



**Figure S4: Southern Blot confirming ectopic integration of *hH2Az* gene fragment into *N. crassa***

A) Southern blot of wild type,  $\Delta hH2Az$ , and two ectopic complemented strains ( $\Delta hH2Az + hH2Az^{wt}$ ). Distinct bands in wild type (left arrow) and  $\Delta hH2Az$ . Band corresponding to  $\Delta hH2Az$  and larger band seen in ectopic complemented strains (right arrows).

B) PCR genotyping of endogenous *hH2Az* gene. Amplicon for endogenous locus fragment is 300 bp, deletion mutant band is 700bp. Red arrows indicate complemented strains used in experiments.

C) FLAG western blot displaying the same expression level of 3xFLAG-EED in both  $\Delta eed$  and  $\Delta eed; \Delta hH2Az$  background. 3xFLAG-EED indicated by black arrow (expected size 77.5kD).

D) Growth phenotype on slants for wild type,  $\Delta eed$ ,  $\Delta eed; his-3::Pccg1-3xflag-eed$ ,  $\Delta hH2Az$ ,  $\Delta hH2Az; \Delta eed; his-3::Pccg1-3xflag-eed$ . Strains containing *hH2Az* deletion exhibit poor growth.