

Table S2. Organisms used in this study.

strain	genotype	remarks	reference
<i>Aspergillus niger</i> ATNTΔpyrG	TetOn:terR_ble; pyrG::ptrA	expression platform	[1]
<i>Aspergillus niger</i> tLK01	TetOn:terR_ble; pyrG::ptrA; ΔakuB::hph	expression platform for homologous integration	this study
<i>Aspergillus niger</i> tLK04	TetOn:terR_ble; pyrG::ptrA; ΔakuB::hph; ΔfwnA::PterA:His6:lpaA_pyrG	laetiporic acid production	this study
<i>Aspergillus niger</i> tLK05	TetOn:terR_ble; pyrG::ptrA; ΔakuB::hph; ΔfwnA::PterA:His6:lpaA ^{D1415A} _pyrG	no laetiporic acid production	this study
<i>Aspergillus niger</i> tLK06	TetOn:terR_ble; pyrG::ptrA; ΔfwnA::PterA:His6_pyrG	-	this study
<i>Aspergillus niger</i> tLK07	TetOn:terR_ble; pyrG::ptrA; ΔakuB::hph; ΔfwnA::PterA:His6_pyrG	empty vector control	this study
<i>Aspergillus niger</i> tJMW06	TetOn:terR_ble; pyrG::ptrA; ΔakuB::hph; ΔfwnA::PterA:His6:calA_pyrG	calpinactam production	this study
<i>Mortierella alpina</i> ATCC32222	wildtype	native calpinactam producer	ATCC
<i>Laetiporus sulphureus</i> JMRC:SF:012599	wildtype	native laetiporic acids producer	JMRC [2]

References

1. Geib E, Brock M: **ATNT: an enhanced system for expression of polycistronic secondary metabolite gene clusters in *Aspergillus niger***. *Fungal Biol Biotechnol* 2017, **4**(1):e13
2. Seibold PS, Lenz C, Gressler M, Hoffmeister D: **The *Laetiporus* polyketide synthase LpaA produces a series of antifungal polyenes**. *J Antibiot (Tokyo)* 2020, **73**(10):711-720.