**S3 Table. Genotypes of the flies used in this study**

| Name and properties | Abbreviated fly genotypes | Genotypes of parents* |
|---|---|---|
| Control (for RNAi experiment) | *phm22 > dicer2* | *w; UAS-dicer2; phantom$^{22}$-Gal4* |
| | | *y v;; attP2* |
| RNAi against genes of interest | *phm22 > dicer2, RNAi* | *w; UAS-dicer2; phantom$^{22}$-Gal4* |
| | | *UAS-RNAi*** |
| *Fzr* RNAi +InR$^{CA}$ | *phm22 > dicer2, Fzr RNAi, InR.A1325D* | *w; UAS-dicer2; phantom$^{22}$-Gal4* |
| | | *w; UAS-Fzr RNAi UAS-InR.A1325D* |
| Control | *phm22 > +* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$* |
| TOR$^{DN}$ | *phm22 > TOR.TED* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$; UAS-TOR.TED* |
| Control +GFP | *phm22 > mCD8::GFP* | *w$^{1118}$;; phantom$^{22}$-Gal4 UAS-mCD8::GFP* |
| | | *w$^{1118}$* |
| TOR$^{DN}$ +GFP | *phm22 > mCD8::GFP, TOR.TED* | *w$^{1118}$;; phantom$^{22}$-Gal4 UAS-mCD8::GFP* |
| | | *w$^{1118}$; UAS-TOR.TED* |
| TOR$^{DN}$ +CycE-1 | *phm22 > TOR.TED, CycE-1* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$; UAS-TOR.TED UAS-CycE-1* |
| TOR$^{DN}$ +S6k$^{TE}$ | *phm22 > TOR.TED, S6k.TE* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$; UAS-TOR.TED UAS-S6k.TE* |
| TOR$^{DN}$ +CycE-1 +GFP | *phm22 > mCD8::GFP, TOR.TED, CycE-1* | *w$^{1118}$;; phantom$^{22}$-Gal4 UAS-mCD8::GFP* |
| | | *w$^{1118}$; UAS-TOR.TED UAS-CycE-1* |
| TOR$^{DN}$ +S6k$^{TE}$ +GFP | *phm22 > mCD8::GFP, TOR.TED, S6k.TE* | *w$^{1118}$;; phantom$^{22}$-Gal4 UAS-mCD8::GFP* |
| | | *w$^{1118}$; UAS-TOR.TED UAS-S6k.TE* |
| Control (for temperature-shift experiment) | *tub-Gal80$^{ts}$ phm22 > +* | *w$^{1118}$;; phantom$^{22}$-Gal4 tub-Gal80$^{ts}$* |
| | | *w$^{1118}$* |
| TOR$^{DN}$ +tub-Gal80$^{ts}$ | *tub-Gal80$^{ts}$ phm22 > TOR.TED* | *w$^{1118}$;; phantom$^{22}$-Gal4 tub-Gal80$^{ts}$* |
| | | *w$^{1118}$; UAS-TOR.TED* |
| RagA$^{DN}$ | *phm22 > RagA.T16N* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$; UAS-RagA.T16N* |
| InR$^{DN}$ | *phm22 > InR.K1409A* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$;; UAS-InR.K1409A* |
| InR$^{CA}$ | *phm22 > InR.A1325D* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$; UAS-InR.A1325D* |
| InR$^{CA}$ +TOR$^{DN}$ | *phm22 > InR.A1325D, TOR.TED* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *w$^{1118}$; UAS-InR.A1325D UAS-TOR.TED* |
| InR$^{CA}$ +Gal80$^{ts}$ | *tub-Gal80$^{ts}$ phm22 > InR.A1325D* | *w$^{1118}$;; phantom$^{22}$-Gal4 tub-Gal80$^{ts}$* |
| | | *w$^{1118}$; UAS-InR.A1325D* |
| Control (for epistasis analysis between *InR* and *Rheb*/*raptor*) | *phm22 > +* | *w$^{1118}$;; phantom$^{22}$-Gal4* |
| | | *y v;; attP2* |
| InR$^{CA}$ (for epistasis analysis between *InR* and *Rheb*/*raptor*) | *phm22 > InR.A1325D* | *w$^{1118}$; UAS-InR.A1325D; phantom$^{22}$-Gal4/TM6B tub-Gal80* |
| | | *y v;; attP2* |
| InR$^{CA}$ +RNAi (for epistasis analysis between *InR* and *Rheb*/*raptor*) | *phm22 > InR.A1325D, RNAi* | *w$^{1118}$; UAS-InR.A1325D; phantom$^{22}$-Gal4/TM6B tub-Gal80* |
| | | *UAS-RNAi*** |
| * Flies with *w$^{1118}$* were backcrossed with *w$^{1118}$* (BDSC #5905) three times. | | |
| ** see S1 Table. | | |