Appendix figures for Marinaro et al., **MicroRNA-independent functions of DGCR8 are essential for neocortical development and TBR1 expression**

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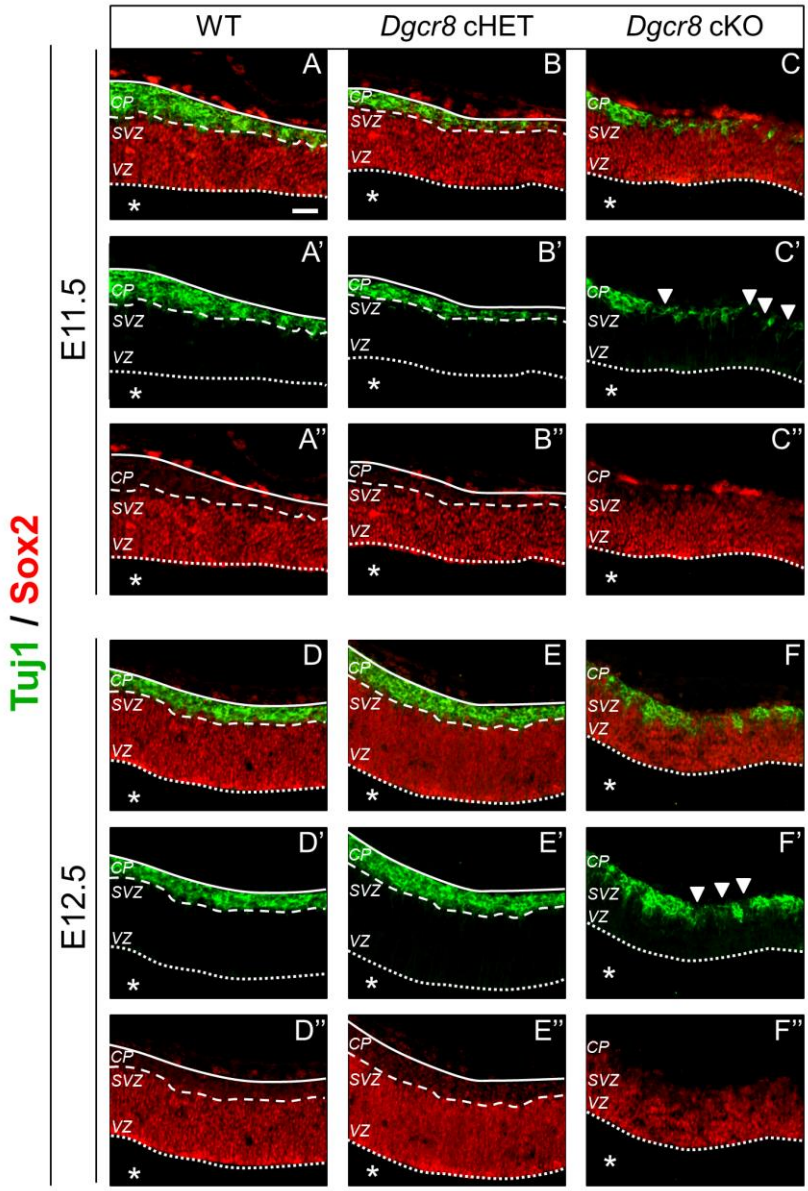
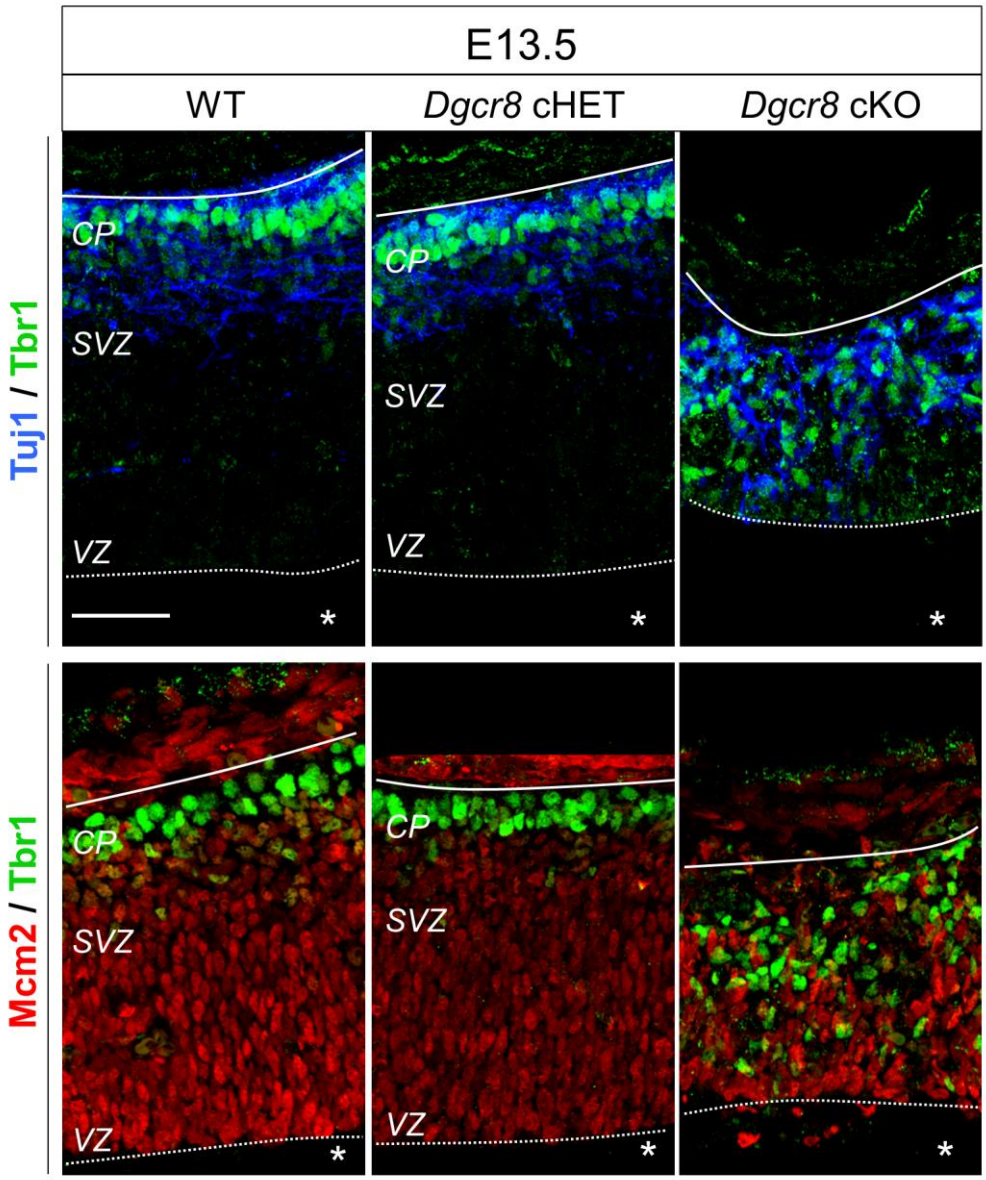
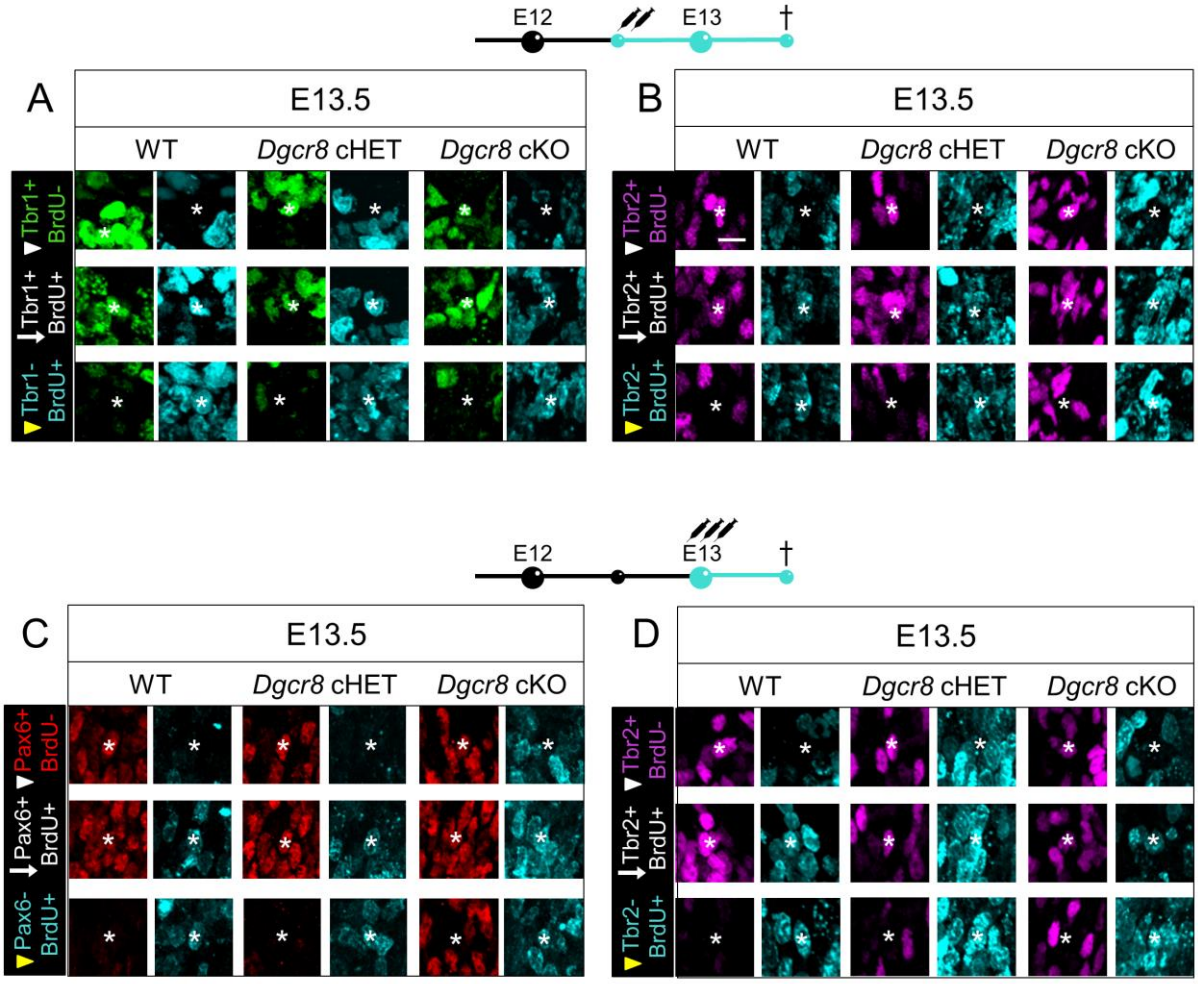


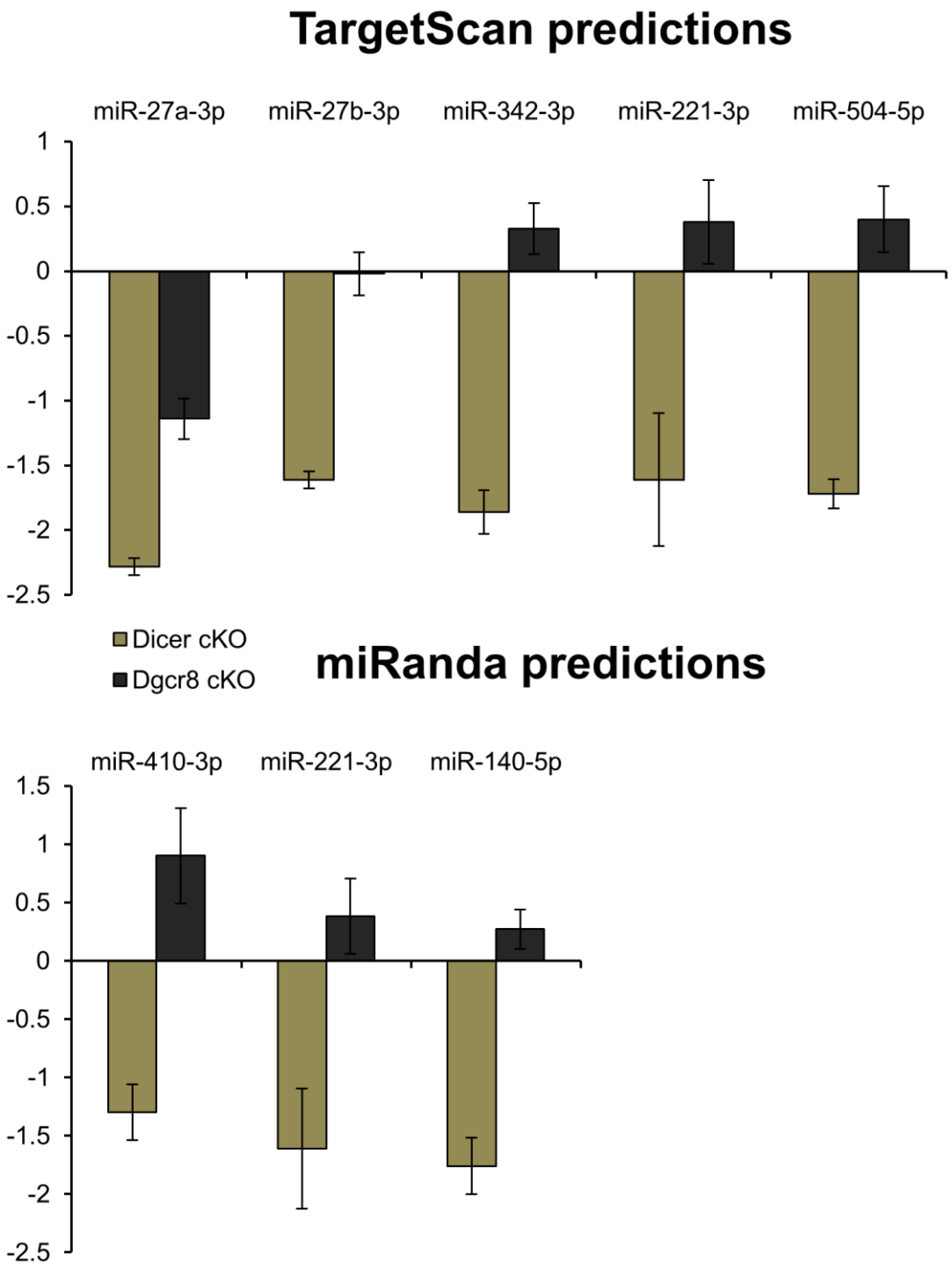
Appendix Figure S1. Altered cortical lamination in the dorsal telencephalon of *Dgcr8* cKO embryos from E11.5. Tuj1 and Sox2 immunofluorescence microscopy images of coronal cryosections through the dorsal telencephalon of E11.5 **(A-C'')**, E12.5 **(D-F'')** of WT (A-A'', D-D''), *Dgcr8* cHET (B-B'', E-E'') and *Dgcr8* cKO (C-C'', F-F'') embryos. Note at E11.5 the discontinuous staining of Tuj1 (arrowheads) in *Dgcr8* cKO, compared to WT and Dgcr8 cHET cortices. At E12.5 note the intermixing of Tuj1 and Sox2 staining in *Dgcr8* cKO compared to WT and *Dgcr8* cHET cortices. Scale bar: 50 μm. Asterisks indicate the ventricular lumen. Solid and dashed lines indicate cortex boundaries. Cortical plate (CP); subventricular zone (SVZ); ventricular zone (VZ).



Appendix Figure S2. Analysis of Tbr1+ postmitotic neurons in E13.5 neocortices. Tuj1/Tbr1 (upper panel) and Mcm2/Tbr1 immunofluorescence microscopy images of coronal cryosections through the dorsal telencephalon of E13.5 WT, *Dgcr8* cHET and *Dgcr8* cKO embryos.



Appendix Figure S3. Categories of cells counted in Figures 3 and 4. Littermate mouse embryos were subjected to BrdU injection and sacrificed as in Figure 3 (A, B) or as Figure 4 (C, D), respectively. **A)** White arrowheads indicate Tbr1+/BrdU- nuclei; arrows indicate Tbr1+/BrdU+ nuclei; yellow arrowheads indicate Tbr1-/BrdU+ nuclei. **B, D)** White arrowheads indicate Tbr2+/BrdU- nuclei; arrows indicate Tbr2+/BrdU+ nuclei; yellow arrowheads indicate Tbr2-/BrdU+ nuclei. **C)** White arrowheads indicate Pax6+/BrdU- nuclei; arrows indicate Pax6+/BrdU+ nuclei; yellow arrowheads indicate Pax6-/BrdU+ nuclei.



Appendix Figure S4. Read counts of miRNAs predicted to target Tbr1 in E13.5 Dicer cKO and Dgcr8 cKO neocortices.