

**S1 File. Expression clone detail. (A) Protein sequence. (B) Plasmid DNA sequence.**

**A**

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LOCUS Translation\of\pRSET-FTT0583-His8 401 aa 25-OCT-2018
SOURCE
ORGANISM
FEATURES             Location/Qualifiers
     Site              394..401
                        /vntifkey="264"
                        /label=His8
     Region            1..393
                        /vntifkey="1000"
                        /label=FopA\full-length
     Region            1..23
                        /vntifkey="200"
                        /label=signal\sequence
ORIGIN
1  mmrlksivia ttvllgsata siaagsdnid tlantnsatt qssgfaannf iapfantysa
61 ltnkndtwgp qdrtgqwylg vdanglagtp nspsgaganf tigyninkyf avqynqlvgr
121 vfaglgegvv nfsnntmftp yaaggagwan lagqatgawd vgggllkfels rnvqasvdyr
181 yiqtmapsni sgangragtn migagltwff ggkdttnndt gniqngatt aaqtvampiti
241 deskyvlpag ikqcegnfnl tedgvacyti ngddvtvylt tkfaydkatl nakgkkaias
301 fvnfikdsni ssvtkgyas qggtgsefdi ynqklsekra qavadymkql gldsekiitk
361 gfgyndtlgg ihksdprnqr veasvsaplk eanhhhhhhh h
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**B**

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LOCUS pRSET-FTT0583-His8 3995 bp DNA circular 9-OCT-2018
SOURCE
ORGANISM
FEATURES             Location/Qualifiers
     promoter          20..39
                        /vntifkey="30"
                        /label=T7\promoter
     rep_origin         1554..2009
                        /vntifkey="33"
                        /label=f1\ori
     CDS                2140..3000
                        /vntifkey="4"
                        /label=AMP-R
     promoter          2041..2139
                        /vntifkey="30"
                        /label=bla\pr
     rep_origin         3145..3818
                        /vntifkey="33"
                        /label=pUC\ori
     RBS                85..92
                        /vntifkey="32"
                        /label=RBS
     terminator         1354..1483
                        /vntifkey="43"
                        /label=T7\term
     CDS                1279..1302
                        /vntifkey="4"
                        /label=His8
     CDS                100..1278
                        /vntifkey="4"
                        /label=FopA
BASE COUNT 1069 a 890 c 949 g 1087 t
ORIGIN
1  gatctcgatc ccgcgaaatt aatacagactc actataggga gaccacaacg gtttccctct
61 agaaataatt ttgtttaact ttaagaagga gatatacat t gatgagatt aaaaagtatt
121 gttatagcta caactgtatt attaggttca gctacagcat ctatcgctgc aggttcagat
181 aatatogata cattagcaaa cactaatca gctactacac aaagcagtg ttttcagct
241 aataatttca ttgctcctt tgcaaaact tatagcgct tgactaaaca ggacaatact
301 tggggtcctc aagatagaac tggccagtgg tacttaggtg tagatgctaa cggctagct
361 ggaactccta actctccatc aggtgctggt gctaacttca caatcggtta taacatcaat
421 aaactctteg ctgtacagta caaccaatta gttggtagag tatttgctgg tttagtgtaa
481 ggtgttgtaa actttagtaa taatactatg ttactccat atgctgcagg tggctgctgt
541 tgggcaaatc tagcagtgca agcaacaggt gottgggatg tgggtggtgg tcttaagttt
601 gaactatcta gaaatgttca agcaagtgtt gactacagat atatccaac aatggcacct
661 agtaatatatt ctggtgctaa tggcagagcg ggtactaaca tgattggtgc tggtttaaca
721 tggttccttg gtggcaaaaga tactactaat aatgacactg gtaatatcoa ggaataatggt
781 gcgactacag ctgctcaaac tgttgctatg ccaactattg atgagtctaa gtagtgttta
841 cctgctgcta ttaagcaatg tgaaggcaac ttaactctaa ctgaagatgg tgtcgctgct
901 tatacaataa atggtgatga tgtaacagtt taactagata ctaagtttgc ttatgatataa
961 gctactttaa atgctaaagg taaaaagct attgcatctt ttgttaattt tatcaaggat
1021 agtaacatta gctctgtaac agttaaggt tatgcttcto aaggtcaaac tggtagcgag

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1081 **tttgatat** **ataccaaaa** **actttctgag** **aagagagcac** **aagctgttgc** **tgattacatg**  
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1201 **ttaggtggta** **ttcataagtc** **tgatccgcgt** **aaccagcgtg** **tagaagctag** **cgatcagct**  
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1561 ctgtagcggc gcattaagcg cggcgggtgt ggtggttacg cgcagcgtga ccgctacact  
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1741 acggcacctc gaccccaaaa aacttgatta gggatgaggt tcacgtagtg ggccatcgcc  
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2401 caactcggtc gccgcataca ctattctcag aatgacttgg ttgagtactc accagtaca  
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2521 agtgataaca ctgcccgaaa cttacttctg acaacgatcg gaggaccgaa ggagctaac  
2581 gcttttttgc acaacatggg ggatcatgta actcgccttg atcgttggga accggagctg  
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