

Table S1 Strains and primers used in this study.

Strains/primers	Use, relevant characteristic (s), and/or sequence (source)
Strains	
<i>E. coli</i> DH5 α	<i>E. coli</i> host for DNA manipulations, TransGen (Beijing, China)
<i>E. coli</i> Rosetta (DE3)	<i>E. coli</i> host for overproduction of recombinant protein
<i>Phaeodactylum tricornutum</i>	Pt1
Primers (5'>3')	
TALEseq-for	CTCCCCTTCAGCTGGACAC
TALEseq-rev	AGCTGGGCCACGATTGAC
ptTES1KO-for	GTCTTCCCAGGCAATCTGC
ptTES1KO-rev	CTTCCAGCGTACTCAACGG
KmR-for	CGTATTTCTGCTCTCGCTCAGG
KmR-rev	TCGAGCATCAAATGAAACTGC
Talen-tes1en-1	<u>CGTAACTATAACGGTCCTAAGGATGACGATGACAAGATGGC</u>
Talen-tes1en-2	<u>GAGGTAGTTCGCTACCTTAGCATAGAGCCCACCGCATCCC</u>
Talen-tes1en-3	<u>ACCAGTTACGCTAGGGATAAGGATGACGATGACAAGATGGC</u>
Talen-tes1en-4	<u>TAGCTATATTACCCTGTTATCATAGAGCCCACCGCATCCC</u>
Tes1up-easy-1	atcttcagagattggatccgtTCGTAAGTCATGCCGTCCC
Tes1up-easy-2	taagagctcgatatctacgtatATAAACCAAGGCGAGCGT
Tes1dw-easy-1	TAGCTCGTCTTCACCTGCAGGCGAACTTACAGCCGCCAACG
Tes1dw-easy-2	ATTACTAGTCCGCGGGCATGCC <u>TTAGAACCATCCCTCGGGT</u>