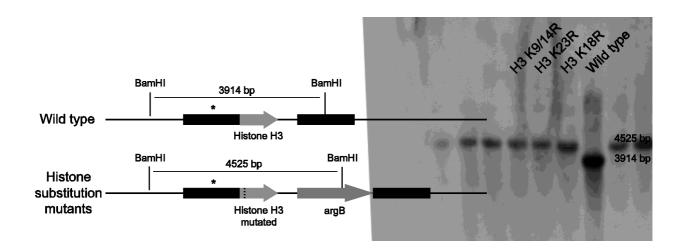
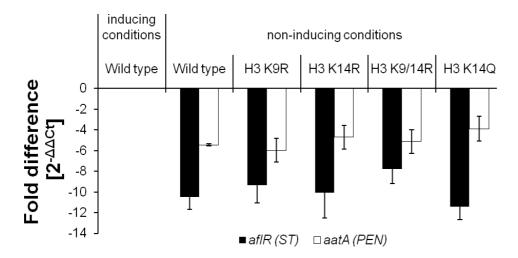
**Supplementary Figure 1.** Generation of strains of histone substitution strains. Schematic representation of genomic arrangements of Wild type and histone substitution strains. Arrows indicate genes, black boxes mark ~1,000-bp-long regions serving for homologous recombination. Restriction sites used for Southern blot analyses are indicated. As probes for Southern blot, the DNA regions marked by a black box with a star were used. Southern blot analyses show the expected restriction patterns for Wild type and histone substitution strains (not all are shown).



**Supplementary Figure 1.** Generation of histone substitution strains.

**Supplementary Figure 2.** Expression of penicillin and sterigmatocystin biosynthesis genes of histone H3 mutant strains under non-inducing conditions. Wild type and histone mutant strains were grown in AMM and mycelia were harvested after 3 h of incubation. As a control, the wild-type strain was grown for 36 h in AMM media for comparison under inducing conditions. Given are fold difference of the mRNA steady-state level of penicillin and sterigmatocystin biosynthesis genes *aatA* and *aflR*. The  $\beta$ -actin gene of *A. nidulans* was used as an internal standard.



**Supplementary Figure 2.** Penicillin and sterigmatocystin biosynthesis cluster genes mRNA steady state level in histone H3 mutant strains under non-inducing conditions.