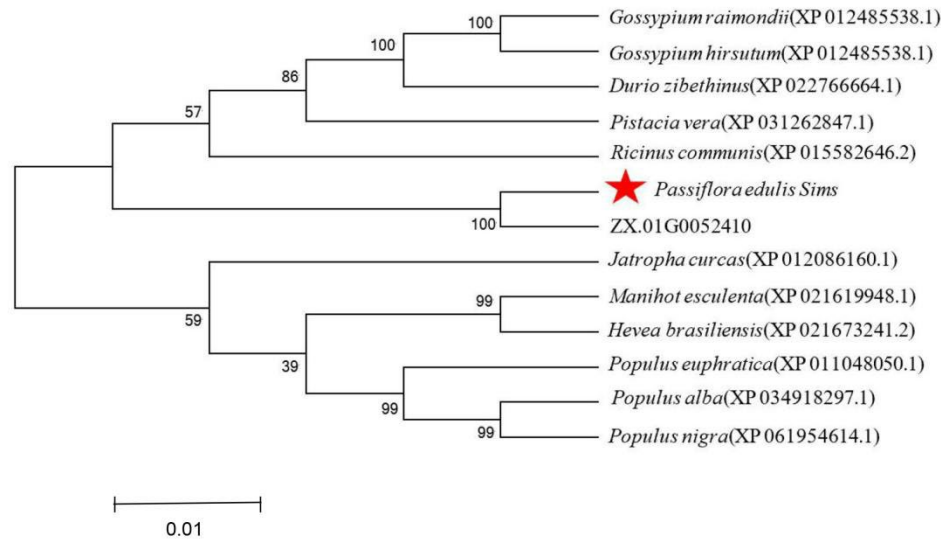


A



B

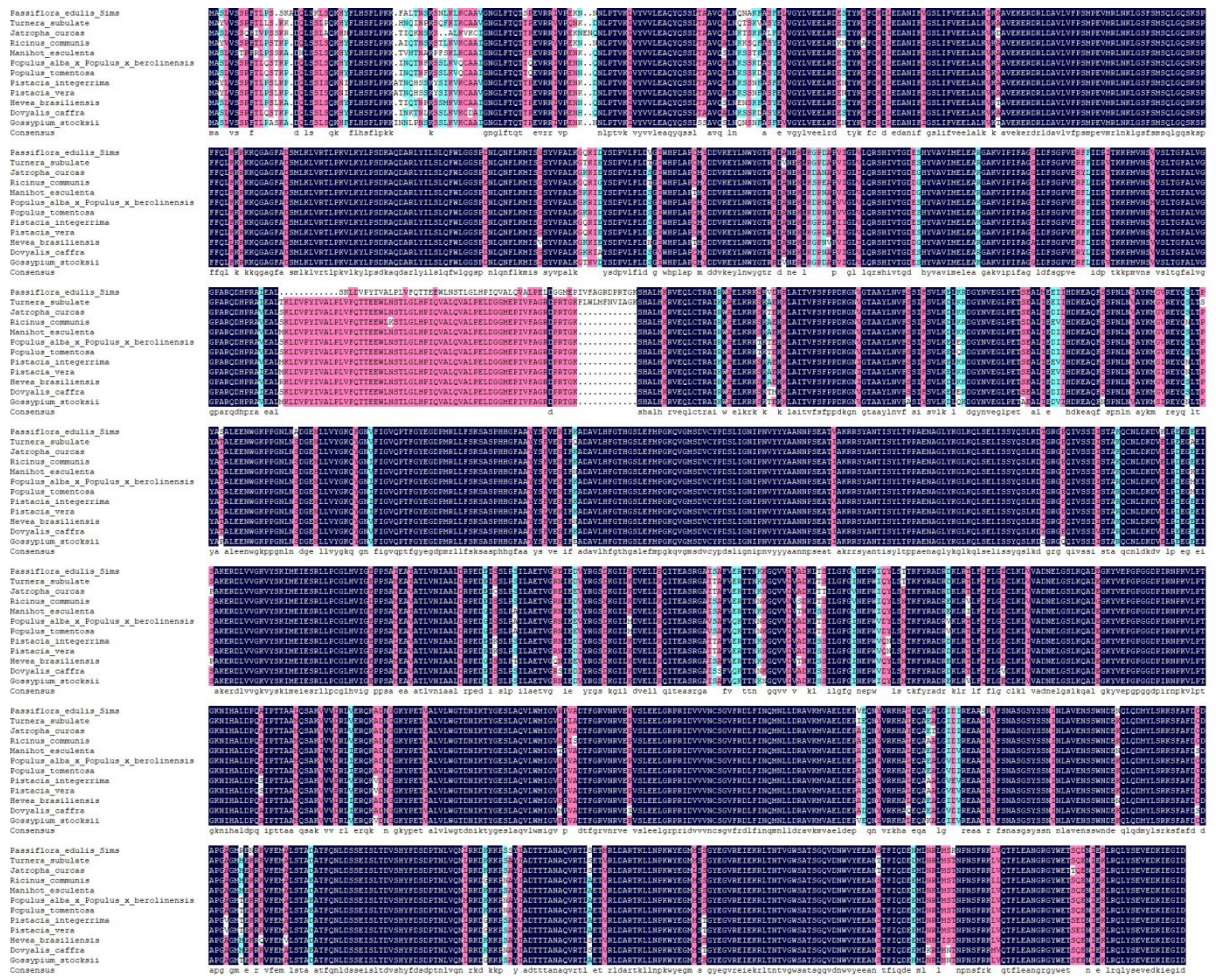


Figure S1. Bioinformatics analysis of *PeCHLH* in *Passiflora edulis*. (A) Phylogeny during the evolution of *Passiflora edulis*; (B) The amino acid sequence alignment analysis with other species.

Table S1. The efficiency of infection in different *Agrobacterium* densities

OD ₆₀₀	Vacuum Pressure (KPa)	Infection Efficiency (%)
0.8	0.8	46.70%
1.0	0.8	23.30%
1.2	0.8	33.30%

Table S2. Efficiency of the infestation of passion fruit seedlings of different cultivars

Variety Name	Silence Efficiency
Tainong	6.3%
Purple Passion Fruit	3.1%
Qin Mi No.9	0%
Guava-flavored	35.6%

Table S3. List of gene-specific primers used for gene cloning.

	Gene and primer name	Forward primer (5' to 3')	Reverse primer (5' to 3')	Source
PCR for MP	MP (MPF/MPR)	CGCAGTACAAGGTTGAATACAGT	CTCAATCGTCTTCATCTCCACTT	This study
PCR for CP	CP (CPF/CPR)	CTAACAGTGCTCTTGGTGTGATT	CAACTCCATGTTCTCTAACGAAGT	This study
Gene cloning for <i>PePDS</i>	<i>PDS</i> (<i>PDSF</i> / <i>PDSR</i>)	tgagtaagggtaccggaattcCTTCATGCGAGTGTT CCT	GGGACATGCCCCGGGCCTCGAGTCAACTCATCCTT GCCTC	This study
Gene cloning for <i>PechlH</i>	<i>chlH</i> (<i>CHF</i> / <i>CHR</i>)	tgagtaagggtaccggaattcGGCATTGGCATAGTT AATGAC	GGGACATGCCCCGGGCCTCGAGCTTGAGATGCAT TGTGTGAC	This study
Gene cloning for <i>pTRV2-PechlH</i>	<i>chlH</i> (<i>tRCHF</i> / <i>tRCHR</i>)	tgagtaagggtaccggaattcGCAGGCATGAGAGA GAACAG	GGGACATGCCCCGGGCCTCGAGAATCTCCCTAAC ACCCTCAT	This study
Gene cloning for <i>pTRV2-PePDS</i>	<i>PDS</i> (<i>tRPDF</i> / <i>tRPDR</i>)	tgagtaagggtaccggaattcCTTCATGCGAGTGTT CCT	GGGACATGCCCCGGGCCTCGAGCTTTCAGTGGCTT AGCAG	This study
For RT-qPCR	<i>PDS</i> (<i>qPDSF</i> / <i>qPDSR</i>)	TGCTTATGTGTTTGCCACT	ATTAATAACAGGAACTCCGACT	This study
For RT-qPCR	<i>chlH</i> (<i>qCHF</i> / <i>qCHR</i>)	AAGAAATTGGCCCTAACCAAC	TTCAGGCACTATTCTACGAAC	This study
For RT-qPCR	<i>60S</i> (<i>qSF</i> / <i>qSR</i>)	AGGTGGGTAACAGGATTATC	TGGCTGTCTTTTGGTGCTG	This study

>The structural domain fragments of *PePDS* cDNA: (1695 bp)

CTTCATGCGAGTGTTCTGCTTTGAATTTTAGCCGGCAAAGCAATGCCTTGGATGTTGAAACTG
CCTTTCTTCTCCCTCAGATGCGGTGCTCATCCTTCTTCTTTAAAAATTCAATCTGCAAATCCCCG
TAAAGCAGGTCTCAGGAGTGTCTCCCGCCCCTGAAGGTAGTTTGCCTGGACTATCCTAGACCG
GACCTTGATAACACCGCCAATTTCTTGAAGCTGCACTCTTATCATCCTCCTTTGCACTCGTTCA
CGTCCTGCTAAGCCACTGAAAGTCGTTATTGCTGGTGCAGGTTTGGCTGGTCTATCGACTGCTAA
ATATTTGGCGGATGCAGGTCATAAGCCTTTATTACTCGAAGCAAGAGATGTTCTAGGTGAAAAG
GTGGCTGCGTGGAAAGATGATGATGGGGACTGGTATGAGACAGGGTTGCATATATTCTTTGGGG
CATACCCAAATGTCCAAAACCTGTTTGGAGAACTTGATATCAATGATAGGCTGCAGTGGAAGGA
GCACTCTATGATCTTTGCAATGCCAAACAAGCCTGGAGAGTTCAGCCGTTTTGATTTCCCTGAAA
ATCTGCCTGCACCCTTAAATGGAATATTGGCGATTTTAAAGAACAATGAAATGCTGACTTGGCCA
GAAAAAATAAAGTTTGCAATTGGTCTCCTTCCAGCAATGGTTGGTGGACAACCTTATGTTGAGG
CTCAAGATGGTCTGACGGTTAAGGAATGGATGCGAAAGCAGGGTGTACCTGATCGAGTACTA
CTGAGGTGTTCAATGCCATGTCAAAGGCACTTAACTTCATAAATCCTGATGAACTTCAATGCAG
TGCATCTTGATTGCGCTGAACCGATTTCTACAGGAGAAAAATGGTTCCAGGATGGCTTTCTTAGA
CGGTAATCCCCCAGAAAGACTCTGCATGCCAATTGCTGACCATATTCAGTCACTGGGTGGTGAA
GTCAGACTTAATTCTCGAATAAAAAAGAATTGACCTAAATGATGATGGGACAGTAAAGAGCTTTG
TTTTAAACAGTGGGGATGTGATTGAAGGGGATGCTTATGTGTTTGCCACTCCAGTTGACATCCTG
AAGCTAATTTTGCCTGACCGTTGGAAAGAGATGCCATACTTCAATAAGTTGGAGAACTAGTCG
GAGTTCCTGTTATTAATGTACATATATGGTTTGACAAAAAATTGAAGAATACGTATGATCATCTC
CTCTTTAGCAGAAGTCCCCTTCTAAGTGTGTATGCAGATATGTCTTTGACGTGCAAGGAATATTA
CAACCCAAATCAATCAATGCTGGAATTAGTTTTTCTCCAGCAGAAGAGTGGATCTCTCGCAGT
GACTCGGAGATCATTGATGCCACTATGAAAGAACTTGCAAAACTCTTTCCTGATGAAATATCTGC
AGATCAGAGCAAAGCAAAAAATTGTTAAATACCATGTTGTCAAACACCCAGGTCTGTTTACAAG
ACTGTGCCCCGATTGTGAACCTTGTGACCGTTGCAAAGATCACCAATAGAAGGTTTCTATTTATC
TGGTGATTACACAAAACAGAAATATTTGGCTTCAATGGAAGGCGCTGTTCTATCTGGGAAGTTCT
GTGCTCAGGCTATTGTACAGGACTACCAGTTGCTAGCTGCTCGTACGCAGGGTAAGTTGGCCGA
GGCAAGGATGAGTTGA

>The full-length cDNA of *PeChlh*: 4146 bp

ATGGCTTCTCTAGTTTCCTCTCCTTTCACTTTACCATCTTCGAAAGCAGACCAACTCTCTAAGCTT
TCTCAGAAGCATTACTTTCTCCATTCATTTCTACCCAAGAAATTTGCCCTAACCAACTCAAAATCC
AACTTGAAACTAAAATGTGCTGCGGTTGGAAATGGCCTGTTTACACAGACTAGTCCAGAAGTTC
GTAGAATAGTGCCTGAAAAGAACAACAATCTTCCTACTGTTAAACTGTTTATGTAGTCTTGAA
GCTCAGTACCAATCGTCGCTCACTGCTGCAGTTCAAGCTTTAAACCAGAACGCCAAATTTGCCT
CCTTTGAACTCGTCGGCTACTTGGTAGAGGAGCTTCGCGACGAATCAACATACAAAACCTTTCTGT
AAGGACCTTGAAGATGCAAATATCTTTGTTGGGTCGTTGATTTTTGTTGAGGAGCTTGCTTTGAA
GATCAAAGCTGCCGTGGAGAAAGAGCGGGATAGACTTGATGCAGTTTTGGTCTTCCCTCTATG
CCTGAGGTAATGAGACTTAACAAGTTGGGTTCTTTCAGTATGTCCCAGCTTGGTCAGTCAAAGA
GTCCATTCTTTCAGTTGTTCAAGAAAAAGAAGCAAGGTGCAGGTTTTGCCGACAGTATGTTAAA
GTTGGTCAGGACGTTACCCAAGGTTCTAAAGTATTTGCCTAGTGATAAGGCTCAAGATGCTAGG
CTTTATATCTTGAGTCTGCAGTTTTGGCTCGGCGGATCTCCTGATAACTTGCAAGATTTCTGAAG
ATGATATCTGGCTCTTATGTCCCTGCATTGAAAGGGCAAAGATTGACTACTCTGACCCAGTTCT
CTTCTTGACGTTGGCATTGTCACCCTTTGGCTCCTTGATGTATGATGATGTGAAAGAGTATTT

GAATTGGTACGGAAGCTAGAAGGGATGCTAATGAGAAGCTCAAGGGGCCTGATGCACCGGTGAT
TGGGCTAGTTTTGCAAAGGAGTCACATTGTAAGTGGTGATGAGAGTCATTATGTGGCTGTGATA
ATGGAATTGGAGGCAAGGGGTGCCAAAGTCATACCTATTTTCGCCGGTGGACTTGACTTTTCAG
GGCCTGTTGAGAGGTTCTTCATTGATCCAATTACAAAGAAGCCAATGGTGAAGTTCGGTGGTATC
ATTGACTGGTTTTGCTCTTGTGGAGGGCCAGCTAGGCAGGACCATCCTAGAGCTATTGAGGCC
CTGAGCAAGCTTGATGTGCCTTACATTGTAGCGTTGCCTTTGGTGTTCAAACTACCGAAGAATG
GTTGAACAGTACCCTTGGGTGACCCAATTCAGGTGGCTTTGCAAGTTGCACTTCCTGAGCTG
GATGGAGGCATGGAGCCCATTGTCTTTGCTGGTCGAGATCCCAGAACAGGGAAATCACATGCC
CTTCACAAGAGGGTGGAACAGCTCTGCACCAGGGCTATCAGATGGGCTGAACTGAAAAGAAAA
TCAAAGTTGACAAGAAGTTAGCGATCACCGTCTTCAGTTTCCCTCCGGACAAAGGAAATGTAG
GGACAGCAGCCTACCTCAATGTCTTCTCTTCATCTTCTGTTCTAAAAGAAGTCAAGAGAGAT
GGTTACAACGTTGAGGGCCTTCCAGAGACATCAGAAGCCTTGATGGAAGAAATAATTCATGATA
AAGAGGCCCAATTCAGCAGTCCTAATCTGAATATTGCCTATAAAATGGGTGTTGAGAAATACCA
GAGTCTTACTCCTTACGCCTCTGCATTAGAGGAAAAGTGGGGCAAACCTCCTGGCAATTTGAAC
GCTGACGGAGAGAATCTTTGGTCTATGGAAAACAGTTTGGTAATGTCTTCATTGGCGTCCAGCC
GACTTTTGGCTATGAGGGTGATCCCATGCGGCTTCTGTTCTCCAAATCTGCAAGCCCACATCATG
GATTTGCAGCTTACTACTCATTTGTTGAGAAAATCTTCAAAGCTGATGCGGTTCTTCACTTTGGAA
CTCATGGTTCTCTTGAATTCATGCCAGGAAAGCAGGTGGGGATGAGTGATGTTTGCTATCCAGA
CAGTCTCATTGGTAATATCCCCAATGTCTATTATTATGCAGCTAACAACCCATCTGAAGCCACAG
TAGCAAAACGCCGTAGCTACGCAAACACTATTAGCTATTTGACCCCTCCAGCAGAAAACGCTGG
ACTTTACAAGGGACTGAAGCAGTTGAGTGAGCTCATCTCCTCATACCAATCCCTCAAAGACACA
GGCCGTGGGCCACAGATCGTAAGCTCCATTATCAGCACTGCCAAGCAATGCAATCTTGACAAA
GATGTTAACTTCCGGAGGAAGGGGAGGAGATCTCTGCAAAAGAGCGGGATCTCGTGGTTGGT
AAGGTGTACTCCAAGATTATGGAAATCGAATCCAGGCTTTTGCCCTGTGGGCTTCATGTCAATTGG
TGAGCCCCCATCTGCCATTGAAGCTATTGCAACTCTAGTAAACATTGCCGCTCTAGACCGTCCTG
AAGATGAGATTTTCACTCCCCTCCATATTGGCCGAAAGTGTGGGCGAGAGATAGAGGATGT
TTATCGAGGAAGTGACAAGGGAATCTTGAAGGATGTGGAGCTTCTGAGACAAATAACTGAGGC
ATCACGAGGTGCCATCAGTGCCTTCGTGGAGAGGACCACCAATAAGAAGGGTCAAGTTGTGGA
TGTGGCTGATAAGCTTACCTCCATCCTTGGGTTTGGTGTTAACGAACCATGGATTCACTATTGT
CGACCACGAAGTTTTACCGGGCAGATAGGGATAAGCTTAGAACACTGTTTCAGTTCCTCGGAGA
GTGTTTGAACTGGTAGTCGCTGATAATGAGTTGGGAAGTCTGAAACAGGCCTTGGAGGGGAA
ATATGTGGAACCAGGGCCCCGGTGGTGATCCAATCAGAAACCCGAAGGTGCTCCCCACAGGAAA
GAACATTCATGCGCTGGACCCACAAGCCATTCTACGACAGCAGCATTGCAGAGTGCAAAAGT
AGTGGTGGATAGATTAGTCGAGAGGCAGAAAGCTGACAATGGTGGGAAGTATCCTGAAACAGT
CGCACTAGTGTTGTGGGGAAGTACCAATATCAAGACTTATGGTGAGTCCCTGGCTCAGGTCTTG
TGGATGATAGGAGTGAGGCCAGTCGCCGATACCTTTGGTAGAGTTAACCGGGTTGAACCGGTG
AGCCTTGAAGAGCTTGAAGGCCCAAGATCGACGTTGTTGTGAAGTCTCCGGAGTTTTTCAGAG
ATCTTTTTATCAATCAGATGAACCTCCTGGACCGAGCAGTGAAGATGGTGGCTGAACTAGATGA
GCCGGTGGAAACAAAAGTATGTTAGGAAACATGCGCTGGAGCAAGCTGAAGCCCTTGGCATCGA
CATCCGGGAAGCTGCTTCACGAGTGTTCTTAATGCCTCGGGATCTTACTCCTCAAATATAAATC
TTGCTGTGGAGAATTCATCATGGAATGATGAGAATCAGCTTCAAGACATGTACTTAAGCCGCAA
GTCCTTTGCATTTGATTGTGATGCTCCAGGTGCAGGCATGAGAGAGAACAGAAAAGTTTTCGAG
ATGGCTCTAAGCACAGCAGATGCCACCTTCCAAAACCTGGACTCCTCTGAAATCTCACTCACTG
ATGTGAGCCACTATTTTGAAGTCAAGCCCAACAAACCTAGTGCAGAACCTGAGGAAGGACAAGA

AAAAGCCTAGCTCCTATATCGCAGACACAACAACAGCTAATGCTCAGGTACGCACACTGTCAG
AGACCATGCGGCTCGATGCTCGAACCAAGTTGTTGAACCCCAAGTGGTATGAAGGCATGATGTC
CAGTGGATATGAGGGTGTAGGGAGATTGAGAAGAGGCTCACAAACACAGTTGGATGGAGTGC
AACTTCAGGGCAAGTTGACAACCTGGGTCTACGAAGAGGCCAACTCGACTTTCATTGAGGATGAG
AACATGCTCAATAGGCTCATGAGCAAGAACCCCAATTCATTGAGGAAGTTGGTGCAGACATTCC
TGGAGGCCAACGGACGTGGTACTGGGAACTTCTCAGGATAACATTGAAAGTTGAGGCAGC
TATACTCGGAAGTTGAAGACAAGATTGAGGGCATTGATCGGTAG

>PePDS amplified sequences in TRV2-PePDS: 283 bp

CTTCATGCGAGTGTTCTGCTTTGAATTTTAGCCGGCAAAGCAATGCCTTGGATGTTGAAACTG
CCTTTCTTCTCCCTCAGATGCGGTGCTCATCCTTCTTCTTTAAAAATTCAATCTGCAAATCCCCG
TAAAGCAGGTCTCAGGAGTGTCTCCCGCCCCTGAAGGTAGTTTGGTGGACTATCCTAGACCG
GACCTTGATAACACCGCCAATTTCTTGAAGCTGCACTCTTATCATCCTCTTTCGCACTCGTTCA
CGTCTGCTAAGCCACTGAAAG

>PechIH amplified sequences in TRV2-PechIH: 315 bp

GCAGGCATGAGAGAGAACAGAAAAGTTTTGAGATGGCTCTAAGCACAGCAGATGCCACCTTC
CAAAACCTGGACTCCTCTGAAATCTCACTCACTGATGTGAGCCACTATTTGACTCAGACCCAAC
AAACCTAGTGCAGAACCTGAGGAAGGACAAGAAAAAGCCTAGCTCCTATATCGCAGACACAAC
AACAGCTAATGCTCAGGTACGCACACTGTCAGAGACCATGCGGCTCGATGCTCGAACCAAGTT
GTTGAACCCCAAGTGGTATGAAGGCATGATGTCCAGTGGATATGAGGGTGTAGGGAGATT

>Mp nucleotide sequences: 759 bp

ATGGAAGACAAGTCATTGGTCACCTTGAAGAAGAAGACTTTCGAAGTCTCAAAATTCTCAAATC
TAGGGGCCATTGAATTGTTTGTGGACGGTAGGAGGAAGAGACCGAAGTATTTTACAGAAGAA
GAGAACTGTCCTAAATCATGTTGGTGGGAAGAAGAGTGAACACAAGTTAGACGTTTTTGACCA
AAGGGATTACAAAATGATTAAATCTTACGCGTTTCTAAAGATAGTAGGTGTACAACCTAGTTGTAA
CATCACATCTACCTGCAGATACGCCTGGGTTCATTCAAATCGATCTGTTGGATTGAGACTTACT
GAGAAAAGAAAGAGAGGAAAGACTATTCAGAGATTCAAAGCTCGAGCTTGCATAACTGTTCA
GTTGCGCAGTACAAGGTTGAATACAGTATTTCCACACAGGAGAACGTACTTGATGTCTGGAAGG
TGGGTTGTATTTCTGAGGGCGTTCCGGTCTGTGACGGTACATACCCTTTCAGTATCGAAGTGTG
CTAATATGGGTTGCTACTGATTGACTAGGCGCCTCAATGTGGAAGAACTGAACAGTTCGGATT
ACATTGAAGGCGATTTTACCGATCAAGAGGTTTTCGGTGAGTTCATGTCTTTGAAACAAGTGGA
GATGAAGACGATTGAGGCGAAGTACGATGGTCCTTACAGACCAGCTACTACTAGACCTAAGTC
ATTATTGTCAAGTGAAGATGTTAAGAGAGCGTCTAATAAGAAAAACTCGTCTTAA

>Cp nucleotide sequences: 615 bp

ATGGGAGATATGTACGATGAATCATTTGACAAGTCGGGCGGTCTGCTGACTTGATGGACGATT
CTTGGGTGGAATCAGTTTCGTGGAAAGATCTGTTGAAGAAGTTACACAGCATAAAATTTGCACT
ACAGTCTGGTAGAGATGAGATCACTGGGTACTAGCGGCACTGAATAGACAGTGTCTTATTCA
CCATATGAGCAGTTTCCAGATAAGAAGGTGTATTTCTTTTAGACTCACGGGCTAACAGTGCTCT
TGGTGTGATTGAGAACGCTTCAGCGTTCAAGAGACGAGCTGATGAGAAGAATGCAGTGGCGGG
TGTTACAAATATTCCTGCGAATCCAAACACAACGGTTACGACGAACCAAGGGAGTACTACTACT
ACCAAGGCGAACACTGGCTCGACTTTGGAAGAAGACTTGTACACTTATTACAAATTCGATGATG

CCTCTACAGCTTTCCACAAATCTCTAACTTCGTTAGAGAACATGGAGTTGAAGAGTTATTACCGA
AGGAACTTTGAGAAAGTATTCGGGATTAAGTTTGGTGGAGCAGCTGCTAGTTCATCTGCACCGC
CTCCAGCGAGTGGAGGTCCGATACGTCCTAATCCCTAG