

Table S2. *A. nidulans* strains constructed in reconstituting the *A. terreus* asperfuranone biosynthesis pathway.

Fungal strain or transformant(s)	<i>A. terreus</i> gene transferred into <i>A. nidulans</i> and placed under control of <i>alcA</i> (p)	genotypes
LO7020, LO7021, LO7022	none	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ</i>
LO6751, LO6754	<i>AteafoG, AteafoE</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: AfpYrA</i>
LO6763, LO6764, LO6765, LO6777, LO6778, LO6779	<i>AteafoG, AteafoE, AteafoF</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoF: AfriboB</i>
LO6758, LO6759, LO6760, LO6772, LO6773, LO6774	<i>AteafoG, AteafoE, AteafoD</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoD: AfriboB</i>
LO6767, LO6768, LO6769, LO6782, LO6783, LO6784	<i>AteafoG, AteafoE, AteafoC</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoC: AfriboB</i>
LO7156, LO7157, LO7158, LO7159	<i>AteafoG, AteafoC</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoC: AfpYrA</i>
LO6817, LO6838	<i>AteafoG, AteafoE, AteafoC, AteafoD</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoC: alcA(p)-AteafoD: AfpYrA</i>
LO6853, LO6854	<i>AteafoG, AteafoE, AteafoC, AteafoD, AteafoC</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoC: alcA(p)-AteafoD: alcA(p)-AteafoC: AfriboB</i>
LO6864, LO6865	<i>AteafoG, AteafoE, AteafoC, AteafoD, AteafoF</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoC: alcA(p)-AteafoD: alcA(p)-AteafoF: AfriboB</i>
LO6843, LO6844, LO6848, LO6849	<i>AteafoG, AteafoE, AteafoF, AteafoD, AteafoC</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoF: alcA(p)-AteafoD: alcA(p)-AteafoC: AfriboB</i>
LO6855, LO6856, LO6859, LO6860	<i>AteafoG, AteafoE, AteafoF, AteafoC, AteafoD</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoF: alcA(p)-AteafoC: alcA(p)-AteafoD: AfriboB</i>
LO7160, LO7161, LO7162, LO7163, LO7164	<i>AteafoG, AteafoE, AteafoF, AteafoC, AteafoD, AteafoB</i>	<i>pyrG89; pyroA4; nkuA::argB; riboB2; stcA-WΔ; afoA-GΔ; wA::AfpYrG: alcA(p)-AteafoG: alcA(p)-AteafoE: alcA(p)-AteafoF: alcA(p)-AteafoC: alcA(p)-AteafoD: alcA(p)-AteafoB: AfriboB</i>