Supplemental Figures:

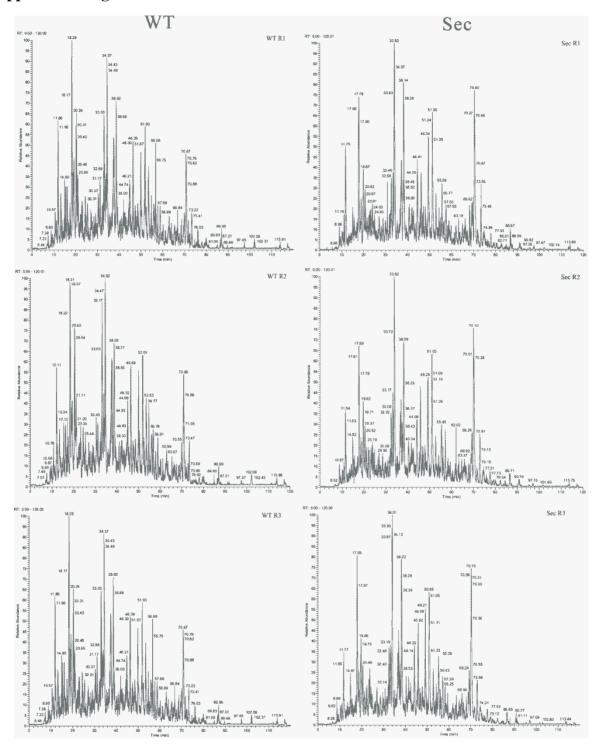


FIG. S1. MS spectra profiles of the mitochondrial proteins isolated from the wild type (WT, left panels) and sector (Sec, right panels) cultures of *A. nidulans*.

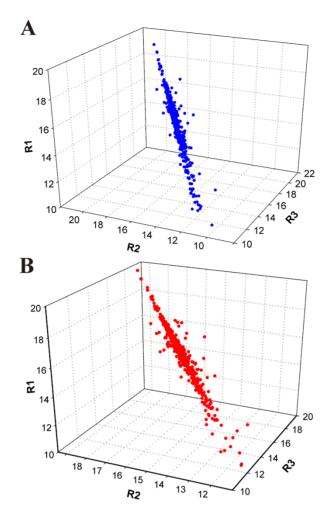


FIG. S2. Regression analysis of technical triplication spectrum data of the wild type (WT) (A) and (Sec) (B) mitochondrial proteins. R1-R3 represent data from repeats 1 to 3.

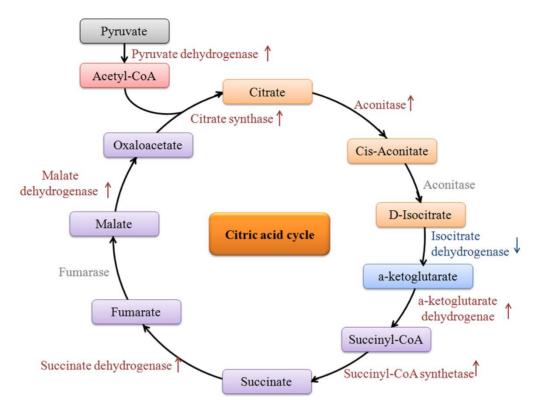


FIG. S3. Schematic representation of up- or down-regulated mitochondrial proteins involved in citric acid cycle in the sector mitochondria when compared to the wild-type.

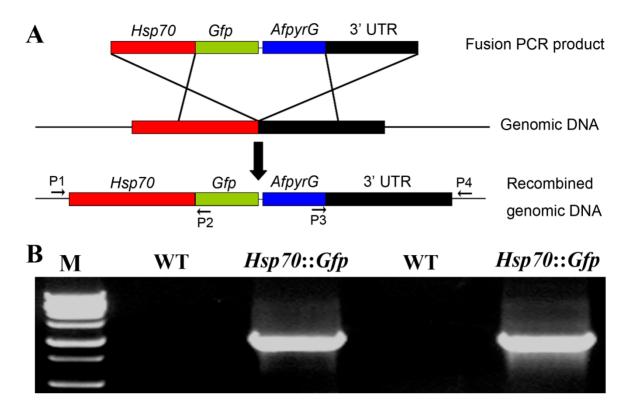


FIG. S4. **Fungal transformation and verification.** *A.* Construction of an *Hsp70*::*Gfp* gene fusion PCR cassette for replacement of endogenous *Hsp70* (AN5129) gene in the wild type (WT) *A. nidulans. B.* PCR verification of the acquired transformants using the primer pairs P1 (CCTGTTTGTCTCTTCTCCCC) and P2 (AACAGCTCCTCGCCCTTGCT) for lanes 1 and 2, and primers P3 (CATCAGTGCCTCCTCTCAGACAGT) and P4 (GACGCCAACTTCTTGGAAAGCT) for lanes 3 and 4, respectively.