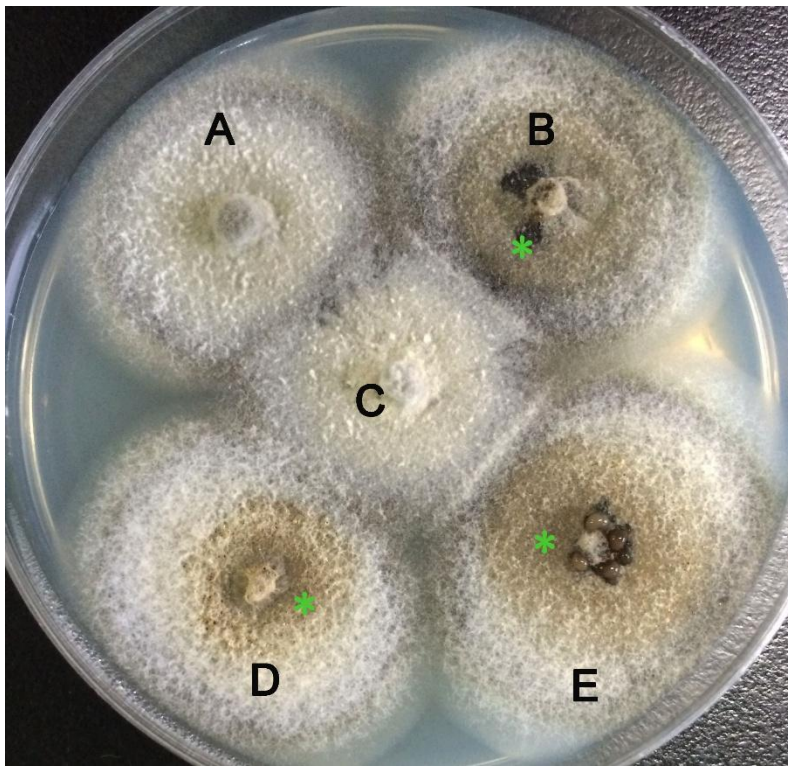


**Autophagy-related protein MoAtg14 is involved in differentiation, development and pathogenicity in the rice blast fungus *Magnaporthe oryzae***

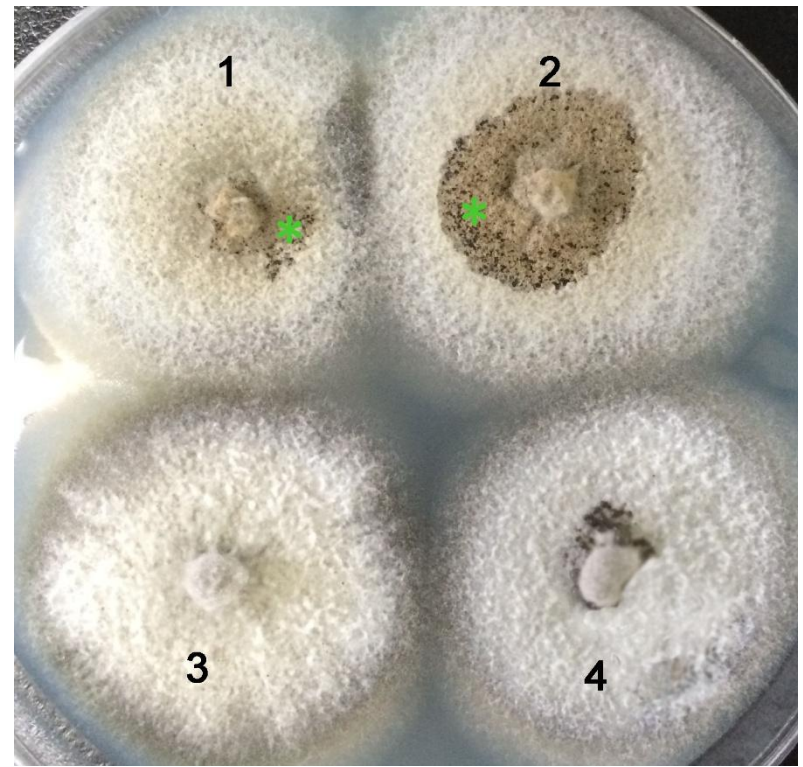
Xiao-Hong Liu<sup>1</sup>, Ya-Hui Zhao<sup>1</sup>, Xue-Ming Zhu<sup>1</sup>, Xiao-Qing Zeng<sup>4</sup>, Lu-Yao Huang<sup>1</sup>,  
Bo Dong<sup>5</sup>, Zhen-Zhu Su<sup>1,3</sup>, Yao Wang<sup>1</sup>, Jian-Ping Lu<sup>2</sup>, Fu-Cheng Lin<sup>1\*</sup>

**Table S1 Primers in this study**

Name	Sequence (5'-3')
ATG14up-1	CAGTGTGATGAGGTTGGGA
ATG14up-2	CATTCATTGTTGACCTCCACTAAAGGGCAGAGTAGTCAGGAAA
ATG14dn-1	GGGCAAAGGAATAGAGTAGATGATAGAATTGTCCCCTGAGCCC
ATG14dn-2	ACATCGTTTGTTCCTCCGTGA
ATG14-N1	ACGTCGACTCCTGTGAATCTTCTGGGTG
ATG14-N2	CGTCTAGAGGGTGATAGCGTCCTGGTTG
ATG14-C1	CTTGGTCGTCGTCAATCTCG
ATG14-C2	CTGTCCGCAGCCCTTGTTAG
ATG14pb-1	ACGTCGACTCCTGTGAATCTTCTGGGTG
ATG14pb-2	AGGGCAGAGTAGTCAGGAAA
Atg14FL-F	GAGCTGTACAAGTCTAGAATGTCATGCTATATCTGCGG
Atg14FL-R	CTGCAGGTGCGACTCTAGAAGTCCAAGCATCATCCTCCA
ATG14N-F	GCTCTAGAATGTCATGCTATATCTGCGG
ATG14N-R	AATCTAGATGCAGCCTTGCGAGCTGCGG
ATG14CCD-F	AACCCGGGATGCGCTCATCCCCGCAGCTCG
ATG14CCD-R	AGGTCGACATCCCAGTCGGCCCTGGTTG
ATG14C-F	AACCCGGGAATATTGCGGCAACCAGGGC
ATG14C-R	AGTCTAGAAGTCCAAGCATCATCCTCCA
ATG6-BDF	CATGGAGGCCGAATTCATGATGTTTTGCCAAAAATGCCGGAC
ATG6-BDR	GCAGGTCGACGGATCCCTTAGGTCGAGCTTGAGCCAAAACCT
ATG6CCD-BDF	CATGGAGGCCGAATTCATGGTTCGAAGGCCTGCGCAAGCGCCT
ATG6CCD-BDR	GCAGGTCGACGGATCCATACACGTTTGTCCGCTGCAGAGACT
ATG14-ADF	GGAGGCCAGTGAATTCATGTCATGCTATATCTGCGGACGCGG
ATG14-ADR	CGAGCTCGATGGATCCTCAAGTCCAAGCATCATCCTCCAGCA
ATG14CCD-ADF	GGAGGCCAGTGAATTCATGCGCTCATCCCCGCAGCTCG
ATG14CCD-ADR	CGAGCTCGATGGATCCATCCCAGTCGGCCCTGGTTG
ATG14N-ADF	GGAGGCCAGTGAATTCATGTCATGCTATATCTGCGGACGCGG
ATG14N-ADR	CGAGCTCGATGGATCCTGCAGCCTTGCGAGCTGCGG
ATG14C-ADF	GGAGGCCAGTGAATTCATGAATATTGCGGCAACCAGGGC
ATG14C-ADR	CGAGCTCGATGGATCCTCAAGTCCAAGCATCATCCTCCAGCA
FgAtg14C-F	CCCGGGAAGTCTAGAATGGACTGTGATATCTGTCATC
FgAtg14C-R	CAGGTCGACTCTAGATCATCTATTCTTGACCCTCATC
TrAtg14C-F	CCCGGGAAGTCTAGAATGGAATGCGACATCTGCCACC
TrAtg14C-R	CAGGTCGACTCTAGATCATCTGCTCTTGACCCTCATC



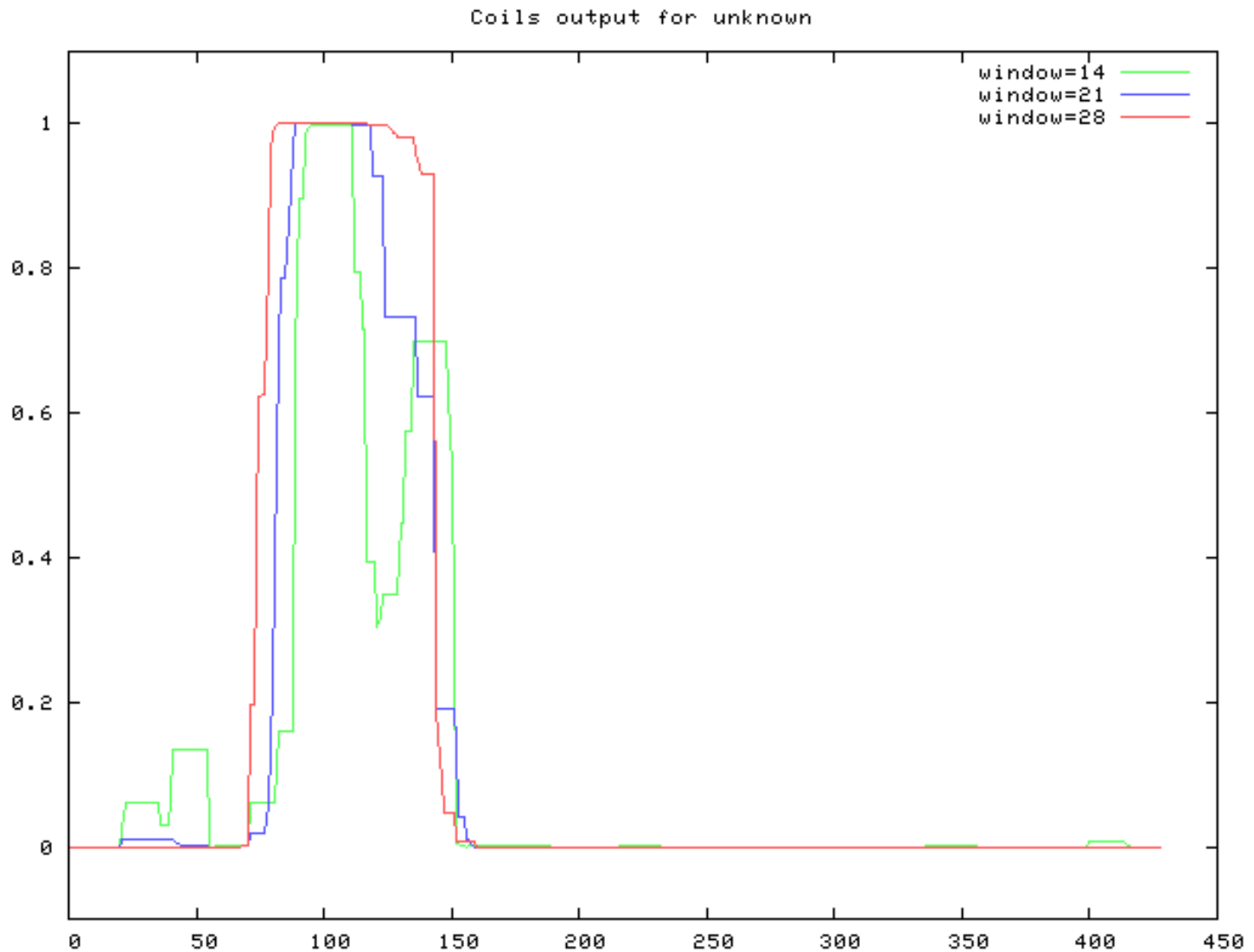
FgAtg14 to the  $\Delta MoAtg14$  mutant



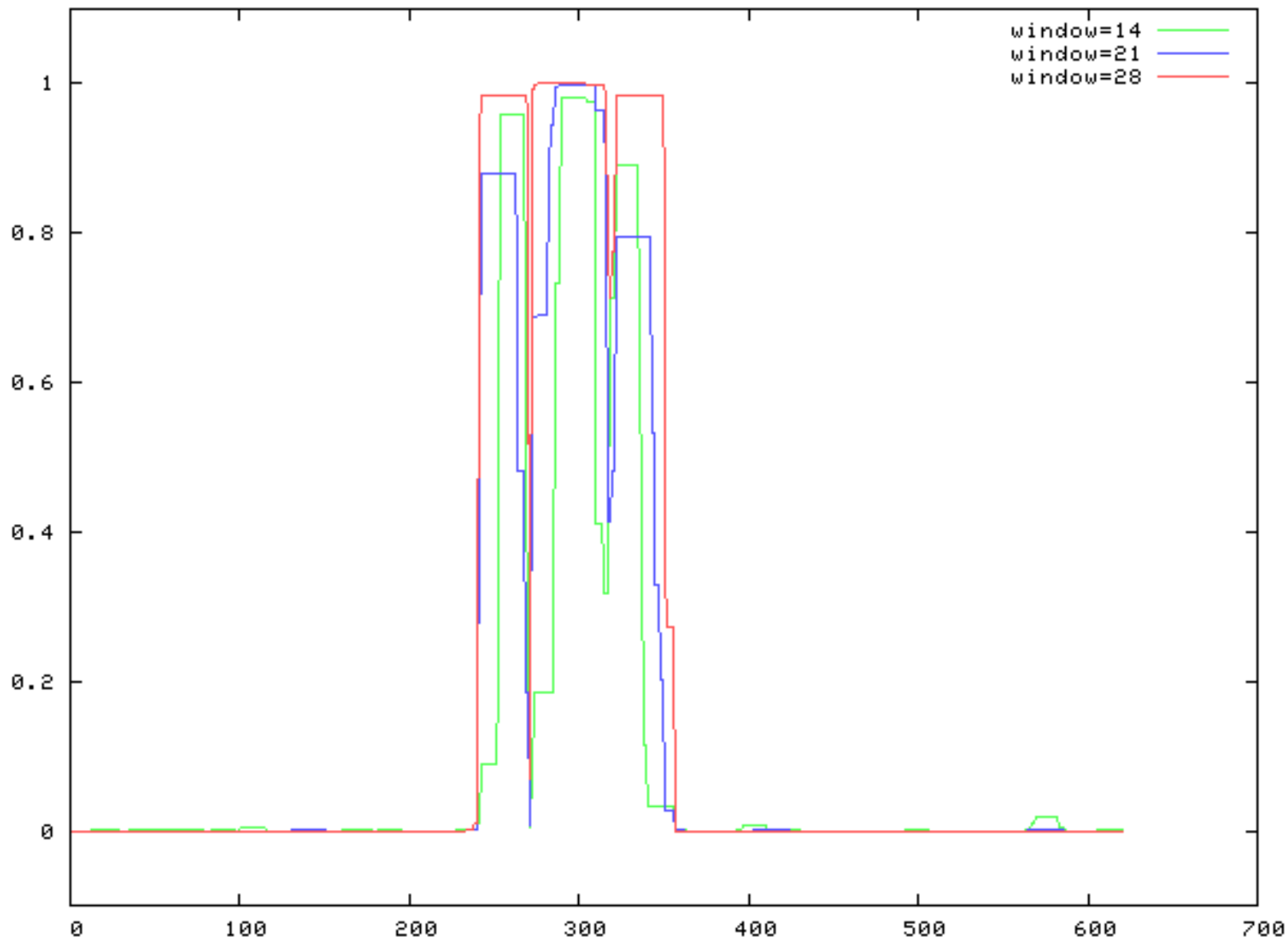
TrAtg14 to the  $\Delta MoAtg14$  mutant

### Figure S1 Complementation assays of FgAtg14 and TrAtg14

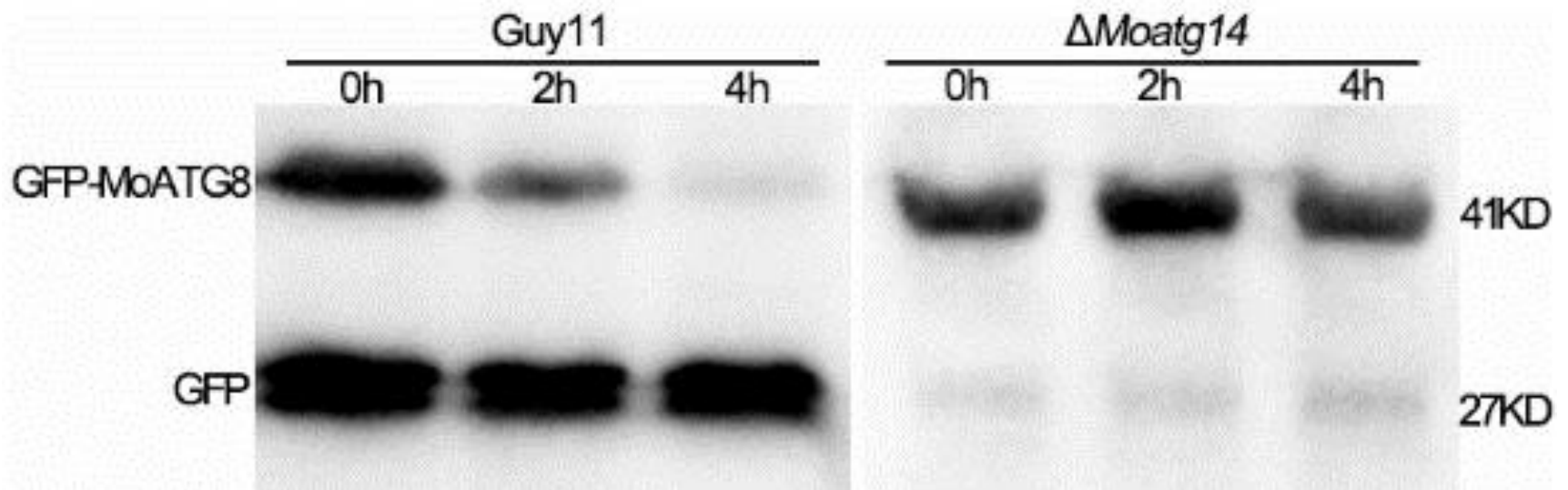
Left, introduction FgAtg14 to the  $\Delta MoAtg14$  mutant, A & C are recovered, and similar to the wild type. Right, introduction TrAtg14 to the  $\Delta MoAtg14$  mutant, 3 & 4 are recovered, and similar to the wild type. \* the typical characteristics of the  $\Delta MoAtg14$  mutant.



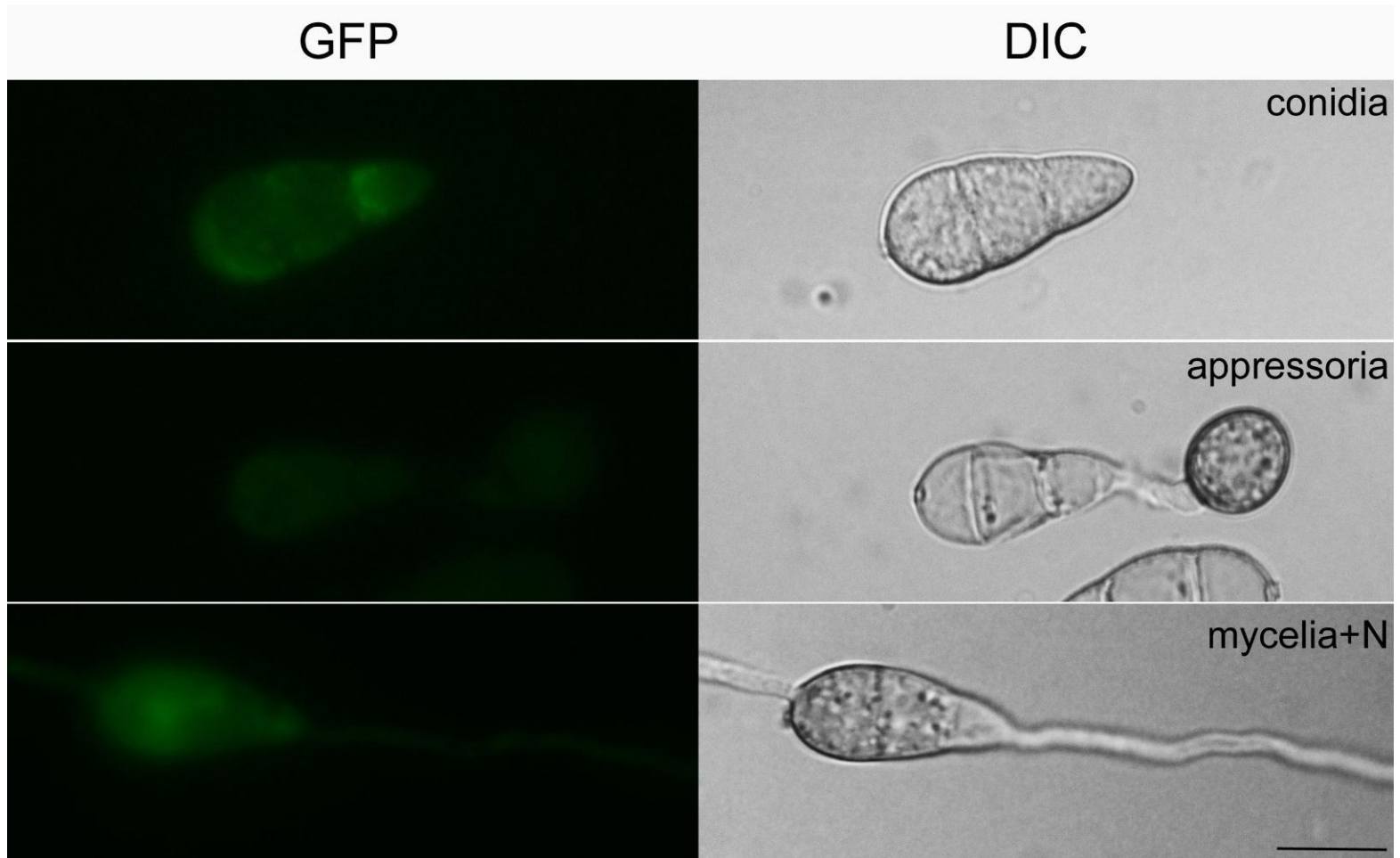
**Figure S2** The coiled-coil domain was predicted within the MoAtg14.



**Figure S3** The coiled-coil domain was predicted within the MoVps38.



**Figure S4** GFP-MoAtg8 proteolysis assays of *Guy11* and  $\Delta MoAtg14$ . Mycelia were cultured at 25 °C for 48 h in CM liquid medium continuously shaken at 150 rpm. Autophagy was induced after 2 and 4 h of nitrogen starvation. The mycelia were collected at the indicated times, and the mycelial extracts were analyzed by anti-GFP western blotting.



**Figure S5** Subcellular localization of GFP-MoAtg14 in conidia, appressoria and mycelia. Scale bar = 10  $\mu\text{m}$ .