**Figure S1.** Sequences of the original PMK and the codon-optimized version of PMK.

**Original PMK**

ATGTCAGAGTTGAGAGCCTTCAGTGCCCCAGGGAAAGCGTTACTAGCTGGTGGATATTTAGTTTTAGATACAAAATATGAAGCATTTGTAGTCGGATTATCGGCAAGAATGCATGCTGTAGCCCATCCTTACGGTTCATTGCAAGGGTCTGATAAGTTTGAAGTGCGTGTGAAAAGTAAACAATTTAAAGATGGGGAGTGGCTGTACCATATAAGTCCTAAAAGTGGCTTCATTCCTGTTTCGATAGGCGGATCTAAGAACCCTTTCATTGAAAAAGTTATCGCTAACGTATTTAGCTACTTTAAACCTAACATGGACGACTACTGCAATAGAAACTTGTTCGTTATTGATATTTTCTCTGATGATGCCTACCATTCTCAGGAGGATAGCGTTACCGAACATCGTGGCAACAGAAGATTGAGTTTTCATTCGCACAGAATTGAAGAAGTTCCCAAAACAGGGCTGGGCTCCTCGGCAGGTTTAGTCACAGTTTTAACTACAGCTTTGGCCTCCTTTTTTGTATCGGACCTGGAAAATAATGTAGACAAATATAGAGAAGTTATTCATAATTTAGCACAAGTTGCTCATTGTCAAGCTCAGGGTAAAATTGGAAGCGGGTTTGATGTAGCGGCGGCAGCATATGGATCTATCAGATATAGAAGATTCCCACCCGCATTAATCTCTAATTTGCCAGATATTGGAAGTGCTACTTACGGCAGTAAACTGGCGCATTTGGTTGATGAAGAAGACTGGAATATTACGATTAAAAGTAACCATTTACCTTCGGGATTAACTTTATGGATGGGCGATATTAAGAATGGTTCAGAAACAGTAAAACTGGTCCAGAAGGTAAAAAATTGGTATGATTCGCATATGCCAGAAAGCTTGAAAATATATACAGAACTCGATCATGCAAATTCTAGATTTATGGATGGACTATCTAAACTAGATCGCTTACACGAGACTCATGACGATTACAGCGATCAGATATTTGAGTCTCTTGAGAGGAATGACTGTACCTGTCAAAAGTATCCTGAAATCACAGAAGTTAGAGATGCAGTTGCCACAATTAGACGTTCCTTTAGAAAAATAACTAAAGAATCTGGTGCCGATATCGAACCTCCCGTACAAACTAGCTTATTGGATGATTGCCAGACCTTAAAAGGAGTTCTTACTTGCTTAATACCTGGTGCTGGTGGTTATGACGCCATTGCAGTGATTACTAAGCAAGATGTTGATCTTAGGGCTCAAACCGCTAATGACAAAAGATTTTCTAAGGTTCAATGGCTGGATGTAACTCAGGCTGACTGGGGTGTTAGGAAAGAAAAAGATCCGGAAACTTATCTTGATAAATAG

**Codon-Optimized PMK**

ATGAGCGAATTACGTGCATTCAGCGCGCCAGGTAAGGCACTGCTGGCCGGTGGCTACCTGGTGTTAGACACCAAGTACGAGGCGTTCGTCGTCGGCTTATCTGCCCGTATGCATGCAGTTGCCCACCCGTATGGTAGCCTGCAGGGCTCTGACAAGTTCGAAGTGCGTGTGAAGAGCAAGCAGTTCAAGGACGGCGAGTGGCTGTACCACATTAGCCCAAAGAGCGGCTTCATCCCGGTTAGCATTGGTGGCAGCAAGAACCCATTTATCGAGAAGGTCATTGCCAACGTCTTCAGCTACTTCAAGCCGAATATGGACGATTACTGCAACCGCAACCTGTTCGTCATCGACATTTTCAGCGACGACGCGTACCACAGCCAAGAGGACTCTGTTACGGAGCATCGTGGTAACCGCCGCCTGAGCTTCCACAGCCATCGCATTGAGGAGGTGCCGAAGACGGGTCTGGGTTCTAGCGCCGGTTTAGTTACCGTCTTAACGACGGCGTTAGCGAGCTTCTTCGTGAGCGACCTGGAGAACAACGTGGACAAGTACCGCGAAGTGATTCATAACCTGGCGCAGGTGGCACATTGTCAGGCCCAAGGTAAGATTGGCTCTGGTTTTGATGTGGCAGCGGCCGCCTATGGCTCTATCCGCTATCGCCGCTTTCCGCCGGCCCTGATCAGCAATCTGCCGGACATCGGCTCTGCGACGTATGGTAGCAAACTGGCGCATCTGGTGGACGAGGAGGACTGGAACATCACCATTAAGTCTAATCACCTGCCGAGCGGCTTAACGTTATGGATGGGCGATATCAAGAACGGCAGCGAAACGGTTAAGCTGGTGCAGAAAGTGAAAAACTGGTACGACAGCCACATGCCGGAAAGCCTGAAGATTTACACGGAGCTGGACCACGCCAATAGCCGTTTCATGGATGGTCTGAGCAAGCTGGACCGCCTGCACGAAACCCACGACGACTACAGCGACCAGATCTTCGAGAGCCTGGAGCGCAATGACTGCACCTGCCAGAAGTACCCGGAGATCACGGAGGTCCGCGATGCCGTGGCAACGATTCGCCGTAGCTTCCGCAAAATTACGAAGGAGAGCGGCGCGGATATCGAACCACCGGTCCAGACGTCTCTGCTGGACGACTGTCAAACCTTAAAGGGCGTGTTAACGTGCCTGATTCCGGGCGCGGGTGGTTACGACGCCATTGCCGTCATCACGAAACAGGACGTCGATCTGCGCGCACAAACGGCCAACGACAAACGTTTCAGCAAAGTCCAATGGCTGGATGTTACGCAGGCCGACTGGGGTGTTCGCAAGGAGAAGGACCCGGAAACGTATCTGGATAAGTGA