Appendix A. Primers used in this study.

Primers	Sequences (5'−3')
For gene cloning	
GhFPS-F	ATGGCGGATCTCAGGTC
GhFPS-R	CTATTTCTGCCTCTTGTAGATCTTC
GhFPS- *KpnI* -F	TCATCA**GGTACC**ATGGCGGATCTCAG
GhFPS- *XhoI* -R	TCATCA**CTCGAG**CTATTTCTGCCTCTT
For qPCR	
GhFPS1-F	TGCGTGTGCACTGGTTATGGC
GhFPS1-R	CACTTTAGCAACATTGGCAGTG
GhFPS2-F	TGCGTGTGCACTGGTTATGTG
GhFPS2-R	CACTTTAGCAACATTGGCAGGG
GhACT4-F	TCGCTCGTTCCTTGTATAATTCATC
GhACT4-R	TGGATTCCAGCAGCTTCCA

Note: the restriction sites used for cloning are underlined and shown in bold.

Appendix B. Protein sequences used in construction of phylogenetic tree.

FPSs	Accession number
Withania somnifera FPS	ADR10437.1
Oryza sativa Japonica Group FPS	BAA19856.1
Lilium longiflorum FPS	ADZ57167.1
Chimonanthus praecox FPS	ACJ38671.1
Betula platyphylla FPS	AKQ62666.1
Ornithogalum longebracteatum FPS	AHA51120.1
Pyrus communis FPS	AHH93009.1
Hedychium coccineum FPS	AER12202.1
Dendrobium catenatum FPS	AFX68799.1
Alisma plantagoaquatica FPS	ADR83704.1
Medicago sativa FPS	ADC32809.1
Chlorophytum borivilianum FPS	AIU80188.1
Salvia miltiorrhiza FPS	ADT70780.1
Magnolia chapensis FPS	ACS74708.1
Cyclocarya paliurus FPS	ACY80695.1
Panax notoginseng FPS	AAY53905.1
*Paeonia lactiflor*a FPS	AKJ26301.1
Hevea brasiliensis FPS	AKM12344.1
Sonneratia alba FPS	AGJ71757.1
Plagiochasma appendiculatum FPS	AFM78687.1

Cymbidium goeringii FPS	AFP19446.1
Phlegmariurus carinatus FPS	AFO53558.1
Huperzia serrata FPS	AFO53556.1
Helianthus annuus FPS	AAC78557.1
Humulus lupulus FPS	AAK58594.1
Aquilaria sinensis FPS1	AHG54251.1
Triticum aestivum FPSD2	AGC11812.1
Triticum aestivum FPSB2	AGC11811.1
Triticum aestivum FPSA2	AGC11810.1
Triticum aestivum FPSD1	AGC11809.1
Triticum aestivum FPSB1	AGC11808.1
Triticum aestivum FPSA1	AGC11807.1
Gossypium arboreum FPS1	KHG28027.1
Gossypium arboreum FPS2	KHG22761.1
Zostera marina FPS1	KMZ75599.1
*Zostera marin*a FPS2	KMZ59047.1
Zea mays FPS	AAQ14871.1
Chlamydomonas reinhardtii FPS	EDP03194.1
Aralia elata FPS	ADK12004.1
Astragalus membranaceus FPS	AKC92685.1
Vitis vinifera FPS	NP_001267864.1
Bupleurum chinense FPS	ADL74465.1

Euphorbia pekinensis FPS	ACN63187.1
Eleutherococcus senticosus FPS	AEY77151.1
Catharanthus roseus FPS	ADO95193.1
Bacopa monnieri FPS	ADV03080.1
Centella asiatica FPS	AAV58896.1
Tripterygium wilfordii FPS	AJY53644.1
Gynostemma pentaphyllum FPS	AII72208.1
Leibnitzia anandria FPS	AFW98445.1
Taraxacum mongolicum FPS	AFW98444.1
Tanacetum coccineum FPS	AFW98443.1
Leucanthemum vulgare FPS	AFW98442.1
Chrysanthemum lavandulifolium FPS	AFW98441.1
Achillea asiatica FPS	AFW98440.1
Bos taurus FPS	NP_803463.1
Drosophila melanogaster FPS	NP_477380.1
Pongo abelii FPS	NP_001125620.1
Equus caballus FPS	NP_001296255.1
Mus musculus FPS	AAL09445.1
Danio rerio FPS	NP_001020642.1
Trichinella pseudospiralis FPS	KRY68475.1
Strongyloides ratti FPS	CEF65900.1
Papilio machaon FPS	KPJ18339.1

Defluviitoga tunisiensis FPS	CEP79083.1
Clostridium bornimense FPS	CDM68610.1
Streptomyces argenteolus FPS	BAC66492.1
Rhodobacter capsulatus FPS	ADE44162.1
Escherichia coli FPS	BAA00599.1
Micrococcus luteus FPS	BAA25265.1
Rhodovulum sulfidophilum FPS	BAA96459.1
Rhodobacter sphaeroides FPS	BAA96457.1
Fusarium langsethiae FPS	KPA39997.1
Phialophora attae FPS	KPI36394.1
Madurella mycetomatis FPS	KOP44214.1
Aspergillus lentulus FPS	GAQ08849.1
Blakeslea trispora FPS	AFC92797.1
Termitomyces sp. J132	KNZ79524.1
Trichoderma harzianum FPS	KKP04355.1
Ceratocystis platani FPS	KKF97128.1
Exophiala xenobiotica FPS	KIW57626.1
Exophiala oligosperma FPS	KIW45882.1
Cladophialophora immunda FPS	KIW30036.1
Exophiala spinifera FPS	KIW18083.1
Verruconis gallopava FPS	KIW07049.1
Exophiala sideris FPS	KIV86042.1

Mucor ambiguus FPS	GAN06747.1
Xanthophyllomyces dendrorhous FPS	AIP94027.1
Scedosporium apiospermum FPS	KEZ39894.1
Colletotrichum higginsianum FPS	CCF34730.1
Capronia semiimmersa FPS	KIW68787.1
Exophiala mesophila FPS	KIV91925.1
Lupinus albus FPS	AAA86687.1
Mangifera indica FPS	AFJ53077.1
Rosa rugosa FPS	AKT74339.1
Triticum urartu FPS	EMS61433.1
Artemisia annua FPS	AIC83778.1
Malus domestica FPS	AAM08927.1

Appendix C. SDS-PAGE analysis of recombinant GhFPS1 and GhFPS2.

M: protein molecular weight marker; Lane 1: supernatant of non-induced GhFPS1; Lane 2: supernatant of induced GhFPS1; Lane 3: pellet of induced GhFPS1; Lane 4: supernatant of non-induced GhFPS2; Lane 5: supernatant of induced GhFPS2; Lane 6: pellet of induced GhFPS2. The arrow in figure indicates the location of the target protein.