

Figure S1. Knockout and complementation of *NAP1* in *Magnaporthe oryzae* strain 70-15. **(a)** Targeted gene deletion strategy. Two pairs of primers (Up-F/Up-R and Down-F/Down-R) were used to clone the respective left and right flanking fragments of the targeted genes. The primer set S-F/S-R was used to clone a fragment of the targeted deletion gene in transformants. The primer set L-F/HPH-CKR was used to clone the recombinational DNA fragments in mutants. **(b)** *MoNAP1* deletion events in wild-type 70-15 were confirmed at the DNA level by double PCRs of both *MoNAP1* (amplified by primers S-F/S-R) and the positive control of β -*TUBULIN* DNA (amplified by primers Tbl-gF/Tbl-gR). **(c)** Recombinational DNA

was confirmed at the DNA level by positive PCR using the primer set L-F/HPH-CKR. (d) Complementation of $\Delta Monap1$ by *MoNAP1* (*Monap1c*). Complemented *MoNAP1* was confirmed at the RNA level by RT-PCR using β -*TUBULIN* as a control. The primer set cNAP1-F/cNAP1-R was used to clone a fragment of the complemented gene in the transformants. (e) Complementation of $\Delta Monap1$ by *MoNAP1* without the NES sequence (*Monap1^{ΔNES}*). The primer set cNAP1^{ΔNES}-F/cNAP1^{ΔNES}-R was used to verify the deletion of the NES sequence at the RNA level, where a fragment could be cloned in the wild type, but no fragment was cloned in *Monap1^{ΔNES}*. (f) Complementation of $\Delta Monap1$ with the *NAP1* gene of *S. cerevisiae* (*Ynap1c*). Complemented *YNAP1* was confirmed at the RNA level by RT-PCR using β -*TUBULIN* as a control. The primer set cNAP1y-F/cNAP1y-R was used to clone the *NAP1* gene of *S. cerevisiae*.

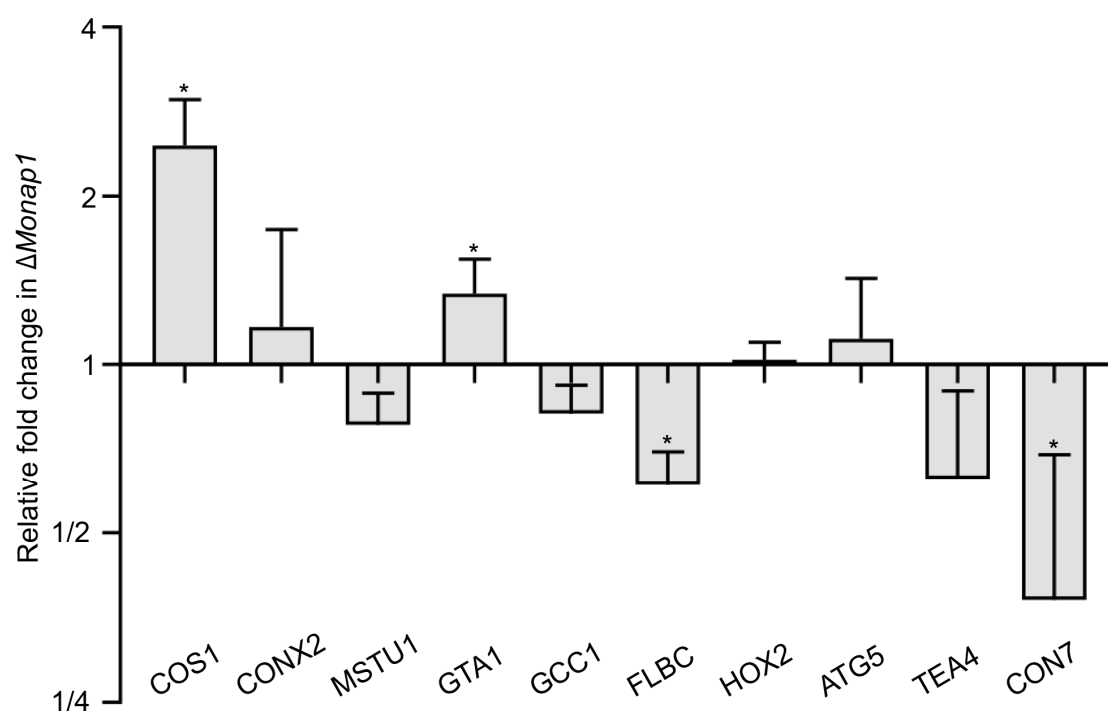


Figure S2. Expression levels of the conidiation-related genes *COS1*, *CONX2*, *MSTU1*, *GTA1*, *GCC1*, *FLBC*, *HOX2*, *CON7*, *TEA4*, and *ATG5* in $\Delta Monap1$. Error bars represent the standard deviations. The data were analyzed by GraphPad Prism 8.0 and significant differences compared with the wild type were estimated by multiple t tests: * $p < 0.05$.

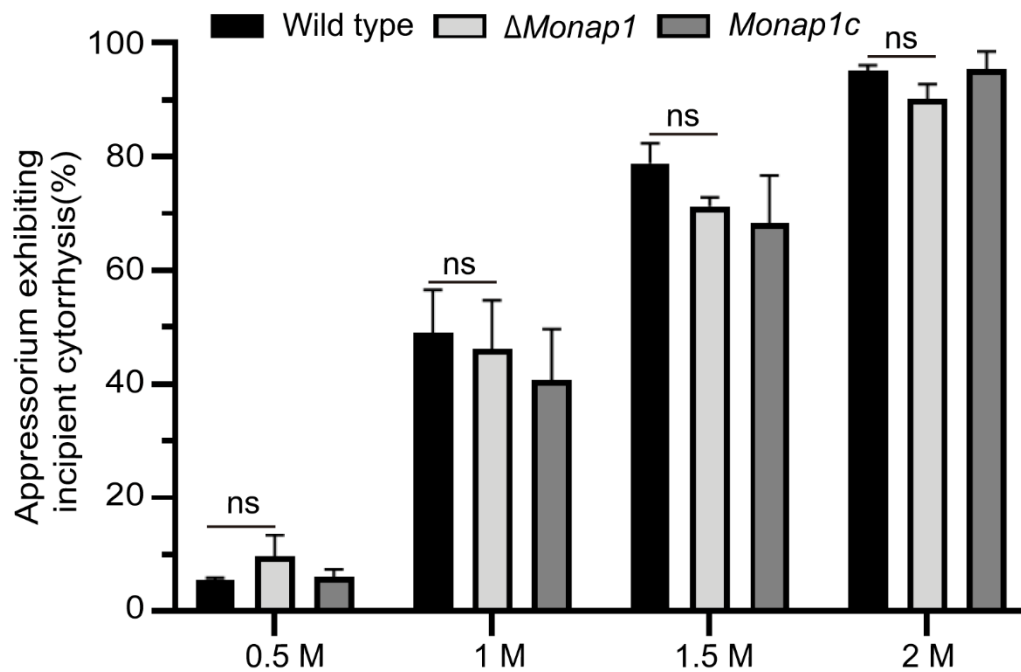


Figure S3. Collapsed appressoria rates (%) of the wild-type, $\Delta Monap1$, and *MoNAP1* complemented strains of $\Delta Monap1$ (*Monap1c*). At least 150 spores were counted per replicate. $n = 3$ independent biological replicates. Error bars represent the standard deviations. The data were analyzed by GraphPad Prism 8.0 and significant differences compared with the wild type were estimated by multiple t tests: ns, $p > 0.05$.

Table S1. Copy number identification of the selectable marker gene *HPH* inserted in the genome of $\Delta Monap1$.

Gene	Gene (MG8)	locus	Parent strain	Recombination resistance gene	Knockout ^a	Copies of <i>HPH</i> by qPCR ^b	Insertion event ^c
<i>MoNAP1</i>	MGG_06924	70-15		<i>HPH</i>	Y	0.99	Single

Notes:

a "Y" and "N" represent the target gene deleted or undeleted, respectively.

b The copy number of the selectable marker gene (*HPH*) in the genome of the mutants identified by qPCR after normalized with β -tubulin gene and the wild type strain.

c "Single" represents the targeted gene deletion without ectopic insertion.

Table S2. Primers used in this study

1 Primers used to build gene deletion cassettes		
Up-F		GCCCCGGGAGATGGGGGAGGCTAACTGACACTCTAGATACTCGAGGTCTACC
Up-R		AAAATAGGCATTCATTGTTGACCTCCACTA TGCTGCATGGCGTGATT
Down-F		CCCAGCACTCGTCCGAGGGCAAAGGAATAGGTGACGGTGCTAGTCTGTTT
Down-R		TCACGACGTTGTAAAACGACGGCCAGTGCCAAGCTTGTTTGCTCAGTCCATTGTTATG
HPH-F		TAGTGGAGGTCAACAATGAATG
HPH-R		CATCTACTCTATTCTTTGCC
2 Primers used to identify $\Delta Monap1$, <i>Monap1c</i> , <i>Monap1</i> ^{ΔNES} and <i>Ynap1c</i>		
S-F		CATCGTCATCGTCCTCATCTT
S-R		GAGCAGAAGAAACAGCGAAAC
L-F		AGACAGCAATTCCATGACG
HPH-CKR		GGCTGATCTGACCAGTTGCCT
Tbl-gF		TTCCGCGCTGTCACCGTTCC
Tbl-gR		GGGCCTCCTCCTCGTACTCCTCTT
cNAP1-F		GAAGAAGGAGGTCAAGACTGAAG
cNAP1-R		CGGCATGGTCGTAGATGAA
qtub-F		ATTGTTACCTTCAGACCGG
qtub-R		TTGAAGTAGACGCTCATAACG
qHPH-F		ATGTCCTGCGGGTAAATAGC
qHPH-R		GATGCAATAGGTCAGGCTCTC
cNAP1 ^{ΔNES} -F		AAGTGAAGCGCCGAGTGGCTG
cNAP1 ^{ΔNES} -R		GGCCAGGGAAATTTGGTTCTTC
cNAP1y-F		CGCAAAGGGCCAAGAGATTG
cNAP1y-R		TGGGTTGGCGGAAGAATCAA
3 Primers used in the complementation experiments		
NAP1c-F		TCACCGAGATTTAGGAATTCGCCAGCGACAACTCAA
NAP1c-R		TACTGCAGGTCGACTCTAGAACAGAATACTGCAGGATCAAAC
NAP1 ^{ΔNES} -F1		TCAATCACAATGGCCGGATCCATGGCCGAGCCCATTCCC
NAP1 ^{ΔNES} -R1		TCAAGTTTGGAGTGCTCCTTTGACTCGATGTAGCCAGAAG
NAP1 ^{ΔNES} -F2		AAGGAGCACTCCAACTTGA
NAP1 ^{ΔNES} -R2		TACTGCAGGTCGACTCTAGACTAGCTCTGCTTGCACTCGG
yNAP1-F		TCAATCACAATGGCCGGATCCATGTCAGACCCTATCAGAACGAAAC
yNAP1-R		TTACTGCAGGTCGACTCTAGAGGTGGCATTGCCCAAGTCC
4 Primers used to construct NAP1-GFP and NAP1 ^{ΔNES} -GFP plasmid		
NAP1-GFP-F		CAATCACAATGGCC GGATCC ATGGCCGAGCCCATTCCC
NAP1-GFP-R		CCCTTGCTCACCATCCCGGGGCTCTGCTTGCACTCGGC
NAP1 ^{ΔNES} -GFP-F1		ACGAGCTGTACAAGTCTAGAATGGCCGAGCCCATTCCC
NAP1 ^{ΔNES} -GFP-R1		TCAAGTTTGGAGTGCTCCTTTGACTCGATGTAGCCAGAAG
NAP1 ^{ΔNES} -GFP-F2		AAGGAGCACTCCAACTTGA

NAP1^{ΔNES}-GFP-R2 TACTGCAGGTCGACTCTAGACTAGCTCTGCTTGCACTCGG

5 Primers used in BiFC and pull-down assays

NAP1- YFP ^{CTF} -F	CAAACCATAAAAATGGGATCCATGGCCGAGCCCATTCCC
NAP1- YFP ^{CTF} -R	CTTGCAGGCCGGGCGCCCCGGGGCTCTGCTTGCACTCGGCG
H ₂ A-YFP ^{NTE} -F	AGAAAGGTATCTAGAGTCGACATGACTGGAGGCGGCAAGTCCGG
H ₂ A-YFP ^{NTE} -R	TGTCGCTTACTGCAGGTCGACCATCTCTTGGCTGGCGTTCTT
FLAG-NAP1-F	ATGATGACGACAAGGTCGACATGGCCGAGCCCATTCCCAA
FLAG-NAP1-R	TCGAGTGCGGCCGCAAGCTTGCTCTGCTTGCACTCGGCGG
GST-H ₂ A-F	CGCGTGGATCCCCGGAATTCATGACTGGAGGCGGCAAGTC
GST-H ₂ A-R	TCGAGTCGACCCGGAATTCCATCTCTTGGCTGGCGTTCT
GST-H ₂ B-F	CGCGTGGATCCCCGGAATTCATGCCCCCAAGGCCGCTGA
GST-H ₂ B-R	TCGAGTCGACCCGGAATTCTTTGGTGCTTGAAGAGTACT
GST-CYC1-F	CGCGTGGATCCCCGGAATTCCCCCAGCCCGGACTGCGC
GST-CYC1-R	TCGAGTCGACCCGGAATTCAGCTGGTCGATAGCTACG

6 Primers used in qPCR

COS1-qF	CACAACCATTCAAAGACGCAC
COS1-qR	AGAGTTGACTTTGGCGATGAG
CONX2-qF	GCCCGAGAGCAAGAGTAATAC
CONX2-qR	CTGCTTCATGTACGGGTAGTC
MSTU1-qF	GATCAGGGTCACAATAACGGG
MSTU1-qR	ACTAGAGATGGACGAGACAGG
GTA1-qF	AAGACATCCACGACCAGTTC
GTA1-qR	GTAACGTGGTTCCTGGTAGC
GCC1-qF	CCAAGTTTGAAAGCTCCGAG
GCC1-qR	GTGAACAAAGGGCAAGGAAG
FLBC-qF	TCCCTCAACTACGACCCTTAC
FLBC-qR	GTGAGCTGCCAGAGTAGATAC
HOX2-qF	GGACTGCCTCTCAATGGTATG
HOX2-qR	AGGTGTGGGAGCAATTATCG
ATG5-qF	GGGTCTTTTAGGGTCATGCAG
ATG5-qR	AGCAAGTCACGTAGTGTGG
TEA4-qF	AGCACATTGAGACACCCAC
TEA4-qR	GGCTACAGTCTTGGTCTTCC
CON7-qF	ACCATTAAACGCGCATGTG
CON7-qR	CGTTCCTCGTCTGCCTTG
