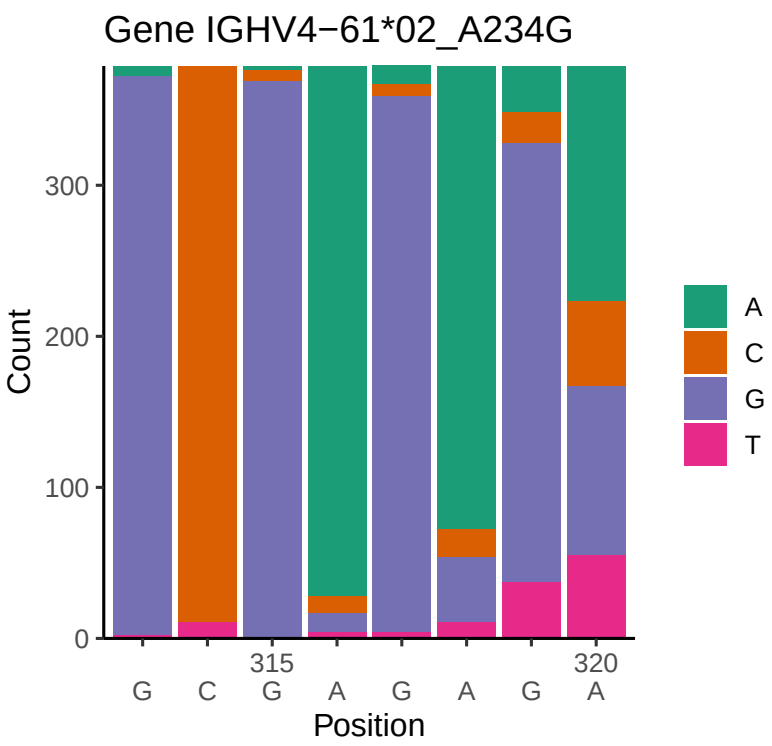
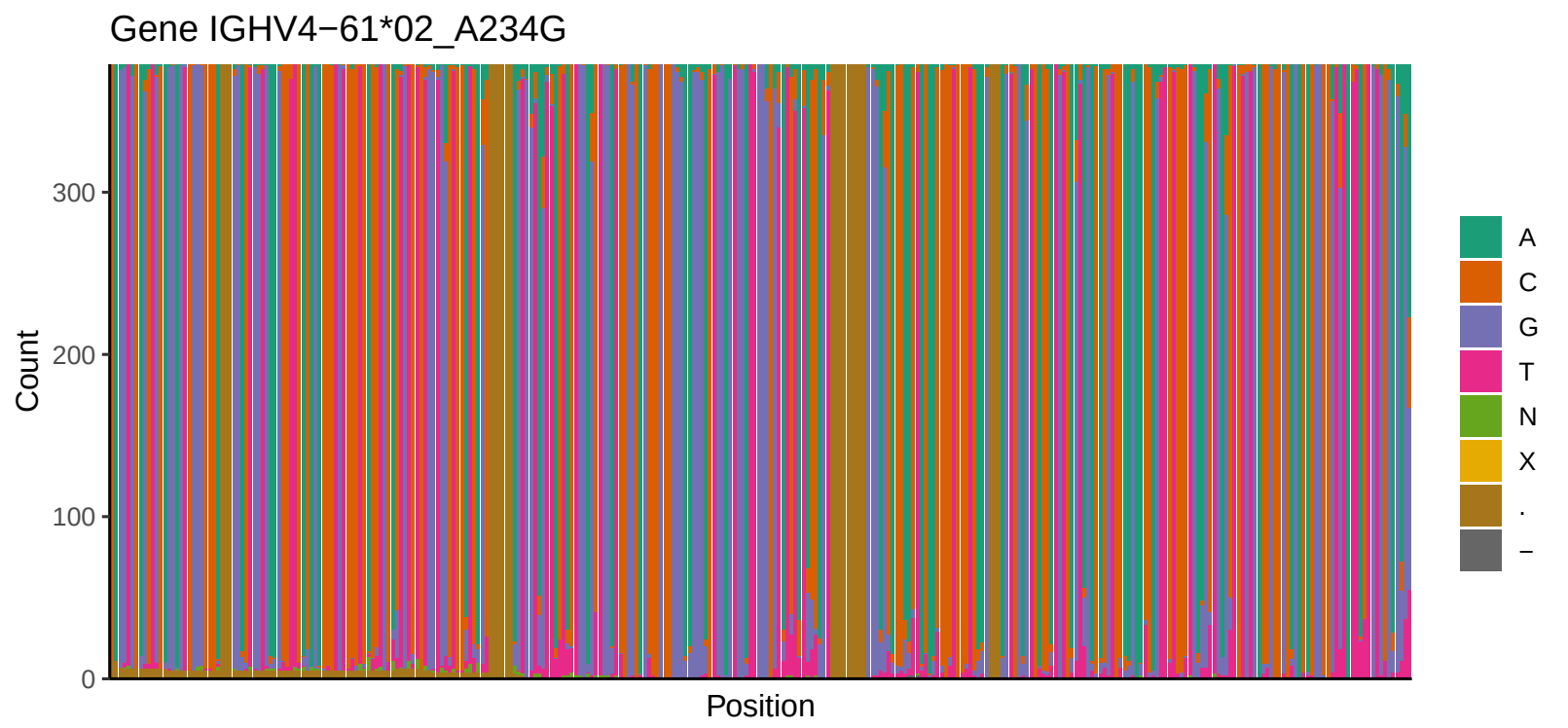
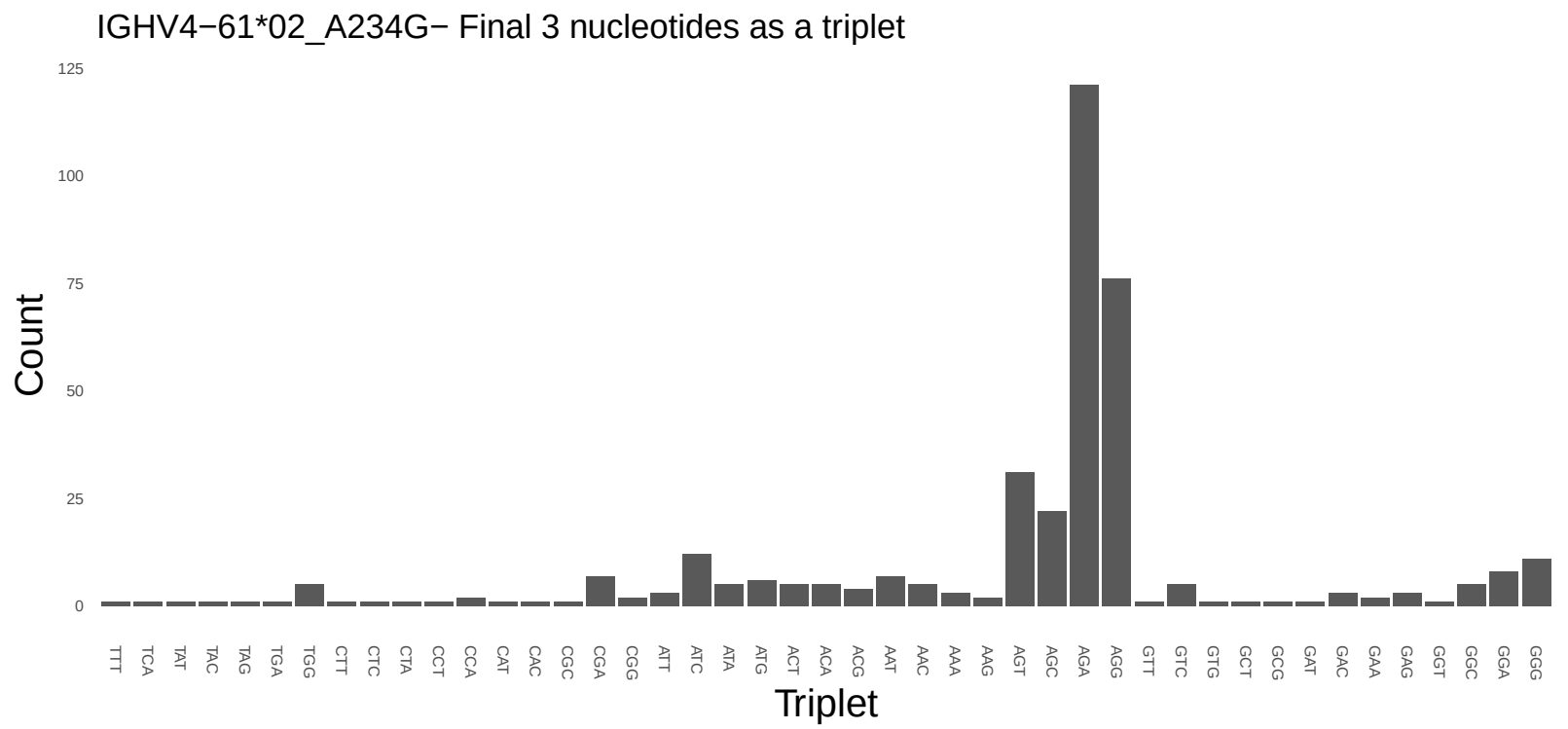
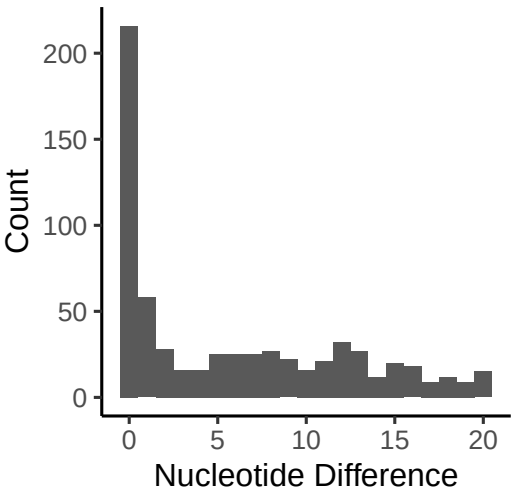

Gene IGHV4−61*02_A234G
Count
300
200
100
0
315
320
G C G A G A G A
Position
A
C
G
T


Gene IGHV4−61*02_A234G
Count
300
200
100
0
Position
A
C
G
T
N
X
.
–


IGHV4−61*02_A234G− Final 3 nucleotides as a triplet
Count
125
100
75
50
25
0
TTT
TCA
TAT
TAC
TAG
TGA
TGG
CTT
CTC
CTA
CCT
CCA
CAT
CAC
CGC
CGA
CGG
ATT
ATC
ATA
ATG
ACT
ACA
ACG
AAT
AAC
AAA
AAG
AGT
AGC
AGA
AGG
GTT
GTC
GTG
GCT
GCG
GAT
GAC
GAA
GAG
GGT
GGC
GGA
GGG
Triplet

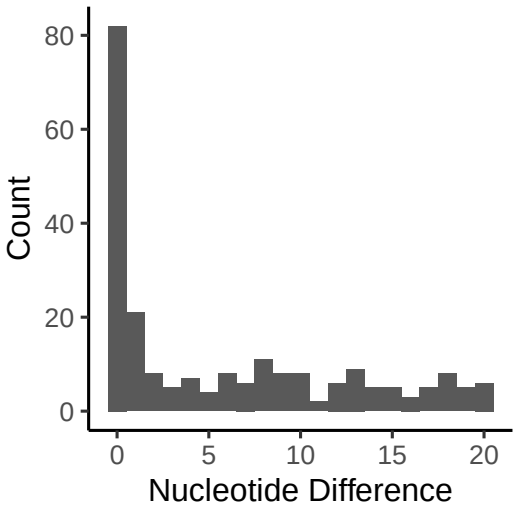
IGHV1−2*02

732 sequences assigned
216 (29.5%) exact matches, in which:
212 unique CDR3
6 unique J



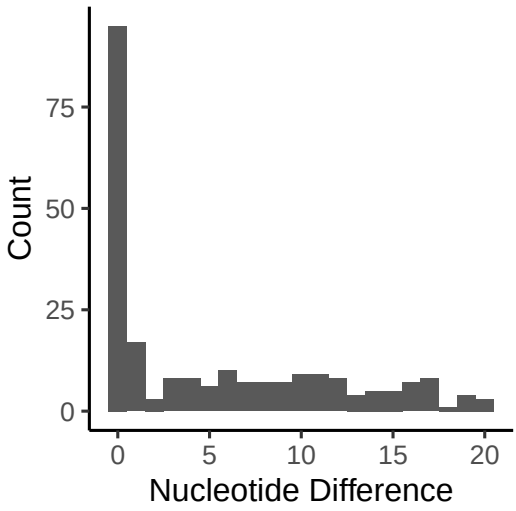
IGHV1−18*01

248 sequences assigned
82 (33.1%) exact matches, in which:
80 unique CDR3
5 unique J



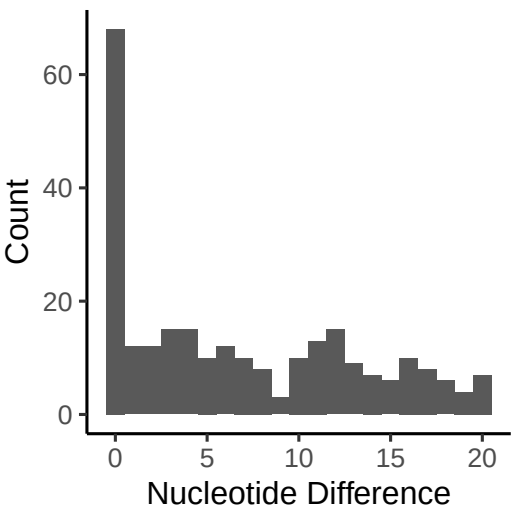
IGHV1−46*03

252 sequences assigned
95 (37.7%) exact matches, in which:
95 unique CDR3
7 unique J



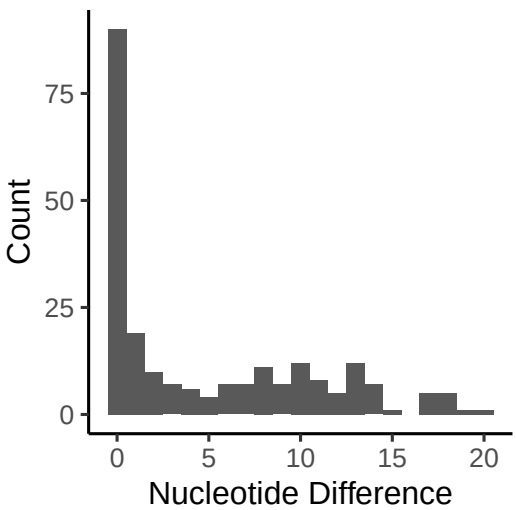
IGHV1−3*01

305 sequences assigned
68 (22.3%) exact matches, in which:
68 unique CDR3
4 unique J



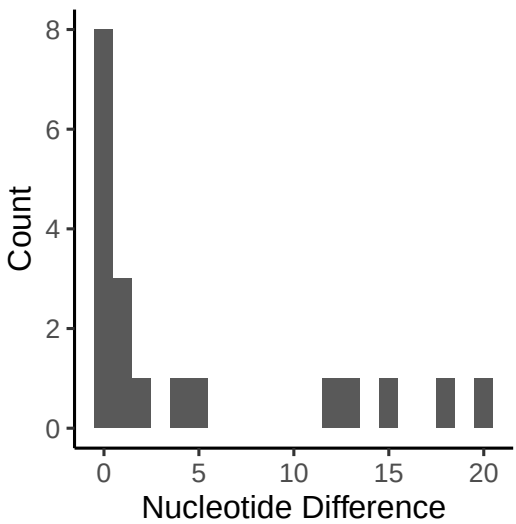
IGHV1−18*04

249 sequences assigned
90 (36.1%) exact matches, in which:
90 unique CDR3
6 unique J



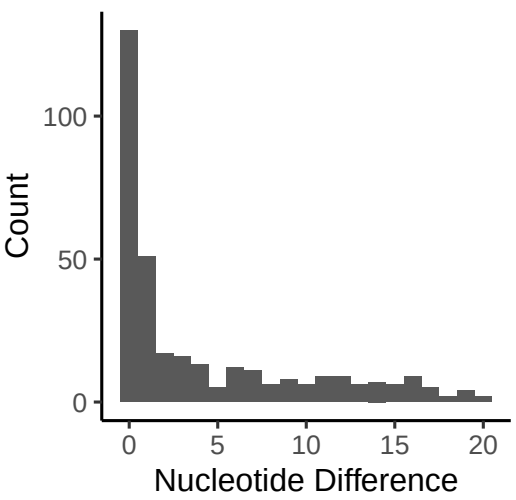
IGHV1−58*02

27 sequences assigned
8 (29.6%) exact matches, in which:
8 unique CDR3
3 unique J



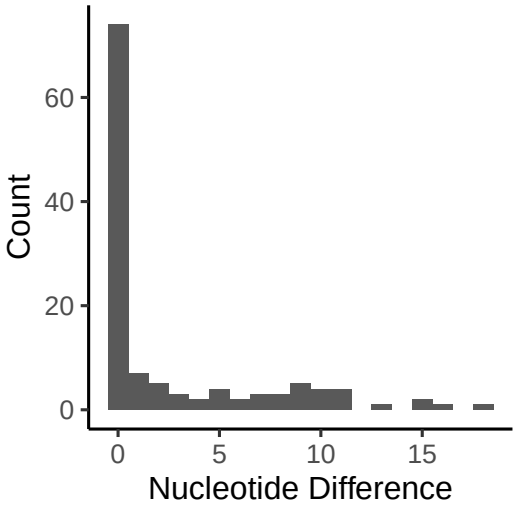
IGHV1−8*01

359 sequences assigned
130 (36.2%) exact matches, in which:
126 unique CDR3
6 unique J



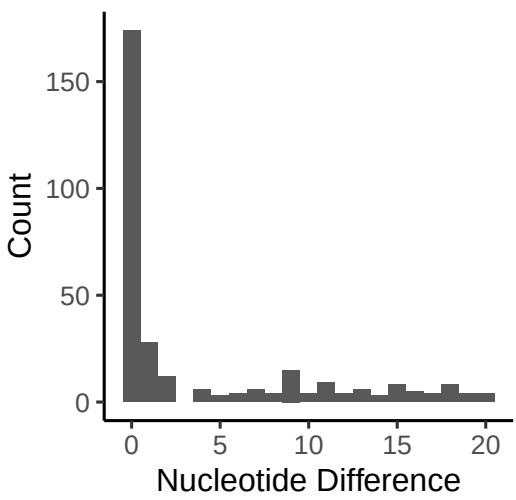
IGHV1−24*01

132 sequences assigned
74 (56.1%) exact matches, in which:
73 unique CDR3
6 unique J



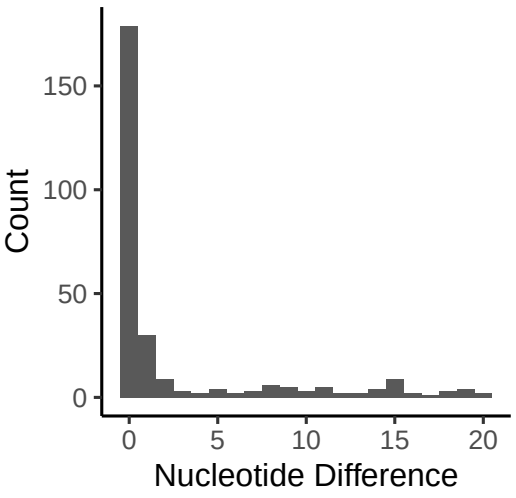
IGHV1−69*01

369 sequences assigned
174 (47.2%) exact matches, in which:
173 unique CDR3
6 unique J



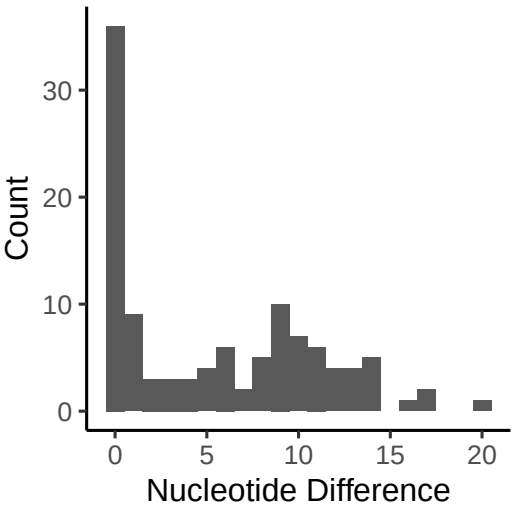
IGHV1−69*04

333 sequences assigned
179 (53.8%) exact matches, in which:
176 unique CDR3
6 unique J



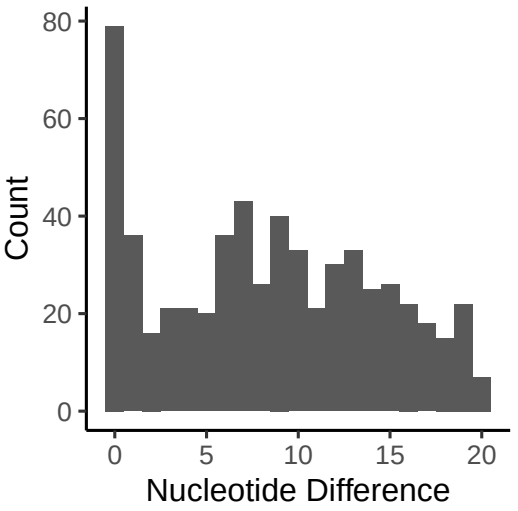
IGHV2−26*01

117 sequences assigned
36 (30.8%) exact matches, in which:
36 unique CDR3
7 unique J



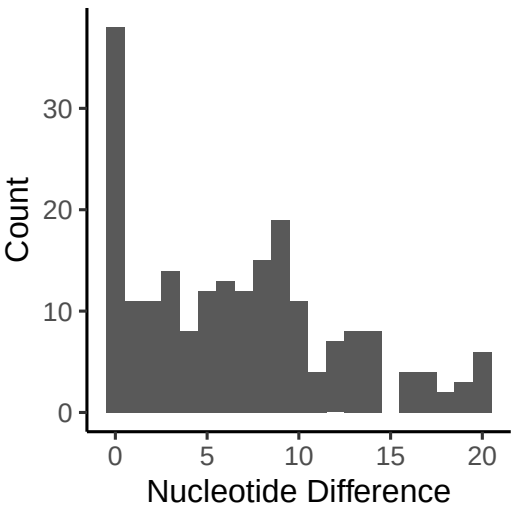
IGHV3−7*01

672 sequences assigned
79 (11.8%) exact matches, in which:
79 unique CDR3
6 unique J



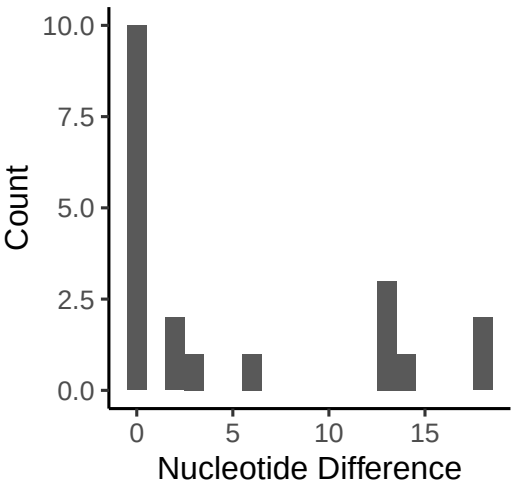
IGHV2−5*01

230 sequences assigned
38 (16.5%) exact matches, in which:
38 unique CDR3
4 unique J



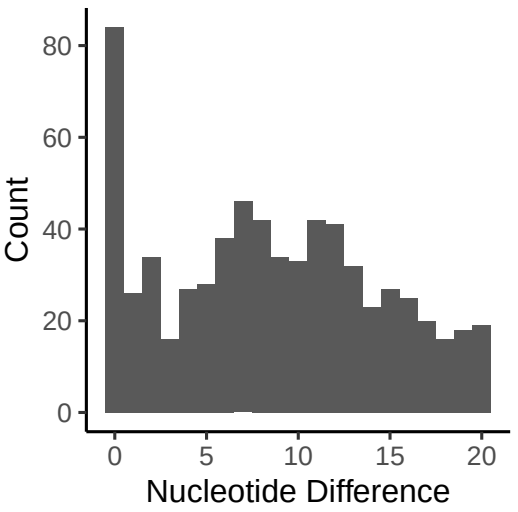
IGHV2−70*01

27 sequences assigned
10 (37%) exact matches, in which:
10 unique CDR3
4 unique J



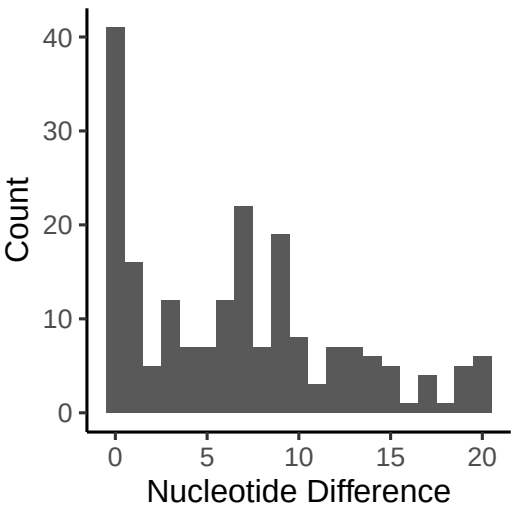
IGHV3−7*03

778 sequences assigned
84 (10.8%) exact matches, in which:
83 unique CDR3
6 unique J



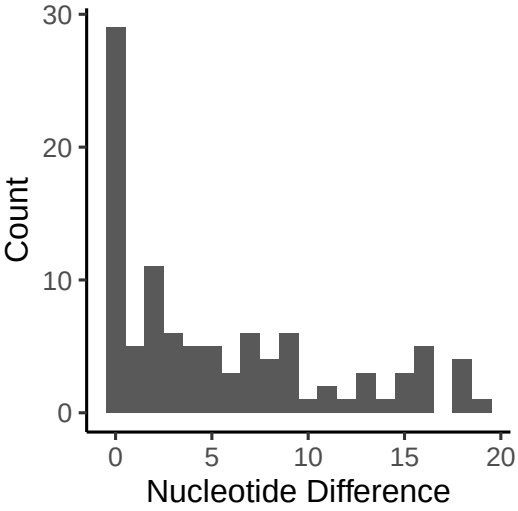
IGHV2−5*02

236 sequences assigned
41 (17.4%) exact matches, in which:
41 unique CDR3
5 unique J



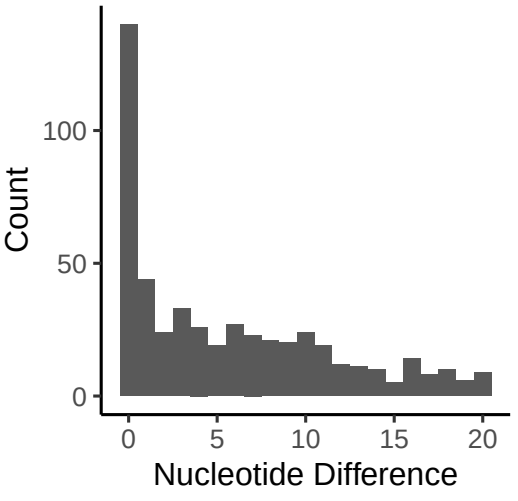
IGHV2−70*15

112 sequences assigned
29 (25.9%) exact matches, in which:
28 unique CDR3
5 unique J



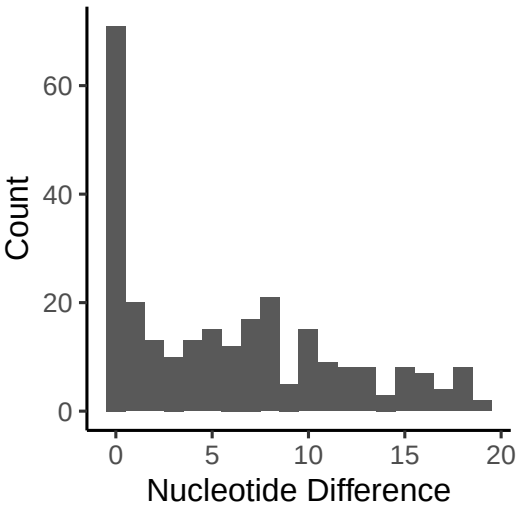
IGHV3−9*01

557 sequences assigned
140 (25.1%) exact matches, in which:
140 unique CDR3
6 unique J



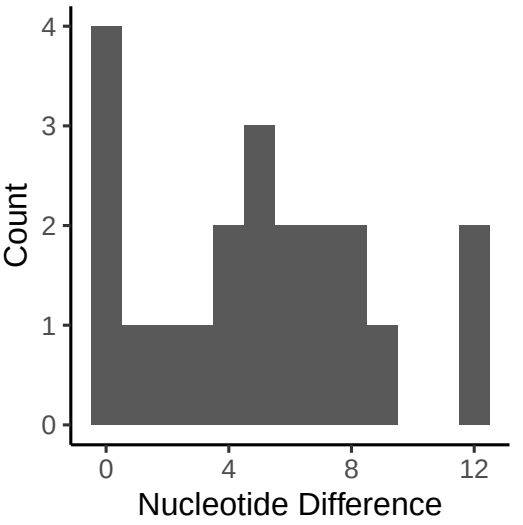
IGHV3−11*01

289 sequences assigned
71 (24.6%) exact matches, in which:
71 unique CDR3
5 unique J



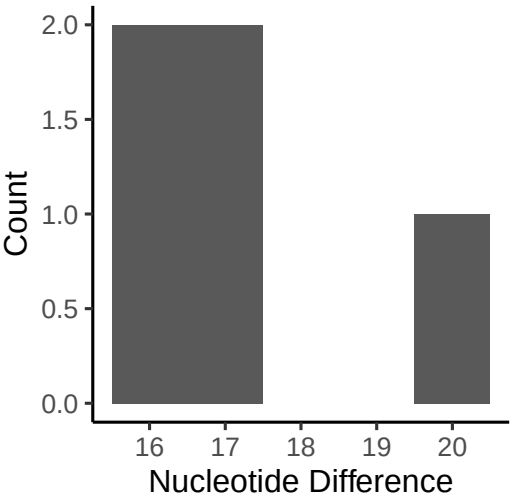
IGHV3−13*05

21 sequences assigned
4 (19%) exact matches, in which:
4 unique CDR3
3 unique J



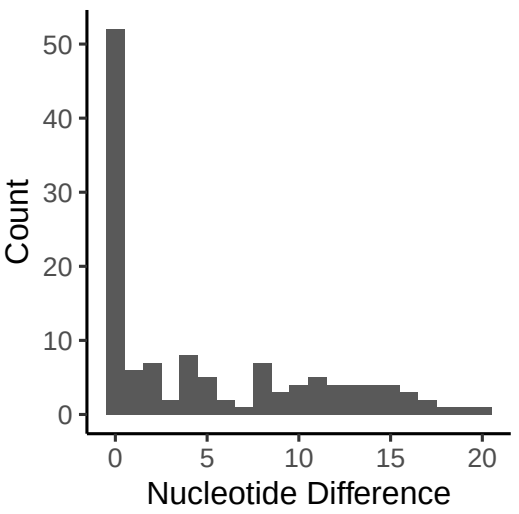
IGHV3−20*04

13 sequences assigned
No exact matches.



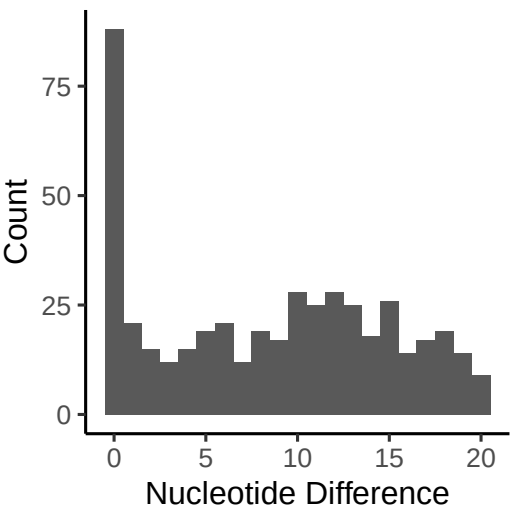
IGHV3−11*06

153 sequences assigned
52 (34%) exact matches, in which:
49 unique CDR3
5 unique J



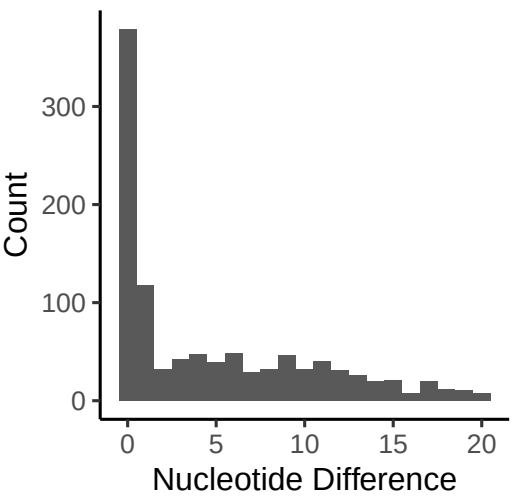
IGHV3−15*01

570 sequences assigned
88 (15.4%) exact matches, in which:
88 unique CDR3
7 unique J



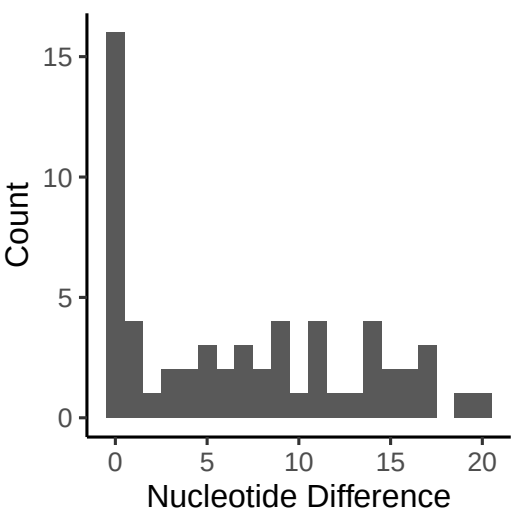
IGHV3−21*01

1125 sequences assigned
379 (33.7%) exact matches, in which:
372 unique CDR3
6 unique J



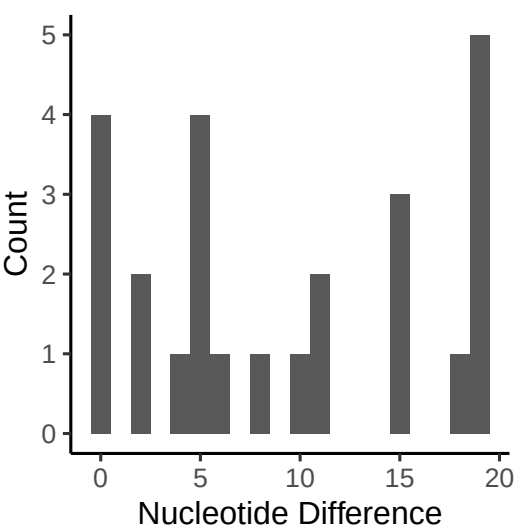
IGHV3−13*01

67 sequences assigned
16 (23.9%) exact matches, in which:
16 unique CDR3
4 unique J



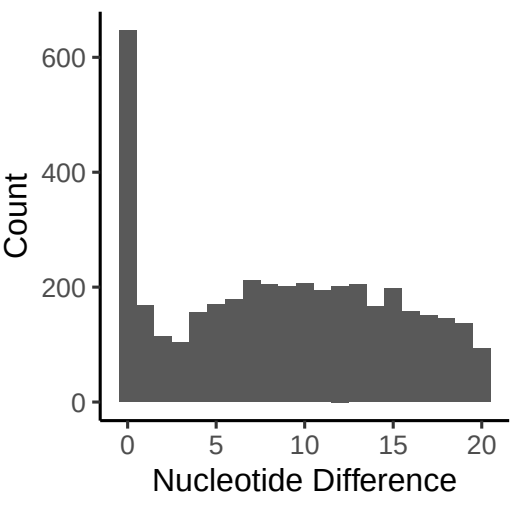
IGHV3−20*01

25 sequences assigned
4 (16%) exact matches, in which:
4 unique CDR3
4 unique J



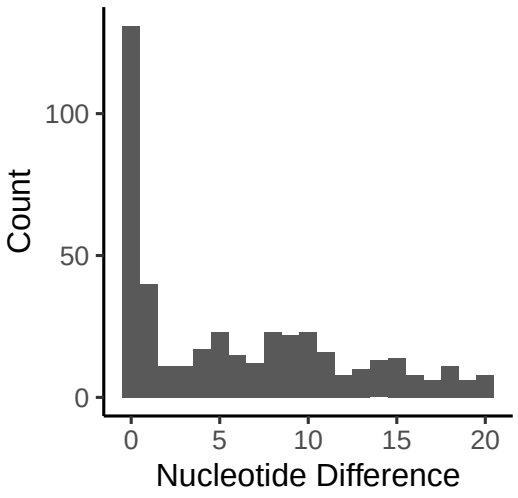
IGHV3−23*01

4681 sequences assigned
647 (13.8%) exact matches, in which:
639 unique CDR3
7 unique J



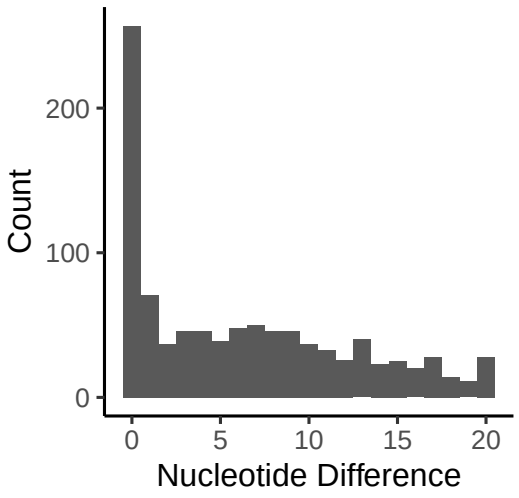
IGHV3−30−3*01

488 sequences assigned
131 (26.8%) exact matches, in which:
128 unique CDR3
5 unique J



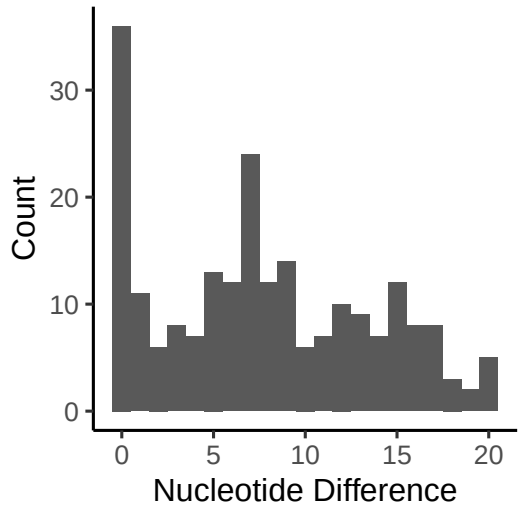
IGHV3−33*01

1081 sequences assigned
257 (23.8%) exact matches, in which:
252 unique CDR3
7 unique J



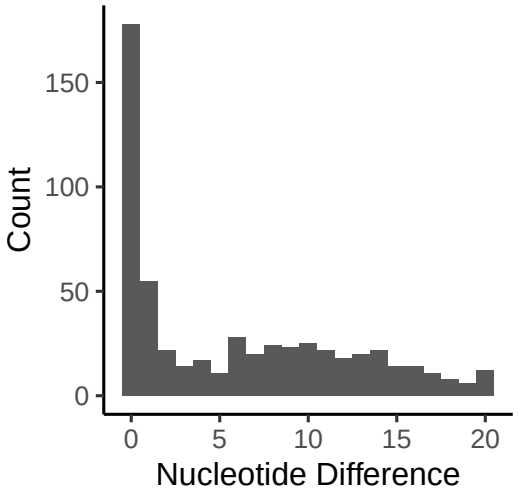
IGHV3−49*03

248 sequences assigned
36 (14.5%) exact matches, in which:
36 unique CDR3
6 unique J



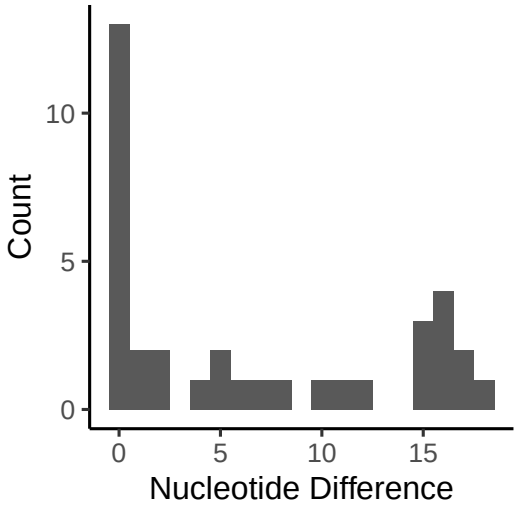
IGHV3−30*04

657 sequences assigned
178 (27.1%) exact matches, in which:
176 unique CDR3
6 unique J



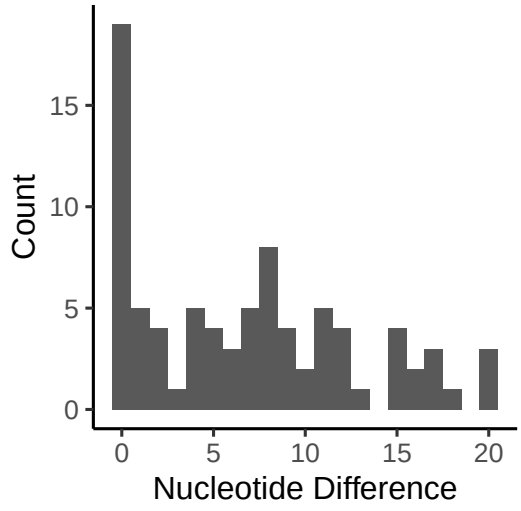
IGHV3−43*01

45 sequences assigned
13 (28.9%) exact matches, in which:
13 unique CDR3
6 unique J



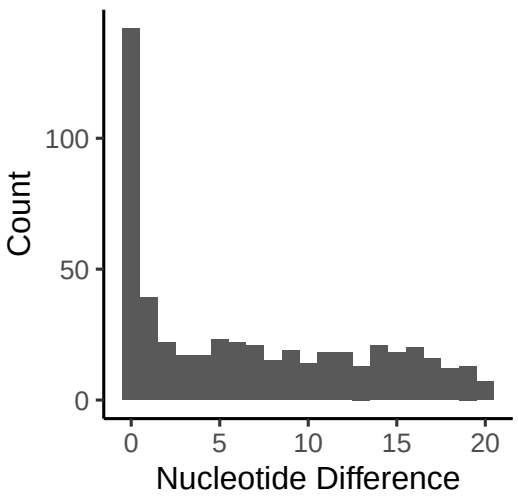
IGHV3−53*02

90 sequences assigned
19 (21.1%) exact matches, in which:
18 unique CDR3
3 unique J



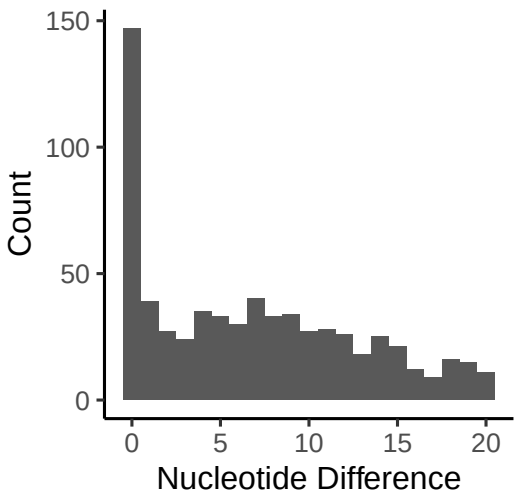
IGHV3−30*18

577 sequences assigned
142 (24.6%) exact matches, in which:
140 unique CDR3
5 unique J



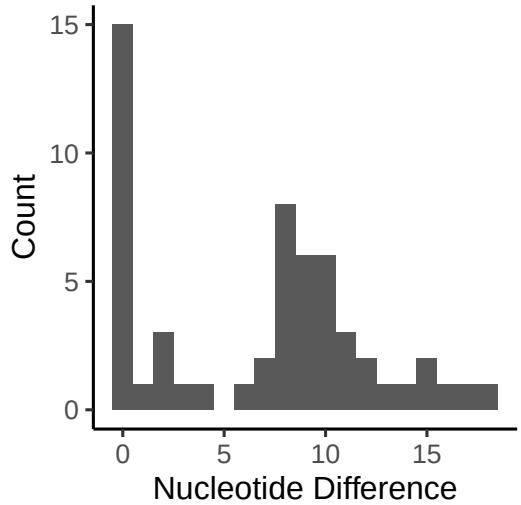
IGHV3−48*01

734 sequences assigned
147 (20%) exact matches, in which:
145 unique CDR3
7 unique J



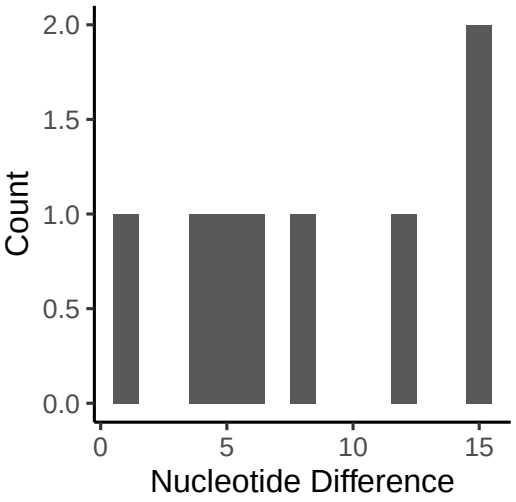
IGHV3−64*01

57 sequences assigned
15 (26.3%) exact matches, in which:
15 unique CDR3
4 unique J



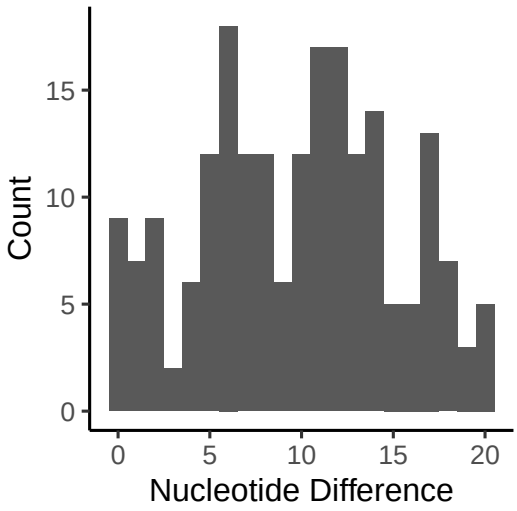
IGHV3−64*07

12 sequences assigned
No exact matches.



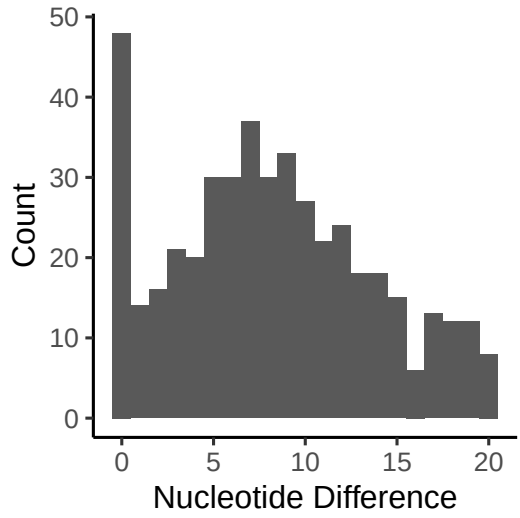
IGHV3−72*01

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



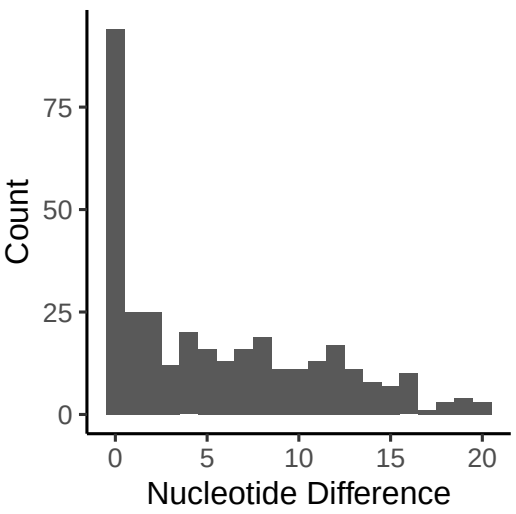
IGHV3−74*01

521 sequences assigned
48 (9.2%) exact matches, in which:
46 unique CDR3
5 unique J



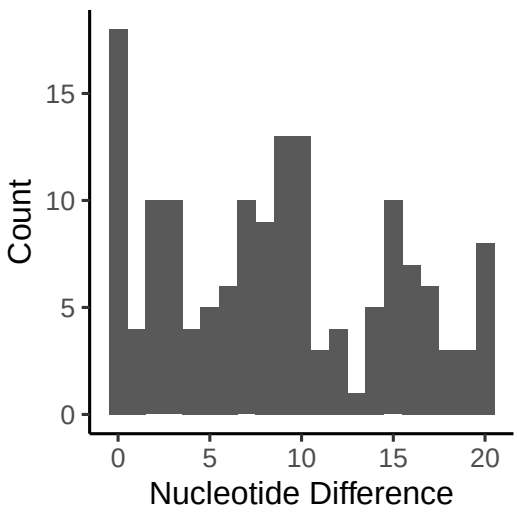
IGHV3−66*01

407 sequences assigned
94 (23.1%) exact matches, in which:
93 unique CDR3
6 unique J



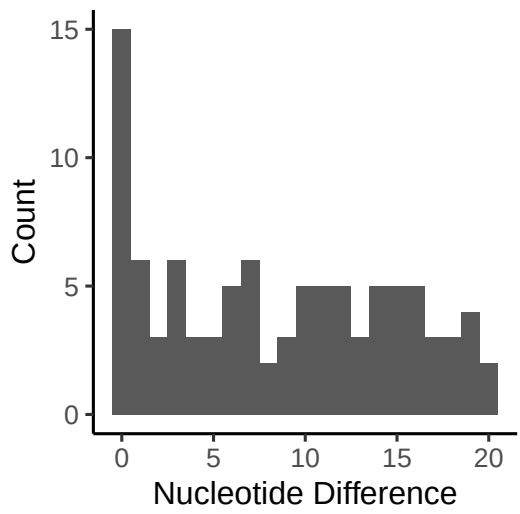
IGHV3−73*01

200 sequences assigned
18 (9%) exact matches, in which:
18 unique CDR3
4 unique J



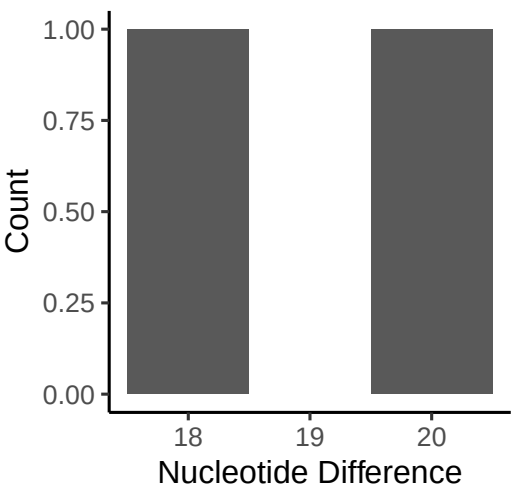
IGHV3−64D*06

104 sequences assigned
15 (14.4%) exact matches, in which:
15 unique CDR3
3 unique J



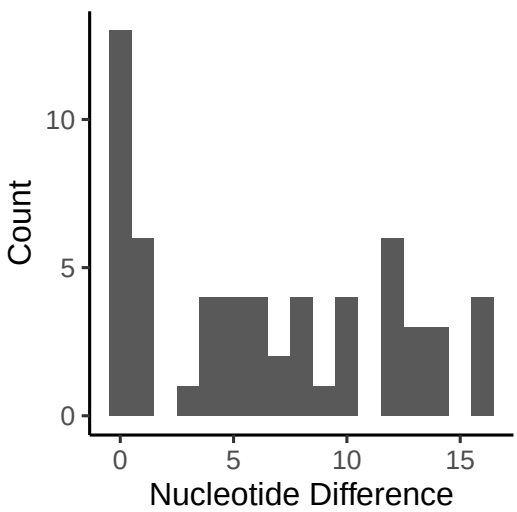
IGHV3−69−1*01

5 sequences assigned
No exact matches.



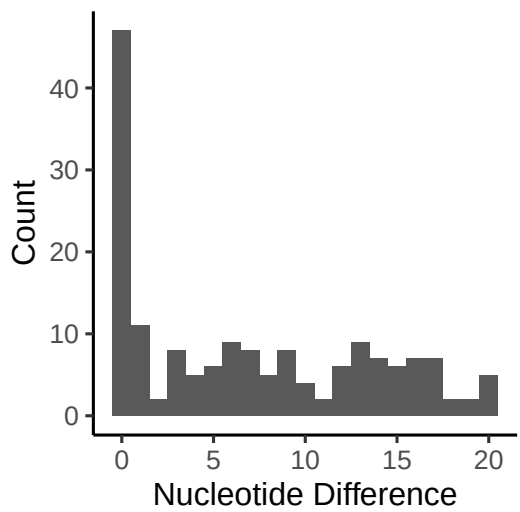
IGHV3−73*02

72 sequences assigned
13 (18.1%) exact matches, in which:
12 unique CDR3
3 unique J



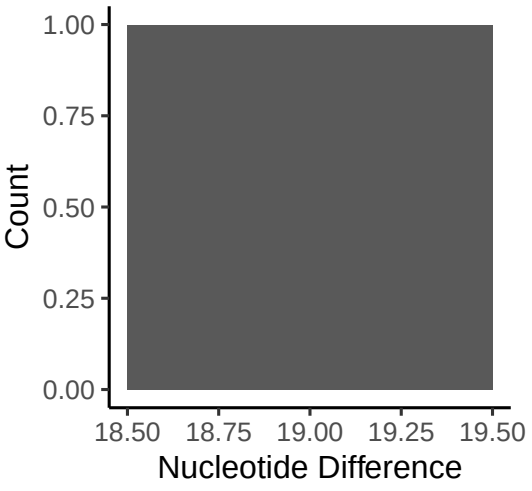
IGHV4−4*07

190 sequences assigned
47 (24.7%) exact matches, in which:
47 unique CDR3
4 unique J



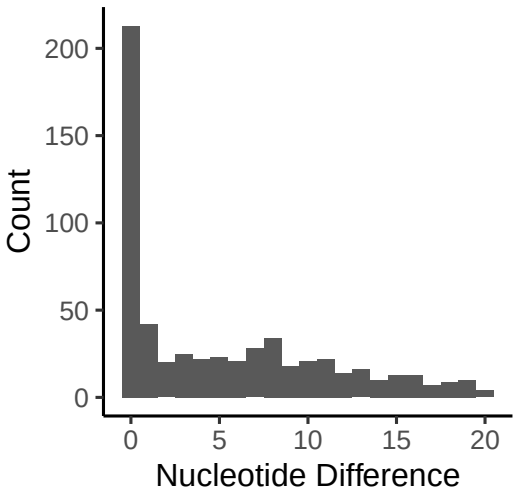
IGHV4−28*05

1 sequences assigned
No exact matches.



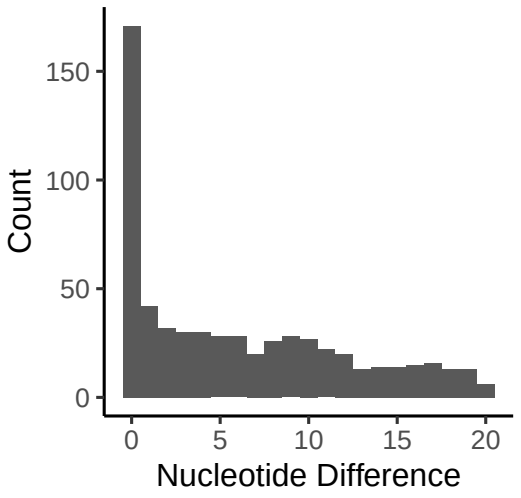
IGHV4−31*03

653 sequences assigned
213 (32.6%) exact matches, in which:
213 unique CDR3
7 unique J



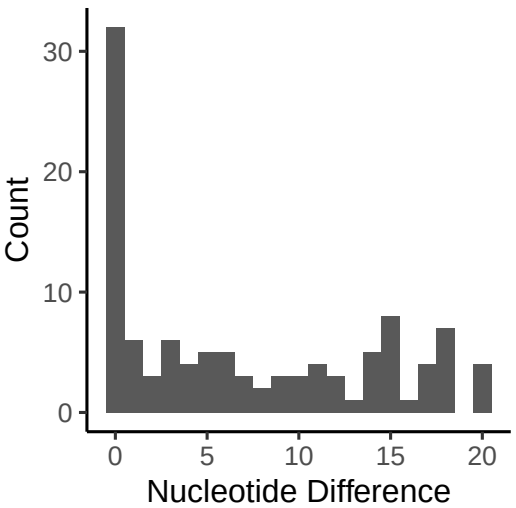
IGHV4−59*01

682 sequences assigned
171 (25.1%) exact matches, in which:
171 unique CDR3
7 unique J



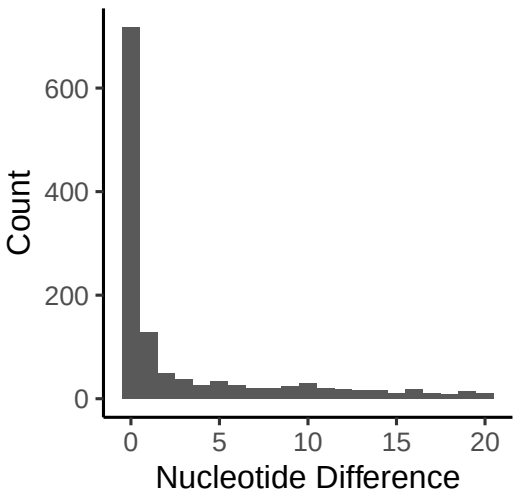
IGHV4−30−4*01

131 sequences assigned
32 (24.4%) exact matches, in which:
32 unique CDR3
5 unique J



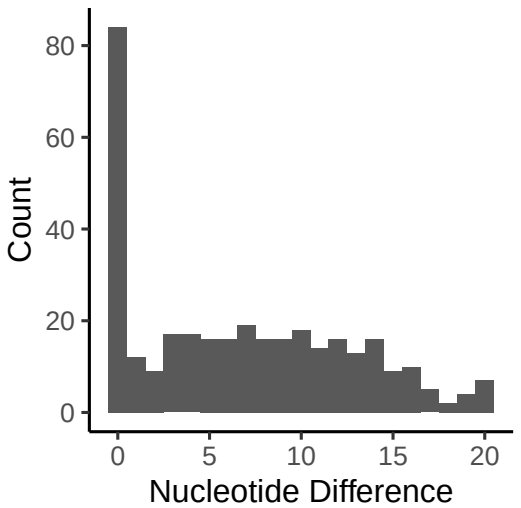
IGHV4−34*01

1372 sequences assigned
718 (52.3%) exact matches, in which:
702 unique CDR3
7 unique J



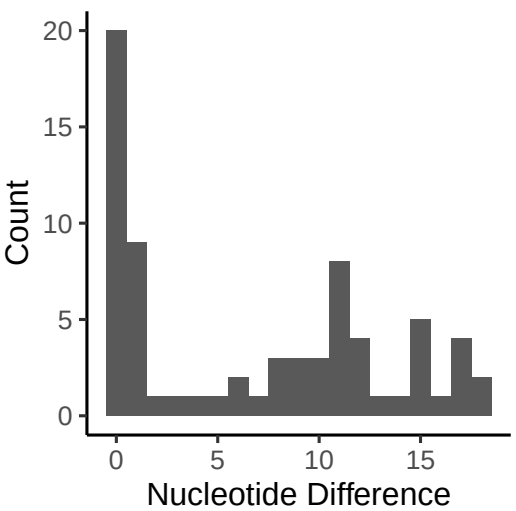
IGHV4−59*08

391 sequences assigned
84 (21.5%) exact matches, in which:
84 unique CDR3
6 unique J



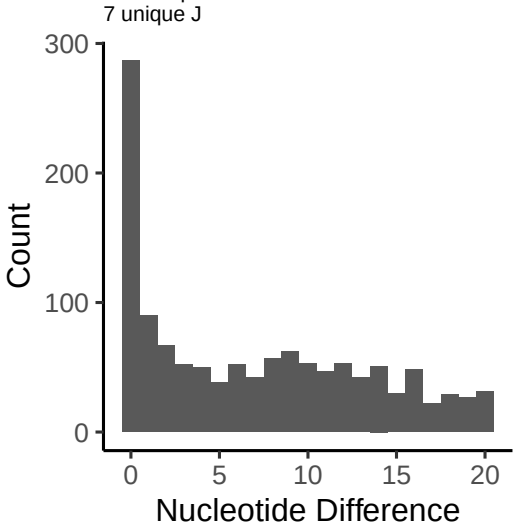
IGHV4−30−2*01

83 sequences assigned
20 (24.1%) exact matches, in which:
19 unique CDR3
6 unique J



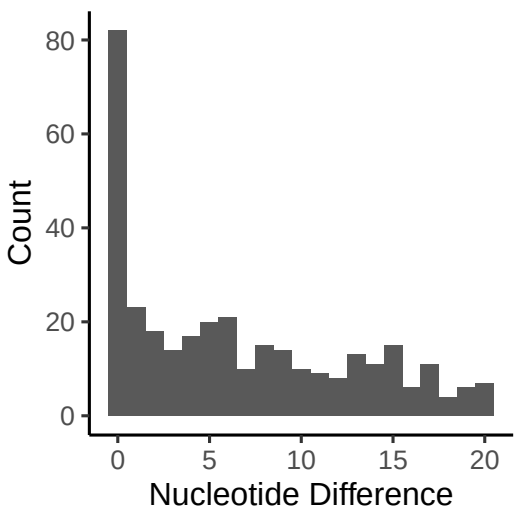
IGHV4−39*01

1382 sequences assigned
287 (20.8%) exact matches, in which:
281 unique CDR3
7 unique J



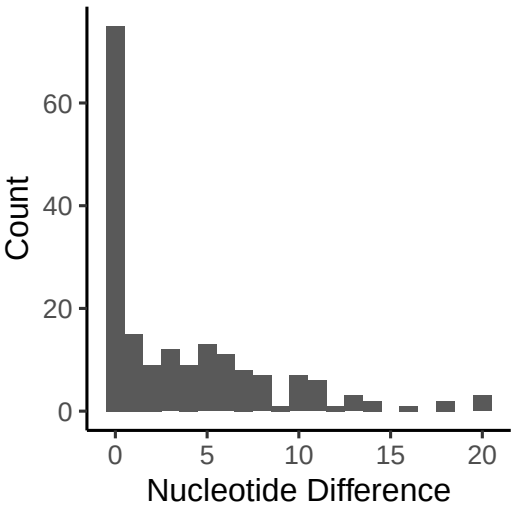
IGHV4−61*02_A234G

379 sequences assigned
82 (21.6%) exact matches, in which:
79 unique CDR3
6 unique J



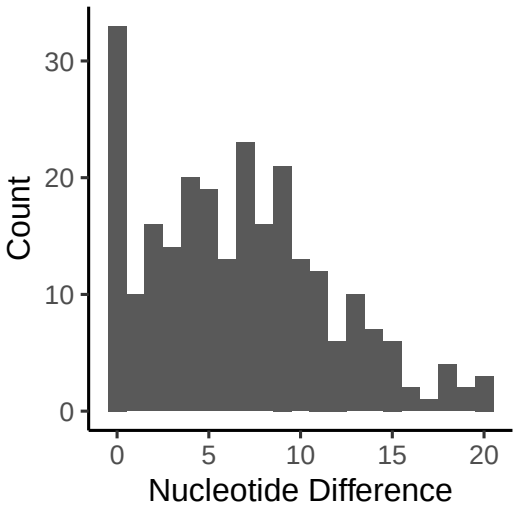
IGHV5−10−1*03

223 sequences assigned
75 (33.6%) exact matches, in which:
75 unique CDR3
5 unique J



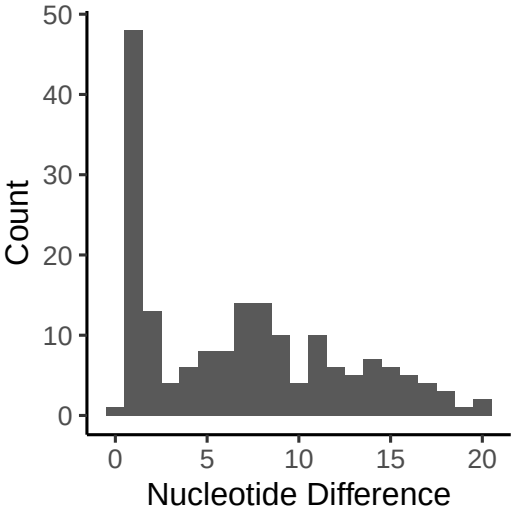
IGHV6−1*01

263 sequences assigned
33 (12.5%) exact matches, in which:
32 unique CDR3
5 unique J



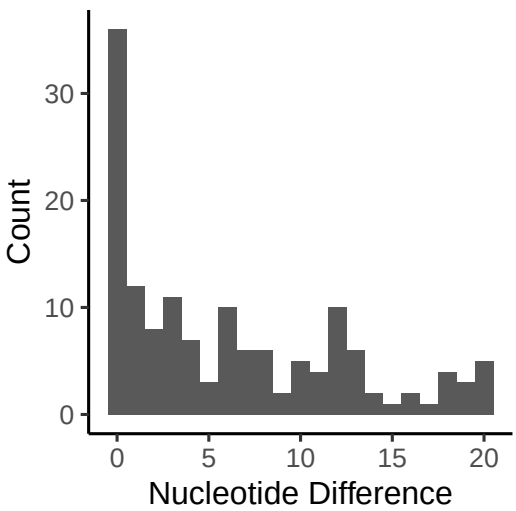
IGHV5−51*01

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



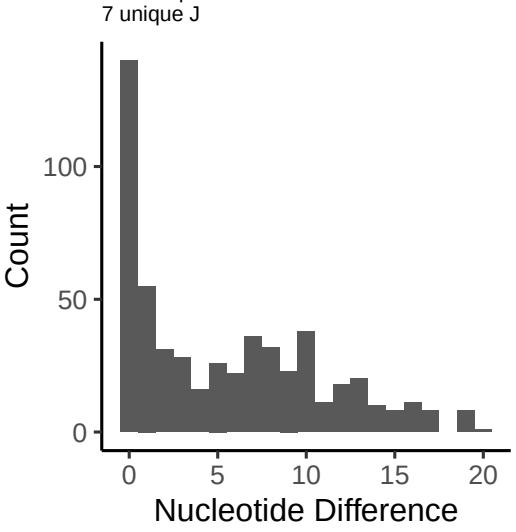
IGHV7−4−1*02

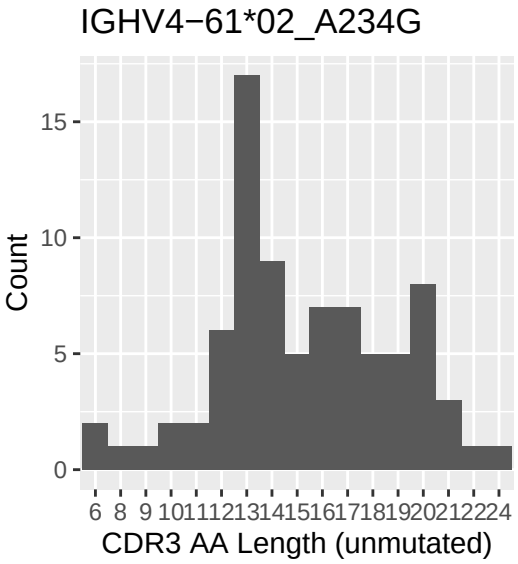
159 sequences assigned
36 (22.6%) exact matches, in which:
36 unique CDR3
6 unique J

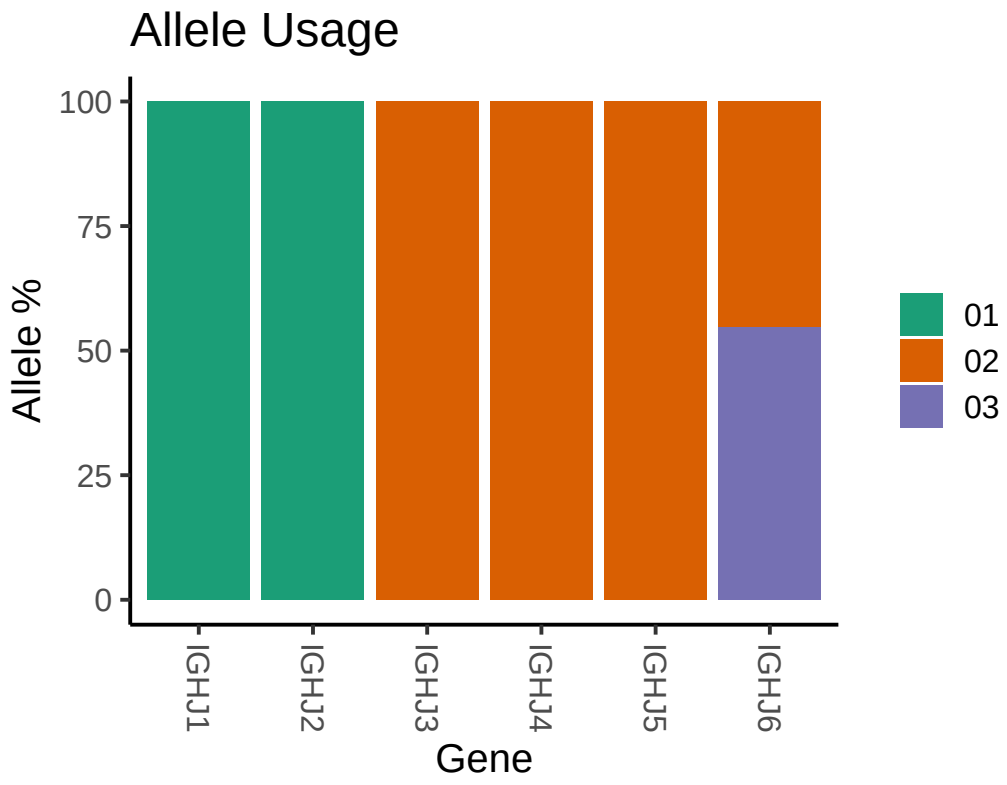
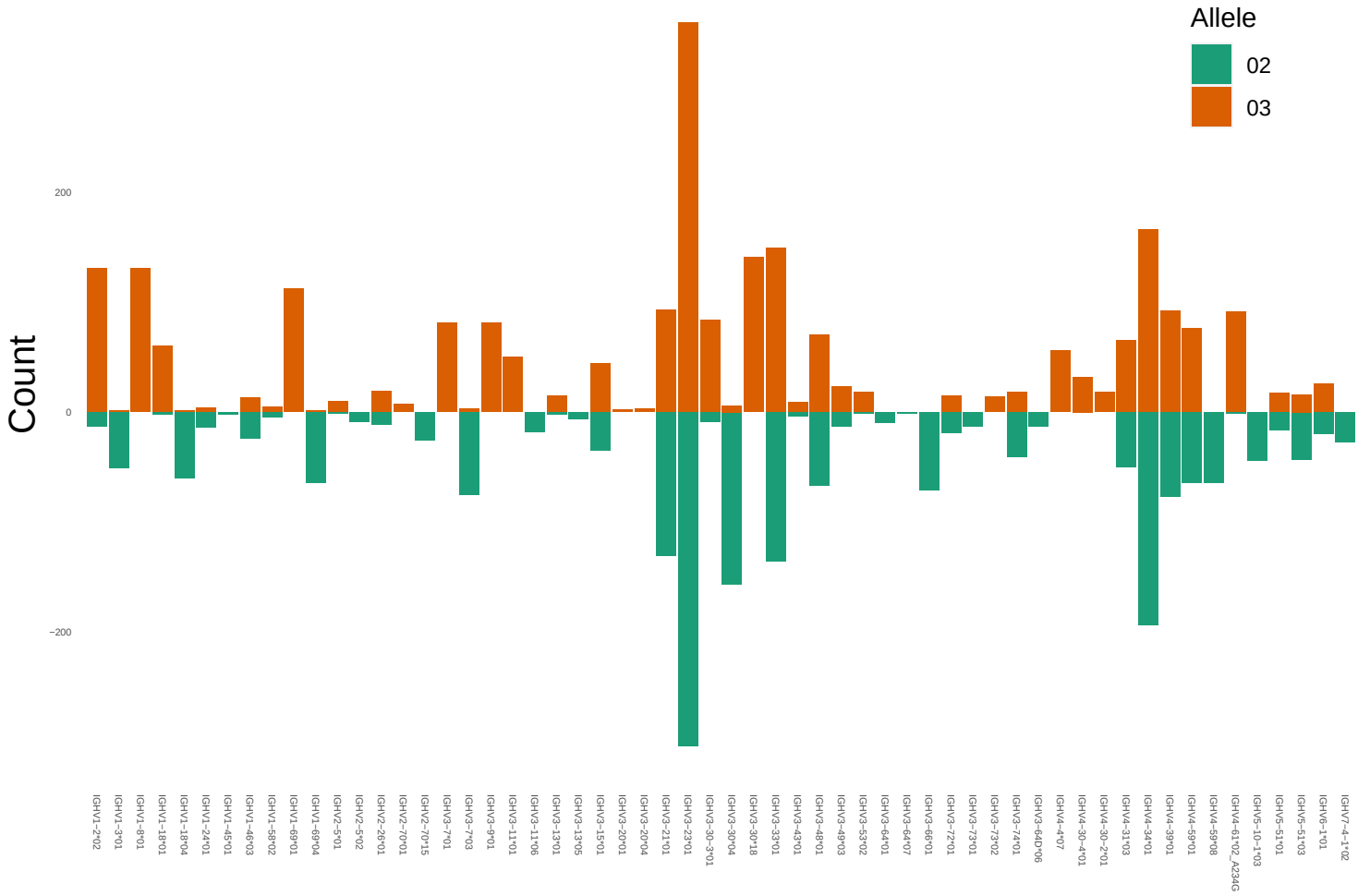


IGHV5−51*03

585 sequences assigned
140 (23.9%) exact matches, in which:
136 unique CDR3
7 unique J




IGHV4−61*02_A234G
Count
0
5
10
15
6 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24
CDR3 AA Length (unmutated)


Allele Usage
100
75
50
25
0
Allele %
IGHJ1
IGHJ2
IGHJ3
IGHJ4
IGHJ5
IGHJ6
Gene
01
02
03

Sequence Count by IGHJ6 allele usage