

(A)

- Genomic DNA (gDNA) sequence

>Bol031422 (gDNA) Reference

ATGGGAGGTTGTTTCTCTGTCTCAGTTTCATGTGATCAAGTGGTGAATCAAGT
CTCCCAATGTCTATGCCTCAATGGAAGTTATATCCACAATCTCCCCCAGAATCT
AGGGACTCTCCATAAAGCCATGCGAGCTCTCAAGGCTAAGAGAGATGATGTT
CAAGGGAGGGTAGACAGAGAAGAGTTTGCTGGACATCGTCGAAGGCTTGCT
CAAGTCCAGGTATGGCTTACGAGTATCCTCACAATGGAAAACCAATATAATGA
GCTTCTTAATACTAGTGAGGTTGAGCTTCAAAGGTTGTGTCTCTGTTCGATTTTG
CTCTAAAAATGTGAAAAAGAGCTATCTTTATGGGAAAAGGGTTATGGTAATGT
TGAGGGAGGTTGAGAGTCTTAGTTCTCAGGGAGAATTTAATGGGGTGACTGA
TGAAACTCCTATAGCTGAGGGTGAAGAGTTGCCTATTCAACCAACCATAGGTC
AGGAAACAATGCTGGAAATGGTATGGAACCGTCTGATGGAAGATGAAGTTGG
GATTGTGGGTCTGTACGGTATGGGGGGAGTTGGCAAACCAACCTTCTCACG
CAGATCAACAATAGGTTTTCTGATAGAGGGCATGGGTTCGGTGTGTGATATG
GGTTGTGGTGTCTCAAAATGCAACAGTCCATAAGATTCAAGGGAGCATTGGT
GAAAAGCTAGGCCTTGGGGGGAAAGAGTGGGAGGAGAAAAGAGAGATGAA
GAGAGGCCAAGACATCCACAACGTTCTTAGGAAGAAGAAGGTTGTGTTATTG
TTGGATGATATATGGGAGAAAGTGAATTTAAGTACGATTGGAGTCCCATATCC
GAGCAAGGTAAATGGAAGCAAAGTAGTATTTACCACACGCTCTCGAGATGTG
TGTGGGCGCATGGGGGTTGATGACCCGATCGAAGTCCGTTGTCTGGACACGG
ACAAAGCCTGGGATTTGTTCAAAGAGAAAGTCGGAGAACACACACTGGGAA
GGCACCCAGACATTCCCGAGCACGCAAGGAAAGTCGCAGGGAAATGTCGTG
GCCTACCATTGGCACTTAATGTCATCGGCGAAACAATGTCCGTGCATGTTTAC
TGTTGGAAGATGACGAGGATGAATCAGAAGTGA

>SCNU-C-3470 (gDNA) Resistant line

ATGGGAGGTTGTTTCTCTGTCTCAGTTTCATGTGATCAAGTGGTGAATCAAGT
CTCCCAATGTCTATGCCTCAATGGAAGTTATATCCACAATCTCCCCCAGAATCT
AGGGACTCTCCATAAAGCCATGCGAGCTCTCAAGGCTAAGAGAGATGATGTT
CAAGGGAGGGTAGACAGAGAAGAGTTTGCTGGACATCGTCGAAGGCTTGCT
CAAGTCCAGGTATGGCTTACGAGTATCCTCACAATGGAAAACCAATATAATGA
GCTTCTTAATACTAGTGAGGTTGAGCTTCAAAGGTTGTGTCTCTGTTCGATTTTG
CTCTAAAAATGTGAAAAAGAGCTATCTTTATGGGAAAAGGGTTATGGTAATGT

TGAGGGAGGTTGAGAGTCTTAGTTCTCAGGGAGAATTTAATGGGGTGACTGA
TGAAACTCCTATAGCTGAGGGTGAAGAGTTGCCTATCCAACACACAATTGTTG
GTCAGGAAACAATGCTGGAAATGGTATGGAACCGTCTGATGGAAGATGAAGT
TGGGATTGTGGGTCTGTACGGTATGGGGGGAGTTGGCAAACCACCCTTCTC
ACGCAGATCAACAATAGGTTTTCTGATAGAGGGCATGGGTTCCGGTGTGTGAT
ATGGGTTGTGGTGTCTCAAAATGCAACAGTCCATAAGATTCAAGGGAGCATT
GGTGAAAAGCTAGGCCTTGGGGGGAAAGAGTGGGAGGAGAAAAGTGAGAT
GAAGAGAGGCCAAGACATCCACAACGTTCTTAGGAAGAAGAAGTTTGTGTT
ATTGTTGGATGATATATGGGAGAAAGTGAATTTAAGTACGATTGGAGTCCCAT
ATCCGAGCAAGGTAAATGGAAGCAAAGTAGTATTTACCACACGCTCTCGAGA
TGTGTGTGGGCGCATGGGGGTTGATGACCCGATCGAAGTCCGTTGTCTGGAC
ACGGACAAAGCCTGGGATTTGTTCAAAGAGAAAGTCGGAGAACACACACTG
GGAAGGCACCCAGACATTCCCGAGCACGCAAGGAAAGTCGCAGGGAAATGT
CGTGGCCTACCATTGGCACTTAATGTCATCGGCGAAACAATGTCCGTGCATGT
TACTGTTGGAAGATGACGAGGATGAATCAGAAGTGA

>SCNU-C-3328 (gDNA) Susceptible line

ATGGGAGGTTGTTTCTCTGTCTCATTGTCATGTGATCAAGTGGTGAATCAAGTC
TTCCGATGTCTATGCCTCAAAGGAAGTTATGTCCACAACCTCCCCCAGAATCT
AGCGTCACTGGAGAAAGCCATGGGAACTCTCACGGCTAAGAGAGATGATGTT
CAAGGGAGGGTAGACAGAGAAGAGTTTACTGGACATCGTCGAAGGCTTGCT
CAAGTCCAGGTATGGCTTACGAGTATCCTCACAATGGAAAACCAATATAATGA
GCTTCTTAATACTAGAGACGTTGAGCTTCAAAGGTTGTGTCTCTGTGATTTTG
CTCTAAAAATGTGAAAAAGAGCTATCTTTATGGGAAAAGGGTTATGGTAATGT
TGAGGGAGGTTGAGAGTCTTATCCGTCAACAACGAGAATTTGATGAGGTGAC
TGACGCAACTCCTATAGCTGAGGGTGAAGAGTTGCCTATTCAACCAACCATA
GGTCAGGAAACAATGCTGGAAATGGTATGGAACCGTCTGATGGAAGATGAA
GTTGGGATTGTGGGTCTGTACGGTATGGGTGGAGTTGGCAAACCTACCCTTCT
CACGCAGATCAACAATAGGTTTTCTAAAAGAGGTGGTGGGTTTGATGTTGTGA
TATGGGTTGTGGTGTCAAAAATGCAACAGTCCATAAGATTCAAGGGAGCAT
CGGTGAAAAGCTAGGGCTTCTGGGGAAAGAGTGGGACGAGAAAAGTGAGAT
GAAGAGAGGCCAAGACATCCACAACGTTCTTAGGAAGAAGAAGTTTGTGTT
ATTGTTGGATGATATATGGGAGAAAGTGAATTTAAGTACGATTGGAGTCCCAT
ATCCGAGCAAAGTAAATGGAAGCAAAGTAGCATTACCACACGCTCTCGAGA
TGTGTGTGGACGCATGGAGGTTGATGATCCGATCGAAGTCCGTTGTCTGGACA
CGGACAAAGCCTGGGATTTGTTCAAAAAGAAAGTCGGGGAAAACACGTTGG

GAAGCCACCCAGGCATTCCCGAGCTCGCAAGGGAAGTCGCTGGGAAATGTC
 GTGGCCTACCATTTGGCCCTTAATGTCATCGGTGGAACAATGGCGAGCAAAAG
 ATCACTACAAGAGTGGCGTCTAGCAGTTGATGTTTTGACTTCATCTGCCAGAG
 AGTTTTTCAGGCGTGGAAGATGAGATTCTTCAGATATTGAAGTATAGCTACGAT
 AGTTTGGATGGTGAGATGACCAAGTCATGTTTTCTGTATTGCTCTCTGTTTCCT
 GAAGATGACATTATTGATAAAGAAGAAGTATGATAGAGTATTGGATAGGTGAGG
 GGTTCATTGATGAGAAGGAAGGAAGAGAAATGGCAATGAACAAAGGTTATG
 AGATACTCGAGACCCTTGTCCGTGCATGTTTGTGTTGGAAGATGACGAGGAT
 GAATCAGAAGTGA

- gDNA alignment

Bol031422	
ATGGGAGGTTGTTTCTGTCTCAGTTTCATGTGATCAAGTGGTGAATCAAGTCTCCCAA	60
SCNU-C-3470	
ATGGGAGGTTGTTTCTGTCTCAGTTTCATGTGATCAAGTGGTGAATCAAGTCTCCCAA	60
SCNU-C-3328	
ATGGGAGGTTGTTTCTGTCTCATTGTGATGTGATCAAGTGGTGAATCAAGTCTTCCGA	60
***** * * * * *	

Bol031422	
TGTCTATGCCTCAATGGAAGTTATATCCACAATCTCCCCAGAATCTAGGGACTCTCCAT	120
SCNU-C-3470	
TGTCTATGCCTCAATGGAAGTTATATCCACAATCTCCCCAGAATCTAGGGACTCTCCAT	120
SCNU-C-3328	
TGTCTATGCCTCAAAGGAAGTTATGTCCACAACCTCCCCAGAATCTAGCGTCACTGGAG	120
***** * * * * *	

Bol031422	
AAAGCCATGCGAGCTCTCAAGGCTAAGAGAGATGATGTTCAAGGGAGGGTAGACAGAGAA	180
SCNU-C-3470	
AAAGCCATGCGAGCTCTCAAGGCTAAGAGAGATGATGTTCAAGGGAGGGTAGACAGAGAA	180
SCNU-C-3328	
AAAGCCATGGGAACTCTCACGGCTAAGAGAGATGATGTTCAAGGGAGGGTAGACAGAGAA	180
***** * * * * *	

Bol031422	
GAGTTTGCTGGACATCGTCGAAGGCTTGCTCAAGTCCAGGTATGGCTTACGAGTATCCTC	240
SCNU-C-3470	
GAGTTTGCTGGACATCGTCGAAGGCTTGCTCAAGTCCAGGTATGGCTTACGAGTATCCTC	240
SCNU-C-3328	
GAGTTTACTGGACATCGTCGAAGGCTTGCTCAAGTCCAGGTATGGCTTACGAGTATCCTC	240
***** * * * * *	

Bol031422	
ACAATGGAAAACCAATATAATGAGCTTCTTAATACTAGTGAGGTTGAGCTTCAAAGGTTG	300
SCNU-C-3470	
ACAATGGAAAACCAATATAATGAGCTTCTTAATACTAGTGAGGTTGAGCTTCAAAGGTTG	300

SCNU-C-3328
ACAATGGAAAACCAATATAATGAGCTTCTTAATACTAGAGACGTTGAGCTTCAAAGGTTG 300

Bol031422
TGTCTCTGTCGATTTTGCTCTAAAAATGTGAAAAAGAGCTATCTTTATGGGAAAAGGGTT 360
SCNU-C-3470
TGTCTCTGTCGATTTTGCTCTAAAAATGTGAAAAAGAGCTATCTTTATGGGAAAAGGGTT 360
SCNU-C-3328
TGTCTCTGTCGATTTTGCTCTAAAAATGTGAAAAAGAGCTATCTTTATGGGAAAAGGGTT 360

Bol031422 ATGGTAATGTTGAGGGAGGTTGAGAGTCTTAGTT---CTCAGGGAGAATTAAATGGGGTG
417
SCNU-C-3470 ATGGTAATGTTGAGGGAGGTTGAGAGTCTTAGTT---
CTCAGGGAGAATTAAATGGGGTG 417
SCNU-C-3328
ATGGTAATGTTGAGGGAGGTTGAGAGTCTTATCCGTCACAACGAGAATTTGATGAGGTG 420

Bol031422 ACTGATGAAACTCCTATAGCTGAGGGTGAAGAGTTGCCTATTCAACCAACCATAG---GT
474
SCNU-C-3470
ACTGATGAAACTCCTATAGCTGAGGGTGAAGAGTTGCCTATCCAACACACAATTGTTCGT 477
SCNU-C-3328 ACTGACGCAACTCCTATAGCTGAGGGTGAAGAGTTGCCTATTCAACCAACCATAG---
GT 477

Bol031422
CAGGAAACAATGCTGGAAATGGTATGGAACCGTCTGATGGAAGATGAAGTTGGGATTGTG 534
SCNU-C-3470
CAGGAAACAATGCTGGAAATGGTATGGAACCGTCTGATGGAAGATGAAGTTGGGATTGTG 537
SCNU-C-3328
CAGGAAACAATGCTGGAAATGGTATGGAACCGTCTGATGGAAGATGAAGTTGGGATTGTG 537

Bol031422
GGTCTGTACGGTATGGGGGGAGTTGGCAAAACCACCCTTCTCACGCAGATCAACAATAGG 594
SCNU-C-3470
GGTCTGTACGGTATGGGGGGAGTTGGCAAAACCACCCTTCTCACGCAGATCAACAATAGG 597
SCNU-C-3328
GGTCTGTACGGTATGGGTGGAGTTGGCAAAACTACCCTTCTCACGCAGATCAACAATAGG 597

Bol031422
TTTTCTGATAGAGGGCATGGGTTCGGTGTGTGATATGGGTTGTGGTGTCTCAAAATGCA 654
SCNU-C-3470
TTTTCTGATAGAGGGCATGGGTTCGGTGTGTGATATGGGTTGTGGTGTCTCAAAATGCA 657
SCNU-C-3328
TTTTCTAAAAGAGGTGGTGGTGTGATGTGTGATATGGGTTGTGGTGTCAAAAATGCA 657

Bol031422
ACAGTCCATAAGATTCAAGGGAGCATTGGTGAAAAGCTAGGCCTTGGGGGGAAAGAGTGG 714
SCNU-C-3470
ACAGTCCATAAGATTCAAGGGAGCATTGGTGAAAAGCTAGGCCTTGGGGGGAAAGAGTGG 717

SCNU-C-3328
 ACAGTCCATAAGATTCAAGGGAGCATCGGTGAAAAGCTAGGGCTTCTGGGGAAAGAGTGG 717

Bol031422
 GAGGAGAAAAGAGAGATGAAGAGAGGCCAAGACATCCACAACGTTCTTAGGAAGAAGAAG 774
 SCNU-C-3470
 GAGGAGAAAAGTGAAGAGAGGCCAAGACATCCACAACGTTCTTAGGAAGAAGAAG 777
 SCNU-C-3328
 GACGAGAAAAGTGAAGAGAGGCCAAGACATCCACAACGTTCTTAGGAAGAAGAAG 777

Bol031422
 GTTGTGTTATTGTTGGATGATATATGGGAGAAAGTGAATTTAAGTACGATTGGAGTCCCA 834
 SCNU-C-3470
 TTTGTGTTATTGTTGGATGATATATGGGAGAAAGTGAATTTAAGTACGATTGGAGTCCCA 837
 SCNU-C-3328
 TTTGTGTTATTGTTGGATGATATATGGGAGAAAGTGAATTTAAGTACGATTGGAGTCCCA 837

Bol031422
 TATCCGAGCAAGGTAAATGGAAGCAAAGTAGTATTACCACACGCTCTCGAGATGTGTGT 894
 SCNU-C-3470
 TATCCGAGCAAGGTAAATGGAAGCAAAGTAGTATTACCACACGCTCTCGAGATGTGTGT 897
 SCNU-C-3328
 TATCCGAGCAAAGTAAATGGAAGCAAAGTAGCATTACCACACGCTCTCGAGATGTGTGT 897

Bol031422
 GGGCGCATGGGGGTTGATGACCCGATCGAAGTCCGTTGTCTGGACACGGACAAAGCCTGG 954
 SCNU-C-3470
 GGGCGCATGGGGGTTGATGACCCGATCGAAGTCCGTTGTCTGGACACGGACAAAGCCTGG 957
 SCNU-C-3328
 GGACGCATGGAGGTTGATGATCCGATCGAAGTCCGTTGTCTGGACACGGACAAAGCCTGG 957

Bol031422
 GATTTGTTCAAAGAGAAAAGTCGGAGAACACACACTGGGAAGGCACCCAGACATTCCCGAG 1014
 SCNU-C-3470
 GATTTGTTCAAAGAGAAAAGTCGGAGAACACACACTGGGAAGGCACCCAGACATTCCCGAG 1017
 SCNU-C-3328
 GATTTGTTCAAAGAGAAAAGTCGGGGAAAACACGTTGGGAAGCCACCCAGGCATTCCCGAG 1017

Bol031422
 CACGCAAGGAAAGTCGCAGGGAAATGTCGTGGCCTACCATTGGCACTTAATGTCATCGGC 1074
 SCNU-C-3470
 CACGCAAGGAAAGTCGCAGGGAAATGTCGTGGCCTACCATTGGCACTTAATGTCATCGGC 1077
 SCNU-C-3328
 CTCGCAAGGGAAGTCGCTGGGAAATGTCGTGGCCTACCATTGGCCCTTAATGTCATCGGT 1077

Bol031422 GAAACAATG----- 1083
 SCNU-C-3470 GAAACAATG----- 1086
 SCNU-C-3328
 GGAACAATG**CGGAGCAAAAGATCACTACAAGAGTGGCGTCTAGCAGTTGATGTTTTGACT** 1137

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Bol031422 ----- 1083
SCNU-C-3470 ----- 1086
SCNU-C-3328
TCATCTGCCAGAGAGTTTTTCAGGCGTGGAAGATGAGATTCTTCAGATATTGAAGTATAGC 1197

Bol031422 ----- 1083
SCNU-C-3470 ----- 1086
SCNU-C-3328
TACGATAGTTTGGATGGTGAGATGACCAAGTCATGTTTTCTGTATTGCTCTCTGTTTCCT 1257

Bol031422 ----- 1083
SCNU-C-3470 ----- 1086
SCNU-C-3328
GAAGATGACATTATTGATAAAGAAGAACTGATAGAGTATTGGATAGGTGAGGGGTTTCATT 1317

Bol031422 ----- 1083
SCNU-C-3470 ----- 1086
SCNU-C-3328
GATGAGAAGGAAGGAAGAGAAATGGCAATGAACAAAGGTTATGAGATACTCGAGACCCTT 1377

Bol031422 -TCCGTGCATGTTTACTGTTGGA**AGATGACGAGGATGAATCAGAAAGTGA**
1131
SCNU-C-3470 -TCCGTGCATGTTTACTGTTGGA**AGATGACGAGGATGAATCAGAAAGTGA**
1134
SCNU-C-3328 **G**TCCGTGCATGTTTGTGTTGGA**AGATGACGAGGATGAATCAGAAAGTGA**
1426

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(B)

- Protein sequence

>Bol031422 (Protein) Reference

MGGCFSVSVSCDQVVNQVSQCLCLNGSYIHNLQPQLGTLHKAMRALKAKRDDV
QGRVDREEFAGHRRRLAQVQVWLTSILTMENQYNELLNTSEVELQRLCLCRFCSK
NVKKSYLEYLGKRVMLREVESLSSQGEFNGVTDETPIAEGEELPIQPTIGQETMLE
MVWNRLMEDEVGIVGLYGMGGVGKTTLLTQINNRFSDRGHGFVVIWVVVSQN
ATVHKIQGSIGEKLGGLGGKEWEEKREMKRGQDIHNVLRKKKVLLDDIWEKVN
LSTIGVPYPSKVNGSKVVFTRSRDVCGRMGVDDPIEVRCLDTDKAWDLFKEKVG
EHTLGRHPDIPEHARKVAGKCRGLPLALNVIGETMSVHVYCWMTRMNQK

>SCNU-C-3470 (Protein) Resistant line

MGGCFSVSVSCDQVVNQVSQCLCLNGSYIHNLQPQLGTLHKAMRALKAKRDDV
QGRVDREEFAGHRRRLAQVQVWLTSILTMENQYNELLNTSEVELQRLCLCRFCSK
NVKKSYLEYLGKRVMLREVESLSSQGEFNGVTDETPIAEGEELPIQHTIVGQETML
EMVWNRLMEDEVGIVGLYGMGGVGKTTLLTQINNRFSDRGHGFVVIWVVVSQ
NATVHKIQGSIGEKLGGLGGKEWEEKSEMKGQDIHNVLRKKKFVLLDDIWEKV
NLSTIGVPYPSKVNGSKVVFTRSRDVCGRMGVDDPIEVRCLDTDKAWDLFKEKV
GEHTLGRHPDIPEHARKVAGKCRGLPLALNVIGETMSVHVYCWMTRMNQK

>SCNU-C-3328 (Protein) Susceptible line

MGGCFSVSLSCDQVVNQVFRCLCLKGSYVHNLPQNLASLEKAMGTLTAKRDDV
QGRVDREEFTGHRRRLAQVQVWLTSILTMENQYNELLNTRDVELQRLCLCRFCS
KNVKKSYLYGKRVMLREVESLIRQQREFDEVTDATPIAEGEELPIQPTIGQETM
LEMVWNRLMEDEVGIVGLYGMGGVGKTTLLTQINNRFSGKGGGFDVVIWVVVS
QNATVHKIQGSIGEKLGGLGKEWDEKSEMKGQDIHNVLRKKKFVLLDDIWEK
VNLSTIGVPYPSKVNGSKVAFTRSRDVCGRMEVDDPIEVRCLDTDKAWDLFKKK
VGENTLGSHPGIPELAREVAGKCRGLPLALNVIGGTMASKRSLQEWRLAVDVLTS
SAREFSGVEDEILQILKYSYDSLKGEMTKSCFLYCSLFPEDDIIDKEELIEYWIGEGFI
DEKEGREMAMNKGYEILETLVRACLLEDEDESEV

- Protein alignment

Bol031422 MGGCFSVSVSCDQVVNQVSQCLCLNGSYIHNLQPQLGTLHKAMRALKAKRDDVQGRVDRE

SCNU-C-3470
MGGCFSVSVSCDQVVNQVSQCLCLNGSYIHNLQPQLGTLHKAMRALKAKRDDVQGRVDRE
60

SCNU-C-3328
MGGCFSVSLSCDQVVNQVFRCLCLKGSYVHNLPQNLASLEKAMGTLTAKRDDVQGRVDRE
60

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Bol031422 EFAGHRRRLAQVQVWLTSILTMENQYNELLNTSEVELQRLCLCRFC SKNVKKS YLYGKRV
120

SCNU-C-3470
EFAGHRRRLAQVQVWLTSILTMENQYNELLNTSEVELQRLCLCRFC SKNVKKS YLYGKRV
120

SCNU-C-3328
EFTGHRRRLAQVQVWLTSILTMENQYNELLNTRDVELQRLCLCRFC SKNVKKS YLYGKRV
120

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Bol031422 MVMLREVESLS-SQGEFNGVTDETPIAEGEELPIQPTIG-QETMLEMVWNRLMEDEVGIV
178

SCNU-C-3470 MVMLREVESLS-SQGEFNGVTDETPIAEGEELPIQHTIVGQETMLEMVWNRLMEDEVGIV
179

SCNU-C-3328 MVMLREVESLIRQQREFDEVTDATPIAEGEELPIQPTIG-QETMLEMVWNRLMEDEVGIV
179

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Bol031422 GLYGMGGVGKTTLLTQINNRFSDRGHGFVVIWVVVSQNATVHKIQGSIGEKLG LGGKEW
238

SCNU-C-3470 GLYGMGGVGKTTLLTQINNRFSDRGHGFVVIWVVVSQNATVHKIQGSIGEKLG LGGKEW
239

SCNU-C-3328 GLYGMGGVGKTTLLTQINNRF SKRGGGFDVVIWVVVSQNATVHKIQGSIGEKLG LGGKEW
239

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Bol031422 EEKREMKRGQDIHNVL RKKKV LLLDDIWEK VNLSTIGVPYPSKVNGSKV VFTT SRDVC 298

SCNU-C-3470 EEKSEMKRGQDIHNVL RKKKFV LLLDDIWEK VNLSTIGVPYPSKVNGSKV VFTT SRDVC
299

SCNU-C-3328 DEKSEMKRGQDIHNVL RKKKFV LLLDDIWEK VNLSTIGVPYPSKVNGSKV AFTT SRDVC 299

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Bol031422 GRMGVDDPIEVRCLD TDKAWDLFKEKVGEHTLGRHPDIPEHARKVAGKCRGLPLALNVIG
358

SCNU-C-3470 GRMGVDDPIEVRCLD TDKAWDLFKEKVGEHTLGRHPDIPEHARKVAGKCRGLPLALNVIG
359

SCNU-C-3328 GRMEVDDPIEVRCLD TDKAWDLFKKKVGENTLGSHPGIPELAREVAGKCRGLPLALNVIG
359

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Bol031422	ETMSVHVYCWKMTRMNQK-----	376
SCNU-C-3470	ETMSVHVYCWKMTRMNQK-----	377
SCNU-C-3328	GTMASKRSLQEWRLAVDV LTSSAREFSGVEDEILQILKYSYD SLDGEMTKSCFLYCSLFP	
419		
	**:: : :	
Bol031422	-----	376
SCNU-C-3470	-----	377
SCNU-C-3328	EDDIIDKEELIEYWIGEGFIDEKEGREMAMNKGYEILETLVRACLLLEDEDESEV	475

Figure S3. Sequence information obtained by cloning and sequencing of cabbage resistant (SCNU-C-3470) and susceptible (SCNU-C-3328) lines for a NBS-LRR gene (*Bol031422*) and their alignments. Genomic DNA (gDNA) sequence and their alignment (A), protein sequence and their alignment (B). Sequence alignments along with the references sequences retrieved from Bolbase (<http://www.ocri-genomics.org/bolbase/>) considering *Brassica oleracea* as reference genome database. In sequence alignment asterisks (*) indicate sequence similarity. Absence of asterisks indicates sequence dissimilarity. Endesh (-) indicates insertion/deletion of nucleotides. The grey and red highlights in the alignment of genomic DNA sequences indicate the BR6-InDel-F and BR6-InDel-R, respectively. The red text colors in the alignment of genomic sequences indicate InDel regions.