Cad7GFP11

ATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCC
AATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTAT
CATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCT
TATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTAC
ATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGT
TTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGCCCCATTGACGCAAATGGGCGGTAGGC
GTGTACGGTGGGAGGTCTATATAAGCAGAGCTGGTTTAGTGAACCGTCAGATCCGCTAGCATGGAGACAGACAC
ACTCCTGCTATGGGTACTGCTGCTCTGGGTTCCAGGTTCCACTGGTGACACCGGTGACACATACAGATACATAAGC
GAGGTTACAGCCTCTCGCGACCACATGGTGCTGCATGAGTATGTCAACGCTGCGGGAATTACCGGGGGTGGTGG
GTCTGGTGGAGGGGGATCCAGCTGGGTGTGGAATCAATTCTTTGTGCTGGAAGAATACATGGGCTCAGACCCACT
CTATGTAGGAAAGCTTCACTCTGATGTTGATAAAGGAGATGGTTCCATCAAATACATCTTGTCAGGAGAAGGGGC
AAGTTCCATTTTCATTATTGATGAGAACACAGGGGATATTCACGCTACAAAGAGGCTGGATCGAGAAGAGCAGGC
CTACTACACACTCCGAGCACAAGCACTAGATAGGCTGACTAATAAACCGGTGGAACCAGAATCTGAGTTCGTCATT
AAGATTCAGGACATCAATGACAATGAGCCAAAATTTCTGGATGGTCCTTACACTGCTGGAGTTCCTGAGATGTCTC
CTGTGGGTACCTCTGTGGTTCAAGTGACAGCCACTGATGCAGATGATCCTACTTATGGCAATAGTGCCCGAGTGGT
TTACAGCATATTGCAAGGACAACCTTACTTTTCTGTGGAACCAAAGACAGGCATTATCAAAACTGCCCTTCCAAATA
TGGATAGAGAAGCCAAGGACCAATACTTACTAGTTATTCAAGCAAAGGACATGGTTGGGCAAAATGGTGGATTAT
CAGGAACAACATCTGTAACTGTCACTCTGACTGATGTTAATGACAACCCACCCCGCTTCCCACGACGATCATATCAG
TATAATGTCCCAGAGTCTTTACCTCTGGCATCTGTAGTGGCCAGAATAAAAGCTGCAGATGCAGATGTGGGACCCA
ATGCTGAAATGGAGTATAAGATTGTAGATGGTGATGGTTTGGGAGTATTCAAAATTTCTGTAGACAAAGACACTC
AGGAAGGAATCATCACAATTCAGAAGGAGTTGGATTTTGAAGCTAAAACAAGTTATACCCTGAGGATAGAAGCAG
CCAATATGCATGTTGATCCTCGCTTCCTAAGTCTGGGACCCTTCAGCGACATGACAACAGTGAAGATAATCGTAGA
AGATGTTGATGAGCCACCTGTGTTTACTTCACGTTTATACTCCATGGTGGTGTCTGAAGCAGCAAAAGTCGGCACT
ATCATTGGAACTGTTGCTGCCCATGATCCAGATGCCTCAAATAGTCCAGTCAGGTACTCAATAGATCGAAACACAG
ACCTCGAGAGGTATTTCAATATTGATGCCAACAGTGGAGTCATTACAACTGCCAAGTCTTTGGACAGGGAAACTAA
TGCTGTTCATAACATTACAGTCTTGGCTATGGAGAGTCAGAATCCAGCACAGATTGGGAGAGGATATGTAGCCAT
AACTATCCTTGACATCAACGACAATGCCCCTGAGTTTGCCATGGAGTATGAGACAACTGTCTGTGAAAATGCTCAA
CCTGGCCAGATCATCCAGAAAATCAGTGCAATTGATAAAGATGACCCACCAAATGGTCATCAGTTCTACTTCAGTTT
AACAGCAGAAGCAGCAAATAACCATAATTTTACACTTCAGGACAACAAAGATAACACTGCAACTGTATTAACCAGA
CGAAATGGTTTCCGAAGACAGGAACAATCTGTTTTCTACTTGCCAATATTCATTGTGGACAGCGGATCACCTTCACT
TAGTAGCACTAATACCCTCACCATAAGAGTCTGTGACTGCGATGCAGATGGTATTGCTCAGACATGCAATGCAGAG
GCATATATCTTGCCTGCGGGACTTAGCACTGGAGCCCTGATAGCAATATTGGCTTGTGTTTTAACATTGCTAGTTCT
TGTCTTGCTGATTGTCACCATGAGGCGACGAAAAAAAGAGCCCCTCATTTTTGATGAAGAGAGAGATATCAGAGA
AAATATTGTCAGATATGATGATGAGGGTGGTGGAGAAGAAGACACTGAGGCTTTTGACATGGCTGCCTTAAGAAA
CCTCAACATCATCCGAGACACCAAGACCAGGAGGGATGTGACACCTGAGATTCAGTTCTTGAGCAGACCGACTTTT
AAAAGCATCCCAGATAATGTCATTTTTAGGGAATTTATCTGGGAGAGACTAAAAGAAGCTGATGTGGACCCTTGT
GCACCACCCTACGACTCCCTGCAGACATATGCGTTTGAGGGGAATGGCTCAGTGGCAGAGTCACTCAGCTCATTA
GATTCAATAAGCTCAAACTCTGACCAGAACTATGATTACCTCAGTGACTGGGGTCCTCGCTTTAAAAGGCTTGCAG
ATATGTATGGGAGTGGTCCAGACTGCTTATACTCATAGTCTAGATCATAATCAGCCATACCACATTTGTAGAGGTTT
TACTTGCTTTAAAAAACCTCCCACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTTGTTGTTAACTTGT

TTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTCACAAATAAAGCATTTTTTTCACTGCATT
CTAGTTGTGGTTTGTCCAAACTCATCAATGTATCTTAAGGCGTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGC
GTTAAATTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAAT
AGACCGAGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCA
AAGGGCGAAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCCTAATCAAGTTTTTTGGGGTCGA
GGTGCCGTAAAGCACTAAATCGGAACCCTAAAGGGAGCCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAAC
GTGGCGAGAAAGGAAGGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTG
CGCGTAACCACCACACCCGCCGCGCTTAATGCGCCGCTACAGGGCGCGTCAGGTGGCACTTTTCGGGGAAATGTG
CGCGGAACCCCTATTTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATG
CTTCAATAATATTGAAAAAGGAAGAGTCCTGAGGCGGAAAGAACCAGCTGTGGAATGTGTGTCAGTTAGGGTGT
GGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGA
AAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCC
TAACTCCGCCCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTATTTA
TGCAGAGGCCGAGGCCGCCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTT
TTGCAAAGATCGATCAAGAGACAGGATGAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTC
CGGCCGCTTGGGTGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGT
TCCGGCTGTCAGCGCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAAG
ACGAGGCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAG
CGGGAAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTGCTCCTGCCGAGA
AAGTATCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGACCACCAAGC
GAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGC
ATCAGGGGCTCGCGCCAGCCGAACTGTTCGCCAGGCTCAAGGCGAGCATGCCCGACGGCGAGGATCTCGTCGTG
ACCCATGGCGATGCCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGTGGCCGGC
TGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGG
GCTGACCGCTTCCTCGTGCTTTACGGTATCGCCGCTCCCGATTCGCAGCGCATCGCCTTCTATCGCCTTCTTGACGA
GTTCTTCTGAGCGGGACTCTGGGGTTCGAAATGACCGACCAAGCGACGCCCAACCTGCCATCACGAGATTTCGATT
CCACCGCCGCCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCG
GGGATCTCATGCTGGAGTTCTTCGCCCACCCTAGGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAA
GGAACCCGCGCTATGACGGCAATAAAAAGACAGAATAAAACGCACGGTGTTGGGTCGTTTGTTCATAAACGCGG
GGTTCGGTCCCAGGGCTGGCACTCTGTCGATACCCCACCGAGACCCCATTGGGGCCAATACGCCCGCGTTTCTTCC
TTTTCCCCACCCCACCCCCCAAGTTCGGGTGAAGGCCCAGGGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCC
ATAGCCTCAGGTTACTCATATATACTTTAGATTGATTTAAAACTTCATTTTTAATTTAAAAGGATCTAGGTGAAGATC
CTTTTTGATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGAT
CAAAGGATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGG
TGGTTTGTTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAACTGGCTTCAGCAGAGCGCAGATACCAAA
TACTGTCCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGC
TAATCCTGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACC
GGATAAGGCGCAGCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCG
AACTGAGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCG
GTAAGCGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCC
TGTCGGGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAA

CGCCAGCAACGCGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCC
TGATTCTGTGGATAACCGTATTACCGCCATGCAT

Cad7 GFP1-10

TAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGG
TAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAAC
GCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTG
TATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGA
CCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAG
TACATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTT
TGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGCCCCATTGACGCAAATGGGCGGTAG
GCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTGGTTTAGTGAACCGTCAGATCCGCTAGCATGGAGACAGAC
ACACTCCTGCTATGGGTACTGCTGCTCTGGGTTCCAGGTTCCACTGGTGACATGTCCAAAGGAGAAGAGCTGTTCA
CTGGAGTGGTACCAATACTTGTGGAGTTGGACGGAGATGTGAACGGACACAAATTTTCAGTCCGCGGGGAGGGG
GAAGGGGATGCTACTATTGGCAAGCTGACGCTCAAATTCATCTGTACCACCGGAAAACTCCCTGTACCCTGGCCCA
CACTGGTGACAACTCTGACTTACGGCGTGCAATGTTTTAGCCGATACCCAGACCACATGAAGAGGCACGACTTTTT
CAAAAGCGCAATGCCTGAAGGATACGTACAGGAAAGGACCATTTCTTTTAAAGACGACGGGAAGTACAAAACCCG
GGCAGTGGTGAAGTTTGAGGGCGATACCCTCGTCAATAGGATCGAATTGAAGGGAACTGACTTCAAAGAAGATG
GCAACATCCTGGGTCACAAGCTTGAGTATAACTTTAACTCCCACAACGTGTATATTACAGCCGACAAACAGAAGAA
TGGAATTAAGGCTAACTTCACTGTCAGACACAATGTCGAAGATGGCTCCGTGCAGCTCGCCGATCACTATCAACAG
AATACTCCTATCGGGGACGGCCCAGTCCTGCTGCCCGACAACCACTACCTGAGTACCCAGACTGTTCTGAGCAAAG
ATCCGAACGAGAAGGGAACCGTCGAGGGGTCTACATCTGGAAGATCTAGCTGGGTGTGGAATCAATTCTTTGTGC
TGGAAGAATACATGGGCTCAGACCCACTCTATGTAGGAAAGCTTCACTCTGATGTTGATAAAGGAGATGGTTCCAT
CAAATACATCTTGTCAGGAGAAGGGGCAAGTTCCATTTTCATTATTGATGAGAACACAGGGGATATTCACGCTACA
AAGAGGCTGGATCGAGAAGAGCAGGCCTACTACACACTCCGAGCACAAGCACTAGATAGGCTGACTAATAAACC
GGTGGAACCAGAATCTGAGTTCGTCATTAAGATTCAGGACATCAATGACAATGAGCCAAAATTTCTGGATGGTCCT
TACACTGCTGGAGTTCCTGAGATGTCTCCTGTGGGTACCTCTGTGGTTCAAGTGACAGCCACTGATGCAGATGATC
CTACTTATGGCAATAGTGCCCGAGTGGTTTACAGCATATTGCAAGGACAACCTTACTTTTCTGTGGAACCAAAGAC
AGGCATTATCAAAACTGCCCTTCCAAATATGGATAGAGAAGCCAAGGACCAATACTTACTAGTTATTCAAGCAAAG
GACATGGTTGGGCAAAATGGTGGATTATCAGGAACAACATCTGTAACTGTCACTCTGACTGATGTTAATGACAACC
CACCCCGCTTCCCACGACGATCATATCAGTATAATGTCCCAGAGTCTTTACCTCTGGCATCTGTAGTGGCCAGAATA
AAAGCTGCAGATGCAGATGTGGGACCCAATGCTGAAATGGAGTATAAGATTGTAGATGGTGATGGTTTGGGAGT
ATTCAAAATTTCTGTAGACAAAGACACTCAGGAAGGAATCATCACAATTCAGAAGGAGTTGGATTTTGAAGCTAAA
ACAAGTTATACCCTGAGGATAGAAGCAGCCAATATGCATGTTGATCCTCGCTTCCTAAGTCTGGGACCCTTCAGCG
ACATGACAACAGTGAAGATAATCGTAGAAGATGTTGATGAGCCACCTGTGTTTACTTCACGTTTATACTCCATGGT
GGTGTCTGAAGCAGCAAAAGTCGGCACTATCATTGGAACTGTTGCTGCCCATGATCCAGATGCCTCAAATAGTCCA
GTCAGGTACTCAATAGATCGAAACACAGACCTCGAGAGGTATTTCAATATTGATGCCAACAGTGGAGTCATTACAA
CTGCCAAGTCTTTGGACAGGGAAACTAATGCTGTTCATAACATTACAGTCTTGGCTATGGAGAGTCAGAATCCAGC
ACAGATTGGGAGAGGATATGTAGCCATAACTATCCTTGACATCAACGACAATGCCCCTGAGTTTGCCATGGAGTAT
GAGACAACTGTCTGTGAAAATGCTCAACCTGGCCAGATCATCCAGAAAATCAGTGCAATTGATAAAGATGACCCA

CCAAATGGTCATCAGTTCTACTTCAGTTTAACAGCAGAAGCAGCAAATAACCATAATTTTACACTTCAGGACAACAA
AGATAACACTGCAACTGTATTAACCAGACGAAATGGTTTCCGAAGACAGGAACAATCTGTTTTCTACTTGCCAATA
TTCATTGTGGACAGCGGATCACCTTCACTTAGTAGCACTAATACCCTCACCATAAGAGTCTGTGACTGCGATGCAG
ATGGTATTGCTCAGACATGCAATGCAGAGGCATATATCTTGCCTGCGGGACTTAGCACTGGAGCCCTGATAGCAAT
ATTGGCTTGTGTTTTAACATTGCTAGTTCTTGTCTTGCTGATTGTCACCATGAGGCGACGAAAAAAAGAGCCCCTCA
TTTTTGATGAAGAGAGAGATATCAGAGAAAATATTGTCAGATATGATGATGAGGGTGGTGGAGAAGAAGACACT
GAGGCTTTTGACATGGCTGCCTTAAGAAACCTCAACATCATCCGAGACACCAAGACCAGGAGGGATGTGACACCT
GAGATTCAGTTCTTGAGCAGACCGACTTTTAAAAGCATCCCAGATAATGTCATTTTTAGGGAATTTATCTGGGAGA
GACTAAAAGAAGCTGATGTGGACCCTTGTGCACCACCCTACGACTCCCTGCAGACATATGCGTTTGAGGGGAATG
GCTCAGTGGCAGAGTCACTCAGCTCATTAGATTCAATAAGCTCAAACTCTGACCAGAACTATGATTACCTCAGTGA
CTGGGGTCCTCGCTTTAAAAGGCTTGCAGATATGTATGGGAGTGGTCCAGACTGCTTATACTCATAGGTCGACGGT
ACCGCGGGCCCGGGATCCACCGGATCTAGATAACTGATCATAATCAGCCATACCACATTTGTAGAGGTTTTACTTG
CTTTAAAAAACCTCCCACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTTGTTGTTAACTTGTTTATTG
CAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTCACAAATAAAGCATTTTTTTCACTGCATTCTAGTT
GTGGTTTGTCCAAACTCATCAATGTATCTTAACGCGTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGCGTTAAA
TTTTTGTTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCG
AGATAGGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGC
GAAAAACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCCTAATCAAGTTTTTTGGGGTCGAGGTGCC
GTAAAGCACTAAATCGGAACCCTAAAGGGAGCCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCG
AGAAAGGAAGGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTA
ACCACCACACCCGCCGCGCTTAATGCGCCGCTACAGGGCGCGTCAGGTGGCACTTTTCGGGGAAATGTGCGCGGA
ACCCCTATTTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAA
TAATATTGAAAAAGGAAGAGTCCTGAGGCGGAAAGAACCAGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAG
TCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCC
CCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCTAACTC
CGCCCATCCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTATTTATGCAG
AGGCCGAGGCCGCCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCA
AAGATCGATCAAGAGACAGGATGAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCC
GCTTGGGTGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGG
CTGTCAGCGCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAAGACGAG
GCAGCGCGGCTATCGTGGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGA
AGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTGCTCCTGCCGAGAAAGTA
TCCATCATGGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGACCACCAAGCGAAAC
ATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCATCAG
GGGCTCGCGCCAGCCGAACTGTTCGCCAGGCTCAAGGCGAGCATGCCCGACGGCGAGGATCTCGTCGTGACCCAT
GGCGATGCCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGTGGCCGGCTGGGT
GTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGA
CCGCTTCCTCGTGCTTTACGGTATCGCCGCTCCCGATTCGCAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTT
CTGAGCGGGACTCTGGGGTTCGAAATGACCGACCAAGCGACGCCCAACCTGCCATCACGAGATTTCGATTCCACC
GCCGCCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGAT
CTCATGCTGGAGTTCTTCGCCCACCCTAGGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAAGGAAC
CCGCGCTATGACGGCAATAAAAAGACAGAATAAAACGCACGGTGTTGGGTCGTTTGTTCATAAACGCGGGGTTCG

GTCCCAGGGCTGGCACTCTGTCGATACCCCACCGAGACCCCATTGGGGCCAATACGCCCGCGTTTCTTCCTTTTCCC
CACCCCACCCCCCAAGTTCGGGTGAAGGCCCAGGGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCCATAGCCT
CAGGTTACTCATATATACTTTAGATTGATTTAAAACTTCATTTTTAATTTAAAAGGATCTAGGTGAAGATCCTTTTTG
ATAATCTCATGACCAAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGG
ATCTTCTTGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTT
GTTTGCCGGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAACTGGCTTCAGCAGAGCGCAGATACCAAATACTGT
CCTTCTAGTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCC
TGTTACCAGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATA
AGGCGCAGCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTG
AGATACCTACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAG
CGGCAGGGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTCG
GGTTTCGCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCA
GCAACGCGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCCTGATT
CTGTGGATAACCGTATTACCGCCATGCAT

N-cad GFP1-10

TAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCCGCGTTACATAACTTACGG
TAAATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAAC
GCCAATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTG
TATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGA
CCTTATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAG
TACATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTT
TGTTTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGCCCCATTGACGCAAATGGGCGGTAG
GCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTGGTTTAGTGAACCGTCAGATCCGCTAGCATGGAGACAGAC
ACACTCCTGCTATGGGTACTGCTGCTCTGGGTTCCAGGTTCCACTGGTGACATGTCCAAAGGAGAAGAGCTGTTCA
CTGGAGTGGTACCAATACTTGTGGAGTTGGACGGAGATGTGAACGGACACAAATTTTCAGTCCGCGGGGAGGGG
GAAGGGGATGCTACTATTGGCAAGCTGACGCTCAAATTCATCTGTACCACCGGAAAACTCCCTGTACCCTGGCCCA
CACTGGTGACAACTCTGACTTACGGCGTGCAATGTTTTAGCCGATACCCAGACCACATGAAGAGGCACGACTTTTT
CAAAAGCGCAATGCCTGAAGGATACGTACAGGAAAGGACCATTTCTTTTAAAGACGACGGGAAGTACAAAACCCG
GGCAGTGGTGAAGTTTGAGGGCGATACCCTCGTCAATAGGATCGAATTGAAGGGAACTGACTTCAAAGAAGATG
GCAACATCCTGGGTCACAAGCTTGAGTATAACTTTAACTCCCACAACGTGTATATTACAGCCGACAAACAGAAGAA
TGGAATTAAGGCTAACTTCACTGTCAGACACAATGTCGAAGATGGCTCCGTGCAGCTCGCCGATCACTATCAACAG
AATACTCCTATCGGGGACGGCCCAGTCCTGCTGCCCGACAACCACTACCTGAGTACCCAGACTGTTCTGAGCAAAG
ATCCGAACGAGAAGGGAACCGTCGAGGGGTCTACATCTGGAAGATCTAAAGCAACTTGTGAAGACATGTTGTGCA
AGATGGGATTTCCTGAAGATGTGCACAGTGCAGTCGTGTCGAGGAGTGTACATGGAGGACAACCTCTGCTCAATG
TGAGGTTTCAAAGCTGCGATGAAAACAGAAAAATATACTTTGGAAGCAGTGAGCCAGAAGATTTTAGAGTAGGTG
AAGATGGTGTGGTATATGCAGAGAGAAGCTTTCAACTTTCAGCAGAGCCCACGGAGTTTGTAGTGTCTGCTCGAG
ACAAGGAAACTCAGGAAGAATGGCAAATGAAGGTGAAGCTAACCCCTGAACCAGCATTCACAGGGGCCTCAGAA
AAGGACCAAAAGAAAATTGAAGACATCATATTTCCATGGCAACAATATAAGGACAGCAGCCATCTGAAGAGACAG
AAGAGAGACTGGGTTATCCCTCCAATCAACCTACCAGAAAATTCCAGAGGACCTTTTCCTCAAGAATTAGTTAGGA

TTCGGTCTGATCGTGATAAAAGCCTTTCGCTACGGTACAGTGTGACTGGCCCAGGAGCTGACCAACCTCCAACAGG
AATCTTCATCATCAACCCCATCTCAGGACAGCTGTCTGTGACAAAGCCTTTAGATCGGGAGCAGATTGCTTCTTTTC
ATCTGAGAGCACATGCAGTGGATGTAAATGGAAACCAGGTGGAAAATCCTATTGATATTGTGATTAACGTCATTG
ATATGAATGATAACAGACCTGAATTCTTGCATCAGGTTTGGAATGGGACAGTTCCTGAAGGATCAAAGCCAGGAA
CCTATGTAATGACTGTTACTGCCATCGATGCTGATGATCCCAATGCACAGAATGGGATGCTGAGATACAGAATCTT
GTCACAGGCACCAAGCAGTCCCTCTCCCAACATGTTTACAATCAACAATGAGACTGGTGACATTATTACCGTAGCA
GCTGGGCTCGACAGAGAGAAAGTACAACAGTATACATTAATAATTCAAGCTACGGACATGGAAGGAAACCCAACA
TATGGTCTTTCAAACACAGCAACTGCTGTCATCACTGTGACAGATGTCAATGACAATCCTCCAGAGTTCACTGCTAT
GACTTTCTACGGTGAAGTACCAGAAAACAGAGTGGATGTCATAGTGGCTAACCTAACAGTAACAGATAAAGATCA
GCCACACACGCCTGCGTGGAATGCGAGGTACCAAATGACAGGGGGAGACCCGACAGGCCAGTTTACTATCCTGAC
CGATCCAAATAGCAATGATGGGTTGGTAACTGTTGTCAAGCCCATTGACTTTGAGACCAACAGGATGTTTGTACTT
ACTGTAGCTGCAGAAAATCAAGTGCCTTTGGCTAAGGGGATTCAGCATCCTCCTCAGTCAACAGCAACCGTGTCCA
TTACAGTCATTGATGTGAATGAGAGTCCATATTTTGTTCCAAACCCCAAGCTTGTACGTCAAGAAGAAGGGCTACT
TGCTGGTAGCATGTTGACAACTTTCACTGCTCGGGACCCAGATCGTTACATGCAGCAAACCTCTCTAAGGTACTCA
AAACTTTCGGACCCTGCAAACTGGCTAAAAATTGACCCTGTTAATGGACAAATAACAACCACAGCTGTTTTGGACA
GAGAATCGATATATGTGCAAAACAATATGTATAATGCAACTTTTCTTGCCTCTGATAATGGAATTCCTCCAATGAGT
GGAACTGGTACACTTCAGATATACTTGCTGGACATCAATGATAATGCTCCCCAAGTGAACCCAAAAGAAGCCACCA
CCTGTGAAACACTGCAGCCTAATGCTATTAACATCACTGCTGTAGACCCTGACATTGATCCAAATGCAGGCCCATTT
GCCTTTGAGCTGCCTGATTCACCTCCTAGTATTAAGAGGAATTGGACCATTGTTCGAATTAGTGGTGATCATGCCCA
GCTCTCTTTAAGGATCAGGTTCCTGGAGGCTGGTATCTATGATGTGCCCATAGTAATTACAGATTCTGGAAATCCA
CATGCATCTAGCACTTCTGTGCTAAAAGTGAAAGTTTGCCAATGTGACATAAATGGGGACTGTACTGATGTTGACC
GGATTGTTGGCGCAGGACTGGGCACTGGTGCCATCATTGCAATTCTGCTTTGTATCATCATCTTACTCATTTTAGTT
TTGATGTTCGTAGTATGGATGAAGCGCCGTGATAAGGAGCGTCAGGCCAAGCAGCTCTTAATTGATCCAGAAGAT
GATGTGAGGGACAACATTCTGAAATATGATGAAGAAGGTGGTGGAGAAGAAGATCAGGATTATGACTTGAGCCA
GCTCCAGCAGCCTGACACTGTAGAACCAGACGCCATCAAACCTGTTGGAATCAGACGTCTTGATGAAAGGCCAAT
CCATGCAGAACCTCAGTATCCAGTCAGATCAGCTGCTCCTCATCCTGGGGACATTGGGGACTTCATTAATGAGGGA
CTTAAAGCAGCCGACAACGACCCTACAGCCCCGCCATACGATTCCCTCTTAGTCTTTGACTATGAAGGAAGCGGCT
CCACTGCTGGATCCTTGAGCTCTCTTAATTCCTCAAGTAGCGGTGGTGAGCAAGACTATGACTACCTAAATGACTG
GGGCCCACGTTTCAAGAAACTTGCTGACATGTACGGTGGAGGTGATGACTGAGTCGACGGTACCGCGGGCCCGG
GATCCACCGGATCTAGATAACTGATCATAATCAGCCATACCACATTTGTAGAGGTTTTACTTGCTTTAAAAAACCTC
CCACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTTGTTGTTAACTTGTTTATTGCAGCTTATAATGG
TTACAAATAAAGCAATAGCATCACAAATTTCACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGTTTGTCCAA
ACTCATCAATGTATCTTAACGCGTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGCGTTAAATTTTTGTTAAATCA
GCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGGGTTGAG
TGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAAACCGTCTAT
CAGGGCGATGGCCCACTACGTGAACCATCACCCTAATCAAGTTTTTTGGGGTCGAGGTGCCGTAAAGCACTAAATC
GGAACCCTAAAGGGAGCCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCGAGAAAGGAAGGGAA
GAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTAACCACCACACCCGCCG
CGCTTAATGCGCCGCTACAGGGCGCGTCAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTATTTGTTTATT
TTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAATAATATTGAAAAAGGA
AGAGTCCTGAGGCGGAAAGAACCAGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAG
CAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAG

GCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCTAACTCCGCCCATCCCGCCCCTA
ACTCCGCCCAGTTCCGCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTATTTATGCAGAGGCCGAGGCCGCCTC
GGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAGATCGATCAAGAGA
CAGGATGAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGGTGGAGAGG
CTATTCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAGGGG
CGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAAGACGAGGCAGCGCGGCTATCGT
GGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTGGCTGCTAT
TGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGC
AATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGACCACCAAGCGAAACATCGCATCGAGCGAGC
ACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCG
AACTGTTCGCCAGGCTCAAGGCGAGCATGCCCGACGGCGAGGATCTCGTCGTGACCCATGGCGATGCCTGCTTGC
CGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATC
AGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTCCTCGTGCTTT
ACGGTATCGCCGCTCCCGATTCGCAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCGGGACTCTGG
GGTTCGAAATGACCGACCAAGCGACGCCCAACCTGCCATCACGAGATTTCGATTCCACCGCCGCCTTCTATGAAAG
GTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTC
GCCCACCCTAGGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAAGGAACCCGCGCTATGACGGCAAT
AAAAAGACAGAATAAAACGCACGGTGTTGGGTCGTTTGTTCATAAACGCGGGGTTCGGTCCCAGGGCTGGCACTC
TGTCGATACCCCACCGAGACCCCATTGGGGCCAATACGCCCGCGTTTCTTCCTTTTCCCCACCCCACCCCCCAAGTT
CGGGTGAAGGCCCAGGGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCCATAGCCTCAGGTTACTCATATATAC
TTTAGATTGATTTAAAACTTCATTTTTAATTTAAAAGGATCTAGGTGAAGATCCTTTTTGATAATCTCATGACCAAAA
TCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCTTGAGATCCTTTT
TTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTTTGCCGGATCAAGAGC
TACCAACTCTTTTTCCGAAGGTAACTGGCTTCAGCAGAGCGCAGATACCAAATACTGTCCTTCTAGTGTAGCCGTA
GTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACCAGTGGCTGCTG
CCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCAGCGGTCGGGCT
GAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACCTACAGCGTGAG
CTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAGGGTCGGAACAG
GAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTCGCCACCTCTGAC
TTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAGCAACGCGGCCTTTTTAC
GGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGATAACCGTATTA
CCGCCATGCAT

N-cad GFP11

ATGGCCCGCCTGGCTGACCGCCCAACGACCCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGTAACGCC
AATAGGGACTTTCCATTGACGTCAATGGGTGGAGTATTTACGGTAAACTGCCCACTTGGCAGTACATCAAGTGTAT
CATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCCTGGCATTATGCCCAGTACATGACCT
TATGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTAC
ATCAATGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGT
TTTGGCACCAAAATCAACGGGACTTTCCAAAATGTCGTAACAACTCCGCCCCATTGACGCAAATGGGCGGTAGGC

GTGTACGGTGGGAGGTCTATATAAGCAGAGCTGGTTTAGTGAACCGTCAGATCCGCTAGCATGGAGACAGACAC
ACTCCTGCTATGGGTACTGCTGCTCTGGGTTCCAGGTTCCACTGGTGACACCGGTGACACATACAGATACATAAGC
GAGGTTACAGCCTCTCGCGACCACATGGTGCTGCATGAGTATGTCAACGCTGCGGGAATTACCGGGGGTGGTGG
GTCTGGTGGAGGGGGATCCAAAGCAACTTGTGAAGACATGTTGTGCAAGATGGGATTTCCTGAAGATGTGCACA
GTGCAGTCGTGTCGAGGAGTGTACATGGAGGACAACCTCTGCTCAATGTGAGGTTTCAAAGCTGCGATGAAAACA
GAAAAATATACTTTGGAAGCAGTGAGCCAGAAGATTTTAGAGTAGGTGAAGATGGTGTGGTATATGCAGAGAGA
AGCTTTCAACTTTCAGCAGAGCCCACGGAGTTTGTAGTGTCTGCTCGAGACAAGGAAACTCAGGAAGAATGGCAA
ATGAAGGTGAAGCTAACCCCTGAACCAGCATTCACAGGGGCCTCAGAAAAGGACCAAAAGAAAATTGAAGACAT
CATATTTCCATGGCAACAATATAAGGACAGCAGCCATCTGAAGAGACAGAAGAGAGACTGGGTTATCCCTCCAAT
CAACCTACCAGAAAATTCCAGAGGACCTTTTCCTCAAGAATTAGTTAGGATTCGGTCTGATCGTGATAAAAGCCTTT
CGCTACGGTACAGTGTGACTGGCCCAGGAGCTGACCAACCTCCAACAGGAATCTTCATCATCAACCCCATCTCAGG
ACAGCTGTCTGTGACAAAGCCTTTAGATCGGGAGCAGATTGCTTCTTTTCATCTGAGAGCACATGCAGTGGATGTA
AATGGAAACCAGGTGGAAAATCCTATTGATATTGTGATTAACGTCATTGATATGAATGATAACAGACCTGAATTCT
TGCATCAGGTTTGGAATGGGACAGTTCCTGAAGGATCAAAGCCAGGAACCTATGTAATGACTGTTACTGCCATCG
ATGCTGATGATCCCAATGCACAGAATGGGATGCTGAGATACAGAATCTTGTCACAGGCACCAAGCAGTCCCTCTCC
CAACATGTTTACAATCAACAATGAGACTGGTGACATTATTACCGTAGCAGCTGGGCTCGACAGAGAGAAAGTACA
ACAGTATACATTAATAATTCAAGCTACGGACATGGAAGGAAACCCAACATATGGTCTTTCAAACACAGCAACTGCT
GTCATCACTGTGACAGATGTCAATGACAATCCTCCAGAGTTCACTGCTATGACTTTCTACGGTGAAGTACCAGAAA
ACAGAGTGGATGTCATAGTGGCTAACCTAACAGTAACAGATAAAGATCAGCCACACACGCCTGCGTGGAATGCGA
GGTACCAAATGACAGGGGGAGACCCGACAGGCCAGTTTACTATCCTGACCGATCCAAATAGCAATGATGGGTTGG
TAACTGTTGTCAAGCCCATTGACTTTGAGACCAACAGGATGTTTGTACTTACTGTAGCTGCAGAAAATCAAGTGCC
TTTGGCTAAGGGGATTCAGCATCCTCCTCAGTCAACAGCAACCGTGTCCATTACAGTCATTGATGTGAATGAGAGT
CCATATTTTGTTCCAAACCCCAAGCTTGTACGTCAAGAAGAAGGGCTACTTGCTGGTAGCATGTTGACAACTTTCAC
TGCTCGGGACCCAGATCGTTACATGCAGCAAACCTCTCTAAGGTACTCAAAACTTTCGGACCCTGCAAACTGGCTA
AAAATTGACCCTGTTAATGGACAAATAACAACCACAGCTGTTTTGGACAGAGAATCGATATATGTGCAAAACAATA
TGTATAATGCAACTTTTCTTGCCTCTGATAATGGAATTCCTCCAATGAGTGGAACTGGTACACTTCAGATATACTTG
CTGGACATCAATGATAATGCTCCCCAAGTGAACCCAAAAGAAGCCACCACCTGTGAAACACTGCAGCCTAATGCTA
TTAACATCACTGCTGTAGACCCTGACATTGATCCAAATGCAGGCCCATTTGCCTTTGAGCTGCCTGATTCACCTCCT
AGTATTAAGAGGAATTGGACCATTGTTCGAATTAGTGGTGATCATGCCCAGCTCTCTTTAAGGATCAGGTTCCTGG
AGGCTGGTATCTATGATGTGCCCATAGTAATTACAGATTCTGGAAATCCACATGCATCTAGCACTTCTGTGCTAAAA
GTGAAAGTTTGCCAATGTGACATAAATGGGGACTGTACTGATGTTGACCGGATTGTTGGCGCAGGACTGGGCACT
GGTGCCATCATTGCAATTCTGCTTTGTATCATCATCTTACTCATTTTAGTTTTGATGTTCGTAGTATGGATGAAGCGC
CGTGATAAGGAGCGTCAGGCCAAGCAGCTCTTAATTGATCCAGAAGATGATGTGAGGGACAACATTCTGAAATAT
GATGAAGAAGGTGGTGGAGAAGAAGATCAGGATTATGACTTGAGCCAGCTCCAGCAGCCTGACACTGTAGAACC
AGACGCCATCAAACCTGTTGGAATCAGACGTCTTGATGAAAGGCCAATCCATGCAGAACCTCAGTATCCAGTCAGA
TCAGCTGCTCCTCATCCTGGGGACATTGGGGACTTCATTAATGAGGGACTTAAAGCAGCCGACAACGACCCTACA
GCCCCGCCATACGATTCCCTCTTAGTCTTTGACTATGAAGGAAGCGGCTCCACTGCTGGATCCTTGAGCTCTCTTAA
TTCCTCAAGTAGCGGTGGTGAGCAAGACTATGACTACCTAAATGACTGGGGCCCACGTTTCAAGAAACTTGCTGAC
ATGTACGGTGGAGGTGATGACTGATCTAGATCATAATCAGCCATACCACATTTGTAGAGGTTTTACTTGCTTTAAA
AAACCTCCCACACCTCCCCCTGAACCTGAAACATAAAATGAATGCAATTGTTGTTGTTAACTTGTTTATTGCAGCTT
ATAATGGTTACAAATAAAGCAATAGCATCACAAATTTCACAAATAAAGCATTTTTTTCACTGCATTCTAGTTGTGGT
TTGTCCAAACTCATCAATGTATCTTAAGGCGTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGCGTTAAATTTTTG

TTAAATCAGCTCATTTTTTAACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATA
GGGTTGAGTGTTGTTCCAGTTTGGAACAAGAGTCCACTATTAAAGAACGTGGACTCCAACGTCAAAGGGCGAAAA
ACCGTCTATCAGGGCGATGGCCCACTACGTGAACCATCACCCTAATCAAGTTTTTTGGGGTCGAGGTGCCGTAAAG
CACTAAATCGGAACCCTAAAGGGAGCCCCCGATTTAGAGCTTGACGGGGAAAGCCGGCGAACGTGGCGAGAAAG
GAAGGGAAGAAAGCGAAAGGAGCGGGCGCTAGGGCGCTGGCAAGTGTAGCGGTCACGCTGCGCGTAACCACCA
CACCCGCCGCGCTTAATGCGCCGCTACAGGGCGCGTCAGGTGGCACTTTTCGGGGAAATGTGCGCGGAACCCCTA
TTTGTTTATTTTTCTAAATACATTCAAATATGTATCCGCTCATGAGACAATAACCCTGATAAATGCTTCAATAATATT
GAAAAAGGAAGAGTCCTGAGGCGGAAAGAACCAGCTGTGGAATGTGTGTCAGTTAGGGTGTGGAAAGTCCCCAG
GCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCT
CCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCCTAACTCCGCCCAT
CCCGCCCCTAACTCCGCCCAGTTCCGCCCATTCTCCGCCCCATGGCTGACTAATTTTTTTTATTTATGCAGAGGCCGA
GGCCGCCTCGGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAGATCG
ATCAAGAGACAGGATGAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGGCCGCTTGGG
TGGAGAGGCTATTCGGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAG
CGCAGGGGCGCCCGGTTCTTTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAAGACGAGGCAGCGC
GGCTATCGTGGCTGGCCACGACGGGCGTTCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACT
GGCTGCTATTGGGCGAAGTGCCGGGGCAGGATCTCCTGTCATCTCACCTTGCTCCTGCCGAGAAAGTATCCATCAT
GGCTGATGCAATGCGGCGGCTGCATACGCTTGATCCGGCTACCTGCCCATTCGACCACCAAGCGAAACATCGCATC
GAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTCGATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGC
GCCAGCCGAACTGTTCGCCAGGCTCAAGGCGAGCATGCCCGACGGCGAGGATCTCGTCGTGACCCATGGCGATG
CCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTCATCGACTGTGGCCGGCTGGGTGTGGCGG
ACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCGGCGAATGGGCTGACCGCTTCC
TCGTGCTTTACGGTATCGCCGCTCCCGATTCGCAGCGCATCGCCTTCTATCGCCTTCTTGACGAGTTCTTCTGAGCG
GGACTCTGGGGTTCGAAATGACCGACCAAGCGACGCCCAACCTGCCATCACGAGATTTCGATTCCACCGCCGCCTT
CTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGATCTCATGCT
GGAGTTCTTCGCCCACCCTAGGGGGAGGCTAACTGAAACACGGAAGGAGACAATACCGGAAGGAACCCGCGCTA
TGACGGCAATAAAAAGACAGAATAAAACGCACGGTGTTGGGTCGTTTGTTCATAAACGCGGGGTTCGGTCCCAGG
GCTGGCACTCTGTCGATACCCCACCGAGACCCCATTGGGGCCAATACGCCCGCGTTTCTTCCTTTTCCCCACCCCAC
CCCCCAAGTTCGGGTGAAGGCCCAGGGCTCGCAGCCAACGTCGGGGCGGCAGGCCCTGCCATAGCCTCAGGTTA
CTCATATATACTTTAGATTGATTTAAAACTTCATTTTTAATTTAAAAGGATCTAGGTGAAGATCCTTTTTGATAATCT
CATGACCAAAATCCCTTAACGTGAGTTTTCGTTCCACTGAGCGTCAGACCCCGTAGAAAAGATCAAAGGATCTTCT
TGAGATCCTTTTTTTCTGCGCGTAATCTGCTGCTTGCAAACAAAAAAACCACCGCTACCAGCGGTGGTTTGTTTGCC
GGATCAAGAGCTACCAACTCTTTTTCCGAAGGTAACTGGCTTCAGCAGAGCGCAGATACCAAATACTGTCCTTCTA
GTGTAGCCGTAGTTAGGCCACCACTTCAAGAACTCTGTAGCACCGCCTACATACCTCGCTCTGCTAATCCTGTTACC
AGTGGCTGCTGCCAGTGGCGATAAGTCGTGTCTTACCGGGTTGGACTCAAGACGATAGTTACCGGATAAGGCGCA
GCGGTCGGGCTGAACGGGGGGTTCGTGCACACAGCCCAGCTTGGAGCGAACGACCTACACCGAACTGAGATACC
TACAGCGTGAGCTATGAGAAAGCGCCACGCTTCCCGAAGGGAGAAAGGCGGACAGGTATCCGGTAAGCGGCAG
GGTCGGAACAGGAGAGCGCACGAGGGAGCTTCCAGGGGGAAACGCCTGGTATCTTTATAGTCCTGTCGGGTTTC
GCCACCTCTGACTTGAGCGTCGATTTTTGTGATGCTCGTCAGGGGGGCGGAGCCTATGGAAAAACGCCAGCAACG
CGGCCTTTTTACGGTTCCTGGCCTTTTGCTGGCCTTTTGCTCACATGTTCTTTCCTGCGTTATCCCCTGATTCTGTGGA
TAACCGTATTACCGCCATGCAT