

3'HPRT

GCTACAGGGCGCGTCCATTCCGACATTCAGGCTGCGCAACTGTTGGGAAGGGCGATCGGTGCGGGCCCTTCGCTATTAC
GCCAGGGCGCGCCGATCCGGCGCCCACTAGTGGATCTCGAGCCCCAGCTGGTTCTTTCCGCTCAGAAGCCATAGAGC
CCACCGCATCCCAAGCATGCTGCTATTGTTCTCCCAATCTCCCTTGGCTGTCTGCCCCACCCACCCCAAGAATA
GAATGACACCTACTCAGACAAATGCGATGCAATTTCTCATTATAGGAAAGGACAGTGGAGTGGCACCTTCAGGGT
CAAGGAAAGGCAGGGGGAGGGGCAAAACAAGATGGCTGGCAACTAGAAAGGCAGAGTGGAGGCTGATCAGCGCGATGAT
GGGGTGTGGCGCTCTTTCCGTCGGGCGCTGCGGGTCTGGGGCGGGGCTCAGGCACCGGGCTTGGGGTCTGCGCCAG
GTGGCGGCTCTTCCGGCACCTCGAGTGGCGGTGACGGTGAAGCCGAGCCGCTCGTAGAAGGGAGGTTGCGGGGCGC
GGAGGTCTCAGGAAGGCGGGCACCCCGCGCGCTCGGCCGCTCCACTCCGGGAGCAGCAGCGGCTGCCAGACCCT
TGCCCTGGTGGTGGCGGAGACGCCGACGGTGGCCAGGAACCACGGGGCTCTTGGCCGGTGGCGGCAGGAGGCT
TCCATCTGTTGCTGCGGGCCAGCCGGGAACCGCTCAACTCGGCATGCGCGGGCGATCTCGGCGAACCCGCCCCCG
TTGACGCTCTCCGGCTGGTCCAGACCGCCACCGCGGCGCTCGTCCGCGACCCACCTTCCGATGTCAGGCCGA
CGCGCTGAGGAAGATTCTTGCAGCTCGGTGACCCGCTCGATGTGGCGGTCCGGATCGACGGTGGCGCGTGGCGGG
TAGTCCGGCAACCGCGGGGAGGGTGCCTACGGCCCTGGGACGTCTGCGGGTGGCGAGGCGACCCGTGGGCTTGT
CTGGTCTAGGTAAGTTCAGTCTCGAGATCCACTGCGAGTGGATCTAGATGGATCAGGTCGAAAGGCCCGGAGATG
GGAAGAGGGAACAGCGCGGACAGCTGCGCTTTGAAGCTGACAGAATCGGGCCCTCCGGAGACCTTCCGGCGCCCG
CCCCGCCCTGAGCCCGCCCTGAGCCCGCCCCGACCCACCTTCCAGCCTCTGAGCCAGAAAGCGAAGGAGCAA
AGCTGCTATTGGCCGCTGCCCAAAGGCCCTACCGCTTCCATTGCTCAGCGGTGCTGTCCATCTGCACGAGACTAGT
ACGTGCTACTTCCATTGTCACTGCTGCACGACCGAGCTGCGGGCGGGGGAACTTCTGACTAGGGGAGGAGTAG
AAGTGGCGGAAAGGGGCAACAAAGAACGGAGCCGTTGGCGCTACCGTGGATGTGGAATGTGTGCGAGGCCAGAG
CCACTTGTGAGCGCCAAAGTCCAGCGGGGCTGCTAAAGCGCATGCTCAGACTGCCCTGGGAAAAGCGCTCCCTAC
CCGGTAGAATTCGAGGTCTAGTGGATCTAAAATGAGGTTTTTACTTTTTCTTGTGTTAATTTCAAACATCAGCAG
CTGTTCTGAGTATTGCTATTGAAACATAAACTAGGCCAACTTATAAATAACTGATGTTTTCTAAAATCTTTTATTA
AAAATAAAGAGGAGGCCCTTACTAATTTACTTAGTATCAGTTGTGGTATAGTGGGACTCTGTAGGGACGAGAACAA
AACCATTGAAGGGAGATGGAAGAAGAACTTAGCCAGAGTCTTGCAATTTCTAGTCTAAACAGGGTAAATGGACTGG
TGAATCACATGAAGGCAAGGTGAGATTTTTATTATGACATCTAGCTTGAATAATTTCTGTTAAGTCAATACAGTG
AAAACCTTACCTGGTATGAATGCTTGCATTGTATGTCTGGCTATTCTGTGTTTTATTTAAAATATAATATCAAAA
TATTTGTGTTATAAAAATTTCTAATCTGAGGGCCATAAACAAGAAGACTAAAGTTCTCTCTTTCAGCCTTCTGTAC
ATTTCTTCTCAAGCACTGGCTATGCTATATGCAAAAGTACATATATACATTTATATTTTTAACGTATGAGTAT
AGTTTTAAATGTTATTGGACACTTTAATATTAGTGTGTCTAGAGCTGGGCTGCAGGTCGAGGGACCTAATAACTCGT
ATAGCATACATTACGAAGTTATATTAAGGGTCCGGATCAATTTCTAGAGCTATCTAATATATTTTAAAGGTTGCATAG
CATTGCTCTTATGGAGATACCATAAAGTCTTTAACACAGTCCACTATTGATAGACACTATTTTTGTTCTTACCAGT
TAGAAGAATCTTTTACATGTTGGTACTTGTTCAGCTTTATTCAAGTGAATTTCTGGTCAAGGGGAAAGAGTTT
ATTGAATATTTGGTATGCCAAATTTTCTTCAAGAAGTTGAATCATTTTATACTCTGATGTTATATGAGAGTACCTT
TCTCTTCAAAATTTGTCTCTTT
TGATCACAGTTCAGTGCAGTCTCAACCTCTGGGTTCAAGCGATCCTTCCACCTCAGCCTCTGAGTAGCTGGGACTATA
GGTGTGCCACCACCTCCAGCTAATATTT
GGGATACAGGCATGAGGCAGCTGGCCAGTTTCTACAGTCTCTCTAATATTGATATTTATCAAGAATTTCTTTAAT
CAGAACCTGCCAGTCTGATAGGTGAAATGGTATCTTGTTTTTATTGCAATTTAAAAAAATATGATAGTGGTATGCTT
GGTTTTTTTTGAAAGGTATCAAAATTTTTACCTTATGAAACATGAGGGCAAAGGATGTTTACGTGGAAAGATTTAAAA
TTTTAATGCAATTTTTTTGAGCAAGGTCTTGTCTATTGTTCCAGGCTGGAGTGCAGTGGCACAATCAGACTTCACTCA
GCCTCAACATCTGCACTAAAGTATTTTCCACCTCACCCTCAAGTAGCTGGGACTACAGGTACATGCTACCATGCCT
GGCTAATTTTTTTTTTTTTTTCAGGCATGGGGTCTCACTATATTGCCAGGTTGGTGTGGAAGTTAATGACTAAGAGGT
TTTTGTTATAAAGTTAATGATGAAACTTCTAATAAATCTGATTTTTATTCTGAGGACTGAACGTCTTGTCTGAGA
TGTGATGAAAGGAGATGGAGGCCATCAGTTTTGAGCCCTCTGTGTCTCAAGGGGGGCTATAAATTTCTTGTGACTGC
TGGATTACATCAAAGCACTGAATAGAATAGTGATAGATCCATTCTATGACTGTAGATTTATCAGACTGAAGAGCTAT
TGTAATGACAGTCAACAGGGGACATAAAGTAAATGGTGGAGATGATCTCAACTTAACTGGAAGAATGCTTTGAT
TGTGGAAGATATAAATGACACTGGCAAAACAAATGCAGACTTTGCTTTCTTGGTCAAGCAGTATAAATCCAAAGATGGTCA
AGGTGCGAAGCTTGTGGTAAAAGGCCACCGAAGTGTGGATATAAGCCAGACTTGTGGATTGAAATTCAGAC
AAGTTTTGTTAGGATATGCCCTGACTAATGAATACTTCAAGGATTTGAATCATGTTTGTGCTATTAGTGAACCTGG
AAAAGCAAAAACAAAAGCTTAAGATGAGATTTCAAGTTGAGTTTGGAAACATCTGGAGCTTATGACATGAGCAATAA
ATTATCAATGTTCTAGTTCTGTGGCCATCTGCTTAGTAGAGCTTTTTGCATGTATCTTCAAGAATTTATCTGTTTTGT
ACTTTAGAAATGTGAGTGTGCTGCTTCAAACTGTTATTTGCACTATGAGCCTATAGACTATCAGTTCCCTTTGGGCG
GATTTGTTTAACTTGAATGAAAATTTTCAAGTGTGCTTAAACCACAGCACTTGGAGTGAACATTTGACATCATATCTGT
GAAATAAAGAGAAGATATATTAGTTTTTAAATGGTATTTAATTTTTATATATGCAAGAAAGAAATAGAAGTGAATGAAT
ATTGTTAATATACCACCGTGTGTAGAAAAGTAAAGAGCAGTCAATTTTACATCAAAGACAGCATCAAGAAGTTTTG
TTCTGCTCGGAATTTATTTTAGTAGTTTTCAGTAATGTTGACTGATTTTCAACTTGTTCAAATTTACAGTGAAT
CTTTGTGACAGTTCCTTTTTAAATGCAAAATCAATAAATCCAAAAATTTAAAAAATTTTTTTTTTTTTTTTTTTTT
AAAAAATTT
AAAAAATTT
GGACCCCAACGCATGAGAGGACAGTGGCCAGCAAGCAACTCAAAATGTCACCCGGTGGGCATGGCCAGGTAGCCATGCT
GTGCTGGAGCTCTCTGCTGGTATAGTATTAAAAATCAGAAGGACAGGGAAGGAGCAGTGGTTCACGCTGTAAT
CCCAGCAATTTGGGAGGCCAAGTGGGTAGATCACCTGAGATTAGGAGTTGGAGACCAGCTGGCCAATATGGTGAACCC
CGTCTCTACCAAAAAAACAATAATAGCTGAGCTGGTATGATGCTGGAAATCCCAACAACCTCGGGAGGCTGAGGCA
GGAGAATCGTTGAACCCAGGAGGCGGAGATTGCAAGTGGCAAGATTGTCACCTGCACTCCAGCTTGGTCCCAATAG
ACCCCGCAGGCCCTACAGTTGCTTCCCAACTGGCCCTTGTCCATACCACCCCTCCACCCATAATATTATAGAA
GGACACCTAGTCAGACAAAATGATGCAACTTAATTTTTATTAGGACAAGGCTGGTGGGCATGGAGTGGCAACTCCAGGG
CCAGGAGAGGCACTGGGGAGGGTACAGGGATGCCACCCAGATCCCCGGGCTGCAGCCGGGGGATCAATTCGGCTT
TTTAGCTTCACTAGGTTTTCTAGAAAACCGGTTTTTTGAAAGCGCCACAAGTCAACCACTGACCCAGCCACCCAC
AAGCCCAACGCATGAGAGGACCGCCCTCAGCTAGAACGCGGGACCTGAAGCCCGCCCAATCACCCGTTCCGAAAG
TGCGCGCGCAGCAAGAAGCTGCTCAGCAGTTGGGGTTGAGTACTCGACAGGTGCAGGCGCTGCCGAAGAACGGCACT
GGCAGGAGGCGCAGGGTGCAGCAGGCGGGTGGCGGGTGGCTTGCAGCTGTGCGGGTGGCCACGAGGGCGAAGGTGGC
GGGGCTTCCACCTTCTCATCGAAGCTTTTTCTTGAAGACCTTCTCCGCTTCTCGGCTCTTTTTCTGTGATCTT
CTTGGATTTCTGTTTCACTGACGATGAGAAACAGAGGAGAAATCCAGCGAGTTTCAAGGAGGTTACTCCGCAAGCTCC
TGTATCTCAAGCGTCTCTCGAGTGCAGGTGGCTGTGGACGGTGAAGAAAGCAGGAAGTCTCAGTAGGGTGGCCAGG
AGTAGGCGGGTGCATCCATCTGAGAAGCAGCACAAGTACTTATCCGATCAGCTCCCTAAGGGAAGCCAGGCCA
GAATGCTTTCTGTAAAGCCGAATTTGATCCTACTAGTTCTAGTAGAGGAGGGAGGTGAGCAGCAGCAGCAATTTGGT
GAGGAGAAAGTGTGCGGTAATTTGAAAGGGATGCGAGTCTTTATACTCGTGGGTAGGGGGCGGGTCTGGCACTTCC
ATTCCTTGGCTTCTCATCCCAAGCTAGCGCCAACTCCAGCCAGGTCCTCTCTCATCCGCTCATCATGTCTG
TCTATTTTTACTGAAAACCTATTGTTGGAGTGTGGGCTTCTTGTCCCGCCAGGCGTATTACAGGGGGAGGTTG
GGGCTGCAAGGCTACTTTCCATCGGACCTGGGAGTCCAGCCCTCAGGAACCCAGCACTGGGCTTAGCCAGGGTG
ACAGAGAGCAGGGCTCTGCACCTTAAACCTAGTTACTGCTAGCTCTCATGAATGAGTGGGCTTAAACATCCAGT
AGGAAAGCTGCTGTCGAGGATGGATACCAGGCTGGAAGCAGCCGGCATGGCAAGGTCACCTTGGGCAAGACAG

CCTCCCTCACCATGACCCTCTATTAGAGACAAGGAGGTCTGGGGGCCCTCCAGGCCTGACCTGCCGTGCTGTGCTGAG
AAGTCTGTCCCATCCCTGAAATACACCACAGCTAGTCAGGTGTATCGTGATTCCACCCCAACATCCCATCAAAGAGAAA
TCCAGGCAGCTCTCCAGCCCTGAGCACAGACCCTAATCTCCTCCCTATGGTGAGGATCTCACATCCACCACACCATAG
GGCAGGTGGCCTCATGGAGGCCAGGAAACAGCCTGGAGTCAGGTGGGTCTGGCTCTGCCATTTACGCCCTGTGACCCA
GGCTTGGCACTTCTGAGCCTCAGTGTCTCATCTGCAAAGTGGGAGTCATACCATCTATTCTGCTTAGTGCAAGTCAG
CTCTGAGAATCAAATGCGACAATGTATGTGAAAGGTTTTGTAACCGAGTATGGCAAGAAGCCTCGTTGGCATTGTTAT
AGCCAGGCTTAGCCCAAAGTGGCTGGAGCTGATCCAGGAACAGGCCTAGGGGGCCTTTTATTTCCAGCCCCAGA
TATCTTCTCAGACCCCAAGAACCTTCCAAAGCAACCCCTCCGGCCCCACCCACCCTCCATCAGCCCTCGGCTCCACA
GAGATGTTCTGGGAGGAGTAGAGCTGGAGTGGAGCTGGCTGTGCCAAGGGCAAGGCTGAGTGGACACGAGGGTCCC
TGACTCCTGAAGCCCAAGGGTCAGGGGACATTTCTAGGAGTCCACTTGGTCTGCTTTGGAGGTGTGTATATCAAAAT
TCAGCAATCTCCAGACAACCTCCAAAGCAACCCCTCCGGCCCCACCCACCCTCCATCAGCCCTCGGCTCCACA
GACCCCGGCAGGCATGTTGAGAGGAATGTGATCGTGTCTGGGCTGCCTGACGCATCTATCTCCTCAGACAGGCCCAA
CAGCCCTGTGAGGCTCCAATGCTCTTCTGGGATCACTGCTCCTAGAAAGAGAAGCAGGACCTCTGTCAACCCCAA
CCCCACCTTGAAGTGTACCAAAAGAAAGCCAGAGAGGGAGCCCCCACTACTGTGGCTTAGGAGCTTGGAAAGCAATG
CTGAGACAGACATCTGAGCTGTGGCTCCCAAATCTGCCAGCAAGGACTCTCAAGGATGTGAGTAAGCCAGGGCCCA
CCCCGCTCCACCCGCCCTGACAGACCTCAATCTCCTGACAGAAATGGTCCCCCACCCTGGCCAGCCCTCAACT
TTCCAGAGAGAGGCCAAGAGGTTTTGGCTGAGGGACAGATGCTTTTGTGGGAGGATGTTGCTGTTGGCTGTGGGG
CAAGGGGAGGCTGTGCTCACTGGAGAAAAATGTGTGTCAGAGGGATCTGGGAGCGGGAATGGGTGACAGAGCCAGTA
TCGGCTTCTCTGTGCCCCACCACCCACCACCACCACCACCATGCTCCTTCTTATGACAGGATCAGGAATAGA
AGCTCCGGAGCCCGGACATAGGAACCTCTACTTTCCCTTTCATTGATCAATAAAACCCAAAAGAACTCTTCTCT
CCCCCTCCTCCGAGGGGAATCAAAAAGATAAAGATGACAGGGAACCAATGACAGATCAGTCAATCATAAATCTTAAAG
GCATTTCTGAGTCCACCCCAACCCACGACCAACACCAAGAACCTAGCATGGAATATAAGCTTCTGCATTAATGAAT
CGCCCAACGCGGGGAGAGGGGTTGCTTCCGCTTATGGGCGCTTCCGCTTCTCGCTCACTGACTCGCTGCGCTCGTCCG
TTCCGCTGCGGGAGCGGTATGACTCACTCAAAGCGGTAAATACGTTATCCACAGAATCAGGGGATAACGCGGAAAG
AACATGTGAGCAAAGGCCAGCAAAAGGCCAGGAACCGTAAAGAGGCGCGTGTGCTGGCGTTTTTCCATAGGCTCCGCC
CCCTGACGAGCATCAAAAAATCAGCCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTC
CCCTGGAAAGCTCCCTCGTGGCTCTCCTGTTCCGACCCCTGCGCTTACCGGATACCTGTCCGCTTTTCTCCTTCCGGA
AGCGTGGCGCTTCTCATAGCTCAGCTGTAGTATCTCAGTTCGGTGTAGGTCGTTGCTCAGCTGAGGCTGTGTGCA
CGAACCCCGGTTAGCCGACCGCTGCGCTTATCCGGTAACTATCGTCTTGAAGTCAACCCGGTAAGACACGACTTAT
CAGCCTGGCAGCAGCCACTGGTAAAGCTTATGACAGCGAGGATGTAGGCGGTGACAGAGTTCTTGAAGTGGTGG
CCTAACTACGGCTACACTAGAAGAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACTTCCGAAAAAGAGTTGG
TAGCTCTTGAATCCGGCAAAACCAACCCGCTGGTAGCGGTGTTTTTTGTTGCAAGCAGCAGATTACCGCAGAAAAA
AAGGATCTCAAGAAGATCCTTTGATCTTTTTCTACGGGCTGACGCTCAGTGGAAACGAAACTCAGTTAAGGATTTTTG
GTCATGAGATATCAAAAGGATCTTCACTAGATCCTTTAAATTAATAAAGTTTTAAATCAATCTAAGTATATA
TAGATAAATTTGGTCTGACAGTACCAATGCTTAAATCAGTGAAGCACTATCTCAGCGATCTGTCTATTTGTTTCACTCA
TAGTTGCTGACTCCCGCTGCTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCAAGTGTGCAATGATACCG
CGAGACCCGCTCACCAGCTCAGATTTATCAGCAATAAACAGCAGCGGAAAGGGCCGAGCGCAGAAAGTGGTCTGC
AACTTTATCCGCTCTCATCCAGTCTTAAATTTGTTGCGGGAAGCTAGAGTAAGTATGTTGCGCAGTTAATAGTTTGGCA
ACGTTGTTGCCATTGCTCAGGGCATCGTGGTGTACGCTCGTCTGTTGATGGCTTCACTCAGCTCCGTTCCCAACGA
TCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAAGCGTTAGCTCCTCGGCTCCTCGATCGTTGTCAGAAAGTAA
GTTGGCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAAATCTTACTGTCATGCCATCCGTAAGATGCTTTTT
CTGTGACTGGTGAAGTACTCAACCAAGTCACTTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTTTCGCCGGCGTCAATA
CGGGATAATACCGCCACATAGCAGAACTTAAAGTGTCTCATTTGGAAAACGTTCTTCCGGGCGAAAACCTCAAG
GCTCTTACCCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGCACCAACTGATCTTACGATCTTTTACTTTACCA
GCGTTTTCTGGGTGAGCAAAAAGAGGCAAAAATGCGCAAAAAAGGGAATAAGGGCGACACGAAATGTTGAATACT
ATACCTTCTTTTTCAATATAATGAAGCACTTATCAGGGTATTTGCTCATGAGCGGATACATAATTTGAATGATTTTA
GAAAAATAAACAAATAGGGGTTCCGCGCACATTTCCCGAAAAGTGCACCTAAATGTAAGCGTTAATATTTTGTAAA
AATCGGTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCTTATAAATCAAAAG
AATAGACGAGATAGGTTGAGTGTGTTCCAGTTTGGAAACAAGAGTCCACTATAAAGAACGTGGACTCCAACGTCAAA
GGCGAAAAACCGTCTATCAGGGCGATGGCCACTACGTGAACCATACCCTAATCAAGTTTTTTGGGGTGGAGGTGGCG
TAAAGCACTAAATCGGAACCTAAAGGGAGCCCCGATTTAGAGCTTGACGGGAAAGCCGGCAACGTGGCGAGAAAG
AAGGAAAGAAAGCGAAAGGAGGGGCGCTAGGGCGTGGCAAGTGTAGCGGTACAGCTGCGCGTAACCACCACCCCGCC
GCGCTAATGCGCC

5'HPRT

GGCCCAATACGCAAAACCGCTCTCCCGCGGCTTGGCCGATTCAATTAATGACGGGCGCGCGGATCCGGCGGCCAAGC
TTTAATTAAGAAGTCTATTCTCTAGAAGTTTAAACAACCTGCTATTTGCTCTTCTATGACTCTTTAATAGTCTCTCAAA
ATATGTTTTCTCCAGAAAATCTCCTCAACTTTCTTCAAATTAATAGACTACATTTTGCACCAGAAAATTTCTTAT
AGGAACCTCAATTTTTTATTTAATCCAGGAAAACATATTTAAACA TACTTAGCTATAAATATTAAGATTAATTTGTGAT
AAAAACTTATTTTTGACAGTGGTGGAAACTGTCTATTAATTTACCATATCATTCCAATTTTTATCCTCAGAAAATGCC
AATAGATGATCAATAAATATTTGACGATATACTTATGCACTCCAGCTATAGCTAATATAGATTGCATTAAGACTGTCTT
AGGGTAGACAATAGTCAAAAGAAATGGATAGGGCATATTTCAAATTTCTGAGCTACCAAAATGTTGATACAAGGAAAAAT
GTGTAATGAATACTTACATAGAAGAGCAGGACTGGTGAATAAGATTGTATGTAATAAAGTGGTGGAGACTGTAGATT
ACATTTGACAGGAATAAAGAGAACTTTAATTTAAGAGAATCAGTCTATGAAGAAAAAAGACAGCAAACTACACTTC
AGTCACTTCTCTCATGAGGCTCTACAGATTTTGAATAAGAGCATGGGAAAGCCCTTAGAAAATGAGCATGGGAAAGCCCT
TAGAAAAGATGATGAGGATTTCTGAGCAATTTTGTAAAGATGCTGATAGTAGAAACAAGGAAAGAAAAAGTTGTTAAT
TAAGTTTAAACAGGAGAAGCTGGATTCCACTGCAACTAGTGGGAAAGAGTTACAAAAGGCCCATGTAGCTACAAGTAA
TACATAACAAAAAGTCCCAAGGGAACGAGGCTCTGTGTTAATCTACTATGGGCTTTAAGAGAAGAAAAAAGAAAAAGGA
CTAAGACTCTGAAAGAAATCATGTGAGAGCTTCTTATTCCAGCAAGAGACAAAATCTCCATGGAACTTCTCTTTCT
GCACCCACACTGTTCTTCTACCTGCCAAGGCTGCCTTGAATCTCAAGAGAATCCTATGGAGCAGTCAACACATTTTA
AATACTGAAACAAACCTAGGGAAGAAAAGAGCAGAGCAGGCTGACATTTCCAGCATTATCAGGAAAGCAATGATTTTCC
TAGATTTCCGAGCCAGTGTTCAGATAAAGGTTTTCTCAAACCTCACTTCTCTCTCCTACAGTATAAATTAAGAAAG
AACCACTCAGCTTTTAGTATAAGACGACATAGAGAAAGGAGTTCCAAAGAGACGTTTGTCTTACCATTCTTATC
CTTCTTTCATGGAGCAGTGTATTTCAAACCTCAGTAAGTCCATTACTCACTTCCACATTTTATGAGCAAAAATAAATAA
AGAGAGATAGAGTAAAGATGAAGGAGGTTTCTT
AATAGAAAATTTATGACATTAAGACGATTTCAACAAAATAACAAAGTAAAGTAAAGTATCTTTGAAATAATCAATTTCA
AGATAATCAAGGAAAAATGAGAGGCAACTATTTAGACTGATTTTATAAATAAATAAAGCTCAGCTTAGCCAGATA
TAAGCAATTTCTGAGTTCTGAAGAAAAATTTTTGACAAAATGAGTCTATAAATGTTATTGTCTACTTATGATCTCTAA
ATACACAGGCTGTATTTAGAACTAGATGTTTCTAGGACCTTTATTCATAAGAGATGATGATTTCTTGATACTACTTCT
CATTTGCAAAATTTCAATTTATTTAATTTTCAATTAAGAAATATAATCTTCTTCAATTTAGTTACCTCACTATGG
GCTATGTACAAACTCAAGAAAAGTTAGTCACTGTGCTTTGCAAGATAAAAAGCTTAGTGTAAAACAGGCTGAGAGTAT
TTGATGAAGAAAGGGGAGTGGTTATATGAGTCTTAGCCAAAACATGTGATAGTCACTCAGGGGTTGCTGGAAAAGAAAGT

CTGTGACACTCATTAACTATTGGTGAGATTTTGTATGATCTAAAGGAGAAAATGTTCTTGGCTGTTTTGTATTGCCTT
CTGTGGAGTTTCCAGATCTCTGATGGCCATTTTCTCGAGCCTGTGCCTCTTAAGAACTTGTGGCAAAGAATGCTG
CCCACCATGGATGGGTGATGGGAGTCCCTCGGCCAGCTTTCAGGCAGAGGTTCTGCCAGGATATCCTTCTGTCCAGTG
CACCATCTGGACCTCAGTTCCTTCAAAGGGGTGGATGACCGTGTGCTGGCCCTCTGTGTTTTATAATAGGACCTGC
CAGTGTCCAGGCAACTTCATGGGTTCAACTGCGGAACTGTAAGTTTGGATTGGGGGCCAAATTGTACAGAGAAGCG
AGTCTTGATTAGAAGAAACATTTTGTATTGAGTGTCTCCGAAAGAATAAGTCTTTTCTTACCTCACTTAGCAAAC
ATACATCAGCTCAGTCTATGTGATCCCCACAGGCACCTATGGCAAATGAACAATGGGTCAACACCCATGTTTAAATGAT
ATCAACATCTACGACCTCTTTTGTATGGATCTACTATGTGTCAAGGGACACACTGCTTGGGGGCTCTGAAATATGGAG
GGACATTGATTTTGGCCATGAAGCACCAGGTTTCTGCCTTGGCACAGACTTTTCTGTTATTGTGGGAACAAGAAATTC
GAGAATAACTGGGGATGAGAACTTCACTGTTCCATACTGGGATGGAGAGATGCAGAAAATGTGACATTTGCACAGAT
GAGTACTTGGGAGGTCGTACCTGAAAATCTAACTTACTCAGCCAGCATCCTTCTTCTCTCTGCGAGATCATTG
TAGCAGATCAGAAGATATAATAGCCATCAGGTTTTATGCGATGGAACACCTGAGGGACCACTATTACGTAATCTGGAA
ACCATGACAAAGCCAAAACCCAGGCTCCCATCTTCAAGCAGATGTGGAATTTTGTCTGAGTTTGACCCAGTATGAATCT
GGATCAATGGATAGAATGCAATTTTCACTTTCAGTCTTTAGAAACACACTGGAAGGATTTGCGAGTCCACTCACAGGGATAGCAGA
TCCTTCTCAAAGTAGCATGCAATATGCCTTACATATCTTTATGAATGGAACAATGTCCAAAGTACAGGGATCGGCCAAG
ATCCCATTTTCTTCTTCCACCTGCTTTTGTGGACAGTATTTTGAACAATGGCTGCGAAGGCCACCGCCCTTTTGGAA
GTTTACCAGAAGCAAAGTCACTTACCGCCATAACAGAGACTTACATGGTTCTTTTACATCCGCTCTATAGAAATGG
TGATTTCTTATAACATCAAAGGATCTGGGATGACTACAGCTACCTCAAAGAGTCAAGTCCAGGCTTTTACAGAAAT
ATATTGAGCCTTACTTGGAAACAGCCAGTCTGATCTGGCCATGGCTTCTGGGGCAGCACTGGTGGGAGCTGTTATTGCT
GCAGCTCTCTGGGCTTAGCAGTAGCCATGCTTCCAGAAGAAGAAGAAGAAGCAACCCAGGAGGAAAGGCAGCC
ACTCCTCATGGACAAAGCACTACAGCAGCTTCTGTATCAGAGCCATCTGTGAACATCTAGGAAACAGAGTGGGACT
GAAAGGTTTTACCTCACTCCAGCTATTTGTTGGTGTCTTCAAAATTTAAACTAGTATAAAAACATAGACATAGCTGTTT
GGCTTTTTTTCAGACCAATGTTTTTCTAAGTCTAGTTTCTAAGAAATGACTGGGATTTGCTAAAATATATATATA
TAAATAAATCTACTAATAGTAAATAAATTTCTCTTCAACTAATTGAGCTGGTTTTTATGAATGTGTCTTAAATTA
TTTAACTTGAAGCACATTTTGTCTTACTTCTTGTGAAATTTCCGGAAATTTACCAGGAGGGGAGGCGCTTTTC
CCAAGGCAGTCTGGAGCATGCGCTTGTAGCAGCCCGCTGGGCACTTGGCGCTACACAAGTGGCTCTGGCCTCGCACACA
TTCCACATCCACCGGTAGGCGCCAAACGGGCTCGGTTCTTTGGTGGCCCTTCCGCGCACCTTCTACTCCCTTAGTCA
GGAAGTTCCCGCCCGCCGAGCTCGCGTGTGACAGGACGTGACAAATGGAAGTAGCACGTCTCACATAGTCTCGTGCGAG
ATGGACAGCACCGCTGAGCAATGGAAGCGGTAGGCTTTGGGGCAGCGGCAATAGCAGCTTTGCTCCTTCGCTTCTG
GGCTCAGAGGCTGGGAAGGGTGGGTCGGGGCGGGCTCAGGGGCGGGCTCAGGGGCGGGCGCCGAAGGTCCT
CCGGAGGCCCGGCTTGTGACAGCTTCAAAGCGCACGTCTGCCGCGCTGTTCTCTCTTCTCATCTCCGGGCTTTTCG
ACCTGACAGGGGGGGGGGGGCTTGTGCTGGCCCTCCGCTCTCTCTGCTCCGCCACCGGCTTCTCTCTGAGCAGT
CAGCCCGCGCGGGCCGGCTCCGTTATGCGCACCCGACGCTTGGCGCTGATTAAGTATGATGATGAACAGGTTATGAC
CTTGATTTATTTGCATACCTAATCATTATGCTGAGGATTTGGAAGGGTGTATTCCCATGGACTAATTATGGACAG
GTAAGTAAGATCTTAAATAGGTTTTTACTTTTTCTTGTGTTAAATTTCAAACATCAGCAGCTGTTCTGAGTACTGTCT
ATTTGAACATAAACTAGGCCAATTTTAAATAAATGATGCTTTTCTAAAATCTTCTTTTATAAAAAATAAAGAGGAGGGC
CTTACTAATTAAGTATCAGTTGTGGTATAGTGGGACTCTGTAGGGACAGAAACAAGTAAACATGGAAGGGAGATGG
AAGAAGGAACTTAGCCAGAGTCTTGCATTTCTCAGTCTTAAACAGGGTAAATGGACTGGGGCTGAATCACATGAAGGCAA
GCTCAGATTTTTATTTATTTATGACATCTAGCTTGAATTTTTCTGTTAAGTCAATTACAGTGAAAAAACCTTACCTGGTAT
TGAATGCTTGCATGATGCTGGCTATTCTGTGTTTTTATTTAAAATATAATATAAATATTTGTTTATAAAAA
TTCTAATCTGAGGGCCATAAACAAGAGACTAAAGTTCTCTCTTTCAGCCTTCTGTACACATTTCTTCTCAAGCACTG
GCTATGATGTATACTATATGCAAAAGTACATATACATTTATATTTAAAGTATAGTATAGTTTTAAATGTTATTGG
ACACTTTTAAATTAAGTGTGTCTAGAGCTTGGGCTGCAGGTCGAGGGACCTAATAACTTCTGATAGCATAACATTAACGA
AGTTATATTAAGGTTCCGGATCAGCTTGGGCTGAACATCAGGCGCCAGGGCTCCGTAAGGCTACTAGAGCACAGGGGGT
GCCCAAAGCTCTGGGGCTCTCCACTAATAACGGCTACTTCAATTGATTGGACGCGCCATCTTGCCTGCTTATGCAT
ATTGAGCGTGAAGTGAATATTCATGAACAGAGGCGGTCCTCCGCTCCCTCCTTCCCGCCAGCCCGGAACCGGCTCCG
GAGGACCCGAAGGCGCCCGCTTCAATACCGATGCGTAGGACAAACATTTTCCGATGTTGTGGGGGATACATATGA
GAGACTTTAGCTGAAATGAGCTGAACTCGAAGCTGAGTAAAAATGGCCTAATCTTATCTCCGTTCTGTAAGTCTC
GGTTTGGAGTGCAGGGAAACCCGAAAGAGGAGGACAGGACCCAGGAACATTTCTCTCTCTGCTGCGCTCAGAAAGACA
CCCAACAGGGAGCCGGAGCCCTAGCGTCAACAACCTCCGCGCGCGGCTCCGTTAGGCGGTTGCGGGCGGGCCCGTAG
CGCAAGGGAGGGCGGAAAGGAGGGCGGGACACAAGGGCAATCTATAAGGGCGTCACTCAGCCAGTTCTCTCTCA
GAAGCGCCGAGAGCGCCAGCGGGACGGTGGAGAAGAAGTGGCTCCGGAAGGGGAGAGACAAACTGCGCTAACCTCT
GCCGTTGAGGATCATCAATTTCTGACAGCAATATGGGATCGGCCATTTGAACAAGATGGATTGCACGAGGTTCTCCGGC
CGCTTGGGTGGAGGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCTGCTGATGCCCGGCTGTTCCGGCTGT
CAGCGCAGGGGGCGCCGGTCTTTTGTGCAAGCCGACCTGTCCGGTCCCTGAATGAACAGGACAGGCGAGGCGCGG
CTATCGTGGCTGGCCACGAGGGGCTTCTTGGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAGGGGACTGGCTGCT
ATTGGCGAAGTCCGGGGCAGGATCTCTGCTATCTCACCTTGTCTCCTCCGAGAAAGTATCCATCATGGCTGATGCAA
TGCGCGGCTGCATACGCTTATCGGCTTACTCCGCTTCCGACCAACAGCGAAACATCGCATCGAGCGAGCAGCTACT
CGGATGGAAGCCGGTCTTGTGATCAGGATGATCTGACGAAAGCATCAGGGGCTCGCGCAGCCGAACTGTTCCGCGAG
GCTCAAGCGCGCATGCCGACGGCGATGATCTGCTGTAACCATGGCATGCTGCTTCCGCAATATCATGGTGGAAA
ATGGCGCTTTTTCTGGAATCATCGACTGTGGCGGGTGGGTGTGGCGGACCGTATCAGGACATAGCGTTGGTACCCGT
GATATTGCTGAAGAGCTTGGCGGCAATGGCTGACCGCTTCTCTGCTTACGGTATCGCGCTCCGATTCCGACGG
CATCGCTTCTATCGCTTCTGACGAGTTCTTCTGAGGGGATCAATTTCTAGAGCTCGCTGATCAGCCTCGACTGTGC
CTTCTAGTTGCCAGCCATCTGTTGTTTGGCCCTCCCGGCTTCTTGAACCTGGAAGGTGCCACTTCCACTGTCTT
TCTAATAAAATGAGAAATGATCGCATGCTGAGTAGGTGCTATTCTATTCTGGGGGTGGGGTGGGGCAGGACAG
CAAGGGGAGGATTTGGAAAGCAATAGCAGGATGCTGGGGATCGGTGGGCTATGCTTCTGAGGGCGAAAGAACCA
TGCGGGCTCGAGCTGGCGTAATAGCGAAGAGGCGCACCGATCGCCCTTCCCAACAGTTGCGCAGCCTGAATGGCGAA
TGGGACGCGCCTGTAGCGGCGCATTAAGCGGGCGGGTGGTGGTTACGCGCAGCGTACCGCTACACTTGCAGCGC
CTTACCGCCGCTCTTCTGCTTCTTCCCTTCTTCTCGCCACGTTCCGCGGCTTTCCCGTCAAGCTCTAAATCGGG
GGCTCCCTTAGGGTTCCGATTTAGTCTTTACCGCACCTCGACCCCAAAAACCTTGAATTAGGGTGTGGTTACGTA
GGCCATCGCCCTGATAGAGGTTTTTCCGCTTGTGAGCTTGGAGTCCAGCTTCTTAAATAGTGGACTTGTGTTCAAAC
TGGAAACAACACTCAACCTATCTCGGCTATTCTTTGATTTATAAGGGATTTTGGCGATTTGGGCTATTGGTTAAAAA
ATGAGCTGATTTAAACAAAATTTAACCGCAATTTAAACAAAATTTAACGCTTACAATTTAGGTGGCACTTTTCGGGAA
ATGTGCGCGAAACCCCTATTGTTTATTTTCAAATACATTTCAAATATGATATCCGCTCATGAGACAATAACCCCTGATAA
ATGCTTCAATAATATTGAAAAGGAGAGATAGATATTAACATTTCCGCTGTCGCCCTTATTCCCTTTTTTGGCGCATT
TTGCCCTCTGTTTTGCTCACCAGAAACGCTGGTGAAGTAAAGATGCTGAAGATCAGTTGGGTGCACGAGTGGTT
ACATCGAACTGGATCTCAACAGGTTAAGATCTTGAAGTTTTTCCGCGGAAAGAACTTTTCAAATGATGAGCACTTTT
AAAGTTCTGCTATGTGGCGGGTATTATCCGATTTGACGCGGGCAAGAGCAACTCGGTGCGCGCATACACTATTCTCA
GAATGACTTGGTTGAGTACTCACCAGTACAGAAAAGCATCTTACGGATGGCATGACAGTAAAGAAATATGACAGTCTG
CCATAACCATGAGTGAATAACCTCGCCCAACTTACTTTCGACAACTCGGAGGACCGAAGGAGCTAACCGCTTTTTT
CACAAATGGGGATCATGTAACCTCGCTTGTGTTGGAAACCGAGCTGAATGAAGCATAACCAACGACGAGCTGGA
CACCAGATGCTGTAGCAATGGCAACAGGTTGGCAAACTTAACTGGCGAACTTACTTCTAGCTTCCGGCAAC
AATTAATAGACTGGATGAGGCGGATTAAGTTGACGGCCACTTCTGCGCTGGCCCTTCCGGCTGGCTGGTTTTATGCT

GATAAATCTGGAGCCGGTGAGCGTGGGTCTCGCGGTATCATTGCAGCACTGGGGCCAGATGGTAAGCCCTCCCGTATCGT
AGTTATCTACACGACGGGGAGTCAGGCAACTATGGATGAACGAAATAGACAGATCGCTGAGATAGGTGCCTCACTGATTA
AGCATTGGTAACTGTCAGACCAAGTTTACTCATATATCTTTAGATTGATTTAAACTTCATTTTTAATTTAAAGGATC
TAGGTGAAGATCCTTTTTGATAATCTCATGACAAAATCCCTTAACGTGAGTTTTCTTCCACTGAGCGTCAGACCCCGT
AGAAAAGATCAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAAACAAAAAACCCCGCTAC
CAGCGGTGGTTTTGTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAAGTGGCTTCAGCAGAGCGCAGATACCA
AATACTGTTCTCTAGTGTAGCCGTAGTTAGGCCACCCTTCAAGAAGCTGTAGCACCGCTACATACCTCGCTCTGCT
AATCCTGTTACCAAGTGGCTGCTGCCAGTGGCGATAAGTCTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATA
AGGCGCAGCGGTGGGCTGAACGGGGGTTCTGTCACACAGCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATAC
CTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGG
AACAGGAGAGCGCACGAGGGAGCTTCCAGGGGAAACGCCGGTATCTTTATAGTCTGTGCGGGTTTCGCCACCTCTGAC
TTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGCGGAGCCTATGGAAAACGCCAGCAACGCGGCCTTTTTACGGTTC
CTGGCCTTTTGTGCGCCTTTTGTCTACATGTTCTTCTGCGTTATCCCCTGATTCTGTGGATAACCGTATTACCGCCTT
TGAGTGAGCTGATACCGCTCGCCGACCCGAACGACCGAGCGCAGTCAGTGAGCGAGGAAGCGGAAGA