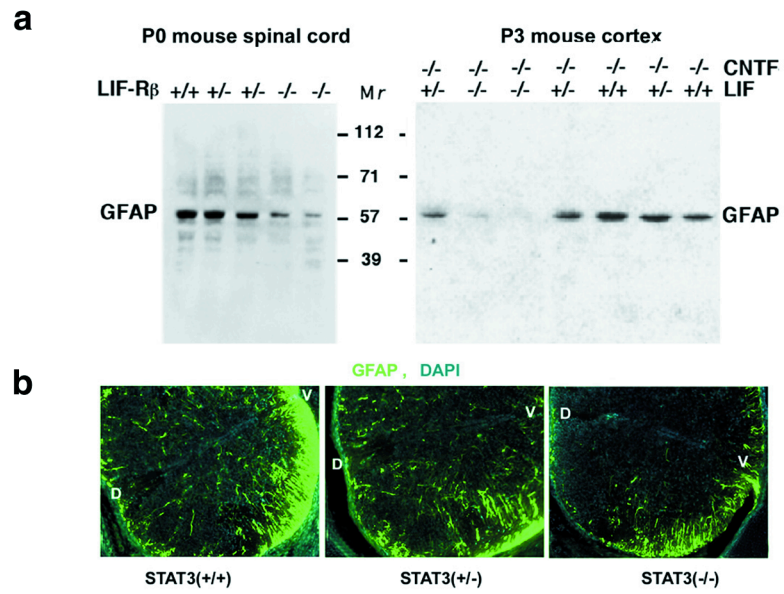
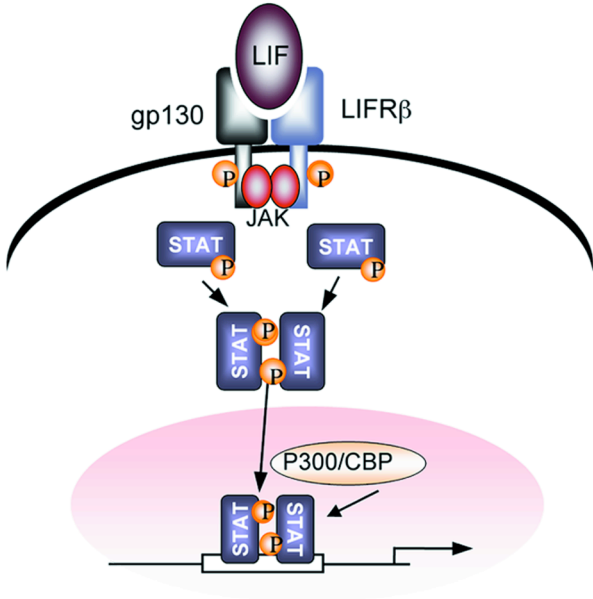


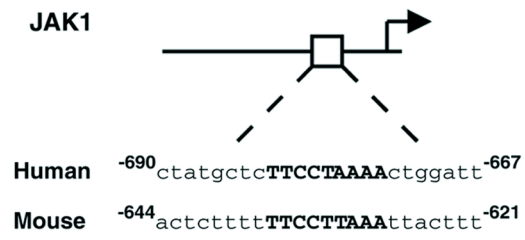
Supplementary Figure 1



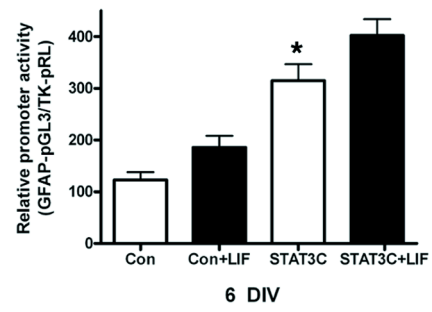
Supplementary Figure 2



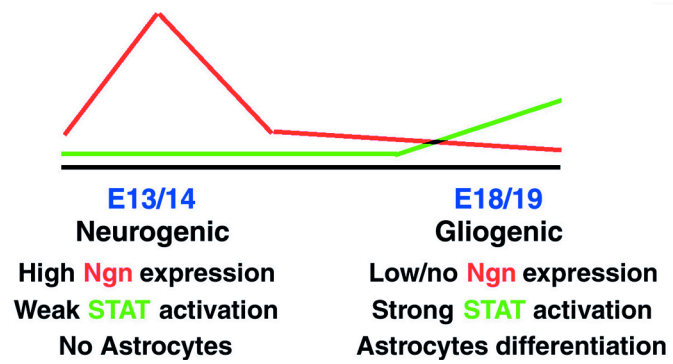
Supplementary Figure 3



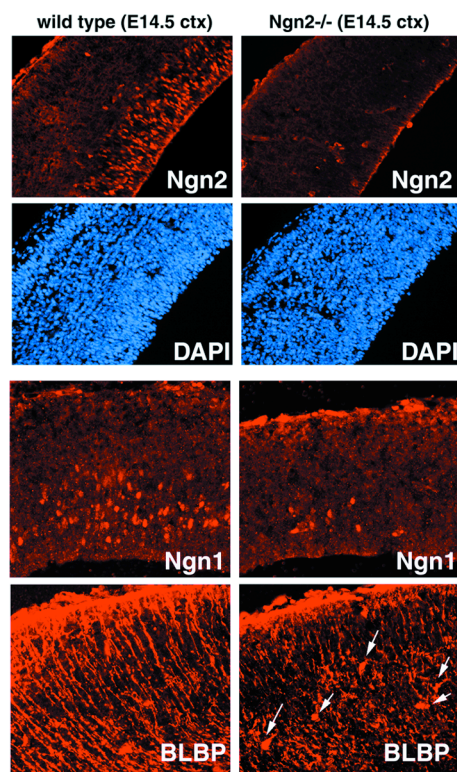
Supplementary Figure 4



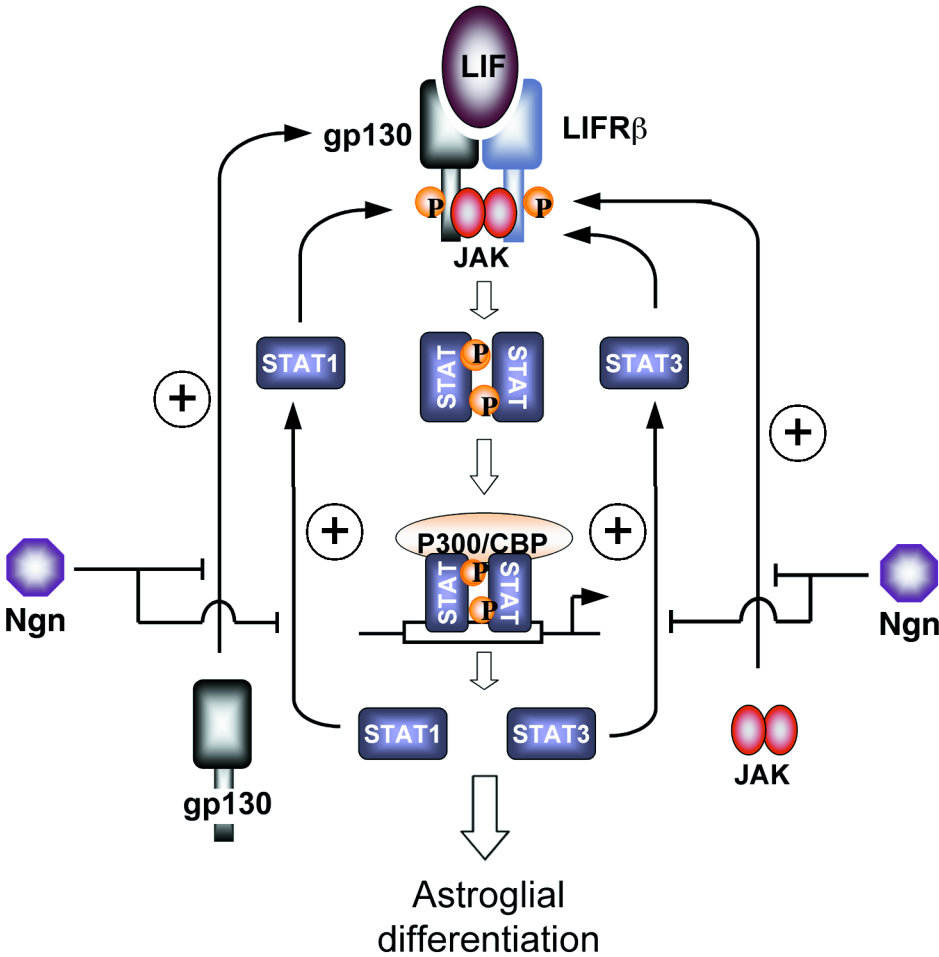
Supplementary Figure 5



Supplementary Figure 6



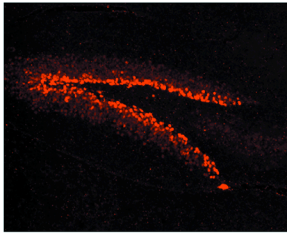
Supplementary Figure 7



Supplementary Figure 8

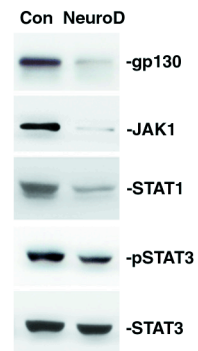
a

NeuroD



Adult mouse hippocampal
dentate gyrus

b



SUPPLEMENTARY METHODS

Immunohistochemistry. The embryonic brains were removed from the skull, fixed in 4% paraformaldehyde (PFA) in PBS overnight at 4 °C. All brains were cryoprotected with 20% sucrose for 24 h, embedded in O.C.T., frozen with liquid nitrogen, cut in the coronal or sagittal plane on a cryostat at 10 μ m, and then mounted onto Superfrost (plus) slides. After rinsing with PBS, sections were kept in blocking buffer (2% normal donkey serum and 0.16% Triton X-100 in PBS) and were incubated overnight at 4°C with primary antibodies. The following antibodies were used: rabbit anti-Ngn1 (gift from J.E. Johnson), rabbit anti-Ngn2 (gift from D. Anderson), rabbit anti-BLBP (gift from N. Heintz) and goat anti-NeuroD (N-19, Santa Cruz).

Primers. PCR was performed using the primers synthesized by IDT as follows:

gp130: forward: 5'-GCA GCA GGT TTC AGA TCA CA-3'
reverse: 5'-TCA GGA GCC AGT CCT TCA CT-3'

JAK1: forward: 5'-GAG GAC TGC AAT GCC ATG GCG TTC-3'
reverse: 5'-TCG CCA TAC AGA CTG TTC GTT GTC-3'

STAT1: forward: 5'-CAT GTG AGT GGG AAG AAA ACA A-3'
reverse: 5'-AAC CGA TAA GTT CAG CCC ACT A-3'

STAT3: forward: 5'-GTG TCA GAT CAC ATG GGC TAA A-3'
reverse: 5'-AGA CAA GTG GAG ACA CCA GGA T-3'

GFAP: forward: 5'-TTT CTC CTT GTC TCG AAT GA-3'
reverse: 5'-GGT TTC ATC TTG GAG CTT CT-3'

S100 : forward: 5'-GGT TGC CCT CAT TGA TGT CT-3'
reverse: 5'-GTC CAG CGT CTC CAT CAC TT-3'

GAPDH: forward: 5'-ACC ACA GTC CAT GCC ATC AC-3'
reverse: 5'-TCC ACC ACC CTG TTG CTG GA-3'