| | **Genotype used** |
|---|---|
| **Figure 1** | *y, w, UbxFLP ; FRT82Bttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| | *y, w, UbxFLP ; Ase(5)::GFP/+; FRT82 ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| **Figures 2 and 3** | *y, w, UbxFLP ; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| | *y, w, UbxFLP ; neur::GFP; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| **Figure 4** | *y, w, UbxFLP ; cycE$^{AR95/+}$, FRT82Bttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| | *y, w, UbxFLP ; cycE::lacZ-4.6WT/+; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| | *y, w, UbxFLP ; cycE::lacZ-4,6m/+; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| **Figure 5** | *y, w, UbxFLP ; FRT82B ttk$^{le11}$ / TM6* |
| | *y, w, UbxFLP ; cycE::lacZ-D/+; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| | *y, w, UbxFLP ; cycE::lacZ-ΔD/+; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| **Figure 6** | *UAS-His::YFP ; neur$^{p72}$* |
| | *UAS-His::YFP; neur$^{p72}$, tub-Gal80$^{ts}$* |
| | *UAS-His::YFP / UAS-ttk69; neur$^{p72}$, tub-Gal80ts* |
| **Figure 7** | *y, w, UbxFLP ; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| | *y, w, UbxFLP ; FRT40A ham$^{1}$; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |
| **Figure S2** | *cycE-lacZ-4.6* |
| | *cycE-lacZ-4,6m* |
| | *cycE-lacZ-ΔAC* |
| | *cycE-lacZ-ΔB* |
| | *cycE::lacZ-ΔD* |
| | *cycE::lacZ-D* |
| **Figure S3** | *UAS-His::YFP ; neur$^{p72}$, tub-Gal80$^{ts}$* |
| | *UAS-His::YFP ; neur$^{p72}$, tub-Gal80$^{ts}$ / UAS-ham* |
| | *UAS-His::YFP / UAS-HA::seq; neur$^{p72}$, tub-Gal80$^{ts}$* |
| | *y, w, UbxFLP ; FRT40A ham$^{1}$/ FRT40A ubi-nls::GFP* |
| | *y, w, UbxFLP ; FRT42 seq$^{A41}$/ FRT42 ubi-nls::GFP* |
| **Figure S4** | *UAS-Mep1GL00319; UAS-His::YFP; neur$^{p72}$* |
| | *UAS-Mep124534; UAS-His::YFP; neur$^{p72}$* |
| | *UAS-His::YFP; neur$^{p72}$ / UAS- trlGL00699* |
| | *UAS-His::YFP; neur$^{p72}$/ UAS-trlHMS02188* |
| | *UAS-Mi-2$^{RNAi}$ / UAS-His::YFP; neur$^{p72}$* |
| | *UAS-Mi-2$^{RNAi}$ / UAS-His::YFP; neur$^{p72}$/ FRT82B ttk$^{le11}$* |
| **Movies S1** | *neur::GFP* |
| **Movies S2 and S3** | *y, w, UbxFLP ; neur::GFP; FRT82B ttk$^{le11}$ / FRT82B ubi-nls::GFP* |

**Table S1. Fly genotypes.** Fly genotypes used in each figure.