



**Supplemental Figure 1** Immunohistochemistry shows retrograde labeling of ChAT+ cholinergic neurons in the septum (A–D) and 5HT+ serotonergic neurons in the raphe nucleus (E–H) 5–7 days after injection of fluorogold into the dentate gyrus. Scale bars: A, 200  $\mu\text{m}$ ; B–D, 50  $\mu\text{m}$ ; E, 100  $\mu\text{m}$  and F–H, 25  $\mu\text{m}$ . Abbreviations: 5-HT, 5-hydroxytryptamine; ChAT, choline acetyltransferase; FG, fluorogold.