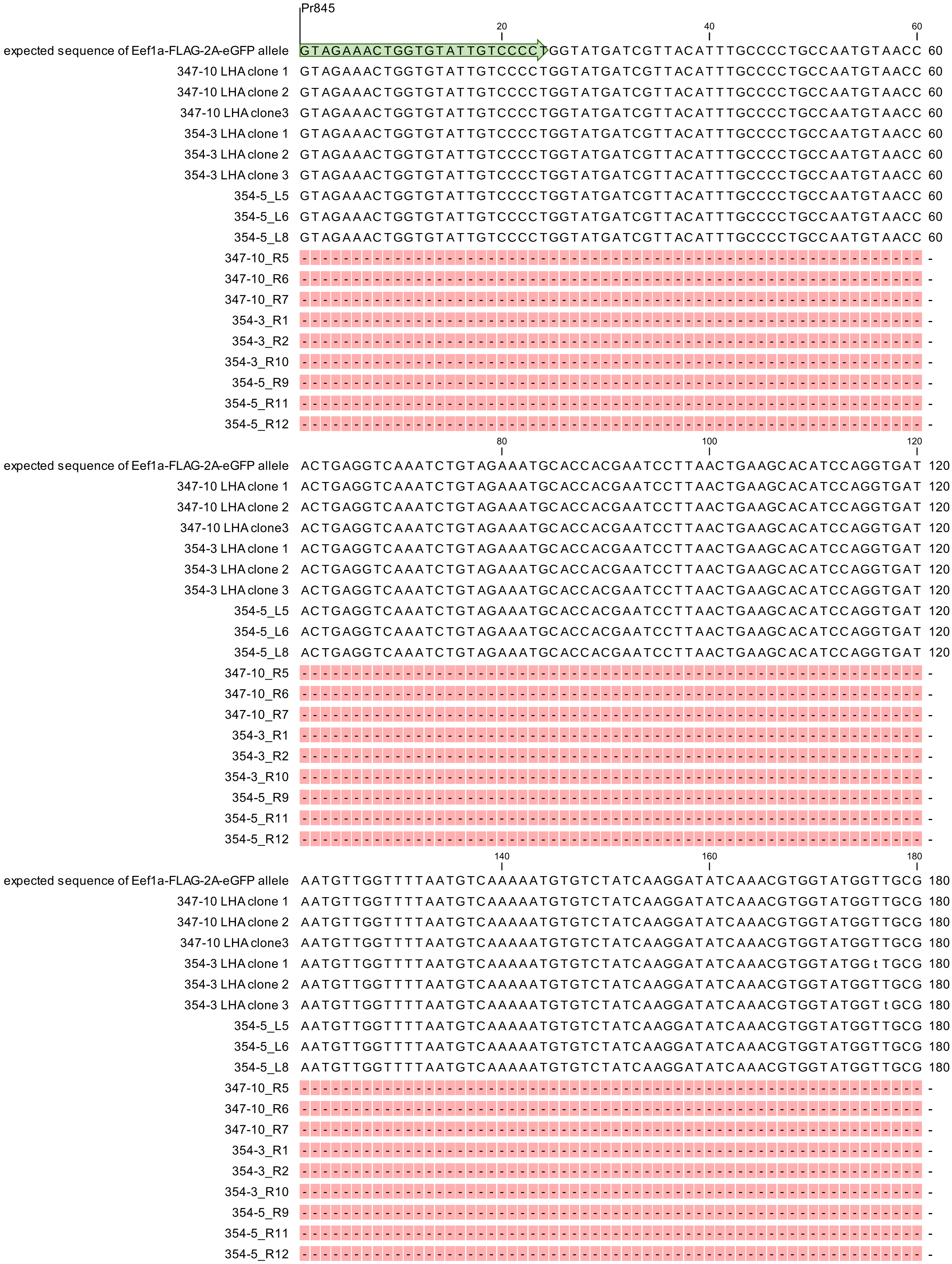
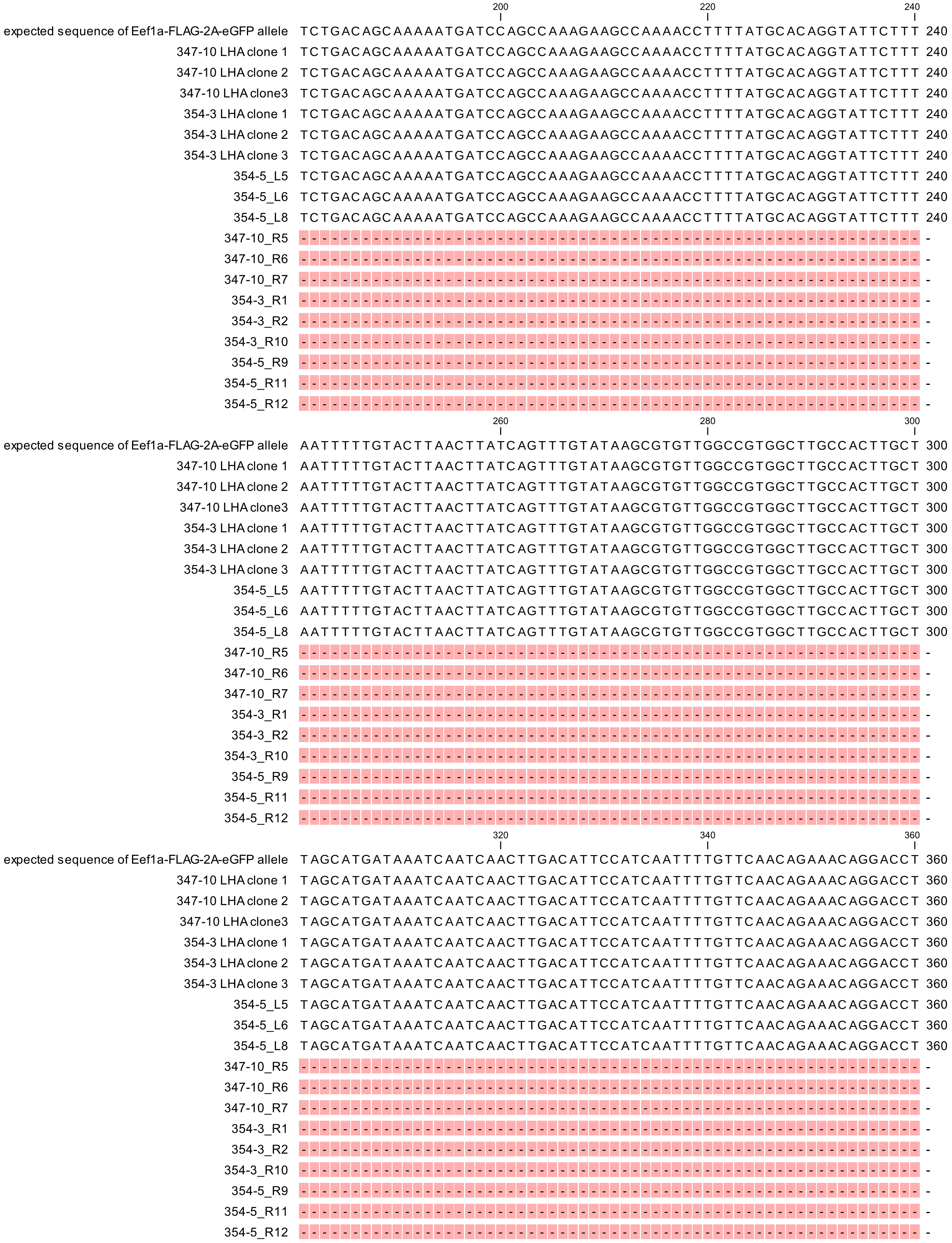


```
expected sequence of Eef1a-FLAG-2A-eGFP allele  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                           347-10 LHA clone 1  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                           347-10 LHA clone 2  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                            347-10 LHA clone3  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                            354-3 LHA clone 1  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                            354-3 LHA clone 2  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                            354-3 LHA clone 3  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                                     354-5_L5  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                                     354-5_L6  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                                     354-5_L8  GTAGAAACTGGTGTATTGTCCCCTGGTATGATCGTTACATTTGCCCCTGCCAATGTAACC  60
                                    347-10_R5  ------------------------------------------------------------  -
                                    347-10_R6  ------------------------------------------------------------  -
                                    347-10_R7  ------------------------------------------------------------  -
                                     354-3_R1  ------------------------------------------------------------  -
                                     354-3_R2  ------------------------------------------------------------  -
                                    354-3_R10  ------------------------------------------------------------  -
                                     354-5_R9  ------------------------------------------------------------  -
                                    354-5_R11  ------------------------------------------------------------  -
                                    354-5_R12  ------------------------------------------------------------  -

expected sequence of Eef1a-FLAG-2A-eGFP allele  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                           347-10 LHA clone 1  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                           347-10 LHA clone 2  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                            347-10 LHA clone3  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                            354-3 LHA clone 1  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                            354-3 LHA clone 2  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                            354-3 LHA clone 3  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                                     354-5_L5  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                                     354-5_L6  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                                     354-5_L8  ACTGAGGTCAAATCTGTAGAAATGCACCACGAATCCTTAACTGAAGCACATCCAGGTGAT  120
                                    347-10_R5  ------------------------------------------------------------  -
                                    347-10_R6  ------------------------------------------------------------  -
                                    347-10_R7  ------------------------------------------------------------  -
                                     354-3_R1  ------------------------------------------------------------  -
                                     354-3_R2  ------------------------------------------------------------  -
                                    354-3_R10  ------------------------------------------------------------  -
                                     354-5_R9  ------------------------------------------------------------  -
                                    354-5_R11  ------------------------------------------------------------  -
                                    354-5_R12  ------------------------------------------------------------  -

expected sequence of Eef1a-FLAG-2A-eGFP allele  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                           347-10 LHA clone 1  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                           347-10 LHA clone 2  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                            347-10 LHA clone3  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                            354-3 LHA clone 1  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGtTGCG  180
                            354-3 LHA clone 2  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                            354-3 LHA clone 3  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTtGCG  180
                                     354-5_L5  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                                     354-5_L6  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                                     354-5_L8  AATGTTGGTTTTAATGTCAAAAATGTGTCTATCAAGGATATCAAACGTGGTATGGTTGCG  180
                                    347-10_R5  ------------------------------------------------------------  -
                                    347-10_R6  ------------------------------------------------------------  -
                                    347-10_R7  ------------------------------------------------------------  -
                                     354-3_R1  ------------------------------------------------------------  -
                                     354-3_R2  ------------------------------------------------------------  -
                                    354-3_R10  ------------------------------------------------------------  -
                                     354-5_R9  ------------------------------------------------------------  -
                                    354-5_R11  ------------------------------------------------------------  -
                                    354-5_R12  ------------------------------------------------------------  -
```

Figure S5 - Page 1



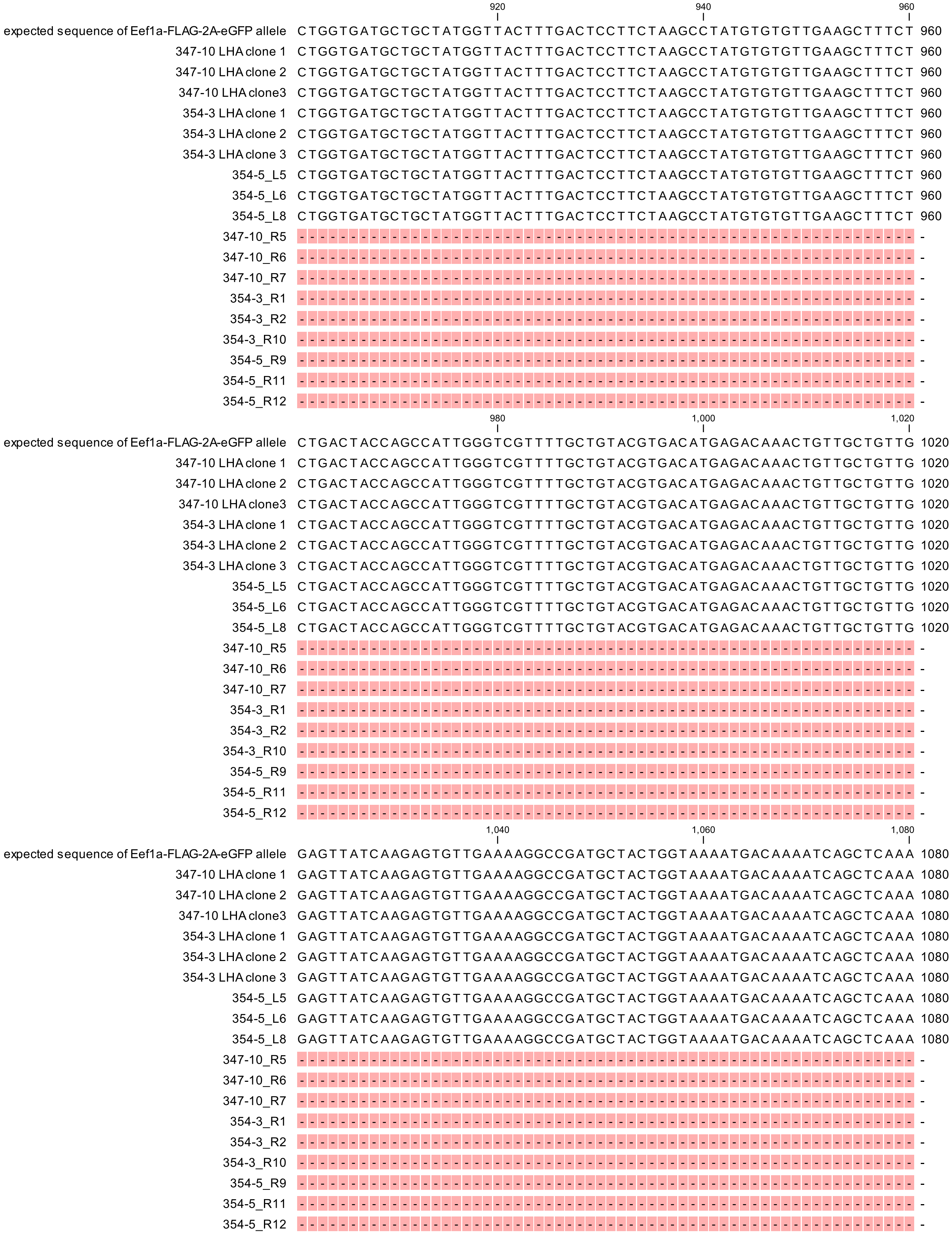
```
                                                                     200                 220                 240
                                                                       |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                             347-10 LHA clone 1  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                             347-10 LHA clone 2  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                              347-10 LHA clone3  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                              354-3 LHA clone 1  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                              354-3 LHA clone 2  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                              354-3 LHA clone 3  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                                       354-5_L5  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                                       354-5_L6  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                                       354-5_L8  TCTGACAGCAAAAATGATCCAGCCAAAGAAGCCAAAACCTTTTATGCACAGGTATTCTTT 240
                                      347-10_R5  ------------------------------------------------------------ -
                                      347-10_R6  ------------------------------------------------------------ -
                                      347-10_R7  ------------------------------------------------------------ -
                                       354-3_R1  ------------------------------------------------------------ -
                                       354-3_R2  ------------------------------------------------------------ -
                                      354-3_R10  ------------------------------------------------------------ -
                                       354-5_R9  ------------------------------------------------------------ -
                                      354-5_R11  ------------------------------------------------------------ -
                                      354-5_R12  ------------------------------------------------------------ -
                                                                     260                 280                 300
                                                                       |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                             347-10 LHA clone 1  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                             347-10 LHA clone 2  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                              347-10 LHA clone3  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                              354-3 LHA clone 1  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                              354-3 LHA clone 2  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                              354-3 LHA clone 3  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                                       354-5_L5  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                                       354-5_L6  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                                       354-5_L8  AATTTTTGTACTTAACTTATCAGTTTGTATAAGCGTGTTGGCCGTGGCTTGCCACTTGCT 300
                                      347-10_R5  ------------------------------------------------------------ -
                                      347-10_R6  ------------------------------------------------------------ -
                                      347-10_R7  ------------------------------------------------------------ -
                                       354-3_R1  ------------------------------------------------------------ -
                                       354-3_R2  ------------------------------------------------------------ -
                                      354-3_R10  ------------------------------------------------------------ -
                                       354-5_R9  ------------------------------------------------------------ -
                                      354-5_R11  ------------------------------------------------------------ -
                                      354-5_R12  ------------------------------------------------------------ -
                                                                     320                 340                 360
                                                                       |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                             347-10 LHA clone 1  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                             347-10 LHA clone 2  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                              347-10 LHA clone3  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                              354-3 LHA clone 1  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                              354-3 LHA clone 2  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                              354-3 LHA clone 3  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                                       354-5_L5  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                                       354-5_L6  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                                       354-5_L8  TAGCATGATAAATCAATCAACTTGACATTCCATCAATTTTGTTCAACAGAAACAGGACCT 360
                                      347-10_R5  ------------------------------------------------------------ -
                                      347-10_R6  ------------------------------------------------------------ -
                                      347-10_R7  ------------------------------------------------------------ -
                                       354-3_R1  ------------------------------------------------------------ -
                                       354-3_R2  ------------------------------------------------------------ -
                                      354-3_R10  ------------------------------------------------------------ -
                                       354-5_R9  ------------------------------------------------------------ -
                                      354-5_R11  ------------------------------------------------------------ -
                                      354-5_R12  ------------------------------------------------------------ -
```

```
                                                                         380                 400                 420
                                                                           |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                         347-10 LHA clone 1  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                         347-10 LHA clone 2  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                          347-10 LHA clone3  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                          354-3 LHA clone 1  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                          354-3 LHA clone 2  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                          354-3 LHA clone 3  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                                   354-5_L5  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                                   354-5_L6  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                                   354-5_L8  TTAAATAGCAAACAAAATATTGAAATAAAACTGTATGATTTTGTCACTATCGTTTATGTG 420
                                  347-10_R5  ------------------------------------------------------------ -
                                  347-10_R6  ------------------------------------------------------------ -
                                  347-10_R7  ------------------------------------------------------------ -
                                   354-3_R1  ------------------------------------------------------------ -
                                   354-3_R2  ------------------------------------------------------------ -
                                  354-3_R10  ------------------------------------------------------------ -
                                   354-5_R9  ------------------------------------------------------------ -
                                  354-5_R11  ------------------------------------------------------------ -
                                  354-5_R12  ------------------------------------------------------------ -
                                                                         440                 460                 480
                                                                           |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                         347-10 LHA clone 1  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                         347-10 LHA clone 2  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                          347-10 LHA clone3  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                          354-3 LHA clone 1  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                          354-3 LHA clone 2  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                          354-3 LHA clone 3  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                                   354-5_L5  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                                   354-5_L6  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                                   354-5_L8  CCCACCATGAAAATTTTACAAAGAAGTGGAACTGTTTGAAAGTTCATTAGCAAGAACAAA 480
                                  347-10_R5  ------------------------------------------------------------ -
                                  347-10_R6  ------------------------------------------------------------ -
                                  347-10_R7  ------------------------------------------------------------ -
                                   354-3_R1  ------------------------------------------------------------ -
                                   354-3_R2  ------------------------------------------------------------ -
                                  354-3_R10  ------------------------------------------------------------ -
                                   354-5_R9  ------------------------------------------------------------ -
                                  354-5_R11  ------------------------------------------------------------ -
                                  354-5_R12  ------------------------------------------------------------ -
                                                                         500                 520                 540
                                                                           |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                         347-10 LHA clone 1  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                         347-10 LHA clone 2  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                          347-10 LHA clone3  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                          354-3 LHA clone 1  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                          354-3 LHA clone 2  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                          354-3 LHA clone 3  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                                   354-5_L5  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                                   354-5_L6  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                                   354-5_L8  TCCTAGAAATGTTAGATTTGTGTCAAGAATTTCAAGATTTTTGTTTCTTGGCAAGTTTTT 540
                                  347-10_R5  ------------------------------------------------------------ -
                                  347-10_R6  ------------------------------------------------------------ -
                                  347-10_R7  ------------------------------------------------------------ -
                                   354-3_R1  ------------------------------------------------------------ -
                                   354-3_R2  ------------------------------------------------------------ -
                                  354-3_R10  ------------------------------------------------------------ -
                                   354-5_R9  ------------------------------------------------------------ -
                                  354-5_R11  ------------------------------------------------------------ -
                                  354-5_R12  ------------------------------------------------------------ -
```

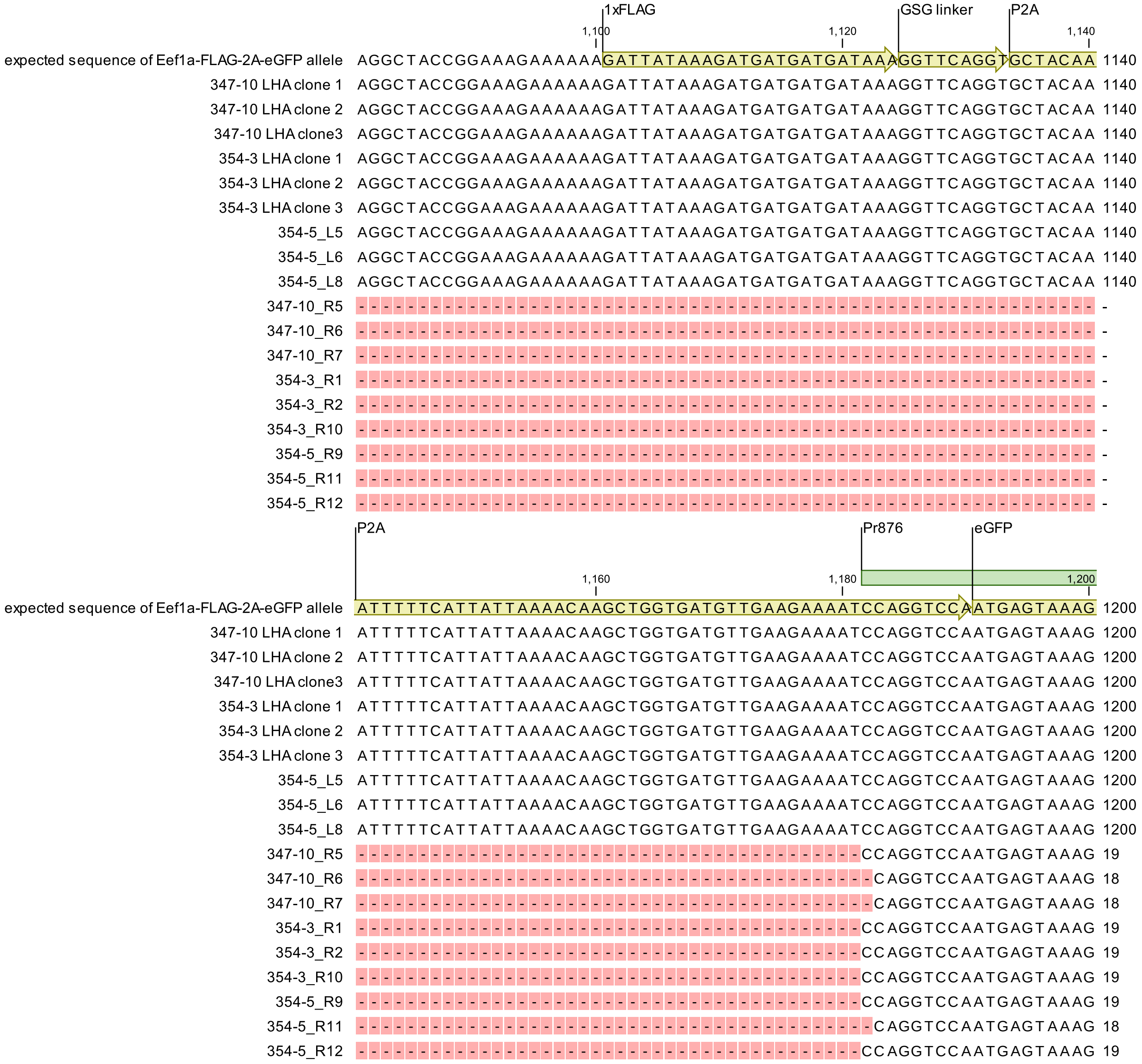
```
                                                                   560                  580                  600
                                                                     |                    |                    |
expected sequence of Eef1a-FLAG-2A-eGFP allele  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                          347-10 LHA clone 1  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                          347-10 LHA clone 2  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                           347-10 LHA clone3  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                           354-3 LHA clone 1  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                           354-3 LHA clone 2  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                           354-3 LHA clone 3  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                                    354-5_L5  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                                    354-5_L6  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                                    354-5_L8  AGCACTTGCTTAGGGAACTATTTAAAATATTAATTTTTATTGAATAAAGAACCAACCTGT 600
                                   347-10_R5  ------------------------------------------------------------ -
                                   347-10_R6  ------------------------------------------------------------ -
                                   347-10_R7  ------------------------------------------------------------ -
                                    354-3_R1  ------------------------------------------------------------ -
                                    354-3_R2  ------------------------------------------------------------ -
                                   354-3_R10  ------------------------------------------------------------ -
                                    354-5_R9  ------------------------------------------------------------ -
                                   354-5_R11  ------------------------------------------------------------ -
                                   354-5_R12  ------------------------------------------------------------ -
                                                                   620                  640                  660
                                                                     |                    |                    |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                          347-10 LHA clone 1  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                          347-10 LHA clone 2  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                           347-10 LHA clone3  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                           354-3 LHA clone 1  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                           354-3 LHA clone 2  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                           354-3 LHA clone 3  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                                    354-5_L5  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                                    354-5_L6  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                                    354-5_L8  TTGACTTTTATTAGTAATAAAGCTAAAATTATGGCCTAAATCATAATTTATTATGTGATT 660
                                   347-10_R5  ------------------------------------------------------------ -
                                   347-10_R6  ------------------------------------------------------------ -
                                   347-10_R7  ------------------------------------------------------------ -
                                    354-3_R1  ------------------------------------------------------------ -
                                    354-3_R2  ------------------------------------------------------------ -
                                   354-3_R10  ------------------------------------------------------------ -
                                    354-5_R9  ------------------------------------------------------------ -
                                   354-5_R11  ------------------------------------------------------------ -
                                   354-5_R12  ------------------------------------------------------------ -
                                                                   680                  700                  720
                                                                     |                    |                    |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                          347-10 LHA clone 1  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                          347-10 LHA clone 2  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                           347-10 LHA clone3  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                           354-3 LHA clone 1  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                           354-3 LHA clone 2  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                           354-3 LHA clone 3  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                                    354-5_L5  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                                    354-5_L6  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                                    354-5_L8  TGGGAAAGAAATTTGTGTTGATTTTTCCATTAATATTGTAAAAACAAAATCGAAAGTTAA 720
                                   347-10_R5  ------------------------------------------------------------ -
                                   347-10_R6  ------------------------------------------------------------ -
                                   347-10_R7  ------------------------------------------------------------ -
                                    354-3_R1  ------------------------------------------------------------ -
                                    354-3_R2  ------------------------------------------------------------ -
                                   354-3_R10  ------------------------------------------------------------ -
                                    354-5_R9  ------------------------------------------------------------ -
                                   354-5_R11  ------------------------------------------------------------ -
                                   354-5_R12  ------------------------------------------------------------ -
```

```
                                                                   740                 760                 780
                                                                    |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                            347-10 LHA clone 1  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                            347-10 LHA clone 2  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                             347-10 LHA clone3  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                             354-3 LHA clone 1  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                             354-3 LHA clone 2  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                             354-3 LHA clone 3  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                                      354-5_L5  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                                      354-5_L6  TTTCTTTCAAAAaTTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                                      354-5_L8  TTTCTTTCAAAAATTACTTTTAGGTCATCATTCTCAATCATCCAGGTGAGATTCATGCTG 780
                                     347-10_R5  ------------------------------------------------------------ -
                                     347-10_R6  ------------------------------------------------------------ -
                                     347-10_R7  ------------------------------------------------------------ -
                                      354-3_R1  ------------------------------------------------------------ -
                                      354-3_R2  ------------------------------------------------------------ -
                                     354-3_R10  ------------------------------------------------------------ -
                                      354-5_R9  ------------------------------------------------------------ -
                                     354-5_R11  ------------------------------------------------------------ -
                                     354-5_R12  ------------------------------------------------------------ -
                                                                   800                 820                 840
                                                                    |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                            347-10 LHA clone 1  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                            347-10 LHA clone 2  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                             347-10 LHA clone3  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                             354-3 LHA clone 1  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                             354-3 LHA clone 2  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                             354-3 LHA clone 3  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                                      354-5_L5  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                                      354-5_L6  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                                      354-5_L8  GTTACCAACCTGTTTTGGATTGCCACACTGCTCACGTTGCCTGCAAATTTACAGAATTAA 840
                                     347-10_R5  ------------------------------------------------------------ -
                                     347-10_R6  ------------------------------------------------------------ -
                                     347-10_R7  ------------------------------------------------------------ -
                                      354-3_R1  ------------------------------------------------------------ -
                                      354-3_R2  ------------------------------------------------------------ -
                                     354-3_R10  ------------------------------------------------------------ -
                                      354-5_R9  ------------------------------------------------------------ -
                                     354-5_R11  ------------------------------------------------------------ -
                                     354-5_R12  ------------------------------------------------------------ -
                                                                   860                 880                 900
                                                                    |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                            347-10 LHA clone 1  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                            347-10 LHA clone 2  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                             347-10 LHA clone3  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                             354-3 LHA clone 1  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                             354-3 LHA clone 2  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                             354-3 LHA clone 3  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                                      354-5_L5  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                                      354-5_L6  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                                      354-5_L8  AGCAGAAATGTGATAGACGAAGTGGTAAAGTTTTAGAAGAAAATCCCAAAATGGTTAAAT 900
                                     347-10_R5  ------------------------------------------------------------ -
                                     347-10_R6  ------------------------------------------------------------ -
                                     347-10_R7  ------------------------------------------------------------ -
                                      354-3_R1  ------------------------------------------------------------ -
                                      354-3_R2  ------------------------------------------------------------ -
                                     354-3_R10  ------------------------------------------------------------ -
                                      354-5_R9  ------------------------------------------------------------ -
                                     354-5_R11  ------------------------------------------------------------ -
                                     354-5_R12  ------------------------------------------------------------ -
```

Figure S5 - Page 5



```
                                                                920                 940                 960
expected sequence of Eef1a-FLAG-2A-eGFP allele CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                            347-10 LHA clone 1 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                            347-10 LHA clone 2 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                             347-10 LHA clone3 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                             354-3 LHA clone 1 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                             354-3 LHA clone 2 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                             354-3 LHA clone 3 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                                      354-5_L5 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                                      354-5_L6 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                                      354-5_L8 CTGGTGATGCTGCTATGGTTACTTTGACTCCTTCTAAGCCTATGTGTGTTGAAGCTTTCT 960
                                     347-10_R5 ------------------------------------------------------------ -
                                     347-10_R6 ------------------------------------------------------------ -
                                     347-10_R7 ------------------------------------------------------------ -
                                      354-3_R1 ------------------------------------------------------------ -
                                      354-3_R2 ------------------------------------------------------------ -
                                     354-3_R10 ------------------------------------------------------------ -
                                      354-5_R9 ------------------------------------------------------------ -
                                     354-5_R11 ------------------------------------------------------------ -
                                     354-5_R12 ------------------------------------------------------------ -
                                                                980               1,000               1,020
expected sequence of Eef1a-FLAG-2A-eGFP allele CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                            347-10 LHA clone 1 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                            347-10 LHA clone 2 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                             347-10 LHA clone3 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                             354-3 LHA clone 1 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                             354-3 LHA clone 2 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                             354-3 LHA clone 3 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                                      354-5_L5 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                                      354-5_L6 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                                      354-5_L8 CTGACTACCAGCCATTGGGTCGTTTTGCTGTACGTGACATGAGACAAACTGTTGCTGTTG 1020
                                     347-10_R5 ------------------------------------------------------------ -
                                     347-10_R6 ------------------------------------------------------------ -
                                     347-10_R7 ------------------------------------------------------------ -
                                      354-3_R1 ------------------------------------------------------------ -
                                      354-3_R2 ------------------------------------------------------------ -
                                     354-3_R10 ------------------------------------------------------------ -
                                      354-5_R9 ------------------------------------------------------------ -
                                     354-5_R11 ------------------------------------------------------------ -
                                     354-5_R12 ------------------------------------------------------------ -
                                                              1,040               1,060               1,080
expected sequence of Eef1a-FLAG-2A-eGFP allele GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                            347-10 LHA clone 1 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                            347-10 LHA clone 2 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                             347-10 LHA clone3 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                             354-3 LHA clone 1 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                             354-3 LHA clone 2 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                             354-3 LHA clone 3 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                                      354-5_L5 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                                      354-5_L6 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                                      354-5_L8 GAGTTATCAAGAGTGTTGAAAAGGCCGATGCTACTGGTAAAATGACAAAATCAGCTCAAA 1080
                                     347-10_R5 ------------------------------------------------------------ -
                                     347-10_R6 ------------------------------------------------------------ -
                                     347-10_R7 ------------------------------------------------------------ -
                                      354-3_R1 ------------------------------------------------------------ -
                                      354-3_R2 ------------------------------------------------------------ -
                                     354-3_R10 ------------------------------------------------------------ -
                                      354-5_R9 ------------------------------------------------------------ -
                                     354-5_R11 ------------------------------------------------------------ -
                                     354-5_R12 ------------------------------------------------------------ -
```



```
expected sequence of Eef1a-FLAG-2A-eGFP allele  AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
347-10 LHA clone 1                              AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
347-10 LHA clone 2                              AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
347-10 LHA clone3                               AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
354-3 LHA clone 1                               AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
354-3 LHA clone 2                               AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
354-3 LHA clone 3                               AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
354-5_L5                                        AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
354-5_L6                                        AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
354-5_L8                                        AGGCTACCGGAAAGAAAAAAGATTATAAAGATGATGATGATAAAGGTTCAGGTGCTACAA 1140
347-10_R5                                       ------------------------------------------------------------ -
347-10_R6                                       ------------------------------------------------------------ -
347-10_R7                                       ------------------------------------------------------------ -
354-3_R1                                        ------------------------------------------------------------ -
354-3_R2                                        ------------------------------------------------------------ -
354-3_R10                                       ------------------------------------------------------------ -
354-5_R9                                        ------------------------------------------------------------ -
354-5_R11                                       ------------------------------------------------------------ -
354-5_R12                                       ------------------------------------------------------------ -

expected sequence of Eef1a-FLAG-2A-eGFP allele  ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
347-10 LHA clone 1                              ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
347-10 LHA clone 2                              ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
347-10 LHA clone3                               ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
354-3 LHA clone 1                               ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
354-3 LHA clone 2                               ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
354-3 LHA clone 3                               ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
354-5_L5                                        ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
354-5_L6                                        ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
354-5_L8                                        ATTTTTCATTATTAAAACAAGCTGGTGATGTTGAAGAAAATCCAGGTCCAATGAGTAAAG 1200
347-10_R5                                       -----------------------------------------CCAGGTCCAATGAGTAAAG 19
347-10_R6                                       ------------------------------------------CAGGTCCAATGAGTAAAG 18
347-10_R7                                       ------------------------------------------CAGGTCCAATGAGTAAAG 18
354-3_R1                                        -----------------------------------------CCAGGTCCAATGAGTAAAG 19
354-3_R2                                        -----------------------------------------CCAGGTCCAATGAGTAAAG 19
354-3_R10                                       -----------------------------------------CCAGGTCCAATGAGTAAAG 19
354-5_R9                                        -----------------------------------------CCAGGTCCAATGAGTAAAG 19
354-5_R11                                       ------------------------------------------CAGGTCCAATGAGTAAAG 18
354-5_R12                                       -----------------------------------------CCAGGTCCAATGAGTAAAG 19
```

Pr876
eGFP

1,220 1,240 1,260

expected sequence of Eef1a-FLAG-2A-eGFP allele	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
347-10 LHA clone 1	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
347-10 LHA clone 2	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
347-10 LHA clone3	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
354-3 LHA clone 1	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
354-3 LHA clone 2	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
354-3 LHA clone 3	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
354-5_L5	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
354-5_L6	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGaATTAGATGGTGATGTTAATG	1260
354-5_L8	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	1260
347-10_R5	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	79
347-10_R6	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	78
347-10_R7	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	78
354-3_R1	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	79
354-3_R2	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	79
354-3_R10	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	79
354-5_R9	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	79
354-5_R11	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	78
354-5_R12	GAGAAGAACTTTTCACTGGAGTTGTCCCAATTCTTGTTGAATTAGATGGTGATGTTAATG	79

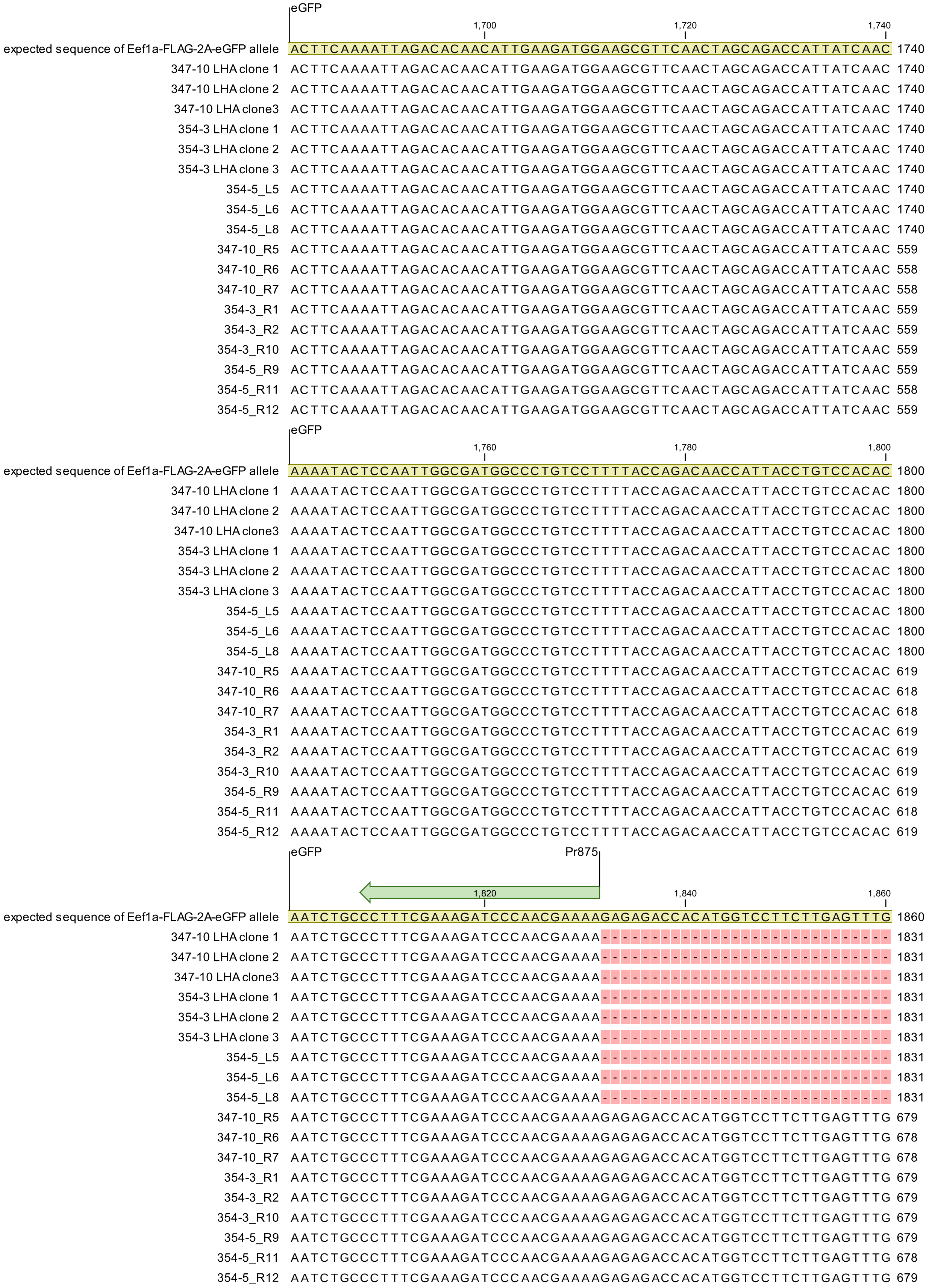
eGFP

1,280 1,300 1,320

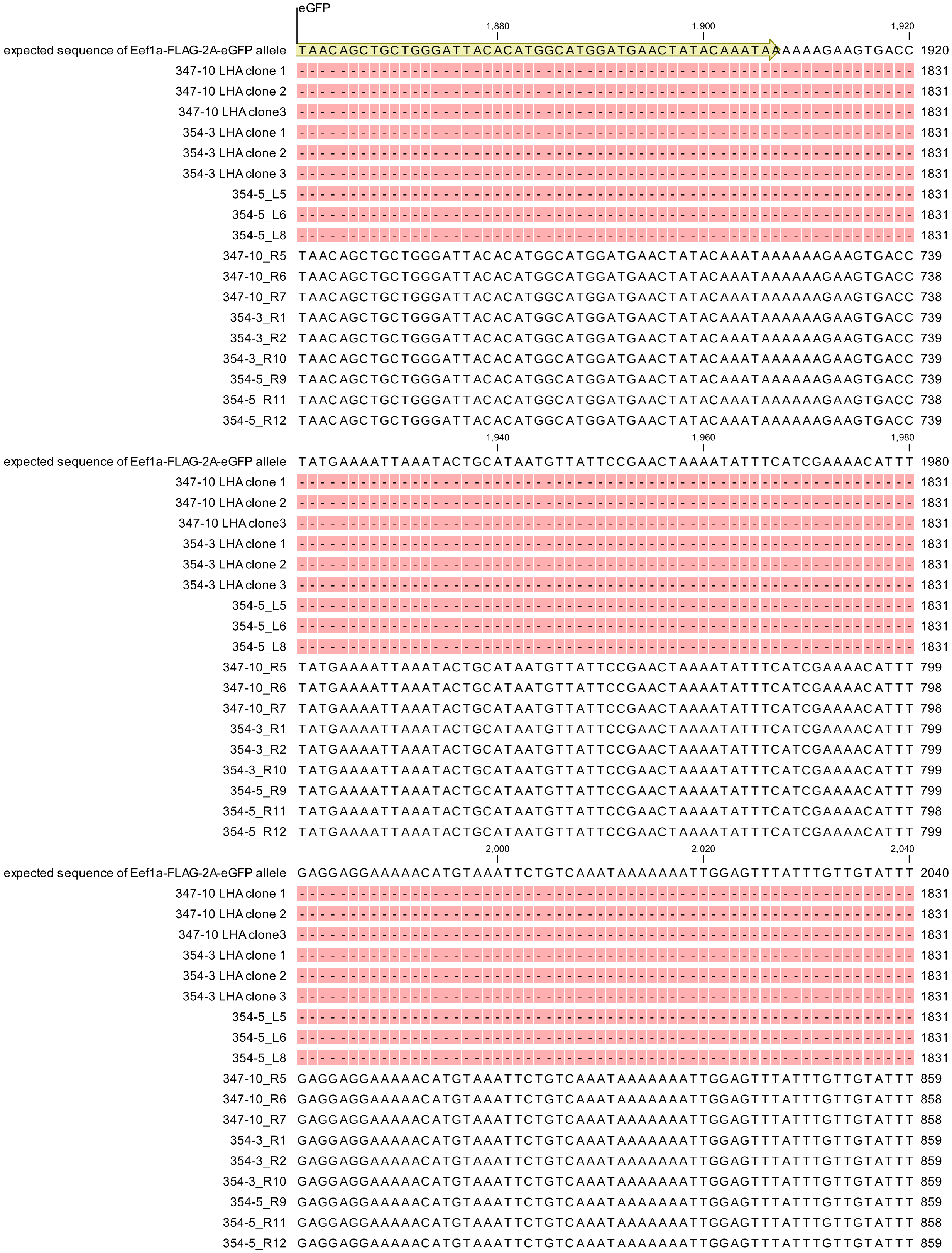
expected sequence of Eef1a-FLAG-2A-eGFP allele	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
347-10 LHA clone 1	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
347-10 LHA clone 2	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
347-10 LHA clone3	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
354-3 LHA clone 1	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
354-3 LHA clone 2	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
354-3 LHA clone 3	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
354-5_L5	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
354-5_L6	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
354-5_L8	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	1320
347-10_R5	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	139
347-10_R6	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	138
347-10_R7	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	138
354-3_R1	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	139
354-3_R2	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	139
354-3_R10	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	139
354-5_R9	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	139
354-5_R11	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	138
354-5_R12	GGCACAAATTTTCTGTCAGTGGAGAGGGTGAAGGTGATGCAACATACGGAAAACTTACCC	139

```
                                               eGFP
                                                                  1,340               1,360               1,380
expected sequence of Eef1a-FLAG-2A-eGFP allele TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                             347-10 LHA clone 1 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                             347-10 LHA clone 2 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                              347-10 LHA clone3 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                              354-3 LHA clone 1 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                              354-3 LHA clone 2 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                              354-3 LHA clone 3 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                                       354-5_L5 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                                       354-5_L6 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                                       354-5_L8 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 1380
                                      347-10_R5 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 199
                                      347-10_R6 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 198
                                      347-10_R7 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 198
                                       354-3_R1 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 199
                                       354-3_R2 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 199
                                      354-3_R10 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 199
                                       354-5_R9 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 199
                                      354-5_R11 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 198
                                      354-5_R12 TTAAATTTATTTGCACTACTGGAAAACTACCTGTTCCATGGCCAACACTTGTCACTACTT 199
                                               eGFP
                                                                  1,400               1,420               1,440
expected sequence of Eef1a-FLAG-2A-eGFP allele TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                             347-10 LHA clone 1 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                             347-10 LHA clone 2 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                              347-10 LHA clone3 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                              354-3 LHA clone 1 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                              354-3 LHA clone 2 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                              354-3 LHA clone 3 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                                       354-5_L5 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                                       354-5_L6 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                                       354-5_L8 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 1440
                                      347-10_R5 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 259
                                      347-10_R6 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 258
                                      347-10_R7 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 258
                                       354-3_R1 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 259
                                       354-3_R2 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 259
                                      354-3_R10 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 259
                                       354-5_R9 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 259
                                      354-5_R11 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGACTTTT 258
                                      354-5_R12 TCTGTTATGGTGTTCAATGCTTTTCAAGATACCCAGATCATATGAAACGGCATGAcTTTT 259
                                               eGFP
                                                                  1,460               1,480               1,500
expected sequence of Eef1a-FLAG-2A-eGFP allele TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                             347-10 LHA clone 1 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                             347-10 LHA clone 2 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                              347-10 LHA clone3 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                              354-3 LHA clone 1 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                              354-3 LHA clone 2 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                              354-3 LHA clone 3 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                                       354-5_L5 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                                       354-5_L6 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                                       354-5_L8 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 1500
                                      347-10_R5 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 319
                                      347-10_R6 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 318
                                      347-10_R7 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 318
                                       354-3_R1 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 319
                                       354-3_R2 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 319
                                      354-3_R10 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 319
                                       354-5_R9 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 319
                                      354-5_R11 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 318
                                      354-5_R12 TCAAGAGTGCCATGCCCGAAGGTTATGTACAGGAAAGAACTATATTTTTCAAAGATGACG 319
```

```
                                              eGFP
                                                                1,520                 1,540                 1,560
expected sequence of Eef1a-FLAG-2A-eGFP allele GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                           347-10 LHA clone 1 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                           347-10 LHA clone 2 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                            347-10 LHA clone3 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                            354-3 LHA clone 1 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                            354-3 LHA clone 2 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                            354-3 LHA clone 3 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                                     354-5_L5 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                                     354-5_L6 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                                     354-5_L8 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 1560
                                    347-10_R5 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 379
                                    347-10_R6 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 378
                                    347-10_R7 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 378
                                     354-3_R1 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 379
                                     354-3_R2 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 379
                                    354-3_R10 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 379
                                     354-5_R9 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 379
                                    354-5_R11 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 378
                                    354-5_R12 GGAACTACAAGACACGTGCTGAAGTCAAGTTTGAAGGTGATACCCTTGTTAATAGAATCG 379
                                              eGFP
                                                                1,580                 1,600                 1,620
expected sequence of Eef1a-FLAG-2A-eGFP allele AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                           347-10 LHA clone 1 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                           347-10 LHA clone 2 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                            347-10 LHA clone3 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                            354-3 LHA clone 1 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                            354-3 LHA clone 2 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                            354-3 LHA clone 3 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                                     354-5_L5 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                                     354-5_L6 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                                     354-5_L8 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 1620
                                    347-10_R5 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 439
                                    347-10_R6 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 438
                                    347-10_R7 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 438
                                     354-3_R1 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 439
                                     354-3_R2 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 439
                                    354-3_R10 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 439
                                     354-5_R9 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 439
                                    354-5_R11 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 438
                                    354-5_R12 AGTTAAAAGGTATTGATTTTAAAGAAGATGGAAACATTCTTGGACACAAATTGGAATACA 439
                                              eGFP
                                                                1,640                 1,660                 1,680
expected sequence of Eef1a-FLAG-2A-eGFP allele ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                           347-10 LHA clone 1 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                           347-10 LHA clone 2 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                            347-10 LHA clone3 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                            354-3 LHA clone 1 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                            354-3 LHA clone 2 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                            354-3 LHA clone 3 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                                     354-5_L5 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                                     354-5_L6 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                                     354-5_L8 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 1680
                                    347-10_R5 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 499
                                    347-10_R6 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 498
                                    347-10_R7 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 498
                                     354-3_R1 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 499
                                     354-3_R2 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 499
                                    354-3_R10 ACTATAACTCACGCAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 499
                                     354-5_R9 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 499
                                    354-5_R11 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 498
                                    354-5_R12 ACTATAACTCACACAATGTATACATCATGGCAGACAAACAAAAGAATGGAATCAAAGTTA 499
```

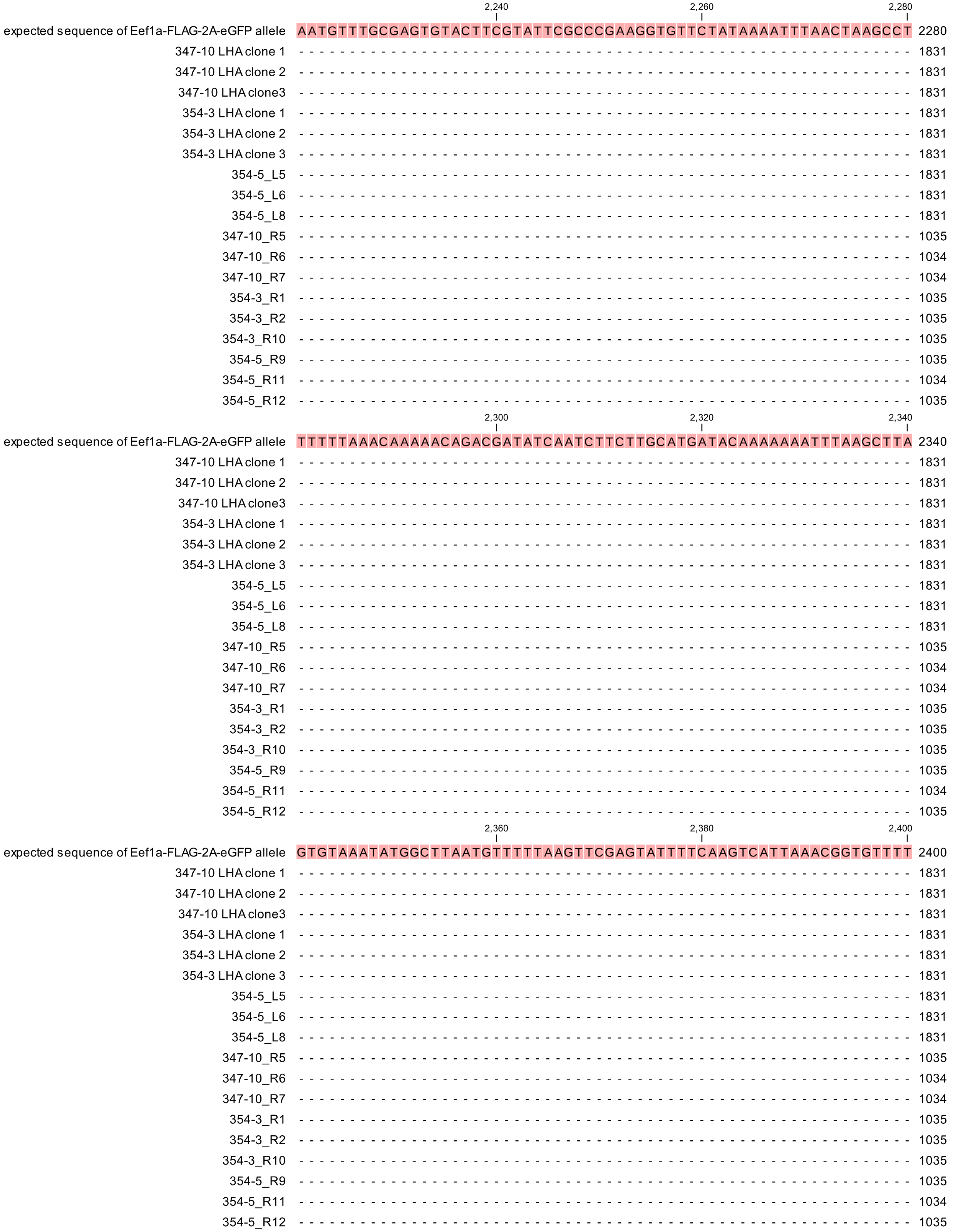


```
expected sequence of Eef1a-FLAG-2A-eGFP allele ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                             347-10 LHA clone 1 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                             347-10 LHA clone 2 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                              347-10 LHA clone3 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                              354-3 LHA clone 1 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                              354-3 LHA clone 2 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                              354-3 LHA clone 3 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                                       354-5_L5 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                                       354-5_L6 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                                       354-5_L8 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 1740
                                      347-10_R5 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 559
                                      347-10_R6 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 558
                                      347-10_R7 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 558
                                       354-3_R1 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 559
                                       354-3_R2 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 559
                                      354-3_R10 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 559
                                       354-5_R9 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 559
                                      354-5_R11 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 558
                                      354-5_R12 ACTTCAAAATTAGACACAACATTGAAGATGGAAGCGTTCAACTAGCAGACCATTATCAAC 559

expected sequence of Eef1a-FLAG-2A-eGFP allele AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                             347-10 LHA clone 1 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                             347-10 LHA clone 2 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                              347-10 LHA clone3 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                              354-3 LHA clone 1 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                              354-3 LHA clone 2 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                              354-3 LHA clone 3 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                                       354-5_L5 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                                       354-5_L6 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                                       354-5_L8 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 1800
                                      347-10_R5 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 619
                                      347-10_R6 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 618
                                      347-10_R7 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 618
                                       354-3_R1 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 619
                                       354-3_R2 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 619
                                      354-3_R10 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 619
                                       354-5_R9 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 619
                                      354-5_R11 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 618
                                      354-5_R12 AAAATACTCCAATTGGCGATGGCCCTGTCCTTTTACCAGACAACCATTACCTGTCCACAC 619

expected sequence of Eef1a-FLAG-2A-eGFP allele AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 1860
                             347-10 LHA clone 1 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                             347-10 LHA clone 2 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                              347-10 LHA clone3 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                              354-3 LHA clone 1 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                              354-3 LHA clone 2 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                              354-3 LHA clone 3 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                                       354-5_L5 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                                       354-5_L6 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                                       354-5_L8 AATCTGCCCTTTCGAAAGATCCCAACGAAAA----------------------------- 1831
                                      347-10_R5 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 679
                                      347-10_R6 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 678
                                      347-10_R7 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 678
                                       354-3_R1 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 679
                                       354-3_R2 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 679
                                      354-3_R10 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 679
                                       354-5_R9 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 679
                                      354-5_R11 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 678
                                      354-5_R12 AATCTGCCCTTTCGAAAGATCCCAACGAAAAGAGAGACCACATGGTCCTTCTTGAGTTTG 679
```



```
                                                                   1,880               1,900               1,920
expected sequence of Eef1a-FLAG-2A-eGFP allele  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 1920
                           347-10 LHA clone 1  ------------------------------------------------------------ 1831
                           347-10 LHA clone 2  ------------------------------------------------------------ 1831
                            347-10 LHA clone3  ------------------------------------------------------------ 1831
                            354-3 LHA clone 1  ------------------------------------------------------------ 1831
                            354-3 LHA clone 2  ------------------------------------------------------------ 1831
                            354-3 LHA clone 3  ------------------------------------------------------------ 1831
                                     354-5_L5  ------------------------------------------------------------ 1831
                                     354-5_L6  ------------------------------------------------------------ 1831
                                     354-5_L8  ------------------------------------------------------------ 1831
                                   347-10_R5  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 739
                                   347-10_R6  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 738
                                   347-10_R7  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 738
                                    354-3_R1  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 739
                                    354-3_R2  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 739
                                   354-3_R10  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 739
                                    354-5_R9  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 739
                                   354-5_R11  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 738
                                   354-5_R12  TAACAGCTGCTGGGATTACACATGGCATGGATGAACTATACAAATAAAAAAGAAGTGACC 739
                                                                   1,940               1,960               1,980
expected sequence of Eef1a-FLAG-2A-eGFP allele  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 1980
                           347-10 LHA clone 1  ------------------------------------------------------------ 1831
                           347-10 LHA clone 2  ------------------------------------------------------------ 1831
                            347-10 LHA clone3  ------------------------------------------------------------ 1831
                            354-3 LHA clone 1  ------------------------------------------------------------ 1831
                            354-3 LHA clone 2  ------------------------------------------------------------ 1831
                            354-3 LHA clone 3  ------------------------------------------------------------ 1831
                                     354-5_L5  ------------------------------------------------------------ 1831
                                     354-5_L6  ------------------------------------------------------------ 1831
                                     354-5_L8  ------------------------------------------------------------ 1831
                                   347-10_R5  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 799
                                   347-10_R6  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 798
                                   347-10_R7  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 798
                                    354-3_R1  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 799
                                    354-3_R2  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 799
                                   354-3_R10  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 799
                                    354-5_R9  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 799
                                   354-5_R11  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 798
                                   354-5_R12  TATGAAAATTAAATACTGCATAATGTTATTCCGAACTAAAATATTTCATCGAAAACATTT 799
                                                                   2,000               2,020               2,040
expected sequence of Eef1a-FLAG-2A-eGFP allele  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 2040
                           347-10 LHA clone 1  ------------------------------------------------------------ 1831
                           347-10 LHA clone 2  ------------------------------------------------------------ 1831
                            347-10 LHA clone3  ------------------------------------------------------------ 1831
                            354-3 LHA clone 1  ------------------------------------------------------------ 1831
                            354-3 LHA clone 2  ------------------------------------------------------------ 1831
                            354-3 LHA clone 3  ------------------------------------------------------------ 1831
                                     354-5_L5  ------------------------------------------------------------ 1831
                                     354-5_L6  ------------------------------------------------------------ 1831
                                     354-5_L8  ------------------------------------------------------------ 1831
                                   347-10_R5  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 859
                                   347-10_R6  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 858
                                   347-10_R7  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 858
                                    354-3_R1  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 859
                                    354-3_R2  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 859
                                   354-3_R10  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 859
                                    354-5_R9  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 859
                                   354-5_R11  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 858
                                   354-5_R12  GAGGAGGAAAAACATGTAAATTCTGTCAAATAAAAAAATTGGAGTTTATTTGTTGTATTT 859
```

```
                                                                2,060               2,080             2,100
                                                                  |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 2100
                            347-10 LHA clone 1 ------------------------------------------------------------ 1831
                            347-10 LHA clone 2 ------------------------------------------------------------ 1831
                             347-10 LHA clone3 ------------------------------------------------------------ 1831
                             354-3 LHA clone 1 ------------------------------------------------------------ 1831
                             354-3 LHA clone 2 ------------------------------------------------------------ 1831
                             354-3 LHA clone 3 ------------------------------------------------------------ 1831
                                      354-5_L5 ------------------------------------------------------------ 1831
                                      354-5_L6 ------------------------------------------------------------ 1831
                                      354-5_L8 ------------------------------------------------------------ 1831
                                     347-10_R5 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 919
                                     347-10_R6 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 918
                                     347-10_R7 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 918
                                      354-3_R1 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 919
                                      354-3_R2 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 919
                                     354-3_R10 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 919
                                      354-5_R9 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 919
                                     354-5_R11 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 918
                                     354-5_R12 TTTTCACTAAATTAGTGTGGGCAGTGAATTCCATTTAGCTGATTAAAATTCATTTTGCGG 919
                                                                2,120               2,140             2,160
                                                                  |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 2160
                            347-10 LHA clone 1 ------------------------------------------------------------ 1831
                            347-10 LHA clone 2 ------------------------------------------------------------ 1831
                             347-10 LHA clone3 ------------------------------------------------------------ 1831
                             354-3 LHA clone 1 ------------------------------------------------------------ 1831
                             354-3 LHA clone 2 ------------------------------------------------------------ 1831
                             354-3 LHA clone 3 ------------------------------------------------------------ 1831
                                      354-5_L5 ------------------------------------------------------------ 1831
                                      354-5_L6 ------------------------------------------------------------ 1831
                                      354-5_L8 ------------------------------------------------------------ 1831
                                     347-10_R5 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 979
                                     347-10_R6 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 978
                                     347-10_R7 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 978
                                      354-3_R1 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 979
                                      354-3_R2 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 979
                                     354-3_R10 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 979
                                      354-5_R9 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 979
                                     354-5_R11 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 978
                                     354-5_R12 CTAAATATTGTCCCGATTTGCGGTCACCAATTAATAGTGCGACCTTACAGAAAAATTTTC 979
                                                                2,180               2,200             2,220
                                                                  |                   |                   |
expected sequence of Eef1a-FLAG-2A-eGFP allele TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGGAATT 2220
                            347-10 LHA clone 1 ------------------------------------------------------------ 1831
                            347-10 LHA clone 2 ------------------------------------------------------------ 1831
                             347-10 LHA clone3 ------------------------------------------------------------ 1831
                             354-3 LHA clone 1 ------------------------------------------------------------ 1831
                             354-3 LHA clone 2 ------------------------------------------------------------ 1831
                             354-3 LHA clone 3 ------------------------------------------------------------ 1831
                                      354-5_L5 ------------------------------------------------------------ 1831
                                      354-5_L6 ------------------------------------------------------------ 1831
                                      354-5_L8 ------------------------------------------------------------ 1831
                                     347-10_R5 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1035
                                     347-10_R6 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1034
                                     347-10_R7 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1034
                                      354-3_R1 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1035
                                      354-3_R2 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1035
                                     354-3_R10 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1035
                                      354-5_R9 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1035
                                     354-5_R11 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1034
                                     354-5_R12 TGTCGCGCTAAATTGCAAATGCACCTGGATAAAAAAGCGCGAAGAAAATAAAGCGG---- 1035
```



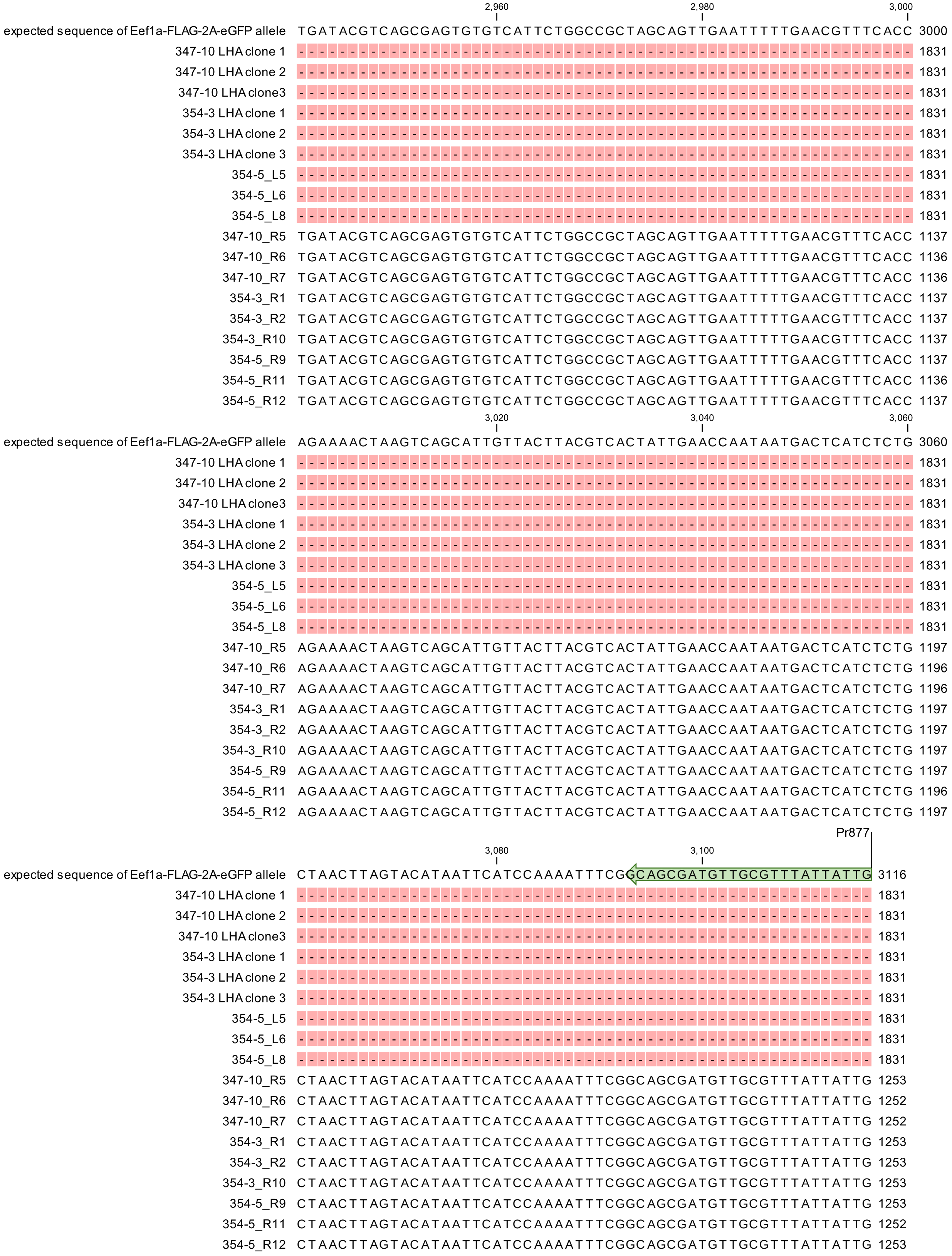
	2,240 · 2,260 · 2,280	
expected sequence of Eef1a-FLAG-2A-eGFP allele	AATGTTTGCGAGTGTACTTCGTATTCGCCCGAAGGTGTTCTATAAAATTTAACTAAGCCT	2280
347-10 LHA clone 1	--	1831
347-10 LHA clone 2	--	1831
347-10 LHA clone3	--	1831
354-3 LHA clone 1	--	1831
354-3 LHA clone 2	--	1831
354-3 LHA clone 3	--	1831
354-5_L5	--	1831
354-5_L6	--	1831
354-5_L8	--	1831
347-10_R5	--	1035
347-10_R6	--	1034
347-10_R7	--	1034
354-3_R1	--	1035
354-3_R2	--	1035
354-3_R10	--	1035
354-5_R9	--	1035
354-5_R11	--	1034
354-5_R12	--	1035
	2,300 · 2,320 · 2,340	
expected sequence of Eef1a-FLAG-2A-eGFP allele	TTTTTAAACAAAAACAGACGATATCAATCTTCTTGCATGATACAAAAAAATTTAAGCTTA	2340
347-10 LHA clone 1	--	1831
347-10 LHA clone 2	--	1831
347-10 LHA clone3	--	1831
354-3 LHA clone 1	--	1831
354-3 LHA clone 2	--	1831
354-3 LHA clone 3	--	1831
354-5_L5	--	1831
354-5_L6	--	1831
354-5_L8	--	1831
347-10_R5	--	1035
347-10_R6	--	1034
347-10_R7	--	1034
354-3_R1	--	1035
354-3_R2	--	1035
354-3_R10	--	1035
354-5_R9	--	1035
354-5_R11	--	1034
354-5_R12	--	1035
	2,360 · 2,380 · 2,400	
expected sequence of Eef1a-FLAG-2A-eGFP allele	GTGTAAATATGGCTTAATGTTTTTAAGTTCGAGTATTTTCAAGTCATTAAACGGTGTTTT	2400
347-10 LHA clone 1	--	1831
347-10 LHA clone 2	--	1831
347-10 LHA clone3	--	1831
354-3 LHA clone 1	--	1831
354-3 LHA clone 2	--	1831
354-3 LHA clone 3	--	1831
354-5_L5	--	1831
354-5_L6	--	1831
354-5_L8	--	1831
347-10_R5	--	1035
347-10_R6	--	1034
347-10_R7	--	1034
354-3_R1	--	1035
354-3_R2	--	1035
354-3_R10	--	1035
354-5_R9	--	1035
354-5_R11	--	1034
354-5_R12	--	1035

```
                                                                      2,420                    2,440                    2,460
                                                                          |                        |                        |
expected sequence of Eef1a-FLAG-2A-eGFP allele  ACTATGTGAATATCAACTGTTTGCTCACACAATTATCTTCAGTAATAATTTTTACTGCTT  2460
                          347-10 LHA clone 1  ------------------------------------------------------------  1831
                          347-10 LHA clone 2  ------------------------------------------------------------  1831
                           347-10 LHA clone3  ------------------------------------------------------------  1831
                           354-3 LHA clone 1  ------------------------------------------------------------  1831
                           354-3 LHA clone 2  ------------------------------------------------------------  1831
                           354-3 LHA clone 3  ------------------------------------------------------------  1831
                                    354-5_L5  ------------------------------------------------------------  1831
                                    354-5_L6  ------------------------------------------------------------  1831
                                    354-5_L8  ------------------------------------------------------------  1831
                                   347-10_R5  ------------------------------------------------------------  1035
                                   347-10_R6  ------------------------------------------------------------  1034
                                   347-10_R7  ------------------------------------------------------------  1034
                                    354-3_R1  ------------------------------------------------------------  1035
                                    354-3_R2  ------------------------------------------------------------  1035
                                   354-3_R10  ------------------------------------------------------------  1035
                                    354-5_R9  ------------------------------------------------------------  1035
                                   354-5_R11  ------------------------------------------------------------  1034
                                   354-5_R12  ------------------------------------------------------------  1035
                                                                      2,480                    2,500                    2,520
                                                                          |                        |                        |
expected sequence of Eef1a-FLAG-2A-eGFP allele  AATTATGTTTAAGTTGATGATGATTGCGGTACCGTGTTTGAGTAGCACATCTTGTCTAAT  2520
                          347-10 LHA clone 1  ------------------------------------------------------------  1831
                          347-10 LHA clone 2  ------------------------------------------------------------  1831
                           347-10 LHA clone3  ------------------------------------------------------------  1831
                           354-3 LHA clone 1  ------------------------------------------------------------  1831
                           354-3 LHA clone 2  ------------------------------------------------------------  1831
                           354-3 LHA clone 3  ------------------------------------------------------------  1831
                                    354-5_L5  ------------------------------------------------------------  1831
                                    354-5_L6  ------------------------------------------------------------  1831
                                    354-5_L8  ------------------------------------------------------------  1831
                                   347-10_R5  ------------------------------------------------------------  1035
                                   347-10_R6  ------------------------------------------------------------  1034
                                   347-10_R7  ------------------------------------------------------------  1034
                                    354-3_R1  ------------------------------------------------------------  1035
                                    354-3_R2  ------------------------------------------------------------  1035
                                   354-3_R10  ------------------------------------------------------------  1035
                                    354-5_R9  ------------------------------------------------------------  1035
                                   354-5_R11  ------------------------------------------------------------  1034
                                   354-5_R12  ------------------------------------------------------------  1035
                                                                      2,540                    2,560                    2,580
                                                                          |                        |                        |
expected sequence of Eef1a-FLAG-2A-eGFP allele  AACAGATACCATTTCTAATTGTATGGTAGGCATGCTACCGAACATCAAAACGTTGCTCAC  2580
                          347-10 LHA clone 1  ------------------------------------------------------------  1831
                          347-10 LHA clone 2  ------------------------------------------------------------  1831
                           347-10 LHA clone3  ------------------------------------------------------------  1831
                           354-3 LHA clone 1  ------------------------------------------------------------  1831
                           354-3 LHA clone 2  ------------------------------------------------------------  1831
                           354-3 LHA clone 3  ------------------------------------------------------------  1831
                                    354-5_L5  ------------------------------------------------------------  1831
                                    354-5_L6  ------------------------------------------------------------  1831
                                    354-5_L8  ------------------------------------------------------------  1831
                                   347-10_R5  ------------------------------------------------------------  1035
                                   347-10_R6  ------------------------------------------------------------  1034
                                   347-10_R7  ------------------------------------------------------------  1034
                                    354-3_R1  ------------------------------------------------------------  1035
                                    354-3_R2  ------------------------------------------------------------  1035
                                   354-3_R10  ------------------------------------------------------------  1035
                                    354-5_R9  ------------------------------------------------------------  1035
                                   354-5_R11  ------------------------------------------------------------  1034
                                   354-5_R12  ------------------------------------------------------------  1035
```

```
                                                                   2,600               2,620               2,640
expected sequence of Eef1a-FLAG-2A-eGFP allele  ACGTCGGTTATCCAGTTACAAGGCAAGATGTACTAATCGGCCACGGTATTTCGGTATCCA 2640
                             347-10 LHA clone 1  ------------------------------------------------------------ 1831
                             347-10 LHA clone 2  ------------------------------------------------------------ 1831
                              347-10 LHA clone3  ------------------------------------------------------------ 1831
                              354-3 LHA clone 1  ------------------------------------------------------------ 1831
                              354-3 LHA clone 2  ------------------------------------------------------------ 1831
                              354-3 LHA clone 3  ------------------------------------------------------------ 1831
                                       354-5_L5  ------------------------------------------------------------ 1831
                                       354-5_L6  ------------------------------------------------------------ 1831
                                       354-5_L8  ------------------------------------------------------------ 1831
                                      347-10_R5  ------------------------------------------------------------ 1035
                                      347-10_R6  ------------------------------------------------------------ 1034
                                      347-10_R7  ------------------------------------------------------------ 1034
                                       354-3_R1  ------------------------------------------------------------ 1035
                                       354-3_R2  ------------------------------------------------------------ 1035
                                      354-3_R10  ------------------------------------------------------------ 1035
                                       354-5_R9  ------------------------------------------------------------ 1035
                                      354-5_R11  ------------------------------------------------------------ 1034
                                      354-5_R12  ------------------------------------------------------------ 1035
                                                                   2,660               2,680               2,700
expected sequence of Eef1a-FLAG-2A-eGFP allele  AGAATAAAACGTGTGTGATTGCGTATATTAGCGAACATGTGCAACAAGATGTTAAAAACA 2700
                             347-10 LHA clone 1  ------------------------------------------------------------ 1831
                             347-10 LHA clone 2  ------------------------------------------------------------ 1831
                              347-10 LHA clone3  ------------------------------------------------------------ 1831
                              354-3 LHA clone 1  ------------------------------------------------------------ 1831
                              354-3 LHA clone 2  ------------------------------------------------------------ 1831
                              354-3 LHA clone 3  ------------------------------------------------------------ 1831
                                       354-5_L5  ------------------------------------------------------------ 1831
                                       354-5_L6  ------------------------------------------------------------ 1831
                                       354-5_L8  ------------------------------------------------------------ 1831
                                      347-10_R5  ------------------------------------------------------------ 1035
                                      347-10_R6  ------------------------------------------------------------ 1034
                                      347-10_R7  ------------------------------------------------------------ 1034
                                       354-3_R1  ------------------------------------------------------------ 1035
                                       354-3_R2  ------------------------------------------------------------ 1035
                                      354-3_R10  ------------------------------------------------------------ 1035
                                       354-5_R9  ------------------------------------------------------------ 1035
                                      354-5_R11  ------------------------------------------------------------ 1034
                                      354-5_R12  ------------------------------------------------------------ 1035
                                                                   2,720               2,740               2,760
expected sequence of Eef1a-FLAG-2A-eGFP allele  CCTGTTAACTAATAGTCGTTACCATAGTGACTAATATTAATGCAAATGTAAAAGAATTCC 2760
                             347-10 LHA clone 1  ------------------------------------------------------------ 1831
                             347-10 LHA clone 2  ------------------------------------------------------------ 1831
                              347-10 LHA clone3  ------------------------------------------------------------ 1831
                              354-3 LHA clone 1  ------------------------------------------------------------ 1831
                              354-3 LHA clone 2  ------------------------------------------------------------ 1831
                              354-3 LHA clone 3  ------------------------------------------------------------ 1831
                                       354-5_L5  ------------------------------------------------------------ 1831
                                       354-5_L6  ------------------------------------------------------------ 1831
                                       354-5_L8  ------------------------------------------------------------ 1831
                                      347-10_R5  ------------------------------------------------------------ 1035
                                      347-10_R6  ------------------------------------------------------------ 1034
                                      347-10_R7  ------------------------------------------------------------ 1034
                                       354-3_R1  ------------------------------------------------------------ 1035
                                       354-3_R2  ------------------------------------------------------------ 1035
                                      354-3_R10  ------------------------------------------------------------ 1035
                                       354-5_R9  ------------------------------------------------------------ 1035
                                      354-5_R11  ------------------------------------------------------------ 1034
                                      354-5_R12  ------------------------------------------------------------ 1035
```

Figure S5 - Page
16

```
                                                            2,780               2,800                     2,820
                                                              |                   |                         |
expected sequence of Eef1a-FLAG-2A-eGFP allele  GTAAAAAACTTTCAAAGTTCATTTTTAGGAGAGTTATTTGACAAAACATAATTTTTGCAA  2820
                            347-10 LHA clone 1  ------------------------------------------------------------  1831
                            347-10 LHA clone 2  ------------------------------------------------------------  1831
                             347-10 LHA clone3  ------------------------------------------------------------  1831
                             354-3 LHA clone 1  ------------------------------------------------------------  1831
                             354-3 LHA clone 2  ------------------------------------------------------------  1831
                             354-3 LHA clone 3  ------------------------------------------------------------  1831
                                      354-5_L5  ------------------------------------------------------------  1831
                                      354-5_L6  ------------------------------------------------------------  1831
                                      354-5_L8  ------------------------------------------------------------  1831
                                     347-10_R5  ------------------------------------------------------------  1035
                                     347-10_R6  ------------------------------------------------------------  1034
                                     347-10_R7  ------------------------------------------------------------  1034
                                      354-3_R1  ------------------------------------------------------------  1035
                                      354-3_R2  ------------------------------------------------------------  1035
                                     354-3_R10  ------------------------------------------------------------  1035
                                      354-5_R9  ------------------------------------------------------------  1035
                                     354-5_R11  ------------------------------------------------------------  1034
                                     354-5_R12  ------------------------------------------------------------  1035
                                                            2,840               2,860                     2,880
                                                              |                   |                         |
expected sequence of Eef1a-FLAG-2A-eGFP allele  TTAATTATTCTTACGCTTCATTGAAGATCATACTTAATAATTTTTTTAATAGTAATTATT  2880
                            347-10 LHA clone 1  ------------------------------------------------------------  1831
                            347-10 LHA clone 2  ------------------------------------------------------------  1831
                             347-10 LHA clone3  ------------------------------------------------------------  1831
                             354-3 LHA clone 1  ------------------------------------------------------------  1831
                             354-3 LHA clone 2  ------------------------------------------------------------  1831
                             354-3 LHA clone 3  ------------------------------------------------------------  1831
                                      354-5_L5  ------------------------------------------------------------  1831
                                      354-5_L6  ------------------------------------------------------------  1831
                                      354-5_L8  ------------------------------------------------------------  1831
                                     347-10_R5  ------------------------------------------------------------  1035
                                     347-10_R6  ------------------------------------------------------------  1034
                                     347-10_R7  ------------------------------------------------------------  1034
                                      354-3_R1  ------------------------------------------------------------  1035
                                      354-3_R2  ------------------------------------------------------------  1035
                                     354-3_R10  ------------------------------------------------------------  1035
                                      354-5_R9  ------------------------------------------------------------  1035
                                     354-5_R11  ------------------------------------------------------------  1034
                                     354-5_R12  ------------------------------------------------------------  1035
                                                            2,900               2,920                     2,940
                                                              |                   |                         |
expected sequence of Eef1a-FLAG-2A-eGFP allele  AGTTATTCTTGAAAATTGGTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  2940
                            347-10 LHA clone 1  ------------------------------------------------------------  1831
                            347-10 LHA clone 2  ------------------------------------------------------------  1831
                             347-10 LHA clone3  ------------------------------------------------------------  1831
                             354-3 LHA clone 1  ------------------------------------------------------------  1831
                             354-3 LHA clone 2  ------------------------------------------------------------  1831
                             354-3 LHA clone 3  ------------------------------------------------------------  1831
                                      354-5_L5  ------------------------------------------------------------  1831
                                      354-5_L6  ------------------------------------------------------------  1831
                                      354-5_L8  ------------------------------------------------------------  1831
                                     347-10_R5  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1077
                                     347-10_R6  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1076
                                     347-10_R7  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1076
                                      354-3_R1  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1077
                                      354-3_R2  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1077
                                     354-3_R10  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1077
                                      354-5_R9  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1077
                                     354-5_R11  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1076
                                     354-5_R12  ------------------GTGTGGACACTCAAAACGCGTCGAATGCCCCTCTATTTTTGC  1077
```



S5 Fig. Alignment of upstream and downstream integration sites from *Eef1a*$^{FLAG\text{-}P2A\text{-}eGFP}$ colonies. Nucleotide alignment of the regions encoding the up- and downstream integration sites from the founder colony, 347-10, and two transgenic offspring, 354-3 and 354-5. Three cloned amplicons were sequenced for each animal at each site. Primer binding sites are indicated in green on the expected sequence. Differences are highlighted in red boxes. Note that the regions that do not overlap between the upstream and downstream sequences are shown as gaps at the beginning and end of the alignment.