

Supplementary Materials

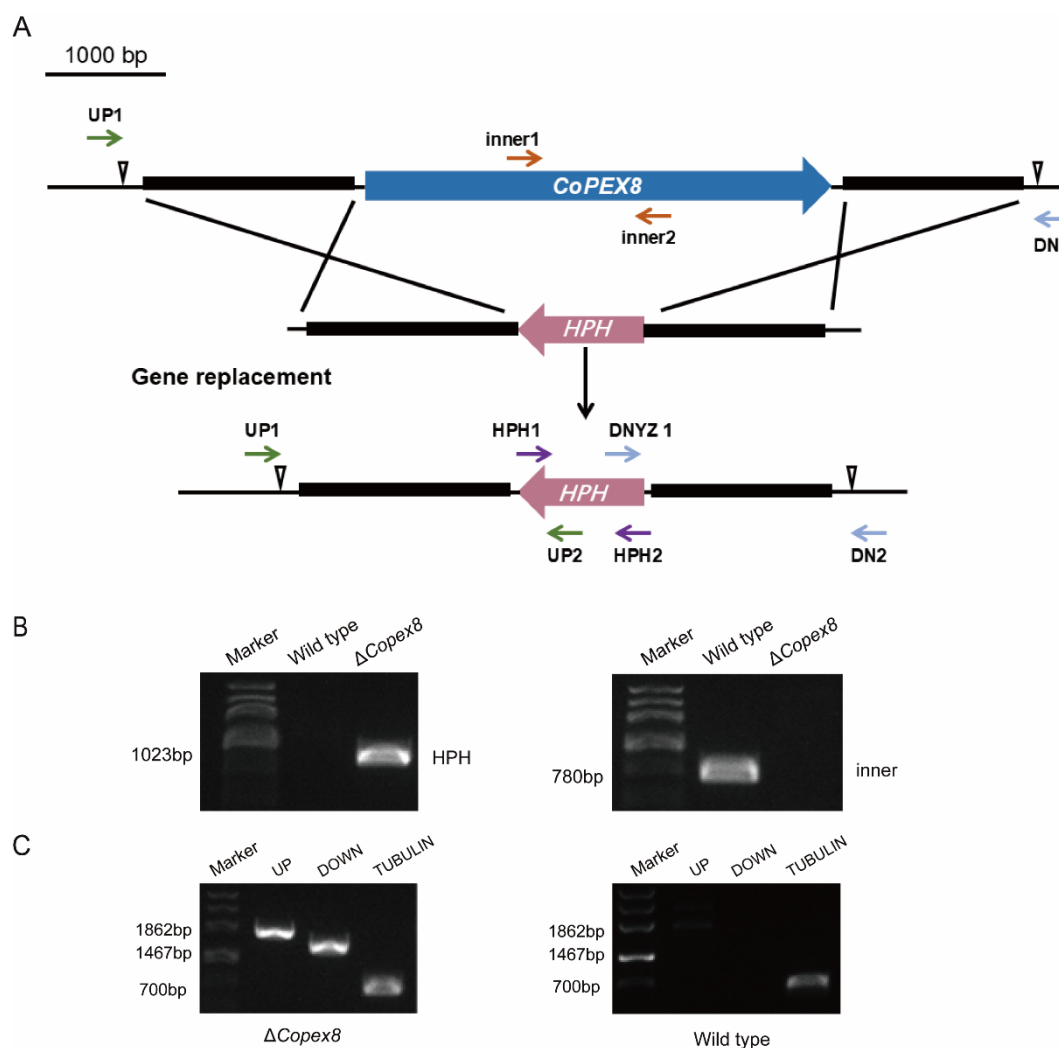


Figure S1. Deletion of *CoPEX8* gene in *C. orbiculare*. (A) Schematic diagram of the gene knockout strategy. *CoPEX8* coding region was replaced by the hygromycin-resistance gene (*HPH*) cassette. The positions of the primers are indicated by arrows, with primers of the same color used as a pair. (B) Validation of *CoPEX8* knockout. The primer set (*CoPEX8* inner-F/*CoPEX8* inner-R) was used to verify the target gene, and the primer set (*HPH*-F/*HPH*-R) was used to amplify the fragment of *HPH* in mutant. (C) PCR verification of the recombinant DNA fragment (amplified by primers *CoPEX8* upyz-F/*CoPEX8* upyz-R or *CoPEX8* downyz-F/*CoPEX8* downyz-R), with β -*TUBULIN* DNA used as a positive control.

Table S1. Primers used in this study.

Primer	Sequence (5'-3')
CoPEX8 up-F	AGGCTAACTGACACTCTAGATTCTCATAAGCCACCCTGAATT
CoPEX8 up-R	ATGCCTGCAGGTCGACTCTAGACGCATCACCCCGTCGCAACC
CoPEX8 down-F	CCGAGGGCAAAGGAATAGGAGCTCACGTGGTGGCAACAGCATA

CoPEX8 down-R	GCTATGACCATGATTACGAATTCCTCTTATTGTATCTCGCCCCGC
CoPEX8-F	GACGAGCTGTACAAGTCTAGAATGCCGGCCGACCGACTTCTCAAC
CoPEX8-R	GCTATGACCATGATTACGAATTCCTCTTATTGTATCTCGCCCCGC
CoPEX8 upyz-F	GCTCCTTCTACAGCGGCACACA
CoPEX8 upyz-R	GGTCTTGCAACGTGACACCCTG
CoPEX8 downyz-F	CCGGGCGTATATGCTCCGCAT
CoPEX8 downyz-R	GCGGGGCCAACGTCAATCGTA
CoPEX8 inner-F	ATGCCGGCCGACCGACTTCTC
CoPEX8 inner-R	TCAAAGCCTGCTCATCGTCCC
HPH-F	TAGTGGAGGTCAACAATGAATG
HPH-R	CATCTACTCTATTCCTTTGCCC
TUB-F	AACATGCGTGAGATTGTAAGT
TUB-R	ACCCTCAGTGTAGTGACCCTTGGC
MPG11	TCACGACTGGGAGTAGAAAGA
MPG12	CCAGATTCCAGGGTTGCTAAA
GFP-CHK1	GCCACCTACGGCAAGCTGACCCTG
GFP-CHK2	GGGTGCTCAGGTAGTGGTTGTCCG
RED1	CCGGGGTGAGCAAGGGCGAGG
RED2	TCTAGAGCCGCCGGTGGAGTG
NEO1	CGGGTAGCCAACGCTATGTCC
NEO2	GGACGACCCGGTCATACCTTC
H3-1	AGTCATGTTGATTGAGGTGT
H3-2	GGCCATTGTGATTGATTGTG
pNMCherryA1	TCGGCGCGTTCTGACTGTTCC
PNMCherryA2	ATGGTGAGCAAGGGCGAGGAG
