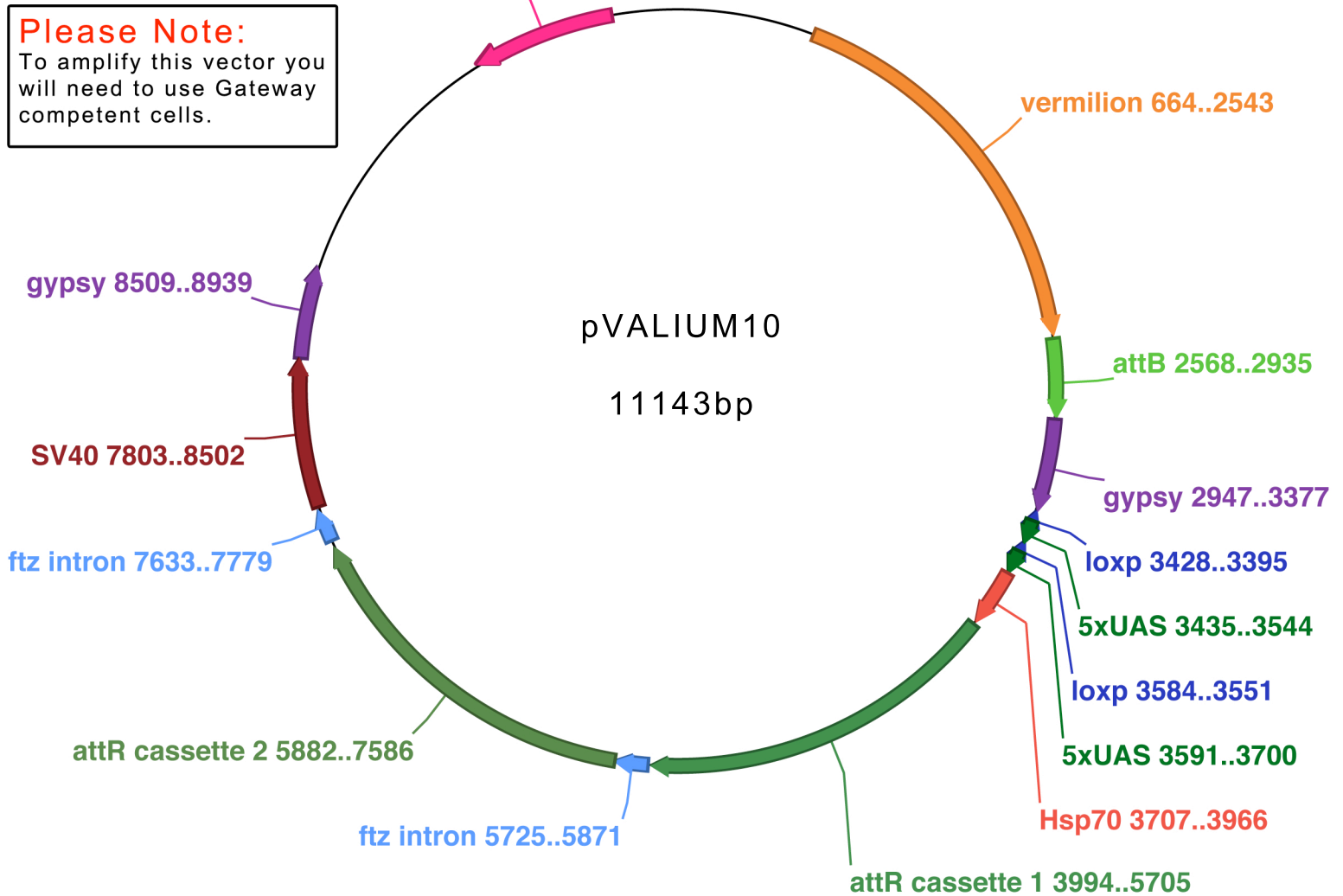


AmpR 10820..10161

**Please Note:**

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



**Features:**

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

664-2543,	vermilion
2568-2935,	attB
2947-3377,	gypsy
3395-3428,	loxP
3435-3544,	5xUAS
3551-3584,	loxP
3591-3700,	5xUAS
3707-3966,	Hsp70 promoter
3994-5705,	attR cassette 1
5725-5871,	ftz intron
5882-7586,	attR cassette 2
7633-7779,	ftz intron
7803-8502,	SV40 polyA
8509-8939,	gypsy

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

Accession number: GU931382

Reference: Ni et al., 2009. Genetics, 182(4):1089-100.

VALIUM10: 11143bp

CACCTAAATTGTAAGCGTTAATATTTTGTAAAAATTCGCGTTAAATTTTTGTAAATCAGCTCATTTTTT  
AACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAGAATAGACCGAGATAGGGTTGAGTGTG  
TTCCAGTTTGGAAACAAGAGTCCACTATTAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTA  
TCAGGGCGATGGCCACTACGTGAACCATCACCTAATCAAGTTTTTTGGGGTCGAGGTGCCGTAAAGCA  
CTAAATCGGAACCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCGAGAA  
AGGAAGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTACAGCTGCGCGTAAC  
CACCACACCCGCCGCTTAATGCGCCGCTACAGGGCGCGTCCCATTCCGCCATTCAGGCTGCGCAACTGT  
TGGGAAGGGCGATCGGTGCGGGCTCTTCGCTATTACGCCAGCTGGCGAAAGGGGGATGTGCTGCAAGGC  
GATTAAGTTGGGTAACGCCAGGGTTTTCCAGTACGACGTTGTAAAACGACGGCCAGTGAATTGTAATA  
CGACTCACTATAGGGCGAATTGGGTACAAGCTT**ATTTATTTTTGTTATGTTATATGTATTATATGTCAGAC**  
**ATAAAGAAAAGGAACACATCAAATGTGATAACAAAGACTAAACAAGTAATTTTTATTACACAAAACGACA**  
**AAACAGTAGGCAGAACAAACAACGCATAGCCAAACATTGACGAATTGGATACCTTGCCGATTGTCAGACA**  
**CTTTTGTGATCAGTTTCTTGCGAATGGTCTCGTCCAGCGGTGGAATCGCCTCGCGGGGAATCAGAAAAG**  
**TGGACAGATTGAACAGATCCAGAAACACCTTGTACCGATCACTGAAACCAAAAAAAAAACAAAGGGAGAAC**  
**AGTTTGAGTTCATTGATCCCCGATATAATCACATCTGCGATGATCACCTGAGAGTGGAGCGCAGATATTG**  
**ATATCCAGACGAGCCACCAGTGCCCAACTGTTGGGATCCAATCATGCGTTGCACCATGATCACGTGATTG**  
**TCTGCGGCGGGAATAGAAAGTATTTGGTTAGGAAAACAGTCTTAAACATAAGATATATTTATAAAAAGAG**  
**TATCAAAGAATGCAATACTTACATCTCCACTTGGTTATTAACGAGTCGATGTCCATGAGCAGGGTGAGCA**  
**ACTGGTGTGGTTGGCTGAACCTGGGTTCATCCCTATAGAAGGTGATCATGATGGCTCCCTGAAGGGCACG**  
**ATGGCTAAACCGGCGATCCCCACGACGCACCAGTGCATCGTGCCTGCCGATCAAAGATGGAGCGATAC**  
**ACCTCGCGTCGCTTCTCAATGTCCATGAGGCGGTAGTTTTTTCGCTTCTCCACGGGCTCCTCCATGGCGC**  
**TCTGTACCTGCGCCTCCAGGAATCGATCGACGCTCTCCTGAAACTTGGCCCAGAAGTTGAAGCCACTCTC**  
**CTCCAGTCCGGGCGTCTCTCCAGCCATCGTGCCTAGCTCCAGTAGCGAGGGATCTTCTCCGAGTTG**  
**CGAATCGAGTTCGCGCCTCCTCGTGCCTAAAGACATCCGAGTACTTCTGGTTGTATCTCACCCGCTGCT**  
**CTGTCAGAACTCCCAGCTTGTCTCGATCAAACGGAAGTGCAGCGACTGAAAACCAGATGCGGGTGCCAG**  
**GTACTTGCAGGAAGTCCATGAAGTCTAGCGGGTTCATGGTCTCCAGAATGGGCAGTGGTCCACCAGGAGC**  
**TGTACAAAGGAAGTTATAAACGGATTTTGGTAAGAGATTGAGAAAGCACTCACTTTTAGAATCAGAACCA**  
**CTCGGTTGAGTCGCTTGCATCTCCAGCGTCTTGGTTTCATCGATGACCTCTGCATCCAACATGTCTCG**  
**TATGGAGTCGAACTCAAAGATGATCTGCTTGAACCAAAGCTCGTAGGCTGTGGCGAAGGTACTTAAATGC**  
**CATTGAGTGTGTCATCAAAGTTGTAACCTACTCACCTGGTGCCTGATGATGAACAGATGCTCATCGT**  
**GCACGGTTCGCTTGTCTCCTCGGACAGCATACTGGGCATCCAGCAGTTTGTCCAGCATCAGATACTC**  
**TCCATAGATTTTGCCACTTCCGTGGTTAATGGCACCGCCGAATCATCGTATCGTTTCTGTATGGGTTT**  
**GAATTGAATCGCAGAAGTGAAGATCGATTGGCATTCCCTGGACAGCACGTGCTGGTGTCCACCCGTTTCT**  
**GCATAGGGACAGCTCATGGTGCACAGCTCAGATCAGATCGTACTCCTCGAGCGGCGGATGCTGGCGAAC**  
**TGATCTCCGCCAGCGGACCGGAGATGAGACCCAGCGAACCAGATAACAGAGCGAGAGACTCCAGTTCGG**  
**ACTGATTGCACAGTCGGTATCTGGGCGATGGGCACTGCCAGATAGGCTGGGAATTATCAATCACTTGAG**  
**GTGAAAGTGCGGCGCACACAAATAAGCTTGATATCATCGATCTCGAGGCTGCATCCAACGCGTTGGGAGC**  
**TCTCCGGATCAATTCGGCTTCAGGTACCGTGCAGCATGTAGGTACGGTCTCGAAGCCGCGGTGCGGGTG**  
**CCAGGGCGTGCCCTTGGGCTCCCCGGGCGGTACTCCACCTCACCCATCTGGTCCATCATGATGAACGGG**  
**TCGAGGTGGCGGTAGTTGATCCCGGCGAACGCGCGGCGCACCGGGAAGCCCTCGCCCTCGAAACCGCTGG**  
**GCGCGGTGGTACGGTGAGCACGGGACGTGCGACGGCGTGGCGGGTGGCGGATACGCGGGGACGCTCAG**  
**CGGGTCTCGACGGTACGGCGGGCATGTCGACAAGCCGAATTGATCCACTAGAAGGCCTAATTCGGTAC**  
**ACTAGTTGGCCACGTAATAAGTGTGCGTTGAATTTATTCGCAAAAACATTGCATATTTTCGGCAAAGTAA**  
**AATTTTGTGTCATACCTTATCAAAAATAAGTGTGCTGCATACTTTTTAGAGAAACCAAATAATTTTTTATT**  
**GCATACCCGTTTTTAATAAAAATACATTGCATACCTCTTTTAATAAAAATATTGCATACTTTGACGAAA**  
**CAAATTTTCGTTGCATACCCAATAAAAGATTATTATATTGCATACCCGTTTTTAATAAAAATACATTGCAT**  
**ACCTCTTTTAATAAAAATATTGCATACGTTGACGAAACAAATTTTCGTTGCATACCCAATAAAAAGATT**  
**ATTATATTGCATACCTTTTCTTGCATACCATTTAGCCGATCAATTGTGCTCGGCAACAGTATATTGTG**  
**GTGTGCCAACCAACAACACTAGTAGTACCAGCT**ATAACTTCGTATAATGTATGCTATACGAAGTTAT**CT**  
**GCAGGCAGGTTCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGG**  
**AGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGACTCCATGG**ATAACTTCGTATAATGTATG****  
**CTATACGAAGTTATGGATCCGCAGGTTCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGT**  
**ACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCCGAGCGGAGTACTGTCTCGAC**AGCG****  
**AGCGCCGGAGTATAAATAGAGGGCGCTTCGTCTACGGAGCGACAATTCAATTCAAAACAAGCAAAGTGAACA**

CGTCGCTAAGCGAAAGCTAAGCAAATAACAAGCGCAGCTGAACAAGCTAAACAATCTGCAGTAAAGTGC  
AAGTTAAAGTGAATCAATTAAGTAACCAGCAACCAAGTAAATCAACTGCAACTACTGAAATCTGCCAA  
GAAGTAATTATTGAATACAAGAAGAGAACTCTGAATAGGGAATTGGGAATTCAGATCTGCGGCCGCGGC  
TCGAATCACAAAGTTTGTACAAAAAGCTGAACGAGAAACGTAAAATGATATAAATATCAATATATTAAT  
TAGATTTTGCATAAAAAACAGACTACATAACTGTAAAACACAACATATCCAGTCACTATGGCGGCCGC  
ATTAGGCACCCAGGCTTTACACTTTATGCTTCCGGCTCGTATAATGTGTGGATTTTGAGTTAGGATCCG  
GCGAGATTTTTCAGGAGCTAAGGAAGCTAAAATGGAGAAAAAATCACTGGATATAACCACCGTTGATATAT  
CCCAATGGCATCGTAAAGAACATTTTGAGGCATTTTCAGTCAGTTGCTCAATGTACCTATAACCAGACCGT  
TCAGCTGGATATTACGGCCTTTTAAAGACCGTAAAGAAAAATAAGCACAAAGTTTATCCGGCCTTTATT  
CACATTCTTGCCCGCCTGATGAATGCTCATCCGGAATTCGGTATGGCAATGAAAGACGGTGAGCTGGTGA  
TATGGGATAGTGTTTACCCTTGTACACCGTTTTCCATGAGCAAACTGAAACGTTTTTCATCGCTCTGGAG  
TGAATACCACGACGATTTCCGGCAGTTTCTACACATATATTCGCAAGATGTGGCGTGTACGGTGAAAAC  
CTGGCCTATTTCCCTAAAGGGTTTATTGAGAATATGTTTTTCGTCTCAGCCAATCCCTGGGTGAGTTTCA  
CCAGTTTTGATTTAAACGTGGCCAATATGGACAACCTTCTTCGCCCCGTTTTTACCATGGGCAAAATATTA  
TACGCAAGGCGACAAGGTGCTGATGCCGCTGGCGATTTCAGGTTTCATCATGCCGTCTGTGATGGCTTCCAT  
GTCGGCAGAATGCTTAATGAATTACAACAGTACTGCGATGAGTGGCAGGGCGGGGCGTAAACGCGTGGAT  
CCGGCTTACTAAAAGCCAGATAACAGTATGCGTATTTGCGCGCTGATTTTTGCGGTATAAGAATATATAC  
TGATATGTATACCCGAAGTATGTCAAAAAGAGGTGTGCTATGAAGCAGCGTATTACAGTGACAGTTGACA  
GCGACAGCTATCAGTTGCTCAAGGCATATATGATGTCAATATCTCCGGTCTGGTAAGCACAAACCATGCAG  
AATGAAGCCCGTCTGCTGCGTGCCGAACGCTGGAAAGCGGAAAAATCAGGAAGGGATGGCTGAGGTCGCC  
GGTTTATTGAAATGAACGGCTCTTTTGTGCTGACGAGAACAGGGACTGGTGAATGCAGTTTAAAGGTTTACA  
CCTATAAAAGAGAGAGCCGTTATCGTCTGTTTTGTGGATGTACAGAGTGATATTATTGACACGCCGGGCG  
ACGGATGGTGATCCCCCTGGCCAGTGCACGTCTGCTGTGATATAAAGTCTCCCGTGAACTTTACCCGGTG  
GTGCATATCGGGGATGAAAGCTGGCGCATGATGACCACCGATATGGCCAGTGTGCCGGTCTCCGTTATCG  
GGGAAGAAGTGGCTGATCTCAGCCACCGCGAAAATGACATCAAAAACGCCATTAACCTGATGTTCTGGGG  
AATATAAATGTGAGGCTCCCTTATACACAGCCAGTCTGCAGGTCGACCATAGTGACTGGATATGTTGTGT  
TTTACAGTATTATGTAGTCTGTTTTTTATGCAAAATCTAATTTAATATATTGATATTTATATCATTTTAC  
GTTTCTCGTTTTCAGCTTTCTTGTACAAAGTGGTGATTCGAGGGTACCTCTAGAAGGTAGGCATCACACAG  
ATTAACAACCCCTAAAATACACTTTGAAAATATTGAAAATATGTTTTTGTATACATTTTTTGATATTTTC  
AAACAATACGCAGTTATAAACTCATTAGCTAACCCATTTTTTCTTTGCTTATGCTTACAGGTCGACTGT  
GACCATTTTGTACAAGAAAGCTGAACGAGAAACGTAAAATGATATAAATATCAATATATTAATAGATT  
TTGCATAAAAAACAGACTACATAACTGTAAAACACAACATATCCAGTCACTATGGTCGACCTGCAGAC  
TGGCTGTGTATAAGGGAGCCTGACATTTATATTTCCCGAAGCATCAGGTTAATGGCGTTTTTGTATGTCAT  
TTTTCGGGTGGCTGAGATCAGCCACTTCTTCCCGATAACGGAGACCGGCACACTGGCCATATCGGTGGT  
CATCATGCGCCAGCTTTTCATCCCGATATGCACCACCGGGTAAAGTTCACGGGAGACTTTATCTGACAGC  
AGACGTGCACTGGCCAGGGGATCACCATCCGTGCGCCGGGCGTGTCAATAATATCACTCTGTACATCCA  
CAAACAGACGATAACGGCTCTCTTTTTATAGGTGTAACCTTAACTGCATTTACCAGTCCCTGTTCT  
CGTCAGCAAAAGAGCCGTTTCAATTAACCGGGCGACCTCAGCCATCCCTTCTGATTTTTCCGCTTT  
CCAGCGTTCCGCACGACGACGAGCGGGCTTCATTCTGCATGGTTGTGCTTACCAGACCGGAGATATTGACA  
TCATATATGCCTTGAGCAACTGATAGCTGTGCTGTCAACTGTCACTGTAATACGCTGCTTCATAGCACA  
CCTTTTTTTGACATACTTCGGGTATACATATCAGTATATATTCTTATACCGCAAAAATCAGCGCGCAAT  
ACGCATACTGTTATCTGGCTTTTAGTAAGCCGGATCCACGCGTTTACGCCCCGCCCTGCCACTCATCGCA  
GTACTGTTGTAATTCATTAAGCATTCTGCCGACATGGAAGCCATCACAGACGGCATGATGAACCTGAATC  
GCCAGCGCATCAGCACCTTGTGCGCTTGCATATAATATTTGCCATGGTGAAAACGGGGCGAAGAAGT  
TGTCCATATTGGCCAGTTTTAAATCAAACTGGTGAAACTCACCCAGGGATTGGCTGAGACGAAAACAT  
ATTCTCAATAAACCTTTAGGGAAATAGGCCAGGTTTTTACCAGTAAACGACCCACATCTTGCGAATATATG  
TGTAAGAACTGCCGAAATCGTCTGTTGTTACTCCAGAGCGATGAAAACGTTTCAGTTTGTCTATGGA  
AAACGGTGTAAACAAGGGTGAACACTATCCCATATCACCAGCTCACCGTCTTTTATTGCCATACGGAATTC  
CGGATGAGCATTATCAGGCGGGCAAGAATGTGAATAAAGGCCGGATAAAACTTGTGCTTATTTTTCTTT  
ACGGTCTTTAAAAGGCCGTAATATCCAGCTGAACGGTCTGGTTATAGGTACATTGAGCAACTGACTGAA  
ATGCCTCAAAATGTTCTTTACGATGCCATTGGGATATATCAACGGTGGTATATCCAGTGATTTTTTTCTC  
CATTTTAGCTTCTTAGCTCCTGAAAATCTCGACGGATCCTAACTCAAAATCCACACATTATAACGAGCCG  
GAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGCGGCCGCATAGTACTGGATATGTTGTGTTTTACA  
GTATTATGTAGTCTGTTTTTTATGCAAAATCTAATTTAATATATTGATATTTATATCATTTTACGTTTCT  
CGTTTACGCTTTTTTTGTACAACTTGTCTAGAGCAAACTAGTTCTGATCTGCTAGACAATTGTTGGCATC  
AGGTAGGCATCACACACGATTAACAACCCCTAAAATACACTTTGAAAATATTGAAAATATGTTTTTGTAT

TACATTTTTGATATTTTCAAACAATACGCAGTTATAAACTCATTAGCTAACCCATTTTTTCTTTGCTTA  
 TGCTTACAGATTGCAAAGAAGCTAGAGCCGCGGGATCTTTGTGAAGGAACCTTACTTCTGTGGTGTGACAT  
 AATTGGACAAACTACCTACAGAGATTTAAAGCTCTAAGGTAATATAAAATTTTTAAGTGTATAATGTGT  
 TAAACTACTGATTCTAATTGTTTGTGTATTTTAGATTCCAACCTATGGAAGTGAATGGGAGCAGTGG  
 TGGAAATGCCTTTAATGAGGAAAACCTGTTTTGCTCAGAAGAAATGCCATCTAGTGATGATGAGGCTACTG  
 CTGACTCTCAACATTTACTCTCCAAAAAAGAAGAGAAAGGTAGAAGACCCCAAGGACTTTCTTCAGA  
 ATTGCTAAGTTTTTTGAGTCATGCTGTGTTTAGTAATAGAAGTCTTGCTTGCTTTGCTATTTACACCACA  
 AAGGAAAAGCTGCCTGTATACAAGAAAATTATGGAAAATATTTGATGTATAGTGCCTTGACTAGAG  
 ATCATAATCAGCCATACCACATTTGTAGAGGTTTTACTTGCTTTAAAAAACCTCCACACCTCCCCCTGA  
 ACCTGAAACATAAAATGAATGGAATTGTTGTTGTTAACTTGTTTATGTCAGCTTATAATGGTTACAAATA  
 AAGCAATAGCATCACAAATTTACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTTGTCCAAA  
 CTCATCAATGTATCTTATCATGTCTGGTTCCAGAGCTCTGGCCACGTAATAAGTGTGCGTTGAATTTATT  
 CGCAAAAACATTGCATATTTTCGGCAAAGTAAAATTTGTTGCATACCTTATCAAAAAATAAGTGTGCA  
 TACTTTTTAGAGAAAACCAATAATTTTTTATTGCATACCCGTTTTTAATAAAAATACATTGCATACCCCTCT  
 TTTAATAAAAAATATTGCATACTTTGACGAAACAAATTTTCGTTGCATACCCAATAAAAGATTATTATAT  
 TGCATACCCGTTTTTAATAAAAATACATTGCATACCCCTTTTTAATAAAAAATATTGCATACGTTGACGAA  
 ACAAAATTTTCGTTGCATACCCAATAAAAGATTATTATATTGCATACCTTTTTCTTGCCATACCATTTAGCC  
 GATCAATTGTGCTCGGCAACAGTATATTTGTGGTGTGCCAACCAACAGAGCTCCAGCTTTTGTTCCTT  
 TTAGTGAGGGTTAATTTTCGAGCTTGCGGTAATCATGGTTCATAGCTGTTTCCTGTGTGAAATTGTTATCCG  
 CTCACAATTCACACAACATACGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTGAGCT  
 AACTCACATTAATTGCGTTGCGCTCACTGCCCGCTTTCAGTCCGGAAACCTGTGCTGCCAGCTGCATTA  
 ATGAATCGGCCAACGCGCGGGGAGAGCGGTTTTGCGTATTGGGCGCTCTTCCGCTTCCCTCGCTCACTGAC  
 TCGCTGCGCTCGGTGCTTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCA  
 CAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAA  
 GGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGT  
 CAGAGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCCT  
 CTCTGTTCCGACCTGCCGCTTACCGGATACCTGTCCGCCTTCTCCCTTCGGGAAGCGTGGCGCTTTC  
 TCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCACGAA  
 CCCCCGTTTCAGCCCGACCGCTGCGCCTTATCCGGTAACATATCGTCTTGAGTCCAACCCGTAAGACAG  
 ACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGA  
 GTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAG  
 CCAGTTACCTTCGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTT  
 TTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTAC  
 GGGGTCTGACGCTCAGTGAACGAAAACCTCACGTTAAGGGATTTTGGTTCATGAGATTATCAAAAAGGATC  
 TTCACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAACTTGGT  
 CTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTCATCCATAGT  
 TGCCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATG  
 ATACCGCGAGACCCAGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGC  
 GCAGAAGTGGTCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAG  
 TAGTTCGCCAGTTAATAGTTTTGCGCAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTGC  
 TTTGGTATGGCTTCATTCAGCTCCGTTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCA  
 AAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTTGTCAGAAGTAAGTTGGCCGAGTGTATCACTCAT  
 GGTTATGGCAGCACTGCATAATTTCTTACTGTATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAG  
 TACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCGGCGTCAATACGGG  
 ATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAAC  
 CTCAAGGATCTTACCGCTGTTGAGATCCAGTTTCATGTAACCCACTCGTGCACCAACTGATCTTCAGCA  
 TCTTTTACTTTTACCAGCGTTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAA  
 GGGCGACACGAAATGTTGAATACTCATACTCTTCTTTTCAATATTATTGAAGCATTATCAGGGTTA  
 TTGTCTCATGAGCGGATACATATTTGAATGTATTTAGAAAAATAAACAAATAGGGTTCCGCGCACATTT  
 CCCCCAAAAGTGC