

**Supplementary data**

**TABLE 1**

Age	Substantia Nigra		
	WT	<i>En1</i> <sup>+/-</sup>	% of survival ( <i>En1</i> <sup>+/-</sup> vs WT)
<b>3</b>	17320 <sup>+/-</sup> 653	16810 <sup>+/-</sup> 500	<b>97</b> <sup>+/-</sup> 2.9
<b>8</b>	21275 <sup>+/-</sup> 832	17025 <sup>+/-</sup> 485	<b>80</b> <sup>+/-</sup> 2.3
<b>16</b>	17286 <sup>+/-</sup> 422	12840 <sup>+/-</sup> 440	<b>74</b> <sup>+/-</sup> 2.5
<b>24</b>	20373 <sup>+/-</sup> 1364	12873 <sup>+/-</sup> 1648	<b>63</b> <sup>+/-</sup> 8.1
<b>48</b>	23146 <sup>+/-</sup> 622	14220 <sup>+/-</sup> 1026	<b>61</b> <sup>+/-</sup> 4.4
	Ventral Tegmental Area		
	WT	<i>En1</i> <sup>+/-</sup>	% of survival ( <i>En1</i> <sup>+/-</sup> vs WT)
<b>3</b>	9473 <sup>+/-</sup> 711	9873 <sup>+/-</sup> 475	<b>104</b> <sup>+/-</sup> 3.2
<b>48</b>	11986 <sup>+/-</sup> 715	9120 <sup>+/-</sup> 386	<b>76</b> <sup>+/-</sup> 5.0
	All neurons in Substantia Nigra		
	WT	<i>En1</i> <sup>+/-</sup>	% of survival ( <i>En1</i> <sup>+/-</sup> vs WT)
<b>3</b>	29740 <sup>+/-</sup> 1280	27600 <sup>+/-</sup> 2200	<b>94</b> <sup>+/-</sup> 7.4
<b>48</b>	36080 <sup>+/-</sup> 666	22806 <sup>+/-</sup> 1702	<b>63</b> <sup>+/-</sup> 4.7

**FIGURE S1**

Elevated plus-maze test

This test is based on the natural aversion of rodents for open spaces and heights. The elevated-plus-maze was made of grey Plexiglas and consisted of two opposite open arms (25 cm x 5 cm) and two opposite closed arms (25 cm x 5 cm) enclosed by 15 cm high walls and arranged at right angles. The arms extended from a common central platform (5 cm x 5 cm) that gave access to all arms. The maze was elevated 41 cm above the floor under dispersed light conditions. Entries into open arms and time spent in these arms measure animal anxiety (Pellow et al., 1985). Number of entries, distance, and total time spent in the open and closed arms as well as in the central area were measured for 5 minute using a video-tracking system (Smart, Bioseb, France). Data were analyzed using the Student t-test.

## Results

Figure S1 illustrates the absence of differences in the percentage of time spent in, and the number of entry into, the open arms between WT and *En1*<sup>+/-</sup> mice [ $t_{17}=0.5$ , NS and  $t_{17}=0.3$ ; NS; respectively]. Thus, *En1*<sup>+/-</sup> mice demonstrate normal anxiety levels in locomotor activity as well as elevated plus maze paradigms.