

Table S1: Full genotypes in figures

Fig. 1C		Genotype (driver: HS-GAL4, BL2077)	Includes	
LDS-(G4C2) _{CTRL} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ , <i>UAS-LDS-(G4C2)</i> _{4,9,12} ^{GR-GFP} / <i>w</i> *; <i>GAL4-Hsp70/+</i> ;		
LDS-(G4C2) _{EXP} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ / <i>w</i> *; <i>GAL4-Hsp70/+</i> ; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} /+		
Fig. 1D and Sup. Fig. 1		Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
LDS-(G4C2) _{CTRL} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ , <i>UAS-LDS-(G4C2)</i> _{4,9,12} ^{GR-GFP} / <i>w</i> ¹¹¹⁸ ;; <i>GMR-GAL4</i> ^{YH3} /+	UAS-DSRED	26 °C
LDS-(G4C2) _{EXP} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ ;; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} / <i>GMR-GAL4</i> ^{YH3}		26 °C
GFP CTRL		<i>w</i> ¹¹¹⁸ ;; <i>UAS-GFP.NLS/GMR-GAL4</i> ^{YH3}	BDSC #4776	26 °C
Neg CTRL		<i>w</i> ¹¹¹⁸ ;; <i>GMR-GAL4</i> ^{YH3} /+		26 °C
Fig. 1E		Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
Positive Control		<i>w</i> ¹¹¹⁸ / <i>Y</i> ; <i>UAS-DSRED/+</i> ; <i>GMR-GAL4</i> ^{YH3} /+	UAS-DSRED	26 °C
LDS-(G4C2) _{CTRL} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ , <i>UAS-LDS-(G4C2)</i> _{4,9,12} ^{GR-GFP} / <i>Y</i> ; ;; <i>GMR-GAL4</i> ^{YH3} /+		26 °C
LDS-(G4C2) _{EXP} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ / <i>Y</i> ; ;; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} / <i>GMR-GAL4</i> ^{YH3}		26 °C
Fig. 1F		Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
DSRED		<i>w</i> ¹¹¹⁸ / <i>Y</i> ; <i>UAS-DSRED/+</i> ; <i>GMR-GAL4</i> ^{YH3} /+	UAS-DSRED	26 °C
LDS-(G4C2) _{CTRL} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ , <i>UAS-LDS-(G4C2)</i> _{4,9,12} ^{GR-GFP} / <i>Y</i> ; ;; <i>GMR-GAL4</i> ^{YH3} /+		26 °C
LDS-(G4C2) _{EXP} ^{GR-GFP}		<i>w</i> ¹¹¹⁸ / <i>Y</i> ; ;; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} / <i>GMR-GAL4</i> ^{YH3}		26 °C
Fig. 2A - external eye toxicity		Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ eIF4B RNAi		<i>w</i> ¹¹¹⁸ / <i>Y</i> ; <i>UAS-eIF4B RNAi</i> ^{HMS04503} /+; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} , <i>GMR-GAL4</i> ^{YH3} /+	BDSC #57305	26 °C
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ Control RNAi		<i>w</i> ¹¹¹⁸ / <i>Y</i> ; ;; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} , <i>GMR-GAL4</i> ^{YH3} / <i>UAS-Luc RNAi</i> ^{JF01355}	BDSC #31603	26 °C
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ eIF3B RNAi		<i>w</i> ¹¹¹⁸ / <i>Y</i> ; ;; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} , <i>GMR-GAL4</i> ^{YH3} / <i>UAS-eIF3B RNAi</i> ^{HMS00668}	BDSC #32880	26 °C
(GR) ₃₆ w/ eIF4G1 RNAi		<i>w</i> ¹¹¹⁸ / <i>y</i> ¹ , <i>sc</i> *, <i>v</i> ¹ ; <i>UAS-(GR)</i> ₃₆ /+; <i>GMR-GAL4</i> ^{YH3} / <i>UAS-eIF4G1 RNAi</i> ^{HMS00762}	BDSC #33049	24 °C
(GR) ₃₆ w/ Control RNAi		<i>w</i> ¹¹¹⁸ / <i>y</i> ¹ , <i>v</i> ¹ ; <i>UAS-(GR)</i> ₃₆ /+; <i>GMR-GAL4</i> ^{YH3} / <i>UAS-Luc RNAi</i> ^{JF01355}	BDSC #31603	24 °C
(GR) ₃₆ w/ eIF4B RNAi		<i>w</i> ¹¹¹⁸ / <i>y</i> ¹ , <i>sc</i> *, <i>v</i> ¹ ; <i>UAS-(GR)</i> ₃₆ / <i>UAS-eIF4B RNAi</i> ^{HMS04503} ; <i>GMR-GAL4</i> ^{YH3} /+	BDSC #57305	24 °C
Fig. 2A - external eye GR-GFP		Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ eIF4B RNAi		<i>w</i> ¹¹¹⁸ / <i>y</i> ¹ , <i>sc</i> *, <i>v</i> ¹ ; <i>UAS-eIF4B RNAi</i> ^{HMS04503} /+; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} , <i>GMR-GAL4</i> ^{YH3} /+	BDSC #57305	26 °C
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ Control RNAi		<i>w</i> ¹¹¹⁸ / <i>y</i> ¹ , <i>v</i> ¹ ;; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} , <i>GMR-GAL4</i> ^{YH3} / <i>UAS-Luc RNAi</i> ^{JF01355}	BDSC #31603	26 °C
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ eIF3B RNAi		<i>w</i> ¹¹¹⁸ / <i>y</i> ¹ , <i>sc</i> *, <i>v</i> ¹ ;; <i>UAS-LDS-(G4C2)</i> _{4,42,44} ^{GR-GFP} , <i>GMR-GAL4</i> ^{YH3} / <i>UAS-eIF3B RNAi</i> ^{HMS00668}	BDSC #32880	26 °C
Fig. 3A		Genotype (driver: Da-GAL4, III)	Includes	Temp

Control RNAi	$w^{1118}/Y;; UAS-Luc RNAi^{JF01355}/Da-GAL4$	BDSC #31603	26°C
eIF4B RNAi	$w^{1118}/Y; UAS-eIF4B RNAi^{HMS04503}/+; Da-GAL4/+$	BDSC #57305	26°C
eIF4H1 RNAi	$w^{1118}/Y; UAS-eIF4H1 RNAi^{HMS04504}/+; Da-GAL4/+$	BDSC #57306	26°C
Fig. 3B	Genotype (driver: Da-GAL4, III)	Includes	Temp
progeny with eIF4B RNAi	$UAS-eIF4B RNAi^{HMS04503}/+; Da-GAL4/+$	BDSC #57305	26°C
progeny without eIF4B RNAi	$CyO/+; Da-GAL4/+$		26°C
progeny with eIF4H1 RNAi	$UAS-eIF4B RNAi^{HMS04504}/+; Da-GAL4/+$	BDSC #57306	26°C
progeny without eIF4H1 RNAi	$CyO/+; Da-GAL4/+$		26°C
Fig. 4A-B and 5A-B	Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ Control RNAi	$w^{1118}/Y;; UAS-LDS-(G4C2)_{4,42,44}^{GR-GFP}, GMR-GAL4^{YH3}/UAS-Luc RNAi^{JF01355}$	BDSC #31603	26°C
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ eIF4B RNAi	$w^{1118}/Y; UAS-eIF4B RNAi^{HMS04503}/+; UAS-LDS-(G4C2)_{4,42,44}^{GR-GFP}, GMR-GAL4^{YH3}/+$	BDSC #57305	26°C
LDS-(G4C2) _{EXP} ^{GR-GFP} w/ eIF4H1 RNAi	$w^{1118}/Y; UAS-eIF4H1 RNAi^{HMS04504}/+; UAS-LDS-(G4C2)_{4,42,44}^{GR-GFP}, GMR-GAL4^{YH3}/+$	BDSC #57306	26°C
Fig. 4C-D	Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
(GR) ₃₆ w/ Control RNAi	$w^{1118}/y^1, v^1; UAS-(GR)_{36}/+; GMR-GAL4^{YH3}/UAS-Luc RNAi^{JF01355}$	BDSC #31603	24°C
(GR) ₃₆ w/ eIF4B RNAi	$w^{1118}/y^1, sc^*, v^1; UAS-(GR)_{36}/UAS-eIF4B RNAi^{HMS04503}; GMR-GAL4^{YH3}/+$	BDSC #57305	24°C
(GR) ₃₆ w/ eIF4B RNAi	$w^{1118}/y^1, sc^*, v^1; UAS-(GR)_{36}/UAS-eIF4B RNAi^{HMS04504}; GMR-GAL4^{YH3}/+$	BDSC #57306	24°C
Fig. 4E-F	Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
Control RNAi	$w^{1118}/Y;; GMR-GAL4^{YH3}/UAS-Luc RNAi^{JF01355}$	BDSC #31603	26°C
eIF4B RNAi	$w^{1118}/Y; UAS-eIF4B RNAi^{HMS04503}/+; GMR-GAL4^{YH3}/+$	BDSC #57305	26°C
eIF4H1 RNAi	$w^{1118}/Y; UAS-eIF4H1 RNAi^{HMS04504}/+; GMR-GAL4^{YH3}/+$	BDSC #57306	26°C
Fig. 5C-D	Genotype (driver: GMR-GAL4 ¹¹⁰⁴)	Includes	Temp
DsRed w/ Control RNAi	$w^{1118}/Y; UAS-DsRed, GMR-GAL4/+; UAS-Luc RNAi^{JF01355}/+$	BDSC #31603	26°C
DsRed w/ eIF4B RNAi	$w^{1118}/Y, v^1; UAS-DsRed, GMR-GAL4/UAS-eIF4B RNAi^{HMS04503};$	BDSC #57305	26°C
DsRed w/ eIF4B RNAi	$w^{1118}/Y; UAS-DsRed, GMR-GAL4/UAS-eIF4B RNAi^{HMS04504};$	BDSC #57306	26°C
Fig. 5E	Genotype (driver: GMR-GAL4 ¹¹⁰⁴)	Includes	Temp
LacZ w/ Control RNAi	$w^{1118}/Y; UAS-LacZ, GMR-GAL4/+; UAS-Luc RNAi^{JF01355}/+$	BDSC #31603	26°C
LacZ w/ eIF4B RNAi	$w^{1118}/Y, v^1; UAS-LacZ, GMR-GAL4/UAS-eIF4B RNAi^{HMS04503};$	BDSC #57305	26°C
LacZ w/ eIF4B RNAi	$w^{1118}/Y; UAS-LacZ, GMR-GAL4/UAS-eIF4B RNAi^{HMS04504};$	BDSC #57306	26°C
Sup. Fig. 2	Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
Control RNAi	$w^{1118}/Y;; UAS-LDS-(G4C2)_{4,42,44}^{GR-GFP}, GMR-GAL4^{YH3}/UAS-Luc RNAi^{JF01355}$	BDSC #31603	26°C

eIF5B RNAi	<i>w</i> ¹¹¹⁸ /Y;; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /UAS-eIF5B RNAi ^{GL01593}	BDSC #57305	26 °C
eIF5 RNAi	<i>w</i> ¹¹¹⁸ /Y;; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /UAS-eIF5 RNAi ^{HMS00159}	BDSC #34841	26 °C
eIF2β RNAi	<i>w</i> ¹¹¹⁸ /Y;; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /UAS-eIF2β RNAi ^{HMC02396}	BDSC #53268	26 °C
eIF2Bα RNAi	<i>w</i> ¹¹¹⁸ /Y; UAS-eIF2Bα RNAi ^{HMC03768} /+; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /+	BDSC #55624	26 °C
eIF3g1 RNAi	<i>w</i> ¹¹¹⁸ /Y;; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /UAS-eIF3g1 RNAi ^{GLC01430}	BDSC #43243	26 °C
eEFSec RNAi	<i>w</i> ¹¹¹⁸ /Y;; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /UAS-eIF3g1 RNAi ^{GL01178}	BDSC #42805	26 °C
Sup. Fig. 3A	Genotype (driver: Da-GAL4, III)	Includes	Temp
<i>w</i> ¹¹¹⁸	<i>w</i> ¹¹¹⁸ /Y;; Da-GAL4/+		26 °C
eIF4B RNAi-2	<i>w</i> ¹¹¹⁸ /Y; UAS-eIF4B RNAi ³³⁰⁰¹⁰ /+; Da-GAL4/+	VDRC #330010	26 °C
eIF4H1 RNAi-2	<i>w</i> ¹¹¹⁸ /Y; UAS-eIF4H1 RNAi ¹⁰⁸⁸⁰⁵ /+; Da-GAL4/+	VDRC #100817	26 °C
Sup Fig. 3B-E	Genotype (driver: GMR-GAL4 ^{YH3})	Includes	Temp
Control RNAi	<i>w</i> ¹¹¹⁸ /Y;; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /UAS-Luc RNAi ^{JF01355}	BDSC #31603	26 °C
eIF4B RNAi-2	<i>w</i> ¹¹¹⁸ /Y; UAS-eIF4B RNAi ³³⁰⁰¹⁰ /+; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /+	VDRC #330010	26 °C
eIF4H1 RNAi-2	<i>w</i> ¹¹¹⁸ /Y; UAS-eIF4H1 RNAi ¹⁰⁸⁸⁰⁵ /+; UAS-LDS-(G4C2) _{4,42,44} ^{GR-GFP} , GMR-GAL4 ^{YH3} /+	VDRC #100817	26 °C
Sup. Fig. 3F	Genotype (driver: GMR-GAL4 ¹¹⁰⁴)	Includes	Temp
LacZ w/ Control	<i>w</i> ¹¹¹⁸ /Y; UAS-LacZ, GMR-GAL4/UAS-DSRED;	UAS-DSRED	26 °C
LacZ w/ eIF4B RNAi-2	<i>w</i> ¹¹¹⁸ /Y, v ¹ ; UAS-LacZ, GMR-GAL4/UAS-eIF4B RNAi ³³⁰⁰¹⁰ ;	VDRC #330010	26 °C
LacZ w/ eIF4B RNAi-2	<i>w</i> ¹¹¹⁸ /Y; UAS-LacZ, GMR-GAL4/UAS-eIF4B RNAi ¹⁰⁸⁸⁰⁵⁷ ;	VDRC #100817	26 °C