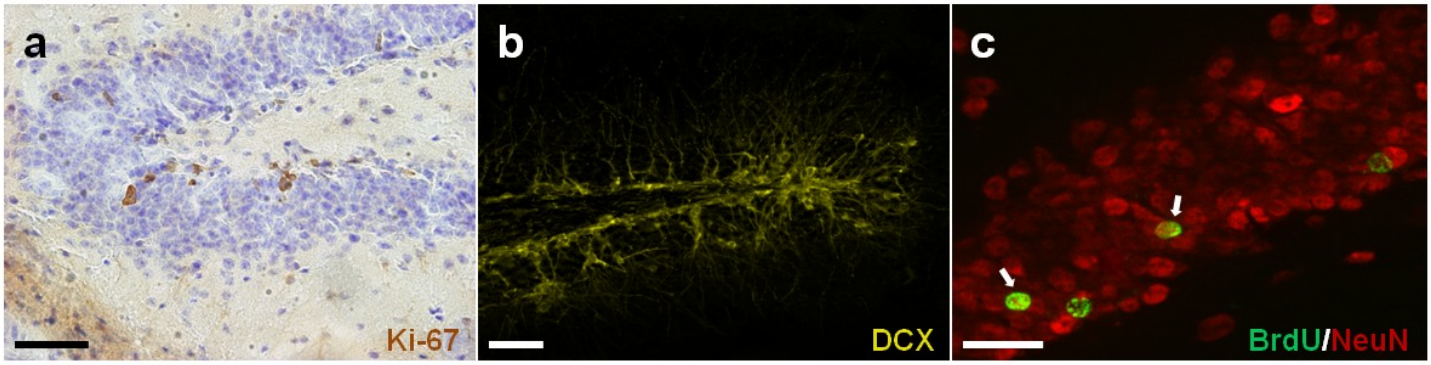
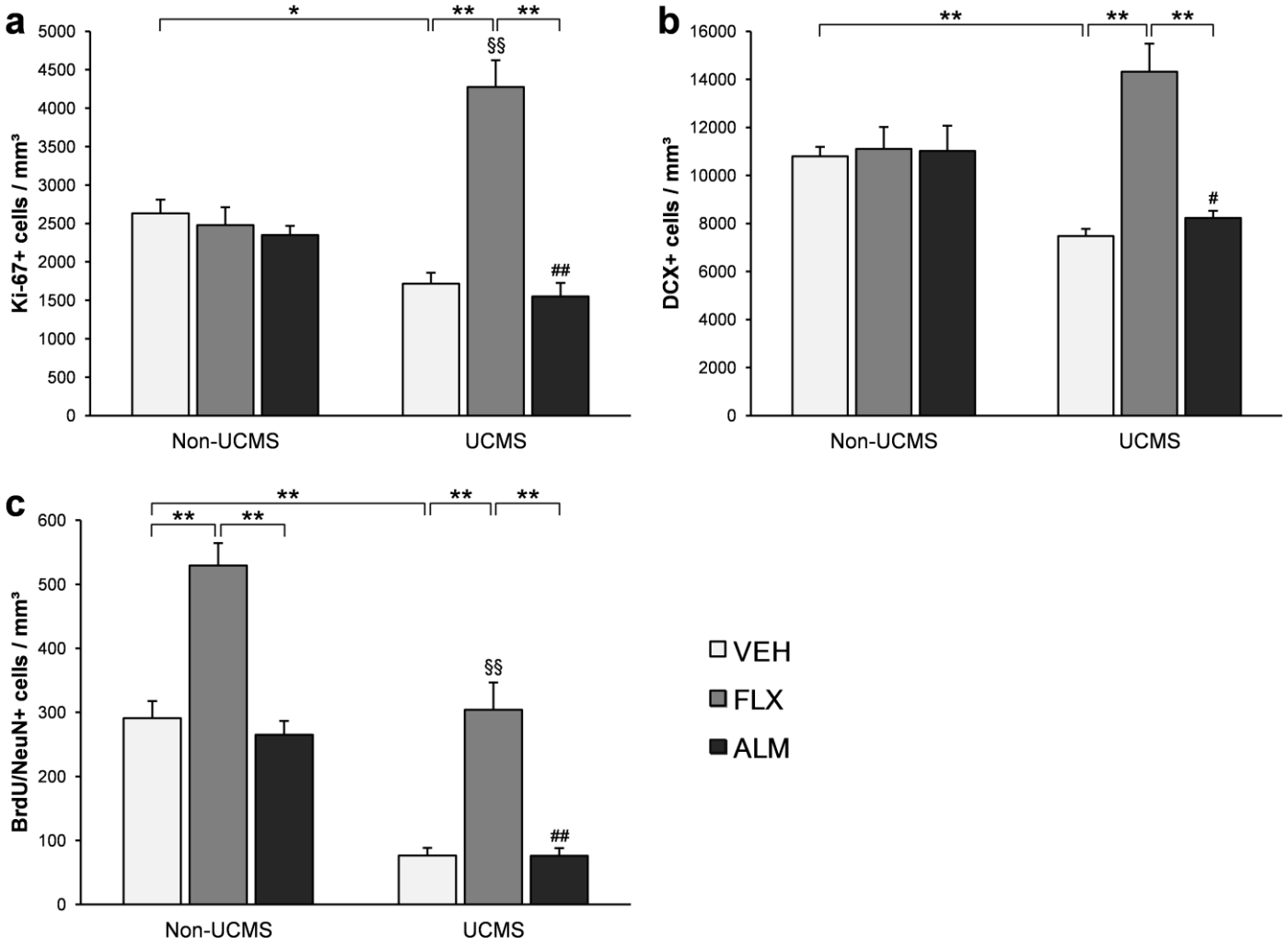
Supplementary Figures



Supplementary Figure 1 Examples of immunohistochemical analyses performed in this study. Cellular proliferation (a) was measured using Ki-67 protein marker (in brown) in the presence of cresyl violet staining (magnification bar, 50 µm). Immature newborn neurons (b) were quantified using DCX marker (in yellow) (magnification bar, 50 µm). Neuronal survival (c) was assessed by immunohistochemical staining to detect BrdU-positive cells (in green) and NeuN-positive neurons (in red) in the granule cell layer. Colocalization of BrdU with NeuN (white arrow indicate BrdU/NeuN-positive cell) allows to detect newborn mature neurons (4 weeks old) (magnification bar, 25 µm).



Supplementary Figure 2 Effects of the unpredictable chronic mild stress (UCMS) and 7-week treatment with fluoxetine (FLX, 20 mg/kg/day, *per os* (p.o.)) or almorexant (ALM, 100 mg/kg/day, p.o.) on the cell proliferation, generation of immature and mature neurons in the intermediate part of the hippocampus assessed by the number of Ki-67-, DCX- and BrdU/NeuN-positive cells per mm^3 of the granular cell layer (GCL), respectively. (a) The UCMS induced a decrease of cell proliferation (non-UCMS/VEH group *vs* UCMS/VEH group), while treatment with FLX counteracted this reduction (UCMS/VEH group *vs* UCMS/FLX group). No effect of ALM was noticed in UCMS mice (UCMS/FLX group *vs* UCMS/ALM group). Furthermore, significant differences were observed between non-UCMS/FLX group *vs* §UCMS/FLX group and between non-UCMS/ALM group *vs* $^{\#}$UCMS/ALM group. (b) The UCMS induced a decrease of immature neurons genesis (non-UCMS/VEH group *vs* UCMS/VEH group), while treatment with FLX counteracted this reduction (UCMS/VEH group *vs* UCMS/FLX group) without effect of ALM in UCMS mice (UCMS/FLX group *vs* UCMS/ALM group). A significant difference was also seen between non-UCMS/ALM group *vs* $^{\#}$UCMS/ALM group. (c) The UCMS decreased the amount of mature newborn neurons (non-UCMS/VEH group *vs* UCMS/VEH group), whereas FLX treatment reversed this alteration (UCMS/VEH group *vs* UCMS/FLX group). No effect of ALM was observed (UCMS/FLX group *vs* UCMS/ALM group). FLX increased the proportion of mature neurons in non-UCMS mice (non-UCMS/FLX group *vs* non-UCMS/VEH or non-UCMS/ALM groups, and non-UCMS/FLX group *vs* §UCMS/FLX group). A significant difference was also seen between non-UCMS/ALM group *vs* $^{\#}$UCMS/ALM group. Data represent mean ± SEM; one symbol $p < 0.05$, two symbols $p < 0.01$; $n = 8$ mice/group.