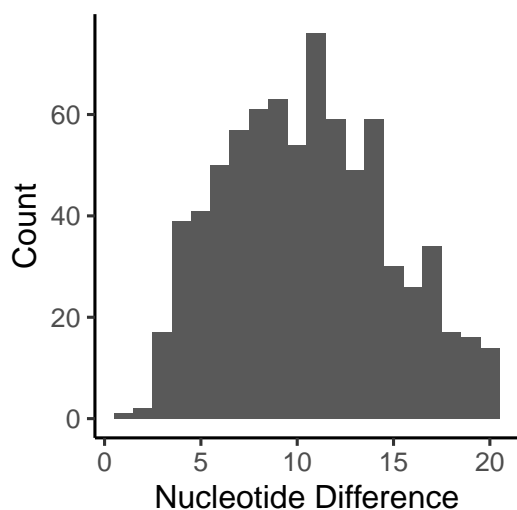


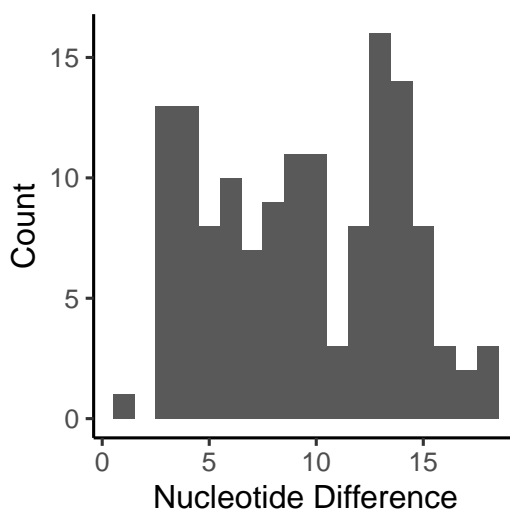
### IGHV1-2\*02

846 sequences assigned  
No exact matches.



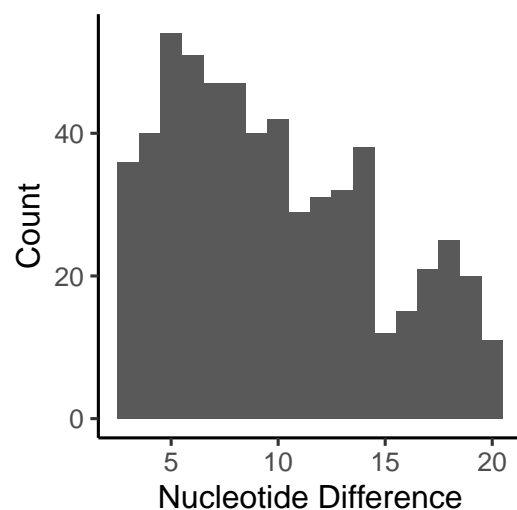
### IGHV1-8\*01

157 sequences assigned  
No exact matches.



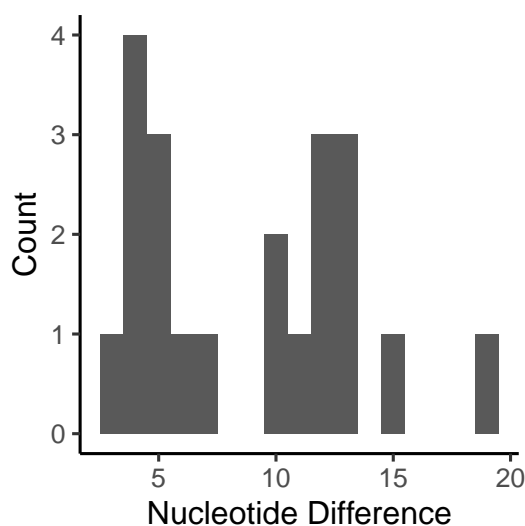
### IGHV1-46\*01

681 sequences assigned  
No exact matches.



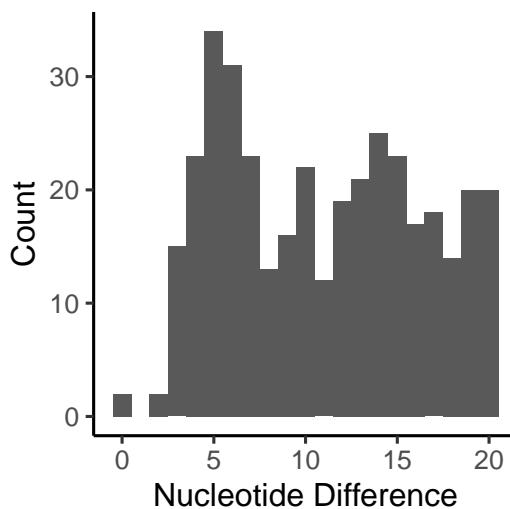
### IGHV1-3\*04

29 sequences assigned  
No exact matches.



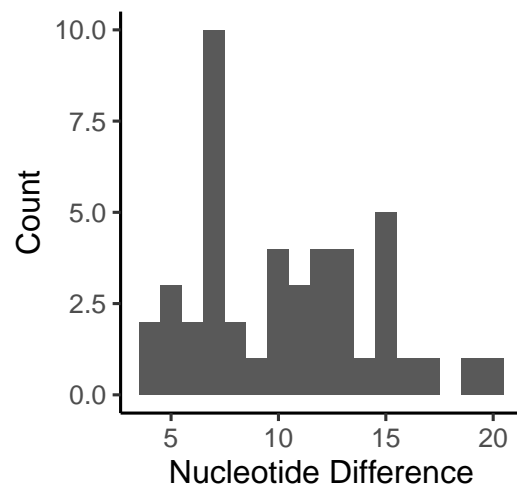
### IGHV1-18\*01

577 sequences assigned  
2 (0.3%) exact matches, in which:  
2 unique CDR3  
2 unique J



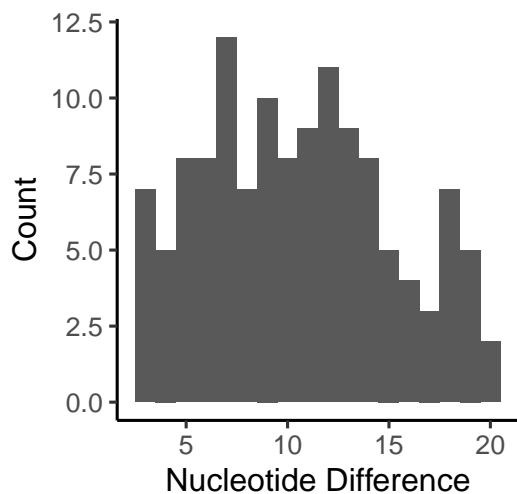
### IGHV1-58\*01\_03

49 sequences assigned  
No exact matches.



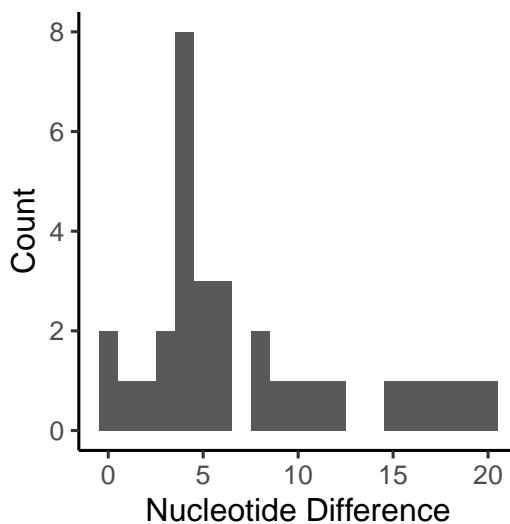
### IGHV1-3\*01\_05

163 sequences assigned  
No exact matches.



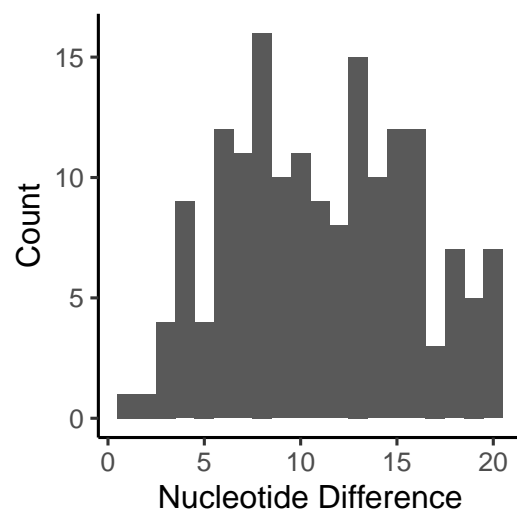
### IGHV1-24\*01

48 sequences assigned  
2 (4.2%) exact matches, in which:  
2 unique CDR3  
1 unique J



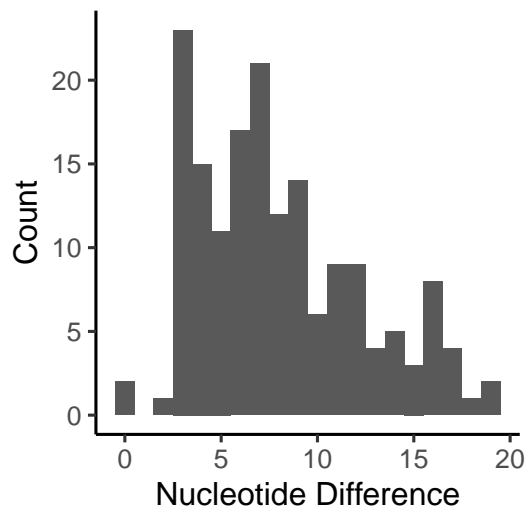
### IGHV1-69\*04\_09

225 sequences assigned  
No exact matches.



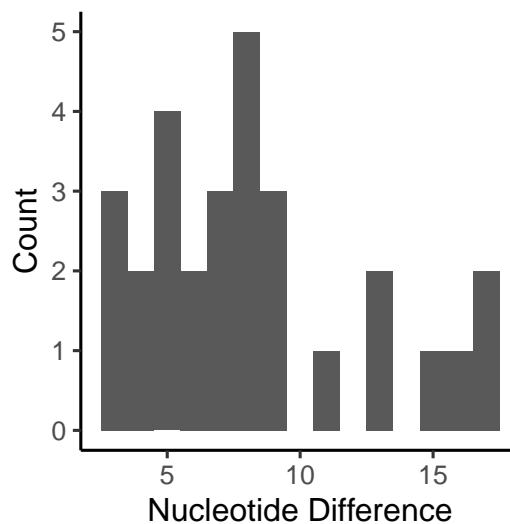
### IGHV2-5\*01

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



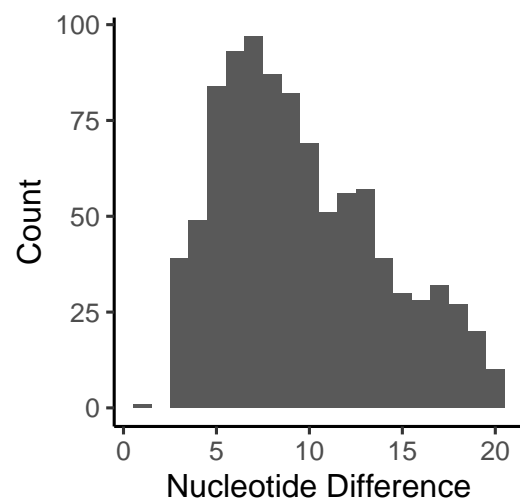
### IGHV2-70\*01

34 sequences assigned  
No exact matches.



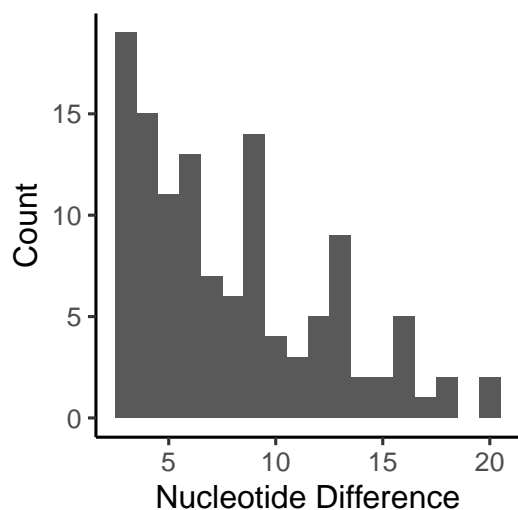
### IGHV3-7\*01

1045 sequences assigned  
No exact matches.



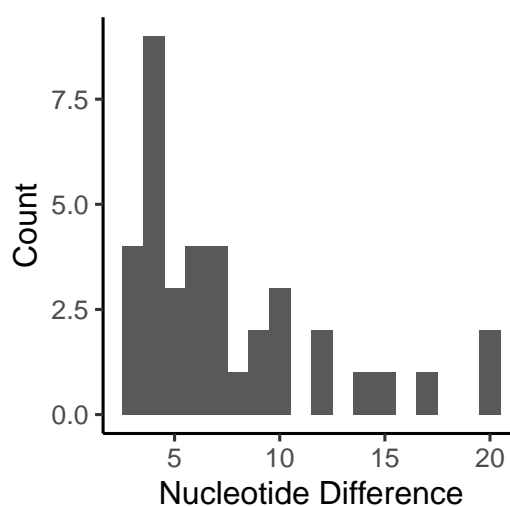
### IGHV2-5\*02

137 sequences assigned  
No exact matches.



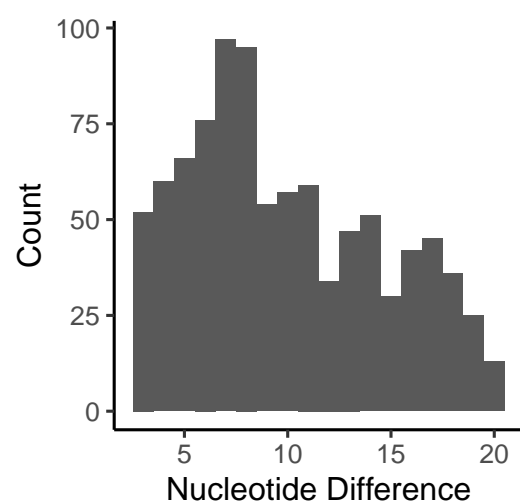
### IGHV2-70\*11\_15

43 sequences assigned  
No exact matches.



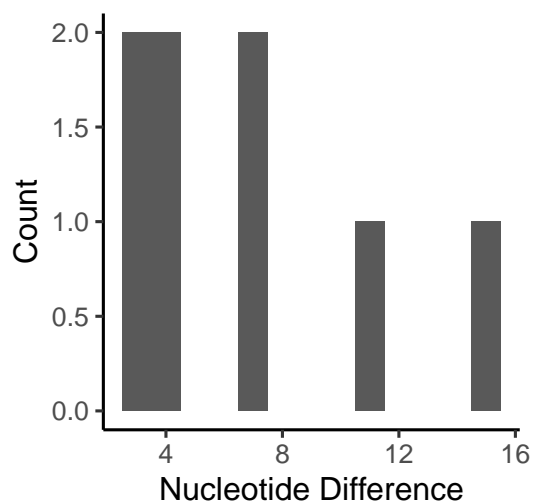
### IGHV3-7\*03

1044 sequences assigned  
No exact matches.



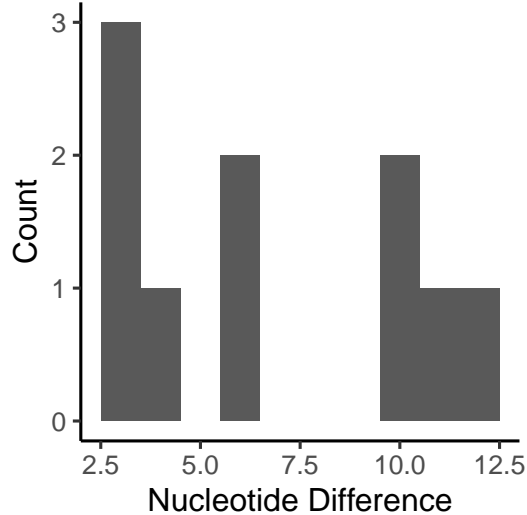
### IGHV2-26\*01

11 sequences assigned  
No exact matches.



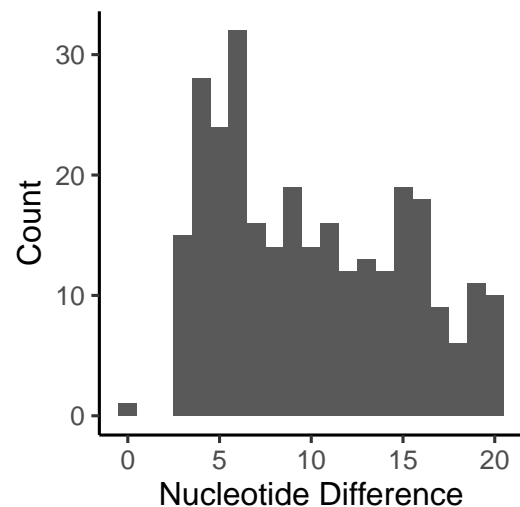
### IGHV2-70\*16\_17

12 sequences assigned  
No exact matches.



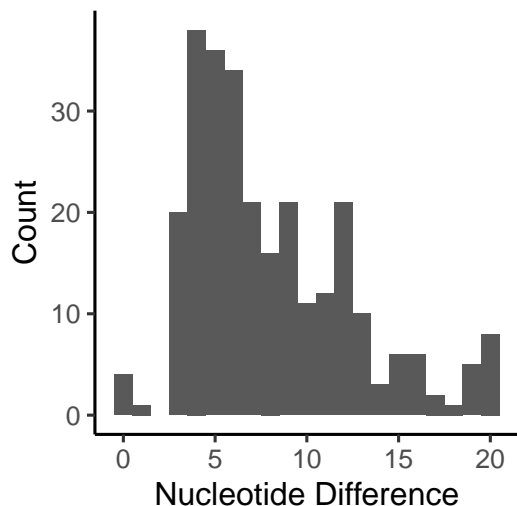
### IGHV3-9\*01

330 sequences assigned  
1 (0.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



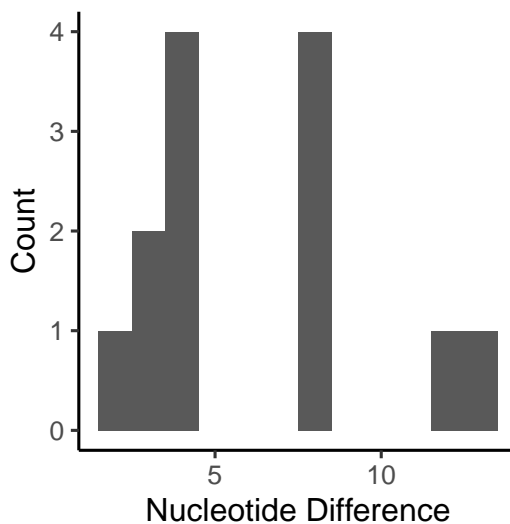
### IGHV3-11\*01

327 sequences assigned  
4 (1.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



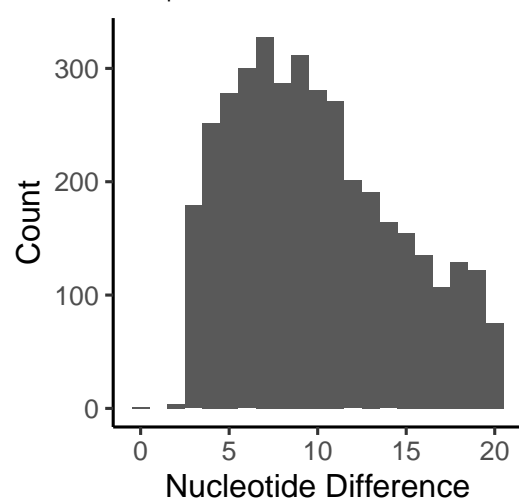
### IGHV3-20\*01\_02

13 sequences assigned  
No exact matches.



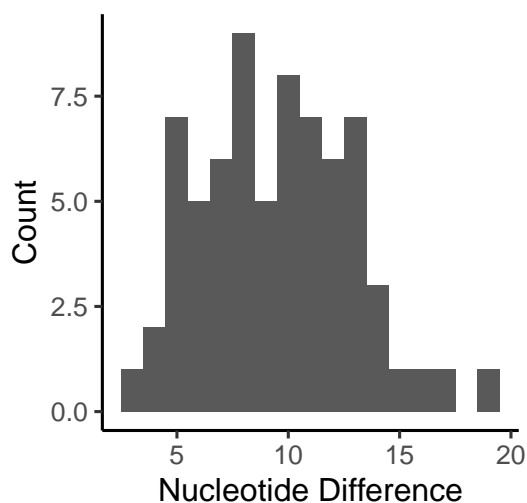
### IGHV3-23\*01\_04

4199 sequences assigned  
1 (0%) exact matches, in which:  
1 unique CDR3  
1 unique J



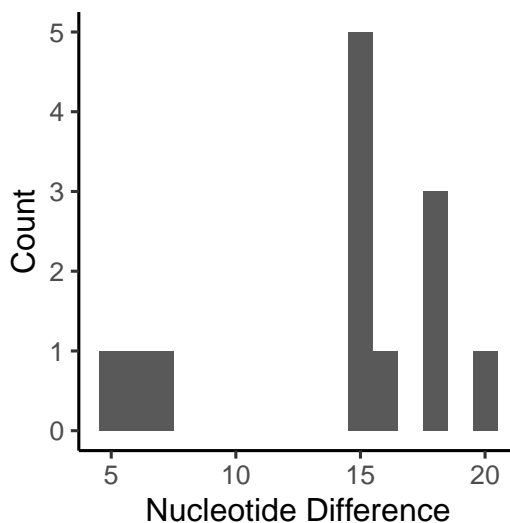
### IGHV3-13\*01

90 sequences assigned  
No exact matches.



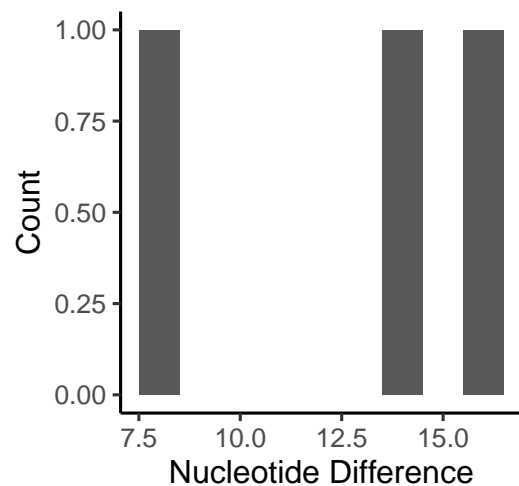
### IGHV3-20\*03\_04

17 sequences assigned  
No exact matches.



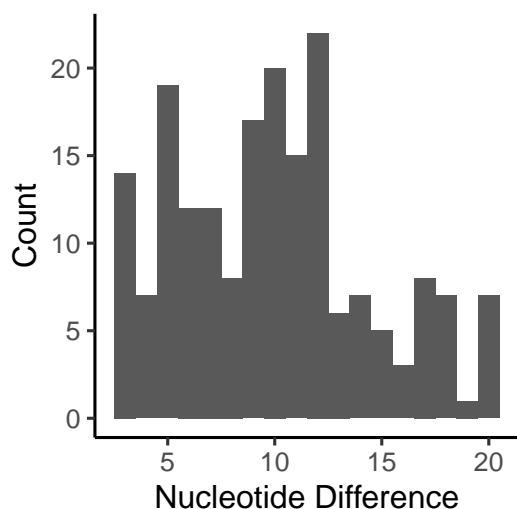
### IGHV3-30-3\*03

5 sequences assigned  
No exact matches.



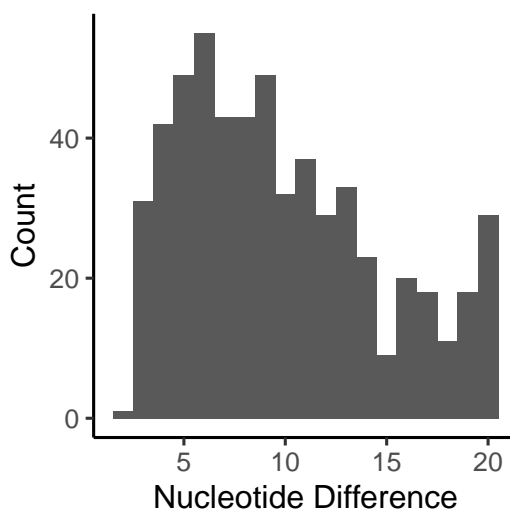
### IGHV3-15\*01\_02

213 sequences assigned  
No exact matches.



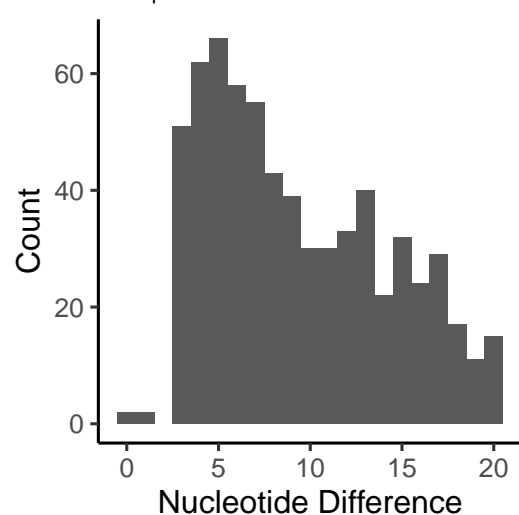
### IGHV3-21\*01\_02

656 sequences assigned  
No exact matches.



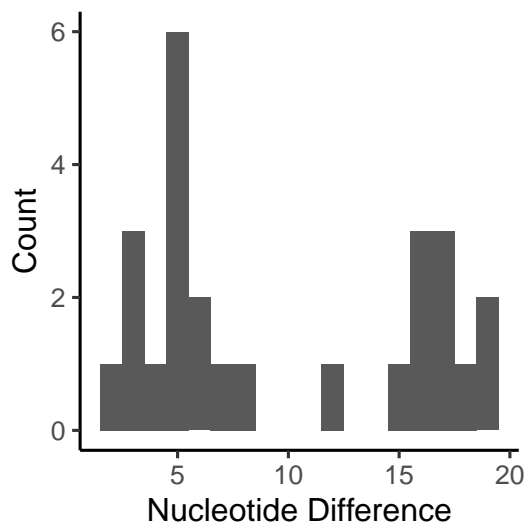
### IGHV3-33\*01

762 sequences assigned  
2 (0.3%) exact matches, in which:  
2 unique CDR3  
2 unique J



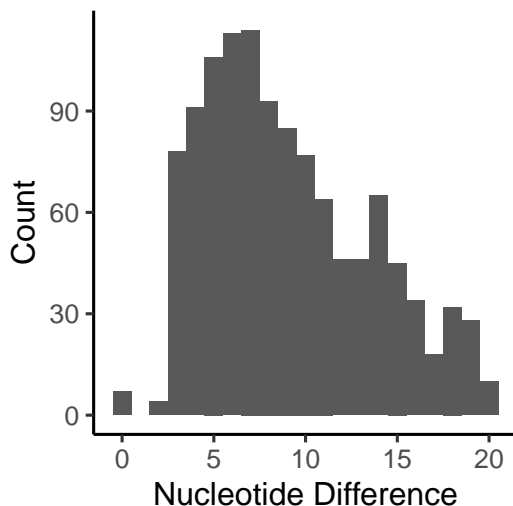
### IGHV3-43\*01

37 sequences assigned  
No exact matches.



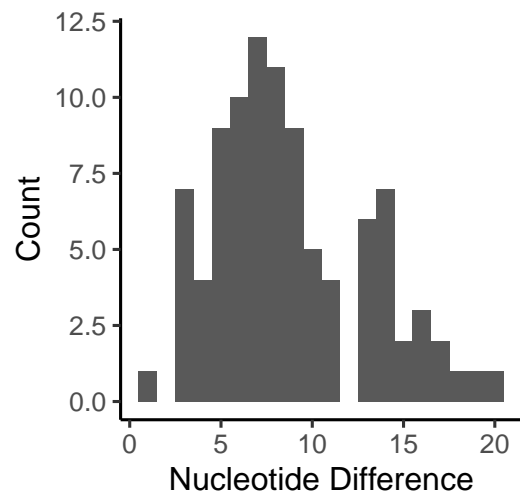
### IGHV3-48\*03

1273 sequences assigned  
7 (0.5%) exact matches, in which:  
3 unique CDR3  
2 unique J



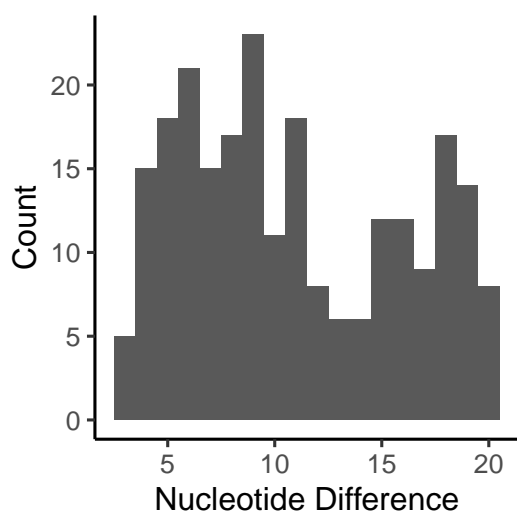
### IGHV3-53\*04

102 sequences assigned  
No exact matches.



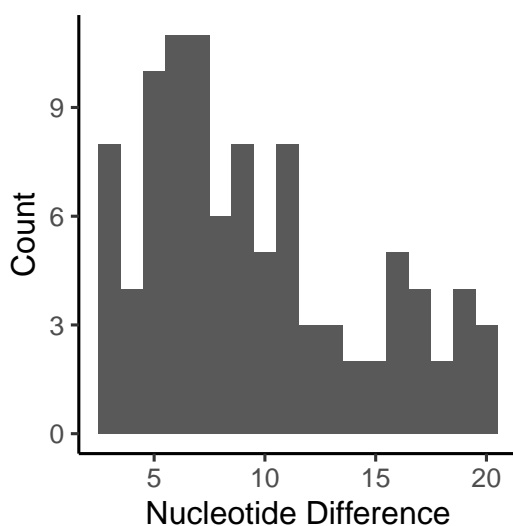
### IGHV3-43\*02

416 sequences assigned  
No exact matches.



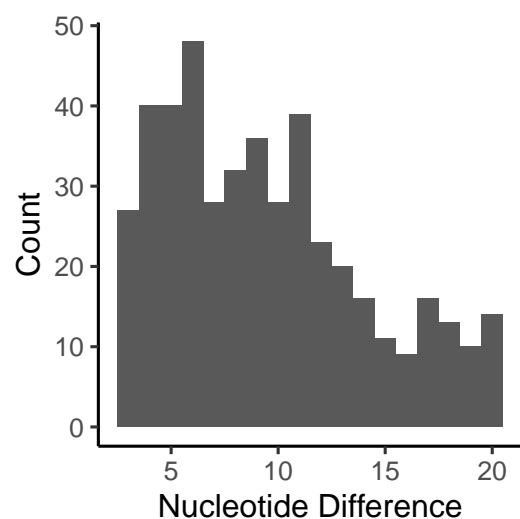
### IGHV3-49\*04

117 sequences assigned  
No exact matches.



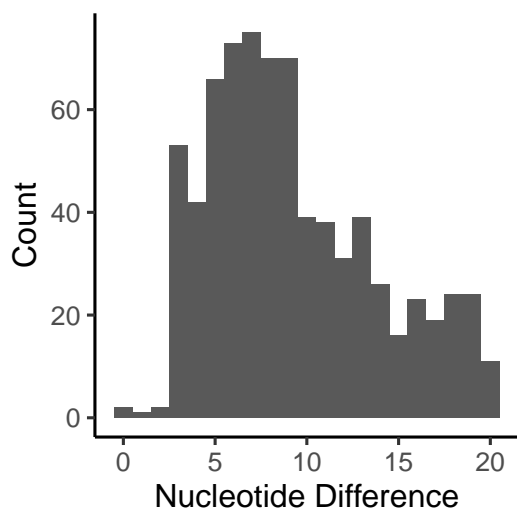
### IGHV3-53\*01\_02

622 sequences assigned  
No exact matches.



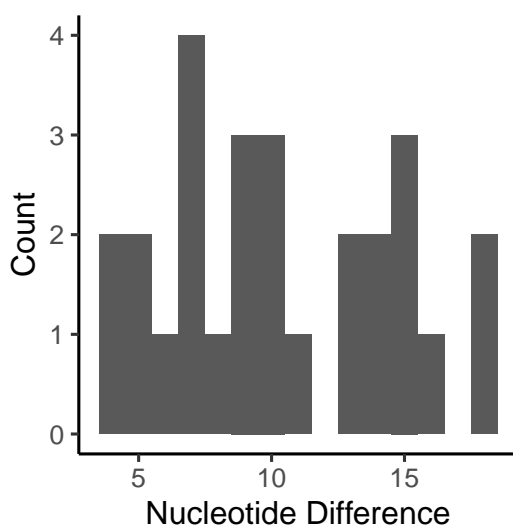
### IGHV3-48\*02

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



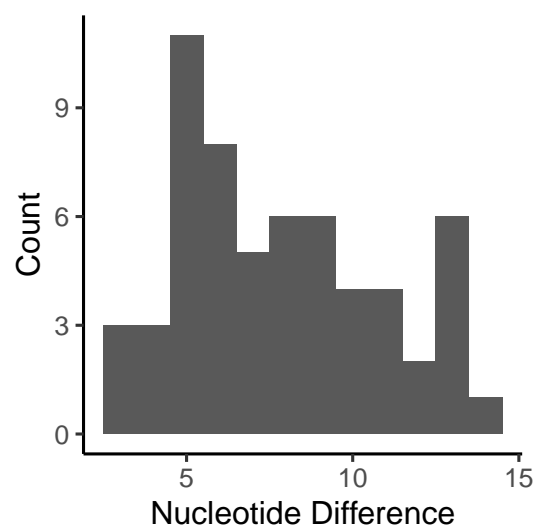
### IGHV3-49\*03\_05

33 sequences assigned  
No exact matches.



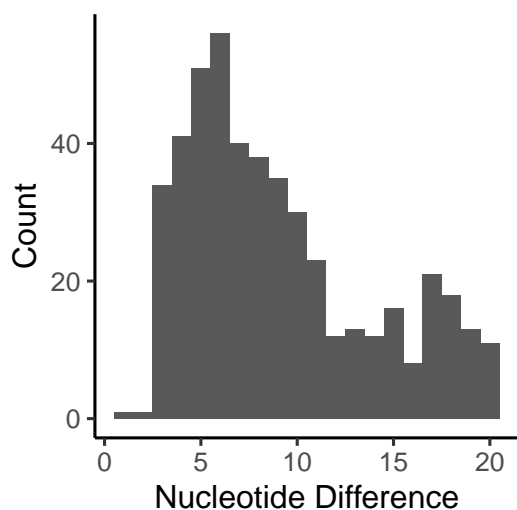
### IGHV3-64\*02\_07

60 sequences assigned  
No exact matches.



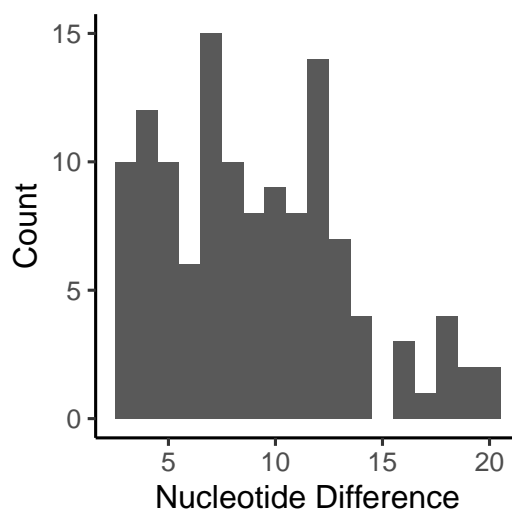
### IGHV3-66\*01

529 sequences assigned  
No exact matches.



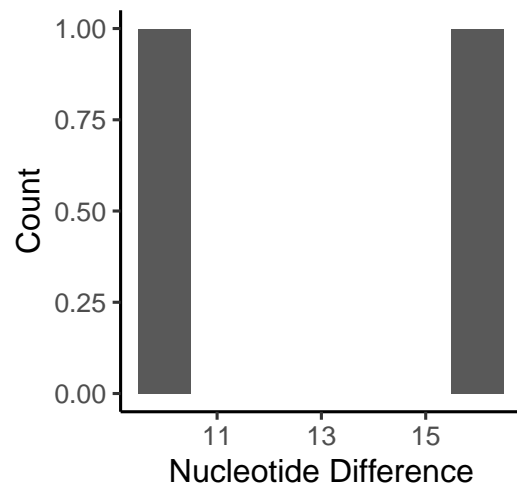
### IGHV3-73\*01\_02

141 sequences assigned  
No exact matches.



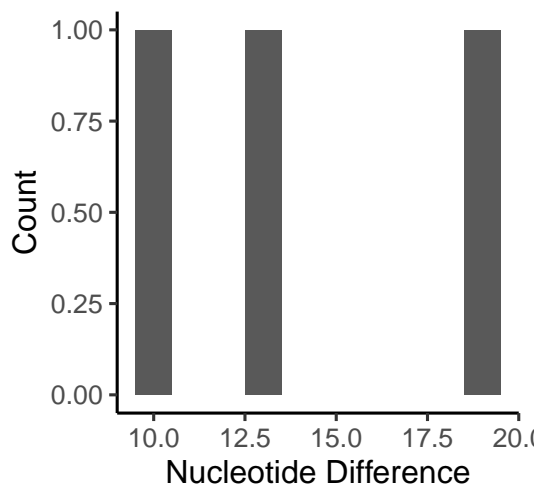
### IGHV3-64D\*06

2 sequences assigned  
No exact matches.



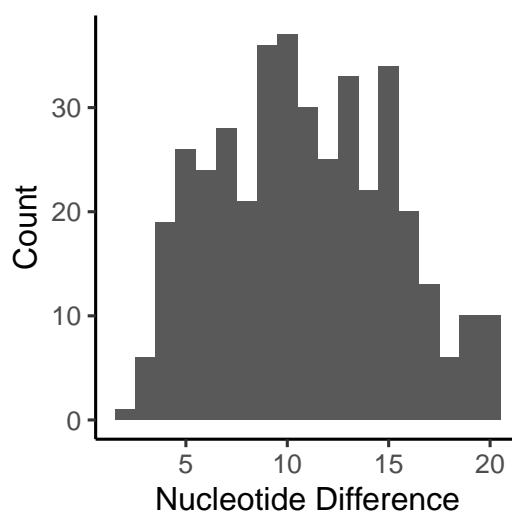
### IGHV3-69-1\*01

3 sequences assigned  
No exact matches.



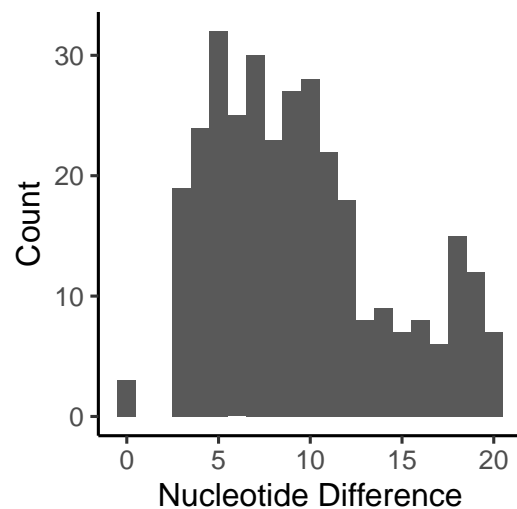
### IGHV3-74\*03

466 sequences assigned  
No exact matches.



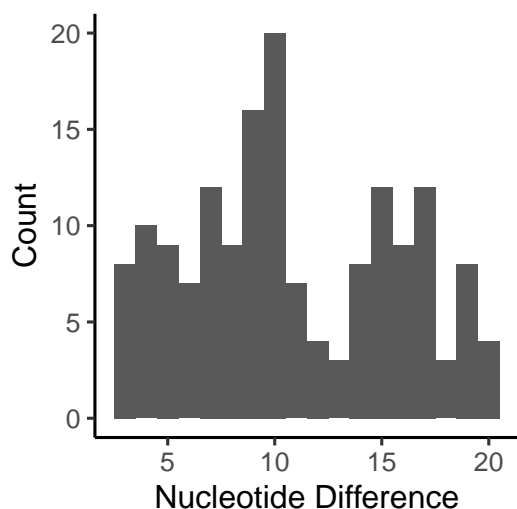
### IGHV4-4\*07

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



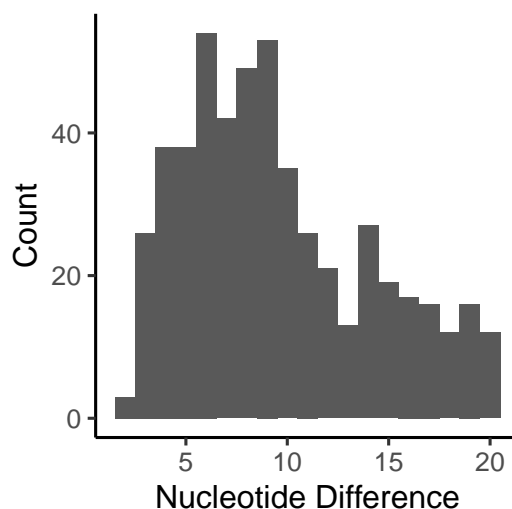
### IGHV3-72\*01

193 sequences assigned  
No exact matches.



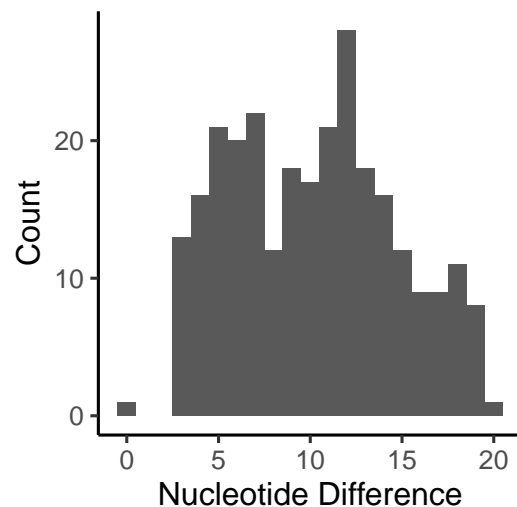
### IGHV3-74\*01\_02

611 sequences assigned  
No exact matches.



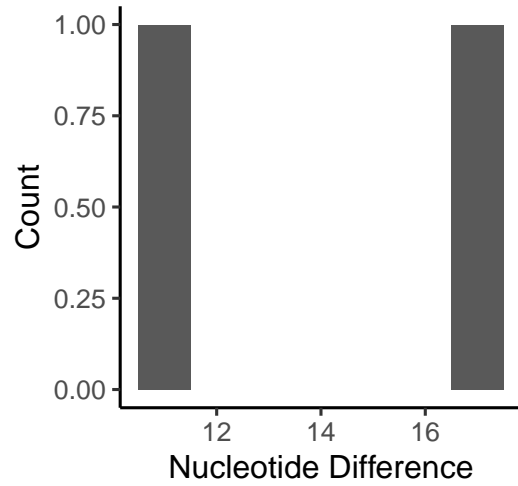
### IGHV4-4\*02\_03

305 sequences assigned  
1 (0.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



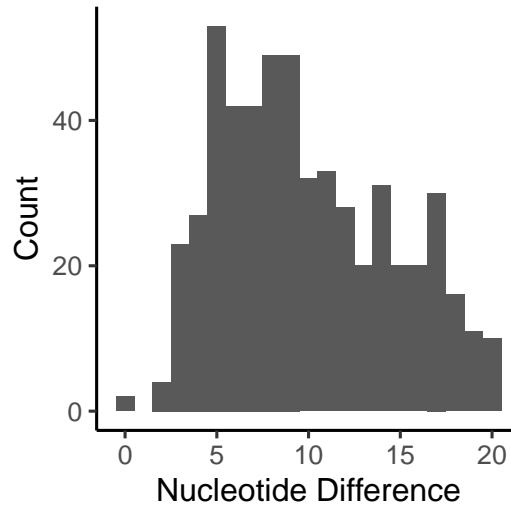
### IGHV4-30-2\*03

5 sequences assigned  
No exact matches.



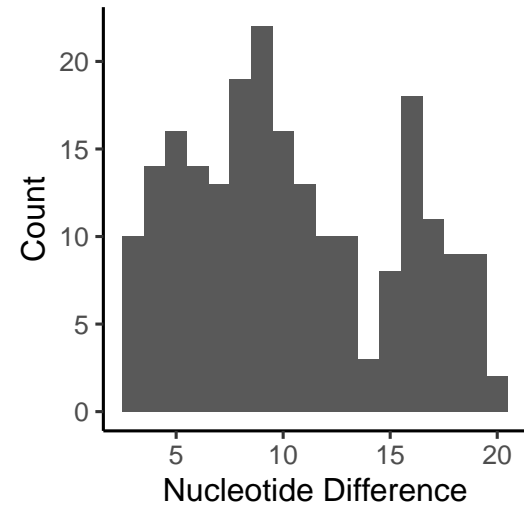
### IGHV4-34\*01\_02

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



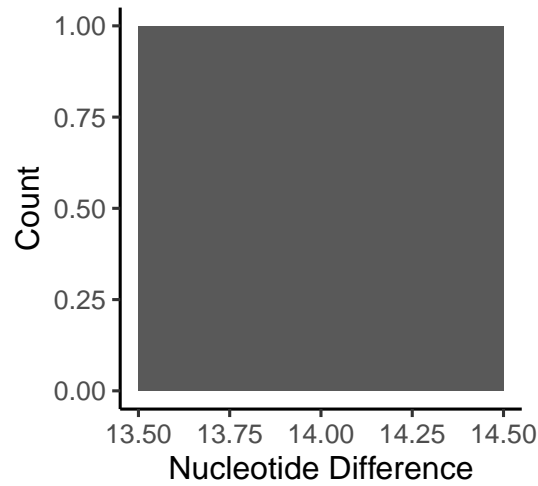
### IGHV4-39\*01\_05

263 sequences assigned  
No exact matches.



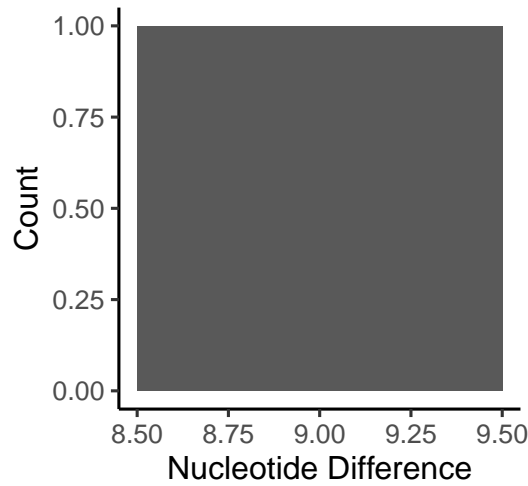
### IGHV4-30-4\*07

1 sequences assigned  
No exact matches.



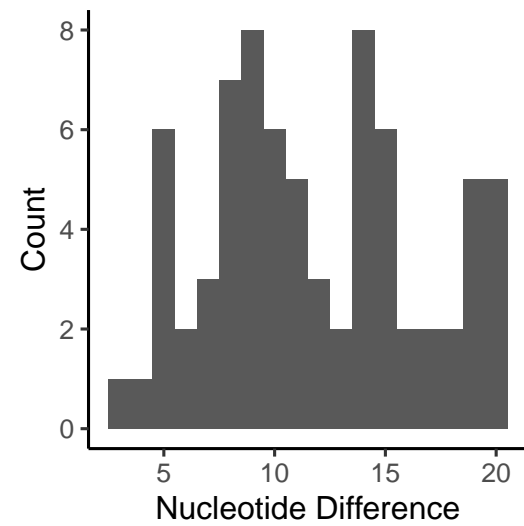
### IGHV4-38-2\*02

1 sequences assigned  
No exact matches.



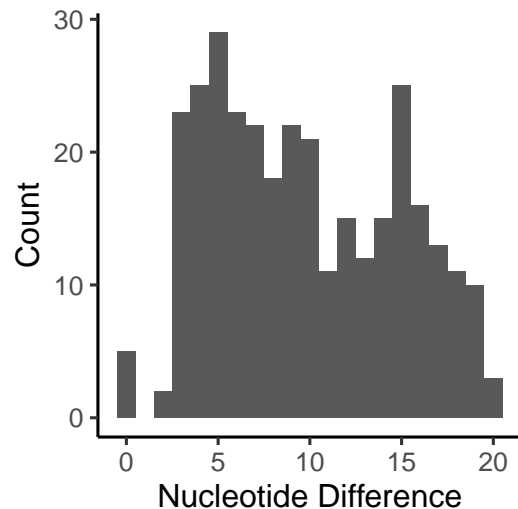
### IGHV4-59\*02

105 sequences assigned  
No exact matches.



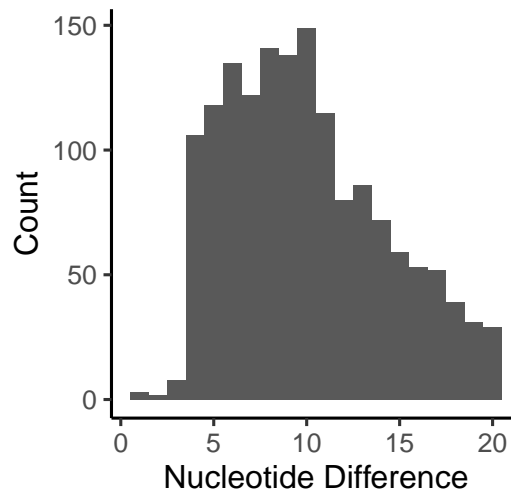
### IGHV4-31\*02

405 sequences assigned  
5 (1.2%) exact matches, in which:  
1 unique CDR3  
1 unique J



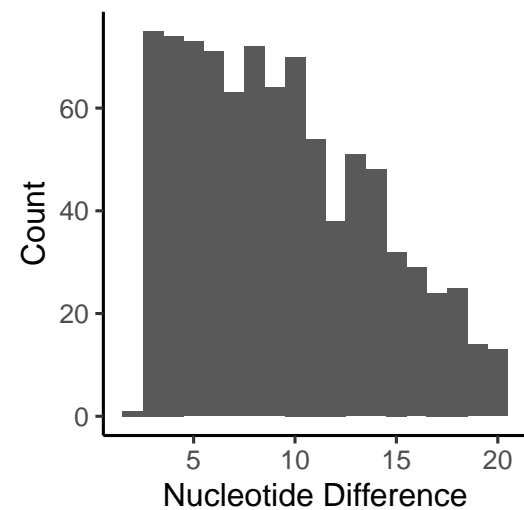
### IGHV4-39\*02

1838 sequences assigned  
No exact matches.



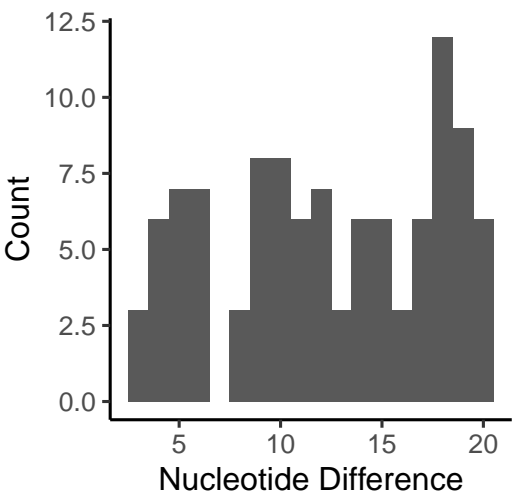
### IGHV4-59\*01\_07

1048 sequences assigned  
No exact matches.



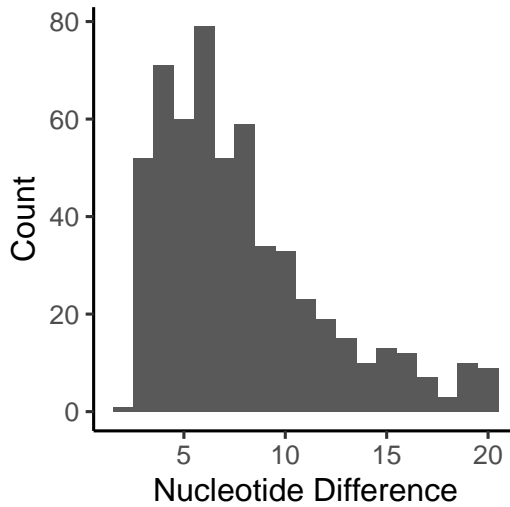
### IGHV4-59\*11

132 sequences assigned  
No exact matches.



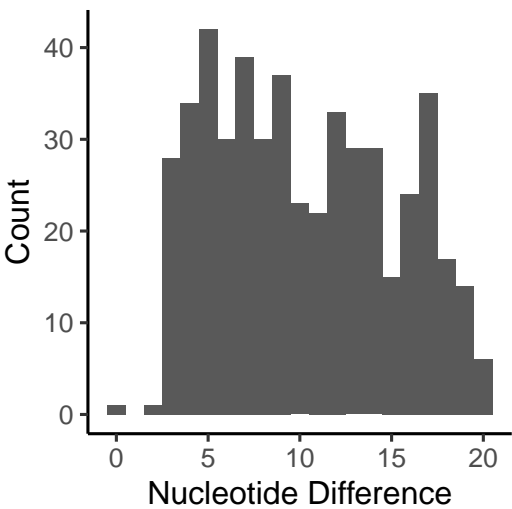
### IGHV5-51\*01\_03

601 sequences assigned  
No exact matches.



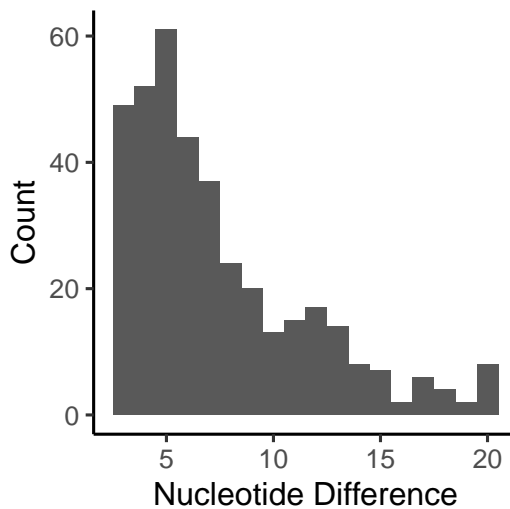
### IGHV4-61\*01

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



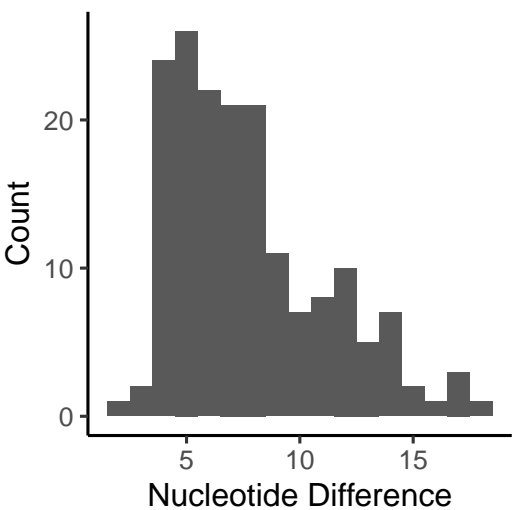
### IGHV6-1\*01\_02

393 sequences assigned  
No exact matches.



### IGHV5-51\*07

176 sequences assigned  
No exact matches.







Warning – no inferred sequences found.