

Table S1. Synthetic genes used in this study.

Synthetic Genes ^a	
SmVAL4	GAATTC AAGCTT AGTGAAGGTCAACGTGCTATTTTACAAC TTCCATAAAAAAGGTGAGAAAAGACGTAAAGAAT TG TAGAATACCAGGACAACCACCTGCAAAGAACCTTACCAAAC TGAAATGGAACAAACTTCTGGCAAATAAG GCAAAACAACAAGCTAAAAGATGTAAGTATGACTCCAATGATCCAAACGATTTTCATTATCGGAGATTTTGAG TCAATAGGACAAAATCTAGCCGACTACCCAACCATCGAAGGCGCTATGAAGGACTGGTTGGAGGAGTACAAA AATTACAAC TTTGAGAAAAACCAGTGTAAACGGAGACTGTAAGAATTATAAGCAAATGGTGTGGAATACTACT GAAGAAATAGGCTGTGGTTATGAGAAGTGCGGGAAAAATTACTTGATCGTTTGTAAC TACGCCCCCTGGTGAT TCAGAAGATAGACCATAACGAAGCCAAACCAGAATCTAAGTGTAAACAAATCCGAATCTAGA
SmVAL26	GAATTC AAGCTT GATGATGCCATGAGAAATGAGTTACTTACACTACACAATGAGGCAAGACAGGCTGTTAGA AATGGACAAC TGT TGGCCAACCAATCGCCGTTAGTATTTAAACCATTTAAATGGAATGTTGAGCTAGAGAGA AAAGCACAGATCTTATCAGATCAATGCAGAGTAGGTCACGACACAAACGCCGATCGTCAGATACCTGAGTTC CAGTACGTTGGTCAAAATTGGGCTGGAGCAACTGATATCAAACCGGCTTTTCAGTTGTGGCTTGATGAGTAT AATAACTACGACTTTTATACAAGAACC GTAGAAATGGGCCAATGCGGGCACTACACTCAATTGGTTTGGGAA GACACCACCGACGTGGGATGTGGTGTACAGATTGTCCAAATTTTCCTTACGGTTTGTCAATCGTTTGTAAAC TACGGTCCAGGCCACATCACGGACATGAAGTCTAGA

^aRedesigned sequence using DNA2.0 codon optimization algorithms for expression in *Pichia pastoris*.