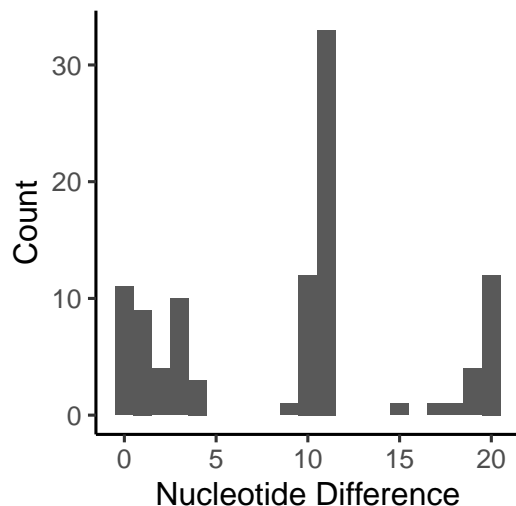


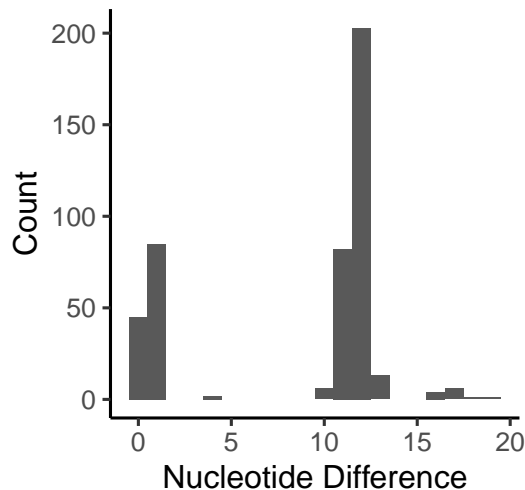
### IGHV1-2\*04

102 sequences assigned  
11 (10.8%) exact matches, in which:  
5 unique CDR3  
2 unique J



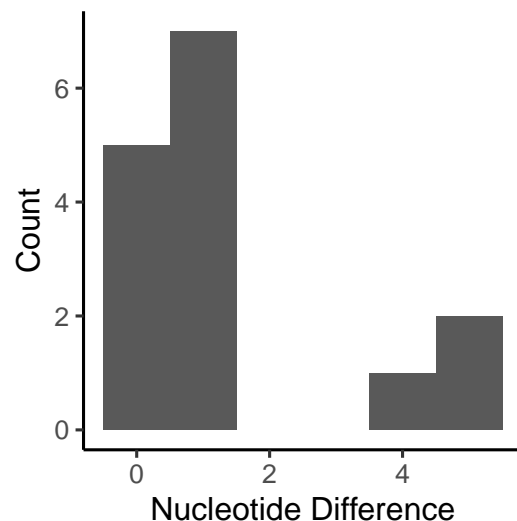
### IGHV1-18\*01

607 sequences assigned  
45 (7.4%) exact matches, in which:  
32 unique CDR3  
3 unique J



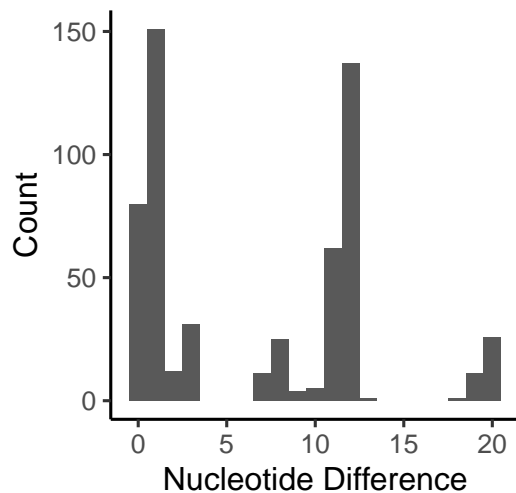
### IGHV1-58\*02

15 sequences assigned  
5 (33.3%) exact matches, in which:  
3 unique CDR3  
2 unique J



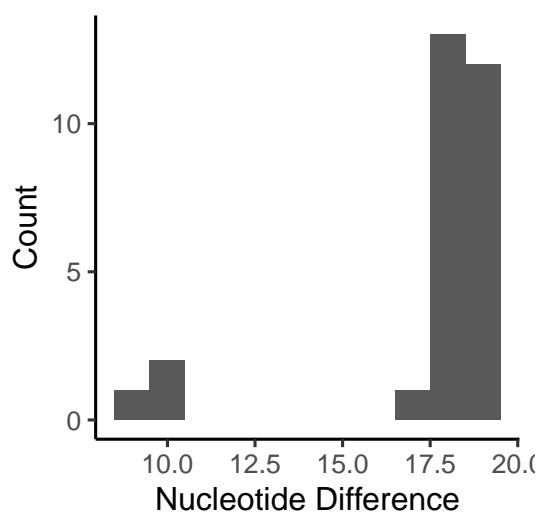
### IGHV1-3\*01\_05

1127 sequences assigned  
80 (7.1%) exact matches, in which:  
46 unique CDR3  
4 unique J



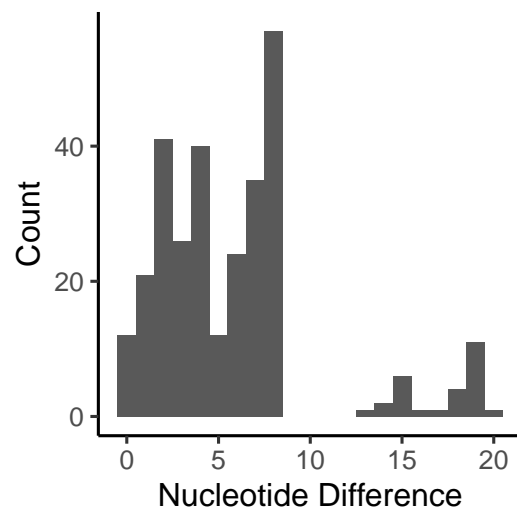
### IGHV1-24\*01

51 sequences assigned  
No exact matches.



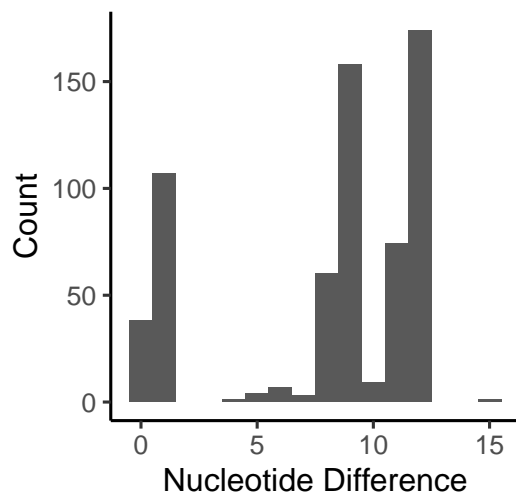
### IGHV1-69\*04\_09

330 sequences assigned  
12 (3.6%) exact matches, in which:  
9 unique CDR3  
3 unique J



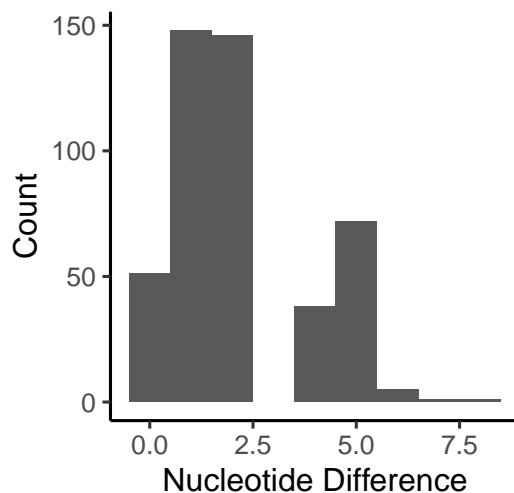
### IGHV1-8\*01

638 sequences assigned  
38 (6%) exact matches, in which:  
20 unique CDR3  
2 unique J



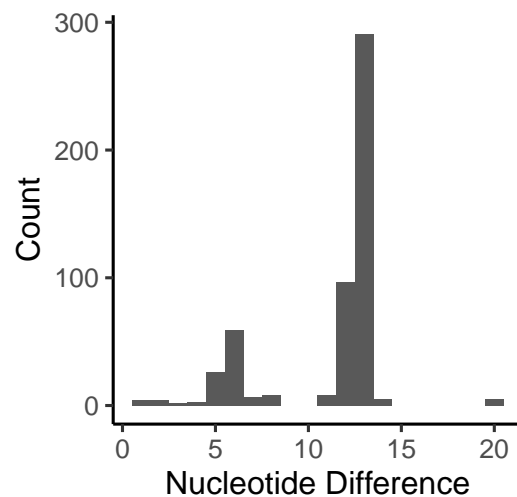
### IGHV1-46\*01

462 sequences assigned  
51 (11%) exact matches, in which:  
32 unique CDR3  
3 unique J



### IGHV2-5\*02

683 sequences assigned  
No exact matches.



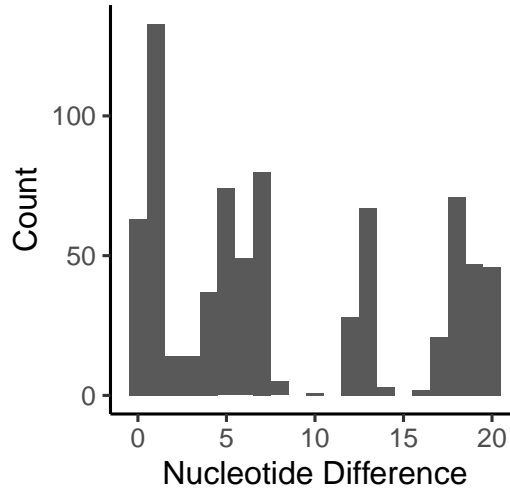
### IGHV2–26\*01

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



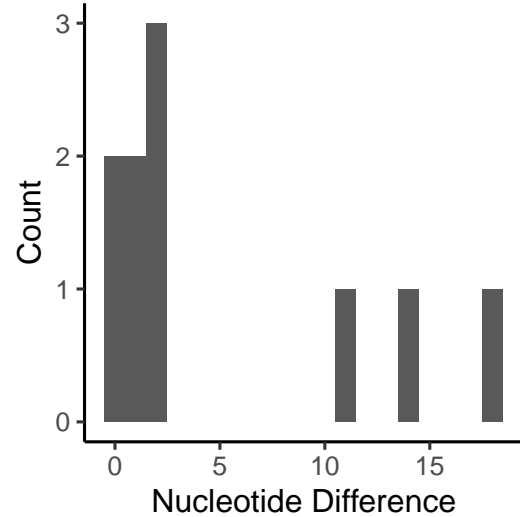
### IGHV3–7\*03

879 sequences assigned  
63 (7.2%) exact matches, in which:  
30 unique CDR3  
4 unique J



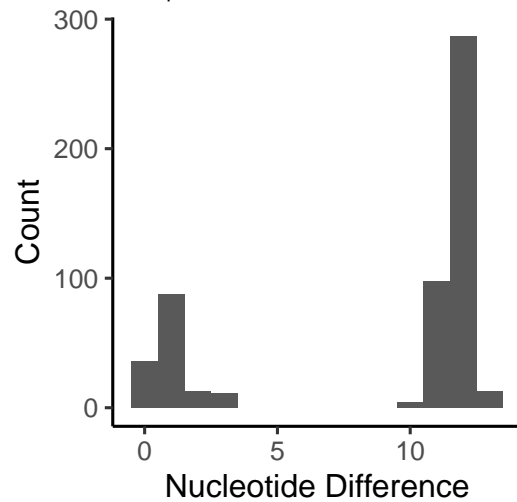
### IGHV3–11\*04

10 sequences assigned  
2 (20%) exact matches, in which:  
2 unique CDR3  
2 unique J



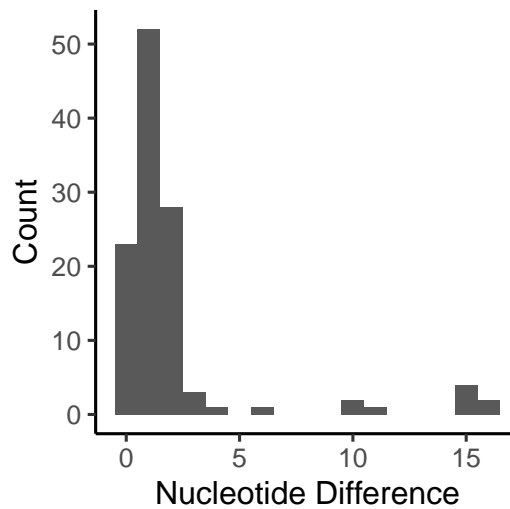
### IGHV2–70\*11\_15

557 sequences assigned  
36 (6.5%) exact matches, in which:  
17 unique CDR3  
2 unique J



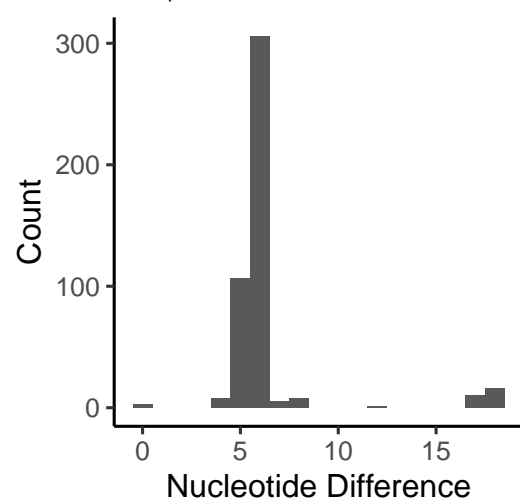
### IGHV3–9\*01

120 sequences assigned  
23 (19.2%) exact matches, in which:  
13 unique CDR3  
3 unique J



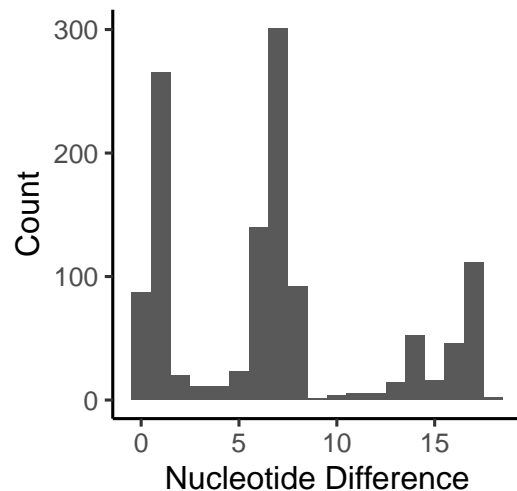
### IGHV3–13\*01

464 sequences assigned  
3 (0.6%) exact matches, in which:  
1 unique CDR3  
1 unique J



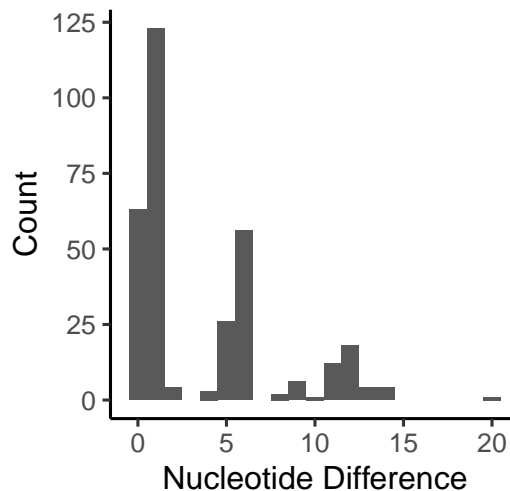
### IGHV3–7\*01

1206 sequences assigned  
87 (7.2%) exact matches, in which:  
39 unique CDR3  
4 unique J



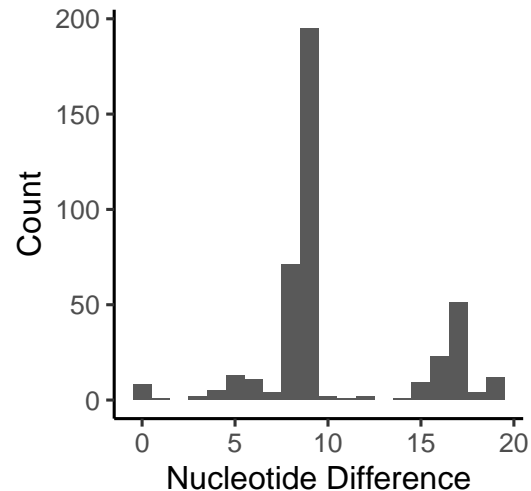
### IGHV3–11\*01

337 sequences assigned  
63 (18.7%) exact matches, in which:  
30 unique CDR3  
3 unique J



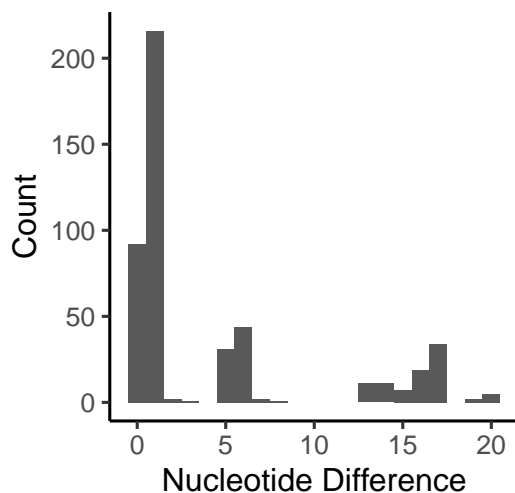
### IGHV3–15\*07

415 sequences assigned  
8 (1.9%) exact matches, in which:  
5 unique CDR3  
2 unique J



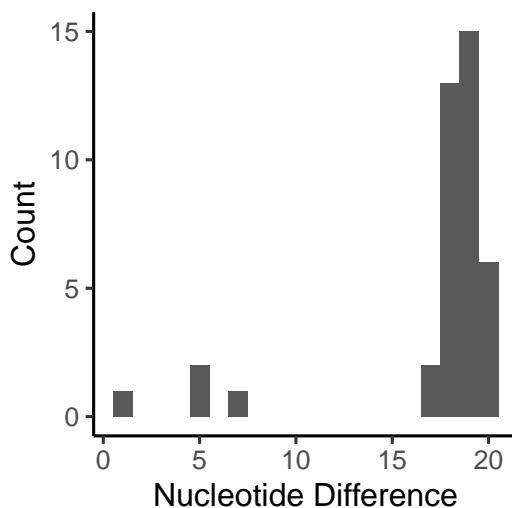
### IGHV3-21\*01\_02

2011 sequences assigned  
92 (4.6%) exact matches, in which:  
29 unique CDR3  
3 unique J



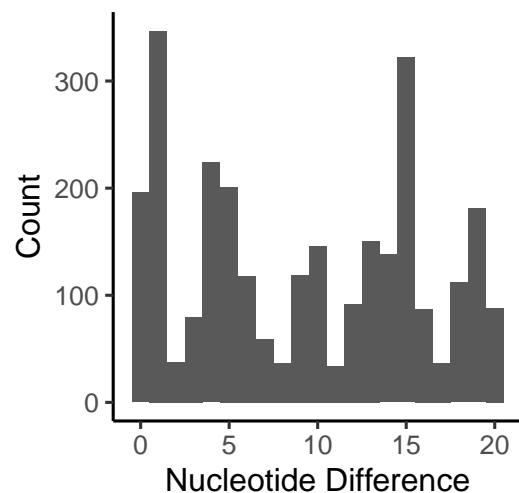
### IGHV3-30\*03

272 sequences assigned  
No exact matches.



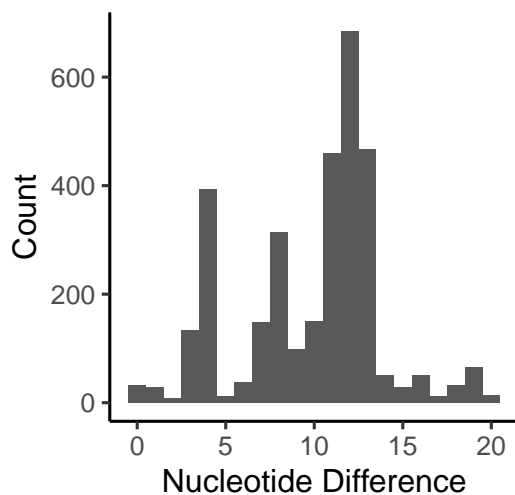
### IGHV3-48\*04

3490 sequences assigned  
196 (5.6%) exact matches, in which:  
91 unique CDR3  
3 unique J



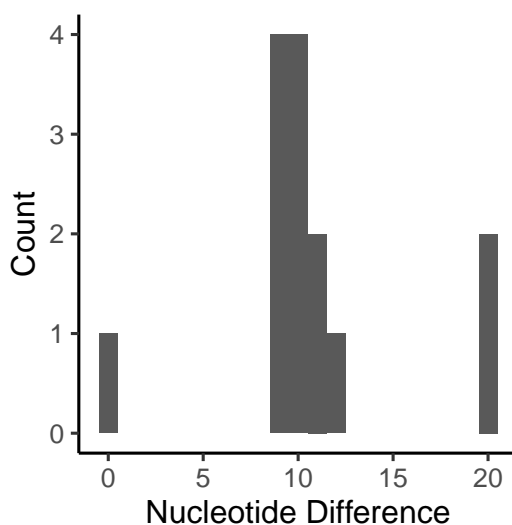
### IGHV3-23\*01\_04

4668 sequences assigned  
32 (0.7%) exact matches, in which:  
14 unique CDR3  
3 unique J



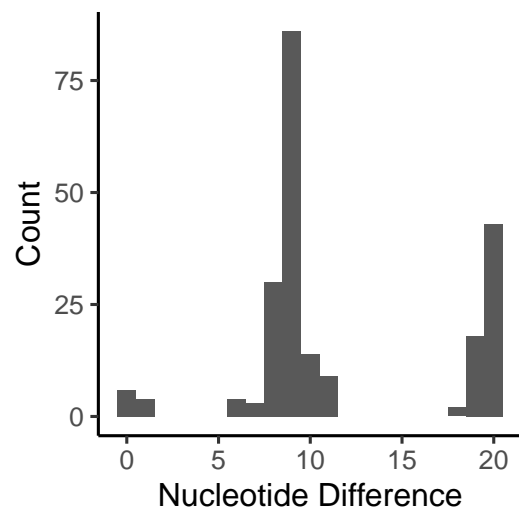
### IGHV3-30-3\*03

19 sequences assigned  
1 (5.3%) exact matches, in which:  
1 unique CDR3  
1 unique J



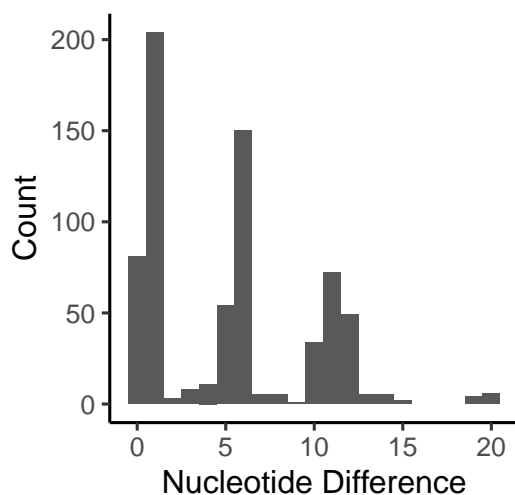
### IGHV3-49\*03\_05

229 sequences assigned  
6 (2.6%) exact matches, in which:  
2 unique CDR3  
2 unique J



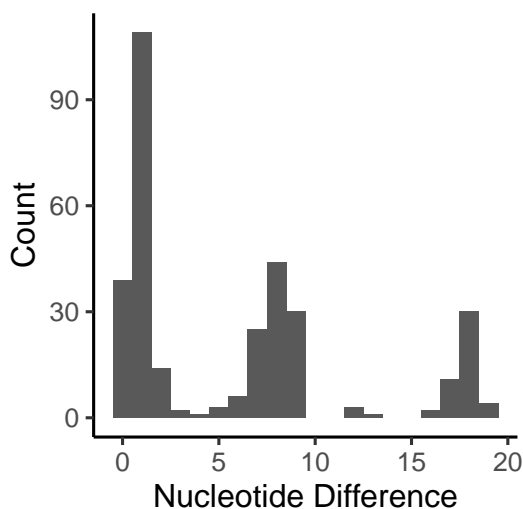
### IGHV3-30-3\*01

712 sequences assigned  
81 (11.4%) exact matches, in which:  
33 unique CDR3  
4 unique J



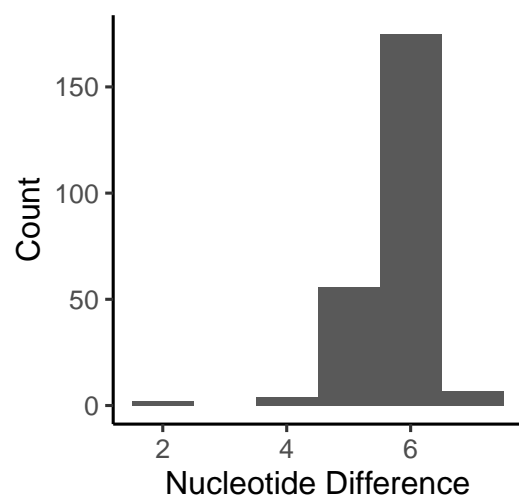
### IGHV3-33\*01

527 sequences assigned  
39 (7.4%) exact matches, in which:  
16 unique CDR3  
2 unique J



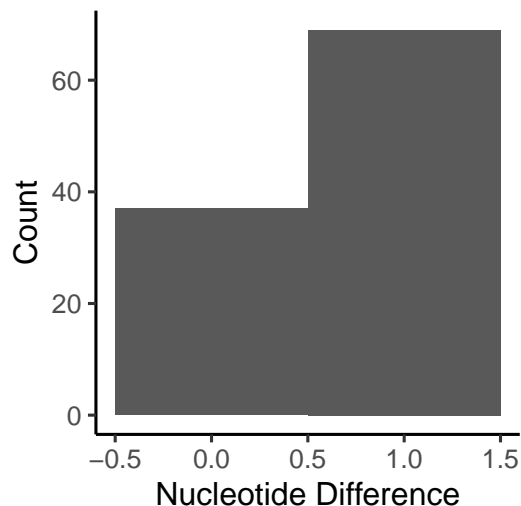
### IGHV3-53\*04

371 sequences assigned  
No exact matches.



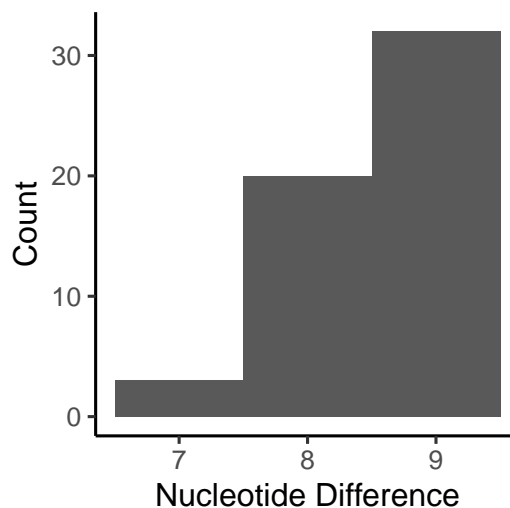
### IGHV3-64\*01

106 sequences assigned  
37 (34.9%) exact matches, in which:  
15 unique CDR3  
4 unique J



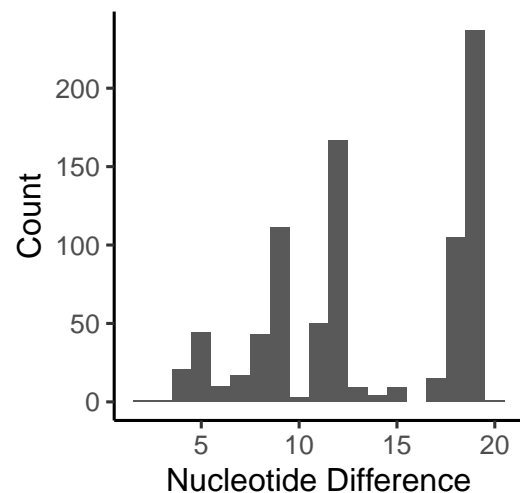
### IGHV3-66\*04

55 sequences assigned  
No exact matches.



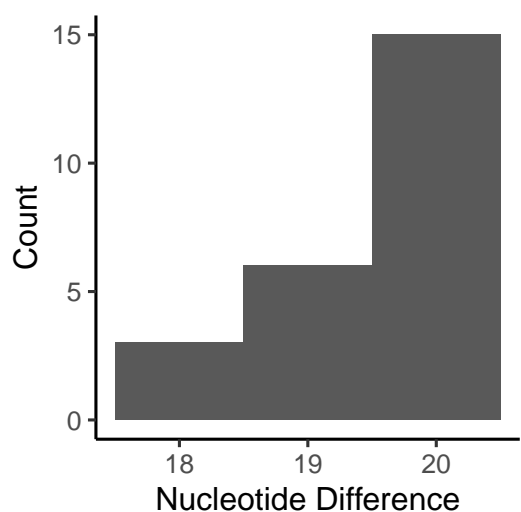
### IGHV3-74\*03

1750 sequences assigned  
No exact matches.



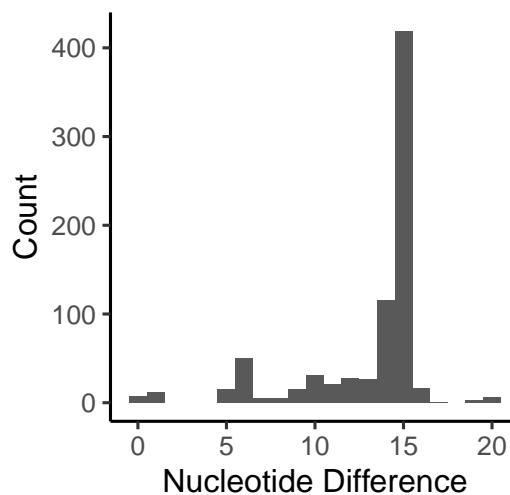
### IGHV3-64\*02\_07

24 sequences assigned  
No exact matches.



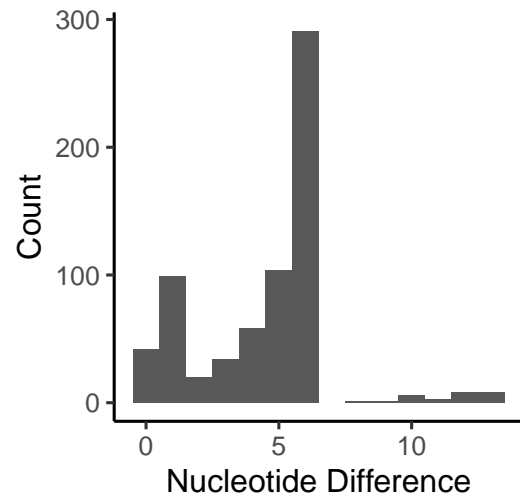
### IGHV3-72\*01

787 sequences assigned  
7 (0.9%) exact matches, in which:  
2 unique CDR3  
1 unique J



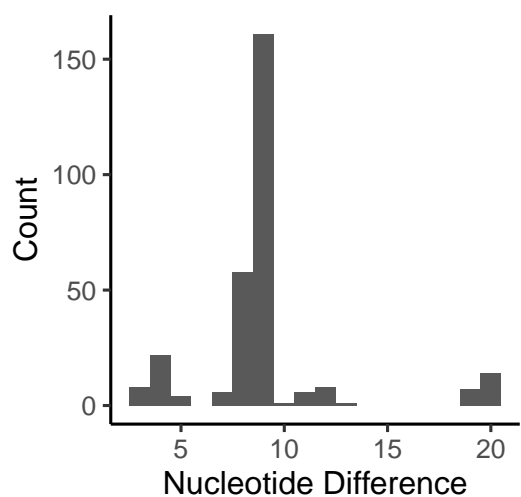
### IGHV3-74\*01\_02

690 sequences assigned  
42 (6.1%) exact matches, in which:  
20 unique CDR3  
4 unique J



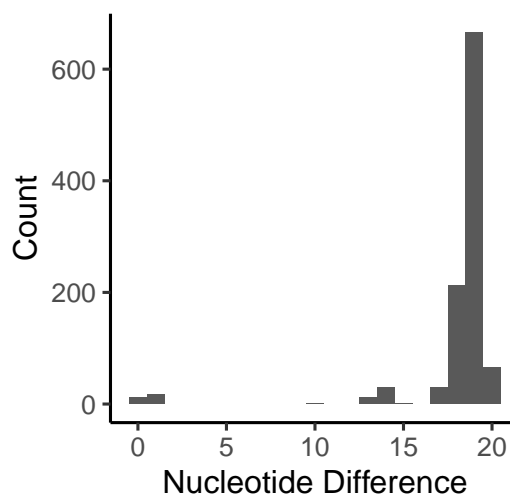
### IGHV3-66\*01

1507 sequences assigned  
No exact matches.



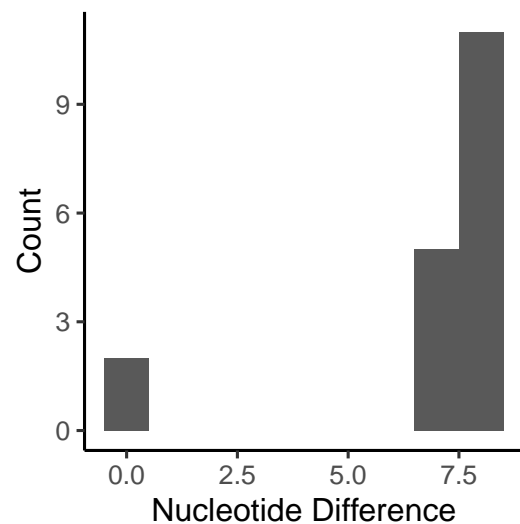
### IGHV3-73\*01\_02

1099 sequences assigned  
11 (1%) exact matches, in which:  
7 unique CDR3  
3 unique J



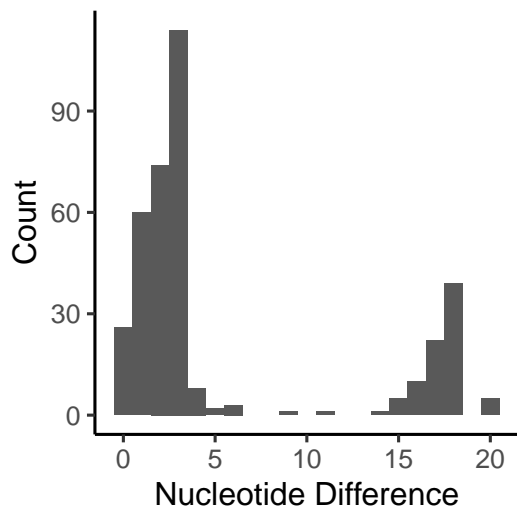
### IGHV3-43D\*03

18 sequences assigned  
2 (11.1%) exact matches, in which:  
1 unique CDR3  
1 unique J



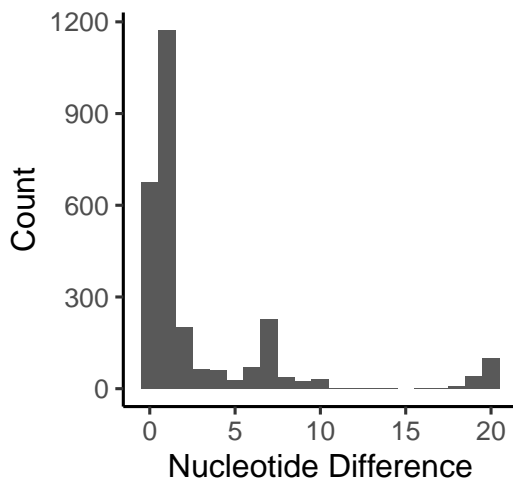
### IGHV4-4\*02\_03

847 sequences assigned  
26 (3.1%) exact matches, in which:  
14 unique CDR3  
2 unique J



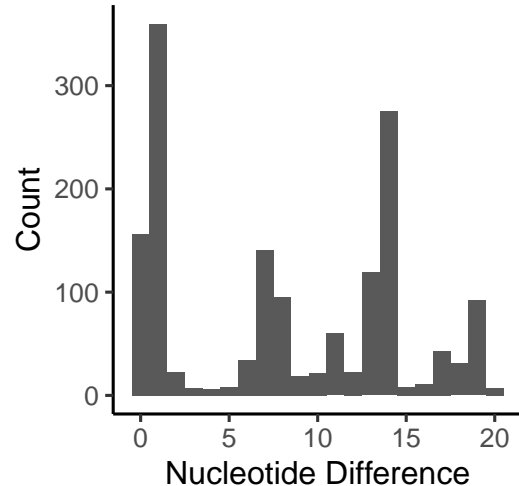
### IGHV4-34\*01\_02

2778 sequences assigned  
676 (24.3%) exact matches, in which:  
379 unique CDR3  
6 unique J



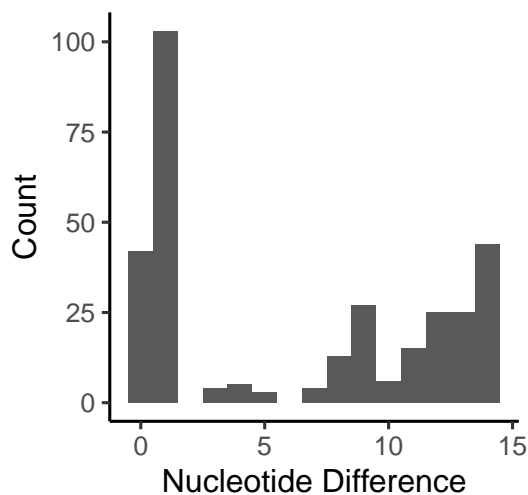
### IGHV4-39\*07

1666 sequences assigned  
156 (9.4%) exact matches, in which:  
90 unique CDR3  
6 unique J



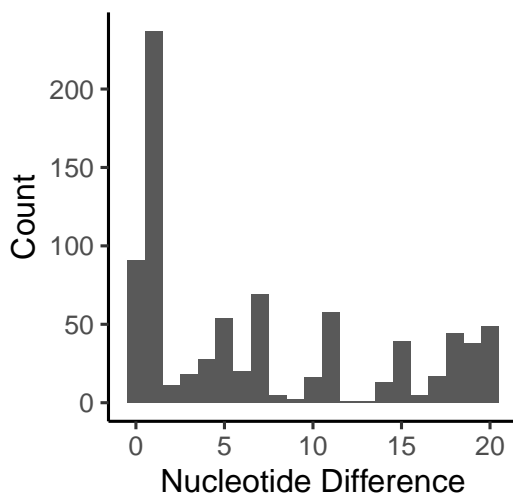
### IGHV4-30-4\*01

325 sequences assigned  
42 (12.9%) exact matches, in which:  
26 unique CDR3  
5 unique J



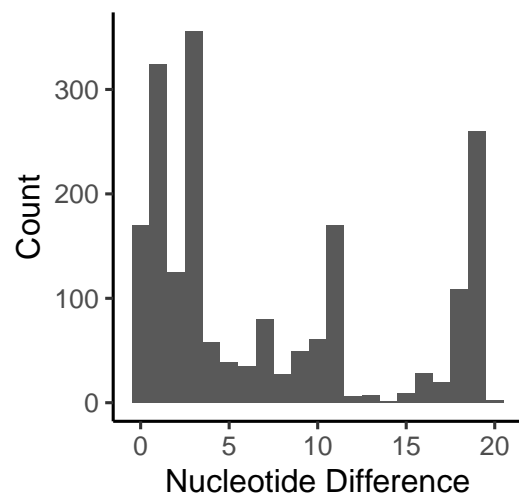
### IGHV4-38-2\*02

955 sequences assigned  
91 (9.5%) exact matches, in which:  
49 unique CDR3  
4 unique J



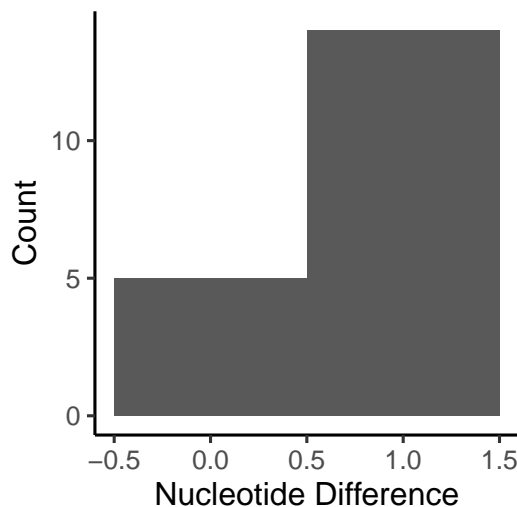
### IGHV4-59\*08

2181 sequences assigned  
170 (7.8%) exact matches, in which:  
109 unique CDR3  
4 unique J



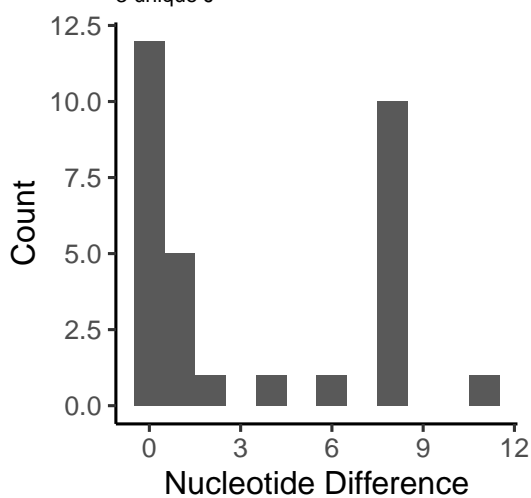
### IGHV4-30-2\*01

27 sequences assigned  
5 (18.5%) exact matches, in which:  
3 unique CDR3  
2 unique J



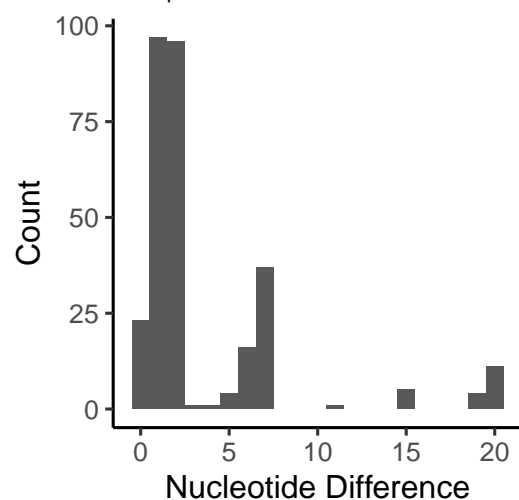
### IGHV4-38-2\*02\_A291G\_

31 sequences assigned  
12 (38.7%) exact matches, in which:  
12 unique CDR3  
3 unique J



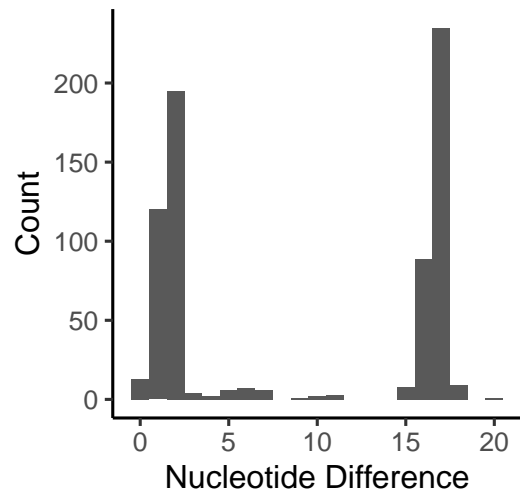
### IGHV4-59\*01\_07

336 sequences assigned  
23 (6.8%) exact matches, in which:  
14 unique CDR3  
3 unique J



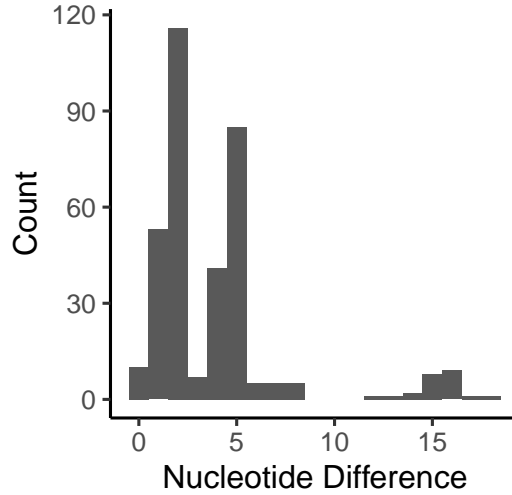
### IGHV4-59\*12

776 sequences assigned  
13 (1.7%) exact matches, in which:  
13 unique CDR3  
3 unique J



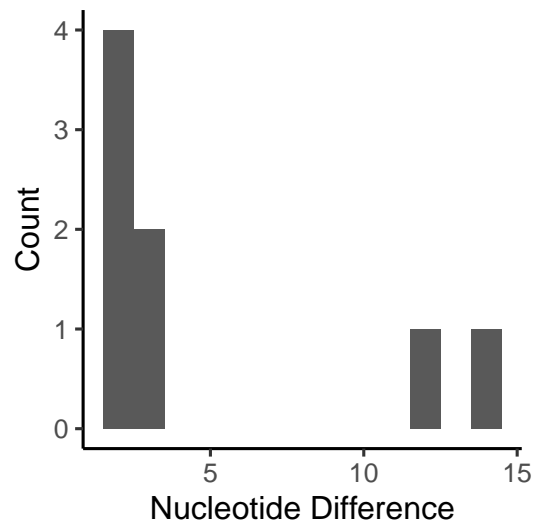
### IGHV5-51\*07

381 sequences assigned  
10 (2.6%) exact matches, in which:  
8 unique CDR3  
3 unique J



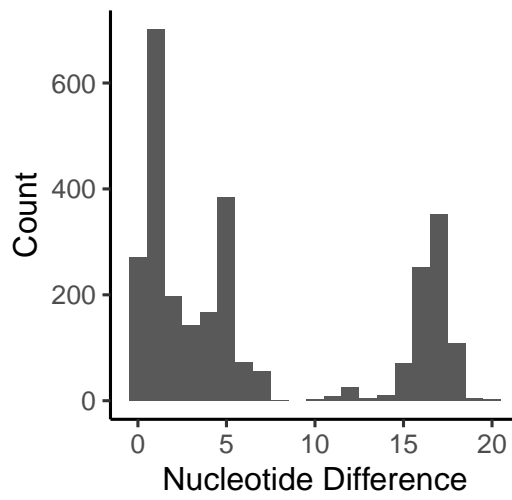
### IGHV4-61\*01

8 sequences assigned  
No exact matches.



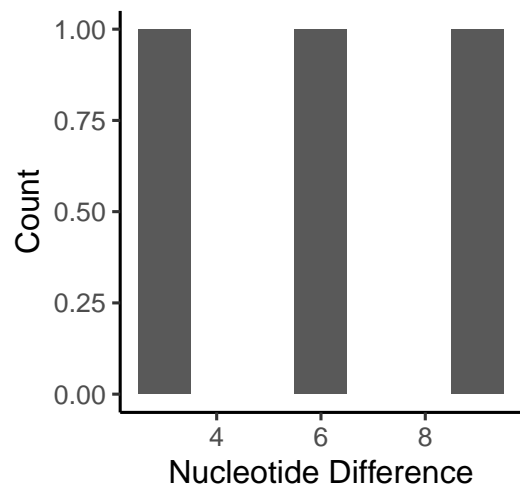
### IGHV5-51\*01\_03

2912 sequences assigned  
271 (9.3%) exact matches, in which:  
137 unique CDR3  
5 unique J



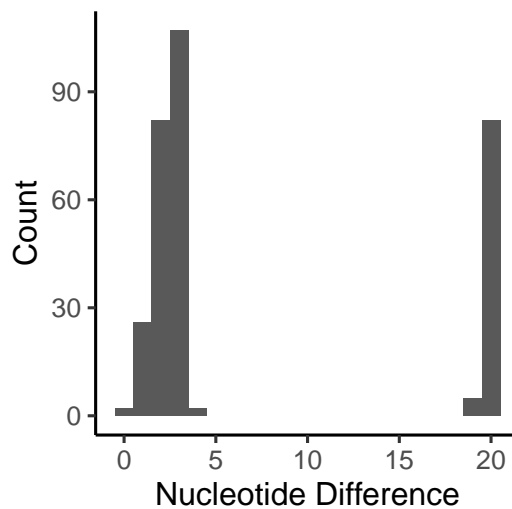
### IGHV4-61\*05

3 sequences assigned  
No exact matches.

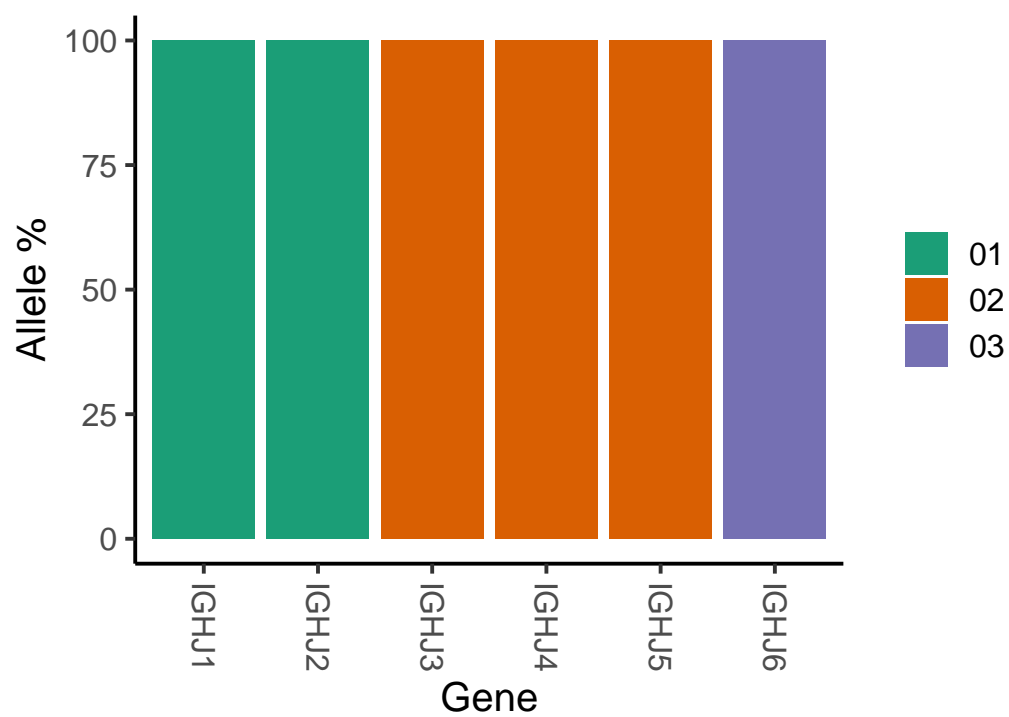


### IGHV6-1\*01\_02

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



Allele Usage



Warning – no inferred sequences found.