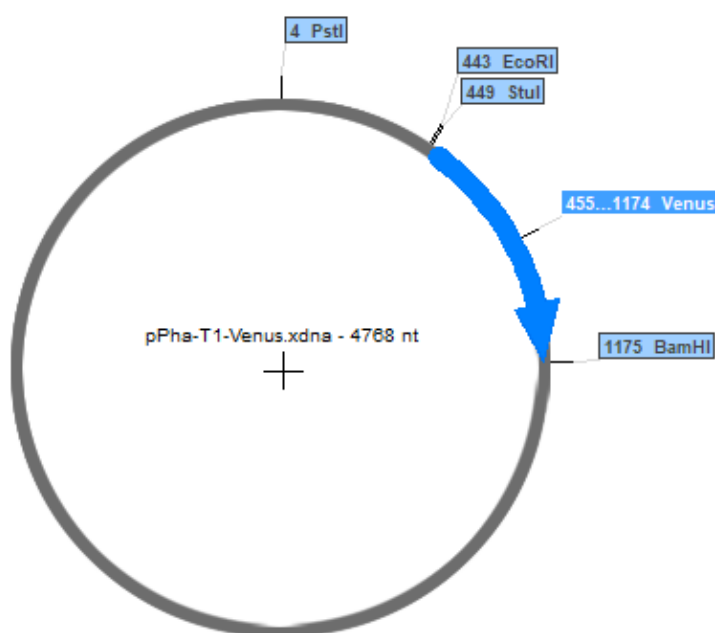


Supplementary Data S5: Sequence information for pPha-T1-Venus vector



pPha-T1-Venus

A codon optimised Venus gene was synthesised and cloned into pPha-T1 via *EcoRI* and *BamHI*. Cutting with *PstI* and *StuI* removes the *fcpA* promoter, allowing the gene of interest (without stop codon) and its native promoter to be inserted in frame with Venus. This results in expression of the gene of interest with a C-terminal Venus fusion.

The entire sequence is shown below. *PstI* and *StuI* sites are underlined and the Venus coding sequence is shaded.

>pPha-T1-Venus

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GGGCTGCAGGACGCAATGGAGGATTATCACCGCAAAAATGAACTTCGAAAAAACTTTTCGAGCGACCA
TGGAAAAGGAGGATCAGATTTCAGATTACAACAGTGGATTGCTCTGGTAGCAAATATCTTCTGCTAGAT
TGGCTCATGGTCGGTTTTTGGACGTTCTGAAGCTCACCGTCAAAGAAACAAAAGAGAAGAATGACGTCT
TCGTGACGTAGAATCTACGACTGTACTCGGATCTGGGAAATGAATTGACTCACGGTCTTCTTCGAGTC
CTGTTACAGGCCCTTGGTCCGAACCCCCACACGATTTTTGCACCAAAGATTTGCTTCAATTTGCTGGA
TGTTTTGACTGCAAGATCAGCTGGCCTAGCAAGAGTGCTCGTGTGCTTCGTCGGGAATCCCTACGAA
TTTCAGTTCTGCACAAATTTGTCTGCCGTTTCGAGAATTCAGGCCTATGGTTTTCCAAGGAGAAGAAC
TCTTCACCGGTGTCGTCCCCATTCTCGTCGAACTCGACGGAGACGTCAACGGTCACAAGTTTTTCGGTC
TCCGGCGAAGGAGAAGGTGACGCCACCTACGGCAAGCTCACCTCAAGCTCATCTGCACCACCGGAAA
GTTGCCGGTCCCCCTGGCCGACCTTGGTCAACACCTTGGGATACGGACTCCAGTGCTTCGCCCCGCTACC
CCGACCACATGAAGCAGCACGACTTCTTTAAGTCCGCCATGCCCGAAGGATACGTCCAGGAACGTACC
ATTTTCTTTAAGGACGACGGTAACATAAGACCCGCGCCGAAGTCAAGTTCGAAGGTGACACCCTCGT
CAACCGTATTGAACTCAAGGGCATCGACTTTAAGGAAGACGGCAACATCCTCGGACACAAGCTCGAAT
ACAACATACTCCCAACAGTCTACATTACCGCCGACAAGCAGAAGAACGGAATCAAGGCCAACTTC
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AAGATTTCGCCACAACATCGAAGACGGAGGTGTCCAGCTCGCCGACCACTACCAGCAGAACACCCCGAT
TGGAGATGGACCGGTCTCTCTCCCGACAACCACTACCTCTCCTACCAGTCCAAGCTCTCCAAGGACC
CCAACGAAAAGCGTGACCACATGGTCTCTCGAATTTGTCAACGCCGCCGGTATCACCTTGGGAATG
GACGAACTCTACAAGTGAGGATCCTCTAGAGCTTCAGAAGCGTGCTATCGAACTCAACCAGGGACGTG
CGGCACAAATGGGCATCCTTGCTCTCATGGTGCACGAACAGTTGGGAGTCTCTATCCTTCCTTAAAA
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ACCATGGATGCCAATCTCGCCTATTCATGGTGTATAAAAGTTCAACATCCAAAGCTAGAACTTTTGG
AAGAGAAAGAATATCCGAATAGGGCACGGCGTGCCGTATTGTTGGAGTGGACTAGCAGAAAGTGAGGA
AGGCACAGGATGAGTTTTCTCGAGACATACTTCAGCGTCGTCTTCACTGTCACAGTCAACTGACAGT
AATCGTTGATCCGGAGAGATTCAAATTTCAATCTGTTTGGACCTGGATAAGACACAAGAGCGACATCC
TGACATGAACGCCGTAAACAGCAAATCCTGGTTGAACACGTATCCTTTTGGGGGCTCCGCTACGACG
CTCGCTCCAGCTGGGGCTTCCTTACTATACACAGCGCGCATATTTACGGTTGCCAGATGTCAAGATG
GCCAAGTTGACCAGTGCCGTTCCGGTGCTCACC CGCGCGACGTGCGCGGAGCGGTGAGTTCTGGAC
CGACCGGCTCGGGTTCTCCCGGACTTCGTGGAGGACGACTTCGCCGGTGTGGTCCGGGACGACGTGA
CCCTGTTTCATCAGCGCGGTCCAGGACCAGGTGGTGCCGGACAACACCCTGGCCTGGGTGTGGGTGCGC
GGCCTGGACGAGCTGTACGCCGAGTGGTCCGAGGTGCTGTCCACGAACTTCGGGGACGCCTCCGGGCC
GGCCATGACCGAGATCGGCGAGCAGCCGTGGGGGCGGGAGTTGCCCCGCGCGACCCGGCCGGCAACT
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CATCTGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACC GGCTCCAGATTTATCAGCAATA
AACCAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCCTCCATCCAGTCTAT
TAATTGTTGCCGGAAGCTAGAGTAAGTAGTTCGCCAGTTAATAGTTTGCGCAACGTTGTTGCCATTG
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TGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATG
CGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAA
AGTGCTCATCATTTGGAACGTTCTTCGGGGCGAAAACCTCTCAAGGATCTTACCGCTGTTGAGATCCA
GTTTCGATGTAACCACTCGTGCAACCAACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGG
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GATCCCCC