Table S2 Native genome sequences of the four CRISPR-Casπ cassettes.

Name	Description	Sequence (5'-3')
CRISPR-Casπ-1 cassette	DNA nucleotides sequence of CRISPR-Casπ-1 cassette from *Casπ* gene to the last repeat.	ATGGCGAAGGCAACCAAAGAAGTCAAGTCGAAGCG CGTGGAAGCGTTGCGGCAGGTGGCGTATCAACGGCT GGAACGCCTCGAGCGGAAGGCTCAGAAGATCGGAG CGCATCTGCGCAAGCCGGGAAAAGCCGCTGACCTCC AATCACTCCATTATCTTCTTCACAAGGTCGAAGTCGA ATATCACGATATCGCAAGGAACCTGGAGAAGGACCC GACTTGGACACCAAAACCGAAAATGCGACGAGAGA AGCGTGCCATCGTGCCGGAGTCCGGCCCGGCTGCGC CCCTCCCGACCACGGCAAAGGGTGAGCCGGGTAGAC CGGCAAACCGTCATATTCCGCCACCAGTGCCGCTCG ATTCAGCAAGGATCCCCGAAGACCAACAGTCGATGG GCCAAGGAAGCGGGGGGAGGAGTTGGTGTTCTGCGC CTTTCGTTGAGGTGAAGTTACCGCCGACTCAATGGTC GAATGTCCGGGAGAAGCTTCTGAAATTCCGAATTGA GGACGACGCCGACATCGTCAGGCGGTGGGCCGAGGC CAAGTTCGGAAGCATCGAGACGGCGCGCGATGGATT ACGTGCGAGCGCAGAGATCGGAACGAGCCCGGATGT CTGGCGTTCCTTCATCAGCCGCGCGATCTCGAACGGC AAGAAGGACTTTGAGCCACTTCTCTCGTTGGACGAT GACGAATTGACCGCGGATGCAACAGCCGAGCGCGTT GTGCGTCGGTGGCATCAGATTGACTGGGTGGGCCGA ATGCTCGACTCCATCCTGGAAACCGTCCCGTCGGGG GTCTCGAAAGACACGTTTCGAAGCAGGGTCGAATCG CGTCTCAAGACGTTTCACTCGTCTGTGAACAGCTTCG AGCTCAAGAAGAGGAAGGACGGTACGGTCGAGCGC AAGCGGAAGCACACCAACCCGCAGTTTCCGTACTTG TCACCGAGCGCAGTGAGCATCGATCCTGATGTTGTG ACTATGGAGGCGGTCGAACTGCTCCAGATGCAGCCC GAGGAACGCTTTGCAAAGGACCCGAACGATGCGAAT GGCAGAATGAGGCTGAGGGTTTTGCAGGCGGAACTC GGCAAAGCACGACGCGAGGCTCTGGGTCGGCGGGGC GAGAAGGCCCCGCCGTGGAGTGGCCGCAAGGTCTTT CGCGGAACCACGACCAGGAAGAGGGAAGCGTGCCT GGTTTGGGACAAAGAGGCACAAGCGGATGGACTTTA CTTCGCGCTCGTGATGTCGGGCGGACCAAAGATCGA CGACAAACGGTTTGTCTACATGGACGGTCAGCCGCT ACAAAGCGATTGGCAACTGCACAACGGAGTGGCCGG TAAGGCAAAGTCATGCAGGGCGATGCCTCTCATTTT GAAGCATGACTTCCTGCGGTGGTACCACCGCCACAT TAAGAACCACGACGTCAATGCTCCCCTCGAAAAGCG GTGCGTTCACACGACGACCCAGTTCGTTTTCGTGGAG

		CCGGACGAAAAGAAGGGCCTTCAGCCCCGGCTGTTC ATCAGACCCGTATTCAAGTTCTACGATCCGGTCTATG AAGTGCCGGATAGCCACTCGATTGACAAGAAGCCGG ACTGCCGATATTTGATCGGAATTGACCGAGGCGTTA ACTACCCCTATCGTGCCGCAGTATACGATTGCGAGA CAAACTCCATAATCGCCGACAAGTTCGTGGACGGAC GAAAGGCAGATTGGGAGCGGATACGAAATGAACTC GCATACCACCAGCGGCGACGTGACCTCCTGCGCAAC TCGCGTGCCTCTTCCGCCGCAATACAGCGAGAGATTC GAGCCATTGCACGGATTCGCAAGAGGGAGCGTGGGC TGAACAAAGTCGAGACGGTCGAGAGCATCGCGCGGC TCGTCGACTGGGCGGAAGAGAATCTCGGGAAGTGCA ATTACTGCTTCGTTCTCGAAGACCTTTCTTCAAACTT GAATCTGGGGCGAAACAACAGGGTCAAGCACATTGC CGCGATCAAGGAGGCGCTGATCAACCAGATGCGCAA GCGCGGATATCGTTTCAAAAAGAGCGGGAAAGTTGA CGGCGTGCGAGAGGAGTCCGCGTGGTACACGAGTGC CGTTGCGCCATCCGGTTGGTGGGCGAAGAAGGAAGA AGTGGACGGGGCCTGGAAAGCGGACAAGACGCGGC CATTGGCGAGAAAGATCGGCAGTTACTATTGCTGCG AAGAAATCGACGGACTCCATTTGCGCGGCGTGCTGA AGGGGCTCGGAAGGGCGAAGCGACTCGTTCTTCAAA GCGACGACCCATCCGCGCCGACTCGCAGACGAGGGT TTGGATCAGAGTTGTTCTGGGACCCCTATTGCACCGA ACTCTGCGGCCACGCTTTCCCGCAAGGCGTCGTACTG GACGCAGACTTCATCGGCGCCTTCAATATTGCGCTGC GACCGCTGGTGAGGGAGGAACTTGGGAAGAAGGCG AAGGCCGTGGACCTGGCCGACAGGCACCAGACGCTC AATCCGACGGTTGCCCTCCGATGCGGCGTAACGGCG TACGAGTTCGTCGAAGTCGGGGGCGATCCCCGGGGC GGTCTCCGAAAAATCTTGCTCAATCCCGCAGAGGCC GTGATATAATTTGAATGTGCTCTGCCGAAGACGCCG CACGGAGCCTGGGCCGGAATCGTAGATCGAACGCGG CATCGAAGCCCTGCAGCCCTTCGGGGCCAAGGCGGC GCAGCAAGCCTCTTTCAGGCGGCAGAGTCCTTTAGA GTGTAACGAGGGCCCCCAGGAACGGGGGCCCAGCCA TCTCCAGGGAAGGGACAGAGGAGGTGGATAGTGAA GTACGAATACGTCGAGACATTCGGGTCGGCGGTTCA AAAGCACTCCGAGCGACTTGTCGTGTCGGAGCCTTC CGGCGAAGGAGGGCAGAGAACAAAGAGGCAGGTGC CCGCTCTACACCTGGACCACCTGCTGATCGGCTCACG CGGCGTCAGCATTTCGTCGGACGCTCTCGAACTCTGC TGCGAACGAGGCATTCCCGTCACAATCGTGGATCGC CGCGGCAAGCCGGTGGGGAAGTTCACCGCCCCGGCA

		ATTCACGGCACCAGCCGGACGCGCCGAGCGCAGATC AGAGCGTACGAGAACGGCCTCGGGGTTACTTTCGCT CGCTCGGTCGTCATTGGAAAGGCGGCGAATCAGGCA ATAAACCTGAAATACTTCGCAAAGAATCGACGAGAG CGAAGCCCGGATCAGTACGAGACGCTCAGAAAATCC GCAGAGGCGATCGACCGCGTTGCTCGTAGAGCGAAG AAGATCTCGGCGAACTGCATTGATGAAGTTCGACAA CCGCTCATGGTCCTTGAGGCCGAGGCTTCGCGCATCT ACTGGAGTTCGTTGTCAGCTCTTTACGGCAGCAGCTC TGGCTTTGTGCACCGCGAGCAAAGGGGTACCAAGAA TCCAGTCAATGCTGCGCTGAACTACGCCTACGGTGTA CTGACAGGCGAAGTTTGGACAGCGTGCCTCCTGGCT GGGCTTGAACCGTACGCAGGATTCCTACACGCGGAC CGACCAGGGAGGCTCAGTTTCGTGTTGGACCTTATCG AGGAGTTTCGGCCAGTGGTCGCGGATAGGGTCGTAT TCGCACTCGCGGCGAAGGGGTGGAGGATTGAACAAG AGGAGAATGGATGGCTCTCGCTCGCGTCGAAAAACA AGCTCCTCGCGAGTTTGGCCGAGAGGTTGGATTCTCC CGAGCCTGACCGCGGGAGGAGGCGCAAACTGCGCA ACGTAATTCAGCGGCAGGCATACGCAGCGGCACAGC ATTTCTTAGGAAATGAAACCTACGTGCCATATAAGC AGAGGTGGTAGCAGAATGACCTGGCTCGTTGTGTAT GACATTGAGGATGACAGAGTTCGAACGAAGGTCGCA GACTATTGCCTGGACAAGGGTCTGGAGCGGATCCAA TACAGTTGCTTTCTTGGCGAGATGTCGCGAACATTGG CTCGCGAGCTGGCATCAAAGTGCAAGCGGAAGCTCG GGGACAAGCCCGGGAAGATTCGGCTTGTTCCCGTTT GTGAAAAGGACCTTGCAAGCCAGGTTCGAATCGAGA ATGTGCCTTGATCATGGAAGTCTCGCCGAGTGATGG ATTCGTCTCCGTATCCGAGGTCAGACAGTGGTCATAT TGTCCGCGTGTCGTCTGGCACAACCGCTGGCTAGGG GAACGCAGACCCCAGACGTCTCGAATGGAAGAAGG GAGGGCCGACCAGGCGGAACGGGAGCGGAAGGAGA AGAGGCGCACGTTCGCCGAATACCGGTTGCCTGCCC AATCGCGAAGATTCAACGTGTACTTGAGGTCGGAGC GGCTCGGTGTTTCTGGTGTCGTGGACGCCGTGCTGGA ACTTACGAATCGCTCCATCGACGAAGTGGACTCCCA AGGGCTCGATCCGGAACGCCCTTATTTCGCGCCAGTT GAGTATAAGAGCACGCAAGAGAGGGTCGGCCGCCAT CATCTTCTGCAGCTCGCAGGGTATGCGGCGCTGCTCT CCGATATTACGGGAACGAGCGTACCGTTCGGATACT TCGTTTCGCTTCCCAACGGGCGAGCAAGCAGGGTCG AACTGAGCGAGAAGGCGAGGGAAGAGTTCCTTTCGT GCGTGCAAGGGATACGTAACATGGTAGTCGAGTGCC

		GAATGCCGGAGCCCACGCCTTCGCGGGCGAAGTGCC GAGACTGTGAGTTCCGCCGCTTCTGCAATGACGTGTG GTGAGCCCGCAACCCTGTCAACCGACGGATTCCCGG CCCAATGTGCGAAAGTAGCGCGGGCGCCGTTGCTCG ATCCTCCATGCCGGGAGTGCGAAGAGGTGCCTCCAT TTTGGGGCAGTAGGAGGCTTATCGGCCTCCTCCGCCG TCCGCAGCAGGCCGGAGCCGCCGAACTGTTCGCACA TTGGCGCAGATACACTGGCAGATATGGGGTTGCGAA TCTCGCGGACGAATCGGGTGTTTGAACCAAAAATGC GGCGATAATGTACGGAAGCCCGAGTGCGGAGCCCCA GCCTTTGAGGCTGGCCCCTACGGGCGCAGGACAAAA TGCACACTCTAAAGGAATGAAAGGGTCACGGCCACG GTGAGCGCGACGGACGTGAGCTCGGCGCAGGACAA AATGCACACTCTAAAGGAATGAAAGGAGGGCTGGA AACTCGAAATCCTCGACACGGGCGGGCGCAGGACAA AATGCACACTCTAAAGGAATGAAAGGAAAAGAATC GAGACGGCGCAAAGCCGAAAGAATACTGGCGCAGG ACAAAATGCACACTCTAAAGGAATGAAAGGGTTCTG ATAGCCAAGTAGTGCCTCGATTCCCACCCTGGCGCA GGACAAAATGCACACTCTAAAGGAATGAAAGATCAG CTCGAGGGCGTTCGCAAGCGCGACCGCTTCCTCGGC GCAGGACAAAATGCACACTCTAAAGGAATGAAAGA CGGAGAGTGGATGCTCTTGGCACGAGAGCGCTGGCA GGCGCAGGACAAAATGCACACTCTAAAGGAATGAA AGACACGACGCGCGGGTGAGCCGCGAGGAGTTCCGG CTGCGGCGCAGGACAAAATGCACACTCTAAAGGAAT GAAAGAGGCAGATGCGCGGCGGACCATGATCGCGA CACTCCTGGCGCAGGACAAAATGCACACTCTAAAGG AATGAAAGCTCGTGGAAGTTCCGGAAGCGCTCTTCA GTAGAGAGCGGCGCAGGACAAAATGCACACTCTAAA GGAATGAAAGACAACGCAGCGTCTCGCAACAGGCCG TATCTCGCAGTGGCGCAGGACAAAATGCACACTCTA AAGGAATGAAAGGAGCAGAACGCGGCGCAATACGG GAGGGGCGGACCGGCGCAGGACAAAATGCACACTCT AAAGGAATGAAAGGGATATGTTTCCGTGAACGCCGG TCGCTCGGACGCCGGGCGCAGGACAAAATGCACACT CTAAAGGAATGAAAGTCTTTTAGCGTCGAAAAACCC CGACATTTTTCGCCAAAACCGGCGCAGGACAAAATG CACACTCTAAAGGAATGAAAGTGCATAACTCTACCT CGCTAATAGCGCGTGAACGGAAAGGCGCAGGACAA AATGCACACTCTAAAGGAATGAAAGGAAGTACAGG GCGTCATTCGTGTCGAACGGATCCGGCAGGCGCAGG ACAAAATGCACACTCTAAAGGAATGAAAGACACTCG GCGCGCACTTGCAAGATGAAAGAGCCCCCAGGCGCA

		GGACAAAATGCACACTCTAAAGGAATGAAAGCGAAT CGGCCACGTCCACGGCCCCTCAGACGGGTCGAGGCG CAGGACAAAATGCACACTCTAAAGGAATGAAAGAG CCGAGCGTCAGGGGTTTCATTCCGTCTCTCCTTTCGC GGCGCAGGACAAAATGCACACTCTAAAGGAATGAA AGTTGCAAGTCTCATTCGATTGCCTCCATGATTGCTT GAGGCGCAGGACAAAATGCACACTCTAAAGGAATG AAAGCGGCTACGCACGGATGGACTCCGCACGCGTAA TCTCTGGCGCAGGACAAAATGCACACTCTAAAGGAA TGAAAGTAGTCGAATGCGTTTTGATCGCGAATGCGC GTAACGGGCGCAGGACAAAATGCACACTCTAAAGGA ATGAAAGCCAGCCACTTCCATATCCGTCGATCGCGC GCGAGCAGTGGCGCAGGACAAAATGCACACTCTAAA GGAATGAAAGGTAAAGGAGATCGTGGCAGCCGCGA CCGCGCTCTTGGGCGCAGGACAAAATGCACACTCTA AAGGAATGAAAGTGTGATTGCAGGTCCGAGTGCATC GCTCGCGCATCCTGGCGCAGGACAAAATGCACACTC TAAAGGAATGAAAGCGCGTCTCTTATAGGGATCAGT CGGAATCCTCATTAGGCGCAGGACAAAATGCACACT CTAAAGGAATGAAAGCAACTGGATGGTCAGAATGCG GTCGTACTCTGTGGGGGCGCAGGACAAAATGCACAC TCTAAAGGAATGAAAGTGACGACGACGTTCGGCTCG CGATTCTGAATCGCGGGCGCAGGACAAAATGCACAC TCTAAAGGAATGAAAGTTACCAAAACCGAAACCATT ATTGGGAATGGGGAAAACGGCGCAGGACAAAATGC ACACTCTAAAGGAATGAAAGACCCGTCGGTGAACTC GACGAACAAGTCCTCGATGTCGGCGCAGGACAAAAT GCACACTCTAAAGGAATGAAAGGAGAAGACCCCCGC GAGGCGAAGAACCTGGGCCATCTGGGCGCAGGACA AAATGCACACTCTAAAGGAATGAAAGGGATCCTCGA GCCTGAGCAGTAATGGACTGGTCGGAGGGGCGCAGG ACAAAATGCACACTCTAAAGGAATGAAAGGGTCCGC TGGGCGCTGTCGCACTACGGTCGCTGCCGGCGGCGC AGGACAAAATGCACACTCTAAAGGAATGAAAGACTC CAGGGCCTCCCTGTTGGTGAAGAACAGATAGGGCGC AGGACAAAATGCACACTCTAAAGGAATGAAAGTCTT ATCTGCCTCCGGCATTTATTTCTTCTTGGGGCGGGCG CAGGACAAAATGCACACTCTAAAGGAATGAAAGTCC CTGAGCCCTTGCAAGTCCAGTGAGACGTTGTCGAGG CGCAGGACAAAATGCACACTCTAAAGGAATGAAAGT TGTAGACGACGTTCGAGTAGACGCGCGAGCCCGGCA GGCGCAGGACAAAATGCACACTCTAAAGGAATGAA AG

CRISPR-Casπ-2 cassette	DNA nucleotides sequence of CRISPR-Casπ-2 cassette from *Casπ* gene to the last repeat.	ATGGGTAAGAATCGATCCTCGTCCTCGGATTTGAGCC CGCTCGAACGGTCCTTGCGGAAGGTCGGTGAGAATC GCCTTGAGCGGCTGCGGGTGCGAGAGGAGAAGATTA GGAAGCACATAGAACAGCACCCCCGCGGTAAGAAC GATCATCAGGCTCTCCACTTCTTATTGCACCAAATCG AGGTCGAGCGTAACGACCTGTACCGAAACCTCAAAG ACCCCGAGTACGTGCCCAAACCAGCGAAACAGCGGC GCGAAAGACGGCAGATCAACGTCGCCAAACCCCCGA CTCGACCAAAGAAGGAAAAGGGGCCTCAACCAGAG TCGACGAAGTACGTGATCCGTCCACCAGTCCCTGGG AAAAACCTTCCTGCCTTTGCTAGCAAGTACGAGGCG CGAGACACGCGGGACGATTCCTACCAGGACGGTCGC TCATGGACCTCCGCACCATATGTTGAAGTCGAACTTC CCATCCTTGGTGCAGACAAAGTCATCCAGAAACTGA TGAAGTTCGTGCAGAAGGACGAGCGGTCGATCGTGC GCGACTGGGCGACAAAGACGTATAGCTCGATCGAAG CCGCAAGAGAAGCACTCCTTGTCGGGGCACAAGTCT CGGAAGACGTTTCGGTCTGGCGCGGACTCCTCGCAG AAACGAAGAACGCACAGAACTTCGCCGCCCTCTCCG ACGATCAGATCGAAGCAGCGATGTCGAAGGAGGCG AAGGGCGCGGACTTGCGTCCGAGGCGCGCCGCACTG CTGGTCGCACAGCGCCACTGGGTGGATCAGACCGTC AAAGCAATCAAGGAGTCCGCACCGTCCGGCGTCGAC AAGGACACTCTCGATCGCCGTCTGCGCGCAGGTCTG AGGGGGTTTCATACTGCGGCCAACTCAGGCAAGCAC ACGAACCCGCAGTTCCCATACCTCACCGCAGAGAAG CCGGTAGTCCCGATGGAGTCTGTTGTTCAGAGCGTAT TGGCCTTTCTCGACGATCCAGACGATCAAAGGTACA CGAAGGACAAAGAAGACGACAAGAAGCGCCACCGC GTCACTGTCTTGCAGAAGGAGCTCGGAAAGGCGAGG CCACGAAAACGGTTAGAACTCCAAACGCCGAAATGG GCCGGCAGGCCCACGGTAAAAGGAACCATCAGCAA ACGGCGCGACGCAGCGCTCGTCTGGGACACAAGCAA AGAAGCGAACGGGCTTTGTCTCGCGCTCCCAATCGG GGGCATGCCGAAGATAGACGTCGAGCAGTTCATCTA CCAGGATGGGACGTCGCTCCTGTCCGATTGCCAGAT CGCATCGAAAACGACCAAGAAGGGCGCGGCTTGCGC AGTCTTGCCGCTCAAGCCCAAGCATGACTTCCTGCGC TGGTTCACCAAGCACGTCGAGAACCACAATCCCGAC GCTCCACTGGAACGCAGGTGCCTCCACAACACGACC CAGTTCGTCATAGTCGACCCAGAAGGGCCGCGCCCA CGTCTCTTCGTCCGGCCCGTCTTCAAGTTCTACGACC CCGGCAAGACGGTGCCGAACACGCATGAAACTTGGA AAAAGCCCGACTGCCGCTACCTGGTTGGAATCGACC

		GAGGCATCAATTACGTTCTGCGAGCCGTCGTCGTCG ATACTGAAGAGAAGAAGGTTATCGCCGATATCGGCT TGCCGGGCAGGAAGCACGAATGGAGGATGATCCGTG ACGAGATCGCCTACCACCAACAGATGCGTGATCTTG CCCGCAACACTGGCAAACACGCGAGCGTCGTGGCCA AGCACGTCCGCGCCCTCGCGCTCGCGCGCAAGAAGG ACCGCGCGCTCGGCAAGTTCGCAACAGTCGAAGCCG TCGCAGAACTTGTCAAGAAGTGTGAACAGGACTATG GTAGCGGCAACTACTGTTTCGTGCTCGAAGACCTCG ACATGGGGGCGATGAATCTCAAGCGAAACAACAGA GTCAAACACATGGCGGTCATGGAGGAGGCCCTCGTC AATCAAATGCGCAAGCAGGGCTATGCCTATGACGGG CGTCGCGGTCGGGTGGACGGCGTGAGGCACGAGGGC GCTTGGTACACGAGCCAGGTCTCGCCCTTTGGCTGGT GGGCCAAGCGCGACGAAGTCGAGGAGGCGTGGAAG AGGGACAAGACTCGCCCCATCGGGCGCAAGGTCGGC AACTGGTACGAGATGCCCGAGCCAGGCCAAGACGGA GACCGGCCCGACACGTATCGGAAGGGCTACTGGTCG AAACCGAAGAACGCGGAGGGCAAGCCGTATGGGCG CAACCGCTTCAGCGTCGAGCCTGGCGACGAGAAGCC GGACGCTGAGCGGCGCTTCTGCTGGGGCAGCGAGCT GTTCTGGGATCCGAACGTGAAGTCCTTCAAGGGCAA GGAGTTTCCCGAGGGCGTCGTGCTGGACGCCGACTT CGTAGGAGCCCTCAACATCGCTCTCCGCCCGTTGGTC AACGACGGCCAGGGTAAAGGCTTCAAGGCCGAGGA CATGGCGAGGGAGCACACGATACTAAACCCGCAGTT CAAGATCGCCTGCCAGATACCAGTTTACGAGTTCGTC GAAGAGGACGGCGACAAGTGGGCAGCTCTGCGCCG GATCATGCTATAGTTAGGCGTTCCGTCTCGACTATGC CGTACCACTAGACCGAGCCTACACGGCACGCGGTCA TAGCGTTAACCAAGGCGTGGTGACAAGCCTCTTTCA GGCGTCGGACACTTAAGAGCGTTAGGCGGGCGGTCC CTAAGCCGCCCGCCCCCTTATTTGCACGTTTTCCCCG AACCCCGTAACTCTGCCAGCCACAAACACCCAGAAG CGCGTCTACACTCCCTACGGGGGTAGACAGACATGC GCTATGAGATCGTAGACGGTTACGGGTGCCAAGTGC TCAAGCACAGCGAGCGCCTCGTTCTTCGATACCCCCT CGCCCCTCCGGGGGAGAGGGGGCCAGGGGGTGAGG GGAAGCAACCCAAGCGCGAGGTGCCCGTCTTGCACC TTGACCACTTGCTCATCGGCACGAAGGGCGTGACGG TCTCGACCGACGCCCTCGCTCTGTGCTGTGAGCGCGG GATTCCCGTCACGGTCGTGGACTGGCGCGGGCGGCC GGTGGGTAGGTTCGGAAGCCCTGCTCTCCACGGCAC AGCACAGGTGCGCCGCGCGCAGATCGCTGCTTTCGC

		CACCGAGATAGGAGCAACCTTCGCCCGAGAGGTCGT CAGCGGCAAGTTGCTCAACCAGGCCGACAACCTCCG ATACATCGGCAAGAACAGAAAGACACGGGCGCCCA ACGAGCACGAGGCCCTGACAAGGACAGCTGACACGC TCCAACGTCTGGCAAAGAAGGCAGCGACGGTCAAGG GCAAGAACGCGGACGACGTGCGGCTCCCGCTCATGA CGGTCGAGGCCGAGGGCGCGCGCGCCTACTGGTCCG TTCTCAGCGAGGTTTACGGCGAGAGGTCGGGCTTCG CAAAGCGAGAGCAACGTGGCACACGCGACCCGGTCA ACGCCGCGCTCAACTACGCCTACGGAGTCCTGAACG GCGAGGTCTGGAATGCCACGATCCTCGCTGGCCTCG AGCCGTACGCAGGGTTCCTGCATGTGGATCGGCCGG GACGCCTGAGCTTCGTGCTCGATCTGATGGAAGAGT TCCGCCCCGTGGTCGCGGACCGCGTCGTGTTCGGACT GGTGGCGAAGGGCTGGAAGATCGGCCAGGAGGAGA ACGGCTGGCTGGACATGCCGACAAAAAGGAGACTGA TTCAGGCGATCGGCGAGAGGTGGGGAGCGCGCGTCC TGCATCAAGCCCGGAAACTGCAATTGCGATCTGTCCT CCAGCTTCAGGCACGCGACGCCGCAAGGCACTTCCA GGGCAAGGCGGAGTACATCGCGTTCCGCCTGAGGTG GTAGGCCATGAAGTGGCTCGTGTGCTACGACATCGA GAAGGATAGTGTCCGAAACAAGGTGGCAGACTTCTG CCTGGACAAGGGGCTCGAGCGGGTTCAATACAGCGT CTTCCTTGGGTCGATGACAAGAACGCTCGCCAAAGA ACTTGGCGCACAGATCAGACGGAAGATGGGCAAGA ACCCCGGCCAGGTGCGGTTCGTGCCGATCTGCGACA AAGACTGGAAGACGTCGTTCCGCGTCCAGGTCGGCG ACCACATGGGAGAGAAGGCGAGCGATGGCAAGTAG CGCCCACGCCTATCAGCCGAGAGACACGGTAAGCGT AAGCGAACTCCGCCAGTGGATGTACTGCCCGCGCGT TGTTTGGTACGGACGCTCGATGGGCGACTACCGTCCC ACGACAGGCGCTATGAAAGTCGGGATCGAGGCGGA GGCGGAGCGCCAAAGGCTGGAGGAGCGCCGGTCGTT CGCGCAGTACGGGCTGGAGGCATGCAACAAGCGATT CCAAGTGCCTGTAGCGTCGGAGGCGTTGGGGCTGTC GGGGCGCATTGACTGCCTGATCGAACTTACGCCCGTT TCGCTGGAGGACGCTCAGGTCGGGGTGAGGCCGTTG AACTGGAAGGTGGGCGATCCGATGTTCGTGCCAGTC GAGTACAAATGGACGTCCAGGGCTGACCAGAGGCAG AACACAATTCAGCTGGCCGCTTATGGGATGATTCTG GAAAGCTTGACGGGGACGCCCGTGCCGCTCGGCTTC ATCGCGCTCCTGCCTGAGGAAGAGGTTGTCCGTGTC GAACTCGTCCCTAGAGTTAGGCGCGCAGTCAAATGC ACCCTAGACGAGGCTCGCGAAGGCCTCTCCGCCCCG

		GAACTCCCCTGGCCAACGCTCCACCGCGGAAAGTGC CAAGACTGCGAGTTCCGACGGTTTTGCAATGACGTCT GGTAGATGGGGTTCGAAACCCTCGCAACCGCTCGGA TTTCGGGGCGATGTGCGAATCCTAACGCCCCCGACA CTCAAGATGATGGAGGCCTTCGACCCACAATCAAGC CCGACTCAGACAGCGAAGAGCCAATGGTGTGCGCAA ATTCGCTCTCACCGGGTACATTCATTCGCACAACGGC GGACTTTGTAAGCTAAATAGCGGGTTTCGAAACGAC GCGGCCGAACCTGTTAGGGCAGGGTTGCAGCAAATG GACGGCGTGCTTGAGTCCGGCCATGCATGGTCGCAG GGGATCAAGAACGCTCTTAGGGAATGAAAGACGGGC AGTATCGGAGGGCGCGGGAGAGGTGCCAGCCTTCGT CGCAGGGGATCAAGAACGCTCTTAGGGAATGAAAGC GTTGCAGGCAATGATCTCTGCAACTGGCCGTCGAAT GTCGCAGGGGATCAAGAACGCTCTTAGGGAATGAAA GGGAGTGGGTGCGACTTAAAGCGTTTGACGGTGGCT GTCGCAGGGGATCAAGAACGCTCTTAGGGAATGAAA GAAACAAAGACGAATTGCCTGGACGCAGGCAAAAT ACGTCGCAGGGGATCAAGAACGCTCTTAGGGAATGA AAGATTGCGACAGCCTCGCCTCATTCCAGGCCGACA GGCTGGTCGCAGGGGATCAAGAACGCTCTTAGGGAA TGAAAGATCGTTCCTGCACGAGAGCGGAGTGAGTCG CCGGGGGGTCGCAGGGGATCAAGAACGCTCTTAGGG AATGAAAGGATTACCTAACCACCCCCAGCAGGGCTT CCGGCCCTGGTCGCAGGGGATCAAGAACGCTCTTAG GGAATGAAAGGGAGAGACGGGCAGGGAGAATGAAC AATGAAAGCGATCCGTCGCAGGGGATCAAGAACGCT CTTAGGGAATGAAAGCTCGCCCAACCCTCGGACAGG TTGGGTGGCGGGGTCGCAGGGGATCAAGAACGCTCT TAGGGAATGAAAGTTGAACCCGCCAAAGCAGTTCAG CCACGCCGCCAGGTCGCAGGGGATCAAGAACGCTCT TAGGGAATGAAAGTATTCCACGCAGCACATCGGAGA ACTTGCGTTTCGGTGTCGCAGGGGATCAAGAACGCT CTTAGGGAATGAAAGTGCGTAGTGCGAGCGGATCTA TCCGAGGTTGACCGGAGTCGCAGGGGATCAAGAACG CTCTTAGGGAATGAAAGGTATGCTCCAAGACCTTCG TCGTCGGGTTCCAGGCCATGTCGCAGGGGATCAAGA ACGCTCTTAGGGAATGAAAGTGTAATTCTGATACAG GCGCGACCTCACGAGCACCCGTCGCAGGGGATCAAG AACGCTCTTAGGGAATGAAAGCATTCTGCGCGGCCT ATACATCGAATACCTGCGAACGTCGCAGGGGATCAA GAACGCTCTTAGGGAATGAAAGATTGCCTTCAGCCG CTTAGCCATTCGCTCGGCATAGCAAGTCGCAGGGGA TCAAGAACGCTCTTAGGGAATGAAAGTTTGCCGGCC

		GAGACGTGCCACCGCCTAGTCAGGCGATGTCGCAGG GGATCAAGAACGCTCTTAGGGAATGAAAG
CRISPR-Casπ-3 cassette	DNA nucleotides sequence of CRISPR-Casπ-3 cassette from *Casπ* gene to the last repeat.	ATGGGTAAGAATCGGTCCTCGTCCTCGGATTTGAGCC AGCTCGAACGATCCTTACGGAAAGTCGGTGAGAATC GCCTTGAGCGGCTGCGGGTGCGTGGGCAGAAGATTA GGAAGCACCTTGAACAGCACCCCCGAGGTAAGAACG ATCATCAGGCCCTCCACTTTCTGCTCCACCAGATCGA GGTCGAACGGAATGACCTGTACCGAAACCTCAAAGA CCCCGAATACGTGCCCAAGCCAGCGAAACGGCGGCG AGAAAGACGGCAGATCAACGTCGCCCAACCGCCGAC CCGACCCACCAAGAGTGTGGGGCCGAAACCAGCGCC GACGACATACGTGATCCCGCGCCCCGAGCCAGGCCG TGACCTACCAGCATTCGCGAGCAGGTACAAGGCAAG TGACTCGAGAGGCGAGGACGACCAAGACGGTCGGTC ATGGACTGCCGCGCCCTTTGTCGAAGTCGAGCTGCC GATACAAATTGCCGGCAAGATCCTCGAGAAACTCCG TAAGTACGTGCAAAAGGACGAACGGGAGATCGTTCG CGAGTGGGCTGTCAAGACCTATGGCTCGATCGAAGC CGCAAGAGAACCACTTCTTATCGGGGCACAAGTCTC GGAAGACGTCTCGGTCTGGCGCGGACTCCTCGCAGA AACGAAAAACGCACAGGACTTCGCCGCCCTCTCCGA CGATCAGATCGAAGCAGCGATGTCGAAGGAGGCGA AGGGGTCAGACCTGCGTCCGAGGCGCGCCGCACTGC TAGTCGCACAGCGCCACTGGGTGGATCAGACCGTCA AGGCAATCAAGGAGTCGGCCCCGAAAGGCGTCGATA AGGACACACTCGATCGCCGTTTGCGCGCTGGCCTAA GGGGGTTTCATACAGCAGCTAATTCGGGTAAGCACA CGAACCCACAGTTCCCATACTTGACGCCGAAAGAGG CAAAGGTGCCGTTAGAATCGGTCGTCAATCAGGTCT TAGAGTTCCTCGACGACGCGGACGACCAGCGCTACG TCCAGGTCAAGGTTGACGACAAGAAGCGCCACAGAG TCAGTCATCTCCAGAAGGAACTCGGGAAGGCGAGGC CGCGCAAGCGACTGGAGCTTCAGAGGCCAAAGTGGG CGGGTAGGCCTACAGTGCAAGGAACGATCAGCAAAC GGCGCGACGCCGCACTCGTGTGGGACACGAGCAAGA AGGAAAACGGCCTCTGCCTCGCGCTCCCGCTCGGGG GTTTGCAGAAGATAGATGTTGAGCGGTTCATCTACCA AGACGGCACGTCACTATTGTCGGACTGCCAGATCGC GTCGAAGACCTCCAAGAAAGGTGCGGCGTGCGCGCT CATGCCGCTCAAGCCCAAGCACGACTTCCTGCGTTG GTACACCAAACACGTCGAGAACCACAACGCAGACGC GCCGCTCGAGCGCCGCTGTCTGCACAACACGACCCA GTTCGTGATCGTGGATCCAGAGGGGCAGCGCCCGCG TCTCTTCATCCGCCCCGTCTTCAAGTTCTACGACCCC

		GGCAAGGCAGTGCCGAACACGCACGAAACTTGGAA GAAGCCGGACTGCCGCTACCTGGTAGGGATCGACCG AGGTATCAACTACGTTCTGCGCGCTGTCGTTGTGGAC ATCGAAAAGAAGGAAGTCATCGCTGACATCCACCTA CAAGGCGACAAGCACAAATGGAGGATGATCCGCGA CGAGATCGCCTACCACCAACAGATGCGTGATCTTGC CAGCAACACAGGCAAACACCCGAGCGTCGTGGCGAG GCACGTCCGCGCACTCGCCCTCGCCCGCAAGAAGGA TCGCGCGCTCGGCAGGTTTACGACGGTCAAGGCTGT CGCAGATATCGTCATGCAATGCGAAAACGACTACGG AAGCGGTAACTACTGCTTCGTGCTCGAAGACCTCGA CATGGGCAAGATGAATCTCAAGCGCAACAACCGCGT GAAGCACATGGCCGTCATGAAGGAAGCGCTTGTCAA TCAAATGCGCAAGCGCGGCTATGCCTACGACGGTCG CCGCGGCCGGGCGGACGGCGTCAGGTACGAGGGCGC ATGGTACACGAGCCAAGTGTCCCCCTTCGGCTGGTG GGCCAAGCGTGAAGAGGTGGAGGAGGCGTGGAAGA AGGACACGTCGCGCCCGATCGGTCGCAAGGTCGGCA ACTGGTACGAGATGCCAGATCCGAACGAAGAAGGA AAGCGGTCAGACGTGTATCGGAAGGGCTGCTGGAAG AAACCGCAGAACGCAAGCGGAAAGCCATACGGGCG GAACCGCTTCTGTGTGGAACCTGGCGACGAGAAGCC GGACGCTCAGCGGCGCTTCTCCTGGGGGAGCGAGCT GTTCTGGGACCCGAACGTGAAGTCCTTCAAGGGCAA AGAGTTTCCCGAGGGGGTCGTGCTGGACGCCGACTT CGTAGGAGCGCTCAACATCGCCCTTCGCCCACTCGTC AACGACGGTCAGGGCAGGGGCTTCACGGCAGACAA GATGGCCGAAGCGCATACGAGACTCAACCCGCAGTT CGAGATCGTTTGCAAAATCCCCGTTTATGAGTTCATC GAAGAGCACGGTGACAAGAGGGCAAAACTCAGGCG GATCGTGCTATAGTAGGCCGTTCTGACTCGATGCGG GACGGATACTACACTAAGCCTAAACGGCACGAGCGA TAGCCCTGCGGGGATTCCCCAAAGCCCGTACGACAA GCCTCTTTCAGGCGTCGGACACTTAAGAGCGTTAGG CGGGCGGTCCCTAAGCCGCTCGCCCCCTTATCCCCAC GGTTTCCAAGAACCCCGTAACTCTGCCAGTCACAAA CACCCAGAAGCGCGTCTACACTTACTTGTGAGTAAG GAGTAGATAGACATGCGCTATGAGATCGTAGATGGC TACGGGTGCCAGGTGCTTAAGCACAGCGAGCGCCTG ATCCTCAAGTGGTCCGCCAGAGACGACCAGCAACCC AAGCGCGAGGTGCCGATTCTGCACCTCGACCACCTG CTCGTCGGCTCCAAGGGCGTGACGGTCTCGACCGAC GCCCTCGCCCTCTGCTGTGAGCGCGGGATTCCCGTCA CGGTCGTGGACTGGCGTGGTCGTCCAGTTGGGAGGT

		TCGGAAGCCCCGCCCTCCACGGAACGGCACAGGTGC GCCGAGCACAGATAGCCGCCTTCGACACAAAACGAG GAGCCTCTTTCGCCAGCGAGATCGTCGGCGGCAAGC TCCTCAACCAGGCAGACAATCTCAACTACATCGGCA AGAACAGAAAGACGCGCGCTCCAGAAGTTTACGAAG AGTTGACAAGGACAGCCGACACGCTCCAACGTCTGG CAAAGAAGGCAGTGGCGGTCAAAGGCAAGAATGCG GACGAAATTCGGATGCTCCTCATGACGGTCGAGGCA GAGGGCGCCCGCGCTTACTGGTCGGTGCTCAGCGAA GTCTACGGCAAAGGGTCGGGGTTCGCCAAGCGCGAA CAGCGCGGCACCCGCGACCCGGTCAACGCCGTGCTC AACTACGCCTATGGCGTACTCAATGGCGAGGTCTGG AACGCCGTCGTGCTGGCCGGACTGGAGCCCTACGCA GGGTTCCTGCACGTCGATCGGCCGGGACGCCTGAGC TTCGTGCTCGATCTGATGGAGGAGTTCCGCCCCGTCG TCGCCGACCGCGTTGTGTTTGGCCTCGTCGCCAAGGG ATGGAAGATCGGTCAGGAGGAGAACGGTTGGCTCGA TCTATCGACGAAGAAGCGGCTCGTCCGGGCGATCGG CGACAGGTGGGGGACGCGCGTCGAGCACCAAGGTCG CAAGTTGCAACTACGATCTGTGCTCCAGCTGCAGGC ACGGGACGCCGCACGGCACTTCCAGGACAAGGCGGA GTACGACGCGTTCCGCCAGAGGTGGTAAGGCATGAA GTGGCTCGTGTGCTACGACATCGAGAAGGATAGTGT CCGAAACAAGGTGGCAGACTTCTGCCTTGACAAGGG GCTCGAACGGGTTCAATACAGCGTCTTCCTTGGGTCG ATGACAAGAACGCTCGCCAAAGAACTTGGAGCACAG ATCAGGAAGCGAATGGGCAAGAATCCAGGGCAAGT GCGCTTTGTGCCGATTTGTGAGAAGGACTGGCGTTCG TCGTTCCGCGTCCAAGTCGGTGACCACATGGGAGAA AAGTCATCCGATGATAAGTAGGTTCCACGCCTACCA ACCACTTGACATGGTGAACGTGAGCGATCTCCGCCA GTGGGTGTACTGTCCGCGCGTCGTCTGGTACGGGCG CTCATTGGGCGACTACCGCCCGAGGACCGGGGCGAT GAAGGTGGGGATAGAGGCGGAGGCGGAGCGGCAGA GGCTGGAGGAGCGAAGGACGTTCGCTCAATACGGTC TGGGGGCGTGCACCAAGCGGTTCCAGGTTCCCGTTG TGTCGGAGGCGTTGGGGCTGTCGGGGCGAATCGACT GCCTGTTCGAACTTACGCCCGTTGCGCTGGAGGACG CTCAGGTCGGGGTGAGGCCGCTGAACTGGAAGGAGG GCGATCCGATGTTCGCGCCAGTTGAGTACAAATGGA CGTCCAGAGCTGACCAGAGGCGGAACACAATTCAGC TGGCCGCTTATGGGATGATTCTGGAAAGCTTGACGG GGACGCCCGTGCCGCTCGGCTTCATCGCGCTCCTGCC TGAGGAAGAGGTTGTCCGTGTCGAACTCGGCCCCAG

		AGTTAGGCGCGCAGTCAAACGCACCCTAGACGAGGC TCGCGAAGGCCTTTCCGCCTCGGAACTCCCCTGGCCA ACGCTCCACCGCGGAAAGTGCCAAGACTGCGAGTTC CGACGGTTTTGCAATGACGTCTGGTAGATGGGGTTCG AAACCCTCGCAGCTGCTCGGATTTCGGGGCGATGTG CGAATCCTAACGCCCCCGACACTCAAGATGATGGAG GCCTTCGACCCACAATCAAGCCCGACTCAGACAGCG AAGAGCCAATGGTGTGCGCAAATTCGCTCTCACCGG GTACATTCATTCGCACAACGGCGGACTTTGTAAGCTA AATAGCGGGTTTCGAAACGACGCGGCCGAACCTGTT AGGGCAGGGTTGCAGCAAATGGACGGCGTGTCTGAG TCCGGTCATGCATGGTCGCAGGGGATCAAGAACGCT CTTAGGGAATGAAAGCCAGCCGCACGCGCAGGGTGC CCCGCTCATCGCGGAGCGTCGCAGGGGATCAAGAAC GCTCTTAGGGAATGAAAGGACCGACGGCCTTCCGAA CGGAGAGGTTCTCGCGTCGTCGCAGGGGATCAAGAA CGCTCTTAGGGAATGAAAGATGGCTCTCGACGAAGG CCTACGGCTGGACCGTCGAGAGTCGCAGGGGATCAA GAACGCTCTTAGGGAATGAAAGGAACCCGTCCGCGT CGAGCAGCGCCTTCTGGCCGTTGTCGCAGGGGATCA AGAACGCTCTTAGGGAATGAAAGAACATCCACCTCA CTGGGCGCGTGGTCGTCATTGCCGTCGCAGGGGATC AAGAACGCTCTTAGGGAATGAAAGACGTAGGCGGTC GCCATCTCCGCTGTCGTCGATTTCCGTCGCAGGGGAT CAAGAACGCTCTTAGGGAATGAAAGCAGCATGAGCA CGCAGGCGATCTCCGGGAGGTCGAACGTCGCAGGGG ATCAAGAACGCTCTTAGGGAATGAAAGACGGTGTTG AGGCCCTTGGCGTCCTTGAAGTCGCGTCGCAGGGGA TCAAGAACGCTCTTAGGGAATGAAAGCACCACGTTC GAGGCGGGCAACCTGCAATCGGTCGGCGGTCGCAGG GGATCAAGAACGCTCTTAGGGAATGAAAGGCAATCG GTCGGCGATTACGCGTTCTACCTCTGCGACGTCGCAG GGGATCAAGAACGCTCTTAGGGAATGAAAGGGACA GACGGGCAAGGAGAATGAACAATGTCTGCCCTGTCG CAGGGGATCAAGAACGCTCTTAGGGAATGAAAGTCT CCGGCAATCCGTCGAGGCATTTCGCGCCTGAGAGTC GCAGGGGATCAAGAACGCTCTTAGGGAATGAAAGCG GAGCGGCGGATGAAGCGGCGGGGGCCAGAACCCTG TCGCAGGGGATCAAGAACGCTCTTAGGGAATGAAAG CCGCCATGTACGCGGCTGAGGAGCCTCCCCGCCTCG TCGCAGGGGATCAAGAACGCTCTTAGGGAATGAAAG
CRISPR-Casπ-4 cassette	DNA nucleotides sequence of	ATGCCCAAAAAGACATCGACGGTCGCTCTGTCACCC AGAGATATTCGCTTGCGCGAACTTGGAGAGAAGCGA CTTCAAAGGTTGCGACAGCGCGAAGAGAAGATTCGT

	CRISPR-Casπ-4 cassette from *Casπ* gene to the last repeat.	CGTCACCTGGAGTCGGAGCGCGGGCGGCGTGACTTT CAATCGCTGCACTTTCTTCTTCATAAAATTGAAGTTG AACGAAACGATCTGTACCGAAATCTTTACCAGAACG AAGGGCACGAGTCGTATGTGCCAAAGCCAGGTAAGA CGAAACATAGGAAAGAACTTTCTTTGCCATCCACAG AGTTACCGTCTCCACCTGATGAGAAGAAAGGGCCCC GGCCCAAAAAGAGTCGCTATGTGATTCCCCAGCCCG TACCTGGAATCAATCTCCCACGATTGATCAATAGATT CGGTAAATCGGATCAAAAGTCCGAATCGGATCAAGA AGGCAGATTTTGGACTTCAGCGCCTTTCATCGAAGTT GAGCTGCCTATGCTTAATGCCCATCGAGTCATAAAG GCGTTGATGCGATTCGTTCAGAAAGACGAGCGTTCG GTTGTCCGAACATGGGCTGTGACCAAGTTTGGCAGC ATTGAGGCCGCCAGAGAAGTCCTGCTAGCAGGAGCT TTGCTGCAAAGAGAGCCGGAAATCATGAGAGGCTTC CTCCAGAATATTGACCCCTGGGGGAGTTTGAGCGAT GAGGAACTCATTCGCGATGAAAAAGCGTGGCGGACG GTGAAGCTCCTAGCCCAAAAGAATTGGGTGGATCAA ATCGCGAAGTCGATCAAGGACTCGGCGCCTAAGGGC GTAGATAAAGACACTTTGGATCGTCGCCTGCGGAGT GGCTTAAAAGCATTCCATTCTGCGGCAAATTCAGGA AAACACACGAATCCCCAGTTTCCCTATTTGACATCGG AGAAACCGTCCGCGAACTTTGAATCAGTTGTCGACT CTGTGCTTGAGTTCCTCGATCTGGAGGACAAGGATC GATACACGATTGCGAAGGTTGACGACAAGAAACGCC ACCGAGTGACGGCTCTGCAAAAGGAGCTAGGCCAAG CCAAACCACGTGTAAGGTTGGAGCAGGAACGTAGCA GGTGGGCTGGCCACTCGTATCTCCAAGGGACCATTA CCAGGAAAAGGCAGGCTTCCCTCGTTTGGGATGGTC ACCGAACGGAGAACGGTTTGGCTCTCGCCATCCCAT TAGATGGCATGCCGAAAATTGACGTGCAGCGATATA TGTATCAAGATGGCACCTCCCTTCTCTCGGATCGGCA AATTACTTCCAAGACCAAGTCCGAGGGTAAGGACTG TGCCTTGATGCCTCTACGATTTAAGCATGCCTTTCTT CGATGGTATACGAAACACGTCGAAAATCACGTGGCC GAGGCCCCTTTGGAACGGCGATGCATTCATAACACA ACGCAGTTTGTCATCGTCGACCCAGAAGGAAAGCAT CCTCGGCTGTTCATCCGACCTGTCTTCAAATTCTATG ACTCTAATAAGACAATACAGAACAGTAACGCCCCCT GGTGCAAACCGCAGTGTCGATACCTTATCGGCATTG ATCGGGGCATCAACTACGTGCTACGAGCGGTTGTTG TAGATACTGAAGAGAAAGCCGTAATCGACGACATCC CTCTACCGGGTCGAAAGCGGGAGTGGCGAGCCATTC GGCAAGAGATCGCGTACTTTCAGCGCATGCGGGACC

		TCTCCAAGAGTGCCCAAGAAAGGAACCGCTATGTGG TTGCGCTTGCCAAAGCTCGTAGGAAAGATCGCAGCT TGGGCAAGACAGAGACGGTTGAGGCTGTTGCAAAAC TTGTTCAGAATTGCAGCGAGAGATTTGGGGAAGGAA ACTACTGCTTCGTGTTGGAGAACCTTGAGTTAGGTGC TCTTAACTTAAAAAGAAATAACCGAGTTAAACATCT CGCTTCCATGGAAGAGGCATTGATCTATCAGATGCG GAAAAGAGGCTACTTCTACAACTCCCGATCGAACCG GGTGGATGGTGTTCGTTGGGAAGCCGCACGCTATAC AAGTCAAGTTTCTCCGTTTGGCTGGTGGGCCAAGCGC GATGAAGTGGAGAAGGCCAAGAAACAAGATAAAAG CATGGCGATTGGCCGCAAGATTGGCGAGGGATATGA AGGTCCGCAGGACGATGAAATAGAAAGTCATTCGAC TATCTATCGGCAGGGCAGATGGATGAAACTCAGAAA TGAAGAAGGAAAGGCCTACGGAAGAAGTCGGTTTGT GGTTCAGCCGGAAGACTTGGACCCTGCACAACCCAG AAGGTTCAGTTGGGGAAGTGAACTTTTCTGGGATCCC TATCAAAAGGAATTTAAAGGAAAGTCCTTCTCTCAA GGCGTTGTGTTGGATGCTGATTTTGTGGGAGCCCTAA ACATTGCCCTTCGGCCACTAGTCAACGACGGCAAAG GCAAAGGTTTCACCACCGCGATGATGGCGGAAGCAC ATGTCAAGTTGAACCCGACCTTTGAGATCCGTTGCAA GATCCCGGTTTACGAATTTATCGCTGAGAACGACAA TTCTCGTGCCGCGCTGAGAAGGATTGTGATATAGTTT CTAAGTTCCATCTCGATGCGGAACGGATACTACGCT GTAGTCTATACGACACGAGTGATAGCCCTGCGGGGT TCGCCCCTAAGTCCGTATGACAAGCCTCTTTCAGGCG GTGGACTTCTAAGAGTGCTGGTGGGTGGAATCCCTA AGCCACCCACCTCCTTCACAATCTGGCAGAATCACG AGTTCCATTAAGAAAAGGTGACGTTAACCTAATTTGT GCGTTACGAAATTGTTGATGGTTATGGTAGCCAGGTC CTCAAGCATAGCGAGCGTCTCGTACTTCGCATCCCTT CTGCCCTAGATAAGAATATTAAGCGGGAAGTGCCTG TCCTCCATCTGGACCATCTGCTTGTGGGGACAAAGG GAGTGCTCGTATCGAGCGATGCCCTTGCCTTATGCTG CGAGCGAGGTATTCCCGTTACGGTTGTCGATTGGAG GGGGCGTCCCGTAGGAAGGTTCGGTAGCCCCGCGCT TCACGGCTCCGCCCATATTCGCCGAGCTCAGCTCGAG GCCTTTGACGCCAATTTAGGCGCTGAGTTCGCTCGGG AAGTCGTCTGCGGGAAGCTCTTGAATCAAGCTGACA ATCTTCGATATTTTGGCAAAAATCGAAAGACTCGCG ACCCCGCGCAACACGAACTGCTTGAGACCTCGGCAG ATGATATCAATGAGATTTCAAAAAGAGCTTCCTGTAT CTCTGAAAAGTGCGCGAATACAGCACGGTTGCCGTT

		GATGACCTTAGAAGCCGAAGGCGCTCGTATCTATTG GTCCGCCCTCTCGCGCCTCTATGGGACAAGATCCGG ATTCGCTCGGCGGGAGCAAAGAGGCACGAGAGACCC CGTAAACGCCGCGCTCAACTACGCCTATGGAGTACT CAATGGCGAGGTGTGGAACGCCGTGGTCCTGGCTGG GCTAGAGCCATACGCCGGATTGTTGCACGTTGACCG GCCCGGAAGACTTTCGTTTGTCTTGGACCTGATGGAA GAGTTTCGCCCGATTATCGCGGATCGCCTCGTCTTTG GTCTTGCGGCTAAGGGTTGGAAAATCGGTCAAGAGG AGAACGGATGGCTGGATTTTGCCACCAAGCAGAGAC TGCTTAAAGCGATTTCCGAGCGGTGGGATGCACGCG TTAACTATCAAGGACGAAAAATTCGCCTGAGAAGTG TGCTTCAACTTCAAGCCAGAGATGCCGCTCGCCACTT CCTCGGTCGCGCCCAATATCGTGCTTTTCGACAAAGG TGGTAATGAGATGAAGTGGCTCGTTTGTTACGATATC GAAAAGGACAGCGTTCGGCAGAAGATTGCCGACTTT TGTCTGGATAAAGGACTCGAACGTGTCCAGTACAGC GTCTTCCTGGGCGATATGAATCAAACGTTGGCGTTTG ATCTCGCCGCTCAGATTCGTCGTCGAATGGGTGATCA TCCAGGTCAAGTCCGATTTATTCCTATCTGCGACCGT GATTGGAAAAAGACCTTTCGGATTCAGATAGGCAAC TACATGGGAGTTAAGCCTAGCAATGGTAAATGAAAC TCATCCCTACGCGCAGGCGGATATTGTTAGTGTCAGT GAATTAAGGCAGTGGAGCTATTGTCCCCGGGTCGTTT GGTATGGCCGTTCAATGGGCGATTACCGCCCAACAA GCGGAGCTATGAAAGCAGGCATTGATGCAGAGGCAG AGCGTCAAAGGTTGGAAACTCGCCGAGGTTTTTCGC AGTATGGGATCACCGCCGTTGACAAAAGATTCCAGT TTTCAGTTCGTTCGGATTCGCTTGGGCTTGCCGGAAG AATAGATTGCCTGATCGAGACAACCGATGTAACTTTT GAGGAAGCCCAAGCGGGCCTACGCCCCAACGAATGG AATTGGGATGATCCTCTCTTTGTGCCCGTGGAGTACA AGACAACGTTCCGGGTTCAACAAAAGCACAACGTCA TGCAGCTTGCGGCTTATGCCCGAATGCTGGAGAGTCT AACAGGAACTGCCGTGCCGTTCGGATTCATTGTGAT GCTGCCCGAAGAAGAGGTTCTTAAGATTGAGATAAG TTCCGAGATCAAGCGGTCACTCGACTTCTTAATCGAA GAAGTTCAAAGAGGCTTGGTGTCGGATGAACTTCCC AGGCCCACCCCGCACTCGGGCAAGTGTCAAAACTGC GAGTTTCGTCGATTTTGCAACGACGTTTGGTGAGACC TTCGAAACCTTGTTGATGGCCGATTGCATCGGCAGAT GTGCGAATCTGAACTACATCGTTCTGCGAATTGAGCC TCGTGAGCGCTCCCAGGTAGATCAGTTCGCCTGATGT TCGAGCTTTCCTAACGTCAAATTCTTTGATTCTATGCT

		GTATCCTAATATCGAACCAACTGTTGGCTTCGCACAT CAAGGCACCTTGATAGGTTAATTGTGGATTTCGAAA ATTCGCCCTTCTACTTGTTAGGGACAAGTTGGGCGAG AGTTTGTATGACGCCTCAGTTCAAATGAGAACGGTC GCATGAGGCGAGAAGCACTCTTAGGGAATGAAAGCG CTCTTGGCGTGCCATGCCCCCGAGTTGTGGGCGGTCA GTCGCATGAGGCGAGAAGCACTCTTAGGGAATGAAA GGCCATTCCTCCTCAGGATTCAGAAGCTCGGGGAAT TGTCGCATGAGGCGAGAAGCACTCTTAGGGAATGAA AGTTCAAGAAGGCATCAGACGAGTACTTCGCCGCCC GTCGCATGAGGCGAGAAGCACTCTTAGGGAATGAAA GAAGATTCGCGCTATTACTACGCGGTTCTGGTGCTGA CGTCGCATGAGGCGAGAAGCACTCTTAGGAAATGAA AGTTCCATCGTCCATCGGTGCCCGAGGGGTCCAAAC TTCGTCGCATGAGGCGAGAAGCACTCTTAGGGAATG AAAGCGAGATCGGTTCGAGATCGTCCTTGGGCTTTG CCCGTCGCATGAGGCGAGAAGCACTCTTAGGGAATG AAAGAATCAATGATCCCCGGACACTCTTTAGGAGTG TCCATGTCGCATGAGGCGAGAAGCACTCTTAGGGAA TGAAAGTGGAAGATCTGAACGTCGCGCTGCTTAAAT GGCAGTGTCGCATGAGGCGAGAAGCACTCTTAGGGA ATGAAAGCTCTTGAGCTTTGGCCGCTTCCAGGTCAGT ATCAGTCGCATGAGGCGAGAAGCACTCTTAGGGAAT GAAAGATGATCAAATGCACTCGCAAGGATTGTGACA ACTGGATCGTCGCATGAGGCGAGAAGCACTCTTAGG GAATGAAAGAACGAGCAACCGGCAGTAGAGCTTCTT GAGACTGATGTCGCATGAGGCGAGAAGCACTCTTAG GGAATGAAAGGTGAGAATGCCATGACGATGGACGC GCGGCGGTCGTCGCATGAGGCGAGAAGCACTCTTAG GGAATGAAAGAAATCGAGTTGTCAAGGATTACTTGA CAATTGAGAAAGTCGCATGAGGCGAGAAGCACTCTT AGGGAATGAAAGTGTTTCGCAGATTCAGGCAGGACT TGCGACATCTTCAGCATTGTCGCATGAGGCGAGAAG CACTCTTAGGGAATGAAAGAGCAGCCGCCGACCCGT TGCCCCTCCGGACTCCAGCGTCGCATGAGGCGAGAA GCACTCTTAGGGAATGAAAGCCCGAAGAGGCGGTAA AGAGCCCCATCTCTCGCAAGGTCGCATGAGGCGAGA AGCACTCTTAGGGAATGAAAGGTGGTCACCGATGGT GGAGTCAAGAAAACAGTCGGTAGTCGCATGAGGCGA GAAGCACTCTTAGGGAATGAAAGAAGAGAGCGATG CGGCCTGTCCAAAGTAGCTCCATCCGTCGCTTGAGGC GAGAAGCACTCTTAGGGAATGAAAGACCTACGCTTG CTTGGTCGCCAGTTGTTTCTAGTCGCATGAGGCGAGA AGCACTCTTAGGGAATGAAAGCGCGAAGTCGTCTTC

		GTGGTAGCGGTGGAACATGACGTCGCATGAGGCGAG AAGCACTCTTAGGGAATGAAAGTTGTACCAGTCCGG GCGTGTGCCGATCTCCTGGGTTGGTCGCATGAGGCG AGAAGCACTCTTAGGGAATGAAAGAACTTTTCGTCC AGTCGTCACGTCGATGATATCGAAAAGTCGCATGAG GCGAGAAGCACTCTTAGGGAATGAAAGGGAGGAAG CGCTCCCGCTCCGGGTCCTTGAGCGAGGTCGCATGA GGCGAGAAGCACTCTTAGGGAATGAAAGATTGTGCC GCCAGGTGCATCCCCTGGACTGCTTATGGCGTCGCAT GAGGCGAGAAGCACTCTTAGGGAATGAAAGCCTCAC GCAAAACGTTTATGCCCCCGGTCTCGCTTCCTGTCGC ATGAGGCGAGAAGCACTCTTAGGGAATGAAAGGCTC GATCAAGGCCATGGCCAAGGAACTCGGTGTCCGTCG CATGAGGCGAGAAGCACTCTTAGGGAATGAAAGCGC ACAACTCGGGCTAGAATCAAGCGGGGATGCCGAGTC GCATGAGGCGAGAAGCACTCTTAGGGAATGAAAGA ACTTGCGACCTGTGGACGTGCCTGCAAAAAGTCTGT GTCGCATGAGGCGAGAAGCACTCTTAGGGAATGAAA GTTGGACCTCAGTGTCTAAGTTGTTGGACGCAAGCGT AGCATGAGGCGAGAAGCACTCTTAGGGAATGAAAGT TATGACGCAGCGAGGGCTCACCTTTGATCGCTACGTC GCATGAGGCGAGAAGCACTCTTAGGGAATGAAAGA AGCAAAACGAAGATCGTTGCCCTCGTCGACTCTGGT CGTCGCATGAGGCGAGAAGCACTCTTAGGGAATGAA AGTGGAGAGGCTGGCTACATCGTTGGGAACAACCTG GGTCGCATGAGGCGAGAAGCACTCTTAGGGAATGAA AGAACGTCTGTAAGTGGGGCTGATCTTGCGGTGTTTT ATGTCGCATGAGGCGAGAAGCACTCTTAGGGAATGA AAGCTAGTAGTTCGTCGATGTTCATCTCAACTCCCAG GCCGTCGCATGAGGCGAGAAGCACTCTTAGGGAATG AAAGGCAGAACATTTCGAACTCGGCGGCGACTTACA TCCTGGTCGCATGAGGCGAGAAGCACTCTTAGGGAA TGAAAGTTACAGATAGGGCAAACAAATTTCCAGTCA TAGAAGTCGGTCGCATGAGGCGAGAAGCACTCTTAG GGGCACCTGA