**Supplementary Figure 2**

Induction of Fos in the dentate gyrus neurons following water maze training and testing

**Figure 2.** Fos is upregulated in dentate gyrus neurons following water maze training and testing. The percentage of NeuN+ cells expressing Fos was similar in the training and probe test groups. These levels were significantly higher than in home cage (HC) control mice and much lower than in mice treated with the chemical convulsant, pentylenetetrazol (PTZ), indicating that water maze training and testing selectively upregulates Fos.