Table S2: sequence of plasmids

|  |  |
| --- | --- |
| pCDF-T7-sfGFP(Turquoise: T7 promoteryellow: sfGFPpurple: Terminator) | gcgaaattaatacgactcactatagggagaccacaacggtttccctctaCaaataattttgtttaactttaagaaggagatatacatatgcgtaaaggcgaagagctgttcactggtgtcgtccctattctggtggaactggatggtgatgtcaacggtcataagttttccgtgcgtggcgagggtgaaggtgacgcaactaatggtaaactgacgctgaagttcatctgtactactggtaaactgccagtaccttggccgactctggtaacgacgctgacttatggtgttcagtgctttgctcgttatccggaccacatgaagcagcatgacttcttcaagtccgccatgccggaaggctatgtgcaggaacgcacgatttcatttaaggatgacggcacgtacaaaacgcgtgcggaagtgaaatttgaaggcgataccctggtaaaccgcattgagctgaaaggcattgactttaaagaagacggcaatatcctgggccataagctggaatacaattttaacagccacaatgtttacatcaccgccgataaacaaaaaaatggcattaaagcgaatttcaaaattcgccacaacgtggaggatggcagcgtgcagctggctgatcactaccagcaaaacactccaatcggtgatggtcctgttctgctgccagacaatcactatctgagcacgcaaagcgttctgtctaaagatccgaacgagaaacgcgatcacatggttctgctggagttcgtaaccgcagcgggcatcacgcacggtatggatgaactgtacaaatgagaattcttgttcagaacgctcggtcttgcacaccgggcgttttttctttgtgagtccaatccaaaacgccgcgttcagcggcgttttttctgcttctgaaag |
| pJM135A(Turquoise:P1Yellow:eT7N-ABIred:Terminator 1Teal:J23105Green:PYR1MANDI-T7CBlue:Terminator 2) | tgttcacattcgaaccgtctctgctttgacatcttatgattctcgactgtaaagtcgtggccacaacgctgcacccgaatcacattacggactattattatgaacacgattaacatcgctaagaacgacttctctgacatcgaactggctgctatcccgctcaacactctggctgaccattacggtgagcgttcagctcgcggacagttggcccttgagcatgagtcttacgagatgggtgaagcacgcttccgcaagatgtttgagtgtcaacttaaagctggtaaggttgcggataacgctgccgccaagcctctcatcactaccctcctccctaagatgattgcccgcatcaacgactggtttgaggaagtgaaagctaagcgcggcaggcgcccgacagccttcaagttcctcaaagaaatcaagccggaagccgtagcgtacatcaccattaagacctctctggcttgcctcaccagtgctgacaatacaaccgttcaggctgtagcaagcgcaatcggtcggaccattgaggacgaggctcgcttcggtcgtatccgtgaccttgaagctaagcacttcaagaaaaacgttgaggaacaactcaacaagcgcgtagggcacgtctacaagggtggatccggctctggttcgagtgtccccctgtatgggttcaccagcatttgtgggcggagaccagagatggaggcagccgtcagcactattccccggttcctgcagtcaagctccggcagcatgctggacgggaggttcgatccacagtccgccgctcacttctttggggtctacgatggacatggcgggtcccaggtggccaactattgcagggagcgcatgcacctggctctggcagaggaaatcgccaaggagaaacctatgctgtgcgacggagatacatggctggaaaagtggaagaaagccctgttcaactcttttctgcgggtggactccgagatcgaatctgtcgctcctgagaccgtgggctctacaagtgtggtcgcagtggtcttcccatctcacatttttgtcgcaaattgcggcgacagccgggccgtgctgtgcaggggaaagaccgccctgccactgagcgtggaccataaacccgacagggaggatgaagcagcccgcatcgaggctgcaggaggcaaagtgatccagtggaacggagcacgggtgtttggcgtcctggccatgtcacgcagcattggggatcgatacctgaaaccatcaatcattcccgaccctgaagtgactgccgtcaagagagtgaaagaagacgattgcctgatcctggctagcgacggcgtctgggatgtgatgaccgacgaggaagcatgtgagatggcccgaaagcggattctgctgtggcataagaaaaatgccgtggctggcgatgctagtctgctggcagacgagcggagaaaggaagggaaagatcccgccgctatgagtgcagccgaatatctgtcaaaactggctattcagaggggcagtaaggacaacatctccgtcgtcgtcgtggacctgaagtgaggtaccattcaagacccccgcaccgaaaggtccgggggttttttttactatttaaatcctgccagtttacggctagctcagtcctaggtactatgctagctgcaattgcaagaaggaggatattgatgccatcggaacttacaccggaggaaaggtccgagttgaagaacagcattgcggagtttcatacatatcaactcgatccggggagttgttctagtttgcacgcccaaaggatacacgccccaccggaacttgtgtggagtatcgtccgccggttcgataaaccacaaacacacaggcatttcattaaaagctgctccgtggagcagaactttgaaatgagagtgggatgcacacgggatataatagttataagcggcctcccggccaacacgagcaccgaaagattggacatactggatgacgagcgccgcgtgacgggggcatcaataatcggtggggaacatcgccttacgaattataaaggcgtcactactgttcatagatttgagaaggaaaatagaatctggactgttgttctggaatcttatgtggttgatatgccagagggtaactcggaagatgatacacgcatgctggcggacacggttgtgaaacttaatctgcaaaagctggcaactgtcgccgaagccatggcatcaggatctggtagcgcaggatcaggctcgagtggtaaagcatttatgcaagttgtcgaggctgacatgctctctaagggtctcctcggtggcgaggcgtggtcttcgtggcataaggaagactctattcatgtaggagtacgctgcatcgagatgctcattgagtcaaccggaatggttagcctccaccgccaaaatgctggcgtagtaggtcaagactctgagactatcgaactcgcacctgaatacgctgaggctatcgcaacccgtgcaggtgcgctggctggcatctctccgatgttccaaccttgcgtagttcctcctaagccgtggactggcattactggtggtggctattgggctaacggtcgtcgtcctctggcgctggtgcgtactcacagtaagaaagcactgatgcgctacgaagacgtttacatgcctgaggtgtacaaagcgattaacattgcgcaaaacaccgcatggaaaatcaacaagaaagtcctcgcggtcgccaacgtaatcaccaagtggaagcattgtccggtcgaggacatccctgcgattgagcgtgaagaactcccgatgaaaccggaagacatcgacatgaatcctgaggctctcaccgcgtggaaacgtgctgccgctgctgtgtaccgcaaggacaaggctcgcaagtctcgccgtatcagccttgagttcatgcttgagcaagccaataagtttgctaaccataaggccatctggttcccttacaacatggactggcgcggtcgtgtttacgctgtgtcaatgttcaacccgcaaggtaacgatatgaccaaaggactgcttacgctggcgaaaggtaaaccaatcggtaaggaaggttactactggctgaaaatccacggtgcaaactgtgcgggtgtcgataaggttccgttccctgagcgcatcaagttcattgaggaaaaccacgagaacatcatggcttgcgctaagtctccactggagaacacttggtgggctgagcaagattctccgttctgcttccttgcgttctgctttgagtacgctggggtacagcaccacggcctgagctataactgctcccttccgctggcgtttgacgggtcttgctctggcatccagcacttctccgcgatgctccgagatgaggtaggtggtcgcgcggttaacttgcttcctagtgaaaccgttcaggacatctacgggattgttgctaagaaagtcaacgagattctccaagcagacgcaatcaatgggaccgataacgaagtagttaccgtgaccgatgagaacactggtgaaatctctgagaaagtcaagctgggcactaaggcactggctggtcaatggctggcttacggtgttactcgcagtgtgactaagcgttcagtcatgacgctggcttacgggtccaaagagttcggcttccgtcaacaagtgctggaagataccattcagccagctattgattccggcaagggtctgatgttcactcagccgaatcaggctgctggatacatggctaagctgatttgggaatctgtgagcgtgacggtggtagctgcggttgaagcaatgaactggcttaagtctgctgctaagctgctggctgctgaggtcaaagataagaagactggagagattcttcgcaagcgttgcgctgtgcattgggtaactcctgatggtttccctgtgtggcaggaatacaagaagcctattcagacgcgcttgaacctgatgttcctcggtcagttccgcctccagcctaccattaacaccaacaaagatagcgagattgatgcacacaaacaggagtctggtatcgctcctaactttgtacacagccaagacggtagccaccttcgtaagactgtagtgtgggcacacgagaagtacggaatcgaatcttttgcactgattcacgactccttcggtaccattccggctgacgctgcgaacctgttcaaagcagtgcgcgaaactatggttgacacatatgagtcttgtgatgtactggctgatttctacgaccagttcgctgaccagttgcacgagtctcaattggacaaaatgccagcacttccggctaaaggtaacttgaacctccgtgacatcctcgagtcggacttcgcgttcgcgtaatagcaccaccaccaccaccactgagatccggctgctaacaaagcccgaaaggaagctgagttggctgctgccaccgctgagcaataactagcataaccccttggggcctctaaacgggtcttgaggggttttttg |
| pCDF-T7-lacO-GFP1-9(Turquoise:T7 promoterRed:lacOyellow:GFP1-9Violet:terminator) | TAATACGACTCACTATAGGGGAATTGTGAGCGGATAACAATTCCCCTCTAGAAATAATTTTGTTTAACTTTAAGAAGGAGATATACCatgcgcaaaggcgaagaactgtttaccggcattgtgccgattctggtggaactggatggcgatgtgaacggccataaattttttgtgcgcggcgaaggcgaaggcgatgcgaccattggcaaactgagcctgaaatttatttgcaccaccggcaaactgccggtgccgtggccgaccctggtgaccaccctgacctatggcgtgcagtgctttagccgctatccggatcatatgaaacgccatgatttttttaaaagcgcgatgccggaaggctatgtgcaggaacgcaccatttattttaaagatgatggcacctataaaacccgcgcggaagtgaaatttgaaggcgataccctggtgaaccgcattgaactgaaaggcattgattttaaagaagatggcaacattctgggccataaactggaatataactttaacagccataaagtgtatattaccgcggataaacagaacaacggcattaaagcgaactttaccattcgccataacgtggaagatggcagcgtgcagctggcggatcattatcagcagaacaccccgattggcgatggcccggttcttcttccttaggaattcttgttcagaacgctcggtcttgcacaccgggcgttttttctttgtgagtcca |
| pJM134(Turquoise:J23101Yellow:G10- ABI-CP1Red:Terminator 1Violet:P2Green:PYR1MANDI-G11Gray:Terminator 2) | tttacagctagctcagtcctaggtattatgctagcgaaattacccttgccttaactaataagagagctgtctatggacctgcctgacgaccactacctgtccacccagaccatcctgtccaaggacctgaacggatctggtggatccggctctggttcgagttctgtcgctcctgagaccgtgggctctacaagtgtggtcgcagtggtcttcccatctcacatttttgtcgcaaattgcggcgacagccgggccgtgctgtgcaggggaaagaccgccctgccactgagcgtggaccataaacccgacagggaggatgaagcagcccgcatcgaggctgcaggaggcaaagtgatccagtggaacggagcacgggtgtttggcgtcctggccatgtcacgcagcattggggatcgatacctgaaaccatcaatcattcccgaccctgaagtgactgccgtcaagagagtgaaagaagacgattgcctgatcctggctagcgacggcgtctgggatgtgatgaccgacgaggaagcatgtgagatggcccgaaagcggattctgctgtggcataagaaaaatgccgtggctggcgatgctagtctgctggcagacgagcggagaaaggaagggaaagatcccgccgctatgagtgcagccgaatatctgtcaaaactggctattcagaggggcagtaaggacaacatctccgtcgtcgtcgtggacctgaagggcggtagtggttcgggttcttcggtccccctgtatgggttcaccagcatttgtgggcggagaccagagatggaggcagccgtcagcactattccccggttcctgcagtcaagctccggcagcatgctggacgggaggttcgatccacagtccgccgctcacttctttggggtctacgatggacatggcgggtcccaggtggccaactattgcagggagcgcatgcacctggctctggcagaggaaatcgccaaggagaaacctatgctgtgcgacggagatacatggctggaaaagtggaagaaagccctgttcaactcttttctgcgggtggactccgagatcgaatgaggtaccattcaagacccccgcaccgaaaggtccgggggttttttttactatttaaatcctgccagtgttcacattcgaaccgtctctgctttgacaacatgctgtgcggtgttgtaaagtcgtggccaggagaatacgacaggcaattgcaagaaggaggatattgatgccatcggaacttacaccggaggaaaggtccgagttgaagaacagcattgcggagtttcatacatatcaactcgatccggggagttgttctagtttgcacgcccaaaggatacacgccccaccggaacttgtgtggagtatcgtccgccggttcgataaaccacaaacacacaggcatttcattaaaagctgctccgtggagcagaactttgaaatgagagtgggatgcacacgggatataatagttataagcggcctcccggccaacacgagcaccgaaagattggacatactggatgacgagcgccgcgtgacgggggcatcaataatcggtggggaacatcgccttacgaattataaaggcgtcactactgttcatagatttgagaaggaaaatagaatctggactgttgttctggaatcttatgtggttgatatgccagagggtaactcggaagatgatacacgcatgctggcggacacggttgtgaaacttaatctgcaaaagctggcaactgtcgccgaagccatggcaggatcaggctcgagtggttcaggatctggtgcaagcgaaaagcgagaccatatggttttgcttgagtatgttacagcggctggcattaccgatgcatcatagtcggacttcgcgttcgcgtaatagcaccaccaccaccaccactgagatccggctgctaacaaagcccgaaaggaagctgagttggctgctgccaccgctgagcaataactagcataaccccttggggcctctaaacgggtcttgaggggttttttg |
| pJM1B6(turquoise:P1Yellow:eT7N- ABI\_CP234Red:Terminator 1Teal:P2Green:PYR1MANDI-T7CBlue:Terminator 2) | ctatactcggatatctgttcacattcgaaccgtctctgctttgacatcttatgattctcgactgtaaagtcgtggccacaacgctgcacccgaatcacattacggactattattatgaacacgattaacatcgctaagaacgacttctctgacatcgaactggctgctatcccgctcaacactctggctgaccattacggtgagcgttcagctcgcggacagttggcccttgagcatgagtcttacgagatgggtgaagcacgcttccgcaagatgtttgagtgtcaacttaaagctggtaaggttgcggataacgctgccgccaagcctctcatcactaccctcctccctaagatgattgcccgcatcaacgactggtttgaggaagtgaaagctaagcgcggcaggcgcccgacagccttcaagttcctcaaagaaatcaagccggaagccgtagcgtacatcaccattaagacctctctggcttgcctcaccagtgctgacaatacaaccgttcaggctgtagcaagcgcaatcggtcggaccattgaggacgaggctcgcttcggtcgtatccgtgaccttgaagctaagcacttcaagaaaaacgttgaggaacaactcaacaagcgcgtagggcacgtctacaagggtggatccggctctggttcgagttctgtcgctcctgagaccgtgggctctacaagtgtggtcgcagtggtcttcccatctcacatttttgtcgcaaattgcggcgacagccgggccgtgctgtgcaggggaaagaccgccctgccactgagcgtggaccataaacccgacagggaggatgaagcagcccgcatcgaggctgcaggaggcaaagtgatccagtggaacggagcacgggtgtttggcgtcctggccatgtcacgcagcattggggatcgatacctgaaaccatcaatcattcccgaccctgaagtgactgccgtcaagagagtgaaagaagacgattgcctgatcctggctagcgacggcgtctgggatgtgatgaccgacgaggaagcatgtgagatggcccgaaagcggattctgctgtggcataagaaaaatgccgtggctggcgatgctagtctgctggcagacgagcggagaaaggaagggaaagatcccgccgctatgagtgcagccgaatatctgtcaaaactggctattcagaggggcagtaaggacaacatctccgtcgtcgtcgtggacctgaagggcggtagtggttcgggttcttcggtccccctgtatgggttcaccagcatttgtgggcggagaccagagatggaggcagccgtcagcactattccccggttcctgcagtcaagctccggcagcatgctggacgggaggttcgatccacagtccgccgctcacttctttggggtctacgatggacatggcgggtcccaggtggccaactattgcagggagcgcatgcacctggctctggcagaggaaatcgccaaggagaaacctatgctgtgcgacggagatacatggctggaaaagtggaagaaagccctgttcaactcttttctgcgggtggactccgagatcgaatgaggtaccattcaagacccccgcaccgaaaggtccgggggttttttttactatttaaatcctgccagtgttcacattcgaaccgtctctgctttgacaacatgctgtgcggtgttgtaaagtcgtggccaggagaatacgacaggcaattgcaagaaggaggatattgatgccatcggaacttacaccggaggaaaggtccgagttgaagaacagcattgcggagtttcatacatatcaactcgatccggggagttgttctagtttgcacgcccaaaggatacacgccccaccggaacttgtgtggagtatcgtccgccggttcgataaaccacaaacacacaggcatttcattaaaagctgctccgtggagcagaactttgaaatgagagtgggatgcacacgggatataatagttataagcggcctcccggccaacacgagcaccgaaagattggacatactggatgacgagcgccgcgtgacgggggcatcaataatcggtggggaacatcgccttacgaattataaaggcgtcactactgttcatagatttgagaaggaaaatagaatctggactgttgttctggaatcttatgtggttgatatgccagagggtaactcggaagatgatacacgcatgctggcggacacggttgtgaaacttaatctgcaaaagctggcaactgtcgccgaagccatggcaggtagcgcaggatcaggctcgagtggtaaagcatttatgcaagttgtcgaggctgacatgctctctaagggtctcctcggtggcgaggcgtggtcttcgtggcataaggaagactctattcatgtaggagtacgctgcatcgagatgctcattgagtcaaccggaatggttagcctccaccgccaaaatgctggcgtagtaggtcaagactctgagactatcgaactcgcacctgaatacgctgaggctatcgcaacccgtgcaggtgcgctggctggcatctctccgatgttccaaccttgcgtagttcctcctaagccgtggactggcattactggtggtggctattgggctaacggtcgtcgtcctctggcgctggtgcgtactcacagtaagaaagcactgatgcgctacgaagacgtttacatgcctgaggtgtacaaagcgattaacattgcgcaaaacaccgcatggaaaatcaacaagaaagtcctcgcggtcgccaacgtaatcaccaagtggaagcattgtccggtcgaggacatccctgcgattgagcgtgaagaactcccgatgaaaccggaagacatcgacatgaatcctgaggctctcaccgcgtggaaacgtgctgccgctgctgtgtaccgcaaggacaaggctcgcaagtctcgccgtatcagccttgagttcatgcttgagcaagccaataagtttgctaaccataaggccatctggttcccttacaacatggactggcgcggtcgtgtttacgctgtgtcaatgttcaacccgcaaggtaacgatatgaccaaaggactgcttacgctggcgaaaggtaaaccaatcggtaaggaaggttactactggctgaaaatccacggtgcaaactgtgcgggtgtcgataaggttccgttccctgagcgcatcaagttcattgaggaaaaccacgagaacatcatggcttgcgctaagtctccactggagaacacttggtgggctgagcaagattctccgttctgcttccttgcgttctgctttgagtacgctggggtacagcaccacggcctgagctataactgctcccttccgctggcgtttgacgggtcttgctctggcatccagcacttctccgcgatgctccgagatgaggtaggtggtcgcgcggttaacttgcttcctagtgaaaccgttcaggacatctacgggattgttgctaagaaagtcaacgagattctccaagcagacgcaatcaatgggaccgataacgaagtagttaccgtgaccgatgagaacactggtgaaatctctgagaaagtcaagctgggcactaaggcactggctggtcaatggctggcttacggtgttactcgcagtgtgactaagcgttcagtcatgacgctggcttacgggtccaaagagttcggcttccgtcaacaagtgctggaagataccattcagccagctattgattccggcaagggtctgatgttcactcagccgaatcaggctgctggatacatggctaagctgatttgggaatctgtgagcgtgacggtggtagctgcggttgaagcaatgaactggcttaagtctgctgctaagctgctggctgctgaggtcaaagataagaagactggagagattcttcgcaagcgttgcgctgtgcattgggtaactcctgatggtttccctgtgtggcaggaatacaagaagcctattcagacgcgcttgaacctgatgttcctcggtcagttccgcctccagcctaccattaacaccaacaaagatagcgagattgatgcacacaaacaggagtctggtatcgctcctaactttgtacacagccaagacggtagccaccttcgtaagactgtagtgtgggcacacgagaagtacggaatcgaatcttttgcactgattcacgactccttcggtaccattccggctgacgctgcgaacctgttcaaagcagtgcgcgaaactatggttgacacatatgagtcttgtgatgtactggctgatttctacgaccagttcgctgaccagttgcacgagtctcaattggacaaaatgccagcacttccggctaaaggtaacttgaacctccgtgacatcctcgagtcggacttcgcgttcgcgtaatagcaccaccaccaccaccactgagatccggctgctaacaaagcccgaaaggaagctgagttggctgctgccaccgctgagcaataactagcataaccccttggggcctctaaacgggtcttgaggggttttttgctgaaaggaggaactatatccg |
| pCDF-T7-mcherry(Turquoise: T7 promoteryellow: mcherrypurple: Terminator) | agatctcgatcccgcgaaattaatacgactcactatagggagaccacaacggtttccctctacaaataattttgtttaactttaagaaggagatatacatatggtctccaagggcgaggaggacaacatggccatcatcaaggagttcatgcgcttcaaggtccacatggagggctccgtcaacgggcacgagttcgagatcgagggcgagggggagggccggccgtacgagggcacccagaccgccaagctgaaggtgaccaagggcggccccctcccgttcgcctgggacatcctctccccccagttcatgtacggctcgaaggcatacgtcaagcacccggccgacatcccggactacctgaagctctcgttcccggaggggttcaagtgggagcgggtcatgaacttcgaggacggcggcgtcgtcaccgtcacccaggacagctccctgcaggacggcgagttcatctacaaggtcaagctgcggggcacgaacttcccgagcgacggccccgtgatgcagaagaagacgatgggctgggaagcgtcctcggagcgcatgtacccggaggacggcgccctcaagggcgagatcaagcagcgcctgaagctgaaggacggcggccactacgacgccgaagtcaagacgacgtacaaggccaagaagccggtgcagctcccggGAgcctacaacgtgaacatcaagctcgacatcacctcgcacaacgaggactacacgatcgtggagcagtacgagcgcgccgagggccggcactcgaccggcggcatggacgagctgtacaagtgagaattcttgttcagaacgctcggtcttgcacaccgggcgttttttctttgtgagtcca |