

**Table S1.** *A. gossypii* strains used in this study.

Strain	Genotype	Source
WT	Wild type (ATCC 10895)	our lab stock
A751	<i>MSN2</i> $\Delta$	our lab stock
A783	<i>P<sub>GPD1</sub>-MSN2</i>	our lab stock
A846	<i>adr304w::loxP-kanMX-loxP-P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; Gt <sup>R</sup>	this work
A848	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i>	“
A855	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::loxP-kanMX-loxP-P<sub>GPD1</sub>-Firefly-T<sub>PGK1</sub></i> ; Gt <sup>R</sup>	“
A947	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>GPD1</sub>-Firefly-T<sub>PGK1</sub></i>	“
A986	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>SED1</sub>-Firefly-T<sub>PGK1</sub></i>	“
A987	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>AGL366C</sub>-Firefly-T<sub>PGK1</sub></i>	“
A988	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>TMA10</sub>-Firefly-T<sub>PGK1</sub></i>	“
A989	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>PFS1</sub>-Firefly-T<sub>PGK1</sub></i>	“
A990	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>HSP26</sub>-Firefly-T<sub>PGK1</sub></i>	“
A991	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>TSA1</sub>-Firefly-T<sub>PGK1</sub></i>	“
A992	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>CWP1</sub>-Firefly-T<sub>PGK1</sub></i>	“
A993	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>CCW121</sub>-Firefly-T<sub>PGK1</sub></i>	“
A997	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>AFR038</sub>-Firefly-T<sub>PGK1</sub></i>	“
A998	<i>adr304w::P<sub>GPD1</sub>-Renilla-T<sub>PGK1</sub></i> ; <i>agl034c::P<sub>CDA2</sub>-Firefly-T<sub>PGK1</sub></i>	“
A1121	<i>P<sub>TSA1</sub>-MSN2</i>	“
A1127	<i>P<sub>SED1</sub>-MSN2</i>	“
A1128	<i>P<sub>AGL366C</sub>-MSN2</i>	“
A1129	<i>P<sub>AFR038W</sub>-MSN2</i>	“