

Supplementary Information

Disruption of polyubiquitin gene *Ubb* causes dysregulation of neural stem cell differentiation with premature gliogenesis

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Figure S1. Expression levels of various genes in embryonic brains on 14.5 dpc.

(a) *Nes*, *Fox3* (*NeuN*), and *Gfap* mRNA levels in wild-type (*Ubb*^{+/+}) and *Ubb*^{-/-} embryonic brains ($n = 3$ each) on 14.5 dpc were determined by qRT-PCR and normalized to *Gapdh* levels. mRNA levels are expressed as a fold increase relative to wild-type levels. (b) *Notch1*, *Hes5*, and *Hey1* mRNA levels were determined in a similar manner as in (a). (c) *Neurog1* mRNA levels were determined in a similar manner as in (a). All data are expressed as the means \pm SEM from the indicated number of samples. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$ vs. *Ubb*^{+/+}.

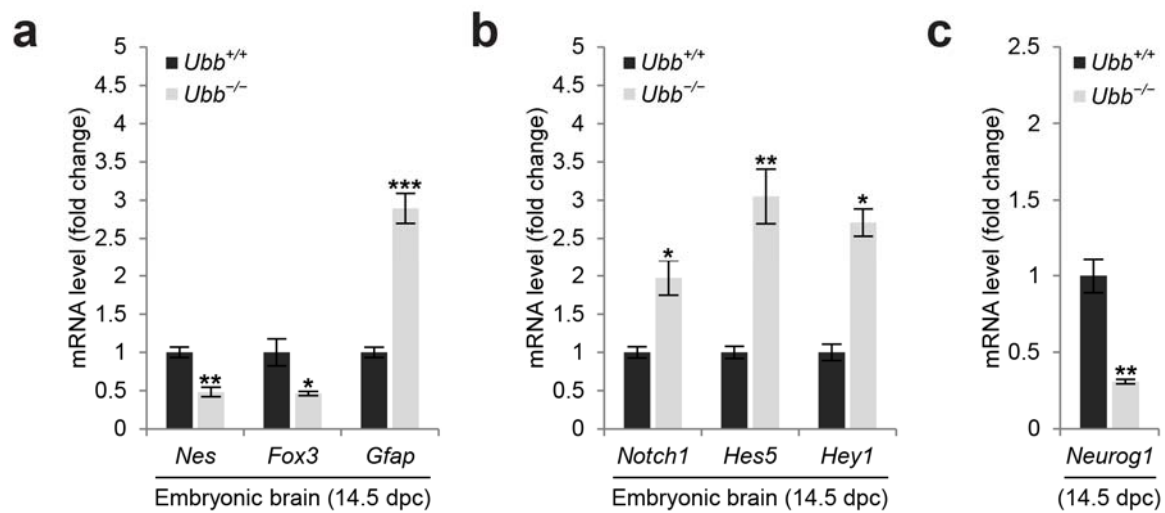


Figure S2. Presentation of original immunoblots.

The cropped parts of immunoblots were indicated with boxes.

Fig. 1a

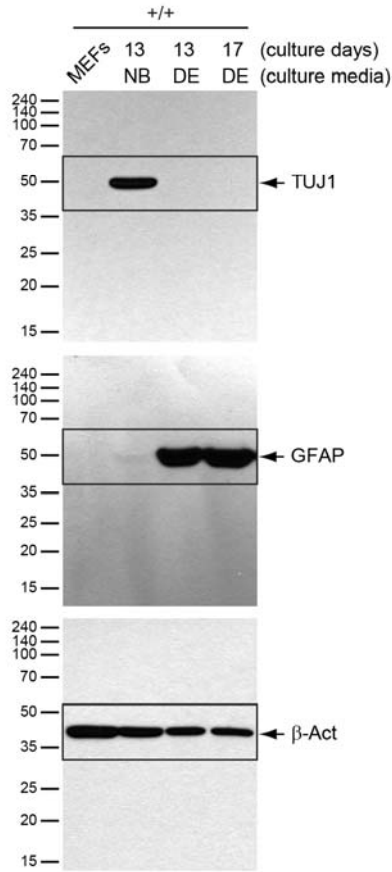


Fig. 1b

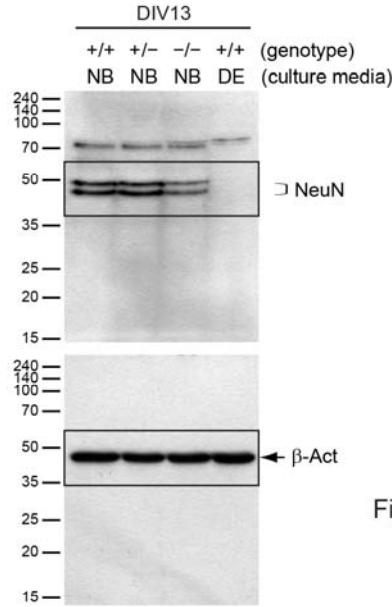


Fig. 2d

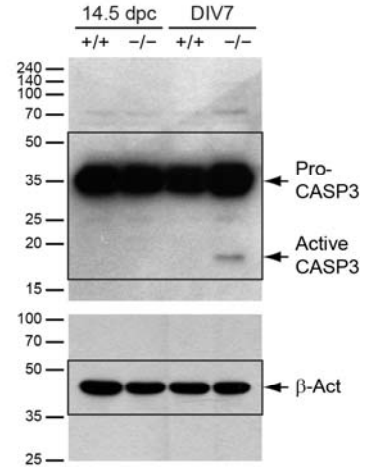


Fig. 4d

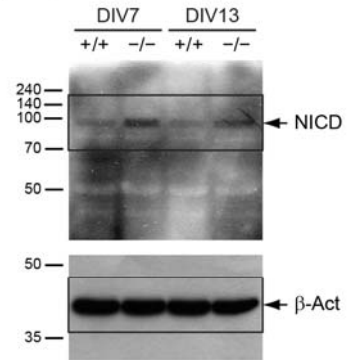


Fig. 4c

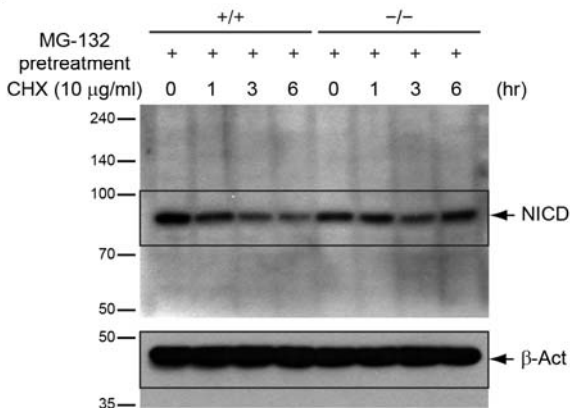


Fig. 5d

