

**Table S2: Original data related to Fig. 1, Fig. 2, Fig. 3, Fig. 4 and Fig. 5**

<b>Fig. 1b</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	<b>Condition</b>
<i>w<sup>1118</sup></i>	0.42	0.06	26	Vehicle
<i>w<sup>1118</sup></i>	0.33	0.07	28	5mM 5HTP
<i>w<sup>1118</sup></i>	0.14	0.08	30	45mM 5HTP
<b>Fig. 1d</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	
<i>w<sup>1118</sup>; Tph-GAL4</i>	0.49	0.08	33	
<i>w<sup>1118</sup>; UAS-Sert<sup>DN</sup>-GFP</i>	0.51	0.05	28	
<i>w<sup>1118</sup>; Tph-GAL4, UAS-Sert<sup>DN</sup></i>	0.21	0.05	35	
<b>Fig. 1f</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	
<i>w<sup>1118</sup>; Tph-GAL4</i>	0.49	0.05	28	
<i>w<sup>1118</sup>; UAS-Sert<sup>DN</sup></i>	0.50	0.04	35	
<i>w<sup>1118</sup>; Tph-GAL4, UAS-Sert<sup>DN</sup></i>	0.20	0.05	32	
<b>Fig. 2d</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	
<i>w<sup>1118</sup>; Sert3-GAL4</i>	0.52	0.06	27	
<i>w<sup>1118</sup>; UAS-Sert<sup>DN</sup></i>	0.53	0.05	15	
<i>w<sup>1118</sup>; Sert3-GAL4, UAS-Sert<sup>DN</sup></i>	0.22	0.06	21	
<b>Fig. 3b</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	<b>Condition</b>
<i>NorpA1; Sert3-GAL4; UAS-ChR2</i>	-0.02	0.12	25	Vehicle
<i>NorpA1; Sert3-GAL4; UAS-ChR2</i>	-0.12	0.10	26	Retinal
<b>Fig. 3c</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	<b>Condition</b>
<i>NorpA1; Sert3-GAL4; UAS-ChR2</i>	0.21	0,06	30	Vehicle
<i>NorpA1; Sert3-GAL4; UAS-ChR2</i>	-0.09	0,06	30	Retinal
<b>Fig. 4a</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	
<i>w<sup>1118</sup>; ; Trh-GAL4</i>	0.49	0.04	30	

$w^{1118}; UAS-Sert^{DN}$	0.35	0.06	31	
$w^{1118}; UAS-Sert^{DN}; Trh-GAL4$	0.33	0.05	31	
<b>Fig. 4b</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	
$w^{1118}; Sert3-GAL4; Trh-GAL4$	0.52	0.07	32	
$w^{1118}; UAS-Sert^{DN}$	0.54	0.08	32	
$w^{1118}; Sert3-GAL4, UAS-Sert^{DN}; Trh-GAL4$	0.60	0.09	31	
<b>Fig. 4c</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	
$w^{1118}; Sert3-GAL4; RN2-GAL4$	0.57	0.11	29	
$w^{1118}; UAS-Sert^{DN}$	0.58	0.05	33	
$w^{1118}; Sert3-GAL4, UAS-Sert^{DN}; RN2-GAL4$	0.58	0.12	20	
<b>Fig. 4d</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	
$w^{1118}; ;RN2-GAL4$	0.33	0.07	45	
$w^{1118}; UAS-Sert^{DN}$	0.24	0.07	58	
$w^{1118}; UAS-Sert^{DN}; RN2-GAL4$	0.40	0.07	50	
<b>Fig. 5a</b>				
<b>Genotype</b>	<b>Mean</b>	<b>SEM</b>	<b>N</b>	<b>Conditions</b>
$w^{1118}; ;RN2-GAL4$	0.06	0.07	28	1% EtOH
$w^{1118}; UAS-Sert^{DN}$	0.05	0.08	27	
$w^{1118}; UAS-Sert^{DN}; RN2-GAL4$	0.04	0.08	26	
$w^{1118}; ;RN2-GAL4$	0.33	0.07	25	3% EtOH
$w^{1118}; UAS-Sert^{DN}$	0.22	0.08	25	
$w^{1118}; UAS-Sert^{DN}; RN2-GAL4$	0.20	0.08	20	
$w^{1118}; ;RN2-GAL4$	0.29	0.06	32	5% EtOH
$w^{1118}; UAS-Sert^{DN}$	0.32	0.07	26	
$w^{1118}; UAS-Sert^{DN}; RN2-GAL4$	0.22	0.08	27	
$w^{1118}; ;RN2-GAL4$	0.27	0.06	34	10% EtOH
$w^{1118}; UAS-Sert^{DN}$	0.26	0.05	33	
$w^{1118}; UAS-Sert^{DN}; RN2-GAL4$	0.44	0.06	34	

$w^{118}; ;RN2-GAL4$	0.02	0.05	31	15% EtOH
$w^{118}; UAS-Sert^{DN}$	0.06	0.05	32	
$w^{118}; UAS-Sert^{DN}; RN2-GAL4$	0.21	0.05	33	
$w^{118}; ;RN2-GAL4$	-0.27	0.07	25	23% EtOH
$w^{118}; UAS-Sert^{DN}$	-0.28	0.06	23	
$w^{118}; UAS-Sert^{DN}; RN2-GAL4$	-0.02	0.07	22	