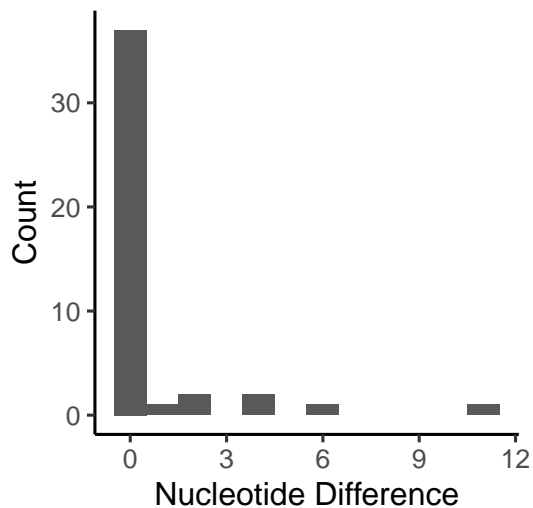


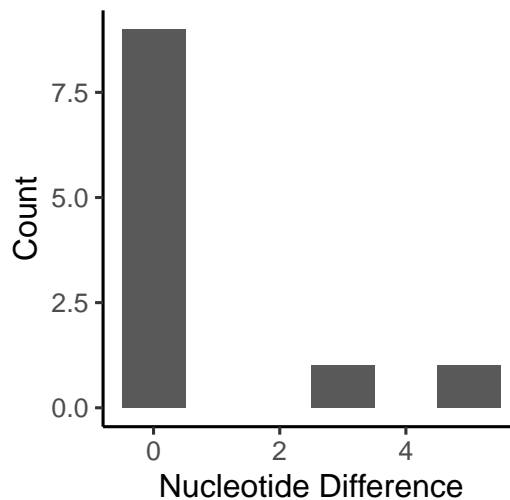
### IGHV1-2\*02

44 sequences assigned  
37 (84.1%) exact matches, in which:  
37 unique CDR3  
5 unique J



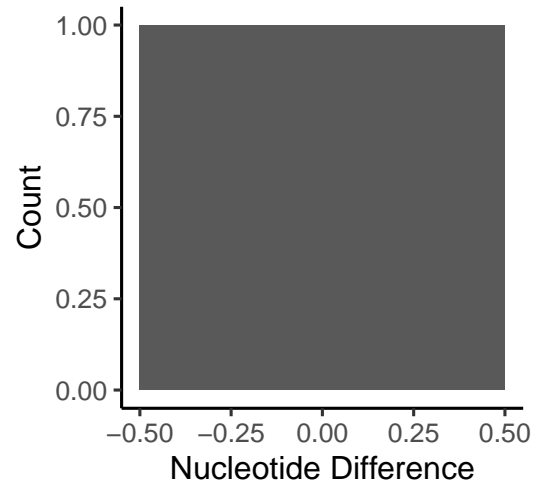
### IGHV1-24\*01

11 sequences assigned  
9 (81.8%) exact matches, in which:  
9 unique CDR3  
4 unique J



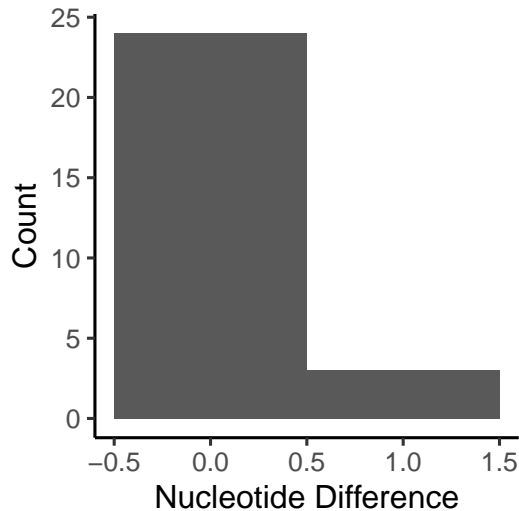
### IGHV1-58\*02

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



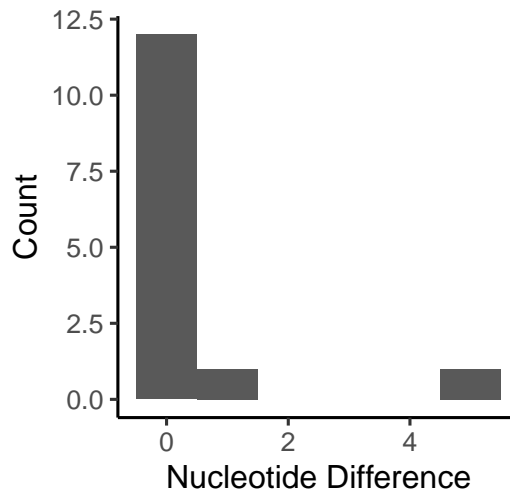
### IGHV1-8\*01

27 sequences assigned  
24 (88.9%) exact matches, in which:  
24 unique CDR3  
5 unique J



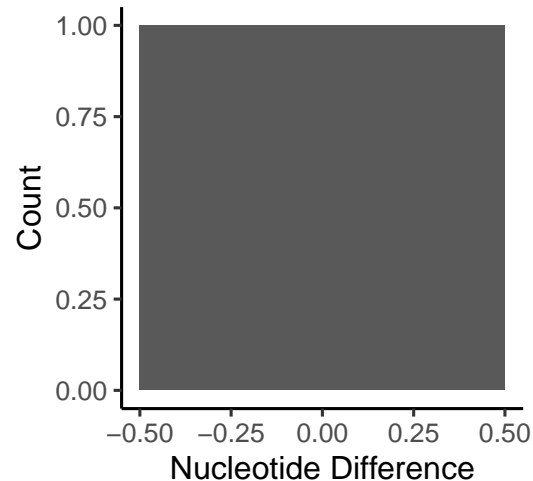
### IGHV1-46\*01

14 sequences assigned  
12 (85.7%) exact matches, in which:  
12 unique CDR3  
4 unique J



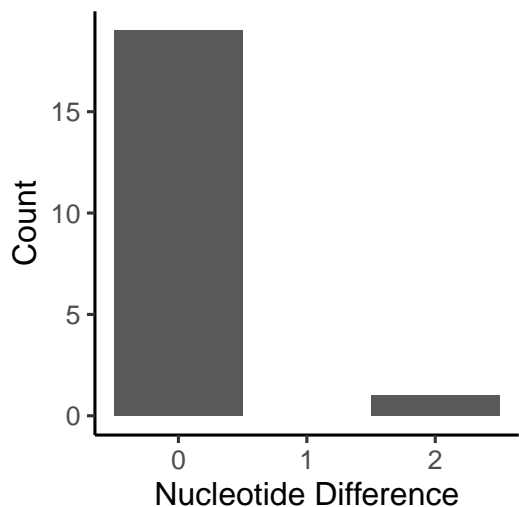
### IGHV1-69-2\*01

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



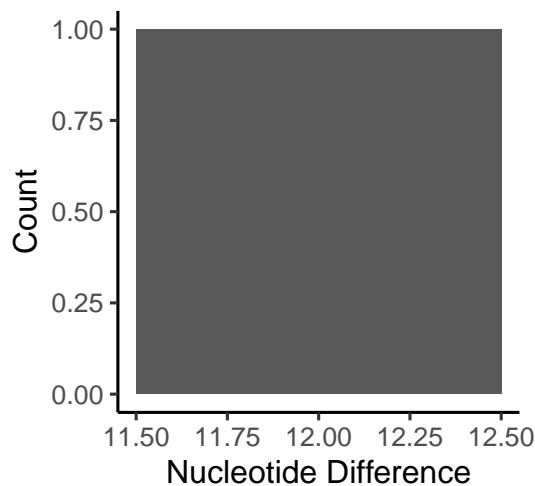
### IGHV1-18\*01

20 sequences assigned  
19 (95%) exact matches, in which:  
19 unique CDR3  
5 unique J



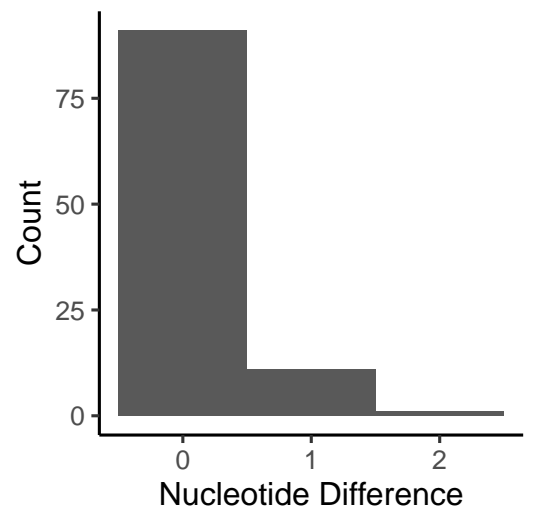
### IGHV1-58\*01

1 sequences assigned  
No exact matches.



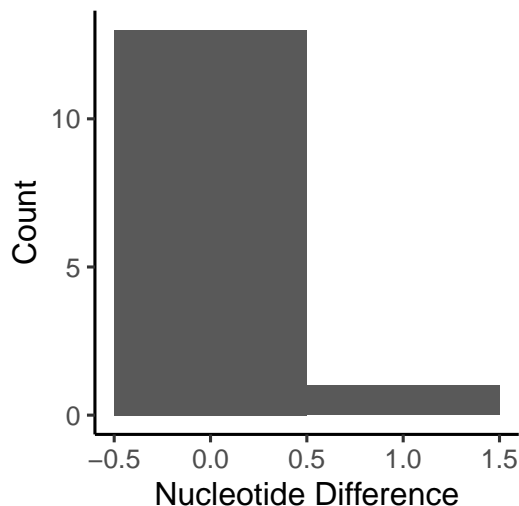
### IGHV1-69\*01

103 sequences assigned  
91 (88.3%) exact matches, in which:  
91 unique CDR3  
5 unique J



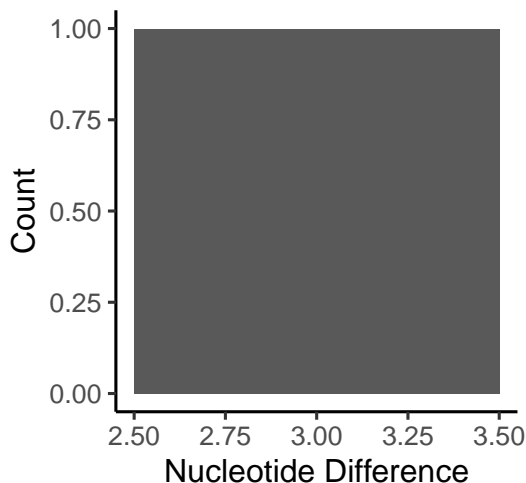
### IGHV1-69\*06

14 sequences assigned  
13 (92.9%) exact matches, in which:  
13 unique CDR3  
4 unique J



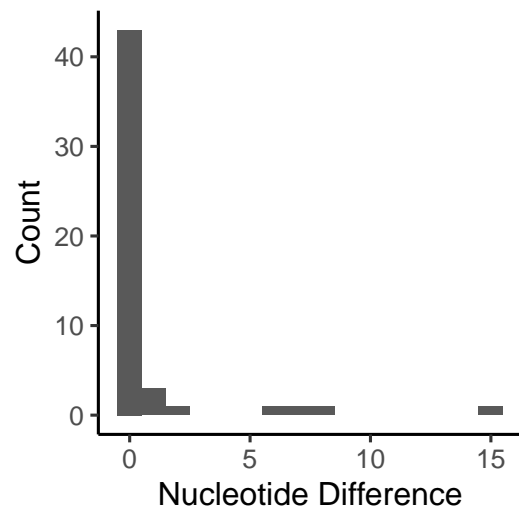
### IGHV2-70\*01

1 sequences assigned  
No exact matches.



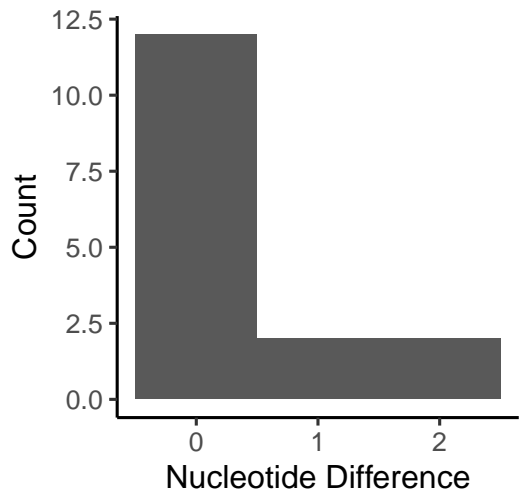
### IGHV3-9\*01

51 sequences assigned  
43 (84.3%) exact matches, in which:  
43 unique CDR3  
5 unique J



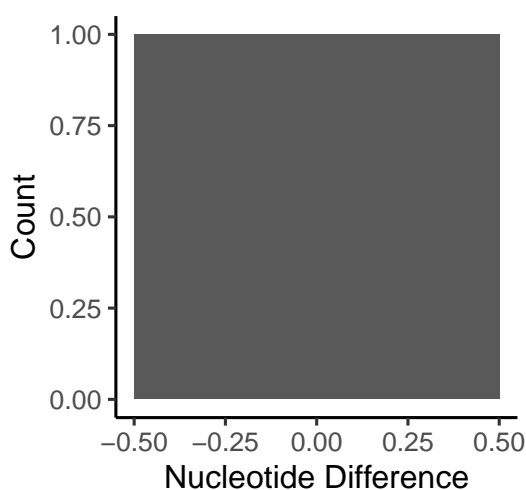
### IGHV2-5\*01

16 sequences assigned  
12 (75%) exact matches, in which:  
12 unique CDR3  
5 unique J



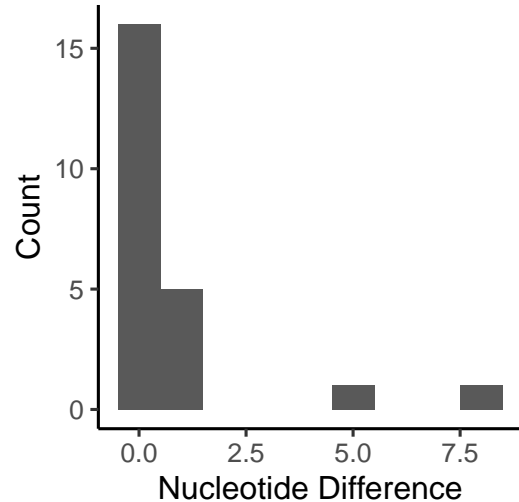
### IGHV2-70\*04

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



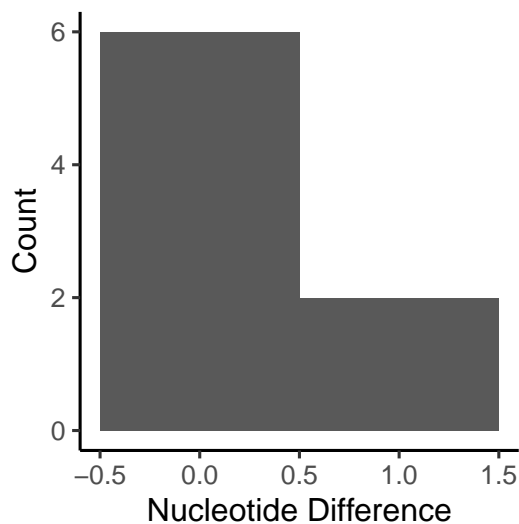
### IGHV3-11\*01

23 sequences assigned  
16 (69.6%) exact matches, in which:  
16 unique CDR3  
5 unique J



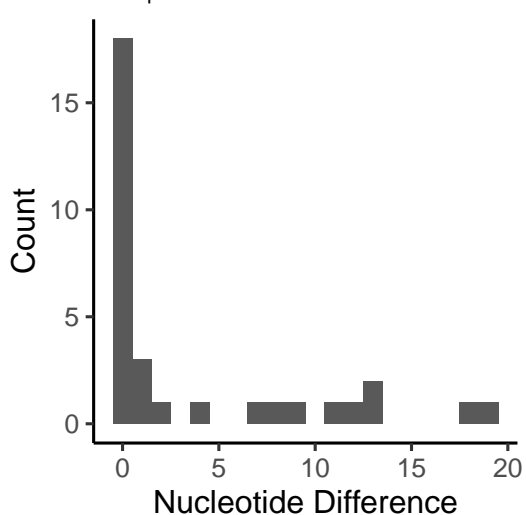
### IGHV2-26\*01

8 sequences assigned  
6 (75%) exact matches, in which:  
6 unique CDR3  
1 unique J



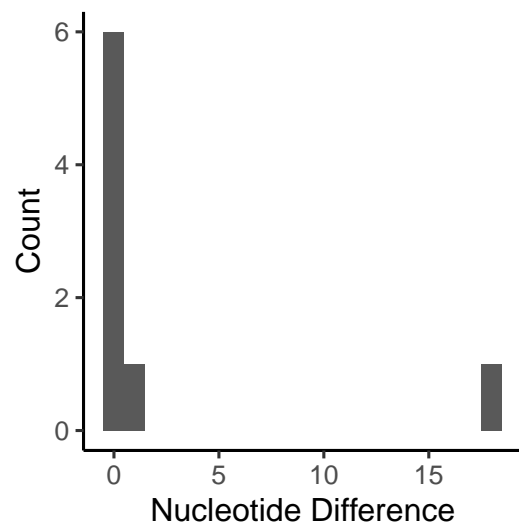
### IGHV3-7\*01

34 sequences assigned  
18 (52.9%) exact matches, in which:  
18 unique CDR3  
4 unique J



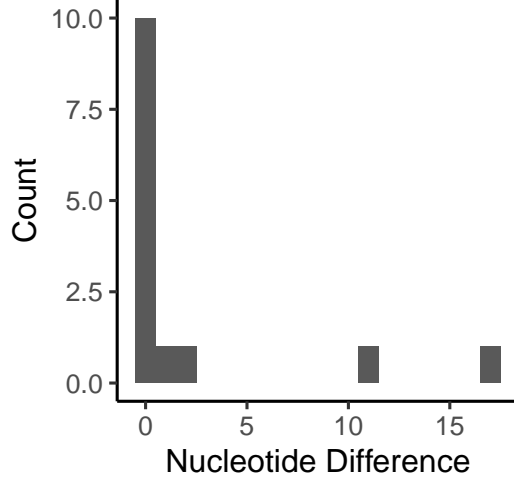
### IGHV3-13\*01

8 sequences assigned  
6 (75%) exact matches, in which:  
6 unique CDR3  
3 unique J



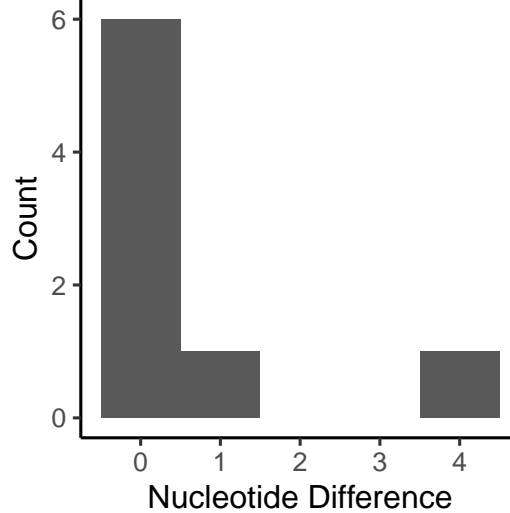
### IGHV3-15\*01

14 sequences assigned  
10 (71.4%) exact matches, in which:  
10 unique CDR3  
2 unique J



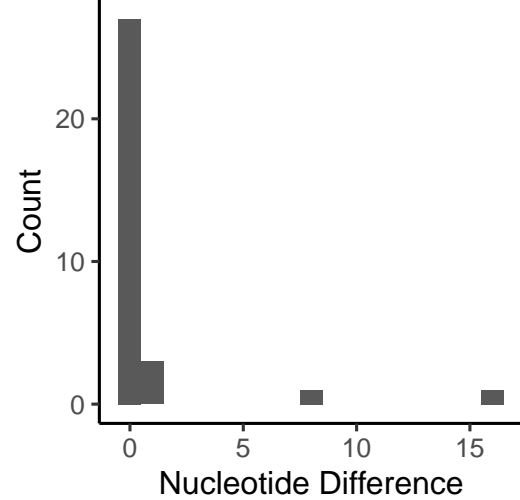
### IGHV3-30\*01

8 sequences assigned  
6 (75%) exact matches, in which:  
6 unique CDR3  
3 unique J



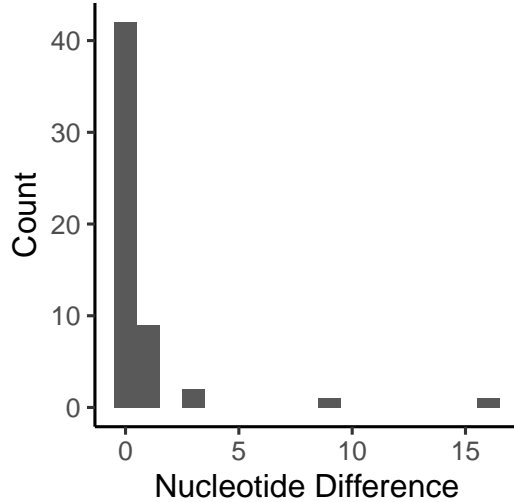
### IGHV3-33\*01

32 sequences assigned  
27 (84.4%) exact matches, in which:  
27 unique CDR3  
3 unique J



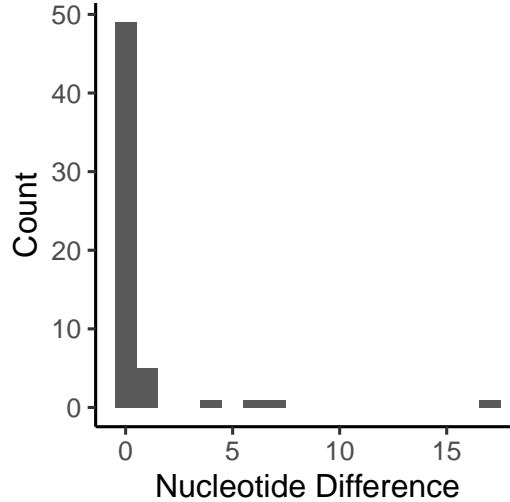
### IGHV3-21\*01

55 sequences assigned  
42 (76.4%) exact matches, in which:  
42 unique CDR3  
6 unique J



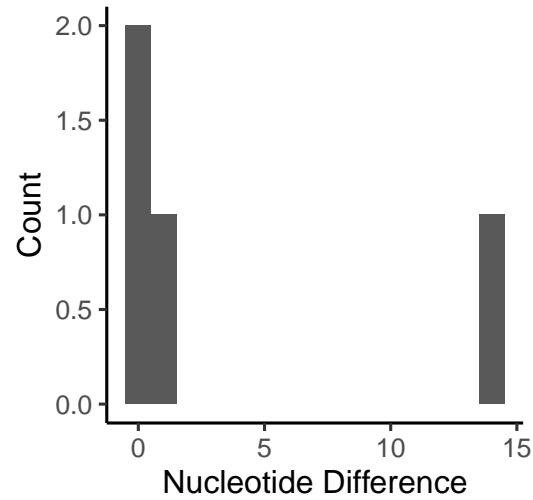
### IGHV3-30-3\*01

59 sequences assigned  
49 (83.1%) exact matches, in which:  
48 unique CDR3  
5 unique J



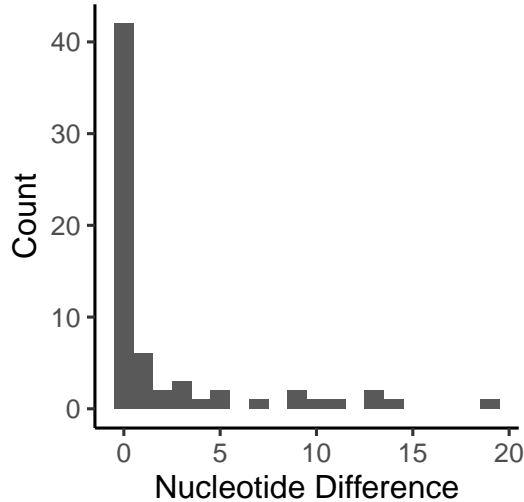
### IGHV3-43\*01

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



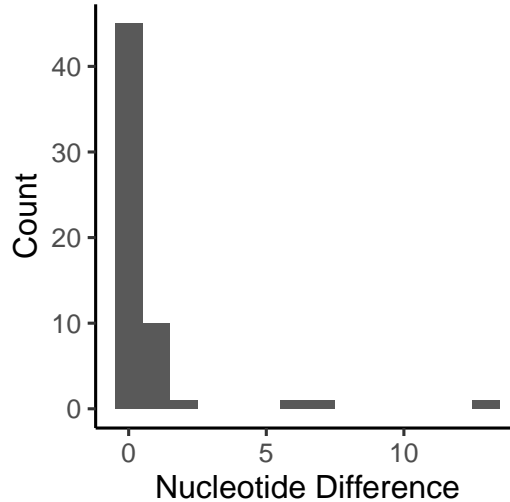
### IGHV3-23\*01

65 sequences assigned  
42 (64.6%) exact matches, in which:  
42 unique CDR3  
4 unique J



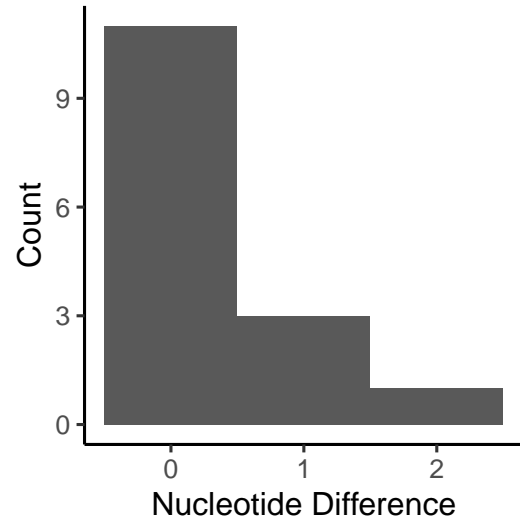
### IGHV3-30\*18

59 sequences assigned  
45 (76.3%) exact matches, in which:  
45 unique CDR3  
6 unique J



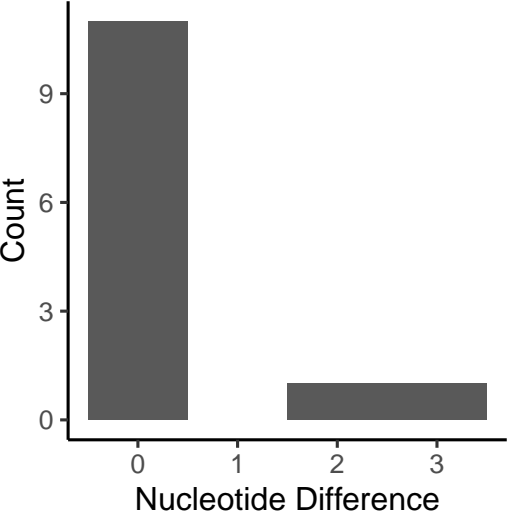
### IGHV3-48\*01

15 sequences assigned  
11 (73.3%) exact matches, in which:  
11 unique CDR3  
3 unique J



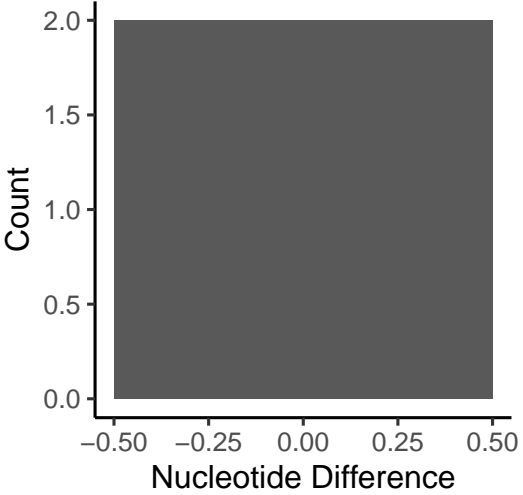
IGHV3-48\*02

13 sequences assigned  
11 (84.6%) exact matches, in which:  
11 unique CDR3  
3 unique J



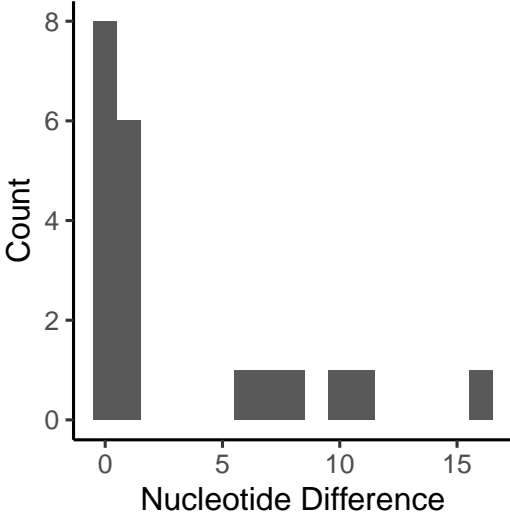
IGHV3-64\*01

2 sequences assigned  
2 (100%) exact matches, in which:  
2 unique CDR3  
2 unique J



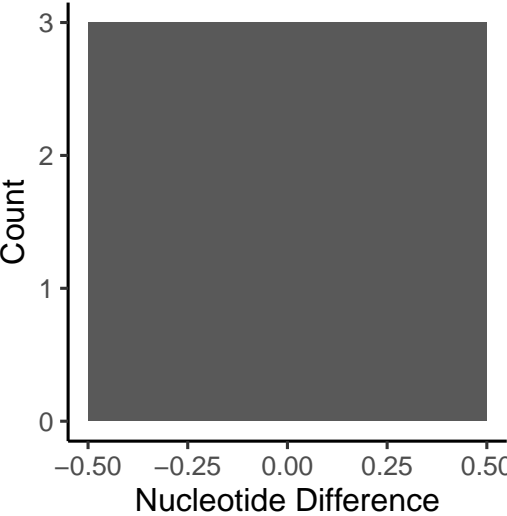
IGHV4-4\*07

20 sequences assigned  
8 (40%) exact matches, in which:  
8 unique CDR3  
4 unique J



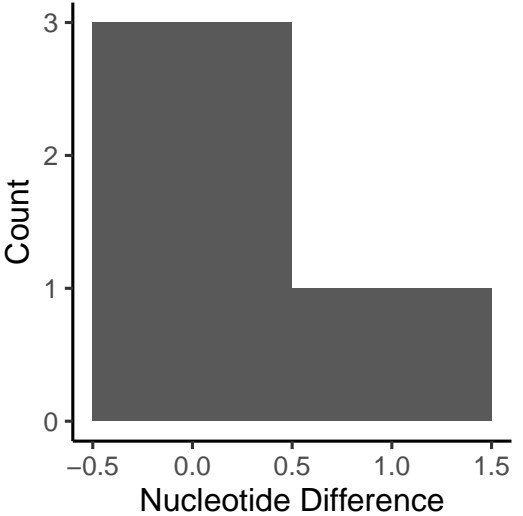
IGHV3-49\*03

4 sequences assigned  
3 (75%) exact matches, in which:  
3 unique CDR3  
2 unique J



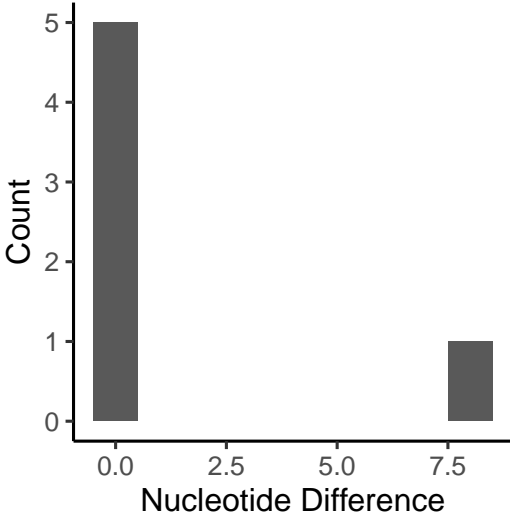
IGHV3-73\*02

4 sequences assigned  
3 (75%) exact matches, in which:  
3 unique CDR3  
3 unique J



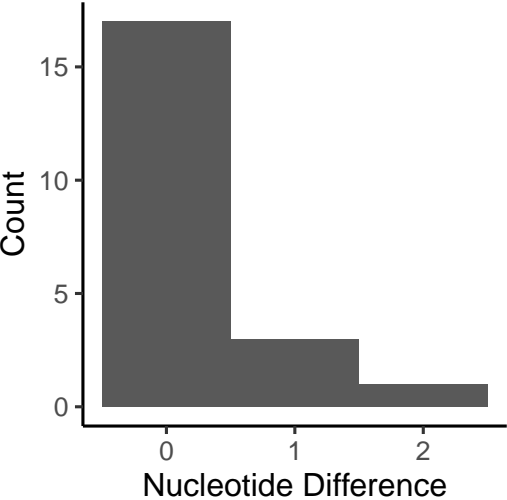
IGHV4-30-4\*01

6 sequences assigned  
5 (83.3%) exact matches, in which:  
5 unique CDR3  
3 unique J



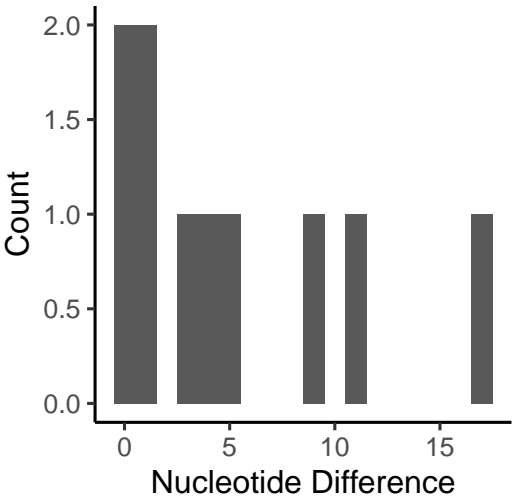
IGHV3-53\*01

21 sequences assigned  
17 (81%) exact matches, in which:  
17 unique CDR3  
6 unique J



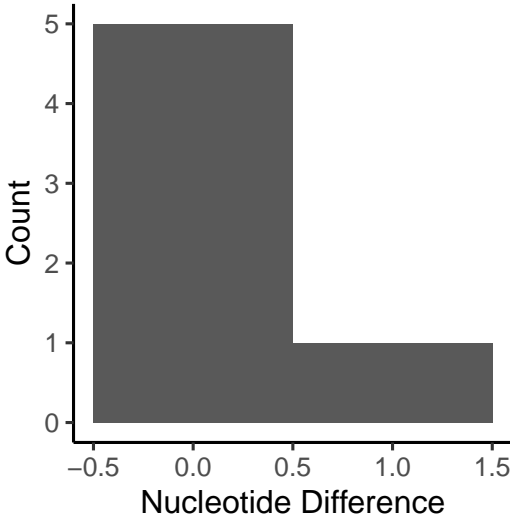
IGHV3-74\*01

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



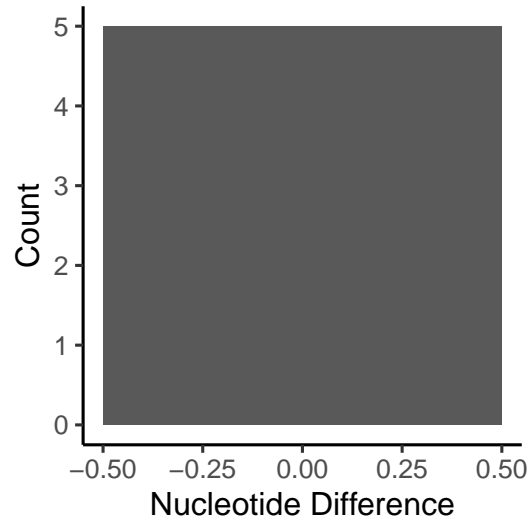
IGHV4-30-2\*01

6 sequences assigned  
5 (83.3%) exact matches, in which:  
5 unique CDR3  
3 unique J



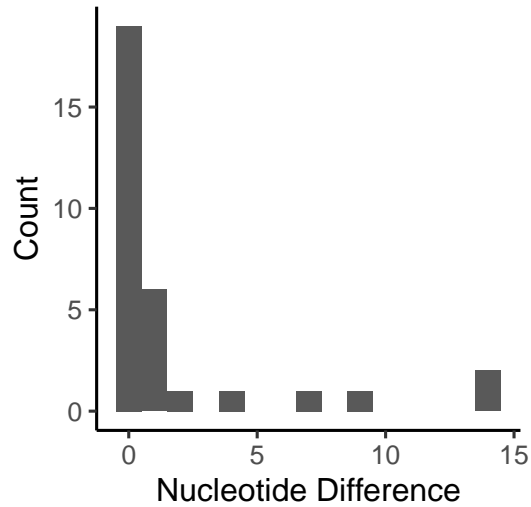
### IGHV4-31\*01

5 sequences assigned  
5 (100%) exact matches, in which:  
5 unique CDR3  
4 unique J



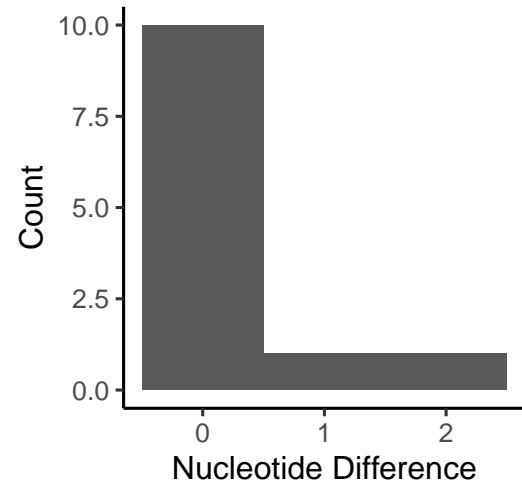
### IGHV4-39\*01

31 sequences assigned  
19 (61.3%) exact matches, in which:  
19 unique CDR3  
5 unique J



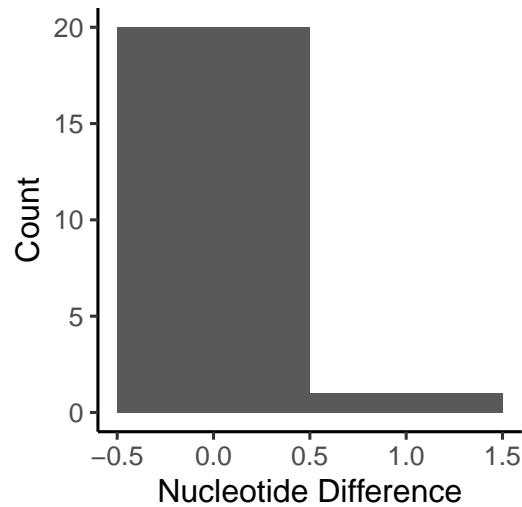
### IGHV4-61\*02

12 sequences assigned  
10 (83.3%) exact matches, in which:  
10 unique CDR3  
5 unique J



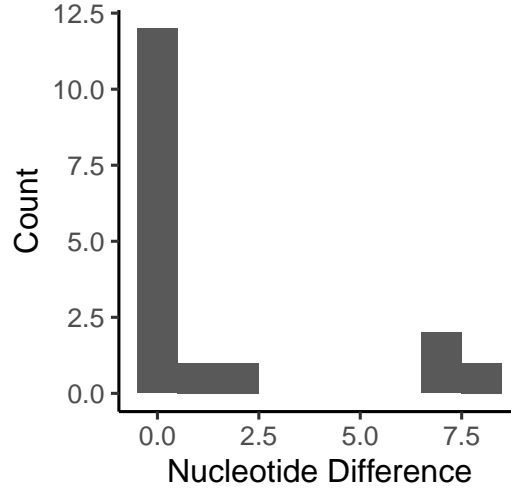
### IGHV4-31\*03

21 sequences assigned  
20 (95.2%) exact matches, in which:  
20 unique CDR3  
5 unique J



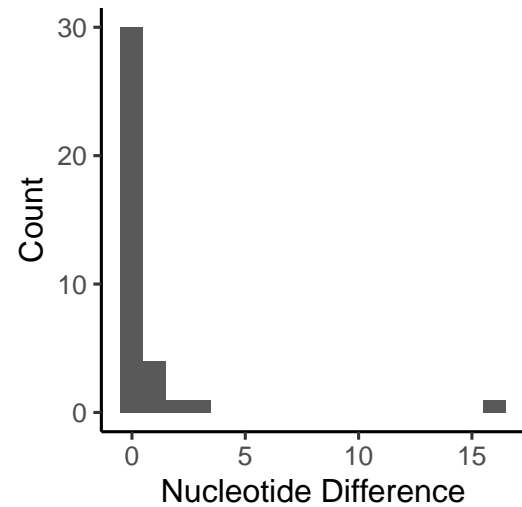
### IGHV4-59\*01

17 sequences assigned  
12 (70.6%) exact matches, in which:  
12 unique CDR3  
3 unique J



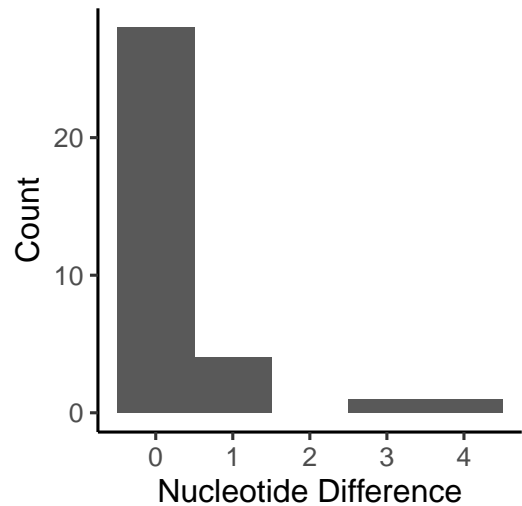
### IGHV5-51\*01

37 sequences assigned  
30 (81.1%) exact matches, in which:  
30 unique CDR3  
5 unique J



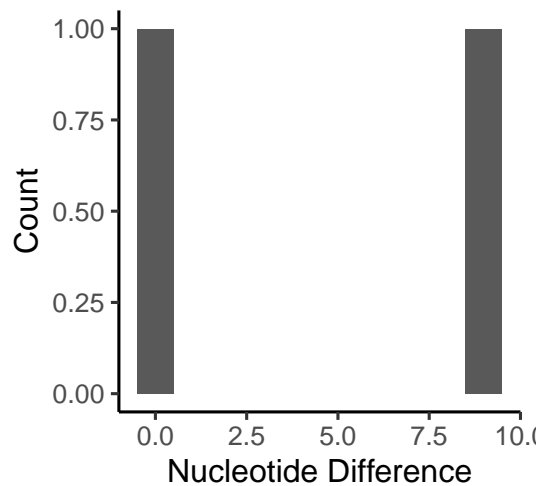
### IGHV4-34\*01

34 sequences assigned  
28 (82.4%) exact matches, in which:  
28 unique CDR3  
4 unique J



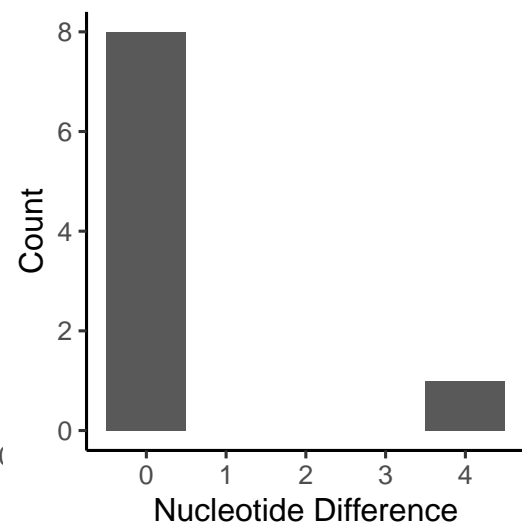
### IGHV4-61\*01

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



### IGHV6-1\*01

9 sequences assigned  
8 (88.9%) exact matches, in which:  
8 unique CDR3  
3 unique J





Warning – no inferred sequences found.