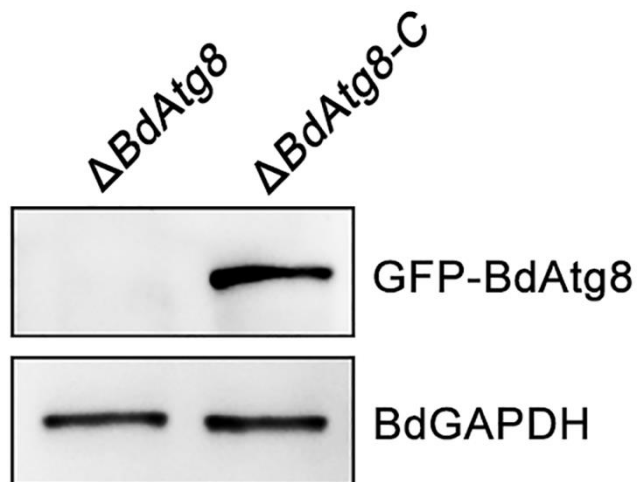


Appendix A PCR primers used in this study

Primer	Sequence (5'-3')	Relevant characteristics
P1 P2	CGTGAAATCAACGAGCTGC CAAATAGGCATTGATGTGTTGACCTCC GTGTTGTGCTGGTACGATAG	PCR primers to amplify <i>BdATG8</i> upstream fragment for construction of the <i>BdATG8</i> deletion fragment
P3 P4	CTCGTCCGAGGGCAAAGGAATAGAGTA GATACCTCCGCACTGCCAAC AACACACCGTAACTCTCACC	PCR primers to amplify <i>BdATG8</i> downstream fragment for construction of the <i>BdATG8</i> deletion fragment
P5 P6	ACGCGGATAATGGAGCTGTTG CATAGCGATCGTTTACCTAG	PCR primers to amplify the <i>BdATG8</i> deletion fragment for generation of the <i>BdATG8</i> deletion mutants
P7 P8	TATAACGCGCTTTCAAGCGG CTCGTACTTATGGTTGATGC	PCR primers for identification of <i>BdATG8</i> deletion mutants
HPH-F HPH-R	GGAGGTCAACACATCAATGCCTATT CTACTCTATTCCTTTGCCCT	PCR primers for amplification of hygromycin resistance gene (<i>HPH</i>)
Probe-F Probe-R	CAAAGAAGGCAGGGCTTTGG GAGAAGAGACGCTGAGCTGG	PCR primers to amplify the <i>BdATG8</i> upstream fragment used as the probe for Southern blotting analysis
GFP-ATG8-F1 GFP-ATG8-R1 GFP-ATG8-F2 GFP-ATG8-R2	ACTCACTATAGGGCGAATTGGGTACTCA AATTGGTTAGTGTTTCGTTGACACGTTGG TGAACAGCTCCTCGCCCTTGCTCACCAT GCTTGCGGTGGGTGTGTTGT GATCACTCTCGGCATGGACGAGCTGTAC AAGATGCGCTCCAAGTTTAAGGACG GAATGTTGAGTGGAATGATGTCAGAGCG CTTCACCGAACG	PCR primers to amplify the native promoter region and open reading frame of <i>BdATG8</i> for GFP fusion protein construction

GFP-ATG8-ID-F	AGGTCATCTGCGAGAAGGTC	PCR primers for PYF11-GFP-BdATG8 plasmid identification
GFP-ATG8-ID-R	CAAGAATGCGCATATGTGCG	
ATG8-pYES2-F	TCACACTGGCGGCCGctcgagATGCGCTCC AAGTTTAAGGAC	PCR primers for amplification of the full-length cDNA sequence of the <i>BdATG8</i> gene
ATG8-pYES2-R	CCCTCTAGATGCATGctcgagTCAGAGCGCT TCACCGAACGT	
ATG8-pYES2-I-F	ATGAACTCCATTAACATCCTGACG	PCR primers for pYES2-BdATG8 plasmid identification
ATG8-pYES2-I-R	TTATGCCATGTGCTGTCCGTC	

The restriction enzyme sites included in primers are listed in lowercase in the sequence.



Appendix B Detection of GFP-BdAtg8 expression in the complemented strain. BdGAPDH was served as a reference.