

Supplementary information, Figure S12

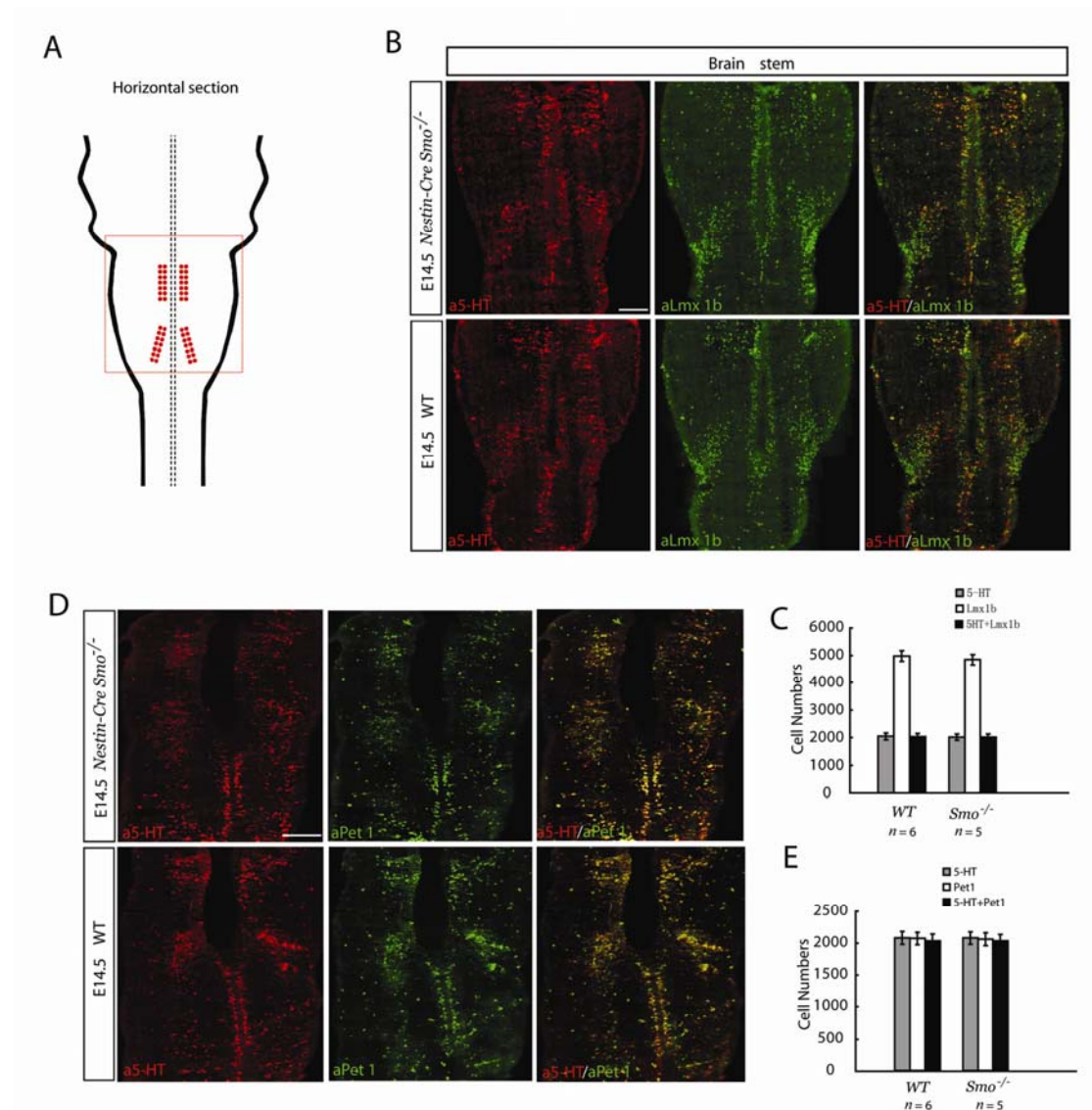


Figure S12 The development of serotonergic neurons in the brainstem is not altered in *Nestin-Cre; Smo^{-/-}* mice. The caudal brainstem containing the CRN (**A**) was cut into horizontal sections (shown in the rectangle), and the serotonergic CRN neurons were co-immunostained for 5-HT and Lmx1b or 5-HT and Pet1. (**B**) The pattern of serotonergic CRN neurons was similar in *Smo*-deficient and WT mice. Lmx1b was expressed normally in the CRN of *Smo*-deficient mice. Scale bar: 100 μ m. (**C**) Numbers of serotonergic neurons and Lmx1b-expressing serotonergic neurons in the brain stem of *Nestin-Cre; Smo^{-/-}* and WT mice. Data are presented as the mean \pm S.E.M. WT: 5-HT positive: 2041 \pm 115; Lmx1b positive: 4955 \pm 193; 5-HT+Lmx1b positive: 2035 \pm 107. *Nestin-Cre; Smo^{-/-}* mice: 5-HT positive: 2020 \pm 112; Lmx1b

positive: 4826 ± 189 ; 5-HT+Lmx1b positive: 2019 ± 114 . **(D)** Pet1 was also expressed normally in the CRN of Smo-deficient mice. Scale bar: 100 μm . **(E)** Numbers of serotonergic neurons and Pet1-expressing serotonergic neurons in the brainstem of *Nestin-Cre; Smo^{-/-}* and WT mice. Data are presented as the mean \pm S.E.M. WT: 5-HT positive: 2075 ± 103 ; Pet 1 positive: 2065 ± 99 ; 5-HT+Pet 1 positive: 2029 ± 102 ; *Nestin-Cre; Smo^{-/-}* mice: 5-HT positive: 2070 ± 97 ; Pet 1 positive: 2053 ± 101 ; 5-HT+Pet 1 positive: 2024 ± 105 . *n* indicates the total number of embryos quantified.