

cagtgagcaaactgtcgttacagtgttgcgggataaaaatacatataaagaaccaagtatgaaacacgtaattcaatgttgcattacgt
tgcagcgtgaaaagaaaatatgtacttatgtattacatgccctcattttattagtaatttttaagccatgaaaaataaaaacgtgaaccaca
atttgatttttagacttagg

Edited sequence (left and right of the deletion with a different color):

ttgatagaaggatataccatataaaattcatatgttcagaaaactcgagattcaatcacaacgattttctatggggaatgagagcaaga
aaggaaattatgacaaaataataaacaccatcaaattgatcaaagaagagtgaagttgcaaatagtatggagagattcttgaaagt
gagtttcagatattttgatgtcgtttgaaaattgtaacagaatggaatcagaacatcttcgtttatattggaaattttctgtaaactaaaacc
tcaaaaaacaaattatgttaaaattttattctcaaaacactagtagttgctataaaagttgaagttgaaaggaattgacataaaatgctcaa
actccaataattttttgataggttaaatttagattgaaaaattaaggtgttgcctatttccgaattaatgaattcgatttgaagttttactggc
ccaacttttccaaattccaaatatttttcagggcaatcacgaaattcaactccggtcttgatgaagaaacgatgatgaggttacgaaat
gaaacgatgaatctagactaaaacgaattgtgttttgatttcttttttaaaagtagtttcagatcttccagatactattcgtaatagttgt
ttccagttttattcaaaacagacaaagtcaagttgacaattagttctccggtgactttcggagggaatattcggctctcacttgaatgta
gatcgataacatcgataacatttgaaatattaattctgaattttttgcatttaattgtgtagtacggaatgttgacttttcaaatttgcaaa
aatgtgccacctgcctaaacgagtgaaaagaaggaccctccggggtgtaagtcgcgattcgcaaatctcgtaaaaagagaaac
gacaaaagagaaaaagcacttccgcatacctctgtttgattgtaacataaaagtcgtttgttccgtatagtttaaaatttttgaactctcc
taccttatgaaatgaattcaattctactacaattgagcatgtgtgaaagtttatagtaaccgaaaaactaccattgtattttgctcaagtcaa
aatctagtaagatttctagtaaaagctccatcttaatgataagctttcaaaaatctgcttccactcggtcggaggcgcctctcaccgcctc
gctcccagtgagcaaactgtcgttacagtgttgcgggataaaaatacatataaagaaccaagtatgaaacacgtaattcaatgttgc
attacgttgcagcgtgaaaagaaaatatgtacttatgtattacatgccctcattttattagtaatttttaagccatgaaaaataaaaacgtga
accacaatttgatttttagacttagg

~~egtgetattactaegataatecetaaaatattacaanteateccatataagataaagtcctetagtffctctctteteceegatetetettegtttte~~
~~etogagagacttatgtgeccatattggcattcageegtcceceggtecegectattgttttttegtcgettttttttggctencaatttttgg~~
~~gaetfctcagtttctagacaaaagagactccacattagaagctctgctctagggcageaaaactcattagtttttgcacaacaagcctccgcaga~~
~~caataacacgeaaaacacattacaaeagcagatataaataatattctcagtgatagattagtttccaaagaatggattttgatttcaegg~~
~~atatctcagatgaggatcataactatgttacaaaggtttgttttaaaagaactattctatataaacggaaagtctggaaatcacaagaggac~~
~~gggaaatgaattttctttttttgataaaatttttatttccaggagacatcgtctgcctctctcgttgcctcacacaatagagatggagtt~~
~~ctggggtcagaaggttgggtgacatttttgggaaacttttcttgagaagttgggcctaataataatttttttaaaaagtttttgagccgaaa~~
~~atgtttcagaagacgatctattgagaaattaaagttgtggatatacggatccaaaaacatcagaatcagcgcagttcttgatactggagc~~
~~tcaagaacaacaatttaaaaaattataagttttccacaataatttcagagtttgttgtgcaccgaaggccttggaaaccggatgtgcacac~~
~~tggaaaacgtgtcggacaaggacatcccgcagatattgcaatgtgcatgctttacatcgataacgcactgtc gatgagagcattacag~~
~~gaaatgatgtcagcggatagtgatc atgtgagtttttttaattaaataatttttcgcatataatggaaagatacagtt~~

Edited sequence (left and right of the deletion with a different color and synonymous mutations are labelled in purple):

~~actataaatcccaaatctcagctcagtgaaatgctttaaaataaaaattaactcaaatcagagcagttttgaatttttcaactctcttcaaaa~~
~~atattaaacgcacgtaaattttgtattgaaggaaatatttactttactgcttgcaattgaaaatagatttctactttccacttataaaaatc~~
~~tcaaaaacctccttgcaataaatctaaaatatacccataatttccgttcgtttttctgctcttttgcctccgtttgtatttttttttgcgtttt~~
~~cccaagtggtaccagcacctctagttttttgtttacagatgcaaaaccagtgaaaaacggaacgaactgagtgagcagatataagaac~~
~~gaaaccgaccgaacattatcagatcgacgatcgacaacgatggccgacaaggaggagcagggaggagcgaacaggatgatgtct~~
~~ctttt**ctacgaacc**ggagacatcgtctgcct**ctc**gtgctgttgcctcacacaatagagatggagttctcgggtcagaaggttgggtgacat~~
~~ttttgggaaacttttcttgagaagttgggcctaataataatttttttaaaaagtttttgagccgaaaatgtttcagaagacgatctattgaga~~
~~aattaaagttgtggatatacggatccaaaaacatcagaatcagcgcagttcttgatactggagctcaagaacaacaatttaaaaaattata~~
~~agttttccacaataatttcagagtttgttgtgcaccgaaggccttggaaaccggatgtgcacactggaaaacgtgtcggacaaggacat~~
~~cccgcagatattgcaatgtgcatgctttacatcgataacgcactgtc gatgagagcattacaggaaatgatgtcagcggatagtgatca~~
~~tgtgagtttttttaattaaataatttttcgcatataatggaaagatacagtt~~

Strain: PHX217

Allele: *syb217*

Description: Deletion of *unc-68* exon 1.2

Wild type sequence (with deletion in double strikethrough):

aaactcatagtattttgccaacaagcatccgcagacaaatacacgcaaacacaattacaacgcagatataaatatattattcagtgatag
attagttagtccaagaaatggatttgatttaacggatateteagatgaggatcataactatgttaacaagggttttaaagaactattctat
attaacggaaagtctggaaatcacagaggacagaggaaatgaattcttttttgataaaatftttattccag

Edited sequence (left and right of the deletion with a different color):

aaactcatagtattttgccaacaagcatccgcagacaaatacacgcaaacacaattacaacgcagatataaatatattattcagtgatag
attagttagtccaagaaattaaagaactattctatattaaacggaaagtctggaaatcacagaggacagaggaaatgaattcttttttt
gataaaatftttattccag

Strain: PHX219

Allele: *syb219*

Description: Deletion of alternative *unc-68* exon 12.2

Wild type sequence (with deletion in double strikethrough):

tagatagattttaactgaaattatttatag~~cttcag~~ggatagtgatagaaggaaagaagaaaaagctgcacaa

Edited sequence (left and right of the deletion with a different color and synonymous mutations are labelled in purple):

tagatagattttaactgaaattatttatagggattcggatagaaggaaagaagaaaaagctgcacaa

Strain: PHX220

Allele: *syb220*

Description: Deletion of alternative *unc-68* exon 13

Wild type sequence (with deletion in double strikethrough):

agcttctccgctttctgtactttaagcacatccgattttcaatcaataatftttcaatttcaactaacttcaatttcagaagaagtctactggaact
 gccacatgatgagcgacaaattgctgaagacagtatgagagacttaacgatcgtcattctgagaaacaaagaaggagggtcttctaa
 gcaggctcagagattcaagtaatactcgcaaaaagtaagagtcattagaaaaatgtagatagatttactgaaattattatagcttcagg
 gatagtatagaaggaaagaagaaaaagctgcacaattgcgacaaatgaaggcaattcaagaagtttgatgcaggaagtcttgata
 cgtaacccttccaactggtcagaaggatgtattg~~ctttagtctttgaaagtcaaaaaataaaagatgaagaatggtaaaccaatgataa~~
~~tttgatttgactcaacagcagcagcttgcnaattttaataaaaaagtctctatcaaaaaetttagaacattateagctctccaatagctact~~
~~agaaaccttagtagtagaattattcagaagaagaaacagaagcagcagcctatttgggtcatgcaagaccaatttcagcagcagaat~~
~~acagtgctcgggtgagcagtaegeegeateagcctctctttcagatctttcctcaacattcttaccctttccatacctttctctgagcagatg~~
~~actegcattatcactcctttctctcctaccctcattcaaatcttaattctaatgaaaaacagctcaaaattgtagcttacttcaattttt~~
~~agcctctagcagatgccactatccggaccaggtcgacaattgacgatcaagagaagttctattaagaaaaacaaaaaggaaagaa~~
 ggtatattagaaagtagagattttcaagttactttttccaggccgaaatcgtcttgagaagatggaacgagagaagaaaggctcaa
 ttataccaatggatgctcagctagatgtgctccaagaaggagacgccatgcactgttcaccacaaggataaggttgatgaatactact
 acggtatcagaatcttccaggcaagatccatctcaagatgggttgatgggtcaccacacaataccactattataatgtcaactttgat
 ggaagtcaaggagtcagaaaaatgtagattctcagaagccgatcatcacggaact

Edited sequence (left and right of the deletion with a different color and synonymous mutations are labelled in purple):

agcttctccgctttctgtactttaagcacatccgattttcaatcaataatftttcaatttcaactaacttcaatttcagaagaagtctactggaact
 gccacatgatgagcgacaaattgctgaagacagtatgagagacttaacgatcgtcattctgagaaacaaagaaggagggtcttctaa
 gcaggctcagagattcaagtaatactcgcaaaaagtaagagtcattagaaaaatgtagatagatttactgaaattattatagcttcagg
 gatagtatagaaggaaagaagaaaaagctgcacaattgcgacaaatgaaggcaattcaagaagtttgatgcaggaagtcttgata
 cgtaacccttccaactggtcagaaggatgtactggcctttggcagatgccactatccggaccaggtcgacaattgacgatcaagag
 aagttctattaagaaaaacaaaaaggaaagaaggtatattagaaagtagagattttcaagttactttttccaggccgaaatcgtct
 tgagaagatggaacgagagaagaaaggctcaattatccaatggatgctcagctagatgtgctccaagaaggagacgccatgcact
 gttcaccacaaggataaggttgatgaatactactacggtatcagaatcttccaggcaagatccatctcaagatgggttgatgggtc
 accacacaataccactattataatgtcaactttgatggaagtcaaggagtcagaaaaatgtagattctcagaagccgatcatcacggaact

Strain: PHX471

Allele: *syb471*

Description: wrmScarlet (intron free) in frame upstream of *unc-68* exon 1.1

Wild type sequence:

```
tttgtaaaagcgctaacatgcaaatgttgattaatgaagtaagaaagctatactataaatcccaaatctcagctcagtgaatatgctttaa
aataaaaattaactcaaatcagagcagttttgaatttttcaactctctcaaaaatattaacgcacgttaattttgtattgaaggaaatatt
attcactttactgcttgcaacttgaaaatagtatttctacttttccactttaaaaaatctcaaaaacctccttgcaataaatctaaaatccccat
aattttccgttcgtttttctgctgcttttgcctccgtttgtatttttttttgcgttttccaagtgtaccagcacctctagttttttgtttacag
atgcaaaaccagtgaaaaacggaacgaactgagtgagcagatataagaacgaaaccgaccgaacattatcagatcgacgatcgaca
acgatggccgacaaggaggagcagggaggaggcgaacaggatgatgtctcttttccgaacggttagttttattcaaaacagacaaa
gttcaagttgacaattagttctccggttgacttttcggaggggaatatttcggctctcacttgaatgtagatcgataacatcgataacattttg
aaatattaatttctgaatttttttgcatttaattgtgtagtacggaatgtgtacttttcaaattgtgcaaaaatgtgccacctcgcttaacgag
tgaagaagaagaggacctccggggtgtaagtgcgcgattcgcaaat
```

Edited sequence (left and right of the insertion with a different color, WormScarlet sequence is in orange and synonymous mutations are labelled in purple):

```
tttgtaaaagcgctaacatgcaaatgttgattaatgaagtaagaaagctatactataaatcccaaatctcagctcagtgaatatgctttaa
aataaaaattaactcaaatcagagcagttttgaatttttcaactctctcaaaaatattaacgcacgttaattttgtattgaaggaaatatt
attcactttactgcttgcaacttgaaaatagtatttctacttttccactttaaaaaatctcaaaaacctccttgcaataaatctaaaatccccat
aattttccgttcgtttttctgctgcttttgcctccgtttgtatttttttttgcgttttccaagtgtaccagcacctctagttttttgtttacag
atgcaaaaccagtgaaaaacggaacgaactgagtgagcagatataagaacgaaaccgaccgaacattatcagatcgacgatcgaca
acgatggtcagcaagggagagggcagttatcaaggagttcatgcgtttcaaggtccacatggagggatccatgaacggacacgagttc
gagatcgagggagagggagagggacgtccatacaggggaaccaaaaccgccaagctcaaggtcaccaagggaggaccactccc
attctctgggacatcctctcccacaattcatgtacggatcccgtgccttcaccaagcaccagccgacatcccagactactacaagca
atccttcccagagggattcaagtgggagcgtgtcatgaacttcgaggacggaggagccgtcaccgtcaccgaagacacctcctcga
ggacggaacctcactacaaggtcaagctccgtggaaccaactcccaccagacggaccagtcatagcaaaaagaagaccatgggat
gggaggcctccaccgagcgtctctaccagaggacggagtcctcaagggagacatcaagatggccctccgtctcaaggacggagg
acgttacctcgccgacttcaagaccacctacaaggccaagaagccagtcctcaaatgccaggagcctacaacgtcgaccgtaagctcga
catcacctcccacaacgaggactacaccgtcgtgagcaatacagcgttccgagggacgtcactccaccggaggaatggacgagc
tctacaagatggccgacaaggaagagcagggaggaggcgaacaggatgatgtctcttttccgaacggttagttttattcaaaacaga
caaagttcaagttgacaattagttctccggttgacttttcggaggggaatatttcggctctcacttgaatgtagatcgataacatcgataaca
ttttgaaatattaatttctgaatttttttgcatttaattgtgtagtacggaatgtgtacttttcaaattgtgcaaaaatgtgccacctcgcttaa
cgagtgaagaagaagaggacctccggggtgtaagtgcgcgattcgcaaat
```

Strain: PHX729

Allele: *syb729*

Description: mNeonGreen in frame upstream of *unc-68* exon 1.2

Wild type sequence:

```
ctccttctcccgatctctcttcgtttccctcgagagacttatgtcgcccatatggcattcagccgccccgggtcccgcctattgttttctgt
cgctcttttttggctcacaattttggtgactcttcagtttcagacaaagagactccacattagaagtctgctctaggcagcaaacctata
gtattttgccaacaagcatccgcagacaaatacacgaaacacaattacaacgcagatataaatatattattcagtgatgattagttag
ttccaagaaatggattttgatttcacggatatctcagatgaggatcataactatgttacaaggtttgtttaaaagaactattctatattaaac
gaaagtctggaaatcacagaggacagaggaaatgaatttctttttgataaaattttttccaggggagacatcgctcgcctctctgcg
gttcctcacacaatagagatggagttctcgggtcagaaaggttggtg
```

Edited sequence (left and right of the insertion with a different color, mNeonGreen sequence is in blue and synonymous mutations are labelled in purple):

```
ctccttctcccgatctctcttcgtttccctcgagagacttatgtcgcccatatggcattcagccgccccgggtcccgcctattgttttctgt
cgctcttttttggctcacaattttggtgactcttcagtttcagacaaagagactccacattagaagtctgctctaggcagcaaacctata
gtattttgccaacaagcatccgcagacaaatacacgaaacacaattacaacgcagatataaatatattattcagtgatgattagttag
ttccaagaaatggctccaaggagaggaggacaacatggcctccctcccagccaccacgagctccacatcttcggatccatcaac
ggagtgcacttcgacatggtcggacaaggaaccggaacccaaacgacggatagaggagctcaacctcaagtccaccaaggtaa
gtttaaacatatataactaactaacctgatttttaaatttcaggggagacctccaattctccccatggatcctcgtccacacatcggata
cggattccaccaatacctcccatacccagacggaatgtccccattccaagccgcatggtcgcagggatccggataccaagtcaccgt
accatgcaattcgaggacggagcctcctcaccgtcaactaccgttacacctacgagggatccacatcaaggttaagttaaacagttc
ggtactaactaaccatacatatttaaattttcaggggagaggcccaagtaagggaaccggattcccagccgacggaccagtcagacc
aactcctcaccgcccggactggtgccgttccaagaagacctaccacaaacgacaaggttaagttaaacatgattttactaactaactaa
tctgatttaaatttcagaccatcatctccacctcaagtgtcctacaccaccggaacggaaagcgttaccgttcaccgcccgtacca
cctacaccttcgccaagccaatggccgccaactacctcaagaaccaaccaatgtacgtcttcgtaagaccgagctcaagcactcaa
gaccgagctcaactcaaggagtggaagggcctcaccgacgtcatgggaatggacgagctctacaagatggattttgatttcacgg
atatctcagatgagatcataactacgttacaaggtttgtttaaaagaactattctatattaaacggaaagtctggaaatcacagaggac
agaggaaatgaatttcttttttataaaattttttccaggggagacatcgctcgcctctctcgttcctcacacaatagagatggagt
tctcgggtcagaaaggttggtg
```