

1 ttaacccttttgcagtttagaggggaatatttttccccaataaaaaccaataaaaaaggaacaaaatttctatttgcatttttatttt
89 tgcacctgacaacattaacgtacattatgacatttgtttctgattttatttgacattgacagattcaatttttttcaaagtcttgagg
179 tgaatttgaaaactagcgggtttttgtacttcgagagaaatcggtacatatctttgcaatagagtggtgaaaaaaggtaagttcttctag
269 atgttgtgcttttgatgtttttcatagatataagacgtattttttatgtatctgccacgaattttcatatatgtcgatttttttgggt
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449 tgtttttattgcttgcggctttttctcggggttgggtgtggtttttgcatggcttttgtttttttatttgcagattgagtgaaaatgaaa
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I L R D D D I E K E L N G M F G L S E P E E S E D G E E S E
629 gacgatgacgttccgtacaatgtcactaagttacagcgaatttttaggggatttagaagaaccagaccttcgatctactgcaacaattcga
D D D V P Y N V T K L Q R I L G D L E E P D L R S T A T I R
719 gcatcggttatcgctcaactatcaacatcatctgatgctggagatcccatgctgagcctttacttgaatactccacctactgtgata
A S L S P Q L S T S S D A E I P C G E P L L V I P P P T V I
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E A V A S T S A V P L H V P Q P A V L L P A E P P I S R K L
899 cctgtaaaaggtagaggacgagctaggtatgggaacgtggatccggaacgggacgtagatttagaaccaggacgagaagctggaaactaga
P V K G R G R G A R M E R G S G T G R R F R T G R E A G T R
989 atgggacgtggagctagaacgaggctaggaagtgggttggagataaagacagcgattcatccgaagataatagccaccaggtatcagaa
M G R G A R T R L G S G V G D K D S D S S E D N T P P V S E
1079 gcagatgcagaagcaagcattctgacagagatgaagaagtggaaaaaaaccttggactgatattaggccacagcttgagtccttt
A E S E A S D S D R D E E W K K T L W T D I R P Q L E S F
1169 gatagtgttccaatgactccgacacgcgtgttaccatctaattgccaggcctatccgatattttgaaaaatttttactcaagaagttttt
D S V P M T P T R V L P S N A R P I R Y F E K F F T Q E V F
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E L I I T E T N R Y A C Q N N V I G W T I L D I K E L K A F
1349 ctaggatatattgatttattggtatcaaatattttacctaatttcgaattgtattggtcatcggtatcccggaatttagagttgacgaata
L G I L I I M G Y N I L P T F E L Y W S S D P E F R V D E I
1439 gcttccaccatgacattccgaagattcaagcaaattttacgttgtttgcatctaaatgataatttcaaaacaacctgccagacttagcccc
A S T M T F R R F K Q I L R C L H L N D N S K Q P A R L S P
1529 gagtatgataagctattcaaaattcgcctgttattgacttataaacacctcttttcaagaaaatgcgcacaactcttctctcagtc
E Y D K L F K I R P L K T L I N T S F Q E N A H N S S T S Q S
1619 atagatgaatcaatgattcttttcaagggaaggtctacattgaagcatatcatgcctatgaagccaataaaaaaggggtttcaagggtatgg
I D E S M I L F K G R S T L K Q Y M P M K P I K R G F K V W
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1799 aaagtgttcaaaaaggttaacagaaaaattgaaagggaatggcggcagtgatgtttacatttgataattttttgacgttatgatcatg
K V V K K L T E K L K G M A A V H V T F D N F F C S Y D I M
1889 aattatctacatgtaaatggtattttctgcgagcggtagtgcgcagggcaaaagagcagacttaccgaaacttgtgaaaagtaaaaaaaa
N Y L H V N G I S A S G T V R R Q R A D L P K L V K S K K K
1979 ctaaaactaacaaggagcagtaaaatggagagtgaaggagaacgtggcttttgaatctggcaagatacaaaagaagtcttattttg
L K L T K G Q Y K W R V K E N V A F V I W Q D T K E V L F M
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T N A F H P K D N E T S L P R K G R D G S K T D V R C P A V
2159 gtgaagaatatacaaaaagaatgggtggagtagatcactttgatcacatcaagggaacatactcagtgggggaagaggaacacgggtgg
V K E Y T K R M G G V D H F D H I K G T Y S V G R R S K R W
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W L R I F Y F I F D A C I T N S F L L Q G K N A N A T K L S
2339 aacctagagtatcggtcgtcttagccagaggacttattggttgttttttctccgaaaacgtcgtgctgaaggcgtcaattacgtcgt
N L E Y R V A L A R G L I G C F S S R K R R A E G V N Y V V
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R K K K V A T S E N Y Q K A I H I V A P E I R F S N V G D H M
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P N D I P S Y Q R C R Y C S T K A K D K R S K I K C S K C G
2609 gtaccgttatgtataacaccatgcttttcgaattttcacaaacaagtttaatttttcttttttttttggtttctatttttctattggtattc
V P L C I T P C F S N F H K Q V - (SEQ ID NO: 2)
2699 aattgtgtgattgaaataaagtattatgtgagatttattgttttttagtttggtaaaaatcatactacaatttcattactctcaa
2789 acaggttagaggggaatatttaccaccaatttaaaagaaaaagtttaaaaaaattgaaatctcaatttttttaggcatcttatgtaac
2879 acaaatccgaaaaccaaattctttctatctcatcttagatccttataaccgttaagggttaa (SEQ ID NO: 1)

Figure 1

Gene name	Disrupted gene	5' of PLE-wu	3' of PLE-wu	Disrupted gene
fp25K:	ACAGAGCGTCGCGAGTTTTTT TTA ACCCTTTTGCAG...CCGTTAAAGGG TTA AGTAACAGCTTTTGCTCCGCT			
Lipase H:	CTCCGGATGGGCAAGGGACCT TTA ACCCTTTTGCAG...CCGTTAAAGGG TTA ACTTCATTTCGGAGAATCCTGA			

Figure 2

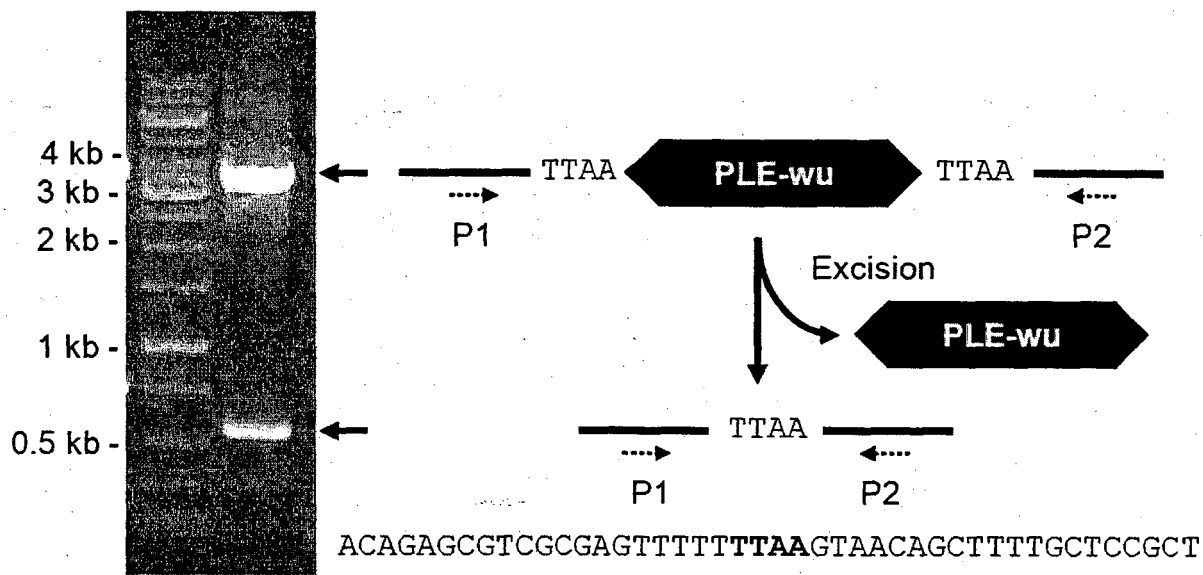


Figure 3

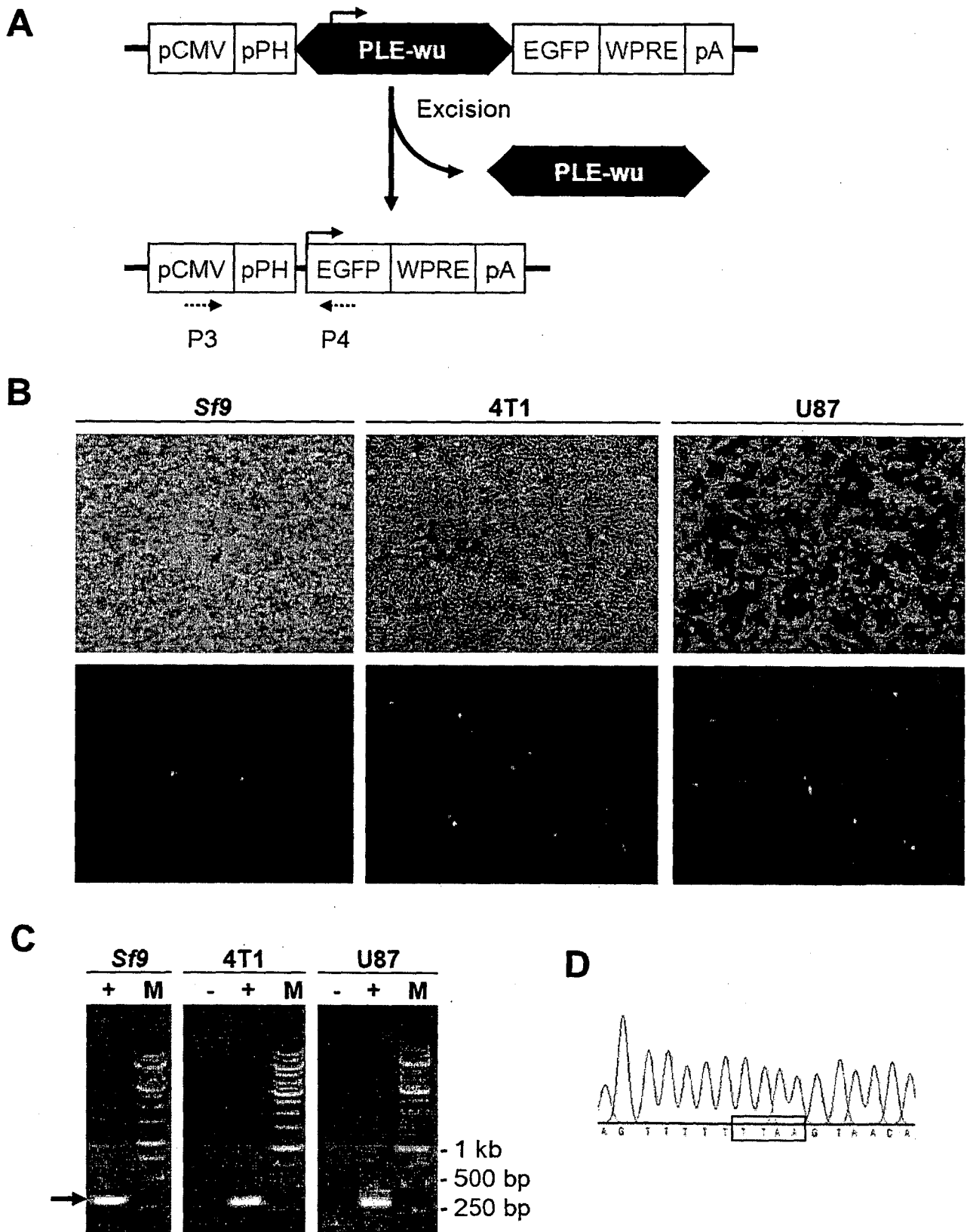


Figure 4

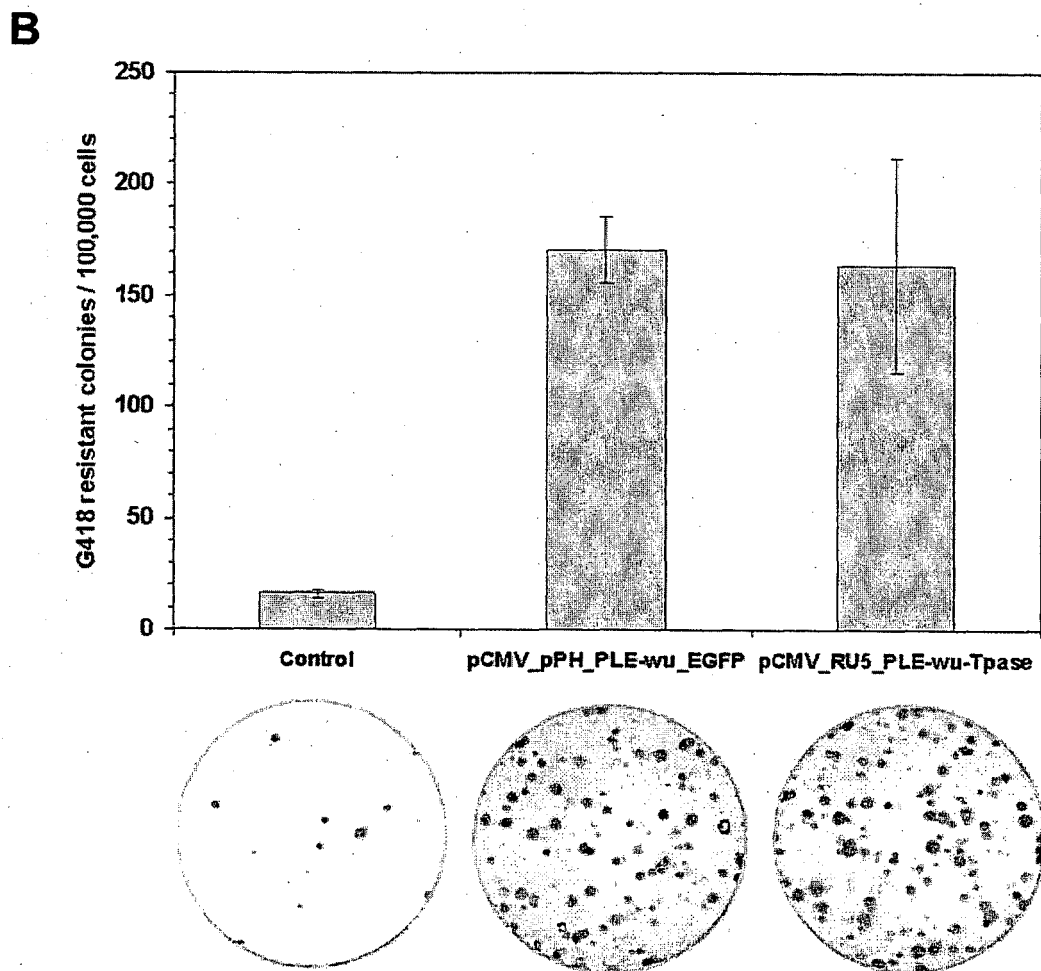
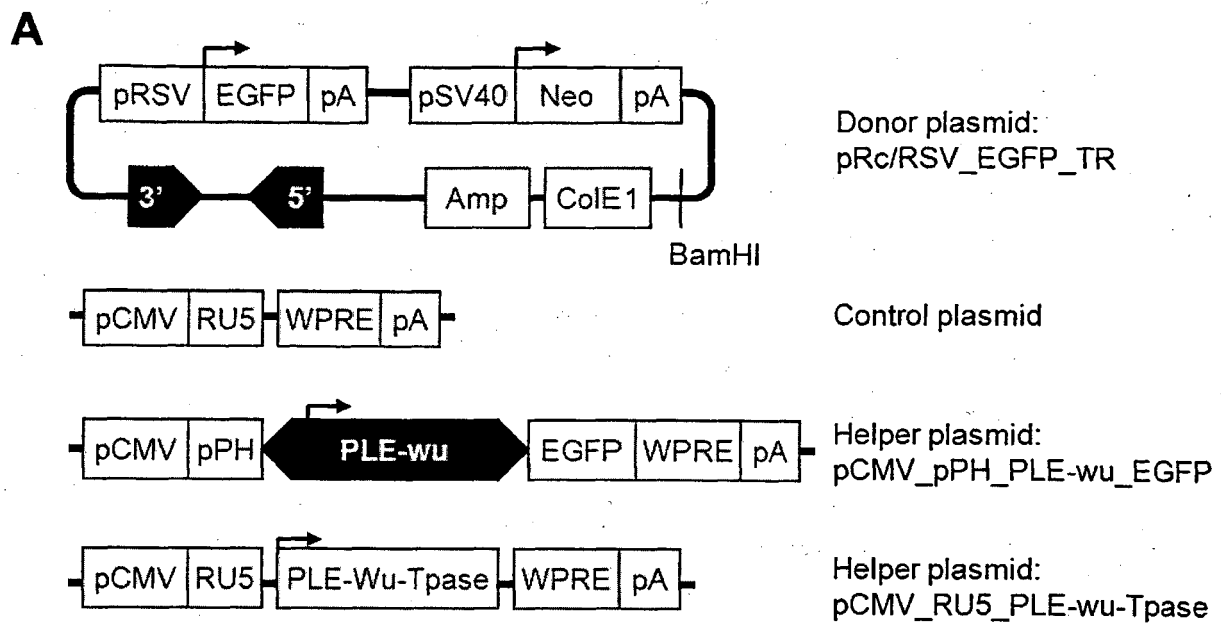
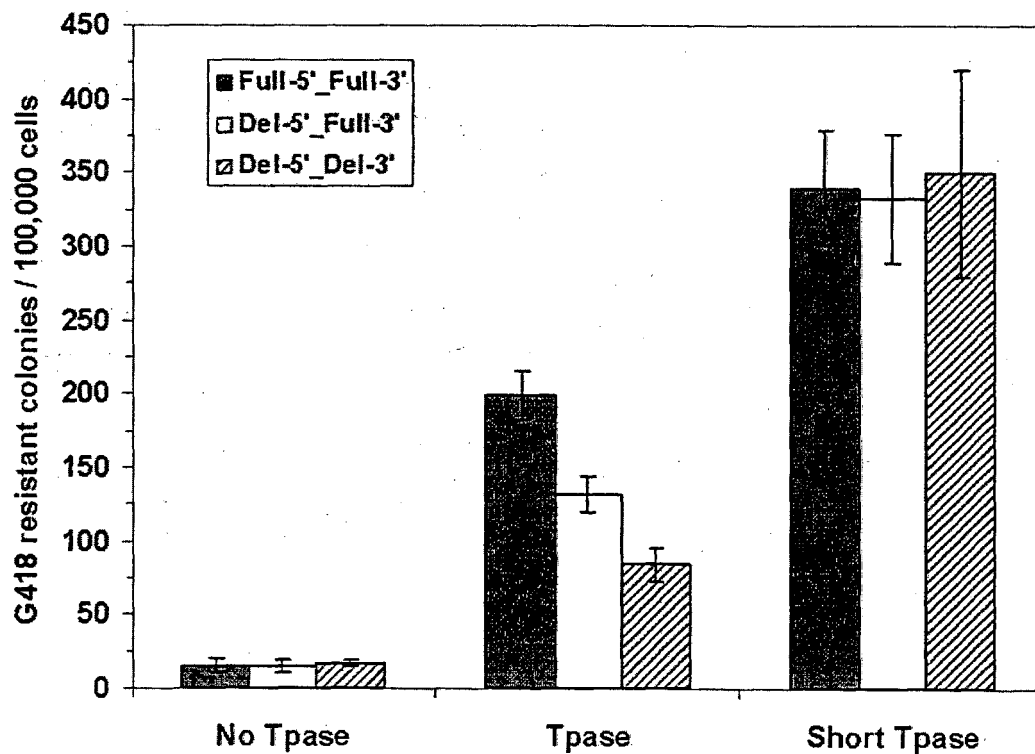


Figure 5

A

SEQ ID NO: 29

5' 1 ttaaccctttgcagtagagggatatttttccaccaataaaaaaccaataaaaaagggaacaaaatttctatttgcaattttat
 89 tgcacctgacaacattaacgtaacattatgacatttgtttctgattttatttgacattgacagattcaattttttcaaagtcttgagg
 179 tgaatttgaaaactagcgggtttttgtacttcgagagaaatcggtacatatctttgcaatagagtggtgaaaaaggtaagttcttctag
 269 atgttggtgcttttgatgtttttcatagatataagacgtattttttatgtatctgccacgaattttcatatatgtcgatttttttgggt
 359 gggaagaatattccctctaaccgtgaagtatccgcttttctactaatcgttaagggttagagaaaatattcctttattatgtttacggtacc
 449 tgtttttattgcttgcggctttttctcggggcttggtgtggtttttgcatggcttttgtttttttatttgcagattgagtgaatgaaa
 M K
 ▶ Short Tase
 899 cctgtaaaaggttagaggacgaggagctaggatggaacgtggatccggaacgggacgtagatttagaacaggacgagaagctggaactaga
 P V K G R G R G A R M E R G S G T G R R F R T G R E A G T R
 ▶ Full-3'
 2609 gtaccgttatgtataacaccatgctttttcgaattttcacaaacaagtttaattttctttatttttgtttctattttcttattggtattc
 V P L C I T P C F S N F H K Q V -
 2699 aattgtgtgattgaaataaagttattatgtgagatttatgttgttttttagtttgttgaaaaatcatactacaatttcattactctcaa
 ▶ Del-3'
 2789 acaggttagaggggaatattcttaccaccaattaaaaaaaaaagtttaaaaaaattgaatctcaattttttattttaggcattcttatgtaac
 2879 acaaatccgaaaaccaaattctttctatctcatctagatcctttataaccggttaagggttaa 3'
 SEQ ID NO: 30

B**Figure 6**