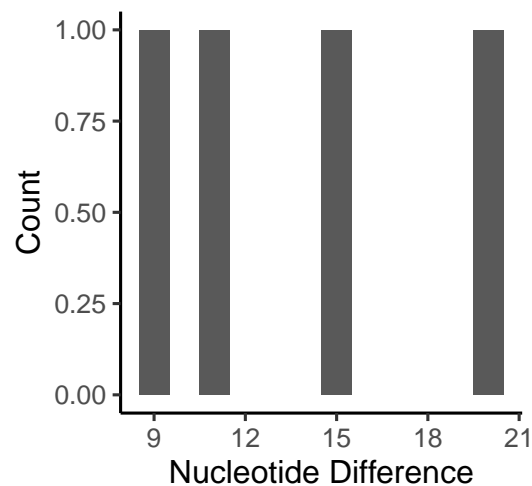
### IGHV3-64\*02\_07

51 sequences assigned  
No exact matches.



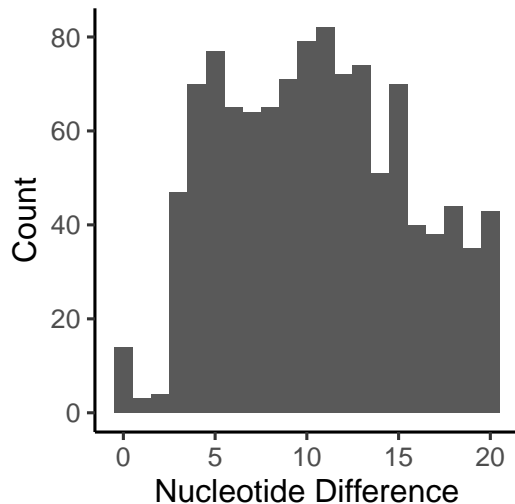
### IGHV3-66\*04

5 sequences assigned  
No exact matches.



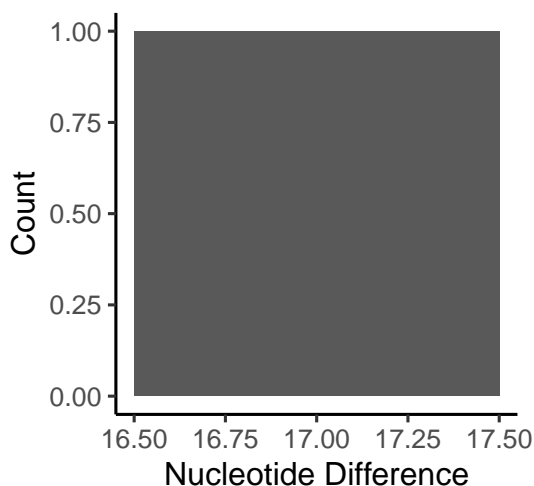
### IGHV3-53\*01\_02

1311 sequences assigned  
14 (1.1%) exact matches, in which:  
8 unique CDR3  
2 unique J



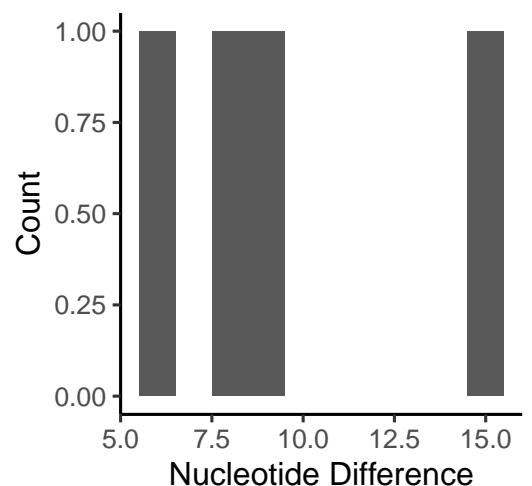
### IGHV3-66\*01

1 sequences assigned  
No exact matches.



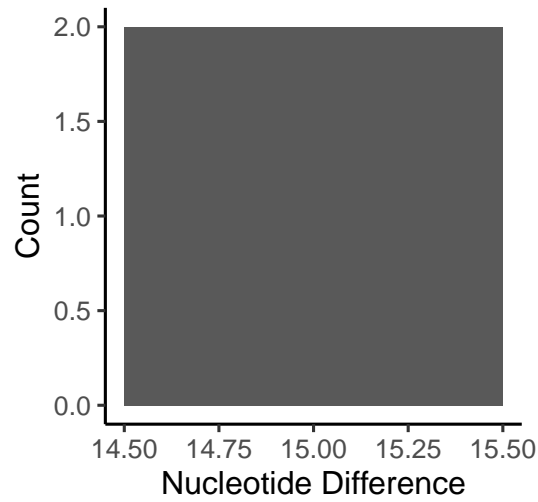
### IGHV3-69-1\*01

17 sequences assigned  
No exact matches.



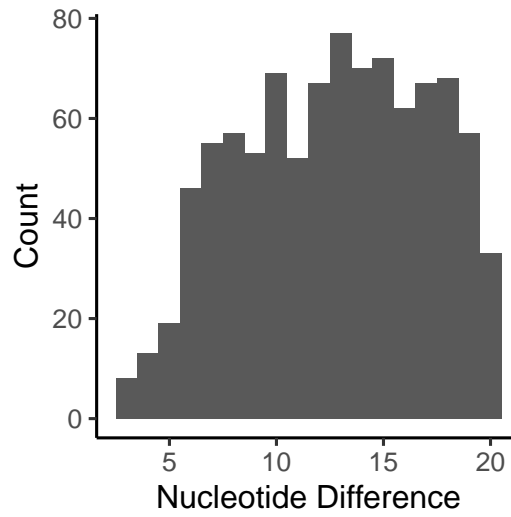
### IGHV3-69-1\*02

7 sequences assigned  
No exact matches.



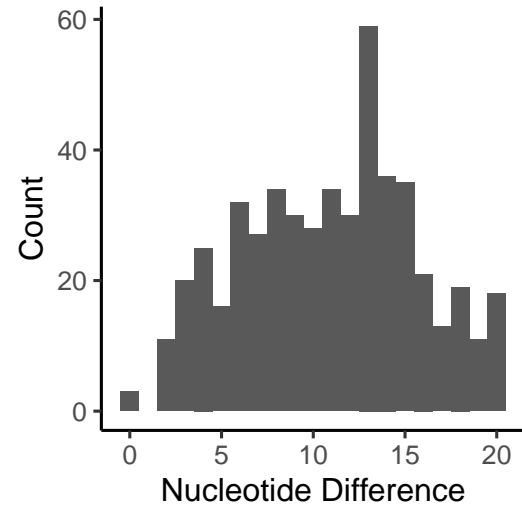
### IGHV3-74\*03

1165 sequences assigned  
No exact matches.



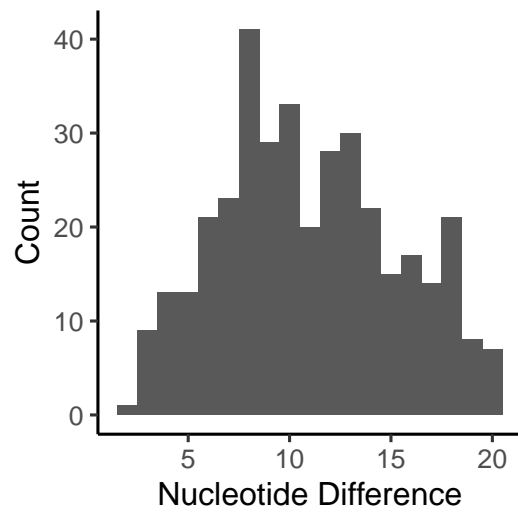
### IGHV3-64D\*09

720 sequences assigned  
3 (0.4%) exact matches, in which:  
2 unique CDR3  
1 unique J



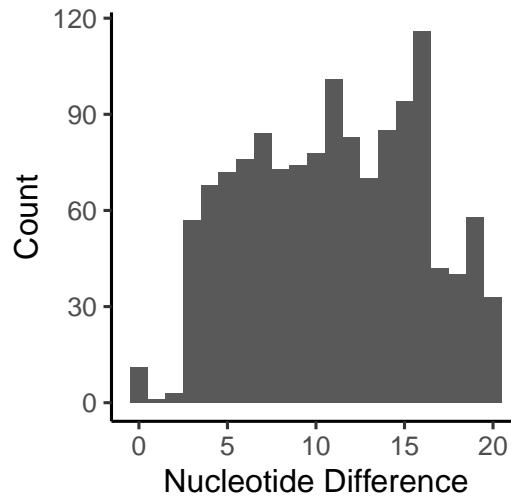
### IGHV3-72\*01

415 sequences assigned  
No exact matches.



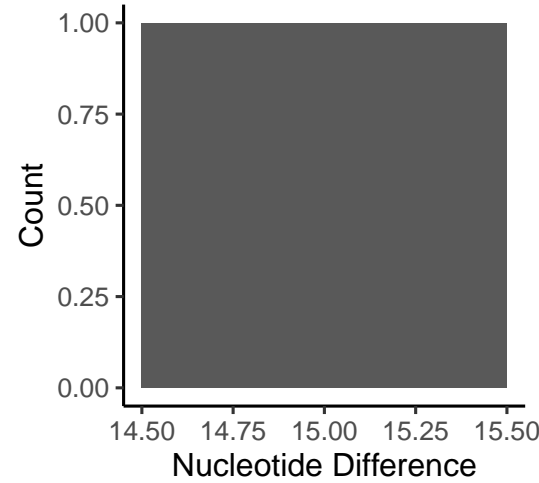
### IGHV3-74\*01\_02

1624 sequences assigned  
11 (0.7%) exact matches, in which:  
6 unique CDR3  
4 unique J



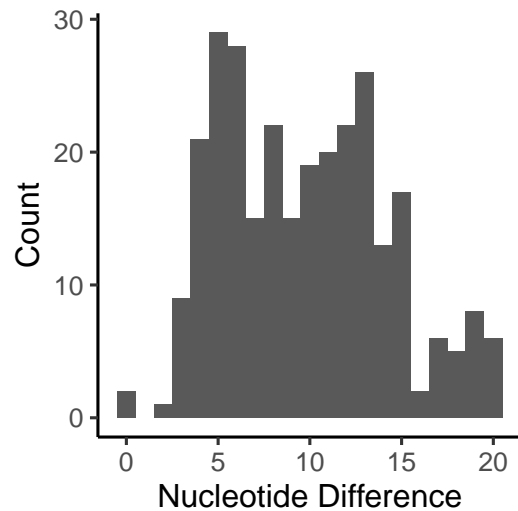
### IGHV3-NL1\*01

4 sequences assigned  
No exact matches.



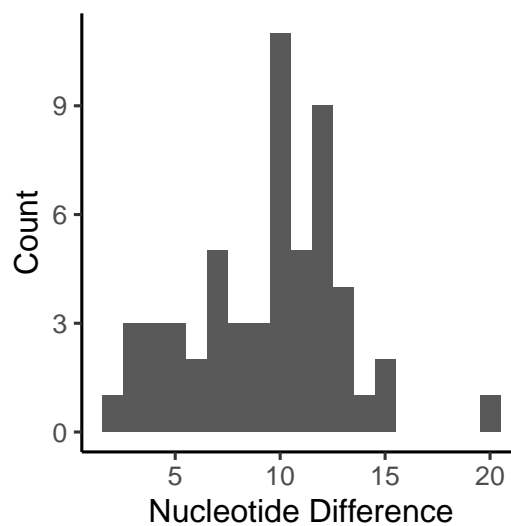
### IGHV3-73\*01\_02

370 sequences assigned  
2 (0.5%) exact matches, in which:  
1 unique CDR3  
1 unique J



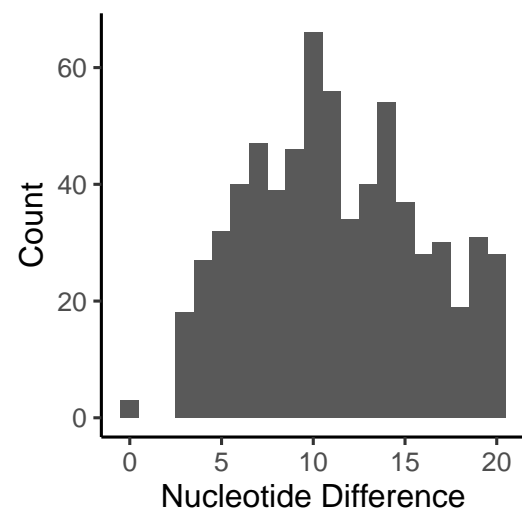
### IGHV3-43D\*04

68 sequences assigned  
No exact matches.



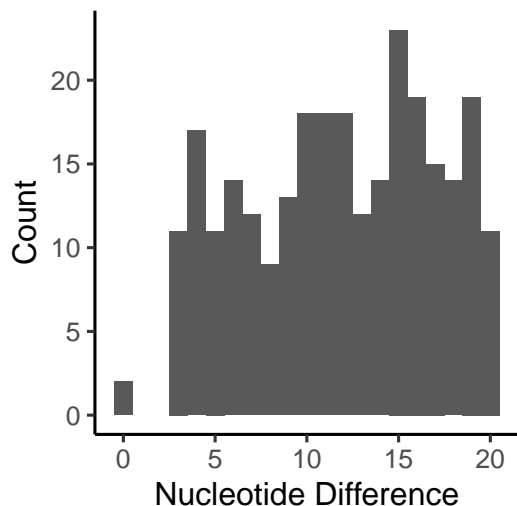
### IGHV4-4\*07

802 sequences assigned  
3 (0.4%) exact matches, in which:  
2 unique CDR3  
2 unique J



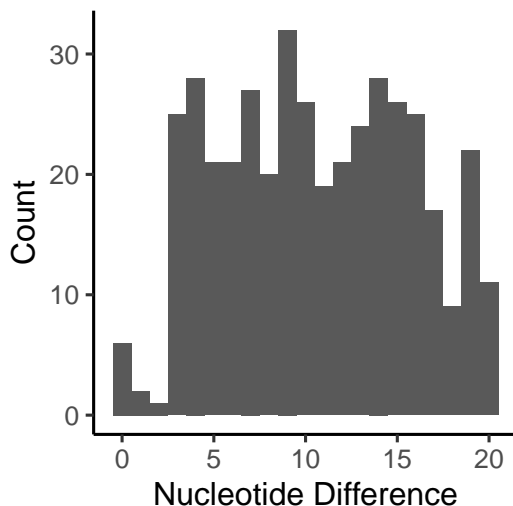
### IGHV4-4\*02\_03

407 sequences assigned  
2 (0.5%) exact matches, in which:  
2 unique CDR3  
2 unique J



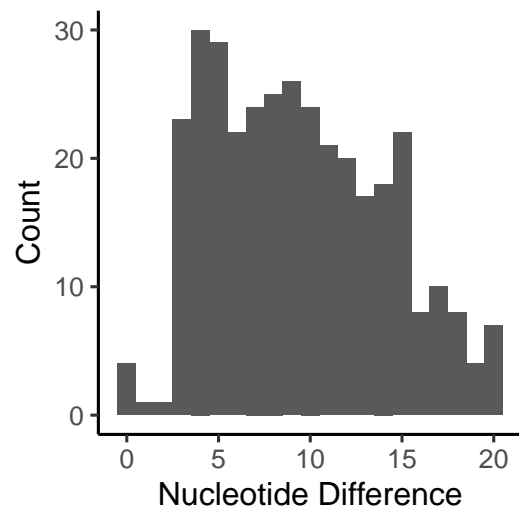
### IGHV4-30-4\*01

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



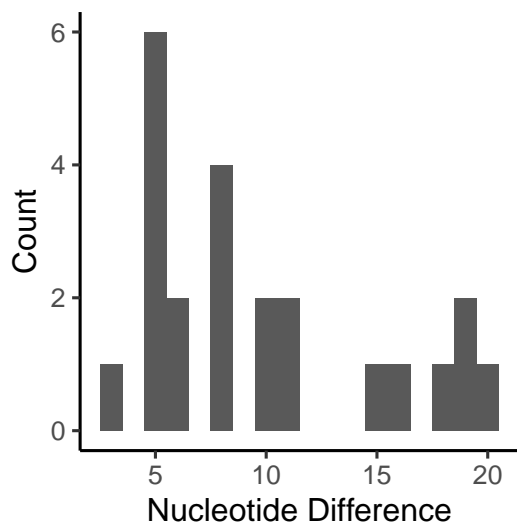
### IGHV4-38-2\*01

410 sequences assigned  
4 (1%) exact matches, in which:  
4 unique CDR3  
4 unique J



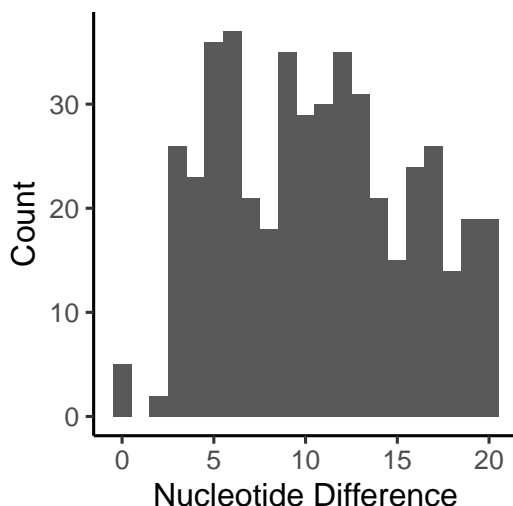
### IGHV4-28\*01\_07

26 sequences assigned  
No exact matches.



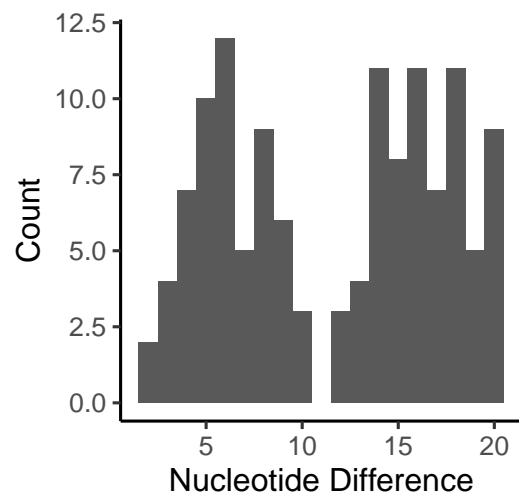
### IGHV4-31\*02

712 sequences assigned  
5 (0.7%) exact matches, in which:  
4 unique CDR3  
2 unique J



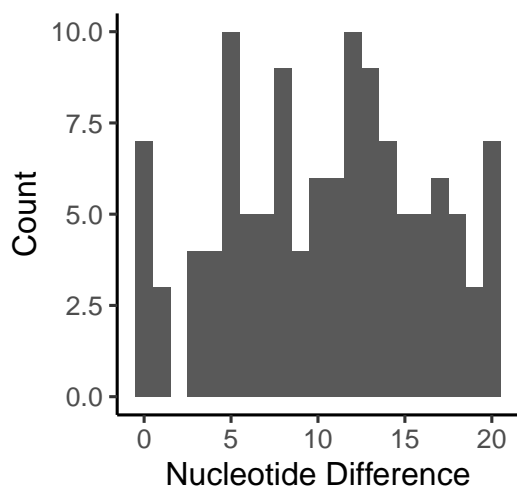
### IGHV4-38-2\*02

178 sequences assigned  
No exact matches.



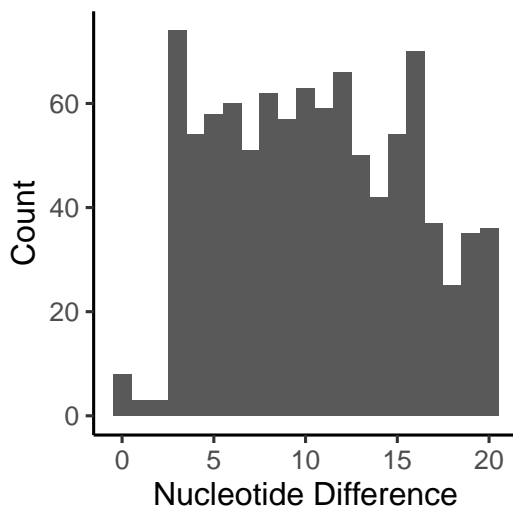
### IGHV4-30-2\*01

196 sequences assigned  
7 (3.6%) exact matches, in which:  
5 unique CDR3  
3 unique J



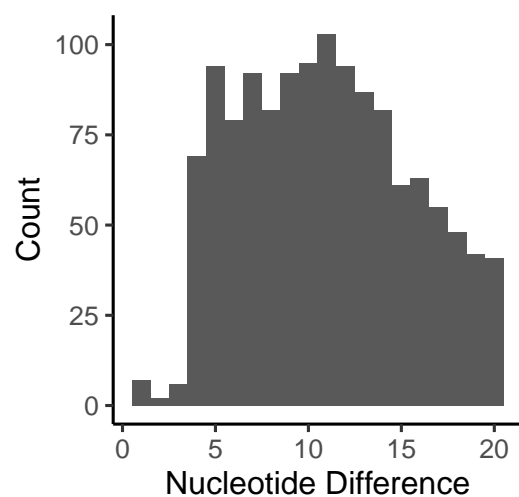
### IGHV4-34\*01\_02

1299 sequences assigned  
8 (0.6%) exact matches, in which:  
5 unique CDR3  
4 unique J



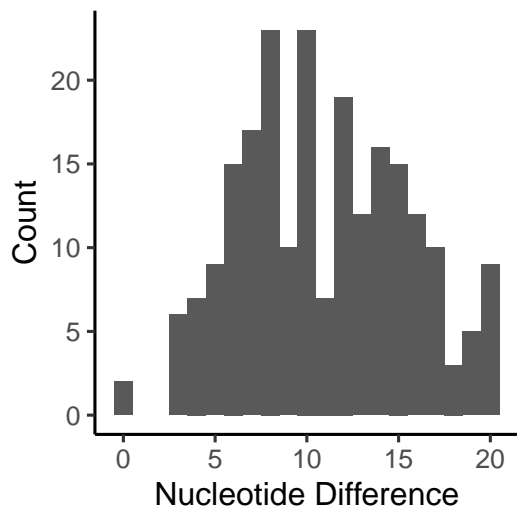
### IGHV4-39\*02

1639 sequences assigned  
No exact matches.



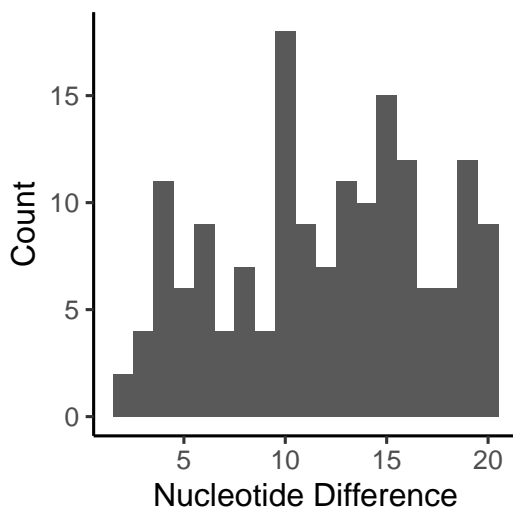
### IGHV4-39\*01\_05

278 sequences assigned  
2 (0.7%) exact matches, in which:  
2 unique CDR3  
1 unique J



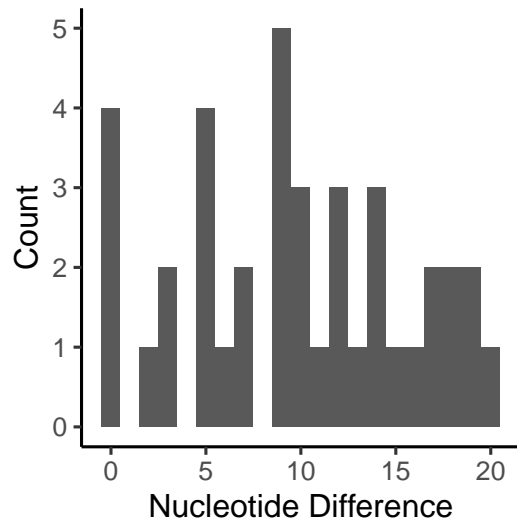
### IGHV4-59\*11

238 sequences assigned  
No exact matches.



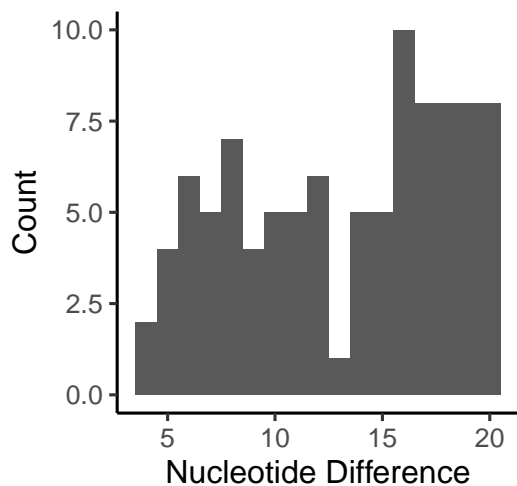
### IGHV5-10-1\*01\_03

63 sequences assigned  
4 (6.3%) exact matches, in which:  
4 unique CDR3  
2 unique J



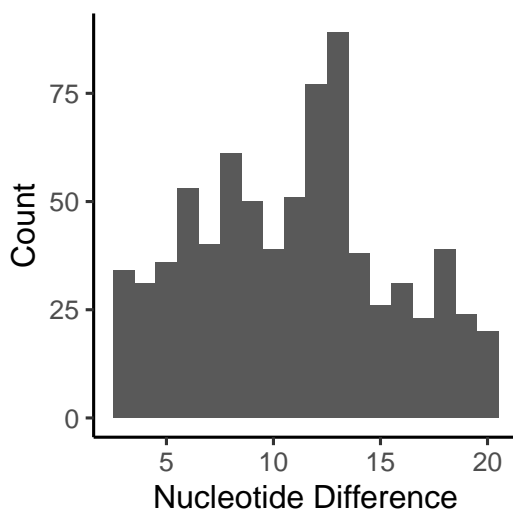
### IGHV4-59\*02

152 sequences assigned  
No exact matches.



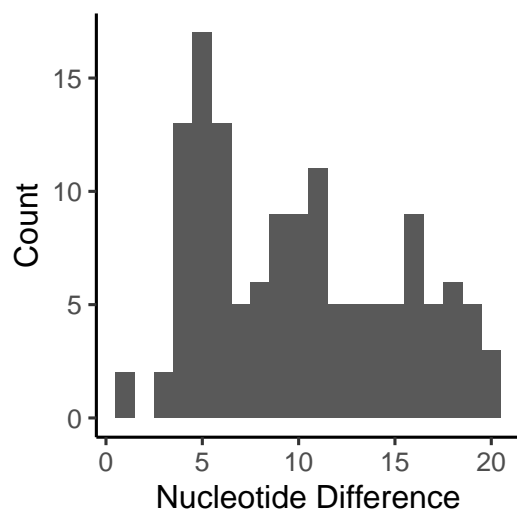
### IGHV4-61\*01

914 sequences assigned  
No exact matches.



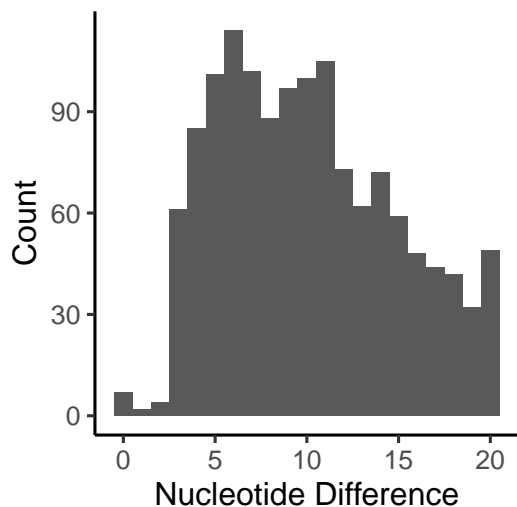
### IGHV5-51\*07

170 sequences assigned  
No exact matches.



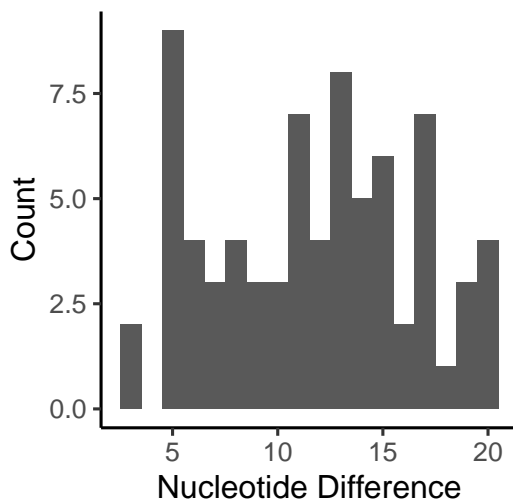
### IGHV4-59\*01\_07

1603 sequences assigned  
7 (0.4%) exact matches, in which:  
7 unique CDR3  
4 unique J



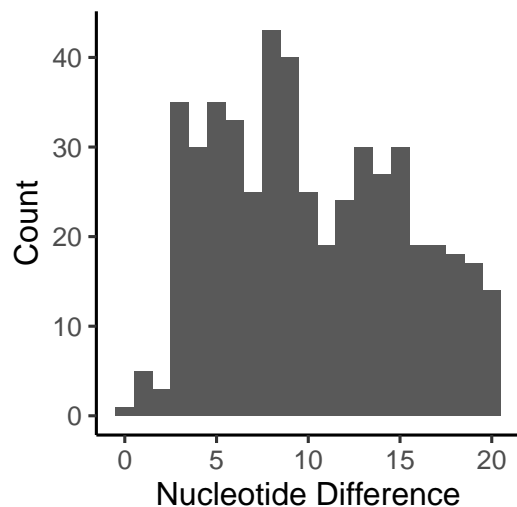
### IGHV4-61\*08

151 sequences assigned  
No exact matches.



### IGHV5-51\*01\_03

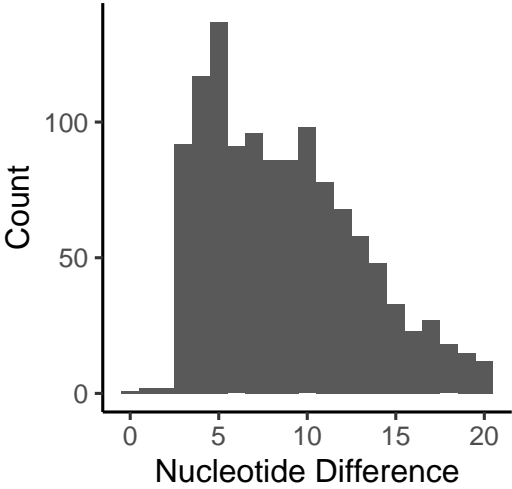
575 sequences assigned  
1 (0.2%) exact matches, in which:  
1 unique CDR3  
1 unique J





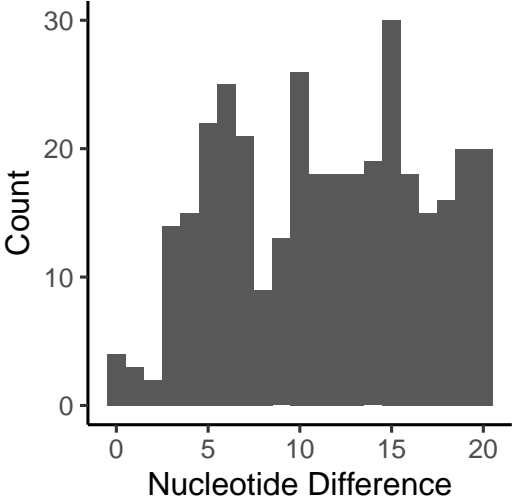
# IGHV6-1\*01\_02

1229 sequences assigned  
1 (0.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



# IGHV7-4-1\*02

424 sequences assigned  
4 (0.9%) exact matches, in which:  
4 unique CDR3  
2 unique J





Warning – no inferred sequences found.