

**Additional file 8. RT-PCR validation of novel PA clusters located in intronic or intergenic regions.**

a) A schematic diagram for experimental validation of PA clusters. A junction primer (+, half complementary to the region immediately upstream of PA cleavage site and half complementary to polyA sequence), in together with an upstream gene-specific primer, was used to validate the corresponding polyA site. A control primer (-), which contains only the gene-specific portion of the junction primer, served as a negative control. For an authentic polyA site, the junction primer is expected to produce a specific band, but the control primer fails to do so because of its lower melting temperature ( $T_m$ ). Novel poly(A) sites in 3' UTR (b) and intronic (c) region were validated by a junction primer (+, half complementary to 3' end sequence and half complementary to polyA sequence) together with an upstream primer. The control primer (-) lacks the sequence complementary to poly(A).

