

#### Duke File (IDF) Number

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IDF #:T-002700

#### Meet the Inventors

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Neurobiology

## GAD67-GFP mice

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This line of transgenic mice expresses GFP in newly generated dentate granule cells in the hippocampus, the most prominent site of adult neurogenesis. Adult neurogenesis has been shown to play important roles in learning, memory and mood disorders. Recent studies also showed that the effectiveness of antidepressant drugs depends on adult neurogenesis. In these transgenic mice, cell bodies, dendrites, axons and nerve terminals of all newborn neurons in the dentate gyrus of the hippocampus are brightly labeled, making them an ideal tool for studying adult neurogenesis in vivo. These mice can be used to screen for compounds that promote neurogenesis, as well as to screen for chemicals and toxins that adversely affect adult neurogenesis.

