

Supplemental Table 1. Primers for PCR analysis

Primer name	Sequence (5'-3')	Purpose
<i>TrGDH</i> -1F	ATGTCCCACCTGCCTTTCGARCCNGARTT	Clone of <i>TrGDH</i>
<i>TrGDH</i> -1R	CCACCAGTCACCCTGGTCRTGCATNGC	
<i>TrGDH</i> -pCold F	AAAGGATCCATGTCCCACCTGCCTTTCGA	Protein expression
<i>TrGDH</i> -pCold R	GG <u>AAGCTT</u> CCACCAGTCACCCTGGTCGT	
<i>TrGDH</i> RT-qPCR F	ACCGAGAACGAGGTCAGCA	RT-qPCR for expression analysis
<i>TrGDH</i> RT-qPCR R	GCAACGAGCGAAGGAAGC	
<i>OsGDH1</i> RT-qPCR F	GCTGTGGTACTGGAAAACCTG	
<i>OsGDH1</i> RT-qPCR R	ATGCTCTGCAAGCAAGGCTTC	
<i>OsGDH2</i> RT-qPCR F	ACGCTACTGAGGCTCTTTTGGC	
<i>OsGDH2</i> RT-qPCR R	TGATTCGTGCAGCCCATGA	
<i>OsGDH3</i> RT-qPCR F	TCATCCATCAGAAAGGTGGCA	
<i>OsGDH3</i> RT-qPCR R	CCTGTGCTTCAAGAGAGCAGGT	
<i>OsGDH4</i> RT-qPCR F	GCATTCCCTTGTGCATCACA	
<i>OsGDH4</i> RT-qPCR R	TATAAGAACACGGCAGCCAGAGT	
<i>Actin1</i> RT-qPCR F	AACATCGTTCTCAGTGGTGGTA	
<i>Actin1</i> RT-qPCR R	GGAGGACGGCGATAACAG	

The underline indicates the restriction enzyme cleavage site sequence.

Supplemental Table 2. Information of all the sequences used in phylogeny

Gene	Accession number	Locus number	Source species
<i>AgGDH</i>	XP_003177786	/	<i>Arthroderma gypseum</i>
<i>AcGDH</i>	EEH08744	/	<i>Ajellomyces capsulatus</i>
<i>AnGDH</i>	ACJ03788	/	<i>Aspergillus niger</i>
<i>AoGDH</i>	XP_001821419	/	<i>Aspergillus oryzae</i>
<i>AtGDH1</i>	NM_121822	AT5G18170	<i>Arabidopsis thaliana</i>
<i>BfGDH</i>	XP_001547803	/	<i>Botryotinia fuckeliana</i>
<i>CeGDH</i>	/	/	<i>Cylindrocarpon ehrenbergii</i>
<i>CmGDH</i>	EGX96726	/	<i>Cordyceps militaris</i>
<i>ChGDH</i>	CCF37615	/	<i>Colletotrichum higginsianum</i>
<i>CpGDH</i>	XP_003068285	/	<i>Coccidioides posadasii</i>
<i>CaGDH</i>	EEQ44915	/	<i>Candida albicans</i>
<i>CgGDH</i>	XP_001225369	/	<i>Chaetomium globosum</i>
<i>EcGDH</i>	/	/	<i>Eurotium cheralieri</i>
<i>EdGDH</i>	EHY56229	/	<i>Exophiala dermatitidis</i>
<i>EnGDH</i>	CAA34252	/	<i>Emericella nidulans</i>
<i>EcoGDH</i>	NP_416275	/	<i>Escherichia coli</i>
<i>GlGDH</i>	EHK96567	/	<i>Glarea lozoyensis</i>
<i>GcGDH</i>	EFX05298	/	<i>Grosmannia clavigera</i>
<i>MoGDH</i>	XP_003715028	/	<i>Magnaporthe oryzae</i>
<i>MbGDH</i>	EKD12453	/	<i>Marssonina brunnea</i>
<i>MaGDH</i>	EFY85547	/	<i>Metarhizium acridum</i>
<i>MgGDH</i>	/	/	<i>Magnaporthe grisea</i>
<i>NcGDH</i>	XP_961561	/	<i>Neurospora crassa</i>
<i>OsGDH1</i>	AK071839	Loc_Os03g58040	<i>Oryza sativa</i>
<i>OsGDH2</i>	AK065301	Loc_Os04g45970	<i>Oryza sativa</i>
<i>OsGDH3</i>	AK103028	Loc_Os02g43470	<i>Oryza sativa</i>
<i>OsGDH4</i>	AK120139	Loc_Os01g37760	<i>Oryza sativa</i>
<i>PcGDH</i>	/	/	<i>Pleurotus cystidiosus</i>
<i>PtGDH</i>	XP_001934415	/	<i>Pyrenophora tritici</i>
<i>PbGDH</i>	EEH48437	/	<i>Paracoccidioides brasiliensis</i>
<i>PcGDH</i>	XP_002565667	/	<i>Penicillium chrysogenum</i>
<i>SsGDH</i>	XP_001590355	/	<i>Sclerotinia sclerotiorum</i>
<i>TriGDH</i>	EGR52650	/	<i>Trichoderma reesei</i>