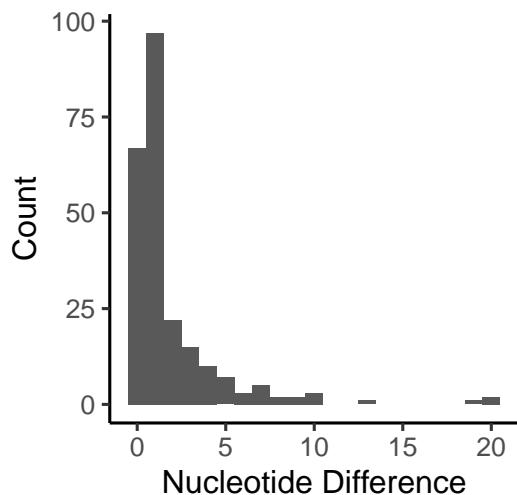


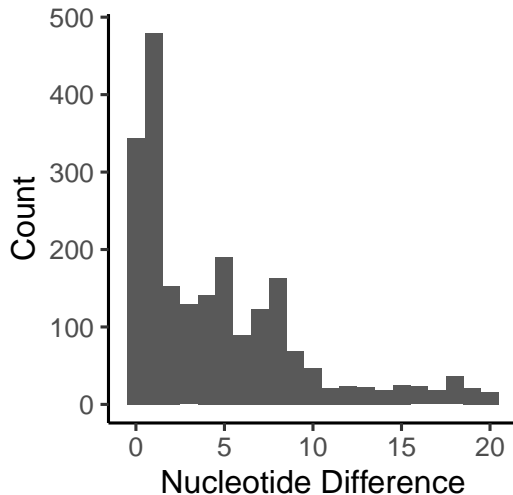
### IGHV1S10\*01\_G167T\_A'

271 sequences assigned  
67 (24.7%) exact matches, in which:  
56 unique CDR3  
6 unique J



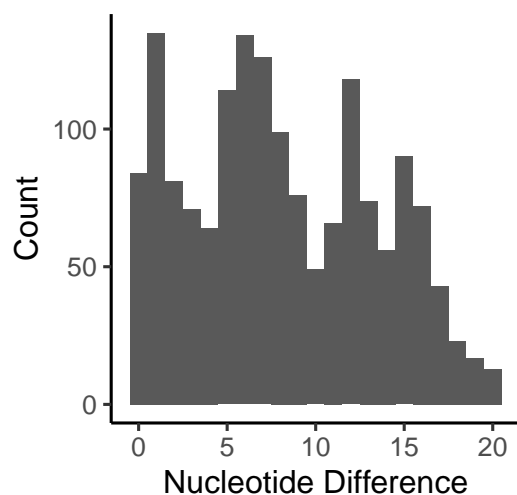
### IGHV3S11\*01\_C78T\_A11

2310 sequences assigned  
344 (14.9%) exact matches, in which:  
294 unique CDR3  
6 unique J



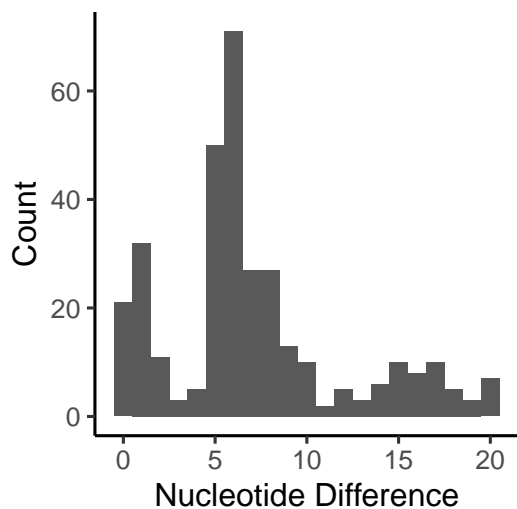
### IGHV3S22\*01\_G24A\_C6

1663 sequences assigned  
84 (5.1%) exact matches, in which:  
71 unique CDR3  
6 unique J



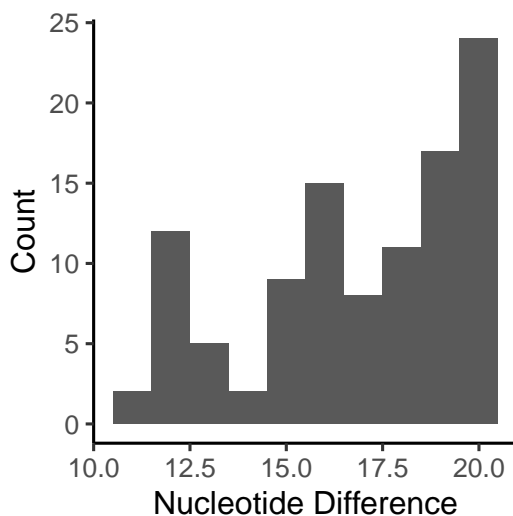
### IGHV1S2\*01\_C123G

538 sequences assigned  
21 (3.9%) exact matches, in which:  
18 unique CDR3  
6 unique J



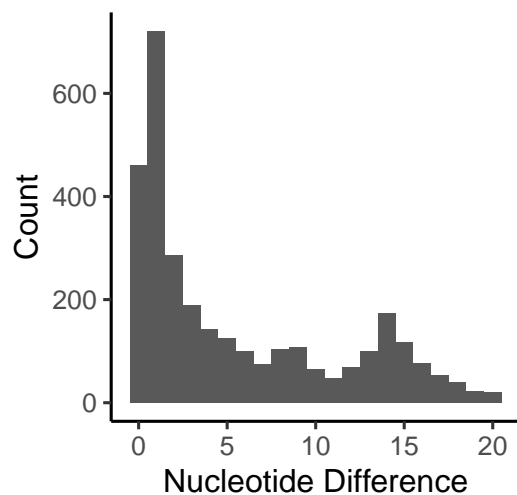
### IGHV3S15\*01

626 sequences assigned  
No exact matches.



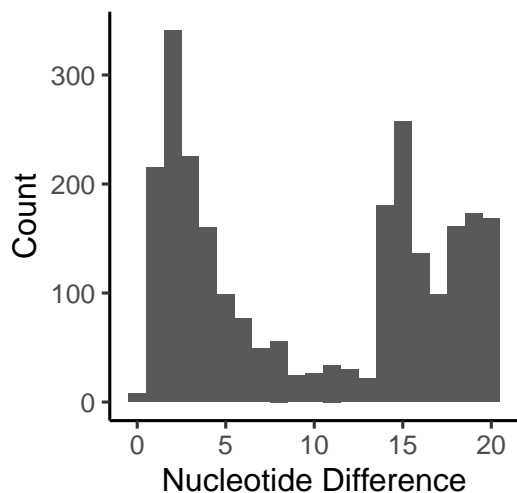
### IGHV3S32\*01\_C114T\_T1

3184 sequences assigned  
460 (14.4%) exact matches, in which:  
389 unique CDR3  
6 unique J



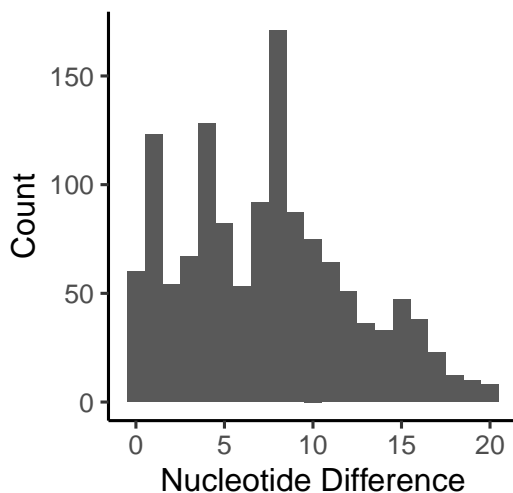
### IGHV2S2\*01\_C6G\_G115

3604 sequences assigned  
8 (0.2%) exact matches, in which:  
8 unique CDR3  
4 unique J



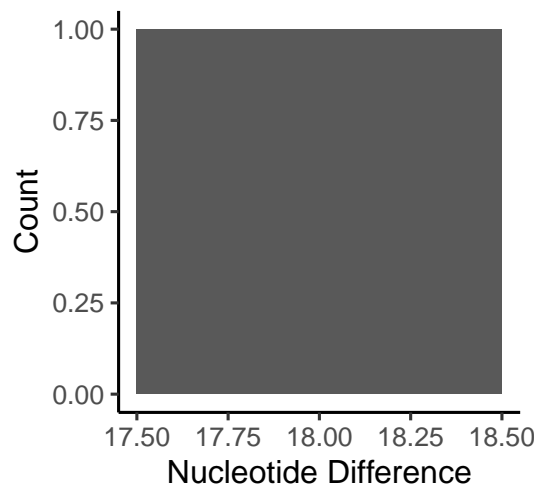
### IGHV3S22\*01\_C61G\_A11

1444 sequences assigned  
60 (4.2%) exact matches, in which:  
52 unique CDR3  
5 unique J



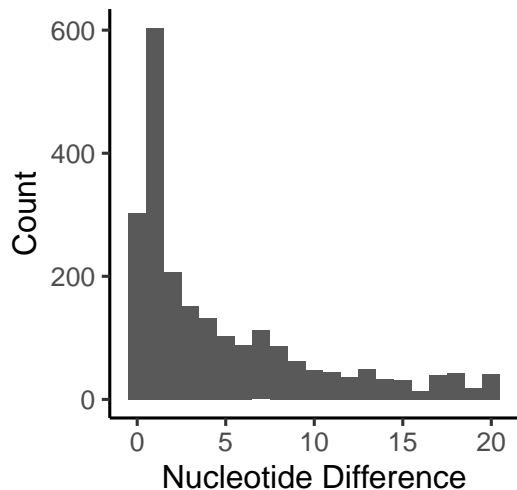
### IGHV3S41\*01

48 sequences assigned  
No exact matches.



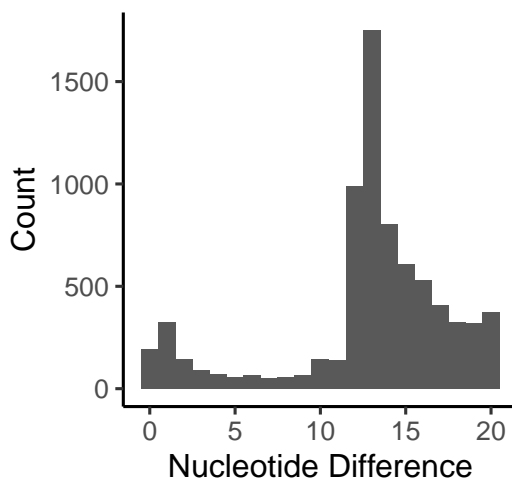
### IGHV3S45\*01\_A122G\_T'

2511 sequences assigned  
303 (12.1%) exact matches, in which:  
243 unique CDR3  
6 unique J



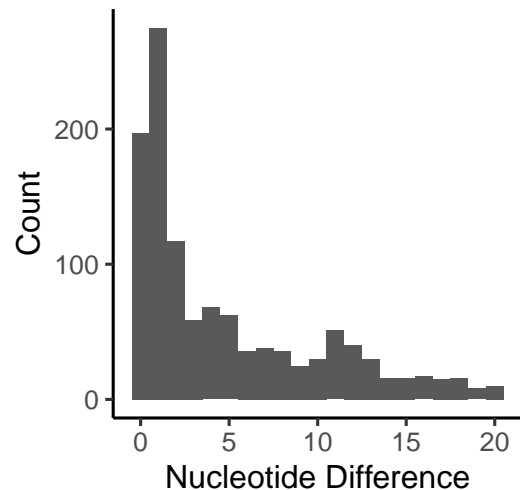
### IGHV3S5\*01\_T19A\_G11

10191 sequences assigned  
191 (1.9%) exact matches, in which:  
165 unique CDR3  
6 unique J



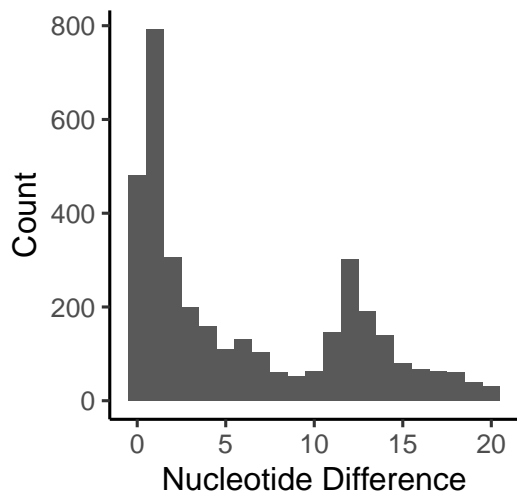
### IGHV4S11\*01\_T90C\_C13

1381 sequences assigned  
197 (14.3%) exact matches, in which:  
179 unique CDR3  
6 unique J



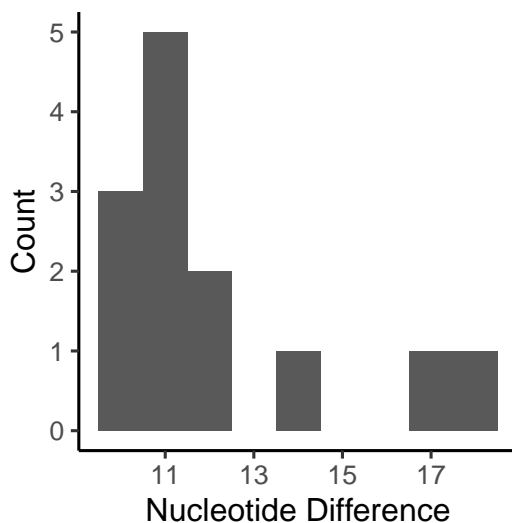
### IGHV3S45\*01\_G26C\_G1

3781 sequences assigned  
482 (12.7%) exact matches, in which:  
406 unique CDR3  
6 unique J



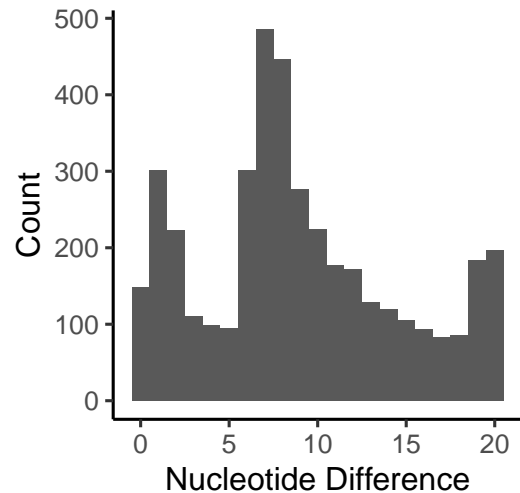
### IGHV3S7\*01

15 sequences assigned  
No exact matches.



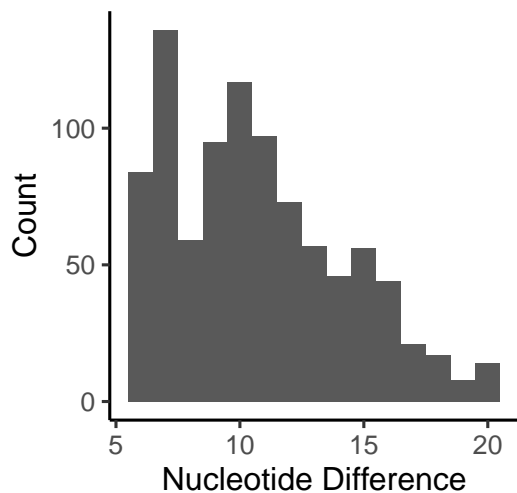
### IGHV4S12\*01\_G34C\_C9

4660 sequences assigned  
148 (3.2%) exact matches, in which:  
132 unique CDR3  
6 unique J



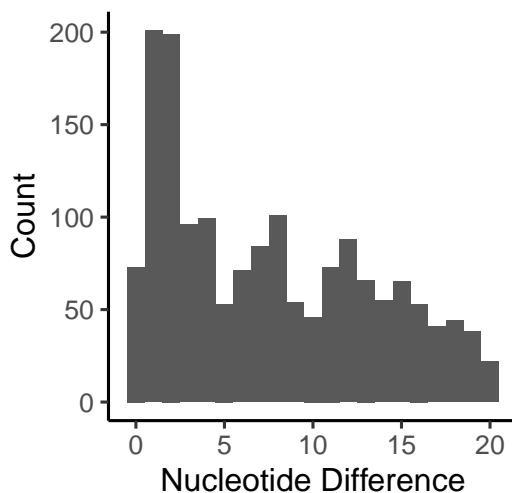
### IGHV3S46\*01

958 sequences assigned  
No exact matches.



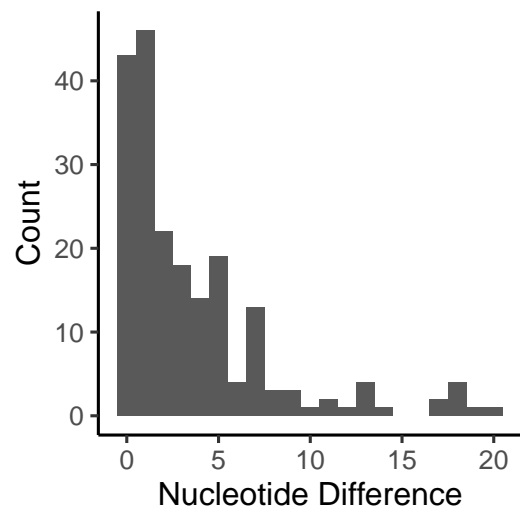
### IGHV4S11\*01\_T90C\_C13

1778 sequences assigned  
73 (4.1%) exact matches, in which:  
65 unique CDR3  
6 unique J



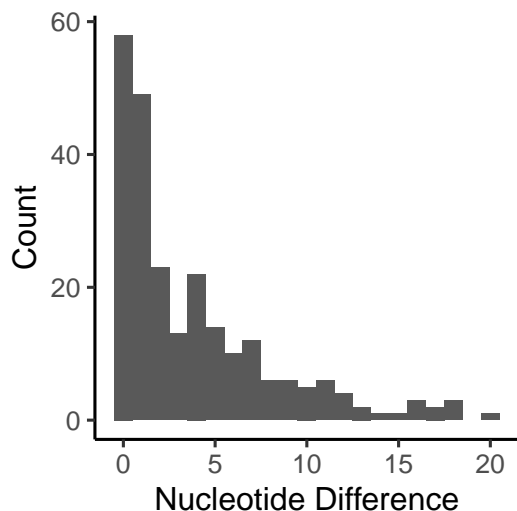
### IGHV4S14\*01\_A116G\_C1

227 sequences assigned  
43 (18.9%) exact matches, in which:  
41 unique CDR3  
6 unique J



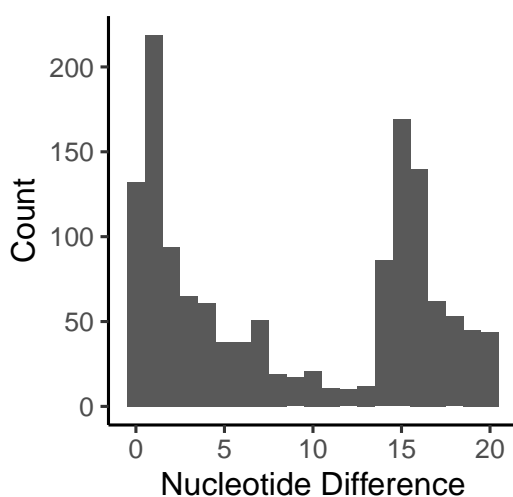
## IGHV4S14\*01\_A116G\_C1

264 sequences assigned  
58 (22%) exact matches, in which:  
55 unique CDR3  
6 unique J



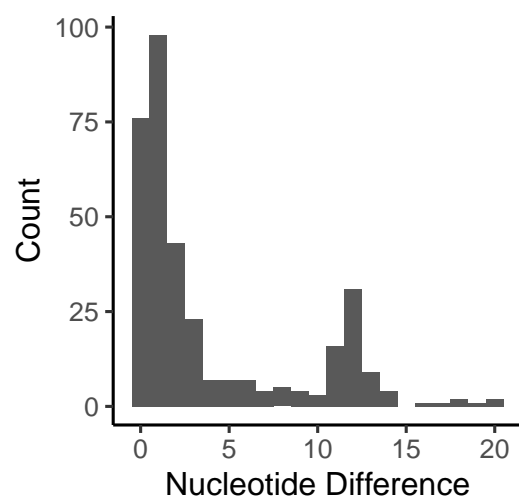
## IGHV4S6\*01\_A70G\_C86

1724 sequences assigned  
132 (7.7%) exact matches, in which:  
114 unique CDR3  
6 unique J



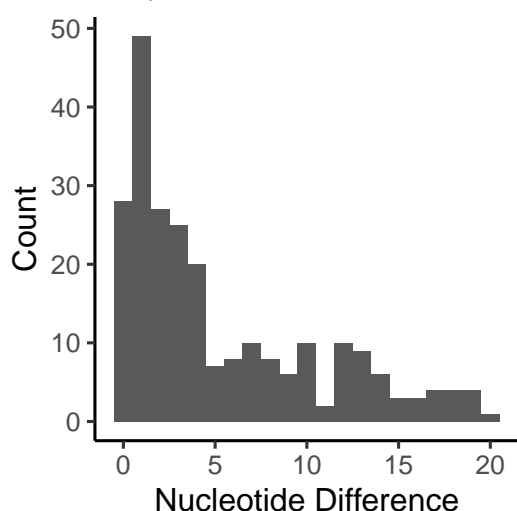
## IGHV7S1\*01\_T84A\_C127

344 sequences assigned  
76 (22.1%) exact matches, in which:  
63 unique CDR3  
5 unique J



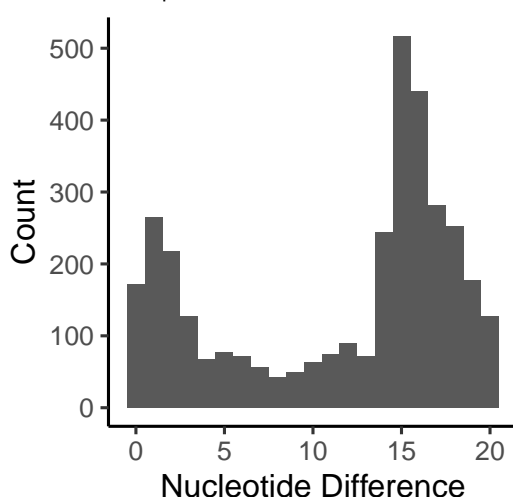
## IGHV4S14\*01\_G70A\_T90

262 sequences assigned  
28 (10.7%) exact matches, in which:  
26 unique CDR3  
5 unique J



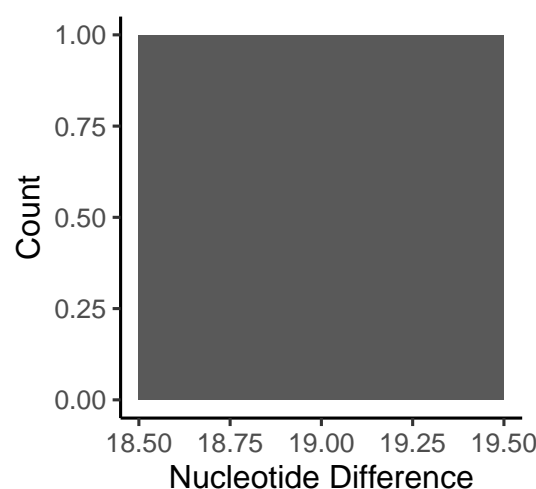
## IGHV4S7\*01\_G85T\_G86

5455 sequences assigned  
172 (3.2%) exact matches, in which:  
157 unique CDR3  
6 unique J



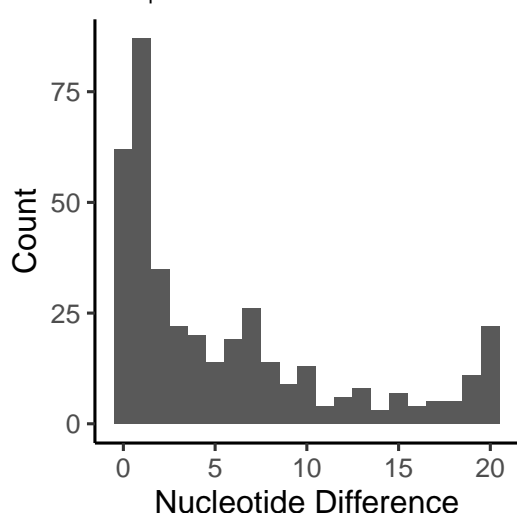
## IGHV7S3\*01

2 sequences assigned  
No exact matches.



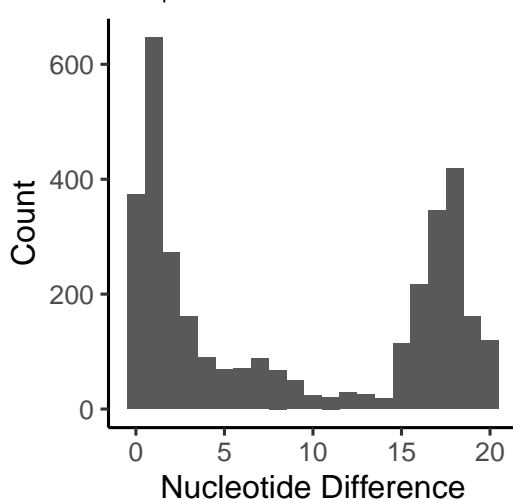
## IGHV4S14\*01\_T90C\_A91

445 sequences assigned  
62 (13.9%) exact matches, in which:  
57 unique CDR3  
5 unique J



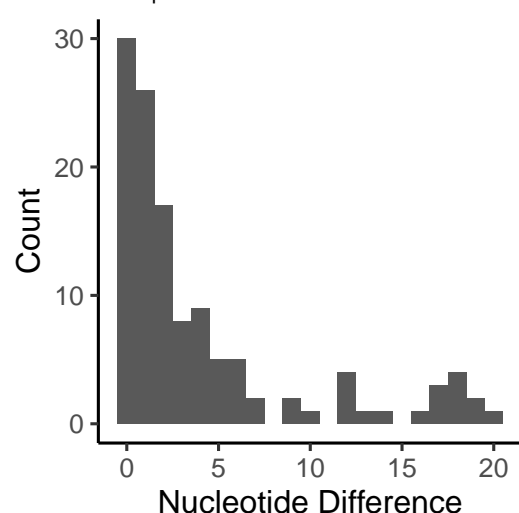
## IGHV5S1\*01\_G51A\_A10

3775 sequences assigned  
373 (9.9%) exact matches, in which:  
295 unique CDR3  
6 unique J



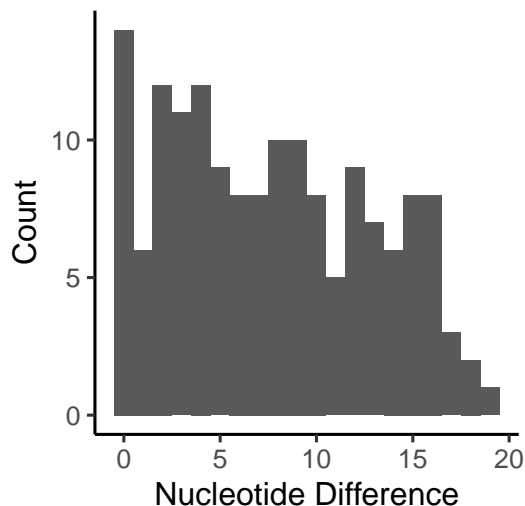
## IGHV3-5\*01\_C62T\_A109

309 sequences assigned  
30 (9.7%) exact matches, in which:  
27 unique CDR3  
6 unique J



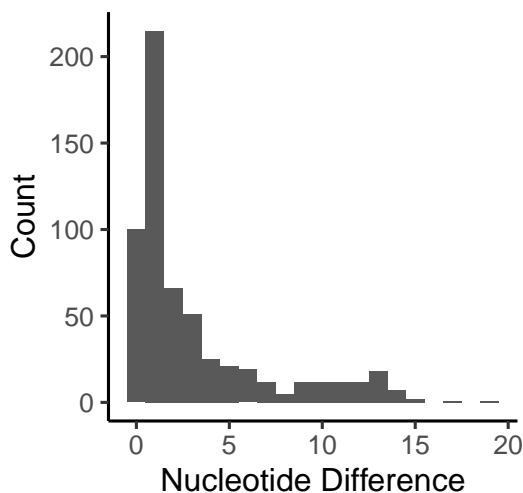
### IGHV3-6\*01\_G24A\_C61G

165 sequences assigned  
14 (8.5%) exact matches, in which:  
13 unique CDR3  
4 unique J



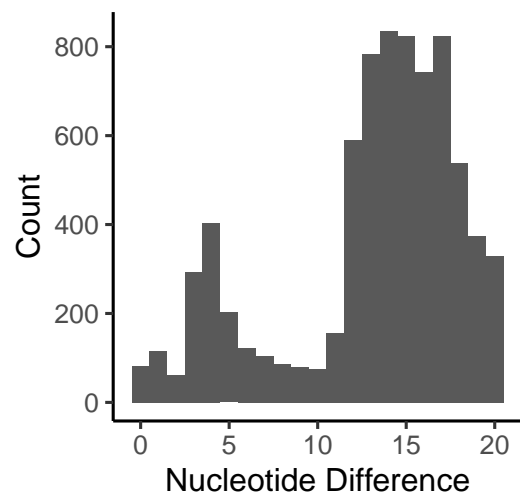
### IGHV3-7\*01\_C39A\_C40A

618 sequences assigned  
100 (16.2%) exact matches, in which:  
79 unique CDR3  
6 unique J



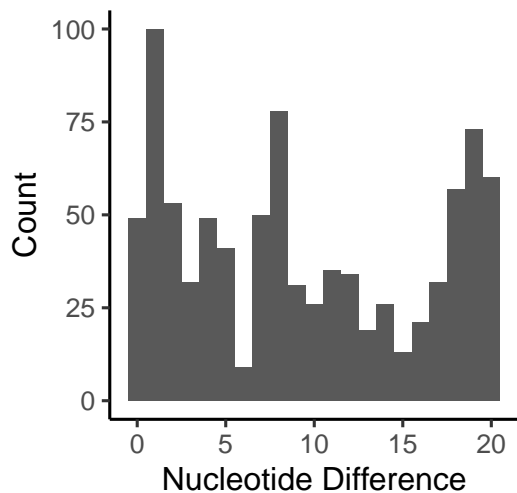
### IGHV4-2\*01\_C4G\_C136G

9507 sequences assigned  
82 (0.9%) exact matches, in which:  
68 unique CDR3  
6 unique J



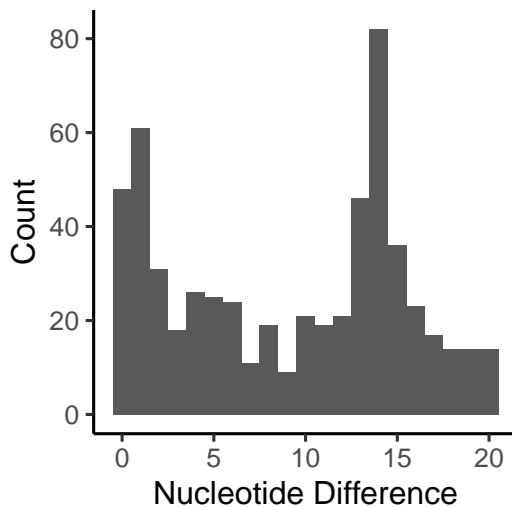
### IGHV3-6\*01\_T122A\_A14

1015 sequences assigned  
49 (4.8%) exact matches, in which:  
39 unique CDR3  
6 unique J



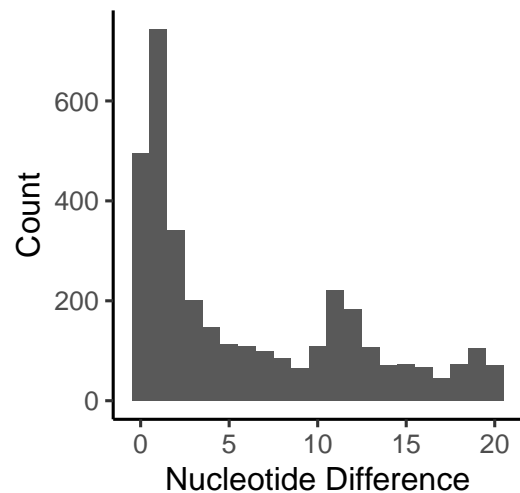
### IGHV3-14\*01\_G110A\_C110A

763 sequences assigned  
48 (6.3%) exact matches, in which:  
42 unique CDR3  
6 unique J



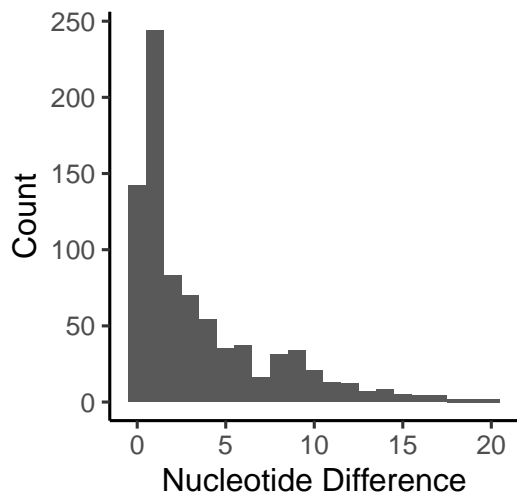
### IGHV4-2\*01\_C4G\_C90T

4189 sequences assigned  
496 (11.8%) exact matches, in which:  
432 unique CDR3  
6 unique J



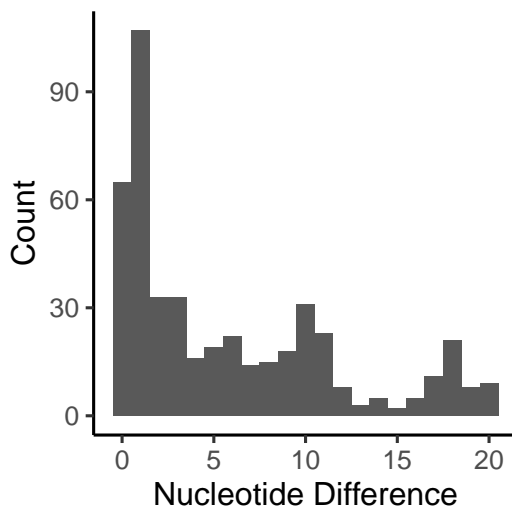
### IGHV3-7\*01\_C39A\_C40A

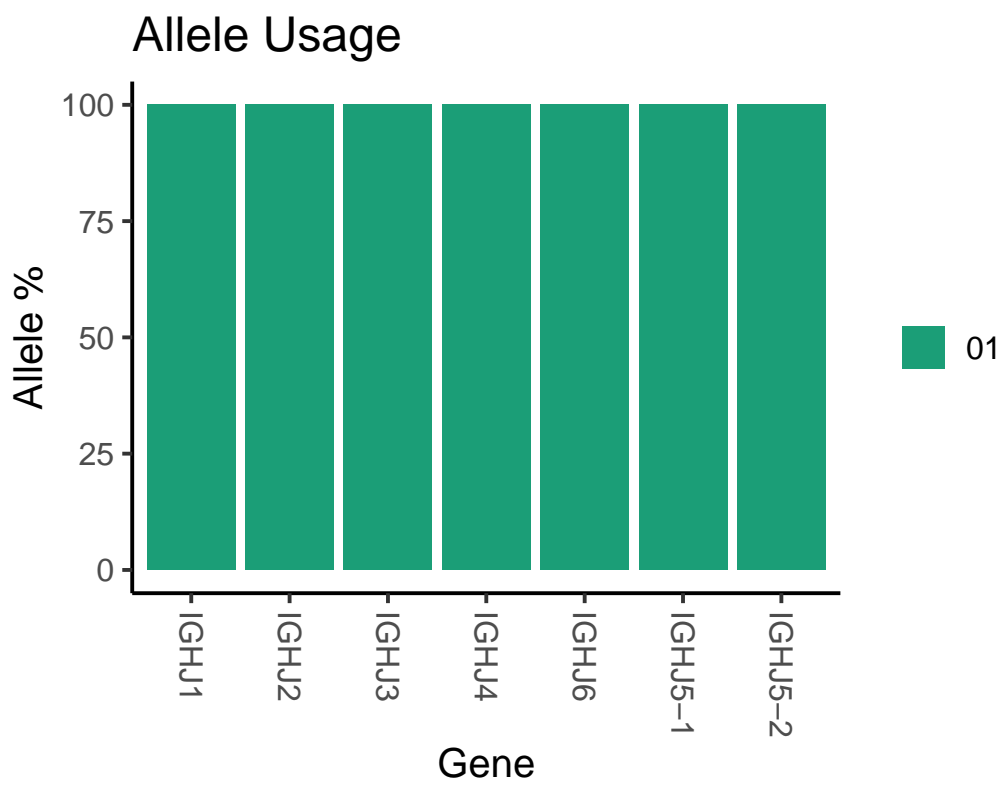
833 sequences assigned  
142 (17%) exact matches, in which:  
113 unique CDR3  
6 unique J



### IGHV3-22\*01\_C10T\_G51G\_A127G\_G141A\_Q154G\_A226A

503 sequences assigned  
65 (12.9%) exact matches, in which:  
55 unique CDR3  
6 unique J





Warning – no inferred sequences found.