

Expanding the toolbox: another auxotrophic marker for targeted gene integrations in *Trichoderma reesei*

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Additional File 1 - Genotype verification of the constructed strains

Figure S1 Genotype testing of QM6a Δ his1 (*pyrG*+) and QM6a Δ pyr4 Δ his1

Figure S2 Genotype testing of QM6a Δ pyr4 *eyfp* (*his1*)

Figure S3 Genotype testing of QM6a Δ pyr4 Δ his1 Δ asl1

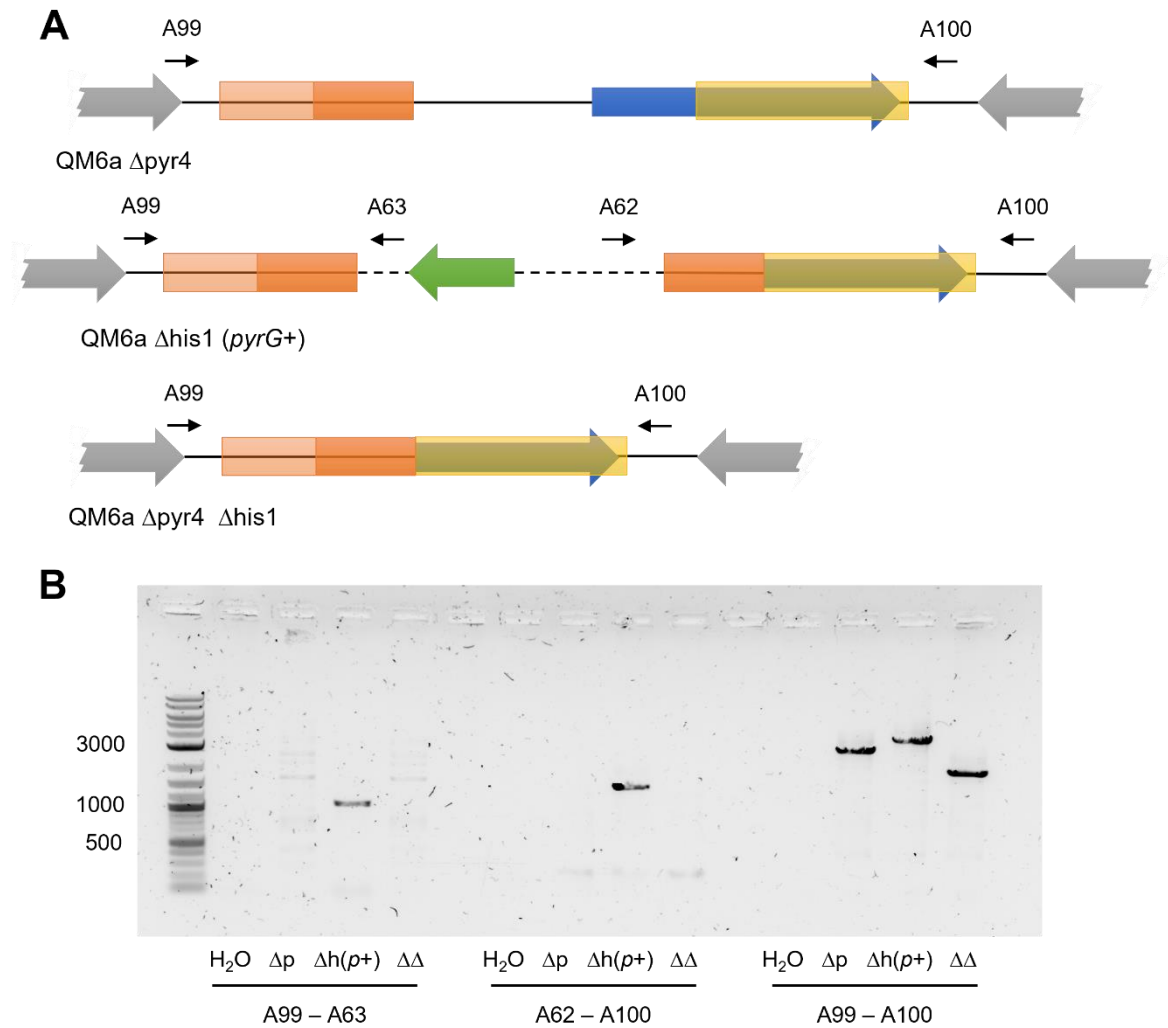


Figure S1 Genotype testing of QM6a Δ his1 (*pyrG*⁺) and QM6a Δ pyr4 Δ his1. Analytical PCR assays were performed targeting the *his1* locus (A) in the strains QM6a Δ pyr4 (Δ p), QM6a Δ his1 (*pyrG*⁺) (Δ (*p*⁺), and QM6a Δ pyr4 Δ his1 ($\Delta\Delta$) using the indicated primers (sequences given in Table 2) and chromosomal DNA of the strains as template. Sterile water (H₂O) was used instead of a template as negative control for each PCR assay. PCR results were visualized on an agarose gel (B) using the 1 kb Plus DNA Ladder (NEB) as standard. Expected sizes for the PCR reactions: A99 – A63, 1042 bp; A62 – A100, 1473 bp; A99 – A100, 3082 bp for Δ p, 3783 bp for (Δ (*p*⁺), 1968 bp for $\Delta\Delta$.

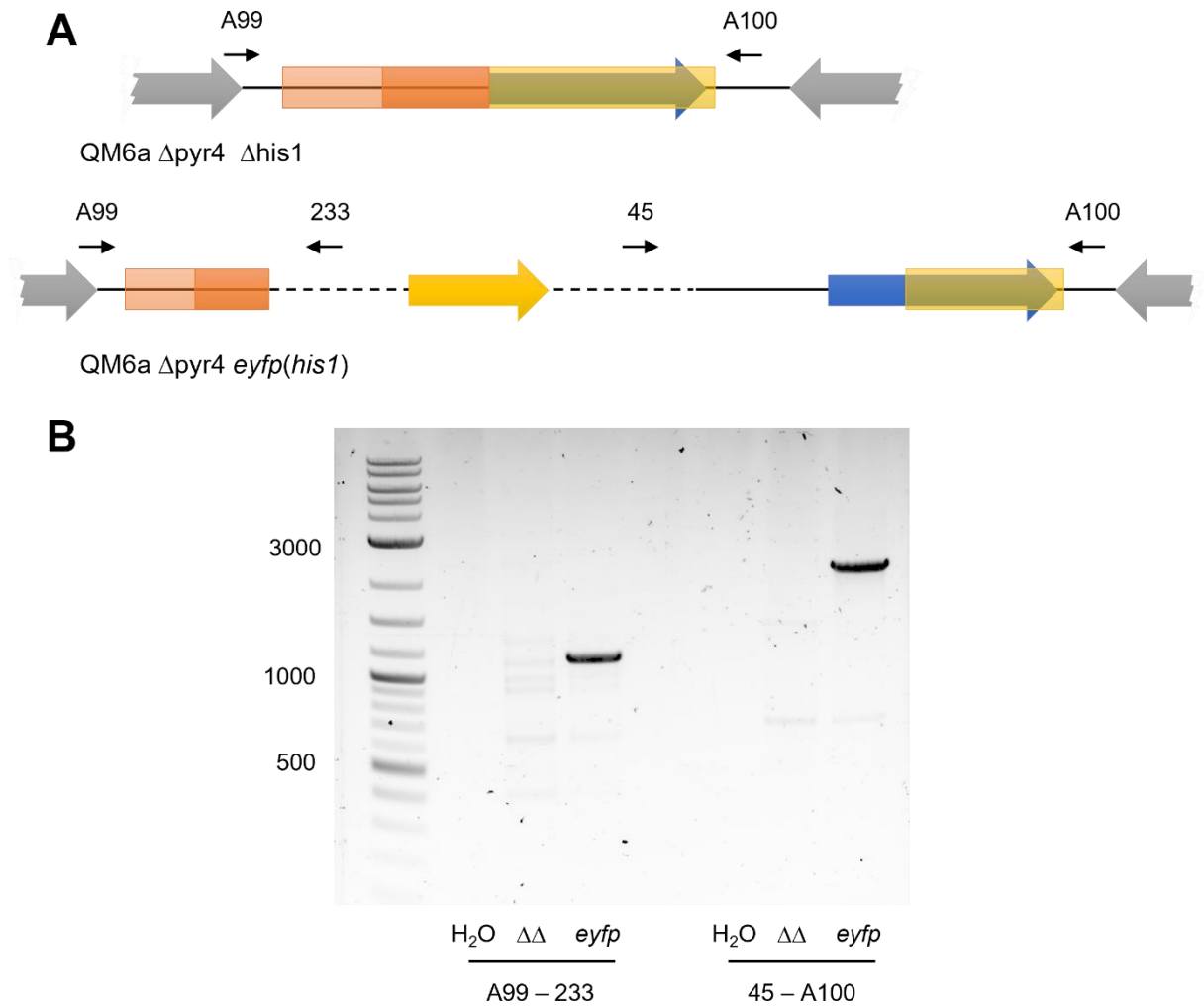


Figure S2 Genotype testing of QM6a Δ pyr4 *eyfp* (*his1*). Analytical PCR assays were performed targeting the *his1* locus (**A**) in the strains QM6a Δ pyr4 Δ his1 ($\Delta\Delta$) and QM6a Δ pyr4 *eyfp* (*his1*) (*eyfp*) using the indicated primers (sequences given in Table 2) and chromosomal DNA of the strains as template. Sterile water (H₂O) was used instead of a template as negative control for each PCR assay. PCR results were visualized on an agarose gel (**B**) using the 1 kb Plus DNA Ladder (NEB) as standard. Expected sizes for the PCR reactions: A99 – 233: 1139 bp; 45 – A100: 2250 bp.

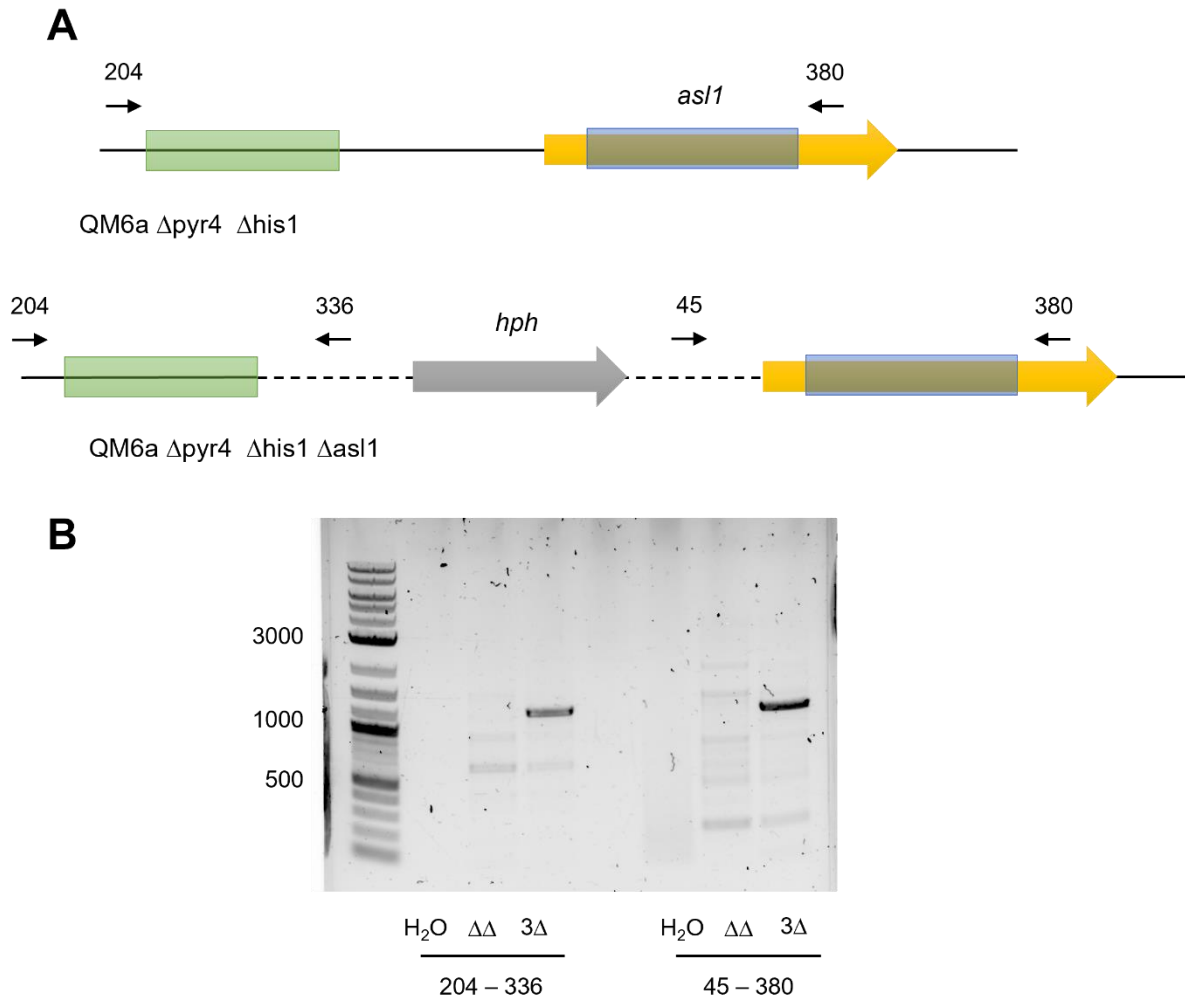


Figure S3 Genotype testing of QM6a Δ pyr4 Δ his1 Δ asl1. Analytical PCR assays were performed targeting the *asl1* locus (**A**) in the strains QM6a Δ pyr4 Δ his1 ($\Delta\Delta$) and QM6a Δ pyr4 Δ his1 Δ asl1 (3 Δ) using the indicated primers (sequences given in Table 2) and chromosomal DNA of the strains as template. Sterile water (H₂O) was used instead of a template as negative control for each PCR assay. PCR results were visualized on an agarose gel (**B**) using the 1 kb Plus DNA Ladder (NEB) as standard. Expected sizes for the PCR reactions: 204 – 336: 1242 bp; 45 – 380: 1208 bp.