

**Table S1.** Total BrdU+, Ki-67+, DCX+, CHOP+, and caspase-12+ cells in the DG of the hippocampus following acute deltamethrin exposure in mice.

Cell Type	Control	Salubrinal	Deltamethrin	Salubrinal + Deltamethrin
BrdU+ cells	183	177	81*	150 <sup>#</sup>
Ki-67+ cells	245	240	147*	218 <sup>#</sup>
DCX+ cells	1130	1147	775*	1017 <sup>#</sup>
CHOP+/BrdU+ cells	15	13	56*	22 <sup>#</sup>
CHOP+/Ki67+ cells	14	12	60*	24 <sup>#</sup>
Casp 12+/BrdU+ cells	15	12	66*	30 <sup>#</sup>
Casp 12+/Ki67+ cells	16	15	69*	27 <sup>#</sup>

Total BrdU+, Ki-67+, DCX+, and CHOP+ cells were visualized through immunofluorescence. Positive cells in the subgranular zone (SGZ) for BrdU and Ki-67, and in the SGZ and granule cell layer (GCL) for DCX, were manually counted at high magnification (40×) using an All-in-One Fluorescence Microscope (BZ-X810, Keyence Corporation, Itasca, IL). Positive cell quantification was performed on 12 sections per animal with 5 animals in each group. The group mean was obtained by averaging the total counts from these sections. Statistical comparisons were made using two-way ANOVA with Bonferroni's post hoc test. An asterisk (\*) indicates a significant difference from the control group and a hashtag (#) indicates a significant difference from deltamethrin when compared with the deltamethrin + salubrinal group (BrdU+ cells:  $F_{3,12} = 7.29$ ;  $p < 0.048$ ; Ki-67+ cells:  $F_{3,16} = 3.77$ ;  $p < 0.032$ ; DCX+ cells:  $F_{3,16} = 3.67$ ;  $p < 0.035$ ; CHOP+/BrdU+:  $F_{3,12} = 16.85$ ;  $p < 0.001$ ; CHOP+/Ki-67+ cells:  $F_{3,12} = 11.99$ ;  $p < 0.005$ ; Caspase 12+/BrdU+ cells:  $F_{3,12} = 10.20$ ;  $p < 0.001$ ; Caspase 12+/Ki67+ cells:  $F_{3,12} = 34.96$ ;  $p < 0.001$ ).

**Table S2.** Total BrdU+, Ki-67+, DCX+ and CHOP+ cells in the DG of the hippocampus of caspase-12 KO mice following acute exposure to deltamethrin.

Cell Type	WT Cont	Caspase 12 KO Cont	WT Del	Caspase 12 KO + Del
BrdU+ cells	171	167	93*	153 <sup>#</sup>
Ki-67+ cells	255	287	112*	206 <sup>#</sup>
DCX+ cells	1209	1231	486*	891 <sup>#</sup>
CHOP+/BrdU+ cells	12	9	56*	22 <sup>#</sup>
CHOP+/Ki67+ cells	11	10	62*	30 <sup>#</sup>

Total BrdU+, Ki-67+, DCX+, and CHOP+ cells were visualized through immunofluorescence. Positive cells in the subgranular zone (SGZ) for BrdU and Ki-67, and in the SGZ and granule cell layer (GCL) for DCX, were manually counted at high magnification (40×) using an All-in-One Fluorescence Microscope (BZ-X810, Keyence Corporation, Itasca, IL). Positive cell quantification was performed on 12 sections per animal with 5 animals in each group. The group mean was obtained by averaging the total counts from these sections. Statistical comparisons were made using two-way ANOVA with Bonferroni's post hoc test. An asterisk (\*) indicates a significant difference from the control group and a hashtag (#) indicates a significant difference from deltamethrin when compared with the deltamethrin + salubrinal group (BrdU+ cells:  $F_{3,12} = 8.81$ ;  $p < 0.0023$ ; Ki-67+ cells:  $F_{3,16} = 4.92$ ;  $p < 0.01$ ; DCX+ cells:  $F_{3,16} = 8.13$ ;  $p < 0.002$ ; CHOP+/BrdU+ cells:  $F_{3,12} = 18.21$ ;  $p < 0.001$ ; CHOP+/Ki67+ cells:  $F_{3,12} = 16.01$ ;  $p < 0.002$ ).