1 Supplementary figure legends

- 2 Supplementary Figure 1. Characterization of naïve-like rdES4 (left panels) and rdES6
- 3 (right panels) cells. The colony morphology is shown for primed-state rdESCs (top
- 4 panels), naïve-like converted ESCs (upper middle panels), expressing
- 5 hOCT3/4-IRES-GFP (lower middle panel) and alkaline phosphatase activity (bottom
- 6 panels). Scale bar = $200 \ \mu m$.
- 7 Supplementary Figure 2. Immunohistochemical detection of oligodendrocytes using an
- 8 anti-O1 antibody (A) (red) and anti-O1 and anti-CNPase signals merged (B) (orange;
- 9 arrowheads) before (top panels) and after (bottom panels) naïve-like conversion of rdES4
- 10 (left panels) and rdES6 (right panels) cells. Mature oligodendrocytes with dendrites
- 11 (arrows) were derived from naïve-like rdES cells. Scale bar = $100 \mu m$.
- 12 Supplementary Table 1. Primers used in this study.
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Supplemental Fig. 1. Honsho et. al.





Supplemental Fig. 2. Honsho, et.al.