



### Supplemental Figure 1

Mutations in conserved basic residues outside of domain II affect auxin responsiveness of an IAA17(1-111):LUC:NLS protein

IAA17(1-111:K31Q,R32Q):LUC:NLS (QQ) shows a greater reduction in luciferase activity than the wild type IAA17(1-111):LUC:NLS (WT) fusion protein following a 2 hr incubation with the synthetic auxin 5 μM 2,4-D. The samples have statistically distinguishable ratios at a *p* value of 0.05 using a Student's *t*-test. Error bars as in 2B. Data for IAA17(1-111):LUC:NLS from 2 lines, 3 exp; IAA17(1-111:K31Q, R32Q):LUC:NLS from 2 lines, 3 exp.