Supplemental Figure 1. Nkx6.2 expression in the entire sections of postnatal mouse spinal cords.

Cross sections from P0 (A), P4 (B), P8 (C), P13 (D), P25 (E), P31 (F), and adult (G) wild-type

spinal cords were immunostained with anti-Nkx6.2 antibody.



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Supplemental Figure 2. Triple immunostaining with anti-Nkx6.2, anti-Olig2 and anti-NeuN (**A** and **B**) on transverse sections from P3 (**A**) and P8 (**B**) wild-type spinal cords. Only the ventrolateral spinal cord positions were shown. Scale bar: 100 μm.

Supplemental Figure 3. Triple immunostaining with Dapi, anti-Nkx6.2 and anti-PDGFR α (**A**), anti-NG2 (**B**), anti-MBP (**C**), or anti-MAG (**D**) on transverse sections from P2 (**C** and **D**) and P15 (**A** and **B**) wild-type spinal cords. Arrows represented Nkx6.2+/PDGFR α -/NG2- cells (**A** and **B**) or Nkx6.2+/MBP+/MAG+ cells (**C** and **D**). Arrowheads indicated Nkx6.2-/PDGFR α + cells in **A**, Nkx6.2-/NG2+ cells in **B**, Nkx6.2+/MBP- cell in **C**, or Nkx6.2-/MAG+ cell in **D**. Scale bar: 50 µm.

Supplemental Figure 4. Double immunostaining of Nkx2.2 with MAG in E9 chicken (A-C) and P2 mouse (D-F) spinal cords. Mature oligodendrocytes with strong MAG expression did not co-express Nkx2.2 (represented by arrows). Conversely, OPC cells with strong Nkx2.2 expression did not co-express MAG. Weak co-expression Nkx2.2 and MAG in the same cells is represented by arrowheads. Scale bar: 100 μm.



170x84mm (300 x 300 DPI)



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101x49mm (300 x 300 DPI)



101x95mm (200 x 200 DPI)

Nkx2.2MAGMAG/Nkx2.2ABCJBCJJCJJDNkx2.2MAGNkx2.2/MAGDFFJJFJJ</tr

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101x98mm (300 x 300 DPI)