

Description of Additional Supplementary Files

Supplementary Movie 1: Tkv-GFP presents as puncta in ISCs upon *Ecc15* infection, related to Figure 1. Flies with ISCs overexpressing Tkv-GFP (*esgG4*, *Su(H)GBEG80*, *tubG80^{ts}*, green) for 6 days were orally fed with *Ecc15* for 20 hours before dissection and imaged *ex vivo* at 30s intervals for 45mins. Timelapse indicated as minutes:seconds.

Supplementary Movie 2: Dynamics of Tkv-GFP puncta and lysosomes in wildtype ISCs under homeostatic conditions, related to Figure 3 and Supplementary Figure 4. ISCs overexpressing Tkv-GFP (*esgG4*, *Su(H)GBEG80*, *tubG80^{ts}*, green) for 7 days were imaged *ex vivo* at 30s intervals for 30mins. Lysosomes were indicated by LysoTracker staining (red). Timelapse indicated as minutes: seconds.

Supplementary Movie 3: Dynamics of Tkv-GFP puncta and lysosomes in *awd^{OE}* ISCs under homeostatic conditions, related to Figure 3 and Supplementary Figure 4. Flies with ISCs co-expressing *awd^{OE}* and Tkv-GFP (*esgG4*, *Su(H)GBEG80*, *tubG80^{ts}*, green) for 7 days were imaged *ex vivo* at 30s intervals for 30mins. Lysosomes were indicated by LysoTracker staining (red). Timelapse indicated as minutes: seconds.

Supplementary Movie 4: Dynamics of Tkv-GFP puncta and lysosomes in wildtype ISCs upon *Ecc15* infection, related to Figure 3 and Supplementary Figure 4. Flies with ISCs overexpressing Tkv-GFP (*esgG4*, *Su(H)GBEG80*, *tubG80^{ts}*, green) for 6 days were orally fed with *Ecc15* for 20 hours before dissection and imaged *ex vivo* at 30s intervals for 30mins. Lysosomes were indicated by LysoTracker staining (red). Timelapse indicated as minutes: seconds.

Supplementary Movie 5: Dynamics of Tkv-GFP puncta and lysosomes in *awd*^{OE} upon *Ecc15* infection, related to Supplementary Figure 4. Flies with ISCs co-expressing *awd*^{OE} and Tkv-GFP (*esgG4*, *Su(H)GBEG80*, *tubG80^{ts}*, green) for 6 days were orally fed with *Ecc15* for 20 hours before dissection and imaged *ex vivo* at 30s intervals for 30mins. Lysosomes were indicated by LysoTracker staining (red). Timelapse indicated as minutes: seconds.

Supplementary Movie 6: Dynamics of Tkv-GFP puncta and lysosomes in *awd*^{RNAi} upon *Ecc15* infection, related to Figure 3 and Supplementary Figure 4. Flies with ISCs co-expressing *awd*^{RNAi} and Tkv-GFP (*esgG4*, *Su(H)GBEG80*, *tubG80^{ts}*, green) for 6 days were orally fed with *Ecc15* for 20 hours before dissection and imaged *ex vivo* at 30s intervals for 30mins. Lysosomes were indicated by LysoTracker staining (red). Timelapse indicated as minutes: seconds.