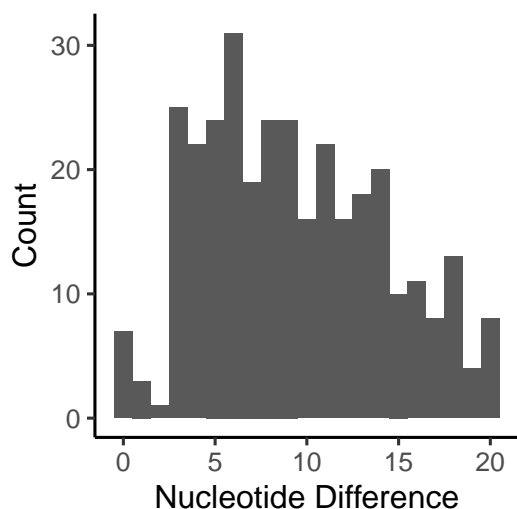


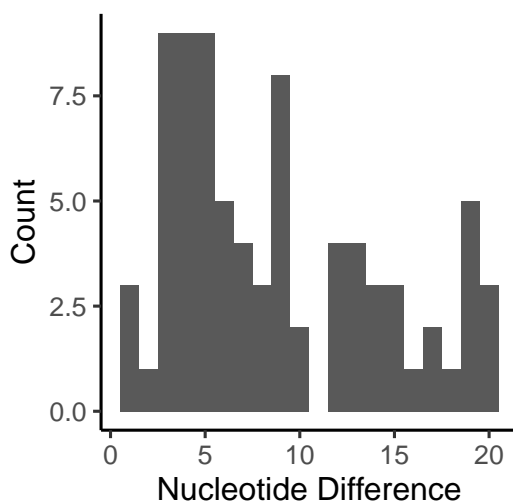
### IGHV1-2\*02

371 sequences assigned  
7 (1.9%) exact matches, in which:  
7 unique CDR3  
4 unique J



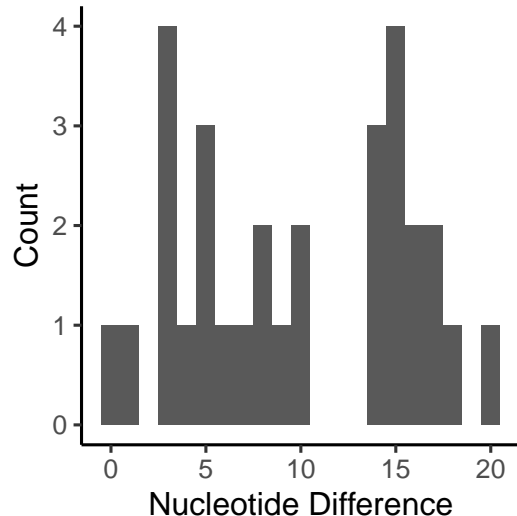
### IGHV1-3\*01\_05

92 sequences assigned  
No exact matches.



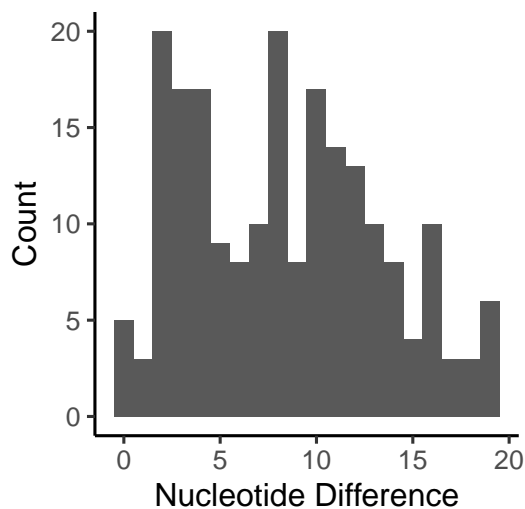
### IGHV1-24\*01

39 sequences assigned  
1 (2.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



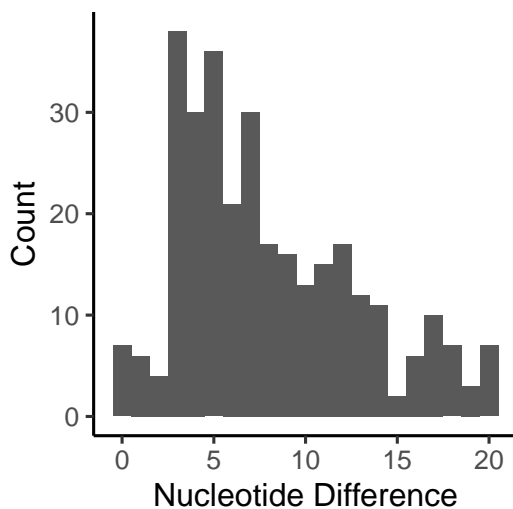
### IGHV1-2\*06

225 sequences assigned  
5 (2.2%) exact matches, in which:  
5 unique CDR3  
3 unique J



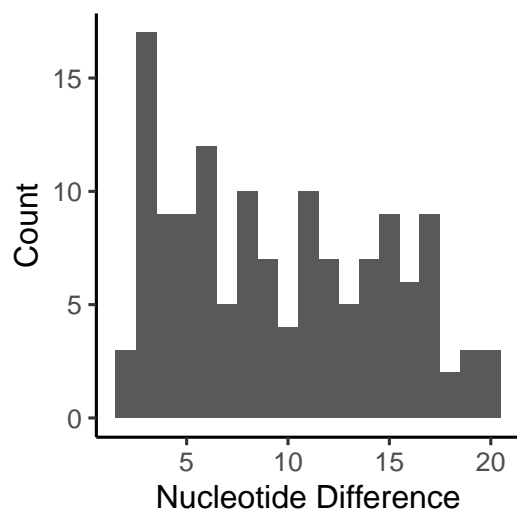
### IGHV1-8\*01

325 sequences assigned  
7 (2.2%) exact matches, in which:  
7 unique CDR3  
3 unique J



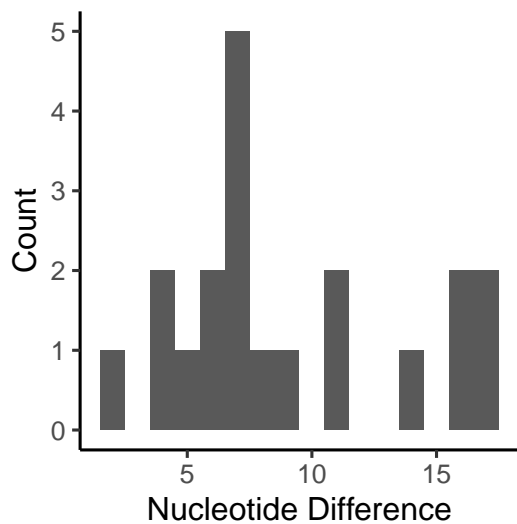
### IGHV1-46\*01

158 sequences assigned  
No exact matches.



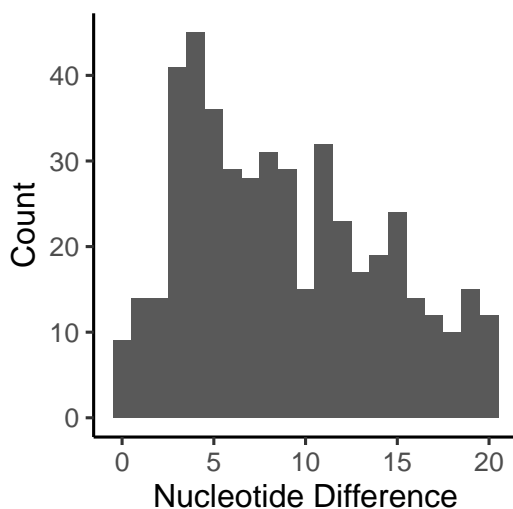
### IGHV1-3\*04

24 sequences assigned  
No exact matches.



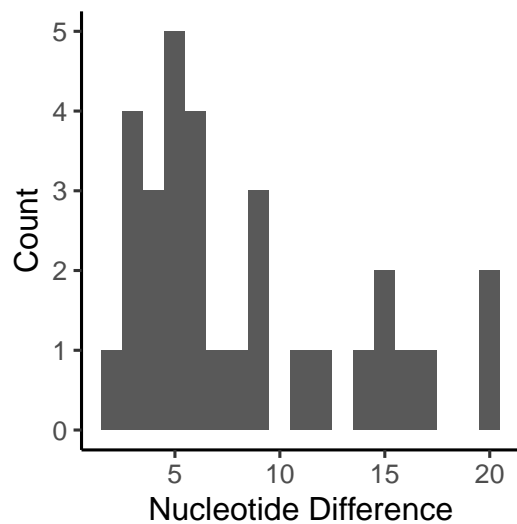
### IGHV1-18\*01

540 sequences assigned  
9 (1.7%) exact matches, in which:  
9 unique CDR3  
4 unique J



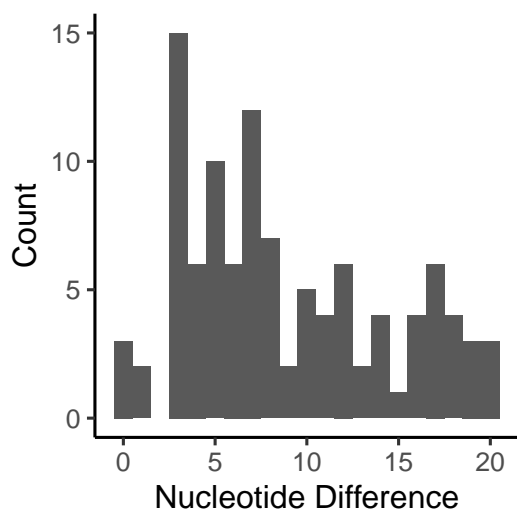
### IGHV1-58\*01\_03

35 sequences assigned  
No exact matches.



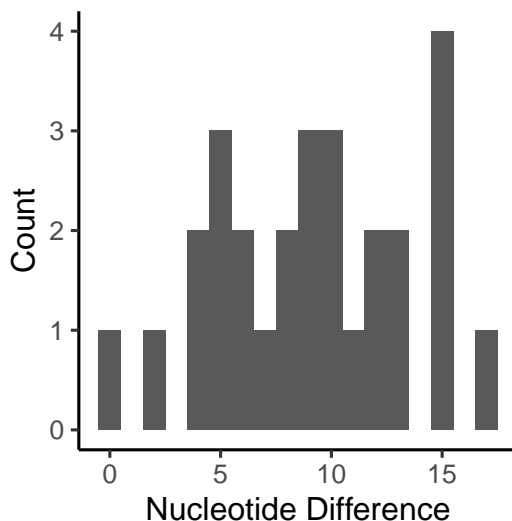
### IGHV2-5\*01

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



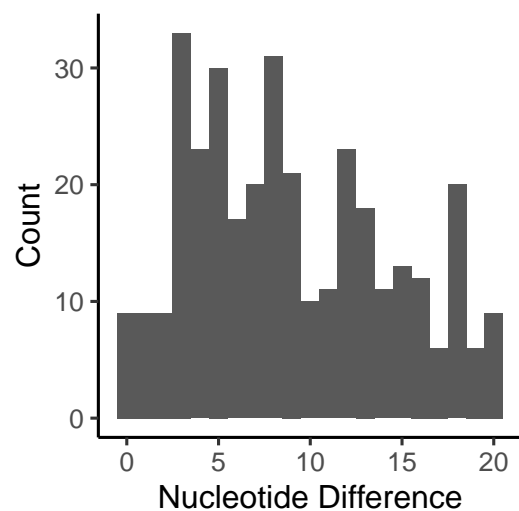
### IGHV2-70\*01

35 sequences assigned  
1 (2.9%) exact matches, in which:  
1 unique CDR3  
1 unique J



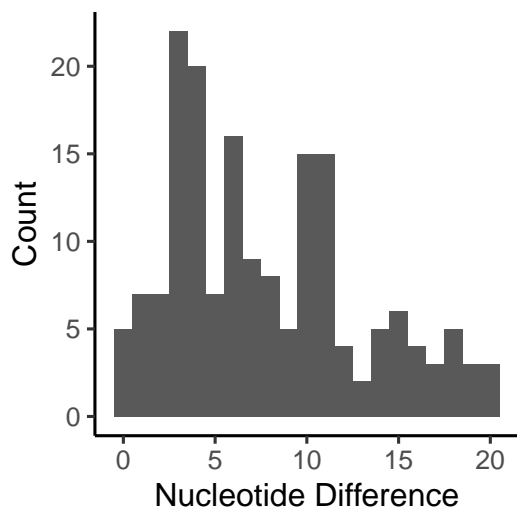
### IGHV3-9\*01

390 sequences assigned  
9 (2.3%) exact matches, in which:  
7 unique CDR3  
2 unique J



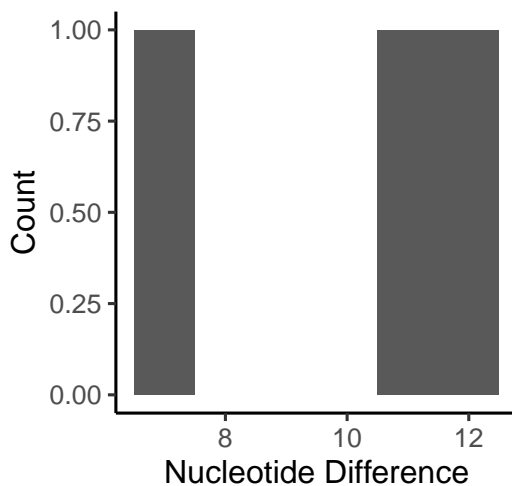
### IGHV2-5\*02

197 sequences assigned  
5 (2.5%) exact matches, in which:  
4 unique CDR3  
2 unique J



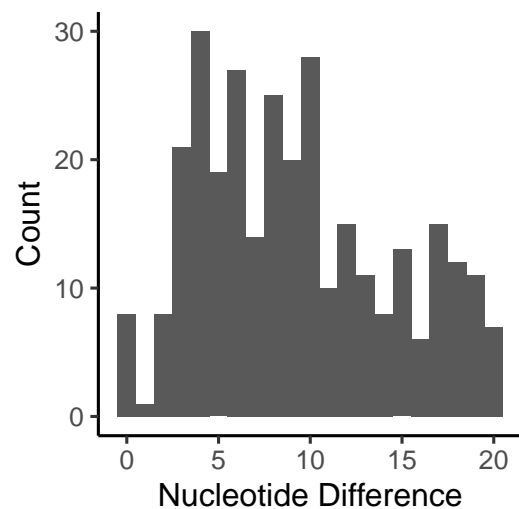
### IGHV2-70\*13

4 sequences assigned  
No exact matches.



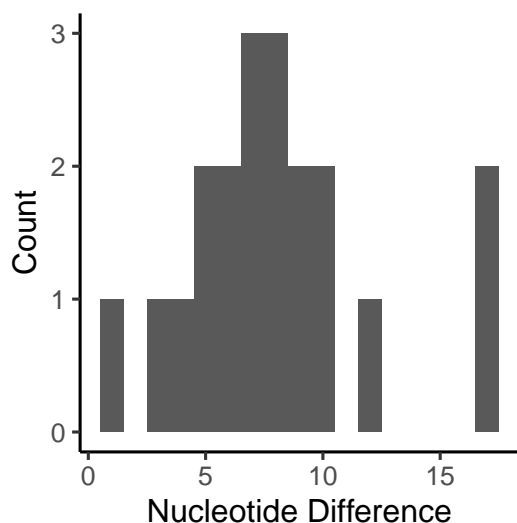
### IGHV3-11\*01

360 sequences assigned  
8 (2.2%) exact matches, in which:  
6 unique CDR3  
2 unique J



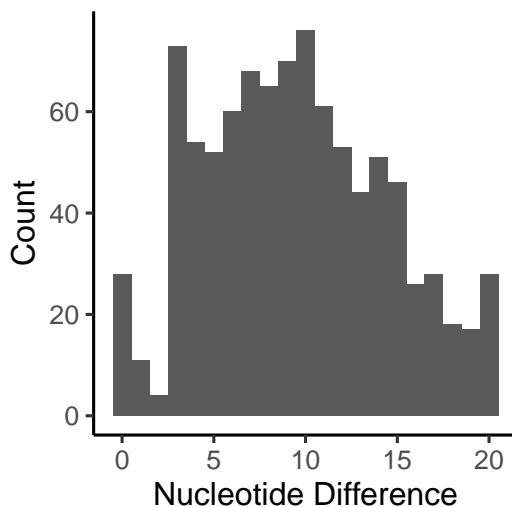
### IGHV2-26\*01

20 sequences assigned  
No exact matches.



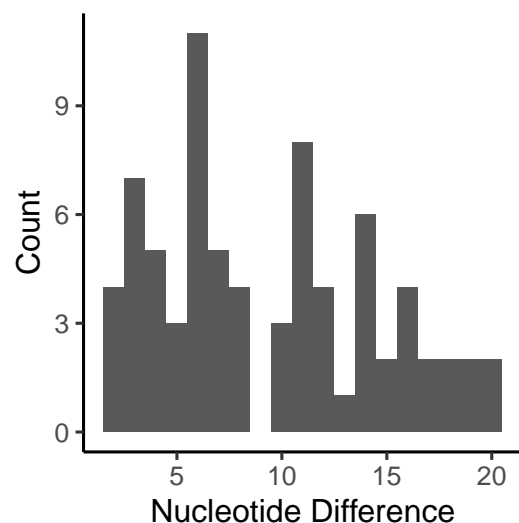
### IGHV3-7\*01

1040 sequences assigned  
28 (2.7%) exact matches, in which:  
18 unique CDR3  
3 unique J



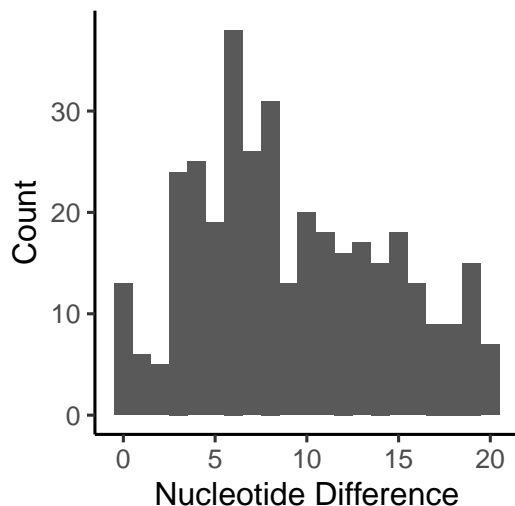
### IGHV3-13\*01

80 sequences assigned  
No exact matches.



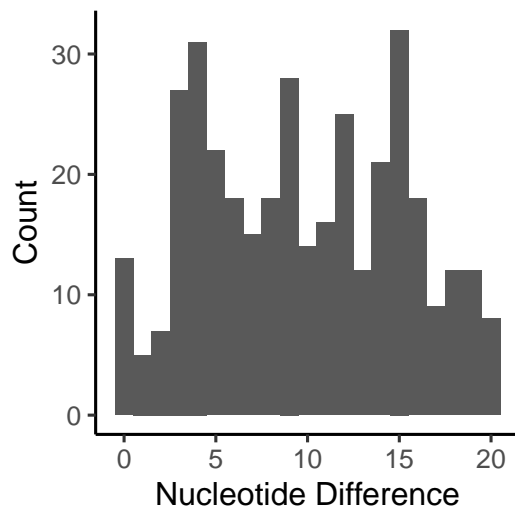
### IGHV3-15\*01\_02

469 sequences assigned  
13 (2.8%) exact matches, in which:  
8 unique CDR3  
4 unique J



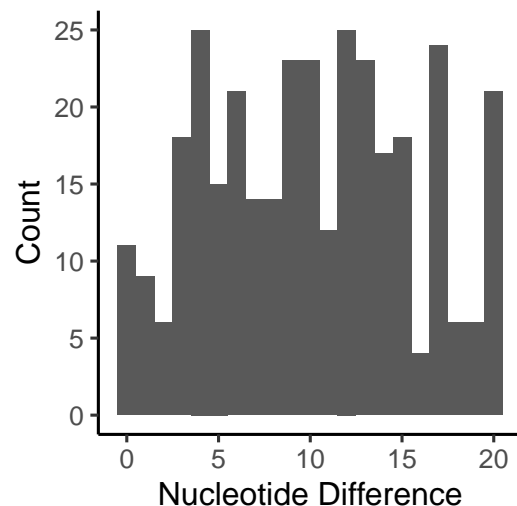
### IGHV3-21\*01\_02

409 sequences assigned  
13 (3.2%) exact matches, in which:  
8 unique CDR3  
4 unique J



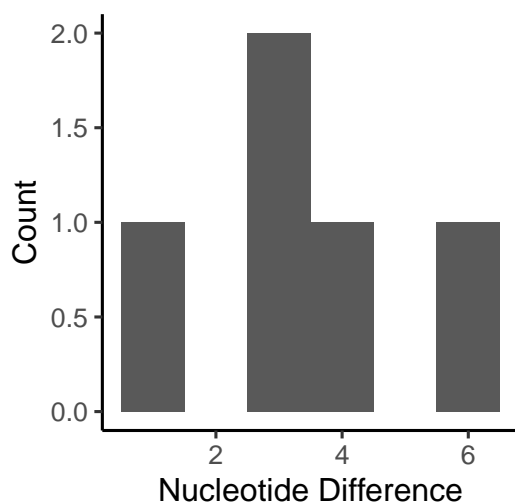
### IGHV3-33\*01

365 sequences assigned  
11 (3%) exact matches, in which:  
6 unique CDR3  
3 unique J



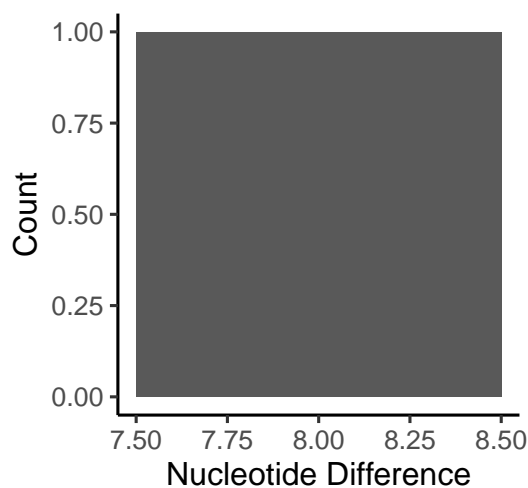
### IGHV3-20\*01\_02

5 sequences assigned  
No exact matches.



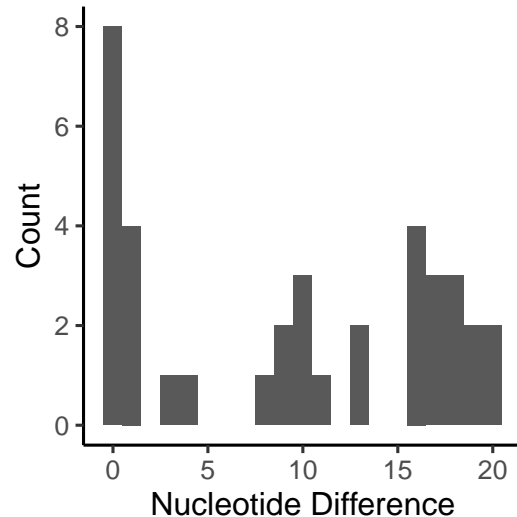
### IGHV3-22\*01\_02

1 sequences assigned  
No exact matches.



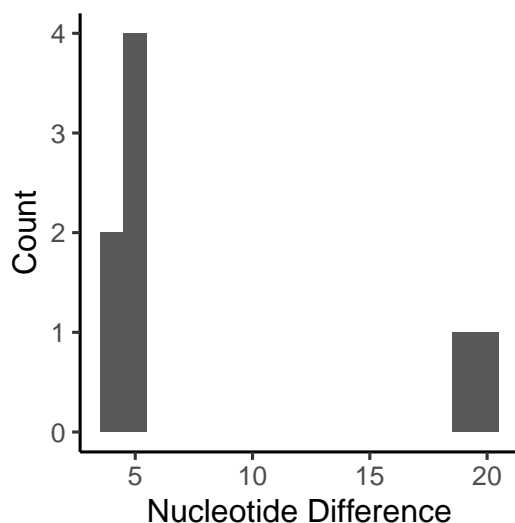
### IGHV3-43\*01

44 sequences assigned  
8 (18.2%) exact matches, in which:  
6 unique CDR3  
2 unique J



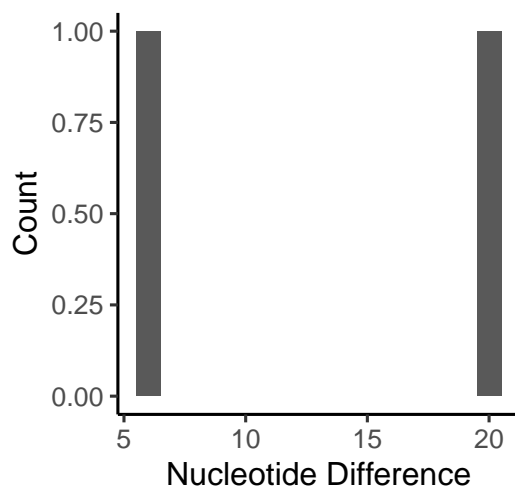
### IGHV3-20\*03\_04

8 sequences assigned  
No exact matches.



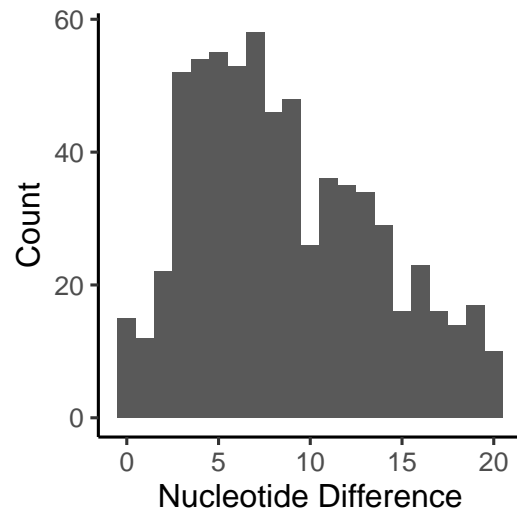
### IGHV3-30\*03

4 sequences assigned  
No exact matches.



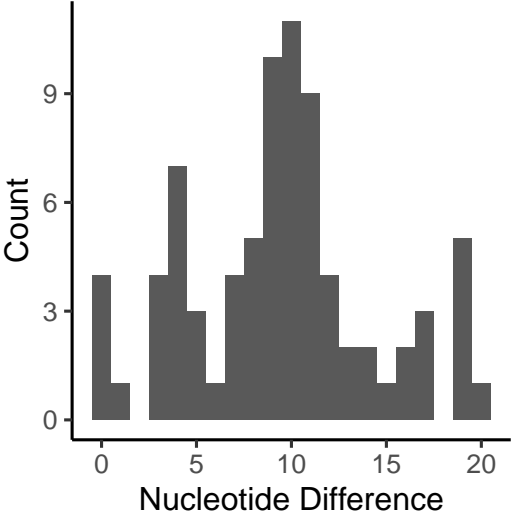
### IGHV3-48\*02

731 sequences assigned  
15 (2.1%) exact matches, in which:  
9 unique CDR3  
2 unique J



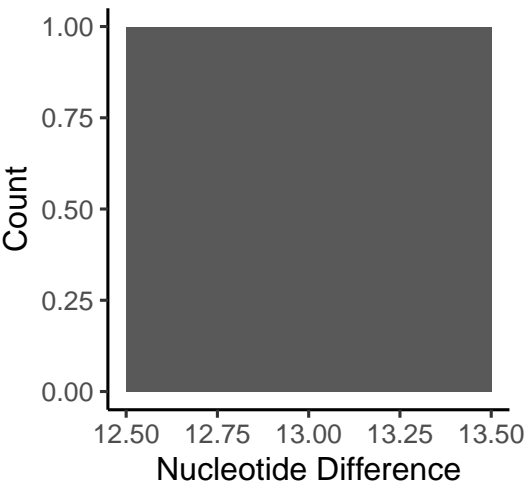
IGHV3-49\*03\_05

93 sequences assigned  
4 (4.3%) exact matches, in which:  
2 unique CDR3  
1 unique J



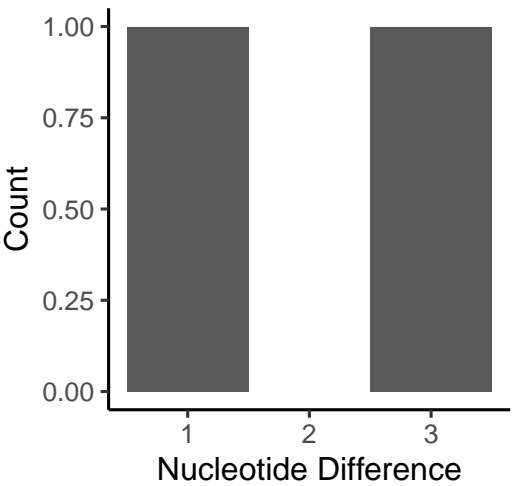
IGHV3-66\*01

1 sequences assigned  
No exact matches.



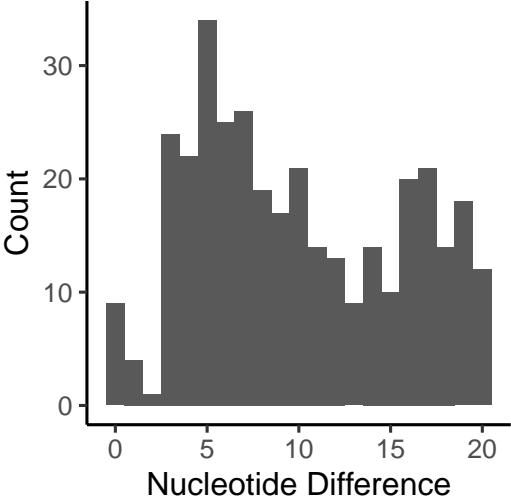
IGHV3-69-1\*02

2 sequences assigned  
No exact matches.



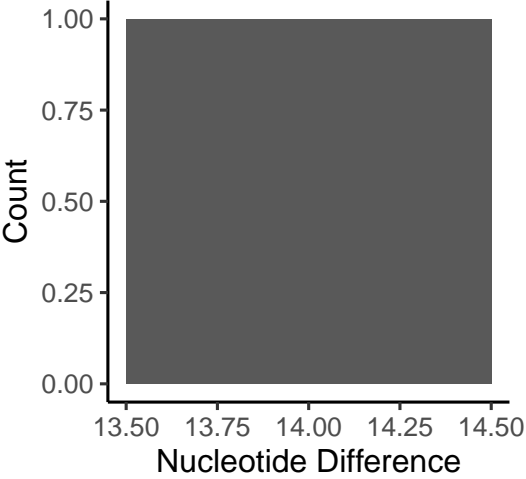
IGHV3-53\*01\_02

404 sequences assigned  
9 (2.2%) exact matches, in which:  
6 unique CDR3  
3 unique J



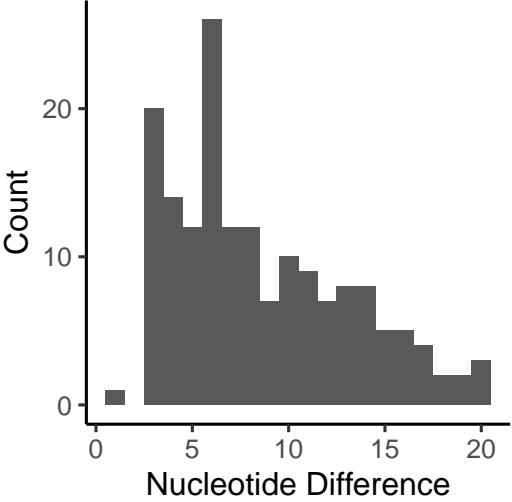
IGHV3-66\*04

1 sequences assigned  
No exact matches.



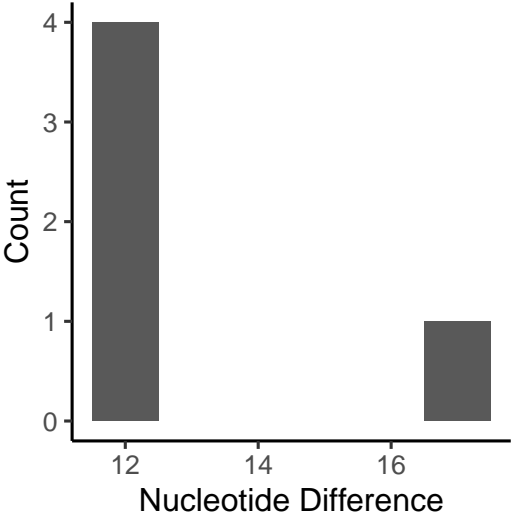
IGHV3-72\*01

170 sequences assigned  
No exact matches.



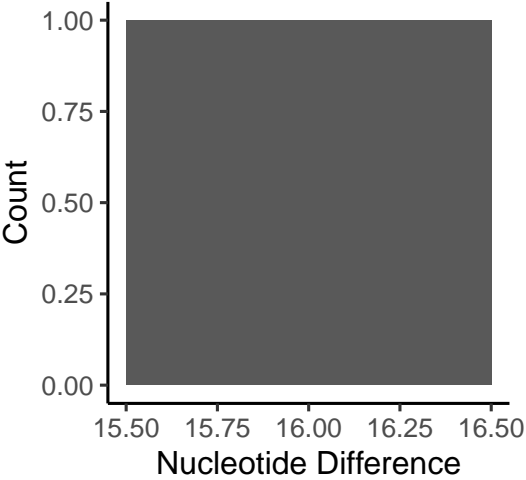
IGHV3-64\*02\_07

5 sequences assigned  
No exact matches.



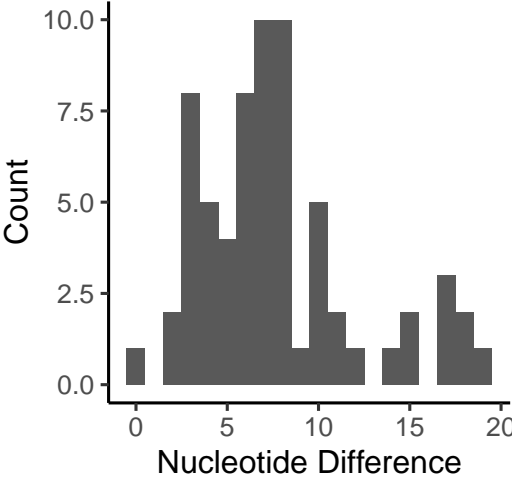
IGHV3-69-1\*01

1 sequences assigned  
No exact matches.



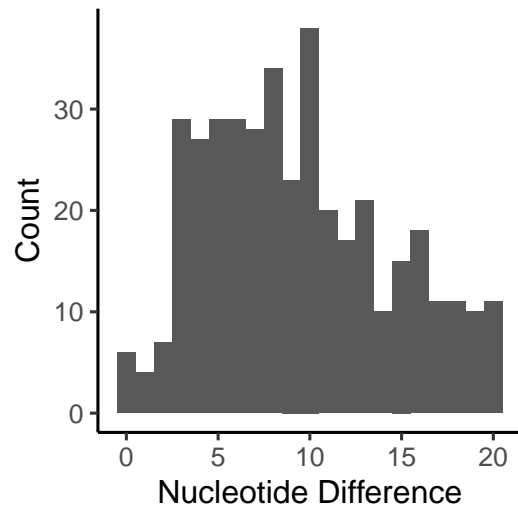
IGHV3-73\*01\_02

78 sequences assigned  
1 (1.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



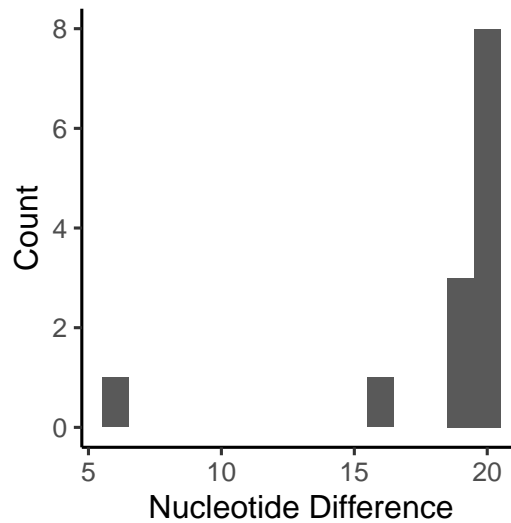
### IGHV3-74\*01\_02

445 sequences assigned  
6 (1.3%) exact matches, in which:  
4 unique CDR3  
2 unique J



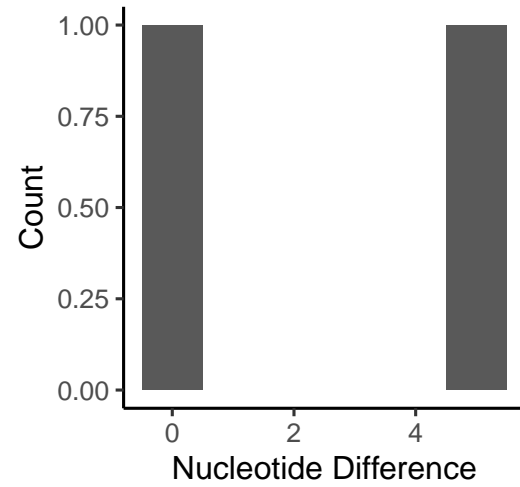
### IGHV4-28\*01\_07

15 sequences assigned  
No exact matches.



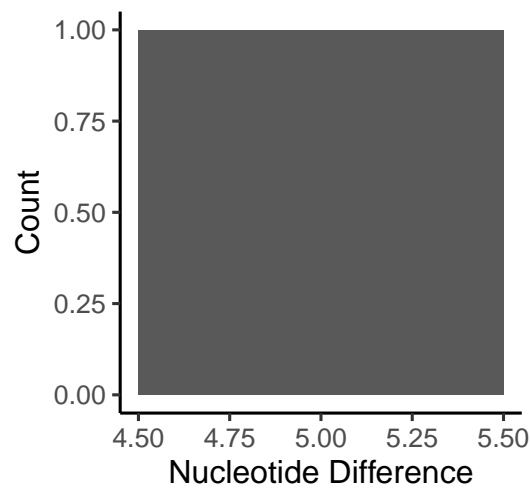
### IGHV4-31\*03\_04

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



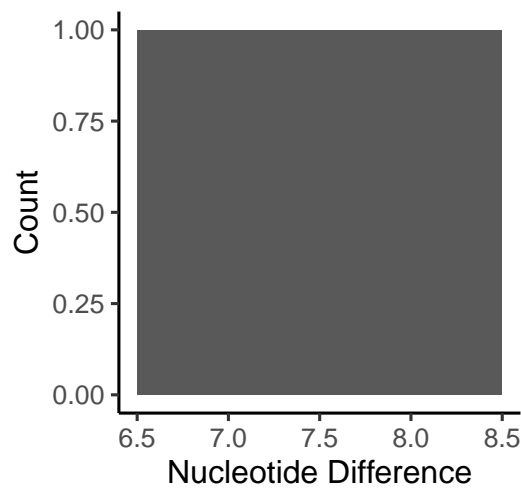
### IGHV3-64D\*09

1 sequences assigned  
No exact matches.



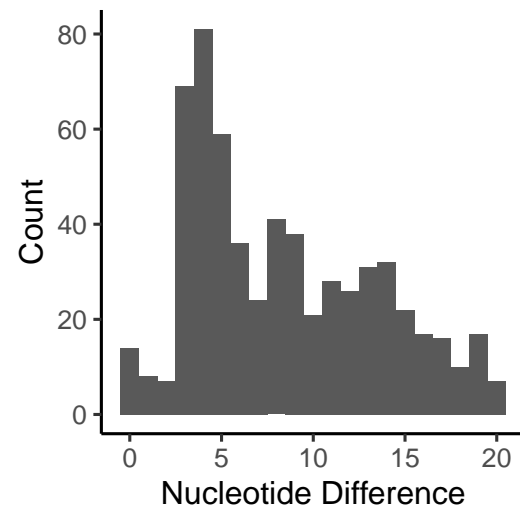
### IGHV4-28\*02\_05

2 sequences assigned  
No exact matches.



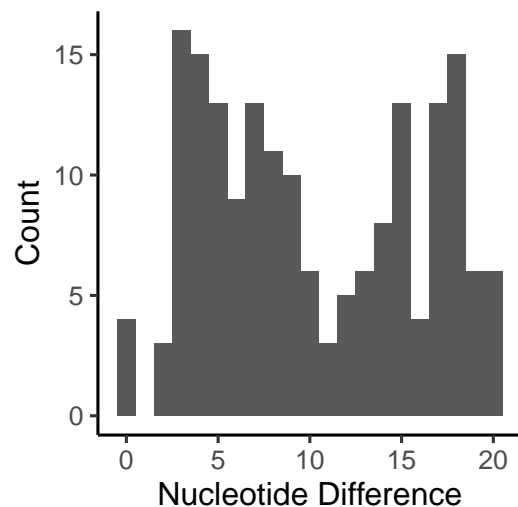
### IGHV4-34\*01\_02

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



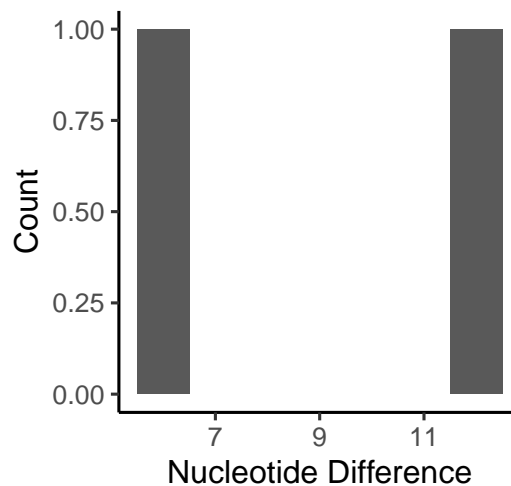
### IGHV4-4\*07

220 sequences assigned  
4 (1.8%) exact matches, in which:  
3 unique CDR3  
3 unique J



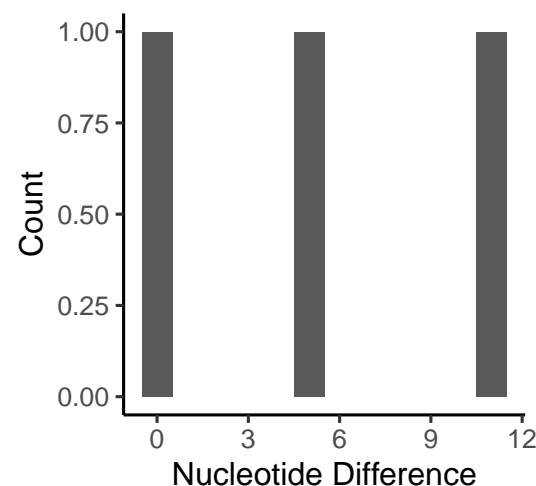
### IGHV4-30-2\*01

3 sequences assigned  
No exact matches.



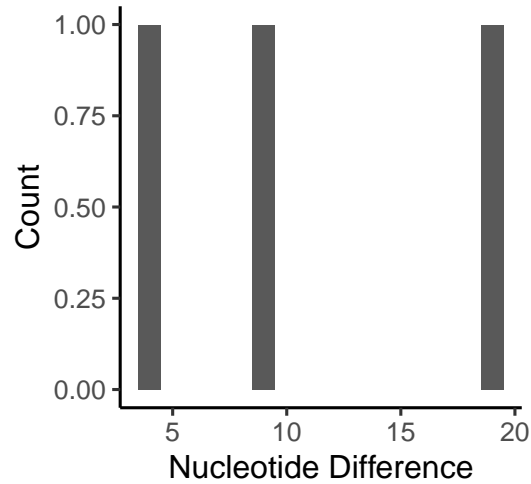
### IGHV4-38-2\*01

3 sequences assigned  
1 (33.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



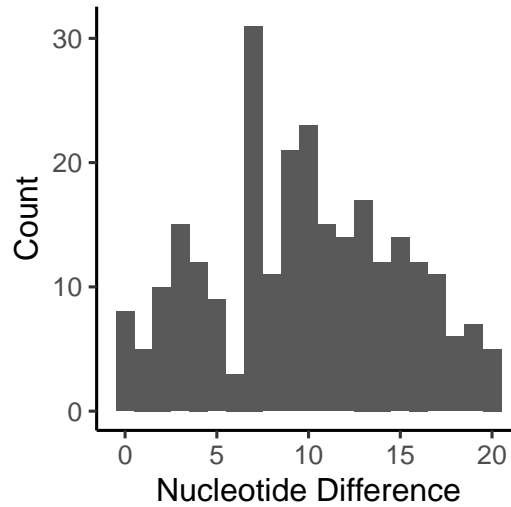
### IGHV4-38-2\*02

3 sequences assigned  
No exact matches.



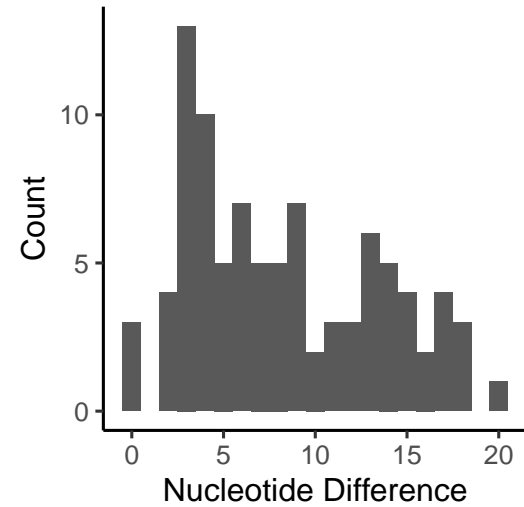
### IGHV4-61\*01

299 sequences assigned  
8 (2.7%) exact matches, in which:  
4 unique CDR3  
2 unique J



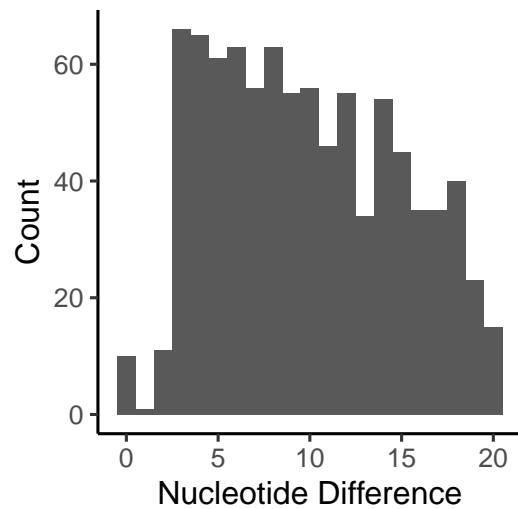
### IGHV7-4-1\*02

102 sequences assigned  
3 (2.9%) exact matches, in which:  
3 unique CDR3  
1 unique J



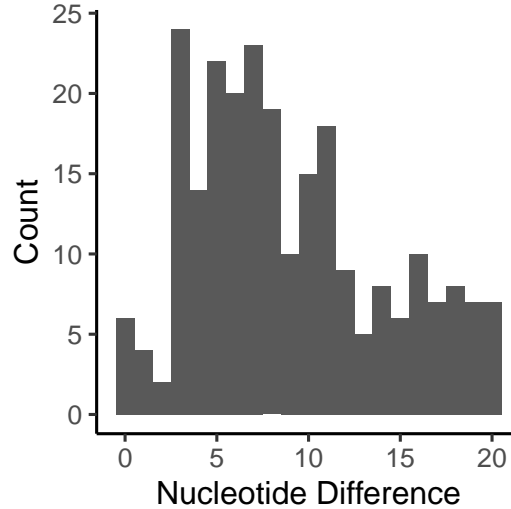
### IGHV4-39\*01\_05

1069 sequences assigned  
10 (0.9%) exact matches, in which:  
9 unique CDR3  
3 unique J



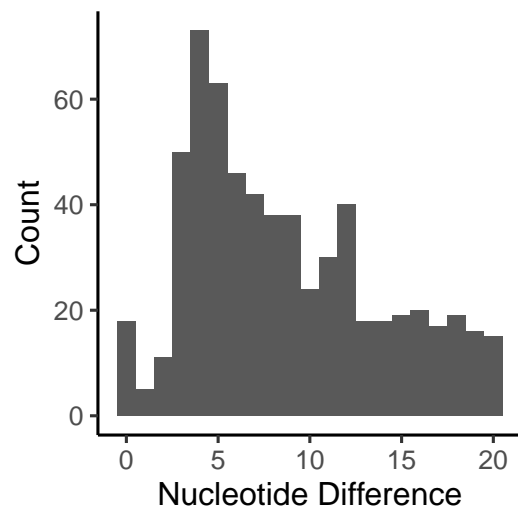
### IGHV5-51\*01\_03

270 sequences assigned  
6 (2.2%) exact matches, in which:  
6 unique CDR3  
3 unique J



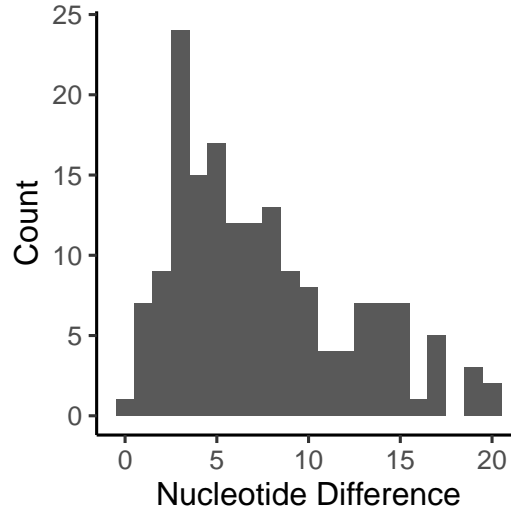
### IGHV4-59\*01\_07

717 sequences assigned  
18 (2.5%) exact matches, in which:  
13 unique CDR3  
4 unique J



### IGHV6-1\*01\_02

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





Warning – no inferred sequences found.

Novel sequence(s)IGHV3–11\*06\_T300CIGHV4–38–2\*02\_A70GIGHV4–39\*02\_C258GIGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–39\*02\_C258GIGHV4–59\*02\_G88AIGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59\*02\_G88AIGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV4–59\*02\_G88AIGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Novel sequence(s)IGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–39\*02\_C258GIGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.

Novel sequence(s)IGHV4–59\*02\_G88AIGHV5–51\*07\_A128G are not listed in the genotype and will be ignored.

Warning – no inferred sequences found.