

Antidepressants inhibit cancer growth in mice

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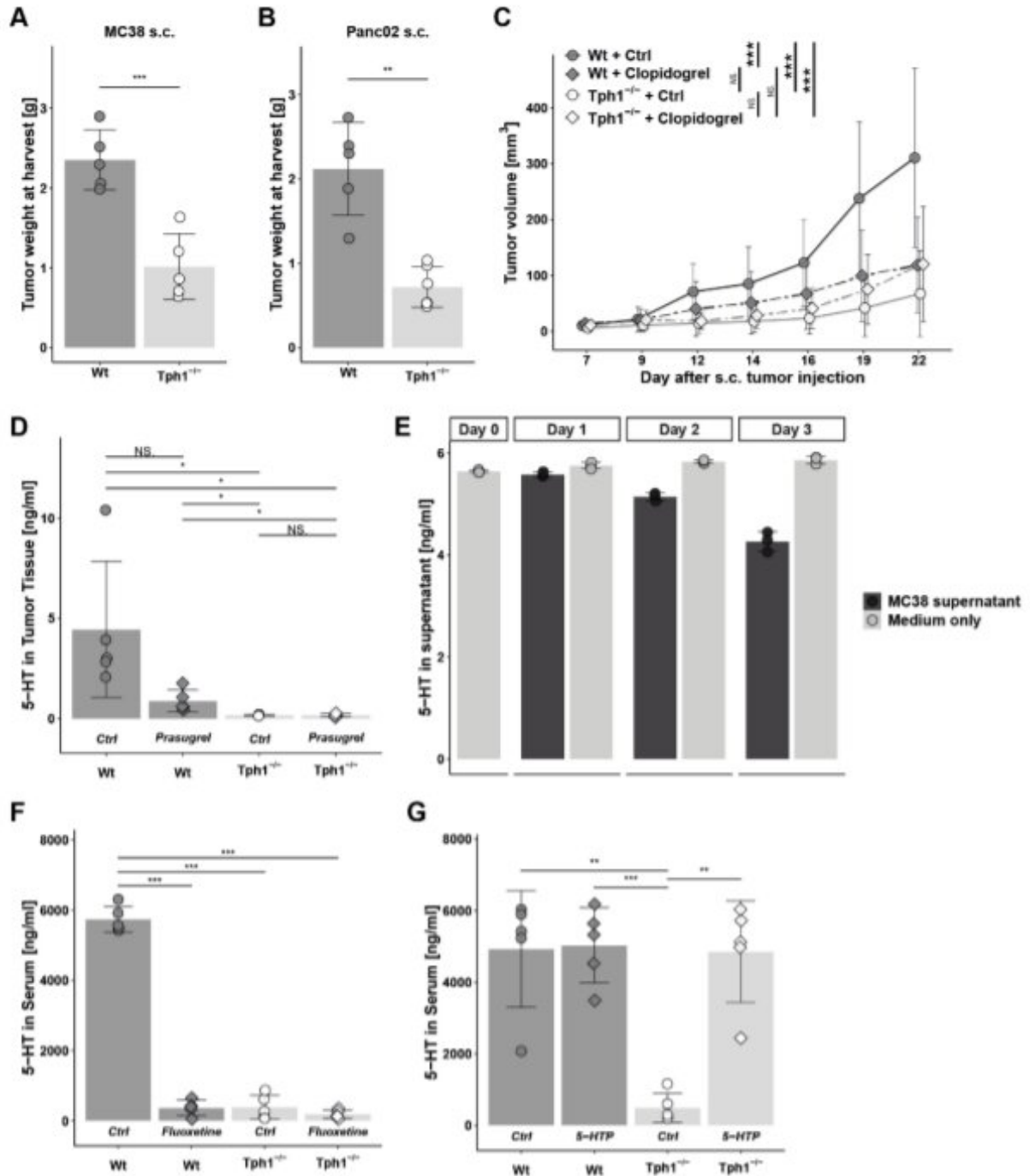


Fig. S1. Syngeneic murine tumor cell growth & efficacy of serotonin depletion and reconstitution therapies in Wt and Tph1^{-/-} mice. (A and B) Tumor weight at the end of the experiment after s.c. injection of syngeneic murine 5*10⁵ MC38 (day 28) and 1*10⁶ Panc02 cell lines (day 35) in Wt and Tph1^{-/-} C57BL/6 mice, respectively (mean±SD, unpaired t-test, n=5 mice/group). (C) Tumor growth

after s.c. injection of 5×10^5 syngeneic murine MC38 cell lines in Wt and Tph1^{-/-} mice and blockade of platelet activation by clopidogrel (20mg/kg over drinking water starting 7d before tumor injections and continued until harvest, mean \pm SD, linear mixed effect model with Holm correction for multiple comparison, n=5 mice/group, N=1). (D) Intratumoral serotonin concentrations measured by ELISA in control or prasugrel (3mg/kg over drinking water starting 7 days before tumor injections and continued until day 28) treated Wt and Tph1^{-/-} mice at day 28 after s.c. injection of 5×10^5 syngeneic MC38 cells (mean \pm SD, Kruskal Wallis test with Holm correction for multiple comparison, n=5 mice/group). (E) Serotonin measurement in the supernatant of in vitro cultivated MC38 cell lines up to 72 hours (serum free medium). Pure medium shown as control (mean \pm SD, N=1). (F) Serum serotonin concentrations measured by ELISA in control or fluoxetine (20mg/kg over drinking water starting 7 days before tumor injections and continued until harvest) treated Wt and Tph1^{-/-} mice at day 26 after s.c. injection of 5×10^5 syngeneic MC38 cells (mean \pm SD, 1-way ANOVA with post-hoc Tukey's multiple comparison test, n=5 mice/group). (G) Serum serotonin concentrations measured by ELISA in control or serotonin precursor 5- hydroxytryptamine (5-HTP, 100mg/kg over drinking water starting 3 days before tumor injections and continued until harvest) treated Wt and Tph1^{-/-} mice at day 26 after s.c. injection of 5×10^5 syngeneic MC38 cells (mean \pm SD, 1-way ANOVA with post-hoc Tukey's multiple comparison test, n=5 mice/group). * = P

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