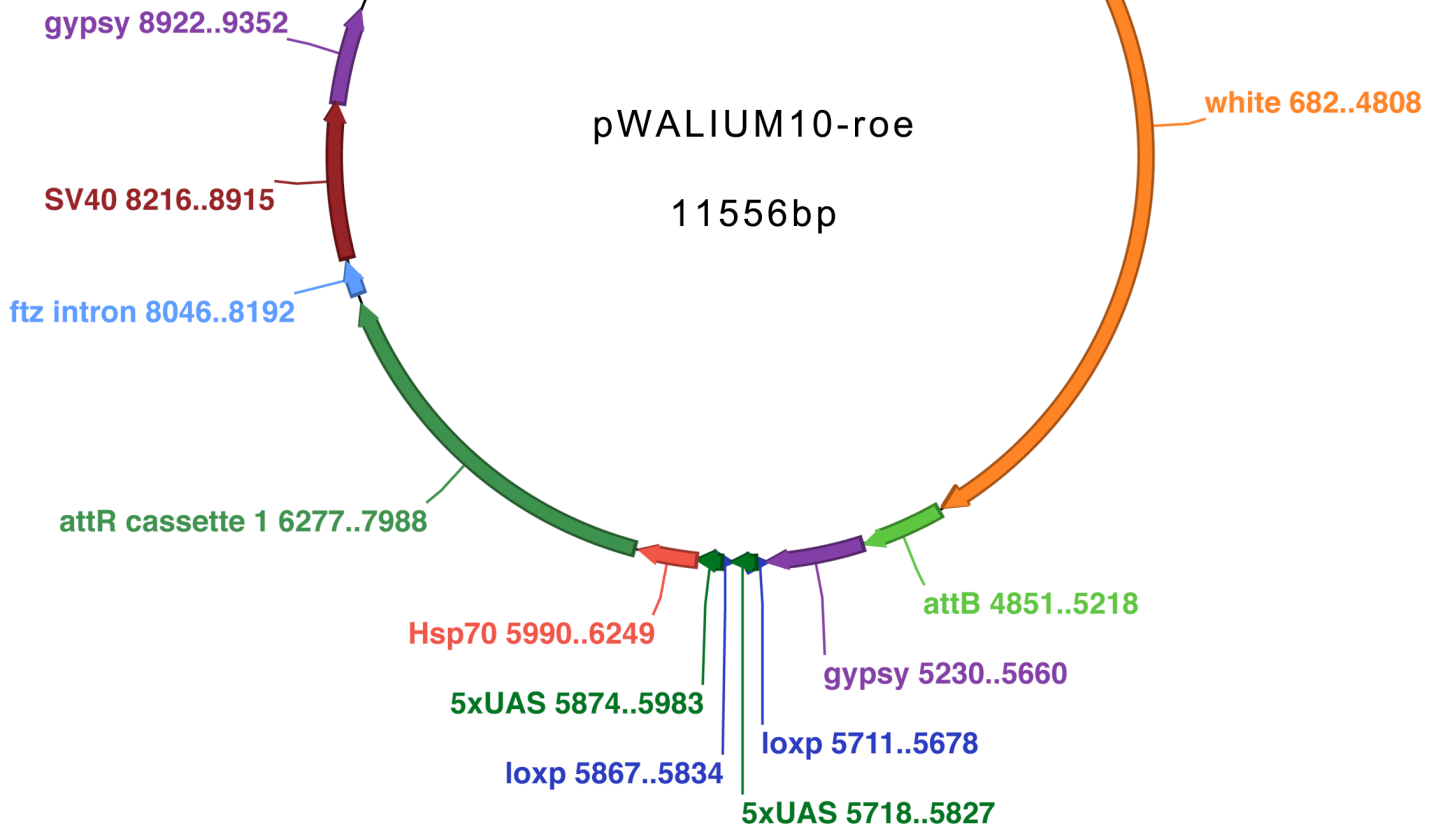


AmpR 11233..10574

Please Note:

To amplify this vector you will need to use Gateway competent cells.



Features:

roe = recombination cloning, over-expression

1. White is the selectable marker
2. attB/P site specific integration
3. Amp resistant
4. For over-expression
 - 10X UAS
 - Hsp70 promoter
 - Two insulators
 - One ftz intron
5. Simplified cloning
 - Recombination method
 - Two step cloning:
 - 1st - clone PCR fragment into Entry vector (pENTR/DTOPO or mENTRY)
 - 2nd - recombination

682-4808,	white
4851-5218,	attB
5230-5660,	gypsy
5678-5711,	loxp
5718-5827,	5xUAS
5834-5867,	loxp
5874-5983,	5xUAS
5990-6249,	Hsp70 promoter
6277-7988,	attR cassette 1
8046-8192,	ftz intron
8216-8915,	SV40 polyA
8922-9352,	gypsy

The detailed cloning method can be found on the TRiP website: <http://flyrnai.org/TRiP-HOME.html>

Jian-Quan Ni (jni@genetics.med.harvard.edu)

WALIUM10-roe: 11556bp

CACCTAAATTGTAAGCGTTAATATTTTGTAAAAATTCGCGTTAAATTTTTGTAAATCAGCTCATTTTTT
AACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAGAATAGACCGAGATAGGGTTGAGTGTG
TTCCAGTTTGGAAACAAGAGTCCACTATTAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTA
TCAGGGCGATGGCCACTACGTGAACCATCACCTAATCAAGTTTTTTGGGGTCGAGGTGCCGTAAAGCA
CTAAATCGGAACCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCGAGAA
AGGAAGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTAAC
CACCACACCCGCCGCTTAATGCGCCGCTACAGGGCGCGTCCCATTTCGCCATTCAGGCTGCGCAACTGT
TGGGAAGGGCGATCGGTGCGGGCTCTTCGCTATTACGCCAGCTGGCGAAAGGGGGATGTGCTGCAAGGC
GATTAAGTTGGGTAACGCCAGGGTTTTCCAGTACAGACGTTGTAAAACGACGGCCAGTGAATTGTAATA
CGACTCACTATAGGGCGAATTGGGTACAAGCTTCACGACCTGAGGCGCGCT**CCAGTGAATCCAAGCAT**
TTTCTAAATTAATGTATTCTTATTATTATAGTTGTTATTTTTGATATATATAAAACAACACTATTATGCC
CACCATTTTTTTGAGATGCATCTACACAAGGAACAAACACTGGATGTCACTTTTAGTTCAAATTGTAACG
CTAATCACTCCGAACAGGTCACAAAAAATTACCTTAAAAAGTCATAATATTAATTAGAATAAATATAGC
TGTGAGGGAAATATATACAAATATATTGGAGCAAATAAATTGTACATACAAATATTTATTACTAATTTCT
ATTGAGACGAAATGAACCACTCGGAACCATTTGAGCGAACCGAATCGCGCGGAACCTAACGACAGTCGCTC
CAAGGTCGTCGAACAAAAGGTGAATGTGTTGCGGAGAGCGGGTGGGAGACAGCGAAAGAGCAACTACGAA
ACGTGGTGTGGTGGAGGTGAATTATGAAGAGGGCGCGCATTTGAAAAGTATGTATATAAAAAATATATC
CCGGTGTTTTATGTAGCGATAAACGAGTTTTTGTATGAAGGTATGCAGGTGTGTAAGTCTTTTGGTTAGA
AGACAAATCCAAAGTCTACTTGTGGGGATGTTTCAAGGGGAAATACTTGTATTCTATAGGTCATATCTTG
TTTTTATTGGCACAAATATAATTACATTAGCTTTTTGAGGGGGCAATAAACAGTAAACACGATGGTAATA
ATGGTAAAAAACAAGCAGTTATTTTCGGATATATGTTCGGCTACTCCTTTCGCTCGGGCCCGAAGTCT
TAGAGCCAGATATGCGAGCACCCGGAAGCTCACGATGAGAATGGCCAGACCCACGTAGTCCAGCGGCAGA
TCGGCGCGGAGAAGTTAAGCGTCTCCAGGATGACCTTGCCCGAATCGGGGCACGTGGTGTTCGACGATG
TGCAGCTAATTTCCGCCGGCTCCAGTCCGCCCATTTGGTTAATCAGCAGACCCTCGTTGGCGTAACGGAA
CCATGAGAGGTACGACAACCATTTGAGGTATACTGGCACCCGAGCCGAGTTCAAGAAGAAGCCGCCAAAG
AGCAGGAATGGTATGATAACCGGCGGACCCACAGACAGCGCCATCGAGGTGAGGAGCTGGCGCAGGATA
TTAGATATCCGAAGGACGTTGACACATTGGCCACCAGAGTGACCAGCGCCAGGCAGTTGAAGAAGTGCAG
CACTCCGGCCCGCAGTCCGATCATCGGATAGGCAATCGCCGTGAAGACCAGTGGCACGTGTGAGAAAAAGC
GGTAATTCGGCAATCGTTTTGCCCAGAAAGTATGTGTACAGCGATAAAGTCGACTTCGGGCCTCCCTCA
TAAAACTGGCAGCTCTGAGGTGAACACCTAAATCGAATCGATTCAATTAGAAAGTTAGTAAATTATTAAT
ATGCAAATGTATTCTAAACAAGACTTACATTTATCGTGGCAAAGACGTTTTGAAAGTTCATGTTGGTCAG
GAAGAGGAAGATGGCTCCGTTGATATTCATCACGCCCACTTGGTGTGAGTTGTTGGCCCAAAAAGATGAGG
CCAATCAAGATGGCAACCATCTGCAAATTAATAATGTTACTCGCATCTCATTAAATATTCATATCTTCAACA
TGTTTCGCGAGTTAAATGAAATTTATTTATTTCTGCAAACTATAAACTATACATCTCATTGAAAAAAC
TAAGAAGGTGTGGAATCAGGCAATCTAACTAAAATCTAGCGAATTTGTTTCCAAGAATTGTAAGCGTT
ATATCATTTGTTTCCACTGGAACCACTCACCGTTGCTGAATAAGTCGCACTTTTACGAGGAGTGGTTCC
TTGAGCACCGACAGCCAGGATCGCCACAGGACCGCCGGAACGTCATGAACCAGGTGGCCTTGTAGGTGT
ACCCATCTCCGGCTGCTCCAGTGGCTTCTCAAATTTTTGGTGGCCAACAACGCTCCATATCCCGGGC
TACTTTGCTAATAGCAAATTTGTCGCATATCTTGGCGATCCGATCACGGGACTCGATCTCCCGTCCGGGC
ACAACGGCCAACACCTGTACGTAAGTCCGCCGATTGTAGTTGGTAGGACACTGGGCACCCACGCTGG
ATAGGAGTTGAGATGTAATGTAATGCTAGATAACCTTAATAAACACATCGAACTCACTAGGAAAAGAAGT
CGACGGCTTCGCTGGGAGTGCCCAAGAAAGCTACCTGCCCTCGGCCATCAGAAGGATCTTGTCAAAGAG
CTCAAACAGCTCGGAAGACGGCTGATGAATGGTCAGGATGACGGTCTTGCCCTTCTGCGACAGCTTCTTC
AGCACCTGGACGACGCTGTGGGCGGTAAATGAGTCCAGTCCGGAGGTGGGCTCATCGCAGATCAGAAGCG
GCGGATCGGTTAGTGCCTCGGAGGCGAATGCCAGACGCTTCTTTCTCCGCCGACAGACCTTTCACCCT
GCCGGGCACACCGATGATCGTGTGCTGACATTTGCTGAGCGAAAGCTCCTGGATCACCTGATCCACGCGG
GCCACTCGCTGCCGATAGGTGAGATGTCGTGGCATCCGCACCATGGCCTGGAAAAATCAGGTGTTCCCTGG
CCGTTAGGGAGCCGATAAAGAGGTATCCTGCTGGACATAGGCGCACCTGGCCTGCATCTCCTTGGCGTC
CACAGGTTGGCCATTGAGCAGTCGCATCCCGGATGGCGATACTTGGATGCCCTGCGGCGATCGAAAGGCA
AGGGCATTAGCAGGGTTCGTTTTCCGGCACCGGAACGCCCATCACGGCCAAAAGTTCGCCCGGATAGG
CCACGCCGCAAACCTGAGTTTTCAAATGGTAATTGGACCCTTTATTAAGATTTACACAGATCAGCCGACT
GCGAATAGAAACTCACCGTTCTTGGCAAAATGTTTCTGGGCGCCGGTATGTGTCGCTCGTTGCAGAATA
GTCCGCGTGTCCGGTTGACCAGCTGCCGCCATCCGGAGCCCGGCTGATTGACCGCCCAAGATGTCCAT
ATTGTGCCAGGCATAGGTGAGGTTCTCGGCTAGTTGGCCGCTCCCTGAACCGGAGTCTCCGGCGGACTG

GGTGGCAGGAGCGTGCCGTAGTTTTTGGCCTGCCCGAAGCCCTGGTTAATGCAGCTCTGCGAAGCCGCTC
CGCTGTCACCCTGCAATGATAGGGGATCTCAAATATCAACTACAAGCGTTATGCTCATCTAACCCCGAAC
AAAACGAAGTATCCTACGAAGTAGGTTTATACTTTTATTTATTTTTTGTGCATCTAGGATCAGCTTAAAA
TATCTGGTTGTTATATTTTTTGTAAAAAGAATGTAGTCGAAAATGAATGCCTTTAGATGTCTTGATCAT
GATATGATCTTAAAAATTGTCTTATATAGCGAGCACAGCTACCAGAATAATCTGTTTCGTGTCACTATTT
GTTTGTGCGATTGCGGTTTGGGATTTTTGTGGGTGCGAGTTCTCACGCCGAGACAATTTGATGTTGCAA
TCGCAGTTCCTATAGATCAAGTGAACCTAAGATGTATGCACATGTACTACTCACATTTGTTTCAAGTGCCTG
GCAGATGGGTGTTTGTGCTGCCTCCGCGAATTAATAGCTCCTGATCCTCTTGGCCATTGCCGGGATTTTTTC
ACACTTCCCCTGCTTACCCACCCAAAACCAATCACCACCCCAATCACTCAAAAAACAAACAAAAATAAG
AAGCGAGAGGAGTTTTGGCACAGCACTTTGTGTTTAATTGATGGCGTAAACCGCTTGGAGCTTCGTACAG
AAACCGCTGACAAAGTGCAACTGAAGGCGGACATTGACGCTAGGTAACGCTACAAACGGTGGCGAAAGAG
ATAGCGGACGCAGCGGCGAAAGAGACGGCGATATTTCTGTGGACAGAGAAGGAGGCAAACAGCGCTGACT
TTGAGTGGAATGTCATTTTGTAGTGAGAGGTAATCGAAAGAACCTGGTACTTCAAAATACCCTTGGATCGAA
GTAAATTTAAAACTGATCAGATAAGTTCAATGATATCCAGTGCAGTAAAAATAAAAAAAAAAAAAATGTTT
TTTTTATCTACTTTCCGCAAAAATGGGTTTTTATTAACCTTACATACATGGCGCGCCAGATCGCAAGAAGC
TTGATATCATCGATCTCGAGGCTGCATCCAACGCGTTGGGAGCTCTCCGGATCAATTCGGCTTCAGGTAC
CGTCGACGATGTAGGTCACGGTCTCGAAGCCGCGGTGCGGGTGCAGGGCGTGCCCTTGGGCTCCCGGG
CGCGTACTCCACCTCACCCATCTGGTCCATCATGATGAACGGGTGAGGTGGCGGTAGTTGATCCCGGGC
AACGCGCGGCGCACCGGGAAGCCCTCGCCCTCGAAACCGCTGGGCGCGGTGGTACGGTGAGCACGGGAC
GTGCGACGGCGTCCGGCGGGTGCAGGATACGCGGGGACGCGTACGCGGGTCTCGACGGTACGGCGGGCAT
GTCGACAAGCCGAATTGATCCACTAGAAGGCCTAATTCGGTACACTAGTTGGCCACGTAATAAGTGTGCG
TTGAATTTATTCGCAAAAACATTGCATATTTTCGGCAAAGTAAAAATTTTGTTCATACCTTATCAAAAA
TAAGTGCTGCATACTTTTTAGAGAAACCAATAATTTTTTATTGCATACCCGTTTTTAATAAAAATACATT
GCATACCCTCTTTTAATAAAAAATATTGCATACTTTGACGAAACAAATTTTCGTTGCATACCCAATAAAA
GATTATTATATTGCATACCCGTTTTTAATAAAAATACATTGCATACCCTCTTTTAATAAAAAATATTGCAT
ACGTTGACGAAACAAATTTTCGTTGCATACCCAATAAAAGATTATTATATTGCATACCTTTTCTTGCCAT
ACCATTTAGCCGATCAATTGTGCTCGGCAACAGTATATTTGTGGTGTGCCAACCAACAACACTAGTAGTA
CCAGCTTATAAAGTTCGTATAATGTATGCTATAACGAAGTTATCTGCAGGCAGGTCGGAGTACTGTCTCCG
AGCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGTACTGT
CCTCCGAGCGGAGACTCCCATGGATAAAGTTCGTATAATGTATGCTATAACGAAGTTATGGATCCGCAGGTC
GGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCT
CCGAGCGGAGTACTGTCTCCGAGCGGAGACTCGTGCACAGCGAGCCCGGAGTATAAATAGAGGCGCTT
CGTCTACGGAGCGACAATTCAATTCAAACAAGCAAAGTGAACACGTCGCTAAGCGAAAGCTAAGCAAATA
AACAAGCGCAGCTGAACAAGCTAAACAATCTGCAGTAAAGTGAAGTTAAAGTGAATCAATTAAGTA
CCAGCAACCAAGTAAATCAACTGCAACTACTGAAATCTGCCAAGAAGTAATTATTGAATACAAGAAGAGA
ACTCTGAATAGGGAATTGGGAATTCAGATCTGCGGCCGCGGCTCGAATCACAAGTTTGTACAAAAAAGC
TGAACGAGAAACGTAATAATGATATAAATATCAATATATTAAATTAGATTTTGCATAAAAAACAGACTACA
TAATACTGTAACCAACAATATCCAGTCACTATGGCGGCCGATTAGGCACCCAGGCTTTACACTTTA
TGCTTCCGGCTCGTATAATGTGTGGATTTTGTAGTTAGGATCCGGCGAGATTTTTCAGGAGCTAAGGAAGCT
AAAAATGGAGAAAAAATCACTGGATATAACCACCGTTGATATATCCCAATGGCATCGTAAAGAACATTTTG
AGGCATTTAGTCAAGTGTCTCAATGTACCTATAACCAGACCGTTGAGTGGATATTACGGCCTTTTAA
GACCGTAAAGAAAAATAAGCACAAAGTTTTATCCGGCCTTTATTACATTTCTTGCCCGCCTGATGAATGCT
CATCCGGAATTCGATGGCAATGAAAGACGGTGAGCTGGTATGATGGGATAGTGTTCACCCTTGTAC
CCGTTTTCCATGAGCAAACCTGAAACGTTTTTATCGCTCTGGAGTGAATACCACGACGATTTCCGGCAGTT
TCTACACATATATTTCGCAAGATGTGGCGTGTACGGTGAACCTGGCCTATTTCCCTAAAGGGTTTATT
GAGAATATGTTTTTTCGTCTCAGCCAATCCCTGGGTGAGTTTACCAGTTTTGATTTAAACGTGGCCAATA
TGGACAACCTTCTCGCCCCGTTTTTACCATGGGCAAATATTATACGCAAGGCGACAAGGTGCTGATGCC
GCTGGCGATTACAGTTTCATCATGCCGTCTGTGATGGCTTCCATGTCGGCAGAATGCTTAATGAATTACAA
CAGTACTGCGATGAGTGGCAGGGCGGGGCGTAAACGCGTGGATCCGGCTTACTAAAAGCCAGATAACAGT
ATGCGTATTTGCGCGCTGATTTTTTGCGGTATAAGAATATATACTGATATGTATAACCCGAAGTATGTCAA
AAGAGGTGTGCTATGAAGCAGCGTATTACAGTGACAGTTGACAGCGACAGCTATCAGTTGCTCAAGGCAT
ATATGATGTCAATATCTCCGGTCTGGTAAGCACAAACATGCAGAATGAAGCCCGTCTGCTGCGTGCAGAA
CGCTGGAAAGCGGAAAATCAGGAAGGGATGGCTGAGGTCGCCCGGTTTTATTGAAATGAACGGCTCTTTTG
CTGACGAGAACAGGGACTGGTGAATGCAGTTTAAAGTTTACACCTATAAAAAGAGAGAGCCGTTATCGT
TGTTTGTGGATGTACAGAGTATATTATTGACACGCCCGGGCGACGGATGGTATCCCCCTGGCCAGTGC
ACGCTGCTGTGATGATAAAGTCTCCCGTGAACCTTTACCCGGTGGTGCATATCGGGGATGAAAGCTGGCGC

ATGATGACCACCGATATGGCCAGTGTGCCGGTCTCCGTTATCGGGGAAGAAGTGGCTGATCTCAGCCACC
 GCGAAAATGACATCAAAAACGCCATTAACCTGATGTTCTGGGGAATATAAATGTCAGGCTCCCTTATACA
 CAGCCAGTCTGCAGGTCGACCATAGTGACTGGATATGTTGTGTTTTACAGTATTATGTAGTCTGTTTTTT
 ATGCAAAATCTAATTTAATATATTGATATTTATATCATTTTACGTTTCTCGTTTCAGCTTTCTTGTACAAA
 GTGGTGATTCGAGGGTACCTCTAGAGCAAACCTAGTTCGATCTGCTAGACAATTGTTGGCATTAGTGTAGG
 CATCACACACGATTAACAACCCCTAAAAATACACTTTGAAAATATTGAAAATATGTTTTTGTATACATTT
 TTGATATTTTCAAACAATACGCAGTTATAAACTCATTAGCTAACCCATTTTTTTCTTTGCTTATGCTTAC
 AGATTGCAAAGAACTAGAGCCGCGGGATCTTTGTGAAGGAACCTTACTTCTGTGGTGTGACATAATTGGA
 CAACTACCTACAGAGATTTAAAGCTCTAAGGTAAATATAAAATTTTTAAGTGTATAATGTGTTAAACTA
 CTGATTCTAATTGTTTGTGTATTTTAGATTCCAACCTATGGAACCTGATGAATGGGAGCAGTGGTGGAAATG
 CCTTTAATGAGGAAAACCTGTTTTGCTCAGAAGAAATGCCATCTAGTGATGATGAGGCTACTGCTGACTC
 TCAACATTTCTACTCTCCAAAAAGAAGAGAAAGGTAGAAGACCCCAAGGACTTTCCTTCAGAATTGCTA
 AGTTTTTTGAGTCATGCTGTGTTTAGTAATAGAACCTTGCTTGCTTTGCTATTTACACCACAAAGGAAA
 AAGCTGCACTGCTATACAAGAAAATATGGAAAAATATTTGATGTATAGTGCCTTGACTAGAGATCATAA
 TCAGCCATACCACATTTGTAGAGGTTTTACTTGCTTTAAAAAACCTCCACACCTCCCCCTGAACCTGAA
 ACATAAAATGAATGGAATTGTTGTTGTTAACTTGTTTATTGCAGCTTATAATGGTTACAAATAAAGCAAT
 AGCATCACAATTTCAAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAAACTCATCA
 ATGTATCTTATCATGCTGGTTCCAGAGCTCTGGCCACGTAATAAGTGTGCGTTGAATTTATTTCGCAAAA
 ACATTGCATATTTTCGGCAAAGTAAAATTTTTGTTGCATACCTTATCAAAAAATAAGTGCCTGCATACCTTT
 TAGAGAAACCAAATAATTTTTTATTGCATACCCGTTTTTAATAAAAATACATTGCATACCCTCTTTTAATA
 AAAAAATATTGCATACCTTGACGAAACAAATTTTCGTTGCATACCCAATAAAAGATTATTATATTGCATAC
 CCGTTTTTAATAAAAATACATTGCATACCCTCTTTTAATAAAAAATATTGCATACGTTGACGAAACAAATT
 TTCGTTGCATACCCAATAAAAGATTATTATATTGCATACCTTTTTCTTGCCATACCATTTAGCCGATCAAT
 TGTGCTCGGCAACAGTATATTTGTGGTGTGCCAACCAACAACGAGCTCCAGCTTTTGTTCCTTTAGTGA
 GGGTTAATTTTCGAGCTTGGCGTAATCATGGTCATAGCTGTTTTCTGTGTGAAATTGTTATCCGCTCACAA
 TTCCACACAACATACGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTGAGCTAACCTCAC
 ATTAATTGCGTTGCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATTAATGAATC
 GGCCAACGCGCGGGGAGAGGCGGTTTGCCTATTGGGCGCTCTTCCGCTTCCCTCGCTCACTGACTCGCTGC
 GCTCGGTCGTTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGTTTATCCACAGAATC
 AGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCG
 TTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGAGGT
 GCGGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCCTCTCCTGT
 TCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGTTTTCTCATAGC
 TCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCG
 TTCAGCCCGACCGCTGCGCCTTATCCGTAACCTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATC
 GCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTCTTG
 AAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTA
 CCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTTTTTTTGT
 TTGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCT
 GACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTTCATGAGATTATCAAAAAGGATCTTCACCT
 AGATCCTTTTAAATTAATAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAACTTGGTCTGACAG
 TTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTATCCATAGTTGCCTGA
 CTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCGC
 GAGACCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAG
 TGGTCCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTTCG
 CCAGTTAATAGTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTGTTGGTA
 TGGCTTCATTCAGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCCATGTTGTGCAAAAAAGC
 GGTTAGCTCCTTCGGTCCCTCCGATCGTTGTGAGAAGTAAGTTGGCCGAGTGTATCACTCATGGTTATG
 GCAGCACTGCATAATTTCTTACTGTGATGCCATCCGTAAGATGCTTTTTCTGTGACTGGTGTAGTACTCAA
 CCAAGTCAATTCGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATAC
 CGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTTGAAAACGTTCTTCGGGGCGAAAACCTCAAGG
 ATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGCATCTTTTA
 CTTTCACCAGCGTTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAAGGGAATAAGGGCGAC
 ACGGAAATGTTGAATACTCATACTCTTCTTTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTC
 ATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCCGAA
 AAGTGC